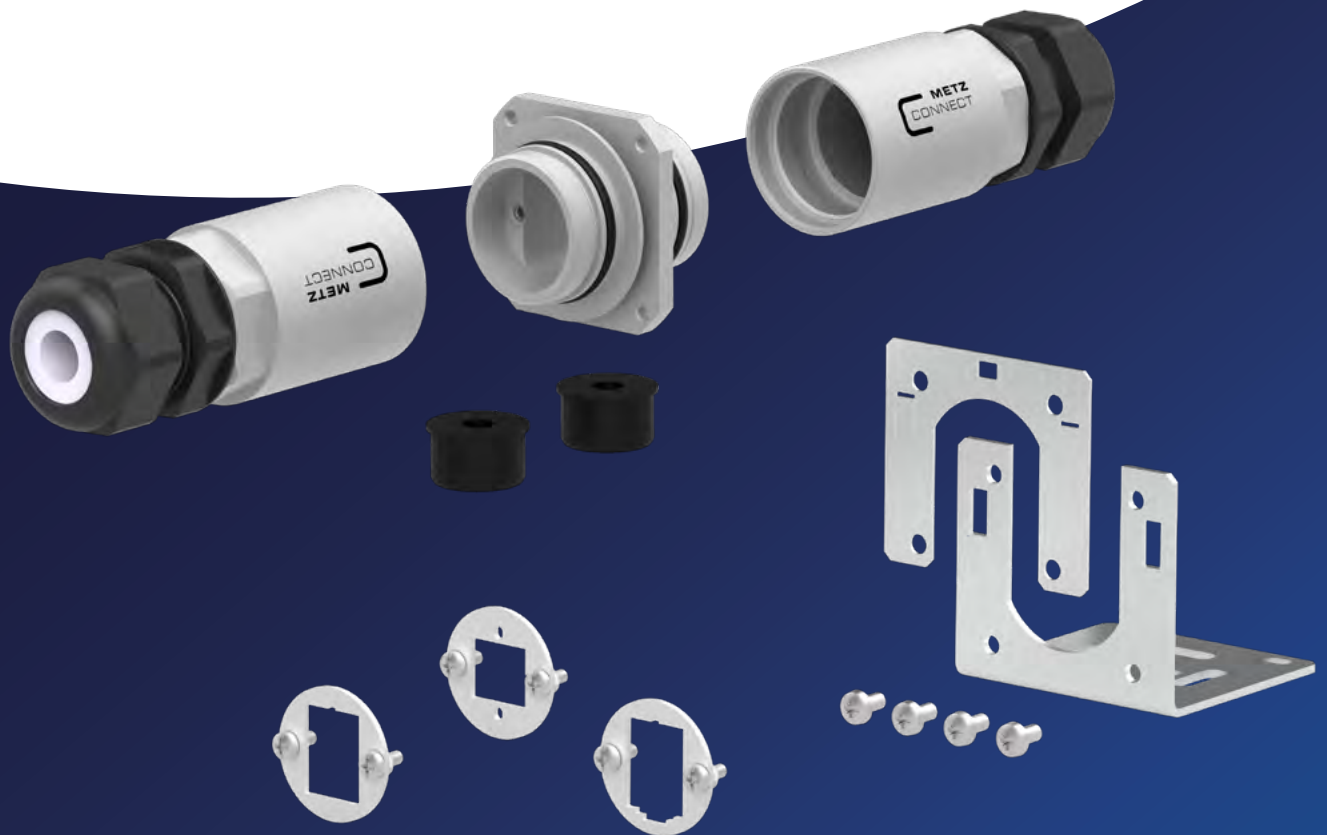


MCO IP69k –

protective housing
for DNT outdoor applications



MCO IP69k

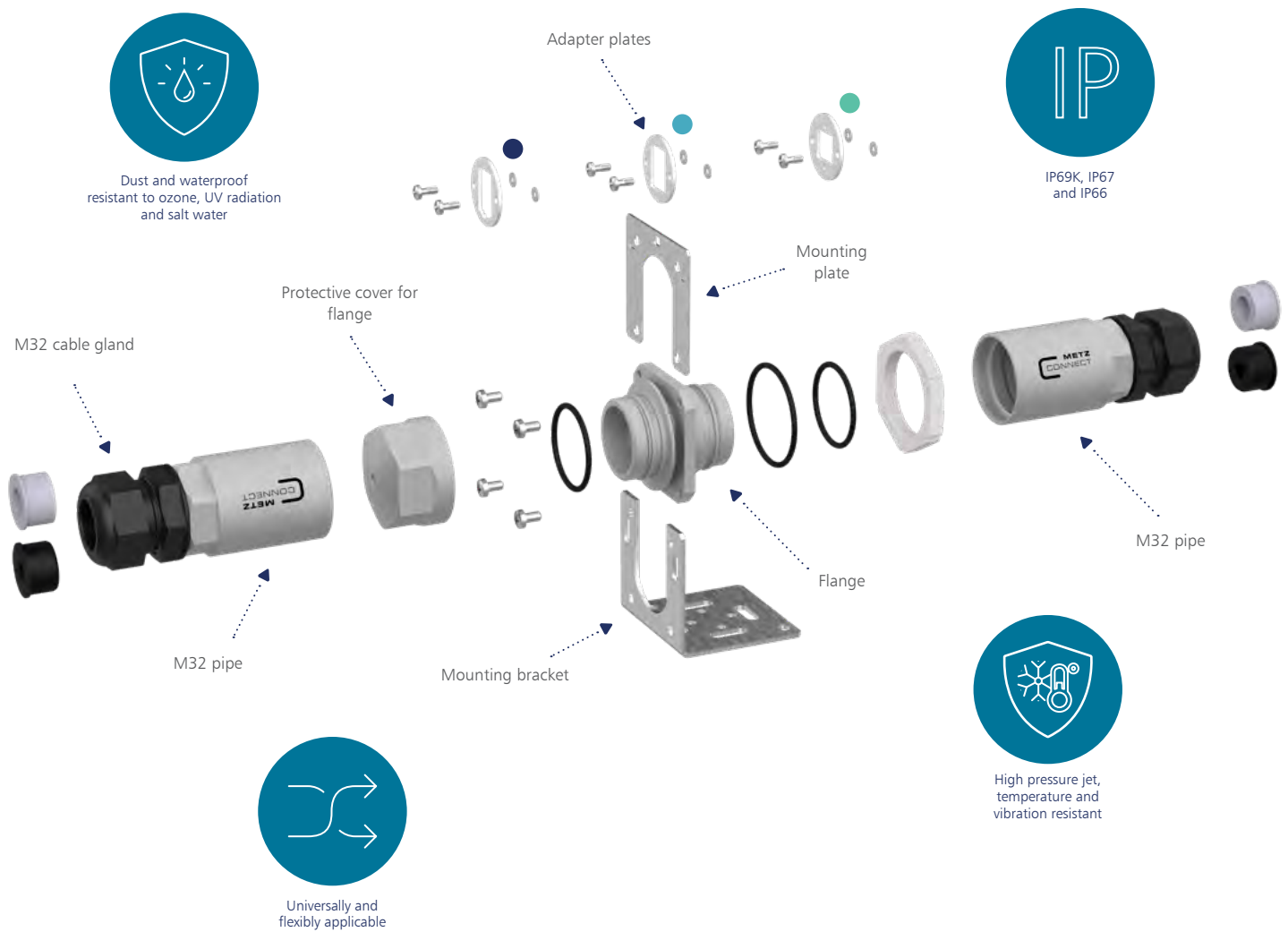
protective housing for DNT* outdoor applications

Digital networking | The demand for outdoor cabling solutions is growing unabated. This is due to modern network and IP interface technologies, which are essential for digitization. These will enable the networking and deployment of surveillance cameras, sensors and digital traffic signs, as well as wireless access points.

METZ CONNECT Outdoor | Our MCO IP69k protective enclosures provide reliable protection for your permanent outdoor connections. They are not only completely dustproof and waterproof, but also resistant to ozone, UV radiation and salt water. Furthermore, they withstand high temperatures, strong vibrations and high-pressure jet cleaning, thus providing reliable protection against external interference. The flexible and easy-to-install solutions have been specially designed to accommodate and protect field-assembled cables, pre-assembled patch cables and fiber optic (FO) connections.

Flexible & reliable | Our universally applicable protective housings for outdoor applications are available in three different versions, and cover all conceivable applications in practice. The three variants of the protective housings have been specially designed for free installation, as well as for wall, DIN rail, quick and pole mounting. In addition, we also offer a solution for wall or housing feed-through. Thanks to the adapter plates included in the delivery contents, countless combinations are possible with various modules, plug-in connectors, and cable connectors, regardless of whether it is a matter of accommodating and protecting field-assembled cables or pre-assembled patch cables and fiber optic (FO) connections.

Structure



MC module

Keystone

Fiber optic (FO)

Variant



Set for free laying

Part Number: 14040000-E

- > universally and flexibly applicable
- > completely dust and waterproof
- > resistant to ozone, UV radiation and salt water
- > resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- > tested according to IP69k, IP67 and IP66
- > M32 anodized aluminum tubes and flange
- > incl. M32 cable glands (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- > suitable for cable sheath diameters from 4.5 to 15 mm



Set wall and housing bushing

Part Number: 14040100-E

- > incl. M40 locknut (PA) for wall and housing mounting
- > universally and flexibly applicable
- > completely dust and waterproof
- > resistant to ozone, UV radiation, and salt water
- > resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- > tested according to IP69k, IP67, and IP66
- > M32 anodized aluminum tube and flange
- > incl. M32 cable gland (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- > suitable for cable sheath diameters from 4.5 to 15 mm

Accessories

Protective cover for flange

Part Number: 14040Z02-E

- > M32 anodized aluminum protective cover
- > Designed for permanent use
- > For the realization of wall and housing feed-throughs
- > IP69k when mounted
- > suitable for item no.: 14040000-E, 14040010-E, 14040100-E
- > Packaging contents: 1 pc.



Set with mounting bracket

Part Number: 14040010-E

- > designed for wall, top-hat rail, quick and pole mounting
- > incl. mounting bracket and mounting plate for quick and tool-free fixation of the flange
- > universally and flexibly applicable
- > completely dust and waterproof
- > resistant to ozone, UV radiation, and salt water
- > resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- > tested according to IP69k, IP67 and IP66
- > M32 anodized aluminum tubes and flange
- > incl. M32 cable glands (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- > suitable for cable sheath diameters from 4.5 to 15 mm
- > Top-hat rail adapter not included in the delivery contents, P/N: 1308990111-I

Protective cover for pipe

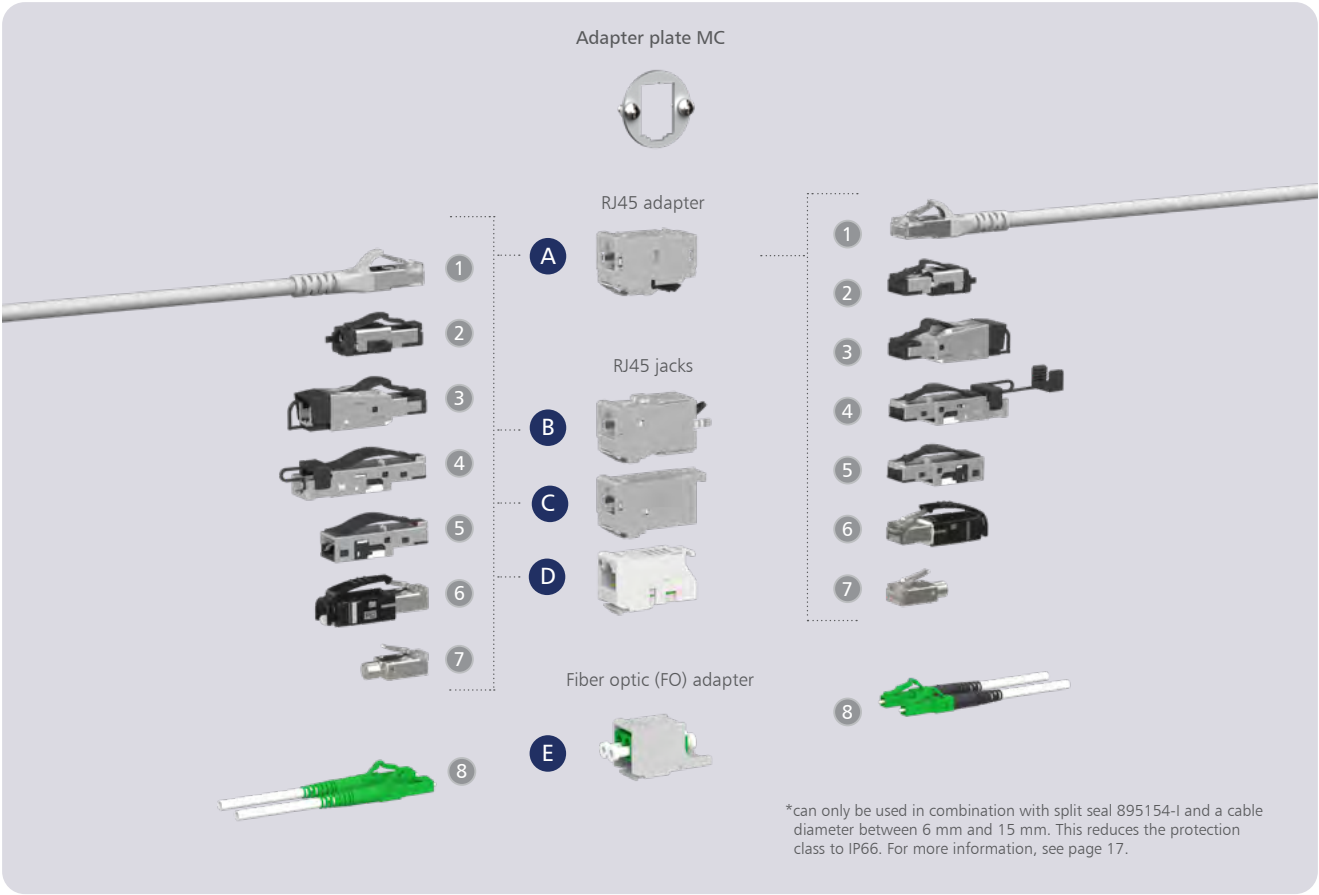
Part Number: 14040Z03-E

- > Temperature-resistant vinyl protective cap for MCO IP69k pipe
- > suitable for temporary use to protect the conduit
- > protect the pipe from foreign bodies
- > Quick and easy manual installation
- > IP40 when installed
- > suitable for item no.: 14040000-E, 14040010-E, 14040100-E
- > Packaging contents: 10 pcs.



Compatibility

MC module Adapter Plate

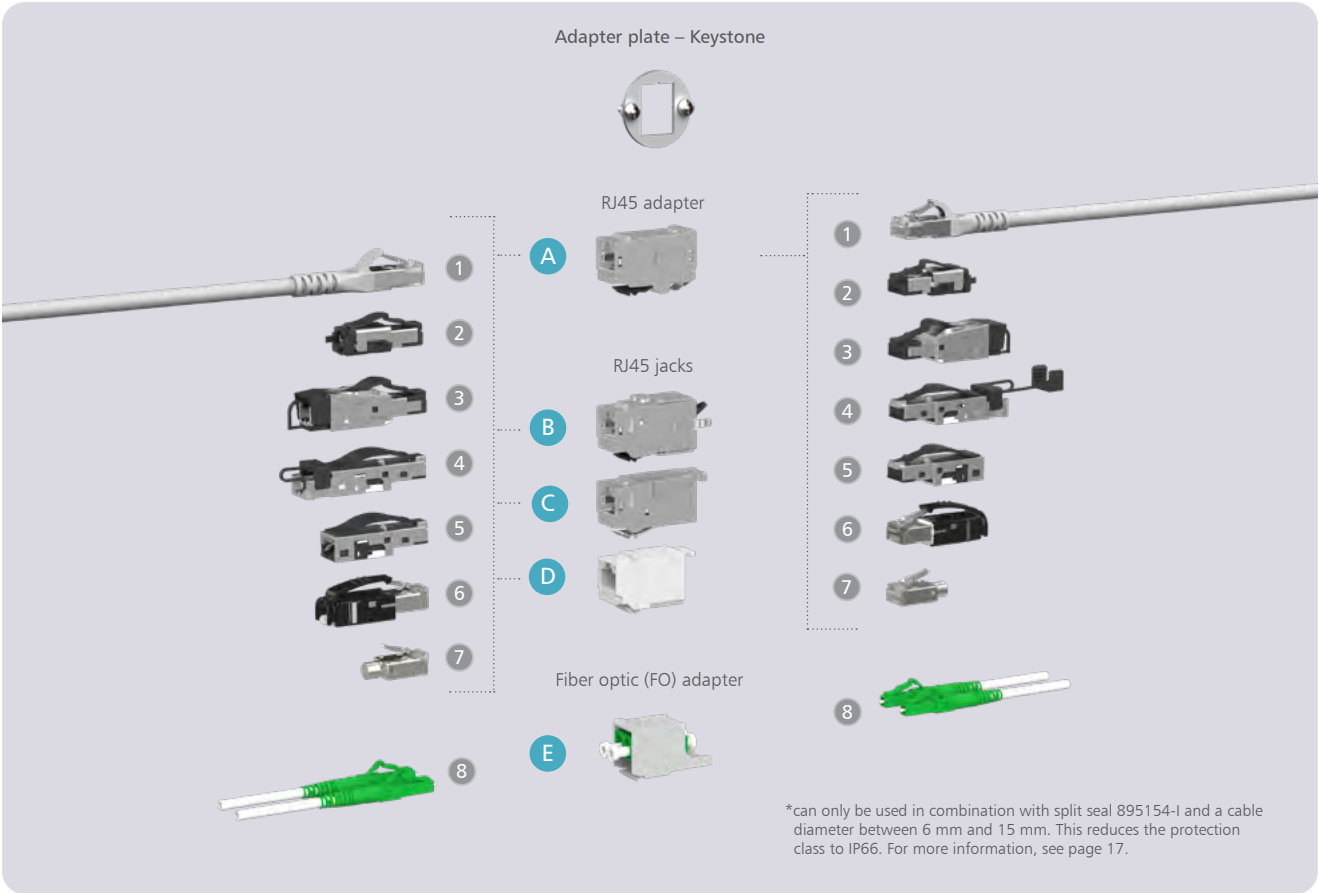


Product name	Features	P/N	Product name	Features	P/N
(A) E-DAT modul adapter	8(8) 180° Cl. E _A	1309A0-I	(D) UAE modul 8(8) Cat.6 _A	white	130A11-I
(B) C6 _A module 180° jack	single	130B11-E		black	130A11-29-I
	PU 12	130B11-Z		Cat.6	130909-I
(B) 25Gmodul	single	130B11-25-E	(D) UAE modul white		
	PU 12	130B11-25-Z		Cat.5e	130908-I-B1
(C) E-DAT modul Cat.6 _A 8(8) jack	single	130910-I	(2) RJ45 field plug ultra short	C6 _A	130E507032-E
	PU 12	130910-Z			

Product name	Features	P/N	Product name	Features	P/N
③ RJ45 field plug pro	C6 _A	130E405032-E	⑧ OpDAT FAST™ Hybrid Connector kit LC APC OS2 for buffers	PU 10	1509QAJA0010-E
	C6 _A , PU 100	130E405032-K		PU 20 incl. tool	1509QAJA002C-E
	40G	130H405032-E		PU 100 incl. tool	1509QAJA010C-E
	25G	130G405032-E	⑧ OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for buffers	PU 10	1509QAJA0010-E
	C5 PROFINET	130E405032-PE		PU 20 incl. tool	1509QAJA002C-E
④ E-DAT Industry field plug	Cat.6 Clas. E _A	1401405012-I		PU 100 incl. tool	1509QAJA010C-E
	PROFINET	1401405012-PI	⑧ OpDAT FAST™ Hybrid Connector kit LC APC OS2 for cable	PU 10	1509QKJA0010-E
⑤ E-DAT field plug short	Cat.6 Class E _A	1401400812-E		PU 20 incl. tool	1509QKJA002C-E
⑥ E-DAT Industry connector	Cat.6 Class E _A	1401505012-E		PU 100 incl. tool	1509QKJA010C-E
⑦ E-DAT Industry connector	Cat.6 Class E _A	1401505010-E	⑧ OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for cable	PU 10	1509QKJO0010-E
⑤ OpDAT module LC-Duplex	OS2	15091071-I		PU 20 incl. tool	1509QKJO002C-E
	OM3	15091072-I		PU 100 incl. tool	1509QKJO010C-E
	OM4	15091075-I			
	APC OS2	15091076-I			
	MM	1509107B-I			
	OM5	1509107M-I			
⑧ OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for buffers	PU 10	1509MAJO0010-E	⑧ OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for cable	PU 10	1509MAJO010C-E
	PU 20 incl. tool	1509MAJO002C-E		PU 20 incl. tool	1509MAJO010C-E
	PU 100 incl. tool	1509MAJO010C-E		PU 100 incl. tool	1509MAJO010C-E

Compatibility

Keystone adapter plate

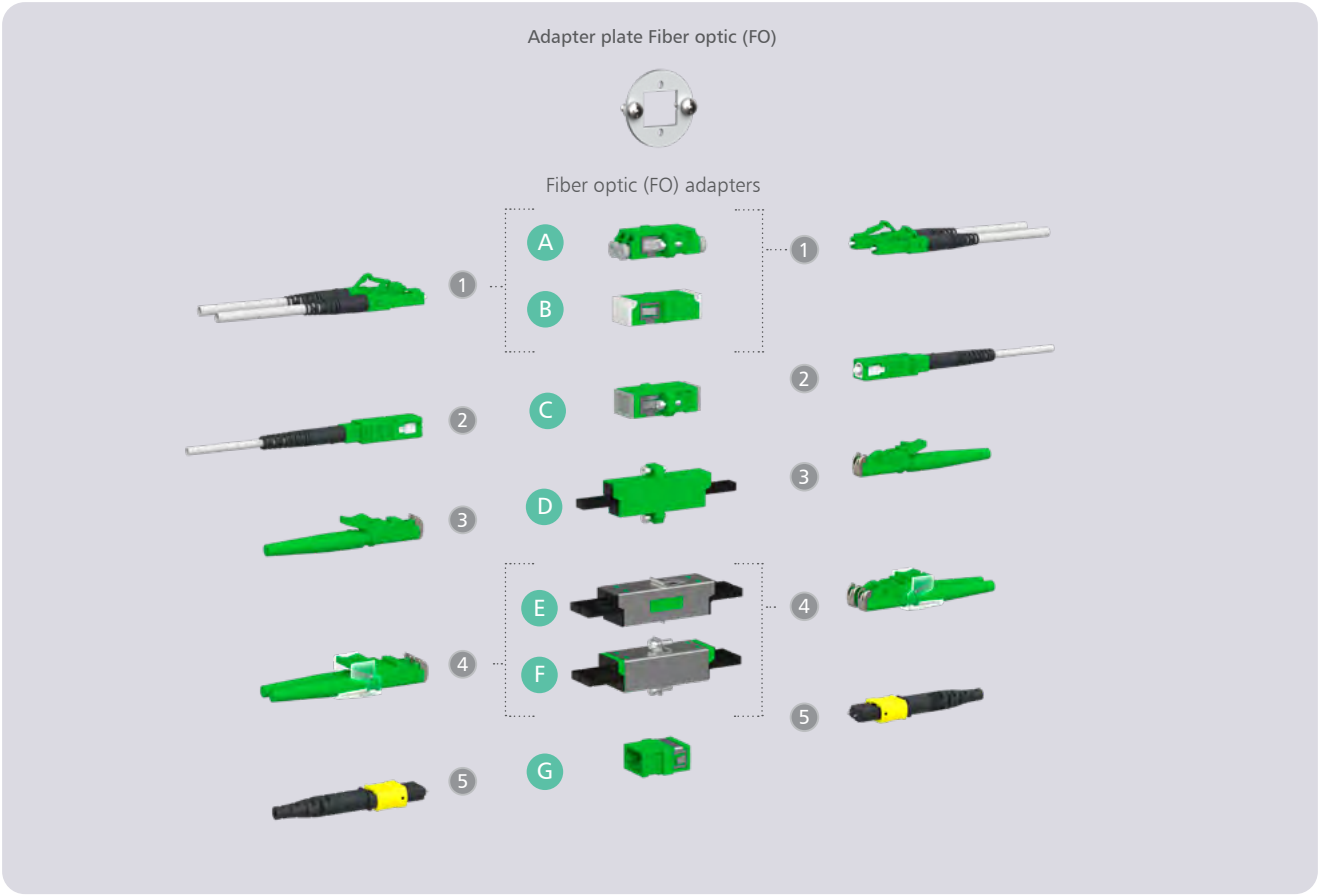


Product name	Features	P/N	Product name	Features	P/N
(A) E-DAT modul adapter	8(8) 180° Cl. E _A	1309A0-I	(D) UTP modul 8(8) Cat.6 _A	white	130A11KI
(B) C6 _A module K 180° jack – Keystone	single	130B21-E		black	130A11-29KI
	PU 12	130B21-Z		Cat.6 black	130A10-29-I-B1
(B) 25Gmodul – Keystone	single	130B21-25-E	(D) UTP modul	Cat.5e white	130A08-I-B1
	PU 12	130B21-25-Z			
(C) E-DAT modul Cat.6 _A K jack – Keystone	single	130910KI	(2) RJ45 field plug ultra short	C6 _A	130E507032-E
	PU 12	130910KZ			

Product name	Features	P/N	Product name	Features	P/N
③ RJ45 field plug pro	C6 _A	130E405032-E	⑧ OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for cable	PU 10	1509QKJO0010-E
	C6 _A , PU 100	130E405032-K		PU 20 incl. tool	1509QKJO002C-E
	40G	130H405032-E		PU 100 incl. tool	1509QKJO010C-E
	25G	130G405032-E	⑧ OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for buffers	PU 10	1509MAJO0010-E
	C5 PROFINET	130E405032PE		PU 20 incl. tool	1509MAJO002C-E
④ E-DAT Industry RJ45 field plug	Cat.6 Clas. E _A	1401405012-I		PU 100 incl. tool	1509MAJO010C-E
	PROFINET	1401405012PI	⑧ OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for cable	PU 10	1509MKJO0010-E
⑤ E-DAT field plug short	Cat.6 Class E _A	1401400812-E		PU 20 incl. tool	1509MKJO002C-E
⑥ E-DAT Industry connector	Cat.6 Class E _A	1401505012-E		PU 100 incl. tool	1509MKJO010C-E
⑦ E-DAT Industry connector	Cat.6 Class E _A	1401505010-E	⑧ OpDAT FAST™ Hybrid Connector kit LC APC OS2 for buffers	PU 10	1509QAJA0010-E
⑤ OpDAT module LC-Duplex	OS2	15091071-I		PU 20 incl. tool	1509QAJA002C-E
	OM3	15091072-I		PU 100 incl. tool	1509QAJA010C-E
	OM4	15091075-I			
	APC OS2	15091076-I			
	MM	1509107B-I			
	OM5	1509107M-I			
⑧ OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for buffers	PU 10	1509QAJO0010-E	⑧ OpDAT FAST™ Hybrid Connector kit LC APC OS2 for cable	PU 10	1509QKJA0010-E
	PU 20 incl. tool	1509QAJO002C-E		PU 20 incl. tool	1509QKJA002C-E
	PU 100 incl. tool	1509QAJO010C-E		PU 100 incl. tool	1509QKJA010C-E

Compatibility

Fiber optic (FO) adapter plate

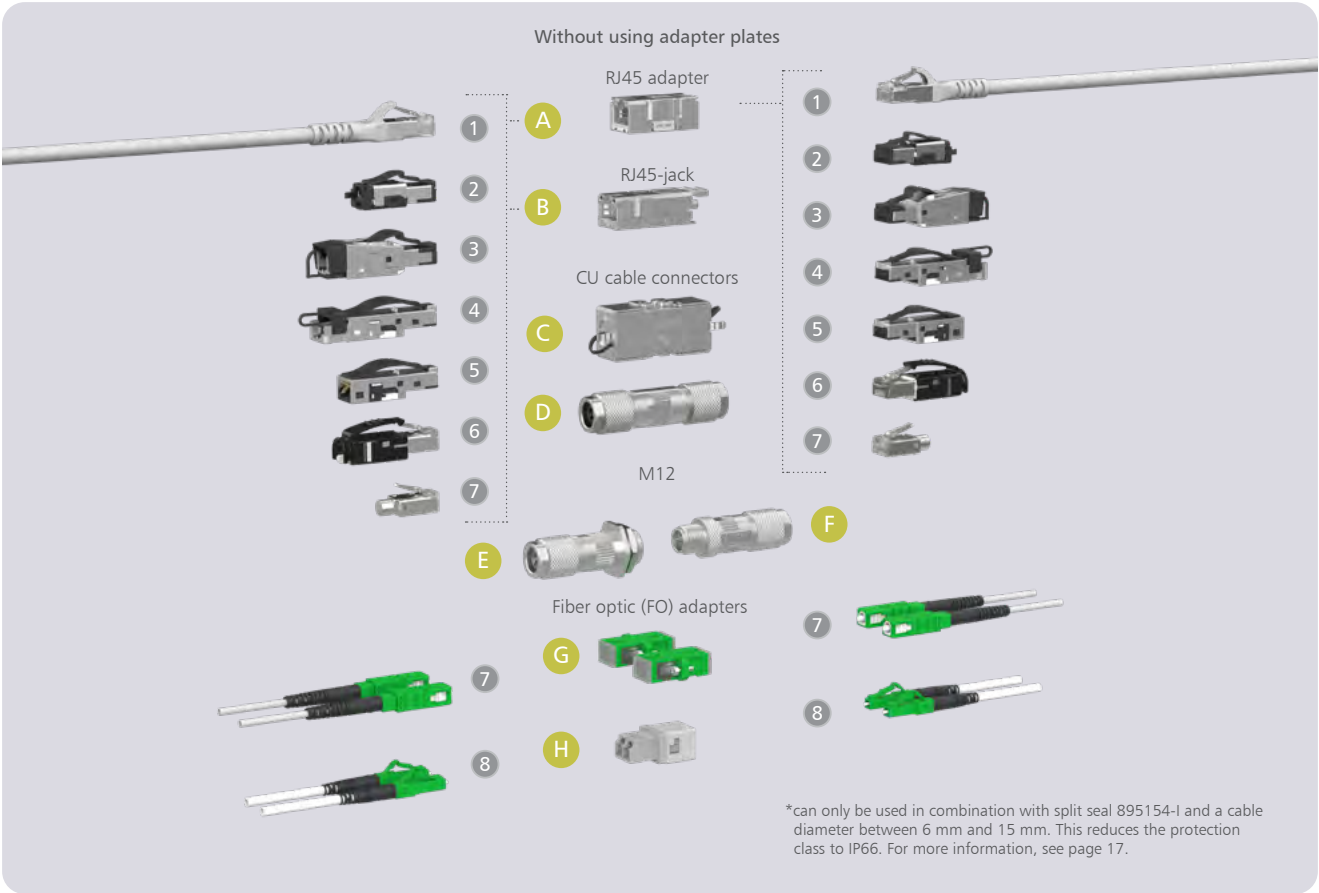


Product name	Features	P/N	Product name	Features	P/N
A OpDAT adapter LC-Duplex OS2	single	15090074-I	A OpDAT adapter LC-Duplex OM3	single	15090077-I
	PU 50	15090074-50		PU 50	15090077-50
A OpDAT adapter LC-Duplex	OM4	15090075-I	A OpDAT adapter LC-Duplex	MM	1509007B-I
	OM4, PU 50	15090075-50	B OpDAT adapter LC-D APC OS2	Inside shutter	1509007G-I
	OM5	1509007M-I	C OpDAT adapter SC-Simplex APC OS2	single	1509001A-I
A OpDAT adapter LC-Duplex APC OS2	single	15090076-I	C OpDAT adapter SC-Simplex UPC OS2	single	1509001B-I
	PU 50	15090076-50			

	Product name	Features	P/N		Product name	Features	P/N
C	OpDAT adapter SC-Simplex	OM3	1509001C-I	1	OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for buffers	PU 10	1509QAJ0010-E
		OM4	1509001D-I			PU 20 incl. tool	1509QAJ0002C-E
C	OpDAT adapter SC-Simplex APC OS2	with shutter	1509001H-I			PU 100 incl. tool	1509QAJ0010C-E
		OM5	1509001M-I	1	OpDAT FAST™ Hybrid Connector kit LC APC OS2 for cable	PU 10	1509QKJA0010-E
D	OpDAT adapter E2000-Simplex	OM4	1509005G-I			PU 20 incl. tool	1509QKJA002C-E
		OM5	1509005M-I			PU 100 incl. tool	1509QKJA010C-E
		OS2	15090058-I	1	OpDAT FAST™ Hybrid Connector kit LC UPC OS2 for cable	PU 10	1509QKJO0010-E
		APC OS2	15090059-I			PU 20 incl. tool	1509QKJO002C-E
E	OpDAT adapter E2000-Duplex with Snap-In mounting	OS2	1509005B-I			PU 100 incl. tool	1509QKJO010C-E
		APC OS2	1509005C-I	2	OpDAT FAST™ Hybrid Connector kit SC PC OM3/OM4 for buffers	PU 10	1509MAEO0010-E
F	OpDAT adapter E2000-Duplex with flange mounting	APC OS2	1509005F-I			PU 20 incl. tool	1509MAEO002C-E
		OM3	1509005MA-I			PU 100 incl. tool	1509MAEO010C-E
		OM4	1509007MA-I	2	OpDAT FAST™ Hybrid Connector kit SC PC OM3/OM4 for cable	PU 10	1509MKEO0010-E
		OM5	1509008MA-I			PU 20 incl. tool	1509MKEO002C-E
G	OpDAT adapter MTP® Type A	APC OS2	1509009MA-I			PU 100 incl. tool	1509MKEO010C-E
		OM5	1509008MB-I	2	OpDAT FAST™ Hybrid Connector kit SC APC OS2 for buffers	PU 10	1509QAEA0010-E
G	OpDAT adapter MTP® Type B	OM4	1509007MB-I			PU 20 incl. tool	1509QAEA002C-E
		OM5	1509008MA-I			PU 100 incl. tool	1509QAEA010C-E
1	OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for buffers	PU 10	1509MAJO0010-E	2	OpDAT FAST™ Hybrid Connector kit SC UPC OS2 for buffers	PU 10	1509QAE00010-E
		PU 20 incl. tool	1509MAJO002C-E			PU 20 incl. tool	1509QAE0002C-E
		PU 100 incl. tool	1509MAJO010C-E			PU 100 incl. tool	1509QAE0010C-E
1	OpDAT FAST™ Hybrid Connector kit LC PC OM3/OM4 for cable	PU 10	1509MKJO0010-E	2	OpDAT FAST™ Hybrid Connector kit SC APC OS2 for cable	PU 10	1509QKEA0010-E
		PU 20 incl. tool	1509MKJO002C-E			PU 20 incl. tool	1509QKEA002C-E
		PU 100 incl. tool	1509MKJO010C-E			PU 100 incl. tool	1509QKEA010C-E
1	OpDAT FAST™ Hybrid Connector kit LC APC OS2 for buffers	PU 10	1509QAJA0010-E	2	OpDAT FAST™ Hybrid Connector kit SC UPC OS2 for cable	PU 10	1509QKEO0010-E
		PU 20 incl. tool	1509QAJA002C-E			PU 20 incl. tool	1509QKEO002C-E
		PU 100 incl. tool	1509QAJA010C-E			PU 100 incl. tool	1509QKEO010C-E

Compatibility

Without adapter plate



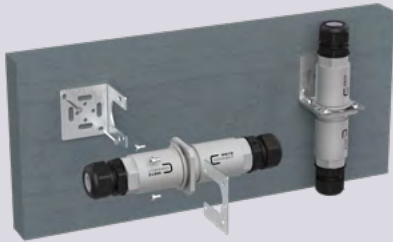
Product name	Features	P/N	Product name	Features	P/N
(A) E-DAT Industry RJ45 adapter insert	-	1401200810MI	(E) M12 jack X-coded IP67, field-configurable	without flange	MMF881A315
	T568A	1401100810MI		with flange	MMF881A315-0001
(B) E-DAT Industry RJ45 field jack insert Cat. 6 Class E _A	T568B	1401800810MI	(E) M12 jack D-coded IP67, field-configurable	with flange	MMF881A115-0001
	PROFINET	1401900810MI	(F) M12 connector X-coded IP67, Cat.6 _A	field-configurable, straight	MNF881A315-0001
(C) Cable connectors Class E _A	180°	130863-04-E	(F) M12 connector D-coded IP67, Cat. 5	field-configurable, straight	MNF881A115
(D) Cable connectors Class F _A	-	130863-02-E	(F) M12 jack D-coded IP67	field-configurable	MMF881A115

	Product name	Features	P/N		Product name	Features	P/N
(G)	OpDAT adapter SC-Simplex APC OS2	single	1509001A-I			PU 10	1509QAE0010-E
(G)	OpDAT adapter SC-Simplex UPC OS2	single	1509001B-I			PU 20 incl. tool	1509QAE0002C-E
						PU 100 incl. tool	1509QAE0010C-E
(G)	OpDAT adapter SC-Simplex	OM3	1509001C-I			PU 10	1509QKEA0010-E
		OM4	1509001D-I			PU 20 incl. tool	1509QKEA002C-E
(G)	OpDAT adapter SC-Simplex APC OS2	with shutter	1509001H-I			PU 100 incl. tool	1509QKEA010C-E
(G)	OpDAT adapter SC-Simplex OM5	single	1509001M-I				
(H)	OpDAT Industry LC-D adapter insert	Multimode (MM)	1402300820MI			PU 10	1509QKEO0010-E
		Singlemode (SM)	1402L00820MI			PU 20 incl. tool	1509QKEO002C-E
(2)	RJ45 field plug ultra short	C6 _A	130E507032-E			PU 100 incl. tool	1509QKEO010C-E
		C6 _A	130E405032-E			PU 10	1509MAJO0010-E
		C6 _A , PU 100	130E405032-K			PU 20 incl. tool	1509MAJO002C-E
(3)	RJ45 field plug pro	40G	130H405032-E			PU 100 incl. tool	1509MAJO010C-E
		25G	130G405032-E				
		C5 PROFINET	130E405032PE				
(4)	E-DAT Industry RJ45 field plug	Cat.6 Class E _A	1401405012-I			PU 10	1509QAJA0010-E
		PROFINET	1401405012PI			PU 20 incl. tool	1509QAJA002C-E
(5)	E-DAT field plug short	Cat.6 Class E _A	1401400812-E			PU 100 incl. tool	1509QAJA010C-E
(6)	E-DAT Industry connector	Cat.6 Class E _A	1401505012-E				
(7)	E-DAT Industry connector	Cat.6 Class E _A	1401505010-E			PU 10	1509QAJO0010-E
						PU 20 incl. tool	1509QAJO002C-E
						PU 100 incl. tool	1509QAJO010C-E
(8)	OpDAT FAST™ Hybrid Connector kit SC PC OM3/OM4 for buffers	PU 10	1509MAEO0010-E			PU 10	1509QKJA0010-E
		PU 20 incl. tool	1509MAEO002C-E			PU 20 incl. tool	1509QKJA002C-E
		PU 100 incl. tool	1509MAEO010C-E			PU 100 incl. tool	1509QKJA010C-E
(8)	OpDAT FAST™ Hybrid Connector kit SC PC OM3/OM4 for cable	PU 10	1509MKEO0010-E			PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509MKEO002C-E			PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509MKEO010C-E			PU 100 incl. tool	1509QKJO010C-E
(8)	OpDAT FAST™ Hybrid Connector kit SC APC OS2 for buffers	PU 10	1509QAEA0010-E			PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509QAEA002C-E			PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509QAEA010C-E			PU 100 incl. tool	1509QKJO010C-E

Application examples

Set with mounting bracket

Wall mounting



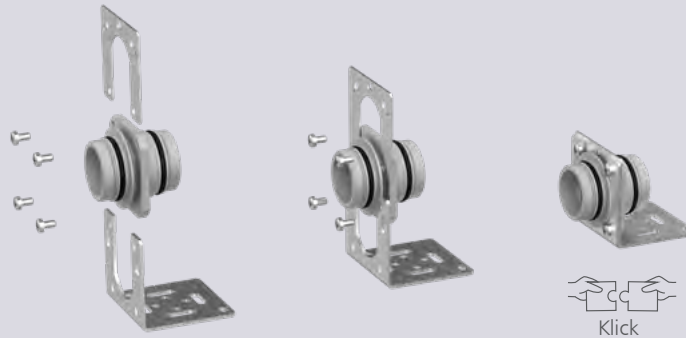
Carrier rail mounting



Mast mounting



Quick assembly



For wall and housing bushin

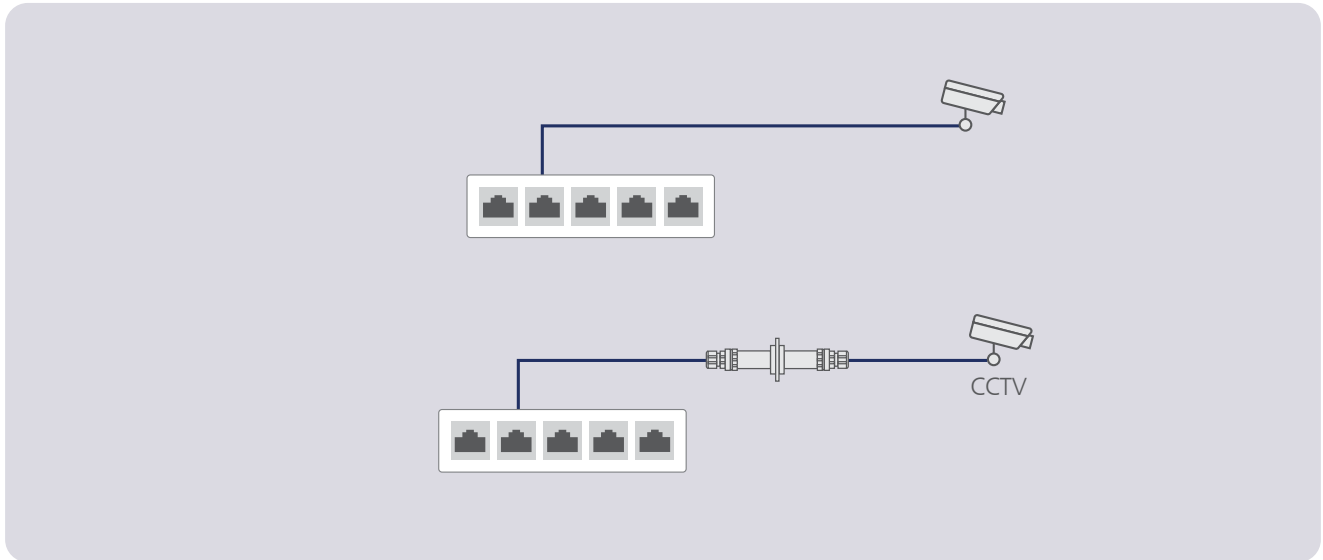
Wall mounting



Application examples

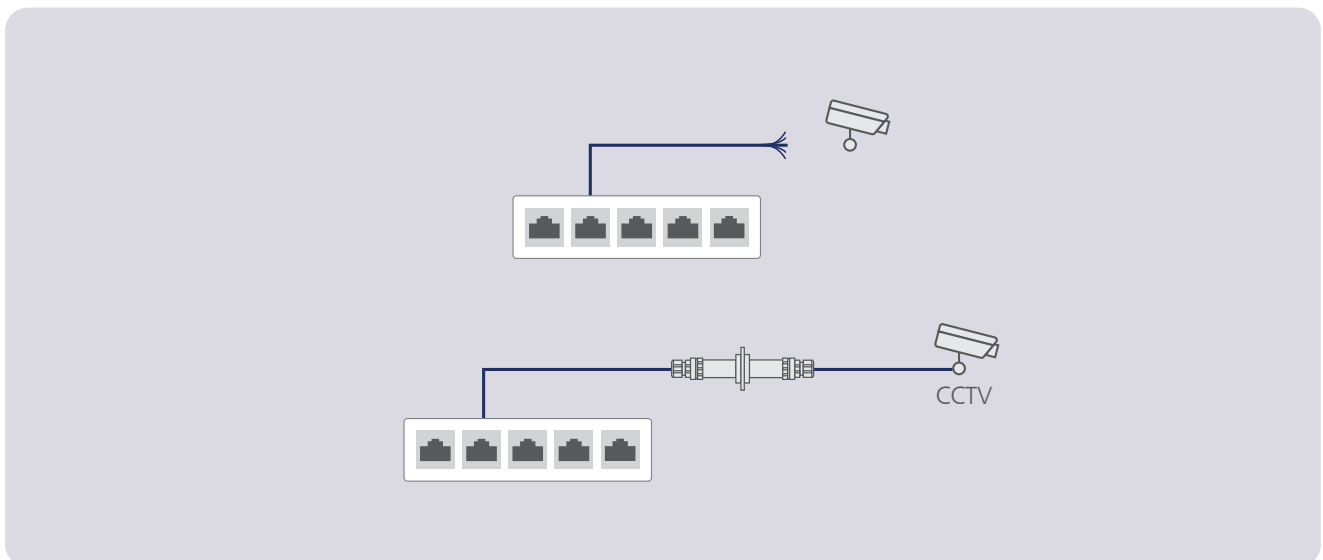
Moving the active components

e.g. surveillance camera or wireless access point



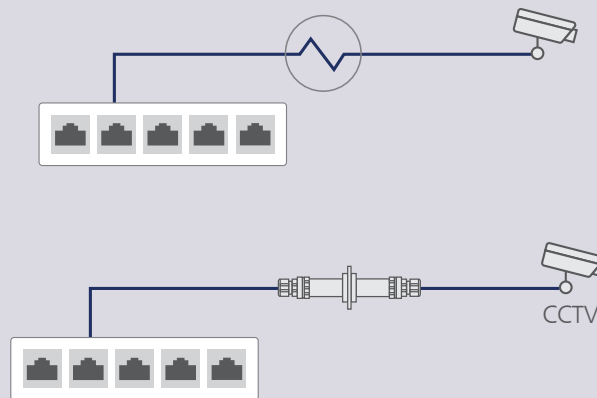
Cable extension

e.g. cable too short



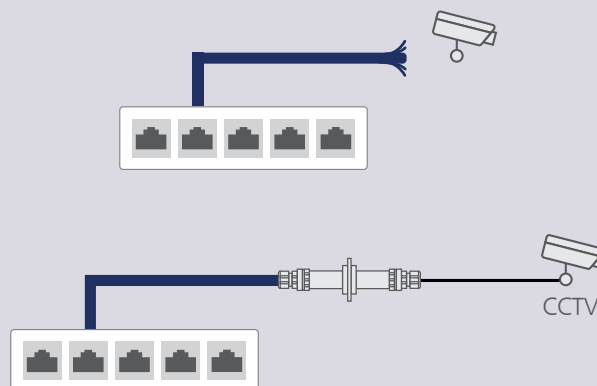
Repair

e. g. defective cable



Reduction of the cable diameter

e. g. too rigid, fixed cable



Notes on the protection of patch cables

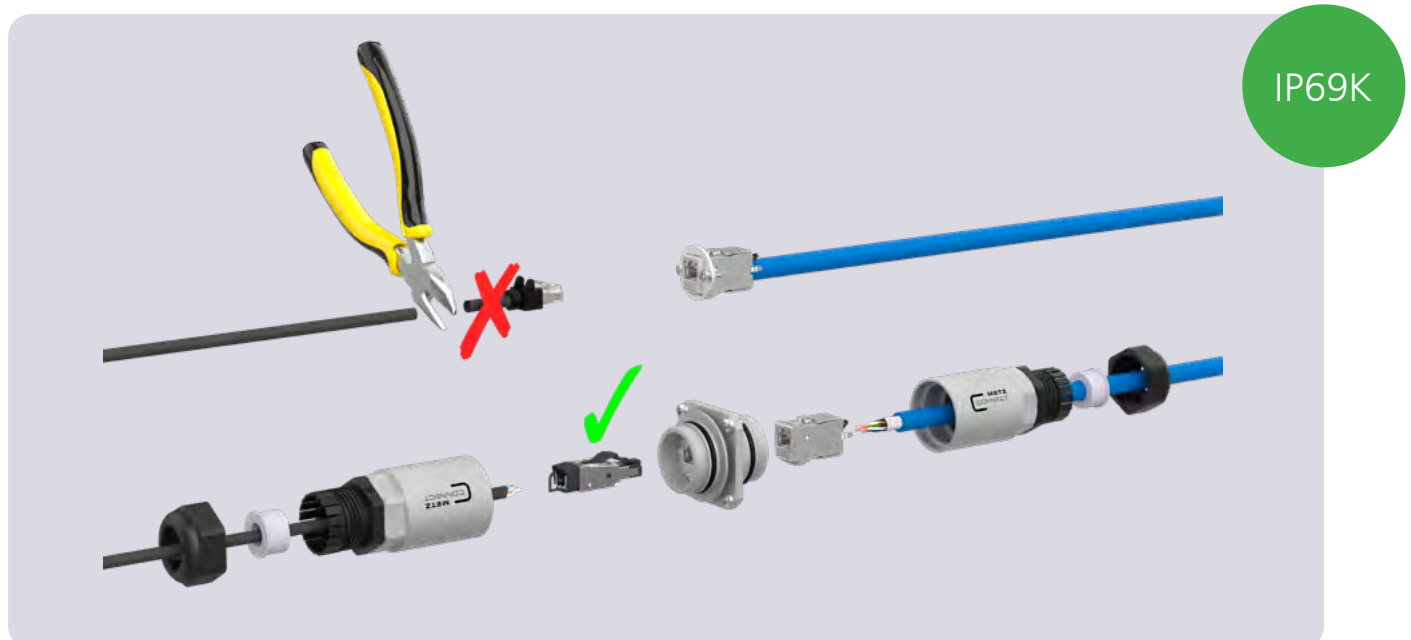
The MCO IP69k protective housing for outdoor applications can be used to protect numerous interfaces as well as patch cable connections. Since RJ45 plugs cannot be passed through

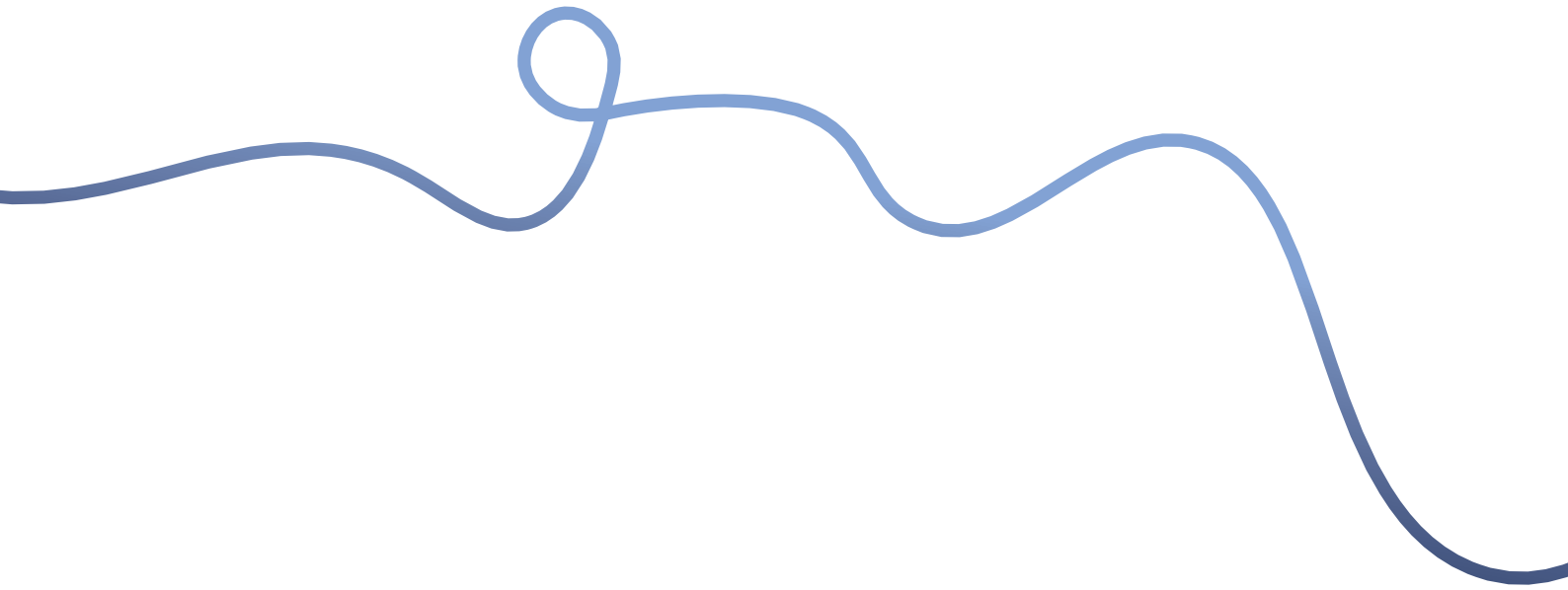
the seals included in the scope of delivery due to their dimensions, a remedy must be found.

To ensure IP69k protection, it is recommended to disconnect one side of the patch cable.

To be able to maintain the IP69k protection, ideally one plug side of the patch cable should be disconnected and replaced by a field-terminable plug, such as our C6_A RJ45 field plug pro

(130E405032-E), so that the installation can then be carried out according to the installation instructions.





The use of the split seal reduces the degree of protection to IP66 from IP69k.

Alternatively, we offer a split seal for patch cables (895154-I), which can be widened accordingly to allow the RJ45 connector to pass through. Consequently, patch cable connections can be protected without having to disconnect the connected RJ45

plug first. However, it is important to note that the use of the split seal for patch cables (895154-I) reduces the protection class from IP69k to IP66, which is why we only recommend this alternative option to a limited extent.

Furthermore, it should be taken into account that only cables suitable for outdoor installation may be used in outdoor areas, such as our patch cable RJ45 6kV Flex500 Outdoor AWG 24 (13084F3000-E).



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