

20M – 16M – 10M

8M – 4M – 2M

T-LED4 PT

MAIN CHARACTERISTICS

Applications	Tunnel lighting
Optic	STE-M/S: Asymmetrical optic street lighting. STU-M/S: Asymmetrical optic for street lighting. STW: Asymmetrical optic for street lighting, specific for wet asphalts. SV: Asymmetrical optic for very narrow urban streets or highway entrance/exit turns. S05/S07: Asymmetrical optic street lighting STA: Asymmetrical optic street lighting AS-xx: Asymmetrical optics for reinforcement lighting of road tunnels. TS-xx: Symmetrical optics for reinforcement and permanent lighting of road tunnels. Colour temperature: 4000K (others in option) CRI ≥ 70 Photobiological safety class: EXEMPT GROUP LED source efficiency: 185 lm/W @ 140mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66 IK08
Dimensions	See drawing below
Weight	See table below
Surface exposée	See table below
Junction box	Separate box with integrated SPD, MCB and terminal blocks. Integrated mounting flanges. Tooled opening (optional tool-free opening).
Optical Unit	Units with integrated LED modules, optics and power supply. Integrated mounting brackets. Integrated power cable. Screen removable by clip with the use of tools.
Operating temp.	-40°C / +40°C
Storage temp	-40°C / +80°C
Main reference standards	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3

ELECTRICAL CHARACTERISTICS

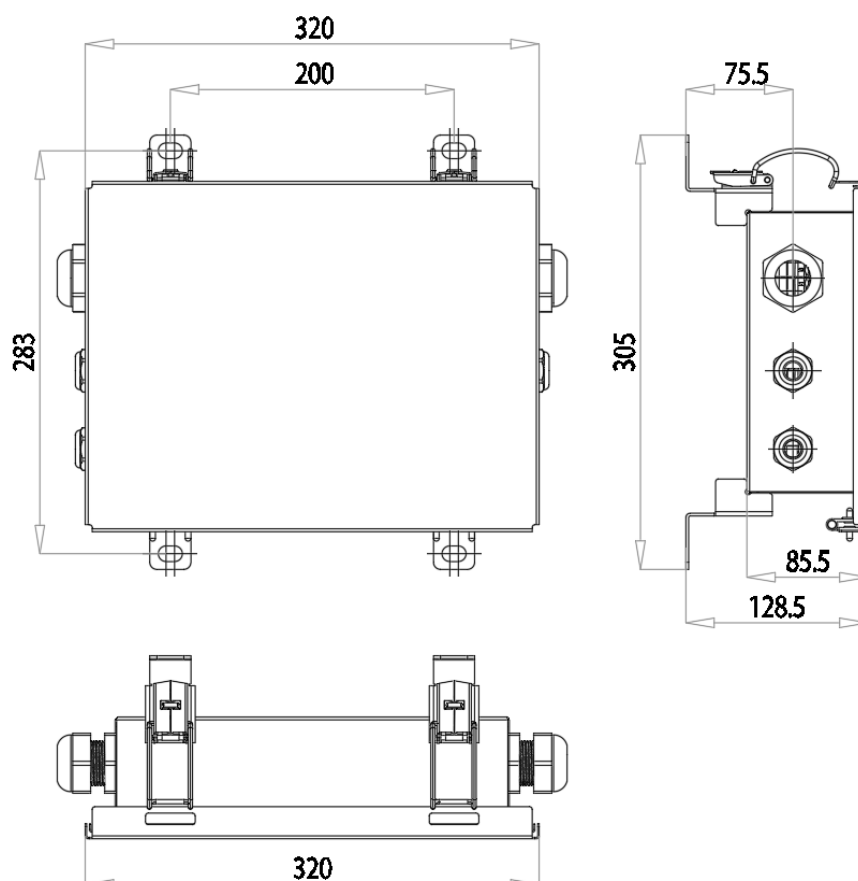
Rated voltage	Mains connection (pass-through): 380÷415V 50/60Hz. 3-phase + neutral. Control gear feeding: 220÷240V 50/60Hz. Single-phase.
Power factor	>0,9 (at full load)
Mains connection	Pass through (PT) via junction box. Three-phase
Optical unit connection	Single optical unit connected to the junction Box. Cables between optical unit and junction box: FG16-OM16 0.6/1Kv L=1,5 mt F: 2x1,5mm² (CL.II) / 3x1,5mm² (CL.I) DALI: 4x1,5mm² (CL.II) / 5x1,5mm² (CL.I) Option: connector M/F IP68 (see table cable/connectors details). Option: FTG18-OM16 0.6/1kV 1,5 mm² L=1,5 mt. (see table cable/connectors details).
Surge protection	Up to 12kV With SPD: CL.II: 10kV / 10kV CM/DM CL.I: 12kV / 10kV CM/DM Without SPD: CL.II: 10kV / 6kV CM/DM CL.I: 10kV / 6kV CM/DM
SPD (optional)	12kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life.
MCB Type (optional)	MCB 2P C6 6kA (Other type on request)

T-LED4

GREENLIGHT

Control system (options)	F: Fixed power not dimmable. DALI: Digital dimming interface DALI. FLC: Constant light flux. WL: Wireless single point communication system. <i>Other controls on request</i>
Optical unit lifetime (Tq=25°C)	>100.000hr L90B10 >100.000hr L90 TM-21
MATERIALS	
Fixing	Stainless steel AISI 316L.
Optical Unit	
Junction box	
Heatsink	ED: External for 20M - 18 - 16M - 10M versions. Extruded aluminium. ID: Internal for 8M - 4M versions. Extruded aluminium.
Fixing clip	Stainless steel.
Optic	99.85% aluminium with a surface finish in 99.95% with vacuum-sealed deposition. Alluminum grade class A+ (DIN EN 16268)
Screen	Flat tempered glass, 5mm thickness high transparency.
Cable glands	Plastic ULHV0 (<i>metallic in option</i>)
Gasket	Polyurethane without junction point.

JUNCTION BOX



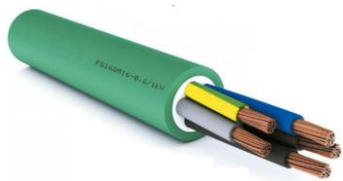
Dimensions	322 x 283 x 130mm
Surface exposée	Side: 0.027m ² – Top: 0.086 m ²
Weight	3.1kg

Mains/Dimming connection details

	Cable Gland	Max cable diameter	Number of terminal blocks	Max cross-wire section with stranded wire	Max cross-wire section with ferrule
Mains	M32L	14 – 25 mm	CL. I: 5 (L1, L2, L3, N, PE)	16 mm ²	10 mm ²
Dimming Control (optional)	M20	9 – 13 mm	DALI: 2 (DALI, DALI)	10 mm ²	6 mm ²
					

External Cable Details

(Between junction box and optical unit)

ELECTRICAL CHARACTERISTICS		SAMPLE PICTURE
Type	FG16-OM16	
Rated voltage U0/U	0,6/1kV	
Operating temperature range	Up to 90°C	
Sheath Colour	Green	
Smoke Emission	LS0H (Low-Smoke Zero Halogen)	
CPR classification	C _{ca} -s1b, d1, a1	
Outer diameter	2P 12mm – 5P 14,4mm	

Optional Fireproof External Cable Details

(Between optical unit and junction box)

ELECTRICAL CHARACTERISTICS		SAMPLE PICTURE
Type	FTG18-OM16	
Rated voltage U0/U	0,6/1kV	
Operating temperature range	Up to 90°C	
Sheath Colour	Blue	
Smoke Emission	LS0H (Low-Smoke Zero Halogen)	
CPR classification	B2 _{ca} -s1a, d1, a1	
Outer diameter	2P 12mm – 5P 14,8mm	

Optional External Connectors Details

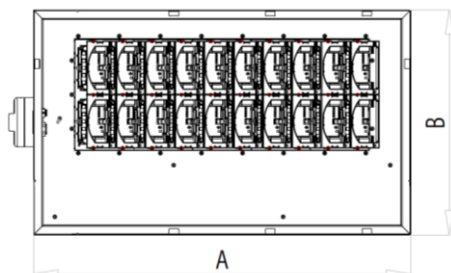
(Between optical unit and junction box)

ELECTRICAL CHARACTERISTICS		PICTURE
Type	Plug & Socket – Straight Type	
Materials	Body : PA66 GF UL94 V0 GWT 960°C Halogen Free Closure Ring : Nickel-Brass	
Operating temperature range	-40°C / +125°C	
Protection Degree	IP68	
Terminals connection	Fast Connection	
Dimension	PLUG : 70 x Ø37mm SOCKET 74 x Ø26mm	

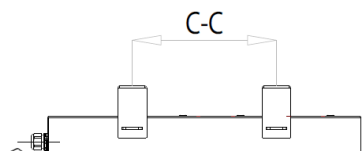
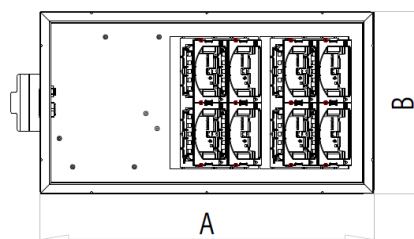
DIMENSIONAL DRAWINGS LUMINAIRE

F-DALI-FLC Version

ED Version 20-16-10M



ID Version 8-4-2M

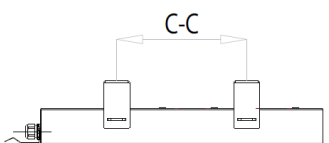
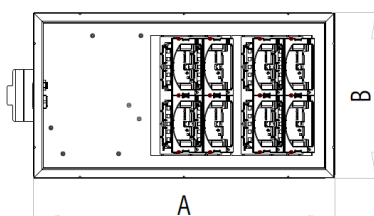
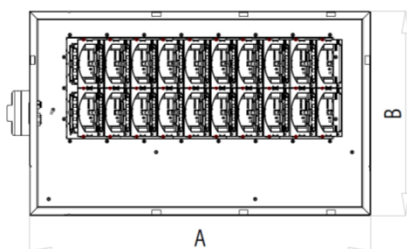


Dimensions	20M: 772(A) x 462(B) x 130mm – C-C = 500mm 16M: 652(A) x 462(B) x 130mm – C-C = 500mm 10M: 577(A) x 462(B) x 130mm – C-C = 250mm	Dimensions	8M: 580(A) x 320(B) x 130mm – C-C = 250mm 4M: 332(A) x 320(B) x 130mm – C-C = (Single fixing bracket) 2M: 260(A) x 320(B) x 130mm – C-C = (Single fixing bracket)
Exposed Surface	20M: Side: 0.069m ² – Top: 0.361 m ² 16M: Side: 0.058m ² – Top: 0.306 m ² 10M: Side: 0.051m ² – Top: 0.271 m ²	Exposed Surface	8M: Side: 0.047m ² – Top: 0.190 m ² 4M: Side: 0.027m ² – Top: 0.110 m ² 2M: Side: 0.020m ² – Top: 0.087 m ²
Weight	20M: 20.5kg 16M: 16.9kg 10M: 14.8kg	Weight	8M: 9.7kg 4M: 5.6kg 2M: 3.7kg

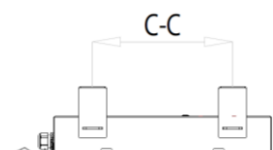
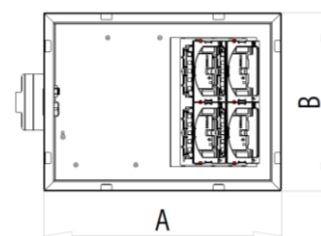
WL Version

ID Version 8M

ED Version 20-16-10M



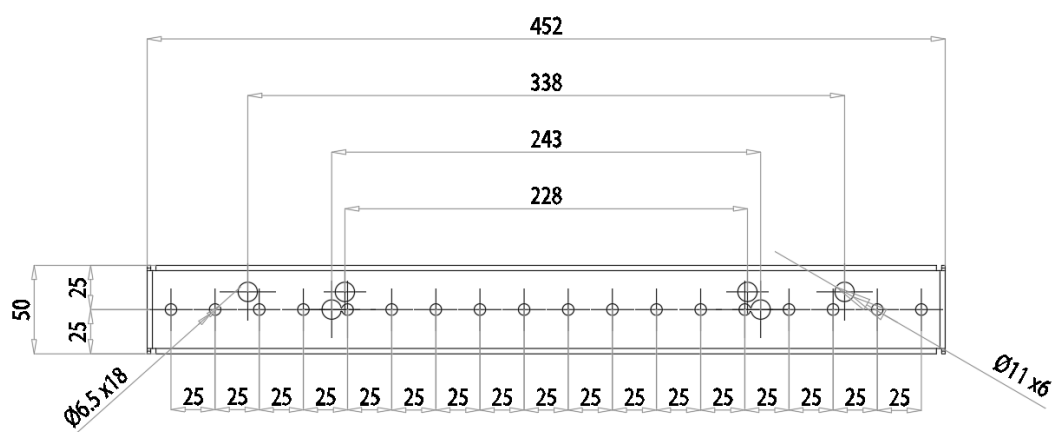
ID Version 4-2M



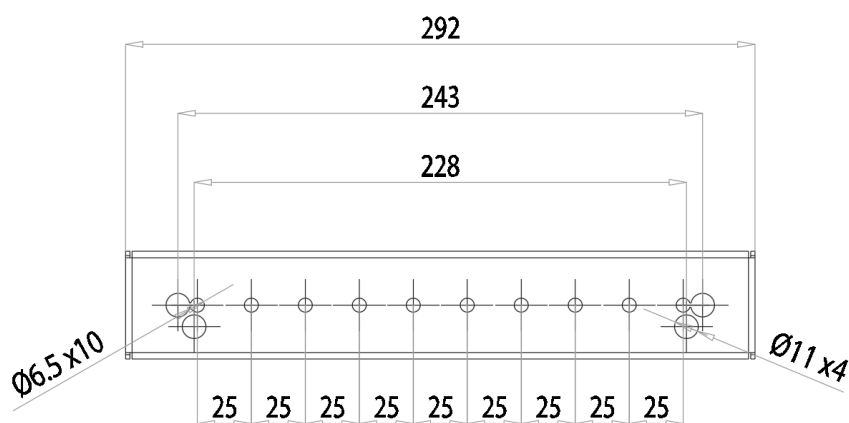
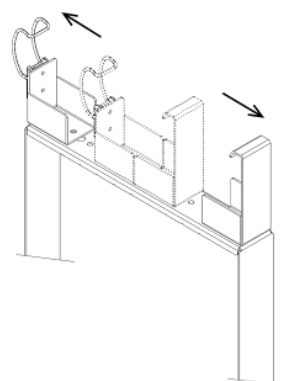
Dimensions	20M: 772(A) x 462(B) x 130mm – C-C = 500mm 16M: 652(A) x 462(B) x 130mm – C-C = 500mm 10M: 577(A) x 462(B) x 130mm – C-C = 250mm	Dimensions	8M: 580(A) x 320(B) x 130mm – C-C = 250mm	Dimensions	4M: 424(A) x 320(B) x 130mm – C-C = 250mm 2M: 290(A) x 320(B) x 130mm – C-C = (Single fixing bracket)
Exposed Surface	20M: Side: 0.069m ² – Top: 0.361 m ² 16M: Side: 0.058m ² – Top: 0.306 m ² 10M: Side: 0.051m ² – Top: 0.271 m ²	Exposed Surface	8M: Side: 0.047m ² – Top: 0.190 m ²	Exposed Surface	4M: Side: 0.035m ² – Top: 0.140 m ² 2M: Side: 0.022m ² – Top: 0.097 m ²
Weight	20M: 20.5kg 16M: 16.9kg 10M: 14.8kg	Weight	8M: 9.7kg	Weight	4M: 7.1kg 2M: 4.3kg

FIXING BRACKET DETAIL

Version 20-16-10M



Version 8-4-2M

Cable Ladder Adjustable Fixing Flange
(Optional)

Adjustable fixing flange for cable channel
100x75mm up to 300x75mm.

Tilt angle on request.

The bracket is supplied unmounted in the unit.