ENERGY EFFICIENT
ARCHITECTURAL

LIGHTING

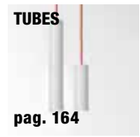
2016

mizar

APPLICAZIONI PER PRODOTTO
PRODUCTS APPLICATION

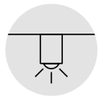
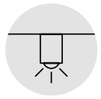
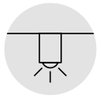
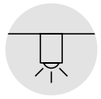
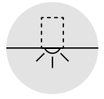
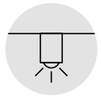
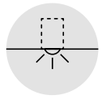
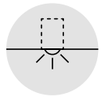
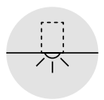
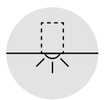
PRODUCTS	PLAFONE/PARETE *WALL/CEILING LIGHTS*	SOSPENSIONE *PENDANT LIGHTS*	INCASSI *RECESSED LIGHTS*	BINARI *TRACKS*	TERRA *FLOOR*
HIDDEN 151 pag. 30			pag. 36		
HIDDEN 17 pag. 40			pag. 45		
THOT EVO pag. 48	pag. 64	pag. 64	pag. 64	pag. 74	
BIRD pag. 84		pag. 90			
SLIM PROFILES pag. 96	pag. 100/104/106		pag. 100/104/106		
SYNTHESIS pag. 110	pag. 112			pag. 114	
KY pag. 120	pag. 128			pag. 126	
KRUYS pag. 134	pag. 139	pag. 140		pag. 138	
TRACKS 230V pag. 142				pag. 146	

Si prega di consultare il sito web per l'aggiornamento delle caratteristiche tecniche dei prodotti e delle sorgenti LED.
Please visit our website for the latest update on the products' technical features and LED sources.

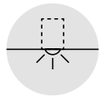
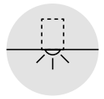
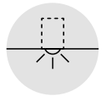
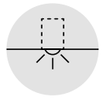
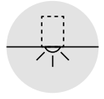
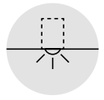
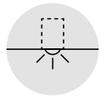
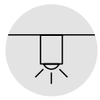
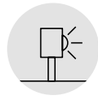
PRODUCTS	PLAFONE/PARETE *WALL/CEILING LIGHTS*	SOSPENSIONE *PENDANT LIGHTS*	INCASSI *RECESSED LIGHTS*	BINARI *TRACKS*	TERRA *FLOOR*
TOP/JET/KING pag. 150				pag. 154	
MINITRAK 12V pag. 158				pag. 162	
TUBES  pag. 164	pag. 170	pag. 168			
QSO pag. 174		pag. 178		pag. 178	
SHOP pag. 186	pag. 190	pag. 191			
RAY pag. 196	pag. 204	pag. 204		pag. 200	pag. 204
ETHER pag. 210	pag. 214	pag. 214		pag. 214	
UDG pag. 218	pag. 222	pag. 226			
STING pag. 230	pag. 233				

Si prega di consultare il sito web per l'aggiornamento delle caratteristiche tecniche dei prodotti e delle sorgenti LED.
Please visit our website for the latest update on the products' technical features and LED sources.

APPLICAZIONI PER PRODOTTO
PRODUCTS APPLICATION

PRODUCTS	PLAFONE/PARETE *WALL/CEILING LIGHTS*	SOSPENSIONE *PENDANT LIGHTS*	INCASSI *RECESSED LIGHTS*	BINARI *TRACKS*	TERRA *FLOOR*
STILT pag. 236	 pag. 240				
MIRAGE pag. 242	 pag. 246				
CUBIS pag. 248	 pag. 252				
REFLEX/KABRIO pag. 254	 pag. 258				
PIT pag. 260			 pag. 264		
SURROUND pag. 268	 pag. 274		 pag. 276		
IKKUNA pag. 282			 pag. 286		
POINT LED pag. 294			 pag. 298		
TEAM MODULE pag. 304			 pag. 312		

Si prega di consultare il sito web per l'aggiornamento delle caratteristiche tecniche dei prodotti e delle sorgenti LED.
Please visit our website for the latest update on the products' technical features and LED sources.

PRODUCTS	PLAFONE/PARETE *WALL/CEILING LIGHTS*	SOSPENSIONE *PENDANT LIGHTS*	INCASSI *RECESSED LIGHTS*	BINARI *TRACKS*	TERRA *FLOOR*
TEAM pag. 316			 pag. 319		
TRENDY pag. 324			 pag. 326		
L-LED pag. 330			 pag. 332		
SHUTTER pag. 336			 pag. 340		
QUADRO/TONDO pag. 344			 pag. 348		
SMALL DOWNLIGHTS pag. 356			 pag. 360		
BLADE pag. 364			 pag. 368		
UPPY 50 pag. 374	 pag. 378				 pag. 378

Si prega di consultare il sito web per l'aggiornamento delle caratteristiche tecniche dei prodotti e delle sorgenti LED.
Please visit our website for the latest update on the products' technical features and LED sources.

VISIONTECH OFFICES
Dubai, U.A.E.

Progetto di illuminazione degli uffici.
Progetto a cura di: Perkins+Will Architects.
Apparecchi: Hidden design Mario Mazzer, Surround design S.+R. Cornelissen, Ether e Thot Evo design Mizar team.

Lighting project of the offices.
Project curated by: *Perkins+Will Architects.*
Products: *Hidden design Mario Mazzer, Surround design S.+R. Cornelissen, Ether and Thot Evo design Mizar team.*

ENERGY EFFICIENT ARCHITECTURAL LIGHTING

DAL 1994 LE NOSTRE IDEE SI TRASFORMANO IN APPARECCHI E SISTEMI DI ILLUMINAZIONE CAPACI DI ESPRIMERE IL NOSTRO MODO DI FARE LUCE.
Gli spazi diventano ambienti da vivere dove la qualità della luce assume primaria importanza: dialoga con i volumi architettonici, costruisce scenari, genera benessere psicofisico, aiuta il risparmio energetico. La nostra pluriennale esperienza si affianca al professionista per valorizzare la sua opera: spazi commerciali, edifici storici, luoghi di culto, musei, centri direzionali, spazi collettivi rappresentano solo alcuni ambiti della nostra expertise.

SINCE 1994, OUR IDEAS TURN INTO LIGHTING SYSTEMS AND FIXTURES CAPABLE OF EXPRESSING THE WAY WE "MAKE LIGHT".
Spaces become living environments where quality of light is paramount: it dialogues with architectural volumes, builds scenarios, generates mental and physical wellbeing, and helps energy saving.
Our long experience is at the service of professionals to enhance their work: applications in historical buildings, places of worship, museums, retail spaces, office spaces and public spaces represent our most significant background.

BECOMING LIGHT

ESPERIENZA
Proponiamo idee illuminotecniche dal 1994. Il brand vanta numerosi progetti internazionali nei settori delle forniture per negozi, uffici, alberghi e strutture per la collettività. Nel 2001 dall'incontro con Tobia Scarpa è nata una linea di prodotti dedicata all'illuminazione delle opere d'arte e dei musei in generale. Mizar è oggi il fornitore preferenziale per l'illuminazione di alcuni fra i più importanti musei e monumenti storici al mondo, dalla gallerie dell'Accademia di Venezia alle prestigiose sale della Biblioteca Nazionale di Praga.
Nel 2003 l'acquisizione del marchio DIL, leader nel mercato dei sistemi di illuminazione per ufficio e ambienti di lavoro, ha permesso a Mizar di perfezionare e completare la propria offerta di prodotti.
Mizar ha una ampia rete di distiribuzione con showroom a Milano, Parigi e Dubai oltre che di agenti.

DESIGN
Migliorare l'integrazione dei nostri prodotti nell'architettura degli spazi, offrire nuove soluzioni ai bisogni sempre crescenti di comfort illuminotecnico, aumentare l'efficienza energetica e il risparmio energetico sono i principali obiettivi di Mizar nella progettazione dei prodotti.
Il design e la progettazione accurata comunicano fra di loro e si affiancano senza prevalere una sull'altra in un gioco equilibrato di forme e funzionalità. I prodotti Mizar sono progettati per avere tempi e costi minimi di installazione. Inoltre i prodotti sono conformi a tutte le norme in materia di riciclaggio per i componenti elettrici e meccanici oltre che per la finitura esterna.
Ogni prodotto è il frutto di un'intensa collaborazione con i grandi nomi del design internazionale come Momodesign, Tobia Scarpa, David Lewis, Serge e Robert Cornelissen, Silvio De Ponte, Stefano Anconetani, Paolo De Lucchi, Paolo Torcolacci, Matteo Fiore, MDM Design e Mario Mazzer.

SERVIZIO
La qualità al primo posto. Certificata ISO 9001:2000 Mizar assicura un controllo totale su tutti i processi interni per garantire prodotti di alta qualità ai suoi clienti da un punto di vista sia tecnico sia estetico che di performance illuminotecnica di lunga durata.
Un efficiente servizio di assistenza tecnica e commerciale pre e post-venidta permette di rispondere con rapidità e precisione a qualsiasi richiesta di clienti e progettisti. L'ufficio progettazione illuminotecnica di Mizar è inoltre a disposizione per fornire assistenza ai professionisti e agli installatori in tutte le fasi preliminari di un progetto.

RESPONSABILITÀ SOCIALE DI IMPRESA
Fare impresa significa essere consapevoli di far parte di un tessuto sociale che comprende vari soggetti, tra i quali spicca sicuramente una società civile molto attenta all'operato imprenditoriale. Per queste ragioni Mizar si adopera per garantire condizioni di lavoro ottimali ai suoi dipendenti, una accurata selezione e controllo delle materie prime utilizzate, una elevata percentuale di riciclabilità dei materiali e notevoli investimenti in automazione, ricerca e sviluppo per migliorare il rendimento dei propri cicli produttivi e dei propri prodotti.

LED
Il terzo millennio rappresenta un momento di svolta per tutto il mondo dell'illuminotecnica. La tecnologia e l'elettronica sconvolgono il mondo delle sorgenti luminose tradizionali introducendo i LED come nuova fonte di luce a basso consumo, di lunga durata e dalle infinite possibilità di applicazione. Questi dati, uniti ai ridotti consumi necessari per il funzionamento, fanno del LED una sorgente luminosa innovativa e altamente performante, capace di sostituire molte delle tradizionali lampade oggi sul mercato.
Mizar impiega solo LED di lunga durata con eccellenti sistemi di dissipazione a garanzia di qualità della temperatura colore e dell'intensità costante dell'emissione luminosa nel tempo.

EXPERIENCE
Mizar offers innovative lighting ideas since 1994. The brand boasts numerous worldwide references in retail, office buildings, hotels and entertainment facilities. Since 2001, its encounter with architect Tobia Scarpa allowed Mizar to create a successful line of product dedicated to the illumination of works-of-art and museums in general. Mizar is now the provider of choice for the illumination of some of the most important museums and historical monuments in the world: from the Great Galleries of the Venice Academy to the prestigious halls of the National Library in Prague. In 2003, the important acquisition of DIL, leader in the market of lighting systems for offices and work spaces, allowed Mizar to complete its offer. Mizar has a widespread national distribution network, showrooms in Milan, Paris and Dubai; a network of agents and customers worldwide.

DESIGN
Improving the integration of products into architectural spaces, providing new solutions to the growing demand of comfortable lighting, increasing energy efficiency and energy savings are the fundamental goals driving any Mizar's product design. Design and rigorous planning communicate and come together without prevailing on one another, in a balanced play of shapes and functionality.
The MIZAR products are designed to require the minimum installation times and costs. Moreover the products comply with all recycling regulations for both the electronic and mechanical parts and the outer finishing.
Any design is an expression of an intense collaboration with major International Designers such as Tobia Scarpa, David Lewis, Serge and Robert Cornelissen, Momodesign, Silvio De Ponte, Stefano Anconetani, Paolo De Lucchi, Paolo Torcolacci, and Matteo Fiore, MDM Design and Mario Mazzer.

SERVICE
Quality first. Certified ISO 9001:2000, Mizar ensures the supervision of all its internal processes to guarantee high quality products to its end customers, both from a technical and an aesthetical point of view, as well as from a long lasting lighting performance point of view.
An efficient technical and commercial pre-and post-sale service allows responding quickly and accurately to the demands of clients and designers.
Mizar's 'Lighting Project Department' is also available to assist professionals and installers in all the preliminary stages of a project.

CORPORATE SOCIAL RESPONSIBILITY
Managing a company means belonging to a social fabric that includes a variety of entities, among which a society paying hawkish attention to any corporate activity. Mizar strives to ensure optimal working conditions for its employees, a careful selection and control of raw materials purchased, a high percentage of recyclable materials used and significant investments in automation, research and development to improve the performance of its production cycles and products.

LED
The third millennium is a turning point for the entire lighting industry. Technology and electronics turned upside down the world of traditional lighting sources by introducing LED technology as the new lighting source with low power consumption, long life and endless possibilities of application. These aspects, combined with reduced energy consumption required for their operation, make LEDs an innovative and high-performance lighting source, capable of replacing many of the traditional lamps on the market today. Only long life LED with excellent dissipation system are used in MIZAR products; therefore constant intensity of enduring light emission and light colour temperature quality are guaranteed.

PALAZZO IN FORO BUONAPARTE

Milan, Italy

Risanamento conservativo immobile in Foro Buonaparte 16, Milano.
Progetto a cura di: Rudy R. Franchi de Notarvanni.
Apparecchi: Hidden design Mario Mazzer, Surround design S.+R. Cornelissen.

Preservation and restoration of office building in Foro Buonaparte 16, Milan.
Project curated by: *Rudy R. Franchi de Notarvanni.*
Products: *Hidden design Mario Mazzer, Surround design S.+R. Cornelissen.*

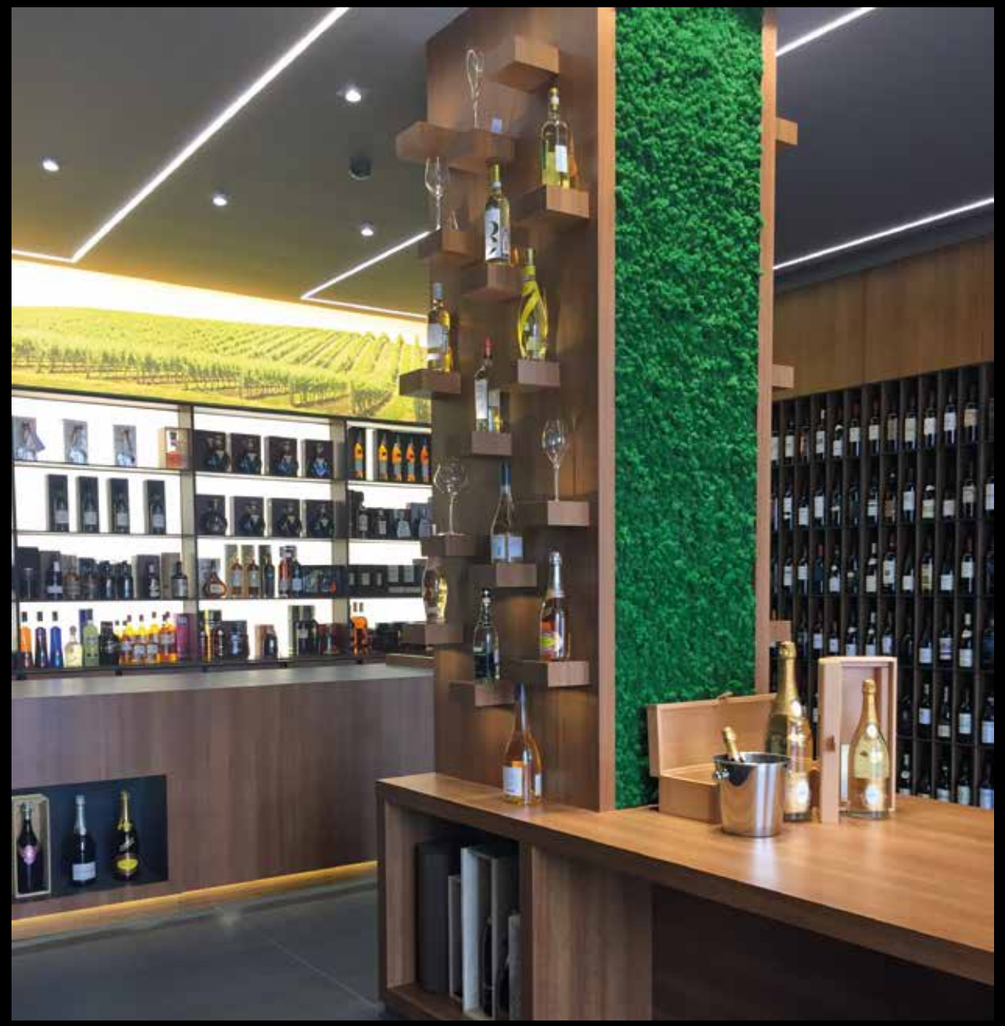
VISIONTECH OFFICES
Dubai, U.A.E.

Progetto di illuminazione degli uffici.
Progetto a cura di: Perkins+Will Architects.
Apparecchi: Hidden design Mario Mazzer, Surround design S.+R. Cornelissen, Ether e Thot Evo design Mizar team.

Lighting project of the offices.
Project curated by: *Perkins+Will Architects.*
Products: *Hidden design Mario Mazzer, Surround design S.+R. Cornelissen, Ether and Thot Evo design Mizar team.*

CATENA VINERIE GRAND CRU

Moscow, Russia



Enoteca Valovaya 11/19, Moscow. Progettazione di interni di un punto vendita delle enoteche Grand Cru (gruppo SIMPLE) a Mosca comprensivo di progetto di illuminazione e arredi su misura.
Progetto a cura di: Mario Mazzer.
Apparecchi: Hidden design Mario Mazzer, Surround design S.+R. Cornelissen.

Valovaya Wine-Shop 11/19, Moscow. Retail design of a wine-shop of the Grand Cru stores in Moscow (SIMPLE group), including lighting project and custom-made furnitures.
Project curated by: Mario Mazzer.
***Products:** Hidden design Mario Mazzer, Surround design S.+R. Cornelissen.*

“OMAGGIO A LORENZO LOTTO. I DIPINTI DELL’ERMITAGE”
Academy Galleries of Venice, Italy

Progetto di valorizzazione territoriale Terre di Lotto di Marche, Lombardia e Veneto.
Esposizione a cura di: Matteo Ceriana.
Apparecchi: Ray design Afra e Tobia Scarpa.

Territorial Development Project Terre di Lotto of Marche, Lombardy and Veneto.
Exhibition curated by: Matteo Ceriana.
Products: Ray design Afra and Tobia Scarpa.

SALA PILOTA
Academy Galleries of Venice, Italy

Progetto di restauro delle Gallerie dell’Accademia di Venezia.
Progetto a cura di: Arch. Tobia Scarpa.
Apparecchi: Ray design Afra e Tobia Scarpa.

Restoration project of Academy Galleries of Venice.
Project curated by: Arch. Tobia Scarpa.
Products: Ray design Afra and Tobia Scarpa.

CHIESA DELLA CARITÀ
Academy Galleries of Venice, Italy

Progetto di illuminazione delle Gallerie dell'Accademia di Venezia.
Progetto a cura di: Arch. Tobia Scarpa.
Apparecchi: Ray design Afra e Tobia Scarpa.

Lighting project of Academy Galleries of Venice.
Project curated by: Arch. Tobia Scarpa.
Products: Ray design Afra and Tobia Scarpa.

THE PHILOSOPHICAL HALL
Strahov Library - Prague, Czech Republic

Progetto di restauro dell'impianto illuminotecnico.
Progetto a cura di: Mizar team.
Apparecchi: Ray design Afra e Tobia Scarpa, apparecchio di illuminazione speciale ad emissione indiretta.

Lighting refurbishment.
Project curated by: Mizar team.
Products: Ray design Afra and Tobia Scarpa, special indirect light emission fixture.

STUDIO LEGALE FRANCESCO FURLAN

Treviso, Italy

Progetto di illuminazione degli uffici.
Progetto a cura di: Mizar team.
Apparecchi: Bird design David Lewis.

Lighting project of the offices.
Project curated by: Mizar team.
Products: Bird design David Lewis.

OLEA SPA 100% HOTEL
Sia Guest fair - Rimini, Italy

Presentazione del progetto "Olea Spa | Viaggio tra anima, sensi e sensualità mediterranea".
Progetto a cura di: Arch. Silvio De Ponte.
Apparecchi: Team design Mizar, Blade design M.D.W.S.

"Olea Spa | Journey between soul, senses and mediterranean sensuality" project presentation.
Project curated by: Arch. Silvio De Ponte.
Products: Team design Mizar, Blade design M.D.W.S.

AQUAGRANDA LIVIGNO
Abitare il tempo - Verona, Italy

Presentazione del progetto del centro termale Aquagranda di Livigno.
Progetto a cura di: Arch. Simone Micheli.
Apparecchi: Runner design M.D.W.S.

Livigno Aquagranda thermal center project presentation.
Project curated by: Arch. Simone Micheli.
Products: Runner design M.D.W.S.

PRIVATE RESIDENCE
Bologna, Italy

Progetto di illuminazione di una residenza privata.
Progetto a cura di: Riluce srl.
Apparecchi: Viger design Paolo Torcolacci.

Lighting project of private residence.
Project curated by: Riluce srl.
Products: Viger design Paolo Torcolacci.

THE BASILICA “SAN PAOLO FUORI LE MURA”
Rome, Italy

Progetto di illuminazione della navata centrale.
Progetto a cura di: Mizar team.
Apparecchi: apparecchio di illuminazione speciale ad emissione indiretta.

Lighting project of the central nave.
Project curated by: Mizar team.
Products: special indirect light emission fixture.

“FUORI CENTRO”
Hangar Bicocca - Milan, Italy

Esposizione promossa dalla Fondazione Hangar Bicocca.
Esposizione a cura di: Chiara Bertola.
Apparecchi: Kruys e QSO design Mizar.

Exhibition promoted by the Hangar Bicocca Fondation.
Exhibition curated by: Chiara Bertola.
Products: Kruys and QSO design Mizar.

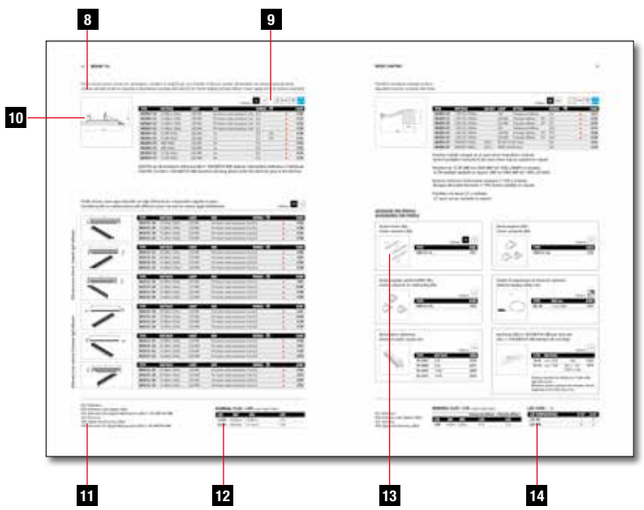
VALCUCINE AND RECORD
Photo shooting

Progetto di illuminazione del negozio.
Apparecchi: Top design Mizar, Royal design Mizar.

Lighting project of retail store.
Products: Top design Mizar, Royal design Mizar.

GUIDA ALLA CONSULTAZIONE DEL CATALOGO
CATALOGUE REFERENCE GUIDE

1 Nome prodotto *Product name*
2 Progettista *Designer*
3 Descrizione del prodotto *Product description*
4 Descrizione tecnica *Technical description*
5 Visualizzazione fasci luminosi
Lighting beem visualisation
6 Sommario sorgenti luminose
Lighting source summary
7 Colori disponibili *Colours available*
8 Caratteristiche del prodotto *Product features*
9 Colori disponibili - Marchi qualità e simbologie
Colours available - Quality marks and symbols
10 Disegno tecnico quotato
Quoted technical drawing
11 Cablaggio *Wiring*
12 Valore flussi nominal *Nominal flux*
13 Accessori *Accessories*
14 Guida alla composizione del codice
degli apparecchi LED
LED product code composition guide



GUIDA ALLA COMPOSIZIONE DEL CODICE
LED PRODUCT CODE COMPOSITION GUIDE

Il codice Prodotto deve essere completato sempre con il codice colore **7** .

Esempio: **561#** + 16 = **561#-16**

Se si tratta di un apparecchio con sorgenti LED, è inoltre necessario sostituire **#** con la lettera/cifra identificativa del fascio e della temperatura colore del LED desiderata, ricavabile dalla tabella a fondo pagina **14** .
Esample: Se si desidera un'apertura di fascio N e colore del LED bianco naturale dovrò scegliere la lettera "**J**".

561# = **561J**

The Item Code should be completed with the colour code **7** *listed at the bottom of the page.*

Esempio: ***561#*** + 16 = ***561#-16***

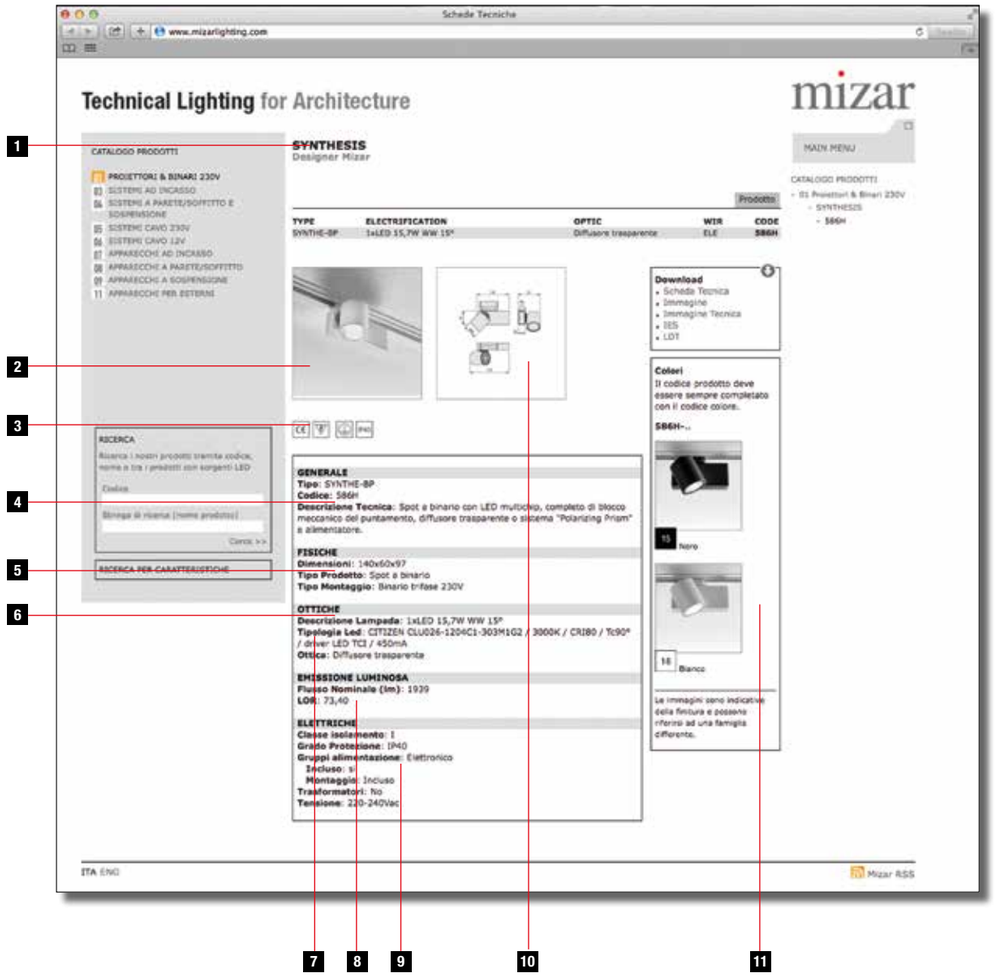
Whenever the item code is a fixture fitted with LED light sources, it is necessary to replace the **#** *symbol with the appropriate letter/number corresponding to the optics/LED colour temperature as per the table at the bottom of the page* **14** .
*Esample: If you prefer fixture fitted with a N optics and Natural White colour temperature, you should choose the "**J**" letter.*

561# —> ***561J***.

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

GUIDA ALLA CONSULTAZIONE DELLA SCHEDA TECNICA NEL WEB
WEB TECHNICAL SHEET REFERENCE GUIDE



1 Nome prodotto *Product name*
2 Foto del prodotto *Product image*
3 Marchi qualità e simbologie *Quality marks and symbols*
4 Caratteristiche del prodotto *Product features*
5 Caratteristiche fisiche Dimensions and application
6 Ottiche *Optics*
7 Tipologia di LED *LED type*
8 Emissione luminosa *Light emission*
9 Caratteristiche elettriche *Electrical features*
10 Disegno tecnico quotato *Quoted technical drawing*
11 Colori disponibili *Colours available*

HIDDEN 151

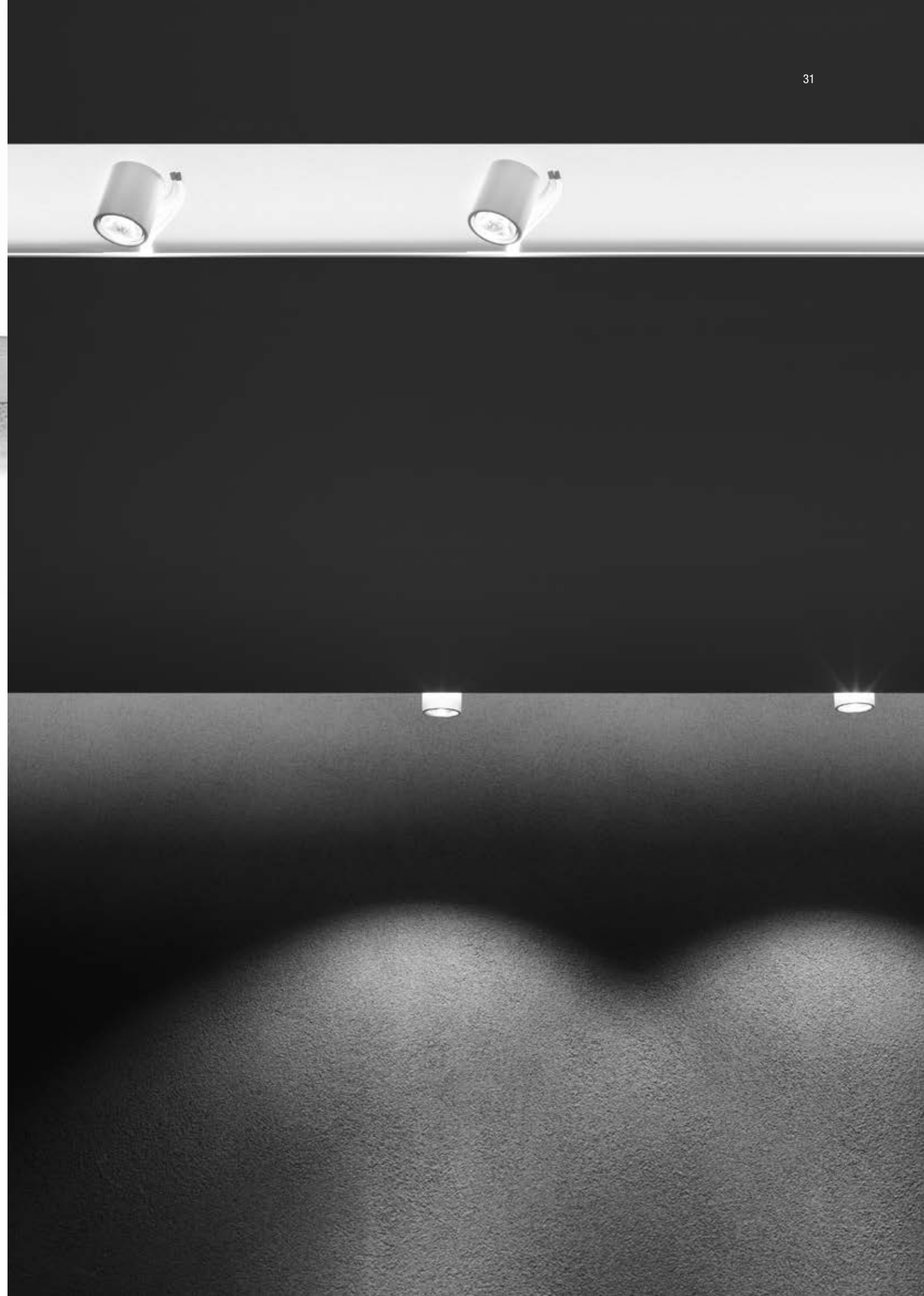
Design **Mario Mazzer**

SISTEMA AD INCASSO INTEGRATO NELL'ARCHITETTURA SENZA CORNICE, PER ILLUMINAZIONE INDIRETTA DIFFUSA E DIRETTA PUNTUALE.

Profilo estruso in alluminio per cartongesso di spessore 15mm, disponibile nelle finiture bianco e nero.
L'inclinazione a 30° del profilo, rende il sistema un tutt'uno con l'architettura, annullando lo spessore del cartongesso, nonchè garantisce un'illuminazione indiretta asimmetrica grazie all'integrazione delle strip led sulla medesima inclinazione.
Proiettori a led per l'illuminazione diretta sono applicabili con un sistema di bloccaggio e di spostamento rapido.

TRIMLESS RECESSED SYSTEM BUILT INTO THE ARCHITECTURE FOR BOTH INDIRECT DIFFUSE LIGHTING AND DIRECT SPOT LIGHTING.

Extruded aluminium profile for 15mm plasterboard available in black and white.
The 30 degree angle of the profile integrates the system within the architecture and plasterboard thickness becomes invisible.
Indirect and asymmetric lighting is assured thanks to the led strip having the same angle.
Led spotlights for direct lighting can be mounted with a quick fixing and sliding system.



HIDDEN 151

Design **Mario Mazzer**

Sistema senza cornice, integrato nell'architettura per illuminazione indiretta diffusa e diretta puntuale.

Trimless system built into the architecture for indirect diffuse lighting and direct spot lighting.

Sorgenti luminose:
Illuminazione indiretta:
StripLED **24,5W/m** e **14,4W/m** posizionata sull'estruso e protetta da diffusore opale.
Illuminazione diretta puntuale:
Proiettore con LED COB **12W,** sorgenti alogene e lampade LED.

Ottica del proiettore:
Diffusore trasparente: **N** 15° **S** 25°,
Sistema "Polarizing Prism": **F** 50°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Rotazione del proiettore:
+50°-90° longitudinalmente al profilo estruso, +35°-210° trasversalmente al profilo estruso.

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI), elettronico, dimmerabile digitale multifunzione (DALI/1-10V/SWITCH-DIM).

Classificazione:
C.I. II e III, Marchio F, IP20.

Emissione luminosa:
Indiretta e diretta.

Caratteristiche costruttive:
Profilo strutturale in alluminio estruso verniciato a polveri. Diffusori in policarbonato. Proiettori in alluminio Anticorodal verniciato a polveri. Viterie e giunti in acciaio.

Light sources:
Indirect lighting:
*StripLED **24,5W/m** and **14,4W/m** fitted into the extruded profile and protected by opal diffuser.*
Direct spot lighting:
*Spotlight with **12W,** COB LED, halogen lamps and LED lamps. .*

Optics of the projector:
*Transparent diffuser: **N** 15° **S** 25°, "Polarizing Prism" system: **F** 50°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Rotation of the projector:
+50°-90° lengthwise to extruded profile +35°-210° crosswise to extruded profile.

Wiring:
Electronic, digital electronic dimmable (DALI), multifunctional digital dimmable. (DALI/1-10V/SWITCH-DIM).

Classification:
I.C. II and III, Mark F, IP20.

Light emission:
Indirect and direct.

Constructive features:
Powder painted extruded aluminium structural profile. Polycarbonate diffusers. Anticorodal aluminium powder painted projectors. Steel screws and joints.

Ottiche
Optics:

W 120° **N** 15° | **W** 120° **S** 25° | **W** 120° **F** 50°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM		DIRECT LIGHT - Spotlight	INDIRECT LIGHT
LED COB		Transparent diffuser	**15° 25°**	12W	-
		Prismatic diffuser	**50°**	12W	-
StripLED		Opal diffuser	**120°**	-	24,5W/m 14,4W/m
LED lamps		-		8W 9W	-
Halogen lamps	**QPAR-16**	-		50W	-
	QR CB-51	-		50W	-

COLORI
COLOURS

15 Nero *Black*

16 Bianco *White*

M5 Nero effetto muro *Black wall effect*

M6 Bianco effetto muro *White wall effect*

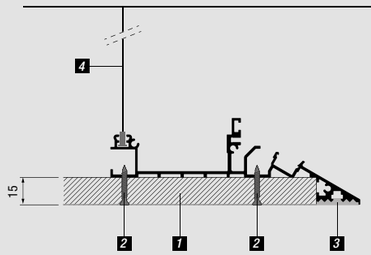
SPOT LENS System
Ottica sfaccettata con diffusore trasparente.
Faceted optics with transparent diffuser.

***N** 15° **S** 25°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico.
Faceted optics with prismatic diffuser.

***F** 50°*

Profilo estruso
Extruded profile



FISSAGGIO DEL PROFILO ESTRUSO
EXTRUDED PROFILE FIXING

LEGENDA

1 Cartongesso spessore 15mm
Plasterboard thickness 15mm

2 Vite di fissaggio
Fixing screw

3 Stucco
Filler

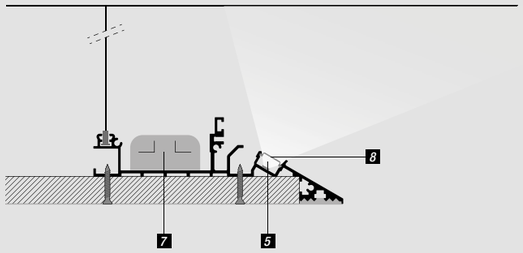
4 Cavetto di sospensione di sicurezza (opzionale)
Hanging safety cord (optional)

5 StripLED
StripLED

6 Fissaggio dello spot
Spotlight fixing

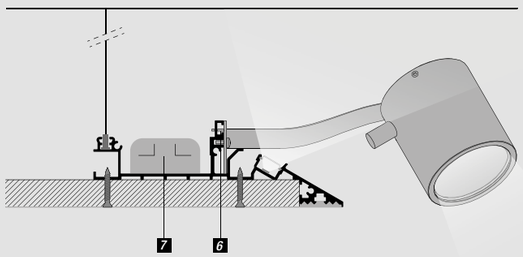
7 Alimentatore
Power supply unit

8 Diffusore
Diffuser



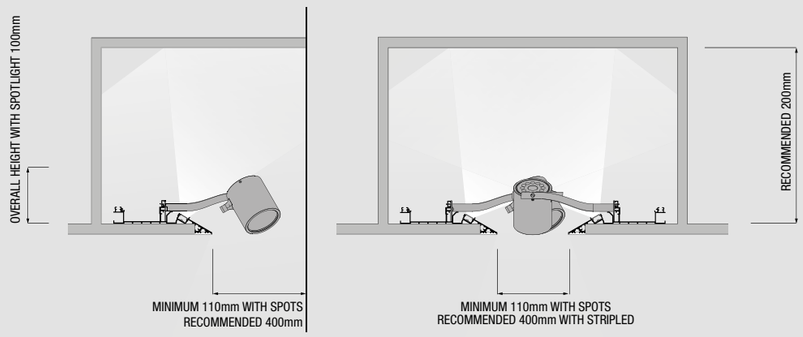
LUCE INDIRETTA - Fissaggio della stripLED
INDIRECT LIGHT - StripLED fixing

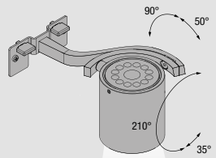
Il taglio della stripLED è consentito solo ogni 3cm (stipLED 24,5W/m), ed ogni 5cm (stipLED 14,4W/m).
StripLED cutting every 3cm only (stripLED 24.5W/m), and every 5cm (stripLED 14.4W/m).



LUCE DIRETTA / INDIRETTA - Fissaggio dello spot
DIRECT / INDIRECT LIGHT - Spotlight fixing

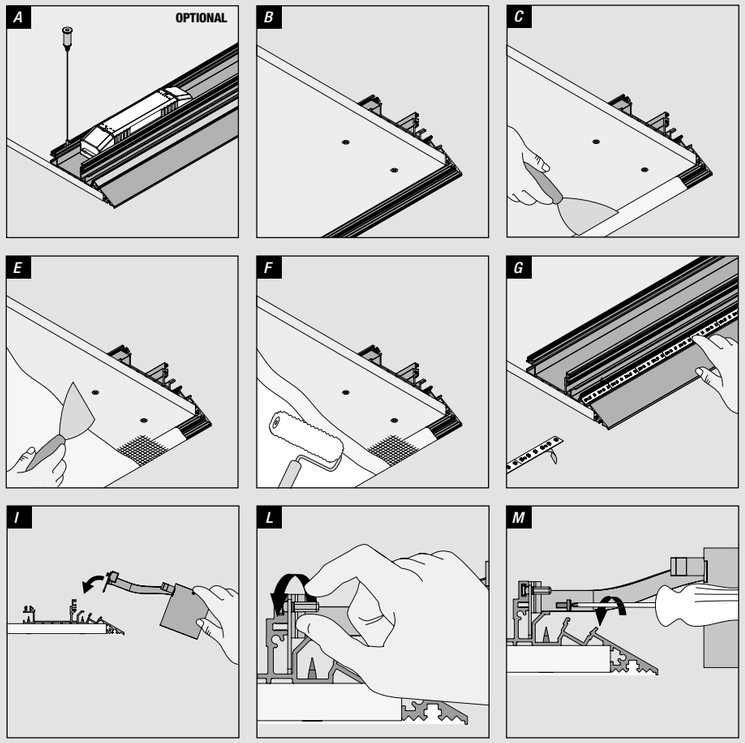
DISTANZE CONSIGLIATE PER UNA MIGLIORE DISTRIBUZIONE DELLA LUCE:
RECOMMENDED DISTANCES FOR BEST POSSIBLE LIGHT DISTRIBUTION:





ORIENTABILITÀ PROIETTORE
PROJECTOR ADJUSTABILITY

Installazione del profilo
Installation of the profile



A — Installazione del cavetto di sicurezza opzionale e posizionamento dell'alimentatore.
— *Fix the optional safety cord and power supply unit.*

B — Fissaggio del profilo alla lastra di cartongesso. Spessore del cartongesso 15mm.
— *Fix the profile to the plasterboard. Plasterboard thickness 15mm..*

C — Stuccatura del profilo.
— *Profile filling.*

D-E — Installazione della rete e rasatura del cartongesso.
— *Fix the metal net and smooth the plasterboard.*

F — Dipintura.
— *Paint.*

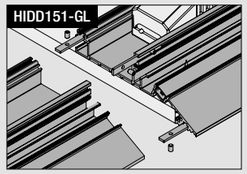
G — Posizionamento e fissaggio della stripLED adesiva.
Il taglio della stripLED è consentito solo ogni 3cm (stipLED 24,5W/m), ed ogni 5cm (stipLED 14,4W/m).

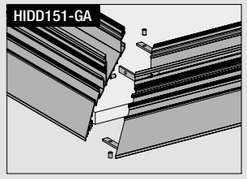
— *Place and fix the adhesive stripLED.*
The stripLED may only be cut every 3cm (stripLED 24.5W/m), and every 5cm (stripLED 14.4W/m). .

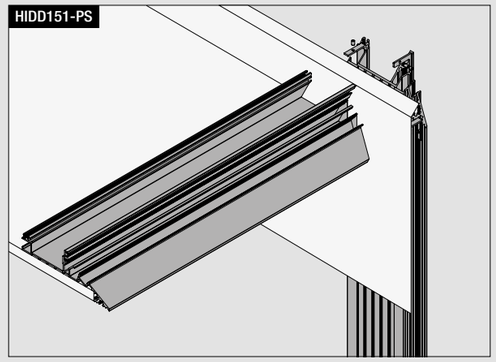
H — Montaggio del diffusore.
— *Fix the diffuser.*

I-L-M — Fissaggio dello spot all'estruso.
— *Fix the spotlight unit to the profile.*

Giunzione dei profili
Profile connectors







HIDD151-GL
— Giunto lineare
Linear joint

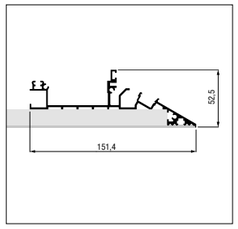
HIDD151-GA
— Giunto angolare
Corner joint

HIDD151-PS
— Giunto parete/soffitto
Wall/ceiling joint

I profili estrusi possono essere tagliati a 45° in cantiere seguendo le istruzioni di montaggio. A richiesta è possibile ricevere gli estrusi già tagliati.

The extruded profiles can be cut on site at 45° following the assembly instructions. Cut-to-size profiles may be supplied on demand.

Profilo estruso senza cornice per cartongesso, completo di stripLED per luce indiretta e diffusore opalino. Alimentatore da ordinare separatamente.
Trimless extruded profile for mounting in plasterboard complete with stripLED for indirect lighting and opal diffuser. Power supply unit to be ordered separately.



Colours: 15 | 16 — IP20

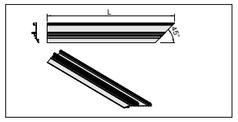
TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDDEN-151	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**4706**
HIDDEN-151	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**4707**
HIDDEN-151	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**4725**
HIDDEN-151	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**4726**
HIDDEN-151	24,5W 24Vdc	LED NW	1m	ELE	●	**4700**
HIDDEN-151	24,5W 24Vdc	LED WW	1m	ELE	●	**4701**
HIDDEN-151	49W 24Vdc	LED NW	2m	ELE	●	**4702**
HIDDEN-151	49W 24Vdc	LED WW	2m	ELE	●	**4703**
HIDDEN-151	73,5W 24Vdc	LED NW	3m	ELE	●	**4704**
HIDDEN-151	73,5W 24Vdc	LED WW	3m	ELE	●	**4705**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

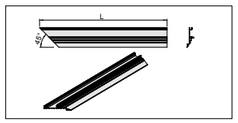
Profilo estruso come sopra descritto con tagli differenti per composizioni angolari in piano.
Extruded profile as outlined above with different corner cut-outs for various angle installations.

Colours: 15 | 16

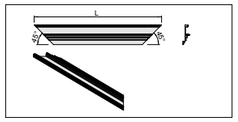
Diffusione luce interna *Inwards light diffusion*



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-DX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470A**
HIDD151-DX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470B**
HIDD151-DX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470C**
HIDD151-DX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470D**

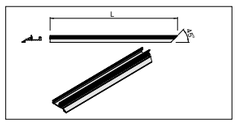


TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-SX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470E**
HIDD151-SX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470F**
HIDD151-SX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470G**
HIDD151-SX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470H**

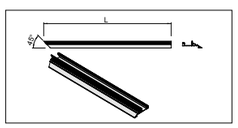


TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-DS	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470L**
HIDD151-DS	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470M**
HIDD151-DS	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470N**
HIDD151-DS	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470P**

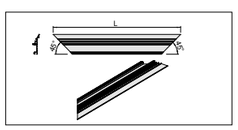
Diffusione luce esterna *Outwards light diffusion*



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-DX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**472L**
HIDD151-DX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**472M**
HIDD151-DX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**472N**
HIDD151-DX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**472P**



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-SX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**472S**
HIDD151-SX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**472T**
HIDD151-SX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**472V**
HIDD151-SX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**472Z**



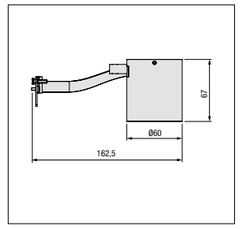
TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD151-DS	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470S**
HIDD151-DS	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470T**
HIDD151-DS	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**470V**
HIDD151-DS	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**470Z**

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
14,4W	1320lm/m	1200lm/m	70%
24,5W	1980lm/m	1917lm/m	70%

Proiettore orientabile completo di driver.
Adjustable projector complete with driver.



Colours: M5 | M6 — IP40

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
HIDDEN-SP	12W 220-240Vac		LED	Transparent diffuser		ELE	●	**473#**
HIDDEN-SP	12W 220-240Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4738**
HIDDEN-SP	12W 220-240Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4739**
HIDDEN-SP	12W 220-240Vac		LED	Transparent diffuser		EDD	●	**474#**
HIDDEN-SP	12W 220-240Vac		LED NW	Prismatic diffuser	50°	EDD	●	**4748**
HIDDEN-SP	12W 220-240Vac		LED WW	Prismatic diffuser	50°	EDD	●	**4749**
HIDDEN-SP	50W/9W 230Vac	GU5,3	QR CB-51/LED lamp			ELE		**4724**
HIDDEN-SP	50W/8W 230Vac	GU10	QPAR-16/LED lamp			ELE		**4710**

Proiettori multipli collegati ad un unico driver disponibili a richiesta.
Several spotlights connected to the same driver may be supplied on request.

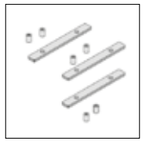
Proiettore da 15,7W (NW lm 2004, WW lm 1939, LOR 81%) a richiesta
15,7W spotlight available on request (NW lm 2004, WW lm 1939, LOR 81%)

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Proiettore con fascio 12° a richiesta
12° beam version available on request

ACCESSORI PER PROFILO
ACCESSORI FOR PROFILE

Giunto lineare (Kit).
Linear connector (Kit).



Colours: 00

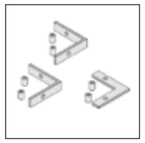
TYPE	CODE
HIDD151-GL	**4721**

Giunto angolare (Kit).
Corner connector (Kit).

Colours: 00

TYPE	CODE
HIDD151-GA	**4720**

Giunto angolare parete/soffitto (Kit).
Corner connector for wall/ceiling (Kit).



Colours: 00

TYPE	CODE
HIDD151-PS	**4722**

Cavetto di sospensione di sicurezza opzionale.
Optional hanging safety cord.

Colours: 23

TYPE	DIM mm	CODE
DIL-KS	L max 3000	**3770**

Alimentatore elettronico.
Electronic power supply unit.

Colours: 00

TYPE	WATTAGE	CODE
TR-CD03	35W	**5376**
TR-CD06	60W	**5377**
TR-CD10	100W	**5378**
TR-CD15	180W	**5379**

Interfaccia DALI/1-10V/SWITCH-DIM (per strip led)
DALI /1-10V/SWITCH-DIM interface (for led strip).

Colours: 00

TYPE	WATTAGE		CODE
TR-ID	max 120W	DALI	**4723**
TR-FA	max 120W	DALI/1-10V/ SWITCH-DIM	**4775**

Distanza massima tra interfaccia e l'inizio della strip LED è di 5m.
Maximum distance between the interface and the beginning of the LED strip is 5m.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

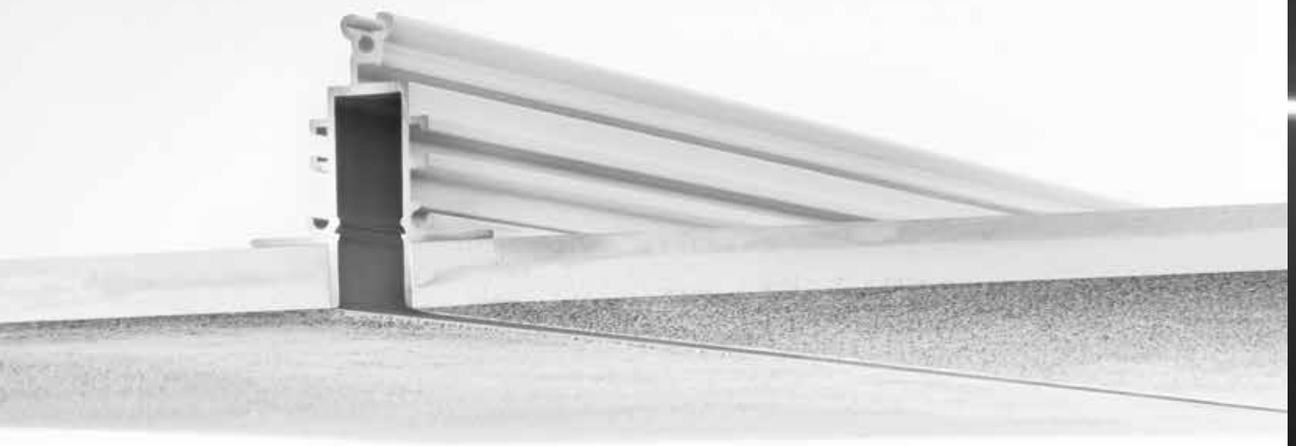
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
12W	1635lm	1582lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

SPOT CON SORGENTI LED COB 12W
SPOTLIGHT WITH 12W LED COB



HIDDEN 17

Design **Mario Mazzer**

SISTEMA AD INCASSO SENZA CORNICE INTEGRATO NELL'ARCHITETTURA, PER ILLUMINAZIONE DIRETTA EFFETTO "LAMA DI LUCE" O INDIRETTA PER LUCE DIFFUSA D'ATMOSFERA.

Profilo estruso in alluminio per cartongesso di spessore 15mm, disponibile nella finitura bianco. Il diffusore in policarbonato opale, posto in posizione arretrata rispetto al bordo inferiore dell'estruso, consente un'emissione più confortevole limitando l'abbagliamento diretto. HIDDEN 17 è ideato per diverse soluzioni architettoniche, e permette di creare linee di luce continue tra parete e soffitto.

TRIMLESS RECESSED SYSTEM BUILT INTO THE ARCHITECTURE FOR DIRECT LIGHT BLADE EFFECT OR INDIRECT MOOD LIGHT.

Aluminium extruded profile for 15mm plasterboard avalable in white finish.
The opal polycarbonate diffuser is set back to the lower profile edge thus emitting a more pleasant light and reducing glaring.
HIDDEN 17 is designed for a variety of architectural solutions and produces continuous light lines between wall and ceiling.

HIDDEN 17

Design **Mario Mazzer**

Sistema senza cornice ad incasso o semi incasso, integrato nell'architettura per illuminazione diretta effetto "lama di luce" o indiretta per luce diffusa d'atmosfera.

Trimless recessed or semi-recessed system built into the architecture for direct Light blade effect or Indirect mood light.

Sorgenti luminose:
Stripled **24,5W/m** e **14,4W/m**, posizionata nell'estruso e protetta da diffusore opale.

Ottica del sistema:
Diffusore opalino: **W** 120°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI), elettronico, dimmerabile digitale multifunzione (DALI/1-10V/SWITCH-DIM).

Classificazione:
C.I. III, Marchio F, IP20.

Emissione luminosa:
Indiretta o diretta.

Caratteristiche costruttive:
Profilo strutturale in alluminio estruso verniciato a polveri. Diffusore in policarbonato opalino. Viterie e giunti in acciaio.

Lamp sources:
*StripLED **24.5W** and **14.4W** positioned into the profile and protected by the opal diffuser.*

Optics of the system:
*Opal diffuser: **W** 120°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital electronic dimmable (DALI), multifunctional digital dimmable.

Classification:
I.C. III, Mark F, IP20.

Light emission:
Indirect or direct.

Constructive features:
Powder painted extruded aluminium structural profile. Polycarbonate opal diffuser. Steel screws and joints.

Ottiche
Optics:

W 120°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM		DIRECT / INDIRECT LIGHT
StripLED	Opal diffuser	**120°**	24,5W/m 14,4W/m

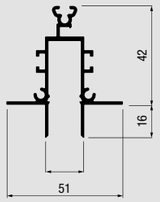
COLORI
COLOURS

16 Bianco
White

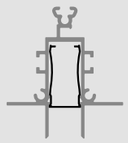
Illuminazione diretta effetto "**lama di luce**", o indiretta per luce **diffusa d'atmosfera**.

*Direct **blade effect** light or **indirect mood** light.*

Profilo estruso
Extruded profile



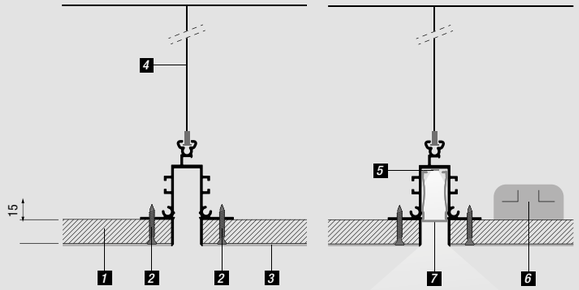
Profilo diffusore
Diffuser profile



La sezione ad “U”
del nuovo diffusore opalino
ne facilita l’installazione
e la manutenzione, inoltre
garantisce una maggiore
stabilità della stripLED
all’interno dell’estruso.

New U-shaped slot-in polycarbonate diffuser for easy installation and maintenance, also assuring better LED strip stability within the extruded profile.

VERSIONE INCASSO
RECESSED VERSION



FISSAGGIO DEL PROFILO ESTRUSO
EXTRUDED PROFILE FIXING

Il posizionamento dell’estruso avviene in corso d’opera del cartongesso

The extruded profile may be fixed from below by cutting the finished plasterboard.

FISSAGGIO DELLA STRIPLED
STRIPLED FIXING

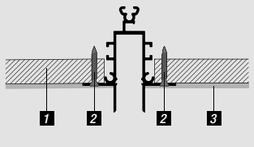
Il taglio della stripLED è consentito solo ogni 3cm (stipLED 24,5W/m), ed ogni 5cm (stipLED 14,4W/m).

StripLED cutting is only possible every 3cm (stripLED 24.5W/m), and every 5cm (stripLED 14.4W/m).

VERSIONE SEMI-INCASSO
SEMI-RECESSED SYSTEM INSTALLATION

LEGENDA

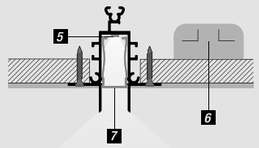
1. Cartongesso spessore 15mm
   Plasterboard thickness 15mm
2. Vite di fissaggio
   Fixing screw
3. Stucco
   Filler
4. Cavetto di sospensione di sicurezza (opzionale)
   Hanging safety cord (optional)
5. StripLED
   StripLED
6. Alimentatore
   Power supply unit
7. Diffusore
   Diffuser



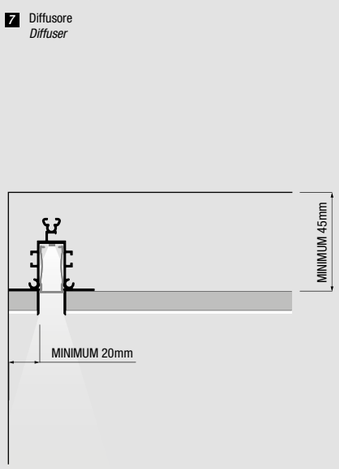
FISSAGGIO DEL PROFILO ESTRUSO
EXTRUDED PROFILE FIXING

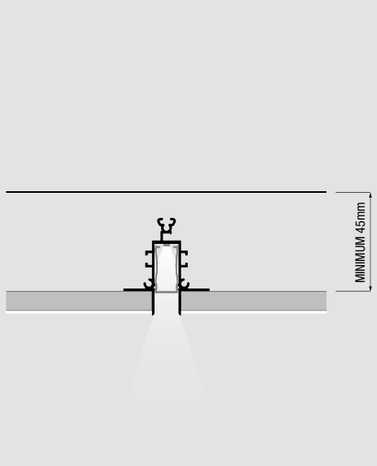
Possibilità di fissaggio dell’estruso dal basso verso l’alto su cartongesso già ultimanto

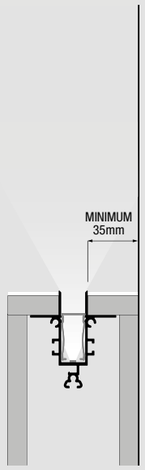
Cut out the plasterboard to fix the plasterboard in



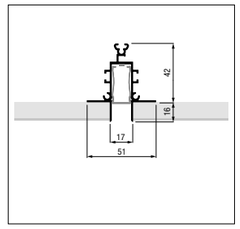
FISSAGGIO DELLA STRIPLED
STRIPLED FIXING







Profilo estruso senza cornice per cartongesso, completo di stripLED e diffusore opalino. Alimentatore e tappi da ordinare separatamente.
Trimless extruded profile for plasterboard complete with stripLED and opal diffuser. Power supply unit and end caps to be ordered separately.



Colours: 16

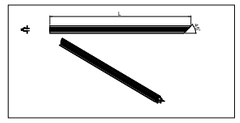
IP20

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDDEN-17	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**4756**
HIDDEN-17	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**4757**
HIDDEN-17	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**4760**
HIDDEN-17	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**4761**
HIDDEN-17	24,5W 24Vdc	LED NW	1m	ELE	●	**4750**
HIDDEN-17	24,5W 24Vdc	LED WW	1m	ELE	●	**4751**
HIDDEN-17	49W 24Vdc	LED NW	2m	ELE	●	**4752**
HIDDEN-17	49W 24Vdc	LED WW	2m	ELE	●	**4753**
HIDDEN-17	73,5W 24Vdc	LED NW	3m	ELE	●	**4754**
HIDDEN-17	73,5W 24Vdc	LED WW	3m	ELE	●	**4755**

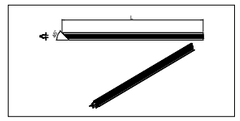
EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming the interface needs to be combined with the electronic power supply.

Profilo estruso come sopra descritto con tagli differenti per composizioni angolari in piano o angolari parete/soffitto
Extruded profile as described above with various corner cut-outs for angle wall or ceiling installations.

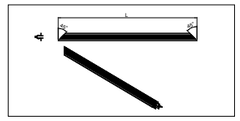
Colours: 16



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD17-DX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475E**
HIDD17-DX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475F**
HIDD17-DX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475G**
HIDD17-DX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475H**

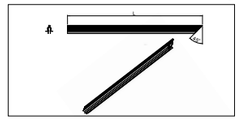


TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD17-SX	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475L**
HIDD17-SX	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475M**
HIDD17-SX	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475N**
HIDD17-SX	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475P**



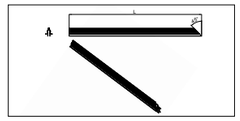
TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD17-DS	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475S**
HIDD17-DS	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475T**
HIDD17-DS	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**475V**
HIDD17-DS	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**475Z**

Diffusione luce interna *Inwards light diffusion*



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD17-PS	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**476E**
HIDD17-PS	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**476F**
HIDD17-PS	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**476G**
HIDD17-PS	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**476H**

Diffusione luce esterna *Outwards light diffusion*



TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
HIDD17-PS	24,5W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**476L**
HIDD17-PS	24,5W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**476M**
HIDD17-PS	14,4W/m 24Vdc	LED NW	Per linear metre (maximum 5m)	ELE	●	**476N**
HIDD17-PS	14,4W/m 24Vdc	LED WW	Per linear metre (maximum 5m)	ELE	●	**476P**

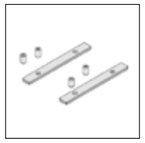
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
14,4W	1320lm/m	1200lm/m	30%
24,5W	1980lm/m	1917lm/m	30%

ACCESSORI
ACCESSORIES

Giunto lineare (Kit).
Linear connector (Kit).



Colours: 00

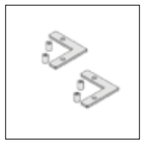
TYPE	CODE
HIDD17-GL	**4770**

Giunto angolare (Kit).
Corner connector (Kit).

Colours: 00

TYPE	CODE
HIDD17-GA	**4771**

Giunto angolare parete/soffitto (Kit).
Corner connector wall/ceiling (Kit).



Colours: 00

TYPE	CODE
HIDD17-PS	**4773**

Cavetto di sospensione di sicurezza opzionale.
Optional hanging safety cord.

Colours: 23

TYPE	DIM mm	CODE
DIL-KS	L max 3000	**3770**

Tappi di chiusura (2pz.).
End caps (2 pcs).

Colours: 00

TYPE	CODE
HIDD17-TC	**4772**

Alimentatore elettronico.
Electronic power supply unit.

Colours: 00

TYPE	WIRING	CODE
TR-CD03	35W	**5376**
TR-CD06	60W	**5377**
TR-CD10	100W	**5378**
TR-CD15	180W	**5379**

Interfaccia DALI/1-10V/SWITCH-DIM (per strip led)
DALI /1-10V/SWITCH-DIM interface (for led strip).

Colours: 00

TYPE	WATTAGE		CODE
TR-ID	max 120W	DALI	**4723**
TR-FA	max 120W	DALI/1-10V/ SWITCH-DIM	**4775**

Distanza massima tra interfaccia e l'inizio della strip LED è di 5m.
Maximum distance between the interface and the beginning of the LED strip is 5m.

THOT EVO

Design **Mizar**

SISTEMA AD INCASSO, SOSPENSIONE E PARETE, CON E SENZA CORNICE, PER ILLUMINAZIONE DIRETTA DIFFUSA, DIRETTA PUNTUALE E WALL WASHER.

Profilo estruso in alluminio proposto nelle versioni con e senza cornice.
È possibile scegliere tra due diverse tipologie di configurazione: semplificata o strutturata.
La prima prevede l'utilizzo di collegamenti semplici realizzati in opera mediante l'ausilio di cablaggi passanti tripolari o pentapolari.

La seconda consente di realizzare sistemi con elevato grado di gestione elettronica grazie all'utilizzo di un cablaggio passante a 7 poli, capace di alimentare e indirizzare con protocollo bus DALI ogni singolo punto luce lungo il profilo.
In questa ultima configurazione l'alimentazione e la gestione dei controlli avvengono sul cablaggio passante attraverso connettori ad innesto rapido sulle morsettiere a 7 poli (5 conduttori per la rete e 2 per il bus) posizionate ad intervalli regolari lungo tutta la lunghezza del cavo eptapolare.

RECESSED, PENDANT AND WALL SYSTEM FOR WALL WASHER, DIRECT DIFFUSE AND ACCENT LIGHTING. AVAILABLE WITH AND WITHOUT FRAME.

Aluminium extruded profile in both versions with and without frame.
Two different configurations are possible, simplified or structured. The former requires simple connections made on site by means of 3 or 5-pole feedthrough wiring, while the latter allows systems with a high level of electronic control to be created by using 7-pole feed-through wiring to power and route every light point on the profile with the DALI bus protocol.
In this latter configuration power supply and controls are carried out on the feed-through wiring with quick connectors on the 7-pole terminal blocks (5 wires for the network and 2 for the bus) placed at regular intervals along the whole heptapolar cable.

THOT EVO

Design **Mizar**

Sistema ad incasso, sospensione e parete, con e senza cornice, per illuminazione diretta diffusa, diretta puntuale e wall washer.

Recessed, pendant and wall light system for wall washer, direct diffuse and accent lighting.

Sorgenti luminose:
Illuminazione diffusa:
LED lineare **25W, 34W** e **42W**, sorgenti fluorescenti lineari T16.
Illuminazione puntuale:
Proiettore con LED COB 10,5W. Sono disponibili anche le versioni con sorgenti alogene e lampade LED.

Ottica del sistema:
Diffusore trasparente: **S** 25° **M** 35°,
Sistema "Polarizing Prism": **F** 50°.
Diffusore opalino **W** 120°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Rotazione del proiettore:
Orientabile ±355° rispetto all'asse verticale, ±45° sul piano orizzontale.

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI), elettronico emergenza SA 1h (3h a richiesta).

Classificazione:
C.I. III, Marchio F, IP20, IP40.

Emissione luminosa:
Diretta diffusa, diretta puntuale e wall washer.

Caratteristiche costruttive:
Canale strutturale in alluminio estruso verniciato a polveri. Diffusori in PMMA e ottiche in alluminio. Proiettori in alluminio Anticorodal verniciati a polveri. Viterie e giunti in acciaio.

Light sources:
Diffuse lighting:
*Linear LED **25W, 34W** and **42W**, T16 fluorescent linear lamp.*
Spot lighting:
Projector with LED COB 10,5W. Halogen and LED lamp versions are also available.

Optics of the system:
*Transparent diffuser: **S** 25° **M** 35°.*
*"Polarizing Prism" System: **F** 50°.*
*Opal diffuser **W** 120°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Rotation of the Projector:
Adjustable ±355° on the vertical axis and ±45° on the horizontal plane.

Wiring:
Electronic, digital electronic dimmable (DALI), electronic emergency 1h SA (3h available on request).

Classification:
I.C. III, Mark F, IP20, IP40

Light Emission
Direct diffuse and accent lighting, wall washer.

Constructive features:
Powder painted extruded aluminium structural profile. PMMA diffusers and aluminium optics. Anticorodal aluminium powder painted projectors. Steel screws and joints.

Ottiche
Optics:

S 25° **M** 35° **F** 50°

SORGENTI LUMINOSE
LIGHT SOURCES

THOT SYSTEM	OPTICS SYSTEM	WIRED PLATE	SPOTLIGHT
LED COB	Transparent diffuser **25° 35°**	-	1x 10,5W 2x 10,5W
	Prismatic diffuser **50°**	-	1x 10,5W 2x 10,5W
Linear LED	Opal diffuser **120°**	25W 34W 42W	-
Fluorescent Lamps T16	-	1x21/39W 2x21/39W 1x28/54W 2x28/54W 1x35/49/80W 2x35/49W	-
Halogen lamps QR-CB 51	-	-	50W
LED Lamps	-	-	9W

THOT STAND ALONE	OPTICS SYSTEM	WIRED PLATE	SPOTLIGHT
Linear LED + LED COB	Opal diffuser **Spot 50°**	25W	1x 10,5W + 1x 10,5W

COLORI
COLOURS

16 Bianco
White

29 Alluminio
Aluminium

16 Bianco
White

28 Grigio argento
Silver grey

SPOTS

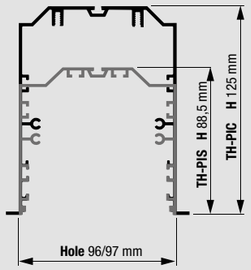
SPOT LENS System
Ottica sfaccettata con diffusore trasparente ad elevato rendimento.
Faceted optics with high-performing transparent diffuser.
***S** 25° **M** 35°*

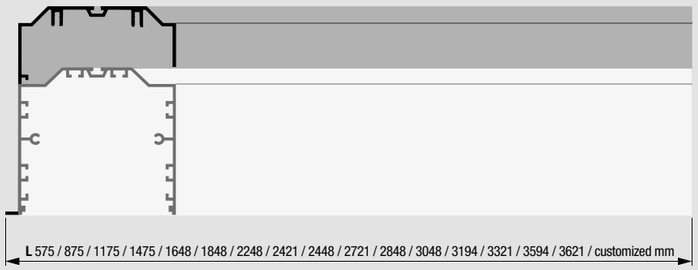
POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico ad elevato rendimento.
Faceted optics with high-performing prismatic diffuser.
***F** 50°*

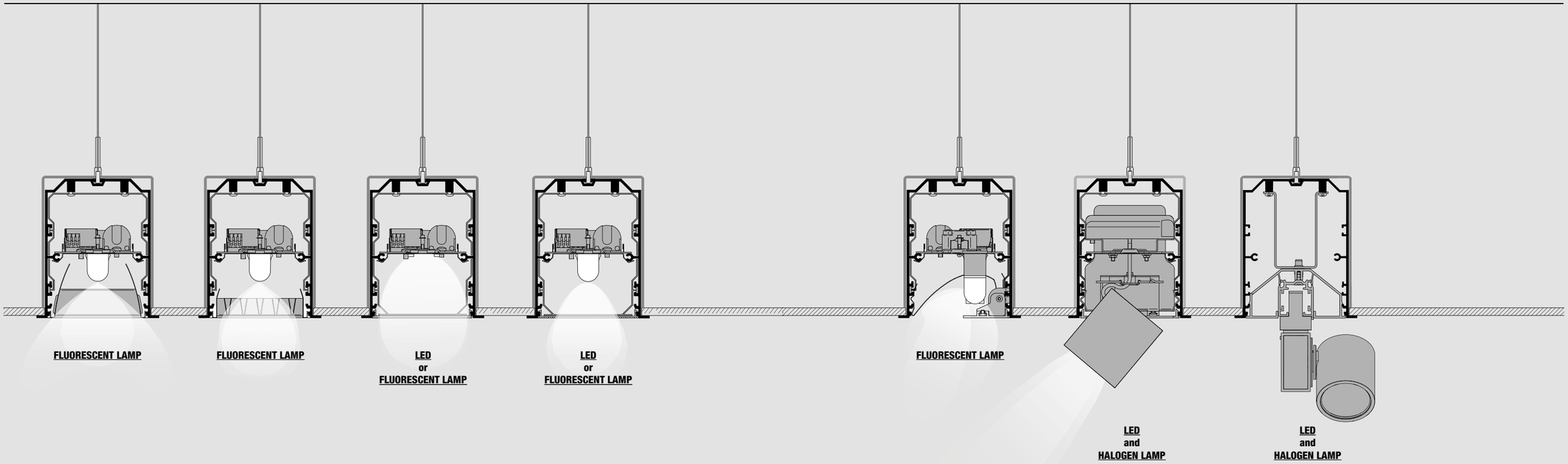
SISTEMI OTTICI
OPTICAL SYSTEMS

Il sistema Thot Evo offre la possibilità di scegliere tra una vasta gamma di ottiche, diffusori e moduli luce per l'illuminazione d'accento: ottica dark light, bassa luminanza, wall washer, diffusore in policarbonato prismatizzato o policarbonato opale; moduli Surround e modulo binario 230V. Tutti i sistemi ottici e i moduli luce sono installabili in entrambi i profili, con e senza cornice.

The Thot Evo system offers the possibility to choose from a wide range of optics, diffusers and light modules for accent lighting. These include dark light optics, low luminance, wall washer, opal or prismatic polycarbonate diffuser, Surround modules and 230V track module.
All optics systems and light modules can be installed on both profiles, with and without frame.







DARK LIGHT
DARK LIGHT

Ottica in alluminio anodizzato speculare.
Riflessione totale = 87%.
Rendimento monolampada = 72%.
Rendimento bilampada = 65%.
UGR < 19.

Anodised specular aluminium optics.
Overall reflection = 87%.
One lamp LOR = 72%.
Two lamps LOR = 65%.
UGR < 19.

LOR: Light Output Ratio
UGR: Unified Glare Rating

BASSA LUMINANZA
LOW BRIGHTNESS

Ottica in alluminio anodizzato opaco.
Riflessione totale = 80%.
Rendimento monolampada = 32%.
Rendimento bilampada = 26%.

Matt anodized aluminium optics
Overall reflection = 80%.
One lamp LOR= 32%.
Two lamps LOR = 26%.

POLICARBONATO OPALE
OPAL POLYCARBONATE

Schermo diffusore in policarbonato opale; garantisce un'ottima uniformità luminosa.
Rendimento LED = 56%.
Rendimento monolampada = 44%.
Rendimento bilampada = 42%.

Opal polycarbonate diffuser
for exceptionally uniform levels of illuminance.
LED LOR = 56%.
One lamp LOR = 44%.
Two lamps LOR = 42%.

POLICARBONATO PRISMATIZZATO
PRISMATIC POLYCARBONATE

Schermo in policarbonato prismatico trasparente; consente una diffusione della luce morbida ed uniforme.
Rendimento LED= 67%.
Rendimento monolampada = 53%.
Rendimento bilampada = 50%.
UGR < 19.

Transparent prismatic polycarbonate diffuser
for a soft and uniform level of illuminance.
LED LOR = 67%.
One lamp LOR = 53%.
Two lamps LOR = 50%.
UGR < 19.

WALL WASHER
WALL WASHER

Ottica alluminio speculare anodizzato.
Riflessione totale = 87%.
Rendimento = 43%

Anodized specular aluminium optics.
Overall reflection = 87%.
LOR = 43%.

MODULO SURROUND
SURROUND MODULE

Il **modulo Surround** risolve ogni esigenza di puntamento grazie alla flessibilità di rotazione sul piano orizzontale di ±45° e sull'asse verticale di 335°.
Il prodotto è completo di alimentatore a bordo.

*The **Surround module** addresses every accent lighting need due to its flexible adjustment ±45° on the horizontal plane and 335° on the vertical axis. The product is supplied complete with power supply unit..*

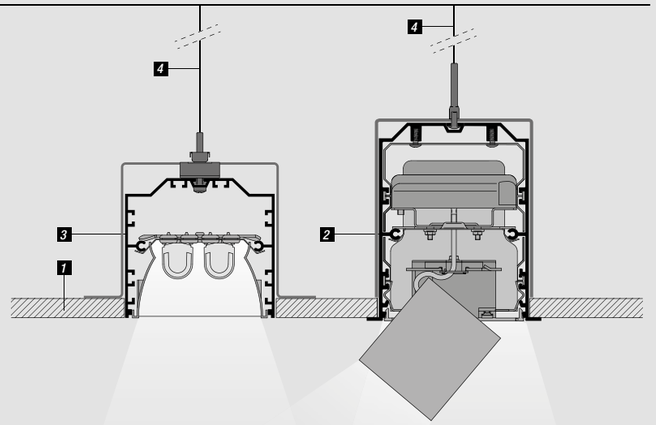
MODULO BINARIO 230V
230V TRACK MODULE

Il **modulo con il binario elettrificato 230V trifase "EUROSTANDARD"** permette l'applicazione di tutti i proiettori della gamma Mizar fino ad un peso massimo consigliato pari a 5kg, con possibilità di 3 accensioni separate a seconda della necessità.

*The **module with the 230V 3-phase "EUROSTANDARD" track** can fit any MIZAR projector up to 5 kilos, as recommended, with the possibility of 3 separate switch-ons based on need.*

COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED CONFIGURATION

— Sistema a soffitto/parete
Wall/Ceiling system
— Sistema a sospensione
Pendant system
— Sistema ad incasso
Recessed system



LEGENDA

1 Cartongesso spessore 12,5mm
Plasterboard thickness 12,5mm

2 Estruso con cornice
Extruded profile with frame

3 Estruso senza cornice
Frameless extruded profile

4 Cavetto di sospensione di sicurezza
Hanging safety cord

5 Kit cablaggio passante a 7 poli
7-pole feed-through wiring

La composizione semplificata gestisce elementi modulari per sorgenti a fluorescenza T16, elementi modulari con sorgenti LED e sorgenti alogene attraverso un collegamento semplice realizzato in opera con l'ausilio del cablaggio passante tripolare o pentapolare.

Composizione - Ordinare sempre:
— Profilo estruso e accessori
— Piastre cablate
— Sistemi ottici e/o moduli luce

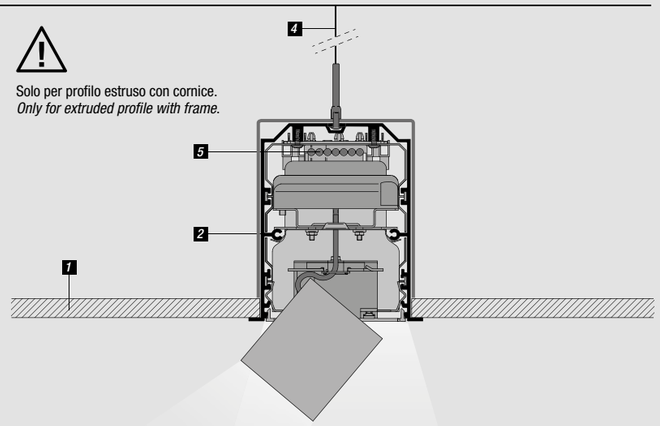
In the simplified configuration the application of the modules for T16 fluorescent lamps, for LED lamps and halogen lamps is carried out by means of a simple connection on site with 3 or 5-pole feed-through wiring.

Composition – Please always order:
— Extruded profile and accessories
— Wired plates
— Optics systems and/or light modules

COMPOSIZIONE STRUTTURATA
STRUCTURED CONFIGURATION

— Sistema ad incasso
Recessed system

Solo per profilo estruso con cornice.
Only for extruded profile with frame.



LEGENDA

1 Cartongesso spessore 12,5mm
Plasterboard thickness 12,5mm

2 Estruso con cornice
Extruded profile with frame

4 Cavetto di sospensione di sicurezza
Hanging safety cord

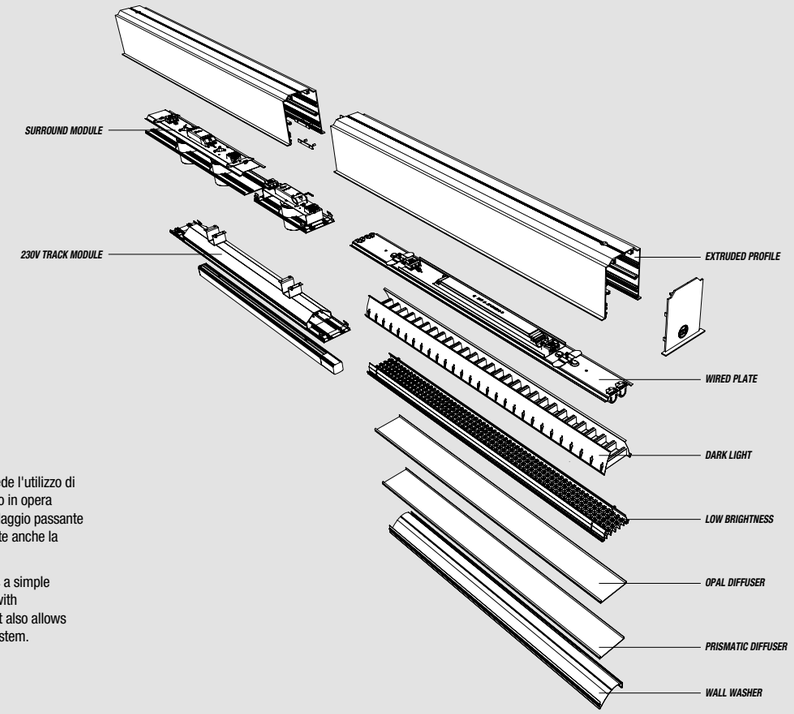
5 Kit cablaggio passante a 7 poli
7-pole feed-through wiring

La composizione strutturata gestisce elementi modulari per sorgenti a fluorescenza T16, elementi modulari con sorgenti LED e sorgenti alogen attraverso un collegamento strutturato che prevede l'utilizzo di un cavo eptapolare ad innesto rapido.

Composizione - Ordinare sempre:
— Profilo estruso e accessori
— Cablaggio passante a 7 poli
— Piastre cablate
— Sistemi ottici e/o moduli luce

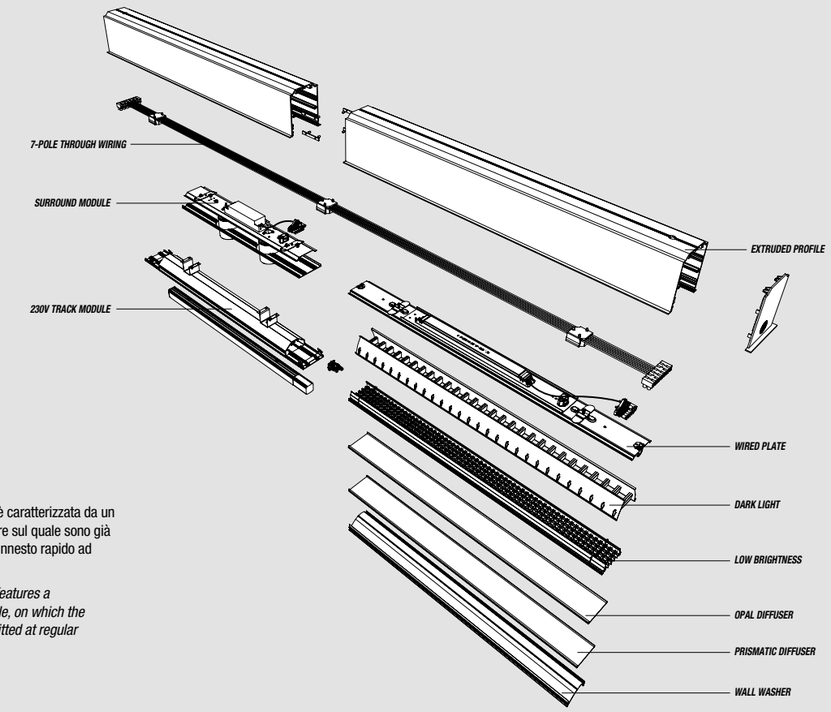
In the structured configuration the application of modules for T16 fluorescent lamps, for LED lamps and halogen lamps is carried out by means of structured wiring with quick connector heptapolar cable.

Composition – Please always order:
— Extruded profile and accessories
— 7-pole feed-through wiring
— Wired plates
— Optics systems and/or light modules



La composizione semplificata prevede l'utilizzo di un collegamento semplice realizzato in opera eventualmente con l'ausilio del cablaggio passante tripolare o pentapolare, che consente anche la gestione con sistema DALI.

The simplified composition requires a simple connection made on site, possibly with 3 or 5-pole feed-through wiring that also allows light to be controlled by the DALI system.



La composizione strutturata è caratterizzata da un cablaggio passante eptapolare sul quale sono già inserite delle morsettiere ad innesto rapido ad intervalli regolari.

The structured composition features a feed-through heptapolar cable, on which the terminal blocks are already fitted at regular intervals.

TYPE A

Led - *Led*

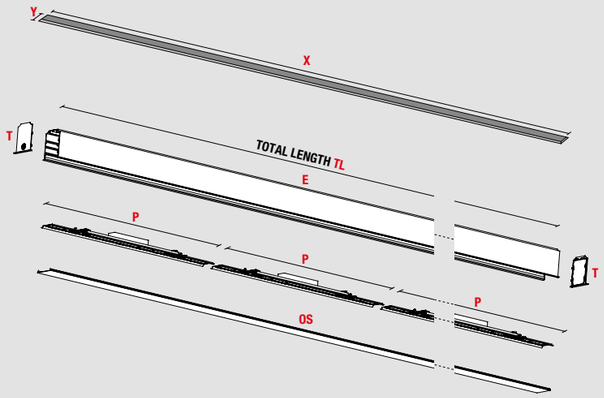
Monolampada - *Single lamp*

Bilampada - *Two-lamps*

Wall washer - *Wall washer*

Moduli luce - *Light modules*

Modulo binario 230V - *230V track module*



TYPE B

Monolampada tuttaluce - *All-ligth single lamp*

Bilampada tuttaluce - *All-ligth two-lamps*

WIRED PLATES P

TYPE A

Piastre cablate LED. ***LED wired plates***

		SIMPLIFIED COMPOSITION						STRUCTURED COMPOSITION					
		TH-PCL						THS-PCL					
L mm	Wattage	Wiring	code	Wiring	code	Wiring	code	Wiring	code	Wiring	code	Wiring	code
873	25W NW	ELE	4950	EDD	49D0	EE1	49M0	ELE	4956	EDD	49D6	EE1	49M6
	25W WW		4951		49D1		49M1		4957		49D7		49M7
1173	34W NW	ELE	4952	EDD	49D2	EE1	49M2	ELE	4958	EDD	49D8	EE1	49M8
	34W WW		4953		49D3		49M3		4959		49D9		49M9
1473	42W NW	ELE	4954	EDD	49D4	EE1	49M4	ELE	4960	EDD	49E0	EE1	49N0
	42W WW		4955		49D5		49M5		4961		49E1		49N1

Piastre cablate T16. ***T16 wired plates***

			SIMPLIFIED COMPOSITION				STRUCTURED COMPOSITION		
			SINGLE LAMP	TWO-LAMP	WALL WASHER - for extruded:		SINGLE LAMP	TWO-LAMP	WALL WASHER
			TH-PCNM	TH-PCNB	With frame TH-PCWW/C	Without frame TH-PCWW/S	THS-PCNM	THS-PCNB	With frame THS-PCWW
Wattage	L mm	Wiring	code	code	code	code	code	code	code
21/39W	873	EMW	4526	4523	4520	45W1	4623	4626	4620
		EMT	45D6	45D3	45D0	45W2	46D3	46D6	46D0
28/54W	1173	EMW	4527	4524	4521	45W3	4624	4627	4621
		EMT	45D7	45D4	45X1	45W4	46D4	46D7	46X1
		EM1	45M7	45M4	45M1	45W5	46M4	46M7	46M1
35/49/80W	1473	EMW	4528	4525	4522	45W6	4625	4628	4622
		EMT	45X8	45D5	45X2	45W7	46D5	46X8	46X2

TYPE B

Piastre cablate tuttaluce T16. ***All-light T16 wired plates***

		SIMPLIFIED COMPOSITION				STRUCTURED COMPOSITION			
		SINGLE LAMP TH-PCTM		TWO-LAMP TH-PCTB		SINGLE LAMP THS-PCTM		TWO-LAMP THS-PCTB	
Wattage	Wiring	L mm	code	L mm	code	L mm	code	L mm	code
21/39W	EMW	873	4529	973	4532	873	4629	973	4632
	EMT		45D9		45E2		46D9		46E2
28/54W	EMW	1173	4530	1273	4533	1173	4630	1273	4633
	EMT		45E0		45E3		46E0		46E3
	EM1		45V0		45V3		46V0		46V3
35/49/80W	EMW	1473	4531	1573	4534	1473	4631	1573	4634
	EMT		45E1		45E4		46E1		46E4

LIGHT MODULES P

				SIMPLIFIED COMPOSITION		STRUCTURED COMPOSITION
				With frame TH-MSUR/C	Without frame TH-MSUR/S	With frame TH-MSUR/C
L mm	Wiring	Wattage		code	code	code
Track modules						
1175	ELE	-		4535	4539	4650
	EDD	-		4536	4599	4651
Surround Modules - 1 Spot						
250	ELE	LED	1x 10,5W (Transparent diffuser)	492#	493#	497#
			1x 10,5W NW (Prismatic diffuser)	4928	4938	4978
			1x 10,5W WW (Prismatic diffuser)	4929	4939	4979
	EDD	QR-CB 51 LED Lamp	50W/9W	47D8	47F2	4680
	ED2		50W/9W	4788	47F1	4688
Surround Modules - 2 Spots						
573	ELE	LED	2x 10,5W (Transparent diffuser)	490#	491#	494#
			2x 10,5W NW (Prismatic diffuser)	4908	4918	4948
			2x 10,5W WW (Prismatic diffuser)	4909	4919	4949
	EDD	QR-CB 51 LED Lamp	2x 50W/9W	45D8	45F2	46D8
	ED2		2x 50W/9W	4588	45F1	4678

EXTRUDED PROFILES E

			WITH FRAME		WITHOUT FRAME	
			Profile TH-PIC	End caps T TH-TC	Profile TH-PIS	End caps T TH-TP
L mm	For composition:		code	code	code	code
875	N° 1 21/39W	**LED, single lamp** and **two-lamp** wired plates	4601		4501	
1175	N° 1 28/54W	**LED, single lamp** and **two-lamp** wired plates	4602		4502	
1475	N° 1 35/49/80W	**LED, single lamp** and **two-lamp** wired plates	4603		4503	
1648	N° 2 21/39W	**All-light single lamp** wired plates	4604		4504	
1848	N° 2 21/39W	**All-light two-lamp** wired plates	4605		4505	
2248	N° 2 28/54W	**All-light single lamp** wired plates	4606		4506	
2421	N° 3 21/39W	**All-light single lamp** wired plates	4607		4507	
2448	N° 2 28/54W	**All-light two-lamp** wired plates	4608		4508	
2721	N° 3 21/39W	**All-light two-lamp** wired plates	4609		4509	
2848	N° 2 35/49/80W	**All-light single lamp** wired plates	4610		4510	
3048	N° 2 35/49W	**All-light two-lamp** wired plates	4611	4642	4511	419C
3194	N° 4 21/39W	**All-light single lamp** wired plates	4612		4512	
3321	N° 3 28/54W	**All-light single lamp** wired plates	4613		4513	
3594	N° 4 21/39W	**All-light two-lamp** wired plates	4614		4514	
3621	N° 3 28/54W	**All-light two-lamp** wired plates	4615		4515	
mL	For linear composition - Maximum 6m		4616		4516	
mL	For plane angle composition - **45° CUT right** - Maximum 6m		461R		451R	
mL	For plane angle composition - **45° CUT left** - Maximum 6m		461L		451L	
mL	For plane angle composition - **45° CUT right-left** - Maximum 6m		461X 461M 461N		461X 461M 461N	
mL	For wall/ceiling composition - **45° CUT** - Maximum 6m		461S 461T		451S 451T	

TOTAL LENGTH TL individual modules	RECESSED HOLE XY individual modules
TL = T + E + T T (End cap) = 2,5mm	X = TL + 2mm
mm	mm
880	Y=97 * X=882
1180	Y=97 * X=1182
1480	Y=97 * X=1482
1653	Y=97 * X=1655
1853	Y=97 * X=1855
2253	Y=97 * X=2255
2426	Y=97 * X=2428
2453	Y=97 * X=2455
2726	Y=97 * X=2728
2853	Y=97 * X=2855
3053	Y=97 * X=3055
3199	Y=97 * X=3201
3326	Y=97 * X=3328
3599	Y=97 * X=3601
3626	Y=97 * X=3628
T + ... (mL) + T	Y=97 * X=TL+2mm
T + ... (mL)	Y=97 * X=TL+2mm
T + ... (mL)	Y=97 * X=TL+2mm
T + ... (mL)	Y=97 * X=TL+2mm
T + ... (mL)	Y=97 * X=TL+2mm

* Per Thot evo incasso a filo: 97mm con parabordi, 96mm senza parabordi.
** For Thot evo recessed flush installation: 97mm with edge protector, 96mm without edge protector.*

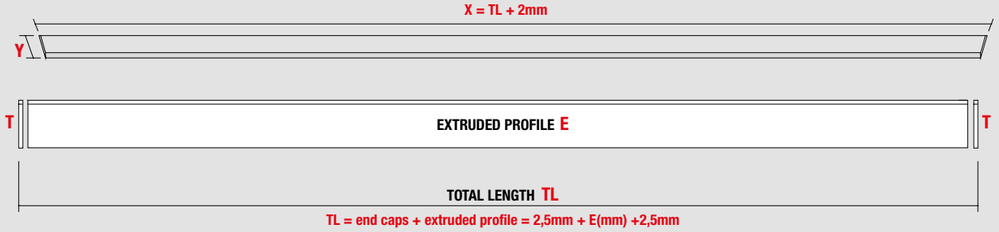
DIFFUSERS AND OPTICS OS

	OPAL DIFFUSERS				PRISMATIC DIFFUSERS			
	90° CUT	45° CUT			90° CUT	45° CUT		
	TH-ODO	right TH-ODO45DX	left TH-ODO45SX	right/left TH-ODO4545	TH-ODP	right TH-ODP45DX	left TH-ODP45SX	right/left TH-ODP4545
L mm	code	code	code	code	code	code	code	code
874	4549	-	-	-	4565	-	-	-
1174	4550	-	-	-	4566	-	-	-
1474	4551	-	-	-	4567	-	-	-
1647	4552	-	-	-	4568	-	-	-
1847	4553	-	-	-	4569	-	-	-
2247	4554	-	-	-	4570	-	-	-
2420	4555	-	-	-	4571	-	-	-
2447	4556	-	-	-	4572	-	-	-
2720	4557	-	-	-	4573	-	-	-
2847	4558	-	-	-	4574	-	-	-
3047	4559	-	-	-	4575	-	-	-
3193	4560	-	-	-	4576	-	-	-
3320	4561	-	-	-	4577	-	-	-
3593	4562	-	-	-	4578	-	-	-
3620	4563	-	-	-	4579	-	-	-
6000	4226	-	-	-	4227	-	-	-
mL	4564 *	456R *	456L *	456X * 456Y *	457A *	457R *	457L *	457X * 457Y *

	DARK LIGHT	LOW LUMINANCE	WALL WASHER
	TH-ODT	TH-OBL	TH-OWW
L mm	code	code	code
874	4543	4540	4546
1174	4544	4541	4547
1474	4545	4542	4548

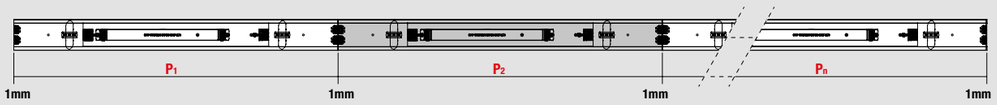
* Per profili estrusi di dimensioni < 4m, ordinare diffusori di lunghezza pari a 1mm in meno rispetto alla lunghezza del profilo estruso.
Per profili estrusi di dimensioni ≥ 4m, ordinare diffusori di lunghezza pari a 2mm in meno rispetto alla lunghezza del profilo estruso.
** On extruded profiles < 4m, please order the diffusers 1mm shorter than the profiles.*
On extruded profiles ≥ 4m, please order the diffusers 2mm shorter than the profiles.

CUT-OUT DIMENSIONS X
X = TL + 2mm



TL = end caps + extruded profile = 2,5mm + E(mm) +2,5mm

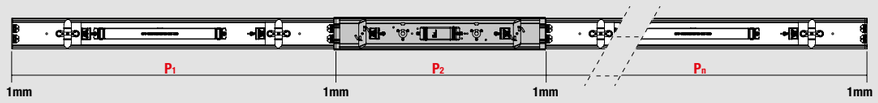
COMPOSIZIONE con Piastre cablate - tipologia "A" - *COMPOSITION with Wiring Plates - type "A"*



E = 1mm + P1(mm) + 1mm + P2(mm) + 1mm + Pn(mm)... + 1mm
TL=2,5mm+E+2,5mm Y= 97*mm X= TL + 2mm

Example: System with three **28/54W TWO-LAMP** WIRED PLATES.
E=1+1173+1+1173+1+1173+1=**3523mm** The extruded profile can be either ordered to your exact size, or by taking the standard longer version, can be cut to size on site.
X=TL+2mm = (2,5+3523+2,5)+2=**3530mm**

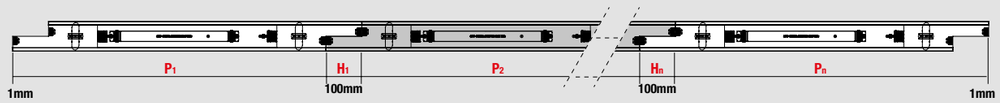
COMPOSIZIONE MISTA con Piastre cablate - tipologia "A" - *MIXED-PLATES COMPOSITION with Wiring Plates - type "A"*



E = 1mm + P1(mm) + 1mm + P2(mm) + 1mm + Pn(mm)... + 1mm
TL=2,5mm+E+2,5mm Y= 97*mm X= TL + 2mm

Example: System with two **28/54W TWO-LAMP** WIRED PLATES and one **SURROUND LIGHT MODULE**.
E=1+1173+1+573+1+1173+1=**2923mm** The extruded profile can be either ordered to your exact size, or by taking the standard longer version, can be cut to size on site.
X=TL+2mm = (2,5+2923+2,5)+2=**2930mm**

COMPOSIZIONE con Piastre cablate - tipologia "B" - *COMPOSITION with Wiring Plates - type "B"*

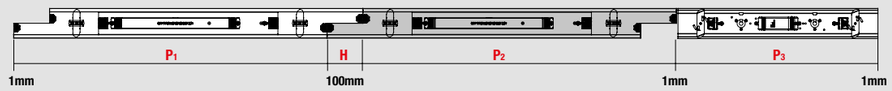


E = 1mm + [P1(mm) + P2(mm) + ... Pn(mm)] - [H1(mm) + ... Hn(mm)] + 1mm
TL=2,5mm+E+2,5mm Y= 97*mm X= TL + 2mm

Example: System with three **28/54W ALL-LIGHT SINGLE LAMP** WIRED PLATES.
E=1+ [1173 +1173 +1173] - [100 + 100] + 1= **3321mm** Please order 4613 or 4513
X=TL+2mm = (2,5+3321+2,5)+2=**3328mm**

Example: System with three **28/54W ALL-LIGHT TWO-LAMP** WIRED PLATES.
E=1+ [1273 +1273 +1273] - [100 + 100] + 1= **3621mm** Please order 4615 or 4515
X=TL+2mm = (2,5+3621+2,5)+2=**3628mm**

COMPOSIZIONE MISTA con Piastre cablate - tipologie "A" e "B" - *MIXED COMPOSITION with Wiring Plates - type "A" and "B"*

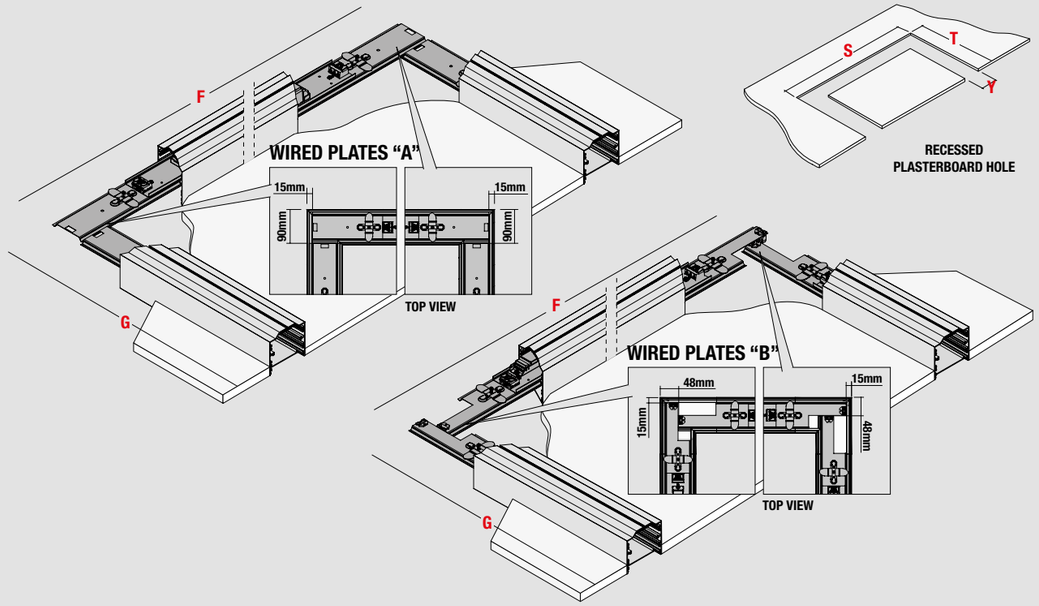


E = 1mm + [P1(mm) + P2(mm) + P3(mm)] - H(mm) + 1mm + 1mm
TL=2,5mm+E+2,5mm Y= 97*mm X= TL + 2mm

Example: System with two **28/54W ALL-LIGHT TWO-LAMP** WIRED PLATES and one SURROUND LIGHT MODULE.
E=1+ [1273 +1273 + 573] - 100 + 1 + 1= **3022mm** The extruded profile can be either ordered to your exact size, or by taking the standard longer version, can be cut to size on site.
X=TL+2mm = (2,5+3022+2,5)+2=**3029mm**

* Per Thot evo incasso a filo: 97mm con paraspigoli, 96mm senza paraspigoli.
** For Thot evo recessed flush installation: 97mm with edge protector, 96mm without edge protector.*

COMPOSIZIONE ANGOLARE IN PIANO con Piastre cablate - tipologia "A" e "B" - *FLAT CORNER COMPOSITION with Wiring Plates - type "A" and"B"*



WIRED PLATES "A"

F = 15mm + P1(mm) + 1 + P2(mm) + 1 + ... Pn(mm) + 15mm
G = 90mm + P1(mm) + 1 + P2(mm) + 1 + ... Pn(mm) + 1mm
Y= 97*mm S= F + 2mm T= G + 2,5mm (end cap) + 2mm

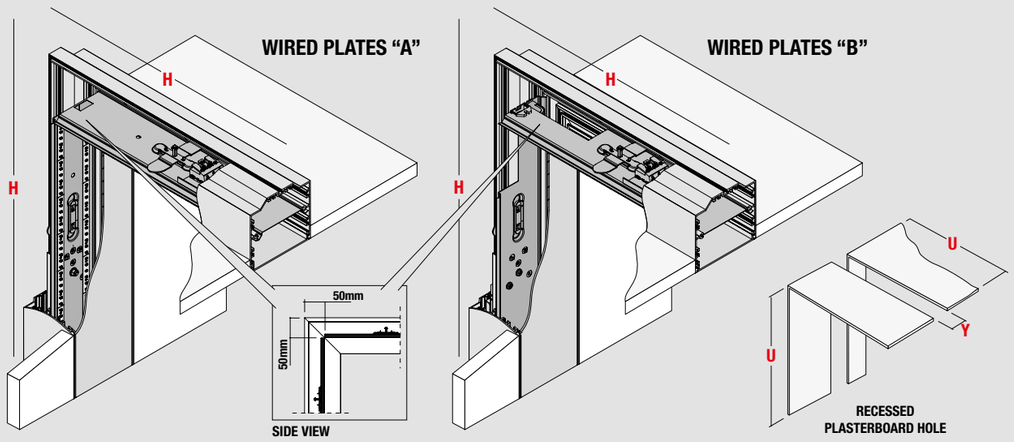
Example: System with two **25W LED** WIRED PLATES.
F=15+873+1+873+15=**1777mm** The extruded profile can be either ordered to your exact size (code: 4616 with frame, 4516 without frame), or by taking the standard longer version, can be cut to size on site.
G=90+873+1+873+ 1= **1838mm**

WIRED PLATES "B"

F = 48mm + [P1(mm) + P2(mm) + ... Pn(mm)] - [H1(mm) + ... Hn(mm)] + 15mm
G = 15mm + [P1(mm) + P2(mm) + ... Pn(mm)] - [H1(mm) + ... Hn(mm)] + 1mm
Y= 97*mm S= F + 2mm T= G + 2,5mm (end cap) + 2mm

Example: System with two **28/54W ALL-LIGHT SINGLE LAMP** WIRED PLATES.
F=48+ [1173 + 1173] - 100 + 15= **2309mm** The extruded profile can be either ordered to your exact size (code: 4616 with frame, 4516 without frame), or by taking the standard longer version, can be cut to size on site.
G=15+ [1173 + 1173] - 100 + 1= **2262mm**

COMPOSIZIONE PARETE-SOFFITTO con Piastre cablate - tipologia "A" e "B" - *WALL-CEILING COMPOSITION with Wiring Plates - type "A" and "B"*



WIRED PLATES "A"

H = 50mm + P1(mm) + 1mm + P2(mm) + 1mm + Pn(mm)... + 1mm
Y= 97*mm U= H + 2,5mm (end cap) + 2mm

Example: System with three **25W LED** WIRED PLATES.
H=50+873+1+873+1+873+1=**2672mm** The extruded profile can be either ordered to your exact size (code: 4616 with frame, 4516 without frame), or by taking the standard longer version, can be cut to size on site.

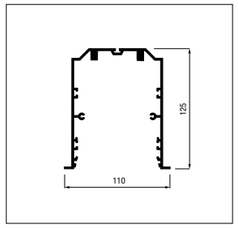
WIRED PLATES "B"

H = 50mm + [P1(mm) + P2(mm) + ... Pn(mm)] - [H1(mm) + ... Hn(mm)] + 1mm
Y= 97*mm U= H + 2,5mm (end cap) + 2mm

Example: System with three **28/54W ALL-LIGHT SINGLE LAMP** WIRED PLATES.
H=50+ [1173 +1173 +1173] - [100 + 100] + 1= **3370mm** The extruded profile can be either ordered to your exact size (code: 4616 with frame, 4516 without frame), or by taking the standard longer version, can be cut to size on site.

PROFILI ESTRUSI
EXTRUDED PROFILES

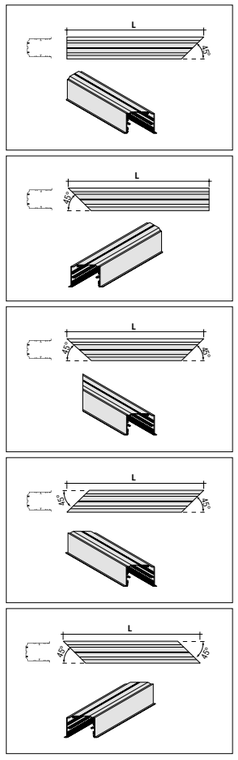
Profilo estruso con cornice per applicazioni ad incasso.
Extruded profile with frame for recessed installation.



Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC/ML	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**4616**
TH-PIC	L 575	**4600**
TH-PIC	L 875	**4601**
TH-PIC	L 1175	**4602**
TH-PIC	L 1475	**4603**
TH-PIC	L 1648	**4604**
TH-PIC	L 1848	**4605**
TH-PIC	L 2248	**4606**
TH-PIC	L 2421	**4607**
TH-PIC	L 2448	**4608**
TH-PIC	L 2721	**4609**
TH-PIC	L 2848	**4610**
TH-PIC	L 3048	**4611**
TH-PIC	L 3194	**4612**
TH-PIC	L 3321	**4613**
TH-PIC	L 3594	**4614**
TH-PIC	L 3621	**4615**

Profilo estruso con cornice per applicazioni ad incasso, con tagli differenti per composizioni angolari in piano.
Extruded profile with frame for recessed installation. The different corner cut-outs allow various plane angle compositions.



Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45DX	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461R**

Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45SX	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461L**

Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45DS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461X**

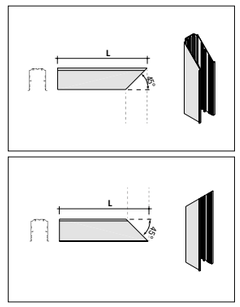
Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45DS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461M**

Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45DS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461N**

Profilo estruso con cornice per applicazioni ad incasso, con tagli differenti per composizioni angolari parete/soffitto.
Extruded profile with frame for recessed installation. The different corner cut-outs allow various wall/ceiling compositions.



Colours: 16 | 29

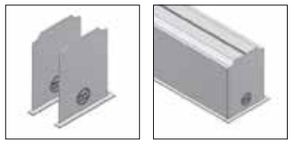
TYPE	DIM mm	CODE
TH-PIC45PS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461S**

Colours: 16 | 29

TYPE	DIM mm	CODE
TH-PIC45PS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**461T**

ACCESSORI
ACCESSORIES

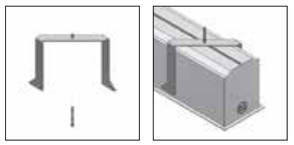
Testate di chiusura (2 pz).
End caps (2 pcs).



Colours: 16 | 28

TYPE	CODE
TH-TC	**4642**

Kit staffa di fissaggio (1pz).
Fastening bracket kit (1pc).



Colours: 00

TYPE	CODE
TH-SKF	**4643**

Cavetto di sospensione di sicurezza opzionale (1pz).
Optional hanging safety cord (1pc).

Colours: 23

TYPE	DIM mm	CODE
DIL-KS	L max 3000	**3770**

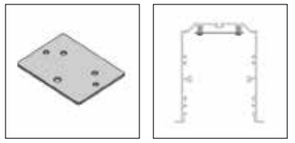
Cablaggio passante a 3 e 5 poli per composizione semplificata.
3 and 5-pole feed-through wiring for simplied composition.

Colours: 00

TYPE		DIM mm		CODE
TH-CP	3-Pole	L 1600		**4583**
TH-CP	5-Pole	L 1600	DALI	**4584**

Solo cavo. *Only cable.*

Piastra per connessioni a 7 poli, per composizione strutturata.
7-pole connection plate for structured composition.



Colours: 00

TYPE	CODE
THS-CCP	**4658**

Morsettiere di chiusura per cablaggio passante a 7 poli.
Per composizione strutturata.
End terminal blocks for 7-pole feed-through wiring.
For structured composition.

Colours: 00

TYPE	CODE
THS-CPM	**4657**

ACCESSORI
ACCESSORIES

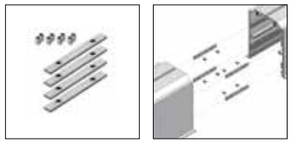
Connessione per cablaggio passante a 7 poli.
Connection for 7-pole feed-through wiring.

Colours: 00

TYPE	CODE
THS-CPC	**4656**

Per composizione strutturata.
For structured composition.

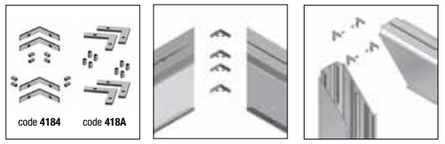
Kit giunti lineari (4 pz).
Kit of linear joints (4 pcs).



Colours: 00

TYPE	CODE
TH-CL	**4188**

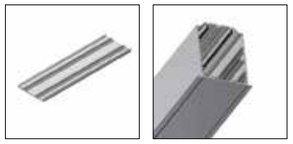
Kit giunti angoli a 45°(4 pz).
Kit of joints for 45° corner (4 pcs).



Colours: 00

TYPE	Per/For	CODE
TH-KA45	Angolo in piano *Flat corner*	**4184**
TH-KA45	Angolo parete/soffitto *Wall/Ceiling corner*	**418A**

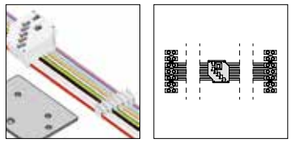
Coperchio di chiusura.
Closing cover.



Colours: 16 29

TYPE	DIM mm	CODE
TH-SCAR	L 300	**4592**
TH-SCAR	L 600	**4593**
TH-SCAR	L 900	**4594**
TH-SCAR	Per linear metre	**459A**

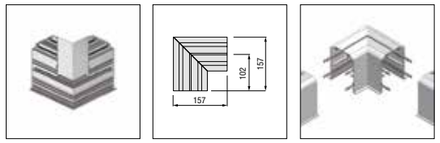
Cablaggio passante a 7 poli per composizione strutturata.
Completo di connessioni, piastre e morsettiere di chiusura.
7-pole feed-through wiring for structured composition; complete with connections, plates and end terminal blocks.



Colours: 00

TYPE	DIM mm	CODE
THS-CP	L 1600 1 connection/plates	**4652**
THS-CP	L 10000 13 connection/plates	**4653**
THS-CP	L 25000 32 connection/plates	**4654**

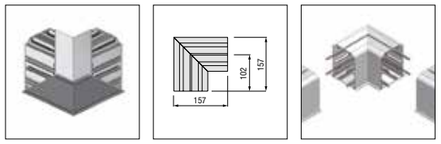
Modulo incasso angolare aperto. Giunti da ordinare separatamente.
Recessed open bottom corner module. Joints to be ordered separately.



Colours: 16 29

TYPE	CODE
TH-MAA	**4640**

Modulo incasso angolare cieco. Giunti da ordinare separatamente.
Recessed corner module with bottom. Joints to be ordered separately.



Colours: 16 29

TYPE	CODE
TH-MAC	**4591**

Controcassa per calcestruzzo.
Outer casing for concrete ceiling.

Colours: 00

TYPE	DIM mm	CODE
TH-CC	L 575	**4635**
TH-CC	L 875	**4636**
TH-CC	L 1175	**4637**
TH-CC	L 1475	**4638**

INSTALLAZIONE AD INCASSO
RECESSED INSTALLATION

— Staffa
Bracket
— Cavo di sicurezza opzionale
Hanging safety cord (optional)

EXTRUDED PROFILE	DIM mm	BRACKET N°	SAFETY CORD N°
TH-PIC code **4600**	L 575	**N° 2** code **4643**	**N° 2** code **3770**
TH-PIC code **4601**	L 875		
TH-PIC code **4602**	L 1175		
TH-PIC code **4603**	L 1475		
TH-PIC code **4604**	L 1648		
TH-PIC code **4605**	L 1848	**N° 3** code **4643**	**N° 3** code **3770**
TH-PIC code **4606**	L 2248		
TH-PIC code **4607**	L 2421		
TH-PIC code **4608**	L2448		
TH-PIC code **4609**	L 2721		
TH-PIC code **4610**	L 2848		
TH-PIC code **4611**	L 3048		
TH-PIC code **4612**	L 3194		
TH-PIC code **4613**	L 3321		
TH-PIC code **4614**	L 3594		
TH-PIC code **4615**	L 3621		

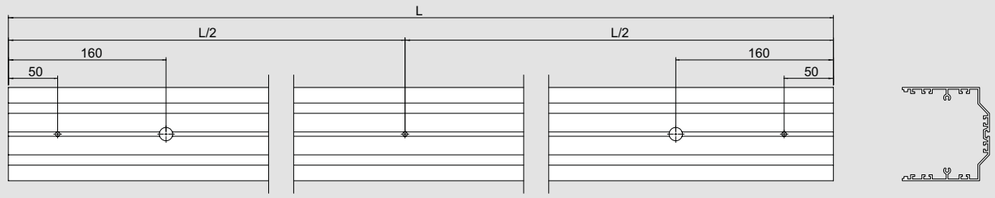
Staffa di montaggio:
Staffa di montaggio per regolazione e fissaggio del profilo all'interno del controsoffitto di cartongesso. Da inserire nel foro soffitto già predisposto, fissaggio tramite avvitamento.

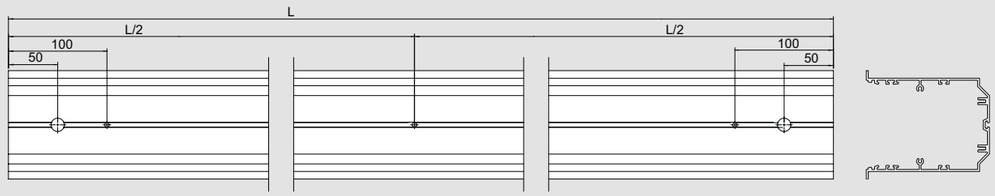
Cavo di sicurezza (opzionale):
Cavo di sospensione di sicurezza. Permette di scaricare il peso dal controsoffitto, e caricarlo direttamente sulla costruzione portante.
Fissaggio sul profilo estruso.
Portata massima: 10 kg.
Lunghezza massima: 3000mm.

Mounting bracket:
Mounting bracket for fixing and levelling the profile into the plasterboard false ceiling.
To be inserted into the ceiling cut-out and screw fastened.

Hanging safety cord (optional):
Hanging safety cord for reducing load on false ceiling, and directly shifting weight to the load-bearing ceiling structure.
Fixing to the extruded profile.
Maximum load bearing capacity: 10 kilos.
Maximum length: 3000mm.

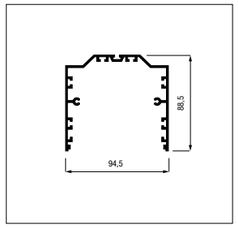
PROFILI ESTRUSI
EXTRUDED PROFILES





PROFILI ESTRUSI
EXTRUDED PROFILES

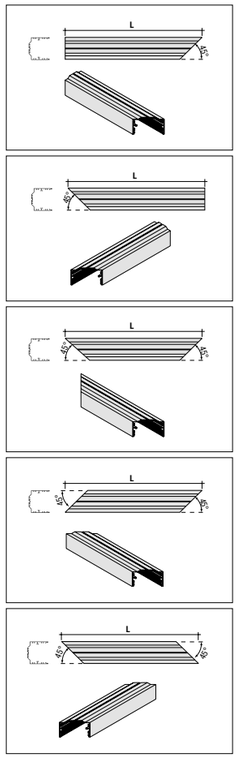
Profilo estruso senza cornice per applicazioni ad incasso, parete/soffitto e a sospensione.
Extruded profile without frame for recessed installation, wall/ceiling and pendant.



Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS/ML	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**4516**
TH-PIS	L 575	**4500**
TH-PIS	L 875	**4501**
TH-PIS	L 1175	**4502**
TH-PIS	L 1475	**4503**
TH-PIS	L 1648	**4504**
TH-PIS	L 1848	**4505**
TH-PIS	L 2248	**4506**
TH-PIS	L 2421	**4507**
TH-PIS	L 2448	**4508**
TH-PIS	L 2721	**4509**
TH-PIS	L 2848	**4510**
TH-PIS	L 3048	**4511**
TH-PIS	L 3194	**4512**
TH-PIS	L 3321	**4513**
TH-PIS	L 3594	**4514**
TH-PIS	L 3621	**4515**

Profilo estruso senza cornice con tagli differenti per composizioni angolari in piano.
Extruded profile without frame. Different corner cut-outs for a variety of flat angle compositions.



Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS45DX	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**451R**

Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS45SX	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**451L**

Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS45DS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**451X**

Colours: 00 | 16 | 29

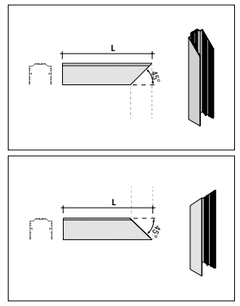
TYPE	DIM mm	CODE
TH-PIS45DS	Al metro lineare (massimo 4m). *Per linear metre (maximum 6m).*	**451M**

Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS45DS	Al metro lineare (massimo 4m). *Per linear metre (maximum 6m).*	**451N**

La finitura 00 (profilo grezzo) è adatta solo per l'applicazione del profilo ad incasso.
The 00 finishing (raw profile) is suitable only for recessed installation.

Profilo estruso senza cornice con tagli differenti per composizioni angolari parete/soffitto.
Extruded profile without frame. The different corner cut-outs allow various wall/ceiling compositions.



Colours: 00 | 16 | 29

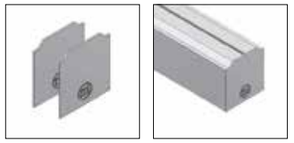
TYPE	DIM mm	CODE
TH-PIS45PS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**451S**

Colours: 00 | 16 | 29

TYPE	DIM mm	CODE
TH-PIS45PS	Al metro lineare (massimo 6m). *Per linear metre (maximum 6m).*	**451T**

ACCESSORI
ACCESSORIES

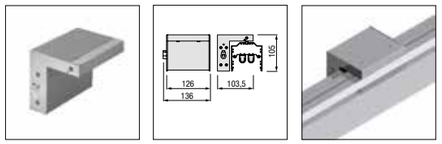
Testate di chiusura (2 pz).
End caps (2 pcs).



Colours: 16 | 28

TYPE	CODE
TH-TP	**419C**

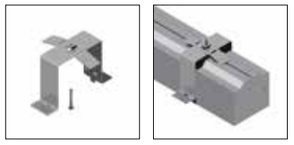
Piastra attacco a parete.
Wall installation plate.



Colours: 16 | 29

TYPE	CODE
TH-AP	**4194**

Kit staffa di fissaggio (1pz).
Fixing bracket kit (1pc).



Colours: 00

TYPE	CODE
TH-SKF	**4309**

Cavo di alimentazione completo di rosone in policarbonato.
Power cable complete with polycarbonate ceiling box.

Colours: 16

TYPE		DIM mm	CODE
TH-AL	3x 1,5mmq	L2000	**4197**
TH-AL	5x 1,5mmq	L2000	**4195**
TH-AL	7x 1,5mmq	L2000	**419A**

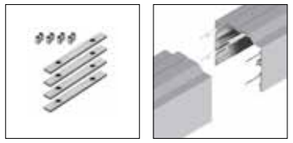
Cavetto di sospensione di sicurezza opzionale (1pz).
Optional hanging safety cord (1pcs).

Colours: 23

TYPE	DIM mm	CODE
DIL-KS	L max 3000	**3770**

ACCESSORI
ACCESSORIES

Kit giunti lineari (4 pz).
Kit of linear joints (4 pcs).



Colours: 00

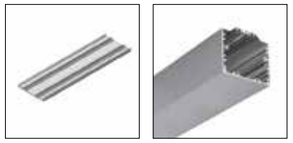
TYPE	CODE
TH-CL	**4188**

Kit giunti angoli a 45° (4 pz).
Kit of joints for 45° corners (4 pcs).

Colours: 00

TYPE	Per/For	CODE
TH-KA45	Angolo in piano *Planar corner*	**4184**
TH-KA45	Angolo parete/soffitto *Wall/Ceiling corner*	**418A**

Coperchio di chiusura.
Closing cover.



Colours: 16 29

TYPE	DIM mm	CODE
TH-SCAR	L 300	**4592**
TH-SCAR	L 600	**4593**
TH-SCAR	L 900	**4594**
TH-SCAR	Per linear metre	**459A**

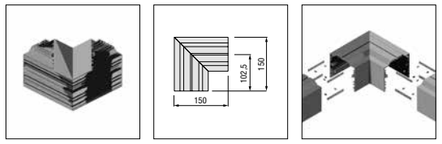
Kit recuperatori di flusso per angolari.
Kit of flux enhancers for corners.

Colours: 23

TYPE	CODE
TH-KRF	**4183**

Modulo incasso angolare aperto, per applicazione del profilo ad incasso.* Giunti da ordinare separatamente.

Recessed open bottom corner module.
Joints to be ordered separately.

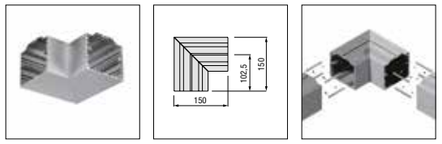


Colours: 16 29

TYPE	CODE
TH-MAA	**4590**

Modulo incasso angolare cieco, per applicazione del profilo ad incasso.* Giunti da ordinare separatamente.

Recessed corner module with bottom.
Joints to be ordered separately.



Colours: 16 29

TYPE	CODE
TH-MAC	**4189**

Controcassa per calcestruzzo.
Outer casing for concrete ceiling.

Colours: 00

TYPE	DIM mm	CODE
TH-CC	L 575	**4595**
TH-CC	L 875	**4596**
TH-CC	L 1175	**4597**
TH-CC	L 1475	**4598**

Cablaggio passante a 3 e 5 poli per composizione semplificata.
3-pole and 5-pole through wiring for simplied composition.

Colours: 00

TYPE	DIM mm	CODE
TH-CP	3-Pole L1600	**4583**
TH-CP	5-Pole L1600 DALI	**4584**

Solo cavo. *Only cable.*

* Per garantire la continuità dell'estruso nelle applicazioni a sospensione ed a parete, si consiglia di utilizzare i profili estrusi a misura con taglio a 45° (rif. TH-PIS45DX, TH-PIS45SX, TH-PIS45DS).

* *To assure profile continuity in pendant and wall applications, it is recommended to use the extruded profiles cut at 45° (ref. TH-PIS45DX, TH-PIS45SX, TH-PIS45DS).*

INSTALLAZIONE AD INCASSO
RECESSED INSTALLATION

— Staffa
Bracket
— Cavo di sicurezza opzionale
Hanging safety cord (optional)

EXTRUDED PROFILE	DIM mm	BRACKET N°	SAFETY CORD N°
TH-PIS code **4500**	L 575		
TH-PIS code **4501**	L 875		
TH-PIS code **4502**	L 1175	**N° 2** code **4309**	**N° 2** code **3770**
TH-PIS code **4503**	L 1475		
TH-PIS code **4504**	L 1648		
TH-PIS code **4505**	L 1848		
TH-PIS code **4506**	L 2248		
TH-PIS code **4507**	L 2421		
TH-PIS code **4508**	L2448		
TH-PIS code **4509**	L 2721		
TH-PIS code **4510**	L 2848	**N° 3** code **4309**	**N° 3** code **3770**
TH-PIS code **4511**	L 3048		
TH-PIS code **4512**	L 3194		
TH-PIS code **4513**	L 3321		
TH-PIS code **4514**	L 3594		
TH-PIS code **4515**	L 3621		

Staffa di montaggio:
Staffa di montaggio per regolazione e fissaggio del profilo all'interno del controsoffitto di cartongesso. Da inserire nel foro soffitto già predisposto, fissaggio tramite avvitamento.

Cavo di sicurezza (opzionale):
Cavo di sospensione di sicurezza. Permette di scaricare il peso dal controsoffitto, e caricarlo direttamente sulla costruzione portante.
Fissaggio sul profilo estruso.
Portata massima: 10 kg.

Mounting bracket:
Mounting bracket for fixing and levelling the profile into the plasterboard false ceiling.
To be inserted into the ceiling cut-out and screw fastened.

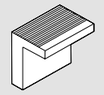
Hanging safety cord (optional):
Hanging safety cord for reducing load on false ceiling, and directly shifting weight to the load-bearing ceiling structure.
Fixing to the extruded profile.
Maximum load bearing capacity: 10 kilos.
Maximum length: 3000mm.

INSTALLAZIONE A PARETE E SOSPENSIONE
WALL AND PENDANT INSTALLATION

— Piastra attacco a parete
Wall installation plate
— Cavo di sospensione
Hanging cord

Per installazioni a plafone il profilo estruso va fissato direttamente sulla superficie (pag. 63)

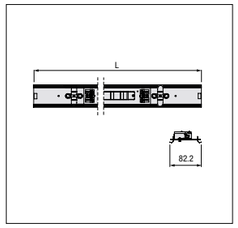
On ceiling application the extruded profile is fixed to the ceiling (pag.63)



EXTRUDED PROFILE	DIM mm	WALL PLATE N°	CABLE N°
TH-PIS code **4500**	L 575		
TH-PIS code **4501**	L 875		
TH-PIS code **4502**	L 1175	**N° 2** code **4194**	**N° 2** code **3770**
TH-PIS code **4503**	L 1475		
TH-PIS code **4504**	L 1648		
TH-PIS code **4505**	L 1848		
TH-PIS code **4506**	L 2248		
TH-PIS code **4507**	L 2421		
TH-PIS code **4508**	L2448		
TH-PIS code **4509**	L 2721		
TH-PIS code **4510**	L 2848	**N° 3** code **4194**	**N° 3** code **3770**
TH-PIS code **4511**	L 3048		
TH-PIS code **4512**	L 3194		
TH-PIS code **4513**	L 3321		
TH-PIS code **4514**	L 3594		
TH-PIS code **4515**	L 3621		

PIASTRE CABLATE LED
PREWIRED LED PLATES

Piastra cablata LED per **estruso con cornice o senza cornice**. Da completare con modulo estruso e diffusore o ottica.
Prewired LED plate for extruded profile with or without frame. To be completed with extruded profile module and diffuser or optics system.



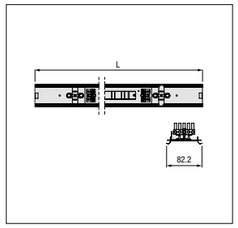
COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION

Colours: 00

IP20

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
TH-PCL	25W	LED NW	L 873	ELE	●	**4950**
TH-PCL	25W	LED WW	L 873	ELE	●	**4951**
TH-PCL	25W	LED NW	L 873	EDD	●	**49D0**
TH-PCL	25W	LED WW	L 873	EDD	●	**49D1**
TH-PCL	25W	LED NW	L 873	EE1	●	**49M0**
TH-PCL	25W	LED WW	L 873	EE1	●	**49M1**
TH-PCL	34W	LED NW	L 1173	ELE	●	**4952**
TH-PCL	34W	LED WW	L 1173	ELE	●	**4953**
TH-PCL	34W	LED NW	L 1173	EDD	●	**49D2**
TH-PCL	34W	LED WW	L 1173	EDD	●	**49D3**
TH-PCL	34W	LED NW	L 1173	EE1	●	**49M2**
TH-PCL	34W	LED WW	L 1173	EE1	●	**49M3**
TH-PCL	42W	LED NW	L 1473	ELE	●	**4954**
TH-PCL	42W	LED WW	L 1473	ELE	●	**4955**
TH-PCL	42W	LED NW	L 1473	EDD	●	**49D4**
TH-PCL	42W	LED WW	L 1473	EDD	●	**49D5**
TH-PCL	42W	LED NW	L 1473	EE1	●	**49M4**
TH-PCL	42W	LED WW	L 1473	EE1	●	**49M5**

Piastra cablata LED per **estruso con cornice**. Da completare con modulo estruso e diffusore o ottica.
Prewired LED plate for extruded profile with or without frame. To be completed with extruded profile module and diffuser or optics system.



COMPOSIZIONE STUTTURATA
STRUCTURED COMPOSITION

Colours: 00

IP20

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
THS-PCL	25W	LED NW	L 873	ELE	●	**4956**
THS-PCL	25W	LED WW	L 873	ELE	●	**4957**
THS-PCL	25W	LED NW	L 873	EDD	●	**49D6**
THS-PCL	25W	LED WW	L 873	EDD	●	**49D7**
THS-PCL	25W	LED NW	L 873	EE1	●	**49M6**
THS-PCL	25W	LED WW	L 873	EE1	●	**49M7**
THS-PCL	34W	LED NW	L 1173	ELE	●	**4958**
THS-PCL	34W	LED WW	L 1173	ELE	●	**4959**
THS-PCL	34W	LED NW	L 1173	EDD	●	**49D8**
THS-PCL	34W	LED WW	L 1173	EDD	●	**49D9**
THS-PCL	34W	LED NW	L 1173	EE1	●	**49M8**
THS-PCL	34W	LED WW	L 1173	EE1	●	**49M9**
THS-PCL	42W	LED NW	L 1473	ELE	●	**4960**
THS-PCL	42W	LED WW	L 1473	ELE	●	**4961**
THS-PCL	42W	LED NW	L 1473	EDD	●	**49E0**
THS-PCL	42W	LED WW	L 1473	EDD	●	**49E1**
THS-PCL	42W	LED NW	L 1473	EE1	●	**49N0**
THS-PCL	42W	LED WW	L 1473	EE1	●	**49N1**

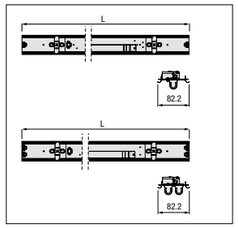
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EE1: Elettronico Emergenza SA 1h
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EE1: Electronic Emergency SA 1h

NOMINAL FLUX / LOR (Light Output Ratio)

			Opal diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
25W	2244lm	2040lm	56%	67%
34W	3036lm	2760lm	56%	63%
42W	3828lm	3480lm	48%	58%

PIASTRE CABLATE PER SORGENTI FLUORESCENTI
PREWIRED-GEAR PLATES FOR FLUORESCENT LAMPS

Piastra cablata per sorgenti fluorescenti. Per **estruso con cornice o senza cornice**. Da completare con modulo estruso e diffusore o ottica.
*Pre-wired plate for fluorescent lamps. For **extruded profile with or without frame**. To be completed with extruded profile and diffuser or optics system.*



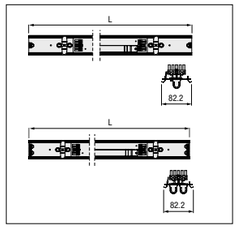
COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION

Colours: 00

TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Monolampada. *Single lamp.*					
TH-PCNM	21/39W	T16 G5	L 873	EMW	**4526**
TH-PCNM	21/39W	T16 G5	L 873	EMT	**45D6**
TH-PCNM	28/54W	T16 G5	L 1173	EMW	**4527**
TH-PCNM	28/54W	T16 G5	L 1173	EMT	**45D7**
TH-PCNM	28/54W	T16 G5	L 1173	EM1	**45M7**
TH-PCNM	35/49/80W	T16 G5	L 1473	EMW	**4528**
TH-PCNM	35/49/80W	T16 G5	L 1473	EMT	**45X8**
Bilampada. *Two-lamps.*					
TH-PCNB	2x 21/39W	T16 G5	L 873	EMW	**4523**
TH-PCNB	2x 21/39W	T16 G5	L 873	EMT	**45D3**
TH-PCNB	2x 28/54W	T16 G5	L 1173	EMW	**4524**
TH-PCNB	2x 28/54W	T16 G5	L 1173	EMT	**45D4**
TH-PCNB	2x 28/54W	T16 G5	L 1173	EM1	**45M4**
TH-PCNB	2x 35/49W	T16 G5	L 1473	EMW	**4525**
TH-PCNB	2x 35/49W	T16 G5	L 1473	EMT	**45D5**

Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

Piastra cablata per sorgenti fluorescenti. Per **estruso con cornice**. Da completare con modulo estruso e diffusore o ottica.
Pre-wired plate for fluorescent lamps. For extruded profile with frame. To be completed with extruded profile and diffuser or optics system.



COMPOSIZIONE STUTTURATA
STRUCTURED COMPOSITION

Colours: 00

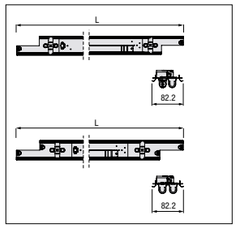
TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Monolampada. *Single lamp.*					
THS-PCNM	21/39W	T16 G5	L 873	EMW	**4623**
THS-PCNM	21/39W	T16 G5	L 873	EMT	**46D3**
THS-PCNM	28/54W	T16 G5	L 1173	EMW	**4624**
THS-PCNM	28/54W	T16 G5	L 1173	EMT	**46D4**
THS-PCNM	28/54W	T16 G5	L 1173	EM1	**46M4**
THS-PCNM	35/49/80W	T16 G5	L 1473	EMW	**4625**
THS-PCNM	35/49/80W	T16 G5	L 1473	EMT	**46D5**
Bilampada. *Two-lamps.*					
THS-PCNB	2x 21/39W	T16 G5	L 873	EMW	**4626**
THS-PCNB	2x 21/39W	T16 G5	L 873	EMT	**46D6**
THS-PCNB	2x 28/54W	T16 G5	L 1173	EMW	**4627**
THS-PCNB	2x 28/54W	T16 G5	L 1173	EMT	**46D7**
THS-PCNB	2x 28/54W	T16 G5	L 1173	EM1	**46M7**
THS-PCNB	2x 35/49W	T16 G5	L 1473	EMW	**4628**
THS-PCNB	2x 35/49W	T16 G5	L 1473	EMT	**46X8**

Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

EMW: Elettronico Multipotenza
EMT: Elettronico Multipotenza Dim Digitale (DALI/SWITCH-DIM)
EM1: Elettronico Multipotenza Emergenza SA 1h
EMW: Electronic Multi-power
EMT: Multi-power Digital Dimmable Electronic (DALI/SWITCH-DIM)
EM1: Multi-power Electronic Emergency SA 1h

PIASTRE CABLATE TUTTALUCE PER SORGENTI FLUORESCENTI
PREWIRED-GEAR PLATES FOR FLUORESCENT LAMPS ALL LIGHT

Piastra cablata tuttaluce per sorgenti fluorescenti. Per **estruso con cornice o senza cornice**. Da completare con modulo estruso e diffusore o ottica.
*pre-wired plate all light for fluorescent lamps. For **extruded profile with or without frame**. To be completed with extruded profile and diffuser or optics system.*



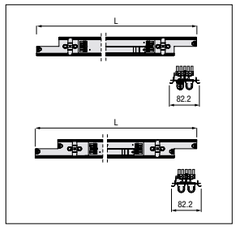
COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION

Colours: 00

TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Monolampada. *Single lamp.*					
TH-PCTM	21/39W	T16 G5	L 873	EMW	**4529**
TH-PCTM	21/39W	T16 G5	L 873	EMT	**45D9**
TH-PCTM	28/54W	T16 G5	L 1173	EMW	**4530**
TH-PCTM	28/54W	T16 G5	L 1173	EMT	**45E0**
TH-PCTM	28/54W	T16 G5	L 1173	EM1	**45V0**
TH-PCTM	35/49/80W	T16 G5	L 1473	EMW	**4531**
TH-PCTM	35/49/80W	T16 G5	L 1473	EMT	**45E1**
Bilampada. *Two-lamps.*					
TH-PCTB	2x 21/39W	T16 G5	L 973	EMW	**4532**
TH-PCTB	2x 21/39W	T16 G5	L 973	EMT	**45E2**
TH-PCTB	2x 28/54W	T16 G5	L 1273	EMW	**4533**
TH-PCTB	2x 28/54W	T16 G5	L 1273	EMT	**45E3**
TH-PCTB	2x 28/54W	T16 G5	L 1273	EM1	**45V3**
TH-PCTB	2x 35/49W	T16 G5	L 1573	EMW	**4534**
TH-PCTB	2x 35/49W	T16 G5	L 1573	EMT	**45E4**

Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

Piastra cablata tuttaluce per sorgenti fluorescenti. Per **estruso con cornice**. Da completare con modulo estruso e diffusore o ottica.
Prewired all light plate for fluorescent lamps. For extruded profile with frame. To be completed with extruded profile and diffuser or optics system.



COMPOSIZIONE STUTTURATA
STRUCTURED COMPOSITION

Colours: 00

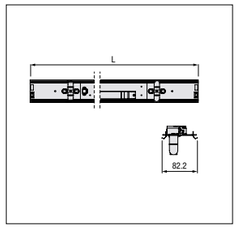
TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Monolampada. *Single lamp.*					
THS-PCTM	21/39W	T16 G5	L 873	EMW	**4629**
THS-PCTM	21/39W	T16 G5	L 873	EMT	**46D9**
THS-PCTM	28/54W	T16 G5	L 1173	EMW	**4630**
THS-PCTM	28/54W	T16 G5	L 1173	EMT	**46E0**
THS-PCTM	28/54W	T16 G5	L 1173	EM1	**46V0**
THS-PCTM	35/49/80W	T16 G5	L 1473	EMW	**4631**
THS-PCTM	35/49/80W	T16 G5	L 1473	EMT	**46E1**
Bilampada. *Two-lamps.*					
THS-PCTB	2x 21/39W	T16 G5	L 973	EMW	**4632**
THS-PCTB	2x 21/39W	T16 G5	L 973	EMT	**46E2**
THS-PCTB	2x 28/54W	T16 G5	L 1273	EMW	**4633**
THS-PCTB	2x 28/54W	T16 G5	L 1273	EMT	**46E3**
THS-PCTB	2x 28/54W	T16 G5	L 1273	EM1	**46V3**
THS-PCTB	2x 35/49W	T16 G5	L 1573	EMW	**4634**
THS-PCTB	2x 35/49W	T16 G5	L 1573	EMT	**46E4**

Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

EMW: Elettronico Multipotenza
EMT: Elettronico Multipotenza Dim Digitale (DALI/SWITCH-DIM)
EM1: Elettronico Multipotenza Emergenza SA 1h
EMW: Electronic Multi-power
EMT: Multi-power Digital Dimmable Electronic (DALI/SWITCH-DIM)
EM1: Multi-power Electronic Emergency SA 1h

PIASTRE CABLATE PER SORGENTI FLUORESCENTI
PREWIRED-GEAR PLATES FOR FLUORESCENT LAMPS

Piastra cablata wall washer per sorgenti fluorescenti. Per **estruso con cornice o senza cornice**. Da completare con modulo estruso e diffusore o ottica.
*Wall-washer prewired-gear plate for fluorescent lamps. For **extruded profile with or without frame**. To be completed with extruded profile and diffuser or optics system.*



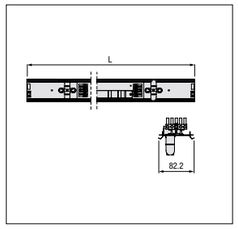
COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION

Colours: 00 IP20 es

TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Per profilo estruso con cornice. *For extruded profile with frame.*					
TH-PCWW/C	21/39W	T16 G5	L 873	EMW	**4520**
TH-PCWW/C	21/39W	T16 G5	L 873	EMT	**45D0**
TH-PCWW/C	28/54W	T16 G5	L 1173	EMW	**4521**
TH-PCWW/C	28/54W	T16 G5	L 1173	EMT	**45X1**
TH-PCWW/C	28/54W	T16 G5	L 1173	EM1	**45M1**
TH-PCWW/C	35/49/80W	T16 G5	L 1473	EMW	**4522**
TH-PCWW/C	35/49/80W	T16 G5	L 1473	EMT	**45X2**
Per profilo estruso senza cornice. *For extruded profile without frame.*					
TH-PCWW/S	21/39W	T16 G5	L 873	EMW	**45W1**
TH-PCWW/S	21/39W	T16 G5	L 873	EMT	**45W2**
TH-PCWW/S	28/54W	T16 G5	L 1173	EMW	**45W3**
TH-PCWW/S	28/54W	T16 G5	L 1173	EMT	**45W4**
TH-PCWW/S	28/54W	T16 G5	L 1173	EM1	**45W5**
TH-PCWW/S	35/49/80W	T16 G5	L 1473	EMW	**45W6**
TH-PCWW/S	35/49/80W	T16 G5	L 1473	EMT	**45W7**

Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

Piastra cablata wall washer per sorgenti fluorescenti. Per **estruso con cornice**. Da completare con modulo estruso e ottica wall washer.
*Wall-washer prewired-gear plate for fluorescent lamps. For **extruded profile with frame**. To be completed with extruded profile and diffuser or optics system.*



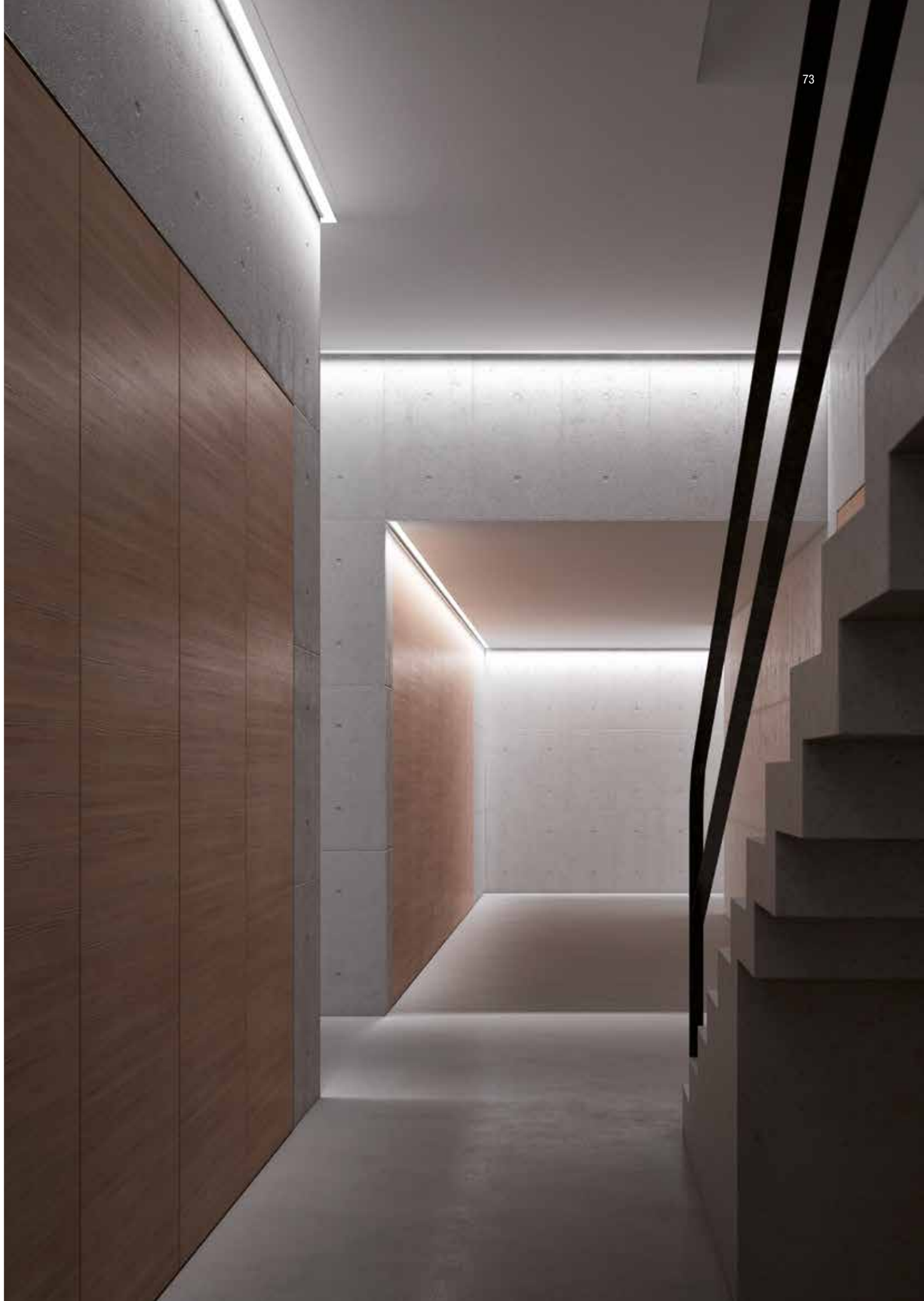
COMPOSIZIONE STUTTURATA
STRUCTURED COMPOSITION

Colours: 00 IP20 es

TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Per profilo estruso con cornice. *For extruded profile with frame.*					
THS-PCWW	21/39W	T16 G5	L 873	EMW	**4620**
THS-PCWW	21/39W	T16 G5	L 873	EMT	**46D0**
THS-PCWW	28/54W	T16 G5	L 1173	EMW	**4621**
THS-PCWW	28/54W	T16 G5	L 1173	EMT	**46X1**
THS-PCWW	28/54W	T16 G5	L 1173	EM1	**46M1**
THS-PCWW	35/49/80W	T16 G5	L 1473	EMW	**4622**
THS-PCWW	35/49/80W	T16 G5	L 1473	EMT	**46X2**

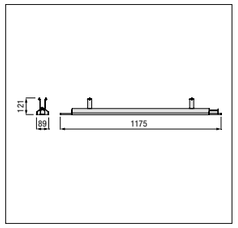
Versione elettronico multipotenza emergenza 3h a richiesta.
Multi-power Electronic 3h Emergency version available on request.

EMW: Elettronico Multipotenza
EMT: Elettronico Multipotenza Dim Digitale (DALI/SWITCH-DIM)
EM1: Elettronico Multipotenza Emergenza SA 1h
EMW: Electronic Multi-power
EMT: Multi-power Digital Dimmable Electronic (DALI/SWITCH-DIM)
EM1: Multi-power Electronic Emergency SA 1h



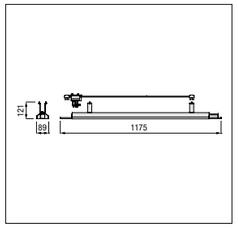
MODULI CON BINARIO 230V E MODULI LUCE
230V TRACK MODULES AND LIGHT MODULES

Modulo con binario 230V (lunghezza 1000mm). Da completare con profilo estruso.
Module with 230V track (1000mm long). To be completed with extruded profile.



COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION
Colours: 16 | 29 — IP20

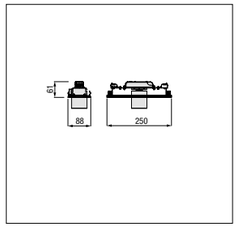
TYPE	WATTAGE	DIM mm	WIRING	CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*				
TH-MBIN/C		1175	ELE	**4535**
TH-MBIN/C		1175	EDD	**4536**
Modulo per profilo estruso senza cornice. *Module for extruded profile without frame.*				
TH-MBIN/S		1175	ELE	**4539**
TH-MBIN/S		1175	EDD	**4599**



COMPOSIZIONE STRUTTURATA
STRUCTURED COMPOSITION
Colours: 16 | 29 — IP20

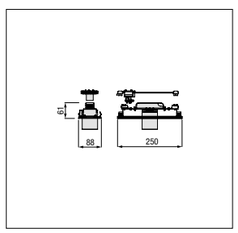
TYPE	WATTAGE	DIM mm	WIRING	CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*				
THS-MBIN/C		1175	ELE	**4650**
THS-MBIN/C		1175	EDD	**4651**

Modulo con 1 proiettore Surround completo di alimentatore. Da completare con profilo estruso.
1-spotlight Surround module including power supply unit. To be completed with extruded profile.



COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION
Colours: 16 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*								
TH-MSUR1/C	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**492#**
TH-MSUR1/C	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4928**
TH-MSUR1/C	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4929**
TH-MSUR1/C	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**47D8**
TH-MSUR1/C	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**4788**
Modulo per profilo estruso senza cornice. *Module for extruded profile without frame.*								
TH-MSUR1/S	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**493#**
TH-MSUR1/S	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4938**
TH-MSUR1/S	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4939**
TH-MSUR1/S	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**47F2**
TH-MSUR1/S	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**47F1**



COMPOSIZIONE STRUTTURATA
STRUCTURED COMPOSITION
Colours: 16 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*								
THS-MSUR1	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**497#**
THS-MSUR1	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4978**
THS-MSUR1	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4979**
THS-MSUR1	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**4680**
THS-MSUR1	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**4688**

Versione LED elettronico dimmerabile digitale (DALI) ed elettronico multipotenza emergenza 3h a richiesta.
LED digital dimmable electronic (DALI) and multi-power Electronic 3h Emergency versions available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim IGBT
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic IGBT

NOMINAL FLUX / LOR (Light Output Ratio)

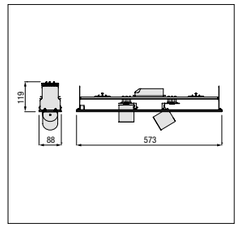
			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1416lm	1330lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

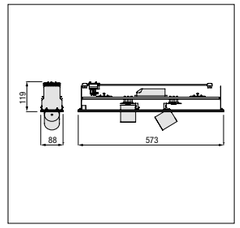
MODULI LUCE
LIGHT MODULES

Modulo con 2 proiettori Surround completo di alimentatore. Da completare con profilo estruso.
2-spotlight Surround module including power supply unit. To be completed with extruded profile.



COMPOSIZIONE SEMPLIFICATA
SIMPLIFIED COMPOSITION
Colours: 16 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*								
TH-MSUR/C	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**490#**
TH-MSUR/C	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4908**
TH-MSUR/C	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4909**
TH-MSUR/C	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**45D8**
TH-MSUR/C	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**4588**
Modulo per profilo estruso senza cornice. *Module for estruded profile without frame.*								
TH-MSUR/S	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**491#**
TH-MSUR/S	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4918**
TH-MSUR/S	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4919**
TH-MSUR/S	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**45F2**
TH-MSUR/S	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**45F1**



COMPOSIZIONE STUTTURATA
STRUCTURED COMPOSITION
Colours: 16 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
Modulo per profilo estruso con cornice. *Module for extruded profile with frame.*								
THS-MSUR/C	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**494#**
THS-MSUR/C	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**4948**
THS-MSUR/C	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**4949**
THS-MSUR/C	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			EDD		**46D8**
THS-MSUR/C	2x 50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**4678**

Versione LED elettronico dimmerabile digitale (DALI) ed elettronico multipotenza emergenza 3h a richiesta.
LED digital dimmable electronic (DALI) and multi-power Electronic 3h Emergency versions available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim IGBT
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic IGBT

NOMINAL FLUX / LOR (Light Output Ratio)

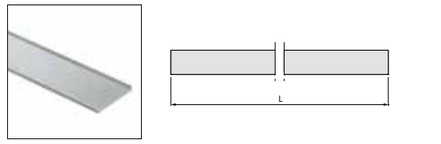
			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1416lm	1330lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

DIFFUSORI
DIFFUSERS

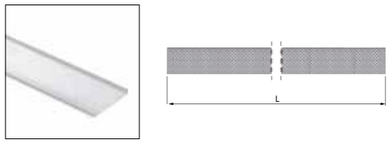
Diffusore in policarbonato opale.
Opal polycarbonate diffuser.



Colours: 16 IP40

TYPE	DIM mm	CODE
TH-ODO/ML	Per linear metre (maximum 6m) *	**4564**
TH-ODO	L 874	**4549**
TH-ODO	L 1174	**4550**
TH-ODO	L 1474	**4551**
TH-ODO	L 1647	**4552**
TH-ODO	L 1847	**4553**
TH-ODO	L 2247	**4554**
TH-ODO	L 2420	**4555**
TH-ODO	L 2447	**4556**
TH-ODO	L 2720	**4557**
TH-ODO	L 2847	**4558**
TH-ODO	L 3047	**4559**
TH-ODO	L 3193	**4560**
TH-ODO	L 3320	**4561**
TH-ODO	L 3593	**4562**
TH-ODO	L 3620	**4563**
TH-ODO	L 6000	**4226**

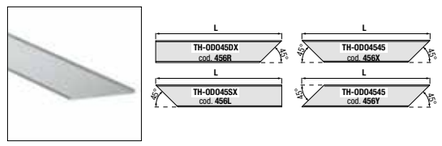
Diffusore in policarbonato prismatizzato.
Prismatic polycarbonate diffuser.



Colours: 02 IP40

TYPE	DIM mm	CODE
TH-ODP/ML	Per linear metre (maximum 6m) *	**457A**
TH-ODP	L 874	**4565**
TH-ODP	L 1174	**4566**
TH-ODP	L 1474	**4567**
TH-ODP	L 1647	**4568**
TH-ODP	L 1847	**4569**
TH-ODP	L 2247	**4570**
TH-ODP	L 2420	**4571**
TH-ODP	L 2447	**4572**
TH-ODP	L 2720	**4573**
TH-ODP	L 2847	**4574**
TH-ODP	L 3047	**4575**
TH-ODP	L 3193	**4576**
TH-ODP	L 3320	**4577**
TH-ODP	L 3593	**4578**
TH-ODP	L 3620	**4579**
TH-ODP	L 6000	**4227**

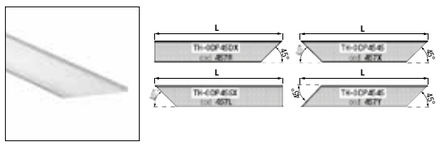
Diffusore in policarbonato opale tagliato a 45°.
Opal polycarbonate diffuser cut at 45°.



Colours: 16 IP40

TYPE	For	CODE
TH-OD045DX	Per linear metre (maximum 6m) *	**456R**
TH-OD045SX	Per linear metre (maximum 6m) *	**456L**
TH-OD04545	Per linear metre (maximum 6m) *	**456X**
TH-OD04545	Per linear metre (maximum 6m) *	**456Y**

Diffusore in policarbonato prismatizzato tagliato a 45°.
Opal prismatic polycarbonate diffuser cut at 45° .



Colours: 02 IP40

TYPE	For	CODE
TH-ODP45DX	Per linear metre (maximum 6m) *	**457R**
TH-ODP45SX	Per linear metre (maximum 6m) *	**457L**
TH-ODP4545	Per linear metre (maximum 6m) *	**457X**
TH-ODP4545	Per linear metre (maximum 6m) *	**457Y**

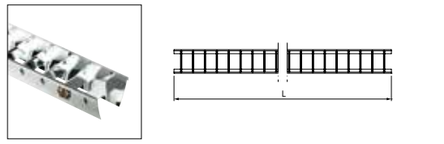
* Per profili estrusi di dimensioni < 4m, ordinare diffusori di lunghezza pari a 1mm in meno rispetto alla lunghezza del profilo estruso.
Per profili estrusi di dimensioni ≥ 4m, ordinare diffusori di lunghezza pari a 2mm in meno rispetto alla lunghezza del profilo estruso.
* *On extruded profiles < 4m, please order the diffusers 1mm shorter than the profiles.*
On extruded profiles ≥ 4m, please order the diffusers 2mm shorter than the profiles.

Per una corretta identificazione dei codici dei diffusori con taglio a 45° desto o sinistro, è necessario progettare il sistema in pianta 2D.
To find the correct codes of the diffusers cut at 45° left or right, it is required to make a 2D top view lighting system design.

Per piastre LED si consiglia l'utilizo del diffusore in policarbonato opale.
For LED plates it is recommended to use the opal polycarbonate diffuser.

OTTICHE
OPTICS

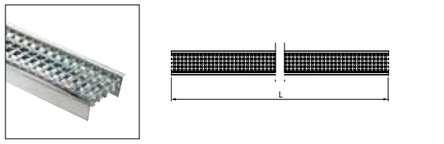
Ottica Dark light.
Dark light optics.



Colours: 23 IP20

TYPE	DIM mm	For	CODE
TH-ODT	L 874	Wired plate 21/39W	**4543**
TH-ODT	L 1174	Wired plate 28/54W	**4544**
TH-ODT	L 1474	Wired plate 35/49/80W	**4545**

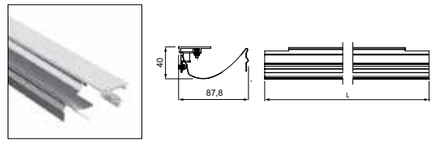
Ottica bassa luminanza.
Low luminance optics.



Colours: 23 IP20

TYPE	DIM mm	For	CODE
TH-OBL	L 874	Wired plate 21/39W	**4540**
TH-OBL	L 1174	Wired plate 28/54W	**4541**
TH-OBL	L 1474	Wired plate 35/49/80W	**4542**

Ottica Wall-Washer completa di carter e di fissaggio.
Wall-Washer optics fitted with cover.

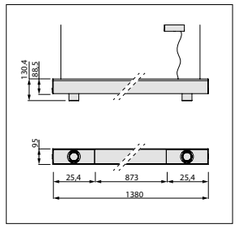


Colours: 16 29 IP20

TYPE	DIM mm	For	CODE
TH-OWW	L 874	Wired plate 21/39W	**4546**
TH-OWW	L 1174	Wired plate 28/54W	**4547**
TH-OWW	L 1474	Wired plate 35/49/80W	**4548**

MODULO SURROUND LED SISTEMA "POLARIZING PRISM"
"POLARIZING PRISM" SYSTEM LED SURROUND MODULE

Apparecchio a sospensione con LED lineare completo di diffusore opalino e due moduli Surround con LED COB - sistema “Polarizing Prism”, alimentatore, tappi di chiusura, cavi di sospensione e rosone.
LED pendant fixture complete with opal diffuser and two LED COB spotlights Surround - “Polarizing Prism” system, power supply unit, end caps, suspension cables and ceiling rose.



Colours: 16 29 IP20

TYPE	WATTAGE	LAMP	WIRING		CODE
THOT-SLED	25W + 2X 10,5W220-240 Vac	LED + LED COB 50° NW	ELE	●	**4178**
THOT-SLED	25W + 2X 10,5W220-240 Vac	LED + LED COB 50° WW	ELE	●	**4179**
THOT-SLED	25W + 2X 10,5W220-240 Vac	LED + LED COB 50° NW	EDD	●	**41W8**
THOT-SLED	25W + 2X 10,5W220-240 Vac	LED + LED COB 50° WW	EDD	●	**41W9**

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

			Opal diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1416lm	1330lm	81%	70%
25W	2244lm	2040lm	56%	67%

BIRD

Design **David Lewis**

SISTEMA A SOSPENSIONE A LUCE DIRETTA E INDIRETTA.

Progettato per l'installazione a sospensione, sia singola che a sistema, Bird è il risultato di una ricerca estetica ed illuminotecnica di altissimo livello che coniuga un design innovativo e funzionale con la più moderna tecnologia dell'illuminare in soli 55mm di spessore.
Nonostante lo spessore minimo, grazie alla sua forma, la struttura è in grado di alloggiare 3 vani ottici: uno nella parte inferiore e due nella parte superiore.
È possibile gestire la modalità con la quale illuminare un locale: diretta, indiretta o combinata in un unico apparecchio.
Le caratteristiche fotometriche consentono di installare il prodotto anche in ambienti con compiti visivi gravosi e direttamente sopra superfici di lavoro con videoterminali.
Tra gli obiettivi progettuali, la semplificazione delle operazioni di installazione e manutenzione.
Il vano alimentatori è integrato nell'apparecchio e facilmente ispezionabile.

DIRECT AND INDIRECT LIGHT PENDANT SYSTEM.

Designed for both individual pendant version and continuous line version, Bird is the result of top-level aesthetic and lighting design research that combines innovative and functional design with state-of-the-art technology in only 55mm thickness.
Despite its minimal thickness and thanks to its shape, the structure can house three optical compartments, one in the lower part and two in the upper section.
It is possible to choose from different lighting modes, direct, indirect or combined in one single fixture.
Thanks to its photometric features BIRD can be installed in settings where heavy-duty visual tasks are required and directly above work surfaces with visual display units.
The design process also aimed at achieving ease of installation and maintenance.
The power supply compartment is built into the luminaire and can be easily inspected.

BIRD

Design **David Lewis**

Sistema a sospensione a luce diretta e indiretta.

Direct and indirect light pendant system.

Sorgenti luminose:
Moduli LED **42W** e **63W**, sorgenti fluorescenti lineari T16.

Ottica dell'apparecchio:
Diffusori superiori: policarbonato trasparente. Diffusori e ottiche inferiori: diffusore prismatizzato, diffusore opalino, ottica dark light.

Caratteristiche del LED:
3000K=WW
4000K=NW
CRI>80

Cablaggio:
Elettronico multipotenza, elettronico multipotenza dimmerabile analogico (1-10V), elettronico multipotenza dimmerabile digitale (DALI/SWITCH-DIM), elettronico emergenza 1h (a richiesta 3h con vano batteria in remoto).

Classificazione:
C.I. I, Marchio F, IP20.

Emissione luminosa:
Singola emissione diretta o indiretta, doppia emissione diretta e indiretta. **UGR<19** con lampade fluorescenti T16 e ottica dark light e con LED/ lampade fluorescenti T16 e diffusore in policarbonato prismatizzato trasparente.

Caratteristiche costruttive:
Struttura in alluminio estruso, diffusori in policarbonato; ottica dark-light in ABS metallizzato sottovuoto ad alto rendimento; parabola interna in alluminio purissimo 99,9%.

Light sources:
*LED modules **42W** and **63W**, T16 linear fluorescent lamp.*

Optics:
Top diffusers: clear transparent polycarbonate. Bottom diffusers and optics: prismatic diffuser, opal diffuser, dark light optics.

LED characteristics:
3000K=WW
4000K=NW
CRI>80

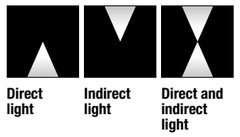
Wiring:
Multi-power electronic ballast, analogue dimmable multi-power electronic ballast (1-10V), digitally dimmable multi-power electronic (DALI/SWITCH-DIM), 1-hour emergency electronic (3-hour emergency version with remote battery unit can be supplied on demand).

Classification:
I.C. I, Mark F, IP20.

Light Emission:
*Direct or indirect single light emission, direct and indirect double light emission. **UGR<19** with T16 fluorescent lamps and dark light optics and with LED/ T16 fluorescent lamps and clear prismatic polycarbonate diffuser.*

Constructive features:
Extruded aluminium structure, polycarbonate diffusers. Dark-light optics in high-performing vacuum-sealed metallic ABS, inside reflector in 99.9% super pure aluminium.

Ottiche
Optics:

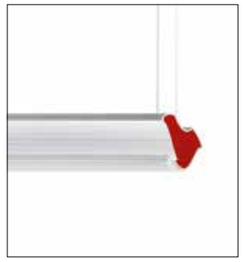


Direct light | **Indirect light** | **Direct and indirect light**

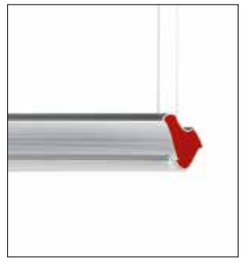
SORGENTI LUMINOSE
LAMP SOURCES

		SINGLE LIGHT EMISSION	DOUBLE LIGHT EMISSION
LED Modules		42W 63W	42W + 2x 21W 63W + 2x 21W
Fluorescent lamps	**T16**	2x 28/54W 2x 35/49W	2x 28/54W + 2x 28/54W 2x 35/49W + 2x 35/49W

COLORI
COLOURS



16 Bianco *White*

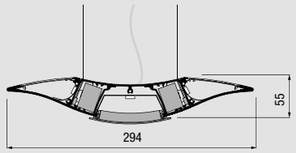


29 Alluminio *Aluminium*

Bird vanta l'impiego di un innovativo principio ottico che vede il diffusore o l'ottica Dark light ribassati rispetto alla sezione del profilo. In questo modo una piccola parte dell'emissione luminosa viene condotta sulla superficie inferiore dell'apparecchio che, grazie ad una texture microrigata, contribuisce a diffondere la luce creando un suggestivo effetto luminoso in grado di abbassare la percezione di luminanze elevate sul diffusore.

Bird boasts an innovative optical principle, by which the diffuser or the dark-light optics are lower than the profile section. Thus the lower part of the luminaire is slightly illuminated and thanks to its micro rifled texture, it enhances light diffusion and creates a striking light effect, that reduces the perception of high luminances on the diffuser.

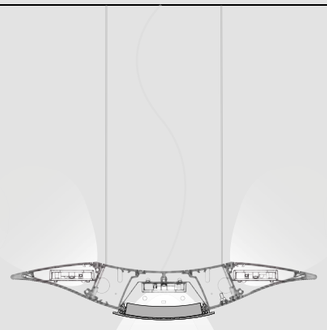
Design ridotto
Minimalist design



In uno spessore di soli 55mm, Bird permette di installare moduli LED e alloggiare da 2 a 4 lampade T16 (luce diretta/indiretta 2+2) con possibilità di gestione separata delle singole accensioni (sopra, sotto, sopra/sotto).
Gli inserti colorati sono posizionati a filo degli estremi del profilo dell'estruso, valorizzando al massimo il minimalismo estetico che contraddistingue il prodotto.
La superficie inferiore dell'apparecchio oltre ad avere una conformazione curvilinea appositamente studiata, presenta una raffinata rigatura superficiale che consente di diffondere su tutta l'ala i raggi divergenti trasmessi dalla fessura laterale ottenuta dall'abbassamento dell'ottica.

Despite being only 55mm thick, Bird can house LED modules and from 2 to 4 T16 lamps (2+2 direct/indirect light) with the possibility of separate switch-ons (up, down, up/down).
The coloured end caps are flush with the profile edges, thus enhancing the minimalist design of the luminaire.
The lower surface of the fixture has a specifically designed curved shape and a refined rifled texture that diffuses over the whole wing the divergent beams from the side slot obtained by lowering the optics.

FLUORESCENT LAMP



LED
or
FLUORESCENT LAMP

LED
or
FLUORESCENT LAMP

OTTICA DARK LIGHT
DARK LIGHT OPTICS

Ottica modulare Dark Light per emissioni dirette controllate a bassa luminanza (UNI EN 12464/1 2004 uni "illuminazione dei posti di lavoro" UGR<19).

Ottica in ABS metallizzato.
Rendimento monoemissione LED= 60%.
Rendimento monoemissione = 52%.
Rendimento biemissione = 43%.
UGR < 19.

Modular Dark light optics for low luminance, directly controlled emissions. *(UNI EN 12464/1 2004 uni "Lighting of work places" UGR<19).*

Metallized ABS optics.
Single emission LED DLOR = 60%.
Single emission DLOR = 52%.
Double emission ULOR = 43%.
UGR < 19.

DLOR: Downward Light Output Ratio
ULOR: Upward Light Output Ratio
UGR: Unified Glare Rating

DIFFUSORE IN POLICARBONATO OPALE
OPAL POLYCARBONATE DIFFUSER

Policarbonato opale con rendimento fino al 60%. Permette di ottenere una emissione piuttosto diffusa che evita la formazione di contrasti elevati.

Schermo diffusore in policarbonato opale; garantisce un'ottima uniformità luminosa.
Rendimento monoemissione LED= 55%.
Rendimento monoemissione = 67%.
Rendimento biemissione = 52%.

Opal polycarbonate with LOR up to 60%. *Assures a fairly diffused light emission and prevents high contrasts.*

Opal polycarbonate diffuser *for exceptionally uniform levels of illuminance.*
Single emission LED DLOR = 55%.
Single emission DLOR = 67%.
Double emission ULOR = 52%.

DIFFUSORE IN POLICARBONATO PRISMATIZZATO TRASPARENTE
TRANSPARENT PRISMATIC POLYCARBONATE DIFFUSER

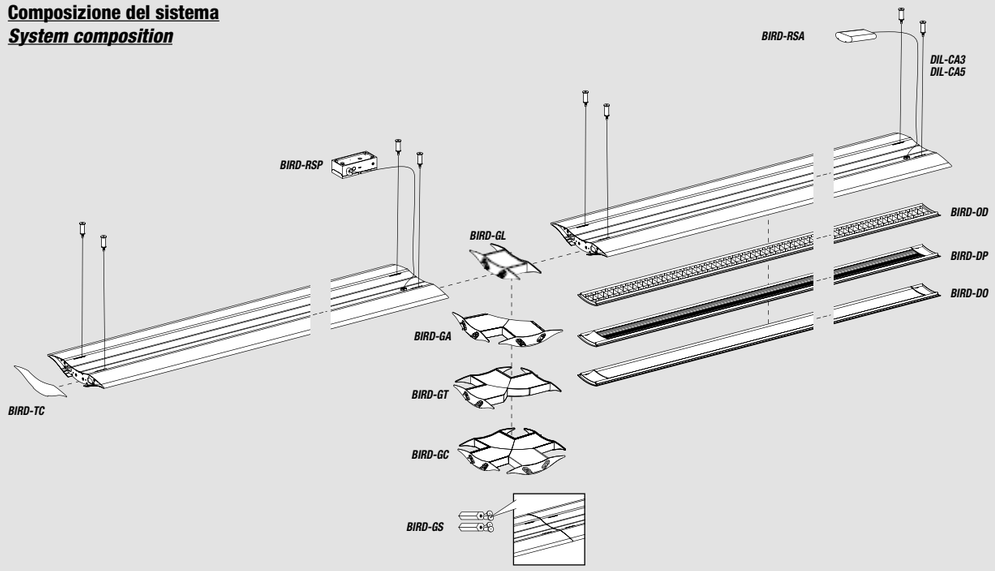
Policarbonato prismatizzato trasparente rendimento fino al 60%. Il diffusore consente di ottenere rendimenti elevati pur mantenendo un'emissione diffusa che consente un'illuminazione uniforme ed omogenea. (UNI EN 12464/1 2004 uni "illuminazione dei posti di lavoro" **UGR<19**).

Schermo in policarbonato prismatico trasparente; consente una diffusione della luce morbida ed uniforme.
Rendimento monoemissione LED = 82%.
Rendimento monoemissione = 72%.
Rendimento biemissione = 68%.
UGR < 19.

Prismatic clear polycarbonate with LOR up to 60%. *The diffuser assures high outputs while maintaining diffuse emission, resulting in even, consistent lighting. (UNI EN 12464/1 2004 uni "Lighting of work places"* ***UGR<19****).*

Transparent prismatic polycarbonate diffuser. *For a soft and uniform level of illuminance.*
Single emission LED DLOR = 82%.
Single emission DLOR = 72%.
Double emission ULOR = 68%.
UGR < 19.

Composizione del sistema
System composition



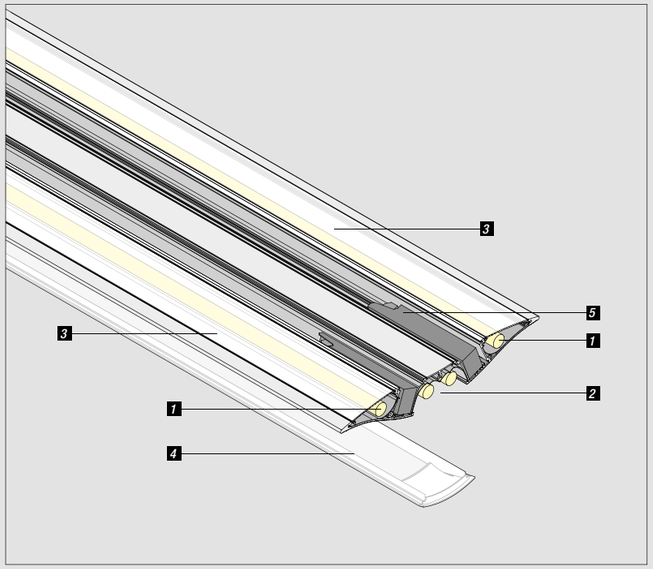
Installazione e manutenzione
Installation and maintenance

Dall'obiettivo progettuale connesso alla semplificazione delle operazioni di installazione e manutenzione, nasce un profilo estruso a cursori integrati che ne correggono eventuali disassamenti e un vano cablaggio dedicato di semplice ispezionabilità.

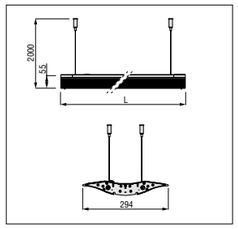
The project's aim of simplifying installation and maintenance leads to designing an extruded profile with integrated sliders to fix any possible offsets and a specific wiring housing that can be easily inspected.

LEGENDA

1. Vano lampada per luce indiretta
   Lamp compartment for indirect light
2. Vano lampada per luce diretta
   Lamp compartment for direct light
3. Diffusore superiore in policarbonato trasparente prismatico
   Top diffuser in transparent prysmatic polycarbonate
4. Diffusore o ottica inferiore
   Bottom diffuser or optics
5. Vano alimentatori
   Power supply housing



Apparecchio luce completo di moduli LED, cavetti di sospensione e cavo di alimentazione 2000mm. Diffusori, rosone e testate di chiusura da ordinare separatamente.
Light fixture complete with LED modules, suspension cables and 2000mm supply cable. Diffusers, ceiling rose and end caps to be ordered separately.

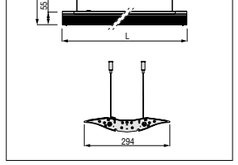


Colours: 16 | 29 — IP20 — 850° — es

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
Monoemissione. *Single emission.*						
BIRD-SML	42W	LED NW	L 1200	ELE	●	**4470**
BIRD-SML	42W	LED WW	L 1200	ELE	●	**4471**
BIRD-SML	42W	LED NW	L 1200	EDT	●	**4472**
BIRD-SML	42W	LED WW	L 1200	EDT	●	**4473**
BIRD-SML	63W	LED NW	L 1500	ELE	●	**4474**
BIRD-SML	63W	LED WW	L 1500	ELE	●	**4475**
BIRD-SML	63W	LED NW	L 1500	EDT	●	**4476**
BIRD-SML	63W	LED WW	L 1500	EDT	●	**4477**
Biemissione. *Double emission.*						
BIRD-SBL	42W + 2x 21W	LED NW	L 1200	ELE	●	**4478**
BIRD-SBL	42W + 2x 21W	LED WW	L 1200	ELE	●	**4479**
BIRD-SBL	42W + 2x 21W	LED NW	L 1200	EDT	●	**4494**
BIRD-SBL	42W + 2x 21W	LED WW	L 1200	EDT	●	**4495**
BIRD-SBL	63W + 2x 21W	LED NW	L 1500	ELE	●	**4496**
BIRD-SBL	63W + 2x 21W	LED WW	L 1500	ELE	●	**4497**
BIRD-SBL	63W + 2x 21W	LED NW	L 1500	EDT	●	**4498**
BIRD-SBL	63W + 2x 21W	LED WW	L 1500	EDT	●	**4499**

Versione elettronico emergenza SA 1h ed elettronico dimmerabile analogico (1-10V) a richiesta.
1-hour emergency SA and analogic dimmable electronic version (1-10V) available on request.

Apparecchio luce per sorgenti fluorescenti completo di cavetti di sospensione e cavo di alimentazione 2000mm. Diffusori/ottica, rosone e testate di chiusura da ordinare separatamente.
Light fixture for fluorescent sources complete with suspension cables and 2000mm supply cable. Diffusers/optics, ceiling rose and end caps to be ordered separately.



Colours: 16 | 29 — IP20 — 850° — es

TYPE	WATTAGE	LAMP	DIM	WIRING	CODE
Monoemissione. *Single emission.*					
BIRD-SM	2x 28/54W	T16 G5	L 1200	EMW	**4400**
BIRD-SM	2x 28/54W	T16 G5	L 1200	EMD	**4402**
BIRD-SM	2x 28/54W	T16 G5	L 1200	EMS	**4420**
BIRD-SM	2x 28/54W	T16 G5	L 1200	EM1	**4404**
BIRD-SM	2x 28/54W	T16 G5	L 1200	EMA	**4422**
BIRD-SM	2x 35/49W	T16 G5	L 1500	EMW	**4401**
BIRD-SM	2x 35/49W	T16 G5	L 1500	EMD	**4403**
BIRD-SM	2x 35/49W	T16 G5	L 1500	EMS	**4421**
BIRD-SM	2x 35/49W	T16 G5	L 1500	EMA	**4423**
Biemissione *Double emission*					
BIRD-SB	2x 28/54W+2x 28/54W	T16 G5	L 1200	EMW	**4410**
BIRD-SB	2x 28/54W+2x 28/54W	T16 G5	L 1200	EMD	**4412**
BIRD-SB	2x 28/54W+2x 28/54W	T16 G5	L 1200	EMS	**4430**
BIRD-SB	2x 28/54W+2x 28/54W	T16 G5	L 1200	EM1	**4414**
BIRD-SB	2x 28/54W+2x 28/54W	T16 G5	L 1200	EMA	**4432**
BIRD-SB	2x 35/49W+ 2x 35/49W	T16 G5	L 1500	EMW	**4411**
BIRD-SB	2x 35/49W+ 2x 35/49W	T16 G5	L 1500	EMD	**4413**
BIRD-SB	2x 35/49W+ 2x 35/49W	T16 G5	L 1500	EMS	**4431**
BIRD-SB	2x 35/49W+ 2x 35/49W	T16 G5	L 1500	EMA	**4433**

Versione elettronico multipotenza emergenza SA 3h (con vano batteria in remoto) a richiesta.
3-hour multi-power emergency SA version (1-10V) available on request (remote battery unit).

ELE: Elettronico
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
EMW: Elettronico Multipotenza
EMD: Elettronico Multipotenza Dim Digitale (DALI)
EMS: Elettronico Multipotenza Dim Digitale (SWITCH-DIM)
EM1: Elettronico Multipotenza Emergenza SA 1h
EMA: Elettronico Multipotenza Dim analogico (1-10V)

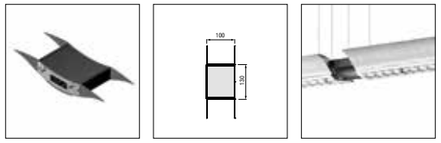
ELE: Electronic
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)
EMW: Electronic Multi-power
EMD: Multi-power Digital Dim Electronic (DALI)
EMS: Multi-power Digital Dim Electronic (SWITCH-DIM)
EM1: Multi-power Electronic Emergency SA 1h
EMA: Multi-power Analogue Dim Electronic (1-10V)

NOMINAL FLUX / LOR (Light Output Ratio)

Single emission			*Opal diffuser*	*Prismatic diffuser*	*Dark light*
LED	**NW**	**WW**	**LOR**	**LOR**	**LOR**
42W	5187lm	5043lm	55%	82%	60%
63W	7780lm	7564lm	55%	82%	60%

ACCESSORI
ACCESSORIES

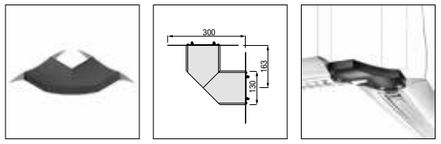
Giunto lineare per fila continua completo di testate di chiusura.
Straight connector for continuous-row system complete with end caps.



Colours: 44 46 48

TYPE	CODE
BIRD-GL	4464

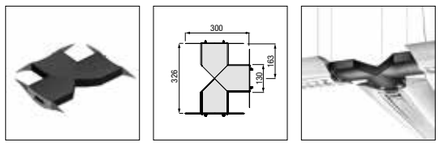
Giunto angolare rigido a "L" completo di testate di chiusura.
"L" connector complete with end caps.



Colours: 44 46 48

TYPE	CODE
BIRD-GA	4462

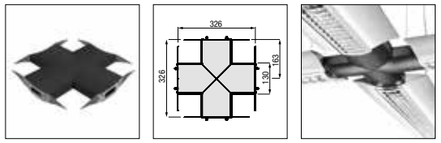
Giunto angolare rigido a “T” completo di testate di chiusura.
"T" connector complete with end caps.



Colours: 44 46 48

TYPE	CODE
BIRD-GT	4461

Giunto angolare rigido a “X” completo di testate di chiusura.
"X" connector complete with end caps.



Colours: 44 46 48

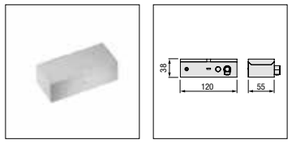
TYPE	CODE
BIRD-GC	4463

Giunto a scomparsa (coppia).
Hidden connector (pair).

Colours: 00

TYPE	CODE
BIRD-GS	4466

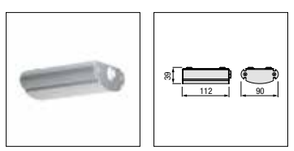
Rosone in materiale termoplastico.
Thermoplastic ceiling rose.



Colours: 02 16

TYPE	CODE
BIRD-RSP	4467

Rosone in alluminio.
Aluminium ceiling rose.



Colours: 16 29

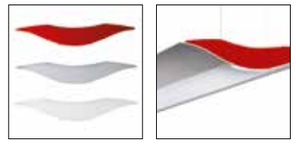
TYPE	CODE
BIRD-RSA	4468

Cavo di alimentazione.
Supply cable.

Colours: 00

TYPE		CODE
DIL-CA3	3x 1,5mm² 2000mm	0716
DIL-CA3	3x 1,5mm² 5000mm	0717
DIL-CA5	5x 1,5mm² 2000mm	0711
DIL-CA5	5x 1,5mm² 5000mm	0712

Testata di chiusura in metallo verniciato.
End cap in painted aluminium.



Colours: 14 16 28

TYPE	CODE
BIRD-TC	4465

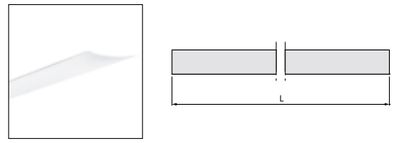
Scatola connessione per cablaggio passante per BIRD-GT e BIRD-GC.
Connection box for through wiring for BIRD-GT ancd BIRD-GC.

Colours: 00

TYPE	CODE
TR-KC68	537A

DIFFUSORI E OTTICHE
DIFFUSERS AND OPTICS

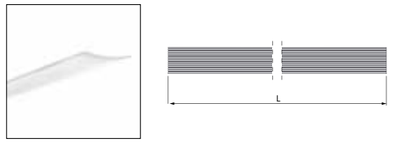
Diffusore in policarbonato opale.
Opal polycarbonate diffuser.



Colours: 16 IP40

TYPE	Per/For	DIM mm	CODE
BIRD-DO	2x 28/54W-42W	L 1200	4453
BIRD-DO	2x 35/49W-63W	L 1500	4454

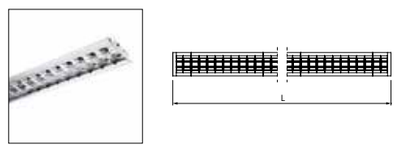
Diffusore prismatizzato trasparente in policarbonato. UGR<19.
Transparent prismatic polycarbonate diffuser. UGR<19.



Colours: 02 IP40

TYPE	Per/For	DIM mm	CODE
BIRD-DP	2x 28/54W-42W	L 1200	4450
BIRD-DP	2x 35/49W-63W	L 1500	4451

Ottica dark light in ABS metalizzato. UGR<19.
Metallized ABS dark light optics. UGR<19.



Colours: 23 IP20

TYPE	Per/For	DIM mm	CODE
BIRD-OD	2x 28/54W-42W	L 1200	4456
BIRD-OD	2x 35/49W-63W	L 1500	4457

SLIM PROFILES FOR STRIPLED

Design **Mizar**

SLIM PROFILES COMPLETI DI STRIPLED IP20, IP65 E IP68 PER INSTALLAZIONE IN INTERNI ED ESTERNI

Serie di profili estrusi in alluminio completi di diffusore in policarbonato opale.
Le stripLED sono particolarmente adatte per creare effetti luce architetturali, lavaggio delle pareti, gestione di scenari RGB, illuminazione in interni di diverse destinazioni d'uso, di teche, zone espositive e spazi umidi come bagni; illuminazione di esterni nei terrazzi coperti, sottotetti, camminamenti e zone esterne coperte.

SLIM PROFILES COMPLETE WITH IP20, IP65 AND IP68 STRIPLED FOR INDOOR AND OUTDOOR APPLICATIONS.

Series of aluminium extruded profiles complete with opal polycarbonate diffuser.
The stripLED fixtures are ideal for a variety of interior effects such as wall-washing applicationsnincluding RGB scenarioncontrol and for indoor lighting of a variety of intended uses,ndisplay cases, exhibition areas and wet premises such as bathrooms.
Outdoor applications include covered terraces, lofts, covered pathways and outdoor areas

SLIM PROFILES FOR STRIPLED

Design **Mizar**

Slim profiles completi di StripLED IP20, IP65 e IP68 per installazione in interni ed esterni coperti.

Slim profiles complete with IP20, IP65 and IP68 stripLED for indoor and covered outdoor applications.

Sorgenti luminose:
StripLED IP20 e IP65 da **7,2W/m**, **14,4W/m**, IP20 da **24,5W/m**, IP68 da **19,2W/m**.

Ottica del prodotto:
Diffusore opalino: **W** 120°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI), elettronico, dimmerabile digitale multifunzione (DALI/1-10V/SWITCH-DIM).

Classificazione:
C.I. III, Marchio F, IP20, IP65, IP68.

Emissione luminosa:
Indiretta o diretta.

Caratteristiche costruttive:
Estruso in alluminio.
Diffusori in PMMA opale.

Light sources
*IP20 and IP50 stripLED **7,2W/m**, **14,4W/m**, IP20 stripLED **24,5W/m,** IP68 stripLED **19,2W/m**,*

Fixture optics:
*Opal diffuser: **W** 120°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital electronic dimmable (DALI), multi-purpose digital electronic dimmable (DALI/1-10V/SWITCH-DIM).

Classification:
I.C. III, Mark F, IP20, IP65, IP68.

Light emission:
Indirect or direct.

Constructive features:
Extruded aluminium profile.
PMMA opal diffusers.

Ottiche
Optics:

W 120°

W 120°
Walk-over

SORGENTI LUMINOSE
LIGHT SOURCES

	StripLED IP20	StripLED IP65	StripLED IP68
StripLED	7,2W/m 14,4W/m 24,5W/m	7,2W/m 14,4W/m	19,2W/m

COLORI
COLOURS

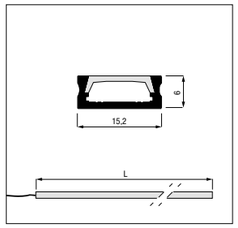
16 Bianco
White

29 Alluminio
Aluminium

SLIM PROFILE COMPLETI DI STRIPLED RGB
StripLED RGB con dispositivi di controllo remoto e sequencer per la creazione di scenari di luce.

SLIM PROFILE COMPLETE WITH RGB STRIPLED
RGB stripLED complete with remote control devices and sequencer to run light scenarios.

Slim profile a plafone completo di stripLED IP20, profilo estruso, diffusore opalino e cavetti di connessione.
Tappi, clips di fissaggio e alimentatore da ordinare separatamente.
Ceiling slim profile complete with IP20 stripLED, extruded profile, opal diffuser and connection cables.
End caps, fixing clips and power supply unit to be ordered separately.



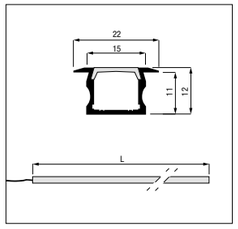
Soffitto/Parete
Ceiling/Wall

Colours: 29

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL-07	7,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2216**
SL-07	7,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2217**
SL-14	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2218**
SL-14	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2219**
SL-24	24,5W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2220**
SL-24	24,5W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2221**
SL-07	14,4W 24Vdc	LED NW	L 2m	ELE	●	**2204**
SL-07	14,4W 24Vdc	LED WW	L 2m	ELE	●	**2205**
SL-14	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2206**
SL-14	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2207**
SL-24	49W 24Vdc	LED NW	L 2m	ELE	●	**2208**
SL-24	49W 24Vdc	LED WW	L 2m	ELE	●	**2209**
SL-07	21,6W 24Vdc	LED NW	L 3m	ELE	●	**2210**
SL-07	21,6W 24Vdc	LED WW	L 3m	ELE	●	**2211**
SL-14	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2212**
SL-14	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2213**
SL-24	73,5W 24Vdc	LED NW	L 3m	ELE	●	**2214**
SL-24	73,5W 24Vdc	LED WW	L 3m	ELE	●	**2215**
StripLED RGB. *RGB StripLED.*						
SL-14RGB	14,4W/m 24Vdc	LED RGB	Per linear metre	ELE	●	**2287**
SL-14RGB	28,8W 24Vdc	LED RGB	L 2m	ELE	●	**2285**
SL-14RGB	43,2W 24Vdc	LED RGB	L 3m	ELE	●	**2286**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

Slim profile ad incasso completo di stripLED IP20, profilo estruso con cornice per cartongesso, diffusore opalino e cavetti di connessione.
Tappi e alimentatore da ordinare separatamente.
Recessed slim profile complete with IP20 stripLED, extruded profile with frame for plasterboard, opal diffuser and connection cables.
End caps and power supply unit to be ordered separately.



Incasso
Downlight

Colours: 29

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL-07C	7,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2234**
SL-07C	7,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2235**
SL-14C	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2236**
SL-14C	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2237**
SL-24C	24,5W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2238**
SL-24C	24,5W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2239**
SL-07C	14,4W 24Vdc	LED NW	L 2m	ELE	●	**2222**
SL-07C	14,4W 24Vdc	LED WW	L 2m	ELE	●	**2223**
SL-14C	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2224**
SL-14C	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2225**
SL-24C	49W 24Vdc	LED NW	L 2m	ELE	●	**2226**
SL-24C	49W 24Vdc	LED WW	L 2m	ELE	●	**2227**
SL-07C	21,6W 24Vdc	LED NW	L 3m	ELE	●	**2228**
SL-07C	21,6W 24Vdc	LED WW	L 3m	ELE	●	**2229**
SL-14C	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2230**
SL-14C	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2231**
SL-24C	73,5W 24Vdc	LED NW	L 3m	ELE	●	**2232**
SL-24C	73,5W 24Vdc	LED WW	L 3m	ELE	●	**2233**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

Profilo estruso completo di stripLED RGB 14,4W/m a richiesta.
Extruded profile complete with 14.4W/m RGB stripLED available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR SL	LOR SL-C
7,2W	650lm/m	600lm/m	70%	50%
14,4W	1320lm/m	1200lm/m	70%	50%
24,5W	1980lm/m	1916lm/m	76%	56%

ACCESSORI
ACCESSORIES

Clip di fissaggio (1 pezzo).
Fixing clip (1 pc).

Colours: 00

TYPE	Per/For	CODE
SL-FSP	IP20 profile	**2290**

Tappi di chiusura forati (2 pezzi).
Perforated end caps (2 pcs).

Colours: 28

TYPE	Per/For	CODE
SL-TF	IP20 profile	**2292**

Tappi di chiusura forati (2 pezzi).
Perforated end caps (2 pcs).

Colours: 28

TYPE	Per/For	CODE
SL-TF	IP20 profile with frame	**2295**

Controllo remoto StripLED RGB.
StripLED RGB remote control.

Colours: 00

TYPE	Per/For	CODE
SL-RGBC	RGB StripLED	**2132**

Sequenzimetro "Touch" StripLED RGB.
Touch stripLED RGB sequencer.

Colours: 00

TYPE	Per/For	CODE
SL-RGBS	RGB StripLED	**2133**

Alimentatore elettronico.
Electronic gear unit.

Colours: 00

TYPE	WIRING	CODE
TR-CD03	35W	**5376**
TR-CD06	60W	**5377**
TR-CD10	100W	**5378**
TR-CD15	180W	**5379**

Interfaccia DALI/1-10V/SWITCH-DIM (per strip led)
DALI /1-10V/SWITCH-DIM interface (for led strip).

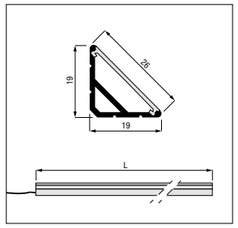
Colours: 00

TYPE	WATTAGE		CODE
TR-ID	max 120W	DALI	**4723**
TR-FA	max 120W	DALI/1-10V/ SWITCH-DIM	**4775**

Distanza massima tra interfaccia e l'inizio della strip LED è di 5m.
Maximum distance between the interface and the beginning of the LED strip is 5m.

EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

Slim profile ad angolo completo di stripLED IP20, profilo estruso, diffusore opalino e cavetti di connessione. Tappi, clips di fissaggio e alimentatore da ordinare separatamente.
Corner slim profile complete with stripLED, extruded profile, opal diffuser and connection cables. End caps, fixing clips and gear unit to be ordered separately.



Applicazione ad angolo
Corner application

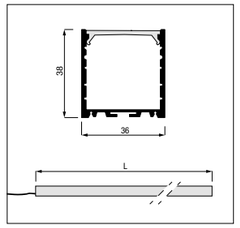
Colours: 16 28

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL-14A	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2244**
SL-14A	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2245**
SL-14A	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2240**
SL-14A	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2241**
SL-14A	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2242**
SL-14A	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2243**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

Profilo estruso completo di stripLED RGB 14,4W/m a richiesta.
Extruded profile complete with 14.4W/m RGB stripLED available on request.

Slim profile a plafone e ad incasso, completo di stripLED IP20, profilo estruso, diffusore opalino e cavetti di connessione. Tappi, clips di fissaggio, staffa di fissaggio per applicazione ad incasso e alimentatore da ordinare separatamente.
Ceiling and recessed slim profile complete with IP20 stripLED, extruded profile, opal diffuser and connection cables. End caps, fixing clips, fixing bracket for recessed installation and gear unit to be ordered separately.



Soffitto/Parete *Ceiling/Wall* Incasso *Downlight*

Colours: 16 28

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL-07D	7,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2192**
SL-07D	7,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2193**
SL-14D	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2194**
SL-14D	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2195**
SL-24D	24,5W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2196**
SL-24D	24,5W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2197**
SL-07D	14,4W 24Vdc	LED NW	L 2m	ELE	●	**2180**
SL-07D	14,4W 24Vdc	LED WW	L 2m	ELE	●	**2181**
SL-14D	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2182**
SL-14D	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2183**
SL-24D	49W 24Vdc	LED NW	L 2m	ELE	●	**2184**
SL-24D	49W 24Vdc	LED WW	L 2m	ELE	●	**2185**
SL-07D	21,6W 24Vdc	LED NW	L 3m	ELE	●	**2186**
SL-07D	21,6W 24Vdc	LED WW	L 3m	ELE	●	**2187**
SL-14D	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2188**
SL-14D	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2189**
SL-24D	73,5W 24Vdc	LED NW	L 3m	ELE	●	**2190**
SL-24D	73,5W 24Vdc	LED WW	L 3m	ELE	●	**2191**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

Profilo estruso completo di stripLED RGB 14,4W/m a richiesta.
Extruded profile complete with 14.4W/m RGB stripLED available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR SL-A	LOR SL-D
7,2W	650lm/m	600lm/m	70%	40%
14,4W	1320lm/m	1200lm/m	70%	40%
24,5W	1980lm/m	1916lm/m	70%	40%

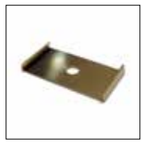
ACCESSORI
ACCESSORIES

Clip di fissaggio trasparente dotata di vite (1 pezzo).
Transparent fixing clip complete with screw (1 pc).

Colours: 00

TYPE	Per/For	CODE
SL-FSP	IP20 corner profile	**2297**

Clip di fissaggio a soffitto (1 pezzo).
Ceiling fixing clip (1 pc).



Colours: 00

TYPE	Per/For	CODE
SL-FSP	IP20 profile	**2299**

Note di installazione: vite UNI5955 M 2,5x19, tassello tipo fischer serie N 4x35
Installation notes: screw type UNI5955 M 2,5x19, ceiling plug fischer-like N 4x35

Staffa di fissaggio per applicazione ad incasso a filo (1 pezzo).
Fixing bracket for flush recessed installation (1 pc).

Colours: 00

TYPE	Per/For	CODE
SL-SF	IP20 profile	**2289**

Per lastre in cartongesso con spessore di 12mm.
For 12mm thick plasterboard panels.

Sequenzimetro "Touch" StripLED RGB.
Touch stripLED RGB sequencer.

Colours: 00

TYPE	Per/For	CODE
SL-RGBS	RGB StripLED	**2133**

Interfaccia DALI/1-10V/SWITCH-DIM (per strip led)
DALI /1-10V/SWITCH-DIM interface (for led strip).

Colours: 00

TYPE	WATTAGE		
TR-ID	max 120W	DALI	**4723**
TR-FA	max 120W	DALI/1-10V/ SWITCH-DIM	**4775**

Distanza massima tra interfaccia e l'inizio della strip LED è di 5m.
Maximum distance between the interface and the beginning of the LED strip is 5m.

Tappi di chiusura (2 pezzi).
End caps (2 pcs).

Colours: 16 28

TYPE	Per/For	CODE
SL-TC	IP20 corner profile	**2296**

Tappi di chiusura (2 pezzi).
End caps (2 pcs).

Colours: 16 28

TYPE	Per/For	CODE
SL-TC	IP20 profile	**22D2**

Controllo remoto StripLED RGB.
StripLED RGB remote control.

Colours: 00

TYPE	Per/For	CODE
SL-RGBC	RGB StripLED	**2132**

Alimentatore elettronico.
Electronic gear unit.

Colours: 00

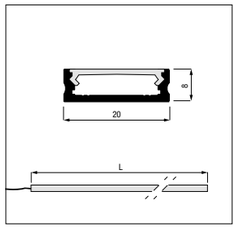
TYPE	WIRING	CODE
TR-CD03	35W	**5376**
TR-CD06	60W	**5377**
TR-CD10	100W	**5378**
TR-CD15	180W	**5379**

Cavetto di sospensione di sicurezza opzionale per SL-D (1pz).
Optional hanging safety cord for SL-D (1pc).

Colours: 23

TYPE	DIM mm	CODE
SL-SOSP	L max 1500	**2198**

Slim profile a plafone completo di stripLED IP65, profilo estruso, diffusore opalino e cavetti di connessione. Tappi, clips di fissaggio e alimentatore da ordinare separatamente. La protezione IP65 riguarda la sola stripLED.
Ceiling slim profile complete with IP65 stripLED, extruded profile, opal diffuser and connection cables.
End caps, fixing clips and gear unit to be ordered separately. IP65 protection concerns LED strip only.



Soffitto/Parete
Ceiling/Wall

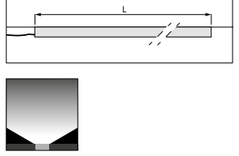
Colours: 29

IP20 PROFILE | IP65 STRIP

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL65-07	7,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2258**
SL65-07	7,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2259**
SL65-14	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2260**
SL65-14	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2261**
SL65-07	14,4W 24Vdc	LED NW	L 2m	ELE	●	**2250**
SL65-07	14,4W 24Vdc	LED WW	L 2m	ELE	●	**2251**
SL65-14	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2252**
SL65-14	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2253**
SL65-07	21,6W 24Vdc	LED NW	L 3m	ELE	●	**2254**
SL65-07	21,6W 24Vdc	LED WW	L 3m	ELE	●	**2255**
SL65-14	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2256**
SL65-14	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2257**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

Slim profile a incasso calpestabile completo di stripLED IP65, profilo estruso, diffusore opalino e cavetti di connessione. Tappi e alimentatore da ordinare separatamente. La protezione IP65 riguarda la sola stripLED.
Walk-over slim profile complete with IP65 stripLED, extruded profile, opal diffuser and connection cables. End caps and gear unit to be ordered separately. IP65 protection concerns LED strip only.



W 120°
Walk-over

Colours: 29

IP20 PROFILE | IP65 STRIP

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL65-07W	7,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2270**
SL65-07W	7,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2271**
SL65-14W	14,4W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2272**
SL65-14W	14,4W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2273**
SL65-07W	14,4W 24Vdc	LED NW	L 2m	ELE	●	**2262**
SL65-07W	14,4W 24Vdc	LED WW	L 2m	ELE	●	**2263**
SL65-14W	28,8W 24Vdc	LED NW	L 2m	ELE	●	**2264**
SL65-14W	28,8W 24Vdc	LED WW	L 2m	ELE	●	**2265**
SL65-07W	21,6W 24Vdc	LED NW	L 3m	ELE	●	**2266**
SL65-07W	21,6W 24Vdc	LED WW	L 3m	ELE	●	**2267**
SL65-14W	43,2W 24Vdc	LED NW	L 3m	ELE	●	**2268**
SL65-14W	43,2W 24Vdc	LED WW	L 3m	ELE	●	**2269**

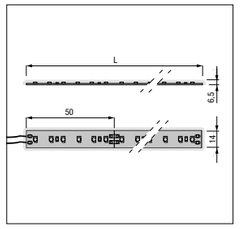
EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR SL65	LOR SL65-W
7,2W	650lm/m	600lm/m	76%	50%
14,4W	1320lm/m	1200lm/m	76%	50%

StripLED IP68 completa di cavetti di connessione. Clips di fissaggio e alimentatore da ordinare separatamente.
IP68 stripLED complete with connection cables. Fixing clips and gear unit to be ordered separately.



Soffitto/Parete
Ceiling/Wall

Colours: 00

IP68

TYPE	WATTAGE	LAMP	DIM	WIRING		CODE
SL68-19	19,2W/m 24Vdc	LED NW	Per linear metre	ELE	●	**2279**
SL68-19	19,2W/m 24Vdc	LED WW	Per linear metre	ELE	●	**2280**
SL68-19	38,4W 24Vdc	LED NW	L 2m	ELE	●	**2275**
SL68-19	38,4W 24Vdc	LED WW	L 2m	ELE	●	**2276**
SL68-19	57,6W 24Vdc	LED NW	L 3m	ELE	●	**2277**
SL68-19	57,6W 24Vdc	LED WW	L 3m	ELE	●	**2278**

EDD/OFA: per dimmerazione elettronica DALI/1-10V/SWITCH-DIM, abbinare l'alimentatore elettronico e l'interfaccia.
EDD/OFA: for DALI/1-10V/SWITCH-DIM electronic dimming please match the electronic gear to the interface.

ACCESSORI
ACCESSORIES

Clip di fissaggio (1 pezzo).
Fixing clip (1 pcs).

Colours: 00

TYPE	Per/For	CODE
SL-FSP	IP65 profile	**2298**

Tappi di chiusura forati (2 pezzi).
Perforated end caps (2 pcs).

Colours: 28

TYPE	Per/For	CODE
SL-TF	IP65 profile	**2293**
SL-TF	IP65 walk-over profile	**2294**

Clip di fissaggio (1 pezzo).
Fastening clip (1 pcs).

Colours: 00

TYPE	Per/For	CODE
SL-FSP	IP68 StripLED	**2291**

Alimentatore elettronico.
Electronic power supply unit.

Colours: 00

TYPE	WIRING	CODE
TR-CD03	35W	**5376**
TR-CD06	60W	**5377**
TR-CD10	100W	**5378**
TR-CD15	180W	**5379**

Interfaccia DALI/1-10V/SWITCH-DIM (per strip led)
DALI /1-10V/SWITCH-DIM interface (for led strip).

Colours: 00

TYPE	WATTAGE		
TR-ID	max 120W	DALI	**4723**
TR-FA	max 120W	DALI/1-10V/ SWITCH-DIM	**4775**

Distanza massima tra interfaccia e l'inizio della strip LED è di 5m.
Maximum distance between the interface and the beginning of the LED strip is 5m.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
OFA: Elettronico Dim Digitale Multifunzione (DALI/1-10V/SWITVH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
OFA: Electronic Dim Digital Multi-purpose (DALI/1-10V/SWITVH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR SL68
19,2W	1040lm/m	860lm/m	95%

SLIM PROFILE CALPESTABILE COMPLETO DI STRIPLED IP65
WALK-OVER SLIM PROFILE COMPLETE WITH IP65 STRIPLED

SYNTHESIS

Design **Mizar**

PROIETTORE A BINARIO 230V E A PARETE/SOFFITTO.

Programma di proiettori caratterizzati da una elevata pulizia estetica e dalle dimensioni ridotte.
Scale graduate e sistemi di bloccaggio consentono di operare i puntamenti con la massima precisione e professionalità.
Il programma si completa con le versioni base senza blocco del puntamento per tutti i casi dove non siano richieste prestazioni specifiche.

230V TRACK AND WALL/ CEILING PROJECTOR.

Range of projectors featuring minimalistic design and compact size.
Graduated ring nuts and mechanical lock allow for very precise and professional training.
The range also includes basic versions without training lock for all the applications where no specific performance is required.

SYNTHESIS

Design **Mizar**

Proiettore a binario 230V e a parete/soffitto, completo di alimentatore.

230V projector for tracks and wall/ceiling installation complete with power supply unit.

Sorgenti luminose:
LED COB **15,7W**, sorgenti alogene e lampade LED.

Ottica del proiettore:
Diffusore trasparente: **N** 15° **S** 25°, Sistema "Polarizing Prism": **F** 50°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Rotazione:
Sull'asse verticale 330°, sul piano orizzontale ±170°.

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI). Elettronico dimmerabile analogico (1-10V) a richiesta.

Classificazione:
C.I. I, Marchio F, IP40.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Corpo in alluminio anticorodal verniciato a polveri, ottica sfaccettata in policarbonato metalizzata ad alta efficienza, viterie e particolari in acciaio, diffusore in PMMA trasparente e prismatizzato.

Lighting sources:
*LED COB **15,7W**, halogen and LED lamps.*

Optics of the projector:
*Transparent diffuser: **N** 15° **S** 25°, "Polarizing Prism" system: **F** 50°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Rotation:
330° on the vertical axis and ±170° on the horizontal plane.

Wiring:
Electronic, digital electronic dimmable (DALI). Analogue dimmable electronic (1-10V) available on request.

Classification:
I.C. I, Mark F, IP40.

Light emission:
Direct.

Constructive features:
Powder painted anticorodal aluminium body, faceted optics in high-efficiency metallised polycarbonate, steel screws and joints, transparent and prismatic PMMA diffuser.

Ottiche
Optics:

N 15° **S** 25° **F** 50°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTICS SYSTEM		SYNTHE-B / SYNTHE-BP	SYNTHE-P / SYNTHE-PP
LED COB		Transparent diffuser	**15° 25°**	15,7W	15,7W
		Prismatic diffuser	**50°**	15,7W	15,7W
LED lamps		-		10W	10W
Halogen lamps	**QR-CB 51**	-		50W	50W

COLORI
COLOURS

15 Nero
Black

16 Bianco
White

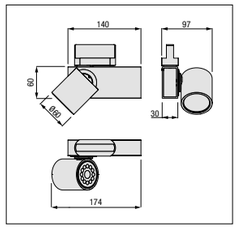
SPOT LENS System
Ottica sfaccettata con diffusore trasparente.
Faceted optics with transparent diffuser.

***N** 15° **S** 25°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico.
Faceted optics with prismatic diffusers.

***F** 50°*

Spot a binario completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Track spotlight, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



SYNTHE-B

Colours: 15 16 IP40

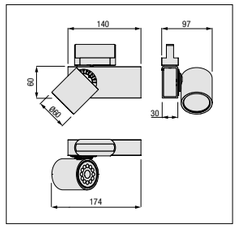
TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SYNTHE-B	15,7W 220-240 Vac		LED	Transparent diffuser		ELE	●	**585#**
SYNTHE-B	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**5858**
SYNTHE-B	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**5859**
SYNTHE-B	15,7W 220-240 Vac		LED	Transparent diffuser		EDD	●	**5D5#**
SYNTHE-B	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**5D58**
SYNTHE-B	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**5D59**
SYNTHE-B	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ELE		**5840**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Proiettore da 12W (NW lm 1635, WW lm 1582, LOR 81%) a richiesta
12W spotlight available on request (NW lm 1635, WW lm 1582, LOR 81%)

Proiettore con fascio 12° a richiesta
12° beam version available on request

Spot a binario completo di blocco meccanico del puntamento, diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Track spotlight, complete with mechanical aiming lock, transparent diffuser or “Polarizing Prism” system and power supply unit.



SYNTHE-BP

Colours: 15 16 IP40

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SYNTHE-BP	15,7W 220-240 Vac		LED	Transparent diffuser		ELE	●	**586#**
SYNTHE-BP	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**5868**
SYNTHE-BP	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**5869**
SYNTHE-BP	15,7W 220-240 Vac		LED	Transparent diffuser		EDD	●	**5D6#**
SYNTHE-BP	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**5D68**
SYNTHE-BP	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**5D69**
SYNTHE-BP	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ELE		**5841**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Proiettore da 12W (NW lm 1635, WW lm 1582, LOR 81%) a richiesta
12W spotlight available on request (NW lm 1635, WW lm 1582, LOR 81%)

Proiettore con fascio 12° a richiesta
12° beam version available on request

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
15,7W	2004lm	1939lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

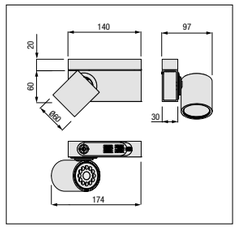
BLOCCAGGIO MECCANICO DEL PUNTAMENTO
MECHANICAL AIMING LOCK

Nelle versioni con blocco del puntamento, è possibile effettuare il blocco usufruendo della chiavetta in dotazione.

In versions with mechanical training lock the locking key is provided.

Asse orizzontale **Horizontal plane**	**Asse verticale** **Vertical axis**
±170°	330°

Apparecchio a parete/soffitto completo di diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Wall/ceiling fixture complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



SYNTHE-P

Colours: 15 16 IP40

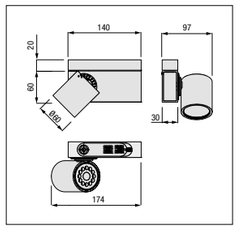
TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SYNTHE-P	15,7W 220-240 Vac		LED	Transparent diffuser		ELE	●	**587#**
SYNTHE-P	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**5878**
SYNTHE-P	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**5879**
SYNTHE-P	15,7W 220-240 Vac		LED	Transparent diffuser		EDD	●	**5D7#**
SYNTHE-P	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**5D78**
SYNTHE-P	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**5D79**
SYNTHE-P	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ELE		**5842**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Proiettore da 12W (NW lm 1635, WW lm 1582, LOR 81%) a richiesta
12W spotlight available on request (NW lm 1635, WW lm 1582, LOR 81%)

Proiettore con fascio 12° a richiesta
12° beam version available on request

Apparecchio a parete/soffitto completo di blocco meccanico del puntamento, diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Wall/ceiling fixture complete with mechanical aiming lock, transparent diffuser or “Polarizing Prism” system and power supply unit.



SYNTHE-PP

Colours: 15 16 IP40

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SYNTHE-PP	15,7W 220-240 Vac		LED	Transparent diffuser		ELE	●	**588#**
SYNTHE-PP	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**5888**
SYNTHE-PP	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**5889**
SYNTHE-PP	15,7W 220-240 Vac		LED	Transparent diffuser		EDD	●	**5D8#**
SYNTHE-PP	15,7W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**5D88**
SYNTHE-PP	15,7W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**5D89**
SYNTHE-P	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp			ELE		**5843**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Proiettore da 12W (NW lm 1635, WW lm 1582, LOR 81%) a richiesta
12W spotlight available on request (NW lm 1635, WW lm 1582, LOR 81%)

Proiettore con fascio 12° a richiesta
12° beam version available on request

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
15,7W	2004lm	1939lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

KY

Design **Paolo De Lucchi**

PROIETTORE A BINARIO 230V E A PARETE/SOFFITTO.

Programma di proiettori caratterizzati da una elevata pulizia estetica e da raffinati particolari e accostamenti cromatici.
Il vano ottico e il gruppo di alimentazione, fisicamente separati per consentire una ottimale dissipazione del calore e semplificare la manutenzione, si sintetizzano in una unica espressione.
Massima flessibilità dell'orientamento resa possibile da fulcri di rotazione sia sull'asse verticale che su quella orizzontale del prodotto. Scale graduate e sistemi di bloccaggio consentono di operare i puntamenti con la massima precisione e professionalità.
Numerosi accessori studiati in risposta a diverse esigenze illuminotecniche, consentono un impiego professionale avanzato del prodotto e ne aumentano la flessibilità e i campi di utilizzo.
Il programma si completa con le versioni base senza blocco per tutti i casi dove non siano richieste prestazioni specifiche.

230V TRACK PROJECTOR AND FOR WALL/CEILING INSTALLATION.

Range of projectors featuring a highly clean design, refined details and colour combinations.
The optical compartment and the power supply unit are separate for optimal heat dissipation and ease of maintenance, at the same time blending harmoniously.
Maximum adjustment flexibility thanks to the pivot points on both the horizontal plane and the vertical axis.
Graduated ring nuts and mechanical locks assure very precise and professional training.
A number of accessories designed to meet various lighting design requirements assure professional and advanced use of the fixture, at the same time increasing its flexibility and fields of application.
The range also includes basic versions without training lock for all applications that do not require specific performances.

KY

Design **Paolo De Lucchi**

Proiettore a binario 230V e a parete/soffitto, completo di alimentatore.

230V track projector and For wall/ceiling Installation complete with power supply unit.

Sorgenti luminose:
LED COB **18W, 26W** e **36W**, sorgenti alogene e lampade LED.

Ottica del proiettore:
Diffusore trasparente: **N** 15° **S** 25° **M** 40°,
Sistema "Polarizing Prism": **F** 50°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile (TRIAC/IGBT), elettronico dimmerabile digitale (DALI, DALI/SWITCH-DIM), elettronico dimmerabile manuale.

Classificazione:
C.I. I, Marchio F, IP40.

Emissiona luminosa:
Diretta con e senza blocco del puntamento.

Rotazione:
Sull'asse verticale 355°,
sul piano orizzontale ±90°.

Caratteristiche costruttive:
Corpo in estruso di alluminio, anello in alluminio pressofuso, ottica sfaccettata in alluminio purissimo 99,9%, viterie e particolari in acciaio, vetro di protezione borosilicato.

Light sources:
*LED COB **18W, 26W** and **36W,** halogen and LED lamp.*

Optics of the projector:
*Transparent diffuser: **N** 15° **S** 25° **M** 40°,*
*"Polarizing Prism" system: **F** 50°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, analogue dimmable electronic (1-10V), dimmable electronic (TRIAC/IGBT), digital dimmable electronic (DALI, DALI/SWITCH-DIM), manual electronic dimmable.

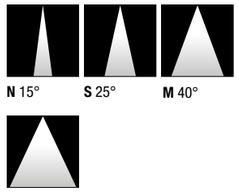
Classification:
I.C. I, Mark F, IP40.

Light emission:
Direct with or without mechanical adjustment lock.

Rotation:
355° on the vertical axis and ±90° on the horizontal plane.

Constructive features:
Extruded aluminium body, die cast aluminium ring, faceted optics in 99.9% super pure aluminium, steel screws and joints, borosilicate protection glass.

Ottiche
Optics:



N 15° **S** 25° **M** 40°

F 50°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM		KY-B09 / KY-B09B	KY-B12 / KY-B12B
LED COB		Transparent glass	**15° 25° 40°**	18W 26W	36W
		Prismatic diffuser	**50°**	18W 26W	36W
LED lamps		-		9W	15W
Halogen lamps	**QR-CB 51**	-		50W	-
	QR111	-		-	100W

COLORI
COLOURS

15 Nero
Black

78 Bianco/Grigio argento
White/black

85 Grigio argento/nero
Silver-grey/black

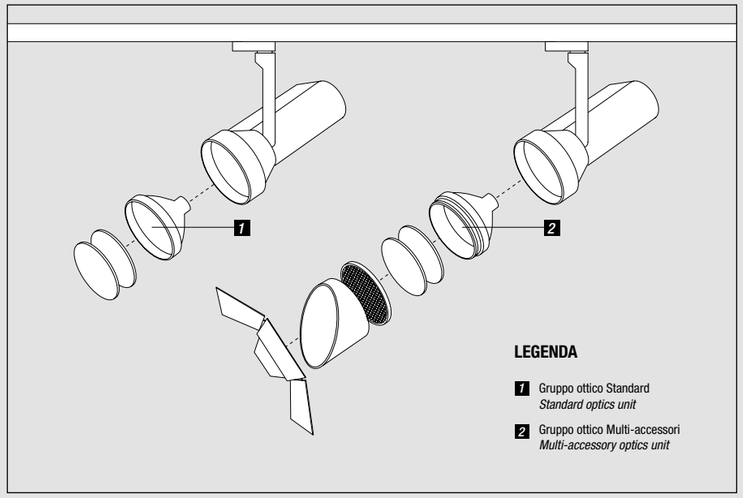
ON REQUEST:

16 Bianco
White

SPOT LENS System
Ottica sfaccettata con vetro trasparente
Faceted optics with transparent glass
***N** 15° **S** 25° **M** 40°*

PRISMATIC PRISM System
Ottica sfaccettata con diffusore prismatico
Faceted optics with prismatic diffuser
***F** 50°*

GRUPPI OTTICI
OPTICAL UNITS



Filtri
Filters

Vetro sabbiato · Vetro trasparente
Rifrattore per distribuzione ellittica
Filtro dicroico.

Sandblasted glass · Transparent glass · Refractor for elliptical distribution · Dichroic filter.

Schermi
Screens

Schermo asimmetrico · Alette direzionali · Schermo alveolare.

Asymmetrical screen · Barn doors · Honeycomb screen.

Ampia scelta di ottiche con differenti aperture di fascio e accessori.

Wide range of optics with a variety of beam angles and accessories.

1_
Gruppo ottico standard
Standard optics unit

Predisposto per l'applicazione di un accessorio della categoria filtri.

Ready for installation of one filter accessory.

2_
Gruppo ottico multi-accessori
Multi-accessory optics unit

Predisposto per l'applicazione, anche in combinazione, di un accessorio della categoria filtri e uno della categoria schermi.

Ready for installation of one filter accessory and one selected from the screens, even combined.

BLOCCAGGIO MECCANICO DEL PUNTAMENTO
MECHANICAL ADJUSTMENT LOCK

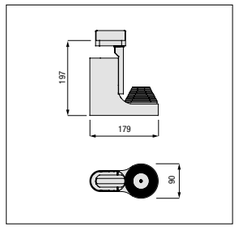
Nelle versioni con blocco del puntamento, è possibile effettuare il blocco usufruendo della chiavetta in dotazione.

In versions with mechanical adjustment lock, the locking key is provided.

Asse orizzontale
Horizontal plane
±90°

Asse verticale
Vertical axis
355°

Spot a binario Ø90mm. Completo di alimentatore.
Ø90mm track spotlight. Complete with power supply unit.



KY-B09

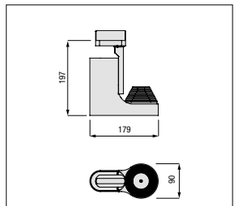
Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-B09	18W 220-240 Vac		LED NW	ELE	●	**7841**
KY-B09	18W 220-240 Vac		LED WW	ELE	●	**7842**
KY-B09	18W 220-240 Vac		LED NW	EDD	●	**7A41**
KY-B09	18W 220-240 Vac		LED WW	EDD	●	**7A42**
KY-B09	26W 220-240 Vac		LED NW	ELE	●	**7831**
KY-B09	26W 220-240 Vac		LED WW	ELE	●	**7832**
KY-B09	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	ELE		**7800**
KY-B09	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	EDR		**7801**
KY-B09	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	EDD		**7802**

Versioni a LED da completare con gruppo ottico.
LED versions to be completed with optics unit.

Versione dimmerabile analogico (1-10V) e versione dimmerabile digitale DALI/SWITCH DIM a richiesta.
Analogue dimmable (1-10V) version and digital dimmable DALI/SWITCH-DIM version available on request.

Spot a binario Ø90mm. Completo di blocco meccanico del puntamento e alimentatore.
Ø90mm track spotlight. Complete with mechanical adjustment lock and power supply unit.



KY-B09P

Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-B09P	18W 220-240 Vac		LED NW	ELE	●	**7843**
KY-B09P	18W 220-240 Vac		LED WW	ELE	●	**7844**
KY-B09P	18W 220-240 Vac		LED NW	EDD	●	**7A43**
KY-B09P	18W 220-240 Vac		LED WW	EDD	●	**7A44**
KY-B09P	26W 220-240 Vac		LED NW	ELE	●	**7845**
KY-B09P	26W 220-240 Vac		LED WW	ELE	●	**7846**
KY-B09P	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	ELE		**78A0**
KY-B09P	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	EDR		**78A1**
KY-B09P	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	EDD		**78A2**

Versioni a LED da completare con gruppo ottico.
LED versions to be completed with optics unit.

Versione dimmerabile analogico (1-10V) e versione dimmerabile digitale DALI/SWITCH DIM a richiesta.
Analogue dimmable (1-10V) version and digital dimmable DALI/SWITCH-DIM version available on request.

GRUPPI OTTICI PER VERSIONI A LED
OPTIC UNITS FOR LED VERSIONS

Gruppo ottico LED standard.
Standard LED optics unit.

KY-SLED09

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-SLED09	15°	**7S65**
KY-SLED09	25°	**7S66**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-SLED09P	50°	**7S68**

Gruppo ottico LED multi-accessori.
Multi-accessory LED optics unit.

KY-ALED09

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-ALED09	15°	**7A74**
KY-ALED09	25°	**7A75**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-ALED09P	50°	**7A77**

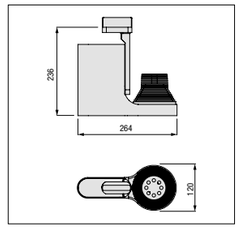
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDR: Elettronico Dim manuale

ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDR: Manual Electronic Dim

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
18W	1673lm	1638lm	81%	67%
26W	2080lm	2037lm	60%	50%

Spot a binario Ø120mm. Completo di alimentatore.
Ø120mm track spotlight. Complete with power supply unit.



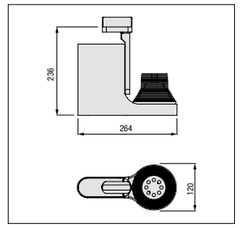
KY-B12

Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-B12	36W 220-240 Vac		LED NW	ELE	●	**7812**
KY-B12	36W 220-240 Vac		LED WW	ELE	●	**7813**
KY-B12	36W 220-240 Vac		LED NW	EDA	●	**7A49**
KY-B12	36W 220-240 Vac		LED WW	EDA	●	**7A50**
KY-B12	36W 220-240 Vac		LED NW	EDT	●	**7849**
KY-B12	36W 220-240 Vac		LED WW	EDT	●	**7850**
KY-B12	100W/15W 230V Vac	G53	QR111/LED lamp	ELE		**7833**
KY-B12	100W/15W 230V Vac	G53	QR111/LED lamp	EDR		**7834**
KY-B12	100W/15W 230V Vac	G53	QR111/LED lamp	EDD		**7835**

Versioni a LED da completare con gruppo ottico.
LED versions to be completed with optics unit.

Spot a binario Ø120mm. Completo di blocco meccanico del puntamento e alimentatore.
Ø120mm track spotlight. Complete with mechanical adjustment lock and power supply unit.



KY-B12P

Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-B12P	36W 220-240 Vac		LED NW	ELE	●	**7818**
KY-B12P	36W 220-240 Vac		LED WW	ELE	●	**7819**
KY-B12P	36W 220-240 Vac		LED NW	EDA	●	**7A53**
KY-B12P	36W 220-240 Vac		LED WW	EDA	●	**7A54**
KY-B12P	36W 220-240 Vac		LED NW	EDT	●	**7853**
KY-B12P	36W 220-240 Vac		LED WW	EDT	●	**7854**
KY-B12P	100W/15W 230V Vac	G53	QR111/LED lamp	ELE		**78B3**
KY-B12P	100W/15W 230V Vac	G53	QR111/LED lamp	EDR		**78B4**
KY-B12P	100W/15W 230V Vac	G53	QR111/LED lamp	EDD		**78B5**

Versioni a LED da completare con gruppo ottico.
LED versions to be completed with optics unit.

GRUPPI OTTICI PER VERSIONI A LED
OPTIC UNITS FOR LED VERSIONS

Gruppo ottico LED standard.
Standard LED optics unit.

KY-SLED12

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-SLED12	15°	**7820**
KY-SLED12	25°	**7821**
KY-SLED12	40°	**7822**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-SLED12P	50°	**7823**

Gruppo ottico LED multi-accessori.
Multi-accessory LED optics unit.

KY-ALED12

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-ALED12	15°	**7825**
KY-ALED12	25°	**7826**
KY-ALED12	40°	**7827**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-ALED12P	50°	**7828**

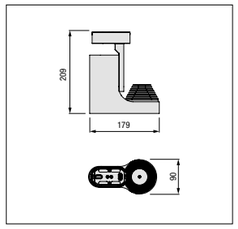
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDA: Elettronico Dim Analogico (1-10V)
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
EDR: Elettronico Dim manuale

ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDA: Analogue Dim Electronic (1-10V)
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)
EDR: Manual Electronic Dim

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
36W	3324lm	3257lm	60%	50%

Apparecchio a parete/soffitto Ø90mm. Completo di alimentatore.
Ø90mm wall/ceiling fixture. Complete with power supply unit



KY-P09

Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-P09	18W 220-240 Vac		LED NW	ELE	●	**4841**
KY-P09	18W 220-240 Vac		LED WW	ELE	●	**4842**
KY-P09	18W 220-240 Vac		LED NW	EDD	●	**4A41**
KY-P09	18W 220-240 Vac		LED WW	EDD	●	**4A42**
KY-P09	26W 220-240 Vac		LED NW	ELE	●	**7855**
KY-P09	26W 220-240 Vac		LED WW	ELE	●	**7856**
KY-P09	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	ELE		**4800**
KY-P09	50W/10W 230Vac	GU5,3	QR-CB 51/LED lamp	EDR		**4801**

Versioni a LED da completare con gruppo ottico.
LED version to be completed with optical unit.

Versione dimmerabile analogico (1-10V) e versione dimmerabile digitale DALI/SWITCH DIM a richiesta.
Analogue dimmable (1-10V) version and digital dimmable DALI/SWITCH-DIM version available on request.

GRUPPI OTTICI
OPTICS UNITS

Gruppo ottico LED standard.
Standard LED optics unit.

KY-SLED09

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-SLED09	15°	**7S65**
KY-SLED09	25°	**7S66**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-SLED09P	50°	**7S68**

Gruppo ottico LED multi-accessori.
Multi-accessory LED optics unit.

KY-ALED09

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-ALED09	15°	**7A74**
KY-ALED09	25°	**7A75**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-ALED09P	50°	**7A77**

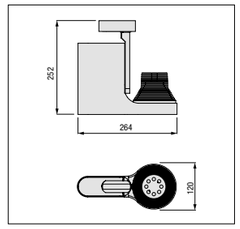
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDR: Elettronico Dim manuale

ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDR: Manual Electronic Dim

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
18W	1673lm	1638lm	81%	67%
26W	2080lm	2037lm	60%	50%

Apparecchio a parete/soffitto Ø120mm. Completo di alimentatore.
Ø120mm wall/ceiling fixture. Complete with power supply unit.



KY-P12

Colours: 15 78 85 — IP40

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
KY-P12	36W 220-240 Vac		LED NW	ELE	●	**4812**
KY-P12	36W 220-240 Vac		LED WW	ELE	●	**4813**
KY-P12	36W 220-240 Vac		LED NW	EDA	●	**4A55**
KY-P12	36W 220-240 Vac		LED WW	EDA	●	**4A56**
KY-P12	36W 220-240 Vac		LED NW	EDT	●	**4855**
KY-P12	36W 220-240 Vac		LED WW	EDT	●	**4856**
KY-P12	100W/15W 230V Vac	G53	QR111/LED lamp	ED2		**4833**
KY-P12	100W/15W 230V Vac	G53	QR111/LED lamp	EDR		**4834**

Versioni a LED da completare con gruppo ottico.
LED version to be completed with optical unit.

GRUPPI OTTICI
OPTICS UNITS

Gruppo ottico LED standard.
Standard LED optics unit.

KY-SLED12

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-SLED12	15°	**7820**
KY-SLED12	25°	**7821**
KY-SLED12	40°	**7822**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-SLED12P	50°	**7823**

Gruppo ottico LED multi-accessori.
Multi-accessory LED optics unit.

KY-ALED12

Colours: 15 16 28

TYPE	OPTICS	CODE
Vetro trasparente ***Transparent glass***		
KY-ALED12	15°	**7825**
KY-ALED12	25°	**7826**
KY-ALED12	40°	**7827**
Diffusore prismatico ***Prismatic diffuser "Polarizing Prism" system***		
KY-ALED12P	50°	**7828**

ELE: Elettronico
ED2: Elettronico Dim (TRIAC/IGBT)
EDA: Elettronico Dim Analogico (1-10V)
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
EDR: Elettronico Dim manuale

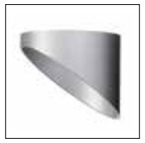
ELE: Electronic
ED2: Dim Electronic (TRIAC/IGBT)
EDA: Analogue Dim Electronic (1-10V)
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)
EDR: Manual Electronic Dim

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
36W	3324lm	3257lm	60%	50%

ACCESSORI
ACCESSORIES

Schermo asimmetrico. Per gruppo ottico multi-accessori.
Asymmetrical screen. For multi-accessory optics unit.



KY-YA

Colours: 15 | 16 | 28

TYPE	Per/For	CODE
KY-YA09	KY-B09	**7883**
KY-YA12	KY-B12	**7884**

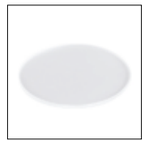
Schermo alveolare. Per gruppo ottico multi-accessori.
Honeycomb screen. For multi-accessory optics unit.

KY-YN

Colours: 15

TYPE	Per/For	CODE
KY-YN09	KY-B09	**7889**
KY-YN12	KY-B12	**7890**

Vetro sabbiato. Per gruppo ottico standard e multi-accessori.
Sandblasted glass. For standard and multi-accessory optics units.



KY-FV

Colours: 03

TYPE	Per/For	CODE
KY-V09	KY-B09	**7892**
KY-V12	KY-B12	**7893**

Alternativa al vetro trasparente in dotazione.
Alternative option to the standard transparent glass

Rifrattore per distribuzione ellittica del flusso luminoso.
Per gruppo ottico standard e multi-accessori.
Refractor for elliptical distribution of the luminous flux.
For standard and multi-accessory optics units.

KY-RF

Colours: 02

TYPE	Per/For	CODE
KY-RF9	KY-B09	**78R5**
KY-RF12	KY-B12	**78R6**

Alternativa al vetro trasparente in dotazione.
Alternative option to the standard transparent glass

Basetta fissaggio proiettori a soffitto.
Ceiling mounted base for projectors.

ST-BS

Colours: 15 | 16

TYPE	DIM	CODE
ST-BS	100x32	**1348**

Non applicabili nelle versioni DALI.
Not applicable in DALI versions.

Alette direzionali. Per gruppo ottico multi-accessori.
Barn doors. For multi-accessory optics unit.

KY-YD

Colours: 15

TYPE	Per/For	CODE
KY-YD09	KY-B09	**7886**
KY-YD12	KY-B12	**7887**

Vetro trasparente. Per gruppo ottico standard e multi-accessori.
Transparent glass. For standard and multi-accessory optics units.

KY-FV

Colours: 00

TYPE	Per/For	CODE
KY-V09	KY-B09	**7892**
KY-V12	KY-B12	**7893**

Vetro di protezione trasparente di ricambio.
Replacement transparent glass

Filtro dicroico interferenziale colorato.
Per gruppo ottico standard e multi-accessori.
Coloured interferential dichroic filter.
For standard and multi-accessory optics units.

KY-FD

Colours: 12 | 13 | 14

TYPE	Per/For	CODE
KY-V09	KY-B09	**7892**
KY-V12	KY-B12	**7893**

Alternativa al vetro trasparente in dotazione.
Alternative option to the standard transparent glass

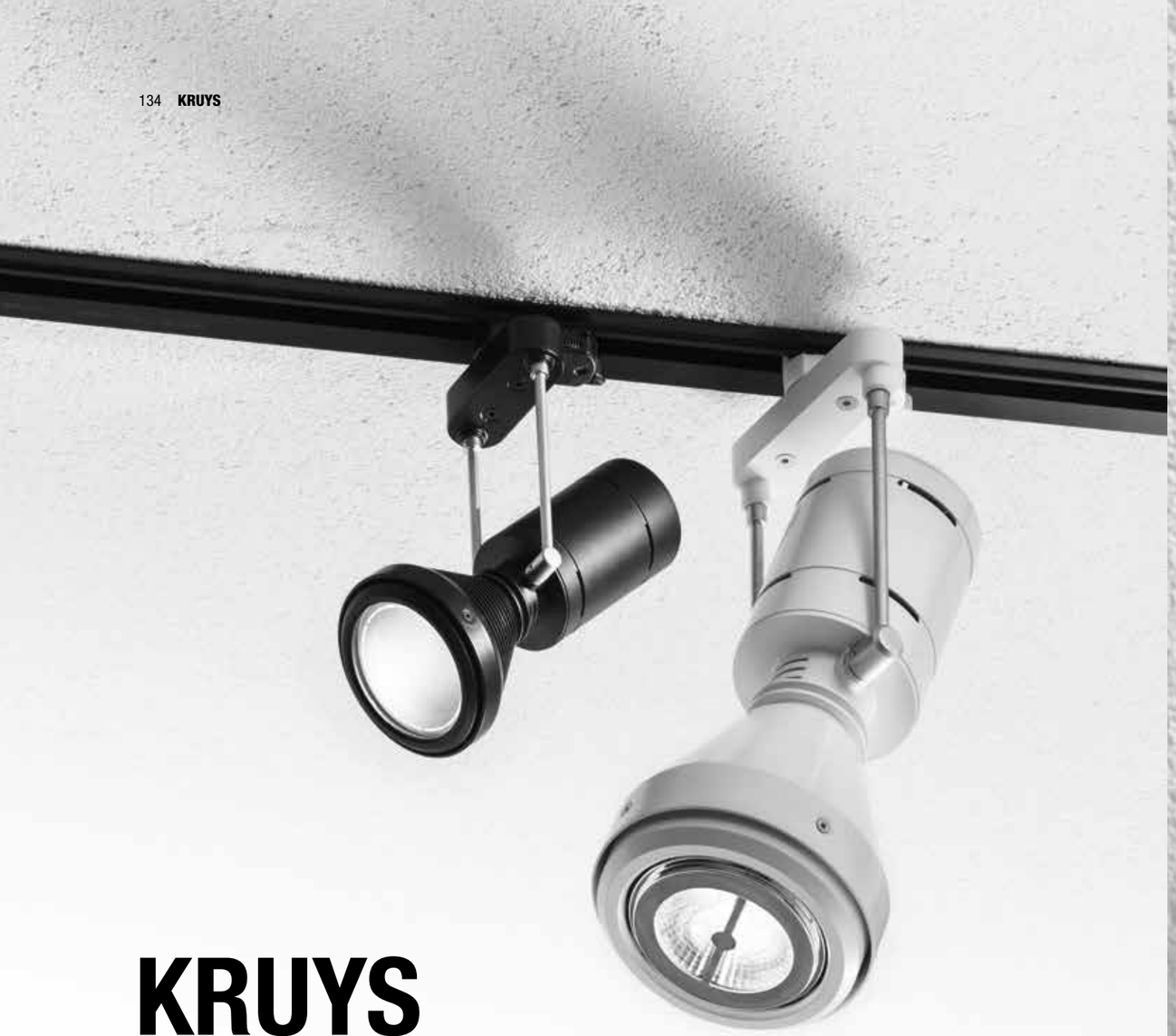
Basetta da incasso fissaggio proiettori in controsoffitto max 30mm.
Recessed projector base for false ceiling max 30mm.

ST-BR

Colours: 15 | 16

TYPE	DIM		CODE
ST-BR	130x60	105-125	**1349**

Non applicabili nelle versioni DALI.
Not applicable in DALI versions.



KRUYS

Design **Mizar**

PROIETTORE A BINARIO 230V E A PARETE/PLAFONE, COMPLETO DI ALIMENTATORE.

Programma di proiettori professionali per illuminazione generale e d'accento.
La solidità costruttiva di questo gruppo di apparecchi realizzati in pressofusione di alluminio e acciaio, è sottolineata da un design che ne enfatizza robustezza e affidabilità.
L'assenza di cavi elettrici a vista, inoltre, rappresenta una protezione aggiuntiva contro danni accidentali causati da frequenti interventi di pulizia o manutenzione, specialmente in ambienti pubblici.

I rendimenti sono massimizzati da ottiche rotosimmetriche in alluminio purissimo e i flussi termici dal vano ottico al corpo del ballast sono controllati da una strozzatura opportunamente areata sul corpo del prodotto.
I volumi generosi, infine, consentono di applicare elettroniche a LED di potenza con prestazioni elevate, con ottima dissipazione e garanzia di durata nel tempo.
Tutto ciò rende molto ampie le possibilità di applicazione di questa famiglia di proiettori.

230V TRACK AND WALL/ CEILING INSTALLATION PROJECTOR COMPLETE WITH POWER SUPPLY UNIT.

A range of professional projectors for general and accent lighting.
The structural soundness of this group of fixtures produced in die-cast aluminium and steel is underlined by a design that emphasises their sturdiness and reliability.
The absence of any electrical cables in view, moreover, affords additional protection against accidental damage caused by frequent cleaning or maintenance operations, especially in public spaces.

Performance is maximised by roto-symmetrical optics in extra-pure aluminium and thermal flow from optics housing to ballast body is controlled by a suitably aerated necking on the fixture body.
The generous volume, finally, allows high-performance, power LED electronics to be applied with optimal dissipation and guaranteed long life.
All these features assure a very wide range of application options for this range of projectors.

SPOT LENS System
Ottica sfaccettata con vetro trasparente
Faceted optics with transparent glass
***N** 15° **S** 25° **M** 60°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico
Faceted optics with prismatic diffuser
***F** 50°*

KRUYS

Design **Mizar**

Proiettore a binario 230V, completo di alimentatore.

230V track spotlight, complete with power supply unit.

Sorgenti luminose:
LED COB **18W**, sorgenti alogene e lampade LED.

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile (TRIAC/IGBT), elettronico dimmerabile digitale (DALI, DALI/SWITCH-DIM), elettronico dimmerabile manuale.

Classificazione:
C.I. I, Marchio F, IP40.

Emissiona luminosa:
Diretta con e senza blocco del puntamento.

Rotazione:
Sull'asse verticale 355°,
sul piano orizzontale ±90°.

Caratteristiche costruttive:
Corpo in estruso di alluminio, anello in alluminio pressofuso, ottica sfaccettata in alluminio purissimo 99,9%, viterie e particolari in acciaio, vetro di protezione borosilicato.

Light sources:
*LED COB **18W,** halogen and LED lamps.*

Wiring:
Electronic, analogue dimmable electronic (1-10V), dimmable electronic (TRIAC/IGBT), digital dimmable electronic (DALI, DALI/SWITCH-DIM), dimmable electronic manual.

Classification:
I.C. I, Mark F, IP40.

Light emission:
Direct with or without mechanical pointing lock.

Rotation:
355° on the vertical axis and ±90° on the horizontal plane.

Constructive features:
Extruded aluminium body, die cast aluminium ring, faceted optics of super pure aluminium 99.9%, steel screws and joints, borosilicate protection glass.

Ottiche
Optic:

N 15° **S** 25° **M** 60°

M 50°

SORGENTI LUMINOSE
LIGHTING SOURCES

		OPTIC SYSTEM		KRUYS-B10	KRUYS-B15	KRUYS-P10	KRUYS-P15
LED multichip		Transparent glass	**15° 25° 60°**	18W	-	18W	-
		Prismatic diffuser	**50°**	18W	-	18W	-
Halogen lamps	**QR-CB 51**			50W/10W	-	50W/10W	-
	QR111			-	70W/15W	-	70W/15W

COLORI
COLOURS

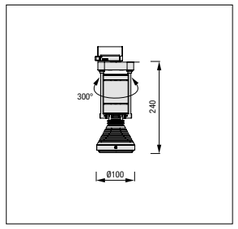
15 Nero *Black*

16 Bianco *White*

23 Cromo *Chrome*

28 Grigio argento *Silver grey*

Spot a binario Ø100mm con LED COB. Completo di alimentatore.
Ø100mm track spotlight with COB LED. Complete with power supply unit.

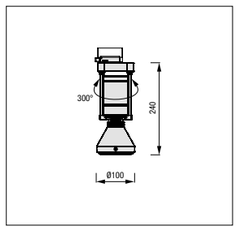


Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP		WIRING		CODE
KRUYS-B10	18W 220-240 Vac		LED	Transparent diffuser	ELE	●	**76C#**
KRUYS-B10	18W 220-240 Vac		LED NW	Prismatic diffuser 50°	ELE	●	**76C8**
KRUYS-B10	18W 220-240 Vac		LED WW	Prismatic diffuser 50°	ELE	●	**76C9**
KRUYS-B10	18W 220-240 Vac		LED	Transparent diffuser	EDD	●	**76D#**
KRUYS-B10	18W 220-240 Vac		LED NW	Prismatic diffuser 50°	EDD	●	**76D8**
KRUYS-B10	18W 220-240 Vac		LED WW	Prismatic diffuser 50°	EDD	●	**76D9**

Versione dimmerabile analogico 1-10V PUSH e versione dimmerabile digitale DALI/SWITCH DIM a richiesta.
1-10V PUSH analogue dimmable version and digital dimmable DALI/SWITCH-DIM version available on request.

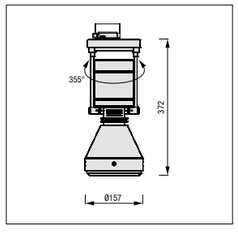
Spot a binario Ø100mm. Completo di alimentatore.
Ø100mm track spotlight. Complete with power supply unit.



Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
KRUYS-B10	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ELE	**7696**

Spot a binario Ø157mm. Completo di alimentatore.
Ø157mm track spotlight. Complete with power supply unit.



Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
KRUYS-B15	70W/15W 220-240Vac	G53	QR111/LED lamp	ED1	**7624**

ELE: Elettronico
EDD: Elettronico Dim (DALI)
ELE: Electronic
EDD: Dim Electronic (DALI)

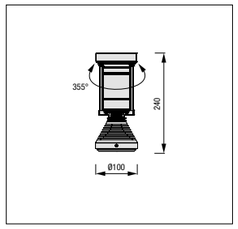
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
18W	1673lm	1638lm	81%	67%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 60°
LED NW	J	B	2
LED WW	H	A	1

Apparecchio ad applique/plafone Ø100mm con LED COB. Completo di alimentatore. Per la versione a sospensione ordinare il kit sospensione separatamente.
Ø100mm wall/ceiling spotlight with COB LED. Complete with power supply unit. For the pendant version, order pendant kit separately.

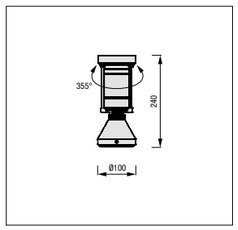


Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP		WIRING		CODE
KRUYS-P10	18W 220-240 Vac		LED	Transparent diffuser	ELE	●	**74L#**
KRUYS-P10	18W 220-240 Vac		LED NW	Prismatic diffuser 50°	ELE	●	**74L8**
KRUYS-P10	18W 220-240 Vac		LED WW	Prismatic diffuser 50°	ELE	●	**74L9**
KRUYS-P10	18W 220-240 Vac		LED	Transparent diffuser	EDD	●	**74M#**
KRUYS-P10	18W 220-240 Vac		LED NW	Prismatic diffuser 50°	EDD	●	**74M8**
KRUYS-P10	18W 220-240 Vac		LED WW	Prismatic diffuser 50°	EDD	●	**74M9**

Versione dimmerabile analogico 1-10V PUSH e versione dimmerabile digitale DALI/SWITCH DIM a richiesta.
1-10V PUSH analogue dimmable version and digital dimmable DALI/SWITCH-DIM version available on request.

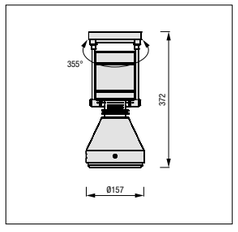
Apparecchio ad applique/plafone Ø100mm. Completo di alimentatore. Per la versione a sospensione ordinare il kit sospensione separatamente.
Ø100mm wall/ceiling spotlight. Complete with power supply unit. For the pendant version, order pendant kit separately.



Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
KRUYS-P10	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ELE	**7551**

Apparecchio ad applique/plafone Ø157mm. Completo di alimentatore. Per la versione a sospensione ordinare il kit sospensione separatamente.
Ø157mm wall/ceiling spotlight. Complete with power supply unit. For the pendant version, order pendant kit separately.



Colours: 15 | 16 | 23 | 28 — IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
KRUYS-P15	70W/15W 220-240Vac	G53	QR111/LED lamp	ED1	**7583**

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim (IGBT)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic (IGBT)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent glass	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
18W	1673lm	1638lm	81%	67%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 60°
LED NW	J	B	2
LED WW	H	A	1

ACCESSORI
ACCESSORIES

Schermo asimmetrico. Non disponibili per le versioni con lampade alogene.
Asymmetrical screen. Not available for halogen lamp versions.

Colours: 15 16 28

TYPE	Per/For	CODE
KRUYS-SA	Ø100mm	4026
KRUYS-SA	Ø157mm	4027

Alette direzionali. Non disponibili per le versioni con lampade alogene.
Barn doors. Not available for halogen lamp versions.

Colours: 15

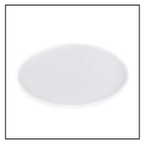
TYPE	Per/For	CODE
KRUYS-AD	Ø100mm	4016
KRUYS-AD	Ø157mm	4017

Vetro di sicurezza borosilicato trasparente. Non disponibili per le versioni con lampade alogene.
Transparent borosilicate protective glass. Not available for halogen lamp versions.

Colours: 02

TYPE	Per/For	CODE
LXV-TP3	Ø100mm	4008
LXV-TP4	Ø157mm	4009

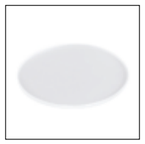
Vetro di sicurezza borosilicato sabbiato. Non disponibili per le versioni con lampade alogene.
Sandblasted borosilicate protective glass. Not available for halogen lamp versions.



Colours: 03

TYPE	Per/For	CODE
LXV-SP3	Ø100mm	4008
LXV-SP4	Ø157mm	4009

Vetro di sicurezza sabbiato UV-stop.
Non disponibili per le versioni con lampade alogene.
UV-stop sandblasted protective glass.
Not available for halogen lamp versions.



Colours: 03

TYPE	Per/For	CODE
LXV-SAU3	Ø100mm	4006
LXV-SAU4	Ø157mm	4007

Vetro di sicurezza trasparente serigrafato UV-stop.
Non disponibili per le versioni con lampade alogene.
UV-stop silkscreened transparent protective glass.
Not available for halogen lamp versions.

Colours: 02

TYPE	Per/For	CODE
LXV-TAU3	Ø100mm	4006
LXV-TAU4	Ø157mm	4007

Basetta fissaggio proiettori a soffitto.
Ceiling mounted base for projector.

ST-BS

Colours: 15 16

TYPE	DIM	CODE
ST-BS	100x32	1348

Non applicabili nelle versioni DALI.
Not available on the DALI versions.

Filtro dicroico in vetro borosilicato. Per gruppo ottico LED.
Non disponibili per le versioni con lampade alogene.
Borosilicate dichroic glass filter. For LED optical unit.
Not available for halogen lamp versions.

Colours: 12 13 14 17

TYPE	Per/For	CODE
KM-V3	Ø100mm	4001
KM-V4	Ø157mm	4003

Basetta da incasso fissaggio proiettori - controsoffitto max 30mm.
Recessed base for projector - false ceiling max 30mm.

ST-BR

Colours: 15 16

TYPE	DIM	CODE
ST-BR	130x60 105-125	1349

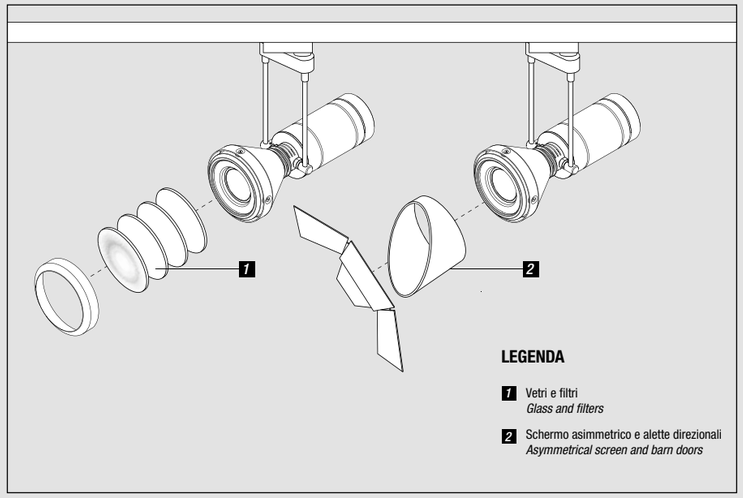
Non applicabili nelle versioni DALI.
Not applicable in DALI versions.

Kit per fissaggio a binario completo di adattatore.
Track fastening kit including adapter.

Colours: 15 16 28

TYPE	Per/For		CODE
KRUYS-KSB	Ø100mm	ELE	7558
KRUYS-KSB	Ø157	ELE	7559
KRUYS-KSB	Ø100mm	DALI	75F8
KRUYS-KSB	Ø157	DALI	75F9

GRUPPI OTTICI
OPTICAL UNITS



Filtri
Filters

Vetro sabbiato · Vetro trasparente
Rifrattore per distribuzione ellittica
Filtro dicroico.

Sandblasted glass · Transparent glass · Refractor for elliptical distribution · Dichroic filter.

Schermi
Screens

Schermo asimmetrico · Alette direzionali · Schermo alveolare.

Asymmetrical screen · Barn doors · Honeycomb screen.

Grazie ai numerosi filtri ed accessori disponibili, è possibile impiegare i proiettori kruys in numerosi contesti che richiedano impianti professionali ad elevata flessibilità.

Thanks to the wide range of available filters and accessories, Kruys projectors can be succesfully deployed in a number of settings which call for highly flexible and professional applications.

1_ Vetri e filtri *Glass and filters*

L'accessorio Vetro o filtro può essere assemblato in tutti i prodotti ad esclusione delle versioni con lampada alogena QR-CB51 e QR111/HIPAR111. Per l'utilizzo o la sostituzione è sufficiente intervenire con semplici operazioni meccaniche sull'anello di chiusura frontale.

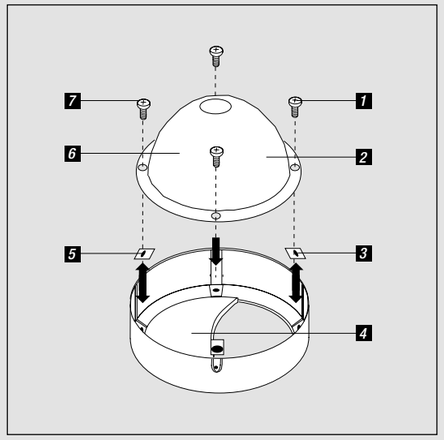
The Glass or Filter accessory can be fitted to all products with the exception of the QR-CB51 and QR111/HIPAR111 halogen lamp versions. All it takes for proper utilisation or replacement is to carry out simple mechanical operations on the front locking ring.

2_ Schermo asimmetrico e alette direzionali *Asymmetrical screen and barn doors*

Le alette direzionali e lo schermo asimmetrico sono sempre forniti completi di anello e possono essere assemblati in tutti i prodotti ad esclusione delle versioni con lampada alogena QR-CB51 e QR111/HIPAR111.

The barn doors and the asymmetrical screen are always supplied with ring and they can be assembled in all products with the exception of the QR-CB51and QR111/HIPAR111 halogen lamp versions.

SOSTITUZIONE DEI VETRI E FILTRI
REPLACING FILTERS AND GLASSES



LEGENDA

1. Svitare le quattro viti.
Loosen the four screws.
2. Togliere la parabola riflettente.
Remove the reflector.
3. Togliere i quattro elementi di fissaggio.
Remove the four fasteners.
4. Sostituire lo schermo di protezione.
Replace the protection screen.
5. Riposizionare gli elementi di fissaggio.
Put the fasteners back in place.
6. Riposizionare la parabola riflettente.
Put the reflector back in place.
7. Avvitare le quattro viti.
Fasten the four screws.

TRACKS 230V

BINARI ELETTRIFICATI A TENSIONE DI RETE

Binari elettrificati in allumino estruso a tensione di rete.
I binari possono essere installati a soffitto, parete ed ad incasso per installazione in controsoffitto, e comprendono una serie completa di accessori che consentono il collegamento meccanico ed elettrico a più binari.

MAINS VOLTAGE E LECTRIFIED TRACKS

Mains voltage electrified tracks in extruded aluminium.
The tracks may be installed on ceiling or wall or recessed in false ceiling, and include a complete range of accessories for mechanical and electric connection of several tracks.

TRACKS 230V

Binari elettrificati 230V in alluminio estruso.

230V extrudes aluminium electrified tracks.

DALI
Digital Addressable Lighting Interface

ST-BIN
Binario elettrificato trifase-DALI a parete/soffitto.

STS-BIN
Binario elettrificato trifase-DALI da incasso.

Binario elettrificato "Eurostandard" trifase-DALI in alluminio estruso.
Possibilità di gestire fino a tre accensioni separate.
È possibile scegliere tra la versione a plafone che può essere declinata per applicazioni a sospensione, o la versione ad incasso per l'installazione a controsoffitto.
È disponibile una gamma completa degli accessori per la costruzione di sistemi anche geometricamente complessi e le basi elettrificate per alimentare singoli proiettori per applicazioni a soffitto o controsoffitto.

Classificazione:
C.I. I, IP20.

Caratteristiche costruttive:
Profilo in estruso di alluminio.

ST-BIN
Three-phase-DALI electrified wall/ceiling track.

STS-BIN
Three-phase-DALI electrified recessed track.

"Eurostandard" extruded aluminium, three-phase-DALI electrical supply track.
Up to three separate switch controls can be managed.
It is possible to select the ceiling version, which can also be adapted for pendant applications, or the recessed version for false ceiling installation.
A comprehensive range of accessories is available for assembling even geometrically complex systems, as well as electrified plates to supply individual projectors for ceiling or false ceiling applications.

Classification:
I.C. I, IP20.

Construction features:
Extruded aluminium profile.

COLORI
COLOURS

15 Nero *Black*

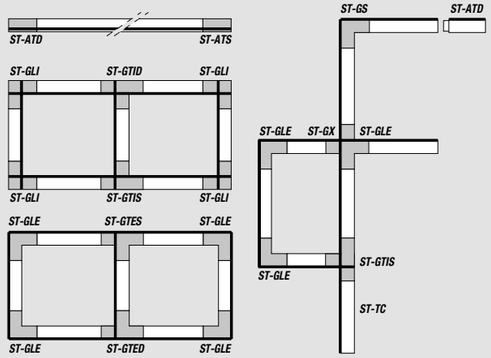
16 Bianco *White*

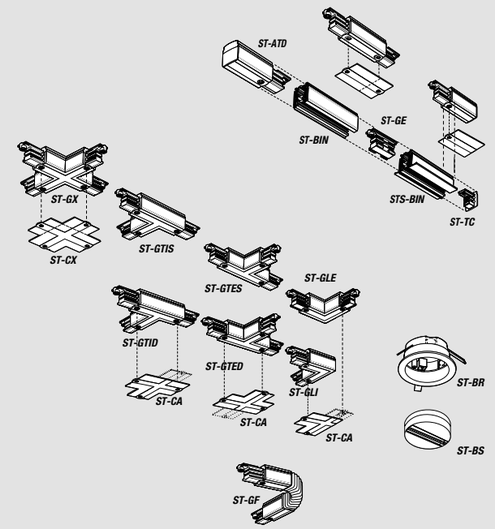
29 Alluminio *Aluminium*

Definizione della posizione dei conduttori di terra
Establishing the position of earth conductors

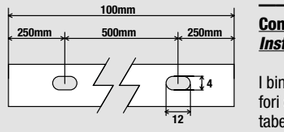
Nella scelta dell'alimentazione, dei giunti angolari e dei giunti a T occorre fare attenzione alla posizione ed alla continuità del conduttore di terra, che nell'estruso del binario passa nella parte inferiore.
Il conduttore di terra, posizionato lateralmente, rende asimmetrica la struttura del binario.
Tale particolarità rende più agevole la connessione alla linea, ma richiede maggiore attenzione nella scelta dei giunti che per questo sono proposti in versione destra e sinistra.

In selecting power supply, corner joints and T joints special care should be given to the position and continuity of the earth conductor, which in the track extruded profile is in the lower section.
The earth conductor is located sideways and makes the track structure asymmetrical.
This feature makes connection to the mains voltage more convenient, but requires greater care in choosing the connectors, which are therefore available in the right and left versions.





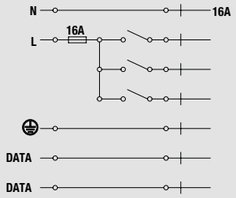
Gli esempi di applicazione evidenziano alcune possibili configurazioni.
The application examples show some possible layouts.



Consigli per l'installazione
Installation suggestions

I binari sono forniti completi di fori di fissaggio punzonati (vedi tabella). La distanza di fissaggio raccomandata è L = 1000mm.

Tracks are supplied with punched fastening holes (see the table). The recommended fastening distance is L = 1000mm.



Rete monofase 230-250V
Single phase 230-250V network

Il collegamento alla rete monofase consente un carico complessivo di 16A corrispondente a 3,7KW suddivisibile in 3 separati circuiti.

Connection to the single-phase network allows a 16A overall load corresponding to 3.7KW, which can be split among the three separate circuits.

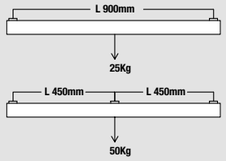
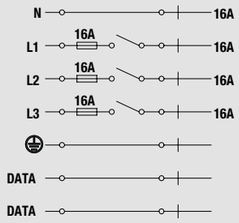


Diagramma di carico
Loading diagram

Il binario può sopportare un carico di 25kg ogni 900mm, rispettando rigorosamente le distanze di fissaggio nella tabella seguente, diversamente il binario rischia di deformarsi. Gli apparecchi devono essere distribuiti uniformemente lungo il binario.

The track can support a 25kg load every 900mm, strictly complying with maximum distance between fastening points as per the following table; the track is likely to buckle otherwise.
Fixtures should be distributed evenly along the track.

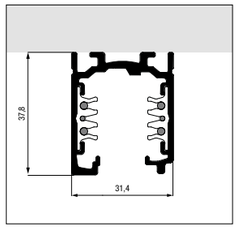


Rete trifase 380-440V
Three-phase 380-440V network

Il collegamento alla rete trifase consente un carico complessivo di 16A corrispondente a 11040VA suddivisibile in 3 separati circuiti.

Connection to the three-phase network permits a 16A overall load corresponding to 11040VA, which can be split in three separate circuits.

Binario elettrificato trifase-DALI da parete/soffitto.
Three-phase -DALI wall/ceiling electrified track.



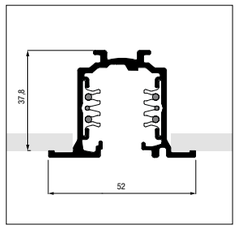
ST-BIN

Colours: 15 | 16 | 29 — IP20

TYPE	DIM	WIRING	CODE
ST-BIN1	1000mm	EDD*	**1341**
ST-BIN2	2000mm	EDD*	**1342**
ST-BIN3	3000mm	EDD*	**1343**

*Il binario può essere utilizzato in modalità ELE (trifase) o EDD (DALI).
**The track can be used electronic (three-phase) and EDD (DALI).*

Binario elettrificato trifase-DALI da incasso.
Three-phase-DALI electrified recessed track.



STS-BIN

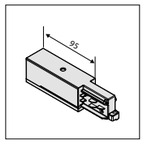
Colours: 15 | 16 | 29 — IP20

TYPE	DIM	WIRING	CODE
STS-BIN1	1000mm	EDD*	**1345**
STS-BIN2	2000mm	EDD*	**1346**
STS-BIN3	3000mm	EDD*	**1347**

*Il binario può essere utilizzato in modalità ELE (trifase) o EDD (DALI).
**The track can be used electronic (three-phase) and EDD (DALI).*

ACCESSORI
ACCESSORIES

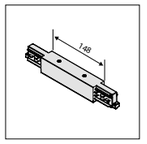
Alimentazione destra o sinistra.
Right and left connector.



Colours: 15 | 16

TYPE		CODE
ST-ATD	Destra *Right*	**1350**
ST-ATS	Sinistra *Left*	**1351**

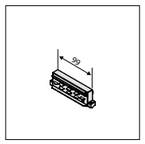
Alimentazione centrale.
Central connector.



Colours: 15 | 16

TYPE	CODE
ST-ATC	**1352**

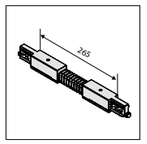
Giunto lineare elettrificato.
Electrified linear joint.



Colours: 15 | 16

TYPE	CODE
ST-GE	**1353**

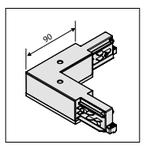
Giunto flessibile 0°-360°.
Flexible joint 0°-360°.



Colours: 15 | 16

TYPE	CODE
ST-GF	**1354**

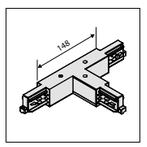
Giunto a "L" interno ed esterno.
Internal and external "L" joint.



Colours: 15 | 16

TYPE		CODE
ST-GLI	Interno *Internal*	**1356**
ST-GLE	Esterno *External*	**1357**

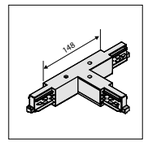
Giunto a "T" interno destro e sinistro.
Right and left internal "T" joint.



Colours: 15 | 16

TYPE		CODE
ST-GTID	Destra *Right*	**1358**
ST-GTIS	Sinistra *Left*	**1359**

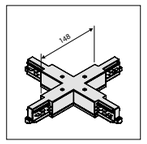
Giunto a "T" esterno destro e sinistro.
Right and left external "T" joint.



Colours: 15 | 16

TYPE		CODE
ST-GTED	Destra *Right*	**1360**
ST-GTES	Sinistra *Left*	**1361**

Giunto a croce.
Cross joint.



Colours: 15 | 16

TYPE	CODE
ST-GX	**1362**

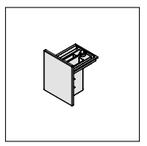
Utensile per taglio conduttori.
Cutting tool for track conductors.

Colours: 00

TYPE	CODE
ST-BT	**1372**

Se è necessario tagliare il binario a misura.
When tracks must be cut to measure.

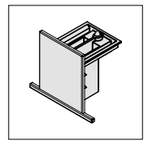
Testata di chiusura.
End cap.



Colours: 15 | 16

TYPE	CODE
ST-TC	**1363**

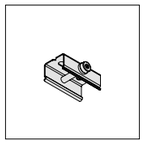
Tappo di chiusura per binario incassato.
End cap for recessed track.



Colours: 15 | 16

TYPE	CODE
ST-TCI	**1366**

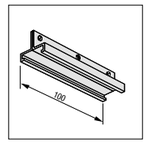
Staffa fissaggio binario a soffitto.
Ceiling clamp.



Colours: 15 | 16 | 29

TYPE	CODE
ST-SF	**1367**

Staffa d'irrigidimento.
Support bracket.



Colours: 16 | 29

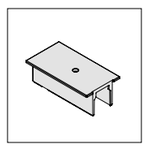
TYPE	CODE
ST-SI	**1368**

Copertura binario 1000mm.
1000mm track cover.

Colours: 15 | 16

TYPE	CODE
ST-CO	**1369**

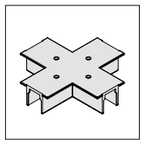
Copertura per alimentazione di testata binario incassato.
Recessed cover for end-feed.



Colours: 15 | 16

TYPE	CODE
ST-CA	**1370**

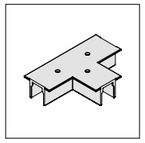
Copertura per connessione a croce binario incassato.
Recessed cover for x-feed.



Colours: 15 | 16

TYPE	CODE
ST-CX	**1371**

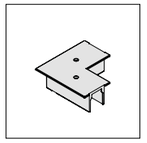
Copertura per connessioni a "T" binario incassato.
Recessed cover for t-feed.



Colours: 15 16

TYPE	CODE
ST-CTI	1355

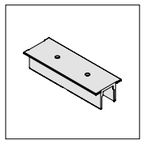
Copertura per connessioni a "L" binario incassato.
Recessed cover for l-feed.



Colours: 15 16

TYPE	CODE
ST-CLI	1373

Copertura per alimentazione centrale binario incassato.
Recessed cover for middle feed.



Colours: 15 16

TYPE	CODE
ST-CAI	1340

Basetta da incasso fissaggio proiettori - controsoffitto max 30mm.
Recessed projector mount plate - false ceiling max 30mm.

Colours: 15 16

TYPE	DIM		CODE
ST-BR	130x60	105-125	1349

Basetta fissaggio proiettori a soffitto.
Projector ceiling mount plate.

Colours: 15 16

TYPE	DIM	CODE
ST-BS	100x32	1348

TOP/JET/KING

Design **Mizar**

PROIETTORE A BINARIO 12V E A PARETE/SOFFITTO

E' un programma di proiettori dall'estetica semplice e raffinata, adatti ad illuminare spazi espositivi, commerciali ed eleganti ambienti residenziali. Particolarmente apprezzati anche nel campo degli allestimenti fieristici per la loro qualità estetica e per la rapidità di installazione.
Tutti i modelli sono dotati del pratico sistema di collegamento rapido 'Jack System' che consente una progettazione flessibile, versatile e garantisce l'intercambiabilità dei corpi lampada con evidenti vantaggi nelle operazioni di manutenzione.
I proiettori dispongono di fulcri di rotazione sia sull'asse orizzontale che verticale per operare con la massima semplicità nelle fasi di puntamento.
Una gamma completa di accessori e sorgenti luminose, incluse le lampade a LED di nuova generazione, consentono l'utilizzo professionale di questi apparecchi.

12V TRACK PROJECTOR AND FOR WALL/CEILING INSTALLATION

It is a range of projectors featuring streamlined and refined aesthetics, suitable for lighting exhibition spaces, shop floors and elegant residential settings.
They are also particularly appreciated in the field of trade fair displays thanks to their pleasing appearance and quick installation.
All models are equipped with the convenient 'Jack' quick connection system which allows flexible and versatile light design solutions and assures light fixture interchangeability, with obvious advantages in maintenance operations.
The projectors feature rotation pivots both on the horizontal and vertical axis in order to perform light beam adjustment with the utmost simplicity.
The fixtures are complemented by a full range of accessories and light sources, including new generation LED lamps, for professional utilisation.

TOP/JET/KING

Design **Mizar**

Proiettore a binario 12V e a parete/soffitto.

12V track projector and for wall/ceiling installation.

Sorgenti luminose:
Sorgenti LED ed alogene.

Ottica del proiettore:
Determinato dalla tipologia di sorgenti utilizzate.

Rotazione:
Determinato dalla tipologia di faretto utilizzato.

Classificazione:
C.I. I e III, Marchio F, IP20.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Corpo lampada in ottone tornito, snodi in materiale plastico, viterie e particolari in acciaio o ottone.

Trattamenti:
Verniciatura a liquido ad alte temperature per le finiture bianco e nero, galvanizzazione per le finiture cromo.

Light sources:
LED and halogen.

Optics of the projector:
determined by the type of light sources used.

Rotation:
Given by the projector installed.

Classification:
I.C. II - III Mark F, IP20.

Light emission:
Direct.

Constructive features:
turned brass lamp body, plastic material joints, steel or brass screws and components.

Treatments:
high-temperature liquid painting for white and black finishes, galvanization for chrome and brushed chrome finishes.

SORGENTI LUMINOSE
LIGHT SOURCES

		TOP	JET	KING
LED lamps	**MLed-LV**	7W	7W	7W
Halogen lamps	**QR-CB 51**	50W	50W	35W

COLORI ESEMPLIFICATIVI (per verificare le finiture consultare le pagine successive)
COLOUR FINISHES (available colours are shown on the following pages)

16 Bianco
White

23 Cromo
Chrome

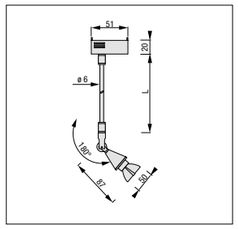
27 Cromo mat
Mat chrome

28 Grigio argento
Silver grey

38 *Oro*
Gold

TOP+DJ KONO
Cono in metallo da ordinare separatamente.
Metal cone to be ordered separately.

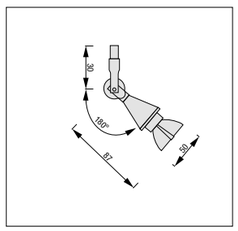
Spot in metallo, completa di tige e adattatore; specifico per installazioni verticali a binario MINITRAK.
Metal spotlight, supplied with stem and adapter; specifically for vertical MINITRAK track installations.



Colours: 16 23 27 — IP20 — 360° — 180°

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TOP/TK05	50W/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6467**
TOP/TK10	50W/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6468**
TOP/TK30	50W/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6469**

Spot "Double Jack" in metallo da completare con: tige DJ-TIGE e adattatore per binario MINITRAK **(applicazione a binario)**; o tige DJ-TIGE e presa DJ-P **(applicazione a soffitto)**.
*"Double Jack" metal spotlight, to be fitted with DJ-TIGE stem and MINITRAK adapter **(track application)** or DJ-TIGE stem and DJ-P socket **(ceiling application)**.*



Colours: 15 16 23 27 38 — IP20 — 360° — 180°

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TOP	50W/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6470**

VETRI E DIFFUSORI
GLASSES AND DIFFUSERS

Solo vetro.
Glass only.

TOP

Colours: 16

TYPE	CODE
DJ-VD	**6491**

Solo vetro. Utilizzare lampade max 35W.
Glass only. Only use max 35W lamps.

TOP

Colours: 16

TYPE	CODE
DJ-VS	**6493**

Solo vetro.
Glass only.

TOP

Colours: 02

TYPE	CODE
DJ-VX	**6497**

Cono in metallo da ordinare separatamente. Utilizzare solo lampade max 35W.
Metal cone to be ordered separately. Only use max 35W lamps.

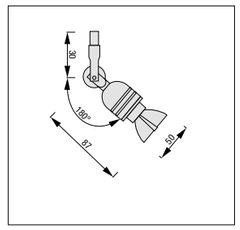
TOP

Colours: 15 16 23 27 38

TYPE	CODE
DJ-KONO	**6496**

ELE: Elettronico
ELE: Electronic

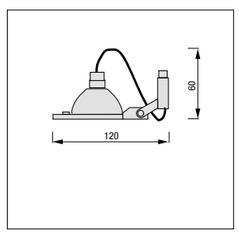
Spot "Double Jack" in metallo da completare con: tige DJ-TIGE e adattatore per binario MINITRAK **(applicazione a binario)**; o tige DJ-TIGE e presa DJ-P **(applicazione a soffitto)**.
*"Double Jack" metal spotlight, to be fitted with DJ-TIGE stem and MINITRAK adapter **(track application)**; or DJ-TIGE stem and DJ-P socket **(ceiling application)**.*



Colours: 15 16 23 27 38 — IP20 — 360° — 180°

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
JET	50W/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6475**

Spot "Double Jack" in policarbonato, da completare con: tige DJ-TIGE e adattatore per binario MINITRAK **(applicazione a binario)**; o tige DJ-TIGE e presa DJ-P **(applicazione a soffitto)**.
*"Double Jack" polycarbonate spotlight, to be fitted with DJ-TIGE stem and MINITRAK adapter **(track application)**; or DJ-TIGE stem and DJ-P socket **(ceiling application)**.*



Colours: 15 16 28 — IP20 — 360° — 180°

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
KING	35W*/7W	GU5,3	QR-CB 51/Mled-LV	ELE	**6482**

* È consentito l'utilizzo di lampade da 50W tipo QR-CB 51 SV.
** 50W type QR-CB 51 SV lamps may be used.*

VETRI E DIFFUSORI
GLASSES AND DIFFUSERS

Solo vetro.
Glass only.

JET

Colours: 16

TYPE	CODE
DJ-VD	**6491**

Solo vetro.
Glass only.

JET

Colours: 16

TYPE	CODE
DJ-VC	**6495**

Solo vetro.
Glass only.

JET

Colours: 56 66 96

TYPE	CODE
DJ-VF	**6494**

Solo vetro.
Glass only.

JET

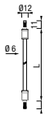
Colours: 16

TYPE	CODE
DJ-VY	**6498**

ELE: Elettronico
ELE: Electronic

COMPONENTI DI INSTALLAZIONE
INSTALLATION COMPONENTS

Tige diritta per il collegamento rapido degli spot "DJ".
Straight stem for quick "DJ" spotlight connection.



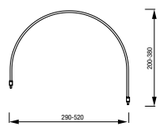
Colours: 15 | 16 | 23 | 27 | 38

TYPE	DIM mm	CODE
DJ-TIGE05	L. 50	**6430**
DJ-TIGE10	L. 100	**6431**
DJ-TIGE30	L. 300	***6432**
DJ-TIGE60	L. 600	***6433**
DJ-TIGE100	L. 1000	***6434**

Code 6430 non disponibile con finitura 16
Code 6430 not available with finish 16

* Non idonea per applicazioni a parete
Not suitable for wall application

Tige ad arco con adattatore per collegamento ai binari MINITRAK.
Non idoneo all'utilizzo con accessori DJ-VD, DJ-VS e DJ-VX.
Arc Stem with adapter for MINITRAK track connection. Not suitable for utilisation with DJ-VD, DJ-VS and DJ-VX accessories.



Colours: 15 | 16 | 23 | 27 | 38

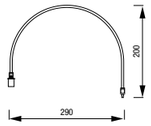
TYPE	DIM mm	CODE
DJ-TIGEC2	290 x 200	**6438**
DJ-TIGEC5	520 x 380	**6440**

Tige flessibile per il collegamento rapido degli spot "DJ".
Flexible stem for quick "DJ" spotlight connection.

Colours: 15 | 16 | 23 | 27 | 38

TYPE	DIM mm	CODE
DJ-TIGEF	Ø8 x 500	**6445**

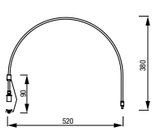
Tige ad arco con adattatore per collegamento ai binari MINITRAK.
Non idoneo all'utilizzo con accessori DJ-VD, DJ-VS e DJ-VX.
Arc Stem with adapter for MINITRAK track connection. Not suitable for utilisation with DJ-VD, DJ-VS and DJ-VX accessories.



Colours: 15 | 16 | 23 | 27 | 38

TYPE	DIM mm	CODE
DJ-TIGEC2A	290 x 200	**6443**

Tige ad arco con adattatore per collegamento ai binari MINITRAK.
Non idoneo all'utilizzo con accessori DJ-VD, DJ-VS e DJ-VX.
Arc Stem with adapter for MINITRAK track connection. Not suitable for utilisation with DJ-VD, DJ-VS and DJ-VX accessories.



Colours: 15 | 16 | 23 | 27 | 38

TYPE	DIM mm	CODE
DJ-TIGEC5A	520 x 380	**6442**

ACCESSORI
ACCESSORIES

Presa jack per pannello con attacco a vite.
Jack socket for screw-in panel.

Colours: 23 | 27 | 38 — III | IP20 | F

TYPE			CODE
DJ-PP	50W 12V	13	**6420**

Presa jack da incasso.
Recessed installation jack socket.

Colours: 15 | 16 | 23 | 27 | 38 — III | IP20 | F

TYPE			CODE
DJ-PC	50W 12V	50	**6421**

Base con presa jack in termoplastico con trasformatore.
Thermoplastic rose with jack socket and transformer.

Colours: 15 | 16 | 28 — IP20 | F

TYPE		CODE
DJ-P1	50W 230/12V ELE	**6423**

Base con presa jack in metallo con trasformatore.
Metal base with jack socket and transformer.

Colours: 23 | 27 | 38 — IP20

TYPE		CODE
DJ-P1M	50W 230/12V INR	**6419**

ELE: Elettronico
ELE: Electronic

MINITRAK 12V

BINARI ELETTRIFICATI A BASSA TENSIONE

Binari a bassa tensione di grande versatilità per innumerevoli soluzioni illuminotecniche e d'arredo.
Il sistema comprende una serie completa di accessori che consentono il collegamento meccanico ed elettrico a più binari.
Può essere installato a soffitto, a parete e in sospensione.
Gli adattatori sono dotati di un sistema esclusivo di collegamento elettrico ai faretti con innesto rapido "Jack System".
Il sistema deve essere alimentato esclusivamente con trasformatori di sicurezza, e deve essere integrato di apposita protezione contro il sovraccarico e il cortocircuito.

LOW VOLTAGE ELECTRIFIED TRACKS

Highly-versatile low voltage tracks, ideal for a number of light design and decorative applications.
The system includes a complete range of accessories for mechanical and electrical connection of several tracks.
It may be installed on ceiling, wall or pendant.
The adapters are fitted with an exclusive electrical connection system to the spotlights with quick Jack fitting.
The system must only be powered with safety transformers, and must be fitted with suitable overload and short-circuit protection.

MINITRAK 12V

Binario elettrificato 12V in alluminio estruso.

12V extruded aluminium electrified track

MT-BIN
Binario elettrificato a parete, soffitto e in sospensione.

Il binario è costruito in alluminio estruso anodizzato naturale o verniciato a polveri di poliestere. I conduttori elettrici sono alloggiati in una guaina estrusa di PVC all'interno del binario. La barra può essere tagliata su misura e adattata a qualsiasi contesto.

Classificazione:
C.I. I, IP20.

Caratteristiche costruttive:
Profilo in estruso di alluminio.

MT-BIN
Electrified wall/ceiling and pendant track.

The track is produced in natural anodized or polyesther powder coated extruded aluminium. Lead-in wires are housed in an extruded PVC sheath inside the track.
The bar may be cut to measure and adapted to any setting.

Classification:
I.C. I, IP20.

Construction features:
Extrudes aluminium profile.

COLORI
COLOURS

15 Nero
Black

16 Bianco
White

23 Cromo
Chrome

27 Cromo mat
Mat chrome

38 *Oro*
Gold

Composizione
Assembly

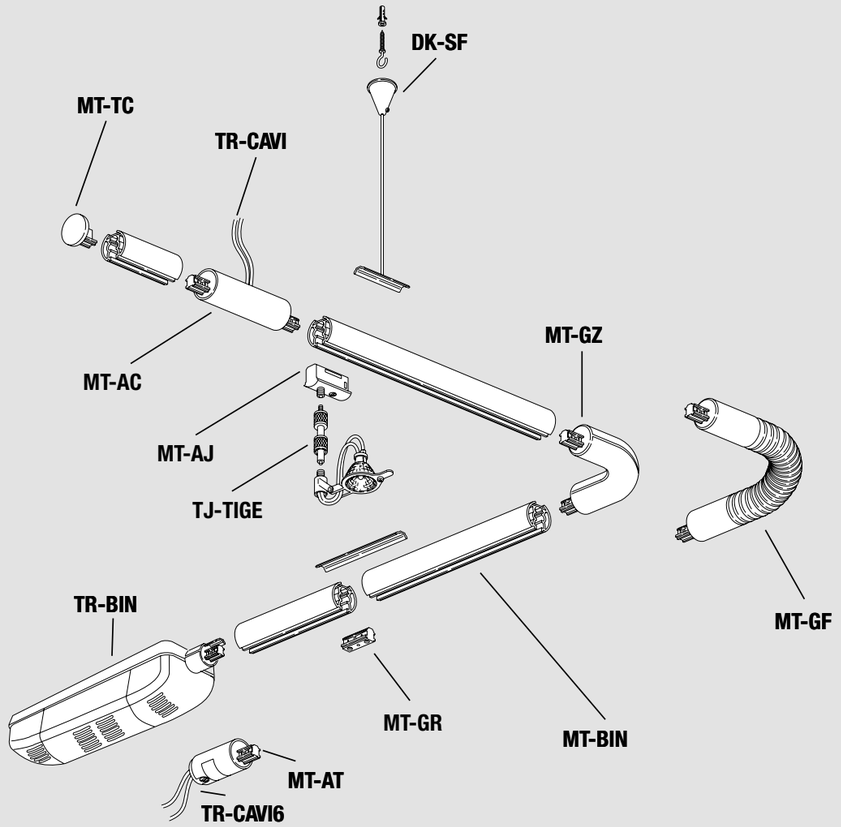


Diagramma di carico
Loading diagram

Il binario può sopportare un carico di 1kg ogni 200mm, rispettando rigorosamente le distanze di fissaggio nella tabella seguente, diversamente il binario rischia di deformarsi. Gli apparecchi devono essere distribuiti uniformemente lungo il binario.

The track can withstand a 1kg load per 200mm. Fastening point spacing must be strictly complied with as per the following table, otherwise the track might buckle. Fixtures should be distributed evenly along the track.

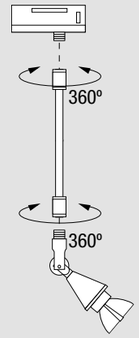
L (m)	TRASFORMATORE/ TRANSFORMER	CODE
Max 2	Elettronico 230Vc.a./12Vc.a. Electronic 230Va.c./12Va.c.	**0741** **0743**
Max 10	Elettronico 230Vc.a./12Vc.a. Electronic 230Va.c./12Va.c.	**0782** **0783**
Max 10	Toroidale 230Vc.a./12Vc.a. Toroidal 230Va.c./12Va.c.	**0778** **0721**

L: Lunghezza massima del circuito dalla lampadina al trasformatore
L: Maximum circuit length from lamp to transformer

Sistema "Double Jack"
"Double Jack" system

Jack system prevede un collegamento "Double Jack" raggiungendo il massimo della modularità oggi disponibile nei sistemi in bassissima tensione.

The "Double Jack" connection technology offers state-of-the-art modularity in extra low voltage systems



Connessione rapida
Fast connection

Il sistema utilizza adattatori con un sistema esclusivo di connessione rapida a jack, un dispositivo facile e intuitivo da usare che assicura rapidità e affidabilità negli interventi di manutenzione.

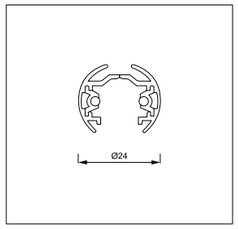
The range utilises adapters with an exclusive quick connection jack system, an easy and user-friendly device which assures quick and reliable maintenance operations.

1

2

3

Binario dritto.
Straight track.



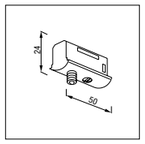
MT-BIN

Colours: 15 16 23 27 38

TYPE	DIM	CODE
MT-BIN1	1000mm	6501
MT-BIN2	2000mm	6502

ACCESSORI
ACCESSORIES

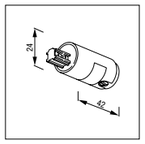
Adattatore jack.
Jack adapter.



Colours: 15 16

TYPE	CODE
MT-AJ	6510

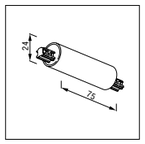
Alimentazione di testata.
Head power supply.



Colours: 15 16 28

TYPE	CODE
MT-AT	6518

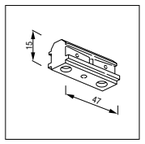
Alimentazione centrale.
Central power supply.



Colours: 15 16

TYPE	CODE
MT-AC	6515

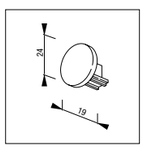
Giunto rettilineo.
Straight joint.



Colours: 15 16

TYPE	CODE
DK-GR	6458

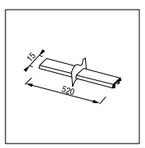
Testata di chiusura.
End cap.



Colours: 15 16 28

TYPE	CODE
MT-TC	6525

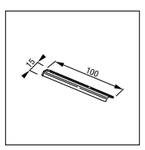
Copertura per binario.
Track cover.



Colours: 15 16

TYPE	CODE
MT-CO	6528

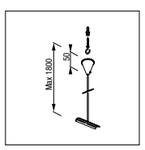
Giunto meccanico.
Mechanical joint.



Colours: 00

TYPE	CODE
DK-GM	6462

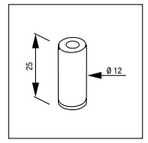
Sospensione a filo.
Wire pendant.



Colours: 15 16

TYPE	CODE
DK-SF	6461

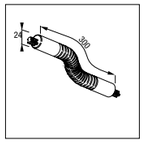
Supporto per fissaggio a parete.
Wall-mounting support.



Colours: 15 16

TYPE	CODE
MT-SP	6529

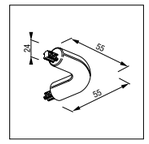
Giunto flessibile.
Flexible joint.



Colours: 15 16

TYPE	CODE
MT-GF	6521

Giunto orizzontale.
Horizontal joint.



Colours: 15 16

TYPE	CODE
MT-GZ	6520

Cavi di collegamento.
Connecting cables.

Colours: 15 16 60

TYPE		CODE
TR-CAV16	6mm²x1000mm	0700

Trasformatore elettronico dimmerabile. La linea collegata (binario+lunghezza tigi spots) non deve superare i 2m.
Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. The connected line (track+stem and spotlight length) must not exceed 2m. For MLED-LV lamps dimmability equals 50%.

Colours: 15 16 28 IP20

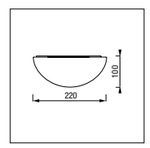
TYPE		CODE
TR-BIN150	30-150W ED2	0741

Trasformatore elettronico dimmerabile. La linea collegata (binario+lunghezza tigi spots) non deve superare i 2m. Non idoneo all'utilizzo con lampade MLed-LV.
Dimmable electronic transformer. The connected line (track+stem and spotlight length) must not exceed 2m. Unsuitable for utilisation with MLED-LV lamps.

Colours: 15 16 28 IP20

TYPE		CODE
TR-BIN250	100-250W ED1	0743

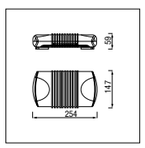
Trasformatore toroidale di sicurezza con scocca in metallo, non dimmerabile. Completo di protezione per sovraccarichi. La linea collegata (binario+lunghezza tigi spots) non deve superare i 10m. Idoneo all'utilizzo con lampade MLed-LV.
Toroidal safety transformer with metal cover, not dimmable. Equipped with overload protection. The connected line (track+stem and spotlight length) must not exceed 10m. Suitable for utilisation with MLED-LV lamps.



Colours: 16 23 27 IP20

TYPE		CODE
TR-PLUS300	0-300W INR	0778
TR-PLUS150	0-150W INR	0721

Trasformatore elettronico di sicurezza. La linea collegata (binario+lunghezza tigi spots) non deve superare i 10m. Non idoneo all'utilizzo di lampade MLed-LV.
Electronic safety transformer. The connected line (track+rod and spotlight length) must not exceed 10m. Unsuitable for utilisation with MLED-LV lamps.



Colours: 28 IP20

TYPE		CODE
TR-KB300	100-300VA ELE	0782
TR-KB300D	100-300VA EDT	0783

ED1: Elettronico Dim (IGBT)
ED2: Elettronico Dim (TRIAC/IGBT)
ELE: Elettronico
EDT: Elettronico Dim (DALI)
INR: Induttivo rifasato

ED1: Elettronico Dim (IGBT)
ED2: Elettronico Dim (TRIAC/IGBT)
ELE: Elettronico
EDT: Elettronico Dim (DALI)
INR: Inductive with PFC

TUBES

Design **Mizar**

APPARECCHII A SOSPENSIONE E PLAFONE.

Apparecchi a sospensione e plafone caratterizzati da un design essenziale.
Disponibile in due diametri, 25mm e 60mm, ed in più lunghezze anche customizzabili.
Proponibile sia in installazioni residenziali che in ambito ho.re.ca., la famiglia Tubes è utilizzabile sia per l'illuminazione diffusa che d'accento.

PENDANT AND CEILING FIXTURES

Pendant and ceiling fixtures featuring essential design.
Available in two diameters, 25mm and 60mm, and several lengths, including custom ones.
The Tubes family may be installed in residential settings as well as ho.re.ca ones, for diffuse and accent lighting.

TUBES

Design **Mizar**

Apparecchio a sospensione e a plafone, completi di alimentatore.

Pendant and celing fixture, complete with power supply unit.

Sorgenti luminose:
LED monocromatici **2,7W**,
LED COB **9,3W**.

Ottica del prodotto:
TUBES-25 con lente prismatica:
N 15°, **S** 25°, **M** 40°.
TUBES-60 con diffusore trasparente:
S 25°, **M** 36°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta TUBES 25)

Cablaggio:
Elettronico.
Elettronico dimmerabile digitale (DALI), elettronico dimmerabile analogico (1-10V) e elettronico emergenza 1h e 3h (in remoto) a richiesta solo per sospensioni multiple.

Classificazione:
C.I. I, Marchio F, IP20.

Emissione luminosa:
Diretta e diretta/indiretta.

Caratteristiche costruttive:
Corpo in estruso di alluminio verniciato a polveri, ottica sfaccettata con diffusore trasparente, lente in PMMA trasparente ad alto indice di trasmissione, viterie e particolari in acciaio.

Lighting sources:
***2,7W** monochrome LEDs,*
*COB **9,3W** LEDs.*

Optics of the projector:
TUBES-25 with prismatic lens:
***N** 15°, **S** 25°, **M** 40°.*
TUBES-60 with clear diffuser:
***S** 25°, **M** 36°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request TUBES 25)

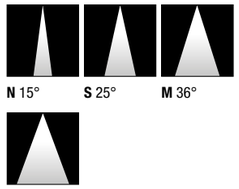
Wiring:
Electronic.
Digital dimmable electronic (DALI) on request, analogue dimmable electronic (1-10V) and 1h and 3h emergency electronic (remote) available on request only for multiple pendants.

Classification:
I.C. I, Mark F, IP20.

Light emission:
Direct and direct/indirect.

Constructive features:
Extruded, powder painted aluminium body, faceted optics with clear diffuser, clear PMMA lens with high transmission index, steel screws and joints.

Ottiche
Optics:



N 15° **S** 25° **M** 36°

M 40°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTICS SYSTEM		TUBES-S25	TUBES-S60	TUBES-P60
LED	Prismatic lens	**15° 25° 40°**	2,7W	-	-
LED COB	Transparent diffuser	**25° 36°**	-	9,3W	6,2W

COLORI
COLOURS

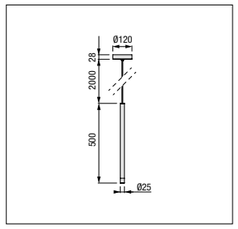
16 Bianco
White

15 Nero
Black

TUBES-S25
Diametro 25mm, lente prismatica.
25mm diametre, prismatic lens

TUBES-S60 / TUBES-P60
Diametro 60mm, diffusore trasparente.
60mm diametre, transparent diffuser

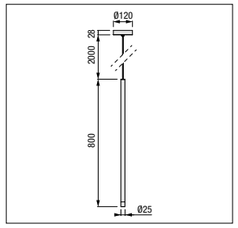
Apparecchio a sospensione Ø25mm - H500mm con 1 LED monocromatico, completo di lente prismatica e alimentatore.
Ø25mm - H500mm pendant fixture with 1 monochrome LED, complete with prismatic lens and power supply unit.



Colours: 15 16

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
TUBES-S25	2,7W 220-240 Vac		LED	ELE	●	**590#**

Apparecchio a sospensione Ø25mm - H800mm con 1 LED monocromatico, completo di lente prismatica e alimentatore.
Ø25mm - H800mm pendant fixture with 1 monochrome LED, complete with prismatic lens and power supply unit.



Colours: 15 16

TYPE	WATTAGE	LAMP	WIRING		CODE
TUBES-S25	2,7W 220-240 Vac	LED	ELE	●	**591#**

ELE: Elettronico
ELE: Electronic

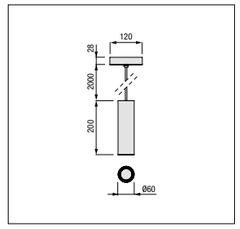
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
2,7W	224lm	149lm	92,0%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

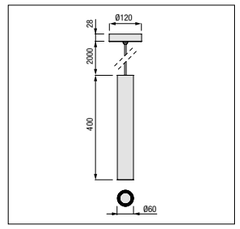
Apparecchio a sospensione Ø60mm - H200mm con LED COB, completo di diffusore trasparente e alimentatore.
Ø60mm - H200mm pendant fixture with COB LED, complete with transparent diffuser and power supply unit.



Colours: 15 16

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
TUBES-S60	9,3W 220-240 Vac		LED	ELE	●	**592#**

Apparecchio a sospensione Ø60mm - H400mm con LED COB, completo di diffusore trasparente e alimentatore.
Ø60mm - H400mm pendant fixture with COB LED, complete with transparent diffuser and power supply unit.



Colours: 15 16

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
TUBES-S60	9,3W 220-240 Vac		LED	ELE	●	**593#**

ELE: Elettronico
ELE: Electronic

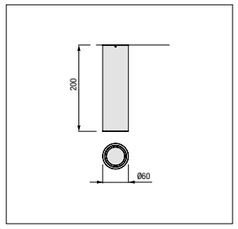
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
9,3W	1012lm	965lm	86%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 36°
LED NW	B	2
LED WW	A	1

Apparecchio a soffitto Ø60mm con LED multichip, completo di diffusore trasparente e alimentatore.
Ø60mm ceiling fixture with LED multichip, complete with transparent diffuser and power supply unit.



Colours: 15 16 IP20

TYPE	WATTAGE	LAMP	WIRING	CODE
TUBES-P60	6,2W 220-240 Vac	LED	ELE ●	**594#**

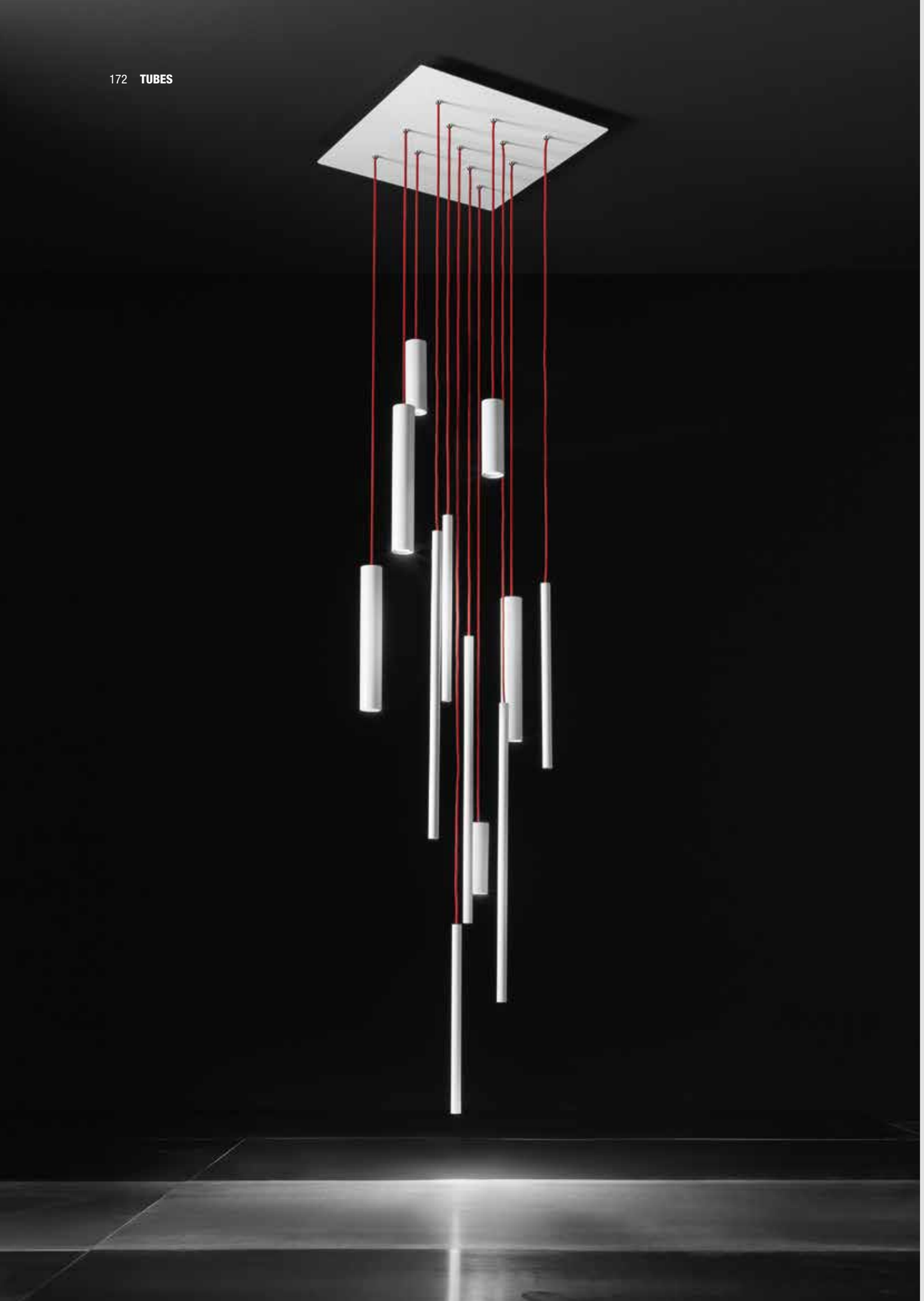
ELE: Elettronico
ELE: Electronic

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
6,2W	755lm	720lm	83%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 40°
LED NW	B	2
LED WW	A	1

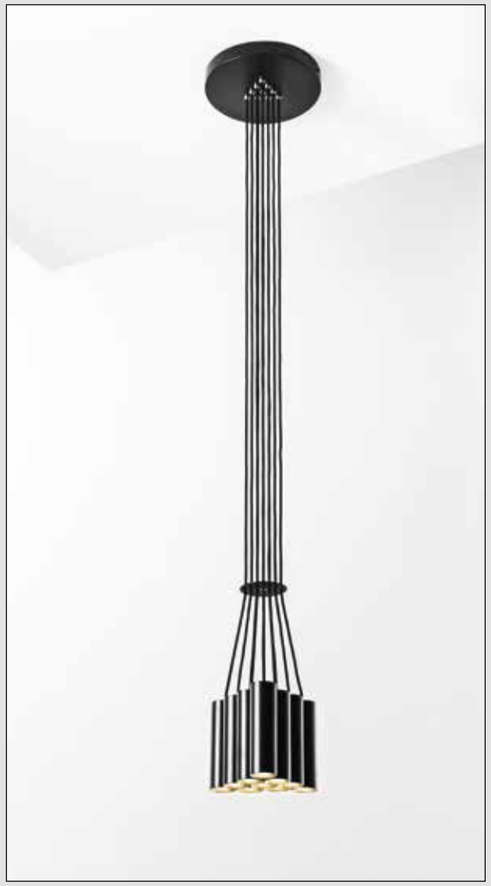


TUBES CUSTOM: AMPIA POSSIBILITA' DI PERSONALIZZARE IL PRODOTTO.
TUBES CUSTOM: WIDE RANGE OF CUSTOMISED OPTIONS

La famiglia TUBES consente la realizzazione di libere composizioni a grappolo. Abbinando elementi di diametro e lunghezza diversi si potranno creare scenari luminosi personalizzati, caratterizzati dal rigore della simmetria o dalla leggerezza delle altezze sfalsate.

The TUBES range makes it possible to create free cluster compositions. Tubes of different diameters and lengths can be clustered to create customised light effects, either in neat symmetries or in light, staggered compositions.

Alcuni esempi di realizzazioni 'custom'
Some examples of custom installations



Le foto mostrano solo alcune delle realizzazioni possibili: lunghezza, colore, elettrificazione e controllo domotico... gli abbinamenti sono molteplici.
The pictures show only some of the possible applications - different lengths, colours, wirings and domotics result in endless combinations.

QSO

Design **Mizar**

APPARECCHIO A SOSPENSIONE

Richiama lo stile delle tradizionali armature industriali questa famiglia di sospensioni, capaci di rispondere con eleganza alle esigenze illuminotecniche di ambienti come negozi, padiglioni espositivi, centri commerciali, foyer e corridoi.
L'accostamento di colori inediti come il verde e il magenta, aggiungono al programma una valenza decorativa e ne estendono l'applicazione a tutti gli ambienti dove si richiedano particolari ambientazioni e personalizzazioni.
Particolarmente interessante, per la tecnologia impiegata, il modello a sospensione maxi con ottica microprismatizzata antiabbagliamento.
La luce generata da LED monocromatici attraversa lo schermo generando una texture tridimensionale formata da tanti anellli luminosi che si sovrappongono l'uno all'altro e che cambiano aspetto rispetto alla posizione dell'osservatore.

PENDANT FIXTURE

The design style of this range of pendants is reminiscent of traditional industrial framing, and makes it suitable to elegantly address the lighting design needs of settings such as shops, trade fair pavilions, shopping centres, foyers and corridors.
The unusual colour schemes including green and magenta give the range its characteristic decorative value and extend its application range to all settings that require unique layouts and customisation.
The maxi pendant model is particularly interesting for the technology it employs, which features micro-prismatic antiglare optics.
The light generated by monochrome LEDs goes through the screen creating a three-dimensional texture formed by multiple overlapping light rings, whose appearance changes depending on the observer's position.

QSO

Design **Mizar**

Apparecchio a sospensione, completo di alimentatore.

Pendant fixture with power supply unit.

Sorgenti luminose:
Versioni con riflettore metallico: LED monocromatici **22W** e **32W**.
Versioni con riflettore in metacrilato: LED monocromatici **31,5W**, **31,5W+13W, 46,5W, 46,5W+13W**.

Ottica dell'apparecchio:
Versioni con diffusore:
Sistema "Polarizing Prism": **F** 50°.
Versioni fosfori remoti: **W** 80°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI).
Elettronico dimmerabile analogico (1-10V) a richiesta

Classificazione:
C.I. I, Marchio F, IP20, IP40.

Emissione luminosa:
Diretta nelle versioni con riflettore metallico, anche con retroilluminazione nelle versioni con diffusore prismatico.

Caratteristiche costruttive:
Corpo in alluminio estruso e acciaio verniciato, diffusore in PMMA prismatizzato, viterie e particolari in acciaio.

Lighting sources:
Versions with metal reflector: ***22W*** *and* ***32W*** *monochrome LEDs.*
Versions with methacrylate reflector: ***31,5W***, ***31,5W+13W, 46,5W, 46,5W+13W*** *monochrome LEDs.*

Optics of the projector:
Diffuser versions:
"Polarizing Prism" system: ***F*** *50°.*
Remote phosphors versions: ***W*** *80°.*

LED features:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI).
Analogue dimmable electronic (1-10V) available on request.

Classification:
I.C. I, Mark F, IP20, IP40.

Light emission:
Direct in the metal reflector versions, also with backlighting in prismatic diffuser versions.

Constructive features:
Extruded and painted steel body, prismatic PMMA diffuser, steel screws and components.

Ottiche
Optics:

F 50° **W** 80°

SORGENTI LUMINOSE
LIGHT SOURCES

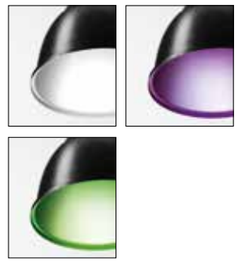
	OPTICS SYSTEM		QSO-SA34	QSO-SA51
LED	Prismatic diffuser	**50°**	-	31,5W 31,5W+13W 46,5W 46,5W+13W
	Remote phosphor	**80°**	22W 32W	-

COLORI
COLOURS

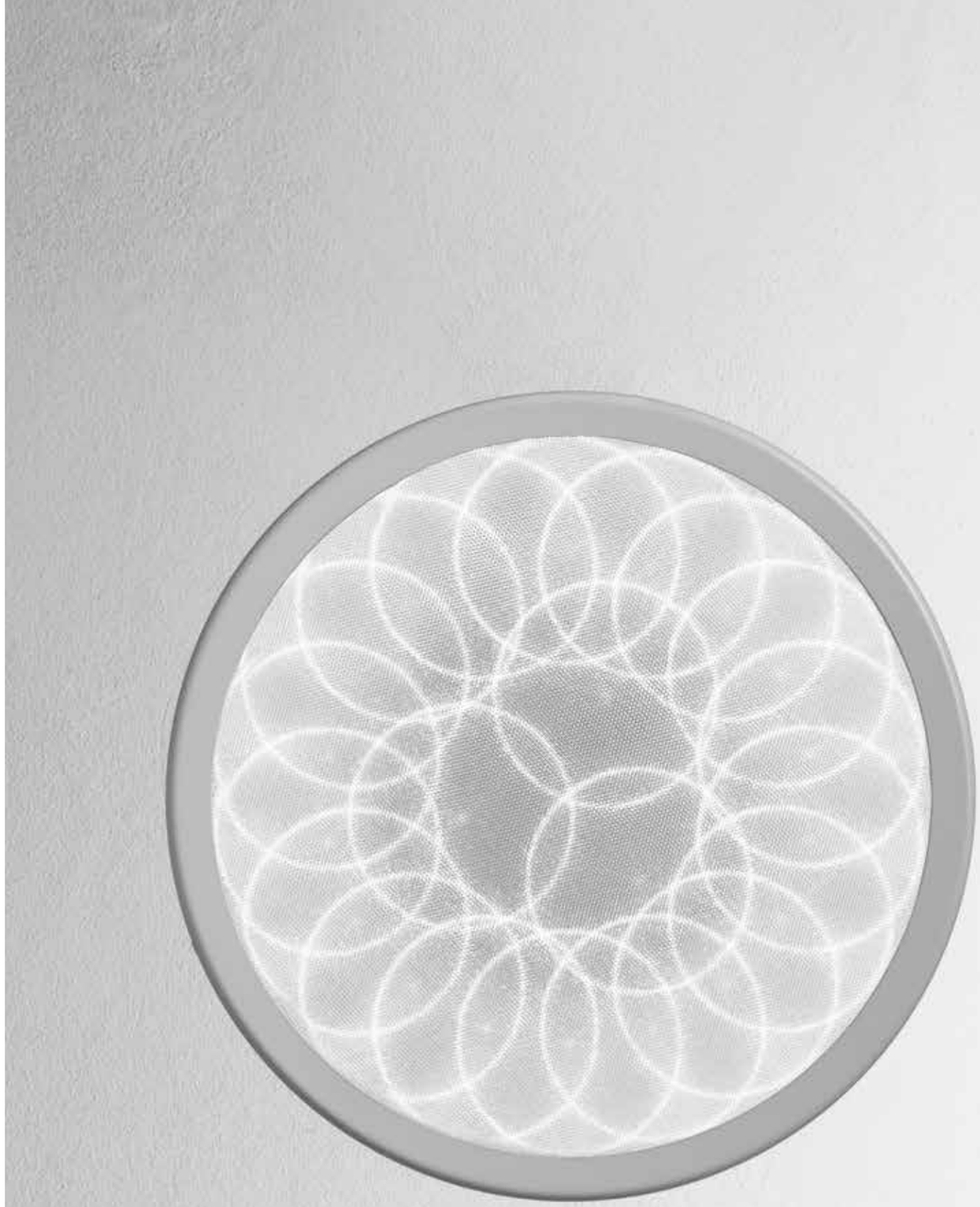
15 Nero
Black

16 Bianco
White

28 Grigio argento
Silver Grey



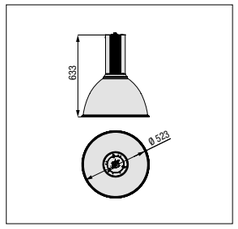
46 49 4V Nero/Bianco, Nero/Magenta, Nero/Verde
Black/White, Black/Magenta Black/Green



EFFETTO SPECIALE 3D
Diffusore prismatico - sistema "Polarizing Prism".

3D SPECIAL EFFECT
Prismatic diffuser - "Polarizing Prism" system.

Sospensione Ø523mm con riflettore metacrilato, LED monocromatici e diffusore prismatizzato - sistema “Polarizing Prism”. Completo di alimentatore.
Ø523mm pendant fixture with monochrome LED source and prismatic diffuser - “Polarizing Prism” system, complete with power supply unit.



Colours: 15 | 16 | 28 — IP40

TYPE	WATTAGE	LAMP	WIRING		CODE
QSO-SA51	31,5W 220-240 Vac	LED NW	ELE	●	**265R**
QSO-SA51	31,5W 220-240 Vac	LED WW	ELE	●	**265V**
QSO-SA51	31,5W 220-240 Vac	LED NW	EDD*	●	**265P**
QSO-SA51	31,5W 220-240 Vac	LED WW	EDD*	●	**265Z**
QSO-SA51	46,5W 220-240 Vac	LED NW	ELE	●	**266R**
QSO-SA51	46,5W 220-240 Vac	LED WW	ELE	●	**266V**
QSO-SA51	46,5W 220-240 Vac	LED NW	EDD*	●	**266P**
QSO-SA51	46,5W 220-240 Vac	LED WW	EDD*	●	**266Z**

Con retroilluminazione. ***With backlight.***

TYPE	WATTAGE	LAMP	WIRING		CODE
QSO-SA51	31,5W + 13W 220-240 Vac	LED NW	ELE	●	**265T**
QSO-SA51	31,5W + 13W 220-240 Vac	LED WW	ELE	●	**265S**
QSO-SA51	31,5W + 13W 220-240 Vac	LED NW	EDD*	●	**265G**
QSO-SA51	31,5W + 13W 220-240 Vac	LED WW	EDD*	●	**265U**
QSO-SA51	46,5W + 13W 220-240 Vac	LED NW	ELE	●	**266T**
QSO-SA51	46,5W + 13W 220-240 Vac	LED WW	ELE	●	**266S**
QSO-SA51	46,5W + 13W 220-240 Vac	LED NW	EDD*	●	**266G**
QSO-SA51	46,5W + 13W 220-240 Vac	LED WW	EDD*	●	**266U**

Kit sospensione da ordinare separatamente.
Pendant fastening kit to be ordered separately.

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic version (1-10V) available on request.

Versione da 67W (NW lm 6870, WW lm 6300, LOR 81%) e 104W (NW lm 9270, WW lm 8520, LOR 81%) a richiesta.
67W (NW lm 6870, WW lm 6300, LOR 81%) and 104W (NW lm 9270, WW lm 8520, LOR 81%) version available on request.

KIT SOSPENSIONE
PENDANT KIT

Kit per fissaggio a binario 230V completo di adattatore.
230V track fastening kit inclusive of adapter.

Colours: 15 | 16 | 28

TYPE	DIM		CODE
QSO-KB	H 3000mm		**2675**
QSO-KB	H 5000mm		**2686**
QSO-KBD	H 3000mm	DALI	**2676**
QSO-KBD	H 5000mm	DALI	**2687**

Kit per fissaggio a soffitto.
Ceiling fastening kit.

Colours: 15 | 16 | 28

TYPE	OPTICS		CODE
QSO-KS3	H 3000mm		**2673**
QSO-KS3	H 5000mm		**2690**
QSO-KS5	H 3000mm	DALI	**2674**
QSO-KS5	H 5000mm	DALI	**2691**

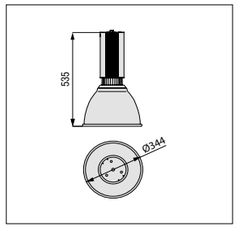
* Utilizzare esclusivamente binario DALI tipo NKD-BIN
* *For installation on DALI NKD-BIN type track only*

ELE: Elettronico
EDD: Elettronico Dim Digitale(DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
31,5W	3780lm	3510lm	81%
46,5W	5070lm	4710lm	81%

Sospensione Ø344mm con sistema LED “Fosfori remoti”. Completo di alimentatore.
Ø344mm pendant fixture with “Remote phosphor” LED system and power supply unit.



Colours: 16 | 28 | 46 | 49 | 4V | IP20

TYPE	WATTAGE	LAMP		WIRING		CODE
QSO-SA34	22W 220-240 Vac	LED WW	2000lm	ELE	●	**264Q**
QSO-SA34	32W 220-240 Vac	LED WW	3000lm	ELE	●	**26QQ**

Kit sospensione da ordinare separatamente. *Pendant fastening kit to be ordered separately.*

KIT SOSPENSIONE
PENDANT KIT

Kit per fissaggio a binario 230V completo di adattatore.
230V track fastening kit inclusive of adapter.

Colours: 15 | 16 | 28

TYPE	DIM	CODE
QSO-KB	H 3000mm	**2675**
QSO-KB	H 5000mm	**2686**

Kit per fissaggio a soffitto.
Ceiling fastening kit.

Colours: 15 | 16 | 28

TYPE	OPTICS	CODE
QSO-KS3	H 3000mm	**2673**
QSO-KS3	H 5000mm	**2690**

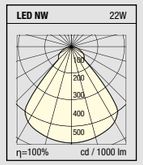
ELE: Elettronico
ELE: Electronic

NOMINAL FLUX / LOR (Light Output Ratio)

LED	WW	LOR
22W	2000lm	70%
32W	3000lm	70%

SISTEMA A "FOSFORI REMOTI"
"REMOTE PHOSPHOR" SYSTEM

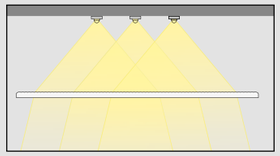
QSO LED - SISTEMA A "FOSFORI REMOTI"
QSO LED - "RHEMOTE PHOSPHORS" SYSTEM



Il prodotto utilizza un Modulo LED ad alta potenza ed efficienza, dotato della speciale tecnologia dei Fosfori Remoti.

The fixture uses a high power, highly efficient LED Module, which utilises the special remote phosphor technology.

QSO LED - SISTEMA "POLARIZING PRISM"
QSO LED - "POLARIZING PRISM" SYSTEM



Il prodotto permette un'emissione luminosa diretta simmetrica con effetto comfort light e una retroilluminazione indiretta; entrambe a LED e gestibili mediante accensioni indipendenti.

The fixture allows symmetrical direct light emission with a comfort light effect and indirect back-lighting; both by LED, they can be controlled by means of independent switching.

SISTEMA "POLARIZING PRISM" E UGR <19
"POLARIZING PRISM" SYSTEM, UGR <19

Il diffusore Microprismatico Sistema Polarizing Prism, posizionato ad una distanza adeguata rispetto alla scheda LED, consente una emissione controllata della luce, una ridotta luminanza tale da garantire un **UGR<19 (solo versione 31,5W)**.

*The Polarising Prism System Micro-prismatic diffuser, placed at adequate distance from the LED board, assures controlled light emission, low luminance resulting in **UGR<19 (only for 31,5W version)**.*

SISTEMA "POLARIZING PRISM" E RENDIMENTI
"POLARIZING PRISM" SYSTEM AND PERFORMANCE

Il diffusore Microprismatico Sistema Polarizing Prism consente di raggiungere elevati rendimenti mantenendo nel contempo una emissione omogenea e gradevole.

The Polarising Prism System Micro-prismatic diffuser assures high performance, yet maintaining consistent and pleasant emission.

SHOP

Design **Mizar**

APPARECCHI A PARETE, SOFFITTO E SOSPENSIONE ORIENTABILI.

Sistema di illuminazione dinamico e versatile per illuminazione generale e d'accento di ambienti espositivi, spazi museali, retail e contesti residenziali moderni.
L'estetica della nuova serie Shop si presenta senza viti a vista, grazie all'impiego di tecnologie e soluzioni all'avanguardia.
Ogni singolo vano lampada è orientabile e indipendente per la massima precisione nei puntamenti ed elevati comfort visivi.
Le alimentazioni elettroniche, elettroniche dimmerabili e DALI sono inglobate nella struttura del prodotto. Questo evita l'utilizzo di componenti invasive e antiestetiche. Nella versione con elettroniche dimmerabili DALI è possibile gestire a coppie il flusso luminoso.
Proposto in cinque varianti dimensionali, da 1 a 4 corpi lampada, il programma prevede l'abbinamento di differenti tipologie di sorgenti: moduli LED di potenza, alogenuri metallici, alogene.
Completano il sistema, filtri dicroici, schermi alveolari e rifrattori per la distribuzione ellittica del flusso luminoso.

ADJUSTABLE WALL, CEILING AND PENDANT FIXTURES.

Dynamic and versatile lighting system for general and accent lighting of exhibition spaces, museums, retail outlets and modern residential buildings.
The new Shop series features no screws in view thanks to state-of-the-art technologies and solutions.
Each single lamp compartment is adjustable and independent for maximum adjustment precision and high visual comfort.
Electronic, electronic dimmable and DALI power supplies are built in the fixture's structure. This makes the use of invasive and unsightly components in anchoring systems unnecessary.
In the DALI electronic dimmable version it is also possible to manage the output of each single light source independently.
Available in five size variants, from 1 to 4 lamp bodies, the range design allows for matching different types of sources: power LED modules, metal halogenides, halogen.
The system is complemented by dichroic filters, honeycomb screens and refractors for elliptical distribution of the light output.

SHOP

Design **Mizar**

Apparecchi a parete, soffitto e sospensione orientabili.

Adjustable wall, ceiling and pendant fixtures.

Sorgenti luminose:
LED COB **17,5W**, sorgenti alogene e lampade LED.

Sistema ottico:
LED con ottiche di tre diverse gradazioni, S **16°**,M **28°** e M **35°**.

Rotazione:
SHOP ±155° sul braccetto asse orizzontale; per i singoli corpi luce orientabilità ±45° e ±16° sugli assi orizzontali.

Cablaggio:
Elettronico, elettronico dimmerabile (IGBT), elettronico dimmerabile digitale (DALI).

Classificazione:
C.I. I, Marchio F, IP20.

Emissiona luminosa:
Diretta.

Caratteristiche costruttive:
Struttura in estruso di alluminio, anello cardanico in alluminio pressofuso, ottica sfaccettata con vetro effetto prismatizzato, viterie e particolari in acciaio.

Trattamenti:
Verniciatura a polveri di poliestere ad elevata resistenza

Light sources:
*LED COB **17,5W**, halogen and LED lamp.*

Optics:
*LED with three different LED optics opening angles: S **16°**,M **28°** and M **35°** .*

Rotation:
SHOP ±155° on the horizontal axis arm; individual light bodies are adjustable by ±45° and ± 16° on the horizontal axes.

Wiring:
Electronic, dimmable electronic (IGBT), electronic digital dimmable (DALI).

Classification:
I.C. I, Mark F, IP40.

Light emission:
Direct

Constructive features:
Extruded aluminium structure, die-cast aluminium cardan ring, high-transmission-index transparent PMMA LED lenses, steel screws and components.

Finishes:
High-resistance, polyester powder painting

Ottiche
Optics:

S 16° **M** 28° **M** 35°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	SHOP-AL1	SHOP-AL2 / SL2	SHOP-AL3 / SL3	SHOP-AL4 / ALQ	SHOP-SL4 / SQ4
LED multichip	Prismatic effect glass **16° 28° 35°**	1x 17,5W	2x 17,5W	3x 17,5W	4x 17,5W	4x 17,5W
Halogen bulbs QR111		1x 70W/15W	2x 70W/15W	3x 70W/15W	4x 70W/15W	4x 70W/15W

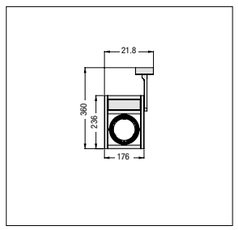
COLORI
COLOURS

16 Bianco *White*

28 Grigio argento *Silver grey*

15 Nero a richiesta *Black on request*

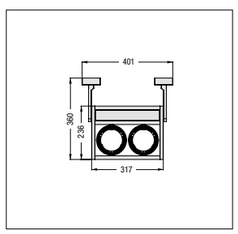
Apparecchio a parete e soffitto ad 1 luce completo di alimentatore.
1-lamp wall and ceiling fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-AL1	17,5W 220-240Vac		LED	ELE	●	**74Q#**
SHOP-AL1	70W/15W	G53	QR111/LED Lamp	ED1		**7901**

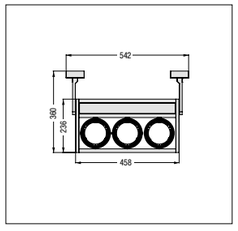
Apparecchio a parete e soffitto in linea a 2 luci completo di alimentatore.
Two-lamp in-line wall and ceiling fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-AL2	2X 17,5W 220-240Vac		LED	ELE	●	**74A#**
SHOP-AL2	2X 17,5W 220-240Vac		LED	EDD	●	**74B#**
SHOP-AL2	2x 70W/15W	G53	QR111/LED Lamp	ED1		**7903**

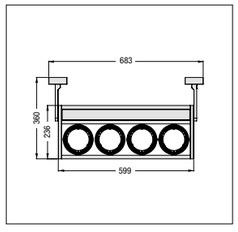
Apparecchio a parete e soffitto in linea a 3 luci completo di alimentatore.
3-lamp in-line wall and ceiling fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-AL3	3x 17,5W 220-240Vac		LED	ELE	●	**74C#**
SHOP-AL3	3x 70W/15W	G53	QR111/LED Lamp	ED1		**7905**

Apparecchio a parete e soffitto in linea a 4 luci completo di alimentatore.
Four-lamp in-line wall and ceiling fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-AL4	4x 17,5W 220-240Vac		LED	ELE	●	**74D#**
SHOP-AL4	4x 17,5W 220-240Vac		LED	EDD	●	**74F#**
SHOP-AL4	4x 70W/15W	G53	QR111/LED Lamp	ELE		**7908**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Dim Electronic (DALI)

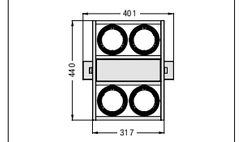
NOMINAL FLUX / LOR (Light Output Ratio)

			Prismatic diffuser
LED	**NW**	**WW**	**LOR**
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

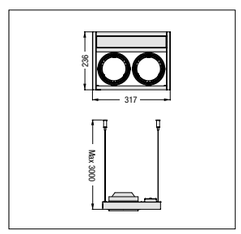
Apparecchio a parete e soffitto quadro a 4 luci completo di alimentatore.
Four-lamp square wall and ceiling fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-ALQ	4x 17,5W 220-240Vac		LED	ELE	●	**74G#**
SHOP-ALQ	4x 17,5W 220-240Vac		LED	EDD	●	**74H#**
SHOP-ALQ	4x 70W/15W	G53	QR111/LED Lamp	ED2		**7913**

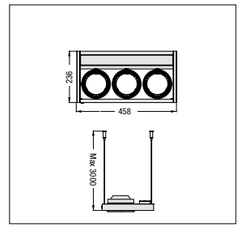
Apparecchio a sospensione in linea a 2 luci completo di alimentatore.
Two-light in-line pendant fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-SL2	2x 17,5W 220-240Vac		LED	ELE	●	**74S#**
SHOP-SL2	2x 17,5W 220-240Vac		LED	EDD	●	**74T#**
SHOP-SL2	2x 70W/15W	G53	QR111/LED Lamp	ED1		**7923**

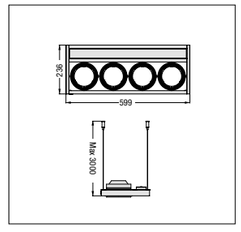
Apparecchio a sospensione in linea a 3 luci completo di alimentatore.
Three-light in-line pendant fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-SL3	3x 17,5W 220-240Vac		LED	ELE	●	**74V#**
SHOP-SL3	3x 70W/15W	G53	QR111/LED Lamp	ED1		**7925**

Apparecchio a sospensione in linea a 4 luci completo di alimentatore.
Four-light in-line pendant fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
SHOP-SL4	4x 17,5W 220-240Vac		LED	ELE	●	**74Y#**
SHOP-SL4	4x 17,5W 220-240Vac		LED	EDD	●	**74Z#**
SHOP-SL4	4x 70W/15W	G53	QR111/LED Lamp	ED1		**7928**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Dim Electronic (DALI)

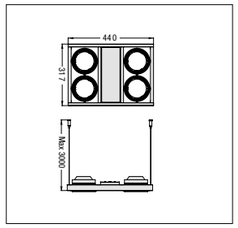
NOMINAL FLUX / LOR (Light Output Ratio)

			Prismatic diffuser
LED	**NW**	**WW**	**LOR**
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

Apparecchio a sospensione quadra a 4 luci completo di alimentatore.
Four-light square pendant fixture complete with power supply unit.



Colours: 16 28 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
SHOP-SQ4	4x 17,5W 220-240Vac		LED	ELE ●	**74X#**
SHOP-SQ4	4x 17,5W 220-240Vac		LED	EDD ●	**74W#**
SHOP-SQ4	4x 70W/15W	G53	QR111/LED Lamp	ED1	**7933**

ACCESSORI
ACCESSORIES

Filtro dicroico colorato.
Coloured dichroic filter.

Colours: 12 13 14

TYPE	CODE
X111-FD	**7965**

Vetro sabbiato.
Sandblasted glass.

Colours: 03

TYPE	CODE
X111-FD	**7965**

Diffusore prismatico trasparente.
Transparent prismatic diffuser.

Colours: 02

TYPE	CODE
X111-DP	**7966**

Rifrattore per distribuzione ellittica.
Refractor for light flux elliptical distribution.

Colours: 02

TYPE	CODE
X111-RE	**7964**

Schermo alveolare.
Honeycomb screen.

Colours: 15

TYPE	CODE
X111-SA	**7963**

Kit 3 molle per fissaggio accessori.
Three-spring accessory fastening kit.

Colours: 00

TYPE	CODE
X111-K	**7962**

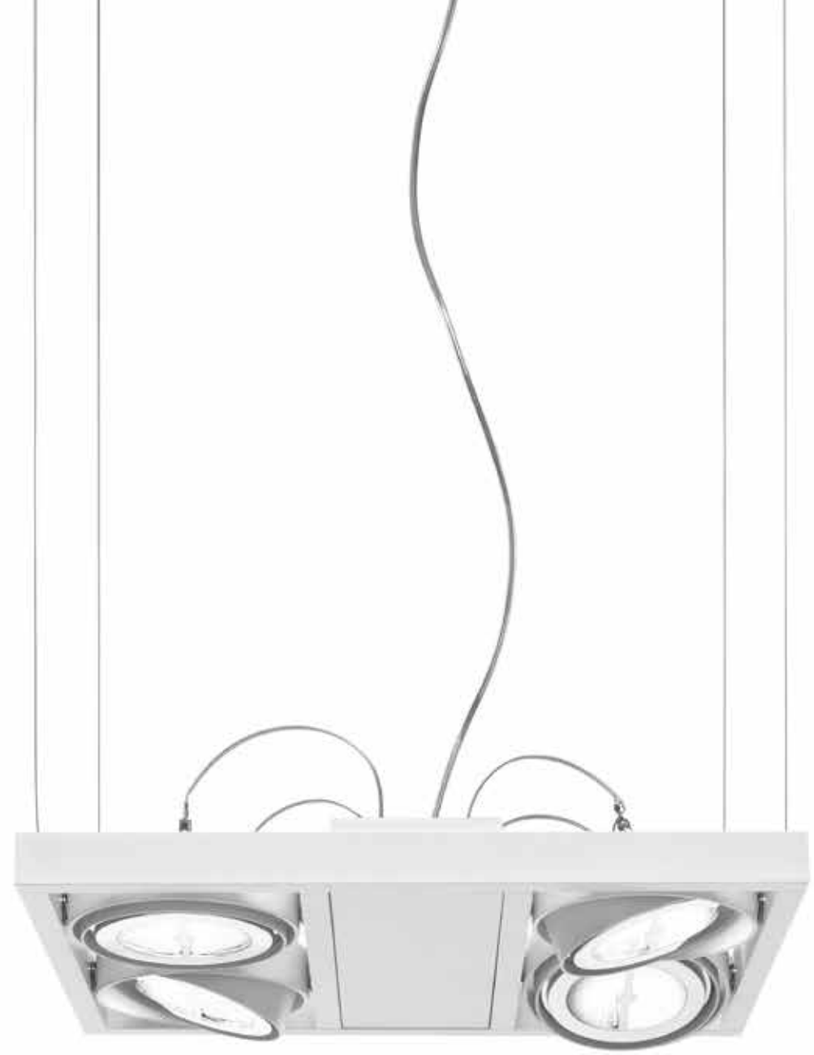
ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

			Prismatic diffuser
LED	**NW**	**WW**	**LOR**
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

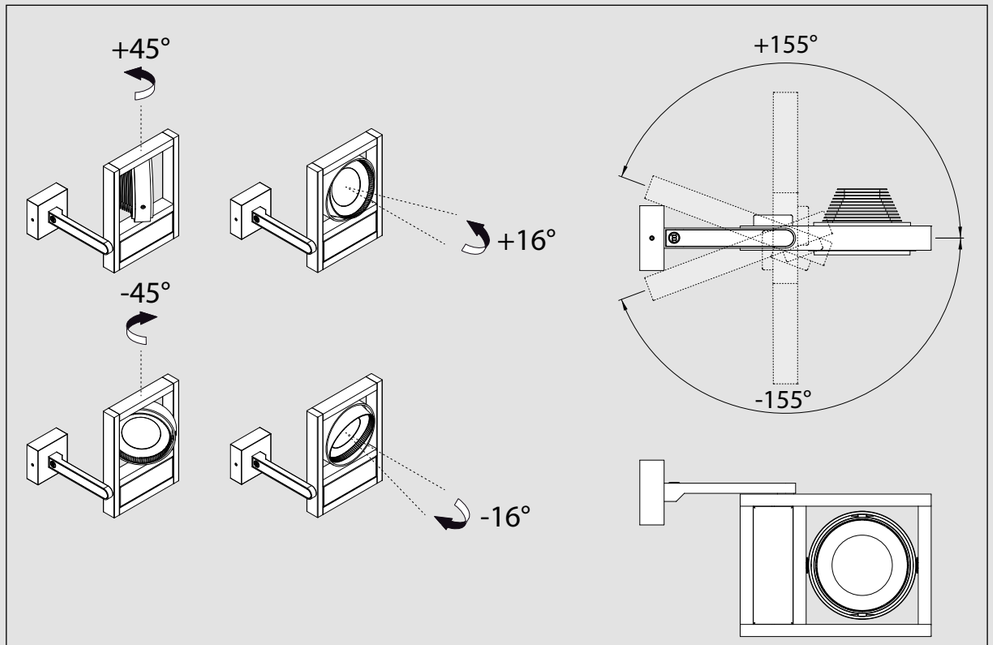


SHOP LED

La tecnologia LED incontra la flessibilità del sistema modulare Shop.
I gruppi luce sono costruiti interamente in alluminio anodizzato e progettati per garantire la massima dissipazione termica.
Questi accorgimenti permettono di preservare stabilità e durata del diodo e delle elettroniche di bordo del circuito.
Le ottiche secondarie utilizzate sono di altissima qualità, studiate per ottimizzare il rendimento del prodotto e le caratteristiche cromatiche del fascio luminoso.
Comfort illuminotecnico - Il gruppo ottico è completo di diffusore prismatizzato per evitare problematiche dovute all'abbagliamento diretto.

LED technology meets the flexibility of the Shop modular system.
Light units are entirely constructed in anodized aluminium and designed to assure maximum thermal dissipation.
These design choices assure stability as well as long life of the circuit's diode and electronics.
Top quality secondary optics are used, developed to optimise product performance and light beam chromatic features.
Lighting design comfort – the LED module is placed rearward in the optics unit to avoid any issues connected to direct glaring.

ORIENTABILITÀ E PUNTAMENTO
ADJUSTABILITY AND FOCUSING



Proiettore ± 155° sull'asse orizzontale.
SHOP - Singoli corpi luce orientabili ±45° e ±16° sugli assi orizzontali.

Projector adjustable by ±155° on the horizontal axis arm.
SHOP - Single light bodies are adjustable ±45° and ± 16° on the horizontal axes.

RAY

Design **Afra e Tobia Scarpa**

APPARECCHIO A SOSPENSIONE, PARETE/SOFFITTO E DA TERRA.

Un unico vano realizzato attraverso un profilo di alluminio estruso ospita le unità di alimentazione per i singoli proiettori che possono variare da uno a quattro.
Il programma Ray si presta particolarmente all'impiego in campo museale nonché in ambienti caratterizzati da frequenti variazioni dell'assetto espositivo per i numerosi vantaggi che offre sia in termini di installazione che di flessibilità di utilizzo.
Ray permette di ridurre al minimo l'impatto visivo e ridurre il numero dei punti di alimentazione a favore della conservazione di ambienti di interesse storico artistico.
Tra gli accessori progettati per migliorare le performance dell'apparecchio, vi è il dispositivo conico convergente che presenta una superficie interna in grado di assorbire totalmente i raggi divergenti: testato su sorgenti alogene dicroiche da 50 watt permette che solo il flusso principale, formato da raggi perpendicolari al piano di fuoco della lampada, raggiunga l'oggetto da illuminare che può trovarsi anche a più di 10 metri di distanza dall'apparecchio.

PENDANT, WALL/CEILING AND FLOOR FIXTURE.

A single compartment made with an extruded aluminium profile houses the power supply units for the individual projectors, which may vary between one and four.
The Ray programme is especially suitable for museum installations as well as in premises featuring frequent changes in the exhibition set-up due to the numerous advantages it offers both in terms of installation and flexibility of use.
Ray makes it possible to reduce visual impact to a minimum and reduce the number of power supply points to the benefit of preservation of premises with high historical and artistic value.
Among the accessories designed to improve the fixture's performance, there is a converging conical device whose internal surface is able to wholly absorb divergent rays: tested on 50 watt halogen dichroic sources it only allows the main flux - formed by rays perpendicular to the lamp's focus plane - to reach the object to be lit, which may be even farther than 10 metres from the fixture.

RAY

Design **Afra e Tobia Scarpa**

Apparecchio a sospensione, parete/soffitto e da terra, completo di alimentatore.

Pendant, wall/ceiling and floor fixture, complete with power supply unit.

Sorgenti luminose:
LED puntuale monocromatico, sorgenti alogene e lampade LED.

Ottica del proiettore:
LED puntuale monocromatico: **N** 10° **S** 20° **M** 35°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Rotazione:
Rotazione del proiettore: sull'asse verticale 355°, sul piano orizzontale ±60°.
Rotazione dell'ala: sul piano orizzontale ±135°.

Cablaggio:
Elettronico, elettronico dimmerabile (TRIAC/IGBT), elettronico dimmerabile digitale (DALI), elettronico dimmerabile manuale.
Elettronico emergenza 1h e 3h a richiesta.

Classificazione:
C.I. II, Marchio F, IP20.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Struttura in estruso di alluminio, corpo in pressofusione di alluminio e alluminio Anticorodal (versioni LED), supporti in vetro temprato extrachiaro, lenti LED in PMMA trasparente, viterie e particolari in acciaio.

Light sources:
Light sources: Monochrome LED, halogen sources and LED lamps.

Projector optics:
Monochrome spot LED: N 10° S 20° M 35°.

LED features:
3000K=WW
4000K=NW
(2700K= on demand)
CRI>80
(CRI>90= on demand)

Fixture:
Projector rotation: 355° on the vertical axis, ±60° on the horizontal plane.
Wing rotation: on the horizontal plane ±135°

Wiring:
Electronic, electronic dimmable (TRIAC/IGBT), electronic dimmable digital (DALI), electronic dimmable manual.
Electronic emergency 1h and 3h on demand.

Classification:
I.C. II, Mark F, IP40.

Light emission:
Direct.

Construction features:
Structure in extruded aluminium, body in die-cast aluminium and Anticorodal aluminium (LED versions), supports in extra-clear tempered glass, LED lenses in clear PMMA, steel screws and components.

Ottiche
Optics:

N 10° **S** 20° **M** 35°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTICS SYSTEM	RAY-B1 / ALA1	RAY-B2 / ALA2	RAY-B3 / ALA3	RAY-B4 / ALA4
LED	- **10° 20° 35°**	1x (7x1,27W)	2x (7x1,27W)	3x (7x1,27W)	4x (7x1,27W)
LED lamps	-	1x 10W 1x 15W	2x 10W 2x 15W	3x 10W 3x 15W	4x 10W 4x 15W
Halogen lamps QR-CB 51	-	1x 50W	2x 50W	3x 50W	4x 50W

COLORI
COLOURS

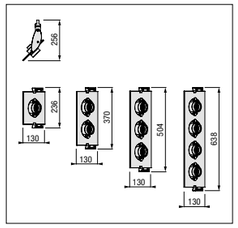
70 Bianco/Trasparente
White/Clear

28 Grigio argento/Trasparente
Silver grey/Clear

LED 7x1,27W
LED puntuale monocromatico
Monochrome spot LED
N *10°* ***S*** *20°* ***M*** *35°*

ALI PER APPLICAZIONI A BINARIO.
WINGS FOR TRACK APPLICATIONS.

Ala a binario da una a quattro luci completa di alimentatore e di diffusore trasparente. Versioni LED: LED puntuali monocromatici.
Track wing with one to four lights complete with power supply unit and clear diffuser. LED versions: Monochrome spot LEDs.



Colours: 70 80 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
RAY-B1	1x (7x1,27W) 220-240 Vac		LED	ELE	●	**77A#**
RAY-B1	1x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ELE		**7741**
RAY-B1	1x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7705**
RAY-B1	1x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ELE		**77Q1**
RAY-B1	1x 50W 220-240 Vac	G53	QR111	EDR		**77Q5**
RAY-B2	2x (7x1,27W) 220-240 Vac		LED	ELE	●	**77C#**
RAY-B2	2x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ELE		**7742**
RAY-B2	2x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7706**
RAY-B2	2x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ELE		**77Q2**
RAY-B2	2x 50W 220-240 Vac	G53	QR111	EDR		**77Q6**
RAY-B3	3x (7x1,27W) 220-240 Vac		LED	ELE	●	**77H#**
RAY-B3	3x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ELE		**7743**
RAY-B3	3x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7707**
RAY-B3	3x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ELE		**77Q3**
RAY-B3	3x 50W 220-240 Vac	G53	QR111	EDR		**77Q7**
RAY-B4	4x (7x1,27W) 220-240 Vac		LED	ELE	●	**77M#**
RAY-B4	4x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ELE		**7744**
RAY-B4	4x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7708**
RAY-B4	4x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ELE		**77Q4**
RAY-B4	4x 50W 220-240 Vac	G53	QR111	EDR		**77Q8**

Versione elettronica dimmerabile digitale (DALI) a richiesta.
Digital dimmable electronic version (DALI) on demand.

ELE: Elettronico
EDR: Elettronico Dim manuale
ELE: Electronic
EDR: Electronic Dim Manual

NOMINAL FLUX / LOR (Light Output Ratio)

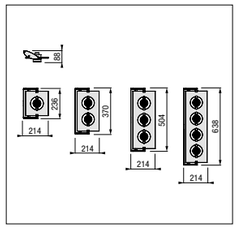
LED	NW	WW	LOR
7x1,27W	678lm	634lm	80%

LED CODE (...#)

LED TEMPERATURES	N 10°	S 20°	M 35°
LED 7x27W NW	J	B	2
LED 7x27W WW	H	A	1

ALI PER COMPOSIZIONI A PARETE, SOFFITTO, SOSPENSIONE E TERRA.
WINGS FOR WALL, CEILING, PENDANT AND FLOOR COMPOSITIONS.

Ala da una a quattro luci, completa di alimentatore e di diffusore trasparente. Accessori da ordinare separatamente. Versioni LED: LED puntuali monocromatici.
Wing with one to four lights complete with power supply unit and clear diffuser. Accessories to be ordered separately. LED versions: Monochrome spot LEDs.



Colours: 70 | 80 | IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
RAY-ALA1	1x (7x1,27W) 220-240 Vac		LED	ELE	●	**77P#**
RAY-ALA1	1x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ED1		**7751**
RAY-ALA1	1x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7D51**
RAY-ALA1	1x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ED1		**7770**
RAY-ALA1	1x 50W 220-240 Vac	G53	QR111	EDR		**7771**
RAY-ALA2	2x (7x1,27W) 220-240 Vac		LED	ELE	●	**77S#**
RAY-ALA2	2x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ED1		**7752**
RAY-ALA2	2x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7D52**
RAY-ALA2	2x 50W 220-240 Vac	GU5,3	QR-CB 51	EDD		**7772**
RAY-ALA2	2x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ED1		**7773**
RAY-ALA2	2x 50W 220-240 Vac	G53	QR111	EDR		**7774**
RAY-ALA2	2x 50W 220-240 Vac	G53	QR111	EDD		**7775**
RAY-ALA3	3x (7x1,27W) 220-240 Vac		LED	ELE	●	**77V#**
RAY-ALA3	3x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ED1		**7753**
RAY-ALA3	3x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7D53**
RAY-ALA3	3x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ED1		**7776**
RAY-ALA3	3x 50W 220-240 Vac	G53	QR111	EDR		**7777**
RAY-ALA4	4x (7x1,27W) 220-240 Vac		LED	ELE	●	**77Y#**
RAY-ALA4	4x 50W/10W 220-240 Vac	GU5,3	QR-CB 51/LED lamp	ED1		**7754**
RAY-ALA4	4x 50W 220-240 Vac	GU5,3	QR-CB 51	EDR		**7D54**
RAY-ALA4	4x 50W 220-240 Vac	GU5,3	QR-CB 51	EDD		**7778**
RAY-ALA4	4x 50W/15W 220-240 Vac	G53	QR111/LED lamp	ED1		**7779**
RAY-ALA4	4x 50W 220-240 Vac	G53	QR111	EDR		**7780**
RAY-ALA4	4x 50W 220-240 Vac	G53	QR111	EDD		**7781**

LED: Versione elettronica dimmerabile digitale (DALI) a richiesta.
LED: Digital dimmable electronic version (DALI) on demand.

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDR: Elettronico Dim manuale
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
ED1: Electronic Dim (IGBT)
EDR: Electronic Dim Manual
EDD: Electronic Digital Dim (DALI)

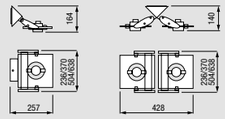
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
7x1,27W	678lm	634lm	80%

LED CODE (...#)

LED TEMPERATURES	N 10°	S 20°	M 35°
LED 7x27W NW	J	B	2
LED 7x27W WW	H	A	1

Installazione a parete/soffitto
Wall/Ceiling installation

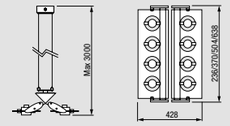


1 ALA / 1 WING **2 ALI / 2 WINGS**

ELECTRIFICATION		WIRING	WINGS				WALL/CEILING APPLICATIONS
POWER	LAMP		1 LIGHT	2 LIGHT	3 LIGHT	4 LIGHT	ROSE
ALA SINGOLA / SINGLE WING - Installazione a plafone / Wall sconce installation							
7X 1,27W	LED	ELE	**77P#**	**77S#**	**77V#**	**77Y#**	**7760**
50W	QR-CB 51	ED1	**7751**	**7752**	**7753**	**7754**	
50W	QR-CB 51	EDR	**7D51**	**7D52**	**7D53**	**7D54**	
50W	QR-CB 51	EDD	-	**7772**	-	**7778**	
50W	QR111	ED1	**7770**	**7773**	**7776**	**7779**	
50W	QR111	EDR	**7771**	**7774**	**7776**	**7780**	
50W	QR111	EDD	-	**7775**	-	**7781**	
DUE ALI / TWO WINGS - Installazione a soffitto / Ceiling installation							
7X 1,27W	LED	ELE	2x **77P#**	2x **77S#**	2x **77V#**	2x **77Y#**	**7765**
50W	QR-CB 51	ED1	2x **7751**	2x **7752**	2x **7753**	2x **7754**	
50W	QR-CB 51	EDR	2x **7D51**	2x **7D52**	2x **7D53**	2x **7D54**	
50W	QR-CB 51	EDD	-	2x **7772**	-	2x **7778**	
50W	QR111	ED1	2x **7770**	2x **7773**	2x **7776**	2x **7779**	
50W	QR111	EDR	2x **7771**	2x **7774**	2x **7776**	2x **7780**	
50W	QR111	EDD	-	2x **7775**	-	2x **7781**	

Ordinare sempre "**codice ALA**" + "**codice ROSONE**". Nel caso il prodotto preveda due ali, queste dovranno avere lo stesso codice.
*Always order "**WING code**" + "**CEILING ROSE code**". In case the product calls for two wings, these must have the same code.*

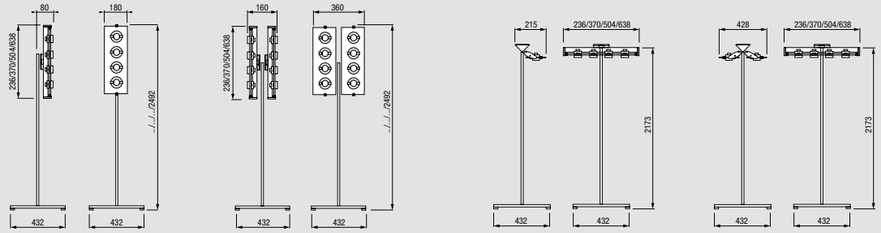
Installazione a sospensione
Pendant installation



ELECTRIFICATION		WIRING	WINGS				PENDANT APPLICATIONS
POWER	LAMP		1 LIGHT	2 LIGHT	3 LIGHT	4 LIGHT	CEILING BASE
7X 1,27W	LED	ELE	2x **77P#**	2x **77S#**	2x **77V#**	2x **77Y#**	**7758**
50W	QR-CB 51	ED1	2x **7751**	2x **7752**	2x **7753**	2x **7754**	**7758**
50W	QR-CB 51	EDR	2x **7D51**	2x **7D52**	2x **7D53**	2x **7D54**	
50W	QR-CB 51	EDD	-	2x **7772**	-	2x **7778**	**7759**
50W	QR111	ED1	2x **7770**	2x **7773**	2x **7776**	2x **7779**	**7758**
50W	QR111	EDR	2x **7771**	2x **7774**	2x **7776**	2x **7780**	
50W	QR111	EDD	-	2x **7775**	-	2x **7781**	**7759**

Ordinare sempre "**codice ALA**" + "**codice ROSONE**". Nel caso il prodotto preveda due ali, queste dovranno avere lo stesso codice.
*Always order "**WING code**" + "**CEILING ROSE code**". In case the product calls for two wings, these must have the same code.*

Installazione da terra
Floor installation



1 ALA / 1 WING — **2 ALI / 2 WINGS** — **1 ALA / 1 WING** — **2 ALI / 2 WINGS**

ELECTRIFICATION		WIRING	WINGS				FLOOR - Vertical wings			FLOOR - Horizontal wings		
POWER	LAMP		1 LIGHT	2 LIGHT	3 LIGHT	4 LIGHT	CONNECTION	STEM	BASE	CONNECTION	STEM	BASE
ALA SINGOLA / SINGLE WING												
7X 1,27W	LED	ELE	**77P#**	**77S#**	**77V#**	**77Y#**	**7764**	**7756**	**7757**	**7769**	**7756**	**7757**
50W	QR-CB 51	ED1	**7751**	**7752**	**7753**	**7754**						
50W	QR-CB 51	EDR	**7D51**	**7D52**	**7D53**	**7D54**						
50W	QR-CB 51	EDD	-	**7772**	-	**7778**						
50W	QR111	ED1	**7770**	**7773**	**7776**	**7779**						
50W	QR111	EDR	**7771**	**7774**	**7776**	**7780**						
50W	QR111	EDD	-	**7775**	-	**7781**						
DUE ALI / TWO WINGS												
7X 1,27W	LED	ELE	**77P#**	**77S#**	**77V#**	**77Y#**	**7769**	**7756**	**7757**	**7767**	**7755**	**7757**
50W	QR-CB 51	ED1	**7751**	**7752**	**7753**	**7754**						
50W	QR-CB 51	EDR	**7D51**	**7D52**	**7D53**	**7D54**						
50W	QR-CB 51	EDD	-	**7772**	-	**7778**						
50W	QR111	ED1	**7770**	**7773**	**7776**	**7779**						
50W	QR111	EDR	**7771**	**7774**	**7776**	**7780**						
50W	QR111	EDD	-	**7775**	-	**7781**						

Ordinare sempre "**codice ALA**" + "**codice ATTACCO**" + "**codice STELO**" + "**codice BASE**". Nel caso il prodotto preveda due ali, queste dovranno avere lo stesso codice.
*Always order "**WING code**" + "**CONNECTION code**" + "**STEM code**" + "**BASE code**". In case the product calls for two wings, these must have the same code.*

ACCESSORI
ACCESSORIES

Basetta fissaggio proiettori a soffitto.
Socket for fastening projectors to ceiling.

Colours: 15 16

TYPE	DIM	CODE
ST-BS	100x32	**1348**

Non applicabili nelle versioni DALI.
Non applicable in DALI versions.

Basetta da incasso fissaggio proiettori in controsoffitto max 30mm.
Socket for projectors recess installation in false ceiling max 30mm.

Colours: 15 16

TYPE	DIM		CODE
ST-BR	130x60	105-125	**1349**

Non applicabili nelle versioni DALI.
Non applicable in DALI versions.

Rosone per applicazione a parete di una ala.
Ceiling rose for one wing wall application.

Colours: 16 28

TYPE	CODE
RAY-CA1	**7760**

Rosone per applicazione a parete di due ali.
Ceiling rose for two wings wall application.

Colours: 16 28

TYPE	CODE
RAY-CA2	**7765**

Rosone per applicazione a sospensione con cavi H 3000mm.
Ceiling rose for pendant application with H 3000mm cables

Colours: 16 28

TYPE	WIRING	CODE
RAY-MS2	ED1 / EDR	**7758**
RAY-MS2A	EDD	**7759**

Attacco per applicazione da terra con ali orizzontali.
Connection for floor application with horizontal wings.

Colours: 28

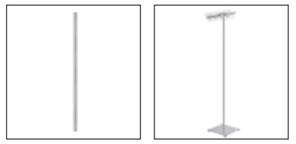
TYPE		WIRING	CODE
RAY-CTZ1	Single wing	ELE / EDR	**7762**
RAY-CTZ2	Two wings	ELE / EDR / EDD	**7767**

Attacco per applicazione da terra con ali verticali.
Connection for floor application with vertical wings.

Colours: 28

TYPE		WIRING	CODE
RAY-CTV1	Single wing	ELE / EDR	**7764**
RAY-CTV2	Two wings	ELE / EDR / EDD	**7769**

Stelo per applicazione da terra con ali orizzontali.
Stem for floor application with horizontal wings



Colours: 28

TYPE	WIRING	CODE
RAY-STZ	ELE / EDR / EDD	**7755**

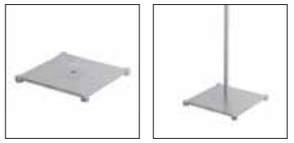
ACCESSORI
ACCESSORIES

Stelo per applicazione da terra con ali verticali.
Stem for floor application with vertical wings.

Colours: 28

TYPE	WIRING	CODE
RAY-STV	ELE / EDR / EDD	**7756**

Base per applicazione da terra.
Base for floor application.



Colours: 28

TYPE	WIRING	CODE
RAY-BASE	ELE / EDR / EDD	**7757**

Filtro dicroico o vetro sabbiato completo di ghiera per QR-CB 51.
Dichroic filter or sandblasted glass complete with ring nut for QR-CB 51.

Colours: 03 12 13 14 17

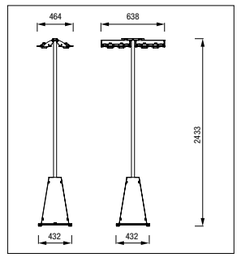
TYPE	Per/For	CODE
RAY-V		**4004**

Cono metallico convergente per il controllo del fascio luminoso. Il dispositivo, assorbendo totalmente i raggi divergenti, permette di illuminare oggetti collocati fino a 10m di distanza.
Convergent metal cone to control light beam. The device wholly absorbs divergent rays to light even objects placed up to 10m away.

Colours: 16 28

TYPE	CODE
RAY-K	**4014**

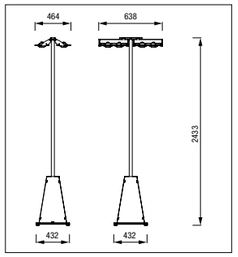
Lampada da terra 4+4 luci con emergenza integrata. *4+4 light floor lamp with built-in emergency.*



Colours: 80 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
RAY-TZ8E	4x50W + 4x50W	GU5,3	QR-CB 51	EE1	007	**7736**
RAY-TZ8E	4x50W + 4x50W	G53	QR111	ELE	007	**7745**

Lampada da terra 8+8 luci con emergenza integrata. *8+8 light floor lamp with built-in emergency.*



Colours: 80 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
RAY-TZ16E	8x50W + 8x50W	GU5,3	QR-CB 51	EE1	007	**7737**
RAY-TZ16E	8x50W + 8x50W	G53	QR111	ELE	007	**7746**

EE1: Elettronico emergenza 1h
EE1: Electronic emergency 1h

ETHER

Design **Mizar**

APPARECCHIO A SOSPENSIONE E A PLAFONE.

Apparecchi a sospensione e a plafone dalle forme geometriche tonde.
Particolarmente interessante è l'effetto 3D del sistema "Polarizing Prism".
La luce delle sorgenti LED attraversa lo schermo generando una texture tridimensionale, formata da tanti anelli luminosi che si sovrappongono l'uno all'altro e che cambiano aspetto rispetto alla posizione dell'osservatore.

PENDANT AND CEILING FIXTURE

Round pendant and ceiling fixtures.
The 3D effect of the "Polarising Prism" system is especially striking.
The light of the LED sources goes through the screen, giving rise to a 3D texture formed by countless overlapping rings of light, whose appearance changes according to the observer's position.

ETHER

Design **Mizar**

Apparecchio a sospensione e a plafone, completo di alimentatore.

Pendant and ceiling fixture, complete with power supply unit.

Sorgenti luminose:
LED monocromatici **31,5W** e **46,5W**.

Ottica dell'apparecchio:
Sistema "Polarizing Prism": **F** 70°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico,elettronico dimmerabile digitale (DALI/SWITCH-DIM). Elettronico dimmerabile analogico (1-10V) a richiesta.

Classificazione:
C.I. I, Marchio F, IP20.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Corpo in acciaio verniciato a polveri, diffusore prismatico, viterie e particolari in acciaio.

Lighting sources:
*Monochrome **31,5W** and **46,5W** LEDs*

Optics of the fixture:
*"Polarizing Prism" system: **F** 70°.*

LED features:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI/SWITCH-DIM). Analogue dimmable electronic (1-10V) on request.

Classification:
I.C. I, Mark F, IP20.

Light emission:
Direct.

Constructive features:
Powder painted steel body, prismatic diffuser, steel screws and joints.

Ottiche
Optics:

F 70°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTICS SYSTEM		ETHER-S	ETHER-P
LED	Prismatic diffuser	**70°**	31,5W 46,5W	31,5W 46,5W

COLORI
COLOURS

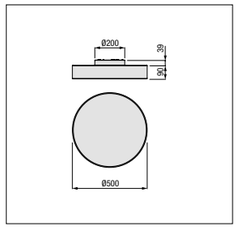
16 Bianco
White

82 Blu antracite
Charcoal blue

EFFETTO EMISSIONE 3D
Diffusore prismatico - sistema "Polarizing Prism".

3D EMISSION EFFECT
Prismatic diffuser - "Polarizing Prism" system.

Sospensione Ø500mm con LED monocromatici e diffusore prismatizzato - sistema “Polarizing Prism”. Completo di alimentatore.
Ø500mm suspending fixture with monochrome LED source and prismatic diffuser - “Polarizing Prism” system and power supply unit.



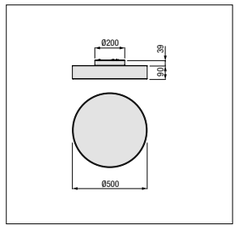
Colours: 16 | 82 — IP20

TYPE	WATTAGE	LAMP	WIRING		CODE
ETHER-S	31,5W 220-240 Vac	LED NW	ELE	●	**1064**
ETHER-S	31,5W 220-240 Vac	LED WW	ELE	●	**1066**
ETHER-S	31,5W 220-240 Vac	LED NW	EDT*	●	**1065**
ETHER-S	31,5W 220-240 Vac	LED WW	EDT*	●	**1067**
ETHER-S	46,5W 220-240 Vac	LED NW	ELE	●	**1068**
ETHER-S	46,5W 220-240 Vac	LED WW	ELE	●	**1069**
ETHER-S	46,5W 220-240 Vac	LED NW	EDT*	●	**1070**
ETHER-S	46,5W 220-240 Vac	LED WW	EDT*	●	**1071**

Kit sospensione da ordinare separatamente. *Fastening kit to be ordered separately.*

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

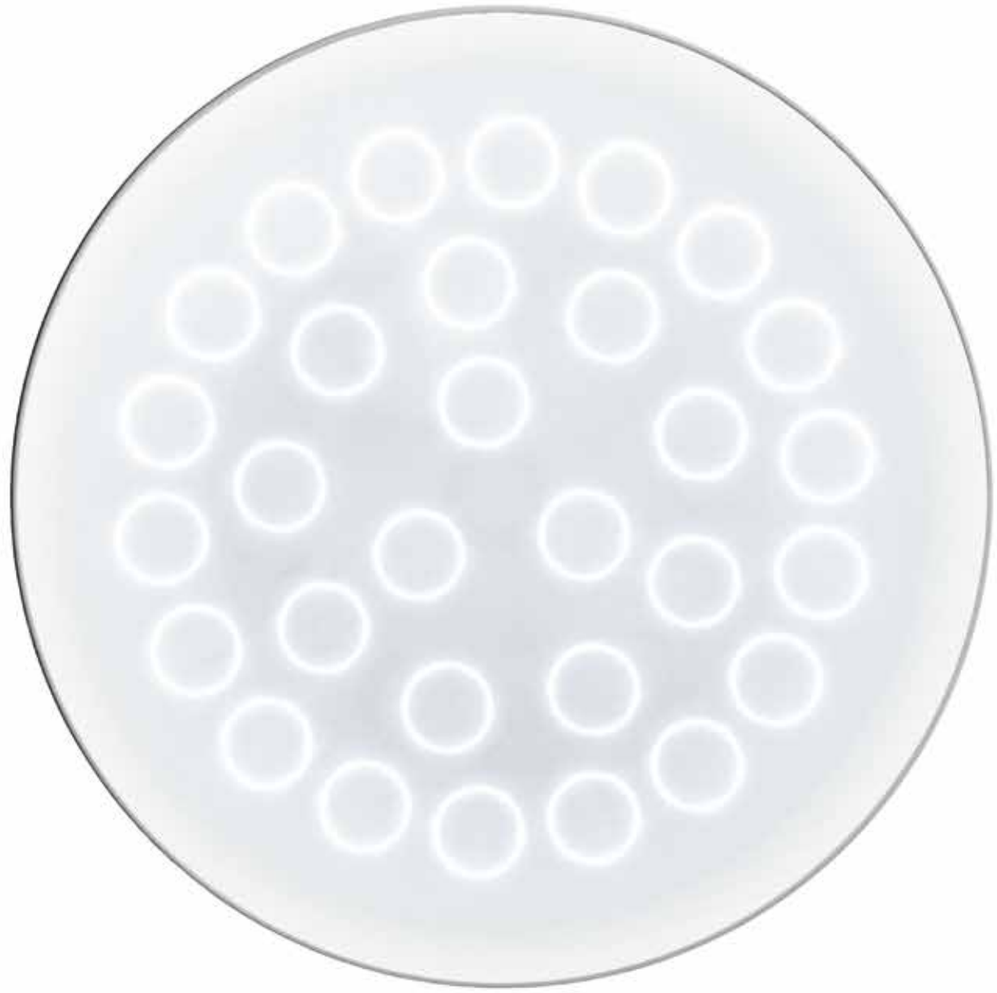
Apparecchio a plafone Ø500mm con LED monocromatici e diffusore prismatizzato - sistema “Polarizing Prism”. Completo di alimentatore.
Ø500mm ceiling fixture with monochrome LED source and prismatic diffuser - “Polarizing Prism” system and power supply unit.



Colours: 16 | 82 — IP20

TYPE	WATTAGE	LAMP	WIRING		CODE
ETHER-P	31,5W 220-240 Vac	LED NW	ELE	●	**1060**
ETHER-P	31,5W 220-240 Vac	LED WW	ELE	●	**1062**
ETHER-P	31,5W 220-240 Vac	LED NW	EDT	●	**1061**
ETHER-P	31,5W 220-240 Vac	LED WW	EDT	●	**1063**
ETHER-P	46,5W 220-240 Vac	LED NW	ELE	●	**1055**
ETHER-P	46,5W 220-240 Vac	LED WW	ELE	●	**1056**
ETHER-P	46,5W 220-240 Vac	LED NW	EDT	●	**1057**
ETHER-P	46,5W 220-240 Vac	LED WW	EDT	●	**1058**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.



KIT SOSPENSIONE BINARIO
TRACK PENDANT KIT

Kit per fissaggio a binario 230V completo di adattatore.
230V track fastening kit inclusive of adapter.

Colours: 16 | 82

TYPE	DIM		CODE
QSO-KB	H 3000mm		**2675**
QSO-KB	H 5000mm		**2686**
QSO-KBD	H 3000mm	DALI	**2676**
QSO-KBD	H 5000mm	DALI	**2687**

KIT SOSPENSIONE SOFFITTO
CEILING PENDANT KIT

Kit per fissaggio a soffitto.
Ceiling fastening kit.

Colours: 16 | 82

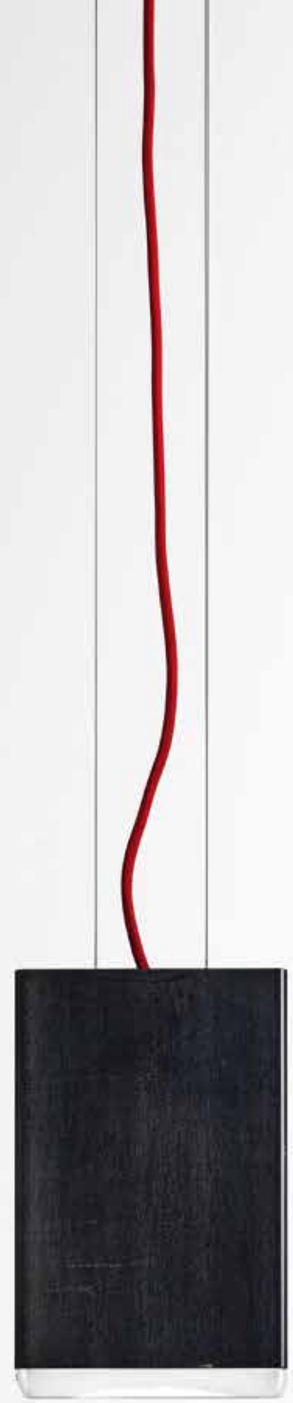
TYPE	OPTICS		CODE
QSO-KS3	H 3000mm		**2673**
QSO-KS3	H 5000mm		**2690**
QSO-KS5	H 3000mm	DALI	**2674**
QSO-KS5	H 5000mm	DALI	**2691**

* Utilizzare esclusivamente binario DALI tipo NKD-BIN
* *For installation on DALI NKD-BIN type track only*

ELE: Elettronico
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
ELE: Electronic
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
31,5W	3780lm	3510lm	93%
46,5W	5070lm	4710lm	93%



UDG

Design **M.D.W.S.**

APPARECCHIO A SOSPENSIONE, PARETE E PLAFONE, COMPLETO DI ALIMENTATORE.

Famiglia di apparecchi dallo stile ‘underground’.
Le finiture spartane e l’utilizzo del trafilato d’acciaio naturale riportano alla mente i sobborghi delle grandi città metropolitane, dove le sfumature del metallo dialogano con i colori vivi dei murales.
Una nota di personalità che è rappresentata anche attraverso l’inserimento di colori decisi come il verde acido e il magenta.
I corpi lampada sono singoli ma, in caso di necessità nelle versioni a plafone, possono essere collegati a mezzo di piastre che consentono di creare interessanti ambientazioni luminose in ambito contract. Particolarmente adatto per illuminazione d’accento di locali e spazi collettivi.
Il corpo lampada è costruito in modo tale da permettere l’orientamento di ogni singola lampada attraverso un sistema cardanico che ne consente l’inclinazione di 45° sull’asse verticale e 30° su quello orizzontale. Un ulteriore meccanismo a slitta, permette inoltre l’arretramento del corpo lampada evitando pertanto possibili situazioni di abbagliamento.

PENDANT, WALL AND CEILING FIXTURE, COMPLETE WITH POWER SUPPLY UNIT.

A range of fixtures with an "underground" style.
The no-frills finishes and use of natural drawn steel evoke the suburbs of large metropolitan cities, where metal hues interact with the bright colours of graffitis.
A personality that is also shown by the inserts in bold colours such as lime green and magenta.
In case of need, in ceiling-mounted versions, the individual lamp bodies may be connected by means of plates that allow interesting lighting moods to be created in the contract sector.
Particularly suitable for accent lighting in public premises and spaces.
The lamp body is constructed in such a way as to allow each lamp to be adjusted through a cardan system, for 45° tilting on the vertical axis and 30° on the horizontal one. A further sliding mechanism also makes it possible to move the lamp body back, thereby preventing possible glare conditions.

UDG

Design **M.D.W.S.**

Apparecchio a sospensione, parete e plafone, completo di alimentatore.

Pendant, wall and ceiling fixture, complete with power supply unit.

Sorgenti luminose:
LED COB **6,6W, 17,5W**, sorgenti alogene e lampade LED.

Ottica dell'apparecchio:
UDG 100x100mm:
S 20° **M** 40°.
UDG 150x150mm:
S 16° **M** 28° **M** 35°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90 a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile (IGBT), elettronico dimmerabile digitale (DALI).
Elettronico dimmerabile analogico (1-10V) a richiesta

Classificazione:
C.I. I, Marchio F, IP20.

Emissiona luminosa:
Diretta, diretta/indiretta.

Rotazione:
Sull'asse verticale ±45°,
sul piano orizzontale ±30°.

Caratteristiche costruttive:
Trafilato di acciaio formato a freddo, struttura e guida frizionata in acciaio verniciato, ottica sfaccettata e vetro effetto prismatizzato, viterie e particolari in acciaio.

Light sources:
*LED COB **6,6W, 17,5W**, halogen and LED lamp.*

Fixture optics:
UDG 100x100mm:
***S** 20° **M** 40°.*
UDG 150x150mm:
***S** 16° **M** 28° **M** 35°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, dimmable electronic (IGBT), digital dimmable electronic (DALI).
Analogue dimmable electronic (1-10V) on demand.

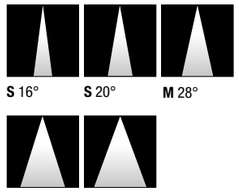
Classification:
I.C. I, Mark F, IP20.

Light emission:
Direct, direct/indirect.

Rotation:
±45° on the vertical axis,
±30° on the horizontal plane.

Constructive features:
Cold-formed drawn steel, painted steel structure and clutch guide, faceted optics and prismatic effect glass, steel screws and components.

Ottiche
Optics:



SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM		UDG-A10 / UDG-P10 UDG-S10	UDG-AB10	UDG-A15 / UDG-P15 UDG-S15	UDG-AB15
LED COB		Prismatic effect glass	**16° 28° 35°**	-	-	17,5W	2x 17,5W
		Transparent diffuser	**20° 40°**	6,6W	2x 6,6W	-	-
LED lamps		-		7W	2x 7W	15W	2x 15W
Halogen lamps	**QR-CB 51**	-		35W	2x 35W	-	-
	QR111	-		-	-	50W	2x 50W

COLORI
COLOURS

46 Acciaio grezzo/bianco
Natural steel/white

49 Acciaio grezzo/magenta
Natural steel/magenta

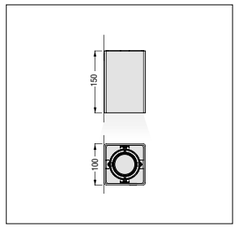
4V Acciaio grezzo/verde acido
Natural steel/lime green

15 Finitura nera a richiesta
Black finish on request

SPOT LENS System
Ottica sfaccettata con vetro effetto prismatizzato
Faceted optics with prismatic effect glass
***S** 16° **M** 28° **M** 35°*

SPOT LENS System
Ottica sfaccettata con diffusore trasparente
Faceted optics with transparent diffuser
***S** 20° **M** 40°*

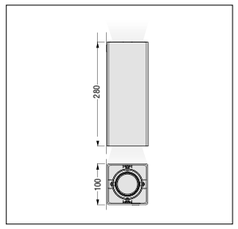
Apparecchio a parete completo di alimentatore. Sezione 100x100mm H150mm.
Wall fixture complete with power supply unit. Section 100x100mm H150mm.



Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-A10	6,6W 220-240 Vac		LED NW	Transparent diffuser 20°	ELE	●	**920B**
UDG-A10	6,6W 220-240 Vac		LED WW	Transparent diffuser 20°	ELE	●	**920A**
UDG-A10	6,6W 220-240 Vac		LED NW	Transparent diffuser 40°	ELE	●	**9202**
UDG-A10	6,6W 220-240 Vac		LED WW	Transparent diffuser 40°	ELE	●	**9201**
UDG-A10	35W/7W 230Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8308**

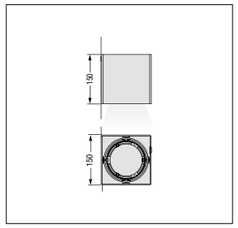
Apparecchio a parete biemissione completo di alimentatore. Sezione 100x100mm H280mm.
Double emission wall fixture complete with power supply unit. Section 100x100mm H280mm.



Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-AB10	2x 6,6W 220-240 Vac		LED NW	Transparent diffuser 20°	ELE	●	**923B**
UDG-AB10	2x 6,6W 220-240 Vac		LED WW	Transparent diffuser 20°	ELE	●	**923A**
UDG-AB10	2x 6,6W 220-240 Vac		LED NW	Transparent diffuser 40°	ELE	●	**9232**
UDG-AB10	2x 6,6W 220-240 Vac		LED WW	Transparent diffuser 40°	ELE	●	**9231**
UDG-AB10	2x 35W/7W 230Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8310**

Apparecchio a parete completo di alimentatore. Sezione 150x150mm H150mm.
Wall fixture complete with power supply unit. Section 150x150mm H150mm.

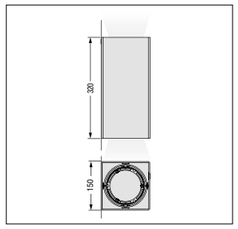


Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-A15B	17,5W 220-240 Vac		LED	Prismatic effect glass	ELE	●	**924#**
UDG-A15B	17,5W 220-240 Vac		LED	Prismatic effect glass	EDD	●	**925#**
UDG-A15B	50W/15W 230Vac	G53	QR111/LED lamp		ED1		**8320**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Apparecchio a parete biemissione completo di alimentatore. Sezione 150x150mm H320mm.
Double emission wall fixture complete with power supply unit. Section 150x150mm H320mm.



Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-AB15A	2x 17,5W 220-240 Vac		LED	Prismatic effect glass	ELE	●	**926#**
UDG-AB15A	2x 17,5W 220-240 Vac		LED	Prismatic effect glass	EDD	●	**927#**
UDG-AB15A	2x 50W/15W 230Vac	G53	QR111/LED lamp		ED1		**83B0**

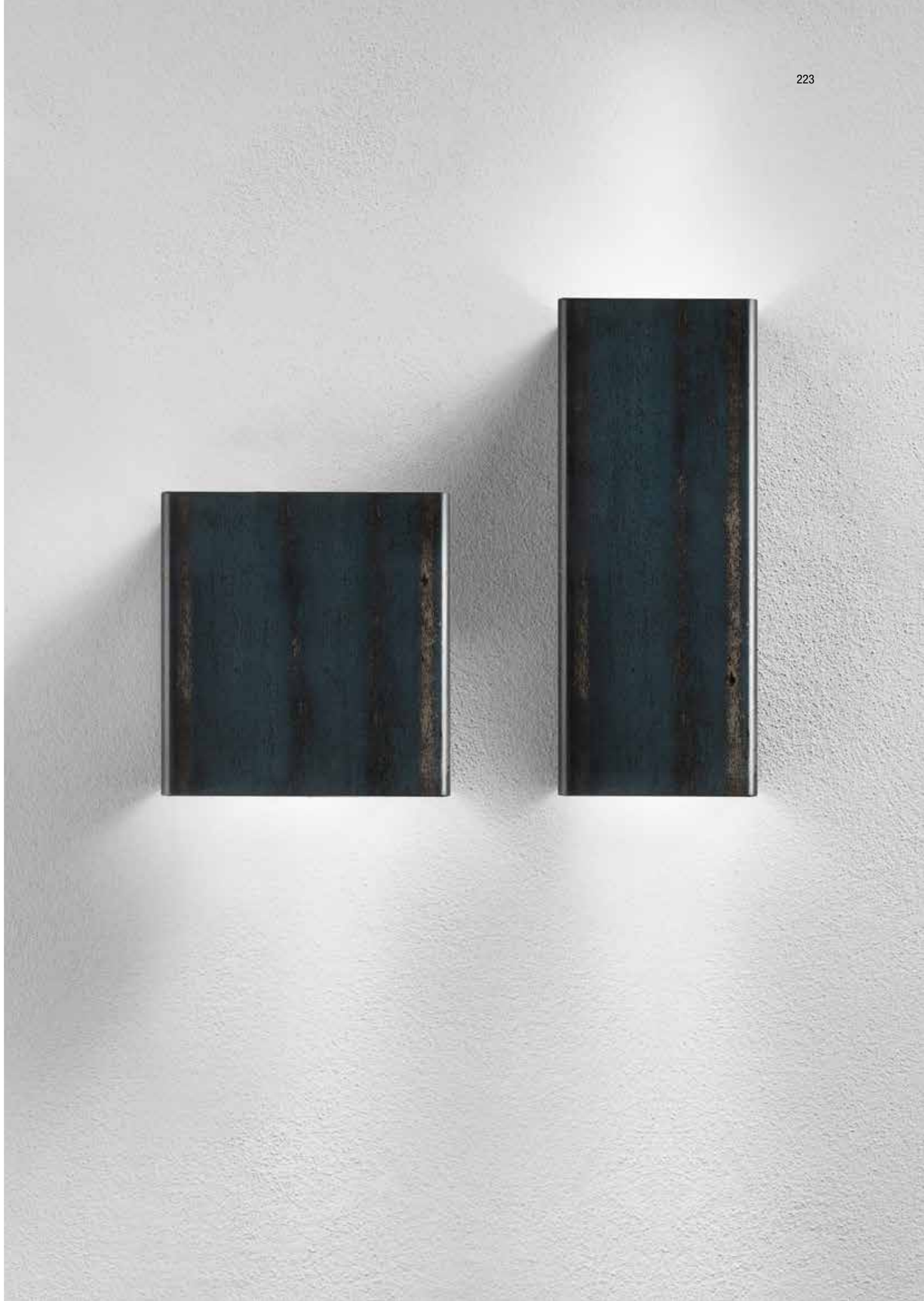
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim (IGBT)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic (IGBT)

NOMINAL FLUX / LOR (Light Output Ratio)

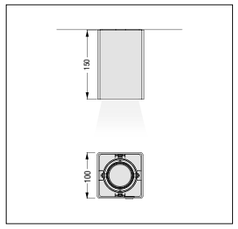
LED	NW	WW	LOR
6,6W	774lm	738lm	80%
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1



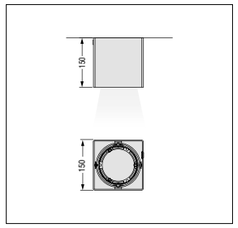
Apparecchio a plafone completo di alimentatore. Sezione 100x100mm H150mm.
Ceiling fixture complete with power supply unit. Section 100x100mm H150mm.



Colours: 46 49 4V IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-P10	6,6W 220-240 Vac		LED NW	Transparent diffuser 20°	ELE	●	**928B**
UDG-P10	6,6W 220-240 Vac		LED WW	Transparent diffuser 20°	ELE	●	**928A**
UDG-P10	6,6W 220-240 Vac		LED NW	Transparent diffuser 40°	ELE	●	**9282**
UDG-P10	6,6W 220-240 Vac		LED WW	Transparent diffuser 40°	ELE	●	**9281**
UDG-P10	35W/7W 230Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8348**

Apparecchio a plafone completo di alimentatore. Sezione 150x150mm H150mm.
Ceiling fixture complete with power supply unit. Section 150x150mm H150mm.



Colours: 46 49 4V IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-P15B	17,5W 220-240 Vac		LED	Prismatic effect glass	ELE	●	**930#**
UDG-P15B	17,5W 220-240 Vac		LED	Prismatic effect glass	EDD	●	**931#**
UDG-P15B	50W/15W 230Vac	G53	QR111/LED lamp		ED1		**8350**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim (IGBT)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic (IGBT)

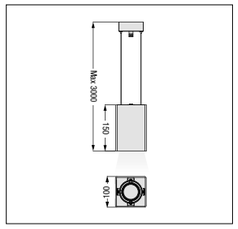
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
6,6W	774lm	738lm	80%
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

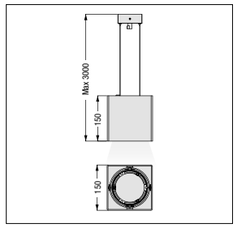
Apparecchio a sospensione completo di alimentatore. Sezione 100x100mm H150mm.
Pendant fixture complete with power supply unit. Section 100x100mm H150mm.



Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-S10	6,6W 220-240 Vac		LED NW	Transparent diffuser 20°	ELE	●	**936B**
UDG-S10	6,6W 220-240 Vac		LED WW	Transparent diffuser 20°	ELE	●	**936A**
UDG-S10	6,6W 220-240 Vac		LED NW	Transparent diffuser 40°	ELE	●	**9362**
UDG-S10	6,6W 220-240 Vac		LED WW	Transparent diffuser 40°	ELE	●	**9361**
UDG-S10	35W/7W 230Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8378**

Apparecchio a sospensione completo di alimentatore. Sezione 150x150mm H150mm.
Pendant fixture complete with power supply unit. Section 150x150mm H150mm.



Colours: 46 49 4V

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
UDG-S15B	17,5W 220-240 Vac		LED	Prismatic effect glass	ELE	●	**921#**
UDG-S15B	17,5W 220-240 Vac		LED	Prismatic effect glass	EDD	●	**922#**
UDG-S15B	50W/15W 230Vac	G53	QR111/LED lamp		ED1		**8380**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ED1: Elettronico Dim (IGBT)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
ED1: Dim Electronic (IGBT)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
6,6W	774lm	738lm	80%
17,5W	1978lm	1842lm	66%

LED CODE (...#)

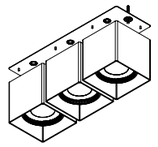
LED TEMPERATURES	S 16°	M 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

ACCESSORI
ACCESSORIES

Piastra per composizionl multiple per UDG a soffitto.
Plate for ceiling UDG multiple composition.

Colours: 16

TYPE	DIM	CODE
UDG-PQ1	210x210mm	**83Q1**
UDG-PQ2	310x310mm	**83Q2**
UDG-PR1	100x320mm	**83R1**
UDG-PR2	150x470mm	**83R2**

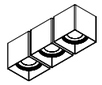


UDG-P10
100x100mm

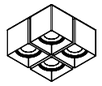
UDG-PR1

UDG-PQ1

UDG-P15B
UDG-P15A
150x150mm



UDG-PR2

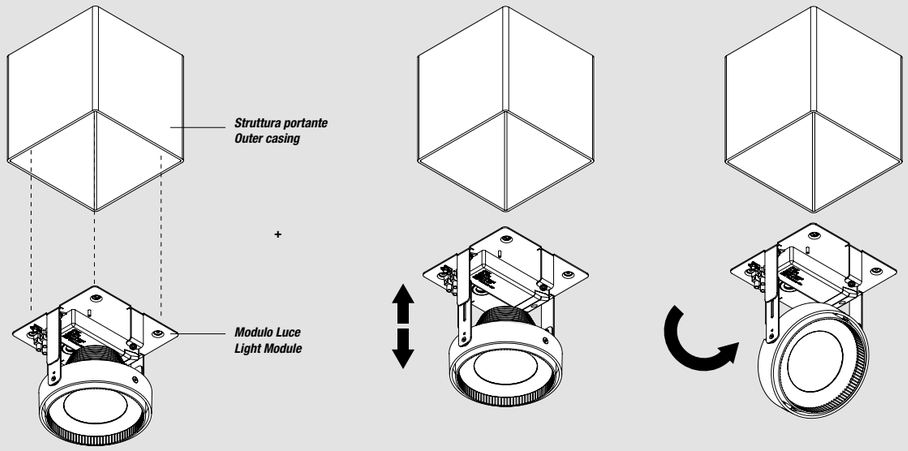


UDG-PQ2

UDG ESTRAIBILE
PULLOUT UDG

I moduli luce possono essere estratti dalla controcassa così da permettere una rotazione del modulo sull'asse orizzontale, conferendo al prodotto grande versatilità di utilizzo.

Light modules can be extracted from the outer casing thus allowing module rotation on the horizontal axis.



L'ACCIAIO SI RIVELA PER LA SUA NATURA
STEEL REVEALS ITS TRUE COLOURS

Una lavorazione di carpenteria pesante distingue questi prodotti che nel loro aspetto comunicano la robustezza e la solidità delle grandi strutture d'acciaio dei sobborghi metropolitani.
Ogni pezzo è frutto di una lavorazione artigianale dove quelli che potrebbero apparire come piccoli difetti, sono in realtà tratti caratteristici del prodotto che lo rendono unico ed esclusivo.

These fixtures feature heavy steel work, which conveys a feeling of sturdiness and solidity typical of large structural steel work in metropolitan cities. Each item is born of handicraft work, so what may appear as a small defect is actually a distinctive feature of the fixture and makes it unique and exclusive.

STING

Design **Carlo Vietri**

APPARECCHIO A PARETE O PLAFONE, COMPLETO DI ALIMENTATORE.

Sting è un apparecchio destinato all'illuminazione in esterno di corridoi, aree di transito, terrazzi, spazi collettivi e ambienti funzionali.
L'apparecchio è contraddistinto da un elevata rigidità meccanica e un'ottima resistenza agli urti.
Possiede un indice di protezione IP66-67 ed è idoneo all'applicazione in ambienti pubblici.
La distribuzione luminosa sul diffusore in policarbonato, stabilizzato ai raggi UV, risulta essere particolarmente omogenea e priva di abbagliamento.
La retroilluminazione conferisce al prodotto una particolare caratteristica decorativa.
Il montaggio e manutenzione sono semplificati dal sistema di chiusura Cam-lock.

WALL OR CEILING FIXTURE, COMPLETE WITH POWER SUPPLY UNIT.

Sting has been designed for outdoor lighting of corridors, transit areas, terraces, public spaces and functional settings.
The fixture features high mechanical rigidity and optimal shock resistance.
It has IP66/IP67 protection index and is suitable for installation in public spaces.
Light distribution on the UV stabilized polycarbonate diffuser is particularly consistent and glare-free. Backlighting makes the product remarkably decorative. Installation and maintenance are simplified by the Cam-lock closing system.

STING

Design **Carlo Vietri**

Apparecchio a parete o plafone, completo di alimentatore.

Wall or ceiling fixture, complete with power supply unit.

Sorgenti luminose:
LED COB **26W**.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile digitale (DALI/SWITCH-DIM), elettronico emergenza 1h a richiesta **(IN REMOTO).**

Classificazione:
IK10, C.I. I, Marchio F, IP66, IP67.

Emissiona luminosa:
Diretta/indiretta.

Caratteristiche costruttive:
Corpo in alluminio pressofuso, diffusore in policarbonato, viti di fissaggio in inox e particolari in acciaio zincato.

Light sources:
*LED COB **26W**.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
*Electronic, analogue dimmable electronic (1-10V), digital dimmable electronic (DALI/SWITCH-DIM), electronic emergency 1h available on request **(REMOTELY)***

Classification:
IK10, I.C. I, Mark F, IP66, IP67.

Light emission:
Direct/indirect.

Constructive features:
Die-cast aluminium body, polycarbonate diffuser, stainless steel fastening screws and zinc-plated components.

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	STING-TL
LED COB	Opal diffuser	26W

COLORI
COLOURS

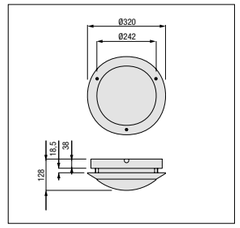
15 Nero
Black

16 Bianco
White

28 Grigio argento
Silver grey

37 Cor-ten
Cor-ten

Apparecchio a parete e soffitto con LED COB con retroilluminazione. Completo di alimentatore.
Wall and ceiling light fixture with COB LED, backlight and power supply unit.

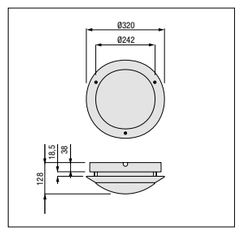


Colours: 15 | 16 | 28 | 37 — IP66 | IP67 | IK10

TYPE	WATTAGE	LAMP	WIRING		CODE
STING-TL	26W 220-240 Vac	LED NW	ELE	●	**52AR**
STING-TL	26W 220-240 Vac	LED WW	ELE	●	**52AQ**
STING-TL	26W 220-240 Vac	LED NW	EDA	●	**52DR**
STING-TL	26W 220-240 Vac	LED WW	EDA	●	**52DQ**
STING-TL	26W 220-240 Vac	LED NW	EDT	●	**52TR**
STING-TL	26W 220-240 Vac	LED WW	EDT	●	**52TQ**

Versione elettronico emergenza 1h a richiesta (IN REMOTO).
1h electronic emergency version available on request (REMOTELY).

Apparecchio a parete e soffitto con LED COB con retroilluminazione e sensore di presenza. Completo di alimentatore.
Wall and ceiling light fixture with COB LED, backlight, presence sensor and power supply unit.



Colours: 15 | 16 | 28 | 37 — IP66 | IP67 | IK10

TYPE	WATTAGE	LAMP	WIRING		CODE
STING-TL	26W 220-240 Vac	LED NW	EDM	●	**52PR**
STING-TL	26W 220-240 Vac	LED WW	EDM	●	**52PQ**

Versione elettronico emergenza 1h a richiesta (IN REMOTO).
1h electronic emergency version available on request (REMOTELY).

ELE: Elettronico
EDA: Elettronico Dim Analogico (1-10V)
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
EDM: Elettronico Dim Sens
ELE: Electronic
EDA: Analogue Dim Electronic (1-10V)
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)
EDM: Dim Electronic Sens

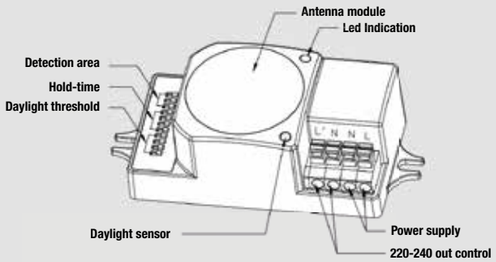
NOMINAL FLUX / LOR (Light Output Ratio)

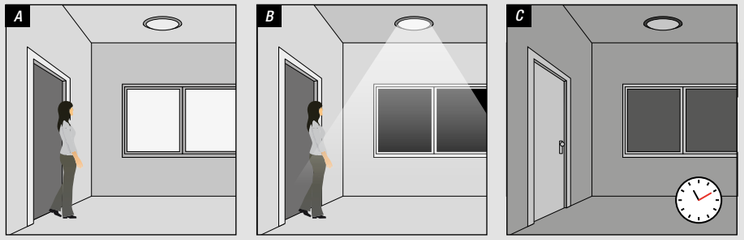
LED	NW	WW	LOR
26W	2221lm	2175lm	49%

SENSORE DI PRESENZA
OCCUPANCY SENSOR

Rilevatore radar di movimento e intensità luminosa, offre una vasta gamma di regolazioni, è possibile settare mediante DIP-switch l'ampiezza della zona da rilevare, l'intervallo di spegnimento del prodotto e l'influenza della luce ambientale.

Radar motion and light intensity detector, offers a wide range of settings. The width of the area to be detected, the power-off interval of the fixture and the influence of ambient light may be set via DIP switches.

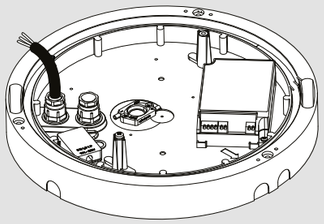




A — Con sufficiente luce naturale, il prodotto non si accende quando la presenza viene rilevata.
— With sufficient natural light, the product does not switch on when presence is detected.

B — Con luce naturale insufficiente il sensore scatta automaticamente quando viene rilevata una presenza, facendo accendere il prodotto.
— With insufficient natural light, the sensor is automatically triggered when occupancy is detected and the fixture switches on.

C — Dopo un tempo prestabilito, se non rileva presenze, il sensore spegne il prodotto automaticamente.
— After a pre-set time, if no presences are detected, the sensor automatically switches the fixture off.



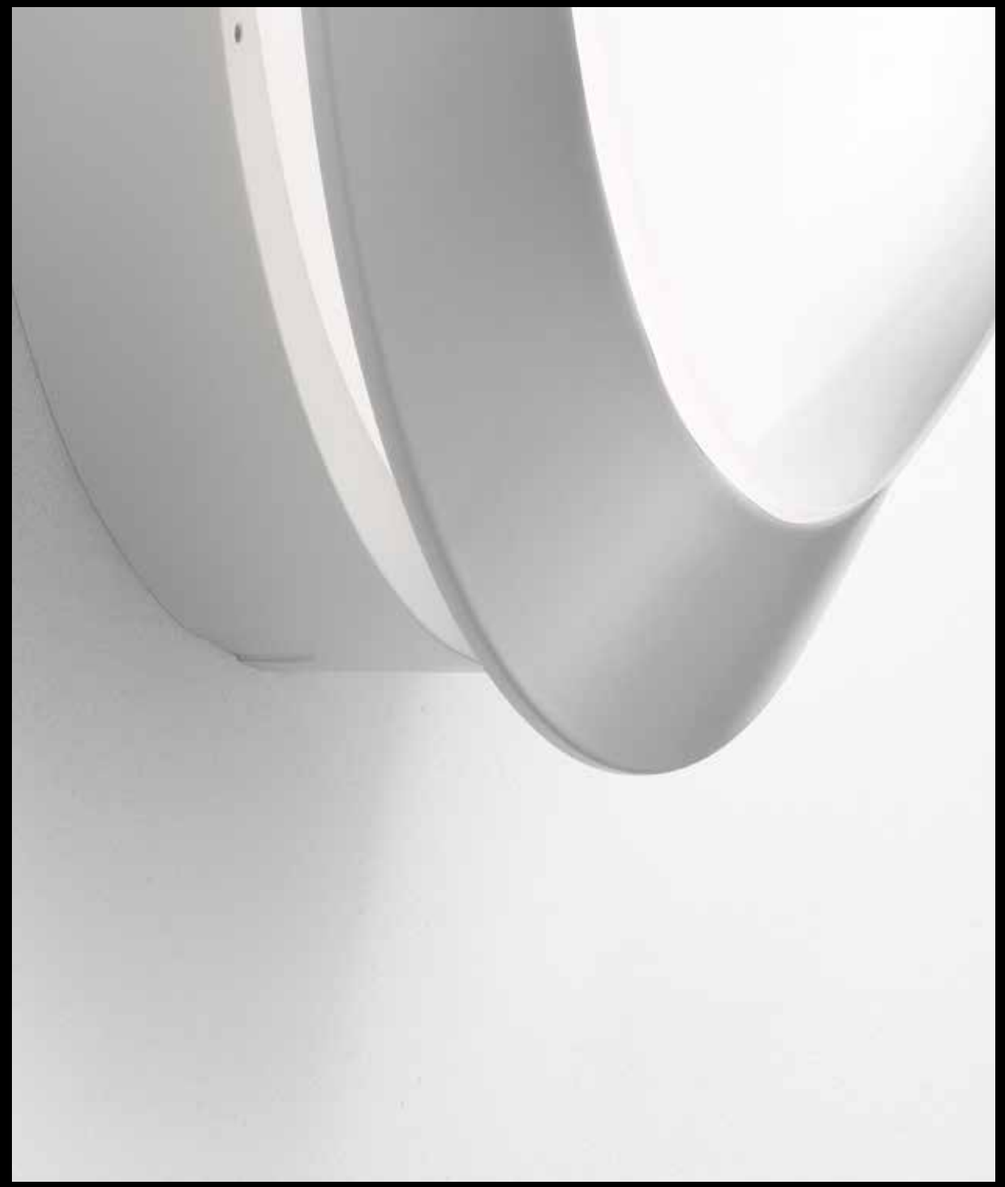
CABLAGGIO PASSANTE ENTRA/ESCI
IN/OUT THROUGH WIRING

TRATTAMENTO GALVANICO
GALVANIC FINISH

Trattamento galvanico con processo di cataforesi per garantire 1200 ore di resistenza alla nebbia salina, verniciatura a polveri poliestere ad alta resistenza.

Galvanic treatment with cataphoresis process to assure 1200 hours of salt mist resistance, high resistance polyester powder painting.

IP66
IP67
IK10



RETROILLUMINAZIONE
BACKLIGHT

STILT

Design **Mizar**

APPARECCHIO A PARETE, COMPLETO DI ALIMENTATORE.

Apparecchio per interni installabile a parete, provvisto di braccio telescopico e corpo luce orientabile. Fornito completo di trasformatore.
La grande orientabilità di braccio e corpo luminoso, lo rendono particolarmente indicato per l'illuminazione puntuale di oggetti a parete.

WALL FIXTURE COMPLETE WITH POWER SUPPLY UNIT.

Indoor fixture for wall installation, fitted with telescopic arm and adjustable light body. Supplied with transformer.
The high adjustability of arm and light body make it especially suited for spot lighting of objects on the wall.

STILT

Design **Mizar**

Apparecchio a parete, completo di alimentatore.

Wall fixture complete with power supply

Sorgenti luminose:
LED **9x 1,87W**, sorgenti alogene e lampade LED.

Sistema ottico:
LED con ottiche di tre diverse gradazioni, N **15°**,S **25°** e M **40°**.

Cablaggio:
Elettronico.

Classificazione:
C.I. I, Marchio F, IP20.

Emissiona luminosa:
Diretta.

Rotazione:
Sull'asse verticale ±355°,
sul piano orizzontale ±90°.

Caratteristiche costruttive:
Corpo del proiettore in alluminio, asta e snodi in acciaio, scatola vano alimentatori in alluminio pressofuso, viterie e particolari in acciaio.

Light sources:
*LED **9x 1,87W**, halogen and LED lamp.*

Optics:
*LED with three different LED optics opening angles: N **15°**,S **25°** and M **40°***

Wiring:
Electronic.

Classification:
I.C. I, Mark F, IP20.

Light emission:
Direct.

Rotation:
±355° on the vertical axis,
±90° on the horizontal plane.

Constructive features:
Aluminium projector body, steel rod and joints, die-cast aluminium power supply compartment, steel screws and components.

Ottiche
Optics:

S 15° **S** 25° **M** 40°

SORGENTI LUMINOSE
LIGHT SOURCES

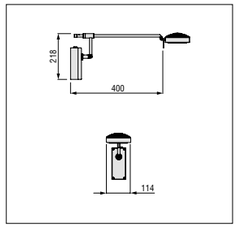
	OPTIC SYSTEM	STL-P04	STL-P06	STL-P10	STL-P13
LED	Transparent lenses **15° 25° 40°**	9x 1,87W	9x 1,87W	9x 1,87W	9x 1,87W
LED lamps	-	15W	15W	15W	15W
Halogen lamps QR111	-	70W	70W	70W	70W

COLORI
COLOURS

23 Cromo
Chrome

79 Bianco/Cromo mat
White/Mat chrome

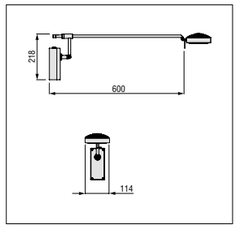
Apparecchio a parete completo di alimentatore. Lunghezza dello sbraccio 400mm.
Wall fixture complete with power supply unit. Arm length 400mm.



Colours: 23 79 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
STL-P04	9x 1,87W 220-240 Vac		LED	Transparent lenses	ELE	●	**116#**
STL-P04	70W/15W 220-240 Vac	G53	QR111/LED lamp		ELE		**1157**

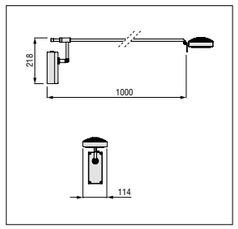
Apparecchio a parete completo di alimentatore. Lunghezza dello sbraccio 600mm.
Wall fixture complete with power supply unit. Arm length 600mm.



Colours: 23 79 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
STL-P06	9x 1,87W 220-240 Vac		LED	Transparent lenses	ELE	●	**117#**
STL-P06	70W/15W 220-240 Vac	G53	QR111/LED lamp		ELE		**1159**

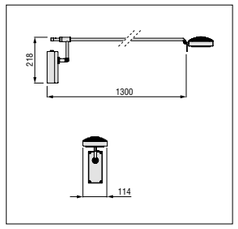
Apparecchio a parete completo di alimentatore. Lunghezza dello sbraccio 1000mm.
Wall fixture complete with power supply unit. Arm length 1000mm.



Colours: 23 79 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
STL-P10	9x 1,87W 220-240 Vac		LED	Transparent lenses	ELE	●	**119#**
STL-P10	70W/15W 220-240 Vac	G53	QR111/LED lamp		ELE		**115D**

Apparecchio a parete completo di alimentatore. Lunghezza dello sbraccio 1300mm.
Wall fixture complete with power supply unit. Arm length 1300mm.



Colours: 23 79 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
STL-P13	9x 1,87W 220-240 Vac		LED	Transparent lenses	ELE	●	**118#**
STL-P13	70W/15W 220-240 Vac	G53	QR111/LED lamp		ELE		**115C**

ELE: Elettronico
ELE: Electronic

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
9x1,87W	880lm	816lm	94%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

MIRAGE

Design **Mizar**

APPARECCHIO A PARETE CON POSSIBILITÀ DI FILA CONTINUA.

La linea pulita e lineare di Mirage è studiata per l'illuminazione omogenea di superfici verticali e il sistema ottico è studiato specificatamente per lampade fluorescenti lineari e fluorescenti compatte.
Costruita interamente in alluminio, la famiglia Mirage oltre a proporsi con apparecchi singoli utilizzabili per l'illuminazione di sale d'attesa o uffici direzionali, permette di comporre file continue, adatte in particolare per un' illuminazione omogenea di corridoi o sale con sviluppo prevalentemente longitudinale.
L'emissione può essere indiretta, con ottica asimmetrica in alluminio purissimo, o diretta/indiretta. L'emissione diretta è filtrata da schermi in policarbonato prismatizzato.
I cablaggi, a seconda dei modelli, sono elettronici, dimmerabili ed anche emergenza.

WALL FIXTURE WITH CONTINUOUS LINE INSTALLATION OPTION.

The clean and essential design of Mirage has been developed for consistent lighting of vertical surfaces and the optics system has been specifically designed for linear and compact fluorescent lamps.
Entirely constructed in aluminium, the Mirage range offers individual fixtures that may be used for lighting waiting rooms or offices, which may also be used to compose rows of fixtures, especially suited for consistent lighting of corridors or halls with a mainly lenghtwise layout.
Emission may be indirect, with asymmetrical optics in extra-pure aluminium, or direct/indirect. Direct emission is filtered by screens in prismatic polycarbonate.
Depending on models, wiring is electronic, dimmable and also emergency.

MIRAGE

Design **Mizar**

Apparecchi a parete con possibilità di fila continua.

Wall fixtures with unbroken file installation option

Sorgenti luminose:
Fluorescenza lineare **28W**, **35W**, **49W**, **54W**, **80W**.

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile analogico, elettronico emergenza 1h.

Classificazione:
C.I.I, Marchio F, IP20.

Emissione luminosa:
Diretta, indiretta, mono e bi-diffusione.

Caratteristiche costruttive:
Corpo in alluminio estruso, tappi laterali in alluminio pressofuso, riflettori in alluminio purissimo 99,9%, diffusore in policarbonato trasparente microrigato, viti di fissaggio e particolari esterni in acciaio.

Lighting sources:
***28W**, **35W**, **49W**, **54W**, **80W** linear fluorescent*

Wiring:
Electronic, analogue dim electronic (1-10V), digital dimmable electronic (DALI), electronic emergency 1h.

Classification:
I.C. I, Mark F, IP20, IP40.

Light emission:
Direct, indirect, single and dual diffusion.

Constructive features:
Extruded aluminium body, side caps in die-cast aluminium, reflectors in 99.9% extra pure aluminium, diffuser in transparent micro-scored polycarbonate, steel screws and joints.

SORGENTI LUMINOSE
LIGHT SOURCES

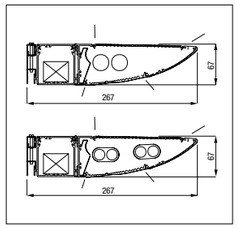
		MIRAGE-ABE	MIRAGE-AIE
Fluorescent lamps	**T16**	2x 28/54W	2x28/54W
		2x 35/49W	2x 35/49W
		2x 80W	2x 80W

COLORI
COLOURS

18 Bianco
White

29 Grigio argento
Silver grey

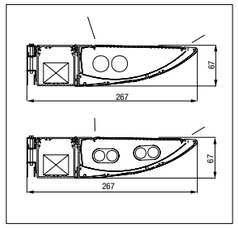
Apparecchio da parete bilampada, bidiffusione, asimmetrico.
Asymmetrical double diffusion, double lamp wall fixture.



Colours: 16 28

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING	CODE
MIRAGE-ABE	2x 28/54W	G5	T16		EMW	**3811**
MIRAGE-ABE	2x 35/49W	G5	T16		EMW	**3812**
MIRAGE-ABE	2x 80W	G5	T16		ELE	**3820**
MIRAGE-ABE	2x 28/54W	G5	T16		EMA	**3823**
MIRAGE-ABE	2x 35/49W	G5	T16		EMA	**3824**
MIRAGE-ABE	2x 28/54W	G5	T16		EM1	**3813**

Apparecchio da parete bilampada, monodiffusione, asimmetrico.
Asymmetrical single diffusion, double lamp wall fixture.



Colours: 16 28

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING	CODE
MIRAGE-AIE	2x 28/54W	G5	T16		EMW	**3814**
MIRAGE-AIE	2x 35/49W	G5	T16		EMW	**3815**
MIRAGE-AIE	2x 80W	G5	T16		ELE	**3821**
MIRAGE-AIE	2x 28/54W	G5	T16		EMA	**3825**
MIRAGE-AIE	2x 35/49W	G5	T16		EMA	**3826**
MIRAGE-AIE	2x 28/54W	G5	T16		EM1	**3816**

ELE: Elettronico
EMW: Elettronico Multipotenza
EMA: Elettronico Multipotenza Dimmerabile Analogico (1-10V)
EM1: Elettronico Multipotenza con gruppo di batterie
emergenza sempre acceso. Autonomia 60'

ELE: Electronic
EMW: Multi-power Electronic
EMA: Analogue Multi-power Dim Electronic (1-10V)
EM1: Multi -power Electronic with Always0n Emergency battery set.
Autonomy 60'

CUBIS

Design **Mizar**

APPARECCHIO A PARETE COMPLETO DI ALIMENTATORE.

Apparecchio a parete bidiffusione con sorgente LED COB integrata. Particolarmente indicato per creare effetti di luce sulla parete. La finitura effetto muro permette al prodotto di mimetizzarsi nell'ambiente di utilizzo.

WALL FIXTURE COMPLETE WITH POWER SUPPLY UNIT

Dual diffusion wall fixture with built-in COB LED source. Especially suitable to create light effects on the wall. The wall effect finish allows the product to blend in the premises.

CUBIS

Design **Mizar**

Apparecchio a parete completo di alimentatore.

Wall fixtures complete with power supply unit.

Sorgenti luminose:
LED multichip **6W**.

Cablaggio:
Elettronico.

Classificazione:
C.I.I, Marchio F, IP20.

Emissione luminosa:
Diretta e indiretta.

Caratteristiche costruttive:
Corpo in alluminio verniciato a polveri, diffusore in policarbonato sabbiato, viteria e particolari in acciaio.

Lighting sources:
*LED **6W** multichip LED.*

Wiring:
Electronich.

Classification:
I.C. I, Mark F, IP20, IP40.

Light emission:
Direct and indirect.

Constructive features:
Powder painted aluminium body, sandblasted polycarbonate diffuser, steel screws and components.

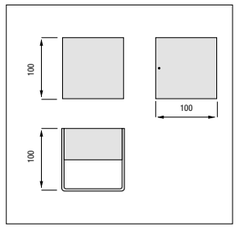
SORGENTI LUMINOSE
LIGHTING SOURCES

	OPTIC SYSTEM	CUBIS
LED multichip	Transparent glass	6W

COLORI
COLOURS

M6 Bianco muro
White wall effect

Apparecchio da parete a luce diretta/indiretta con LED multichip. Completo di alimentatore.
Direct/indirect light wall fixture with LED multichip and power supply unit.



Colours: M6 IP20

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
CUBIS	6W 220-240 Vac		LED multichip WW	ELE	●	**5746**

ELE: Elettronico
ELE: Electronic

NOMINAL FLUX / LOR (Light Output Ratio)

		Prismatic diffuser
LED	**WW**	**LOR**
6W	475lm	77%

ILLUMINAZIONE DIRETTA/INDIRETTA LED
LED DIRECT/INDIRECT LIGHTING

REFLEX/KABRIO

Design **Mizar/Roberto Favaretto**

APPARECCHI A PARETE/ SOFFITTO.

Apparecchi a soffitto e parete dal design pratico ed essenziale. Reflex è disponibile nella versione tonda e si contraddistingue per l'uniformità della luminanza sul diffusore e per la rapidità di installazione e di manutenzione. Kabrio è disponibile nella forma quadra e rettangolare in diverse dimensioni a seconda della tipologia di sorgenti impiegate. Gli interventi di installazione e manutenzione sono semplificati dall'apertura a cerniera, per le versioni quadre, o dalla presenza del diffusore estraibile, per le versioni rettangolari.
Tali aspetti rendono molto ampie le possibilità di applicazione di Reflex e Kabrio in moltissimi ambienti, principalmente sale di accoglienza, sale riunioni, corridoi, locali pubblici, dove sia richiesta un'illuminazione generale efficiente e a basso consumo energetico.

WALL/CEILING FIXTURES

Wall and ceiling fixtures with a streamlined and practical design. Reflex is available in the round version and its distinctive features are consistent luminance on the diffuser and quick installation and maintenance. The Kabrio range is available in the square and rectangular shape in varous sizes depending on the type of sources used. Installation and maintenance operations are simplified by the hinge opening for square versions, or by the presence of the removable diffuser for rectangular versions. These features result in a wide range of application options for Reflex and Kabrio in a number of settings, especially in reception rooms, meeting rooms, halls and public venues where efficient and low energy consumption general lighting is required.

REFLEX/KABRIO

Design **Mizar/Roberto Favaretto**

Apparecchi a parete/soffitto, completi di alimentatore.

Wall/ceiling fixtures complete with power supply unit.

Sorgenti luminose:
LED monocromatici **39,5W**, sorgenti fluorescenti.

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile digitale (DALI), elettronico emergenza 1h e 3h.

Classificazione:
C.I. I, Marchio F, IP20, IP40.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Struttura di acciaio verniciato, diffusore in PMMA (Reflex e Kabrio - versione quadra), diffusore in poliestere (Kabrio - versione rettangolare), viterie e particolari in acciaio.

Lighting sources:
39.5W monochrome LEDs, fluorescent sources.

Wiring:
Electronic, analogue dim electronic (1-10V), digital dimmable electronic (DALI), electronic emergency 1h and 3h.

Classification:
I.C. I, Mark F, IP20, IP40.

Light emission:
Direct.

Constructive features:
Painted steel structure, PMMA diffuser (Reflex and Kabrio - square version), polyester diffuser (Kabrio - rectangular version), steel screws and components.

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTICS SYSTEM	REFLEX	KABRIO
LED		PMMA diffuser	39,5W	39,5W
Flurescent lamps	**T16**	PMMA diffuser/Polyester diffuser	-	2x 14/24W 2x 21/39W 2x 28/54W 3x 14/24W 3x 21/39W 3x 28/54W

COLORI
COLOURS

16 Bianco
White

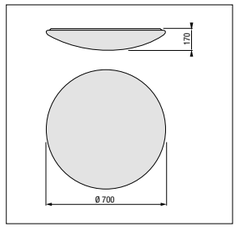
16 Bianco
White

28 Grigio argento
Silver grey

KABRIO - Diffusore opale
Diffusore in PMMA bianco con rendimenti fino al 65%.

KABRIO - Opal diffuser
White PMMA diffuser with up t o 65% efficiency.

Apparecchio LED a parete/soffitto tondo con diffusore in PMMA bianco. Completo di alimentatore.
Wall/ceiling LED round fixture with white PMMA diffuser. Complete with power supply unit.



Colours: 16 | IP40

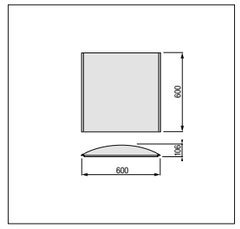
TYPE	WATTAGE	LAMP	WIRING		CODE
RFX70-LED	39,5W 220-240 Vac	LED NW	ELE	●	**1539**
RFX70-LED	39,5W 220-240 Vac	LED WW	ELE	●	**1542**
RFX70-LED	39,5W 220-240 Vac	LED NW	EDD	●	**1543**
RFX70-LED	39,5W 220-240 Vac	LED WW	EDD	●	**1544**

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
39,5W	5470lm	4800lm	65%

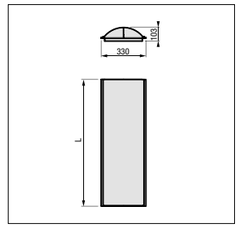
Apparecchio LED a parete/soffitto quadrato con diffusore in PMMA bianco. Completo di alimentatore.
Wall/ceiling LED square fixture with white PMMA diffuser. Complete with power supply unit.



Colours: 16 | 28 | IP20

TYPE	WATTAGE	LAMP	WIRING		CODE
KAB60-LED	39,5W 220-240 Vac	LED NW	ELE	●	**1545**
KAB60-LED	39,5W 220-240 Vac	LED WW	ELE	●	**1546**
KAB60-LED	39,5W 220-240 Vac	LED NW	EDD	●	**1547**
KAB60-LED	39,5W 220-240 Vac	LED WW	EDD	●	**1548**

Apparecchio a parete/soffitto rettangolare con diffusore in poliestere bianco. Completo di alimentatore.
Wall/ceiling rectangulare fixture with white polyester diffuser. Complete with power supply unit.



Colours: 16 | 28 | IP20

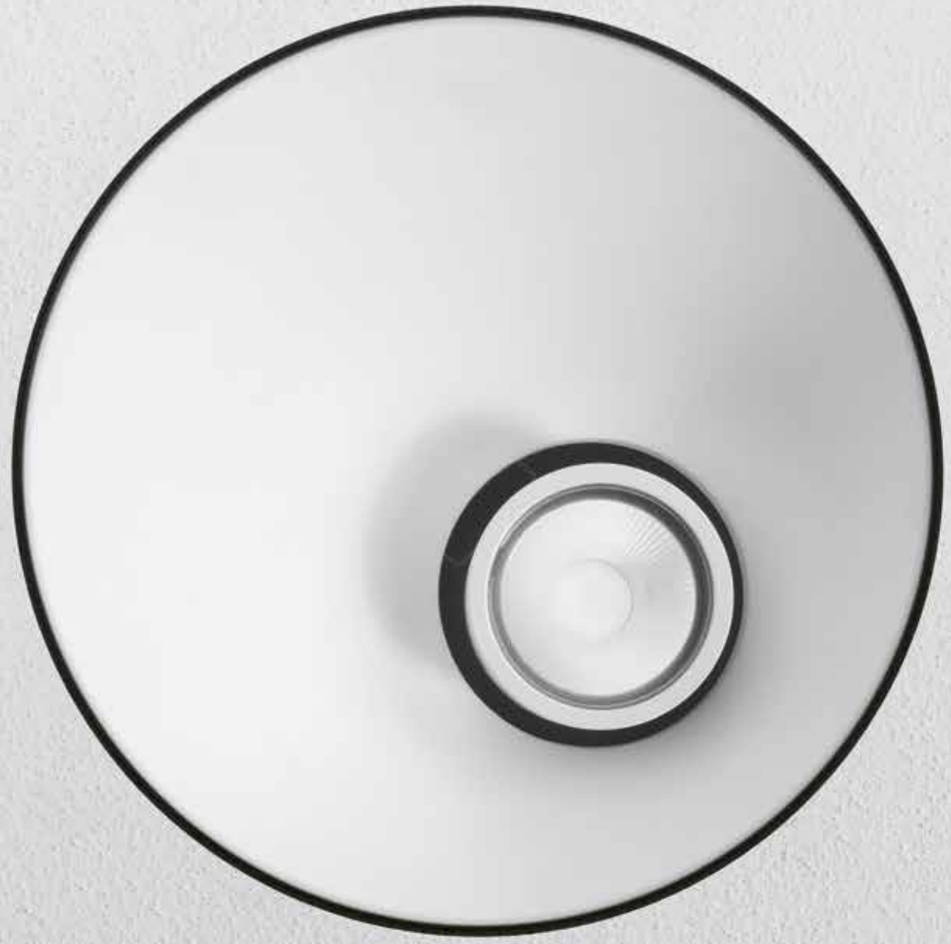
TYPE	WATTAGE	SOCKET	LAMP	DIM mm	WIRING	CODE
KAB32-E2	2x 14/24W	G5	T16	L 654	ELE	**1585**
KAB32-E2	2x 21/39W	G5	T16	L 954	ELE	**1586**
KAB32-E2	2x 28/54W	G5	T16	L 1254	ELE	**1587**
KAB32-A2	2x 28/54W	G5	T16	L 1254	EDA	**1591**
KAB32-D2	2x 28/54W	G5	T16	L 1254	EDD	**1592**
KAB32-SA	2x 28/54W	G5	T16	L 1254	EE1	**1593**
KAB32-S2	2x 28/54W	G5	T16	L 1254	EE3	**1597**
KAB33-E2	3x 14/24W	G5	T16	L 654	ELE	**1588**
KAB33-E2	3x 21/39W	G5	T16	L 954	ELE	**1589**
KAB33-E2	3x 28/54W	G5	T16	L 1254	ELE	**1590**
KAB33-A2	3x 28/54W	G5	T16	L 1254	EDA	**1595**
KAB33-D2	3x 28/54W	G5	T16	L 1254	EDD	**1596**

ELE: Elettronico
EDA: Elettronico Dim Analogico (1-10V)
EDD: Elettronico Dim Digitale (DALI)
EE1: Elettronico Emergenza SA 1h
EE3: Elettronico Emergenza SA 3h

ELE: Electronic
EDA: Analogue Dim Electronic (1-10V)
EDD: Digital Dim Electronic (DALI)
EE1: Electronic Emergency SA 1h
EE3: Electronic Emergency SA 3h

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
39,5W	5470lmlm	4800lm	56%



PIT

Design **S.+R. Cornelissen**

APPARECCHIO A INCASSO A FILO E CON CORNICE, COMPLETO DI ALIMENTATORE REMOTO.

Apparecchi ad incasso disponibili nelle versioni a filo e con cornice. L'utilizzo di sorgenti LED COB li rende idonei ad ogni utilizzo in cui vengano richieste elevate prestazioni luminose, mentre il sistema "Polarizing Prism" garantisce il comfort visivo. L'essenzialità del design lo rende infine versatile ed adatto a numerose applicazioni.

DOWNLIGHT FIXTURE WITH AND WITHOUT FRAME, WITH REMOTE POWER SUPPLY UNIT.

Downlights available in the flush and frame versions. The use of COB LED sources makes them suitable for every use where high light performance is required, while the "Polarising Prism" system assures visual comfort. The essential design also makes it versatile and suited to a variety of applications.

PIT

Design **S.+R. Cornelissen**

Apparecchio a incasso a filo e con cornice, completo di alimentatore remoto.

Downlight fixture with and without frame, with remote power supply unit.

Sorgenti luminose:
LED COB **12W**, sorgenti alogene e lampade LED.

Ottica del proiettore:
Diffusore trasparente: **N** 15° **S** 25°, Sistema "Polarizing Prism": **F** 50°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI).
Elettronico emergenza 1h e 3h a richiesta, elettronico dimmerabile analogico (1-10V) a richiesta.

Classificazione:
C.I. II, Marchio F, IP40.

Emissione luminosa:
Diretta asimmetrica e simmetrica.

Rotazione (Spot):
Orientabile a +68° -17° rispetto all'asse verticale.

Caratteristiche costruttive:
Scocca in alluminio pressofuso verniciato a polveri.
Proiettore in alluminio anticorodal verniciato a polveri.
Particolari e viterie in acciaio.

Light sources:
*LED COB **12W**,halogen and LED lamp.*

Optics of the projector:
*Transparent diffuser: **N** 15° **S** 25°, "Polarizing Prism" system: **F** 50°.*

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI).
Electronic emergency 1h 3h available on request, analogue dimmable electronic (1-10V) available on request.

Classification:
I.C. II, Mark F, IP40.

Light emission:
Symmetric and asymmetric, direct.

Rotation (Spot):
Adjustable +68° -17° on the vertical axis.

Constructive features:
Powder painted die-cast aluminium structure.
Powder painted anticorodal aluminium projector.
Steel screws and components.

Ottiche
Optics:

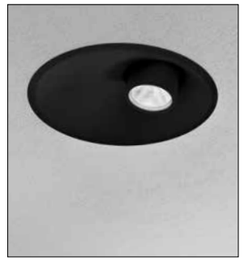
N 15° **S** 25° **F** 50°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTICS SYSTEM		PIT-IC	PIT-IF
LED COB	Transparent glass	**15° 25°**	12W	12W
	Prismatic diffuser	**50°**	12W	12W
LED lamps	-		7W	7W
Halogen lamps **QR-CB 51**	-		50W	50W

COLORI
COLOURS

M6 Bianco muro
White wall effect



M5 Nero muro
Black wall effect

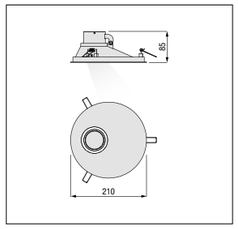
SPOT LENS System
Ottica sfaccettata con diffusore trasparente
Faceted optics with transparent diffuser

***S** 15° **M** 25°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico
Faceted optics with prismatic diffuser

***F** 50°*

Apparecchio ad incasso con cornice, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore posto in remoto.
Downlight fixture with frame, complete with transparent diffuser or “Polarizing Prism” system and remote power supply unit.



Colours: M5 M6 — IP40 — Ø200

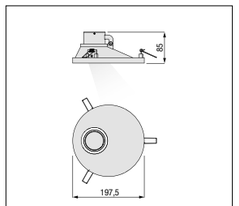
TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
PIT-IC	12W 220-240 Vac		LED	Transparent diffuser		ELE	●	**121#**
PIT-IC	12W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1218**
PIT-IC	12W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1219**
PIT-IC	12W 220-240 Vac		LED	Transparent diffuser		EDD	●	**123#**
PIT-IC	12W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1238**
PIT-IC	12W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1239**
PIT-IC	50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ELE		**1230**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Versione elettronico emergenza 1h e 3h a richiesta.
1h and 3h electronic emergency version available on request.

Proiettore con fascio 12° a richiesta
12° beam version available on request

Apparecchio ad incasso senza cornice, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore posto in remoto.
Frameless downlight fixture, complete with transparent diffuser or “Polarizing Prism” system and remote power supply unit.



Colours: M5 M6 — IP40 — Ø210

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
PIT-IF	12W 220-240 Vac		LED	Transparent diffuser		ELE	●	**122#**
PIT-IF	12W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1228**
PIT-IF	12W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1229**
PIT-IF	12W 220-240 Vac		LED	Transparent diffuser		EDD	●	**124#**
PIT-IF	12W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1248**
PIT-IF	12W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1249**
PIT-IF	50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ELE		**1240**

Plaster kit da ordinare separatamente.
Plaster kit to be ordered separately.

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

Versione elettronico emergenza 1h e 3h a richiesta.
1h and 3h electronic emergency version available on request.

Proiettore con fascio 12° a richiesta
12° beam version available on request

ACCESSORI
ACCESSORIES

Plaster Kit per pareti e soffitti in cartongesso.
Plaster Kit for plasterboard walls and ceilings.

Colours: 15

TYPE	CODE
PIT-PK	**1202**

Solo per PIT-IF.
For PIT-IF only.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

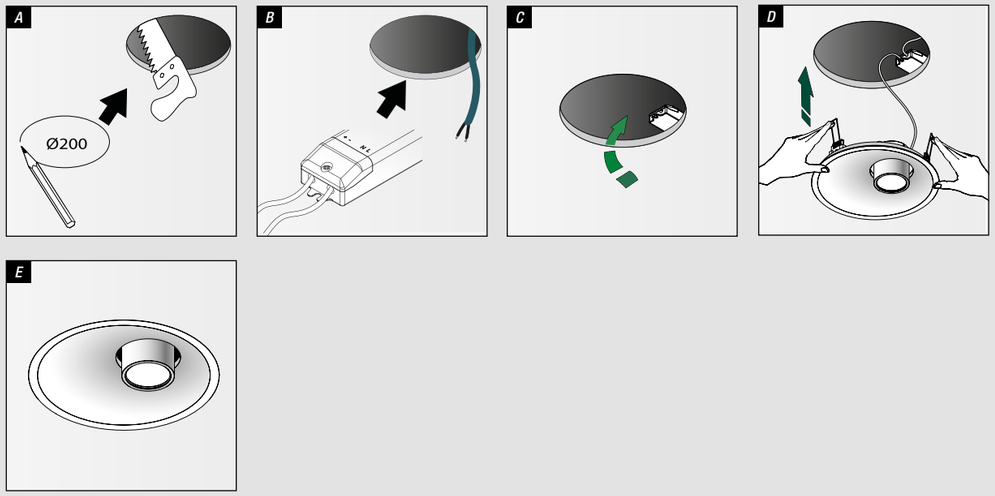
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
12W	1635lm	1582lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

PIT-IC - Installazione su pareti in cartongesso.
PIT-IC - Installation on plasterboard.



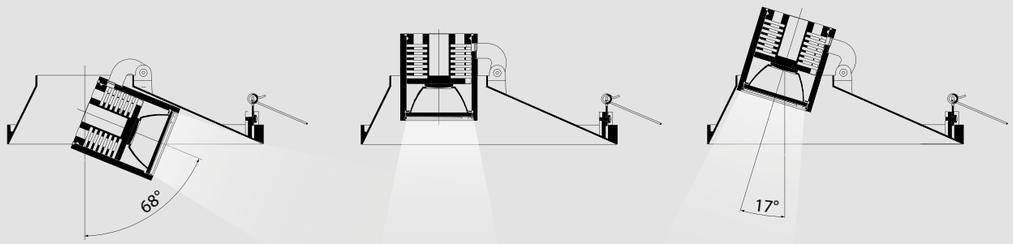
A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
— After selecting the position of the fixture, make the housing recess.

B — Effettuare il cablaggio del driver.
— Wire the driver.

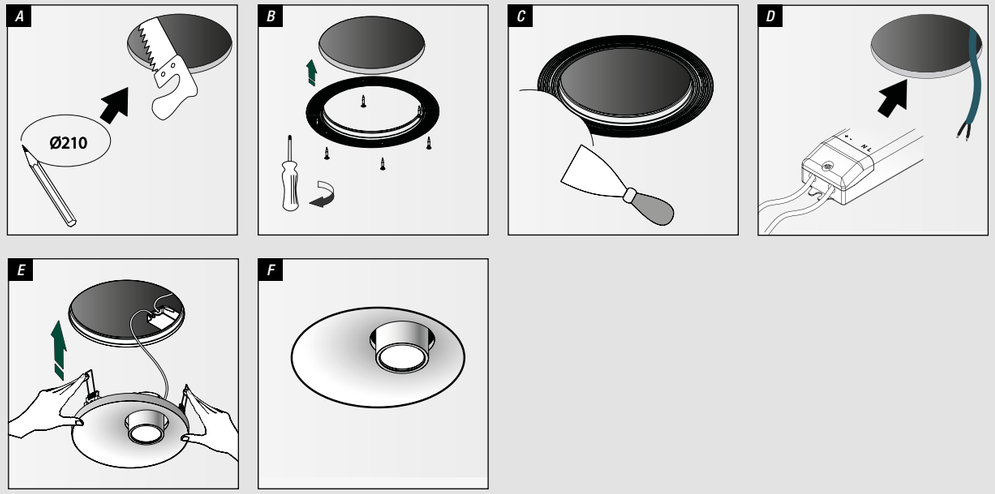
C — Posizionare il driver in incasso.
— Place the driver in the recess housing.

D — Inserire PIT nel foro d'incasso.
— Insert PIT in the recess housing.

ORIENTABILITÀ DEL PROIETTORE
SPOTLIGHT ADJUSTABILITY



PIT-IF - Installazione su pareti in cartongesso
PIT-IF - Installation on plasterboard walls



È possibile installare Pit a filo nelle pareti in cartongesso all'ausilio del Plaster-Kit.
Pit can be installed onto plasterboard by means of the Plaster Kit.

A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
— After selecting the position of the fixture, make the housing recess.

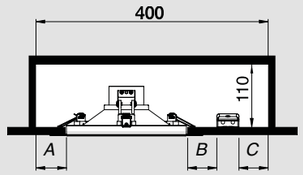
B — Fissare con le viti il Plaster Kit al cartongesso con il collare verso l'interno.
— Use the screws to fasten the Plaster Kit to the plasterboard with the collar inwards.

C — Stuccare e rasare compensando lo spessore del Plaster Kit.
Mantenere pulito l'interno del Plaster Kit.
— Fill and smooth, making good the Plaster Kit thickness.
Keep the inside of the Plaster Kit clean.

D — Effettuare il cablaggio del driver e posizionarlo in incasso.
— Wire the driver and place it in the recess housing.

E — Inserire PIT nel Plaster Kit.
— Insert PIT in the Plaster Kit.

DISTANZE MINIME DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	HOLE mm	A mm	B mm	C mm
PIT-IC	Ø 200	50	50	50
PIT-IF	Ø 210	50	50	50

SURROUND

Design **S.+R. Cornelissen**

APPARECCHI A PARETE, PLAFONE ED INCASSO.

La versione a plafone dalle dimensioni ridotte e dalla forma compatta, consente di risolvere l'illuminazione in tutti quegli ambienti dove vincoli architettonici limitano la possibilità di incasso. Particolarmente indicato per ambienti commerciali, la sua applicazione si estende anche al settore alberghiero, della ristorazione e residenziale. In ambito retail trova applicazione interessante per l'illuminazione delle vetrine, dove è possibile sfruttarne i fianchi interni per collocare il prodotto limitando l'impatto visivo rispetto ad un osservatore esterno.
Il design essenziale nella forma, diventa ergonomico per l'installatore: la sua struttura è composta da una scocca e una base di fissaggio a soffitto.
Le versioni ad incasso a filo e incasso con cornice completano la famiglia e ne ampliano la possibilità di utilizzo e di abbinamento.

WALL, CEILING AND RECESSED INSTALLATION FIXTURES.

The compact sized and shaped ceiling version addresses lighting issues in all settings where architectural constraints affect recessed installation options.
It is particularly suitable for retail spaces, although it can successfully be applied also in the hotel, restaurant and residential sector.
In the retail sector its application is especially interesting in shop windows, by placing the fixture on the inner sides, thus limiting its visual impact on the external observer.

The essential design of its shapes makes for optimally ergonomic installation: its structure consists of a shell body and a ceiling fastening base.
The range is complemented with flush and frame recessed versions for a wide number of utilisation and composition options.

SURROUND

Design **S.+R. Cornelissen**

Apparecchio a parete, plafone ed incasso completo di alimentatore.

Wall, ceiling and recessed installation fixture complete with power supply unit.

Sorgenti luminose:
LED COB **10,5W**, sorgenti alogene e lampade LED.

Cablaggio:
Elettronico, elettronico dimmerabile (IGBT), elettronico dimmerabile digitale (DALI).

Classificazione:
C.I. I, Marchio F, IP20.

Emissione luminosa:
Diretta.

Rotazione:
Sull'asse verticale 355°,
sul piano orizzontale ±45°.

Caratteristiche costruttive:
Trafilato di acciaio formato a freddo, struttura e guida frizionata in acciaio verniciato, lenti LED in Pmma trasparente ad elevato indice di trasmissione, viterie e particolari in acciaio.

Light sources:
*LED COB **10,5W**, halogen and LED lamp.*

Wiring:
Electronic, dimmable electronic (IGBT), digital dimmable electronic (DALI).

Classification:
I.C. I, Mark F, IP20.

Light emission:
Direct.

Rotation:
355° on the vertical axis, ±45° on the horizontal plane.

Constructive features:
Cold-formed drawn steel, painted steel structure and clutch guide, LED lenses in high-transmission index transparent PMMA, steel screws and components.

Ottiche
Optics:

S 25° **M** 35° **F** 50°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM		1 SPOT	2 SPOTS	3 SPOTS	4 SPOTS
LED COB		Transparent glass	**25° 35°**	10,5W	2x 10,5W	3x 10,5W	4x 10,5W
		Prismatic diffuser	**50°**	10,5W	2x 10,5W	3x 10,5W	4x 10,5W
LED lamps		-		7W	2x 7W	3x 7W	4x 7W
Halogen lamps	**QR-CB 51**	-		50W	2x 50W	3x 50W	4x 50W

COLORI
COLOURS

15 Nero
Black

16 Bianco
White

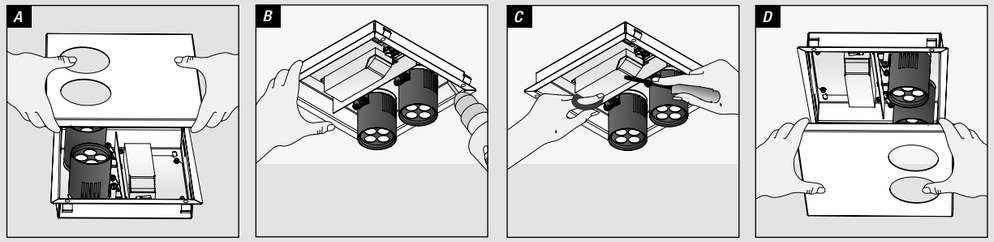
75 Bianco/Nero
White/Black

M6 Bianco muro
White wall effect

SPOT LENS System
Ottica sfaccettata con vetro trasparente
Faceted optics with transparent glass
***S** 25° **M** 35°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico
Faceted optics with polarizing diffuser
***F** 50°*

Installazione Surround a parete/plafone
Surround wall/ceiling installation



A — Apri il prodotto senza bisogno di attrezzi.
— *Open the fixture, no tools are needed.*

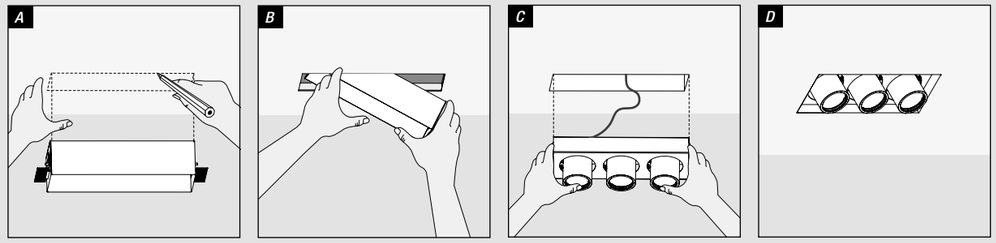
B — Stabilisci la posizione di fissaggio.
— *Establish the fastening position.*

C — Fissa il prodotto al soffitto.
— *Fasten the fixture to the ceiling.*

D — Esegui le operazioni di cablaggio.
— *Carry out wiring operations.*

E — Richiudi il prodotto a scatto senza bisogno di attrezzi.
— *Snap-close the fixture – no tools are needed.*

Installazione Surround filo su pareti in cartongesso
Installing Surround flush with plasterboard walls



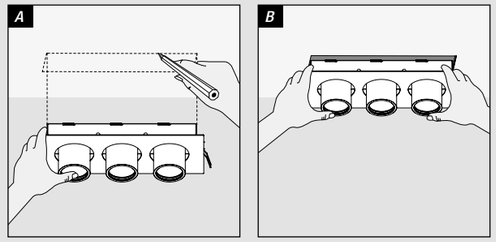
A — Eseguire il foro d'incasso delle dimensioni della controcassa.
— *Make a recess of the same size as the outer casing.*

B — Inserire la controcassa nel foro, avvitare e rasare.
— *Insert the outer casing inside the recess, secure with screws and make good.*

D — Effettuare la connessione delle unità elettriche al modulo incasso.
— *Connect electrical units to the recessed module.*

E — Inserire il modulo nella controcassa, regolabile in 3 posizioni: a filo, incassato 10mm e incassato 20mm.
— *Insert the module in the outer casing, which is adjustable in 3 positions: flush, recessed by 10mm and recessed by 20mm.*

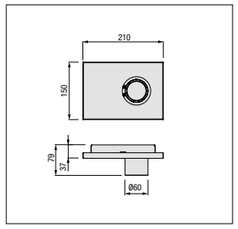
Installazione Surround cornice su pareti in cartongesso
Installing framed Surround on plasterboard walls



A — Eseguire il foro d'incasso delle dimensioni del prodotto.
— *Make a recess of the same size as the fixture.*

B — Eseguire le operazioni di cablaggio, incassare il prodotto nel foro e ancorarlo mediante le apposite molle laterali.
— *Carry out wiring operations, insert the fixture in the recess and anchor it by means of the suitable side springs.*

Apparecchio a parete/soffitto rettangolare ad una luce con diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
One-light rectangular wall/ceiling fixture, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.

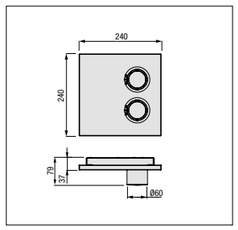


Colours: 15 16 75 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-R1	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**185#**
SUR-R1	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1858**
SUR-R1	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1859**
SUR-R1	50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1763**

Versione dimmerabile digitale DALI a richiesta.
Digital dimmable DALI version available on request.

Apparecchio a parete/soffitto quadro a due luci con diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Two-light square wall/ceiling fixture, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.

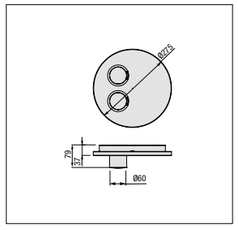


Colours: 15 16 75 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-Q2	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**183#**
SUR-Q2	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1838**
SUR-Q2	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1839**
SUR-Q2	2x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1760**

Versione dimmerabile digitale DALI a richiesta.
Digital dimmable DALI version available on request.

Apparecchio a parete/soffitto tondo a due luci, con LED multichip, diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Two-light round wall/ceiling fixture with multichip LED, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



Colours: 15 16 75 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-T2	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**184#**
SUR-T2	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1848**
SUR-T2	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1849**
SUR-T2	2x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1742**

Versione dimmerabile digitale DALI a richiesta.
Digital dimmable DALI version available on request.

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
ELE: Electronic
ED1: Dim Electronic (IGBT)

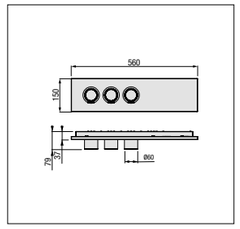
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

Apparecchio a parete/soffitto rettangolare a tre luci con diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Three-light rectangular wall/ceiling fixture, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.

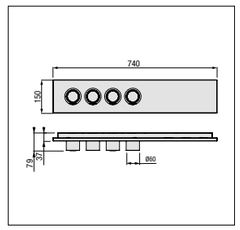


Colours: 15 16 75 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-R3	3x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**186#**
SUR-R3	3x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1868**
SUR-R3	3x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1869**
SUR-R3	3x 10,5W 220-240 Vac		LED	Transparent diffuser		EDD	●	**187#**
SUR-R3	3x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1878**
SUR-R3	3x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1879**
SUR-R3	3x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1700**

Versione dimmerabile digitale DALI a richiesta.
Digital dimmable DALI version available on request.

Apparecchio a parete/soffitto rettangolare a quattro luci con diffusore trasparente o sistema “Polarizing Prism” e alimentatore.
Four-light rectangular wall/ceiling fixture, complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



Colours: 15 16 75 IP20

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-R4	4x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**189#**
SUR-R4	4x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1898**
SUR-R4	4x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1899**
SUR-R4	4x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1720**

Versione dimmerabile digitale DALI a richiesta.
Digital dimmable DALI version available on request.

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Digital Dim Electronic (DALI)

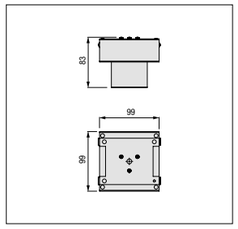
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

Incasso quadro ad una luce a filo, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
One-light square flush recessed fixture complete with transparent diffuser or “Polarizing Prism” system and power supply unit.

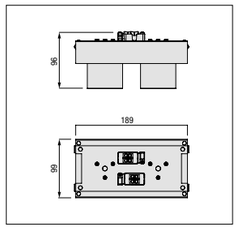


Colours: 75 M6 IP20 107x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IQ1F	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**181#**
SUR-IQ1F	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1818**
SUR-IQ1F	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1819**
SUR-IQ1F	10,5W 220-240 Vac		LED	Transparent diffuser		EDD	●	**195#**
SUR-IQ1F	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1958**
SUR-IQ1F	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1959**
SUR-IQ1F	50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1713**

Versione elettronico emergenza 1h a richiesta. Controcassa da ordinare separatamente.
1h electronic emergency version available on request. Outer casing to be ordered separately.

Incasso rettangolare a due luci a filo, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Two-light square flush recessed fixture complete with transparent diffuser or “Polarizing Prism” system and power supply unit.

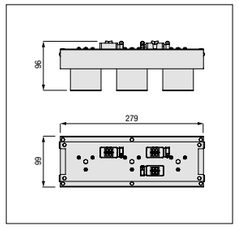


Colours: 75 M6 IP20 197x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IR2F	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**191#**
SUR-IR2F	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1918**
SUR-IR2F	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1919**
SUR-IR2F	2x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1706**

Versione elettronico dimmerabile digitale DALI e elettronico emergenza 1h a richiesta.
Controcassa da ordinare separatamente.
DALI digital dimmable electronic version and 1h electronic emergency version available on request.
Outer casing to be ordered separately.

Incasso rettangolare a tre luci a filo, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Three-light rectangular flush recessed fixture complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



Colours: 75 M6 IP20 287x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IR3F	3x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**192#**
SUR-IR3F	3x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1928**
SUR-IR3F	3x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1929**
SUR-IR3F	3x 50W/7W 220-240 Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1709**

Versione elettronico dimmerabile digitale DALI e elettronico emergenza 1h a richiesta.
Controcassa da ordinare separatamente.
DALI digital dimmable electronic version and 1h electronic emergency version available on request.
Outer casing to be ordered separately.

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Dim Electronic (DALI)

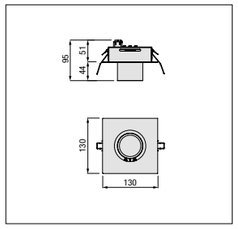
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

Incasso quadro ad una luce con cornice, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
One-light square recessed fixture with frame, transparent diffuser or “Polarizing Prism” system and power supply unit.

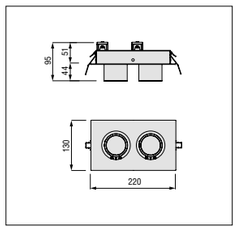


Colours: 75 M6 IP20 115x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IQ1C	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**180#**
SUR-IQ1C	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1808**
SUR-IQ1C	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1809**
SUR-IQ1C	10,5W 220-240 Vac		LED	Transparent diffuser		EDD	●	**196#**
SUR-IQ1C	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1968**
SUR-IQ1C	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1969**
SUR-IQ1C	50W/7W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1744**

Versione elettronico emergenza 1h a richiesta.
1h electronic emergency version available on request.

Incasso rettangolare a due luci con cornice, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Two-light rectangular recessed fixture with frame, transparent diffuser or “Polarizing Prism” system and power supply unit.

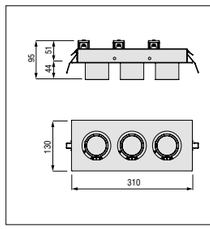


Colours: 75 M6 IP20 205x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IR2C	2x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**193#**
SUR-IR2C	2x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1788**
SUR-IR2C	2x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1789**
SUR-IR2C	2x 50W/7W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1729**

Versione elettronico dimmerabile digitale DALI e elettronico emergenza 1h a richiesta.
DALI digital dimmable electronic version and 1h electronic emergency version available on request.

Incasso rettangolare a tre luci con cornice, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
Three-light rectangular recessed fixture with frame, transparent diffuser or “Polarizing Prism” system and power supply unit.



Colours: 75 M6 IP20 295x107

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IR3C	3x 10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**194#**
SUR-IR3C	3x 10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1798**
SUR-IR3C	3x 10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1799**
SUR-IR3C	3x 50W/7W 230Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1748**

Versione elettronico dimmerabile digitale DALI e elettronico emergenza 1h a richiesta.
DALI digital dimmable electronic version and 1h electronic emergency version available on request.

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Digital Dim Electronic (DALI)

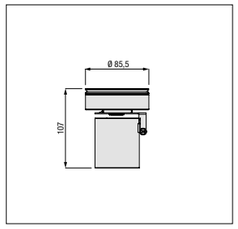
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

Incasso tondo ad una luce a filo, completo di diffusore trasparente o sistema “Polarizing Prism”e alimentatore.
One-light round flush recessed fixture complete with transparent diffuser or “Polarizing Prism” system and power supply unit.



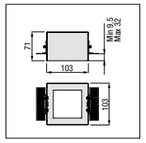
Colours: 75 M6 IP20 Ø95

TYPE	WATTAGE	SOCKET	LAMP	OPTICS		WIRING		CODE
SUR-IT1F	10,5W 220-240 Vac		LED	Transparent diffuser		ELE	●	**190#**
SUR-IT1F	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	ELE	●	**1908**
SUR-IT1F	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	ELE	●	**1909**
SUR-IT1F	10,5W 220-240 Vac		LED	Transparent diffuser		EDD	●	**197#**
SUR-IT1F	10,5W 220-240 Vac		LED NW	Prismatic diffuser	50°	EDD	●	**1978**
SUR-IT1F	10,5W 220-240 Vac		LED WW	Prismatic diffuser	50°	EDD	●	**1979**
SUR-IT1F	50W/7W 220-240Vac	GU5,3	QR-CB 51/LED lamp			ED1		**1704**

Versione elettronico emergenza 1h a richiesta. Controcassa da ordinare separatamente.
1h electronic emergency version available on request. Outer casing to be ordered separately.

CONTROCASSE
OUTER CASINGS

Controcassa quadra per Surround filo ad una luce.
Square outer casing for one-light flush Surround.

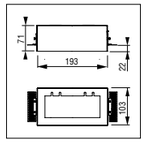


SUR-CC1Q

Colours: M6

TYPE	CODE
SUR-CC1Q	1767

Controcassa rettangolare per Surround filo a due luci.
Rectangular outer casing for two-light flush Surround.

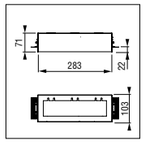


SUR-CC2

Colours: M6

TYPE	CODE
SUR-CC2	1769

Controcassa rettangolare per Surround filo a tre luci.
Rectangular outer casing for three-light flush Surround.

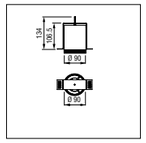


SUR-CC3

Colours: M6

TYPE	CODE
SUR-CC3	1770

Controcassa tonda per Surround filo a una luce.
Round outer casing for one-light flush Surround.



SUR-CC1

Colours: M6

TYPE	CODE
SUR-CC1	1768

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
ED1: Dim Electronic (IGBT)
EDD: Digital Dim Electronic (DALI)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

POSSIBILITÀ DI ARRETRARE LO SPOT IN TRE POSIZIONI DEFINITE
SPOTLIGHT MAY BE SET BACK IN THREE FIXED POSITIONS

IKKUNA

Design **Mizar**

APPARECCHI AD INCASSO CON E SENZA CORNICE.

Famiglia di incassi per applicazioni in controsoffitti ispezionabili e in cartongessi, disponibili nelle versioni quadra con cornice e rettangolare con o senza cornice.
Gli spessori di incasso di soli 37mm, 71mm e 90mm, permettono l'applicazione anche in caso di altezze di incasso ridotte.
È particolarmente adatto ad aree di lavoro, uffici e plessi scolastici.
Di particolare interesse è il particolare effetto 3D della luce che attraversa lo schermo generando una texture tridimensionale, formata da tanti anelli luminosi che si sovrappongono l'uno all'altro e che cambiano forma rispetto alla posizione dell'osservatore.

RECESSED FIXTURES WITH OR WITHOUT FRAME.

A range of recessed downlights for application in inspectable false ceilings and plasterboard, available in the square version with frame and rectangular with or without frame.
The recess thickness of just 37mm, 71mm and 90mm allow the fixtures to be installed even in case of very low recess.
It is especially suitable for work areas, offices and school complexes.
The special 3D effect is remarkable, with light going through the screen and giving rise to a 3D texture, consisting of countless, overlapping rings of light whose shape changes depending on the observer's position.

IKKUNA

Design **Mizar**

Apparecchio ad incasso con e senza cornice, completo di alimentatore.

Recessed fixture with or without frame, complete with power supply unit.

Sorgenti luminose:
LED lineare **11,3W**, **23,6W, 38,7W** e **47,2W**.

Caratteristiche del LED:
3000K=WW
4000K=NW
CRI>80

Cablaggio:
Elettronico, elettronico dimmerabile analogico (1-10V), elettronico dimmerabile digitale (DALI). Elettronico emergenza 1h e 3h a richiesta.

Classificazione:
C.I. I, C.I. II, Marchio F, IP20 P.I, IP40 V.O.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Struttura in lamiera di acciaio, diffusore in policarbonato prismatizzato, sistema di aggancio in acciaio, viterie e particolari in acciaio.

Light sources:
*Linear LED **11,3W, 23,6W, 38,7W** and **47,2W.***

LED features:
3000K=WW
4000K=NW
CRI>80

Wiring:
Electronic, analogue dimmable electronic (1-10V), digital dimmable electronic (DALI). Electronic emergency 1h and 3h on request.

Classification:
I.C. I, I.C. II, Mark F, IP20 P.I, IP40 V.O.

Light emission:
Direct.

Constructive features:
Steel plate structure, prismatic polycarbonate diffuser, steel locking system, steel screws and components.

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	IKKUNA-300	IKKUNA-600	IKKUNA-RC / IKKUNA-RF
LED COB	Prismatic diffuser	11,3W 23,6W	38,7W 47,2W	11,8W

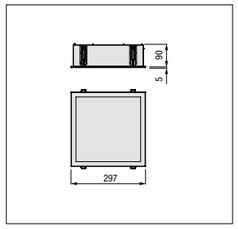
COLORI
COLOURS

M6 Bianco muro
White wall effect

EFFETTO EMISSIONE 3D
Diffusore prismatico - sistema "Polarizing Prism".

3D EMISSION EFFECT
Prismatic diffuser - "Polarizing Prism" system.

Apparecchio ad incasso quadro 300x300mm con LED e diffusore prismatico - sistema “Polarizing prism”. Completo di alimentatore.
300x300mm recessed square fixture with LED, prismatic diffuser - “Polarizing Prism” system and power supply unit.

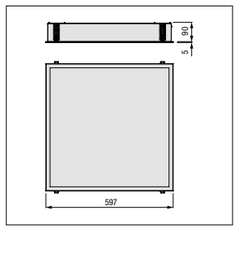


Colours: M6

TYPE	WATTAGE	LAMP	WIRING		CODE
IKKUNA-300	11,3W 220-240 Vac	LED NW	ELE	●	**169M**
IKKUNA-300	11,3W 220-240 Vac	LED WW	ELE	●	**169N**
IKKUNA-300	11,3W 220-240 Vac	LED NW	EDD	●	**169T**
IKKUNA-300	11,3W 220-240 Vac	LED WW	EDD	●	**169U**
IKKUNA-300	11,3W 220-240 Vac	LED NW	EDA	●	**169V**
IKKUNA-300	11,3W 220-240 Vac	LED WW	EDA	●	**169Z**
IKKUNA-300	23,6W 220-240 Vac	LED NW	ELE	●	**169A**
IKKUNA-300	23,6W 220-240 Vac	LED WW	ELE	●	**169B**
IKKUNA-300	23,6W 220-240 Vac	LED NW	EDD	●	**169C**
IKKUNA-300	23,6W 220-240 Vac	LED WW	EDD	●	**169D**
IKKUNA-300	23,6W 220-240 Vac	LED NW	EDA	●	**169E**
IKKUNA-300	23,6W 220-240 Vac	LED WW	EDA	●	**169F**

Versione elettronico emergenza 1h e 3h a richiesta.
1h and 3h electronic emergency version available on request.

Apparecchio ad incasso quadro 600x600mm con LED e diffusore prismatico - sistema “Polarizing prism”. Completo di alimentatore.
600x600mm recessed square fixture with LED, prismatic diffuser - “Polarizing Prism” system and power supply unit.



Colours: M6

TYPE	WATTAGE	LAMP	WIRING		CODE
IKKUNA-600	38,7W 220-240 Vac	LED NW	ELE	●	**1698**
IKKUNA-600	38,7W 220-240 Vac	LED WW	ELE	●	**1699**
IKKUNA-600	38,7W 220-240 Vac	LED NW	EDD	●	**169P**
IKKUNA-600	38,7W 220-240 Vac	LED WW	EDD	●	**169R**
IKKUNA-600	38,7W 220-240 Vac	LED NW	EDA	●	**169Q**
IKKUNA-600	38,7W 220-240 Vac	LED WW	EDA	●	**169S**
IKKUNA-600	47,2W 220-240 Vac	LED NW	ELE	●	**169G**
IKKUNA-600	47,2W 220-240 Vac	LED WW	ELE	●	**169H**
IKKUNA-600	47,2W 220-240 Vac	LED NW	EDD	●	**169I**
IKKUNA-600	47,2W 220-240 Vac	LED WW	EDD	●	**169J**
IKKUNA-600	47,2W 220-240 Vac	LED NW	EDA	●	**169K**
IKKUNA-600	47,2W 220-240 Vac	LED WW	EDA	●	**169L**

Versione elettronico emergenza 1h e 3h a richiesta.
1h and 3h electronic emergency version available on request.

“POLARIZING PRISM” SYSTEM
3D Light effect

IKKUNA-300 - *23,6W*
IKKUNA-600 - *38,7W*

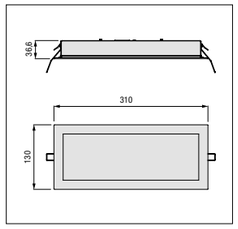
IKKUNA-300 - *11,3W*
IKKUNA-600 - *47,2W*

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDA: Elettronico Dim Analogico (1-10V)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDA: Analogue Dim Electronic (1-10V)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
11,3W	1670lm	1730lm	73,3%
23,6W	2880lm	2720lm	73,3%
38,7W	4500lm	4350lm	95%
47,2W	5800lm	5480lm	95%

Apparecchio ad incasso rettangolare con cornice, LED e diffusore prismatico - sistema “Polarizing prism”. Completo di alimentatore.
Recessed rectangular fixture with frame, LED, prismatic diffuser - “Polarizing Prism” system and power supply unit.

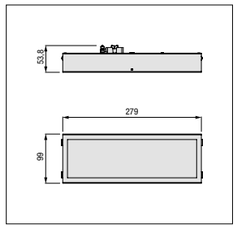


Colours: M6 | IP20 P.I. | IP40 V.O. | 295x107

TYPE	WATTAGE	LAMP	WIRING		CODE
IKKUNA-RC	11,8W 220-240 Vac	LED NW	ELE	●	**1694**
IKKUNA-RC	11,8W 220-240 Vac	LED WW	ELE	●	**1695**
IKKUNA-RC	11,8W 220-240 Vac	LED NW	EDD	●	**1696**
IKKUNA-RC	11,8W 220-240 Vac	LED WW	EDD	●	**1697**
IKKUNA-RC	11,8W 220-240 Vac	LED NW	EDA	●	**16A4**
IKKUNA-RC	11,8W 220-240 Vac	LED WW	EDA	●	**16A5**

Versione elettronico emergenza 1h e 3h a richiesta.
1h and 3h electronic emergency version available on request.

Apparecchio ad incasso rettangolare a filo, con LED e diffusore prismatico - sistema “Polarizing prism”. Completo di alimentatore.
Rectangular frameless recessed fixture with LED, prismatic diffuser - “Polarizing Prism” system and power supply unit.



Colours: M6 | IP20 P.I. | IP40 V.O. | 287x107

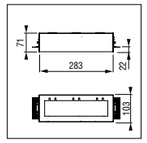
TYPE	WATTAGE	LAMP	WIRING		CODE
IKKUNA-RF	11,8W 220-240 Vac	LED NW	ELE	●	**1690**
IKKUNA-RF	11,8W 220-240 Vac	LED WW	ELE	●	**1691**
IKKUNA-RF	11,8W 220-240 Vac	LED NW	EDD	●	**1692**
IKKUNA-RF	11,8W 220-240 Vac	LED WW	EDD	●	**1693**
IKKUNA-RF	11,8W 220-240 Vac	LED NW	EDA	●	**16A0**
IKKUNA-RF	11,8W 220-240 Vac	LED WW	EDA	●	**16A1**

Versione elettronico emergenza 1h e 3h a richiesta. Controcassa da ordinare separatamente.
Possibilità di arretramento rispetto alla controcassa in tre posizioni definite.

1h and 3h electronic emergency version available on request. Outer casing to be ordered separately.
Retractable in the outer casing in three fixed positions.

CONTROCASSA
OUTER CASING

Controcassa rettangolare per IKKUNA-RF.
Rectangular outer casing for IKKUNA-RF.



SUR-CC3

Colours: M6

TYPE	CODE
SUR-CC3	**1770**

Possibilità di arretramento rispetto alla controcassa in tre posizioni definite.
Retractable in the outer casing in three fixed positions.

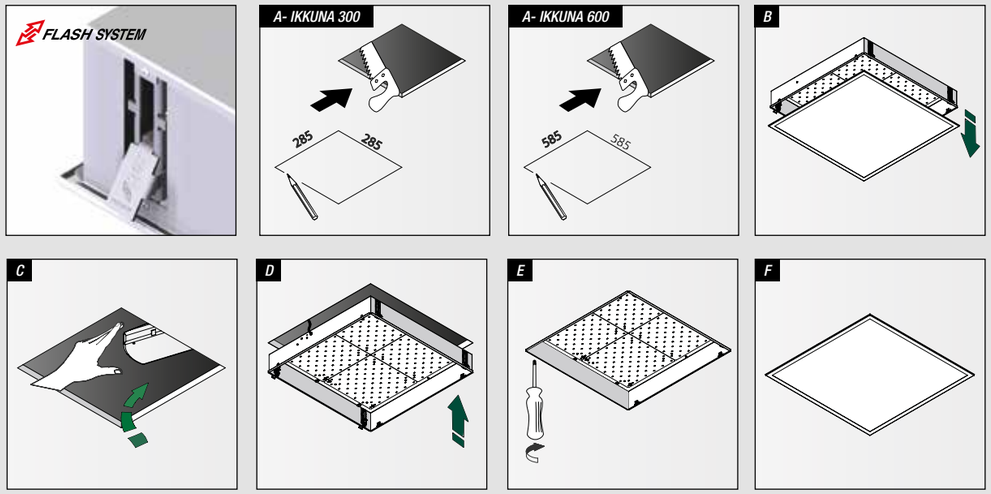
ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDA: Elettronico Dim Analogico (1-10V)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDA: Analogue Dim Electronic (1-10V)

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
11,8W	1440lm	1360lm	76%

290

FLASH SYSTEM - Installazione su pareti in cartongesso
FLASH SYSTEM - Installation on plasterboard walls



Dispositivo brevettato per l'aggancio rapido di apparecchi illuminanti da incasso in controsoffitti da 0 a 30mm. È possibile controllare la pressione di serraggio grazie ad una speciale molla su slitta regolata da movimento a vite. Ottima tenuta su spessori sottili e irregolari; massima stabilità e sicurezza su controssoffitti soggetti a vibrazioni (ascensori, navi, ecc).

Patented device for quickly locking recessed fixtures onto 0-30mm false ceilings. Locking pressure can be controlled by means of a special spring on a screw-adjusted tilting slide. Excellent hold on thin or irregular false ceilings and maximum stability and safety when subject to vibrations (i.e. lifts, ships etc.).

A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
— After selecting the position of the fixture, cut out the recess housing.

B — Rimuovere il diffusore di IKKUNA per avere accesso ai Flash System.
— Remove the IKKUNA diffuser to access the Flash System.

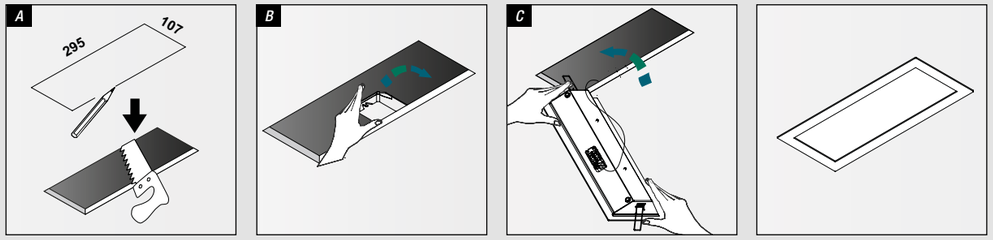
C — Effettuare il cablaggio del driver e posizionarlo in incasso.
— Wire the driver and place it in the recess.

D — Inserire IKKUNA nel foro d'incasso.
— Insert IKKUNA in the recess housing.

E — Fissare IKKUNA agendo sui Flash System.
— Fix IKKUNA using the Flash System.

F — Riposizionare il diffusore.
— Fit the diffuser back on.

IKKUNA RC - Installazione su pareti in cartongesso
IKKUNA RC - Installation on plasterboard walls

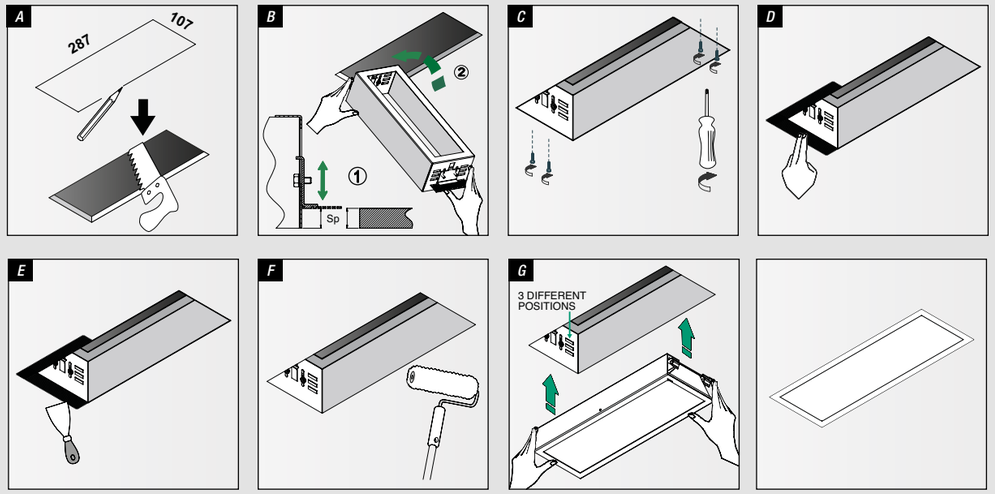


A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
— After selecting the position of the fixture, cut out the recess housing.

B — Effettuare il cablaggio del driver e posizionarlo in incasso.
— Wire the driver and place it in the recess.

C — Inserire IKKUNA nel foro d'incasso agendo sulle molle.
— Insert IKKUNA in the recess housing using the springs.

IKKUNA RF - Installazione su pareti in cartongesso
IKKUNA RF - Installation on plasterboard walls



A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
— After selecting the position of the fixture, cut out the recess housing.

B — Regolare la staffa di fissaggio in relazione allo spessore del cartongesso e inserire la controcassa nel foro d'incasso.
— Adjust fastening bracket in relation to plasterboard thickness.

C — Fissare con le viti la controcassa al cartongesso.
— Secure the outer casing to the plasterboard with the screws.

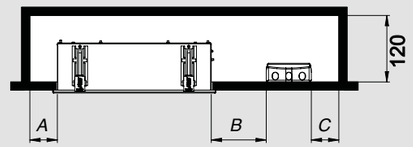
D — Applicare l'apposita rete aggrappante.
— Apply the special adhesive mesh.

E — Stuccare e rasare, compensando lo spessore.
— Fill and smooth, making up for thickness.

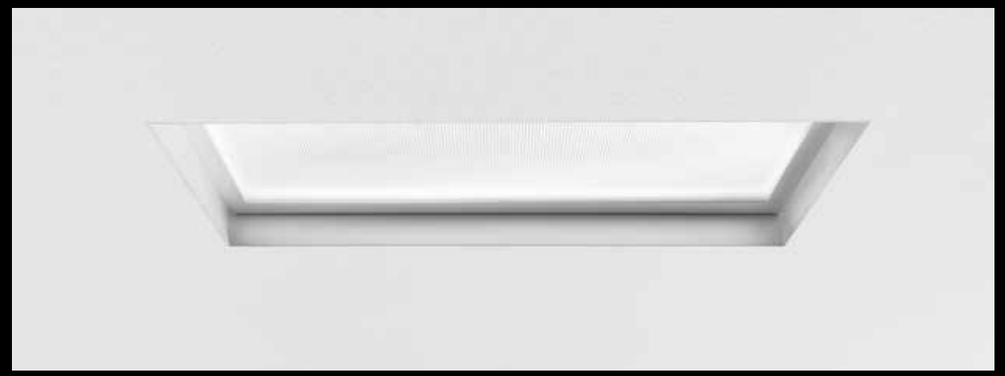
F — Tinteggiare mantenendo pulito l'interno della controcassa.
— Paint and keep the inside of the casing clean.

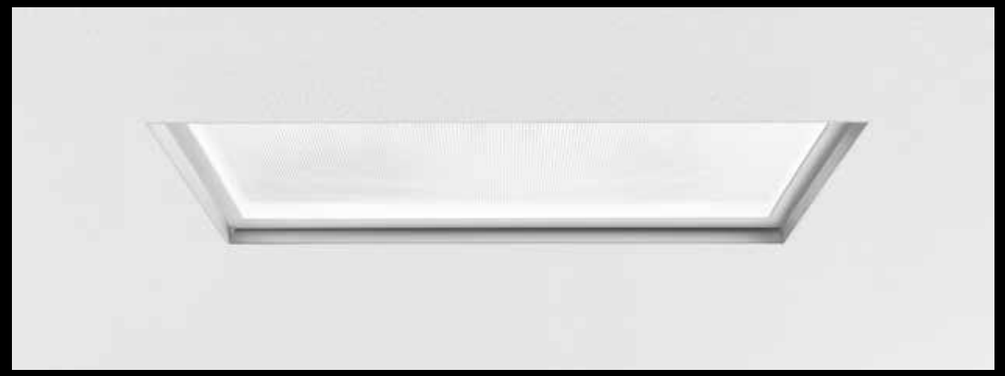
G — Inserire IKKUNA nella controcassa.
— Insert IKKUNA in the casing.

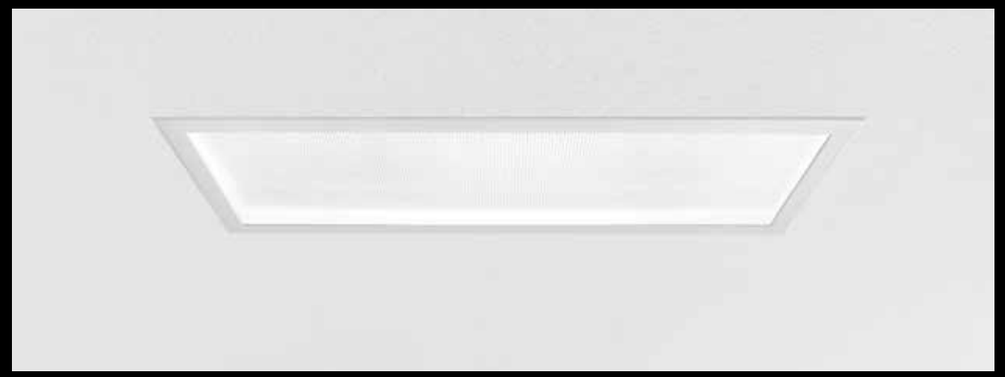
DISTANZE MINIME DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	HOLE mm	A mm	B mm	C mm
IKKUNA-300	285x285	50	50	50
IKKUNA-600	585x585	50	50	50
IKKUNA-RC	295x107	50	50	50
IKKUNA-RF	287x107	50	50	50







IKKUNA-RF APPARECCHIO AD INCASSO RETTANGOLARE A FILO: POSSIBILITÀ DI ARRETRAMENTO IN TRE POSIZIONI DA DEFINIRE PRIMA DELL'INSTALLAZIONE
IKKUNA-RF RECTANGULAR FLUSH RECESSED FIXTURE: RETRACTABLE IN THREE POSITIONS, TO BE SET BEFORE INSTALLATION

POINT LED

Design **Mizar**

PICCOLI APPARECCHI AD INCASSO E SEMI-INCASSO.

Famiglia di incassi disponibili nelle versioni tonda e quadra, arretrati, semi/incasso ed incasso con e senza cornice. Le dimensioni ridotte ne fanno una soluzione ottimale per l'illuminazione puntuale d'accento di teche e vetrine e di spazi ridotti in genere, oltre che per l'illuminazione d'effetto.

SMALL RECESSED AND SEMI-RECESSED APPLIANCES.

A range of recessed downlights available in the round and square versions, retracted, semi-recessed and recessed, with and without frame.
The compact size make them an optimal solution for accent spot lighting of display cases and shop windows, and small spaces in general, as well as for effect lighting.

POINT LED

Design **Mizar**

Apparecchio ad incasso e semi-incasso.

Recessed and semi-recessed fixture

Sorgenti luminose:
LED **2,7W**.

Ottica dell'apparecchio:
Lente prismatica:
N 15° **S** 25° **M** 40°.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI).
Elettronico dimmerabile analogico (1-10V), a richiesta.

Classificazione:
C.I. III, Marchio F, IP54.

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Corpo in alluminio tornito, ottica in PMMA ad alto rendimento.

Light sources:
*LED **2,7W**.*

Optics of the projector:
Prismatic lens:
***N** 15° **S** 25° **M** 40°.*

LED features:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI), Analogue dimmable electronic (1-10V) on request.

Classification:
I.C. III, Mark F, IP54.

Light emission:
Direct.

Constructive features:
Turned aluminium body, high performance PMMA optics.

Ottiche
Optics:

F 15° **F** 25° **F** 40°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM		POINTL-QS/POINTL-TS	POINTL-Q/POINTL-T	POINTL-QA/POINTL-TA
LED	Prismatic diffuser	**15° 25° 40°**	2,7W	2,7W	2,7W

COLORI
COLOURS

16 Bianco
White

23 Cromo
Chrome

28 Grigio argento
Silver grey

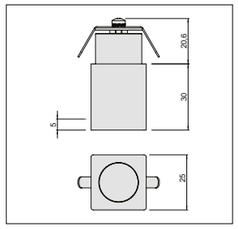
Versione ad incasso tondo arretrato senza cornice
Frameless, retracted round recessed version
Ø 33mm

Versione ad incasso quadro arretrato senza cornice
Frameless, retracted square recessed version
33,5x33,5mm

Diffusore prismatico
Prismatic diffuser

***N** 15° **S** 25° **M** 40°*

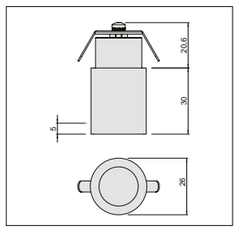
Semi incasso fisso quadro con 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed semi-recessed square downlight with 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 23 28 IP54 Ø21

TYPE	WATTAGE	LAMP		CODE
POINTL-QS	2,7W Max 700mA	LED	●	**8A5#**

Semi incasso fisso tondo con 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed semi-recessed round downlight with 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 23 28 IP54 Ø21

TYPE	WATTAGE	LAMP		CODE
POINTL-TS	2,7W Max 700mA	LED	●	**8A2#**

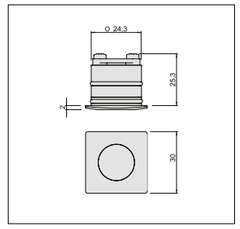
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
2,7W	177lm	155lm	88%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

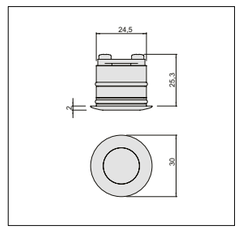
Incasso fisso quadro con cornice, 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed square downlight with frame and 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 23 28 IP54 Ø25

TYPE	WATTAGE	LAMP		CODE
POINTL-Q	2,7W Max 700mA	LED	●	**8A3#**

Incasso fisso tondo con cornice, 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed round downlight with frame and 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 23 28 IP54 Ø25

TYPE	WATTAGE	LAMP		CODE
POINTL-T	2,7W Max 700mA	LED	●	**815#**

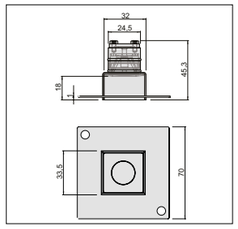
NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
2,7W	177lm	155lm	88%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

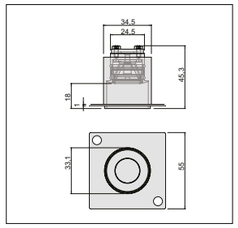
Incasso fisso quadro arretrato senza cornice con 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed frame-less square retracted downlight with 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 | 28 — IP54 — 35x35

TYPE	WATTAGE	LAMP		CODE
POINTL-QA	2,7W Max 700mA	LED	●	**8A4#**

Incasso fisso tondo arretrato senza cornice con 1 LED monocromatico. Alimentatore da ordinare separatamente.
Fixed frame-less round retracted downlight with 1 monochrome LED. Power supply unit to be ordered separately.



Colours: 16 | 28 — IP54 — Ø35

TYPE	WATTAGE	LAMP		CODE
POINTL-TA	2,7W Max 700mA	LED	●	**8A1#**

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
2,7W	177lm	155lm	88%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

ACCESSORI
ACCESSORIES

Alimentatore elettronico.
Electronic power supply.

Colours: 00

TYPE			WIRING	CODE
TRL35-16	16W	350mA	ELE	**0621**
TRL70-12	12W	700mA	ELE	**0795**
TRL70-17	17W	700mA	ELE	**5385**

Alimentatore elettronico multicorrente dimmerabile digitale (DALI).
Direct current dimmable electronic driver multicurrent (DALI).

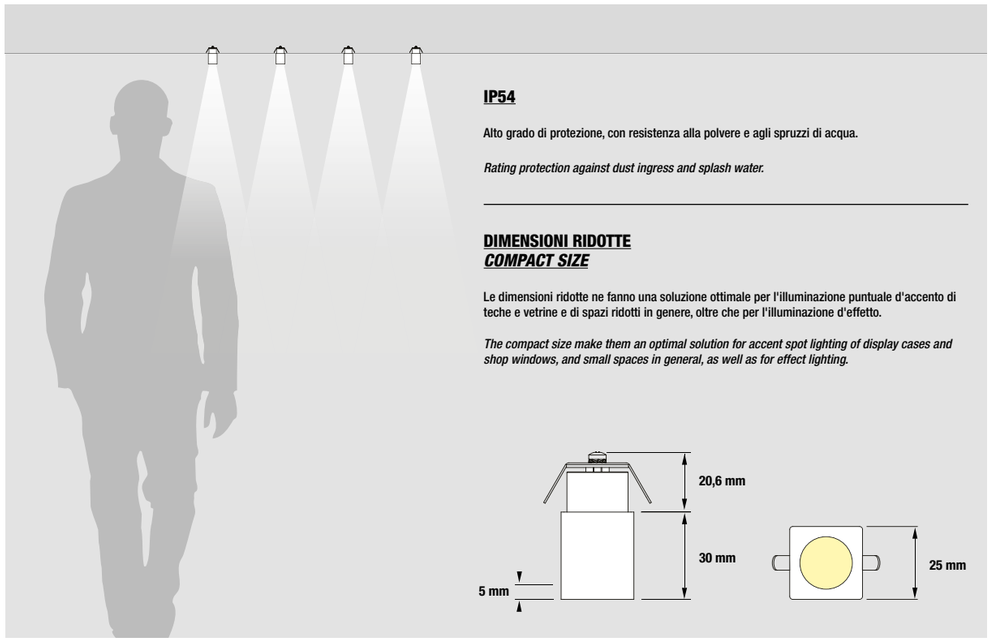
Colours: 00

TYPE			WIRING	CODE
TRL70-20	Min 10W Max 20W	Min 250mA Max 700mA	EDD	**0623**

Alimentatore elettronico multicorrente dimmerabile analagico (1-10V/Push).
Direct current dimmable electronic driver multicurrent (1-10V/ Push).

Colours: 00

TYPE			WIRING	CODE
TRL70-20	Min 13W Max 20W	Min 250mA Max 700mA	EDT	**0622**



IP54

Alto grado di protezione, con resistenza alla polvere e agli spruzzi di acqua.

Rating protection against dust ingress and splash water.

DIMENSIONI RIDOTTE
COMPACT SIZE

Le dimensioni ridotte ne fanno una soluzione ottimale per l'illuminazione puntuale d'accento di teche e vetrine e di spazi ridotti in genere, oltre che per l'illuminazione d'effetto.

The compact size make them an optimal solution for accent spot lighting of display cases and shop windows, and small spaces in general, as well as for effect lighting.

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)

TEAM MODULE

Design **Mizar**

APPARECCHIO A INCASSO A FILO E CON CORNICE.

Serie di apparecchi da incasso per sorgenti luminose ad emissione spotterata a movimento cardanico, gestibili in modalità modulare.
La composizione di Team Module prevede l'abbinamento in opera della struttura portante (con o senza cornice) con i moduli luce (estraibili o non estraibili), consentendo una gestione più flessibile sia in fase di installazione che di progettazione illuminotecnica.
Il sistema brevettato di aggancio rapido 'Flash-System' riduce sensibilmente i tempi di installazione oltre a garantirne la sicurezza ed affidabilità nel tempo.
Pensato per illuminare spazi commerciali e locali, può trovare impiego anche per l'illuminazione di ambienti residenziali e architetture di pregio.
Il corpo lampada è costruito in modo tale da permettere l'orientamento di ogni singola lampada attraverso un sistema cardanico che ne consente l'inclinazione fino a ±90° sull'asse verticale e fino a ±178° su l'asse orizzontale.
Un ulteriore meccanismo a slitta permette da un lato l'arretramento del corpo lampada, evitando pertanto possibili situazioni di abbagliamento, dall'altro l'estrazione completa per consentire ogni tipo di puntamento del corpo luce.

DOWNLIGHT FIXTURE WITH AND WITHOUT FRAME.

Series of cardanic-movement, recessed fixtures for spotlight emission sources, which can be controlled in a modular manner.
"Team Module" is composed by coupling the load-bearing structure - with or without frame – with pull-out or fixed light modules in site; thus assuring increased flexibility both in the installation and lighting design stage.
The patented quick lock "Flash System" dramatically reduces installation times as well as assuring safety and long-term reliability.
Designed to light retail spaces and public venues, the fixtures are successfully employed also in lighting residential settings and fine works of architecture.
The lamp body is constructed for adjustment of each individual lamp by means of a cardanic system, which makes it possible to tilt them up to ± 90° on the vertical axis and up to ±178° on the horizontal axis.
An additional slide mechanism lets you move back the lamp body, therefore avoiding any glaring, as well as assuring complete extraction for any type of luminaire adjustment.

TEAM MODULE

Design **Mizar**

Apparecchio a incasso a filo e con cornice.

Downlight fixture with and without frame.

Sorgenti luminose:
LED COB **17,5W**, sorgenti alogene e lampade LED.

Ottica del proiettore:
Versione LED COB con diffusore trasparente: **N** 16° **S** 28°.
Versione LED COB con sistema "Polarizing Prism": **M** 35°.

Cablaggio:
Induttivo, elettronico o elettronico dimmerabile (IGBT-TRIAC) per mezzo di unità di alimentazione separata con collegamento tramite morsetto ad innesto rapido.

Classificazione:
C.I. III, Marchio F, IP20.

Emissione luminosa:
Diretta.

Rotazione (Spot):
Versione con corpo luce estraibile: orientabile a ± 90° sull'asse verticale e ±178° sull'asse orizzontale.
Versione con corpo luce non estraibile: orientabile a ±30° sugli assi orizzontali.

Caratteristiche costruttive:
Struttura controcassa e cornice perimetrale in metallo.
Gruppi ottici in alluminio pressofuso e lamiera di metallo.
Sistema di aggancio brevettato.
Particolari e viterie in acciaio.

Light sources:
*LED COB **17,5W**, halogen and LED lamp.*

Optics of the projector:
*LED COB version with transparent diffuser: **N** 16° **S** 28°.*
*LED COB version with "Polarizing Prism" system: **M** 35°.*

Wiring:
Inductive, electronic or dimmable electronic (IGBT-TRIAC) by means of separate power supply unit with connection by snap lock clamp.

Classification:
I.C. III, Mark F, IP20.

Light emission:
Direct.

Rotation (Spot):
Version with extractable luminaire: adjustable +90° on the vertical axis and +178° on the horizontal axis.
Version with non-extractable luminaire: adjustable +30° on the horizontal axis.

Constructive features:
Metal outer casing structure and perimeter frame.
Die-cast aluminium and metal plate optics units.
Steel patented locking system.
Steel screws and components.

Ottiche
Optics:

N 16° **S** 28° **M** 35°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTICS SYSTEM		TES-ME	TES-MF
LED COB	Transparent glass	**16° 28°**	17,5W	17,5W
	Prismatic diffuser	**35°**	17,5W	17,5W
LED lamps	-		15W	15W
Halogen lamps **QR111**	-		70W	70W

COLORI
COLOURS

75 Bianco/Nero
White/Black

75 Bianco/Bianco
White/White

85 Grigio argento/Nero
Silver grey/Black

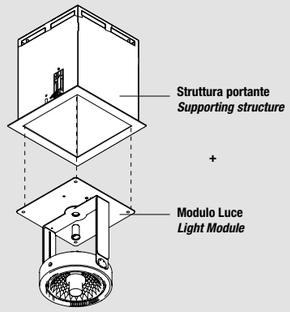
15 Bianco
White

16 Nero
Black

SPOT LENS System
Ottica sfaccettata con diffusore trasparente
Faceted optics with transparent diffuser
***N** 16° **S** 28°*

POLARIZING PRISM System
Ottica sfaccettata con diffusore prismatico
Faceted optics with polarizing diffuser
***M** 35°*

POSSIBILI COMPOSIZIONI
POSSIBLE COMPOSITIONS

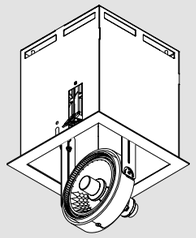


ORDINARE SEMPRE
ALWAYS ORDER:

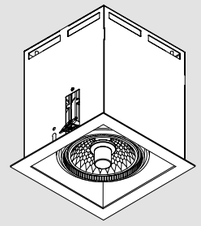
1 Struttura portante con o senza cornice
Supporting structure with or without frame

2 Modulo luce estraibile o non estraibile
Pull-out or non pull-out spotlight module

Team Module con cornice
Team Module with frame

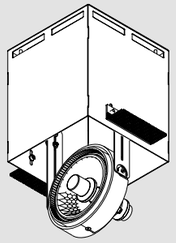


STRUTTURA PORTANTE CON CORNICE
SUPPORTING STRUCTURE WITH FRAME
+
MODULO LUCE ESTRAIBILE
PULL-OUT SPOTLIGHT MODULE

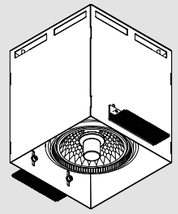


STRUTTURA PORTANTE CON CORNICE
SUPPORTING STRUCTURE WITH FRAME
+
MODULO LUCE NON ESTRAIBILE
NON PULL-OUT SPOTLIGHT MODULE

Team Module a filo soffitto
Team Module flush with ceiling

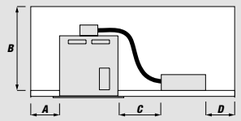


STRUTTURA PORTANTE SENZA CORNICE
SUPPORTING STRUCTURE WITHOUT FRAME
+
MODULO LUCE ESTRAIBILE
PULL-OUT SPOTLIGHT MODULE



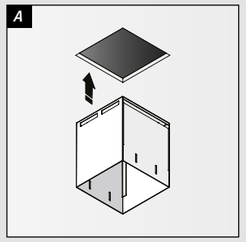
STRUTTURA PORTANTE SENZA CORNICE
SUPPORTING STRUCTURE WITHOUT FRAME
+
MODULO LUCE NON ESTRAIBILE
NON PULL-OUT SPOTLIGHT MODULE

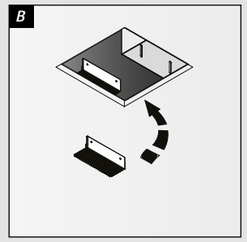
DISTANZE CONSIGLIATE DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:

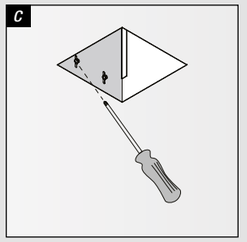


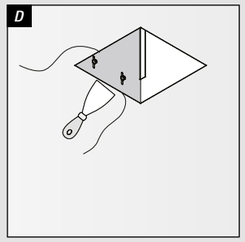
MODELS	CODE	HOLE mm	A mm	B mm	C mm	D mm
Struttura portante con cornice. ***Supporting structure with frame.***						
TES-CCR1	**8901**	168x168	75	220	150	75
TES-CCR2	**8902**	318x168	75	220	150	75
TES-CCR3	**8903**	468x168	75	220	150	75
TES-CCR4	**8904**	618x168	75	220	150	75
TES-CCR6	**8906**	918x168	75	220	150	75
TES-CCQ4	**8905**	318x318	75	220	150	75
Struttura portante senza cornice. ***Supporting structure without frame.***						
TES-SCR1	**8911**	168x168	75	220	150	75
TES-SCR2	**8912**	318x168	75	220	150	75
TES-SCR3	**8913**	468x168	75	220	150	75
TES-CCR4	**8914**	618x168	75	220	150	75
TES-CCR6	**8916**	918x168	75	220	150	75
TES-CCQ4	**8915**	318x318	75	220	150	75

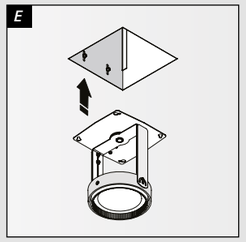
PLASTER KIT - Installazione su pareti in cartongesso e laterizio. Per struttura portante senza cornice
PLASTER KIT - Installation on plasterboard and brick walls. For supporting structure without frame

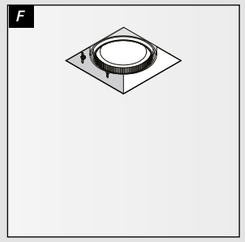












È possibile installare Team Module a filo nelle pareti in cartongesso e laterizio grazie all'ausilio del Plaster-Kit.
Team Module can be installed onto plasterboard and brick walls by means of the Plaster Kit.

A — Eseguire il foro d'incasso delle dimensioni del prodotto, inserire il plaster kit nel foro d'incasso.
Make a cut-out same size of the product and insert the plaster kit.

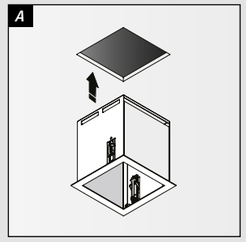
B — Posizionare le staffe di fissaggio e regolarne l'altezza.
Fix the fastening brackets and adjust the height.

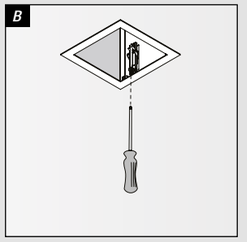
C — Fissare le stafffe di fissaggio agendo sulle viti.
Fix the fastening brackets with the screws.

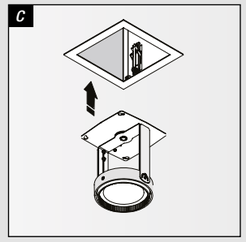
D — Applicare l'apposita rete aggrappante, stuccare e rasare, mantenere pulito l'interno dei TES-SCR.
Apply the adhesive mesh, sparkle and level. Keep the inside of the TES-SCR clean.

E — Inserire il modulo luce nella controcassa, fissare il modulo agendo sui dadi.
Fit the light module into the casing. Fix the module using the nuts.

FLASH SYSTEM - Installazione su pareti in cartongesso. Per struttura portante con cornice
FLASH SYSTEM - Installation on plasterboard walls. For supporting structure with frame







È possibile installare Team Module con cornice in controsoffitti da 0 a 30mm grazie al dispositivo brevettato FLASH SYSTEM per l'aggancio rapido. È possibile controllare la pressione di serraggio grazie ad una speciale molla su slitta regolata da movimento a vite. Ottima tenuta su spessori sottili o irregolari; massima stabilità e sicurezza su controssoffitti soggetti a vibrazioni (Ascensori, navi, ecc).
Team Module can be installed onto 0-30mm false ceilings with frame thanks to the FLASH SYSTEM patented device for quick locking. Locking pressure can be controlled by means of a special spring on a screw-adjusted tilting slide. Excellent hold on thin or uneven false ceilings and maximum stability and safety when subject to vibrations (i.e. lifts, ships etc.).

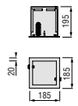
A — Eseguire il foro d'incasso delle dimensioni del prodotto, inserire il plaster kit nel foro d'incasso.
Make a cut-out same size of the product and insert the plaster kit.

B — Posizionare le staffe di fissaggio e regolarne l'altezza.
Fix the fastening brackets and adjust the height.

C — Inserire il modulo luce nella controcassa, fissare il modulo agendo sui dadi.
Fit the light module into the casing. Fix the module using the nuts.

STRUTTURA PORTANTE CON CORNICE
SUPPORTING STRUCTURE WITH FRAME

Struttura quadra con cornice ad 1 vano.
One-unit square supporting structure with frame.

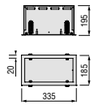


Colours: 75 76 85

168x168

TYPE	CODE
TES-CCR1	8901

Struttura rettangolare con cornice a 2 vani.
Two-unit rectangular supporting structure with frame.

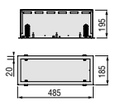


Colours: 75 76 85

318x168

TYPE	CODE
TES-CCR2	8902

Struttura rettangolare con cornice a 3 vani.
Three-unit rectangular supporting structure with frame.

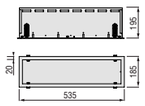


Colours: 75 76 85

468x168

TYPE	CODE
TES-CCR3	8903

Struttura rettangolare con cornice a 4 vani.
Four-unit rectangular supporting structure with frame.

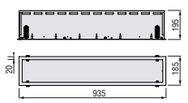


Colours: 75 76 85

618x168

TYPE	CODE
TES-CCR4	8904

Struttura rettangolare con cornice a 6 vani.
Six-unit rectangular supporting structure with frame.

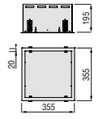


Colours: 75 76 85

918x168

TYPE	CODE
TES-CCR6	8906

Struttura quadra con cornice a 4 vani.
Four-unit square supporting structure with frame.



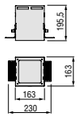
Colours: 75 76 85

318x318

TYPE	CODE
TES-CCQ4	8905

STRUTTURA PORTANTE SENZA CORNICE
FRAME-LESS SUPPORTING STRUCTURE

Struttura quadra senza cornice ad 1 vano.
Frame-less, one-unit square supporting structure.

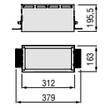


Colours: 15 16

168x168

TYPE	CODE
TES-SCR1	8911

Struttura rettangolare senza cornice ad 2 vani.
Frame-less, two-unit rectangular supporting structure.

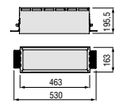


Colours: 15 16

318x168

TYPE	CODE
TES-SCR2	8912

Struttura rettangolare senza cornice ad 3 vani.
Frame-less, three-unit rectangular supporting structure.

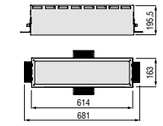


Colours: 15 16

468x168

TYPE	CODE
TES-SCR3	8913

Struttura rettangolare senza cornice ad 4 vani.
Frame-less, four-unit rectangular supporting structure.

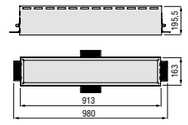


Colours: 15 16

618x168

TYPE	CODE
TES-SCR4	8914

Struttura rettangolare senza cornice ad 6 vani.
Frame-less, six -unit rectangular supporting structure.

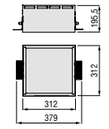


Colours: 15 16

918x168

TYPE	CODE
TES-SCR6	8916

Struttura quadra senza cornice ad 4 vani.
Frame-less, four-unit square supporting structure.

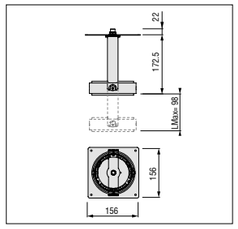


Colours: 15 16

318x318

TYPE	CODE
TES-SCQ4	8915

Modulo luce estraibile orientabile.
Adjustable, pull-out light module.

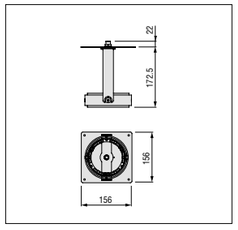


Colours: 15 16 28

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TES-ME	17,5W 500mA		LED	Prismatic diffuser	ELE	●	**894#**
TES-ME	70W/15W 12V	G53	QR111/LED lamp				**8918**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Modulo luce orientabile non estraibile.
Adjustable non pull-out light module.



Colours: 15 16 28

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TES-MF	17,5W 500mA		LED	Prismatic diffuser	ELE	●	**895#**
TES-MF	70W/15W 12V	G53	QR111/LED lamp				**8920**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

ELE: Elettronico
ELE: Electronic

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
17,5W	1978lm	1842lm	66%

LED CODE (...#)

LED TEMPERATURES	N 16°	S 28°	M 35°
LED NW	J	B	2
LED WW	H	A	1

ACCESSORI
ACCESSORIES

Filtro dicroico interferenziale colorato.
Kit fissaggio da ordinare separatamente.
Coloured interferential dichroic filter.
Fastening kit to be ordered separately.

Colours: 12 13 14

TYPE	CODE
X111-FD	**7965**

Vetro sabbiato.
Kit fissaggio da ordinare separatamente.
Sandblasted glass.
Fastening kit to be ordered separately.

Colours: 03

TYPE	CODE
X111-FD	**7965**

Diffusore prismatico trasparente.
Kit fissaggio da ordinare separatamente.
Transparent prismatic diffuser.
Fastening kit to be ordered separately.

Colours: 02

TYPE	CODE
X111-DP	**7966**

Rifrattore per distribuzione ellittica.
Kit fissaggio da ordinare separatamente.
Refractor for light flux elliptical distribution.
Fastening kit to be ordered separately.

Colours: 02

TYPE	CODE
X111-RE	**7964**

Schermo alveolare.
Kit fissaggio da ordinare separatamente.
Honeycomb screen.
Fastening kit to be ordered separately.

Colours: 15

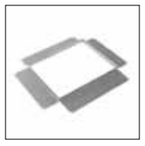
TYPE	CODE
X111-SA	**7963**

Kit tre molle per fissaggio degli accessori: filtro dicroico, vetro sabbiato, diffusore prismatico, rifrattore e schermo alveolare.
Three-spring kit for accessory fastening: dichroic filter, sandblasted glass, prismatic diffuser, refractor and honeycomb screen.

Colours: 00

TYPE	CODE
X111-K	**7962**

Plaster kit per pareti in cartongesso e laterizio.
Plaster kit for plasterboard and brick walls.



Colours: 00

TYPE	Per/For	CODE
TES-PK	TES-SCR1	**89K1**
TES-PK	TES-SCR2	**89K2**
TES-PK	TES-SCR3	**89K3**
TES-PK	TES-SCR4	**89K4**
TES-PK	TES-SCR6	**89K5**
TES-PK	TES-SCQ4	**89K6**

ACCESSORI
ACCESSORIES

Trasformatore elettronico dimmerabile.
Dimmable electronic transformer.

Colours: 15 | IP20 | ENEC

TYPE		WIRING	CODE
TR-ELP060	20-26W 230Vac/12V	ED1	**0730**
TR-ELP105	20-105W 230Vac/12V	ED1	**0731**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00 | IP20 | ENEC | KEMA KEUR

TYPE		WIRING	CODE
TR-ELX060	10-60W 230Vac/12V	ED2	**0744**
TR-ELX105	20-105W 230Vac/12V	ED2	**0745**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer . Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16 | IP20

TYPE		WIRING	CODE
TR-ELP150	30-150W 230Vac/12V	ED2	**0732**

Alimentatore elettronico indipendente.
Indipendent electronic power supply.

Colours: 00 | IP20

TYPE		WIRING	CODE
TDA35-17	17W 350mA	ELE	**0784**
TDA50-20	20W 500mA	ELE	**0780**
TRL70-17	17W 700mA	ELE	**5385**
TRL10-22	22W 1050mA	ELE	**0626**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00 | IP20 | ENEC

TYPE		WIRING	CODE
TR-ELP210	50-210W 230-240Vac/12V	ED1	**0742**
TR-ELP250	50-250W 230-240Vac/12V	ED1	**0749**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16 | IP20 | ENEC | KEMA KEUR

TYPE		WIRING	CODE
TR-ELP200	100-200W 230Vac/12V	ED1	**0733**
TR-ELP250	100-250W 230V/12V	ED1	**0734**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è dal 5% al 100%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, with MLed-LV lamps dimmability goes from min. 5% up to 100% max.

Colours: 00 | IP20 | KEMA KEUR

TYPE		WIRING	CODE
TR-ELP70	2,5-70W* 230Vac/12V	ED1	**0620**

*2,5-50W con utilizzo di LED Lamp.
2,5-50W using LED Lamp

ED1: Elettronico Dim (IGBT)
ED2: Elettronico Dim (TRIAC/IGBT)
ED1: Dim Electronic (IGBT)
ED2: Dim Electronic (TRIAC/IGBT)

TEAM

Design **Mizar**

APPARECCHIO A INCASSO CON CORNICE.

Programma di apparecchi architetturali da incasso per sorgenti luminose ad emissione spotterata a movimento cardanico, disponibile nei moduli da 1 a 4 lampade nel formato rettangolare o quadrato.
Team completa con versioni "finite" la famiglia "Team Module", che invece si esprime in modalità modulare.
Il sistema brevettato di aggancio rapido 'Flash-System' riduce sensibilmente i tempi di installazione oltre a garantirne la sicurezza ed affidabilità nel tempo.
Pensato per illuminare spazi commerciali e locali, può trovare impiego anche per l'illuminazione di ambienti residenziali e architetture di pregio.
Ogni singola lampada è indipendente e orientabile di ±30° sugli assi orizzontali.
La gestione separata degli alimentatori può consentire delle ottimizzazioni di costo, oppure un controllo totalmente indipendente di ogni singola lampada, con funzione on-off/dim per alogene.

DOWNLIGHT FIXTURE WITH FRAME.

Range of architectural cardanic movement recessed fixtures for spotlight emission light sources, available in the 1 to 4-lamp modules in the rectangular or square format.
Team complements with "stand-alone" versions the "Team Module" range.
The patented quick lock 'Flash System' remarkably reduces installation times as well as assuring safety and long-term reliability.
Designed to light retail spaces and public establishments, it can be applied also for lighting residential settings and fine works of architecture.
Each individual lamp is independent and adjustable by ±30° on the horizontal axes.
The separately manageable power supply units allows cost optimization, or totally independent control of each individual lamp, with on-off/dim for halogens.

TEAM

Design **Mizar**

Apparecchio a incasso con cornice.

Downlight fixture with frame.

Sorgenti luminose:
Sorgenti alogene e lampade LED.

Cablaggio:
Induttivo, elettronico o elettronico dimmerabile (IGBT-TRIAC) per mezzo di unità di alimentazione separata con collegamento tramite morsetto ad innesto rapido.

Classificazione:
C.I. III, Marchio F, IP20.

Emissiona luminosa:
Diretta.

Rotazione (Spot):
Orientabile a ±30° sugli assi orizzontali.

Caratteristiche costruttive:
Struttura controcassa e cornice perimetrale in metallo.
Gruppi ottici in alluminio pressofuso e lamiera di metallo.
Sistema di aggancio brevettato.
Particolari e viterie in acciaio.

Light sources:
Halogen and LED lamp.

Wiring:
Inductive, electronic or dimmable electronic (IGBT-TRIAC) by means of separate power supply unit with connection by snap lock clamp.

Classification:
I.C. III, Mark F, IP20.

Light emission:
Direct.

Rotation (Spot):
Adjustable +30° on the horizontal axis.

Constructive features:
Metal outer casing structure and perimeter frame.
Die-cast aluminium and metal plate optics units.
Patented locking system.
Steel screws and components.

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTICS SYSTEM	TEAM-Q1	TEAM-Q2	TEAM-Q3	TEAM-Q4R	TEAM-Q4Q
LED lamps		-	15W	2x 15W	3x 15W	4x 15W	4x 15W
Halogen lamps	**QR111**	-	70W	2x 70W	3x 70W	4x 70W	4x 70W

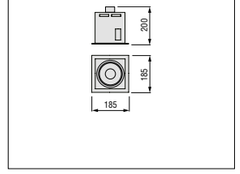
COLORI
COLOURS

16 Bianco
White

28 Grigio argento
Silver grey

76 Bianco/Bianco
White/White

Incasso quadrato ad una luce.
One-spotlight rectangular recessed downlight.

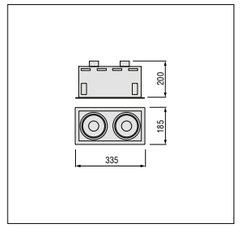


Colours: 16 | 28 | 76 — IP20 — 168x168

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	CODE
TEAM-Q1	70W/15W 12V	G53	QR111/LED lamp		**8131**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso rettangolare a due luci.
Two-spotlight rectangular recessed downlight.

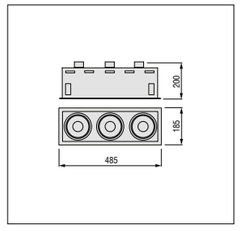


Colours: 16 | 28 | 76 — IP20 — 318x168

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	CODE
TEAM-Q2	2x 70W/15W 12V	G53	QR111/LED lamp		**8132**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso rettangolare a tre luci.
Three-spotlight rectangular recessed downlight.

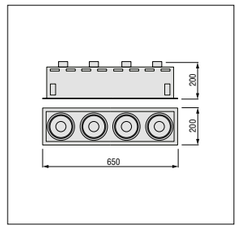


Colours: 16 | 28 | 76 — IP20 — 468x168

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	CODE
TEAM-Q3	3x 70W/15W 12V	G53	QR111/LED lamp		**8133**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso rettangolare a quattro luci.
Four-spotlight rectangular recessed downlight.

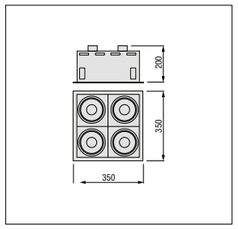


Colours: 16 | 28 | 76 — IP20 — 618x168

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	CODE
TEAM-Q4R	4x 70W/15W 12V	G53	QR111/LED lamp		**8135**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso quadro a quattro luci.
Four-spotlight square recessed downlight.



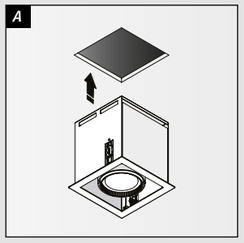
Colours: 16 | 28 | 76

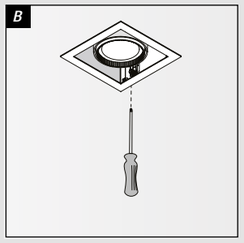
III IP20 F 318x318

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	CODE
TEAM-Q4Q	4x 70W/15W 12V	G53	QR111/LED lamp		**8134**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

FLASH SYSTEM - Installazione su pareti in cartongesso.
FLASH SYSTEM - *Installation on plasterboard walls.*



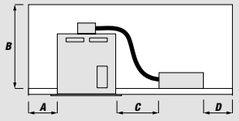


È possibile installare Team in controsoffitti da 0 a 30mm grazie al dispositivo brevettato FLASH SYSTEM per l'aggancio rapido. È possibile controllare la pressione di serraggio grazie ad una speciale molla su slitta regolata da movimento a vite. Ottima tenuta su spessori sottili o irregolari; massima stabilità e sicurezza su controsoffitti soggetti a vibrazioni (Ascensori, navi, ecc).
Team can be installed onto 0-30mm false ceilings thanks to the FLASH SYSTEM patented device for quick locking. Locking pressure can be controlled by means of a special spring on a screw-adjusted tilting slide. Excellent hold on thin or uneven false ceilings and maximum stability and safety when subject to vibrations (i.e. lifts, ships etc.).

A — Eseguire il foro d'incasso delle dimensioni del prodotto, inserire il plaster kit nel foro d'incasso.
Make a cut-out same size of the product and insert the plaster kit.

B — Posizionare le staffe di fissaggio e regolarne l'altezza.
Fix the fastening brackets and adjust the height.

DISTANZE CONSIGLIATE DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	CODE	HOLE mm	A mm	B mm	C mm	D mm
TEAM-Q1	**8131**	168x168	75	220	150	75
TEAM-Q2	**8132**	318x168	75	220	150	75
TEAM-Q3	**8133**	468x168	75	220	150	75
TEAM-Q4R	**8135**	618x168	75	220	150	75
TEAM-Q4Q	**8134**	318x318	75	220	150	75

ACCESSORI
ACCESSORIES

Filtro dicroico interferenziale colorato.
Kit fissaggio da ordinare separatamente.
Coloured interferential dichroic filter.
Fastening kit to be ordered separately.

Colours: 12 | 13 | 14

TYPE	CODE
X111-FD	**7965**

Vetro sabbiato.
Kit fissaggio da ordinare separatamente.
Sandblasted glass.
Fastening kit to be ordered separately.

Colours: 03

TYPE	CODE
X111-FD	**7965**

Diffusore prismatico trasparente.
Kit fissaggio da ordinare separatamente.
Transparent prismatic diffuser.
Fastening kit to be ordered separately.

Colours: 02

TYPE	CODE
X111-DP	**7966**

Rifrattore per distribuzione ellittica.
Kit fissaggio da ordinare separatamente.
Refractor for light flux elliptical distribution.
Fastening kit to be ordered separately.

Colours: 02

TYPE	CODE
X111-RE	**7964**

Schermo alveolare.
Kit fissaggio da ordinare separatamente.
Honeycomb screen.
Fastening kit to be ordered separately.

Colours: 15

TYPE	CODE
X111-SA	**7963**

Kit tre molle per fissaggio degli accessori: filtro dicroico, vetro sabbiato, diffusore prismatico, rifrattore e schermo alveolare.
Three-spring kit for accessory fastening: dichroic filter, sandblasted glass, prismatic diffuser, refractor and honeycomb screen.

Colours: 00

TYPE	CODE
X111-K	**7962**

ACCESSORI
ACCESSORIES

Trasformatore elettronico dimmerabile.
Dimmable electronic transformer.

Colours: 15

TYPE			WIRING	CODE
TR-ELP060	20-26W 230Vac/12V	ED1		**0730**
TR-ELP105	20-105W 230Vac/12V	ED1		**0731**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16

TYPE			WIRING	CODE
TR-ELP200	100-200W 230Vac/12V	ED1		**0733**
TR-ELP250	100-250W 230V/12V	ED1		**0734**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00

TYPE			WIRING	CODE
TR-ELX060	10-60W 230Vac/12V	ED2		**0744**
TR-ELX105	20-105W 230Vac/12V	ED2		**0745**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer . Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16

TYPE			WIRING	CODE
TR-ELP150	30-150W 230Vac/12V	ED2		**0732**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00

TYPE			WIRING	CODE
TR-ELP210	50-210W 230-240Vac/12V	ED1		**0742**
TR-ELP250	50-250W 230-240Vac/12V	ED1		**0749**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è dal 5% al 100%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, with MLed-LV lamps dimmability goes from min. 5% up to 100% max.

Colours: 00

TYPE			WIRING	CODE
TR-ELP70	2,5-70W*	230Vac/12V ED1		**0620**

*2,5-50W con utilizzo di LED Lamp.
2,5-50W using LED Lamp

ED1: Elettronico Dim (IGBT)
ED2: Elettronico Dim (TRIAC/IGBT)
ED1: Dim Electronic (IGBT)
ED2: Dim Electronic (TRIAC/IGBT)

TRENDY

Design **Mizar**

APPARECCHI AD INCASSO FISSI ED ORIENTABILI CON E SENZA CORNICE.

Famiglia di apparecchi da incasso di piccole dimensioni per l'illuminazione d'accento architetturale, proposta nella versione con piccola cornice e a filo soffitto; quest'ultima mantiene la struttura e le dimensioni del prodotto con cornice a vista e la possibilità di orientare il fascio in tutte le direzioni grazie al sistema cardanico, ma acquisisce la pulizia formale dell'incasso a scomparsa.
La struttura è disponibile in metallo verniciato in due colorazioni (bianco o grigio argento) così come il sistema cardanico, costruito però in pressofusione di alluminio per conferire maggior robustezza.

FIXED AND ADJUSTABLE RECESSED FIXTURES, WITH OR WITHOUT FRAME

A Range of small-sized recessed installation fixtures for architectural accent lighting, available in the small-frame and flush-to-ceiling versions; the latter retains the structure and size of the version with visible frame as well as the possibility to aim the light beam in all directions thanks to the cardanic system, with the added advantage of the concealed recess clean design.
The structure is available in painted metal in two colours (white or silver grey). The cardanic system is also available in two colours, but it is produced in die-cast aluminium for increased sturdiness.

TRENDY

Design **Mizar**

Apparecchi ad incasso parete e soffitto.

Wall and ceiling recessed fixtures.

Sorgenti luminose:
Sorgenti alogene, ioduri metallici, lampadine LED.

Sistema ottico:
Sorgenti con ottica e quindi fasci propri

Rotazione:
Corpo luce orientabile di ±40° e di ±45° sugli assi orizzontali.

Cablaggio:
Elettronico dimmerabile.

Classificazione:
C.I. I, C.I. III, Marchio F, IP20.

Emissiona luminosa:
Diretta.

Caratteristiche costruttive:
Senza cornice: controcassa in metallo verniciato; anello in alluminio pressofuso. Con cornice: controcassa e cornice in metallo verniciato; anello in alluminio pressofuso.

Trattamenti:
Verniciatura a polveri epossidiche ad elevata resistenza per la controcassa e per la cornice con finitura bianca; verniciatura a liquido per la cornice di colore grigio.

Light sources:
Halogen, metal halide and LED lamps.

Optics system:
Sources with own optics and beams.

Rotation:
Luminaire adjustable by ±40° and ±45° on the horizontal axes.

Wiring:
Dimmable electronic.

Classification:
I.C. II, I.C. III, Mark F, IP20.

Light emission:
Direct.

Constructive features:
Frameless: painted metal outer casing; die-cast aluminium ring. With frame: painted metal outer casing and frame; die-cast aluminium ring.

Finishes:
High resistance epoxy powder painting for the outer casing and frame with white finish; liquid painting for the grey frame.

SORGENTI LUMINOSE
LIGHT SOURCES

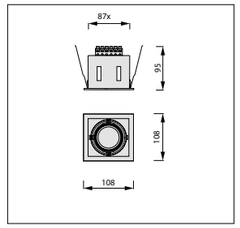
		TRENDY1 / TRENDY-FP1	TRENDY2 / TRENDY-FP2	TRENDY3 / TRENDY-FP3
Halogen lamps	**QPAR16**	50W	2x 50W	3x 50W
	QR-CB 51	50W	2x 50W	3x 50W
Metal Halide bulbs	**HIPAR 50 (CDM-Rm)**	20/35W	2x 20/35W	3x 20/35W
LED bulbs	**MLed-LV**	7W	2x 7W	3x 7W
	MLed-MV	3W	2x 3W	3x 3W

COLORI
COLOURS

16 Bianco
White

28 Grigio argento
Silver grey

Incasso a una luce, con controcassa e cornice in metallo verniciato. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 80Z1).
One-spotlight recessed fixture with painted metal outer casing and frame. Power units and transformers to be ordered separately (except code 80Z1).

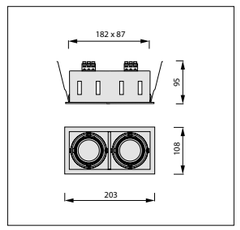


Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY1	50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8021**
TRENDY1	50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**80Z1**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a due luci, con controcassa e cornice in metallo verniciato. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 80Z2).
Two-spotlight recessed fixture with painted metal outer casing and frame. Power units and transformers to be ordered separately (except code 80Z2).

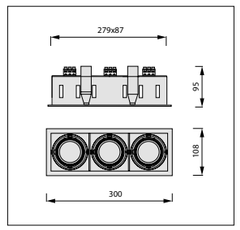


Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY2	2x 50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8022**
TRENDY2	2x 50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**80Z2**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a tre luci, con controcassa e cornice in metallo verniciato. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 80Z3).
Three-spotlight recessed fixture with painted metal outer casing and frame. Power units and transformers to be ordered separately (except code 80Z3).

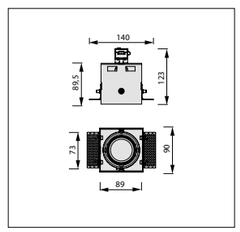


Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY3	3x 50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8023**
TRENDY3	3x 50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**80Z3**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a filo a una luce con controcassa. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 81U1).
One-spotlight flush recessed fixture with outer casing. Power units and transformers to be ordered separately (except code 81U1).

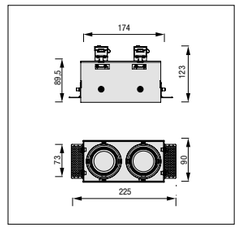


Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY-FP1	50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8141**
TRENDY-FP1	50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**81U1**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a filo a due luci con controcassa. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 81U2).
Two-spotlight flush recessed fixture with outer casing. Power units and transformers to be ordered separately (except code 81U2).

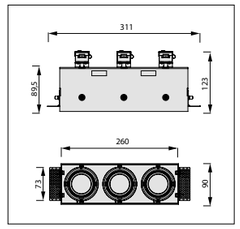


Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY-FP2	2x 50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8142**
TRENDY-FP2	2x 50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**81U2**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a filo a tre luci con controcassa. Unità di alimentazione e trasformatori da ordinare separatamente (tranne per codice 81U3).
Three-spotlight flush recessed fixture with outer casing. Power units and transformers to be ordered separately (except code 81U3).



Colours: 16 | 28 — III — IP20 — F

TYPE	WATTAGE	SOCKET	LAMP	WIRING	CODE
TRENDY-FP3	3x 50W/7W 12V	GU5,3	QR-CB 51/MLed-LV		**8143**
TRENDY-FP3	3x 50W/3W 230Vac	GU10	QPAR-16/MLed-MV		**81U3**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

ACCESSORI
ACCESSORIES

Filtro dicroico.
Dichroic filter.

Colours: 12 | 13 | 14

TYPE	Dim	CODE
X050-FD	Ø50	**7988**

Vetro sabbiato.
Sandblasted glass

Colours: 03

TYPE	Dim	CODE
X050-FD	Ø50	**7988**

Diffusore prismatico trasparente.
Transparent prismatic diffuser.

Colours: 02

TYPE	Dim	CODE
X050-FD	Ø50	**7987**

Rifrattore per distribuzione ellittica.
Refractor for light flux elliptical distribution.

Colours: 02

TYPE	Dim	CODE
X050-RE	Ø50	**7986**

Schermo alveolare.
Honeycomb screen.

Colours: 15

TYPE	Dim	CODE
X050-SA	Ø50	**7989**

Vetro di protezione trasparente.
Transparent protective glass.

Colours: 00

TYPE	Dim	CODE
X050-FD	Ø50	**7988**

Trasformatore elettronico dimmerabile.
Dimmable electronic transformer.

Colours: 15 IP20

TYPE		WIRING	CODE
TR-ELP060	20-26W 230Vac/12V	ED1	**0730**
TR-ELP105	20-105W 230Vac/12V	ED1	**0731**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00 IP20

TYPE		WIRING	CODE
TR-ELP210	50-210W 230-240Vac/12V	ED1	**0742**
TR-ELP250	50-250W 230-240Vac/12V	ED1	**0749**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 00 IP20

TYPE		WIRING	CODE
TR-ELX060	10-60W 230Vac/12V	ED2	**0744**
TR-ELX105	20-105W 230Vac/12V	ED2	**0745**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16 IP20

TYPE		WIRING	CODE
TR-ELP200	100-200W 230Vac/12V	ED1	**0733**
TR-ELP250	100-250W 230V/12V	ED1	**0734**

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è pari al 50%.
Dimmable electronic transformer . Suitable for utilisation with MLed-LV lamps, for MLed-LV dimmability equals 50%.

Colours: 16 IP20

TYPE		WIRING	CODE
TR-ELP150	30-150W 230Vac/12V	ED2	**0732**

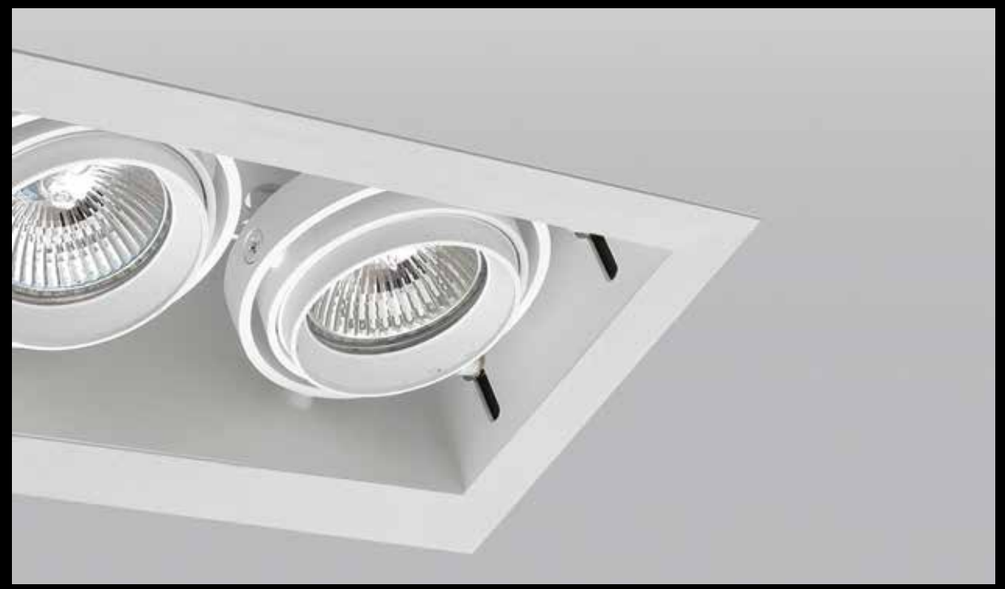
Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è dal 5% al 100%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, with MLed-LV lamps dimmability goes from min. 5% up to 100% max.

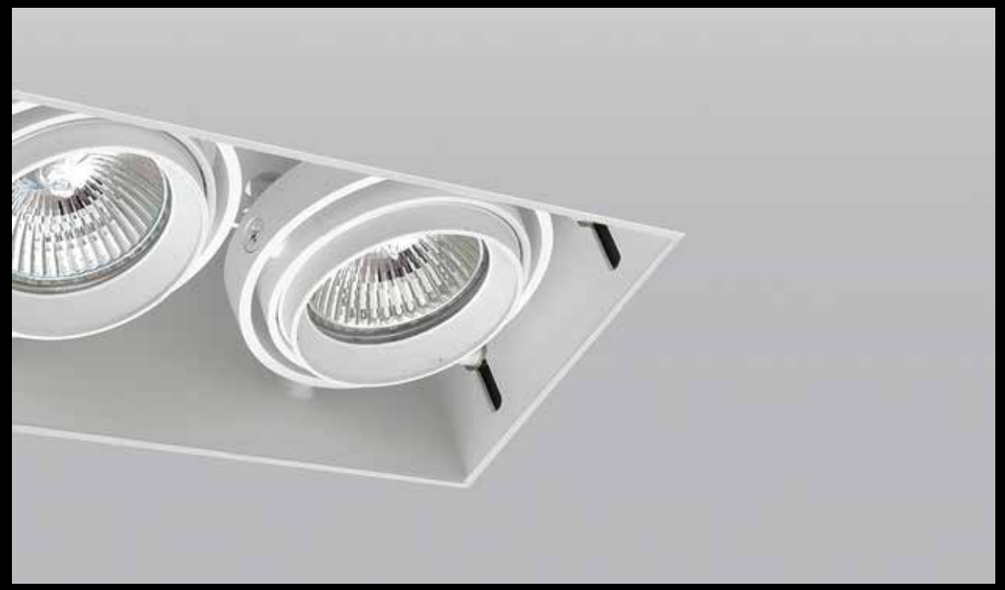
Colours: 00 IP20

TYPE		WIRING	CODE
TR-ELP70	2,5-70W* 230Vac/12V	ED1	**0620**

*2,5-50W con utilizzo di LED Lamp.
2,5-50W using LED Lamp

ED1: Elettronico Dim (IGBT)
ED2: Elettronico Dim (TRIAC/IGBT)
ED1: Dim Electronic (IGBT)
ED2: Dim Electronic (TRIAC/IGBT)





L-LED

Design **Mizar**

APPARECCHIO AD INCASSO

Apparecchio ad incasso dalle linee morbide ed essenziali. Il doppio anello in pressofusione di alluminio ancorato ad oblò consente una manutenzione veloce e facilitata, mentre il sistema di aggancio rapido "flash-system" riduce i tempi di installazione oltre a garantire la sicurezza nel tempo

RECESSED DOWNLIGHT

Recessed downlight featuring soft and essential lines. The double die-cast aluminium ring with porthole hinge assures quick and easy maintenance, while the "flash" quick fixing system reduces installation time as well as assuring safety over time.

L-LED

Design **Mizar**

Apparecchio ad incasso, completo di alimentatore.

Recessed downlight complete with power supply unit.

Sorgenti luminose:
LED COB **26W** e **36W**.

Ottica dell'incasso:
Vetro effetto microprismi

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI/SWITCH-DIM), elettronico emergenza 1h (3h a richiesta), elettronico dimmerabile analogico (1-10V) a richiesta,

Classificazione:
C.I. II, Marchio F, IP20 P.I, IP43 V.O.

Emissiona luminosa:
Diretta.

Caratteristiche costruttive:
Struttura a doppio anello in pressofusione di alluminio verniciato a polveri e ottica in alluminio.

Light sources:
*LED COB **26W** and **36W***

Optics of the downlight:
Micro-prismatic effect glass

LED features:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI/SWITCH-DIM), electronic emergency 1h (3h available on request), analogue dimmable electronic (1-10V) available on request.

Classification:
I.C. II, Mark F, IP20 P.I, IP43 V.O.

Light emission:
Direct.

Constructive features:
Structure with double ring in powder painted, die-cast aluminium and aluminium optics.

Ottiche
Optics:

F 42°

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	**L20-LED**
LED COB	Vetro effetto microprismi *Micro-prism effect glass*	26W 36W

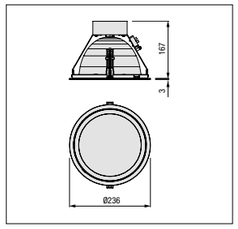
COLORI
COLOURS

16 Bianco
White

23 Cromo
Chrome

28 Grigio argento
Silver grey

Apparecchio ad incasso con LED COB Ø236mm completo di alimentatore e vetro effetto prismatico.
Ø236mm LED COB downlight fixture with power supply unit and prismatic effect glass.



Colours: 16 23 28

IP20 P.I. | IP43 V.O. | Ø223

TYPE	WATTAGE	LAMP	OPTICS	WIRING		CODE
L20-LED	26W 220-240 Vac	LED NW	60°	ELE	●	**8671**
L20-LED	26W 220-240 Vac	LED WW	60°	ELE	●	**8672**
L20-LED	26W 220-240 Vac	LED NW	60°	EDT	●	**86T1**
L20-LED	26W 220-240 Vac	LED WW	60°	EDT	●	**86T2**
L20-LED	26W 220-240 Vac	LED NW	60°	EE1	●	**86T5**
L20-LED	26W 220-240 Vac	LED WW	60°	EE1	●	**86T6**
L20-LED	36W 220-240 Vac	LED NW	60°	ELE	●	**8673**
L20-LED	36W 220-240 Vac	LED WW	60°	ELE	●	**8674**
L20-LED	36W 220-240 Vac	LED NW	60°	EDT	●	**86T3**
L20-LED	36W 220-240 Vac	LED WW	60°	EDT	●	**86T4**
L20-LED	36W 220-240 Vac	LED NW	60°	EE1	●	**86T7**
L20-LED	36W 220-240 Vac	LED WW	60°	EE1	●	**86T8**

Versione elettronico dimmerabile analogico (1-10V) a richiesta.
Analogue dimmable electronic (1-10V) version available on request.

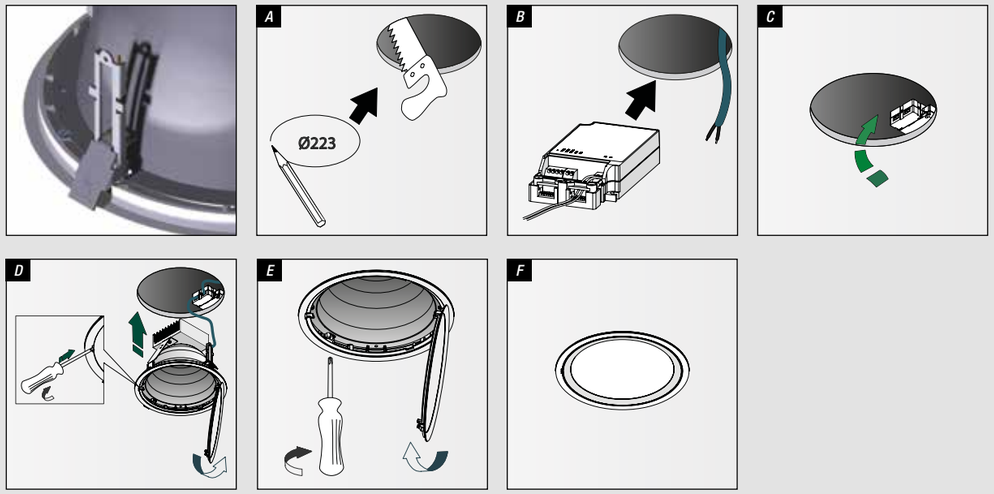
Versione elettronico emergenza 3h a richiesta.
3h electronic emergency version available on request.

ELE: Elettronico
EDT: Elettronico Dim Digitale (DALI/SWITCH-DIM)
EE1: Elettronico emergenza 1h
ELE: Electronic
EDT: Digital Dim Electronic (DALI/SWITCH-DIM)
EE1: Electronic emergency 1h

NOMINAL FLUX / LOR (Light Output Ratio)

LED	NW	WW	LOR
26W	3209lm	3107lm	83%
36W	4758lm	4606lm	83%

FLASH SYSTEM - Installazione su pareti in cartongesso
FLASH SYSTEM - Installation on plasterboard walls



Dispositivo brevettato per l'aggancio rapido di apparecchi illuminanti da incasso in controsoffitti da 0 a 30mm. È possibile controllare la pressione di serraggio grazie ad una speciale molla su slitta regolata da movimento a vite. Ottima tenuta su spessori sottili e irregolari; massima stabilità e sicurezza su controsoffitti soggetti a vibrazioni (ascensori, navi, ecc).

Patented device for quickly locking recessed fixtures onto 0-30mm false ceilings. Locking pressure can be controlled by means of a special spring on a screw-adjusted tilting slide. Excellent hold on thin or irregular false ceilings and maximum stability and safety when subject to vibrations (i.e. lifts, ships etc.).

A — Individuata la posizione dell'apparecchio, eseguire il foro per l'incasso.
— After selecting the fixture position, make the recess hole.

B — Cablare il driver nel morsetto primario 220-240Vac.
— Wire the driver in the primary terminal 220-240Vac.

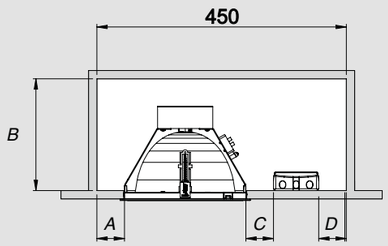
C — Posizionare il driver in incasso.
— Place the driver in the recess.

D — Mediante cacciavite a taglio aprire l'anello interno, inserire l'apparecchio nel foro.
— Use a slot screwdriver to open the inner ring, insert the fixture in the recess.

E — Fissare l'apparecchio agendo sul Flash System.
— Secure the fixture using the Flash System.

F — Chiudere l'anello interno.
— Close the inner ring.

DISTANZE CONSIGLIATE DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	HOLE mm	A mm	B mm	C mm	D mm
L-LED	223	50	200	50	50

SHUTTER

Design **Mizar**

APPARECCHIO AD INCASSO A PARETE AD EMISSIONE ASIMMETRICA.

Una linea minimale caratterizza la famiglia di prodotti Shutter, dedicati all'illuminazione asimmetrica di segnalazione nelle zone di passaggio.
Grazie all'applicazione del diffusore, si eliminano i possibili abbagliamenti molesti.

RECESSED WALL FIXTURE WITH ASYMMETRIC EMISSION.

Minimal style characterises the Shutter product range, designed for asymmetrical lighting to mark out passageways.
Any unpleasant glaring effect is eliminated thanks to the application of the diffuser.

SHUTTER

Design **Mizar**

Apparecchio ad incasso a parete con cornice.

Recessed wall fixture with frame.

Sorgenti luminose:
LED **1,87W** e **3,2W**.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI>90=a richiesta)

Cablaggio:
Elettronico, elettronico dimmerabile digitale (DALI).

Classificazione:
C.I. III, Marchio F, IP20.

Emissione luminosa:
Asimmetrica.

Caratteristiche costruttive:
Corpo e cornice in lamiera di acciaio con ottica rigata in alluminio anodizzato, diffusore in PMMA microprismatizzato, viterie e particolari in acciaio.

Light sources:
*LED **1,87W** and **3,2W**.*

LED features:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI>90=on request)

Wiring:
Electronic, digital dimmable electronic (DALI).

Classification:
I.C. III, Mark F, IP20.

Light emission:
Asymmetrical.

Constructive features:
Steel plate body and frame with anodised aluminium reeded optics, microprismatic PMMA diffuser, steel screws and components.

SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	SHU-Q80	SHU-R282
LED	Prismatic diffuser	1,87W	3,2W

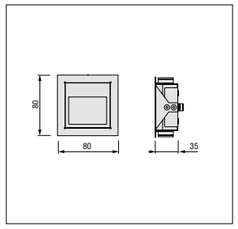
COLORI
COLOURS

16 Bianco
White

28 Grigio argento
Silver grey

SHUTTER
Diffusore prismatico.
Prismatic diffuser.

Incasso a parete quadro piccolo con struttura in metallo con 1 LED monocromatico e diffusore prismatizzato - sistema “Polarizing Prism”.
Small recessed wall square fixture with metal structure, 1 monochrome LED and prismatic diffuser - “Polarizing Prism” system.

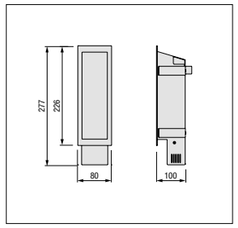


Colours: 16 28 IP20 68x68

TYPE	WATTAGE	LAMP		CODE
SHU-Q80	1,87W 500mA	LED NW	●	**818L**
SHU-Q80	1,87W 500mA	LED WW	●	**818Q**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso a parete rettangolare con struttura in metallo con LED COB e diffusore prismatizzato - sistema “Polarizing Prism”.
Recessed wall rectangular fixture with metal structure, LED COB and prismatic diffuser - “Polarizing Prism” system.



Colours: 16 28 IP20 70x216

TYPE	WATTAGE	LAMP		CODE
SHU-R282	3,2W 350mA	LED NW	●	**818A**
SHU-R282	3,2W 350mA	LED WW	●	**818B**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

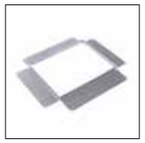
ACCESSORI
ACCESSORIES

Controcassa opzionale per l’applicazione su pareti in laterizio e calcestruzzo.
Optional outer casing for brick and concrete wall installation.

Colours: 00

TYPE	CODE
SHU-XC	**8190**
SHU-XC	**8191**

Plaster Kit per pareti in cartongesso e laterizio.
Plaster Kit for plasterboard and brick walls.



Colours: 00

TYPE	CODE
SHU-PK	**8196**
SHU-PK	**8197**

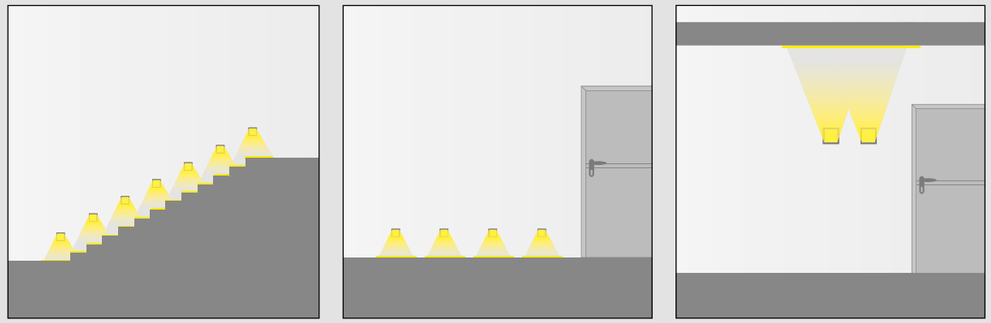
Alimentatore elettronico.
Electronic power supply unit.

Colours: 00

TYPE	WIRING	Per/For	CODE
TR-CC06	6W 350mA	SHU-R282	**0790**
TDB50-12	12W 500mA	SHU-Q80	**0781**

ELE: Elettronico
EDD: Elettronico Dim Digitale (DALI)
ELE: Electronic
EDD: Digital Dim Electronic (DALI)

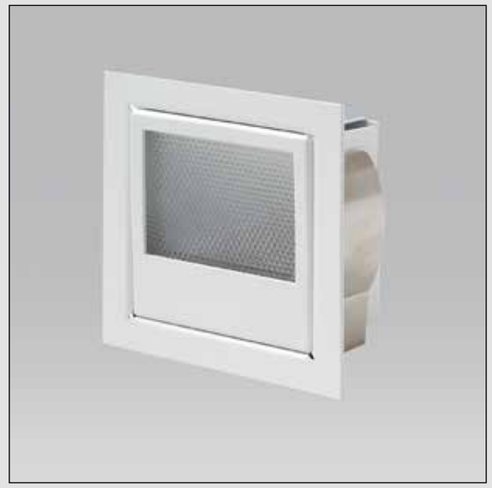
AREE DI UTILIZZO
AREAS OF USE

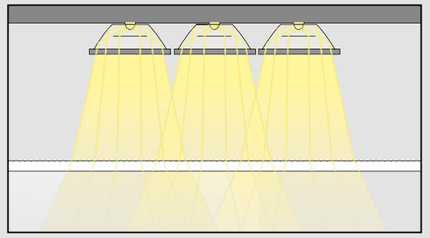


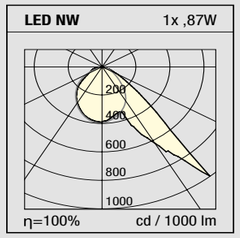
Shutter è particolarmente adatto ad illuminare percorsi, zone di passaggio, ingressi e scale.

Shutter is particularly suitable for lighting pathways, passageways, residential entry halls and staircases.

SHUTTER LED SHU-Q80 - SISTEMA "POLARIZING PRISM"
SHUTTER LED SHU-Q80 - "POLARIZING PRISM" SYSTEM



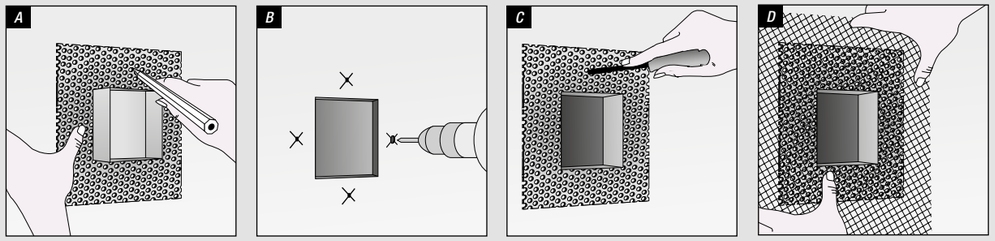




Il diffusore "POLARIZING PRISM" polarizza e ridistribuisce la luce emessa dal LED ampliandone l'angolo di apertura.
Normalmente il LED con l'ottica secondaria ha un fascio puntuale, mentre con il sistema "POLARIZING PRISM", questo viene ampliato fino quasi a raddoppiarlo ottenendo un effetto finale di luce diffusa e il contenimento dell'abbagliamento diretto prodotto dalla sorgente luminosa.

The “POLARIZING PRISM” diffuser polarizes and redistributes the LED light emission widening its beam spread. The LED with secondary optics generally has a spot beam, whilst thanks to the “POLARIZING PRISM” system the beam spread is widened out and nearly doubled achieving a final diffuse light effect and reducing the dazzling effect produced by the light source.

PLASTER KIT - Installazione su pareti in cartongesso
PLASTER KIT - Installation on plasterboard walls



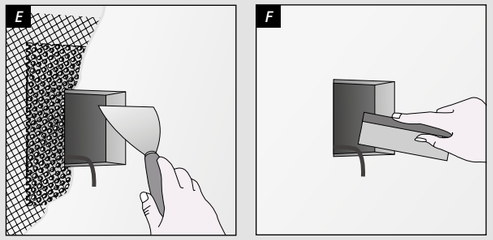
È possibile installare Shutter nelle pareti in cartongesso grazie all'ausilio del Plaster Kit.
Shutter can be installed onto plasterboard walls by means of the Plaster Kit.

A — Individuata la posizione del faretto, segnare i fori di fissaggio della Plaster Kit.
— After selecting the position of the fixture, mark the Plaster Kit fastening holes.

B — Eseguire il foro per l'incasso ed i fori per i tasselli di fissaggio.
— Make the housing recess and the holes for the fixing dowels.

C — Fissare con le viti, il Plaster Kit al cartongesso del soffitto con il collare verso l'interno.
— Secure with screws the Plaster Kit to the ceiling plasterboard with the collar inwards.

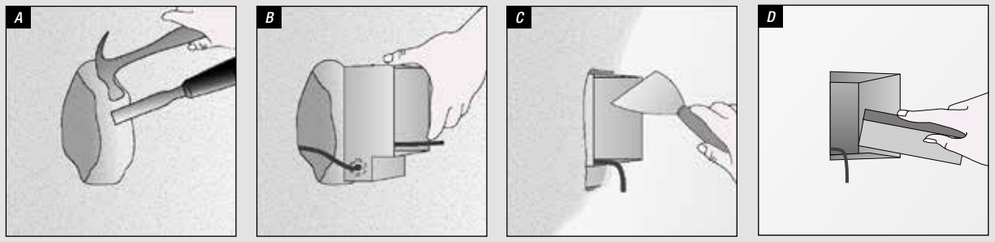
D — Applicare l'apposita rete aggrappante.
— Apply the special adhesive mesh.



E — Stuccare e rasare, compensando lo spessore di 2 millimetri.
— Fill and smooth, making up for 2mm thickness.

F — Mantenere pulito l'interno della controcassa.
— Keep the inside of the casing clean.

CONTROCASSA - Installazione su pareti in laterizio e calcestruzzo
OUTER CASING – Installation on brick and concrete walls



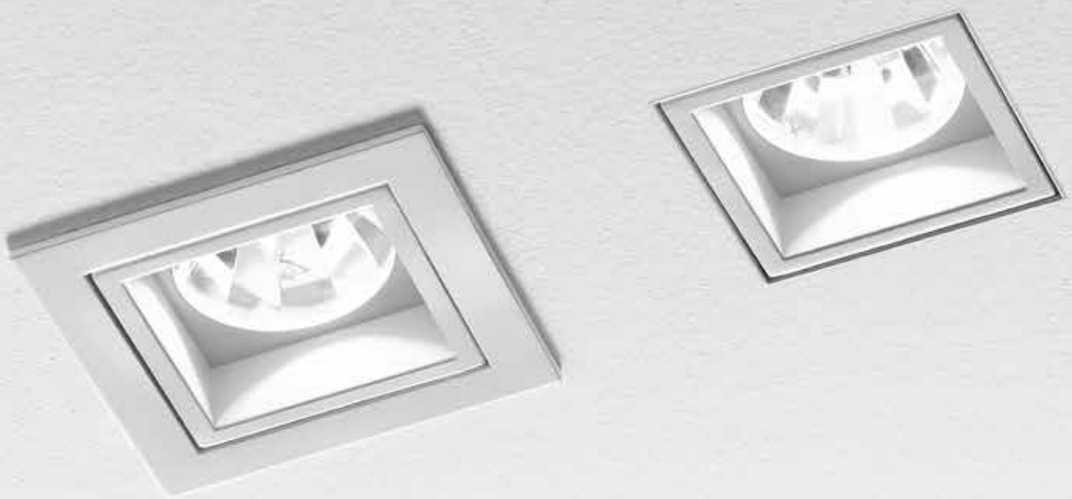
È possibile installare Shutter nelle pareti in laterizio e calcestruzzo grazie all'ausilio della controcassa.
Shutter can be installed onto brick and concrete walls by means of the outer casing.

A — Individuata la posizione del faretto, predisporre nella muratura una nicchia adeguata all'inserimento della controcassa.
— After selecting the position of the fixture, make in the wall a suitably sized recess for inserting the casing.

B — Fissare la controcassa al soffitto o alla parete.
— Fasten the casing to the ceiling or wall.

C — Far transitare i cavi di alimentazione all'interno della controcassa prima di cementarla, facendo attenzione a non sporcarla al suo interno. Ultimare la muratura con finitura dell'intonaco a filo controcassa.
— Run the power supply cables into the casing before cementing it, paying attention not to soil its inside. Finish the wall by making good flush with the casing.

D — Mantenere pulito l'interno della controcassa
— Keep the inside of the casing clean.



QUADRO/TONDO

Design **Mizar**

APPARECCHIO AD INCASSO CON E SENZA CORNICE.

Serie di apparecchi ad incasso di piccole dimensioni disponibili nelle versioni quadra e tonda con cornice o a filo e nella versione quadra arretrata. Quadro e Tondo rappresentano valide soluzioni per illuminare piccoli spazi o realizzare efficaci e suggestivi effetti luminosi.
La modalità di fissaggio "a scatto" del modulo luce nella controcassa ne facilita e velocizza sensibilmente l'installazione. Sono usati in molteplici contesti: dal settore ho.re.ca. al mondo del retail, al domestico in genere.

RECESSED INSTALLATION FIXTURE WITH OR WITHOUT FRAME.

Range of compact downlights available in the square and round version with frame or flush, and in the set-back square version. Quadro and Tondo offer excellent solutions to light small spaces or create successful and striking light effects.
The snap-on fastening method of the light module in the outer casing makes installation remarkably easier and quicker. They are applied in a number of settings: from the ho.re.ca. sector to retail to residential.

QUADRO/TONDO

Design **Mizar**

Apparecchio ad incasso, con e senza cornice.

Recessed installation fixture, with or without frame.

Sorgenti luminose:
LED COB **10W**, sorgenti alogene e lampade LED.

Ottica dell'incasso:
Diffusore trasparente: **S** 25° **M** 35° **M** 42°,
Diffusore semitrasparente a richiesta.

Caratteristiche del LED:
3000K=WW
4000K=NW
(2700K=a richiesta)
CRI>80
(CRI 95 a richiesta)

Cablaggio:
Elettronico.
Elettronico dimmerabile digitale (DALI) a richiesta.

Classificazione:
C.I. II, C.I. III, Marchio F, IP20.

Emissiona luminosa:
Diretta.

Caratteristiche costruttive:
Struttura in pressofusione di alluminio verniciato a polveri, viterie e particolari in acciaio.

Light sources:
*LED COB **10W**, halogen and LED lamps.*

Optics of the downlight:
*Transparent diffuser; **S** 25° **M** 35° **M** 42°,*
Semi-transparent diffuser on request.

LED characteristics:
3000K=WW
4000K=NW
(2700K=on request)
CRI>80
(CRI 95 on request)

Wiring:
Electronic.
Digital dimmable electronic (DALI) on request.

Classification:
I.C. II, I.C. III, Mark F, IP20.

Light emission:
Direct.

Constructive features:
Structure in powder painted die-cast aluminium, steel screws and components.

Ottiche
Optics:

S 25° **M** 35° **M** 42°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM		QUADRO	QUADRO-F	TONDO
LED COB		Transparent diffuser	**25° 35° 42°**	10W	-	10W 10,5W
LED lamps		-		10W	10W	10W
Halogen lamps	**QR-CB 51**	-		50W	50W	50W
	QPAR-16	-		50W	50W	50W

COLORI
COLOURS

15 Nero
Black

16 Bianco
White

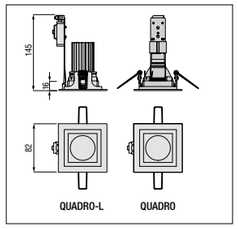
28 Grigio argento
Silver grey

Only QUADRO-F

23 Cromo
Chrome

SPOT LENS System
Ottica sfaccettata con diffusore trasparente
Faceted optics with transparent diffuser
***S** 25° **M** 35°*

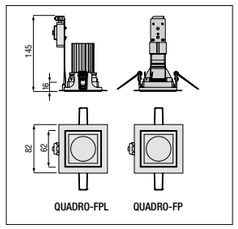
Incasso quadro fisso con cornice in alluminio pressofuso completo di alimentatore (escluso GU10).
Fixed square recessed downlight in aluminium die-cast with frame complete with power supply unit (except GU10 version).



Colours: 15 | 16 | 28 — IP20 — Ø67/67

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
QUADRO-L	10W 220-240Vac		LED	Transparent diffuser	ELE	●	**82P#**
QUADRO	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8250**
QUADRO	50W/10W 220-240Vac	GU10	QPAR-16/LED lamp				**8019**

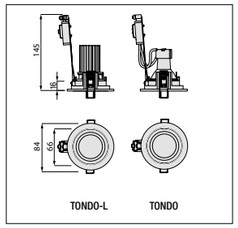
Incasso quadro fisso senza doppia cornice a vista in alluminio pressofuso completo di alimentatore (escluso GU10).
Fixed square recessed downlight without double frame in view in die-cast aluminium complete with power supply unit (except GU10 version).



Colours: 15 | 16 | 28 — IP20 — Ø67/67

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
QUADRO-FPL	10W 220-240Vac		LED	Transparent diffuser	ELE	●	**82N#**
QUADRO-FP	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8253**
QUADRO-FP	50W/10W 220-240Vac	GU10	QPAR-16/LED lamp				**80C2**

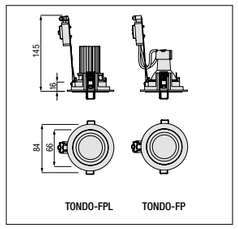
Incasso tondo fisso con cornice in alluminio pressofuso completo di alimentatore (escluso GU10).
Fixed round recessed downlight in aluminium die-cast with frame complete with power supply unit (except GU10 version).



Colours: 15 | 16 | 28 — IP20 — Ø75

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TONDO-L	10W 220-240Vac		LED	Transparent diffuser	ELE	●	**82R#**
TONDO	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8254**
TONDO	50W/10W 220-240Vac	GU10	QPAR-16/LED lamp				**8014**

Incasso tondo fisso senza doppia cornice a vista in alluminio pressofuso completo di alimentatore (escluso GU10).
Fixed round recessed downlight without double frame in view in die-cast aluminium complete with power supply unit (except GU10 version).



Colours: 15 | 16 | 28 — IP20 — Ø75

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TONDO-FPL	10W 220-240Vac		LED	Transparent diffuser	ELE	●	**82Q#**
TONDO-FP	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp		ED1		**8255**
TONDO-FP	50W/10W 220-240Vac	GU10	QPAR-16/LED lamp				**80L2**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
ELE: Electronic
ED1: Electronic Dim (IGBT)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser
LED	**NW**	**WW**	**LOR**
10W	1300lm	1210lm	89%

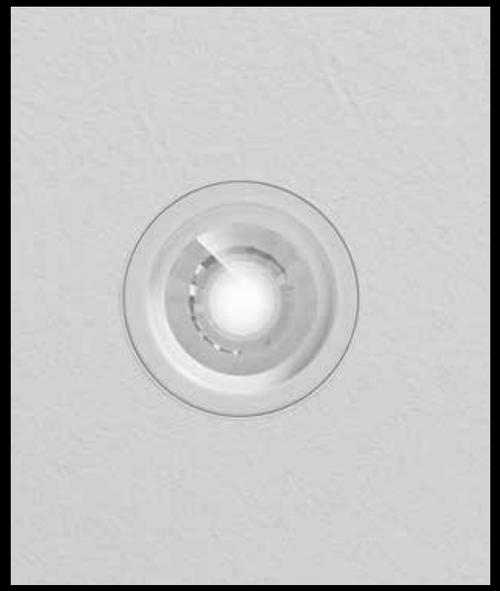
LED CODE (...#)

LED TEMPERATURES	S 25°	M 35°
LED NW	B	2
LED WW	A	1

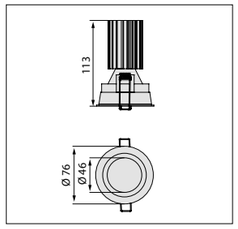
QUADRO-L

QUADRO-FPL

TONDO-L


TONDO-FPL

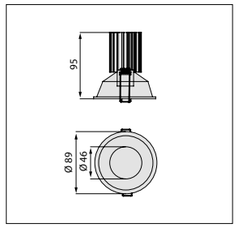
Incasso tondo fisso arretrato con cornice in alluminio pressofuso completo di alimentatore.
Fixed round recessed retracted downlight in aluminium die-cast with frame complete with power supply unit.



Colours: 15 16

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TONDO-AL	10,5W 220-240Vac		LED	Transparent diffuser	ELE	●	**82T#**

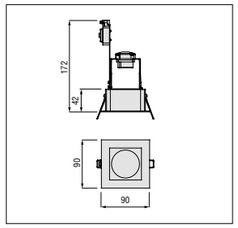
Incasso tondo fisso arretrato con cornice in alluminio pressofuso completo di alimentatore.
Fixed round recessed retracted downlight in aluminium die-cast with frame complete with power supply unit.



Colours: 16

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
TONDO-SAL	10,5W 220-240Vac		LED	Transparent diffuser	ELE	●	**82L#**

Incasso quadro fisso con cornice in acciaio, ottica arretrata.
Fixed square recessed downlight in steel, set-back optics.



Colours: 15 16 23

TYPE	WATTAGE	SOCKET	LAMP		CODE
QUADRO-F	50/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ED1	**8251**
QUADRO-F	50/10W 230Vac	GU10	QPAR-16/LED lamp		**8113**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
ELE: Electronic
ED1: Dim Electronic (IGBT)

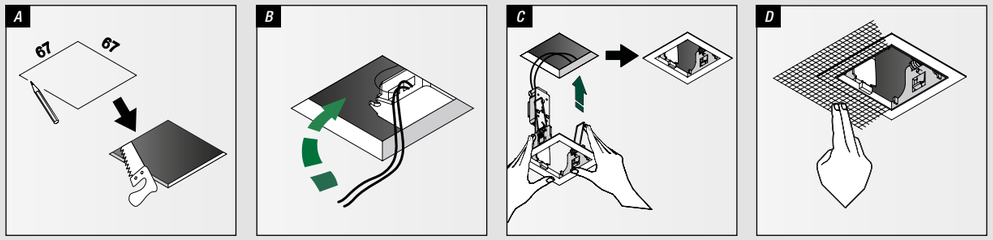
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser	*Prismatic diffuser*
LED	**NW**	**WW**	**LOR**	**LOR**
10,5W	1462lm	1320lm	81%	70%

LED CODE (...#)

LED TEMPERATURES	S 25°	M 42°
LED NW	B	2
LED WW	A	1

QUADRO FPL - Installazione su pareti in cartongesso
QUADRO FPL- Installation on plasterboard walls



A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
After selecting the position of the fixture, mark the Plaster Kit fastening holes.

B — Effettuare il cablaggio del driver e posizionarlo in incasso.
Secure with screws the Plaster Kit to the ceiling plasterboard with the collar inwards.

C — Inserire la struttura portante.
Insert the frame c/w springs.

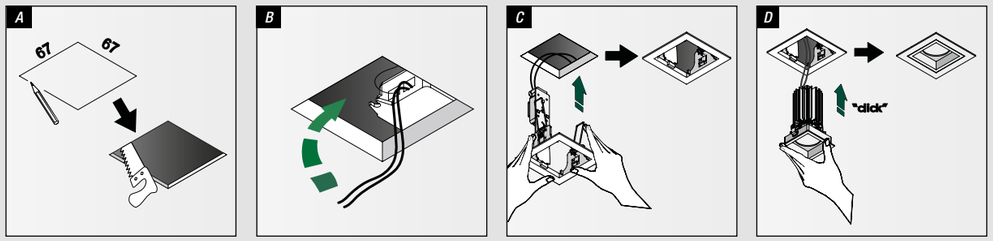
D — Applicare l'apposita rete aggrappante.
Apply the special adhesive mesh.

E — Stuccare e rasare, mantenere pulito l'interno della struttura portante.
Fill and smooth ensuring the inside of the frame is clean.

F — Dipingere.
Paint.

G — Inserire QUADRO FPL.
Insert the QUADRO FPL.

QUADRO L - Installazione su pareti in cartongesso
QUADRO L - Installation on plasterboard walls



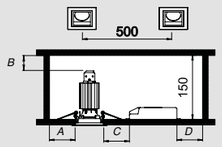
A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
After selecting the position of the fixture, mark the Plaster Kit fastening holes.

B — Effettuare il cablaggio del driver e posizionarlo in incasso.
Secure with screws the Plaster Kit to the ceiling plasterboard with the collar inwards.

C — Inserire la struttura portante.
Insert the frame c/w springs.

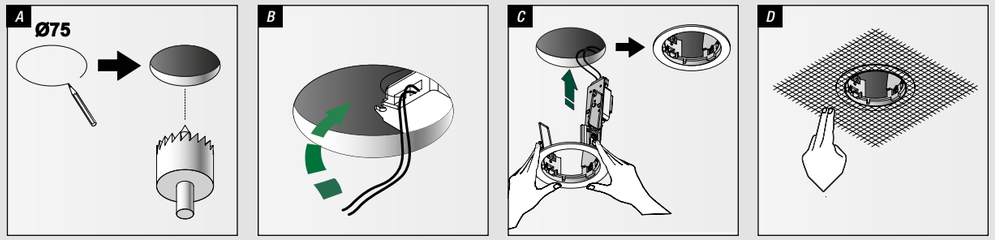
D — Inserire QUADRO L.
Insert the QUADRO L.

DISTANZE CONSIGLIATE DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	HOLE mm	A mm	C mm	D mm
QUADRO FPL	670x670	50	50	50
QUADRO L	670x670	50	50	50

TONDO FPL - Installazione su pareti in cartongesso
TONDO FPL- Installation on plasterboard walls



A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
After selecting the position of the fixture, mark the Plaster Kit fastening holes.

B — Effettuare il cablaggio del driver e posizionarlo in incasso.
Secure with screws the Plaster Kit to the ceiling plasterboard with the collar inwards.

C — Inserire la struttura portante.
Insert the frame c/w springs.

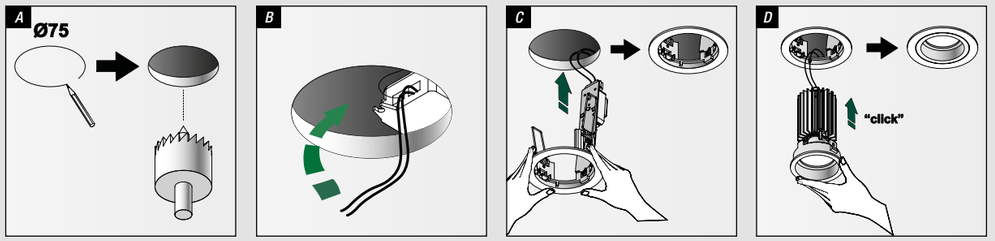
D — Applicare l'apposita rete aggrappante.
Apply the special adhesive mesh.

E — Stuccare e rasare, mantenere pulito l'interno della struttura portante.
Fill and smooth ensuring the inside of the frame is clean.

F — Dipingere.
Paint.

G — Inserire TONDO FPL.
Insert the TONDO FPL.

TONDO L/AL/SAL - Installazione su pareti in cartongesso
TONDO L/AL/SAL - Installation on plasterboard walls



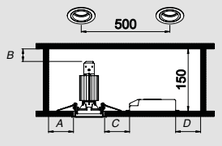
A — Individuata la posizione dell'apparecchio, effettuare il foro d'incasso.
After selecting the position of the fixture, mark the Plaster Kit fastening holes.

B — Effettuare il cablaggio del driver e posizionarlo in incasso.
Secure with screws the Plaster Kit to the ceiling plasterboard with the collar inwards.

C — Inserire la struttura portante.
Insert the frame c/w springs.

D — Inserire TONDO L.
Insert the TONDO L.

DISTANZE CONSIGLIATE DA TENERE NELL'INSTALLAZIONE:
RECOMMENDED DISTANCES FOR INSTALLATION:



MODELS	HOLE mm	A mm	C mm	D mm
TONDO FPL	75Ø	50	50	50
TONDO L	75Ø	50	50	50
TONDO TA	70Ø	50	50	50

SMALL DOWNLIGHTS

Design **Mizar**

PICCOLI APPARECCHI AD INCASSO FISSI ED ORIENTABILI CON CORNICE.

Serie di apparecchi fissi ed orientabili adatti all'illuminazione di piccoli spazi ed alla creazione di suggestivi effetti luminosi.
Le dimensioni ridotte, la facilità d'installazione ed il buon rapporto qualità/prezzo ne suggeriscono un'installazione diffusa in numerosi contesti: dal retail, all'ho.re.ca. al domestico.

SMALL FIXED AND ADJUSTABLE RECESSED FIXTURES WITH FRAME.

Range of fixed and adjustable fixtures suitable for lighting small spaces and creating striking light effects.
The compact size, ease of installation and good price/quality ratio make their widespread installation advisable in a number of settings: retail, ho.re.ca., residential.

SMALL DOWNLIGHTS

Design **Mizar**

Apparecchi ad incasso fissi ed orientabili con cornice.

Fixed and adjustable recessed fixtures with frame.

Sorgenti luminose:
Sorgenti alogene e lampade LED.

Cablaggio:
Elettronico.

Classificazione:
C.I. II, C.I. III, Marchio F, IP20, IP65

Emissione luminosa:
Diretta.

Caratteristiche costruttive:
Struttura in alluminio pressofuso verniciato a polveri epossidiche. Viterie e particolari in acciaio.

Light sources:
Halogen and LED lamp.

Wiring:
Electronic.

Classification:
I.C. II, I.C. III, Mark F, IP20, IP65

Light emission:
Direct.

Constructive features:
Structure in powder painted die-cast aluminium, steel screws and components.

SORGENTI LUMINOSE
LIGHT SOURCES

		BISANTI	CHIP	AQUA65
LED lamps		10W/9W	10W/9W	9W
Halogen lamps	**QR-CB 51**	35W	50W	50W
	QPAR-16	-	50W	-

COLORI
COLOURS

15 Nero
Black

16 Bianco
White

23 Cromo
Chrome

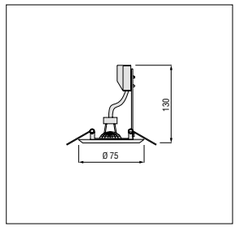
27 Cromo mat
Mat chrome

28 Grigio argento
Silver grey

38 Oro
Gold

39 Brunito
Burnished

Incasso fisso in alluminio pressofuso.
Fixed die-cast aluminium recessed downlight.

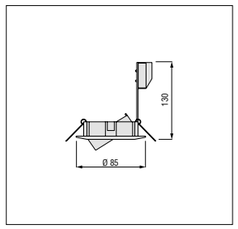


Colours: 15 16 23 27 38 39 — IP20 — ø63

TYPE	WATTAGE	SOCKET	LAMP		CODE
CHIP50-F	50W/10W 12Vac	GU5,3	QR-CB 51/LED lamp	⌖	**8267**
CHIP50-F	50W/9W 220-240Vac	GU10	QPAR-16/LED lamp	▣	**8270**

Alimentatore da ordinare separatamente (tranne che per codice 8270).
Power supply unit to be ordered separately.

Incasso orientabile in alluminio pressofuso. Orientabile a ±35° rispetto all'asse verticale.
Swivelling die-cast aluminium recessed downlight. Adjustable ±35° on the vertical axis.

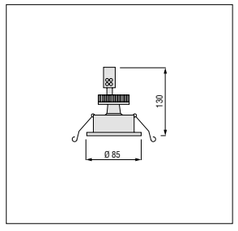


Colours: 15 16 23 27 38 39 — IP20 — ø76

TYPE	WATTAGE	SOCKET	LAMP		CODE
CHIP50-O	50W/10W 12Vac	GU5,3	QR-CB 51/LED lamp	⌖	**8265**
CHIP50-O	50W/9W 220-240Vac	GU10	QPAR-16/LED lamp	▣	**8269**

Alimentatore da ordinare separatamente (tranne che per codice 8269).
Power supply unit to be ordered separately.

Incasso fisso in alluminio pressofuso.
Fixed die-cast aluminium recessed downlight.



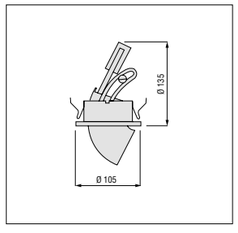
Colours: 16 23 27 38 — IP20 — ø70

TYPE	WATTAGE	SOCKET	LAMP	CODE
BIS50-TF	35W*/9W 12Vac	GU5,3	QR-CB 51/LED lamp	**8010**

* È consentito l'utilizzo di lampade da 50W del tipo QR-CB 51 SV.
* *50W QR-CB 51 SV lamps may be used.*

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso orientabile in alluminio pressofuso. Orientabile a 45° rispetto all'asse orizzontale e 355° rispetto all'asse verticale.
Swivelling die-cast aluminium recessed downlight. Swivel 45° on the horizontal axis, 355° on the vertical axis.

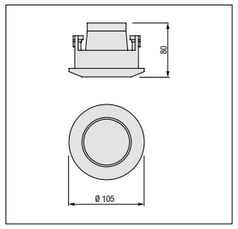


Colours: 16 23 27 38 — IP20 — ø93

TYPE	WATTAGE	SOCKET	LAMP	CODE
BIS50-TO	50W/10W 12Vac	GU5,3	QR-CB 51/LED lamp	**8000**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

Incasso con parabola in alluminio, vetro sabbiato. Struttura in alluminio pressofuso.
Recessed downlight with aluminium parabolic reflector, sandblasted glass. Die-cast aluminium structure.



Colours: 16 23 28 — IP20 — IP65 P.E. — ø92

TYPE	WATTAGE	SOCKET	LAMP	CODE
AQUA65	50W/9W 12Vac	GU5,3	QR-CB 51/LED lamp	**8004**

Alimentatore da ordinare separatamente.
Power supply unit to be ordered separately.

AQUA65

IP65 - Applicazioni
IP65 - Applications

Il grado di protezione IP 65 consente di installare il prodotto in ambienti umidi come piscine, spogliatoi, centri termali. L'elevata protezione all'ingresso di polveri e liquidi ne fanno un prodotto adatto anche per l'illuminazione di ambienti asettici come studi odontoiatrici e ambulatori medici.

The IP 65 protection degree allows the fixture to be installed in high-humidity settings such as swimming pools, changing rooms, spas. The high degree of protection from the ingress of dust and liquids makes it suitable also for lighting aseptic environments such as dentists' and doctors' surgeries.

ACCESSORI
ACCESSORIES

Trasformatore elettronico dimmerabile. Idoneo all'utilizzo di lampade MLed -LV. Per lampade MLed-LV la dimmerabilità è dal 5% al 100%.
Dimmable electronic transformer. Suitable for utilisation with MLed-LV lamps, with MLed-LV lamps dimmability goes from min. 5% up to 100% max.

Colours: 00 — ▣ IP20

TYPE			WIRING	CODE
TR-ELP60	20-60W	230Vac/12V	ED1	**0625**

ED1: Elettronico Dim (IGBT)
ED1: Electronic Dim (IGBT)

BLADE

Design **M.D.W.S.**

INCASSI CALPESTABILI PER ESTERNI, DA TERRA E PARETE.

Gamma di incassi calpestabili da esterni, concepita specificatamente per sorgenti a LED di potenza di ultima generazione. Un design caratterizzato che si integra perfettamente nelle architetture più raffinate. L'assenza di viti ne esalta la forma.
La famiglia Blade costituisce una proposta di incassi calpestabili a LED nelle forme tonda e quadra: tre diverse tipologie a luce fissa e tre applicazioni a luce radente.
Blade si distingue per una elevata efficienza luminosa, resa possibile dall'utilizzo di sorgenti LED impiegate in modo tale da sfruttarne appieno le potenzialità illuminotecniche.
Blade è studiato per garantire una protezione sicura non solo contro gli agenti atmosferici, ma anche da agenti aggressivi derivanti da prodotti di lavaggio industriale o di pulizia per gli ambienti interni. Tutto questo, avviene grazie ad un affidabile sistema di guarnizioni e all'utilizzo di un acciaio ad elevatissima resistenza, AISI 316L. Tali caratteristiche rendono il prodotto ideale in esterno per l'illuminazione d'accento di pareti, colonne e di particolari architettonici, oltre che gruppi floreali e alberature anche ad alto fusto. E' inoltre adatto per applicazioni speciali (in questo caso con tutto il corpo completamente in acciaio) anche in ambito navale.

OUTDOORS WALKOVER GROUND AND WALL RECESSED FIXTURES

Range of outdoor walkover recessed installation fixtures, specifically designed for last generation power LED sources. The shape is emphasized by the absence of screws and their distinct design perfectly blends in with the most refined styles of architecture.
The Blade range offers a comprehensive line of walkover recessed installation LED fixtures in the round and square formats: three different fixed light models and three oblique light applications.
Blade features outstanding high lighting efficiency, thanks to the utilisation of LED sources to fully exploit their lighting potential.
Blade has been designed to guarantee safe protection not just from the weather, but also from aggressive agents employed in industrial washing facilities or indoor cleaning chemicals. This is all assured by a reliable gasket system and the utilisation of highly resistant AISI 316L steel.
These features make it the outdoors fixture of choice for accent lighting of walls, colonnades and architectural elements, as well as flower beds and tall trees. Blade can also be successfully employed indoors when a high degree of protection and resistance to aggressive agents is required, for example in public spaces or retail outlets.
It is also suitable for special shipbuilding applications – in which case it is supplied with an all-steel body.

BLADE

Design **M.D.W.S.**

Incassi calpestabili per esterni, da terra e parete.

Outdoors walkover ground and wall recessed fixtures

Sorgenti luminose:
LED monocromatici per versioni FT1, FQ1 e ER, LED COB per versione FT3. Tre versioni di segnalazione con emissione radente.

Sistema ottico:
Tre diverse gradazioni: **N** 15°, **S** 25° e **M** 40°.

Cablaggio:
Nella versione 220-240Vac elettronico con alimentatore integrato nell'apparecchio.
Per le versioni in corrente driver da ordinare separatamente.

Classificazione:
C.I. I per le versioni 220-240Vac, IP66/67, marchio F.
Calpestabilità 1000Kg (500Kg per la sola versione ad 1 LED).

Emissiona luminosa:
Diretta o indiretta.

Caratteristiche costruttive:
Corpo in alluminio Anticorodal, flangia in acciaio inox AISI 316L, vetro vano ottico temprato trasparente extrachiaro, lenti del LED in PMMA trasparente ad alto indice di trasmissione, controcassa in materiale plastico, viterie e particolari in acciaio inox. Corpo in acciaio AISI316L a richiesta

Trattamenti:
Lucidatura a specchio della flangia.

Light sources:
Monochrome LEDs for FT1, FQ1 and ER, LED COB for FT3 version. Three signalling versions with oblique emission.

Optics system:
*three different angles: **N** 15°, **S** 25° and **M** 40°*

Wiring:
In the 220-240Vac version electronic with built-in power supply unit. For current versions driver to be ordered separately.

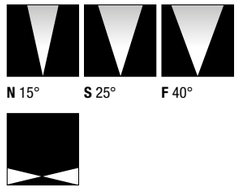
Classification:
I.C. I for 220-240Vac versions, IP66/67, mark F.
Walkability 1000kg (500kg only for the one-LED version).

Light emission:
Direct or indirect

Constructive features:
Anticorodal aluminium body, AISI 316L stainless steel flange, extra-clear transparent tempered optics compartment glass, high transmission index transparent PMMA LED lenses, plastic material outer-frame, stainless steel screws and components. AISI316L steel on request

Finishes:
Flange mirror polishing.

Ottiche
Optics:



N 15° **S** 25° **F** 40°

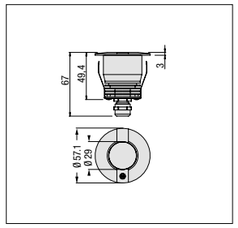
SORGENTI LUMINOSE
LIGHT SOURCES

	OPTIC SYSTEM	BLE-FT1 / BLE-FQ1	BLE-FT3	BLE-ER1	BLE-ER2	BLE-ER3
LED	Transparent diffuser **15° 25° 40°**	3,15W	-	-	-	-
	Opal diffuser	3,15W	7W	1x 1W	2x 1W	3x 1W

COLORI
COLOURS

40 Acciaio lucido
Polished steel

Incasso fisso tondo calpestabile con diffusore trasparente o opalino. Alimentatore e controcassa da ordinare separatamente. Cavo 1000mm.
Walk-over fixed round recessed installation fixture with clear or opal diffuser. Power supply unit and outer-frame to be ordered separately. 1000mm connection cable.

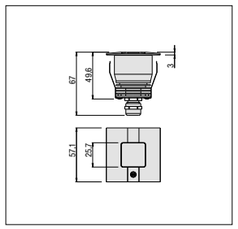


Colours: 40

IP66 | IP67 | IK09 | <40°C | 500Kg

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
BLE-FT1	3,15W Max 1050mA		LED	Transparent diffuser	ELE	●	**575#**
BLE-FT1	3,15W Max 1050mA		LED NW	Opal diffuser	ELE	●	**5758**
BLE-FT1	3,15W Max 1050mA		LED WW	Opal diffuser	ELE	●	**5759**

Incasso fisso quadro calpestabile con diffusore trasparente o opalino. Alimentatore e controcassa da ordinare separatamente. Cavo 1000mm. *Walk-over fixed round recessed installation fixture with clear or opal diffuser. Power supply unit and outer-frame to be ordered separately. 1000mm connection cable.*

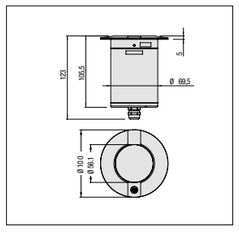


Colours: 40

IP66 | IP67 | IK09 | <40°C | 500Kg

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
BLE-FQ1	3,15W Max 1050mA		LED	Transparent diffuser	ELE	●	**576#**
BLE-FQ1	3,15W Max 1050mA		LED NW	Opal diffuser	ELE	●	**5768**
BLE-FQ1	3,15W Max 1050mA		LED WW	Opal diffuser	ELE	●	**5769**

Incasso fisso tondo calpestabile con diffusore opalino e completo di alimentatore. Controcassa da ordinare separatamente. Cavo 1000mm.
Walk-over fixed round recessed installation fixture with opal diffuser. Power supply included. Outer-frame to be ordered separately. 1000mm connection cable.

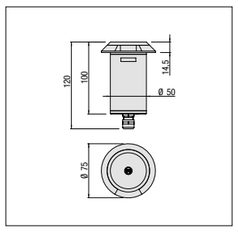


Colours: 40

IP66 | IP67 | IK09 | <40°C | 500Kg

TYPE	WATTAGE	SOCKET	LAMP	OPTICS	WIRING		CODE
BLE-FT3	7W 220-240 Vac		LED	Opal diffuser	ELE	●	**577#**

Incasso tondo calpestabile ad emissione radente 60° e completo di alimentatore. Controcassa da ordinare separatamente. Cavo 1000mm.
Walk-over, 60° grazing light fixed round recessed installation fixture. Power supply included. Outer-frame to be ordered separately. 1000mm connection cable.



Colours: 40

IP66 | IP67 | IK10 | <40°C | 1000Kg

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
BLE-ER1	1x 1W 220-240 Vac		LED NW	ELE	●	**575R**
BLE-ER1	1x 1W 220-240 Vac		LED WW	ELE	●	**575S**

NOMINAL FLUX / LOR (Light Output Ratio)

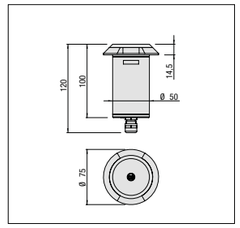
LED	NW	WW
3,15W	211lm	198lm
7W	738lm	643lm
1W	97lm	91lm

LED CODE (...#)

LED TEMPERATURES	S 15°	M 25°	M 40°
LED NW	J	B	2
LED WW	H	A	1

ELE: Elettronico
ELE: Electronic

Incasso tondo calpestabile ad emissione radente 180° e completo di alimentatore. Controcassa da ordinare separatamente. Cavo 1000mm.
Walk-over, 180° grazing light fixed round recessed installation fixture. Power supply included. Outer-frame to be ordered separately. 1000mm connection cable.

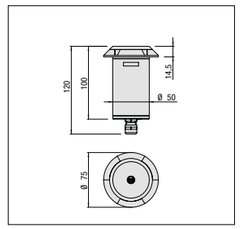


Colours: 40

IP66 | IP67 | IK10 | <40°C | 1000Kg

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
BLE-ER2	2x 1W 220-240 Vac		LED NW	ELE	●	**575T**
BLE-ER2	2x 1W 220-240 Vac		LED WW	ELE	●	**575V**

Incasso tondo calpestabile ad emissione radente 120° e completo di alimentatore. Controcassa da ordinare separatamente. Cavo 1000mm.
Walk-over, 120° grazing light fixed round recessed installation fixture. Power supply included. Outer-frame to be ordered separately. 1000mm connection cable.



Colours: 40

IP66 | IP67 | IK10 | <40°C | 1000Kg

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
BLE-ER3	3x 1W 220-240 Vac		LED NW	ELE	●	**575Z**
BLE-ER3	3x 1W 220-240 Vac		LED WW	ELE	●	**575Y**

ACCESSORI

Controcassa in materiale termoplastico.
Outer-frame in thermoplastic material.

Colours: 15

TYPE	Per/For	CODE
BLE-ZC050	BLE-FT1 BLE-FQ1	**5595**
BLE-ZC090	BLE-FT3	**5596**
BLE-ZC063	BLE-ER1 BLE-ER2 BLE-ER3	**5594**

Scatola protezione morsettiera - IP66/IP67
Protection box for terminal board- IP66/IP67

Colours: 00

TYPE	CODE
TR-PR67	**5370**

Alimentatore elettronico indipendente (FT1 e FQ1).
Indipendent electronic power supply (FT1 and FQ1).

Colours: 00

IP20

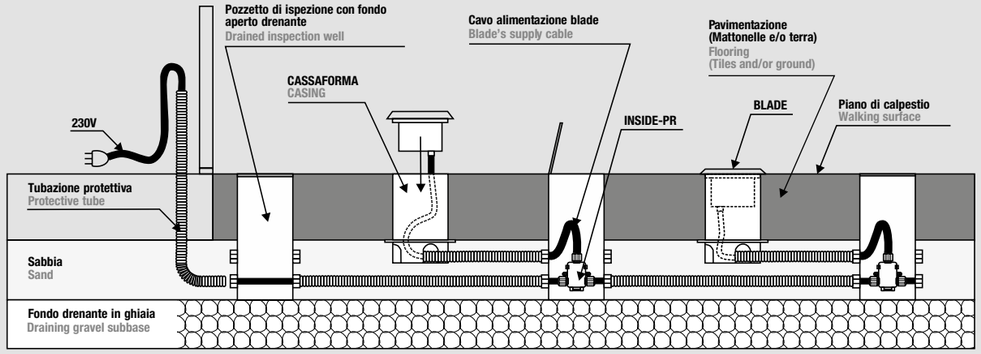
TYPE		WIRING	CODE
TDA35-17	17W 350mA	ELE	**0784**
TDA50-20	20W 500mA	ELE	**0780**
TRL70-17	17W 700mA	ELE	**5385**
TRL10-22	22W 1050mA	ELE	**0626**

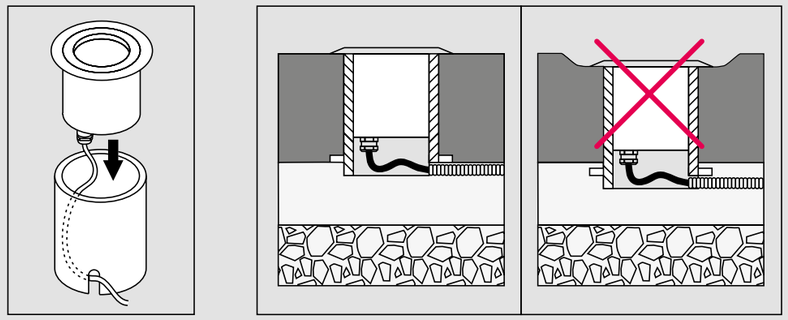
ELE: Elettronico
ELE: Electronic

CONTROCASSE
OUTER FRAMES

È necessario alloggiare Blade in una controcassa in policarbonato che può essere installata nel getto in calcestruzzo o asfalto in fase di realizzazione. La controcassa permette di proteggere l'apparecchio dal contatto diretto con il terreno e agevola le operazione di manutenzione.

Blade must be housed inside a polycarbonate counter frame, which may be installed upon construction in the poured concrete or asphalt. The outer frame allows the fixture to be protected from direct contact with the ground and makes maintenance operations easier.





Protezione contro gli agenti atmosferici e aggressivi
Protection against weather and aggressive substances.

Un affidabile sistema di guarnizione e l'uso di materiali ad altissima resistenza (AISI 316L) consentono applicazioni in ambienti esterni, nonchè interni soggetti ad azione di agenti corrosivi.

A reliable gasket system and the utilisation of extremely resistant materials (AISI 316L) allow applications in outdoors settings, as well as indoors settings subject to corrosive agents.

Tenuta stagna
Water tightness

La tenuta stagna è garantita da guarnizioni e soprattutto dalla realizzazione di una resinatura interna in prossimità dell'innesto del cavo.

Water tightness is assured by gaskets and above all by the internal resin application around the cable connection.

Temperatura superficiale
Surface temperature

Le temperature superficiali del vetro e della ghiera sono sempre inferiori ai 40°C, garantendone quindi la caratteristica cool touch.

Surface glass and ring temperatures are always below 40°C, thus assuring their "cool touch" property.

Calpestabilità
Walkability

Blade si può utilizzare su percorsi pedonali. La calpestabilità è garantita fino a 1000Kg per i modelli BLE-FT3, BLE-ER1, BLE-ER2 e BLE-ER3 e fino a 500Kg per i modelli BLE-FT1 e BLE-FQ1.

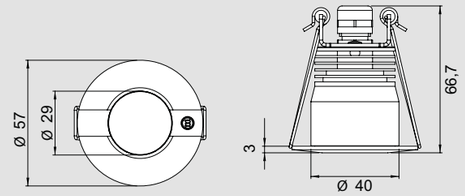
Blade can be installed on pedestrian pathways. Walkability is guaranteed up to 1000Kg for models BLE-FT3, BLE-ER1, BLE-ER2 and BLE-ER3; and up to 500Kg for models BLE-FT1 and BLE-FQ1.

BLADE

Blade sfrutta i numerosi plus della tecnologia LED per assicurare prestazioni elevate e massimo risparmio energetico. Il progetto delle componenti ottiche è sviluppato per garantire affidabilità nel tempo ed elevatissimi standard illuminotecnici.
Comfort illuminotecnico - Il modulo LED è collocato in posizione arretrata nel gruppo ottico per evitare problematiche dovute all'abbagliamento diretto.

Blade makes full use of the many advantages afforded by LED technology to assure high performance and maximum energy savings. Optical components have been specifically developed to guarantee long-term reliability and extremely high lighting design standards.
Lighting design comfort – the LED module is placed rearward in the optics unit to avoid any issues connected to direct glaring.

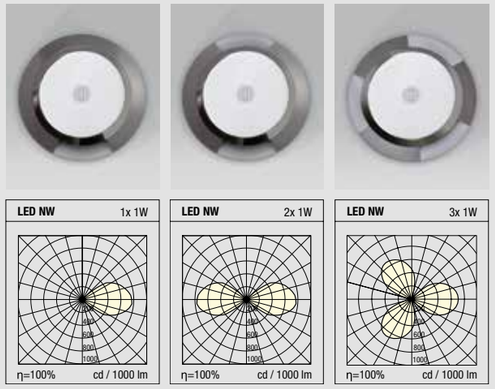
BLADE FT1/FQ1 INCASSO SOFFITTO A RICHIESTA
RECESSED CEILING BLADE TF1/FQ1 AVAILABLE ON REQUEST



BLADE EMISSIONE RADENTE
BLADE GRAZING EMISSION

Ideato per l'illuminazione di percorsi e passaggi pedonali, rampe, giardini e vialetti, questo incasso a pavimento a luce radente permette di delimitare gli spazi, valorizzandoli con scenografie luminose estremamente suggestive.
Blade ad emissione radente disponibile nelle due versioni:
BLE-ER1 con 1 fascio di luce,
BLE-ER2 con 2 fasci di luce,
BLE-ER3 con 3 fasci di luce.

Designed for lighting pedestrians' pathways and passageways, ramps, gardens and paths, this grazing light floor recessed fixture defines space, highlighting it with striking light effects.
Grazing emission Blade is available in the two versions:
BLE-ER1 with one light beam,
BLE-ER2 with two light beams,
BLE-ER3 with three light beams.



Blade è disponibile nelle versioni tonda 1 e 3 LED, quadra a 1 LED.

Blade is available in the fixed round version with 1 or 3 LEDs, and 1 LED in square version.

Elevata efficienza luminosa
High lighting efficiency

Un'elevata efficienza luminosa rende Blade ideale per l'illuminazione architetturale da esterni e la realizzazione di scenografie in camminamenti e giardini.

The high lighting efficiency makes Blade ideal for outdoors architectural lighting and for creating light ambiances in pathways and gardens.

BLADE - Emissione radente 60°, 120° e 180°
BLADE - Grazing emission 60°,120° and 180°

Blade è disponibile anche nelle versioni tonda con emissione radente a 1, 2 e 3 LED.

Blade is also available in the round, grazing emission version with one, two or three LEDs.

UPPY 50

Design **Silvio De Ponte**

PROIETTORI DA ESTERNO DA TERRA, SOFFITTO E PARETE

Misure compatte e cura dei particolare sono gli elementi che contraddistinguono i piccoli proiettori da esterno che a seconda del tipo di applicazione si completano con paletti a due diverse altezze, braccio distanziale, staffe di supporto.
Previsti per applicazione a terra, parete/soffitto, i proiettori impiegano LED COB e sorgenti ad alogeni.
L'applicazione del LED, unita all'elevato grado di protezione IP, rende i proiettori interessanti laddove vi sia l'esigenza di illuminare contenendo i costi di uso e manutenzione. La possibilità di orientare il corpo lampada, consente infine di illuminare dettagli architettonici, monumenti, vegetazione, percorsi e giardini in modo semplice e preciso.
La durata in esterni è garantita da un elevato grado di protezione IP66/67, da finiture ad elevata resistenza e da trattamenti anticorrosione contro gli effetti della nebbia salina.
Ciò rende il prodotto Uppy 50 ideale per applicazioni in ambienti pubblici, oltre che privati.

OUTDOORS GROUND, CEILING AND WALL PROJECTORS

These small outdoors projectors feature a compact size and have been designed with an eye to details. Depending on the type of application they are complemented by posts in two different heights, spacer arm and support brackets.
Designed for ground, wall/ceiling installation, the projectors utilise LED COB as well as halogen sources.
The LED application, together with the high degree of IP protection, makes their utilisation interesting in lighting installations that require reduced utilisation and maintenance costs. The possibility to adjust the lamp body, moreover, allows to light easily and precisely architectural details, monuments, vegetation, pathways and gardens.
Outdoor long life is assured by a high degree of protection – IP66/67 – as well as by high resistance finishes and corrosion-proof treatments against the effects of salt spray.
All these features make Uppy 50 the fixture of choice for applications in both public and private spaces.

UPPY 50

Design **Silvio De Ponte**

Proiettori da esterno da terra, soffitto e parete

Outdoors ground, ceiling and wall projectors

Sorgenti luminose:
LED COB e sorgenti alogene.

Sistema ottico:
N 15°, **S** 25°.

Cablaggio:
Elettronico e elettronico Dimmerabile per versioni alogene (ED1).

Classificazione:
C.I. I-II- III, Marchio F, IP66/67.

Emissiona luminosa:
Orientabile, diretta o indiretta.

Rotazione:
315° sull'asse verticale di e ±90° sull'asse orizzontale.

Caratteristiche costruttive:
Corpo in alluminio pressofuso, vetro trasparente temprato, struttura in metallo, viterie e particolari in acciaio inox.

Trattamenti:
Trattamento galvanico con processo di cataforesi per garantire 1200 ore di resistenza alla nebbia salina, verniciatura a polveri poliestere ad alta resistenza.

Light sources:
LED COB, halogen.

Optics system:
***N** 15°, **S** 25°.*

Wiring:
Electronic and electronic dimmable for halogen (ED1) versions.

Classification:
I.C. I-II- III, Mark F, IP66/67.

Light emission:
Adjustable, direct or indirect.

Rotation:
315°on the vertical axis and ±90°on the horizontal axis.

Constructive features:
Die-cast aluminium body, transparent tempered glass, steel structure, stainless steel screws and components.

Finishes:
galvanic with cataphoresis process to guarantee 1200 hours of salt spray resistance, high-resistance polyester powder painting.

Ottiche
Optics:

N 15° **S** 25°

SORGENTI LUMINOSE
LIGHT SOURCES

		OPTIC SYSTEM	UPPY 50
LED		**15° 25°**	10W 14,7W
Halogen lamps	**QR-CB 51**		50W
LED Lamp			10W

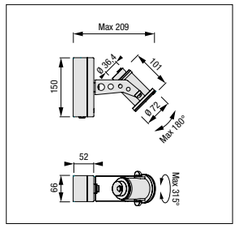
COLORI
COLOURS

28 Grigio argento
Silver grey

35 Antracite
Anthracite

37 Brunito
Burnished

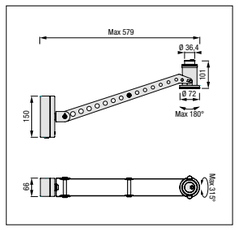
Spot Ø50 con basetta e trasformatore integrato.
Ø50 Spotlight with base and built-in transformer.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
UPPY50-A1	10W 220-240Vac		LED	ELE	●	**54M#**
UPPY50-A1	14,7W 220-240Vac		LED	ELE	●	**54N#**
UPPY50-A1	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ED1		**5410**

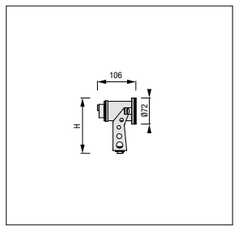
Spot Ø50 con braccio orientabile e trasformatore integrato.
Ø50 Spotlight with adjustable arm and built-in transformer.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
UPPY50-A2	10W 220-240Vac		LED	ELE	●	**54P#**
UPPY50-A2	14,7W 220-240Vac		LED	ELE	●	**54Q#**
UPPY50-A2	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ED1		**5415**

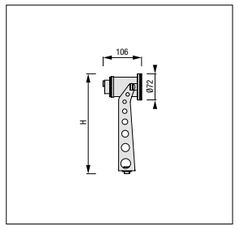
Spot Ø50 con staffa H 146 e cavo di collegamento 2000mm, completo di trasformatore IP20 indipendente.
Ø50 spotlight with bracket H 146 and 2000mm connection cable, complete with IP20 indipendent driver.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	LAMP	WIRING		CODE
UPPY50-C1	10W 220-240Vac	LED	ELE	●	**54R#**
UPPY50-C1	14,7W 220-240Vac	LED	ELE	●	**54S#**

Spot Ø50 con staffa H 268 e cavo di collegamento 2000mm, completo trasformatore IP20 indipendente.
Ø50 spotlight with bracket H 268 and 2000mm connection cable, complete with IP20 indipendent driver.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	LAMP	OPTICS	WIRING		CODE
UPPY50-C2	10W 220-240Vac	LED		ELE	●	**54T#**
UPPY50-C2	14,7W 220-240Vac	LED		ELE	●	**54U#**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
ELE: Electronic
ED1: Dim Electronic (IGBT)

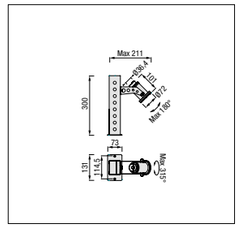
NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser
LED	**NW**	**WW**	**LOR**
10W	1453lm	1403lm	80%
14,7W	1980lm	1916lm	80%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

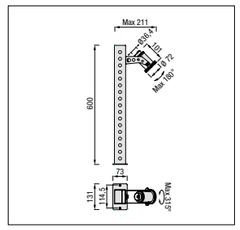
Spot Ø50 a paletto H 300 con trasformatore integrato.
Ø50 Post spotlight H 300 with built-in transformer.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	SOCKET	LAMP	WIRING		CODE
UPPY50-P1	10W 220-240Vac		LED	ELE	●	**54V#**
UPPY50-P1	14,7W 220-240Vac		LED	ELE	●	**54Z#**
UPPY50-P1	50W/10W 220-240Vac	GU5,3	QR-CB 51/LED lamp	ED1		**5420**

Spot Ø50 a paletto H 600 con trasformatore integrato.
Ø50 Post spotlight H 600 with built-in transformer.



Colours: 28 35 37 — IP66 IP67 IK07

TYPE	WATTAGE	LAMP	WIRING		CODE
UPPY50-P2	10W 220-240Vac	LED	ELE	●	**54Y#**
UPPY50-P2	14,7W 220-240Vac	LED	ELE	●	**54W#**

ACCESSORI
ACCESSORIES

Scatola protezione morsettiera - IP66/IP67
Protection box for terminal board- IP66/IP67

Colours: 00

TYPE	CODE
TR-PR67	**5370**

Piastra in acciaio con tirafondi da cementare
Steel plate with anchor bolts, to be cemented

Colours: 28

TYPE	CODE
UPPY-SF	**5430**

Piastra in acciaio con picchetto per installazione a giardino
Steel plate with spike for garden installation

Colours: 28

TYPE	CODE
UPPY-SP	**5431**

ELE: Elettronico
ED1: Elettronico Dim (IGBT)
ELE: Electronic
ED1: Dim Electronic (IGBT)

NOMINAL FLUX / LOR (Light Output Ratio)

			Transparent diffuser
LED	**NW**	**WW**	**LOR**
10W	1453lm	1403lm	80%
14,7W	1980lm	1916lm	80%

LED CODE (...#)

LED TEMPERATURES	N 15°	S 25°
LED NW	J	B
LED WW	H	A

CODE	cl. S	PAG.
0620-00	TRA	314/322/328
0621-00	TRA	302
0622-00	TRA	302
0623-00	TRA	302
0625-00	TRA	361
0626-00	TRA	314/369
0700-15	TRA	163
0700-16	TRA	163
0700-60	TRA	163
0711-00	DIL	92
0712-00	DIL	92
0716-00	DIL	92
0717-00	DIL	92
0721-16	TRA	163
0721-23	TRA	163
0721-27	TRA	163
0730-15	TRA	314/322/328
0731-15	TRA	314/322/328
0732-16	TRA	314/322/328
0733-16	TRA	314/322/328
0734-16	TRA	314/322/328
0741-15	TRA	163
0741-16	TRA	163
0741-28	TRA	163
0742-00	TRA	314/322/328
0743-15	TRA	163
0743-16	TRA	163
0743-28	TRA	163
0744-00	TRA	314/322/328
0745-00	TRA	314/322/328
0749-00	TRA	314/322/328
0778-16	TRA	163
0778-23	TRA	163
0778-27	TRA	163
0780-00	TRA	314/369
0781-00	TRA	340
0782-28	TRA	163
0783-28	TRA	163
0784-00	TRA	314/369
0790-00	TRA	340
0795-00	TRA	302
1055-16	ETH	214
1055-82	ETH	214
1056-16	ETH	214
1056-82	ETH	214
1057-16	ETH	214
1057-82	ETH	214
1058-16	ETH	214
1058-82	ETH	214
1060-16	ETH	214
1060-82	ETH	214
1061-16	ETH	214
1061-82	ETH	214
1062-16	ETH	214
1062-82	ETH	214
1063-16	ETH	214
1063-82	ETH	214
1064-16	ETH	214
1064-82	ETH	212
1065-16	ETH	214
1065-82	ETH	214
1066-16	ETH	214
1066-82	ETH	214
1067-16	ETH	214
1067-82	ETH	214
1068-16	ETH	214
1068-82	ETH	214
1069-16	ETH	214
1069-82	ETH	214
1070-16	ETH	214
1070-82	ETH	214
1071-16	ETH	214
1071-82	ETH	214
1157-23	STL	240
1159-23	STL	240
115C-23	STL	240
115D-23	STL	240
1161-23	STL	240
1162-23	STL	240
116A-23	STL	240
116B-23	STL	240
116H-23	STL	240
116J-23	STL	240
1171-23	STL	240
1172-23	STL	240
117A-23	STL	240
117B-23	STL	240
117H-23	STL	240
117J-23	STL	240
1181-23	STL	240
1182-23	STL	240
118A-23	STL	240
118B-23	STL	240
118H-23	STL	240
118J-23	STL	240
1191-23	STL	240
1192-23	STL	240
119A-23	STL	240
119B-23	STL	240
119H-23	STL	240
119J-23	STL	240
1202-15	PIT	264
1218-M5	PIT	264
1218-M6	PIT	264
1219-M5	PIT	264
1219-M6	PIT	264
121A-M5	PIT	264
121A-M6	PIT	264
121B-M5	PIT	264
121B-M6	PIT	264
121H-M5	PIT	264
121H-M6	PIT	264
121J-M5	PIT	264
121J-M6	PIT	264
1228-M5	PIT	264
1228-M6	PIT	264
1229-M5	PIT	264
1229-M6	PIT	264
122A-M5	PIT	264
122A-M6	PIT	264
122B-M5	PIT	264
122B-M6	PIT	264
122H-M5	PIT	264
122H-M6	PIT	264
122J-M5	PIT	264
122J-M6	PIT	264
1230-M5	PIT	264
1230-M6	PIT	264
1238-M5	PIT	264
1238-M6	PIT	264
1239-M5	PIT	264
1239-M6	PIT	264
123A-M5	PIT	264
123A-M6	PIT	264
123B-M5	PIT	264
123B-M6	PIT	264
123H-M5	PIT	264
123H-M6	PIT	264
123J-M5	PIT	264
123J-M6	PIT	264
1240-M5	PIT	264
1240-M6	PIT	264
1248-M5	PIT	264
1248-M6	PIT	264
1249-M5	PIT	264
1249-M6	PIT	264
124A-M5	PIT	264
124A-M6	PIT	264
124B-M5	PIT	264
124B-M6	PIT	264
124H-M5	PIT	264
124H-M6	PIT	264
124J-M5	PIT	264
124J-M6	PIT	264
1340-15	BSP	148
1340-16	BSP	148
1341-15	BSP	146
1341-16	BSP	146
1341-29	BSP	146
1342-15	BSP	146
1342-16	BSP	146
1342-29	BSP	146
1343-15	BSP	146
1343-16	BSP	146
1343-29	BSP	146
1345-15	BSP	146
1345-16	BSP	146
1345-29	BSP	146
1346-15	BSP	146
1346-16	BSP	146
1346-29	BSP	146
1347-15	BSP	146
1347-16	BSP	146
1347-29	BSP	146
1348-15	BSP	130/140/148/207
1348-16	BSP	130/140/148/207
1349-15	BSP	130/140/148/207
1349-16	BSP	130/140/148/207
1350-15	BSP	146
1350-16	BSP	146
1351-15	BSP	146
1351-16	BSP	146
1352-15	BSP	146
1352-16	BSP	146
1353-15	BSP	146
1353-16	BSP	146
1354-15	BSP	146
1354-16	BSP	146
1355-15	BSP	148
1355-16	BSP	148
1356-15	BSP	146
1356-16	BSP	146
1357-15	BSP	146
1357-16	BSP	146
1358-15	BSP	146
1358-16	BSP	146
1359-15	BSP	146
1359-16	BSP	146
1360-15	BSP	147
1360-16	BSP	147
1361-15	BSP	147
1361-16	BSP	147
1362-15	BSP	147
1362-16	BSP	147
1363-15	BSP	147
1363-16	BSP	147
1366-15	BSP	147
1366-16	BSP	147
1367-15	BSP	147
1367-16	BSP	147
1367-29	BSP	147
1368-16	BSP	147
1368-29	BSP	147
1369-15	BSP	147
1369-16	BSP	147
1370-15	BSP	147
1370-16	BSP	147
1371-15	BSP	147
1371-16	BSP	147
1372-00	BSP	147
1373-15	BSP	148
1373-16	BSP	148
1539-16	REF	258
1542-16	REF	258
1543-16	REF	258
1544-16	REF	258
1545-16	KAB	259
1545-28	KAB	259
1546-16	KAB	259
1546-28	KAB	259
1547-16	KAB	259
1547-28	KAB	259
1548-16	KAB	259
1548-28	KAB	259
1585-16	KAB	259
1585-28	KAB	259
1586-16	KAB	259
1586-28	KAB	259
1587-16	KAB	259
1587-28	KAB	259
1588-16	KAB	259
1588-28	KAB	259
1589-16	KAB	259
1589-28	KAB	259
1590-16	KAB	259
1590-28	KAB	259
1591-16	KAB	259
1591-28	KAB	259
1592-16	KAB	259
1592-28	KAB	259
1593-16	KAB	259
1593-28	KAB	259
1595-16	KAB	259
1595-28	KAB	259
1596-16	KAB	259
1596-28	KAB	259
1597-16	KAB	259
1597-28	KAB	259
1690-M6	IKK	289
1691-M6	IKK	289
1692-M6	IKK	289
1693-M6	IKK	289
1694-M6	IKK	289
1695-M6	IKK	289
1696-M6	IKK	289
1697-M6	IKK	289
1698-M6	IKK	286
1699-M6	IKK	286
169A-M6	IKK	286
169B-M6	IKK	286
169C-M6	IKK	286
169D-M6	IKK	286
169E-M6	IKK	286
169F-M6	IKK	286
169G-M6	IKK	286
169H-M6	IKK	286
169I-M6	IKK	286
169J-M6	IKK	286
169K-M6	IKK	286
169L-M6	IKK	286
169M-M6	IKK	286
169N-M6	IKK	286
169P-M6	IKK	286
169Q-M6	IKK	286
169R-M6	IKK	286
169S-M6	IKK	286
169T-M6	IKK	286
169U-M6	IKK	286
169V-M6	IKK	286
169Z-M6	IKK	286
16A0-M6	IKK	289
16A1-M6	IKK	289
16A4-M6	IKK	289
16A5-M6	IKK	289
1700-15	SRR	275
1700-16	SRR	275
1700-75	SRR	275
1704-75	SRR	280
1704-M6	SRR	280
1706-75	SRR	276
1706-M6	SRR	276
1709-75	SRR	276
1709-M6	SRR	276
1713-75	SRR	276
1713-M6	SRR	276
1720-15	SRR	275
1720-16	SRR	275
1720-75	SRR	275
1729-75	SRR	278
1729-M6	SRR	278
1742-15	SRR	274
1742-16	SRR	274
1742-75	SRR	274
1744-75	SRR	278
1744-M6	SRR	278
1748-75	SRR	278
1748-M6	SRR	278
1760-15	SRR	274
1760-16	SRR	274
1760-75	SRR	274
1763-15	SRR	274
1763-16	SRR	274
1763-75	SRR	274
1767-M6	SRR	280
1768-M6	SRR	280
1769-M6	SRR	280
1770-M6	SRR	280/289
1788-75	SRR	278
1788-M6	SRR	278
1789-75	SRR	278
1789-M6	SRR	278
1798-75	SRR	278
1798-M6	SRR	278
1799-75	SRR	278
1799-M6	SRR	278
1801-75	SRR	278
1801-M6	SRR	278
1802-75	SRR	278
1802-M6	SRR	278
1808-75	SRR	278
1808-M6	SRR	278
1809-75	SRR	278
1809-M6	SRR	278
180A-75	SRR	278
180A-M6	SRR	278
180B-75	SRR	278
180B-M6	SRR	278
1811-75	SRR	276
1811-M6	SRR	276
1812-75	SRR	276
1812-M6	SRR	276
1818-75	SRR	276
1818-M6	SRR	276
1819-75	SRR	276
1819-M6	SRR	276
181A-75	SRR	276
181A-M6	SRR	276
181B-75	SRR	276
181B-M6	SRR	276
1831-15	SRR	274
1831-16	SRR	274
1831-75	SRR	274
1832-15	SRR	274
1832-16	SRR	274
1832-75	SRR	274
1838-15	SRR	274
1838-16	SRR	274
1838-75	SRR	274
1839-15	SRR	274
1839-16	SRR	274
1839-75	SRR	274
183A-15	SRR	274
183A-16	SRR	274
183A-75	SRR	274
183B-15	SRR	274
183B-16	SRR	274
183B-75	SRR	274
1841-15	SRR	274
1841-75	SRR	274
1842-15	SRR	274
1842-16	SRR	274
1842-75	SRR	274
1848-15	SRR	274
1848-16	SRR	274
1848-75	SRR	274
1849-15	SRR	274
1849-16	SRR	274
1849-75	SRR	274
184A-15	SRR	274
184A-16	SRR	274
184A-75	SRR	274
184B-15	SRR	274
184B-16	SRR	274
184B-75	SRR	274
1851-15	SRR	274
1851-16	SRR	274
1851-75	SRR	274
1852-15	SRR	274
1852-16	SRR	274
1852-75	SRR	274
1858-15	SRR	274
1858-16	SRR	274
1858-75	SRR	274
1859-15	SRR	274
1859-16	SRR	274
1859-75	SRR	274
185A-15	SRR	274
185A-16	SRR	274
185A-75	SRR	274
185B-15	SRR	274
185B-16	SRR	274
185B-75	SRR	274
1861-15	SRR	275
1861-16	SRR	275
1861-75	SRR	275
1862-15	SRR	275
1862-16	SRR	275
1862-75	SRR	275
1868-15	SRR	275
1868-16	SRR	275
1868-75	SRR	275
1869-15	SRR	275
1869-16	SRR	275
1869-75	SRR	275
186A-15	SRR	275
186A-16	SRR	275
186A-75	SRR	275
186B-15	SRR	275
186B-16	SRR	275
186B-75	SRR	275
1871-15	SRR	275

CODE	cl. S		PAG.
1871-16	SRR	●	275
1871-75	SRR	●	275
1872-15	SRR	●	275
1872-16	SRR	●	275
1872-75	SRR	●	275
1878-15	SRR	●	275
1878-16	SRR	●	275
1878-75	SRR	●	275
1879-15	SRR	●	275
1879-16	SRR	●	275
1879-75	SRR	●	275
187A-15	SRR	●	275
187A-16	SRR	●	275
187A-75	SRR	●	275
187B-15	SRR	●	275
187B-16	SRR	●	275
187B-75	SRR	●	275
1891-15	SRR	●	275
1891-16	SRR	●	275
1891-75	SRR	●	275
1892-15	SRR	●	275
1892-16	SRR	●	275
1892-75	SRR	●	275
1898-15	SRR	●	275
1898-16	SRR	●	275
1898-75	SRR	●	275
1899-15	SRR	●	275
1899-16	SRR	●	275
1899-75	SRR	●	275
189A-15	SRR	●	275
189A-16	SRR	●	275
189A-75	SRR	●	275
189B-15	SRR	●	275
189B-16	SRR	●	275
189B-75	SRR	●	275
1901-75	SRR	●	280
1901-M6	SRR	●	280
1902-75	SRR	●	280
1902-M6	SRR	●	280
1908-75	SRR	●	280
1908-M6	SRR	●	280
1909-75	SRR	●	280
1909-M6	SRR	●	280
190A-75	SRR	●	280
190A-M6	SRR	●	280
190B-75	SRR	●	280
190B-M6	SRR	●	280
1911-75	SRR	●	276
1911-M6	SRR	●	276
1912-75	SRR	●	276
1912-M6	SRR	●	276
1918-75	SRR	●	276
1918-M6	SRR	●	276
1919-75	SRR	●	276
1919-M6	SRR	●	276
191A-75	SRR	●	276
191A-M6	SRR	●	276
191B-75	SRR	●	276
191B-M6	SRR	●	276
1921-75	SRR	●	276
1921-M6	SRR	●	276
1922-75	SRR	●	276
1922-M6	SRR	●	276
1928-75	SRR	●	276
1928-M6	SRR	●	276
1929-75	SRR	●	276
1929-M6	SRR	●	276
192A-75	SRR	●	276
192A-M6	SRR	●	276
192B-75	SRR	●	276
192B-M6	SRR	●	276
1931-75	SRR	●	278
1931-M6	SRR	●	278
1932-75	SRR	●	278
1932-M6	SRR	●	278
193A-75	SRR	●	278
193A-M6	SRR	●	278
193B-75	SRR	●	278
193B-M6	SRR	●	278
1941-75	SRR	●	278
1941-M6	SRR	●	278
1942-75	SRR	●	278
1942-M6	SRR	●	278
194A-75	SRR	●	278
194A-M6	SRR	●	278
194B-75	SRR	●	278
194B-M6	SRR	●	278
1951-75	SRR	●	276
1951-M6	SRR	●	276
1952-75	SRR	●	276
1952-M6	SRR	●	276
1958-75	SRR	●	276
1958-M6	SRR	●	276
1959-75	SRR	●	276
1959-M6	SRR	●	276
195A-75	SRR	●	276
195A-M6	SRR	●	276
195B-75	SRR	●	276
195B-M6	SRR	●	276
1961-75	SRR	●	278
1961-M6	SRR	●	278
1962-75	SRR	●	278
1962-M6	SRR	●	278
1968-75	SRR	●	278
1968-M6	SRR	●	278
1969-75	SRR	●	278
1969-M6	SRR	●	278
196A-75	SRR	●	278
196A-M6	SRR	●	278
196B-75	SRR	●	278
196B-M6	SRR	●	278
1971-75	SRR	●	280
1971-M6	SRR	●	280
1972-75	SRR	●	280
1972-M6	SRR	●	280
1978-75	SRR	●	280
1978-M6	SRR	●	280
1979-75	SRR	●	280
1979-M6	SRR	●	280
197A-75	SRR	●	280
197A-M6	SRR	●	280
197B-75	SRR	●	280
197B-M6	SRR	●	280
2132-00	TRA		101/105
2133-00	TRA		101/105
2180-16	STR	●	104
2180-28	STR	●	104
2181-16	STR	●	104
2181-28	STR	●	104
2182-16	STR	●	104
2182-28	STR	●	104
2183-16	STR	●	104
2183-28	STR	●	104
2184-16	STR	●	104
2184-28	STR	●	104
2185-16	STR	●	104
2185-28	STR	●	104
2186-16	STR	●	104
2186-28	STR	●	104
2187-16	STR	●	104
2187-28	STR	●	104
2188-16	STR	●	104
2188-28	STR	●	104
2189-16	STR	●	104
2189-28	STR	●	104
2190-16	STR	●	104
2190-28	STR	●	104
2191-16	STR	●	104
2191-28	STR	●	104
2192-16	STR	●	104
2192-28	STR	●	104
2193-16	STR	●	104
2193-28	STR	●	104
2194-16	STR	●	104
2194-28	STR	●	104
2195-16	STR	●	104
2195-28	STR	●	104
2196-16	STR	●	104
2196-28	STR	●	104
2197-16	STR	●	104
2197-28	STR	●	104
2198-23	STR		105
2204-29	STR	●	100
2205-29	STR	●	100
2206-29	STR	●	100
2207-29	STR	●	100
2208-29	STR	●	100
2209-29	STR	●	100
2210-29	STR	●	100
2211-29	STR	●	100
2212-29	STR	●	100
2213-29	STR	●	100
2214-29	STR	●	100
2215-29	STR	●	100
2216-29	STR	●	100
2217-29	STR	●	100
2218-29	STR	●	100
2219-29	STR	●	100
2220-29	STR	●	100
2221-29	STR	●	100
2222-29	STR	●	100
2223-29	STR	●	100
2224-29	STR	●	100
2225-29	STR	●	100
2226-29	STR	●	100
2227-29	STR	●	100
2228-29	STR	●	100
2229-29	STR	●	100
2230-29	STR	●	100
2231-29	STR	●	100
2232-29	STR	●	100
2233-29	STR	●	100
2234-29	STR	●	100
2235-29	STR	●	100
2236-29	STR	●	100
2237-29	STR	●	100
2238-29	STR	●	100
2239-29	STR	●	100
2240-16	STR	●	104
2240-28	STR	●	104
2241-16	STR	●	104
2241-28	STR	●	104
2242-16	STR	●	104
2242-28	STR	●	104
2243-16	STR	●	104
2243-28	STR	●	104
2244-16	STR	●	104
2244-28	STR	●	104
2245-16	STR	●	104
2245-28	STR	●	104
2250-29	STR	●	106
2251-29	STR	●	106
2252-29	STR	●	106
2253-29	STR	●	106
2254-29	STR	●	106
2255-29	STR	●	106
2256-29	STR	●	106
2257-29	STR	●	106
2258-29	STR	●	106
2259-29	STR	●	106
2260-29	STR	●	106
2261-29	STR	●	106
2262-29	STR	●	106
2263-29	STR	●	106
2264-29	STR	●	106
2265-29	STR	●	106
2266-29	STR	●	106
2267-29	STR	●	106
2268-29	STR	●	106
2269-29	STR	●	106
2270-29	STR	●	106
2271-29	STR	●	106
2272-29	STR	●	106
2273-29	STR	●	106
2275-00	STR	●	107
2276-00	STR	●	107
2277-00	STR	●	107
2278-00	STR	●	107
2279-00	STR	●	107
2280-00	STR	●	107
2285-29	STR	●	100
2286-29	STR	●	100
2287-29	STR	●	100
2289-00	STR		105
2290-00	STR		101
2291-00	STR		107
2292-28	STR		101
2293-28	STR		107
2294-28	STR		107
2295-28	STR		101
2296-16	STR		105
2296-28	STR		105
2297-00	STR		105
2298-00	STR		107
2299-00	STR		105
22D2-16	STR		105
22D2-28	STR		105
264Q-15	QSO	●	180
264Q-16	QSO	●	180
264Q-28	QSO	●	180
265G-15	QSO	●	178
265G-16	QSO	●	178
265G-28	QSO	●	178
265P-15	QSO	●	178
265P-16	QSO	●	178
265P-28	QSO	●	178
265R-15	QSO	●	178
265R-16	QSO	●	178
265R-28	QSO	●	178
265S-15	QSO	●	178
265S-16	QSO	●	178
265S-28	QSO	●	178
265T-15	QSO	●	178
265T-16	QSO	●	178
265T-28	QSO	●	178
265U-15	QSO	●	178
265U-16	QSO	●	178
265U-28	QSO	●	178
265V-15	QSO	●	178
265V-16	QSO	●	178
265V-28	QSO	●	178
265Z-15	QSO	●	178
265Z-16	QSO	●	178
265Z-28	QSO	●	178
266G-15	QSO	●	178
266G-16	QSO	●	178
266G-28	QSO	●	178
266P-15	QSO	●	178
266P-16	QSO	●	178
266P-28	QSO	●	178
266R-15	QSO	●	178
266R-16	QSO	●	178
266R-28	QSO	●	178
266S-15	QSO	●	178
266S-16	QSO	●	178
266S-28	QSO	●	178
266T-15	QSO	●	178
266T-16	QSO	●	178
266T-28	QSO	●	178
266U-15	QSO	●	178
266U-16	QSO	●	178
266U-28	QSO	●	178
266V-15	QSO	●	178
266V-16	QSO	●	178
266V-28	QSO	●	178
266Z-15	QSO	●	178
266Z-16	QSO	●	178
266Z-28	QSO	●	178
2673-15	QSO		178/180
2673-16	QSO		178/180/214
2673-28	QSO		178/180
2673-82	QSO		214
2674-15	QSO		178
2674-16	QSO		178/214
2674-28	QSO		178
2674-82	QSO		214
2675-15	QSO		178/180
2675-16	QSO		178/180/214
2675-28	QSO		178/180
2675-82	QSO		214
2676-15	QSO		178
2676-16	QSO		178/214
2676-28	QSO		178
2676-82	QSO		214
2686-15	QSO		178/180
2686-16	QSO		178/180/214
2686-28	QSO		178/180
2686-82	QSO		214
2687-15	QSO		178
2687-16	QSO		178/180
2687-28	QSO		178
2690-15	QSO		178/180
2690-16	QSO		178/180/214
2690-28	QSO		178/180
2690-82	QSO		214
2691-15	QSO		178
2691-16	QSO		178/214
2691-28	QSO		178
2691-82	QSO		214
26QQ-15	QSO	●	180
26QQ-16	QSO	●	180
26QQ-28	QSO	●	180
3770-23	THO		37/46/61/65
3811-16	MIR		246
3811-28	MIR		246
3812-16	MIR		246
3812-28	MIR		246
3813-16	MIR		246
3813-28	MIR		246
3814-16	MIR		246
3814-28	MIR		246
3815-16	MIR		246
3815-28	MIR		246
3816-16	MIR		246
3816-28	MIR		246
3820-16	MIR		246
3820-28	MIR		246
3821-16	MIR		246
3821-28	MIR		246
3823-16	MIR		246
3823-28	MIR		246
3824-16	MIR		246
3824-28	MIR		246
3825-16	MIR		246
3825-28	MIR		246
3826-16	MIR		246
3826-28	MIR		246
4001-12	KRU		140
4001-13	KRU		140
4001-14	KRU		140
4001-17	KRU		140
4003-12	KRU		140
4003-13	KRU		140
4003-14	KRU		140
4003-17	KRU		140
4004-03	RAY		208
4004-12	RAY		208
4004-13	RAY		208
4004-14	RAY		208
4004-17	RAY		208
4006-02	XXX		140
4006-03	XXX		140
4007-02	XXX		140
4007-03	XXX		140
4008-02	XXX		140
4008-03	XXX		140
4009-02	XXX		140
4009-03	XXX		140
4014-16	RAY		208
4014-28	RAY		208
4016-15	KRU		140
4017-15	KRU		140
4026-15	KRU		140
4026-16	KRU		140
4026-28	KRU		140
4027-15	KRU		140
4027-16	KRU		140
4027-28	KRU		140
4178-16	THO	●	80
4178-29	THO	●	80
4179-16	THO	●	80
4179-29	THO	●	80
4183-23	THO		66
4184-00	THO		62/66
4188-00	THO		62/66
4189-16	THO		66
4189-29	THO		66
418A-00	THO		62/66
4194-16	THO		65
4194-29	THO		65
4195-16	THO		65
4197-16	THO		65
419A-16	THO		65
419C-16	THO		65
419C-28	THO		65
41W8-16	THO	●	80
41W8-29	THO	●	80
41W9-16	THO	●	80
41W9-29	THO	●	80
4226-16	THO		76
4227-02	THO		76
4309-00	THO		65
4400-16	BIR		90
4400-29	BIR		90
4401-16	BIR		90
4401-29	BIR		90
4402-16	BIR		90
4402-29	BIR		90
4403-16	BIR		90
4403-29	BIR		90
4404-16	BIR		90
4404-29	BIR		90

CODE	cl. S	PAG.
4410-16	BIR	90
4410-29	BIR	90
4411-16	BIR	90
4411-29	BIR	90
4412-16	BIR	90
4412-29	BIR	90
4413-16	BIR	90
4413-29	BIR	90
4414-16	BIR	90
4414-29	BIR	90
4420-16	BIR	90
4420-29	BIR	90
4421-16	BIR	90
4421-29	BIR	90
4422-16	BIR	90
4422-29	BIR	90
4423-16	BIR	90
4423-29	BIR	90
4430-16	BIR	90
4430-29	BIR	90
4431-16	BIR	90
4431-29	BIR	90
4432-16	BIR	90
4432-29	BIR	90
4433-16	BIR	90
4433-29	BIR	90
4450-02	BIR	93
4451-02	BIR	93
4453-16	BIR	93
4454-16	BIR	93
4456-23	BIR	93
4457-23	BIR	93
4461-44	BIR	92
4461-46	BIR	92
4461-48	BIR	92
4462-44	BIR	92
4462-46	BIR	92
4462-48	BIR	92
4463-44	BIR	92
4463-46	BIR	92
4463-48	BIR	92
4464-44	BIR	92
4464-46	BIR	92
4464-48	BIR	92
4465-14	BIR	93
4465-16	BIR	93
4465-28	BIR	93
4466-00	BIR	92
4467-02	BIR	92
4467-16	BIR	92
4468-16	BIR	92
4468-29	BIR	92
4470-16	BIR	90
4470-29	BIR	90
4471-16	BIR	90
4471-29	BIR	90
4472-16	BIR	90
4472-29	BIR	90
4473-16	BIR	90
4473-29	BIR	90
4474-16	BIR	90
4474-29	BIR	90
4475-16	BIR	90
4475-29	BIR	90
4476-16	BIR	90
4476-29	BIR	90
4477-16	BIR	90
4477-29	BIR	90
4478-16	BIR	90
4478-29	BIR	90
4479-16	BIR	90
4479-29	BIR	90
4494-16	BIR	90
4494-29	BIR	90
4495-16	BIR	90
4495-29	BIR	90
4496-16	BIR	90
4496-29	BIR	90
4497-16	BIR	90
4497-29	BIR	90
4498-16	BIR	90
4498-29	BIR	90
4499-16	BIR	90
4499-29	BIR	90
4500-00	THO	64
4500-16	THO	64
4500-29	THO	64
4501-00	THO	64
4501-16	THO	64
4501-29	THO	64
4502-00	THO	64
4502-16	THO	64
4502-29	THO	64
4503-00	THO	64
4503-16	THO	64
4503-29	THO	64
4504-00	THO	64
4504-16	THO	64
4504-29	THO	64
4505-00	THO	64
4505-16	THO	64
4505-29	THO	64
4506-00	THO	64
4506-16	THO	64
4506-29	THO	64
4507-00	THO	64
4507-16	THO	64
4507-29	THO	64
4508-00	THO	64
4508-16	THO	64
4508-29	THO	64
4509-00	THO	64
4509-16	THO	64
4509-29	THO	64
4510-00	THO	64
4510-16	THO	64
4510-29	THO	64
4511-00	THO	64
4511-16	THO	64
4511-29	THO	64
4512-00	THO	64
4512-16	THO	64
4512-29	THO	64
4513-00	THO	64
4513-16	THO	64
4513-29	THO	64
4514-00	THO	64
4514-16	THO	64
4514-29	THO	64
4515-00	THO	64
4515-16	THO	64
4515-29	THO	64
4516-00	THO	64
4516-16	THO	64
4516-29	THO	64
451L-00	THO	64
451L-16	THO	64
451L-29	THO	64
451M-00	THO	64
451M-16	THO	64
451M-29	THO	64
451N-00	THO	64
451N-16	THO	64
451N-29	THO	64
451R-00	THO	64
451R-16	THO	64
451R-29	THO	64
451S-00	THO	65
451S-16	THO	65
451S-29	THO	65
451T-00	THO	65
451T-16	THO	65
451T-29	THO	65
451X-00	THO	64
451X-16	THO	64
451X-29	THO	64
4520-00	THO	72
4521-00	THO	72
4522-00	THO	72
4523-00	THO	70
4524-00	THO	70
4525-00	THO	70
4526-00	THO	70
4527-00	THO	70
4528-00	THO	70
4529-00	THO	71
4530-00	THO	71
4531-00	THO	71
4532-00	THO	71
4533-00	THO	71
4534-00	THO	71
4535-16	THO	74
4535-29	THO	74
4536-16	THO	74
4536-29	THO	74
4539-16	THO	74
4539-29	THO	74
4540-23	THO	77
4541-23	THO	77
4542-23	THO	77
4543-23	THO	77
4544-23	THO	77
4545-23	THO	77
4546-16	THO	77
4546-29	THO	77
4547-16	THO	77
4547-29	THO	77
4548-16	THO	77
4548-29	THO	77
4549-16	THO	76
4550-16	THO	76
4551-16	THO	76
4552-16	THO	76
4553-16	THO	76
4554-16	THO	76
4555-16	THO	76
4556-16	THO	76
4557-16	THO	76
4558-16	THO	76
4559-16	THO	76
4560-16	THO	76
4561-16	THO	76
4562-16	THO	76
4563-16	THO	76
4564-16	THO	76
4565-02	THO	76
4566-02	THO	76
4567-02	THO	76
4568-02	THO	76
4569-02	THO	76
456L-16	THO	76
456R-16	THO	76
456X-16	THO	76
456Y-16	THO	76
4570-02	THO	76
4571-02	THO	76

CODE	cl. S	PAG.
4572-02	THO	76
4573-02	THO	76
4574-02	THO	76
4575-02	THO	76
4576-02	THO	76
4577-02	THO	76
4578-02	THO	76
4579-02	THO	76
457A-02	THO	76
457L-02	THO	76
457R-02	THO	76
457X-02	THO	76
457Y-02	THO	76
4583-00	THO	61/66
4584-00	THO	61/66
4588-16	THO	75
4588-28	THO	75
4590-16	THO	66
4590-29	THO	66
4591-16	THO	62
4591-29	THO	62
4592-16	THO	62/66
4592-29	THO	62/66
4593-16	THO	62/66
4593-29	THO	62/66
4594-16	THO	62/66
4594-29	THO	62/66
4595-00	THO	66
4596-00	THO	66
4597-00	THO	66
4598-00	THO	66
4599-16	THO	74
4599-29	THO	74
459A-16	THO	62/66
459A-29	THO	62/66
45D0-00	THO	72
45D3-00	THO	70
45D4-00	THO	70
45D5-00	THO	70
45D6-00	THO	70
45D7-00	THO	70
45D8-16	THO	75
45D8-28	THO	75
45D9-00	THO	71
45E0-00	THO	71
45E1-00	THO	71
45E2-00	THO	71
45E3-00	THO	71
45E4-00	THO	71
45F1-16	THO	75
45F1-28	THO	75
45F2-16	THO	75
45F2-28	THO	75
45M1-00	THO	72
45M4-00	THO	70
45M7-00	THO	70
45V0-00	THO	71
45V3-00	THO	71
45W1-00	THO	72
45W2-00	THO	72
45W3-00	THO	72
45W4-00	THO	72
45W5-00	THO	72
45W6-00	THO	72
45W7-00	THO	72
45X1-00	THO	72
45X2-00	THO	72
45X8-00	THO	70
4600-16	THO	60
4600-29	THO	60
4601-16	THO	60
4601-29	THO	60
4602-16	THO	60
4602-29	THO	60
4603-16	THO	60
4603-29	THO	60
4604-16	THO	60
4604-29	THO	60
4605-16	THO	60
4605-29	THO	60
4606-16	THO	60
4606-29	THO	60
4607-16	THO	60
4607-29	THO	60
4608-16	THO	60
4608-29	THO	60
4609-16	THO	60
4609-29	THO	60
4610-16	THO	60
4610-29	THO	60
4611-16	THO	60
4611-29	THO	60
4612-16	THO	60
4612-29	THO	60
4613-16	THO	60
4613-29	THO	60
4614-16	THO	60
4614-29	THO	60
4615-16	THO	60
4615-29	THO	60
4616-16	THO	60
4616-29	THO	60
461L-16	THO	60
461L-29	THO	60
461M-16	THO	60
461M-29	THO	60
461N-16	THO	60
461N-29	THO	60
461R-16	THO	60
461R-29	THO	60
461S-16	THO	61
461S-29	THO	61
461T-16	THO	61
461T-29	THO	61
461X-16	THO	60
461X-29	THO	60
4620-00	THO	72
4621-00	THO	72
4622-00	THO	72
4623-00	THO	70
4624-00	THO	70
4625-00	THO	70
4626-00	THO	70
4627-00	THO	70
4628-00	THO	70
4629-00	THO	71
4630-00	THO	71
4631-00	THO	71
4632-00	THO	71
4633-00	THO	71
4634-00	THO	71
4635-00	THO	62
4636-00	THO	62
4637-00	THO	62
4638-00	THO	62
4640-16	THO	62
4640-29	THO	62
4642-16	THO	61
4642-28	THO	61
4643-00	THO	61
4650-16	THO	74
4650-29	THO	74
4651-16	THO	74
4651-29	THO	74
4652-00	THO	62
4653-00	THO	62
4654-00	THO	62
4656-00	THO	62
4657-00	THO	61
4658-00	THO	61
4678-16	THO	75
4678-28	THO	75
4680-16	THO	74
4680-28	THO	74
4688-16	THO	74
4688-28	THO	74
46D0-00	THO	72
46D3-00	THO	70
46D4-00	THO	70
46D5-00	THO	70
46D6-00	THO	70
46D7-00	THO	70
46D8-16	THO	75
46D8-28	THO	75
46D9-00	THO	71
46E0-00	THO	71
46E1-00	THO	71
46E2-00	THO	71
46E3-00	THO	71
46E4-00	THO	71
46M1-00	THO	72
46M4-00	THO	70
46M7-00	THO	70
46V0-00	THO	71
46V3-00	THO	71
46X1-00	THO	72
46X2-00	THO	72
46X8-00	THO	70
4700-15	HID	36
4700-16	HID	36
4701-15	HID	36
4701-16	HID	36
4702-15	HID	36
4702-16	HID	36
4703-15	HID	36
4703-16	HID	36
4704-15	HID	36
4704-16	HID	36
4705-15	HID	36
4705-16	HID	36
4706-15	HID	36
4706-16	HID	36
4707-15	HID	36
4707-16	HID	36
470A-15	HID	36
470A-16	HID	36
470B-15	HID	36
470B-16	HID	36
470C-15	HID	36
470C-16	HID	36
470D-15	HID	36
470D-16	HID	36
470E-15	HID	36
470E-16	HID	36
470F-15	HID	36
470F-16	HID	36
470G-15	HID	36
470G-16	HID	36
470H-15	HID	36
470H-16	HID	36
470L-15	HID	36
470L-16	HID	36
470M-15	HID	36
470M-16	HID	36
470N-15	HID	36
470N-16	HID	36

CODE	cl. S		PAG.
470P-15	HID	●	36
470P-16	HID	●	36
470S-15	HID	●	36
470S-16	HID	●	36
470T-15	HID	●	36
470T-16	HID	●	36
470V-15	HID	●	36
470V-16	HID	●	36
470Z-15	HID	●	36
470Z-16	HID	●	36
4710-M5	HID	●	37
4710-M6	HID	●	37
4720-00	HID		37
4721-00	HID		37
4722-00	HID		37
4723-00	TRA		37/46/101/105/107
4724-M5	HID		37
4724-M6	HID		37
4725-15	HID	●	36
4725-16	HID	●	36
4726-15	HID	●	36
4726-16	HID	●	36
472L-15	HID	●	36
472L-16	HID	●	36
472M-15	HID	●	36
472M-16	HID	●	36
472N-15	HID	●	36
472N-16	HID	●	36
472P-15	HID	●	36
472P-16	HID	●	36
472S-15	HID	●	36
472S-16	HID	●	36
472T-15	HID	●	36
472T-16	HID	●	36
472V-15	HID	●	36
472V-16	HID	●	36
472Z-15	HID	●	36
472Z-16	HID	●	36
4738-M5	HID	●	37
4738-M6	HID	●	37
4739-M5	HID	●	37
4739-M6	HID	●	37
473A-M5	HID	●	37
473A-M6	HID	●	37
473B-M5	HID	●	37
473B-M6	HID	●	37
473H-M5	HID	●	37
473H-M6	HID	●	37
473J-M5	HID	●	37
473J-M6	HID	●	37
4748-M5	HID	●	37
4748-M6	HID	●	37
4749-M5	HID	●	37
4749-M6	HID	●	37
474A-M5	HID	●	37
474A-M6	HID	●	37
474B-M5	HID	●	37
474B-M6	HID	●	37
474H-M5	HID	●	37
474H-M6	HID	●	37
474J-M5	HID	●	37
474J-M6	HID	●	37
4750-16	HID	●	45
4751-16	HID	●	45
4752-16	HID	●	45
4753-16	HID	●	45
4754-16	HID	●	45
4755-16	HID	●	45
4756-16	HID	●	45
4757-16	HID	●	45
475E-16	HID	●	45
475F-16	HID	●	45
475G-16	HID	●	45
475H-16	HID	●	45
475L-16	HID	●	45
475M-16	HID	●	45
475N-16	HID	●	45
475P-16	HID	●	45
475S-16	HID	●	45
475T-16	HID	●	45
475V-16	HID	●	45
475Z-16	HID	●	45
4760-16	HID	●	45
4761-16	HID	●	45
476E-16	HID	●	45
476F-16	HID	●	45
476G-16	HID	●	45
476H-16	HID	●	45
476L-16	HID	●	45
476M-16	HID	●	45
476N-16	HID	●	45
476P-16	HID	●	45
4770-00	HID		46
4771-00	HID		46
4772-00	HID		46
4773-00	HID		46
4775-00	TRA		37/46/101/105/107
4788-16	THO		74
4788-28	THO		74
47D8-16	THO		74
47D8-28	THO		74
47F1-16	THO		74
47F1-28	THO		74
47F2-16	THO		74
47F2-28	THO		74
4800-15	KYY		128
4800-78	KYY		128
4800-85	KYY		128
4801-15	KYY		128
4801-78	KYY		128
4801-85	KYY		128
4812-15	KYY	●	129
4812-78	KYY	●	129
4812-85	KYY	●	129
4813-15	KYY	●	129
4813-78	KYY	●	129
4813-85	KYY	●	129
4833-15	KYY		129
4833-78	KYY		129
4833-85	KYY		129
4834-15	KYY		129
4834-78	KYY		129
4834-85	KYY		129
4841-15	KYY	●	128
4841-78	KYY	●	128
4841-85	KYY	●	128
4842-15	KYY	●	128
4842-78	KYY	●	128
4842-85	KYY	●	128
4855-15	KYY	●	129
4855-78	KYY	●	129
4855-85	KYY	●	129
4856-15	KYY	●	129
4856-78	KYY	●	129
4856-85	KYY	●	129
4901-16	THO	●	75
4901-28	THO	●	75
4902-16	THO	●	75
4902-28	THO	●	75
4908-16	THO	●	75
4908-28	THO	●	75
4909-16	THO	●	75
4909-28	THO	●	75
490A-16	THO	●	75
490A-28	THO	●	75
490B-16	THO	●	75
490B-28	THO	●	75
4911-16	THO	●	75
4911-28	THO	●	75
4912-16	THO	●	75
4912-28	THO	●	75
4918-16	THO	●	75
4918-28	THO	●	75
4919-16	THO	●	75
4919-28	THO	●	75
491A-16	THO	●	75
491A-28	THO	●	75
491B-16	THO	●	75
491B-28	THO	●	75
4921-16	THO	●	74
4921-28	THO	●	74
4922-16	THO	●	74
4922-28	THO	●	74
4928-16	THO	●	74
4928-28	THO	●	74
4929-16	THO	●	74
4929-28	THO	●	74
492A-16	THO	●	74
492A-28	THO	●	74
492B-16	THO	●	74
492B-28	THO	●	74
4931-16	THO	●	74
4931-28	THO	●	74
4932-16	THO	●	74
4932-28	THO	●	74
4938-16	THO	●	74
4938-28	THO	●	74
4939-16	THO	●	74
4939-28	THO	●	74
493A-16	THO	●	74
493A-28	THO	●	74
493B-16	THO	●	74
493B-28	THO	●	74
4941-16	THO	●	75
4941-28	THO	●	75
4942-16	THO	●	75
4942-28	THO	●	75
4948-16	THO	●	75
4948-28	THO	●	75
4949-16	THO	●	75
4949-28	THO	●	75
494A-16	THO	●	75
494A-28	THO	●	75
494B-16	THO	●	75
494B-28	THO	●	75
4950-00	THO	●	68
4951-00	THO	●	68
4952-00	THO	●	68
4953-00	THO	●	68
4954-00	THO	●	68
4955-00	THO	●	68
4956-00	THO	●	68
4957-00	THO	●	68
4958-00	THO	●	68
4959-00	THO	●	68
4960-00	THO	●	68
4961-00	THO	●	68
4971-16	THO	●	74
4971-28	THO	●	74
4972-16	THO	●	74
4972-28	THO	●	74
4978-16	THO	●	74
4978-28	THO	●	74
4979-16	THO	●	74
4979-28	THO	●	74
497A-16	THO	●	74
497A-28	THO	●	74
497B-16	THO	●	74
497B-28	THO	●	74
49D0-00	THO	●	68
49D1-00	THO	●	68
49D2-00	THO	●	68
49D3-00	THO	●	68
49D4-00	THO	●	68
49D5-00	THO	●	68
49D6-00	THO	●	68
49D7-00	THO	●	68
49D8-00	THO	●	68
49D9-00	THO	●	68
49E0-00	THO	●	68
49E1-00	THO	●	68
49M0-00	THO	●	68
49M1-00	THO	●	68
49M2-00	THO	●	68
49M3-00	THO	●	68
49M4-00	THO	●	68
49M5-00	THO	●	68
49M6-00	THO	●	68
49M7-00	THO	●	68
49M8-00	THO	●	68
49M9-00	THO	●	68
49N0-00	THO	●	68
49N1-00	THO	●	68
4A41-15	KYY	●	128
4A41-78	KYY	●	128
4A41-85	KYY	●	128
4A42-15	KYY	●	128
4A42-78	KYY	●	128
4A42-85	KYY	●	128
4A55-15	KYY	●	129
4A55-78	KYY	●	129
4A55-85	KYY	●	129
4A56-15	KYY	●	129
4A56-78	KYY	●	129
4A56-85	KYY	●	129
52AQ-15	STI	●	233
52AQ-16	STI	●	233
52AQ-28	STI	●	233
52AQ-37	STI	●	233
52AR-15	STI	●	233
52AR-16	STI	●	233
52AR-28	STI	●	233
52AR-37	STI	●	233
52DQ-15	STI	●	233
52DQ-16	STI	●	233
52DQ-28	STI	●	233
52DQ-37	STI	●	233
52DR-15	STI	●	233
52DR-16	STI	●	233
52DR-28	STI	●	233
52DR-37	STI	●	233
52PQ-15	STI	●	233
52PQ-16	STI	●	233
52PQ-28	STI	●	233
52PQ-37	STI	●	233
52PR-15	STI	●	233
52PR-16	STI	●	233
52PR-28	STI	●	233
52PR-37	STI	●	233
52TQ-15	STI	●	233
52TQ-16	STI	●	233
52TQ-28	STI	●	233
52TQ-37	STI	●	233
52TR-15	STI	●	233
52TR-16	STI	●	233
52TR-28	STI	●	233
52TR-37	STI	●	233
5370-00	TRA		379/ 369
5376-00	TRA		37/46/101/105/107
5377-00	TRA		37/46/101/105/107
5378-00	TRA		37/46/101/105/107
5379-00	TRA		37/46/101/105/107
537A-00	TRA		93
5385-00	TRA		302/314/369
5410-28	UPO		378
5410-35	UPO		378
5410-37	UPO		378
5415-28	UPO		378
5415-35	UPO		378
5415-37	UPO		378
5420-28	UPO		379
5420-35	UPO		379
5420-37	UPO		379
5430-28	UPO		379
5431-28	UPO		379
54MA-28	UPO	●	378
54MA-35	UPO	●	378
54MA-37	UPO	●	378
54MB-28	UPO	●	378
54MB-35	UPO	●	378
54MB-37	UPO	●	378
54MH-28	UPO	●	378
54MH-35	UPO	●	378
54MH-37	UPO	●	378
54MJ-28	UPO	●	378
54MJ-35	UPO	●	378
54MJ-37	UPO	●	378
54NA-28	UPO	●	378
54NA-35	UPO	●	378
54NA-37	UPO	●	378
54NB-28	UPO	●	378
54NB-35	UPO	●	378
54NB-37	UPO	●	378
54NH-28	UPO	●	378
54NH-35	UPO	●	378
54NH-37	UPO	●	378
54NJ-28	UPO	●	378
54NJ-35	UPO	●	378
54NJ-37	UPO	●	378
54PA-28	UPO	●	378
54PA-35	UPO	●	378
54PA-37	UPO	●	378
54PB-28	UPO	●	378
54PB-35	UPO	●	378
54PB-37	UPO	●	378
54PH-28	UPO	●	378
54PH-35	UPO	●	378
54PH-37	UPO	●	378
54PJ-28	UPO	●	378
54PJ-35	UPO	●	378
54PJ-37	UPO	●	378
54QA-28	UPO	●	378
54QA-35	UPO	●	378
54QA-37	UPO	●	378
54QB-28	UPO	●	378
54QB-35	UPO	●	378
54QB-37	UPO	●	378
54QH-28	UPO	●	378
54QH-35	UPO	●	378
54QH-37	UPO	●	378
54QJ-28	UPO	●	378
54QJ-35	UPO	●	378
54QJ-37	UPO	●	378
54RA-28	UPO	●	378
54RA-35	UPO	●	378
54RA-37	UPO	●	378
54RB-28	UPO	●	378
54RB-35	UPO	●	378
54RB-37	UPO	●	378
54RH-28	UPO	●	378
54RH-35	UPO	●	378
54RH-37	UPO	●	378
54RJ-28	UPO	●	378
54RJ-35	UPO	●	378
54RJ-37	UPO	●	378
54SA-28	UPO	●	378
54SA-35	UPO	●	378
54SA-37	UPO	●	378
54SB-28	UPO	●	378
54SB-35	UPO	●	378
54SB-37	UPO	●	378
54SH-28	UPO	●	378
54SH-35	UPO	●	378
54SH-37	UPO	●	378
54SJ-28	UPO	●	378
54SJ-35	UPO	●	378
54SJ-37	UPO	●	378
54TA-28	UPO	●	378
54TA-35	UPO	●	378
54TA-37	UPO	●	378
54TB-28	UPO	●	378
54TB-35	UPO	●	378
54TB-37	UPO	●	378
54TH-28	UPO	●	378
54TH-35	UPO	●	378
54TH-37	UPO	●	378
54TJ-28	UPO	●	378
54TJ-35	UPO	●	378
54TJ-37	UPO	●	378
54UA-28	UPO	●	378
54UA-35	UPO	●	378
54UA-37	UPO	●	378
54UB-28	UPO	●	378
54UB-35	UPO	●	378
54UB-37	UPO	●	378
54UH-28	UPO	●	378
54UH-35	UPO	●	378
54UH-37	UPO	●	378
54UJ-28	UPO	●	378
54UJ-35	UPO	●	378
54UJ-37	UPO	●	378
54VA-28	UPO	●	379
54VA-35	UPO	●	379
54VA-37	UPO	●	379
54VB-28	UPO	●	379
54VB-35	UPO	●	379
54VB-37	UPO	●	379
54VH-28	UPO	●	379
54VH-35	UPO	●	379
54VH-37	UPO	●	379
54VJ-28	UPO	●	379
54VJ-35	UPO	●	379
54VJ-37	UPO	●	379
54WA-28	UPO	●	379
54WA-35	UPO	●	379
54WA-37	UPO	●	379
54WB-28	UPO	●	379
54WB-35	UPO	●	379
54WB-37	UPO	●	379
54WH-28	UPO	●	379
54WH-35	UPO	●	379
54WH-37	UPO	●	379
54WJ-28	UPO	●	379
54WJ-35	UPO	●	379
54WJ-37	UPO	●	379
54YA-28	UPO	●	379
54YA-35	UPO	●	379
54YA-37	UPO	●	379
54YB-28	UPO	●	379
54YB-35	UPO	●	379
54YB-37	UPO	●	379
54YH-28	UPO	●	379

CODE	cl. S			PAG.
54YH-35	UPO	●		379
54YH-37	UPO	●		379
54YJ-28	UPO	●		379
54YJ-35	UPO	●		379
54YJ-37	UPO	●		379
54ZA-28	UPO	●		379
54ZA-35	UPO	●		379
54ZA-37	UPO	●		379
54ZB-28	UPO	●		379
54ZB-35	UPO	●		379
54ZB-37	UPO	●		379
54ZH-28	UPO	●		379
54ZH-35	UPO	●		379
54ZH-37	UPO	●		379
54ZJ-28	UPO	●		379
54ZJ-35	UPO	●		379
54ZJ-37	UPO	●		379
5594-15	BLE			369
5595-15	BLE			369
5596-15	BLE			369
5746-M6	CUB	●		252
5751-40	BLE	●		368
5752-40	BLE	●		368
5758-40	BLE	●		368
5759-40	BLE	●		368
575A-40	BLE	●		368
575B-40	BLE	●		368
575H-40	BLE	●		368
575J-40	BLE	●		368
575R-40	BLE	●		368
575S-40	BLE	●		368
575T-40	BLE	●		369
575V-40	BLE	●		369
575Y-40	BLE	●		369
575Z-40	BLE	●		369
5761-40	BLE	●		368
5762-40	BLE	●		368
5768-40	BLE	●		368
5769-40	BLE	●		368
576A-40	BLE	●		368
576B-40	BLE	●		368
576H-40	BLE	●		368
576J-40	BLE	●		368
5771-40	BLE	●		368
5772-40	BLE	●		368
577A-40	BLE	●		368
577B-40	BLE	●		368
577H-40	BLE	●		368
577J-40	BLE	●		368
5840-15	SYT			114
5840-16	SYT			114
5841-15	SYT			114
5841-16	SYT			114
5842-15	SYT			116
5842-16	SYT			116
5843-15	SYT			116
5843-16	SYT			116
5858-15	SYT	●		114
5858-16	SYT	●		114
5859-15	SYT	●		114
5859-16	SYT	●		114
585A-15	SYT	●		114
585A-16	SYT	●		114
585B-15	SYT	●		114
585B-16	SYT	●		114
585H-15	SYT	●		114
585H-16	SYT	●		114
585J-15	SYT	●		114
585J-16	SYT	●		114
5868-15	SYT	●		114
5868-16	SYT	●		114
5869-15	SYT	●		114
5869-16	SYT	●		114
586A-15	SYT	●		114
586A-16	SYT	●		114
586B-15	SYT	●		114
586B-16	SYT	●		114
586H-15	SYT	●		114
586H-16	SYT	●		114
586J-15	SYT	●		114
586J-16	SYT	●		114
5878-15	SYT	●		116
5878-16	SYT	●		116
5879-15	SYT	●		116
5879-16	SYT	●		116
587A-15	SYT	●		116
587A-16	SYT	●		116
587B-15	SYT	●		116
587B-16	SYT	●		116
587H-15	SYT	●		116
587H-16	SYT	●		116
587J-15	SYT	●		116
587J-16	SYT	●		116
5888-15	SYT	●		116
5888-16	SYT	●		116
5889-15	SYT	●		116
5889-16	SYT	●		116
588A-15	SYT	●		116
588A-16	SYT	●		116
588B-15	SYT	●		116
588B-16	SYT	●		116
588H-15	SYT	●		116
588H-16	SYT	●		116
588J-15	SYT	●		116
588J-16	SYT	●		116
5901-15	TUB	●		168
5901-16	TUB	●		168
5902-15	TUB	●		168
5902-16	TUB	●		168
590A-15	TUB	●		168
590A-16	TUB	●		168
590B-15	TUB	●		168
590B-16	TUB	●		168
590H-15	TUB	●		168
590H-16	TUB	●		168
590J-15	TUB	●		168
590J-16	TUB	●		168
5911-15	TUB	●		168
5911-16	TUB	●		168
5912-15	TUB	●		168
5912-16	TUB	●		168
591A-15	TUB	●		168
591A-16	TUB	●		168
591B-15	TUB	●		168
591B-16	TUB	●		168
591H-15	TUB	●		168
591H-16	TUB	●		168
591J-15	TUB	●		168
591J-16	TUB	●		168
5921-15	TUB	●		169
5921-16	TUB	●		169
5922-15	TUB	●		169
5922-16	TUB	●		169
592A-15	TUB	●		169
592A-16	TUB	●		169
592B-15	TUB	●		169
592B-16	TUB	●		169
5931-15	TUB	●		169
5931-16	TUB	●		169
5932-15	TUB	●		169
5932-16	TUB	●		169
593A-15	TUB	●		169
593A-16	TUB	●		169
593B-15	TUB	●		169
593B-16	TUB	●		169
5941-15	TUB	●		170
5941-16	TUB	●		170
5942-15	TUB	●		170
5942-16	TUB	●		170
594A-15	TUB	●		170
594A-16	TUB	●		170
594B-15	TUB	●		170
594B-16	TUB	●		170
5D58-15	SYT	●		114
5D58-16	SYT	●		114
5D59-15	SYT	●		114
5D59-16	SYT	●		114
5D5A-15	SYT	●		114
5D5A-16	SYT	●		114
5D5B-15	SYT	●		114
5D5B-16	SYT	●		114
5D5H-15	SYT	●		114
5D5H-16	SYT	●		114
5D5J-15	SYT	●		114
5D5J-16	SYT	●		114
5D68-15	SYT	●		114
5D68-16	SYT	●		114
5D69-15	SYT	●		114
5D69-16	SYT	●		114
5D6A-15	SYT	●		114
5D6A-16	SYT	●		114
5D6B-15	SYT	●		114
5D6B-16	SYT	●		114
5D6H-15	SYT	●		114
5D6H-16	SYT	●		114
5D6J-15	SYT	●		114
5D6J-16	SYT	●		114
5D78-15	SYT	●		116
5D78-16	SYT	●		116
5D79-15	SYT	●		116
5D79-16	SYT	●		116
5D7A-15	SYT	●		116
5D7A-16	SYT	●		116
5D7B-15	SYT	●		116
5D7B-16	SYT	●		116
5D7H-15	SYT	●		116
5D7H-16	SYT	●		116
5D7J-15	SYT	●		116
5D7J-16	SYT	●		116
5D88-15	SYT	●		116
5D88-16	SYT	●		116
5D89-15	SYT	●		116
5D89-16	SYT	●		116
5D8A-15	SYT	●		116
5D8A-16	SYT	●		116
5D8B-15	SYT	●		116
5D8B-16	SYT	●		116
5D8H-15	SYT	●		116
5D8H-16	SYT	●		116
5D8J-15	SYT	●		116
5D8J-16	SYT	●		116
6419-23	DJS			157
6419-27	DJS			157
6419-38	DJS			157
6420-23	DJS			157
6420-27	DJS			157
6420-38	DJS			157
6421-15	DJS			157
6421-16	DJS			157
6421-23	DJS			157
6421-27	DJS			157
6421-38	DJS			157
6423-15	DJS			157
6423-16	DJS			157
6423-28	DJS			157
6430-15	DJS			156
6430-16	DJS			156
6430-23	DJS			156
6430-27	DJS			156
6430-38	DJS			156
6431-15	DJS			156
6431-16	DJS			156
6431-23	DJS			156
6431-27	DJS			156
6431-38	DJS			156
6432-15	DJS			156
6432-16	DJS			156
6432-23	DJS			156
6432-27	DJS			156
6432-38	DJS			156
6433-15	DJS			156
6433-16	DJS			156
6433-23	DJS			156
6433-27	DJS			156
6433-38	DJS			156
6434-15	DJS			156
6434-16	DJS			156
6434-23	DJS			156
6434-27	DJS			156
6434-38	DJS			156
6438-15	DJS			156
6438-16	DJS			156
6438-23	DJS			156
6438-27	DJS			156
6438-38	DJS			156
6440-15	DJS			156
6440-16	DJS			156
6440-23	DJS			156
6440-27	DJS			156
6440-38	DJS			156
6442-15	DJS			156
6442-16	DJS			156
6442-23	DJS			156
6442-27	DJS			156
6442-38	DJS			156
6443-15	DJS			156
6443-16	DJS			156
6443-23	DJS			156
6443-27	DJS			156
6443-38	DJS			156
6445-15	DJS			156
6445-16	DJS			156
6445-23	DJS			156
6445-27	DJS			156
6445-38	DJS			156
6458-15	BMT			162
6458-16	BMT			162
6461-15	BMT			162
6461-16	BMT			162
6462-00	BMT			162
6467-16	DJS			154
6467-23	DJS			154
6467-27	DJS			154
6468-16	DJS			154
6468-23	DJS			154
6468-27	DJS			154
6469-16	DJS			154
6469-23	DJS			154
6469-27	DJS			154
6470-15	DJS			154
6470-16	DJS			154
6470-23	DJS			154
6470-27	DJS			154
6470-38	DJS			154
6475-15	DJS			155
6475-16	DJS			155
6475-23	DJS			155
6475-27	DJS			155
6475-38	DJS			155
6482-15	DJS			155
6482-16	DJS			155
6482-28	DJS			155
6491-16	DJS			154/155
6493-16	DJS			154
6494-56	DJS			155
6494-66	DJS			155
6494-96	DJS			155
6495-16	DJS			155
6496-15	DJS			154
6496-16	DJS			154
6496-23	DJS			154
6496-27	DJS			154
6496-38	DJS			154
6497-02	DJS			154
6498-16	DJS			155
6501-15	BMT			162
6501-16	BMT			162
6501-23	BMT			162
6501-27	BMT			162
6501-38	BMT			162
6502-15	BMT			162
6502-16	BMT			162
6502-23	BMT			162
6502-27	BMT			162
6502-38	BMT			162
6510-15	BMT			162
6510-16	BMT			162
6515-15	BMT			162
6515-16	BMT			162
6518-15	BMT			162
6518-16	BMT			162
6518-28	BMT			162
6520-15	BMT			163
6520-16	BMT			163
6521-15	BMT			163
6521-16	BMT			163
6525-15	BMT			162
6525-16	BMT			162
6525-28	BMT			162
6528-15	BMT			162
6528-16	BMT			162
6529-15	BMT			163
6529-16	BMT			163
74A1-16	SHO	●		190
74A1-28	SHO	●		190
74A2-16	SHO	●		190
74A2-28	SHO	●		190
74AA-16	SHO	●		190
74AA-28	SHO	●		190
74AB-16	SHO	●		190
74AB-28	SHO	●		190
74AH-16	SHO	●		190
74AH-28	SHO	●		190
74AJ-16	SHO	●		190
74AJ-28	SHO	●		190
74B1-16	SHO	●		190
74B1-28	SHO	●		190
74B2-16	SHO	●		190
74B2-28	SHO	●		190
74BA-16	SHO	●		190
74BA-28	SHO	●		190
74BB-16	SHO	●		190
74BB-28	SHO	●		190
74BH-16	SHO	●		190
74BH-28	SHO	●		190
74BJ-16	SHO	●		190
74BJ-28	SHO	●		190
74C1-16	SHO	●		190
74C1-28	SHO	●		190
74C2-16	SHO	●		190
74C2-28	SHO	●		190
74CA-16	SHO	●		190
74CA-28	SHO	●		190
74CB-16	SHO	●		190
74CB-28	SHO	●		190
74CH-16	SHO	●		190
74CH-28	SHO	●		190
74CJ-16	SHO	●		190
74CJ-28	SHO	●		190
74D1-16	SHO	●		190
74D1-28	SHO	●		190
74D2-16	SHO	●		190
74D2-28	SHO	●		190
74DA-16	SHO	●		190
74DA-28	SHO	●		190
74DB-16	SHO	●		190
74DB-28	SHO	●		190
74DH-16	SHO	●		190
74DH-28	SHO	●		190
74DJ-16	SHO	●		190
74DJ-28	SHO	●		190
74F1-16	SHO	●		190
74F1-28	SHO	●		190
74F2-16	SHO	●		190
74F2-28	SHO	●		190
74FA-16	SHO	●		190
74FA-28	SHO	●		190
74FB-16	SHO	●		190
74FB-28	SHO	●		190
74FH-16	SHO	●		190
74FH-28	SHO	●		190
74FJ-16	SHO	●		190
74FJ-28	SHO	●		190
74G1-16	SHO	●		191
74G1-28	SHO	●		191
74G2-16	SHO	●		191
74G2-28	SHO	●		191
74GA-16	SHO	●		191
74GA-28	SHO	●		191
74GB-16	SHO	●		191
74GB-28	SHO	●		191
74GH-16	SHO	●		191
74GH-28	SHO	●		191
74GJ-16	SHO	●		191
74GJ-28	SHO	●		191
74H1-16	SHO	●		191
74H1-28	SHO	●		191
74H2-16	SHO	●		191
74H2-28	SHO	●		191
74HA-16	SHO	●		191
74HA-28	SHO	●		191
74HB-16	SHO	●		191
74HB-28	SHO	●		191
74HH-16	SHO	●		191
74HH-28	SHO	●		191
74HJ-16	SHO	●		191
74HJ-28	SHO	●		191
74L1-15	KRU	●		139
74L1-16	KRU	●		139
74L1-23	KRU	●		139
74L1-28	KRU	●		139
74L2-15	KRU	●		139
74L2-16	KRU	●		139
74L2-23	KRU	●		139
74L2-28	KRU	●		139
74L8-15	KRU	●		139
74L8-16	KRU	●		139
74L8-23	KRU	●		139
74L8-28	KRU	●		139
74L9-15	KRU	●		139
74L9-16	KRU	●		139
74L9-23	KRU	●		139

CODE	cl. S			PAG.
74L9-28	KRU	●		139
74LA-15	KRU	●		139
74LA-16	KRU	●		139
74LA-23	KRU	●		139
74LA-28	KRU	●		139
74LB-15	KRU	●		139
74LB-16	KRU	●		139
74LB-23	KRU	●		139
74LB-28	KRU	●		139
74LH-15	KRU	●		139
74LH-16	KRU	●		139
74LH-23	KRU	●		139
74LH-28	KRU	●		139
74LJ-15	KRU	●		139
74LJ-16	KRU	●		139
74LJ-23	KRU	●		139
74LJ-28	KRU	●		139
74M1-15	KRU	●		139
74M1-16	KRU	●		139
74M1-23	KRU	●		139
74M1-28	KRU	●		139
74M2-15	KRU	●		139
74M2-16	KRU	●		139
74M2-23	KRU	●		139
74M2-28	KRU	●		139
74M8-15	KRU	●		139
74M8-16	KRU	●		139
74M8-23	KRU	●		139
74M8-28	KRU	●		139
74M9-15	KRU	●		139
74M9-16	KRU	●		139
74M9-23	KRU	●		139
74M9-28	KRU	●		139
74MA-15	KRU	●		139
74MA-16	KRU	●		139
74MA-23	KRU	●		139
74MA-28	KRU	●		139
74MB-15	KRU	●		139
74MB-16	KRU	●		139
74MB-23	KRU	●		139
74MB-28	KRU	●		139
74MH-15	KRU	●		139
74MH-16	KRU	●		139
74MH-23	KRU	●		139
74MH-28	KRU	●		139
74MJ-15	KRU	●		139
74MJ-16	KRU	●		139
74MJ-23	KRU	●		139
74MJ-28	KRU	●		139
74Q1-16	SHO	●		190
74Q1-28	SHO	●		190
74Q2-16	SHO	●		190
74Q2-28	SHO	●		190
74QA-16	SHO	●		190
74QA-28	SHO	●		190
74QB-16	SHO	●		190
74QB-28	SHO	●		190
74QH-16	SHO	●		190
74QH-28	SHO	●		190
74QJ-16	SHO	●		190
74QJ-28	SHO	●		190
74S1-16	SHO	●		191
74S1-28	SHO	●		191
74S2-16	SHO	●		191
74S2-28	SHO	●		191
74SA-16	SHO	●		191
74SA-28	SHO	●		191
74SB-16	SHO	●		191
74SB-28	SHO	●		191
74SH-16	SHO	●		191
74SH-28	SHO	●		191
74SJ-16	SHO	●		191
74SJ-28	SHO	●		191
74T1-16	SHO	●		191
74T1-28	SHO	●		191
74T2-16	SHO	●		191
74T2-28	SHO	●		191
74TA-16	SHO	●		191
74TA-28	SHO	●		191
74TB-16	SHO	●		191
74TB-28	SHO	●		191
74TH-16	SHO	●		191
74TH-28	SHO	●		191
74TJ-16	SHO	●		191
74TJ-28	SHO	●		191
74V1-16	SHO	●		191
74V1-28	SHO	●		191
74V2-16	SHO	●		191
74V2-28	SHO	●		191
74VA-16	SHO	●		191
74VA-28	SHO	●		191
74VB-16	SHO	●		191
74VB-28	SHO	●		191
74VH-16	SHO	●		191
74VH-28	SHO	●		191
74VJ-16	SHO	●		191
74VJ-28	SHO	●		191
74W1-16	SHO	●		192
74W1-28	SHO	●		192
74W2-16	SHO	●		192
74W2-28	SHO	●		192
74WA-16	SHO	●		192
74WA-28	SHO	●		192
74WB-16	SHO	●		192
74WB-28	SHO	●		192
74WH-16	SHO	●		192
74WH-28	SHO	●		192
74WJ-16	SHO	●		192
74WJ-28	SHO	●		192
74X1-16	SHO	●		192
74X1-28	SHO	●		192
74X2-16	SHO	●		192
74X2-28	SHO	●		192
74XA-16	SHO	●		192
74XA-28	SHO	●		192
74XB-16	SHO	●		192
74XB-28	SHO	●		192
74XH-16	SHO	●		192
74XH-28	SHO	●		192
74XJ-16	SHO	●		192
74XJ-28	SHO	●		192
74Y1-16	SHO	●		191
74Y1-28	SHO	●		191
74Y2-16	SHO	●		191
74Y2-28	SHO	●		191
74YA-16	SHO	●		191
74YA-28	SHO	●		191
74YB-16	SHO	●		191
74YB-28	SHO	●		191
74YH-16	SHO	●		191
74YH-28	SHO	●		191
74YJ-16	SHO	●		191
74YJ-28	SHO	●		191
74Z1-16	SHO	●		191
74Z1-28	SHO	●		191
74Z2-16	SHO	●		191
74Z2-28	SHO	●		191
74ZA-16	SHO	●		191
74ZA-28	SHO	●		191
74ZB-16	SHO	●		191
74ZB-28	SHO	●		191
74ZH-16	SHO	●		191
74ZH-28	SHO	●		191
74ZJ-16	SHO	●		191
74ZJ-28	SHO	●		191
7551-15	KRU			139
7551-16	KRU			139
7551-23	KRU			139
7551-28	KRU			139
7558-15	KRU			140
7558-16	KRU			140
7558-28	KRU			140
7559-15	KRU			140
7559-16	KRU			140
7559-28	KRU			140
7583-15	KRU			139
7583-16	KRU			139
7583-23	KRU			139
7583-28	KRU			139
75F8-15	KRU			140
75F8-16	KRU			140
75F8-28	KRU			140
75F9-15	KRU			140
75F9-16	KRU			140
75F9-28	KRU			140
7624-15	KRU			138
7624-16	KRU			138
7624-23	KRU			138
7624-28	KRU			138
7696-15	KRU			138
7696-16	KRU			138
7696-23	KRU			138
7696-28	KRU			138
76C1-15	KRU	●		138
76C1-16	KRU	●		138
76C1-23	KRU	●		138
76C1-28	KRU	●		138
76C2-15	KRU	●		138
76C2-16	KRU	●		138
76C2-23	KRU	●		138
76C2-28	KRU	●		138
76C8-15	KRU	●		138
76C8-16	KRU	●		138
76C8-23	KRU	●		138
76C8-28	KRU	●		138
76C9-15	KRU	●		138
76C9-16	KRU	●		138
76C9-23	KRU	●		138
76C9-28	KRU	●		138
76CA-15	KRU	●		138
76CA-16	KRU	●		138
76CA-23	KRU	●		138
76CA-28	KRU	●		138
76CB-15	KRU	●		138
76CB-16	KRU	●		138
76CB-23	KRU	●		138
76CB-28	KRU	●		138
76CH-15	KRU	●		138
76CH-16	KRU	●		138
76CH-23	KRU	●		138
76CH-28	KRU	●		138
76CJ-15	KRU	●		138
76CJ-16	KRU	●		138
76CJ-23	KRU	●		138
76CJ-28	KRU	●		138
76D1-15	KRU	●		138
76D1-16	KRU	●		138
76D1-23	KRU	●		138
76D1-28	KRU	●		138
76D2-15	KRU	●		138
76D2-16	KRU	●		138
76D2-23	KRU	●		138
76D2-28	KRU	●		138
76D8-15	KRU	●		138
76D8-16	KRU	●		138
76D8-23	KRU	●		138
76D8-28	KRU	●		138
76D9-15	KRU	●		138
76D9-16	KRU	●		138
76D9-23	KRU	●		138
76D9-28	KRU	●		138
76DA-15	KRU	●		138
76DA-16	KRU	●		138
76DA-23	KRU	●		138
76DA-28	KRU	●		138
76DB-15	KRU	●		138
76DB-16	KRU	●		138
76DB-23	KRU	●		138
76DB-28	KRU	●		138
76DH-15	KRU	●		138
76DH-16	KRU	●		138
76DH-23	KRU	●		138
76DH-28	KRU	●		138
76DJ-15	KRU	●		138
76DJ-16	KRU	●		138
76DJ-23	KRU	●		138
76DJ-28	KRU	●		138
7705-70	RAY			200
7705-80	RAY			200
7706-70	RAY			200
7706-80	RAY			200
7707-70	RAY			200
7707-80	RAY			200
7708-70	RAY			200
7708-80	RAY			200
7736-80	RAY			208
7737-80	RAY			208
7741-70	RAY			200
7741-80	RAY			200
7742-70	RAY			200
7742-80	RAY			200
7743-70	RAY			200
7743-80	RAY			200
7744-70	RAY			200
7744-80	RAY			200
7745-80	RAY			208
7746-80	RAY			208
7751-70	RAY			204
7751-80	RAY			204
7752-70	RAY			204
7752-80	RAY			204
7753-70	RAY			204
7753-80	RAY			204
7754-70	RAY			204
7754-80	RAY			204
7755-28	RAY			207
7756-28	RAY			208
7757-28	RAY			208
7758-16	RAY			207
7758-28	RAY			207
7759-16	RAY			207
7759-28	RAY			207
7760-16	RAY			207
7760-28	RAY			207
7762-28	RAY			207
7764-28	RAY			207
7765-16	RAY			207
7765-28	RAY			207
7767-28	RAY			207
7769-28	RAY			207
7770-70	RAY			204
7770-80	RAY			204
7771-70	RAY			204
7771-80	RAY			204
7772-70	RAY			204
7772-80	RAY			204
7773-70	RAY			204
7773-80	RAY			204
7774-70	RAY			204
7774-80	RAY			204
7775-70	RAY			204
7775-80	RAY			204
7776-70	RAY			204
7776-80	RAY			204
7777-70	RAY			204
7777-80	RAY			204
7778-70	RAY			204
7778-80	RAY			204
7779-70	RAY			204
7779-80	RAY			204
7780-70	RAY			204
7780-80	RAY			204
7781-70	RAY			204
7781-80	RAY			204
77A1-70	RAY	●		200
77A1-80	RAY	●		200
77A2-70	RAY	●		200
77A2-80	RAY	●		200
77AA-70	RAY	●		200
77AA-80	RAY	●		200
77AB-70	RAY	●		200
77AB-80	RAY	●		200
77AH-70	RAY	●		200
77AH-80	RAY	●		200
77AJ-70	RAY	●		200
77AJ-80	RAY	●		200
77C1-70	RAY	●		200
77C1-80	RAY	●		200
77C2-70	RAY	●		200
77C2-80	RAY	●		200
77CA-70	RAY	●		200
77CA-80	RAY	●		200
77CB-70	RAY	●		200
77CB-80	RAY	●		200
77CH-70	RAY	●		200
77CH-80	RAY	●		200
77CJ-70	RAY	●		200
77CJ-80	RAY	●		200
77H1-70	RAY	●		200
77H1-80	RAY	●		200
77H2-70	RAY	●		200
77H2-80	RAY	●		200
77HA-70	RAY	●		200
77HA-80	RAY	●		200
77HB-70	RAY	●		200
77HB-80	RAY	●		200
77HH-70	RAY	●		200
77HH-80	RAY	●		200
77HJ-70	RAY	●		200
77HJ-80	RAY	●		200
77M1-70	RAY	●		200
77M1-80	RAY	●		200
77M2-70	RAY	●		200
77M2-80	RAY	●		200
77MA-70	RAY	●		200
77MA-80	RAY	●		200
77MB-70	RAY	●		200
77MB-80	RAY	●		200
77MH-70	RAY	●		200
77MH-80	RAY	●		200
77MJ-70	RAY	●		200
77MJ-80	RAY	●		200
77P1-70	RAY	●		204
77P1-80	RAY	●		204
77P2-70	RAY	●		204
77P2-80	RAY	●		204
77PA-70	RAY	●		204
77PA-80	RAY	●		204
77PB-70	RAY	●		204
77PB-80	RAY	●		204
77PH-70	RAY	●		204
77PH-80	RAY	●		204
77PJ-70	RAY	●		204
77PJ-80	RAY	●		204
77Q1-70	RAY			200
77Q1-80	RAY			200
77Q2-70	RAY			200
77Q2-80	RAY			200
77Q3-70	RAY			200
77Q3-80	RAY			200
77Q4-70	RAY			200
77Q4-80	RAY			200
77Q5-70	RAY			200
77Q5-80	RAY			200
77Q6-70	RAY			200
77Q6-80	RAY			200
77Q7-70	RAY			200
77Q7-80	RAY			200
77Q8-70	RAY			200
77Q8-80	RAY			200
77S1-70	RAY	●		204
77S1-80	RAY	●		204
77S2-70	RAY	●		204
77S2-80	RAY	●		204
77SA-70	RAY	●		204
77SA-80	RAY	●		204
77SB-70	RAY	●		204
77SB-80	RAY	●		204
77SH-70	RAY	●		204
77SH-80	RAY	●		204
77SJ-70	RAY	●		204
77SJ-80	RAY	●		204
77V1-70	RAY	●		204
77V1-80	RAY	●		204
77V2-70	RAY	●		204
77V2-80	RAY	●		204
77VA-70	RAY	●		204
77VA-80	RAY	●		204
77VB-70	RAY	●		204
77VB-80	RAY	●		204
77VH-70	RAY	●		204
77VH-80	RAY	●		204
77VJ-70	RAY	●		204
77VJ-80	RAY	●		204
77Y1-70	RAY	●		204
77Y1-80	RAY	●		204
77Y2-70	RAY	●		204
77Y2-80	RAY	●		204
77YA-70	RAY	●		204
77YA-80	RAY	●		204
77YB-70	RAY	●		204
77YB-80	RAY	●		204
77YH-70	RAY	●		204
77YH-80	RAY	●		204
77YJ-70	RAY	●		204
77YJ-80	RAY	●		204
7800-15	KYY			126
7800-78	KYY			126
7800-85	KYY			126
7801-15	KYY			126
7801-78	KYY			126
7801-85	KYY			126
7802-15	KYY			126
7802-78	KYY			126
7802-85	KYY			126
7812-15	KYY	●		127
7812-78	KYY	●		127
7812-85	KYY	●		127
7813-15	KYY	●		127
7813-78	KYY	●		127
7813-85	KYY	●		127
7818-15	KYY	●		127

CODE	cl. S		PAG.
7818-78	KYY	●	127
7818-85	KYY	●	127
7819-15	KYY	●	127
7819-78	KYY	●	127
7819-85	KYY	●	127
7820-15	KYY		127/129
7820-16	KYY		127/129
7820-28	KYY		127/129
7821-15	KYY		127/129
7821-16	KYY		127/129
7821-28	KYY		127/129
7822-15	KYY		127/129
7822-16	KYY		127/129
7822-28	KYY		127/129
7823-15	KYY		127/129
7823-16	KYY		127/129
7823-28	KYY		127/129
7825-15	KYY		127/129
7825-16	KYY		127/129
7825-28	KYY		127/129
7826-15	KYY		127/129
7826-16	KYY		127/129
7826-28	KYY		127/129
7827-15	KYY		127/129
7827-16	KYY		127/129
7827-28	KYY		127/129
7828-15	KYY		127/129
7828-16	KYY		127/129
7828-28	KYY		127/129
7831-15	KYY	●	126
7831-78	KYY	●	126
7831-85	KYY	●	126
7832-15	KYY	●	126
7832-78	KYY	●	126
7832-85	KYY	●	126
7833-15	KYY		127
7833-78	KYY		127
7833-85	KYY		127
7834-15	KYY		127
7834-78	KYY		127
7834-85	KYY		127
7835-15	KYY		127
7835-78	KYY		127
7835-85	KYY		127
7841-15	KYY	●	126
7841-78	KYY	●	126
7841-85	KYY	●	126
7842-15	KYY	●	126
7842-78	KYY	●	126
7842-85	KYY	●	126
7843-15	KYY	●	126
7843-78	KYY	●	126
7843-85	KYY	●	126
7844-15	KYY	●	126
7844-78	KYY	●	126
7844-85	KYY	●	126
7845-15	KYY	●	126
7845-78	KYY	●	126
7845-85	KYY	●	126
7846-15	KYY	●	126
7846-78	KYY	●	126
7846-85	KYY	●	126
7849-15	KYY	●	127
7849-78	KYY	●	127
7849-85	KYY	●	127
7850-15	KYY	●	127
7850-78	KYY	●	127
7850-85	KYY	●	127
7853-15	KYY	●	127
7853-78	KYY	●	127
7853-85	KYY	●	127
7854-15	KYY	●	127
7854-78	KYY	●	127
7854-85	KYY	●	127
7855-15	KYY	●	128
7855-78	KYY	●	128
7855-85	KYY	●	128
7856-15	KYY	●	128
7856-78	KYY	●	128
7856-85	KYY	●	128
7883-15	KYY		130
7883-16	KYY		130
7883-28	KYY		130
7884-15	KYY		130
7884-16	KYY		130
7884-28	KYY		130
7886-15	KYY		130
7887-15	KYY		130
7889-15	KYY		130
7890-15	KYY		130
7892-00	KYY		130
7892-03	KYY		130
7892-12	KYY		130
7892-13	KYY		130
7892-14	KYY		130
7893-00	KYY		130
7893-03	KYY		130
7893-12	KYY		130
7893-13	KYY		130
7893-14	KYY		130
78A0-15	KYY		126
78A0-78	KYY		126
78A0-85	KYY		126
78A1-15	KYY		126
78A1-78	KYY		126
78A1-85	KYY		126
78A2-15	KYY		126
78A2-78	KYY		126
78A2-85	KYY		126
78B3-15	KYY		127
78B3-78	KYY		127
78B3-85	KYY		127
78B4-15	KYY		127
78B4-78	KYY		127
78B4-85	KYY		127
78B5-15	KYY		127
78B5-78	KYY		127
78B5-85	KYY		127
78R5-02	KYY		130
78R6-02	KYY		130
7901-16	SHO		190
7901-28	SHO		190
7903-16	SHO		190
7903-28	SHO		190
7905-16	SHO		190
7905-28	SHO		190
7908-16	SHO		190
7908-28	SHO		190
7913-16	SHO		191
7913-28	SHO		191
7923-16	SHO		191
7923-28	SHO		191
7925-16	SHO		191
7925-28	SHO		191
7928-16	SHO		191
7928-28	SHO		191
7933-16	SHO		192
7933-28	SHO		192
7962-00	XXX		192/313/321
7963-15	SHO		192/313/321
7964-02	XXX		192/313/321
7965-03	XXX		192/313
7965-12	XXX		192/313/321
7965-13	XXX		192/313/321
7965-14	XXX		192/313/321
7966-02	XXX		192/313/321
7986-02	TRE		327
7987-02	TRE		327
7988-00	TRE		328
7988-03	TRE		327
7988-12	TRE		327
7988-13	TRE		327
7988-14	TRE		327
7989-15	TRE		328
7A41-15	KYY	●	126
7A41-78	KYY	●	126
7A41-85	KYY	●	126
7A42-15	KYY	●	126
7A42-78	KYY	●	126
7A42-85	KYY	●	126
7A43-15	KYY	●	126
7A43-78	KYY	●	126
7A43-85	KYY	●	126
7A44-15	KYY	●	126
7A44-78	KYY	●	126
7A44-85	KYY	●	126
7A49-15	KYY	●	127
7A49-78	KYY	●	127
7A49-85	KYY	●	127
7A50-15	KYY	●	127
7A50-78	KYY	●	127
7A50-85	KYY	●	127
7A53-15	KYY	●	127
7A53-78	KYY	●	127
7A53-85	KYY	●	127
7A54-15	KYY	●	127
7A54-78	KYY	●	127
7A54-85	KYY	●	127
7A74-15	KYY		126/128
7A74-16	KYY		126/128
7A74-28	KYY		126/128
7A75-15	KYY		126/128
7A75-16	KYY		126/128
7A75-28	KYY		126/128
7A77-15	KYY		126/128
7A77-16	KYY		126/128
7A77-28	KYY		126/128
7D51-70	RAY		204
7D51-80	RAY		204
7D52-70	RAY		204
7D52-80	RAY		204
7D53-70	RAY		204
7D53-80	RAY		204
7D54-70	RAY		204
7D54-80	RAY		204
7S65-15	KYY		126/128
7S65-16	KYY		126/128
7S65-28	KYY		126/128
7S66-15	KYY		126/128
7S66-16	KYY		126/128
7S66-28	KYY		126/128
7S68-15	KYY		126/128
7S68-16	KYY		126/128
7S68-28	KYY		126/128
8000-16	BIS		360
8000-23	BIS		360
8000-27	BIS		360
8000-38	BIS		360
8004-16	AQU		361
8004-23	AQU		361
8004-28	AQU		361
8010-16	BIS		360
8010-23	BIS		360
8010-27	BIS		360
8010-38	BIS		360
8014-15	TON		348

CODE	cl. S		PAG.
8014-16	TON		348
8014-28	TON		348
8019-15	TON		348
8019-16	TON		348
8019-28	TON		348
8021-16	TRE		326
8021-28	TRE		326
8022-16	TRE		326
8022-28	TRE		326
8023-16	TRE		326
8023-28	TRE		326
80C2-15	TON		348
80C2-16	TON		348
80C2-28	TON		348
80L2-15	TON		348
80L2-16	TON		348
80L2-28	TON		348
80Z1-16	TRE		326
80Z1-28	TRE		326
80Z2-16	TRE		326
80Z2-28	TRE		326
80Z3-16	TRE		326
80Z3-28	TRE		326
8113-15	TON		350
8113-16	TON		350
8113-23	TON		350
8131-16	TEA		319
8131-28	TEA		319
8131-76	TEA		319
8132-16	TEA		319
8132-28	TEA		319
8132-76	TEA		319
8133-16	TEA		319
8133-28	TEA		319
8133-76	TEA		319
8134-16	TEA		320
8134-28	TEA		320
8134-76	TEA		320
8135-16	TEA		319
8135-28	TEA		319
8135-76	TEA		319
8141-16	TRE		326
8141-28	TRE		326
8142-16	TRE		327
8142-28	TRE		327
8143-16	TRE		327
8143-28	TRE		327
8151-16	POI	●	299
8151-23	POI	●	299
8151-28	POI	●	299
8152-16	POI	●	299
8152-23	POI	●	299
8152-28	POI	●	299
815A-16	POI	●	299
815A-23	POI	●	299
815A-28	POI	●	299
815B-16	POI	●	299
815B-23	POI	●	299
815B-28	POI	●	299
815H-16	POI	●	299
815H-23	POI	●	299
815H-28	POI	●	299
815J-16	POI	●	299
815J-23	POI	●	299
815J-28	POI	●	299
818A-16	SHU	●	340
818A-28	SHU	●	340
818B-16	SHU	●	340
818B-28	SHU	●	340
818L-16	SHU	●	340
818L-28	SHU	●	340
818Q-16	SHU	●	340
818Q-28	SHU	●	340
8190-00	SHU		340
8191-00	SHU		340
8196-00	SHU		340
8197-00	SHU		340
81U1-16	TRE		326
81U1-28	TRE		326
81U2-16	TRE		327
81U2-28	TRE		327
81U3-16	TRE		327
81U3-28	TRE		327
8250-15	TON		348
8250-16	TON		348
8250-28	TON		348
8251-15	TON		350
8251-16	TON		350
8251-23	TON		350
8253-15	TON		348
8253-16	TON		348
8253-28	TON		348
8254-15	TON		348
8254-16	TON		348
8254-28	TON		348
8255-15	TON		348
8255-16	TON		348
8255-28	TON		348
8265-15	CHI		360
8265-16	CHI		360
8265-23	CHI		360
8265-27	CHI		360
8265-38	CHI		360
8265-39	CHI		360
8267-15	CHI		360
8267-16	CHI		360
8267-23	CHI		360
8267-27	CHI		360
8267-38	CHI		360
8267-39	CHI		360
8269-15	CHI		360
8269-16	CHI		360
8269-23	CHI		360
8269-27	CHI		360
8269-38	CHI		360
8269-39	CHI		360
8270-15	CHI		360
8270-16	CHI		360
8270-23	CHI		360
8270-27	CHI		360
8270-38	CHI		360
8270-39	CHI		360
82L1-16	TON	●	350
82L2-16	TON	●	350
82LA-16	TON	●	350
82LB-16	TON	●	350
82N1-15	TON	●	348
82N1-16	TON	●	348
82N1-28	TON	●	348
82N2-15	TON	●	348
82N2-16	TON	●	348
82N2-28	TON	●	348
82NA-15	TON	●	348
82NA-16	TON	●	348
82NA-28	TON	●	348
82NB-15	TON	●	348
82NB-16	TON	●	348
82NB-28	TON	●	348
82P1-15	TON	●	348
82P1-16	TON	●	348
82P1-28	TON	●	348
82P2-15	TON	●	348
82P2-16	TON	●	348
82P2-28	TON	●	348
82PA-15	TON	●	348
82PA-16	TON	●	348
82PA-28	TON	●	348
82PB-15	TON	●	348
82PB-16	TON	●	348
82PB-28	TON	●	348
82Q1-15	TON	●	348
82Q1-16	TON	●	348
82Q1-28	TON	●	348
82Q2-15	TON	●	348
82Q2-16	TON	●	348
82Q2-28	TON	●	348
82QA-15	TON	●	348
82QA-16	TON	●	348
82QA-28	TON	●	348
82QB-15	TON	●	348
82QB-16	TON	●	348
82QB-28	TON	●	348
82R1-15	TON	●	348
82R1-16	TON	●	348
82R1-28	TON	●	348
82R2-15	TON	●	348
82R2-16	TON	●	348
82R2-28	TON	●	348
82RA-15	TON	●	348
82RA-16	TON	●	348
82RA-28	TON	●	348
82RB-15	TON	●	348
82RB-16	TON	●	348
82RB-28	TON	●	348
82T1-15	TON	●	350
82T1-16	TON	●	350
82T2-15	TON	●	350
82T2-16	TON	●	350
82TA-15	TON	●	350
82TA-16	TON	●	350
82TB-15	TON	●	350
82TB-16	TON	●	350
8308-46	UDG		222
8308-49	UDG		222
8308-4V	UDG		222
8310-46	UDG		222
8310-49	UDG		222
8310-4V	UDG		222
8320-46	UDG		222
8320-49	UDG		222
8320-4V	UDG		222
8348-46	UDG		225
8348-49	UDG		225
8348-4V	UDG		225
8350-46	UDG		225
8350-49	UDG		225
8350-4V	UDG		225
8378-46	UDG		227
8378-49	UDG		227
8378-4V	UDG		227
8380-46	UDG		227
8380-49	UDG		227
8380-4V	UDG		227
83B0-46	UDG		222
83B0-49	UDG		222
83B0-4V	UDG		222
83Q1-16	UDG		228
83Q2-16	UDG		228
83R1-16	UDG		228
83R2-16	UDG		228
8671-16	LLE	●	332
8671-23	LLE	●	332
8671-28	LLE	●	332
8672-16	LLE	●	332
8672-23	LLE	●	332
8672-28	LLE	●	332

CODE	cl. S			PAG.
8673-16	LLE	●		332
8673-23	LLE	●		332
8673-28	LLE	●		332
8674-16	LLE	●		332
8674-23	LLE	●		332
8674-28	LLE	●		332
86T1-16	LLE	●		332
86T1-23	LLE	●		332
86T1-28	LLE	●		332
86T2-16	LLE	●		332
86T2-23	LLE	●		332
86T2-28	LLE	●		332
86T3-16	LLE	●		332
86T3-23	LLE	●		332
86T3-28	LLE	●		332
86T4-16	LLE	●		332
86T4-23	LLE	●		332
86T4-28	LLE	●		332
86T5-16	LLE	●		332
86T5-23	LLE	●		332
86T5-28	LLE	●		332
86T6-16	LLE	●		332
86T6-23	LLE	●		332
86T6-28	LLE	●		332
86T7-16	LLE	●		332
86T7-23	LLE	●		332
86T7-28	LLE	●		332
86T8-16	LLE	●		332
86T8-23	LLE	●		332
86T8-28	LLE	●		332
8901-75	TES			310
8901-76	TES			310
8901-85	TES			310
8902-75	TES			310
8902-76	TES			310
8902-85	TES			310
8903-75	TES			310
8903-76	TES			310
8903-85	TES			310
8904-75	TES			310
8904-76	TES			310
8904-85	TES			310
8905-75	TES			310
8905-76	TES			310
8905-85	TES			310
8906-75	TES			310
8906-76	TES			310
8906-85	TES			310
8911-15	TES			311
8911-16	TES			311
8912-15	TES			311
8912-16	TES			311
8913-15	TES			311
8913-16	TES			311
8914-15	TES			311
8914-16	TES			311
8915-15	TES			311
8915-16	TES			311
8916-15	TES			311
8916-16	TES			311
8918-15	TES			312
8918-16	TES			312
8918-28	TES			312
8920-15	TES			312
8920-16	TES			312
8920-28	TES			312
8941-15	TES		●	312
8941-16	TES		●	312
8941-28	TES		●	312
8942-15	TES		●	312
8942-16	TES		●	312
8942-28	TES		●	312
894A-15	TES		●	312
894A-16	TES		●	312
894A-28	TES		●	312
894B-15	TES		●	312
894B-16	TES		●	312
894B-28	TES		●	312
894H-15	TES		●	312
894H-16	TES		●	312
894H-28	TES		●	312
894J-15	TES		●	312
894J-16	TES		●	312
894J-28	TES		●	312
8951-15	TES		●	312
8951-16	TES		●	312
8951-28	TES		●	312
8952-15	TES		●	312
8952-16	TES		●	312
8952-28	TES		●	312
895A-15	TES		●	312
895A-16	TES		●	312
895A-28	TES		●	312
895B-15	TES		●	312
895B-16	TES		●	312
895B-28	TES		●	312
895H-15	TES		●	312
895H-16	TES		●	312
895H-28	TES		●	312
895J-15	TES		●	312
895J-16	TES		●	312
895J-28	TES		●	312
89K1-00	TES			313
89K2-00	TES			313
89K3-00	TES			313
89K4-00	TES			313
89K5-00	TES			313
89K6-00	TES			313
8A11-16	POI		●	300
8A11-28	POI		●	300
8A12-16	POI		●	300
8A12-28	POI		●	300
8A1A-16	POI		●	300
8A1A-28	POI		●	300
8A1B-16	POI		●	300
8A1B-28	POI		●	300
8A1H-16	POI		●	300
8A1H-28	POI		●	300
8A1J-16	POI		●	300
8A1J-28	POI		●	300
8A21-16	POI		●	298
8A21-23	POI		●	298
8A21-28	POI		●	298
8A22-16	POI		●	298
8A22-23	POI		●	298
8A22-28	POI		●	298
8A2A-16	POI		●	298
8A2A-23	POI		●	298
8A2A-28	POI		●	298
8A2B-16	POI		●	298
8A2B-23	POI		●	298
8A2B-28	POI		●	298
8A2H-16	POI		●	298
8A2H-23	POI		●	298
8A2H-28	POI		●	298
8A2J-16	POI		●	298
8A2J-23	POI		●	298
8A2J-28	POI		●	298
8A31-16	POI		●	299
8A31-23	POI		●	299
8A31-28	POI		●	299
8A32-16	POI		●	299
8A32-23	POI		●	299
8A32-28	POI		●	299
8A3A-16	POI		●	299
8A3A-23	POI		●	299
8A3A-28	POI		●	299
8A3B-16	POI		●	299
8A3B-23	POI		●	299
8A3B-28	POI		●	299
8A3H-16	POI		●	299
8A3H-23	POI		●	299
8A3H-28	POI		●	299
8A3J-16	POI		●	299
8A3J-23	POI		●	299
8A3J-28	POI		●	299
8A41-16	POI		●	300
8A41-28	POI		●	300
8A42-16	POI		●	300
8A42-28	POI		●	300
8A4A-16	POI		●	300
8A4A-28	POI		●	300
8A4B-16	POI		●	300
8A4B-28	POI		●	300
8A4H-16	POI		●	300
8A4H-28	POI		●	300
8A4J-16	POI		●	300
8A4J-28	POI		●	300
8A51-16	POI		●	298
8A51-23	POI		●	298
8A51-28	POI		●	298
8A52-16	POI		●	298
8A52-23	POI		●	298
8A52-28	POI		●	298
8A5A-16	POI		●	298
8A5A-23	POI		●	298
8A5A-28	POI		●	298
8A5B-16	POI		●	298
8A5B-23	POI		●	298
8A5B-28	POI		●	298
8A5H-16	POI		●	298
8A5H-23	POI		●	298
8A5H-28	POI		●	298
8A5J-16	POI		●	298
8A5J-23	POI		●	298
8A5J-28	POI		●	298
9201-46	UDG		●	222
9201-49	UDG		●	222
9201-4V	UDG		●	222
9202-46	UDG		●	222
9202-49	UDG		●	222
9202-4V	UDG		●	222
920A-46	UDG		●	222
920A-49	UDG		●	222
920A-4V	UDG		●	222
920B-46	UDG		●	222
920B-49	UDG		●	222
920B-4V	UDG		●	222
9211-46	UDG		●	227
9211-49	UDG		●	227
9211-4V	UDG		●	227
9212-46	UDG		●	227
9212-49	UDG		●	227
9212-4V	UDG		●	227
921A-46	UDG		●	227
921A-49	UDG		●	227
921A-4V	UDG		●	227
921B-46	UDG		●	227
921B-49	UDG		●	227
921B-4V	UDG		●	227
921H-46	UDG		●	227
921H-49	UDG		●	227
921H-4V	UDG		●	227
921J-46	UDG		●	227
921J-49	UDG		●	227
921J-4V	UDG		●	227
9221-46	UDG		●	227
9221-49	UDG		●	227
9221-4V	UDG		●	227
9222-46	UDG		●	227
9222-49	UDG		●	227
9222-4V	UDG		●	227
922A-46	UDG		●	227
922A-49	UDG		●	227
922A-4V	UDG		●	227
922B-46	UDG		●	227
922B-49	UDG		●	227
922B-4V	UDG		●	227
922H-46	UDG		●	227
922H-49	UDG		●	227
922H-4V	UDG		●	227
922J-46	UDG		●	227
922J-49	UDG		●	227
922J-4V	UDG		●	227
9231-46	UDG		●	222
9231-49	UDG		●	222
9231-4V	UDG		●	222
9232-46	UDG		●	222
9232-49	UDG		●	222
9232-4V	UDG		●	222
923A-46	UDG		●	222
923A-49	UDG		●	222
923A-4V	UDG		●	222
923B-46	UDG		●	222
923B-49	UDG		●	222
923B-4V	UDG		●	222
9241-46	UDG		●	222
9241-49	UDG		●	222
9241-4V	UDG		●	222
9242-46	UDG		●	222
9242-49	UDG		●	222
9242-4V	UDG		●	222
924A-46	UDG		●	222
924A-49	UDG		●	222
924A-4V	UDG		●	222
924B-46	UDG		●	222
924B-49	UDG		●	222
924B-4V	UDG		●	222
924H-46	UDG		●	222
924H-49	UDG		●	222
924H-4V	UDG		●	222
924J-46	UDG		●	222
924J-49	UDG		●	222
924J-4V	UDG		●	222
9251-46	UDG		●	222
9251-49	UDG		●	222
9251-4V	UDG		●	222
9252-46	UDG		●	222
9252-49	UDG		●	222
9252-4V	UDG		●	222
925A-46	UDG		●	222
925A-49	UDG		●	222
925A-4V	UDG		●	222
925B-46	UDG		●	222
925B-49	UDG		●	222
925B-4V	UDG		●	222
925H-46	UDG		●	222
925H-49	UDG		●	222
925H-4V	UDG		●	222
925J-46	UDG		●	222
925J-49	UDG		●	222
925J-4V	UDG		●	222
9261-46	UDG		●	222
9261-49	UDG		●	222
9261-4V	UDG		●	222
9262-46	UDG		●	222
9262-49	UDG		●	222
9262-4V	UDG		●	222
926A-46	UDG		●	222
926A-49	UDG		●	222
926A-4V	UDG		●	222
926B-46	UDG		●	222
926B-49	UDG		●	222
926B-4V	UDG		●	222
926H-46	UDG		●	222
926H-49	UDG		●	222
926H-4V	UDG		●	222
926J-46	UDG		●	222
926J-49	UDG		●	222
926J-4V	UDG		●	222
9271-46	UDG		●	222
9271-49	UDG		●	222
9271-4V	UDG		●	222
9272-46	UDG		●	222
9272-49	UDG		●	222
9272-4V	UDG		●	222
927A-46	UDG		●	222
927A-49	UDG		●	222
927A-4V	UDG		●	222
927B-46	UDG		●	222
927B-49	UDG		●	222
927B-4V	UDG		●	222
927H-46	UDG		●	222
927H-49	UDG		●	222
927H-4V	UDG		●	222
927J-46	UDG		●	222
927J-49	UDG		●	222
927J-4V	UDG		●	222
9281-46	UDG		●	225
9281-49	UDG		●	225
9281-4V	UDG		●	225
9282-46	UDG		●	225
9282-49	UDG		●	225
9282-4V	UDG		●	225
928A-46	UDG		●	225
928A-49	UDG		●	225
928A-4V	UDG		●	225
928B-46	UDG		●	225
928B-49	UDG		●	225
928B-4V	UDG		●	225
9301-46	UDG		●	225
9301-49	UDG		●	225
9301-4V	UDG		●	225
9302-46	UDG		●	225
9302-49	UDG		●	225
9302-4V	UDG		●	225
930A-46	UDG		●	225
930A-49	UDG		●	225
930A-4V	UDG		●	225
930B-46	UDG		●	225
930B-49	UDG		●	225
930B-4V	UDG		●	225
930H-46	UDG		●	225
930H-49	UDG		●	225
930H-4V	UDG		●	225
930J-46	UDG		●	225
930J-49	UDG		●	225
930J-4V	UDG		●	225
9311-46	UDG		●	225
9311-49	UDG		●	225
9311-4V	UDG		●	225
9312-46	UDG		●	225
9312-49	UDG		●	225
9312-4V	UDG		●	225
931A-46	UDG		●	225
931A-49	UDG		●	225
931A-4V	UDG		●	225
931B-46	UDG		●	225
931B-49	UDG		●	225
931B-4V	UDG		●	225
931H-46	UDG		●	225
931H-49	UDG		●	225
931H-4V	UDG		●	225
931J-46	UDG		●	225
931J-49	UDG		●	225
931J-4V	UDG		●	225
9361-46	UDG		●	227
9361-49	UDG		●	227
9361-4V	UDG		●	227
9362-46	UDG		●	227
9362-49	UDG		●	227
9362-4V	UDG		●	227
936A-46	UDG		●	227
936A-49	UDG		●	227
936A-4V	UDG			227
936B-46	UDG			227
936B-49	UDG			227
936B-4V	UDG			227

CLASSIFICAZIONI
CLASSIFICATIONS

Contatto di terra - Classe I
Earth contact - Class I

Classe III
Class III

IP20 Protezione contro l'ingresso di corpi solidi Ø >= 12mm
Protected against the penetration of solid bodies Ø >= 12mm

IP40 Protezione contro l'ingresso di corpi solidi Ø >= 1mm
Protected against the penetration of solid bodies Ø >= 1mm

IP54 Protezione contro la penetrazione della polvere e di spruzzi d'acqua
Protection against dust penetration and water splashing

IP65 Protezione completa contro la penetrazione della polvere e di getti d'acqua
Complete protection against dust penetration and water jetting

IP68 Protezione totale alla penetrazione di corpi solidi e polveri e immersione in acqua permanete.
Complete protection against dust penetration and water continuos immersion.

Montaggio diretto su superfici infiammabili
Direct mounting on normally flammable surfaces

850° Resistenza al filo incandescente
850° glow wire resistance

Prodotti Energy Saving con lampade fluorescenti
Items Energy Saving with fluorescent lamps

Prodotti con sorgenti LED
Items with LED sources

Prodotti con sorgenti LED RGB
Items with RGB LED sources

Prodotti con lampada inclusa
Items with bulb included

CABLAGGIO
WIRING

ELE Elettronico
Electronic

EDD Elettronico Dimmerabile Digitale (DALI)
Digital Dimmable Electronic (DALI)

ED1 Elettronico Dim (IGBT)
Electronic Dim (IGBT)

ED2 Elettronico Dim (TRIAC/IGBT)
Dim Electronic (TRIAC/IGBT)

EDA Elettronico Dim Analogico (1-10V)
Analogue Dim Electronic (1-10V)

EDR Elettronico Dim manuale
Manual Electronic Dim

EDT Elettronico Dim Digitale (DALI/SWITCH-DIM)
Digital Dim Electronic (DALI/SWITCH-DIM)

EMW Elettronico Multipotenza
Electronic Multi-power

EMT Elettronico Multipotenza Dim Digitale
Multi-power Digital Dimmable Electronic

EMD Elettronico multipotenza Dimmerabile (DALI)
Multi-power Digital Dimmable Electronic (DALI)

EMS Elettronico multipotenza Dimmerabile (SWICHT-DIM) - Comando tramite semplice pulsante
Multi-power Digital Dimmable Electronic (SWITCH-DIM) - Control by N.O. Pushbutton Switch

EMA Elettronico Multipotenza Dimmerabile analogico (1-10V)
Multi-power Analogue Dimmable Electronic (1-10V)

EE1 Elettronico Emergenza SA 1h
Electronic Emergency SA 1h

EM1 Elettronico Multipotenza Emergenza SA 1h
Multi-power Electronic Emergency SA 1h

COLORI
COLOURS

00 Indefinito
Indefinite

02 Trasparente
Transparent

03 Sabbiato
Sandblasted

13 Celeste
Light blue

14 Rosso
Red

15 Nero
Black

16 Bianco
White

23 Cromo
Chrome

27 Cromo Mat
Mat chrome

28 Grigio argento
Silver grey

29 Alluminio
Aluminium

30 Grigio-Trasparente
Grey-Transparent

35 Antracite
Anthracite

36 Grigio-Bianco
Grey-White

37 Corten
Corten

38 Oro
Gold

39 Brunito
Burnished

40 Acciao lucido
Polished steel

44 Nero-Rosso
Black-Red

45 Nero-Bianco
Black-White

48 Nero-Grigio argento
Black-Silver grey

49 Nero-Magenta
Black-Magenta

4V Nero-Verde
Black-Green

60 Cromo-Trasparente
Chrome-Transparent

70 Bianco-Bianco
White-White

75 Bianco - Nero
White-Black

78 Bianco-Grigio argento
White-Silver grey

76 Bianco-Bianco
White-White

79 Bianco-Cromo mat
White-Mat chrome

80 Grigio argento-Trasparente
Silver grey-Transparent

82 Blu antracite
Charcoal blue

85 Grigio argento-Nero
Silver grey-Black

M5 Nero muro
Black wall effect

M6 Bianco muro
White wall effect

Gruppo Rostirolla Srl dichiara di utilizzare componenti certificati con il marchio CE corrispondenti alle direttive europee sui livelli di emissioni ed immunità previsti dalle CEI EN 61000-6-2 e CEI EN 61000-2-4 e di essersi attenuto alle disposizioni di installazione dei fornitori. Pertanto i prodotti a catalogo possono ritenersi conformi alla direttiva 2004/108/CE del 15/12/04 (recepita dal D.Lgs 194 del 06/11/07) relativa alla Compatibilità Elettromagnetica.

MIZAR
a brand of Gruppo Rostirolla Srl

Via Friuli, 6
31038 Padernello di Paese,
Treviso - ITALY

Tel. +39 0422 8393
Fax +39 0422 950720
www.mizarlighting.com
info@mizarlighting.com

Mizar is part of:

Assil Associazione Nazionale Produttori Illuminazione
www.assil.it

Contract Design Network united brands
www.contractdesignnetwork.com

Art direction & Graphic Project
Mizar Communication Team

Photos
Varianti.it

Print
Imoco Spa

Edizione Gennaio 2016
Rif. cod. D160-00

WWW.MIZARLIGHTING.COM