



TIGUA

street lighting systems in
painted die-cast aluminium

page 236



TIGUA

tunnel light fixtures in painted
die-cast aluminium

page 238



T54

tunnel light fixtures in
anodised extruded aluminium

page 242



TUNNEL54

junction boxes
with insulation-piercing

page 244



TUNNEL54

fire-resistant junction boxes
with terminal block

page 248



TUNNEL54

For ventilation systems



TUNNEL54

fire-resistant sockets
for fans up to 47kW

page 250



TUNNEL54

fire-resistant sockets
for fans up to 117kW

page 253



TUNNEL54

fire-resistant
reducers

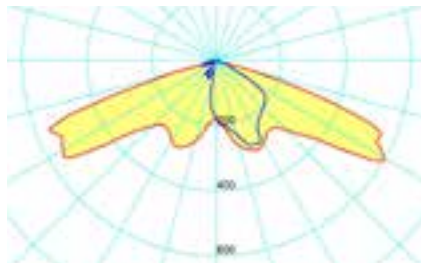
page 252

TIGUA



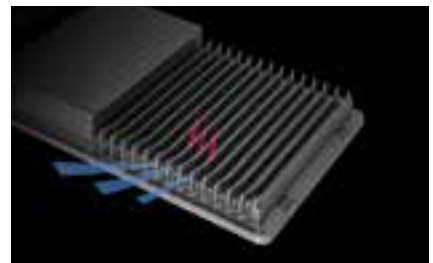
Lights up more

The high power LEDs ensure maximum optimisation of the light output.



Lights up everywhere

This range of lighting systems enables to develop any lighting project for streets, squares, pedestrian precincts, etc.



Reliable

Heat sinks are designed to increase heat conduction while preserving luminous flux.



TIGUA Street is Palazzoli's new range of lighting systems that represents the best solution for the lighting of roads, crossings, roundabouts, motorway junctions and car parks. The body is in die-cast aluminium EN 44300 with a very low copper content and anti-corrosion treatment for maximum resistance in harsh environments.

Compliance with standards
Directive 2014/35/EU
EN 60598-1
EN 60598-2-3
EN 62471
EN 62493
IEC/TR 62778
Directive 2014/30/EU
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
Directive 2011/65/EU
EN 50581

Body material	Die-cast aluminium EN 44300
Surface treatment	Fluoro-zirconium treatment
Diffuser material	Extra clear tempered glass
Protection rating (IP according to IEC/EN 60529)	IP66
Paint	Hot-polymerised non-toxic polyester
Colour	RAL 7011
Impact resistance (IK rating according to IEC/EN 62262)	IK08
Corrosion class	C4 according to ISO9223
Weight	7.5kg
Side surface exposed to the wind	0.031m²
LED device efficiency	115 lm/W
Colour temperature	4000k (other temperatures on request)
CRI	≥ 70
Insulation class	II (I on request)
Supply voltage	200 -240 V 50-60 Hz
Input surge protection	8kV common mode 10 kV differential mode EN 61000
Residual flicker	< 1%
Photobiological risk	Exempt
Power factor	> 0.98
Max conductor cross-section	1.5 mm²
Entry cable diameter	7-13 mm
Driving current	700mA (from 350 to 750mA on request)
Estimated device lifetime	L90 B10 @ 110,000h Tq=-30 °C - +40 °C
Storage temperature	-40 °C - +70 °C
Operating temperature	-30 °C - +45 °C

The photometric curves (LDT files) are available on www.palazzolilux.com



LED roadway lighting systems for 42-60 mm pole-top with **ST1 roadway wide beam optics IP66**

No. of LEDs	Device power (W)	Rated flux (lm) T _j = 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	24	811954	1
6	51	7830	24	811956	1
9	75	11745	24	811959	1
12	100	15660	24	811962	1
15	124	19575	24	811965	1

Equipment included: 42-60 mm pole mounting bracket.
Power supply with quick-coupling 2P connector.

Features: adjustment for pole-top application from 0° to +15°.
Wall mount arm adjustment from 0° to -20°.

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED roadway lighting systems for 42-60 mm pole-top with **ST2 roadway narrow beam optics IP66**

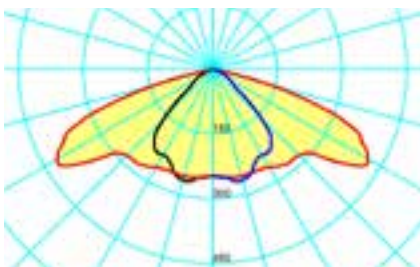
No. of LEDs	Device power (W)	Rated flux (lm) T _j = 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	25	811974	1
6	51	7830	25	811976	1
9	75	11745	25	811579	1
12	100	15660	25	811582	1
15	124	19575	25	811590	1

Equipment included: 42-60 mm pole mounting bracket.
Power supply with quick-coupling 2P connector.

Features: adjustment for pole-top application from 0° to +15°.
Wall mount arm adjustment from 0° to -20°.

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request

TIGUA



High performance

State-of-the-art LEDs allow economical and technical advantages to the product.



High flexibility

Dedicated fixing systems allow the use of TIGUA in any installation.



Maximum luminance

The variety of optics used allows for maximum versatility of customised solutions.



TIGUA TUNNEL is the new tunnel light fixture that represents the best solution for permanent and reinforced lighting in road, railway and underground tunnels. The body is in die-cast aluminium EN 44300 with a very low copper content and anti-corrosion treatment for maximum resistance in harsh environments. All versions are available on request with dimming and/or control system.

Compliance with standards
Directive 2014/35/EU
EN 60598-1
EN 60598-2-3
EN 62471
EN 62493
IEC/TR 62778
Directive 2014/30/EU
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
Directive 2011/65/EU
EN 50581

Body material	Die-cast aluminium EN 44300
Surface treatment	Fluoro-zirconium treatment
Diffuser material	Extra clear tempered glass
Protection rating (IP according to IEC/EN 60529)	IP66
Paint	Hot-polymerised non-toxic polyester
Colour	RAL 7011
Impact resistance (IK rating according to IEC/EN 62262)	IK08
Corrosion class	C4 according to ISO 9223
LED device efficiency	115 lm/W
Colour temperature	4000K (5000K on request)
CRI	≥ 70 (CRI 75-CRI 80 on request)
Insulation class	II (I on request)
Supply voltage	200 -240 V 50-60 Hz
Power cable	FTG10(O)M1 L1.5m
Power plug	16A 2P IP66 IEC EN 60309-1; IEC EN 60309-2
Input surge protection	8kV common mode 10 kV differential mode EN 61000
Residual flicker	< 1%
Photobiological risk	Exempt
Power factor	> 0.98
Driving current	700mA (from 350 to 750mA on request)
Estimated device lifetime	L90 B10 @ 110,000h Tq= -30 °C to +40 °C
Storage temperature	-40 °C - +70 °C
Operating temperature	-30 °C - +45 °C

The photometric curves (LDT files) are available on www.palazzolilux.com



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical** optics **PS1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	26	811304	1
8	67	10440	26	811308	1
12	100	15660	26	811312	1
8+8	134	20880	26	811316	1
8+12	167	26100	26	811320	1
12+12	200	31320	26	811324	1
14+14	232	36.540	26	811328	1
12+12+12	300	46980	26	811336	1
14+14+14	349	54810	26	811342	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical** optics **PS3 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	27	811404	1
6	51	7830	27	811406	1
8	67	10440	27	811408	1
12	100	15660	27	811412	1
14	116	18270	27	811414	1
8+8	134	20880	27	811416	1
8+12	167	26100	27	811420	1
12+12	200	31320	27	811424	1
14+14	232	36.540	27	811428	1
12+12+12	300	46980	27	811436	1
14+14+14	349	54810	27	811442	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical optics 20° PA1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
6	51	7830	28	811356	1
12	100	15660	28	811362	1
9+9	150	23490	28	811368	1
12+12	200	31320	28	811374	1
15+15	249	39150	28	811380	1
12+12+12	300	46980	28	811386	1
14+14+14	349	54810	28	811392	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED tunnel floodlights with **axially counter-beam** and **transversally symmetrical optics RS1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
9	75	11745	30	811509	1
12	100	15660	30	811512	1
15	124	19575	30	811515	1
9+9	150	23490	30	811518	1
12+12	200	31320	30	811524	1
15+15	249	39150	30	811530	1
12+12+12	300	46980	30	811536	1
15+15+15	373	58.725	30	811545	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical optics 25° PA3 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
6	51	7830	29	811456	1
12	100	15660	29	811462	1
9+9	150	23490	29	811468	1
12+12	200	31320	29	811474	1
15+15	249	39150	29	811480	1
12+12+12	300	46980	29	811486	1
14+14+14	349	54810	29	811492	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



LED tunnel floodlights with **axially 50° counter-beam** and **transversally symmetrical optics RS2 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
6	51	7830	31	811556	1
9	75	11745	31	811559	1
12	100	15660	31	811562	1
15	124	19.660	31	811565	1
9+9	150	23490	31	811568	1
12+12	200	31320	31	811574	1
15+15	249	39150	31	811580	1
12+12+12	300	46980	31	811586	1
15+15+15	373	58.725	31	811595	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



Pair of quick fitting
AISI 304 stainless steel
supports

Manufacturing material	Channel dimensions	Palazzoli code	Pack Qty
AISI 304 stainless steel	100X75	811900	1
	200X75	811901	1
	300X75	811902	1
	100X100	811903	1
	200X100	811904	1
	300X100	811905	1



Pair of quick fitting
AISI 304 stainless steel
supports for transversal
adjustment

Manufacturing material	Channel dimensions	Palazzoli code	Pack Qty
AISI 304 stainless steel	100X75	811925	1
	200X75	811926	1
	300X75	811927	1
	100X100	811928	1
	200X100	811929	1
	300X100	811930	1



Pair of quick fitting
AISI 304 stainless steel
supports for
axial adjustment

Manufacturing material	Axial adjustment	Channel dimensions	Palazzoli code	Pack Qty
AISI 304 stainless steel	6°	100X75	811931	1
		200X75	811932	1
		300X75	811933	1
		100X100	811934	1
		200X100	811935	1
		300X100	811936	1
	8°	100X75	811937	1
		200X75	811938	1
		300X75	811939	1
		100X100	811940	1
		200X100	811941	1
		300X100	811942	1
	10°	100X75	811943	1
		200X75	811944	1
		300X75	811945	1
		100X100	811946	1
		200X100	811947	1
		300X100	811948	1



Pair of supports
in AISI 304 stainless steel
direct screw mounting

Manufacturing material	Palazzoli code	Pack Qty
AISI 304 stainless steel	811906	1



Pair of adjustable supports
in AISI 304 stainless steel
direct screw mounting

Manufacturing material	Palazzoli code	Pack Qty
AISI 304 stainless steel	811907	1



The T54 LED range is the system of light fixtures for entrances and central parts of the tunnels. The T54 LED range has great installation flexibility thanks to the broad selection of accessories. All versions are available on request with dimming and/or control system.

Compliance with standards
Directive 2014/35/EU
EN 60598-1
EN 60598-2-3
EN 62471
EN 62493
IEC/TR 62778
Directive 2014/30/EU
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
Directive 2011/65/EU
EN 50581

Body material	Black anodised extruded aluminium alloy
Support material	AISI 304 stainless steel (AISI 316L on request)
Diffuser material	Extra clear tempered glass
Protection rating (IP according to IEC/EN 60529)	IP66
Impact resistance (IK grade according to IEC/EN 62262)	IK08
Corrosion class	C4 according to ISO 9223
LED device efficiency	115 lm/W
Colour temperature	4000K (5000K on request)
CRI	≥ 70 (CRI 75-CRI 80 on request)
Insulation class	II (class I on request)
Supply voltage	200-240V 50/60Hz
Power cable	FTG10(O)M1 L.1.5m
Power plug	16A 2P IP66 IEC EN 60309-1; IEC EN 60309-2
Input surge protection	8kV common mode 10kV differential mode EN 61000
Residual flicker	< 1%
Photobiological risk	Exempt
Power factor	> 0.98
Driving current	700mA (from 350 to 750mA on request)
Estimated device lifetime	L90 B10 @110,000h Tq=-30 °C - +40 °C
Storage temperature	-40 °C - +70 °C
Operating temperature	-30°C - +45°C

The photometric curves (LDT files) are available on www.palazzolilux.com



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical optics PS1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	26	154304	1
8	67	10440	26	154308	1
12	100	15660	26	154312	1

Notes: stated values are intended as having +/- 7% tolerances. Dimmable version on request



LED tunnel floodlights with **axially symmetrical** and **transversally symmetrical optics PS3 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	27	154704	1
6	51	7830	27	154706	1
8	67	10440	27	154708	1
12	100	15660	27	154712	1
18	150	23490	27	154718	1
24	200	31320	27	154724	1
30	249	39150	27	154730	1
36	300	46980	27	154736	1
42	349	54810	27	154742	1
48	398	62640	27	154748	1
54	448	70.470	27	154754	1

Notes: stated values are intended as having +/- 7% tolerances. Dimmable version on request



LED tunnel floodlights with **axially symmetrical** and **20° transversally symmetrical optics PA1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
6	51	7830	28	154406	1
12	100	15660	28	154412	1
18	150	23490	28	154418	1
24	200	31320	28	154424	1
30	249	39150	28	154430	1
36	300	46980	28	154436	1
42	349	54810	28	154442	1
48	398	62640	28	154448	1
54	448	70.470	28	154454	1

Notes: stated values are intended as having +/- 7% tolerances. Dimmable version on request





LED tunnel floodlights with axially symmetrical and **25° transversally symmetrical optics PA3 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
6	51	7830	29	154806	1
12	100	15660	29	154812	1
18	150	23490	29	154818	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



Pair of quick fitting AISI 304 stainless steel supports for fixing of LED light fixtures

Manufacturing material	Channel dimensions	Palazzoli code	Pack Qty
AISI 304 stainless steel	100x75	151910	1
	200x75	151911	1
	300x75	151912	1
	100x100	151913	1
	200x100	151914	1
	300x100	151915	1



LED tunnel floodlights with axially **60° counter-beam** and **transversally symmetrical optics RS1 IP66**

No. of LEDs	Device power (W)	Rated flux (lm) Tj= 25 °C	Photometric curves	Palazzoli code	Pack Qty
4	35	5220	30	154604	1
6	51	7830	30	154606	1
8	67	10440	30	154608	1
12	100	15660	30	154612	1
18	150	23490	30	154618	1
24	200	31320	30	154624	1
30	249	39150	30	154630	1
36	300	46980	30	154636	1
42	349	54810	30	154642	1
48	398	62640	30	154648	1
54	448	70.470	30	154654	1

Notes: stated values are intended as having +/- 7% tolerances.
Dimmable version on request



Pair of quick fitting AISI 304 stainless steel supports for fixing of LED light fixtures

Manufacturing material	Channel dimensions	Palazzoli code	Pack Qty
AISI 304 stainless steel	100x75	151920	1
	200x75	151921	1
	300x75	151922	1
	100x100	151923	1
	200x100	151924	1
	300x100	151925	1

TUNNEL54





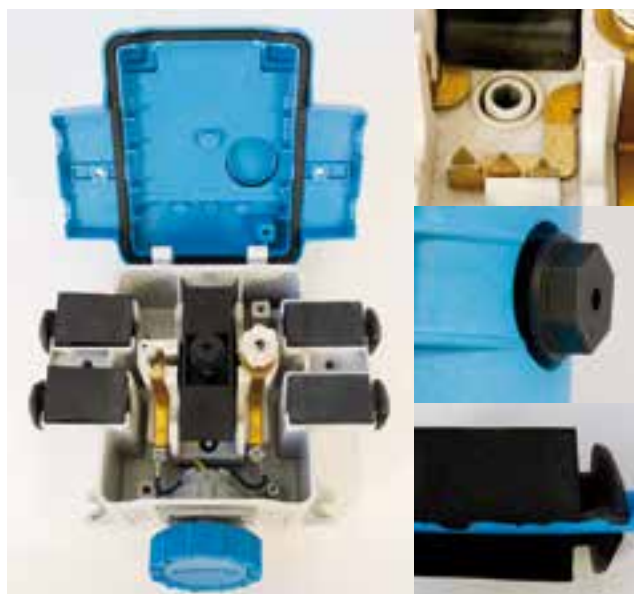
TUNNEL54

You can wire them in less than a minute thanks to the calibrated breaking system and universal gaskets



TUNNEL54 boxes in aluminium alloy have been tested under severe temperature conditions in order to be used in emergency circuits of roadway tunnels.

In both the technopolymer and aluminium alloy versions the protection fuse can be replaced with maximum safety, as access to it does not require opening the box.



The three-blade perforating system avoids cutting and section reductions.

The pre-set screw guarantees the connection without the need of torque wrenches.

The universal gasket allows acceptance of all cables from 6 to 35 mm², avoiding the need for specifically sized glands.

Suitable for ordinary and emergency lighting in roadway, railway and underground tunnels.



The TUNNEL54 series is a range of devices dedicated to lighting systems. It includes specific products for junctions made in aluminium alloy or in reinforced self-extinguishing technopolymer, with IP66 protection rating.

They consist of quick wiring insulation-piercing boxes, with universal entry of cables up to 35mm² or with ceramic terminal block.

The junction boxes for emergency systems guarantee continuity of service at 850°C for 90 minutes, are processed with ecological fluorizirconic passivation treatment and painted with hot-polymerised non-toxic polyester powders. The connections can be achieved by means of a plug-type socket IEC/EN 60309-1 and IEC/EN 60309-2, or by means of a cable gland.



Compliance with standards	CEI EN 50200 CEI EN 50362 European Directive 2004/54/EC ANAS 7735 memorandum Guidelines for safety planning in road tunnels IEC/EN 60309-1 IEC/EN 60309-2
Material	Aluminium alloy (emergency circuit boxes) Reinforced halogen free technopolymer (boxes for ordinary circuits)
Protection rating (IP according to IEC/EN 60529)	IP66
Colour	RAL5012 (box cover) RAL7035 (box base)
Resistance to abnormal heat and fire ("Glow wire" according to IEC/EN 60695-2-10)	960°C (ordinary circuit boxes)
Flammability rating (according to UL94)	V0 (ordinary circuit boxes)
Operating temperature resistance	850°C for 90' (emergency circuit boxes)
Impact resistance (IK grade according to IEC/EN 62262)	IK10
Insulation class	I and II
Fuse type	E14 - D01 (boxes for emergency circuits) Cylindrical 5x20 (boxes for ordinary circuits)
Cable gland type	In nickered brass with metric ISO threading



Resistance to chemical agents

WATER	SALINE SOLUTION	ACIDS		BASES		SOLVENTS			
		CONCENTRATED	DILUTED	CONCENTRATED	DILUTED	ALCOHOL	ACETONE	PERCHLORO-ETHYLENE	BENZENE
↑	↑	↓	→	→	↑	↑	↑	↑	↑
OILS		FATS		AMMONIA	OXIDISERS	INORGANIC SALTS	GASOLINE	DETERGENTS	U.V. RAYS
MINERAL	VEGETABLE	ANIMAL	SYNTHETIC						
↑	↑	↑	↑	↑	→	↑	↑	↑	↑

Legend: ↑ high resistance → partial resistance ↓ low resistance



Junction boxes in reinforced **insulation-piercing** technopolymer for single-pole cables with **socket** for **ordinary circuits IP66**

2P+ \neq
230V

Line cable cross-section (mm ²)	Class	Outer dimensions (mm)	Protections	Palazzoli code	Pack Qty
4 - 16	II	164x242x135	-	158201	1
4 - 16	II	164x242x135	1 4A fuse (L)	158211	1

Note: special configurations on request.



Junction boxes in aluminium alloy with **insulation-piercing** for single-pole cables with **2 cable glands** for **emergency circuits IP66 - 850°C 90'**

2xM20
Ø 7-13mm

Line cable cross-section (mm ²)	Class	Outer dimensions (mm)	Protections	Palazzoli code	Pack Qty
4-35	I	247x225x130	1 6A fuse (L)	157012	1
4-35	I	247x225x130	2 6A fuses (L+N)	157112	1
4-35	II	247x225x130	1 6A fuse (L)	158012	1
4-35	II	247x225x130	2 6A fuses (L+N)	158112	1

Note: special configurations on request.



Junction boxes in aluminium alloy with **insulation-piercing** for single-pole cables with **socket** for **emergency circuits IP66 - 850°C 90'**

2P+ \neq
230V

Line cable cross-section (mm ²)	Class	Outer dimensions (mm)	Protections	Palazzoli code	Pack Qty
4-35	I	247x225x130	1 4A fuse (L)	157001	1
4-35	I	247x225x130	2 4A fuses (L+N)	157101	1
4-35	II	247x225x130	1 fuse 4A (L)	158001	1
4-35	II	247x225x130	2 4A fuses (L+N)	158101	1

Note: special configurations on request.



Supports for insulation-piercing boxes in aluminium alloy

Manufacturing material	Palazzoli code	Pack Qty
AISI 304 stainless steel	157050	20
Galvanised and RAL 7035 painted steel	157051	20

Notes: suitable for channels with maximum height of 100 mm.



Junction boxes in aluminium alloy with **insulation-piercing** for single-pole cables with **cable gland** for **emergency circuits IP66 - 850°C 90'**

M20
Ø 7-13mm

Line cable cross-section (mm ²)	Class	Outer dimensions (mm)	Protections	Palazzoli code	Pack Qty
4-35	I	247x225x130	1 4A fuse (L)	157011	1
4-35	I	247x225x130	2 4A fuses (L+N)	157111	1
4-35	II	247x225x130	1 fuse 4A (L)	158011	1
4-35	II	247x225x130	2 4A fuses (L+N)	158111	1

Note: special configurations on request.



Screws for fixing the junction boxes in aluminium alloy to a bracket

Manufacturing material	Palazzoli code	Pack Qty
Stainless steel	157060	100



The aluminium alloy boxes of the TUNNEL54 series are suitable for ordinary and emergency lighting systems. The fire resistance guarantees continuity of service at 850°C for 90 minutes according to standard IEC/EN 50362. The terminal block is made with brass conducting bars and double screw anti-loosening terminals on a ceramic base. The radially clamped tear-proof cable glands in nickel-plated brass have IP68 protection rating and are fixed on threaded holes without the aid of the locknut. The minimum wall thickness is 3.5 mm. Grounding is ensured by the M6 screw terminal, both internally and externally.

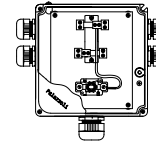
Compliance with standards
CEI EN 50200
CEI EN 50362
European Directive 2004/54/EC
ANAS 7735 memorandum
Guidelines for safety planning in road tunnels
IEC/EN 60309-1
IEC/EN 60309-2

Boxes material	Aluminium alloy
Terminal blocks material	Ceramic (base) Brass (terminals)
Protection rating (IP according to IEC/EN 60529)	IP66
Colour	RAL5012 (box cover) RAL7035 (box base)
Operating temperature resistance	850° C for 90'
Impact resistance (IK grade according to IEC/EN 62262)	IK10
Insulation class	I
Fuse type	E14 - D01
Cable gland type	In nicked brass with metric ISO threading



M25
Ø 8-16mm

Junction boxes in aluminium alloy with terminal block for multi-pole cables with cable glands for emergency circuits IP66 - 850°C 90'



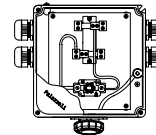
Line cable cross-section (mm²)	Terminals poles/section (mm²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
2x (1x4)-2x (1x6)	2x6	185x185x105	M16 (4-9,5)	151011	1
2x (1x10)-2x (1x16)	2x16	185x185x105	M20 (7-13)	151022	1
2x (1x25)-2x (1x35)	2x40	185x252x152	M25 (8-16)	151034	1
2x (1x50)-2x (1x70)	2x70	252x315x193	M32 (11-21)	151045	1

Equipment included: reduction inserts for cable glands.
Notes: special configurations on request.



2P+≐
230V

Junction boxes in aluminium alloy with terminal block for single-pole cables with socket for emergency circuits IP66 - 850°C 90'



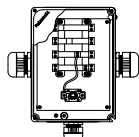
Line cable cross-section (mm²)	Terminals poles/section (mm²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
2x (1x4)-2x (1x6)	2x6	185x185x105	M16 (4-9,5)	151311	1
2x (1x10)-2x (1x16)	2x16	185x185x105	M20 (7-13)	151322	1
2x (1x25)-2x (1x35)	2x40	185x252x152	M25 (8-16)	151334	1
2x (1x50)-2x (1x70)	2x70	252x315x193	M32 (11-21)	151345	1

Equipment included: reduction inserts for cable glands.
Notes: special configurations on request.



M25
Ø 8-16mm

Junction boxes in aluminium alloy with **terminal block** for **multi-pole cables** with **cable glands** for emergency circuits
IP66 - 850°C 90°



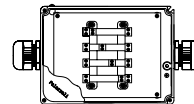
Line cable cross-section (mm ²)	Terminals poles/section (mm ²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
4x4 - 4x6	4x6	185x252x152	M32 (11-21)	151241	1
4x10	4x16	185x252x152	M32 (11-21)	151242	1
4x16	4x16	185x252x152	M40 (15-27)	151252	1
4x25 - 4x35	4x40	185x252x152	M40 (15-27)	151264	1
3x50+25 - 3x70+35	4x70	252x315x193	M50 (22-35)	151275	1
70	4x70	252x315x193	M63 (35-48)	151285	1

Equipment included: reduction inserts for cable glands.

Notes: special configurations on request.



Line junction boxes for power supply lines for tunnel light fixtures
IP66 - 850°C 90°



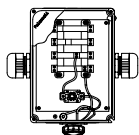
Line cable cross-section (mm ²)	Terminals poles/section (mm ²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
4x4 - 4x6	4x6	252x185x152	M32 (11-21)	151641	1
4x10	4x16	252x185x152	M32 (11-21)	151642	1
4x16	4x16	252x185x152	M40 (15-27)	151652	1
4x25 - 4x35	4x40	252x185x152	M40 (15-27)	151664	1
3x50+25 - 3x70+35	4x70	315x252x193	M50 (22-35)	151675	1
70	4x70	315x252x193	M63 (35-48)	151685	1

Note: special configurations on request.



2P+
230V

Junction boxes in aluminium alloy with **terminal block** for **multi-pole cables** with **socket** for emergency circuits
IP66 - 850°C 90°



Line cable cross-section (mm ²)	Terminals poles/section (mm ²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
4x4 - 4x6	4x6	185x252x152	M32 (11-21)	151441	1
4x10	4x16	185x252x152	M32 (11-21)	151442	1
4x16	4x16	185x252x152	M40 (15-27)	151452	1
4x25 - 4x35	4x40	185x252x152	M40 (15-27)	151464	1
3x50+25 - 3x70+35	4x70	252x315x193	M50 (22-35)	151475	1
70	4x70	252x315x193	M63 (35-48)	151485	1

Equipment included: reduction inserts for cable glands.

Notes: special configurations on request.



Supports for mounting of junction boxes

Manufacturing material	For box dimensions	Palazzoli code	Pack Qty
AlSi 304 stainless steel	185x185 - 252x185	151901	10
AlSi 304 stainless steel	185x252 - 315x252	151902	10
AlSi 304 stainless steel	252x315	151903	10

Equipment included: screws for fixing the boxes.

TUNNEL54



**Easy installation
in tight spaces**
Thanks to compact
dimensions and reduced
weight.



**High Index
Protection (IP) Rating**
Thanks to the IP66 protection rating
it is protected against water jets
used to clean the tunnels.



**No
limits**
Thanks to the AC3-AC23A
category at rated current.



The interlocked socket-outlets with plug of the TUNNEL 54 series are suitable for powering tunnel fans. The system is made in aluminium alloy and built to ensure continuity of service at 400 °C for 120 minutes in accordance with IEC/EN 12101-3 and 2004/54/EC. The socket is equipped with an isolator switch of AC3-AC23A category, with silver alloy contacts and contact holder discs in Palazzoli's high-thickness thermosetting GRP, to ensure non-deformability in the case of temperature changes due to temporary overloads. The cover is opened and closed using stainless steel captive screws. The isolator-switch operation is padlockable. The cable entry of the socket allows the connection of power lines with single-pole or three-pole cables up to a section of 35 mm², and with an additional box up to 185 mm². The system can be installed on the wall, in a channel, or with brackets by means of special kits.

Compliance
with standards

CEI EN 50200
CEI EN 50362
European Directive 2004/54/EC
ANAS 7735 memorandum
Guidelines for safety planning
in road tunnels
IEC/EN 60309-1
IEC/EN 60309-2
IEC/EN 60309-4

Material	Aluminium alloy
Surface treatment	Passivation with fluoro-zirconium treatment
Paint	Hot-polymerised non-toxic polyester
Protection rating (IP according to IEC/EN 60529)	IP66
Colour	RAL5012 (cover) RAL7035 (base)
Operating temperature resistance	400°C for 120'
Impact resistance (IK grade according to IEC/EN 62262)	IK10
Rated current	63A - 125A
Operating voltage	400V - 690V
Operating frequency	50-60Hz
Insulation class	I



Interlocked socket-outlets for fans up to 47kW for single-pole cables with plug 50-60Hz IP66 400°C 120'

Rated current (A)	Rated operating voltage	Poles	Auxiliary contact (AUX)	Palazzoli code	Pack Qty
63	380-415V	3P+⊕	1 NO	151611	1
	600-690V	3P+⊕	1 NO	151612	1

Equipment included: 1 63A 3P+⊕ IP67 plug in aluminium alloy. Complete with cable glands. External earthing terminal.
Features: padlockable handle.
Note: special configurations on request.



Interlocked socket-outlets for fans up to 47kW for multi-pole cables with plug 50-60Hz IP66 400°C 120'

Rated current (A)	Rated operating voltage	Poles	Auxiliary contact (AUX)	Palazzoli code	Pack Qty
63	380-415V	3P+⊕	1 NO	151613	1
	600-690V	3P+⊕	1 NO	151614	1

Equipment included: 1 63A 3P+⊕ IP67 plug in aluminium alloy. Complete with cable glands. External earthing terminal.
Features: padlockable handle.
Note: special configurations on request.

WEB - TUNNEL54

The website dedicated to systems for road, motorway, railway and underground tunnels is available on www.palazzoli.com





Reducers for large-section single-pole cables
400°C 120'
850°C 90'
IP66

M40
Ø 15-27mm

Line cable cross-section (mm ²)	Terminals poles/section (mm ²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
from 50 to 70	3x70	185x252x152	M32 (11-21)	151533	1
from 95 to 120	3x125	252x315x193	M40 (15-27)	151534	1
from 150 to 185	3x200	315x315x193	M40 (15-27)	151535	1

Features: provision for internal and external earth connection.

M40 exit for 3x25mm² or 3x16mm² cables.

Notes: special configurations on request.



Reducers for large-section multi-pole cables
400°C 120'
850°C 90'
IP66

M40
Ø 15-27mm

Line cable cross-section (mm ²)	Terminals poles/section (mm ²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
50	3x70	185x252x152	M50 (22-35)	151531	1
70	3x70	185x252x152	M63 (35-48)	151532	1

Features: provision for internal and external earth connection.

M40 exit for 3x25mm² or 3x16mm² cables.

Notes: special configurations on request.



Pair of brackets
in AISI 304 stainless steel
for wall-mounting
of sockets for fans

Applications	Palazzoli code	Pack Qty
wall-mounting with bracket	151541	1



Pair of brackets
in AISI 304 stainless steel
for wall-mounting
of sockets for fans

Applications	Palazzoli code	Pack Qty
for channel L 200mm	151542	1
for channel L 300mm	151543	1



Kit of screws in stainless steel
AISI 304 for **fastening sockets**
for fans to channel rod

Applications	Palazzoli code	Pack Qty
fixing on channel rod	151544	1



Interlocked socket-outlets
for fans up to **117kW**
in enclosure designed
to accommodate flanges
50-60Hz **IP66 400°C 120'**

Rated current (A)	Rated operating voltage	Poles	Palazzoli code	Pack Qty
63	400-690V	3P+⊕	151880	1
125	400-690V	3P+⊕	151881	1

Note: special configurations on request.



Plugs for fans
up to **117kW**
50-60Hz **IP66 400°C 120'**

M32
Ø 11-21mm

Rated current (A)	Rated operating voltage	Poles	Entry type	Palazzoli code	Pack Qty
63	400-690V	3P+⊕	M32	151890	1
125	400-690V	3P+⊕	M50	151891	1



Supports for ceiling mounting
of sockets for fans up to
117kW

Manufacturing material	Palazzoli code	Pack Qty
AISI 304 stainless steel	151900	1

Features: complete with adjustable support for ceiling, 50x30mm profile and socket fixing screws.



Flanges in aluminium alloy
for **multi-pole cables**
with **cable gland**
in brass **400°C 120'**
850°C 90'
IP66

Line cable glands	Tightening diameter (mm)	Palazzoli code	Pack Qty
M32	11-21	151930	1
M40	15-27	151931	1
M50	22-35	151932	1
M63	35-48	151933	1

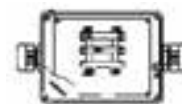


Flanges in aluminium alloy
for **single-pole cables**
with **cable gland**
in brass **400°C 120'**
850°C 90'
IP66

Line cable glands	Tightening diameter (mm)	Palazzoli code	Pack Qty
3 x M25	8-16	151940	1
3 x M32	11-21	151941	1
3 x M40	15-27	151942	1



Line junction boxes
for power supply lines
for tunnel fans
400°C 120'
850°C 90'
IP66



Line cable cross-section (mm²)	Terminals poles/section (mm²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
3x10					
3x16	3x25	185x185x105	M40 (15-27)	151553	1
3x25					
3x35	3x40	252x185x152	M40 (15-27)	151564	1
3x50	3x70	252x185x152	M50 (22-35)	151575	1
3x70	3x70	252x185x152	M63 (35-48)	151585	1

Note: special configurations on request.