

MX PRO 3 TUNNEL

MAIN CHARACTERISTICS

Applications	Tunnel lighting.
Optic	AS-xx: Asymmetrical optics for reinforcement lighting of road tunnels. TS-xx: Symmetrical optics for reinforcement and permanent lighting of road tunnels. SV: Asymmetrical optics extra narrow beam. STE-S / STU-S: Asymmetrical narrow-emission optics. STE-M / STU-M: Asymmetrical medium emission optics. STW / STA / STA1: Asymmetrical optics wide emission. S05 / S07: Asymmetrical optics extra-wide emission. Colour temperature: 4000K (others optional) CRI≥70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP LED source efficiency: 185 lm/W @ 140mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66/IP67 IK09 total
Dimensions	See the drawing
Weight	max 20kg (without fixing flange)
Exposed surface	Bracket A: Side: 0.059m ² - Top: 0.37m ² Bracket C: Side: 0.055m ² - Top: 0.41m ²
Mounting	Mounting with integrated bracket for universal channel or ceiling mounting. Optional: adjustable bracket for channel from 100x75mm to 300x75mm with quick release.
Tilt Angle	0°. Other inclinations on request
LED Modules	Removable / Replaceable.
Gear tray	Tool-free opening of wiring compartment. Removable wiring.
Operating temp.	-40°C / +55°C
Storage temp	-40°C / +80°C
Main reference standards	EN 60598-1, EN 60598-2-3, EN 60598-2-5, IEC 62471, PD EPRS 003 / EN 62722-2-1 2016 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3



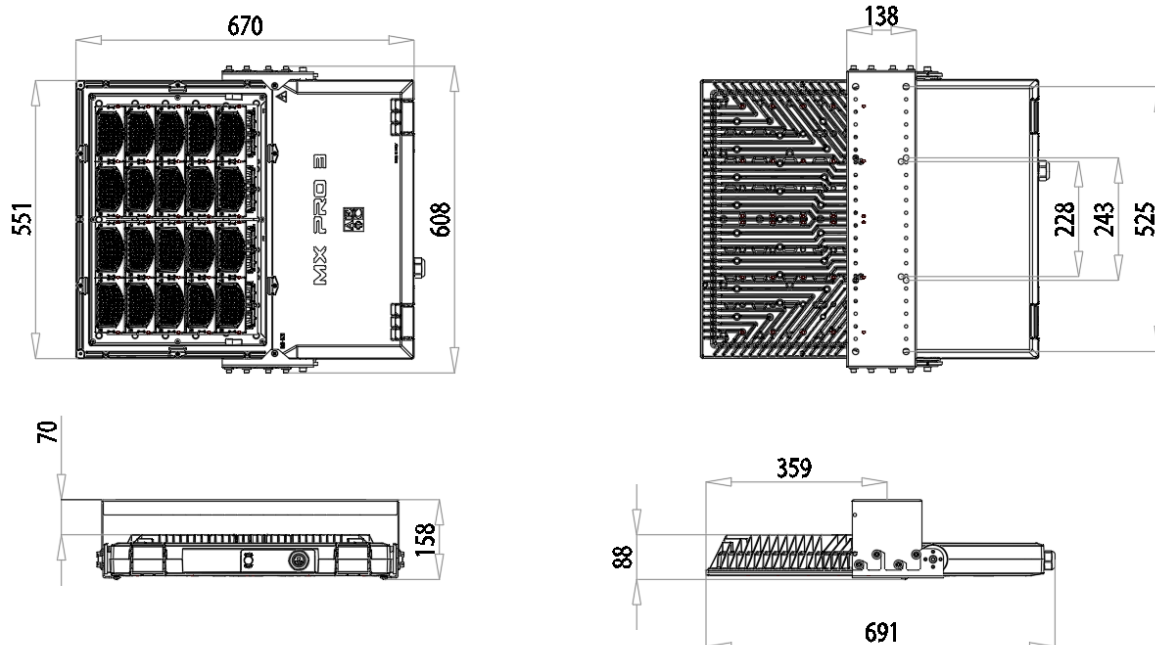
ELECTRICAL CHARACTERISTICS

Rated voltage	220÷240V 50/60Hz (Standard tolerance +/-10%, other voltages and tolerances upon request)
Power factor	>0,95 (at full load - F)
Mains connection	Cable: FG16-OM16 0.6/1kV L=1.5 m (other types on request) F / ZHAGA: 2x1,5mm ² (CL.II) / 3x1,5mm ² (CL.I) DALI: 4x1,5mm ² (CL.II) / 5x1,5mm ² (CL.I) Optionally: Fireproof cable FTG18-OM16 0.6/1kV L=1.5 m Optionally: plug IEC309 2P+E 16A IP67 (other types on request) Optionally: separate Network/Control Cables: Network: 2/3x1,5mm ² / DALI: 2x1,5mm ²
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.
Control system (options)	F: Fixed power not dimmable. DALI: Digital dimming interface DALI. ZHAGA: Socket 4 pin (ZHAGA Book 18). FLC: Constant light flux.
Optical unit lifetime (Tq=25°C)	>100.000hr L90B10 >100.000hr L90, TM-21

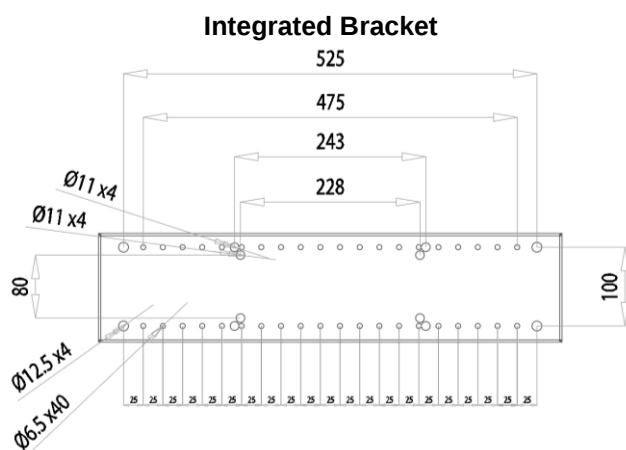
MATERIALS

Fixing	AISI 304 stainless steel with thermoplastic galvanic insulators.
Lower frame	Die-cast aluminum UNI EN1706 powder painted.
Upper canopy	
Closure hook	Extruded aluminium with stainless steel spring.
Optic	99.85% aluminum with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268)
Screen	Flat tempered glass, 5mm thickness high transparency.
Cable gland	Metallic M20x1.5 / M25x1.5 - IP68
Gasket	Polyurethane without joints.
Colour	Graphite - Cod. 01

BRACKET A DIMENSIONAL DRAWING

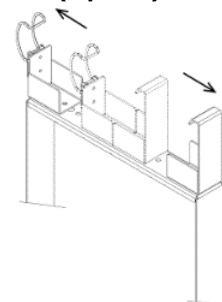


DETAIL OF FIXING BRACKETS



Weight Bracket: 3 kg

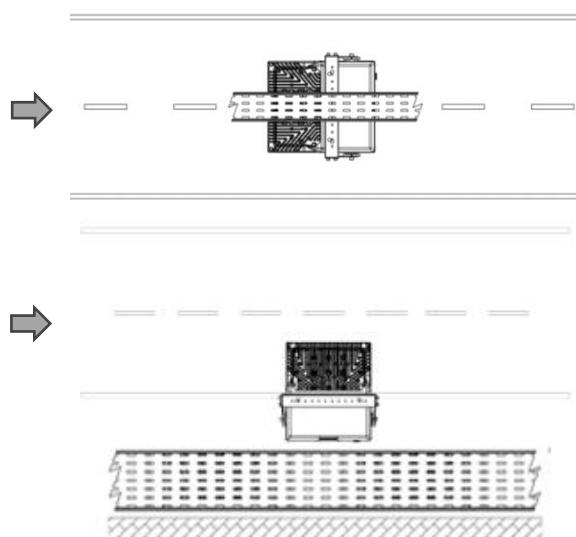
Quick Release Bracket (Option)



Accessory Weight: 1.8 kg

The bracket is supplied unmounted in the unit.

EXAMPLES OF APPLICATION



Assembly

Central channel, Offset channel.
Luminaire in axis with the channel.

Optics used

AS-xx

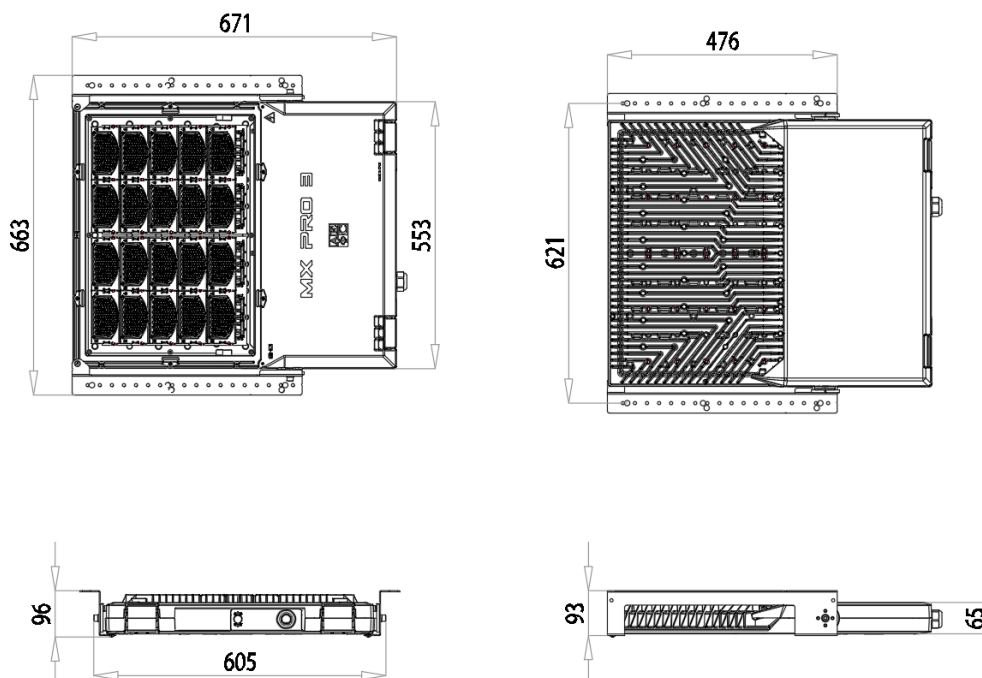
Assembly

Lateral ceiling mounting.
Luminaire rotated 90°.

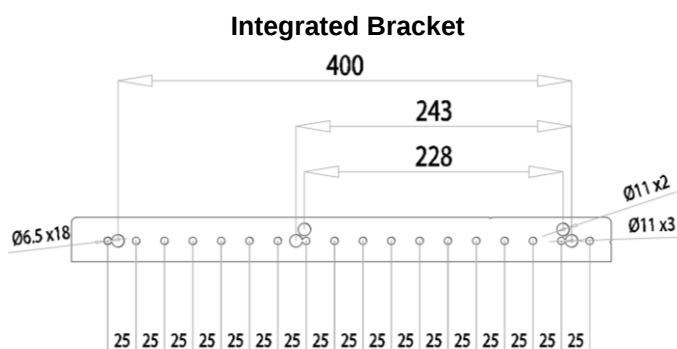
Optics used

STx-x

BRACKET C DIMENSIONAL DRAWING

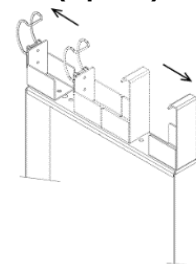


DETAIL OF FIXING BRACKETS



Weight Bracket: 1 kg

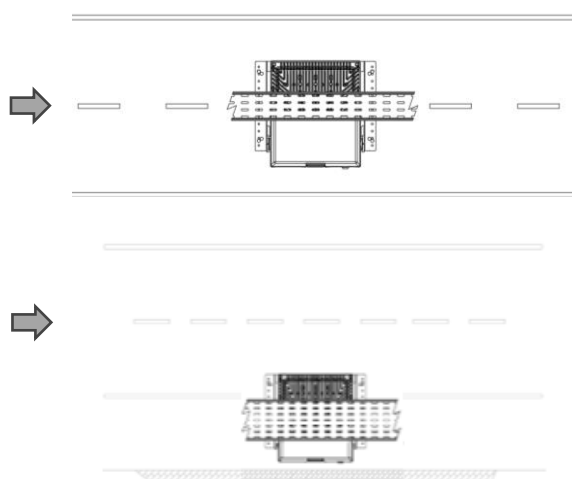
Quick Release Bracket (Option)



Accessory Weight: 1.8 kg

The bracket is supplied unmounted in the unit.

EXAMPLES OF APPLICATION



Assembly

Central channel, Offset channel.

Luminaire rotated 90°.

Optics used

TS-xx

Assembly

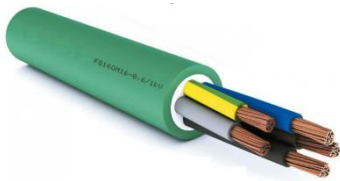
Lateral channel mounting.

Luminaire rotated by 90°.

Optics used

STx-x

EXTERNAL CABLE DETAILS

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	

FIREPROOF EXTERNAL CABLE DETAILS (Option)

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	

MAINS PLUG 2P+T DETAILS (Option)

ELECTRICAL CHARACTERISTICS		SAMPLE PICTURE
Type	IEC309 2P+T 230V 16A	
Typology	Straight Plug	
Materials	External body: Technopolymers (Halogen Free) Pins: Nickel-plated brass	
Poles	2P+T	
Tightening capacity of the cable fastener clamp	7.5 - 13.8mm	
Tightening capacity of the terminals	1-4mm²	
Operating temperature	-25°C / +55°C	
Rated current	16A	
Protection degree	IP67	
Colour	Blue	
Dimension	130mm x Ø72mm	
Note: for only version F, ZHAGA, DALI WITH SEPARATE CABLES (ONLY ON NETWORK CABLE)		

MX PRO 3 TUNNEL 5P5 4000K

LUMINAIRE	OPTIC	RATED LUMINAIRE FLUX*(4000K, lm)	RATED LUMINAIRE POWER*(W)	LUMINAIRE EFFICACY (lm/W)	RATED LED FLUX*(4000K, lm)	RATED LED POWER*(W)	Ta MAX (°C)
MX PRO 3 TUNNEL 5P5 7040.090-14M	STA	35830	224	159	38271	200	50
MX PRO 3 TUNNEL 5P5 7040.100-14M		39420	250	157	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.130-14M		49660	330	150	54216	294	50
MX PRO 3 TUNNEL 5P5 7040.140-14M		52920	357	148	58094	317	50
MX PRO 3 TUNNEL 5P5 7040.090-16M		40710	256	159	43738	229	50
MX PRO 3 TUNNEL 5P5 7040.100-16M		44710	286	156	48368	255	50
MX PRO 3 TUNNEL 5P5 7040.130-16M		56050	377	148	61961	336	50
MX PRO 3 TUNNEL 5P5 7040.140-16M		59650	408	146	66393	363	50
MX PRO 3 TUNNEL 5P5 7040.090-18M		45800	289	158	49205	257	50
MX PRO 3 TUNNEL 5P5 7040.100-18M		50300	322	156	54414	287	50
MX PRO 3 TUNNEL 5P5 7040.130-18M	STE-S	63060	424	148	69706	378	35
MX PRO 3 TUNNEL 5P5 7040.140-18M		67110	459	146	74692	408	35
MX PRO 3 TUNNEL 5P5 7040.090-20M	SV	50890	321	158	54672	286	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		55890	358	156	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.130-20M		70070	472	148	77452	420	35
MX PRO 3 TUNNEL 5P5 7040.140-20M		74560	510	146	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.090-14M		36650	224	163	38271	200	50
MX PRO 3 TUNNEL 5P5 7040.100-14M		40320	250	161	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.130-14M		50790	330	153	54216	294	50
MX PRO 3 TUNNEL 5P5 7040.140-14M		54120	357	151	58094	317	50
MX PRO 3 TUNNEL 5P5 7040.090-16M		41640	256	162	43738	229	50
MX PRO 3 TUNNEL 5P5 7040.100-16M		45730	286	159	48368	255	50
MX PRO 3 TUNNEL 5P5 7040.130-16M	STU-M	57330	377	152	61961	336	50
MX PRO 3 TUNNEL 5P5 7040.140-16M		61010	408	149	66393	363	50
MX PRO 3 TUNNEL 5P5 7040.090-18M	STE-M	46830	289	162	49205	257	50
MX PRO 3 TUNNEL 5P5 7040.100-18M		51440	322	159	54414	287	50
MX PRO 3 TUNNEL 5P5 7040.130-18M	STW	64490	424	152	69706	378	35
MX PRO 3 TUNNEL 5P5 7040.140-18M		68630	459	149	74692	408	35
MX PRO 3 TUNNEL 5P5 7040.090-20M	AS-45M	52040	321	162	54672	286	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		57160	358	159	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.130-20M		71650	472	151	77452	420	35
MX PRO 3 TUNNEL 5P5 7040.140-20M		76250	510	149	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M		39420	250	157	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		55890	358	156	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M		74560	510	146	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M		38970	250	155	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		55250	358	154	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M		73710	510	144	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M	AS-55M	37630	250	150	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		53350	358	149	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M		71170	510	139	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M	AS-65M	39420	250	157	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		55890	358	156	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M	AS-65W	74560	510	146	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M		39420	250	157	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M	TS-A	55890	358	156	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M		74560	510	146	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M	TS-A1	40320	250	161	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M		57160	358	159	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M	TS-UM	76250	510	149	82991	454	35
MX PRO 3 TUNNEL 5P5 7040.100-14M		40320	250	161	42322	223	50
MX PRO 3 TUNNEL 5P5 7040.100-20M	TS-EM	57160	358	159	60460	319	50
MX PRO 3 TUNNEL 5P5 7040.140-20M		76250	510	149	82991	454	35

*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac, F/DA/DAC.

*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet. Tj=85°C.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±7%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

The characteristics of the product listed above are subjected to change without notice.