

Palazzoli

General Catalogue



2019/2020

Palazzoli



CHIAREZZA DELLA FUNZIONE
SEMPlicità DI PROGETTO
QUALITÀ DELLA MANIFATTURA

CLARITY OF FUNCTION
PROJECT SIMPLICITY
QUALITY OF MANUFACTURE



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.

WIRING ISTRUCTIONS



Available on www.palazzoli.com

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+
230V

Line cable cross-section (mm²)	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 **socket** for **emergency circuits** **IP66 - 850°C 90°**

2P+
230V

Line cable cross-section (mm²)	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.



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 (mm²)	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.



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 (mm²)	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.



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.



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

Manufacturing material	Palazzoli code	Pack Qty
Stainless steel	157060	100



TUNNEL54 series

Fire resistant junction boxes with terminal blocks

Tunnels
lighting circuits

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.

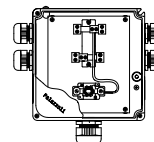
Compliance
with standards

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



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



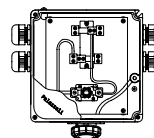
Line cable cross-section (mm²)	Terminals poles/section (mm²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
2x (1x4)-2x (1x6)	2x6	185x185x105	M16 (4-9,5)	151011	1
2x (1x10)-2x (1x16)	2x16	185x185x105	M20 (7-13)	151022	1
2x (1x25)-2x (1x35)	2x40	185x252x152	M25 (8-16)	151034	1
2x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

Equipment included: reduction inserts for cable glands.

Notes: special configurations on request.



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

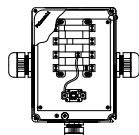
Equipment included: reduction inserts for cable glands.

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 (mm²)	Terminals poles/section (mm²)	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

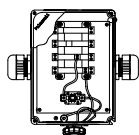
Equipment included: reduction inserts for cable glands.

Notes: special configurations on request.



2P+PE
230V

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



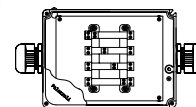
Line cable cross-section (mm²)	Terminals poles/section (mm²)	Outer dimensions (mm)	Line cable glands (ømm)	Palazzoli code	Pack Qty
4x4 - 4x6	4x6	185x252x152	M32 (11-21)	151441	1
4x10	4x16	185x252x152	M32 (11-21)	151442	1
4x16	4x16	185x252x152	M40 (15-27)	151452	1
4x25 - 4x35	4x40	185x252x152	M40 (15-27)	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.



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



Line cable cross-section (mm²)	Terminals poles/section (mm²)	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.



Supports for mounting of junction boxes

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

Equipment included: screws for fixing the boxes.

The background of the entire page is a deep blue space scene. A bright sun or star is rising over the horizon of the Earth, creating a lens flare effect. The Earth's surface is visible, with the Italian peninsula clearly illuminated by city lights. A network of glowing blue lines connects various points across the sky, resembling a global communication or data network.

Palazzoli

— excellence —
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