



TH381
TH625

MICRO CONNECTORS AND CURRENT DISTRIBUTORS (IP68/IP69K)

micronnect

High-reliability
electrical connections

MADE IN ITALY

www.techno.it



t **techno**[®]
TECHNOLOGY & INNOVATION

Micro connectors and current distributors Plug and Socket

Precision and quick installation
in small spaces

Choose **innovation** and reliability
Reduce installation and maintenance costs
Extend the possibilities of use

IP68

IP69K

micronnect®



TH381



ARCHITECTURAL LIGHTING
Techno products are perfect for
connection of floodlights, facade
and wall luminaires.



LIGHTING IN WATER
Techno products guarantees
protection against external
agents also in case of
permanent submersion.



TH625



Ø 14 mm

TH381



TH381



URBAN AND STREET LIGHTING

Techno products ensure the connection of urban luminaires, built-in and walk-over spotlights. They are useful for the connection of LED modules inside all sources of artificial light in the streets.



INDOOR LIGHTING

Techno products are useful for the connection of indoor appliances where the dimensions of the connector are a very important factor.



ADVERTISING BILLBOARDS AND ROAD SIGNS

Techno products can be used to connect lighting panels and road lane light markers.

SERIES TH381

MICRO-CONNECTOR PLUG AND SOCKET, 2 AND 3 POLES, IP68/IP69K, SCREW TERMINAL BLOCKS



EXTRA SAFE



RESISTANT

against the effects of permanent submersion and pressurised water (according to EN60529).

QUICK INSTALLATION

Fewer parts to assemble, fewer installation mistakes, anti-leakage gaskets.

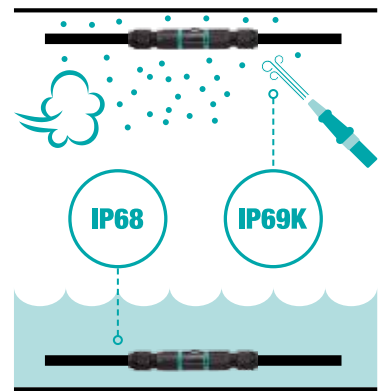
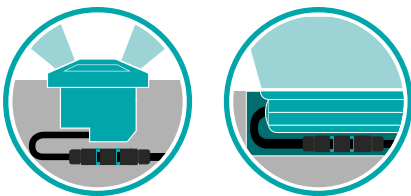


EXTRA COMPACT



CONNECTIONS IN SMALL SPACES

within machinery, equipment and installation systems.



Total protection AGAINST DUST

Total protection against the effects of PERMANENT SUBMERSION AND PRESSURE WATER

EXTRA RAPID

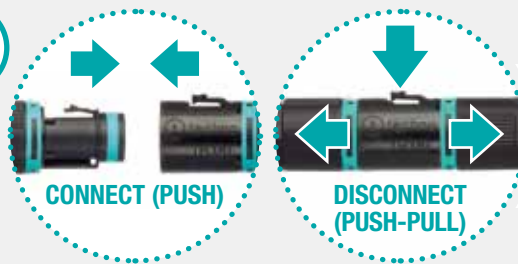


FIELD WIRING INSTALLATION

Screw wire terminals for stranded and solid cables.

RAPID CONNECTION AND DISCONNECTION

Special coupling system ensures the correct fastening. Faster than any screw or bayonet coupling system.



EASY-CLICK SYSTEM

EXTRA ROBUST



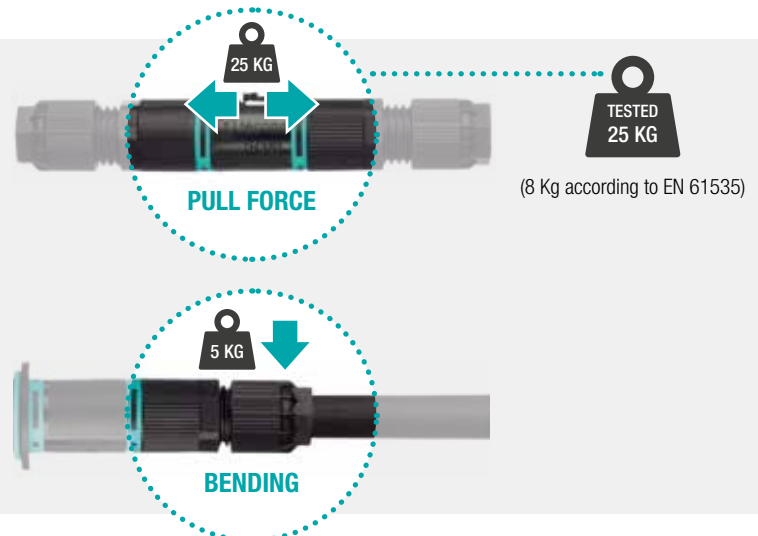
RESISTANT TO CABLE TRACTION

(prevents accidental disconnections) up to 25 kg.

RESISTANT TO CONNECTOR FLEXURE

up to 5 kg.

The special patented coupling system ensures the correct fastening between the plug and the socket.

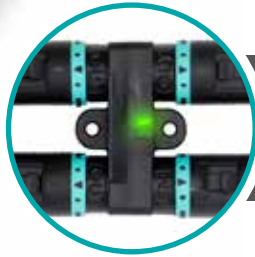


(8 Kg according to EN 61535)

SERIES TH625

CURRENT MICRO-DISTRIBUTOR PLUG AND SOCKET, 4 WAYS (TYPE H), 2 AND 3 POLES, IP68

IP68



LED POWER INDICATOR

Quickly view correct operation of the connector.

xDRY[®] EXTRA DRY

NO MORE CONDENSATION: REDUCED REPAIRS AND MAINTENANCE COSTS

The special anti-moisture barrier prevents any moisture or damp inside the cable from entering the connection and proceeding towards the device installed.

-90% WATER PENETRATION

Important reduction of defects caused by water penetration.

HIGH RELIABILITY

to guarantee electrical continuity over time.

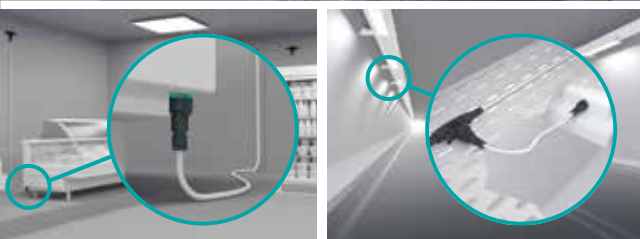
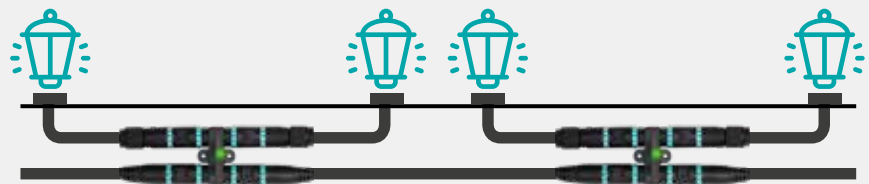


RAPID INSTALLATION
of a more and more advanced plant

EXTRA FLEXIBLE

USEFUL SOLUTIONS FOR MANY APPLICATIONS

Lighting, installation, automation, industrial machines, robots, control systems, industrial washing, motors, infrastructures, transportation, marine, energy production plants, handling machines, gate and door automation, CCTV.



FOLLOW US



CODES AND TECHNICAL INFORMATION

TH381 micro-connector plug and socket, 2 and 3 poles, IP68/IP69K, screw terminal blocks



Our materials do not contain sulfur which negatively affects the LED lifespan.



PLUG



SOCKET

N. poles	Markings	Diam. cable min. - max. (mm)	Code	Pack. (Pieces)	Code	Pack. (Pieces)
2	1 - 2	5.8 ... 6.9	THB.381.A2A	200	THB.381.B2A	200
2	1 - 2	7.0 ... 8.0	THB.381.A2A.L	200	THB.381.B2A.L	200
3	L - N - ⊕	7.0 ... 8.0	THB.381.A3E	200	THB.381.B3E	200
3	L - N - ⊕	8.0 ... 9.0	THB.381.A3E.L*	200	THB.381.B3E.L*	200

NOTE

- (*) Versions for cables of diameter from 8.0 to 9.0 mm available in December 2019
- For cables with a smaller diameter use specific accessories
- Customized markings on request. Contact our Customer Service

KIT PACK

N. poles	Markings	Diam. cable min. - max. (mm)	Code	Pack. (Pieces)
2	1 - 2	4.0 ... 8.0	THB.381.A2A.R	50
3	L - N - ⊕	5.8 ... 8.0	THB.381.A3E.R	50

NOTE: KIT includes plug and socket connectors, installation tool, various accessories and instruction sheet



PLUG PANEL



SOCKET PANEL

N. poles	Markings	Hole/Thread	Code	Pack. (Pieces)	Code	Pack. (Pieces)
2	1 - 2	M16 x 1.5	THB.381.N2A	200	THB.381.P2A	200
2	1 - 2	M11 (only non-conductive panels)	THB.381.L2A	200	THB.381.M2A	200
3	L - N - ⊕	M16 x 1.5	THB.381.N3E	200	THB.381.P3E	200
3	L - N - ⊕	M11 (only non-conductive panels)	THB.381.L3E	200	THB.381.M3E	200

NOTE: customized markings on request. Contact our Customer Service

KIT PACK

N. poles	Markings	Hole/Thread	Code	Pack. (Pieces)
2	1 - 2	M11/M16 - Diam. cables 4.0 - 8.0	THB.381.N2A.R	50
3	L - N - ⊕	M11/M16 - Diam. cables 5.8 - 8.0	THB.381.N3E.R	50

NOTE: KIT includes plug and socket connectors, installation tool, various accessories and instruction sheet

TECHNICAL INFORMATION

Electrical Data

Operating voltage
Operating current
Impulse withstand voltage
Contact resistance
Insulation resistance
Cable section (stranded and solid) min ... max
Stripping length
Dismantling length
Contact screw terminal blocks

Note: Suitable for class 2 (double insulated) max. 250 V AC.

Material characteristics

Plug and Socket connector body
Cable glands
Gaskets
Contacts

Corrosion resistance

Properties

Tracking index

Overvoltage category

Pollution degree

Note: ⁽¹⁾ f1: the material is in compliance with the requirements of UV resistance, installation resistance where there is water and submersion resistance as specified in UL 746C regulation.

Mechanical characteristics

Operating temperature min ... max
Protection degree (IP)
Impact resistance (IK)
Operating cycles (Connection/Disconnection)

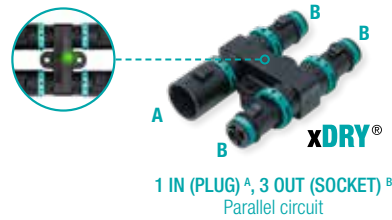
Reference regulations

	2 POLES	3 POLES
Operating voltage	400V AC/DC (48V DC)	400V AC/DC (48V DC)
Operating current	10A AC (max. 1A DC)	10A AC (max. 1A DC)
Impulse withstand voltage	4kV	4kV
Contact resistance	<10 mΩ	<10 mΩ
Insulation resistance	100 M Ohms	100 M Ohms
Cable section (stranded and solid) min ... max	0.25 ... 1.0 mm ²	0.25 ... 1.0 mm ²
Stripping length	10 mm	10 mm
Dismantling length	max. 20 mm	max. 20 mm
Contact screw terminal blocks	↻ max. 0.2 Nm	↻ max. 0.2 Nm
Plug and Socket connector body	PA66 GF UL94 V0 (f1) - GWT 960°C ⁽¹⁾	PA66 GF UL94 V2 (f1) - GWT 850°C ⁽¹⁾
Cable glands	PA66 GF UL94 V2 (f1) - GWT 850°C ⁽¹⁾	TPE
Gaskets	Silver-plated brass (zinc-plated screws)	
Contacts	Salt mist, 1000 hours, 5% salt solutions, 35°C EN60068-2-11 Test Ka; ISO6988 sulfur dioxide	
Corrosion resistance	Halogen free - Silicone free	
Properties	PTI 175	
Tracking index	II	
Overvoltage category	2	
Pollution degree		
Operating temperature min ... max	- 40°C ... +125°C	
Protection degree (IP)	IP68 (30m/1h) / IP69K	
Impact resistance (IK)	IK 06	
Operating cycles (Connection/Disconnection)	100 cycles	100 cycles
Reference regulations	EN61984	EN61535

TH625 current micro-distributor plug and socket, 4 ways (type H), 2 and 3 poles, IP68



Our materials do not contain sulfur which negatively affects the LED lifespan.



N. poles	Markings	Diam. cable min. - max. (mm)	Code	Pack. (Pieces)
2	1 - 2	See series TH381	THH.625.A2A	50
3	L - N - ⊕	See series TH381	THH.625.A3E	50

NOTE: plug and socket connectors are not included in the packaging. To be ordered separately (see previous page - TH381 connectors)

KIT PACK

N. poles	Markings	Diam. cable min. - max. (mm)	Code	Pack. (Pieces)
2	1 - 2	4.0 ... 8.0	THH.625.A2A.R	10
3	L - N - ⊕	5.8 ... 8.0	THH.625.A3E.R	10

NOTE: KIT includes plug and socket connectors, installation tool, various accessories and instruction sheet

TECHNICAL INFORMATION ⁽²⁾

Electrical Data

Operating voltage
Operating current
Impulse withstand voltage
Contact resistance
Insulation resistance
Operating cycles
Cable section (stranded and solid) min ... max
Note: suitable for class 2 (double insulated) max. 250 V AC.

Material characteristics

Current distributor body
Plug and socket connectors
Gaskets
Contacts
Corrosion resistance
Properties
Tracking index
Overvoltage category
Pollution degree

Note: ⁽¹⁾ f1: the material is in compliance with the requirements of UV resistance, installation resistance where there is water and submersion resistance as specified in UL 746C regulation.

Mechanical characteristics

Operating temperature min ... max
Protection degree (IP)
Impact resistance (IK)

Reference regulations

EN61984
EN61535

	2 POLES	3 POLES
Operating voltage	400V AC/DC (48V DC)	400V AC/DC (48V DC)
Operating current	10A AC (max. 1A DC)	10A AC (max. 1A DC)
Impulse withstand voltage	4kV	4kV
Contact resistance	<10 mΩ	<10 mΩ
Insulation resistance	100 M Ohms	100 M Ohms
Operating cycles	100 cycles	100 cycles
Cable section (stranded and solid) min ... max	0.25 ... 1.0 mm ²	0.25 ... 1.0 mm ²
Current distributor body	Thermoplastic Hot Melt	
Plug and socket connectors	PA66 GF UL94 V0 (f1) - GWT 960°C ⁽¹⁾	
Gaskets	TPE	
Contacts	Silver-plated brass (zinc-plated screws)	
Corrosion resistance	Salt mist, 1000 hours, 5% salt solutions, 35°C EN60068-2-11 Test Ka; ISO6988 sulfur dioxide	
Properties	Halogen free - Silicone free	
Tracking index	PTI 175	
Overvoltage category	II	
Pollution degree	2	
Operating temperature min ... max	- 40°C ... +125°C	
Protection degree (IP)	IP68 (30m/1h) xDRY®	
Impact resistance (IK)	IK 06	
Reference regulations	EN61984 EN61535	

NOTE: ⁽²⁾ Product certifications are in progress

ACCESSORIES (Contact our Customer Service or learn more on www.techno.it)



Closure cap:
Connector 2 poles
for socket (cod. 6000448GT)
for plug (cod. 6000447GT)



Cable reducers and multiple hole grommets:
1-hole (cod. 6000473GT)
2-holes (cod. 6000461GT)
3-holes (cod. 6000520GT)



Accessory for cable fixing
(cod. 6000462KC)



Allen screw driver (0.9 mm)
(cod. 650000800)



Accessory for connector panel fixing:
connector 2p (cod. 6000476KC)
connector 3p (cod. 6000531KC)

Connector 3 poles
for socket (cod. 6000521GT)
for plug (cod. 6000447GT)

CONNECTORS WITH CABLE AND CUSTOM SOLUTIONS

The micron.nect® series of connectors are available pre-wired and overmoulded with cables. Techno also offer customized solutions. Contact our Customer Service for more information.



Solutions

High-reliability

We rely on excellent materials and production technologies.

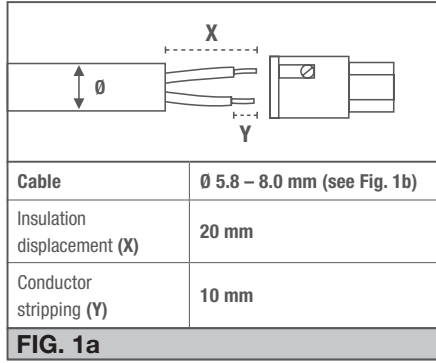
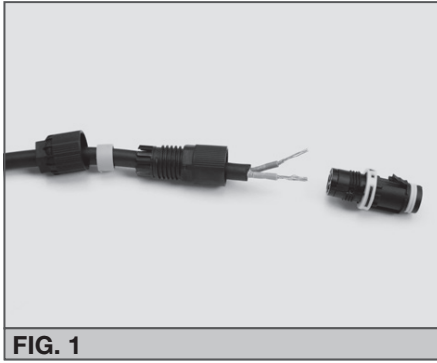
We perform stress tests on our products according to test parameters which are higher than the ones required by the norm. This procedure allows us to obtain very high mechanical resistance to damp, water, dusts and highly toxic substances.

We use thermoplastic materials PA66 GF UL 94 V0/V2 (f1 - UL 746C). Below an incomplete list of some substances and their relative resistance (at room temperature) of the PA66 GF is given.

Substance	Resistant	Chemical formula	Applications
Acetylene	Yes	C_2H_2	Lighting devices, Welding and brazing plants
Ammonia	Yes	NH_3	Painting plants, plastic material production plants, paper and rubber industries
Methyl alcohol	Partially	CH_3OH	Solvents, reagents for industrial chemical processes
Benzene	Yes	C_6H_6	Drugs and colorants production, chemical compounds synthesis, industrial solvents
Calcium chloride in water-based solution (salt)	Yes	$CaCl_2$	Refrigerating plants, sewage disposal, oil and gas extraction wells
Chlorine	Partially	Cl	Swimming pools. Water purification plants
Diesel	Yes	-	Diesel engines. Transport. Heating plants
Fertilizers	Yes	-	Agriculture
Lubricating oils	Yes	-	Industrial machinery. Water plants
Petroleum	Yes	-	Fuels, transport, heating and energy production plants
Phosphate	Yes	-	Cleansers, fertilizers, food industry
Sea water	Yes	-	Marine environment

Contact our customer service to verify the resistance of micron.nect connector to its use under particular conditions according to customers specifications. The characteristics of TPE-S rubber: excellent resistance against UV rays, ozone and weather damage.

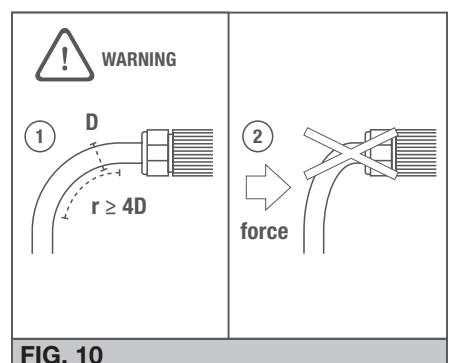
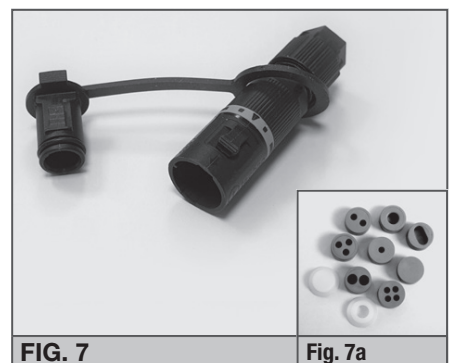
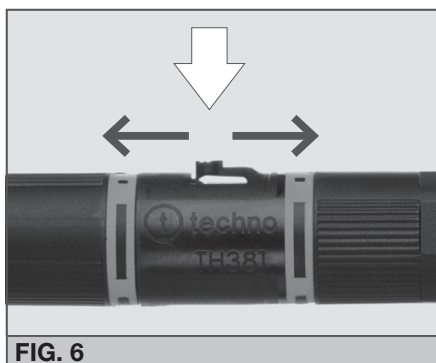
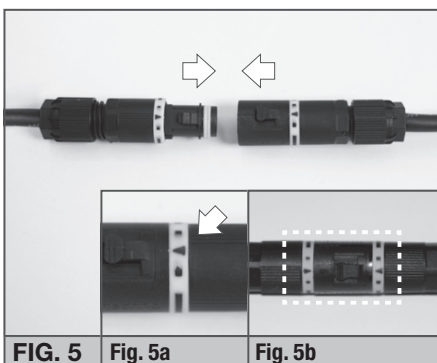
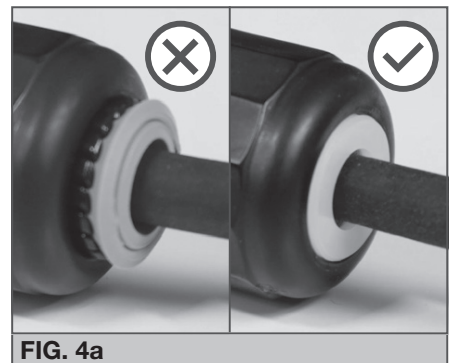
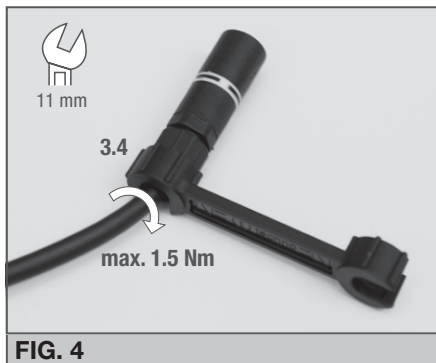
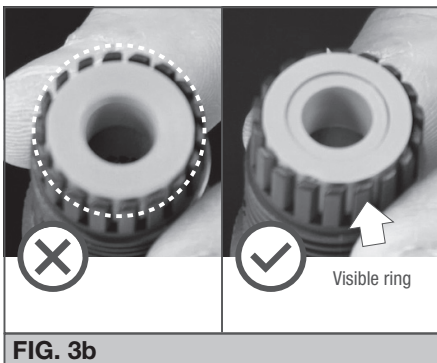
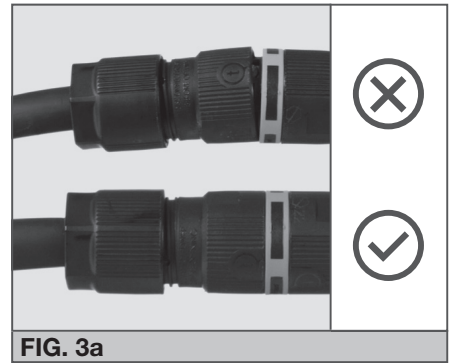
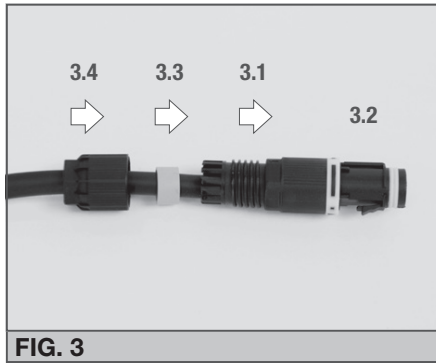
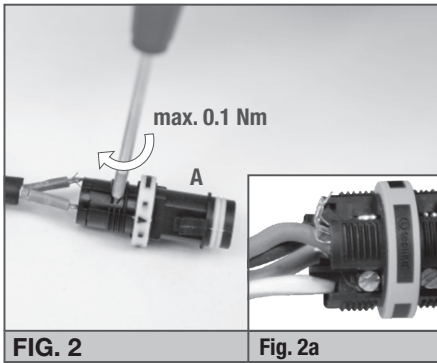
INSTALLATION ILLUSTRATIONS

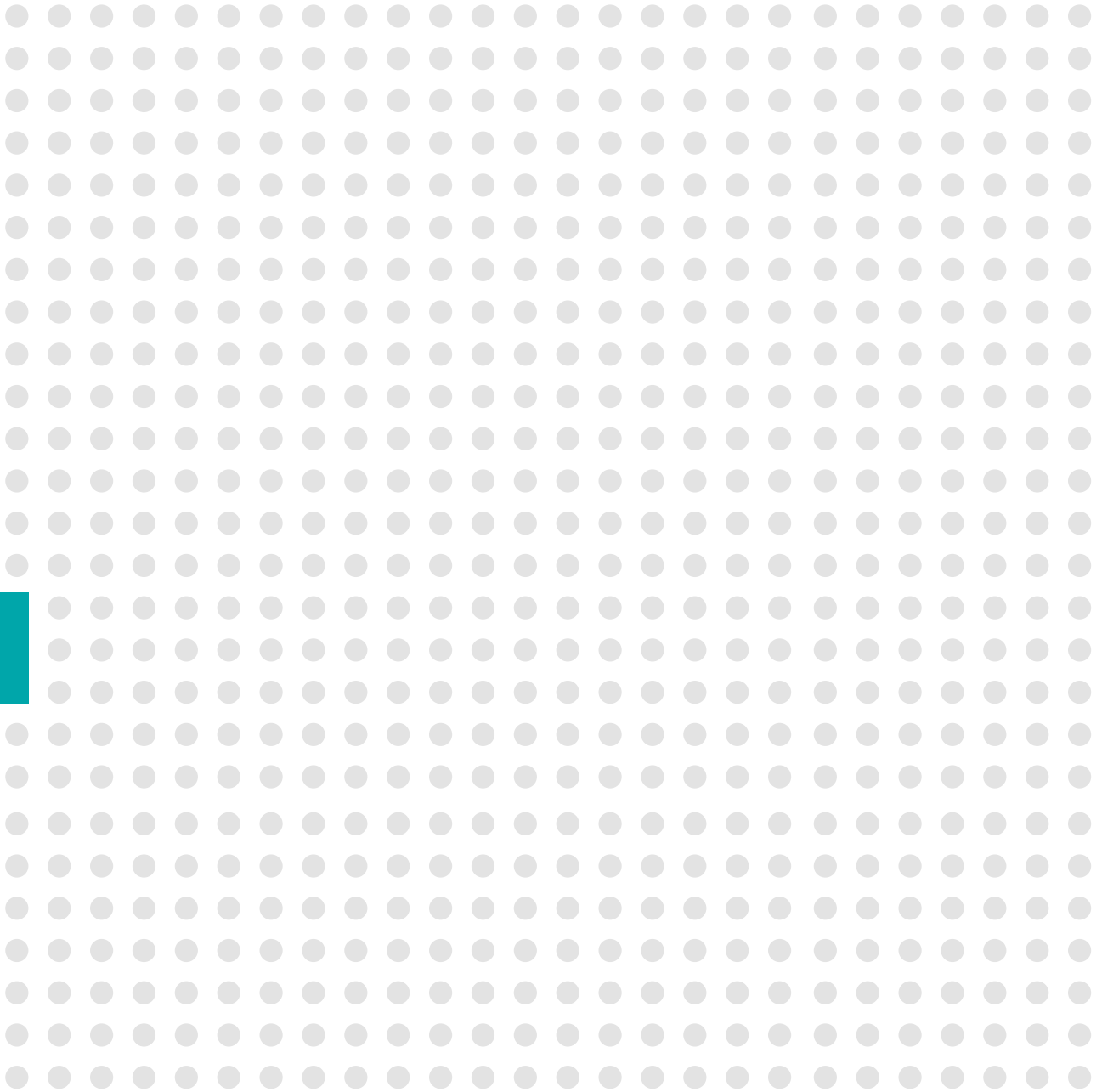


Grommet/ Adapter	Cable Ø min. - max.	
	2 poles	3 poles
	7.0 mm – 8.0 mm ⁽²⁾	7.0 mm – 8.0 mm ⁽¹⁾⁽²⁾
	5.8 mm – 6.9 mm ⁽¹⁾	-

⁽¹⁾ For cables with a smaller diameter, use the appropriate accessories (visit www.techno.it)
⁽²⁾ Tested up to 7.5mm

FIG. 1b





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Techno reserves the right to make any adjustments to the information contained herein at any time without notice. The dimensions and the specifications in this catalogue are for reference purpose only and are subject to change without notice. Consult Techno for the latest dimensions and design specifications or visit our web site www.techno.it

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