Light-line systems

Luminaire family	Page	Lamps		Reflectors		Wiring		
		Fluorescent		Steel	Aluminum	5-wire mm^2	7-wire mm^2	9-wire mm^2
		TL5	TL-D					
Maxos	8.4	•	•	•	•	•	•	
TTX400	8.32	•	•	•	•	•	•	•
Tetrix TTX150	8.64	•	•	•		•	•	

Luminaire family	Wiring			Protection	Emergency lighting	Lighting control	Dynamic lighting option (color mixing)
	2x5 wire mm²	2x7 wire mm²	Bus bar (flexible positioning)	IP class			
Maxos							
	●	●	●	IP64 IP63 IP40 IP20	●	●	●
TTX400							
				IP20	●	●	
Tetrix TTX150							
				IP20	●		

Luminaire family	Wiring			Protection	Emergency lighting	Lighting control	Dynamic lighting option (color mixing)

Maxos

Maxos – the multifunctional performer, in proper style

Maxos has been designed on the basis of in-depth knowledge of end-user needs in the retail business and industry. It also offers solutions for schools, offices and public spaces. Maxos' durable quality and electrical flexibility, combined with a wide selection of reflectors and accessories, ensure well-designed, cost-effective lighting solutions with minimum energy consumption.

**Maxos is designed for fast installation and is available in TL-D and TL5 versions, in the colors silver and white, and with IP20 and IP64 protection. The possibility of integrating projectors and the flexibility in positioning electrical units make it the ideal system for retail outlets.**

www.philips.com/lighting

Facetted reflector with D6-louver

Aluminum reflector TL5
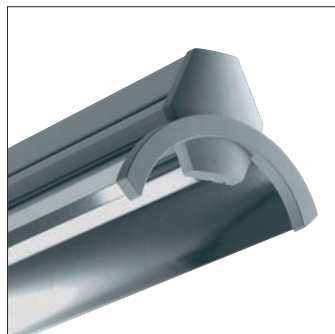
Trapeze reflector

Aluminum reflector TL-D, perforated

1

2

Main applications

1 Retail

Combining attractive design and compact dimensions with outstanding light output and distribution, Maxos is ideally suited to retail applications – e.g. food, non-food and fashion stores. The combination of TL5 lamps and aluminum reflectors, for example, delivers exactly the right amount of light precisely where it is needed. Maxos also offers extensive options to integrate projectors/spots, as well as flexibility in positioning of electrical units and spots (bus bar system). The light-line system is available in both silver and white, ensuring a perfect match with the store interior.

2 Industry

The Maxos light-line system helps to boost operating efficiency and safety in industrial facilities by delivering high lighting levels with low glare, while at the same time reducing energy consumption and maintenance. Dedicated TL-D aluminum reflectors are available for each application. Maxos has IP64 protection options across the system. A dedicated IP63 reflector unit – the outside of which can be cleaned – has been developed for the automotive and food industries. Maxos is also available in versions with up to 14 wires; this allows, among other things, zones for separate switching and emergency lighting with cabling separated from the standard mains.

3 Offices

In office environments, the Maxos light-line system delivers high lighting levels, combined with low glare, for example by means of TL5 lamps in combination with OLC semi-high-gloss high-quality aluminum optics with 3D lamellae (D6). This creates a bright, stimulating ambience that minimizes visual fatigue and improves productivity.

4 Public spaces

Maxos' appealing design aesthetic and system flexibility makes it eminently suited to a host of applications in public spaces.

3

4

Maxos TL5	Maxos bus bar system for TL5 and TL-D

Suspension brackets in silver and white

4MX656...2x (double wiring)	4MX656	4MX056...BB (bus bar)

Trunkings in silver and white

2x5-wire 2.5 mm²	5-wire 1.5 mm²	Bus bar/5-wire 2.5 mm²
2x7-wire 2.5 mm²	7-wire 1.5 mm²	Bus bar/7-wire 2.5 mm²
	5-wire 2.5 mm²	
	7-wire 2.5 mm²	

4MX691	Projector connection	4MX691...BB	4MX091...BB (bus bar)

Electrical units in silver and white

1-lamp TL5	Electrical units with 3C track	Bus bar/1-lamp/TL5	Bus bar/1-lamp/TL-D
2-lamp TL5	and bus bar adapter units	Bus bar/2-lamp/TL5	Bus bar/2-lamp/TL-D
1-lamp TL5 EL			
2-lamp TL5 EL			

4MX692...F	4MX692...D/C	4MX692...T

Reflectors and mirror inlays

Facetted reflector	Aluminum reflector	Trapeze reflector
- slotted	- narrow beam	- without mirror
- standard	- wide beam	- with medium-beam mirror
	- medium beam	- with narrow-beam mirror
	- 'double asymmetrical beam	- perforated without mirror
	- asymmetrical beam	- slotted without mirror
	- very narrow beam	

4MX693...D6	4MX693...M2	4MX693...L

Louvers and optics

Semi-high-gloss optic	Aluminum profiled louver	White louver
- wide-beam optic		
- narrow-beam optic		
White louver		
Prismatic optic		

Maxos TL-D / IP20 / IP40

SDW-T / CDM-T units

4MX014...IP63

Maxos TL-D IP64

9MX056

4MX056

5-wire 1.5 mm²
7-wire 1.5 mm²
5-wire 2.5 mm²
7-wire 2.5 mm²

4MX056...2x (double wiring)

2x5-wire 1.5 mm²
2x7-wire 1.5 mm²
2x5-wire 2.5 mm²
2x7-wire 2.5 mm²

4MX056 A.../M...E...

Extended trunkings
5-wire 1.5 mm²/300 mm
600 mm

4MX056...IP64

White only
7-wire 1.5 mm²
5-wire 2.5 mm²
7-wire 2.5 mm²

Projector connection

Electrical units with 3C track

4MX091

1-lamp TL-D
2-lamp TL-D
1-lamp TL-D EL
2-lamp TL-D EL
2-lamp TL-D FSG32 mm

4MX013

CDM-T lamp
SDW-T lamp
Includes facetted reflector

4MX014...IP63

White only
1-lamp TL-D
2-lamp TL-D
1-lamp TL5
2-lamp TL5

4MX091...IP64

1-lamp TL-D
2-lamp TL-D
1-lamp TL-D EL
2-lamp TL-D EL
1-lamp TL-D FF-sign
2-lamp TL-D FF-sign

4MX092...T

Trapeze reflector
- without mirror
- with wide-beam mirror
- with narrow-beam mirror
- 'wall washer'
- perforated without mirror
- slotted without mirror

4MX092...F

Facetted reflector
- without mirror
- with wide-beam mirror
- with asymmetrical beam mirror
- slotted without mirror

4MX092...D/C/Wing

Aluminum reflector
- narrow beam
- wide beam
- asymmetrical beam
- very narrow beam
- wide beam / perforated
Wing optic reflector/indirect

4MX092...IP64

Trapeze reflector

4MX093...L

White louver
Silver louver

4MX093... L/PL/C6/D6

White louver
Prismatic optic
Semi-high-gloss optic
- wide-beam optic
- narrow-beam optic

Fast and smooth installation

Maxos can be quickly and easily set up by installers of all ability levels, thanks to its clearly definable components and simple click together assembly.

A variety of suspension brackets can be clicked into place along the trunking groove.

The two trunkings are connected via a sturdy coupler. Then the prewired 5- or 7-pole electrical connections can be manually connected.

The gear units are secured in the trunking via a two-way turnable clip, simply click them into place. The locks are made of steel.

Reflectors are fitted onto the same mounting points as the gear units.

Louvers and optics can be easily put in place, enabling easy relamping.

Maxos aluminum reflectors and optics

The aluminum reflectors for TL5 and TL-D lamps are optimized for applications in supermarkets, shops, distribution centers and industry. They are made of high-quality aluminum and are available for electrical units holding 1 or 2 TL5 or TL-D lamps. A semi-high-gloss (D) aluminum reflector is available for wide-beam, medium-beam, narrow-beam, asymmetrical beam and (double-) asymmetrical-beam light distributions. For very narrow beams a high-gloss (C) aluminum reflector is available. For TL-D, a perforated decorative high-gloss aluminum reflector in wide beam can be ordered.

TL5 aluminum reflectors can be equipped with aluminum louvers with profiled lamellae (M2) or with a simple white steel louver (L) for glare reduction.

All the reflectors are fixed to the electrical unit via a simple click. They can be connected to each other in a line by means of an overlap; for the TL5 versions, additional coupling pieces (9MX056 CP/TL5) are available as an option. Also for the TL5 versions, decorative end-plates for the beginning and end of the light-line are available as accessories.

| | Maxos TL5 | |
	Aluminum reflectors and optics	
Type	4MX692 (TL5 reflector)
	4MX693 (TL5 louver/optic)
Suitable electrical unit	For 1 and 2 TL5 35, 49, 54 and 80 W versions
Material and light distribution	Reflector: Semi-high gloss aluminum (D), narrow beam (-NB) Semi-high gloss aluminum (D), medium beam (-MB) Semi-high gloss aluminum (D), wide beam (-WB) Semi-high gloss aluminum (D), asymmetric beam (-A) Semi-high gloss aluminum (D), double asymmetric beam (-DA) High gloss aluminum (C), very narrow beam (-NB) Louver: Aluminum with profiled lamelae (M2) Steel, white coated (L-D WH)
Accessory	Aluminum reflector end caps (9MX056 EP/TL5 SI / WH)*, coupling pieces (9MX056 CP/TL5) *not for C-NB reflector
Remarks	Optics and louvers are suitable for 1- and 2 lamp versions
Main applications	Retail (e.g. food, fashion)

| | Maxos TL-D | |
	Aluminum reflectors	
Type	4MX092
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions
Material and light distribution	Semi-high gloss aluminum (D), narrow beam (-NB), 1- and 2-lamp Semi-high gloss aluminum (D), wide beam (-WB), 1- and 2-lamp Semi-high gloss aluminum (D), asymmetrical beam (-A), 1- and 2-lamp High gloss aluminum (C), very narrow beam (-NB), 1-lamp High gloss aluminum, perforated (CP), wide beam (-WB), 1-lamp
Remarks	*2-lamp versions of aluminum reflectors to be used with dedicated electrical unit (with lampholder F32 mm)
Main applications	Industry, logistics, retail

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

Maxos 4MX692 TL5 aluminum reflector with semi-high-gloss mirror, available for narrow-, medium-, wide-beam, asymmetrical and double asymmetrical light distribution (D-NB/D-MB/D-WB/D-A/D-DA)

Maxos 4MX692 TL5 aluminum reflector with high-gloss mirror for very narrow-beam light distribution

Maxos 4MX692 TL5 aluminum reflector for narrow, medium, wide, asymmetrical or double-asymmetrical-beam light distribution, with aluminum optic with profiled lamellae (4MX693 M2) or white lamellae louver (4MX693 L-D)

TL-D

Maxos 4MX092 TL-D aluminum reflector for 1-lamp electrical unit with a semi-high-gloss mirror for narrow or wide-beam light distribution (D-NB/D-WB) or a high-gloss mirror for narrow-beam light distribution (C-NB)

Maxos 4MX092 TL-D perforated aluminum reflector for wide-beam light distribution and upward lighting

Maxos 4MX092 TL-D aluminum reflector for 2-lamps electrical units with 32 mm lamp holder (F32)

Maxos facetted reflectors and optics

Facetted reflectors for TL5 and TL-D give shops and offices a high-class appearance.
They are made of steel, with a white or silver coating, and are available for electrical units holding 1 or 2 TL5 or TL-D lamps.
The facetted reflector can be integrated with a semi-high-gloss (D6) OLC optic of high-quality aluminum. This optic has parabolic side reflectors and parabolic lamellae, and it can create either a medium beam (with an integrated white top reflector) or a narrow beam (with an integrated mirror top reflector). Moreover, a prismatic acrylic cover (P) and a white steel louver (L-F) are also available.

End-plates for the beginning and end of the light-line are available as accessories.

	Maxos TL5		Maxos TL-D
	Facetted reflectors and optics		Facetted reflectors and optics
Type	4MX692 (TL5 reflector)	Type	4MX092 (TL-D reflector)
	4MX693 (TL5 louver/optic)		4MX093 (TL-D louver/optic)
Suitable electrical unit	For 1 and 2 TL5 35, 49, 54 and 80 W versions	Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions
Material and light distribution	Reflector: Steel, facetted (F) in white (WH) or silver (SI) Reflector option: Steel, facetted (F) with high-gloss aluminum mirror, wide beam (-WB) Steel, facetted (F) with high-gloss aluminum mirror, asymmetrical beam (-A) Optic: Semi-high gloss, high-quality aluminum, (D6), wide beam (-WB) Semi-high gloss, high-quality aluminum, (D6), narrow beam (-NB) Cover: PMMA prismatic cover (P) Louver: Steel lamellae, white (L-F WH)	Material and light distribution	Reflector: Steel, facetted (F) Steel, facetted (F) with high gloss aluminum mirror, wide beam (-WB) Steel, facetted (F), with high gloss aluminum mirror, asymmetrical beam (-A) Reflector option: Steel, facetted (F) with symmetrical beam, direct/indirect (F-S-D/I) Louver: Semi-high gloss, high-quality aluminum, (D6), wide beam (-WB) Semi-high gloss, high-quality aluminum, (D6), narrow beam (-NB) PMMA prismatic cover (P) Steel lamellae, white (L-F WH)
Installation	Click-in fixation on electrical unit	Installation	Click-in fixation on electrical unit
Accessory	Facetted reflector end caps (9MX056 EP-F WH/SI), facetted reflector coupling pieces (9MX056 CP-F WH/SI)	Accessory	Facetted reflector end caps (9MX056 EP-F WH/SI), facetted reflector coupling pieces (9MX056 CP-F WH/SI)
Remarks	Reflectors and optics are suitable for 1- and 2 lamp versions	Remarks	*2-lamp versions of facetted reflectors to be used with dedicated electrical unit (with lampholder F32 mm) Reflectors and optics are suitable for 1- and 2-lamp versions
Main applications	Offices, schools, cash areas in shops	Main applications	Offices, schools, cash areas in shops

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

TL-D

Maxos 4MX692 TL5 facetted reflector, also for wide or asymmetric-beam light distribution (F/F-WB/F-A)

Maxos 4MX092 TL-D facetted reflector, also for wide or asymmetric-beam light distribution (F/F-WB/F-A)

Maxos 4MX692 TL5 slotted facetted reflector with direct/indirect light distribution (F-S-D/I); a version for emergency lighting is also available (F-S-D/I-EL)

Maxos 4MX092 TL-D slotted facetted reflector with direct/indirect light distribution (F-S-D/I); a version for emergency lighting is also available (F-S-D/I-EL)

Maxos 4MX692 TL5 facetted reflector, for wide or asymmetric-beam light distribution with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (4MX693 D6)

Maxos 4MX092 TL-D facetted reflector, for wide or asymmetric-beam light distribution, with OLC semi-high-gloss high-quality aluminum optic with 3D lamellae (4MX093 D6)

Maxos 4MX692 TL5 facetted reflector with prismatic refractor (4MX693 P)

Maxos 4MX092 TL-D facetted reflector with prismatic refractor (4MX093 P)

Maxos 4MX692 TL5 aluminum reflector with semi-high-gloss mirror for narrow, medium, wide, asymmetrical or double-asymmetrical-beam light distribution, with lamellae louver for facetted reflector (4MX693 L-F)

Maxos 4MX092 TL-D facetted reflector, for narrow or wide-beam light distribution, with a lamellae louver for facetted reflector (4MX093 L)

Maxos trapeze reflectors and optics

The sturdy trapeze reflectors for TL5 and TL-D are designed primarily for applications in industry, supermarkets and shops. They are made of steel with a white or silver outer finish. The reflectors are optimized for electrical units holding 1 or 2 TL5/TL-D lamps and provide an excellent light output ratio.

There are basic trapeze reflectors without an additional mirror inlay and trapeze reflectors with dedicated aluminum mirror inlays. These are designed for wide-beam, narrow-beam and asymmetrical wall-washing light distributions. Moreover, perforated and slotted trapeze reflectors (without mirror inlays) can be ordered for design reasons or to create an indirect uplighting effect. For glare reduction, the trapeze reflector can be equipped with a steel louver.

Emergency lighting, for TL-D only

If emergency lighting by means of separately connected orientation light units (E27-sockets) is required, special trapeze reflectors with a bigger cut-off must be used. The length of this reflector corresponds to that of the 58 W trunking length. A 36 W electrical unit plus the orientation light unit will fill this length.

Maxos TL5	
Trapeze reflectors and optics	
Type	4MX692 (TL5 reflector)
	4MX693 (TL5 louver/optic)
Suitable electrical unit	For 1- and 2 TL5 49, 54 and 80 W versions
Material and light distribution	Reflector:
	Steel, trapeze (T)
	Steel, trapeze (T) with high gloss aluminum mirror, medium beam (-MB)
	Steel, trapeze (T) with high gloss aluminum mirror, narrow beam (-NB)
	Reflector option:
	Slotted, direct/indirect (T-S-D/I) or perforated (T-P)
	Louver:
	Steel lamellae, white (L-T WH)
Installation	Click-in fixation on electrical unit
Accessory	Trapeze reflector end caps (9MX056 EP1-T WH/SI)
Remarks	Reflectors and optics are suitable for 1- and 2-lamp versions
Main applications	Retail and general industry

Maxos TL-D	
Trapeze reflectors and optics	
Type	4MX092 (TL-D reflector)
	4MX093 (TL-D louver/optic)
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Reflector:
	Steel, trapeze (T)
	Steel, trapeze (T), with high gloss aluminum mirror, wide beam (-WB)
	Steel, trapeze (T), with high gloss aluminum mirror, narrow beam (-NB)
	Steel, trapeze (T), with high gloss aluminum mirror, asymmetrical half reflector (-A)*
	Steel, trapeze (T), with high gloss aluminum mirror, asymmetrical wallwasher (TI-A)*
	Reflector option:
	Slotted, direct/indirect (T-S-D/I) or perforated (T-P)
	Optic and louver:
	Steel lamellae, white (L-T WH) or silver (L-T SI)
Installation	Click-in fixation on electrical unit
Accessory	Trapeze reflector end caps 1 and 2-lamp version (9MX056 EP1-T WH/SI, 9MX056 EP2-T WH/SI)
Remarks	* For 1-lamp version only
	Dedicated reflectors for 1- and 2-lamp TL-D versions
Main applications	Retail and general industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

TL-D

Maxos 4MX692 TL5 trapeze reflector, also for narrow or wide-beam light distribution (T/T-NB/T-WB)

Maxos 4MX092 TL-D perforated trapeze reflector

Maxos 4MX692 TL5 perforated trapeze reflector (T-P)

Maxos 4MX092 TL-D trapeze reflector, for narrow or wide-beam light distribution, with lamellae louver for trapeze reflector (4MX093 L-T)

Maxos 4MX692 TL5 trapeze reflector, for narrow or wide-beam light distribution, with a lamellae louver for trapeze reflector (4MX693 L-T)

Maxos 4MX092 TL-D trapeze reflector, also for narrow or wide-beam light distribution (T/T-NB/T-WB)

Maxos 4MX692 TL5 slotted trapeze reflector (T-S-D/I)

Maxos 4MX092 TL-D trapeze reflector, also for narrow or wide-beam light distribution (T/T-NB/T-WB)

Maxos, 4MX092 TL-D asymmetrical trapeze reflector

Light-line systems

Maxos TL-D Wing optic

The Wing optic is a reflector solution creating soft indirect light, without glare, and is ideal for office and shop applications. Designed for electrical units holding 1 or 2 TL-D lamps, it is made of white powder-coated steel and a perforated curved sheet conceals the lamps. The 2-lamp version must be used with special electrical units (lamp holder F32 mm). TL5 solutions are available on request.

The Wing optic is fixed to the electrical unit via a simple click-in. The reflectors can be connected to each other without additional coupling pieces, as they are delivered with an integrated connection side at one end of the reflector. Decorative end-plates for the beginning and end of the light-line are available as accessories.

	Maxos TL-D Wing optic
Type	4MX092 WG
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W* versions
Material	Steel, white coated (WH)
Installation	Click-in fixation on electrical unit

Accessory	End plates (9MX056 EP-WG)
Remarks	*2-lamp versions of the Wing optic to be used with dedicated electrical unit (with lampholder F32 mm)
Main applications	shops, offices

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

4MX092 WG Wing optic

Maxos electrical units

The electrical units for Maxos trunking sections can hold 1 or 2 TL5 or TL-D lamps and are designed for quick and reliable click-in mounting. They are made of steel with a white or silver coating.

The electrical units can be equipped with HFP electronic ballasts, HFR dimming ballasts (allowing light output of a TLD-lamp to be regulated from 3 to 100%), HF-DALI ballasts or low-loss conventional ballasts. HFR and HF-DALI units must be mounted to 7-wire trunking sections. The conventional ballasts are available parallel compensated (IC) or inductive (I).

Special electrical units equipped with an emergency battery pack for 1 or 3 hours (EL1/EL3) are available. These units must be used with 7-wire trunking sections. If trunkings with double wiring are used, one flat ribbon cable will be connected to the central battery. This provides a completely separate emergency lighting circuit.

Some 2-lamp TL-D reflectors need dedicated electrical units (F32) with a short distance between the lamps. On request, the TL-D electrical units can be upgraded from IP20 to IP40 with an IP40 set that is available as an accessory.

Maxos TL5	
Electrical units	
Type	4MX691
Lamp	Fluorescent:
	1 × or 2 × MASTER TL5 / G5 / 35, 54, 49, 80 W
Gear	Electronic, 220 - 240 V / 50 - 60 Hz:
	High Frequency Performer (HFP)
	High Frequency Regulator (HFR)
	High Frequency Regulator, DALI (HFD)
Option	Emergency lighting:
	1 hour (EL1)
	3 hours (EL3)
Material	Sheet steel in white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking

Maxos TL-D	
Electrical units	
Type	4MX091
Lamp	Fluorescent:
	1 × or 2 × MASTER TL-D / G13 / 36, 58 W
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz:
	Inductive, parallel compensated (IC)
	Electronic, 220 - 240 V / 50 - 60 Hz:
	High Frequency Performer (HFP)
	High Frequency Regulator (HFR)
	High Frequency Basic (HF-Dali)
Option	Emergency lighting:
	1 hour (EL1), 3 hours (EL3)
	2-lamp lampholder of 32 mm (F32) to be used in facetted and aluminum reflectors, standard is 115 mm
	Master/slave unit: pair of electrical units one with gear (M) one without gear (S)
Material	Sheet steel in white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking
Remarks	Dedicated IP40 sets for upgrading from IP20 to IP40

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

Maxos 4MX691 TL5 1-lamp
electrical unit

Maxos 4MX691 TL5 2-lamp
electrical unit

TL-D

Maxos 4MX091 TL-D 1-lamp
electrical unit

Maxos 4MX091 TL-D 2-lamp
electrical unit

Maxos 4MX091 TL-D 2-lamp
electrical unit; 32 mm lamp holders
(F32) enable smaller solutins using
1/2-lamp reflectors.

Maxos standard trunking

The trunking fulfils two functions: first, it provides a sturdy in-line mounting rail on which to fix the electrical units, and second, it provides a housing for the electrical cables that bring power to the units. All the trunking sections are made of hot-dip galvanized steel with a white or silver finish and available in lengths of 1, 2 and 3 electrical units 36 W and 58 W.

A flat ribbon cable (5 or 7 wires) or two flat ribbon cables (2 x 5 or 2 x 7 wires) are integrated in the trunking and guarantee (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling. The 7-wire cable is used to integrate light regulation or emergency lighting for those electrical units that are equipped with emergency battery packs. Double wiring (2 x 5 or 2 x 7 wires) is needed to provide a completely separate mains supply to the electrical units. Double wiring is mostly used for emergency lighting by central emergency batteries or separate switching. Hence, no extra contact blocks or wiring are required.

For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory). On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.

The trunking is available with a complete range of interchangeable components that optimize flexibility. The outstanding stability of the sections and coupling pieces allows suspension intervals of 3.4 to 5 m (TL5) / 4.8 m (TL-D).

Maxos TL5	
Standard trunkings	
Type	4MX656
Length	1 x, 2 x or 3 x length of electrical unit 49 W (491, 492 or 493), for 80 and 35 W electrical units as well
	1 x, 2 x or 3 x length of electrical unit 54 W (541, 542 or 543)
Electrical circuit option	1 x or 2 x flat ribbon cable, 5 or 7 wires:
	1 x or 2 x 5 x 1.5 or 2.5 mm² (1x5x2.5 etc)
	1 x or 2 x 7 x 1.5 or 2.5 mm² (1x7x2.5 etc)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece, mains connection, trunking coupling pieces, etc. (see chapter Maxos accessories)
Remarks	7-wire cable for integration of light regulation or emergency lighting
	Double wiring for emergency lighting by central emergency batteries or separate switching

Maxos TL-D	
Standard trunking	
Type	4MX056
Length	1 x, 2 x or 3 x length of electrical unit of 58 W (581, 582 or 583) or 36 W (361, 362 or 363)
Electrical circuit option	1 x or 2 x flat ribbon cable, 5 or 7 wires:
	1 x or 2 x 5 x 1.5 or 2.5 mm² (1x5x2.5 etc)
	1 x or 2 x 7 x 1.5 or 2.5 mm² (1x7x2.5 etc)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece and mains connection set (9MX056 EP SET), trunking coupling pieces etc. (see chapter Maxos accessories)
Remarks	7-wire cable for integration of light regulation or emergency lighting
	Double wiring for emergency lighting by central emergency batteries or separate switching

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5/TL-D

Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with 5-wire flat ribbon cable (5x1.5/5x2.5)

Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with 7-wire flat ribbon cable (7x1.5/7x2.5); for dimming (1-10 V), DALI or emergency lighting with local battery

Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with two 5-wire flat ribbon cables (2x5x1.5/2x5x2.5); to create different zones in an application or use central emergency systems

Maxos 4MX656 TL5 and 4MX056 TL-D standard trunking section with two 7-wire flat ribbon cables (2x7x1.5/2x7x2.5); to create different lighting zones with dimming or separate emergency lighting

Maxos projectors and HID solutions

Accent lighting is part of the integral concept of Maxos. The lightlines can be equipped with almost the full range of different projectors next to all the reflector solutions based on TL5 and TL-D fluorescent lamps. Often in specific areas of shops projectors are requested in addition to fluorescent general lighting.

For Maxos trunkings with flat ribbon cable (5 x 2.5, 7 x 2.5), units with integrated 3C-rail are available. These units can be clicked into the trunking sections like a regular electrical unit.
Projectors with a 3C adapter can be fixed to the system. These can be fixed to the trunking similar to a regular electrical unit. 4MX013 facetted reflector units with HID lamps are often used to illuminate fruit and vegetables in supermarkets.

The electrical components are integrated in a white-coated housing with the shape of a facetted reflector. The lengths of these units correspond to those of the 36 W trunking.

End-plates for the beginning and the end of the light-line are available as accessories.

Type	4MX013
	Facetted reflector with HID-lamp units
Suitable trunking unit	For trunking with flat ribbon cable (5/7 wires), length of electrical unit 36 W (361), other lengths available on request
Light source	1-lamp or 2-lamp version:
	HID:
	1 x or 2 x MASTER SDW-T / PG12-1 / 50, 100 W
	1 x or 2 x MASTERColour CDM-T / G12 / 70 W
	Double lamp version:
	1 x MASTER SDW-T / PG12-1 / 50 W and 1 x MASTERColour CDM-T / G12 / 35 W
	1 x MASTER SDW-T / PG12-1 / 100 W and 1 x MASTERColour CDM-T / G12 / 70 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz: Parallel compensated (IC)
Material	Steel, white-coated, shape of a facetted reflector (F)
Installation	Turning bolt fixation (mechanical and electrical) on trunking
Accessory	Decorative end-plates
Main applications	Retail (e.g. food, fashion)

Type	4MX094
	3C units for projectors
Suitable trunking and projectors	For trunkings with flat ribbon cable (5/7 wires) to fix projectors with 3C adapter
Length	Length of electrical unit 58 W (581) or 49 W (491)
Projector fixation	3-circuit power track adapter (3C)
Material	Sheet steel, white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking
Main applications	Retail (e.g. food, fashion)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Maxos 4MX013 HID-lamp units

Maxos 4MX094 unit with integrated 3C rail and projector with 3C adapter

Maxos TL-D extended trunking

The extended trunking sections are made of hot-dip galvanized steel with a white or silver finish. They are available in lengths of 1 and 2 electrical units of 58 W. Extensions of 300 and 600 mm in the middle only (M), or in the middle and at the end of these trunking sections (ME), allow interrupted lines where the gaps between the electrical units correspond to the extended trunking length. The gaps can be filled by blind covers, available as accessories.

A flat ribbon cable (5 wires) is integrated in the trunking and guarantees (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling.
For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory).
On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.

Type	4MX091
	Projector adapter for Bus bar system
Suitable trunking and projectors	For trunkings with Bus bar system only, to fix specific projectors with ceiling base plate
Length	600 mm
Material	Sheet steel, white (WH) or silver (SI)
Installation	Click-in fixation (mechanical and electrical) on trunking. Most Philips projectors, versions with ceiling base plate - can be fixed by screwing the base plate to the projector adapter units
Main applications	Retail (e.g. food, fashion)

	Maxos TL-D Extended trunking
Type	4MX056
Length	1 × or 2 × length of electrical unit 58 W (581 or 582)
Electrical circuit option	Flat ribbon cable, 5 or 7 wires Others on request
Extention length	300 and 600 mm in the middle (M), or in the middle and at the end (ME)
Material	Hot-dip galvanized steel in white (WH) or silver (SI)
Accessory	Trunking end piece and mains connection set (9MX056 EP SET), trunking coupling pieces etc. (see chapter Maxos accessories)

Maxos 4MX091 projector adapter

Maxos 4MX056 TL-D extended trunking section M300/E300/M600/E600 and blind cover, used to close the spaces in the trunking where no electrical units are mounted; available in white or silver

Maxos TL-D IP64 trunking sections

The IP64 trunking sections are made of hot-dip galvanized steel with a white powder coating. They are available in lengths of 1, 2 and 3 electrical units 36 W and 58 W. Special seals between the sections and waterproof trunking end-pieces are used (to be ordered separately).

A flat ribbon cable (5 or 7 wires) is integrated in the trunking and guarantees (in combination with an integrated phase selection switch and contact blocks) safe and correct cabling. The 7-wire cable is used to integrate light regulation or emergency lighting for those electrical units that are equipped with emergency battery packs. Hence, no extra contact blocks or wiring need to be installed.

For suspended light-lines, the trunking sections are connected using the integrated electrical connector and a sturdy external mechanical coupling piece (accessory). Surface-mounted light-lines use the same integrated electrical connector and an internal coupler (accessory).
On the upper part of the trunking section, special knock-out openings enable cable entry wherever needed.
The IP64 trunking can be equipped with special IP64 electrical units and different reflectors.
The outstanding stability of the sections and coupling pieces allows suspension intervals of 3.4 to 4.8 m.

	Maxos TL-D IP64 Trunking (to be used with IP64 electrical unit only)		
Type	4MX056	Material	Hot-dip galvanized steel, coated white (WH)
Length	1 x, 2 x and 3 x length of electrical unit 36 and 58 W	Accessory	Trunking end pieces and mains connection set (9MX056 EP IP64 SET), gasket between trunkings (9MX056 GK IP64), blind cover (9MX056 BC36/58 IP64), PC procetion tube
Wiring (1.5 or 2.5 mm²)	Standard 5 pole (5x1.5 or 2.5) Standard 7 pole for dimming (7x1.5 or 2.5)		
Option	Double wiring (for additional functionality)	Remarks	Not for permanent wet conditions, corrosion possible over time

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Maxos 4MX056 TL-D IP64 trunking section

Two trunking end caps including 1 electrical connector

Blind cover IP64, white

Gasket between trunking sections

Maxos TL-D IP64 electrical units

The IP64 electrical units are designed for quick and reliable mounting in Maxos IP64 trunking sections. They are made of steel with a white powder finish.

The high IP classification is possible due to special seals between the trunking sections and to lamp holders with gasketted screw rings on the IP64 electrical units. Maxos IP by is not designed for applications in regular humid environments.

A connector block is mounted for electrical connection to the trunking. The electrical units are equipped with electronic ballasts (including dimmable and DALI) or low-loss conventional ballasts. The conventional ballasts are available as parallel compensated (IC) or inductive (I). The units can hold 1 or 2 TL-D lamps.

Dimmable versions are delivered with HF-R electronic ballast, allowing the light output of the TL-D lamps to be regulated from 3 to 100%. HF-R and HF-DALI units must be mounted to 7-wire trunking sections.

The electrical units can be combined with dedicated IP64 trapeze reflectors and a selection of aluminum reflectors. These aluminum reflectors offer a choice of narrow-beam, asymmetrical-beam and very-narrow-beam light distributions for 1 x 58 W. Units which comply with the FF rules (limited surface temperature) are available on request. Special electrical units equipped with an emergency battery pack for 1 or 3 hours (EL1/EL3) are available. These units must be used with 7-wire trunking sections.

	Maxos TL-D IP64 Electrical units (to be used with IP64 trunking only)		Material	Sheet steel in white (WH)
Type	4MX091		Accessory	Protection tube
Lamp	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 36, 58 W		Remarks	Not for permanent wet conditions, corrosion possible over time
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive (I) Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP) High Frequency Regulator (HFR)			To be used with standard trapeze reflectors (1-lamp) or dedicated IP64 trapeze reflectors (2-lamp) or dedicated aluminum reflectors (on request)
Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)		IP 64 F D	

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Maxos 4MX091 TL-D IP64 1-lamp electrical unit

Maxos 4MX091 TL-D IP64 2-lamp electrical unit

Maxos TL-D IP63 closed reflector units

Maxos IP63 closed reflector units are ready-to-install dedicated luminaires for the Maxos trunking system. They are designed for industrial applications requiring good protection of reflectors against dust, in particular the automotive industry and food industry. The unit can be easily cleaned with a wet cloth.

The housing is made of steel with a white coating, while the cover is made of tempered glass or, optionally, polycarbonate (PC); the inner reflector is made of aluminum.
Maxos IP63 closed reflector units combine the functions of Maxos electrical units, reflectors and covers. They are designed for reliable mounting on Maxos trunking sections in TL-D lengths. A connector block is mounted on top of the units for electrical connection to the trunking. Mechanical connection is realized by means of a safe bracket with knee-lever clasp around the trunking. IP63 classification is valid

for the complete lamp, optical and ballast compartment; however, the classification for the total system including IP20 trunking sections is IP20.
The standard range is 1-lamp and 2-lamp TL-D 58 W with HF or conventional ballast and TL5 80 W with HF ballast, all to be mounted on the TL-D Maxos trunking system, optionally with EL3 emergency lighting.
The units come with inner aluminum reflectors for wide-beam (WB) or asymmetrical-beam (A) light distribution. White louvers (4MX093 1/2 58 L-IP63-unit WH) are available as accessories.

Please note that Maxos is not designed for application in regular humid environments.

	Maxos TL-D IP63 Reflector unit
Type	4MX014
Lamp	Fluorescent: 1 x or 2 x MASTER TL-D / G13 / 58 W or 1x or 2x TL5 80 W
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz: Inductive, parallel compensated (IC) Electronic, 220 - 240 V / 50 - 60 Hz: High Frequency Performer (HFP)
Reflector	Wide beam (-WB) Asymmetric (-A)
Option	Emergency lighting: 3 hours (EL3)

Material	Housing: steel, white coated Cover: tempered glass (GT) or polycarbonate (PC) (optional)
Accessory	Steel, white inlay louver (4MX093 1/2/58 L-IP63-unit WH)
Remarks	The electrical connection to the trunking is realized via a pre-mounted connector block, the mechanical connection via a bracket with knee-lever clasp around the trunking IP63 for optical compartment inclusive lamp- and ballast compartment only, can be used with regular IP20 flat ribbon trunkings
Main applications	Industry: automotive and food (cleanable front screen)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Maxos 4MX014 IP63 closed reflector unit

Maxos 4MX014 IP63 closed reflector unit with louver

Accessories

Bracket for direct ceiling mounting; available in white or silver

Chain bracket, adjustable; white or silver

Chain bracket, fixed; white, silver or galvanized

Profile bracket for exposed T-profiles; available in white or silver

Mounting bracket including suspension tube, 1250 mm; available in white or silver

Mounting bracket for suspension wire; available in white or silver

Mounting bracket including suspension wire, 1250/3000 mm; available in white or silver (MB-SW-L1250/MB-SW-L3000)

Suspension wire, diameter 2 mm; per meter

Ceiling cover and suspension wire, 1250 mm; available in white or silver

Ceiling fixation with steel wire, 1250 mm; white, silver or zinc

Accessories

Flexible coupling joint; coupling piece to connect flexible coupling joint to the trunking

Blind cover, used to close the spaces in the trunking where no electrical units are mounted; available in white or silver

End-piece set for trunking with mains supply; available in white or silver

Electrical supply connector, 7-pole; 10 pieces

Coupling piece for trunking; available in white or silver

Internal coupling piece for surface-mounted trunking

IP40 set to upgrade TL-D electrical units (1-lamp) from IP20 to IP40

IP40 set to upgrade TL-D electrical units (2-lamps) from IP20 to IP40

TTX400

TTX400 – the value of lighting

Good lighting contributes to our sense of well-being. In typical industrial environments, the cost-effective TTX400 light-line system helps to increase productivity, improve quality and safety, and reduce fatigue.

The experience of lighting
The TTX400 light-line system enhances the shopping experience by ensuring a perfect light distribution in a host of design configurations, keeping the customers' attention fully focused on the merchandise.
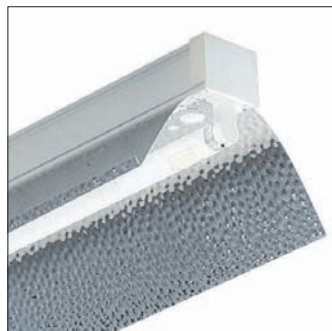
www.philips.com/lighting

Ultra-narrow beam reflector TL5

White lamella louver for medium beam and wide beam reflectors TL5

Narrow beam reflector TL-D

Multi-purpose white reflector TL-D

1

2

Main applications

1 Retail

In retail outlets such as hypermarkets, the TTX400 light-line system with TL5 lamps delivers high lighting levels, focusing attention on the merchandise and creating a bright, stimulating shopping atmosphere.

2 Logistics

To increase operating efficiency in logistics facilities such as distribution centers and groupage warehouses, the TTX400 light-line system delivers high horizontal illuminances in open receipt and dispatch areas and high vertical illuminances on the racks, enhancing the visibility of the whole rack, from floor to ceiling
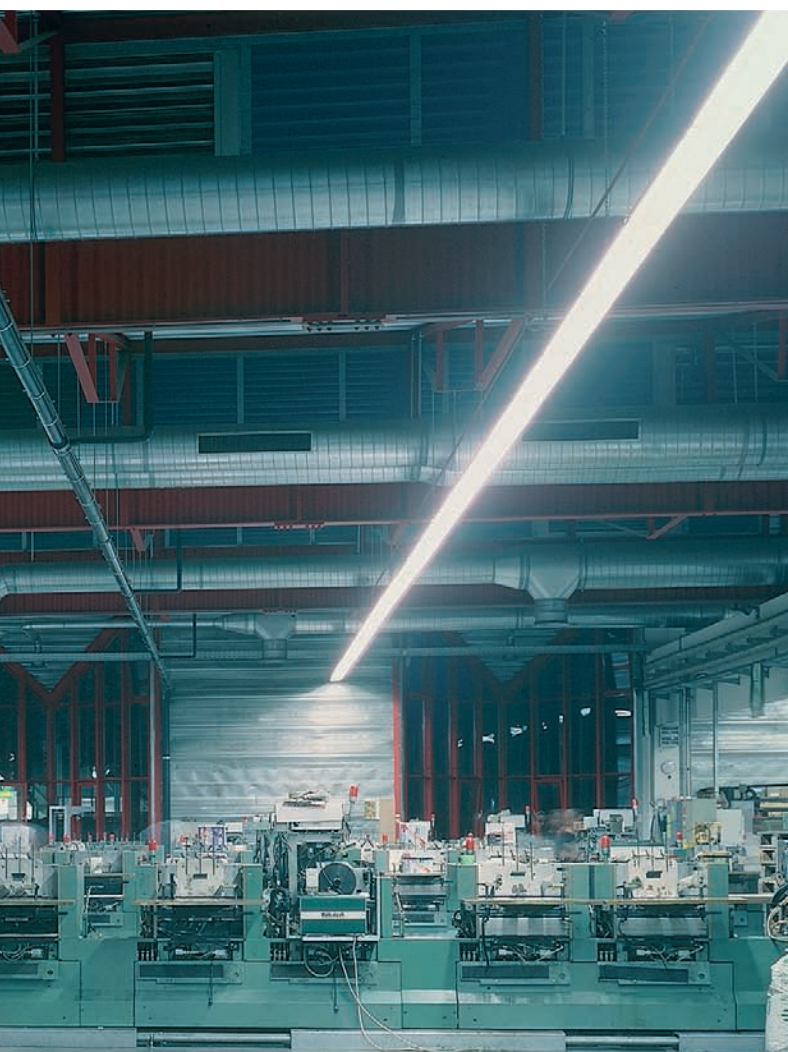
3 Industry

The TTX400 light-line system helps to boost operating efficiency in industrial facilities by delivering high lighting levels – which help workers to focus better on the task in hand and improve safety – while reducing energy consumption and maintenance.
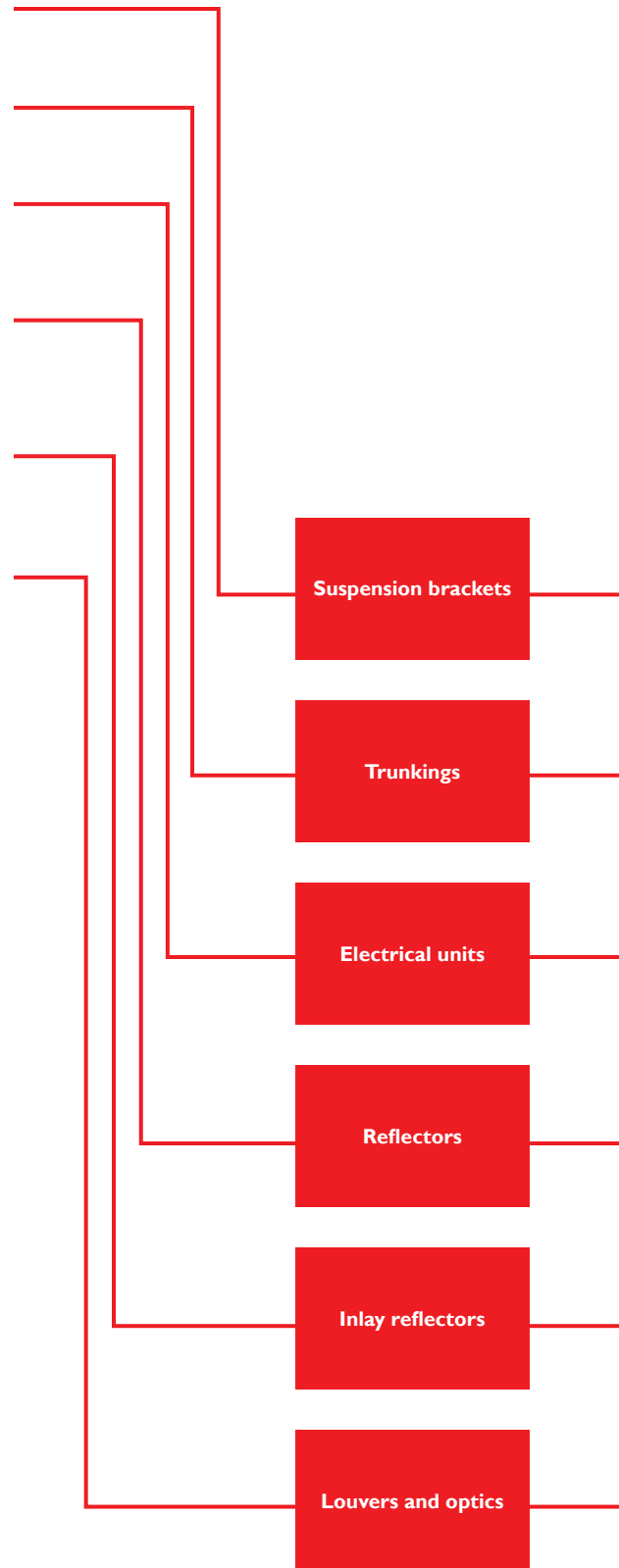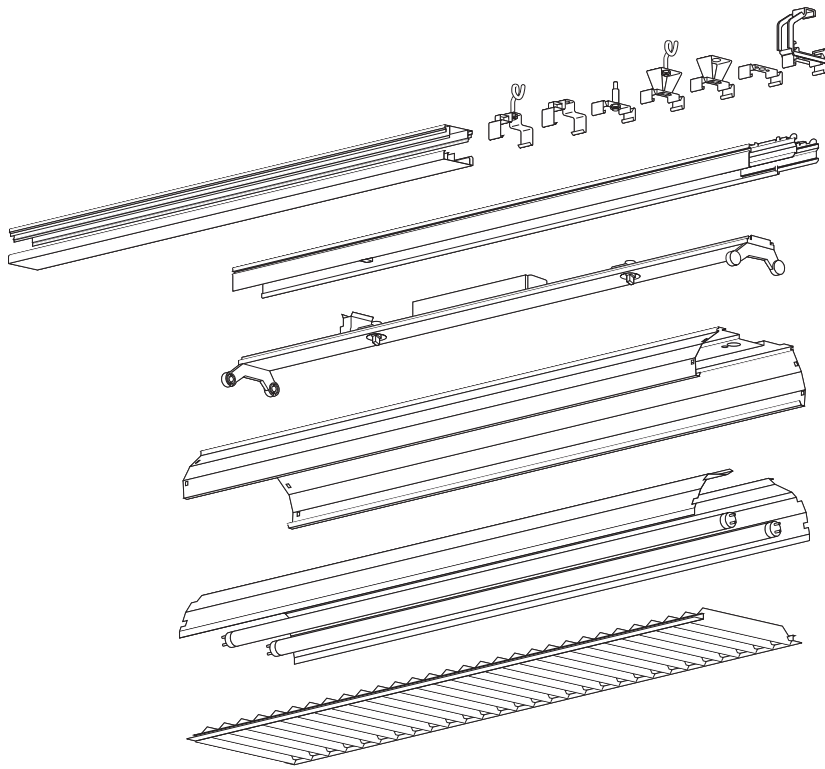
4 Public areas

In public areas, e.g. libraries, the TTX400 light-line system with TL5 lamps delivers high lighting levels, combined with low glare. This creates a bright, stimulating ambience that minimizes visual fatigue.

3

4

Suspension brackets

Trunkings

Electrical units

Reflectors

Inlay reflectors

Louvers and optics

TL5	TL-D

ZTX400

TTX400 5 wire	TTX400 7 wire	TTX400 9 wire *	TTX400 5 wire	TTX400 7 wire	TTX400 9 wire *
5×1.5 mm² 5×2.5 mm²	7×2.5 mm²	7×2.5 mm² $+ 2 \times 1.0$ mm²	5×1.5 mm² 5×2.5 mm²	7×2.5 mm²	7×2.5 mm² $+ 2 \times 1.0$ mm²

TMX400 I 49	TMX400 2 49	TMX40. 49	TMX400 I 58	TMX400 2 58	TMX40. 58
I-lamp TL5 I-lamp TL5 EL3	2-lamp TL5 2-lamp TL5 EL3	- projectors - halogen spots	I-lamp TL-D I-lamp TL-D EL3	2-lamp TL-D 2-lamp TL-D EL3	- projectors - halogen spots

GMX5.. white	GMX5.. aluminum	GMX4.. white	GMX4.. aluminum
- wide beam - medium beam	- wide beam - narrow beam - ultra narrow beam - asymmetric beam - wall washer	- standard - slotted - perforated	- narrow beam - very narrow beam - ultra narrow beam - asymmetric beam - wall washer - wide beam

GGX555 ..	GGX45. ...
- bi-directional - asymmetrical	- narrow beam - asymmetric - wide beam - bi-directional

| GGX555	GGX450
- white louver - flat profiled aluminium - high gloss parabolic lamella - matt parabolic lamella	- white louver - flat profiled aluminum - matt parabolic lamellea - perforated louver	- mesh louver - high gloss parabolic lamella - semi high gloss parabolic lamella - prismatic panel

* see new alternative with TMX400 C-2R onto TTX400 7

Just 5 clicks

TTX400 is installed with just 5 click-in actions.
No tools, no screws and no additional movements.
Fast, easy and secure.

Click 1

The trunking is mounted on the
various suspension brackets.
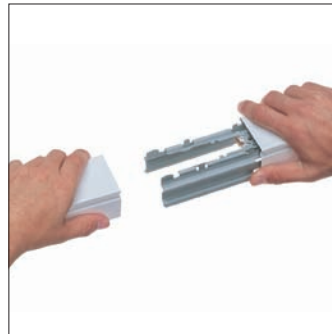
Click 2

Trunkings are connected, mechanically
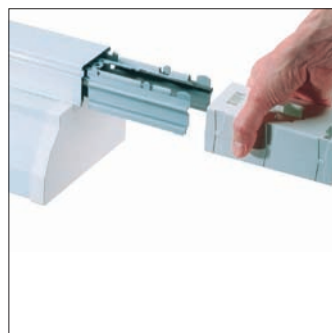and electrically in one movement.

Click 3

Electrical unit is mounted.

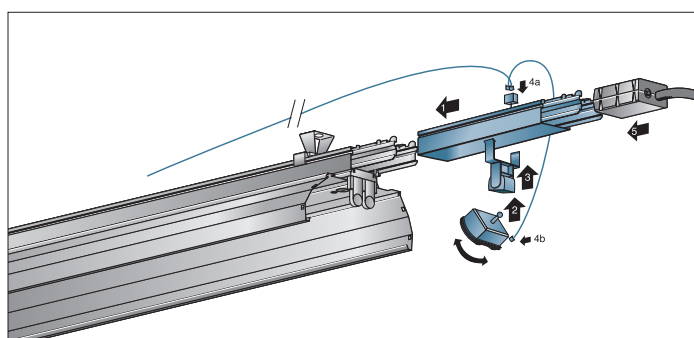**Click 4**

Reflector is mounted on the electrical
unit.

Click 5

Connection unit with the power supply
is installed at the beginning of the line.

Linesense

With Linesense, TTX400 and controls are combined in one. The speed and ease of installation of TTX400 remains when Linesense is used. In addition, substantial energy savings up to 75% can be achieved. Linesense has been developed for industrial applications like warehouses.

Installation clicks only

1 ZTX400 MDU control unit clicks onto the trunking.
2 Movement detector clicks on the bracket.
3 ZTX400 MB-MDU bracket clicks on the trunking.
4 Telejack cables click the detector and control unit together.
5 ZTX400 CU mains connection clicks on the control unit.

ZTX400 MDU

Pre-wired Linesense unit with integrated control function

ZTX400 MB-MDU

Mounting bracket for movement detector LRM8117/00

LRM8117/00

High-bay passive infrared movement detector
Mounting height up to 15 m

Daylight linking   Manual override   Movement detection

Switch on/off or dim to 10, 20, 30%

Switch on/off
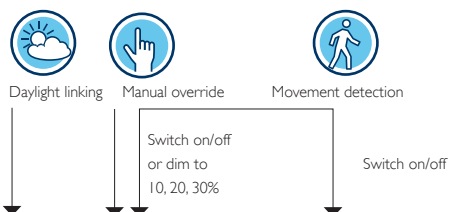
	Best performance	Best economy
	ZTX400 MDU HFD	ZTX400 MDU HFP
Movement detection (detector LRM8117)	√	√
Minimum light level without presence	0, 10, 20, or 30%	0
Maximum number of presence detectors per control unit	4	2*
Maximum cable length for movement detector	300 m	125 m
Daylight linking (light sensor LRL8102)	√	-
Number of light sensors per control unit	1	-
Manual control (on, off and override)	√	-
Type of ballast	HFD***	HFP
Maximum number of ballasts per line	64	**
TTX400 system	7 wire	5 wire

Linesense consists of a 618 mm piece of trunking, which is fully pre-equipped and wired to be added to the trunking. The control function is integrated into this extra unit, and can easily be clicked between the light line and the electrical connection unit. High bay movement detectors are connected with standard RJ-12 cables and mounted at the right location with the use of dedicated brackets. Linesense is equipped as standard with a telejack splitter to easily connect the detectors to the light line.

*   2 presence detectors or 3 with LED disabled
**   any number of luminaires allowed by the TTX400 light line system
***   HFD=HFR-DALI

TTX400 aluminum reflectors

These aluminum one-piece reflectors for both TL5 and TL-D lamps are available in hammered, matt and glossy versions. The TL5 ones are smaller due to the smaller lamps, resulting in easier handling and less space needed. TTX400 aluminum reflectors are specially designed for applications where a wide beam, narrow beam, very narrow beam or ultra- narrow beam is required e.g. distribution centeres and warehouses. Installation is via a simple click-in action to the electrical units TMX400. The high efficiencies of these reflectors ensure a highly cost effective solution. Reflector overlapping and mechanical clips delivered with the reflectors enable proper alignment in the event of continuous lines. All aluminum reflectors are available for 49 W and 54 W lengths.

TTX400 TL5	
Aluminum reflectors	
Type	GMX565, GMX566, GMX567, GMX570
Suitable electrical unit	For 1 and 2 TL5 35/49/80 W and 54/28 W versions

Material and light distribution	GMX565:
	   matt aluminum, narrow beam (M-NB)
	   high-gloss hammer-bow aluminum, narrow beam (HB-NB)
	 GMX566:
	   matt aluminum, wide beam (M-WB)
	   high-gloss hammer-bow aluminum, wide beam (HB-WB)
	   high-gloss hammer-bow aluminum, asymmetric beam (HB-A)
	 GMX567:
	   matt aluminum, asymmetric beam (M-A)
	 GMX570:
	   high-gloss aluminum, ultra narrow beam (C-NB)
	   high-gloss hammer-bow aluminum, ultra narrow beam (HB-NB)

Installation	One click-in action to electrical unit
Remarks	All reflectors are in one piece Reflectors are suitable for 1- and 2 lamp versions, GMX566 M-WB and HB-A for 49 W version only
Main applications	Retail (e.g. food, fashion), industry, warehouses

TTX400 TL-D	
Aluminum reflectors	
Type	GMX440, GMX460, GMX465, GMX466, GMX467, GMX470
Suitable electrical unit	For 1 and/or 2 TL-D 36 and 58 W versions

Material and light distribution	GMX440:
	   matt aluminum, for general lighting, both 1- and 2-lamp 36 and 58 W version*
	 GMX460:
	   high-gloss aluminum, narrow beam (C-NB), 1-lamp 58 W version*
	 GMX465:
	   high-gloss hammer-bow aluminum, narrow beam (HB-NB), 1- and 2-lamp 58 W version*
	   matt aluminum, narrow beam (M-NB), 1- and 2-lamp 58 W version*
	 GMX466:
	   high-gloss hammer-bow aluminum, asymmetrical (wall washer) beam (HB-A), 1-lamp 58 W version*
	   high-gloss hammer-bow aluminum, wide beam (HB-WB), 2-lamp 58 W version
	   matt aluminum, wide beam (M-WB), 2-lamp 58 W version
	 GMX467:
	   matt aluminum, asymmetrical beam (M-A), 1-lamp 36 and 58 W version*
	 GMX470:
	   high-gloss aluminum, very narrow beam (C-NB), 1-lamp 58 W version*
	 * Also for TMX400 electrical unit, 2-lamp version with F32 lampholder

Installation	One click-in action to electrical unit
Remarks	All reflectors are of one piece
Main applications	Retail (e.g. food, fashion), industry, warehouses

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

GMX565 one-piece narrow beam
reflector made from matt aluminum

GMX565 one-piece narrow-beam
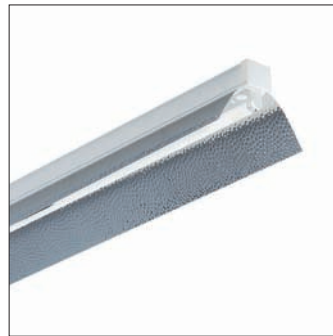reflector made of hammered aluminum
(HB-NB)

GMX566 one-piece wide-beam
reflector made of matt aluminum
(M-WB)

GMX566 one-piece wide beam
reflector made of hammered aluminum
(HB-WB)

GMX566 one-piece asymmetrical
reflector made of high-gloss hammered
aluminum

GMX567 one-piece asymmetrical
reflector made of matt aluminum
(M-A)

GMX570 one-piece narrow beam
reflector made of high-gloss aluminum
(C-NB)

GMX570 one-piece narrow-beam
reflector made of hammered aluminum
(HB-NB)

Philips indoor luminaires

TL-D

GMX440 one-piece general-lighting reflector made from matt aluminum

GMX460 one-piece narrow beam reflector made from high-gloss aluminum

GMX465 one-piece narrow beam reflector made from matt aluminum

GMX465 one-piece narrow beam reflector made from high-gloss hammered aluminum

GMX466 one-piece wide-beam reflector made from high-gloss hammered aluminum (HB-WB)

GMX466 one-piece wide-beam reflector made from matt aluminum

GMX466 one-piece wall-washer reflector made from high-gloss hammered aluminum (HB-A)

GMX467 one-piece asymmetric beam reflector made from matt aluminum

GMX470 one-piece narrow-beam reflector made from high-gloss aluminum (C-NB)

TTX400 multi-purpose reflectors

These multifunctional one-piece reflectors for TL5 and TL-D lamps are designed for applications requiring high technical lighting quality and design. They can be extended by the addition of various optics, mirrors and attachments. Installation is done via a simple click-in on the electrical units.

TTX400 TL5	
Multi-purpose reflectors	
Type	GMX555
Suitable electrical unit	For 1 and 2 TL5 35 / 49 / 80 W and 28 / 54 W versions
Material and light distribution	Steel, pre-lacquered white, wide beam (-WB)
	Steel, pre-lacquered white, medium beam (-MB)
	Steel, pre-lacquered white, perforated, medium beam (RP-MB)
Installation	One click-in action to electrical unit
Accessory	Coupling pieces, end plates
Remarks	All reflectors are in one piece
	Reflectors can be equipped with various optics, mirrors and attachments
Main applications	Retail (e.g. food, fashion), industry

TTX400 TL-D	
Multipurpose reflectors	
Type	GMX450
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Steel, pre-lacquered white
	Steel, pre-lacquered white, perforated (RP)
	Steel, pre-lacquered white, slotted (RS)
Installation	One click-in action to electrical unit
Accessory	Coupling pieces (white or transparent for perforated reflectors), end plates
Remarks	Reflectors can be equipped with various optics, mirror inserts and attachments
Main applications	Retail (e.g. food, fashion), industry

TTX400 TL5	
Mirror inserts	
Type	GMX555
Suitable reflectors	Multi-purpose reflectors GMX555 MB, 35 / 49 / 80 W and 28 / 54 W versions
Material and light distribution	High-gloss aluminum, medium beam, bi-directional, max at 20° (MB C-BD20 SET)
	High-gloss aluminum, medium beam, bi-directional, max at 40° (MB C-BD40 SET)
	High-gloss aluminum, medium beam, bi-directional, max at 50° (MB C-BD50 SET)
	High-gloss aluminum, asymmetrical beam, max at 20° (MB C-A20 SET)
	High-gloss aluminum, asymmetrical beam, max at 40° (MB C-A40 SET)
	Semi-high-gloss aluminum, medium beam, bi-directional, max at 20° (MB D-BD20 SET)
Installation	Clicking into reflector
Remarks	Mirror inserts delivered mounted in reflector (GMX555 MB SET) or as spare parts (GGX555 C-BD/A as universal piece for both beams 20° and 40°)
Main applications	Retail (e.g. food, fashion)

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

GMX555 TL5 multi-purpose reflector(s) for wide beam light distribution

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB)

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 20° (C-BD20)

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss asymmetrical optic, 20° (C-A20)

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss asymmetrical optic, 40° (C-A40)

GMX555 TL5 perforated multi-purpose reflector(s), for medium-beam light distribution (RP-MB)

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 50° (C-BD50)

GMX555 TL5 multi-purpose reflector(s), for medium-beam light distribution (MB) and high-gloss bi-directional optic, 40° (C-BD40)

TL-D

GMX450 TL-D multi-purpose reflector(s) standard version

Light-line systems

TTX400 TL-D basic reflectors

This basic one-piece white reflector is designed for applications
not requiring optics, mirrors or attachments. It is an efficient and
economical solution.

Installation is done via a simple click-in on the electrical units.

	TTX400 TL-D Basic reflectors
Type	GMX430
Suitable electrical unit	For 1 and 2 TL-D 36 and 58 W versions
Material and light distribution	Steel, prelacquered white
Installation	One click-in action to electrical unit
Accessory	Coupling pieces, end plates
Remarks	To be used when optics, mirrors and attachments are not needed
	Reflector is of one piece
	TMX400 F32 can be fitted with 1-lamp reflector
Main applications	Industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

GMX430 TL-D basic reflector(s)

TTX400 louvers and optics

A wide range of different louvers and optics can be mounted in the multifunctional reflector GMX555/GMX450 for TL5 and TL-D lamps respectively. These attachments offer many possibilities to shield the lamps and therefore improve comfort. Each attachment is available in 1-lamp and 2-lamp versions. Changing the lamp remains simple and quick as the attachments are hinged.

The attachments, optics and mirror inserts can only be used in combination with the respective functional reflector.

TTX400 TL5		TTX400 TL-D	
Louvers and optics		Louvers and optics	
Type	GGX555	Type	GGX450
Suitable reflectors	Multi-purpose reflectors GMX555, 35 / 49 / 80 W and 28 / 54 W versions	Suitable reflectors	Multi-purpose reflectors GMX450, 36 and 58 W versions
Material and light distribution	High-gloss aluminum, double parabolic, closed (C6)	Material and light distribution	High-gloss aluminum, double parabolic, closed (C6)
	High-gloss aluminum, double parabolic, closed (C6), with top reflector (T)		Semi-high-gloss aluminum, double parabolic (D6)
	Matt aluminum, double parabolic louvers, closed (M6)		Matt aluminum, parabolic lamellae (M5)
			Matt aluminum, ribbed cross louvers (M2)
	Matt aluminum, ribbed cross louvers (M2)		Lamellae louvers, white (L)
	Lamellae louvers, white (L)		Lamellae louvers, perforated, white (LP)
	Universal insert, beam 20 or 40° (C-BD/A)		Mesh louver, square mesh cover, white (ML)
Remarks	C6 and M6 can only be mounted in GMX555 MB		Prismatic cover (P)
	L and M2 can be mounted in both GMX555 MB and WB	Main applications	Retail (e.g. food, fashion), industry
	Inserts can be mounted only in GMX555 MB		
Main applications	Retail (e.g. food, fashion), industry		

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.
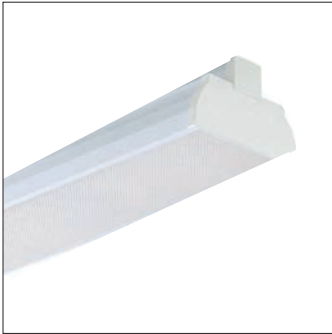
TL5

GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC high-gloss high-quality aluminum optic with 3D lamellae louver (C6)

GMX555 TL5 multi-purpose reflector(s) and GGX555 white lamella louver (L)

GMX555 TL5 multi-purpose reflector(s) and GGX555 matt high-quality aluminum optic with profiled lamellae louver (M2)

GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC matt high-quality aluminum optic with 3D lamellae louver (M6)

GMX555 TL5 multi-purpose reflector(s) and GGX555 high-gloss bi-directional/asymmetrical optic (C-BD/A), beam 20 or 40°

GMX555 TL5 multi-purpose reflector(s) and GGX555 OLC high-gloss high-quality aluminum optic with 3D lamellae louver and top reflector (C6T)

Light-line systems

TL-D

GMX450 TL-D multi-purpose reflector(s) and GGX450 OLC high-gloss high-quality aluminum optic with 3D lamellae louver (C6)

GMX450 TL-D multi-purpose reflector(s) and GGX450 standard-quality aluminum profiled cross-lamellae louver (M2)

GMX450 TL-D multi-purpose reflector(s) and GGX450 OLC semi-high-gloss high-quality aluminum optic with 3D lamellae louver (D6)

GMX450 TL-D multi-purpose reflector(s) and GGX450 white lamellae louver (L)

GMX450 TL-D multi-purpose reflector(s) and GGX450 matt standard-quality aluminum parabolic cross-lamellae louver (M5)

TTX400 TL-D mirror inserts

Mirror inserts improve the distribution of light. They are especially
suitable for applications where directed beams are needed. Installing
mirror inserts is as easy as all other components: they are laid into the
edge profile of the multifunctional reflector (GMX450).
TTX400 offers various types of mirror insert (narrow, wide and
asymmetrical beam).

	TTX400 TL-D Mirror inserts
Type	GGX451, GGX452 (to be mounted in GMX450 1-lamp version) GGX453, GGX454 (to be mounted in GMX450 2-lamp version)
Suitable reflectors	Multipurpose reflectors GMX450, 36 and 58 W versions
Material and light distribution	GGX451: matt aluminum, narrow beam (M-NB), 1-lamp 36 and 58 W version GGX452: matt aluminum, wide beam (M-WB), 1-lamp 36 and 58 W version GGX453: matt aluminum, wide beam (M-WB), 2-lamp 36 and 58 W version GGX454: high-gloss aluminum, bi-directional beam (C-BD), 2-lamp 58 W version
Installation	Clicking into reflector
Remarks	Reflector GGX451 is of one piece, other ones of two pieces Mirror inserts delivered separately
Main applications	Retail (e.g. food, fashion), industry

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

GMX450 TL-D 1-lamp multipurpose
reflector(s) and GGX452 wide-
beam mirror insert made from matt
aluminum (M-WB)

GMX450 TL-D 2-lamps multipurpose
reflector(s) and GGX453 wide-
beam mirror insert made from matt
aluminum (M-WB)

TTX400 electrical units

These electrical units are designed for quick-click mounting in TTX400 trunking sections. They are for use with one or two TL5 or TL-D lamps, with electronic (dimming) ballast (or conventional ballast in the case of TL-D), and are available in emergency lighting versions and in versions for the mounting of projectors. They contain all the necessary electrical and mechanical functions. All components are screwed onto the electrical unit. The units can be combined with any type of reflector and are made of white sheet steel.

TMX400 is delivered with electronic ballast HFP. The dimmable version of the TMX400 is delivered with the electronic ballast HFR, allowing the light output of the TL5 lamps to be regulated from 3 to 100 %. This unit is ideal for (day)light-dependent control and must be mounted to the prewired TTX400 section with 7-wire ribbon cable. The TMX400 units with conventional ballasts are supplied with an electrical connector, starters, any necessary capacitor and lampholders. For more control options the TMX400 can be equipped with DALI ballasts. Especially in combination with Linesense controls DALI solutions offer even greater control and energy savings.

TMX400 is deliverable in versions with in-built 3-hour or 1-hour emergency lighting. For configuration of both emergency lighting and regulation or DALI, TTX400 9-wires is to be used with TMX400 9. The new solution of standard TTX400 7-wires with new units TMX400 C-2R is recommended.

	TTX400 TL5
	Electrical units
Type	TMX400
Light source	Fluorescent:
	1 × or 2 × MASTER TL5 / G5 / 28, 35, 49, 54, 80 W
Gear	Electronic, 220 - 240 V / 50 - 60 Hz:
	High Frequency Performer (HFP)
	High Frequency Regulator (HFR)
	High Frequency Regulator, DALI and Touch (HFR-TD)
Option	Emergency lighting:
	1 hour (EL1), 3 hours (EL3)
	Master/Slave:
	1 master + 1 slave (M/S), both master and slave (M-S)
	HFR/HFR-TD with emergency lighting: TMX400 9 for trunking 9 wires or preferably TMX400 2-CR to be used with TTX400 7-wires (thereby in case of non-continuous lightline, to order throughwiring ZTX400 C1300-2 or C1600-2 as accessory)
Material	Sheet steel, white
Installation	Click-in fixation (both mechanical and electrical connection) on trunking TTX400 with 5- or 7-wire ribbon cable
Accessory	Blind covers (BC)
	Throughwiring set to be used in combination with TMX400 C2R onto TTX400 7, in the case of non-continuous lightline (ZTX400 C1300-2 for 1 section 28/54 W; ZTX400 C1600 for 1 section 35/49/80 W).

⏚ IP 20
CE ⟨⟨

	TTX400 TL-D
	Electrical units
Type	TMX400
Light source	Fluorescent:
	1 × or 2 × MASTER TL-D / G13 / 36, 58 W
Gear	Electro magnetic (low loss), 230 V / 50 Hz:
	Inductive (I)
	Inductive with possible mounting of capacitor in parallel (IKP)
	Inductive, parallel compensated (IC)
	Electronic, 220 - 240 V / 50 - 60 Hz:
	High Frequency Performer (HFP)
	High Frequency Regulator (HFR)
	High Frequency Regulator, DALI and Touch (HFR-TD)
Option	Emergency lighting:
	1 hour (EL1), 3 hours (EL3)
	Master/Slave:
	1 master + 1 slave (M/S)
	both master and slave (M-S)
	2-lamps lampholder with small width (F32)
	HFR/HFR-TD with emergency lighting: TMX400 9 for trunking 9 wires or preferably TMX400 C-2R to be used with TTX400 7-wires (thereby in case of non-continuous lightline, to order throughwiring / ZTX400 C1300-2 or C1600-2 as accessory)
Material	Sheet steel, white
Installation	Click-in fixation (both mechanical and electrical connection) on trunking TTX400 with 5- or 7-wire ribbon cable
Accessory	Blind covers
	Throughwiring set to be used in combination with TMX400 C-2R onto TTX400 7, in the case of non-continuous lightline (ZTX400 C1300-2 for 1 section 28/54 W; ZTX400 C1600 for 1 section 35/49/80 W)

⏚ IP 20 CE ⟨⟨

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

TL5

TL-D

1-lamp TL5 electrical unit

TMX400 1-lamp TL-D electrical unit

TMX400 2-lamps TL5 electrical unit

TMX400 2-lamps TL-D electrical unit

TMX400 1-lamp TL-D F32 electrical unit

TTX400 trunking sections

This trunking system for TL5 and TL-D lamps comprises prewired sections (TTX400) and optional unwired sections (TTX410). The sections can be easily clicked together using the integrated electrical/ mechanical coupling pieces. The trunking is available with a complete range of interchangeable components to offer outstanding flexibility. All the trunking sections are made of white prelaquered steel. Round edges reduce the risk of injury. Flat-ribbon cable (5 or 7 wires), an integrated phase-selection switch and contact blocks with click connection make electrical and mains connection quick, simple and safe (if 3 phases are used equalised, the maximum current is 16 A). The rigidity of the sections and coupling pieces limits the number of mounting brackets needed (max. 3 meters when using 493 trunking sections). The electrical unit is simply clicked into the trunking for both mechanical and electrical connection.

The prewired section TTX400 is equipped standard with a 5- or 7-wire 2.5 or 1.5 mm² flat ribbon cable. The 7-wire flat ribbon cable is used especially for the integration of light regulation or emergency lighting functions. Hence, no extra contact blocks or wiring need to be installed. TTX400 is available in lengths of 1, 2 and 3 electrical units of TL5 28/54 W, 35/49/80 W and TL-D 36 W and 58 W. It is also available in 9 wires (7-wire flat-ribbon plus 2 additional low-voltage cables for dimming) for the integration of light regulation and emergency lighting functions. The new optimized and recommended solution, instead of TTX400 9, consists of the standard TTX400 7-wire flat-ribbon and the new electrical units TMX400 C-2R.

TTX400 is also available with a 5-wire 1.5 mm² ribbon cable, in the same lengths as mentioned before; to be used in combination with HFP units.

	TTX400 TL5 Standard trunkings
Type	TTX400 (prewired)
Length	1 x, 2 x or 3 x length of electrical unit 49 (491, 492 or 493), also applicable for 80 and 35 W electrical unit
	1 x, 2 x or 3 x length of electrical unit 54 (541, 542 or 543), also applicable for 28 W electrical unit
Electrical circuit option	TTX400 5: 1 x flat ribbon cable, 5 wires, 1.5 and 2.5 mm²
	5-wire: standard flat ribbon cable (5)
	TTX400 7: 1 x flat ribbon cable, 7 wires, 2.5 mm²
	7-wire: standard flat ribbon cable (7)
	TTX400 9: 9-wires
	7-wire standard flat ribbon cable + 2 hardcore cables 1 mm² (9)
	7-wire standard flat ribbon cable + 2 cables 1 mm² for communication purpose (9T)
	Alternative to TTX/TMX400 9 : TTX400 7 + TMX400 C-2R
	Phase selection switch and contact blocks with click connection are integrated
Connection	Connection box ZTX400 CU or ZTX400 CM
	Trunking piece TTX400 CU7 (to be completed with ZTX400 EP-CU)
	Universal TTX400 CM-CU for cable entry at the beginning of light-line or in the middle
Material	Steel, prelacquered white
Accessory	Suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

	TTX400 TL-D Standard trunkings
Type	TTX400 (prewired)
Length	1 x, 2 x or 3 x length of electrical unit 36 or 58 W (361, 362 or 363 resp 581, 582 or 583)
Electrical circuit option	TTX400 5: 1 x flat ribbon cable, 5 wires, 1.5 and 2.5 mm²
	5-wire: standard flat ribbon cable (5)
	TTX400 7: 1 x flat ribbon cable, 7 wires, 2.5 mm²
	7-wire: standard flat ribbon cable (7)
	TTX400 9: 9-wires
	7-wire standard flat ribbon cable + 2 hardcore cables 1mm² (9)
	7-wire standard flat ribbon cable + 2 cables 1 mm² for communication purposes (9T)
	Alternative to TTX/TMX400 9 : TTX400 7 + TMX400 C-2R
	Option:
	1, 2, 3 section prewired trunking with 2 circuits flat ribbon 5 wires (2C5)
	1, 2, 3 section prewired trunking with 2 circuits flat ribbon 7 wires (2C7)
	Phase selection switch and contact blocks with click connection are integrated
Connection	Connection box ZTX400 CU or ZTX400 CM
	Trunking piece TTX400 CU7 (to be completed with ZTX400 EP-CU)
	Universal TTX400 CM-CU for cable entry at the beginning of light-line or in the middle
Material	Steel, prelacquered white
Accessory	Suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Light-line systems

TL5/TL-D

Pre-wired TTX400 trunking with 5-wire ribbon cable

Pre-wired TTX400 trunking with 7-wire ribbon cable

TTX410 (optional)

TTX410 is the unwired trunking section that allows the electrical units to be mounted in any desired position. On the upper part of the trunking section, special knock-out openings enable cable entry. The mains connection can be made with the 7-pole connector ZTX410 TC. Electrical connection to the electrical unit can be made with a 5-pole contact block with insert contacts (ZTX400 DC). These connection blocks can be installed at any place inside the trunking sections. The required wiring can be fixed inside the trunking section by using internal cable clips (ZTX410 IC). When electrical units are used with conventional or low-loss ballasts, H07GU (110 °C) cables should be used. When electronic ballasts are used, H07VU (70 °C) cables are sufficient. The TTX410 unwired trunking sections are delivered with the mechanical coupling piece. This unwired system is also well suited to mounting waterproof or surface-mounted luminaires.

TTX400 CM-CU

TTX400 491 7 CM-CU-PI is a 1-length 58 W trunking section with a 7-pole connector. It is a universal and flexible piece for mains supply entry at the beginning or middle of the light-line. It is an alternative to ZTX400 CU, TTX400 CU7 or ZTX400 CM.

	TTX400 TL-D
	Standard trunkings
Type	TTX410 (unwired)
Length	2 × or 3 × length of electrical unit 58 W (582 or 583)
Material	Steel, prelacquered white
Accessory	Connection units, suspension/mounting brackets, external coupling piece, etc, see TTX400 accessory section

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

Unwired TTX410 trunking

TTX400 units for projectors

Increasingly, accent lighting is integrated in functional and general lighting systems, especially in applications like shops, showrooms and public buildings such as museums. The TTX400 light-line system can be equipped with different types of projector to meet these lighting needs. Thanks to its modular concept, TTX400 offers great flexibility in the installation of projectors. For example, a change in the configuration of the shop floor lay-out can be easily followed by changing the positions of the projectors on the light-line.

Electrical unit with 2 connection points for projectors with e.g. CDM-T or SDW-T lamps. The projectors are mounted with the spot bracket on the trunking section

Electrical unit with 4 Express connection points for low-voltage halogen spots. This unit has 2 built-in 12 V / 105 W transformers

Electrical unit with an integrated 3-circuit rail. Standard projectors can be mounted in the rail. The maximum weight of the mounted projectors is 9 kg. Alternative now available with surface-mounted rail

TTX400/410 suspension-/mounting brackets

The TTX400 suspension-/mounting brackets have been designed to allow maximum ease and speed in installation and to provide the greatest possible flexibility in use. All brackets are simply clicked on the trunking. They are suitable for direct fixation or with chains, threaded rods and steel cables for suspension fixation. Distance between the brackets is up to 3 meters (when using the 583 trunking sections), resulting in faster installation and lower costs. All mounting and suspension brackets are constructed from galvanised stainless steel, painted white.

Suspension-/mounting brackets

Chain bracket cable duct for suspending the TTX400/410 sections with the plastic cable duct ZTX400 582/583 CD from chains or steel cables; includes adjustable suspension hook

Profile bracket for mounting TTX400/410 sections onto system ceilings with visible 24 mm T-profiles

Universal bracket for suspending TTX400 section including unwired section TTX410, which then serves as a cable duct

Adjustable suspension hook with 2 brass nuts for use with ZTX400 UB, ZTX400 UCD or ZTX400 CDB

Ceiling mounting bracket (8 mm diameter hole) for mounting TTX400/410 sections directly onto the ceiling
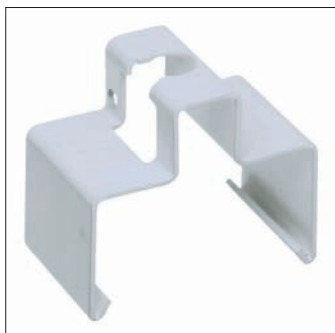
Cable suspension bracket for suspending the TTX400/410 sections from steel cable M 1.8. Integrated clasp mechanism allows easy, tool-less adjustment of the mounting height. Steel cable can be ordered separately with accessory ZTX400 SW1.8-10000

Universal bracket for suspending TTX400/410 sections with threaded rods or M13 internally threaded suspension tubes

Chain bracket for suspending TTX400/410 sections from chains or steel cables; includes adjustable suspension hook

Universal bracket for suspending TTX400/410 sections, including plastic cable duct ZTX400 CD 582/583, with threaded rods or M13 internally threaded suspension tubes

Accessories

Bracket for projectors. This bracket can be installed on TTX400 with reflector and louver, so no interruption of the continuous light-line

Connection unit consisting of a 7-pole contact block with 2.5 mm² contacts and mains connection strain-relief for use at the beginning of a light-line. The same connection unit is used for the TTX400 with either the internal 5- or 7-wire flat ribbon cable

Mounting bracket for waterproof luminaire

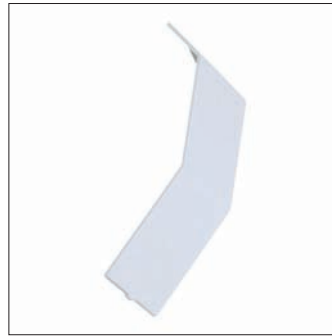Mounting bracket for surface mounted luminaire

ZTX400 end caps for GMX450 TL-D multi-purpose reflector(s) (EP1-450/EP2-450)

ZTX400 coupling piece for GMX450 TL-D multi-purpose reflector(s)

ZTX400 end caps for GMX430 TL-D basic reflector(s)

ZTX400 coupling piece for GMX430 TL-D basic reflector(s)

ZTX400 end caps for GMX555 TL5 multi-purpose reflector(s)

ZTX400 coupling piece for GMX555 TL5 multi-purpose reflector(s)

ZTX400 transparent coupling piece for GMX450 TL-D perforated multi-purpose reflector(s)

White plastic end plate to cover the trunking; includes a knock-out hole of 20 mm, Philips-branded (PHL)

Blind cover, used to close the spaces in the trunking where no electrical units are mounted. Also available in length of 36, 49 or 58 W.

ZTX400 coupling piece for GMX555 TL5 multi-purpose reflector(s)
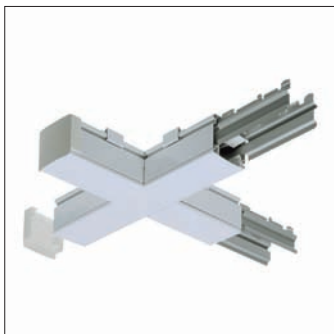
Structure parts with fixed angles, for use with prewired TTX400 light-line. This structure part is delivered with integrated coupling piece and internal through-wiring. Can be used for X-, T- and L configurations
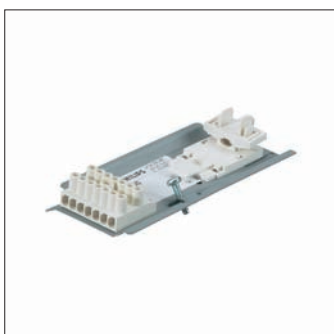
Cable duct, for installing on the trunking, in white plastic, with a length of 2 or 3 electrical units. Can be closed with blind cover strips. To be used in combination with the suspension brackets ZTX400 UCD/CCD. Also available in length of 49, 54 W.

Steel wire, diameter 1.8 mm², length 10 m
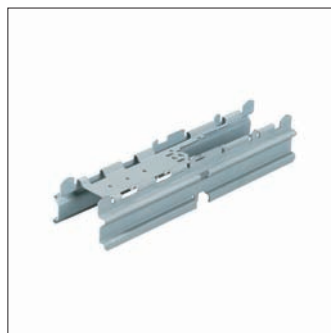
Internal coupling piece

Through-wiring connector

Electrical connector for attaching waterproof and surface-mounted luminaires to the prewired trunking TTX400. This electrical connector can be clicked on the connection block as mounted standard in the TTX400 light-line (also ZTX400 DC). The electrical connector comprises insert contacts and a strain reliever

A 5-pole connection block for connecting the electrical unit when using the unwired TTX410 profiles. The same connection block is used as an additional block for the pre-wired TTX400 when connecting to emergency lighting or light regulation. The connector is clicked inside the trunking and allows through-

The continuous-line connection unit is used at the end of a light-line when a through-connection is needed to pass an interruption of the light-line. It comprises a 7-pole screw connection block. The same continuous-line connector is used for the TTX400 with either the internal 5- or 7-wire flat ribbon cable. Not to be used for

The middle-of-line connection unit enables the mains connection to be made in the middle of a light-line. The unit comprises two 7-pole connection blocks for mains connection. To be used in the middle of a light-line when very long lines are used, to restart mains supply in both directions. The same middle-of-line connection unit is

Cable clips for guiding and easy-click fixing of wires in both TTX400 and TTX410 trunking sections

TTX400 Linesense
TTX400 with Lighting Controls
Applying Lighting Controls in industry contributes to efficient and effective lighting solutions. For TTX400 applications, Philips Lighting offers various standard trunking system based controls solutions, included in the Linesense range. These solutions offer an intelligent light-line, which remains easy-to-install.

With Linesense, TTX400 and lighting controls are combined in one, creating an intelligent light-line which is still easy to install. It allows substantial energy savings of up to 75%. Developed for industrial applications like warehouses,

Linesense consists of a 618 mm section of trunking, which is fully pre-equipped and wired for addition to the trunking. The control function is integrated into this extra unit and can easily be clicked between the light-line and the electrical connection unit. Movement detectors are connected with standard RJ-12 cables and mounted at the right location with the use of dedicated brackets. Linesense is equipped as standard with a telejack splitter to easily connect the detectors to the light-line.

Fully assembled TTX400 Linesense unit

Accessories

ZTX400 MDU-D Linesense unit suitable for movement detection (dimming or switching off), daylight linking and manual control; works with HFR DALI ballasts

The ZTX400 MB-MDU is a Linesense mounting bracket for clicking movement detector LRM 8115/00 or LRM 8117/00 to the trunking section. The right tilt angle can be adjusted manually and is to be checked by a walk test. The same tilt angle can be easily reproduced on more sensors thanks to a click graduation on the bracket

Light sensor intended for high-bay mounting (approx. 7.5 m high). Intended for use with the Linesense control (ZTX400 MDU-D). An installation bracket is included. The sensor is connected to the control unit with a modular plug-in (RJ-12) connector cable

High-bay passive infrared movement detector (mounting height up to 15 m), equipped with an adjustable delay timer (up to 35 minutes). Can be used with all MDU control units. A dedicated mounting bracket (ZTX400 MB-MDU) is available, into which the movement detector can be clicked

TTX150

Tetrix TTX150 – a simple solution

Tetrix TTX150 is a compact light-line characterized by simplicity. It comes with everything in one box and installation is tool-less. Tetrix is available in 1.5 or 3 m lengths with a pre-mounted mechanical coupling and through-wiring connector, TL-D or TL5 lamps, reflector, suspension bracket and snap-on finishing pieces. A starter kit is required to start the light-line. Tetrix is supplied with a white in-laid reflector to cover most standard applications. Conventional and HF versions are available. Dedicated 1.5 m trunkings can be equipped with emergency lighting. Maintenance is carried out from below, enabling the system to be used as a surface-mounted solution. The recommended maximum installation height is 6m.

www.philips.com/lighting

	Tetrix			
Type	TTX150	Material	Aluminum, white	
Length	1 × or 2 × length of 58 W (581 or 582)	Installation	Suspended; pre-mounted mechanical coupling and through-wiring connector	
Light source	Fluorescent			
	1 × or 2 × MASTER TL-D / G13 / 58 W	Accessory	Reflectors for electronic and conventional gear, lamellae louver, acrylic cover (1500 mm)	
Lamp included	Yes (lamp color 840)			
Gear	Electro magnetic (low loss), 230 or 240 V / 50 Hz:	Remarks	Standard equipped with 5-wire, 2.5 mm² through-wiring	
	Inductive, parallel compensated (IC)			
	Electronic, 220 - 240 V / 50 - 60 Hz:		Starter kit required to start the light line	
	High Frequency Performer (HFP)		Suspension brackets and end caps are included in packaging	
	Electronic Included (EI)			
	Electronic Included, pre-heat (EI-PH)		Empty through-wiring units available (5×2.5)	
Option	Lamp; fluorescent TL5	Main applications	Retail	
	Separate switching of lamps in line (left/right) (DS), in 2-lamp version only			
	Emergency lighting: 3 hours (EL3), in 581 versions			
	Pre-wired ribbon cable, 7-wire, 2.5 mm², (7×2.5)			

Where relevant, for detailed descriptions of Lighting Controls we refer you to chapter 11, and descriptions for e.g. optics/optical covers, lamps data, photometrical diagrams, etc. to the respective sections in chapter 12.

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2×	1530
2×2×	3060
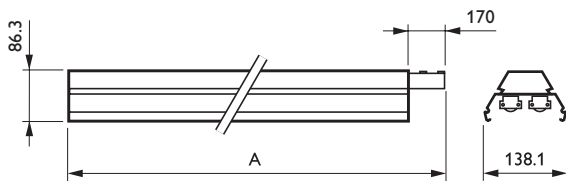
TTX150

Tetrix TTX150 light-line with TL-D fluorescent lamp(s)

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
TTX150 581 1xTL-D58W IC	4.00	124834 00
TTX150 582 2x2xTL-D58W IC	9.50	124940 00
TTX150 582 2x2xTL-D58W HFB	6.20	124957 00

Please contact your local Philips representative for additional configurations

Accessories

Starter kit containing suspension bracket, electrical connector and end caps

Product ID	EOC
ZTX150 MB-EC-2xEP	124445 99

Starter kit containing suspension bracket, electrical connector (separate switching functionality) and end caps

Product ID	EOC
ZTX150 MB-2xEP EC-DS	125350 99

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