Passive Components

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# **Passive Components**



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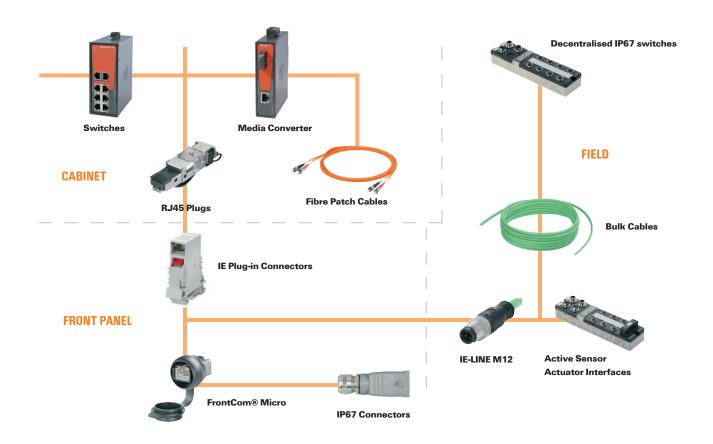
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# **Ethernet Connector System**





Ethernet connectors from Weidmuller: Designed to the last detail







Connectors play a crucial role in any Ethernet system whether it be Fibre or Copper. As a system is only as good as it's weakest link, connectors suitable for the installation location should be common place. High priority is given to switches, routers, power supplies, and even cable with little regard for the connectors, physically and electrically connecting the system together. Weidmuller's Industrial Ethernet range of passive products consist SteadyTec® technology ensuring advanced connections on a modular platform concept with the advantages of the first ever universal IP67 solutions for copper and fibre-optic cabling suitable for up to 750 guaranteed mating cycles without deterioration of contacts or seals.

The SteadyTec® RJ45 connectors, suitable for Cat. 6A to 10 gigabit operation, are crimp free and simply installed in the field providing a reliable, sheilded robust connection. The IP67 range encompasses metal and plastic housings for mounting in any environment. Inserts are available to suit LC and SC fibre, or RJ45 copper connections allowing easy intergration of standard connectors into your project.

### **RJ45 Copper Solutions**





Crimp

# **RJ45 Plugs**

The 10-gigabit connector, with IDC connection, was developed to provide a quick, simple, secure and, most importantly, tool-free solution. In addition, zinc die-casting makes the connector extra robust and therefore suitable for industrial applications. It is fitted with a protected locking clip for tough industrial applications. Optional lower cost RJ45 crimp plug with brass housing material is also available.

### **Applications**

Use the RJ45 Plug for:

- Quick patch cable requirement without tool
- Snagless construction for easy cable pulling
- Tested to 750 plugging cycles (to IEC 60603-7)
- Can be reterminated up to 5 times without any loss of function
- Optional lower cost crimp plug available

#### **Technical Data**

	Tool Free	Crimp
Category	Cat 6a	Cat 6a
Degree of protection	IP 20	IP 20
Housing main material	Zinc diecast	-
Wire cross-section, flexible, min. / max.	0.48 mm / 0.76 mm	0.46 mm / 0.61 mm
Wire cross-section, flexible, min. / max.	AWG 26 / AWG 22	AWG 26 / AWG 22
Wire cross-section, solid, min. / max.	0.4 mm / 0.64 mm	0.36 mm / 0.51 mm
Wire cross-section, solid, min. / max.	AWG 24 / AWG 22	AWG 27 / AWG 24
Insulation cross-section, max.	1.6 mm	1.05 mm
Sheath diameter, min / max.	5.5 mm / 8.5 mm	5 mm / 7.3 mm
Shielding	360° all-round enclosure	360° all-round enclosure
Plugging cycles	750	750
Configuration	Eight-wire field-assembled RJ45 plug with colour coding on the plug, TIA A/B, ProfiNet, multiport-ready	<i>/</i> .
Ambient temperature	-40°C+70°C	-40°C+70°C
Connector standard	IEC 60603-7-51	IEC 60603-7-51
Current-carrying capacity at 50 °C	1 A	1 A

	Туре		Order No.
Tool-Free	IE-PS-RJ45-FH-BK	TIA 568 A/B/PROFINET	1963600000
	IE-PS-RJ45-FH-BK-P	PROFINET	1132060000
	IE-PS-RJ45-FH-BK-A	TIA 568 A	1132040000
	IE-PS-RJ45-FH-BK-B	TIA 568 B	1132050000
Accessories			
Tool-Free: Strain relief	Blue	IE-CR-IP20-RJ45-FH-BU	1963080000
	Orange	IE-CR-IP20-RJ45-FH-OG	1963070000
	Green	IE-CR-IP20-RJ45-FH-GN	1963100000
	Grey	IE-CR-IP20-RJ45-FH-GY	1963060000
	White	IE-CR-IP20-RJ45-FH-WH	1963050000
	Yellow	IE-CR-IP20-RJ45-FH-YE	1963090000
Crimp	IE-PS-RJ45-TH-BK	with kink prevention sleeve	1963590000
	IE-PM-RJ45-TH	without kink prevention sleeve	1963580000
Accessories			
Crimp: Kink prevention	Blue	IE-PH-IP20-RJ45-FH-BU	1962470000
sleeve	Orange	IE-PH-IP20-RJ45-FH-OG	1962450000
	Black	IE-PH-IP20-RJ45-FH-BK	1962500000
	Green	IE-PH-IP20-RJ45-FH-GN	1962490000
	Grey	IE-PH-IP20-RJ45-FH-GY	1962440000
	White	IE-PH-IP20-RJ45-FH-WH	1962430000
	Yellow	IE-PH-IP20-RJ45-FH-YE	1962480000

# **RJ45 Copper Solutions**



Cat 5e

### Cat 5e Patch Cable

The Cat 5e UTP unshielded twisted pair patch cables are for general purpose applications and come in PVC material. Below is ordering data for patch lengths up to 10 m with longer lengths available on request.

# **Applications**

Use the Cat 5e Patch Cable for:

- Indoor general purpose installation
- Typically 10/100Mbps baud rate communications

#### **Technical Data**

Product type	Patch cable
Category	Cat.5e (TIA 568-B) UTP
Shielding	N/A
Cross-section	4*2*AWG 24/1 - 4*2*0.205 mm <sup>2</sup>
Sheath diameter, max.	6.3 mm
Material sheath	PVC
Sheathing colour	green (RAL 6018)
Insulation cross-section	1 mm
Min. bending radius, repetitive	10 x conductor cross-section
Min. bending radius, once only	5 x conductor cross-section
Ambient temperature	-40 °C+80 °C
Installation temperature	-15 °C+60 °C
Storage temperature	-40 °C+80 °C
Abrasion resistance	good
Resistance to spread of flame	acc. to IEC 60332-1

Туре	Length	Straight Through	Cross Over
FCP CAT5E UTP 0.5M	0.5 m	7940031426	7940031432
FCP CAT5E UTP 1M	1 m	7940031427	7940031433
FCP CAT5E UTP 2M	2 m	7940031428	7940031434
FCP CAT5E UTP 3M	3 m	7940031429	7940031435
FCP CAT5E UTP 5M	5 m	7940031430	7940031436
FCP CAT5E UTP 10M	10 m	7940031431	7940031437

### **RJ45 Shielded Patch Cable**







270° Grey

**Cable Mounting Bracket** 

### Cat 6a Patch Cable

Weidmuller carry a large range of industrial grade Cat 6a straight through shielded cables. The Cat 6a cables come in different colours, are individually screened per twisted pair, are low smoke zero halogen (LSZH) and have metal RJ45 plugs, providing the ultimate protection for error free communications.

### **Applications**

Use the Cat 6a Patch Cable for:

- Industrial installation
- Up to 10Gbps baud rate communications
- Colour coding for networks or device identification
- Shielded cables

#### **Technical Data**

Product type	Patch cable
Category	Cat.6A / IEC 11801 2010
Shielding	S/FTP
Version connector left	RJ45 IP20
Version connector right	RJ45 IP 20
Cross-section	4*2*AWG 27/7 - 4*2*0.1 mm²
Sheath diameter, max.	5.9 mm
Material sheath	LSZH
Colour	Various
Insulation cross-section	1.04 mm
Min. bending radius, repetitive	50 mm
Min. bending radius, once only	25 mm
Ambient temperature	-20 °C+60 °C
Installation temperature	0 °C+50 °C
Storage temperature	-20 °C+60 °C
Halogen	to IEC 60754-2
Resistance to spread of flame	to IEC 60332-1/ UL 1581 FT2

# **Ordering Data**

Туре	GREY	BLUE	BLACK	GREEN	RED
0.5 m	1165940005	1165900005	1251610005	1251590005	1166030005
1 m	1165940010	1165900010	1251610010	1251590010	1166030010
1.5 m	1165940015	1165900015	1251610015	1251590015	1166030015
2 m	1165940020	1165900020	1251610020	1251590020	1166030020
3 m	1165940030	1165900030	1251610030	1251590030	1166030030
5 m	1165940050	1165900050	1251610050	1251590050	1166030050
10 m	1165940100	1165900100	1251610100	1251590100	1166030100
15 m	1165940150	1165900150	1251610150	1251590150	1166030150
20 m	1165940200	1165900200	1251610200	1251590200	1166030200
25 m	1165940250	1165900250	1251610250	1251590250	1166030250

Туре	MAGENTA	YELLOW	GREY 270°	GREY 90°
0.5 m	1201270005	1251580005	1233160005	1248280005
1 m	1201270010	1251580010	1233160010	1248280010
1.5 m	1201270015	1251580015	1233160015	1248280015
2 m	1201270020	1251580020	1233160020	1248280020
3 m	1201270030	1251580030	1233160030	1248280030
5 m	1201270050	1251580050	1233160050	1248280050
10 m	1201270100	1251580100	1233160100	1248280100
15 m	1201270150	1251580150	1233160150	1248280150
20 m	1201270200	1251580200	1233160200	1248280200
25 m	1201270250	1251580250	1233160250	1248280250
Accessories		Order No.		
Cable Mounting B	racket: IE-CFK-05	1339610000		

### For USB, RJ45, SC, LC Connection











RJ45/RJ45

RJ45/IDC

USB/A SC/SC

LC/LC

# **Mounting Rail Outlet**

The SteadyTec mounting rail outlets provide a highly reliable patching, terminating or access solution for USB, RJ45, Multimode or Singlemode fibre connections in SC and LC. With SteadyTec technology, these connections will last a lifetime.

### **Applications**

Use the Mounting Rail Outlet for:

- Easy patch panel solution for fibre & and copper
- Robust connection point prior to PLC / HMI etc
- Shielding against EMC
- Operating temperature: -25°C...+70°C
- Intergrated switch for isolating cable shield
- Suitable for TS35 DIN rail
- Very narrow footprint

#### **Technical Data**

Degree of protection	IP 20	
Housing main material	PA UL 94 VO	
Colour	light grey	
Type of mounting	TS 35	
Plugging cycles	750	
Ambient temperature (operational)	-25 °C+70 °C	
Connector standard	IEC 61754-4	

	Туре	Description	Order No.
RJ45	_IE-TO-RJ45-C	Coupling Cat 6a	8946920000
	IE-TO-RJ45-FJ-A	TIA-A Cat 6a	8946930000
USB	IE-TO-USB	USB A / USB A	8946960000
SC	IE-TO-SCD-MM	Duplex multi-mode	8946970000
	IE-TO-SCD-SM	Duplex single-mode	8946980000
LC	IE-TO-LCD-MM	Duplex multi-mode	8947010000
	IE-TO-LCD-MM	Duplex single-mode	8947020000

### **Angled Connection For RJ45 & ST Fibre**



RJ45/IDC



**RJ45/RJ45** 



ST/ST

# **Angled Mounting Rail Coupler**

The SteadyTec Angled mounting rail coupler provide a highly reliable patching, terminating or access solution for RJ45 and ST connection. The coupler also has an integrated label marker window.

# **Applications**

Use the Angled Mounting Rail Coupler for:

- Easy patch panel solution for fibre & and copper
- Robust connection point prior to PLC / HMI etc
- Shielding against EMC
- Suitable for TS35 DIN rail
- Very narrow footprint

#### **Technical Data**

Degree of protection	IP 20	
Housing main material	PA UL 94 VO	
Colour	light grey	
Type of mounting	TS 35	
Plugging cycles	750	
Ambient temperature (operational)	-25 °C+70 °C	
Connector standard	IEC 61754-4	
Dimension H x W x D mm	52.5 x 17.5 x 60	

Туре	Description	Order No.
IE-XM-RJ45/IDC	Outlet RJ45/TIA-A IDC	8808360000
IE-XM-RJ45/RJ45	Cat 6 RJ45/RJ45 Coupler	8879050000
IE-XM-ST/ST	ST/ST Multimode	8808340000

### 19" Patch Panel



#### **RJ45 Patch Panel**

### 19" RJ45 Patch Panel

- Cat 6 according to IEC 11801
- 750 plugging cycles
- Powder-coated steel sheet housing material
- SteadyTec Technology

# **Applications**

### Use the RJ45 Patch Panel for:

- Robust patch panel with shallow depth
- Includes cable sorter
- Up to 24 ports
- Operating temperature: -40°C...+70°C

### **Technical Data**

Category	Cat 6	
Degree of protection	IP 20	
Housing main material	Powder-coated steel sheet	
Colour	Light grey	
Plugging cycles	750	
Ambient temperature	-40 °C+70 °C	

# **Ordering Data**

Туре	Description	Order No.
IE-PPA19-24P-RJ45-C	With 24 RJ45 couplings	1049930000
IE-PPA19-24P-RJ45-FJ-A	With 24 RJ45 modules A	1049910000
IE-PPA19-24P-RJ45-FJ-B	With 24 RJ45 modules B	1049920000
IE-PPA19-24P	With 24 RJ45 adapters, without inserts	1049270000

### Accessories/Inserts

Туре	Description	Order No.
Flange insert		
IE-BI-RJ45-FJ-A	RJ45 EIA/TIA 568 A	1962850000
IE-BI-RJ45-FJ-B	RJ45 EIA/TIA 568 B	1963840000
IE-BI-RJ45-FJ-P	RJ45 PROFINET	1963830000
IE-BI-USB-A	USB coupling, type A	1019570000
	7 0. 71	

<sup>\*</sup> For markers solution, please see page C.11

### **RJ45 Terminal Interface**



#### RS RJ45

# **RJ45 Plug Connectors**

- Direct coupling of PC and modem in control cabinet
- Connection of typical office equipment
- Data rate Cat5 100 Mbit
- For mounting on rail TS 32/35

# **Applications**

Use the RJ45 Plug Connectors for:

- Connecting RS485 to ethernet cables
- Custom RJ45 solution
- PC to modem connection

#### **Technical Data**

Connection on process side	Screw connection/ RJ45 plug-in connector
Connection on control side	Screw connection/ RJ45 plug-in connector
Design	RJ45 female connector
Conversion PCB/plug connector	1:1
Rated current per connection	1.5 A
Number of signals	8 Shielded
Contact material	Phosphor- bronze 6µ AU
Storage temperature	-40 °C+70 °C
Ambient temperature	0 °C+55 °C
Housing	RS 70 section
Terminal rail	TS 32, TS 35
Surge category/Pollution severity	II /2
Clamping range (rating-/min. / max.)	1.5 / 0.5 / 1.5
Length x width x height	70 x 30 x 48

Туре	Order No.
RS RJ45	8611320000

### **Connection Module**



IDC

### **Connection Module**

The connecting module is useful for repairing or extending cables in confined spaces without any extra cable. Please note that you will need to make an extra plug-in connection when using this module. This can influence the transmission properties of that stretch and must therefore be documented.

# **Applications**

Use the Connection Module for:

- Repairing Ethernet cables
- Extending Ethernet cables in confined spaces
- Custom solutions

#### **Technical Data**

Dimension L x W x H mm	112 x 37 x 20
Connection	IDC
Protection degree	IP 20
Colour	grey
Category	Cat.7 (ISO/IEC 11801)
Shielding	Captive 360° shield
Type of mounting	Floor/Wall-mounted

Order No.
Cat 7 7940031132
w/Lid <b>7940031133</b>

# Overvoltage Protection For RJ45



#### **Overvoltage Protection**

# **Overvoltage Protection Module**

The Overvoltage protection module protects signal lines on the Cat 5 Ethernet network. The module can be DIN Rail Mount with potential earth connection via M4 screw.

### **Applications**

Use the Overvoltage protection module for:

- Protection for copper Ethernet cables entering or leaving the cabinet
- Part of a surge protection scheme

#### **Technical Data**

Protection level, Up wire - PE	600 V	
Protection level, Up wire - wire	45 V	
Max. continuous voltage, Uc (AC)	7 V	
Discharge current, max. (8/20 µs)	2 kA	
Gas discharge tube	Yes	
Suppression diodes	Yes	
Dimension H x W x D mm	51 x 64 x 22	

### **Ordering Data**

Туре	Description	Order No.
DME 100Tx-4RJ TS35	Overvoltage protection module	8830230000

#### **Accessories**

Description	Dimensions (L x W x H mm)	Order No.
Ethernet Cat. 5	57 x 36 x 14.4	8805570000
JP Clip M		8778490000
	Ethernet Cat. 5	Ethernet Cat. 5 57 x 36 x 14.4

### **Connection Module**



#### **Ethernet Cat.6**

# **Stage Surge Protection**

Jackpac OVP terminal equipment against the overvoltages that can occur as a result of atmospheric discharges or storms. This type of protection in the form of an adapter is available in IP20 and IP67 versions and complies with the requirements of class III to IEC 61643-21.

### **Applications**

Use the Stage surge protection for:

- Protection for copper Ethernet cables entering or leaving the cabinet
- Part of a surge protection scheme

#### **Technical Data**

Rated voltage	34 V AC / 48 V DC	
Operating voltage (DC), max.	48 V	
Rated discharge current per path (8/20 μs)	5 kA	
Total discharge current, max. (8/20 μs)	10 kA	
DC response voltage	230 V	
Attenuation	< 0.3 dB at 250 Hz	
Response time	≤ 5 ns	
Rated current	0.2 A	
Protection level, signal line, wire to wire/PE	130 V/600 V	
Protection level, supply, wire to wire/PE	80 V/300 V	
Operating temperature	-25 °C+60 °C	
Surge category	III	
Pollution severity	2	
Type of connection	RJ45 plug; IP 20	
Approvals	CE	
Dimensions (L x W x H)	53 x 36 x 14.4	

### **Ordering Data**

Туре	Order No.
JPOVP RJ45 Cat6 IP20	8805550000

### Accessories

Туре	Description	Order No.
JP CLIP M	Retaining clip	8778490000

#### **Fibre Patch Leads**

Weidmuller can supply an extensive range of Fibre Optic Patch Cables, suitable for most industrial patching applications. The range includes variants in OM1 and OM3 as well as Singlemode fibre. All common connector types SC, ST and LC are available as well as adaptor cables to patch between equipment fitted with different connector types.



### **Singlemode Fibre Patch and Adaptor Cables**

- LSZH (Low Smoke Zero Halogen) Sheathing
- Singlemode glass fibre
- Supplied complete with Insertion loss certificate

#### FCP SC-SC SINGLEMODE

Description	Connector	Cable Type				Length (m)			
			1m	2m	3m	5m	10m	15m	20m
Duplex FO Patch cable	SC - SC	Singlemode	7940031025	7940031026	7940031027	7940031028	7940031029	7940031030	7940031031
Duplex FO Adaptor cable	SC - ST	Singlemode	7940031032	7940031033	7940031034	7940031035	7940031036	7940031037	7940031038
Duplex FO Patch cable	ST - ST	Singlemode	7940031039	7940031040	7940031041	7940031042	7940031043	7940031044	7940031045
Duplex FO Adaptor cable	SC - LC	Singlemode	7940031046	7940031047	7940031107	7940031108	7940031109	7940031110	7940031111
Duplex FO Adaptor cable	ST - LC	Singlemode	7940031112	7940031113	7940031114	7940031115	7940031116	7940031117	7940031118
Duplex FO Patch cable	LC - LC	Singlemode	7940031119	7940031120	7940031121	7940031122	7940031123	7940031124	7940031125



### Multimode (OM1) Fibre Patch and Adaptor Cables

- LSZH (Low Smoke Zero Halogen) Sheathing
- $\bullet\,$  Multimode OM1 (62.5 $\mu$ m) glass fibre or
- Supplied complete with Insertion loss certificate

### Multimode (OM3) Fibre Patch and Adaptor Cables

- LSZH (Low Smoke Zero Halogen) Sheathing
- Multimode OM3 (50µm) glass fibre
- Supplied complete with Insertion loss certificate

#### FCP ST-ST MULTIMODE

Description	Connector	Cable Type				Length (m)			
			1m	2m	3m	5m	10m	15m	20m
Duplex FO Patch lead	SC - SC	Multimode (OM1)	7940030890	7940030891	7940030892	7940030893	7940030894	7940030895	7940030896
Duplex FO Adaptor lead	SC - ST	Multimode (OM1)	7940030897	7940030898	7940030899	7940030901	7940030902	7940030903	7940030904
Duplex FO Patch lead	ST - ST	Multimode (OM1)	7940030905	7940030906	7940030907	7940030908	7940030909	7940030910	7940030911
Duplex FO Adaptor lead	SC - LC	Multimode (OM1)	7940030912	7940030913	7940030914	7940030915	7940030916	7940030917	7940030918
Duplex FO Adaptor lead	ST - LC	Multimode (OM1)	7940030919	7940030920	7940030921	7940030922	7940030923	7940030924	7940030925
Duplex FO Patch lead	LC - LC	Multimode (OM1)	7940030926	7940030927	7940030928	7940030929	7940030930	7940030931	7940030932
Duplex FO Patch cable	SC - SC	Multimode (OM3)	7940030977	7940030978	7940030979	7940030980	7940030981	7940030982	7940030983
Duplex FO Adaptor cable	SC - ST	Multimode (OM3)	7940030991	7940030992	7940030993	7940030994	7940030995	7940030996	7940030997
Duplex FO Patch cable	ST - ST	Multimode (OM3)	7940030984	7940030985	7940030986	7940030987	7940030988	7940030989	7940030990
Duplex FO Adaptor cable	SC - LC	Multimode (OM3)	7940030998	7940030999	7940031000	7940031001	7940031002	7940031003	7940031004
Duplex FO Adaptor cable	ST - LC	Multimode (OM3)	7940031005	7940031006	7940031007	7940031008	7940031009	7940031010	7940031011
Duplex FO Patch cable	LC - LC	Multimode (OM3)	7940031012	7940031013	7940031014	7940031015	7940031016	7940031017	7940031018

### **Plastic Wall Mount Enclosure**







Thru-Adapter

### **Plastic Wall Mount Enclosure**

The Wall boxes are ideal for terminating fibres inside cabinets where rack mount is not suitable. Comes complete 2 coupler panels ST and SC Thru-Adapters.

Order Enclosure + Thru-Adapter for a complete set.

### **Applications**

Use the Plastic Wall Mount Enclosure for:

- Low cost fibre termination
- Fibre termination where rack mount is not suitable
- Add FM4 foot for DIN RAIL mount

#### **Technical Data**

Housing Material	Plastic
Fibre Ports	12 x Simplex / 6 x Duplex
Built-In	Coupler Panels for ST or SC
Dimensions	210 x 160 x 65 mm

### **Ordering Data**

Туре	Description	Order No.
Enclosure	12 Fibre Plastic	7940031131
Thru-Adapter	SC Multimode Duplex - Beige	7940031329
	SC Singlemode Duplex - Blue	7940031330
	ST Multimode Simplex - Metal Body	7940031336
	ST Single mode Simplex - Metal Body	7940031337
Accessory	DIN Rail mounting FM4 foot	0687900000

<sup>\*</sup> Note: Mounting screws and holes not included

### Accessories



FM4 Foot

<sup>\*</sup> Note: For a full listing of accessories please see page B.55

### **Metal Wall Mount Enclosure**







**Metal Enclosure** 

**Coupler Panel** 

Thru-Adapter

### **Metal Wall Mount Enclosure**

The Wall boxes are ideal for terminating fibres inside cabinets where rack mount is not suitable. Order Enclosure + Coupler Panel + Thru-Adapter for a complete set.

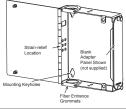
Optional LC components and 24-fibre port enclosure are also available upon request.

### **Applications**

Use the Metal Wall Mount Enclosure for:

- Fibre termination in a metal enclosure
- Fibre termination where rack mount is not suitable

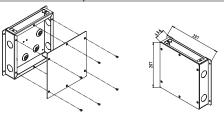
### \* FCP W BOX 12FM 2C PNL H/LID



Size: 160 x 140 x 50mm (H x W x D)

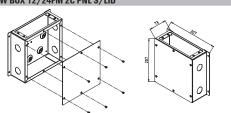
\* Splice Cassette not required for hinged lid model

#### FCP W BOX 12FM 2C PNL S/LID



Size: 207 x 207 x 43.6mm (H x W x D)

\* Small Splice Cassette required
FCP W BOX 12/24FM 2C PNL S/LID



Size: 207 x 207 x 73mm (H x W x D)

#### **Technical Data**

Housing Material	Metal
Fibre Ports	12 x Simplex / 6 x Duplex
Colour housing	Grey steel

Type		Description		Order No.
<i>'</i>		Wall Box 12 Fibre Metal	(1 x Counter Panel)	7940031132
FCP W BOX 12FM CPL PNL H/LID		Hinge/Lid	7010001102	
		Wall Box 12 Fibre Metal	7940031133	
FCP W BOX 12FM CPL PNL S/LID		Screw/Lid	( 1 x obupier runor)	7010001100
		Wall Box 12/24 Fibre M	7940031134	
FCP W BOX 12/24FM 2C PNL H/LID		Hinge/Lid	otal (2 x obapiel i aliel)	7540051154
Coupler Panel		ST Simplex 12 Port	7940031327	
odupioi i diioi		SC Duplex 6 Port		7940031328
		Flat (Blank)		7940031309
		Angled (SC Duplex 6 P	nrt)	7940031311
		Flat (SC Duplex 6 Port		7940031312
		Flat, SC Duplex 6 Port,		7940031314
		Flat, SC Duplex 6 Port,		7940031315
		Angled, SC Duplex 6 P		7940031316
		Angled, SC Duplex 6 P	ort, No. 13-24, Right	7940031317
		Angled, SC Simplex 12		7940031318
		Angled, SC Simplex 12		7940031319
		Angled, SC Simplex 12 P	ort, No. 13-24, Right	7940031320
		Flat, SC Simplex 12 Port	7940031321	
		Angled, SC Simplex 6 Po	7940031322	
		Flat, SC Simplex 6 Port /	7940031323	
		Angled, ST Simplex 12 P	7940031324	
		Flat, ST Simplex 12 Port	7940031325	
		Flat, ST Simplex 6 Port	7940031326	
Thru-Adapter		SC Multimode Duplex - B	eige	7940031329
		SC Singlemode Duplex - I	Blue	7940031330
		ST Multimode Simplex - I	Metal Body	7940031336
		ST Single mode Simplex	- Metal Body	7940031337
		LC Multimode Duplex t	o SC Simplex Hole,	7940031338
		Beige		7340031330
		LC Singlemode Duplex	to SC Simplex Hole,	7940031339
		Blue		7540031335
		LC Multimode OM3 Duplex to SC Simplex		7940031340
		Hole, Aqua	7540031340	
Splice Cassettes		Small Splice Cassette with lid - 12 Fibre		7940031343
Singlemode/Multimode Pigtails	Colours	SC	ST	LC
Multimode OM1 Pigtails 900µm 6	Orange	7940031351	7940031353	7940031355
Multimode OM1 Pigtails 900µm 12	Coloured	7940031352	7940031354	7940031356
Multimode OM2 Pigtails 900µm 6	Aqua	7940031357	7940031359	7940031361
Multimode OM2 Pigtails 900µm 12	Coloured	7940031358	7940031360	7940031362
Singlemode SM Pigtails 900µm 6	Yellow	7940031345	7940031347	7940031349
Singlemode SM Pigtails 900µm 12 Coloured		7940031346	7940031348	7940031350

<sup>\*</sup> Note: For a full list of coupler panels see page B.55

<sup>\*</sup> Small Splice Cassette required

### **Fixed and Sliding Enclosure**



**Sliding Enclosure** 

# **Sliding Enclosure**

Weidmuller carry a complete range of Fibre Patching and Marshalling Accessories. These 19" rack mount Fibre Optic Breakout Tray's (FOBOT) are rugged and durable thanks to their steel construction. Order Enclosure + Coupler Panel + Thru-Adapter + Splice Cassette for a complete set. Optional LC components are also available upon request.

### **Applications**

Use the Rack Mount Enclosure for:

- 19" rackmount Fibre Optic Breakout Tray (FOBOT)
- Quality 2 stage slide out drawer mechanism
- 24, 48, 96 Fibre capacity in 1 RU, 2 RU and 3 RU design adjustable mounting brackets

#### **Technical Data**

IRU-S-24MOD	
Size	43.6mm x 482mm x 269mm (H x W x D)
Coupler Panel	2
Fibre Ports	24 x Simplex / 12 x Duplex
Colour	Black
Material	Steel
Weight	3.30 kg

-	Panel un to 24 fibre	7940031126	
EL 15 1 00 D 1	Sliding Enclosure - Modular 2 Panel up to 24 fibre		
Fixed Enclosure - SC Duplex up	to 24 fibre	7940031129	
Fixed Enclosure - ST Simplex u	p to 24 fibre	7940031130	
Sliding Enclosure - Modular 2 F	7940031126		
Sliding Enclosure - Modular 4 F	7940031127		
Sliding Enclosure - Modular 8 F	7940031128		
Fixed Enclosure - SC Duplex up	7940031129		
Fixed Enclosure - ST Simplex u	p to 24 fibre	7940031130	
Fixed Enclosure - Modular 2 Pa	nel up to 24 fibre	7940031137	
Flat (Blank)		7940031309	
Angled (SC Duplex 6 Port)		7940031311	
Flat (SC Duplex 6 Port)		7940031312	
Flat, SC Duplex 6 Port, No. 1-12	2	7940031314	
Flat, SC Duplex 6 Port, No. 13-	24	7940031315	
Angled, SC Duplex 6 Port, No.	1-12, Left	7940031316	
Angled, SC Duplex 6 Port, No.	13-24, Right	7940031317	
Angled, SC Simplex 12 Port, N	o. 1-12, Left	7940031318	
Angled, SC Simplex 12 Port, N	7940031319		
Angled, SC Simplex 12 Port, N	7940031320		
Flat, SC Simplex 12 Port	7940031321		
Angled, SC Simplex 6 Port	7940031322		
Flat, SC Simplex 6 Port / LC Du	7940031323		
Angled, ST Simplex 12 Port	7940031324		
Flat, ST Simplex 12 Port	7940031325		
Flat, ST Simplex 6 Port	7940031326		
ST Simplex 12 Port	7940031327		
SC Duplex 6 Port	7940031328		
SC Multimode Duplex - Beige		7940031329	
SC Singlemode Duplex - Blue		7940031330	
ST Multimode Simplex - Metal	Body	7940031336	
ST Single mode Simplex - Meta	al Body	7940031337	
LC Multimode Duplex to SC	Simplex Hole, Beige	7940031338	
LC Singlemode Duplex to SC	Simplex Hole, Blue	7940031339	
LC Multimode OM3 Duplex t	o SC Simplex Hole, Aqua	7940031340	
Large Splice Cassette with Lid	- 24 Fibre	7940031344	
SC	ST	LC	
7940031351	7940031353	7940031355	
7940031352	7940031354	7940031356	
7940031357	7940031359	7940031361	
7940031358	7940031360	7940031362	
7940031345	7940031347	7940031349	
7940031346	7940031348	7940031350	
	Sliding Enclosure - Modular 4 F Sliding Enclosure - Modular 8 F Fixed Enclosure - SC Duplex up Fixed Enclosure - Modular 2 Pa Fixed Enclosure - Modular 2 Pa Fixed Enclosure - Modular 2 Pa Fixed SC Duplex 6 Port, No. 1-1 Fixed SC Duplex 6 Port, No. 1-1 Fixed SC Duplex 6 Port, No. 1-1 Fixed SC Simplex 12 Port, No. Angled, SC Duplex 6 Port, No. Angled, SC Simplex 12 Port, No. Angled, SC Simplex 12 Port, No. Angled, SC Simplex 12 Port Fixed SC Simplex 12 Port Fixed SC Simplex 6 Port / LC Di Angled, ST Simplex 12 Port Fixed ST Simplex 12 Port Fixed ST Simplex 12 Port Fixed ST Simplex 12 Port SC Duplex 6 Port SC Simplex 6 Port SC Simplex 12 Port SC Duplex 6 Port SC Multimode Duplex - Beige SC Singlemode Duplex - But LC Multimode Duplex - Meta LC Multimode Duplex to SC LC Singlemode Duplex to SC LC Singlemode Duplex to SC LC Multimode OM3 Duplex to SC LC Multimode Duplex to SC L	Angled (SC Duplex 6 Port) Flat (SC Duplex 6 Port) Flat, SC Duplex 6 Port, No. 1-12 Flat, SC Duplex 6 Port, No. 1-12 Flat, SC Duplex 6 Port, No. 13-24 Angled, SC Duplex 6 Port, No. 1-12, Left Angled, SC Duplex 6 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Right Angled, SC Simplex 12 Port, No. 13-24, Right Flat, SC Simplex 12 Port Angled, SC Simplex 12 Port Angled, SC Simplex 6 Port Flat, SC Simplex 6 Port Flat, ST Simplex 12 Port Flat, ST Simplex 12 Port Flat, ST Simplex 12 Port ST Simplex 12 Port SC Duplex 6 Port SC Multimode Duplex - Beige SC Singlemode Duplex - Beige SC Singlemode Duplex - Metal Body ST Single mode Simplex - Metal Body LC Multimode Duplex to SC Simplex Hole, Beige LC Singlemode Duplex to SC Simplex Hole, Aqua Large Splice Cassette with Lid - 24 Fibre SC ST 7940031351 7940031354 7940031358 7940031358 7940031345 7940031346 7940031346 7940031348	

<sup>\*</sup> Note: For a full list of coupler panels see page B.55



# **Front Panel**

Starts on page B.18

Our front panel products incorporate STEADYTEC technology to ensure you get the best connection from the cabinet to the field for life. We provide a minimum IP65 front panel port to IP67 removable connectors capable of 750 plugging cycles.

Let's connect.

### IP65 Port for RJ45 USB



RJ45 RJ45/IDC USB AA USB AB

# **IP65 Front Panel Coupler**

The FrontCom® Micro provides a flexible, IP65 front panel interface solution for RJ45 and USB. RJ45 direct termination or thru-coupler options are available and the weatherproof rubber housing can be fully sealed when not in use.

### **Applications**

Use the IP65 Front Panel Coupler for:

- Convenient access port for configuring equipment
- Access without opening panel or cubicle doors
- Operating temperature: -40°C...+70°C

### **Technical Data**

Operating temperature	-40 °C+70 °C	
Degree of protection	IP 65	
Housing main material	PA UL 94 VO	
Colour	Black	
Shielding	360°shield contact	
Type of mounting	Cabinet, Distribution box	
Dust protection cap material	EPDM	
Panel cut out diameter mm	22	

# **Ordering Data**

	Туре	Description	Order No.
RJ45	IE-FCM-RJ45-C	Coupling Cat 6a	1018790000
	IE-FCM-RJ45-FJ-A	TIA-A Cat 6a	1018810000
USB	IE-FCM-USB-A	AA coupling	1018840000
	IE-FCM-USB-AB	AB coupling	1222550000
Accessory	SM-H 27/18	Switch mark holder	1716630000
	SM 27/18 MC	Switch markers, white	1699860000
	SM 27/18 MC	Switch markers, custom print	1699870000

### **Accessories**



Switch Mark Holder

# **IP67 Mounting Flange**





Straight

**Angled upward** 

# **IP67 Mounting Flange**

The IP67 mounting flanges provide a convenient access RJ45 port for configuring and maintaining automation equipment within a cabinet, panel or cubicle. 360°C shield contact, coupler or IDC versions and tested to 750 plugging cycles.

### **Applications**

Use the Front Panel Coupler for:

- Convenient access port for configuring equipment
- Access without opening panel or cubicle doors
- Operating temperature: -40°C...+70°C
- 300º shield contact
- Cat 6 (IEC 11801)

#### **Technical Data**

Category	Cat 6 (ISO/IEC 11801)
Degree of protection	IP 67
Shielding	360° shield contact
Housing main material	PA 66, UL 94: V-0
Colour	light grey
Plugging cycles	750
Type of mounting	Cabinet, Distribution box
Ambient temperature	-40 °C+70 °C
Dimension H x W mm	33 x 32

# **Ordering Data**

Туре	Description	Order No.
IE-XM-RJ45/RJ45-IP67	Coupling - Straight	8808450000
IE-XM-RJ45/IDC-IP67	TIA 568A - Straight	8808440000
IE-XM-6D-RJ45/RJ45-IP67	Coupling - Angled downward	8829450000
IE-XM-6U-RJ45/RJ45-IP67	Coupling - Angled upward	8829440000

B.19

### **V01 Plastic**



Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A, 10GB system class Ethernet for copper or SC,LC fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications. The VO1 series is approved for Ethernet IP systems.

The VO1P is a plastic 1/4 turn Bayonet connection system suitable for environments where very high protection from dust and water ingress is required with High mechanical strength and a very good chemical resistance. Also suitable in areas where gloves are worn.

Please order the Plug Insert + Plug Housing + Flange housing + Flange insert

Protection class	IP 67	
Housing material	PA UL 94 VO	
Variant	Variant 1 to IEC 61076-3-106	
Cladding diameter	5 mm - 10 mm	
0 5 5	Connector housing with label retainer 9*11 mm;	
Configuration	suitable for holding RJ45 and FO inserts	
Operation temperature, min. / max.	-40 °C+70 °C	
Plugging cycles	750 plugging cycles for plugs to IEC 60603-7	

Plug insert	Plug housing	Flange-mounted housing	Flange insert
	A STATE OF THE PARTY OF THE PAR		
RJ45 field attachable	With kink prevention	Panel socket	RJ45/RJ45 Coupler
1962730000	1012460000	1016960000	1962840000
SC Duplex multimode	Without kink prevention		RJ45/IDC TIA-A
1067380000	1012440000		1962850000
			9
SC Duplex single mode			2SC/SCRJ adapter multimode
1067390000			1964430000
			9-11
SC POF (1mm)			2SC/SCRJ adapter single mode
1067410000			1962870000
LC Duplex multimode			LC Duplex adapter multimode
1962780000			1964420000
LC Duplex single mode			LC Duplex adapter single mode
1962790000			1962880000
	Order No.		
ptional Extra	Oluci No.		

#### V01 Metal

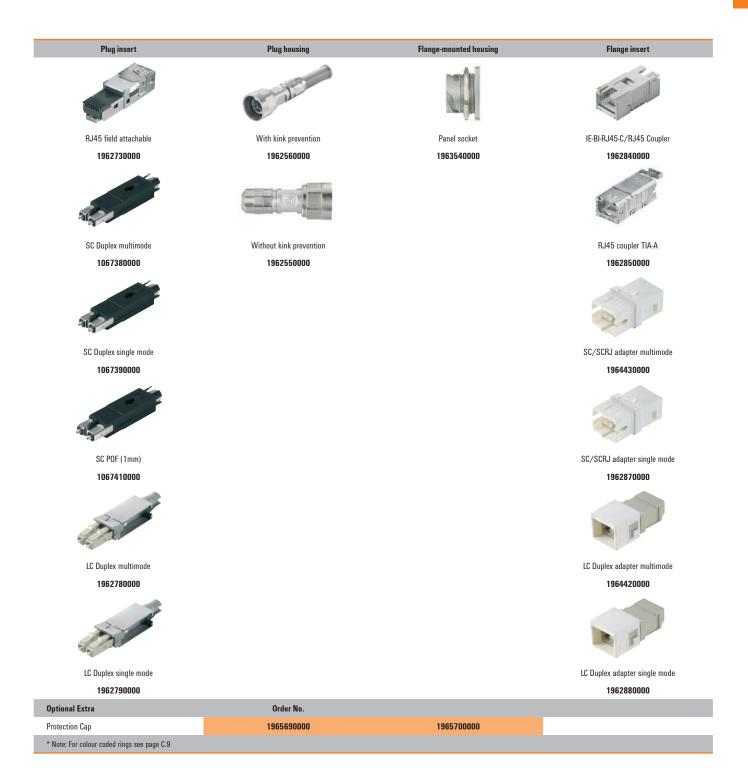


Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications. The VO1 series is approved for Ethernet IP systems.

The VO1M is a 1/4 turn Zinc Diecast metal connector suitable for environments where very high protection from Water, dust, and mechanical stresses is required. Also suitable in areas where gloves are worn.

Please order the Plug Insert + Plug Housing + Flange housing + Flange insert

Protection class	IP 67
Housing material	Diecast zinc
Variant	Variant 1 to IEC 61076-3-106
Cladding diameter	5 mm - 10 mm
Configuration	Plug housing with labelling/marking holder: 9*11 mm; suitable for holding RJ45 and fibre-optic inserts
Operation temperature, min. / max.	-40 °C+70 °C
Plugging cycles	750 plugging cycles for plugs to IEC 60603-7



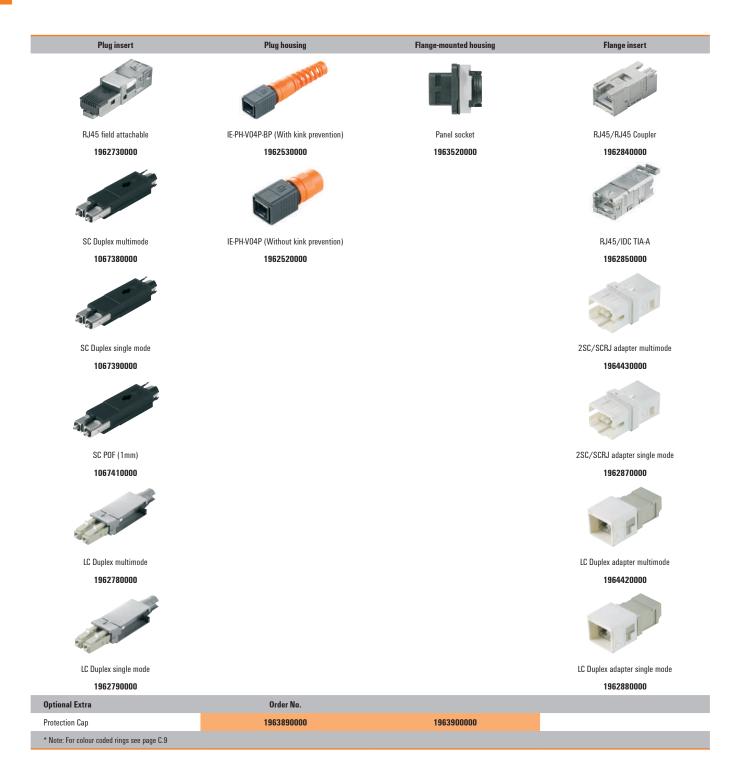
#### V4 Push / Pull

Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V4P housing provides a popular Push/Pull housing for ease of connection disconnection. The V04P is suitable for environments where very high protection from dust and water ingress is required with High mechanical strength and a very good chemical resistance.

Please order the Plug Insert + Plug Housing + Flange housing + Flange insert

Protection class	IP 67	
Housing material	PA UL 94 VO	
Variant	Variant 4 to IEC 61076-3-106	
Cladding diameter	5 mm - 10 mm	
C	Connector housing with label retainer 9*11 mm;	
Configuration	suitable for holding RJ45 and FO inserts	
Operation temperature, min. / max.	-40 °C+70 °C	
Plugging cycles	750 plugging cycles for plugs to IEC 60603-7	



### **V5 Rockstar**



Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V5 housing uses our popular Rockstar HDC Aluminium Diecast housing similar to our multi-pole electrical connectors. With Very high protection against water and dust and mechanical shock, this series will compliment the electrical connectors where Ethernet communications is run in parallel.

Protection class	IP 67
Housing material	Diecast aluminium
Variant	Variant 5 to IEC 61076-3-106
Cladding diameter	5 mm - 12 mm
Configuration	suitable for fitting with RJ45 inserts
Operation temperature, min. / max.	-40 °C+70 °C
Plugging cycles	750 plugging cycles for plugs to IEC 60603-7

Plug insert	Plug housing	Flange-mounted housing	Flange insert
Piug iisett	rity littlesing	France incusing	rialige iliseit
Profinet <b>1132030000</b>	Straight 1962540000	Straight 1 <b>963530000</b>	Profinet 1963830000
			San Property of the Control of the C
RJ45 field attachable <b>1962730000</b>	Angled <b>107730000</b>		RJ45/RJ45 Coupler <b>1962840000</b>
RJ45 Crimp AWG 24			RJ45/IDC TIA-A
1962720000			1962850000
Optional Extra	Order No.		
Protection Cap	1968920000	1968930000	

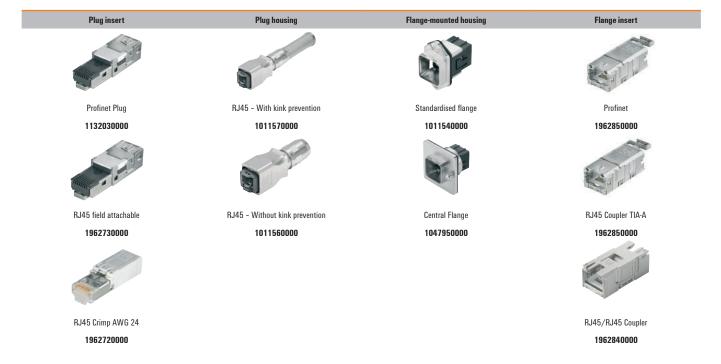
### New! V14 connector system for RJ45



Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC and Plastic fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V14 Push-Pull metal connectors are new to the Steadytech range. Designed originally for robotic automation utilising the ProfiNet specifications, these robust connectors are designed for Rapid Connection/Disconnection, Very high immunity to EMC, welding splatter, and are dust and water tight. Variant 14 combines all of these requirements, which is why the Aida (Automation Initiative of German Automobile Manufacturers) has committed itself to utilising this connector.

#### **CAT6A RJ45 Connectors**



Optional Extra	Order No.		
Dust Cap	1058280000	1058310000	
Colour-coded rings			
Blue	1963020000		
Orange	1963010000		
Green	1963040000		
Grey	1963000000		
White	1962990000		
Yellow	1963030000		

### New! V14 connector system for Fibre Optics



Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC and Plastic fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V14 Push-Pull metal connectors are new to the Steadytech range. Designed originally for robotic automation utilising the ProfiNet specifications, these robust connectors are designed for Rapid Connection/Disconnection, Very high immunity to EMC, welding splatter, and are dust and water tight. Variant 14 combines all of these requirements, which is why the Aida (Automation Initiative of German Automobile Manufacturers) has committed itself to utilising this connector

#### **Plastic and Glass Fibre Optic connectors**



Optional Extra	Protective Cap - Plug / Order No.	Protective Cap - Flange / Order No.	
Protective Cap - Plug	1058280000	1058310000	
* Note: For colour coded rings see page C.9			

### Push-Pull / Variant V14







Without kink prevention

Standardised flange

# **New! V14 Hybrid Connector system**

Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC and Plastic fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V14 Hybrid connector was designed to complement the V14 Power and Data connectors to provide a solution that offers the option of Ethernet data transmissions alongside 24-V auxiliary voltage within a single connector mating face to Cat 5. This enables the option to transmit similar quantities of auxiliary power, IO signals and Ethernet data as is presently available through the RJ-45 system.

### **Technical Data**

	Without kink prevention	Standardised flange
Category	Cat 5 (ISO/IEC 11801)	Cat 5 (ISO/IEC 11801)
Degree of protection	IP 67	IP 67
Housing main material	Zinc diecast	Zinc diecast
Sheath diameter, min. / max.	5 mm / 10 mm	5 mm / 10 mm
Plugging cycles	500	500
Ambient temperature, min. / max.	-40 °C+70 °C	-40 °C+70 °C
Connection 1 / 2	Hybrid (Q10) / Crimp	Hybrid (Q10) / Crimp
Connector standard	IEC 61076-3-117 Var.14	IEC 61076-3-117 Var.14
Wire cross-section, flexible, min. / max.	AWG 27 / AWG 20	AWG 27 / AWG 20
Wire cross-section, flexible, min. / max.	0.08 mm <sup>2</sup> / 0.75 mm <sup>2</sup>	0.08 mm <sup>2</sup> / 0.75 mm <sup>2</sup>
Rated current	3 A per contact	3 A per contact
Volume resistance	< 10 mΩ	< 10 mΩ

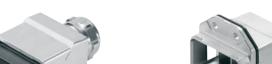
### **Ordering Data**

Туре		Order No.
IE-PS-V14M-HYB-10P	Plug	1072910000
IE-BSS-V14M-HYB-10P-FJ	Standardised Flange	1072900000
12 200 71 11111112 101 10	otaniaanalood Frango	107200000

### Accessories

Crimp Pins	Туре	Order No.
Wire Size		
0,330,5 mm <sup>2</sup>	IE-PIC-HYB-S-0,5-300	1096180000
0,75 mm <sup>2</sup>	IE-PIC-HYB-S-0,75-300	1068950000
0,080,2 mm <sup>2</sup>	IE-PIC-HYB-S-0,2-300	1135150000
Optional Extra		
Hybrid Plugs		
Crimping tool	HTF HYB	1119580000
Cable	IE-C5DHAG-MW	1172250000
Dust protection cap	IE-PP-V14P	1058280000

### Push-Pull / Variant V14









Power plug

Flange power

# **New! V14 Power Connector system**

Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC and Plastic fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.

The V14 Power connector enables a uniform connector series providing IP67 pluggable Power, Signal and Data connections. All V14 connectors comply with the Profinet specification and housed in a robust metal housing. The power connectors are 5 pole delivering up to 16A @ 24V

#### **Technical Data**

	Power plug	Flange power
Degree of protection	IP 67	IP 67
Housing base material	Zinc diecast, nickel-plated	Zinc diecast, nickel-plated
Sealing material	NBR	NBR
Cable sealing material	TPE	TPE
Contact carrier material	-	PA
Contact material	Copper alloy	Copper alloy
Flammability class UL 94	V-2	V-2
Pollution severity level	2	2
Plugging cycles	≤ 100	≤ 100
Current-carrying capacity at 50°C	16 A	16 A
Rated voltage	24 V	24 V
Ambient temperature, min. / max.	-40 °C+70 °C	-40 °C+70 °C
No. of poles	5	5
Wire cross-section, flexible, min. / max.	0.75 mm <sup>2</sup> / 2.5 mm <sup>2</sup>	-
Sheath diameter, min. / max.	9 mm / 13 mm	-
Connection 1	-	Tension clamp
Connection 2	Tension clamp	
Installation	-	4 Screws

# **Ordering Data**

Туре		Order No.
IE-PS-VAPM-24V	Plug	1068910000
IE-BSS-VAPM-24V	Flange	1069030000

#### **Accessories**

Dust Protection Cap		Order No.
Flange	IE-BP-VAPP	1068930000



# **The Connection System**

# M12 Connection System

#### **Description**

M12 is by far the most widespread connection method for controller systems and field level connections. M12 connections have been used with success in the automation sector for about thirty years. The M12 is trusted by users for its compact and sturdy design. It is also available with IP67 protection in compliance with EN 60529. IE organizations and associations are now leading harmonization efforts regarding IP67 connections in Industrial Ethernet. These organizations agree on the use of the M12 connector with the D-coded mating profile.

The Profibus User Organization (Profinet), Ethernet Powerlink Standardization Group (Ethernet Powerlink), Modbus IDA (Modbus) and ODVA (Ethernet/IP) all support the M12, D-coded connection alongside the RJ45 connection.

### **Application**

M12, D-coded plug-in connectors and cables are used for applications in harsh industrial environments – ideal for Ethernet connections in class of protection IP 67 between devices on the machine and in the switching cabinet, or in moving cable carriers.

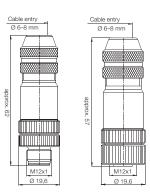
#### **Features**

- · IP 67 class of protection
- 4-core conductor connection
- M12, d-coded pin arrangement to ISO IEC 61076-2-101

### The benefits for you

- Familiar connection technology for Industrial Ethernet as well
- · Compact dimensions

# M12 Plugs and Sockets





# **M12 Plugs and Sockets**

- D Coded
- IP 67
- Cat.5

### **Applications**

Use the M12 Plugs and Sockets for:

- Use in wet or dusty areas
- High vibration exists
- Field mount required
- Machine mounted switches

### **Technical Data**

	Screw Connection	Tension-clamp Connection
Category	Cat.5	-
Protection class	IP 67	IP 67
Connection type	Screw connection	Tension-clamp connection
Housing material	Brass	Brass
Contact tube diameter	M12	M12
Cladding diameter, min. / max.	6 mm / 8 mm	6 mm / 8 mm
Cross-section	0.14 0.5 mm2	0.14 0.5 mm2
Operating temperature, min. / max.	-40 °C / 85 °C	-40 °C / 85 °C

Туре		Male	Socket
SAISM-4/8S-M12-4P D-COD	4-pole, PG 9	1892120000	1892130000
SAISM-4/8S-M12 4P D-ZF	4-pole, Tension-clamp connection, straight	1892120001	1892130001
SAISM-4/8S-M12 4P D-ZF	Tension-clamp connection, angled	1803930001	-

### **M12 Moulded Ethernet Cables**



M12 - Plug / Plug

M12 - Plug / Socket

### **M12 Moulded Ethernet Cables**

- Cat.5
- PUR
- D-coded
- PROFINET type C

### **Applications**

Use the M12 moulded ethernet cables for:

- Use with IP67 switches
- Use in area prone to vibration moisture or dust
- Where secure connection is required

#### **Technical Data**

Product type	Dragline cable
Category	Cat.5 (ISO/IEC 11801) / Cat.5e (TIA 568-B)
Shielding	SF/UTP
Plug / Plug - Version connector left / Version connector right	M12 IP67 straight male / M12 IP67 straight male
Plug / Socket - Version connector left / Version connector right	M12 IP67 straight male / M12 IP67 straight socket
Cross-section	4*AWG 22/7 - 0.36 mm <sup>2</sup>
Sheath diameter, max.	6.7 mm
Material sheath	PUR
Sheathing colour	Green (RAL 6018)
Min. bending radius, repetitive	7.5 *diameter
Min. bending radius, once only	5 x conductor cross-section
Ambient temperature (operational)	-40 °C+70 °C
Abrasion resistance	very good

# **Ordering Data**

	Туре	Order No.
	M12 Plug / Plug	
0.5 m	IE-C5DD4UG0005MCSMCS-E	1025950005
1.5 m	IE-C5DD4UG0015MCSMCS-E	1025950015
3 m	IE-C5DD4UG0030MCSMCS-E	1025950030
5 m	IE-C5DD4UG0050MCSMCS-E	1025950050
10 m	IE-C5DD4UG0100MCSMCS-E	1025950100
	M12 Plug / Socket	
1.5 m	IE-C5DD4UG0015MSSMCS-E	1059330015
3 m	IE-C5DD4UG0030MSSMCS-E	1059330030
5 m	IE-C5DD4UG0050MSSMCS-E	1059330050
10 m	IE-C5DD4UG0100MSSMCS-E	1059330100

### Accessories

	Туре	Qty.	Order No.
Sheathing stripper			
For coaxial and round data cables	IE-CST	1	9204350000
Markers			
Insertion label, yellow, 12 mm	TM-I 12 NEUTRAL GE	320	1718411687
Insertion label, yellow, 18 mm	TM-I 18 NEUTRAL GE	320	1718431687
Transparent sleeves, 12 mm length	TM 4/12 HF/HB	500	1719840000
Transparent sleeves, 18 mm length	TM 4/18 HF/HB	500	1719850000
Wire and cable marker, Ø 4,7 - 7,4 mm	VT SF 5/21 NEUTRAL WS VO	160	1689470001
Wire and cable marker, Ø 5,8 - 8,5 mm	VT SF 5/21 NEUTRAL WS VO	160	1730560001

B.30

### **M12 Moulded Ethernet Cables**



M12 - Open M12 - RJ45

### **M12 Moulded Ethernet Cables**

- Cat.5
- PUR
- D-coded
- PROFINET type C

# **Applications**

Use the M12 moulded ethernet cables for:

- Use with IP67 switches
- Use in area prone to vibration moisture or dust
- Where secure connection is required

### **Technical Data**

Product type	Dragline cable
Category	Cat.5 (ISO/IEC 11801) / Cat.5e (TIA 568-B)
Shielding	SF/UTP
Plug / Open - Version connector left / Version connector right	M12 IP67 straight male / Open
Plug / RJ45 - Version connector left / Version connector right	M12 IP67 straight male / RJ45 IP 20
Cross-section	4*AWG 22/7 - 0.36 mm <sup>2</sup>
Sheath diameter, max.	6.7 mm
Material sheath	PUR
Sheathing colour	Green (RAL 6018)
Min. bending radius, repetitive	7.5 *diameter
Min. bending radius, once only	5 x conductor cross-section
Ambient temperature (operational)	-40 °C+70 °C
Abrasion resistance	very good

# **Ordering Data**

	Туре	Order No.
	M12 Plug / Open	
1.5 m	IE-C5DD4UG0015MCSXXX-X	1025940015
3 m	IE-C5DD4UG0030MCSXXX-X	1025940030
5 m	IE-C5DD4UG0050MCSXXX-X	1025940050
10 m	IE-C5DD4UG0100MCSXXX-X	1025940100
	M12 Plug / RJ45	
1 m	IE-C5DD4UG0010MCSA20-E	1044470010
1.5 m	IE-C5DD4UG0015MCSA20-E	1044470015
3 m	IE-C5DD4UG0030MCSA20-E	1044470030
5 m	IE-C5DD4UG0050MCSA20-E	1044470050
10 m	IF-C5DD4UG0100MCSA20-F	1044470100

### Accessories

	Туре	Qty.	Order No.
Sheathing stripper			
For coaxial and round data cables	IE-CST	1	9204350000
Markers			
Insertion label, yellow, 12 mm	TM-I 12 NEUTRAL GE	320	1718411687
Insertion label, yellow, 18 mm	TM-I 18 NEUTRAL GE	320	1718431687
Transparent sleeves, 12 mm length	TM 4/12 HF/HB	500	1719840000
Transparent sleeves, 18 mm length	TM 4/18 HF/HB	500	1719850000
Wire and cable marker, Ø 4,7 - 7,4 mm	VT SF 5/21 NEUTRAL WS VO	160	1689470001
Wire and cable marker, Ø 5,8 - 8,5 mm	VT SF 5/21 NEUTRAL WS VO	160	1730560001

# M12 Railway Cabling





M12 - Plug / Plug

M12 - Plug / Socket

# **M12 Railway Cabling**

Weidmuller carry a large range of Ethernet Cat 5e assembled cables with M12 connectors. The plug/socket connectors provide IP 67 protection and is used in railway applications.

### **Applications**

Use the M12 Railway Cabling for:

- Ethernet cabling with IP 67 protection
- Railway applications

#### **Technical Data**

Product type	System Cable
Category	Cat.5e (ISO/IEC 11801) / Cat.5e (TIA 568-B)
Shielding	SF/UTP
Type plug / socket	M12 IP67 Straight Male / M12 IP67 Straight Female
Cross-section	2*2*AWG 22/7 - 2*2*0.36 mm <sup>2</sup>
Sheath diameter, max.	7.55 mm
Material sheath	Radox GKW S
Sheathing colour	Black
Insulation cross-section	1.95 mm
Min. bending radius, repetitive	6 x conductor cross-section
Ambient temperature	40 °C+90 °C
Installation temperature	-25 °C+90 °C
Storage temperature	40 °C+90 °C
Abrasion resistance	very good
Halogen	to IEC 60754-2
Resistance to oils	acc. EN 50306-3
Fire safety for railway vehicles	DIN 5510-2 fire safety levels 1,2,3,4

Туре	M12 - Plug / Plug	M12 - Plug / Socket	M12 - Plug / -
1.5 m	1010850015	1059340015	-
3 m	1010850030	1059340030	
5 m	1010850050	1059340050	1269740050
10 m	1010850100	1059340100	1269740100
25 m	1010850250	1059340250	

Passive Components

# M12 Railway Cabling





M12 Open - Plug / -

M12 RJ45 - Plug / Plug

# **M12 Railway Cabling**

Weidmuller carry a large range of Ethernet Cat 5e assembled cables with M12 connectors. The plug/socket connectors provide IP 67 protection and is used in railway applications.

### **Applications**

Use the M12 Railway Cabling for:

- Ethernet cabling with IP 67 protection
- Railway applications

#### **Technical Data**

Product type	System Cable
Category	Cat.5e (ISO/IEC 11801)
Shielding	SF/UTP
Type plug / socket	M12 IP67 Straight Male / M12 IP67 Straight Male
Cross-section	2*2*AWG 22/7 - 2*2*0.36 mm²
Sheath diameter, max.	7 mm
Material sheath	Radox GKW S
Sheathing colour	Black
Insulation cross-section	1.58 mm
Min. bending radius, repetitive	6 x conductor cross-section
Ambient temperature	40 °C+90 °C
Storage temperature	40 °C+90 °C
Abrasion resistance	very good
Halogen	to IEC 60754-2
Resistance to oils	acc. EN 50306-3
Fire safety for railway vehicles	DIN 5510-2 fire safety levels 1,2,3,4

# **Ordering Data**

Туре	M12 Open - Plug / -	M12 RJ45 - Plug / Plug
4 m		1220310040
5 m	1269740050	-
10 m	1269740100	-

Ľ

# M12 Couplers









M12 - RJ45 Adapter

M12 - M12 Coupling

M12 - PCB

# M12 Adapter and Coupling

Our M12 adaptors convert M12 D code to RJ45, and couplers are through panel M12/M12 D coded. Panel models have a threaded collar and securing nut. Order Adapter or Coupling + Plug for a complete set.

### **Applications**

Use the M12 Adapter and Coupling for:

- Ethernet cabling with IP 67 protection
- Conversion from RJ45 to M12 cabling

### **Technical Data**

Protection	IP 67
Type plug / socket	straight male / straight female
M12 code	D coded

# **Ordering Data**

Description	Order No.
M12 Female - RJ45 straight	8901620000
M12 Female - RJ45 angled	8901630000
M12 Female - M12 Female	8901640000
M12 Male (screw connection)	1892120000
M12 Female (screw connection)	1892130000
IE-M12-PCBCE	8902810000
IE-M12-PCBCE-PANEL	8902820000
	M12 Female - RJ45 straight M12 Female - RJ45 angled M12 Female - M12 Female M12 Male (screw connection) M12 Female (screw connection) IE-M12-PCBCE

#### Accessories



### M12 Plug

# IP67 Switches - Managed and Unmanaged

Weidmuller's IP67 switches provide a rugged, reliable network connectivity solution capable of withstanding the rigours of the harshest industrial environments. By integrating the electronics into robust IP67, V0 flammability housings with M12 network connectors, Weidmuller's IP67 range of Ethernet switches can resist the ingress of water, dust and other contaminants. The M12 connectors also provide the highest level of resistance to shock and vibration making these switches ideal for direct mounting on machinery or for applications in the transport industry.



#### **IP67 Unmanaged Switch**

- 8 ports in plastic housing
- Temperature range -40 °C ... +75 °C
- Autonegotiation
- Autocrossing (RJ45)

- Fault relay output
- · Redundant power supply
- cULus, CE, EN 55024, EN 55022, UL508



Туре	Description	Order No.
IE-SW8-IP67	8 x M12	8877190000



**IP67 MANAGED SWITCH** 

### **IP67 Managed Switch**

- Port trunking & port mirroring
- VLAN E 802.1q
- "Filtering and Forwarding Table" with fixed entries
- · Selective multicast control, QoS and DHCP
- Configurable relay functions
- Inspecting of "Address Table"

- SNMP V.1 capability
- RSTP and RapidRing™
- RSTP and RapidRing<sup>™</sup>
- · Autocrossing, Autonegotiation, Autopolarity
- · Broadcast limitation
- Flow control IEEE 802.3x
- . RMON (statistics, history, alarms, events)

Туре	Description	Order No.
IE-SW8-M-IP67	8 x M12	8877200000

#### Accessories

Туре	Description		_ =			Cable Size and Entry					
		Power (AUX) In	Power (AUX) In Power (AUX) Out Belav		Relay Console	Ethernet	PG7 (4	1-6mm)	PG9 (6	i-8mm)	
				Relay			Straight	Angled	Straight	Angled	
	M12 Female, 5 Pin, A code, Plug	•					9457250000	9457260000	1807250000	1807330000	
	M12 Male, 5 Pin, A code, Plug		•	•			9456940000	9456950000	1807350000	1807370000	
	M12 Male, 5 pin, B code, Plug				•			Use RS232 program	m cable (see below)		
	M12 Male, 4 Pin, D code, Plug					•	-	-	1892120000	-	
Туре	Description						1.5m	3.0m	5.0m	10.0m	
IE System Cable	Cat.5, PUR, M12 Male to M12 male, D-coded					•	1025950015	1025950030	1025950050	1025950100	
IE System Cable	Cat.5, PUR, M12 Male to RJ45 (IP20)					•	1044470015	1044470030	1044470050	1044470100	
IE System Cable	Cat.5, PUR, M12 Male to Open End Cable					•	1025940015	1025940030	1025940050	1025940100	
IE System Cable	PUR/PVC, M12 Female to Open End Cable	•					9457910150	9457910300	9457910500	9457911000	
IE System Cable	PUR/PVC, M12 Male to Open End Cable		•	•			9457610150	9457610300	9457610500	9457611000	
RS232 Program Cable	RS232-M12 Cable for managed switch				•		8874290000				
Туре	Description								Ωty	Order No.	
ESG8/13.5/43.3 SAI AU	Transparent markers					•			5	1912130000	
SAI-SK-M12-UNI	M12 Protective Cap (For Male Connector)		•	•	•	•			20	2330260000	
SAI-SK-M12 BU	M12 Protective Cap (For Female Connector)	•							1	8425960000	

 $<sup>\</sup>ensuremath{^{\star}}$  Note: Other cable variations and materials are available on request.



# **Field Installation**

# Starts on page B.37

Our field installation components provide the best features ensuring you with the highest possible uptime for your plant. A choice of PVC, or PUR cables allow you to select the best fit for your environment, while our Steadytec connectors provide the best connection for fibre optics or copper data cabling using industry standard connectors. The new Freecon range provides a plug and play solution for power, signal, and data connections for robots, while the Freecon Active on ProfiNet, monitors the fibre cable and alarms prior to a cable break.

Steadytec: Quality where it counts!

Passive Components

#### Junction Box - Bayonet V1

Characterised by IP67 protection, tested for 750 plugging cycles to provide a reliable connection. Order Plug insert + Plug housing + Junction Box + Flange insert for a complete set. Protective caps included on Flange housings only.



Optional Extra	Order No.
Protection Cap	1965690000
Colour-coded rings	
Blue	1963020000
Orange	1963010000
Green	1963040000
Grey	1963000000
White	1962990000
Yellow	1963030000
* Note: 2 Inserts required	

#### **Junction Box - Push Pull V4**

Characterised by IP67 protection, robust housing material, tested for 750 plugging cycles to provide a reliable connection. Order Plug insert + Plug housing + Junction Box + Flange insert for a complete set. Protective caps included on Flange mounted housings only.

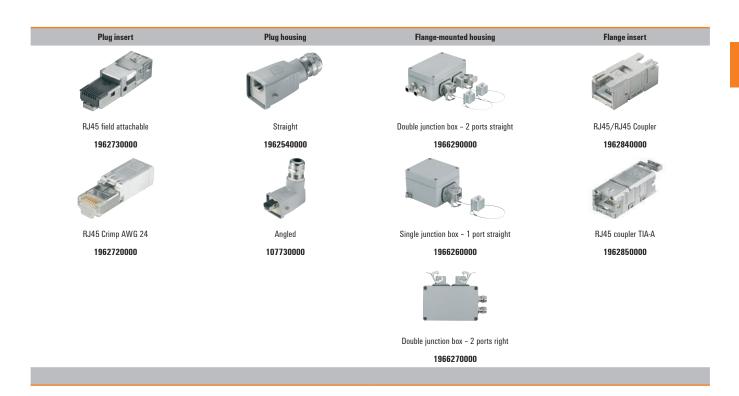


Optional Extra	Order No.
Plug Protective Cap	1963890000
Colour-coded rings	
Blue	1963020000
Orange	1963010000
Green	1963040000
Grey	196300000
White	1962990000
Yellow	1963030000

Passive Components

## Junction Box - Rockstar V5

Characterised by IP67 protection, diecast aluminium housing material, tested for 750 plugging cycles to provide a reliable connection. Order Plug insert + Plug housing + Junction Box + Flange insert for a complete set. Protective caps included.



#### **Push Pull V14 - RJ45 Field Connection**

The FreeCon Junction Box is strong enough to withstand flying sparks, welding slag and moisture for Ethernet data, signal and power connectivity. IP67 degree of protection. Order the required data and power plugs to suit junction box connection.



# Plug housing Flange-mounted housing RJ45 field attachable RJ45 With kink prevention Double junction box - Data RJ45 + Power RJ45 coupler TIA-B / Profinet 1962730000 1011570000 1068830000 RJ45 Crimp AWG 24 RJ45 Without kink prevention Single junction box - Data RJ45 1962720000 1011560000 1068880000 Power plug Double coupling - Data RJ45 + Power 1068910000 1068820000

Single RJ45 Coupling
1068870000

Colour-coded rings	Order No.	
Blue	1963020000	
Orange	1963010000	
Green	1963040000	
Grey	1963000000	
White	1962990000	
Yellow	1963030000	

**Passive Components** 

#### Push Pull V14 - Fibre Optic

money in preventative maintenance.

The Freecon active was designed for monitoring the fibre optic light source when using plastic optical fibre (POF) whilst providing a junction point with quick release connectors for fast change-out of damaged cables. Plastic Optical fibre is more robust than glass, requires no special tools, is suitable for short distance communications, and provides a quick and easy solution for noise free communications in an industrial environment. Its downside though is that POF degrades by going cloudy, thus reducing the throughput of the communication light source over time. The FreeCon Active monitors the communications light level and when it reaches a pre-set low level caused by ageing or damage, will provide to the PLC over Profinet alarm for change out of the Fibre cable

provide to the PLC over Profinet alarm for change out of the Fibre cable

This allows advance warning that a cable must be ready for the next maintenance schedule. Without this function production will be lost if a failure was to occur without warning. This saves time and



Plug insert	Plug housing	Flange-mounted housing	
বা			
IE-PI-SCRJ-POF / SC POF	Without kink prevention	Freecon Active	
1962750000	1058100000	1256240000	
a la			
SC multimode	Power plug		
1067380000	1068910000		

Optional Extra	Order No.	
Fibre Plug	1058280000	
Fibre Socket	1058310000	
Power Socket	1068930000	
Colour-coded rings		
Blue	1963020000	
Orange	1963010000	
Green	1963040000	
Grey	1963000000	
White	1962990000	
Yellow	1963030000	

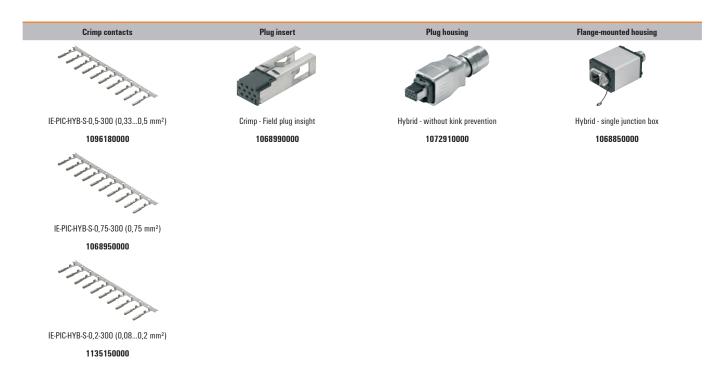
Weidmüller **3**€

#### Push-Pull / Variant 14

Providing High performance with simplicity in design and functionality, our Steadytec IP67 connectors provide CAT6A 10GB system class Ethernet for copper or SC,LC and Plastic fibre, in an efficient plug system providing rapid system connection suitable for harsh industrial applications.



The V14 Hybrid connector was designed to complement the V14 Power and Data connectors to provide a solution that offers the option of Ethernet data transmissions alongside 24-V auxiliary voltage within a single connector mating face to Cat 5. This enables the option to transmit similar quantities of auxiliary power, IO signals and Ethernet data as is presently available through the RJ-45 system.



Optional Extra	Order No.	
Dust Protection Cap - Plug	1058280000	
Dust Protection Cap - Junction Box	1058310000	
Crimping Tool	1956900000	
Hybrid Cable	1172250000	

## V14 Ethernet Patch Cable







V14 RJ45 IP67

#### **RJ45 IP20**

# **PROFINET Dragline Cable Type C**

#### **Technical Data**

	V14 RJ45 IP67	RJ45 IP20
Product type	Dragline cable	Dragline cable
C-4	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /
Category	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)
Shielding	SF/UTP	SF/UTP
Version connector left	RJ45 IP67 PushPull V14 metal	RJ45 IP20
Version connector right	RJ45 IP67 PushPull V14 metal	RJ45 IP20
Cross-section	-	4*AWG 22/7 - 0.36 mm <sup>2</sup>
Sheath diameter, max.	6.7 mm	6.7 mm
Material sheath	PUR	PUR
Insulation cross-section	1.5 mm	1.5 mm
Min. bending radius, repetitive	7.5 *diameter	7.5 *diameter
Min. bending radius, once only	5 x conductor cross-section	5 x conductor cross-section
Bending cycles	3 Mio	3 Mio
Speed	180 m/min	180 m/min
Acceleration	4 m/s <sup>2</sup>	4 m/s <sup>2</sup>
Pulling force	≤ 150 N	≤ 150 N
Ambient temperature (operational)	-40 °C+70 °C	-40 °C+70 °C
Installation temperature	-20 °C+60 °C	-20 °C+60 °C
Storage temperature	-50 °C+70 °C	-50 °C+70 °C
Abrasion resistance	very good	very good
Halogen	to IEC 60754-2	to IEC 60754-2
Resistance to spread of flame	acc. to IEC 60332-1	acc. to IEC 60332-1
Resistance to oils	acc. to IEC 60811-2-1	acc. to IEC 60811-2-1

	Туре	Order No.
V14 RJ45 IP67		
1 m	IE-C5DD4UG0010A2EA2E-X	1119730010
2 m	IE-C5DD4UG0020A2EA2E-X	1119730020
3 m	IE-C5DD4UG0030A2EA2E-X	1119730030
5 m	IE-C5DD4UG0050A2EA2E-X	1119730050
10 m	IE-C5DD4UG0100A2EA2E-X	1119730100
15 m	IE-C5DD4UG0150A2EA2E-X	1119730150
20 m	IE-C5DD4UG0200A2EA2E-X	1119730200
RJ45 IP20		
0,5 m	IE-C5DD4UG0005A20A20-E	1173030005
1 m	IE-C5DD4UG0010A20A20-E	1173030010
2 m	IE-C5DD4UG0020A20A20-E	1173030020
3 m	IE-C5DD4UG0030A20A20-E	1173030030
5 m	IE-C5DD4UG0050A20A20-E	1173030050
10 m	IE-C5DD4UG0100A20A20-E	1173030100
15 m	IE-C5DD4UG0150A20A20-E	1173030150
20 m	IE-C5DD4UG0200A20A20-E	1173030200

## **VO1 EtherNet Patch Cable**







V1 RJ45 IP67 - metal

V1 RJ45 IP67 - plastic

# **PROFINET Dragline Cable Type C**

#### **Technical Data**

	Metal	Plastic
Product type	System cable	System cable
Cotogony	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /
Category	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)
Shielding	SF/UTP	SF/UTP
Cross-section	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>
Sheath diameter, max.	6.1 mm	6.1 mm
Material sheath	PUR	PUR
Sheathing colour	green (RAL 6018)	green (RAL 6018)
Insulation cross-section	1 mm	1 mm
Min. bending radius, repetitive	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, once only	5 x conductor cross-section	5 x conductor cross-section
Ambient temperature (operational)	-40 °C+80 °C	-40 °C+80 °C
Installation temperature	-10 °C+60 °C	-10 °C+60 °C
Storage temperature	-40 °C+80 °C	-40 °C+80 °C
Abrasion resistance	very good	very good
Halogen	to IEC 60754-2	to IEC 60754-2
Resistance to spread of flame	acc. to IEC 60332-1	acc. to IEC 60332-1
Resistance to oils	acc. to IEC 60811-2-1	acc. to IEC 60811-2-1

Туре	Order No.
etal	
IE-C5ES8UG0010B41B41-E	1066850000
IE-C5ES8UG0020B41B41-E	1066860000
IE-C5ES8UG0050B41B41-E	1066870000
IE-C5ES8UG0100B41B41-E	1066880000
astic	
IE-C5ES8UG0010P41P41-E	1106010000
IE-C5ES8UG0020P41P41-E	1106020000
IE-C5ES8UG0050P41P41-E	1106030000
IE-C5ES8UG0100P41P41-E	1106040000
	### IE-C5ES8UG0010B41B41-E    IE-C5ES8UG0020B41B41-E    IE-C5ES8UG0050B41B41-E    IE-C5ES8UG00100B41B41-E    IE-C5ES8UG00100B41B41-E    IE-C5ES8UG0010P41P41-E    IE-C5ES8UG0020P41P41-E    IE-C5ES8UG0050P41P41-E

## Cat5 Bulk Cables









Installation cable - PUR / PVC

System cable - PUR / PVC

#### **Technical Data**

	Installation cable - PUR	Installation cable - PVC	System cable - PUR	System cable - PVC
Product type	Installation cable	Installation cable	System cable	System cable
Catagoni	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /
Category	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)
Shielding	SF/UTP	SF/UTP	SF/UTP	SF/UTP
Cross-section	4*2*AWG 24/1 - 4*2*0.205 mm2	4*2*AWG 24/1 - 4*2*0.205 mm2	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>
Sheath diameter, max.	PUR - 6.7 mm / PVC - 6.3 mm	PVC - 6.3 mm	PUR - 6.1 mm	PVC - 5.8 mm
Material sheath	PUR	PVC	PUR	PVC
Sheathing colour	green (RAL 6018)	green (RAL 6018)	green (RAL 6018)	green (RAL 6018)
Insulation cross-section	1 mm	1 mm	1 mm	1 mm
Min. bending radius, repetitive	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, once only	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section
Ambient temperature (operational)	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C
Installation temperature	-15 °C+60 °C	-15 °C+60 °C	PUR10 °C+60 °C	-15 °C+60 °C
Storage temperature	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C
Abrasion resistance	Very good	good	Very good	Good
Halogen	to IEC 60754-2	-	to IEC 60754-2	-
Resistance to spread of flame	acc. to IEC 60332-1	acc. to IEC 60332-1	acc. to IEC 60332-1	acc. to IEC 60332-1
Resistance to oils	acc. to IEC 60811-2-1	-	acc. to IEC 60811-2-1	-

	Description	Туре	Order No.
Installation cable			
PUR	100 m	IE-5IC4x2xAWG24/1-PUR	8813160000
	Bulk stock starting at 110 m	IE-C5CS8UG-MW	8944310000
PVC	100 m	IE-5IC4x2xAWG24/1-PVC	8813150000
	Bulk stock starting at 110 m	IE-C5CS8VG-MW	8953160000
System cable			
PUR	100 m	IE-5CC4x2xAWG26/7-PUR	8813200000
	Bulk stock starting at 110 m	IE-C5ES8UG-MW	8938880000
PVC	100 m	IE-5CC4x2xAWG26/7-PVC	8813190000
	Bulk stock starting at 110 m	IE-C5ES8VG-MW	8955490000

## Cat5 Bulk Cable



Dragline cable - green

Dragline cable - blue

# Cat. 5 Dragline Cable

#### **Technical Data**

	Green	Blue
Product type	Dragline cable	Dragline cable
Catagory	Cat.5 (ISO/IEC 11801) /	Cat.5 (ISO/IEC 11801) /
Category	Cat.5e (TIA 568-B)	Cat.5e (TIA 568-B)
Shielding	SF/UTP	SF/UTP
Cross-section	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>
Sheath diameter, max.	6.8 mm	6.8 mm
Material sheath	PUR	PUR
Sheathing colour	green (RAL 6018)	blue (RAL 5015)
Insulation cross-section	0.95 mm	0.95 mm
Min. bending radius, repetitive	7.5 *diameter	7.5 *diameter
Min. bending radius, once only	4 x conductor cross-section	4 x conductor cross-section
Bending cycles	5 Mio	5 Mio
Ambient temperature (operational)	-40 °C+80 °C	-40 °C+80 °C
Installation temperature	-20 °C+60 °C	-20 °C+60 °C
Storage temperature	-40 °C+80 °C	-40 °C+80 °C
Abrasion resistance	very good	very good
Halogen	to IEC 60754-2	to IEC 60754-2
Resistance to spread of flame	acc. to IEC 60332-1	acc. to IEC 60332-1
Resistance to oils	acc. to IEC 60811-2-1	acc. to IEC 60811-2-1

	Description	Туре	Order No.
Dragline cable			
Green	100 m	IE-5TC4x2xAWG26/7-PUR	8813210000
	Bulk stock starting at 110 m	IE-C5ED8UG-MW	8936390000
Blue	100 m	IE-C5ED8UB-100M	8960670000
	Bulk stock starting at 110 m	IE-C5ED8UB-MW	8949760000

## Cat7 Bulk Cable



LSZH

# Cat. 7 Connection Cable

#### **Technical Data**

Product type	System cable
Category	Cat.7 (ISO/IEC 11801)
Shielding	S/FTP
Cross-section	4*2*AWG 27/7 - 4*2*0.1 mm²
Sheath diameter, max.	5.9 mm
Material sheath	LSZH
Sheathing colour	light grey (RAL 7035)
Insulation cross-section	1.04 mm
Min. bending radius, repetitive	50 mm
Min. bending radius, once only	25 mm
Ambient temperature (operational)	-20 °C+60 °C
Installation temperature	0 °C+50 °C
Halogen	No
Resistance to spread of flame	acc. to IEC 60332-1
Resistance to oils	•

	Description	Туре	Order No.
System cable			
Light grey	305 m / 1000 ft	IE-C7FS8LD-305M	1273090000

## Cat7 Bulk Cable









Installation cable - PUR / PVC

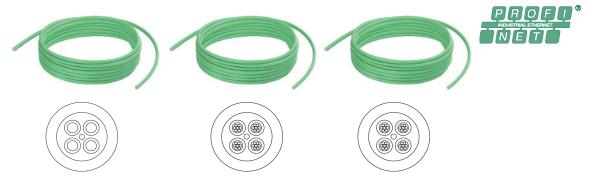
System cable - PUR / PVC

#### **Technical Data**

	Installation cable - PUR / PVC	Installation cable - PVC	System cable - PUR	System cable - PVC
Product type	Installation cable	Installation cable	System cable	System cable
Category	Cat.7 (ISO/IEC 11801)	Cat.7 (ISO/IEC 11801)	Cat.7 (ISO/IEC 11801)	Cat.7 (ISO/IEC 11801)
Shielding	S/FTP	S/FTP	S/FTP	S/FTP
Cross-section	4*2*AWG 23/1 - 4*2*0.255 mm <sup>2</sup>	4*2*AWG 23/1 - 4*2*0.255 mm <sup>2</sup>	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>
Sheath diameter, max.	8.4 mm	8.4 mm	PUR - 6.6 mm	PVC - 6.7 mm
Material sheath	PUR / PVC	PVC	PUR	PVC
Sheathing colour	green (RAL 6018)	green (RAL 6018)	green (RAL 6018)	green (RAL 6018)
Insulation cross-section	1.4 mm	1.4 mm	PUR - 1.03 mm	PVC - 0.98 mm
Min. bending radius, repetitive	10 x conductor cross-section			
Min. bending radius, once only	5 x conductor cross-section			
Ambient temperature (operational)	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C
Installation temperature	-15 °C+60 °C	-15 °C+60 °C	-15 °C+60 °C	-15 °C+60 °C
Storage temperature	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C	-40 °C+80 °C
Abrasion resistance	Very good	Good	Very good	Good
Halogen	to IEC 60754-2	-	to IEC 60754-2	-
Resistance to spread of flame	acc. to IEC 60332-1			
Resistance to oils	acc. to IEC 60811-2-1	-	acc. to IEC 60811-2-1	-

	Description	Туре	Order No.
Installation cable			
PUR	100 m	IE-7IC4x2xAWG23/1-PUR	8813140000
	Bulk stock starting at 110 m	IE-C7BS8UG-MW	8955350000
PVC	100 m	IE-7IC4x2xAWG23/1-PVC	8813130000
	Bulk stock starting at 110 m	IE-C7BS8VG-MW	8955360000
System cable			
PUR	100 m	IE-7CC4x2xAWG26/7-PUR	8813180000
	Bulk stock starting at 110 m	IE-C7ES8UG-MW	8954300000
PVC	100 m	IE-7CC4x2xAWG26/7-PVC	8813170000
	Bulk stock starting at 110 m	IE-C7ES8VG-MW	8955480000

#### **Profinet Bulk Cable**



Installation cable type A

#### Connection cable type B

Dragline cable type C

## **PROFINET Cable**

The Profinet bulk cable is an industrial connecting cable for flexible installations in machines and plants in industrial applications and difficult environments.

#### **Applications**

Applications use the ProfinetBulk Cable for:

- Flexible installation in machines and plants
- Cable requirement in Profinetindustrial network

#### **Technical Data**

	Installation cable type A / B / C
Product type - A	Installation cable
Product type - B	System cable
Product type - C	Dragline cable
Category	Cat.5 (ISO/IEC 11801) / Cat.5e (TIA 568-B)
Shielding	SF/UTP
Cross-section - A	4*AWG 22/1 - 0.33 mm <sup>2</sup>
Cross-section - B	4*AWG 22/7 - 0.36 mm <sup>2</sup>
Cross-section - C	4*AWG 22/7 - 0.36 mm <sup>2</sup>
Sheath diameter, max.	6.7 mm
Material sheath - A	PVC
Material sheath - B	PVC
Material sheath - C	PUR
Sheathing colour	green (RAL 6018)
Insulation cross-section	1.5 mm
Min. bending radius, repetitive	7.5 *diameter
Min. bending radius, once only - A	3.5 x conductor cross-section
Min. bending radius, once only - B	3.5 x conductor cross-section
Min. bending radius, once only - C	5 x conductor cross-section
Bending cycles - C	3 Mio
Ambient temperature (operational) - A	-40 °C+75 °C
Ambient temperature (operational) - B	-40 °C+70 °C
Ambient temperature (operational) - C	-40 °C+70 °C
Installation temperature	-20 °C+60 °C
Storage temperature - A	-40 °C+75 °C
Storage temperature - B	-40 °C+70 °C
Storage temperature - C	-50 °C+70 °C
Abrasion resistance - A	Good
Abrasion resistance - B	Good
Abrasion resistance - C	Very good
Halogen - C	to IEC 60754-2
Resistance to spread of flame - A	acc. to IEC 60332-1 / UL 1685
Resistance to spread of flame - B	acc. to IEC 60332-1 / UL 1685
Resistance to spread of flame - C	acc. to IEC 60332-1
Resistance to oils - C	acc. to IEC 60811-2-1

	Description	Туре	Order No.
Installation cable type A			
PVC	100 m	IE-C5AS4V1000	8899000000
	Bulk stock starting at 110 m	IE-C5AS4VG-MW	8955950000
System cable type B			
PVC	100 m	IE-C5DS4V1000	8898990000
	Bulk stock starting at 110 m	IE-C5DS4VG-MW	8955560000
Dragline cable type C			
PUR	100 m	IE-C5DD4U1000	8899010000
	Bulk stock starting at 110 m	IE-C5DD4UG-MW	8947670000

## **Hybrid cable**





PVC

# **Hybrid Cable**

#### **Technical Data**

Product type	Connecting cables
Category	Cat.5 (ISO/IEC 11801) / Cat.5e (TIA 568-B)
Shielding	SF/UTP
Cross-section	9.5 mm
Sheath diameter, max.	PVC
Material sheath	green (RAL 6018)
Sheathing colour	1.5 mm / 1.75 mm
Insulation cross-section / Insulation diameter 2	7.5 *diameter
Min. bending radius, repetitive	3.5 x conductor cross-section
Min. bending radius, once only	-40 °C+70 °C
Ambient temperature (operational)	-20 °C+60 °C
Installation temperature	-40 °C+70 °C
Storage temperature	good
Halogen	Yes
Resistance to spread of flame	acc. to IEC 60332-1 / UL 1685
Resistance to oils	Limited

	Туре	Order No.
Connecting cables		
Green	IE-C5DHAG-MW	1172250000

## Fibre-optic patch cable



SC-RJ / SC-RJ

# Fibre-optic patch cable PROFINET

• Polymer optical fibre

## **Applications**

Use the Fibre-optic patch cables PROFINET for:

- Use in place of glass fibre for extra robustness
- Robotic communications in welding environment
- Short distance fibre communication

#### **Technical Data**

Product type	Connection cables	
Version connector left / Version connector right	SCRJ IP20 / SCRJ IP20	
Cable layout	Zipcord	
Sheath diameter	PE	
Insulation	PE	
Sheathing colour	Black	
Ambient temperature (operational)	-20°C+80°C	
Attenuation	≤ 160 dB/km at 650 nm	
Bandwidth	≥ 10 MHz bei 650 nm	
Halogen	No	

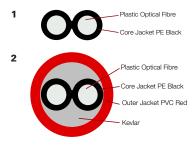
## **Ordering Data**

POF 980/1000 µm	Туре	Order No.
1 m	IE-FP0Z2EE0001MSJ0SJ0-X	1273430010
3 m	IE-FP0Z2EE0003MSJ0SJ0-X	1273430030
5 m	IE-FP0Z2EE0005MSJ0SJ0-X	1273430050
10 m	IE-FP0Z2EE0010MSJ0SJ0-X	1273430100

## Accessories

	Туре	Qty.	Order No.
Markers			
Wire and cable marker, Ø 4,7 - 7,4 mm	VT SF 5/21 NEUTRAL WS VO	160	1689470001
Wire and cable marker, Ø 5,8 - 8,5 mm	VT SF 5/21 NEUTRAL WS VO	160	1730560001

#### **Plastic Fibre Cable**



**Cable Cross Section** 

## **Plastic Fibre Cable**

The Plastic Optical Fibre (POF) provides a robust, cost effective solution for short runs that require a good tolerance to contamination and scratching or a very tight bend radius. POF can be terminated easily and quickly onsite without specialised tools.

## **Applications**

Use the Plastic Fibre Cable for:

- Ideal short distances
- Wide tolerance to scratching and contamination

#### **Technical Data**

Outer jacketmaterial	Plastic PVC	
Cable Type	Duplex	
Fibres	2	
Connector	SC, LC	
Mode	Multimode OM1	

Туре	Description	Order No.
1 - FCP-CAB-POF-D-1MM	(,Rip Cord'/'Figure 8') 1mm Diameter	7940084109
2 - FCP-CAB-POF-D-1MMHD	1mm Diameter / 6mm Outer Jacket	7940084110

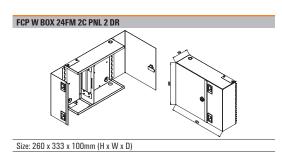
## **Fibre Optic Wall Mount Enclosure**

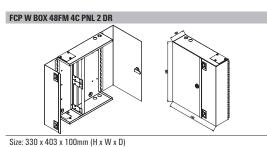


## **Hinged Wall Mount Enclosure**

## **Wall Mount Enclosure**

- Robust wall mount enclosures for easy direct termination or fusion splicing
- Lockable door to secure cable entry compartment
- Cable requirement in Profinetindustrial network
- · Heavy duty hinged mechanism
- Accommodates 24 or 48 fibres
- Modular coupler panels to suit fibre type
- Comes complete with M2O gland; strength clamp and cable management clips





Description	Order No.
24 Fibre Metal (2x Coupler Panel) Two Doors	7940031135
48 Fibre Metal (4x Coupler Panel) Two Doors	7940031136
ST Simplex 12 Port	7940031327
SC Duplex 6 Port	7940031328
Flat (Blank)	7940031309
Angled (SC Duplex 6 Port)	7940031311
Flat (SC Duplex 6 Port)	7940031312
Flat, SC Duplex 6 Port, No. 1-12	7940031314
Flat, SC Duplex 6 Port, No. 13-24	7940031315
Angled, SC Duplex 6 Port, No. 1-12, Left	7940031316
Angled, SC Duplex 6 Port, No. 13-24, Right	7940031317
Angled, SC Simplex 12 Port, No. 1-12, Left	7940031318
Angled, SC Simplex 12 Port, No. 1-12, Right	7940031319
Angled, SC Simplex 12 Port, No. 13-24, Right	7940031320
Flat, SC Simplex 12 Port	7940031321
Angled, SC Simplex 6 Port	7940031322
Flat, SC Simplex 6 Port / LC Duplex	7940031323
Angled, ST Simplex 12 Port	7940031324
Flat, ST Simplex 12 Port	7940031325
Flat, ST Simplex 6 Port	7940031326
SC Multimode Duplex - Beige	7940031329
SC Singlemode Duplex - Blue	7940031330
ST Multimode Simplex - Metal Body	7940031336
ST Single mode Simplex - Metal Body	7940031337
LC Multimode Duplex to SC Simplex Hole, Beige	7940031338
LC Singlemode Duplex to SC Simplex Hole, Beige	7940031339
LC Multimode OM3 Duplex to SC Simplex Hole, Aqua	7940031340
Small Splice Cassette with lid - 12 Fibre	7940031343
	48 Fibre Metal (4x Coupler Panel) Two Doors ST Simplex 12 Port SC Duplex 6 Port Flat (Blank) Angled (SC Duplex 6 Port) Flat (SC Duplex 6 Port, No. 1-12 Flat, SC Duplex 6 Port, No. 1-12 Flat, SC Duplex 6 Port, No. 1-3-24 Angled, SC Duplex 6 Port, No. 1-12, Left Angled, SC Duplex 6 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Left Angled, SC Simplex 12 Port, No. 1-12, Right Angled, SC Simplex 12 Port, No. 1-12, Right Angled, SC Simplex 12 Port No. 13-24, Right Flat, SC Simplex 12 Port Flat, SC Simplex 12 Port Flat, SC Simplex 6 Port Flat, SC Simplex 6 Port Flat, ST Simplex 12 Port Flat, ST Simplex 6 Port SC Multimode Duplex - Beige SC Singlemode Duplex - Metal Body ST Single mode Simplex - Metal Body LC Multimode Duplex to SC Simplex Hole, Beige LC Singlemode Duplex to SC Simplex Hole, Beige

<sup>\*</sup> Note: Coupler panels not included, please select from FCP CPLR Range

## Fibre Optic Accessories



**Coupler Panels** 

## **Coupler Panels**

- Coupler Panels to suit a range of fibre connectors
- SC, ST and LC variants (SC Simplex, suits LC duplex connectors
- Straight or angled versions available
- Clip straight into Weidmuller Rack and Wall Box
- Enclosures
- Optional numbered couplers available

Туре	Description	Order No.
FCP CPLR PNL ENCL & WALL BLNK	Flat (Blank)	7940031309
FCP ANG CPLR PNL SC DUP 6PT	Angled (SC Duplex 6 Port)	7940031311
FCP CPLR SC DUP 6PT	Flat (SC Duplex 6 Port)	7940031312
FCP CPLR SC DUP 6PT 1-12	Flat, SC Duplex 6 Port, No. 1-12	7940031314
FCP CPLR SC DUP 6PT 13-24	Flat, SC Duplex 6 Port, No. 13-24	7940031315
FCP ANG CPLR SC DUP 6PT 1-12L	Angled, SC Duplex 6 Port, No. 1-12, Left	7940031316
FCP ANG CPLR SC DUP 6PT 13-24R	Angled, SC Duplex 6 Port, No. 13-24, Right	7940031317
FCP ANG CPLR SC SIM 12PT 1-12L	Angled, SC Simplex 12 Port, No. 1-12, Left	7940031318
FCP ANG CPLR SC SIM 12PT 1-12R	Angled, SC Simplex 12 Port, No. 1-12, Right	7940031319
FCP ANG CPLR SC SIM 12PT13-24R	Angled, SC Simplex 12 Port, No. 13-24, Right	7940031320
FCP CPLR SC SIM 12PT	Flat, SC Simplex 12 Port	7940031321
FCP ANG CPLR SC SIM 6PT	Angled, SC Simplex 6 Port	7940031322
FCP CPLR SC SIM 6 PT	Flat, SC Simplex 6 Port / LC Duplex	7940031323
FCP ANG CPLR ST SIM 12PT	Angled, ST Simplex 12 Port	7940031324
FCP CPLR ST SIM 12PT	Flat, ST Simplex 12 Port	7940031325
FCP CPLR ST SIM 6 PT	Flat, ST Simplex 6 Port	7940031326
FCP CPLR SPH W BOX ST SIM 12PT	ST Simplex 12 Port	7940031327
FCP CPLR SPH W BOX SC DUP 6PT	SC Duplex 6 Port	7940031328

#### **Fibre Optic Accessories**



FCP SC Thru-Adapters



**FCP ST Thru-Adapters** 



**FCP LC Thru-Adapters** 



Singlemode and Multimode Pigtails

#### Thru-Adapters

- SC Thru Adapters
- Insert directly into Weidmuller coupler panels
- Thru connection of fibre terminations to patch cables
- Multimode or Singlemode variants
- Duplex or Simplex options
- Metal body for ST Thru-Adapters

Туре	Description	Order No.
FCP SC MM DUPLEX BEIGE	SC Multimode Duplex - Beige	7940031329
FCP SC SM DUPLEX BLUE	SC Singlemode Duplex - Blue	7940031330
FCP SC MM OM3 DUPLEX AQUA	SC Multimode OM3 Duplex - Aqua	7940031331
FCP ST MM SIMPLEX METAL BODY	ST Multimode Simplex - Metal Body	7940031336
FCP ST SM SIMPLEX METAL BODY	ST Singlemode Simplex - Metal Body	7940031337

- LC Thru Adapters
- Insert directly into Weidmuller coupler panels
- Thru connection of fibre terminations to patch cables
- Multimode or Singlemode variants

Description	Туре	Order No.
FCP LC MM DUP SC SIM HOLE BEIGE	LC Multimode Duplex to SC Simplex Hole, Beige	7940031338
FCP LC SM DUP SC SIM HOLE BEIGE	LC Singlemode Duplex to SC Simplex Hole, Beige	7940031339
FCP LC MM OM3 DUP SC SIM HOLE AQUA	LC Multimode OM3 Duplex to SC Simplex Hole, Aqua	7940031340

#### **Singlemode and Multimode Pigtails**

- Singlemode SM Pigtails 900µm
- For splicing of fibre within termination enclosures
- Available in 6 pack or 12 pack
- SC, ST or LC fibre connector options
- Yellow or colour-coded options

Fibre	Qty	Colour	SC	ST	LC
Multimode OM1 Pigtails 900μm	6pk	Yellow	7940031351	7940031353	7940031355
Multimode OM1 Pigtails 900µm	12pk	Coded	7940031352	7940031354	7940031356
Multimode OM2 Pigtails 900µm	6pk	Yellow	7940031357	7940031359	7940031361
Multimode OM2 Pigtails 900µm	12pk	Coded	7940031358	7940031360	7940031362
Singlemode SM Pigtails 900µm	6pk	Yellow	7940031345	7940031347	7940031349
Singlemode SM Pigtails 900µm	12pk	Coded	7940031346	7940031348	7940031350

**Splice Cassettes** 

#### **Splice Cassettes**

- Splice cassettes complete with lids
- Loose tube clamps incorporated into tray design
- 12 Splice & 24 Splice capacity
- Safely stores up to 24 fusion splices

Туре	Description	Order No.
FCP SML W&B SPLICE CASS & LID 12F0	Small Splice Cassette with Lid - 12 Fibre	7940031343
FCP LRG W&B SPLICE CASS & LID 24F0	Large Splice Cassette with Lid - 24 Fibre	7940031344
To the was a list cass a list 2410	Large opince cassette with Liu-24 ribre	7340031344

## **Duplex Fibre Optic Cable**









## Connecting cables

Dragline cable

## **Metre Goods**

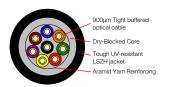
- Multimode fibre-optic
- Customisable

#### **Technical Data**

	Connecting cables	Dragline cable
Product type	System cable	Dragline cable
Cable layout	BREAKOUT	BREAKOUT dragline cable G50/125
Sheath diameter	6 mm	6 mm
Material sheath	PUR	PUR
Sheathing colour	black	black
Ambient temperature (operational)	-40 °C+85 °C	-55 °C+80 °C
Installation temperature	-10 °C+85 °C	-55 °C+85 °C
Storage temperature	-55 °C+85 °C	-70 °C+80 °C

	Туре	Order No.
Connecting cables		
Core 62,5 µm - Bulk stock starting at 50 m	IE-FM6D2UE-MW	8956060000
Core 50 µm - Bulk stock starting at 50 m	IE-FM5D2UE-MW	8946000000
Dragline cable		
Core 62,5 µm - Bulk stock starting at 50 m	IE-FM6D2UE-MW	8956050000
Core 50 µm - Bulk stock starting at 50 m	IE-FM5D2UE-MW	8956070000

#### **Fibre Optic Bulk Cable**



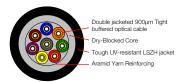
**Cable Cross Section** 

#### Indoor / Outdoor Riser Cable

For general purpose applications where the fibre installation is relatively well mechanically protected such as being supported on cable tray or ladder. With riser cable construction, individual fibre cores are surrounded by a 900µm tight buffer jacket.

- Heavy duty UV resistant outer jacket
- Dry-blocked core to prevent water ingress

Туре	Description	Order No.
FCP-CAB-IOR-06-SM	Indoor/Outdoor Riser Cable 6 core Singlemode	7940084024
FCP-CAB-IOR-02-MM	Indoor/Outdoor Riser Cable 2 core Multimode OM1	7940083904
FCP-CAB-IOR-02-MM3	Indoor/Outdoor Riser Cable 2 core Multimode OM3	7940083905
FCP-CAB-IOR-04-MM	Indoor/Outdoor Riser Cable 4 core Multimode OM1	7940083908
FCP-CAB-IOR-06-MM	Indoor/Outdoor Riser Cable 6 core Multimode OM1	7940083909
FCP-CAB-IOR-06-MM3	Indoor/Outdoor Riser Cable 6 core Multimode OM3	7940083910
FCP-CAB-IOR-08-MM	Indoor/Outdoor Riser Cable 8 core Multimode OM1	7940083911
FCP-CAB-IOR-12-SM	Indoor/Outdoor Riser Cable 12 core Singlemode	7940084026
FCP-CAB-IOR-12-MM	Indoor/Outdoor Riser Cable 12 core Multimode OM1	7940083912
FCP-CAB-IOR-12-MM3	Indoor/Outdoor Riser Cable 12 core Multimode OM3	7940083913



**Cable Cross Section** 

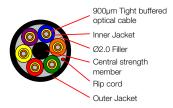
#### Indoor / Outdoor Breakout Cable

For heavier duty general industrial applications where a more durable and robust installation is required. With breakout cable, each 900µm jacketed fibre is additionally over-sleeved to further protect the fibres at the point of break-out. This provides additional mechanical strength and durability for applications subject to higher mechanical stresses and potential movement during and after installation.

- · Heavy duty UV resistant outer jacket
- Dry-blocked core to prevent water ingress

Туре	Description	Mode	Fibers	Order No.
FCP-CAB-IOB-02-MM	Indoor/Outdoor Breakout Cable	Multimode OM1	2	7940083915
FCP-CAB-IOB-02-MM3	Indoor/Outdoor Breakout Cable	Multimode OM3	2	7940083916
FCP-CAB-IOB-04-MM	Indoor/Outdoor Breakout Cable	Multimode OM1	4	7940083917
FCP-CAB-IOB-06-SM	Indoor/Outdoor Breakout Cable	Singlemode	6	7940084025
FCP-CAB-IOB-06-MM	Indoor/Outdoor Breakout Cable	Multimode OM1	6	7940083918
FCP-CAB-IOB-06-MM3	Indoor/Outdoor Breakout Cable	Multimode OM3	6	7940083919
FCP-CAB-IOB-08-MM	Indoor/Outdoor Breakout Cable	Multimode OM1	8	7940083920
FCP-CAB-IOB-12-SM	Indoor/Outdoor Breakout Cable	Singlemode	12	7940084027
FCP-CAB-IOB-12-MM	Indoor/Outdoor Breakout Cable	Multimode OM1	12	7940083921
FCP-CAB-IOB-12-MM3	Indoor/Outdoor Breakout Cable	Multimode OM3	12	7940083922

#### **Cable Range**



**Six Core Cable Cross Section** 

#### **Indoor/Outdoor Military Tactical Cable**

Military Tactical cable displays excellent mechanical characteristics and features a heavier duty outer jacket than conventional riser and breakout cable. The advantages are additional mechanical strength, flexibility, crush-resistance, abrasion resistance and durability. Weidmuller's Military Tactical cables are available in riser and break-out configurations.

- · Heavy duty outer jacket
- Available in Riser or Breakout construction

Туре	Description	Mode	Fibers	Order No.
FCP-CAB-IORM-06-SM	MilSpec Indoor/Outdoor Riser	Singlemode	6	7940084028
FCP-CAB-IORM-06-MM	MilSpec Indoor/Outdoor Riser	Multimode OM1	6	7940083923
FCP-CAB-IORM-12-SM	MilSpec Indoor/Outdoor Riser	Singlemode	12	7940084029
FCP-CAB-IORM-12-MM	MilSpec Indoor/Outdoor Riser	Multimode OM1	12	7940083924
FCP-CAB-IOBM-06-SM	MilSpec Indoor/Outdoor Breakout	Singlemode	6	7940084030
FCP-CAB-IOBM-06-MM	MilSpec Indoor/Outdoor Breakout	Multimode OM1	6	7940083925
FCP-CAB-IOBM-12-SM	MilSpec Indoor/Outdoor Breakout	Singlemode	12	7940084031
FCP-CAB-IOBM-12-MM	MilSpec Indoor/Outdoor Breakout	Multimode OM1	12	7940083926



**Cable Cross Section** 

#### **Armoured Cable**

Armoured cable is surrounded by a metal jacket which provides significantly improved crush resistance, tensile strength and mechanical durability. One significant advantage with armoured cable is its rodent-proof properties due to the impenetrable nature of the steel armour.

- · Armoured cable for protection against rodents
- $\bullet$  -50°C to +85°C Operating Temperature
- Good mechanical and environmental properties
- Flame resistant
- Soft and flexible

Туре	Description	Mode	Fibres	Order No.
FCP-CAB-IORA-02-MM	Indoor/Outdoor Armoured cable	Multimode OM1	2	7940083927
FCP-CAB-IORA-04-MM	Indoor/Outdoor Armoured cable	Multimode OM1	4	7940083928
FCP-CAB-IORA-06-SM	Indoor/Outdoor Armoured cable	Singlemode	6	7940084032
FCP-CAB-IORA-06-MM	Indoor/Outdoor Armoured cable	Multimode OM1	6	7940083929
FCP-CAB-IORA-08-MM	Indoor/Outdoor Armoured cable	Multimode OM1	8	7940083930
FCP-CAB-IORA-12-SM	Indoor/Outdoor Armoured cable	Singlemode	12	7940084033
FCP-CAB-IORA-12-MM	Indoor/Outdoor Armoured cable	Multimode OM1	12	7940083931