

## M12 male connectors

All values in the drawings are in mm

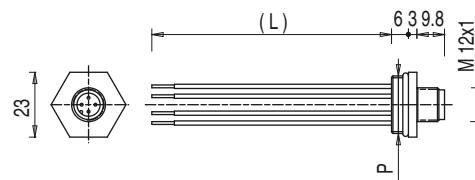


These standard M12 male connectors are ready for the installation on the switches.

Their wires have the right length for the connection to the contact blocks and are provided with wire-end sleeves. On request they can be delivered already wired to the switch. The connectors are used where a very short machine down time is required (e.g. in big plants). The connector-provided switch can be replaced very quickly with an identical one with no chance of incorrect wiring.

**Technical data:**

Max. operating voltage:	250 Vac / 300 Vdc (4/5-pole) 30 Vac / 36 Vdc (8/12-pole)
Max. operating current:	4 A (4/5-pole) 2 A (8-pole) 1.5 A (12-pole)
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653
Ambient temperature:	-25°C ... +80°C
Tightening torque:	1 ... 1.5 Nm
Wire cross-section:	0.5 mm <sup>2</sup> (20 AWG) for 4/5-pole 0.25 mm <sup>2</sup> (23 AWG) for 8-pole 0.14 mm <sup>2</sup> (26 AWG) for 12-pole
Contact type:	gold-plated

**Pin assignment**

4 poles		5 poles		8 poles		12 poles	
Pin	Colour	Pin	Colour	Pin	Colour	Pin	Colour
1	Brown	1	Brown	1	White	1	Brown
2	White	2	White	2	Brown	2	Blue
3	Blue	3	Blue	3	Green	3	White
4	Black	4	Black	4	Yellow	4	Green
		5	Grey	5	Grey	5	Pink
				6	Pink	6	Yellow
				7	Blue	7	Black
				8	Red	8	Grey
						9	Red
						10	Purple
						11	Grey-Pink
						12	Red-Blue

**Code structure**

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

article		options	
<b>VF CNM5MM-L100</b>			
<b>Body material</b>		<b>Cable length (L)</b>	
<b>M</b> metal		8.5 cm (standard)	
<b>P</b> plastic		<b>L16</b> 16 cm	
		<b>L100</b> 100 cm	
		<b>L200</b> 200 cm	
<b>No. of poles</b>		<b>Connection type</b>	
<b>4</b> 4 poles		<b>M</b> M12x1	
<b>5</b> 5 poles		<b>Connector thread (P)</b>	
<b>8</b> 8 poles		<b>M</b> M20 x 1.5 (standard)	
<b>12</b> 12 poles		<b>P</b> PG 13.5	

**Stock items**

VF CNP4MM  
VF CNP4PM  
VF CNM5MM  
VF CNM5PM  
VF CNP8MM  
VF CNP5PM  
VF CNP5MM  
VF CNM4PM  
VF CNM8MM  
VF CNM8PM  
VF CNM12MM-L16  
VF CNM4MM

**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.

**Note:** the 12-pole connector is only available in metal with M20x1.5 thread and 16 cm cables.

Items with code on **green** background are stock items

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

## M12 female connectors with cable

All values in the drawings are in mm

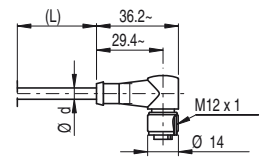
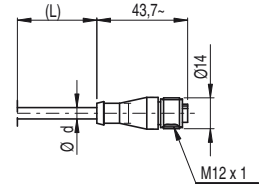


### Technical data:

- Polyurethane connector body
- Class 6 copper conductors acc. to IEC 60228 - mobile installation
- Gold-plated contacts (resistance < 5 mΩ)
- Self-locking ring nut
- High flexibility cable with PVC sheath suitable to be used in drag chains, acc. to IEC 60332-3 and CEI 20-22II. With polyurethane sheath on request

### Technical data:

Max. operating voltage:	250 Vac / 300 Vdc (4/5-pole) 30 Vac / 36 Vdc (8/12-pole)
Max. operating current:	4 A (4-5-pole), 2 A (8-pole), 1.5 A (12-pole)
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653 <small>(Protect the cables from direct high-pressure and high-temperature jets)</small>
Ambient temperature:	-25°C ... +80°C for fixed installation -15°C ... +80°C for mobile installation
Wire cross-section:	0.34 mm <sup>2</sup> (22 AWG) for 4-pole 0.25 mm <sup>2</sup> (23 AWG) for 5/8-pole 0.14 mm <sup>2</sup> (26 AWG) for 12-pole
Minimum bending radius:	> cable diameter x 15



ø d: 5 mm for 4 and 5-pole  
6 mm for 8 and 12 poles

### Pin assignment

4 poles		5 poles		8 poles		12 poles	
Pin	Colour	Pin	Colour	Pin	Colour	Pin	Colour
1	Brown	1	Brown	1	White	1	Brown
2	White	2	White	2	Brown	2	Blue
3	Blue	3	Blue	3	Green	3	White
4	Black	4	Black	4	Yellow	4	Green
		5	Grey	5	Grey	5	Pink
				6	Pink	6	Yellow
				7	Blue	7	Black
				8	Red	8	Grey
						9	Red
						10	Purple
						11	Grey-Pink
						12	Red-Blue

### Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

# VF CA4PD3M

<b>No. of poles</b>	<b>Connection type</b>	<b>No. of poles</b>	
<b>4</b> 4 poles	<b>M</b> M12x1	<b>4</b>	<b>5</b>
<b>5</b> 5 poles		<b>8</b>	<b>12</b>
<b>8</b> 8 poles			
<b>12</b> 12 poles			
<b>Cable sheath</b>		<b>Cable length (L)</b>	
<b>P</b> PVC (standard)		<b>1</b> 1 metre	
<b>U</b> PUR		<b>2</b> 2 metres	
<b>Connector type</b>		<b>3</b> 3 metres (standard)	• •
<b>D</b> straight (standard)		<b>4</b> 4 metres	
<b>G</b> angled		<b>5</b> 5 metres (standard)	• • • •
		<b>...</b>	
		<b>0</b> 10 metres (standard)	• • • •
		Other lengths on request	

### Stock items

- VF CA4PD3M
- VF CA4PD5M
- VF CA4PD0M
- VF CA5PD3M
- VF CA5PD5M
- VF CA5PD0M
- VF CA8PD5M
- VF CA8PD0M
- VF CA12PD5M
- VF CA12PD0M

**Attention!** No stock items, minimum order quantity 100 pcs.

**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.

Items with code on **green** background are stock items

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

## M12 male connectors with cable

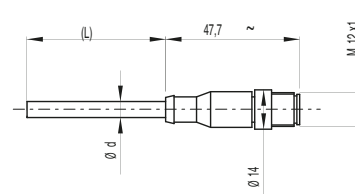
All values in the drawings are in mm

**Technical data:**

Max. operating voltage:	250 Vac / 300 Vdc (5-pole) 30 Vac / 36 Vdc (8-pole)
Max. operating current:	4 A (5-pole), 2 A (8-pole)
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653 (Protect the cables from direct high-pressure and high-temperature jets)
Ambient temperature:	-25°C ... +80°C for fixed installation -15°C ... +80°C for mobile installation
Wire cross-section:	0.25 mm <sup>2</sup> (23 AWG)
Minimum bending radius:	> cable diameter x 15

**Technical data:**

- Polyurethane connector body
- Class 6 copper conductors acc. to IEC 60228 - mobile installation
- Gold-plated contacts (resistance < 5 mΩ)
- Self-locking ring nut
- High flexibility cable with PVC sheath suitable to be used in drag chains, acc. to IEC 60332-3 and CEI 20-22II. With polyurethane sheath on request



ø d: 5 mm for 5-pole  
6 mm for 8-pole

**Pin assignment**

5 poles		8 poles	
Pin	Colour	Pin	Colour
1	Brown	1	White
2	White	2	Brown
3	Blue	3	Green
4	Black	4	Yellow
5	Grey	5	Grey
		6	Pink
		7	Blue
		8	Red

**Code structure****Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.**VF CF5PD3M**

<b>No. of poles</b>	<b>Connection type</b>
<b>5</b> 5 poles	<b>M</b> M12x1
<b>8</b> 8 poles	
<b>Cable sheath</b>	<b>Cable length (L)</b>
<b>P</b> PVC (standard)	<b>3</b> 3 metres (standard)
<b>U</b> PUR	<b>5</b> 5 metres
	<b>0</b> 10 metres
	Other lengths on request
<b>Connector type</b>	
<b>D</b> straight	

**Articles**

VF CF5PD3M  
VF CF8PD3M

**Attention!** No stock items, minimum order quantity 100 pcs.**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

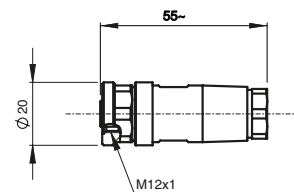
## Field wireable M12 female connectors

All values in the drawings are in mm



### General data

Technopolymer connector body	
Gold-plated contacts	
Screw terminals for cable screw fittings	
Max. operating voltages	250 Vac/dc (4 and 5-pole) 30 Vac/dc (8-pole)
Maximum current	4 A (4 and 5-pole) 2 A (8-pole)
Protection degree	IP67 acc. to EN 60529
Ambient temperature	-25°C ... +85°C
Wire cross-section	0.25 mm <sup>2</sup> (23 AWG) ... 0.5 mm <sup>2</sup> (20 AWG)



Article	Description	no. of poles
VF CBMP4DM04	Field wireable M12 female connector, straight, for Ø 4 ... Ø 6.5 mm multipolar cables	4
VF CBMP5DM04	Field wireable M12 female connector, straight, for Ø 4 ... Ø 6.5 mm multipolar cables	5
VF CBMP8DM04	Field wireable M12 female connector, straight, for Ø 4 ... Ø 7 mm multipolar cables	8

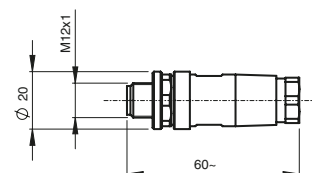
## Field wireable M12 male connectors

All values in the drawings are in mm



### General data

Technopolymer connector body	
Gold-plated contacts	
Screw terminals for cable screw fittings	
Max. operating voltages	250 Vac/dc (5-pole) 30 Vac/dc (8-pole)
Maximum current	4 A (5-pole) 2 A (8-pole)
Protection degree	IP67 acc. to EN 60529
Ambient temperature	-25°C ... +85°C
Wire cross-section	0.25 mm <sup>2</sup> (23 AWG) ... 0.5 mm <sup>2</sup> (20 AWG)



Article	Description	no. of poles
VF CCMP5DM04	Field wireable M12 male connector, straight, for Ø 4 ... Ø 6.5 mm multipolar cables	5
VF CCMP8DM04	Field wireable M12 male connector, straight, for Ø 4 ... Ø 7 mm multipolar cables	8

**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.

Items with code on **green** background are stock items

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

**Series connection with Y-shaped M12 connectors**

To facilitate and simplify the series wiring of the safety devices, a variety of accessories designed specifically for this purpose are available. With the help of the proven M12 round connector and the connection of standard elements, safety equipment of Category 4, SIL3 and PL e with up to 32 elements connected in series is possible. All of which is possible without the risk of connection errors and with a high IP67 protection degree. The safety circuits consist of a 24Vdc power supply unit, a number of extensions to the installed devices, Y connectors for branching out from the chain to each individual device and a terminating plug.

In addition to the power supply unit, a suitable safety module is used to assess the state of the safety outputs within the safety chain.

**Devices suitable for series connection**

The series may consist both of devices that are identical to one another (homogeneous series) or that belong to different series (mixed series).

Only the following Pizzato Elettrica devices may be connected in series using the Y connectors:

ST series safety sensors with RFID technology: ST D•31•M•, ST D•71•M•

NG series safety switches with solenoid and RFID technology: Any item with an M12 connector for series connection with a "Y" connector or with option: K950, K951, K952.

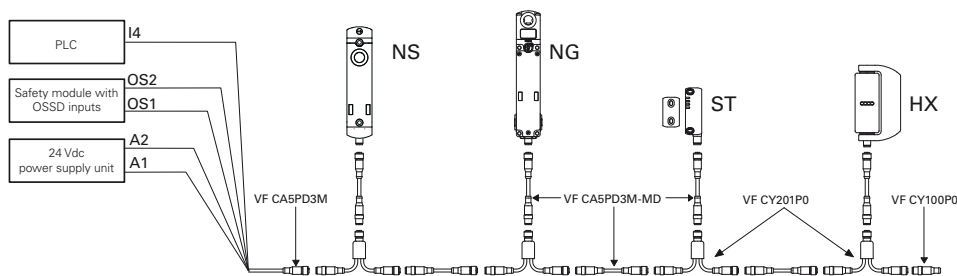
NS: Any item with an M12 connector for series connection with a "Y" connector or with the option "integrated cable or connector", letter "Q".

HX series safety hinge switches: HX BEE1-••M.

**Electrical connection of the chain**

Pin	Colour	Connection
1	Brown	A1 Supply input +24 Vdc
2	White	OS1 Safety output
3	Blue	A2 Supply input 0 V
4	Black	OS2 Safety output
5	Grey	I4 Solenoid activation input

Note: By activating/deactivating input I4, all switches of the NG and NS series in the chain simultaneously block/open all guards. Activation and deactivation of input I4 has no effect on the ST sensors and HX hinges in the chain.



**Attention!** For proper operation of the devices connected in series via cables, Y connectors or junction boxes, it is necessary to pay particular attention to the voltage drop that occurs in the circuit. Pay particular attention to the flowing currents and cross-section/length of the used cables to ensure that the supply voltage of the components at the end of the series connection remains within the specified limit values during effective operation.

**M12 extension cable**

All values in the drawings are in mm

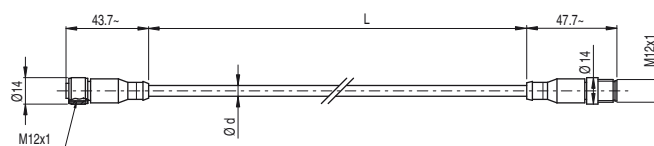


**Technical data:**

- Polyurethane connector body
- Class 6 copper conductors acc. to IEC 60228
- Gold-plated contacts (resistance < 5 mΩ)
- Self-locking ring nut
- High flexibility cable with PVC sheath suitable to be used in drag chains, acc. to IEC 60332-3 and CEI 20-22II.

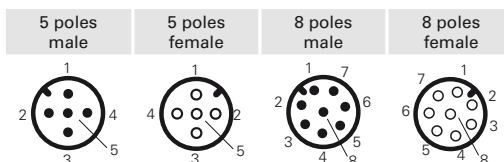
**Technical data:**

- Max. operating voltage: 250 Vac / 300 Vdc (5-pole)  
30 Vac / 36 Vdc (8-pole)
- Max. operating current: 4 A (5-pole), 2 A (8-pole)
- Protection degree: IP67 acc. to EN 60529  
IP69K acc. to ISO 2653 (Protect the cables from direct high-pressure and high-temperature jets)
- Ambient temperature: -25°C ... +80°C for fixed installation  
-15°C ... +80°C for mobile installation
- Wire cross-section: 0.5 mm<sup>2</sup> (20 AWG) (5-pole)  
0.25 mm<sup>2</sup> (23 AWG) (8-pole)
- Minimum bending radius: > cable diameter x 15



ø d: 6.4 mm for 5-pole  
6 mm for 8-pole

**Pin assignment**



**Stock items**

- VF CA5PD3M-MD
- VF CA5PD5M-MD
- VF CA5PD0M-MD
- VF CA8PD3M-MD
- VF CA8PD5M-MD

**Code structure**

**VF CA5PD3M-MD**

No. of poles	5	5 poles	8	8 poles
Connection type	M	M12x1		
Cable length (L)	3	3 metres (standard)	5	5 metres (standard)
	5	5 metres (standard)	8	10 metres (standard)
	0	10 metres (standard)	Other lengths on request	
Cable sheath	P	PVC		
Connector type	D	straight		

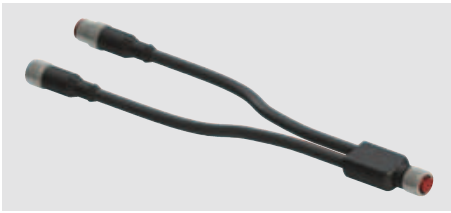
**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.

Items with code on green background are stock items

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

## M12 connectors, Y-shaped, for series connections

All values in the drawings are in mm

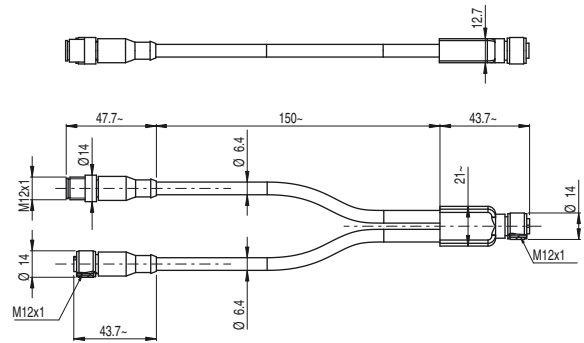


### Technical data:

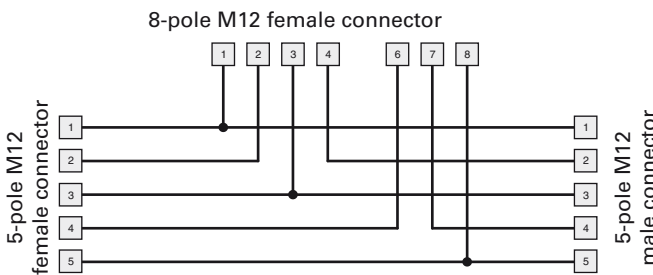
Polyurethane connector body  
 Class 6 copper conductors acc. to IEC 60228  
 Gold-plated contacts (resistance < 5 mΩ)  
 Self-locking ring nut  
 High flexibility cable with PVC sheath suitable to be used in drag chains, acc. to IEC 60332-3 and CEI 20-22II.

### Technical data:

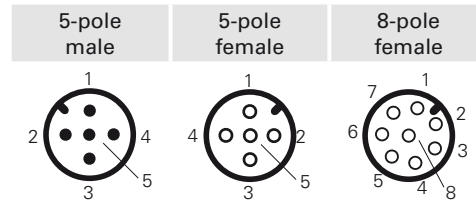
Max. operating voltage: 30 Vac / 36 Vdc  
 Max. operating current: 4 A (5-pole), 2 A (8-pole)  
 Protection degree: IP67 acc. to EN 60529  
 IP69K acc. to ISO 2653  
 (Protect the cables from direct high-pressure and high-temperature jets)  
 Ambient temperature: -25°C ... +80°C for fixed installation  
 -15°C ... +80°C for mobile installation  
 Wire cross-section: 0.5 mm<sup>2</sup> (20 AWG)  
 Minimum bending radius: > cable diameter x 15



### Internal block diagram, Y-shaped connector



### Pin assignment



Article	Description
VF CY201P0	M12 connectors, Y-shaped, for series connections

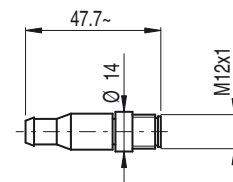
## M12 terminating plugs for series connections

All values in the drawings are in mm

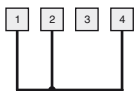


### Technical data:

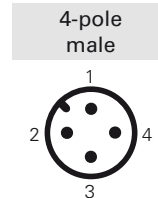
Polyurethane connector body  
 Gold-plated contacts (resistance < 5 mΩ)  
 Self-locking ring nut  
 Protection degree: IP67 acc. to EN 60529  
 Max. operating voltage: 250 Vac / 300 Vdc  
 Max. operating current: 4 A



### Internal block diagram of the terminating plug



### Pin assignment



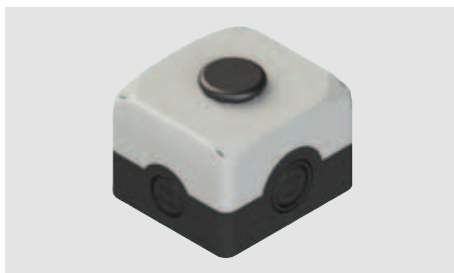
Article	Description
VF CY100P0	M12 terminating plugs for series connections, 4-pole

**ATTENTION:** always disconnect the power supply before removing the connector. The connector is not suitable for separation of electrical loads.

Items with code on **green** background are stock items

➔ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

**Junction box for series connection of up to 4 devices**



**Technical data:**

Material:

Self-extinguishing shock-proof polycarbonate with double insulation, UV-resistant and glass fibre reinforced, high shock resistance.

Material of the screws:

stainless steel

Protection degree:

IP67 acc. to EN 60529, IP69K acc. to ISO 20653, with cable gland of equal or higher protection degree

Conduit entries:

- 2x M20 - 1/2 NPT knock-out upper and lower entries
- 2x M20 - 1/2 NPT - M25 knock-out side entries
- 2x M16 knock-out base entries

Ambient temperature:

-40°C ... +80°C

Tightening torque of the cover screws:

1 ... 1.4 Nm

Connection system:

PUSH-IN spring type

Cross-section of rigid/flexible wires w.

min. 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)

wire-end sleeve:

max. 1 x 1.5 mm<sup>2</sup> (1 x AWG 16)

Wire cross-section with pre-insulated

min. 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)

wire-end sleeve:

max. 1 x 0.75 mm<sup>2</sup> (1 x AWG 18)

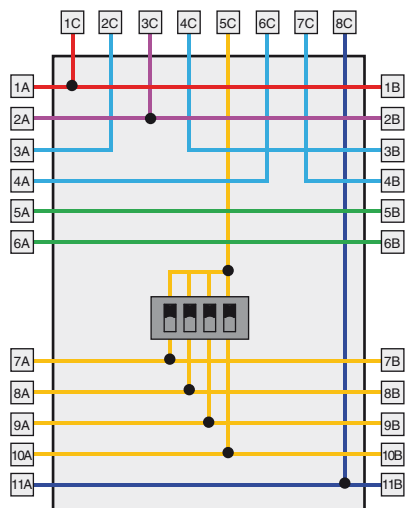
Cable stripping length (x):

min.: 8 mm  
max.: 12 mm



Article	Description
VF CY302P0	Junction box for series connection of up to 4 devices

**Pin assignment**



**Example of series connection of 4 NG series switches**

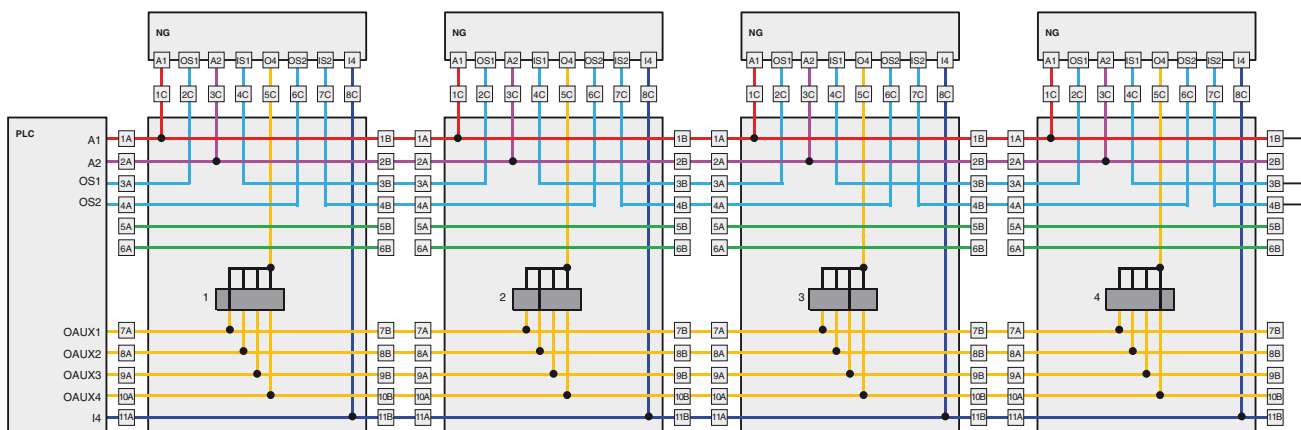
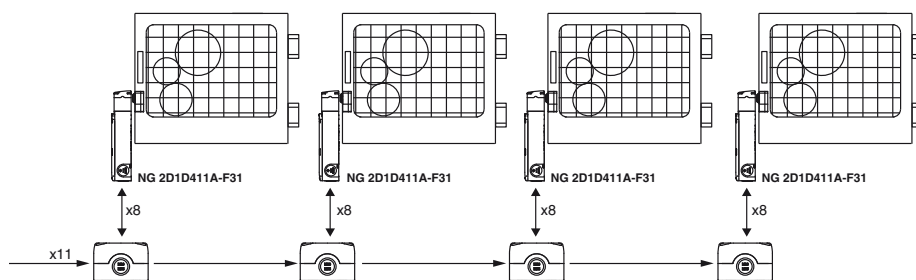
Terminal box	Connection
1A	A1 Supply input +24 Vdc
2A	A2 Supply input 0V
3A	OS1 Safety output
4A	OS2 Safety output
5A	Auxiliary connection
6A	Auxiliary connection
7A	O AUX1 Auxiliary output Oaux1
8A	O AUX2 Auxiliary output Oaux2
9A	O AUX3 Auxiliary output Oaux3
10A	O AUX4 Auxiliary output Oaux4
11A	I4 Solenoid activation input

Terminal box	Connection
1C	A1 Supply input +24 Vdc
2C	OS1 Safety output
3C	A2 Supply input 0V
4C	IS1 Safety input
	O3 Signalling output, actuator inserted
5C	O4 Signalling output, actuator inserted and locked
6C	OS2 Safety output
7C	IS2 Safety input
8C	I4 Solenoid activation input

Terminal box	Connection
1B	A1 Supply input +24 Vdc
2B	A2 Supply input 0V
3B	IS1 Safety input
4B	IS2 Safety input
5B	Auxiliary connection
6B	Auxiliary connection
7B	O AUX1 Auxiliary output Oaux1
8B	O AUX2 Auxiliary output Oaux2
9B	O AUX3 Auxiliary output Oaux3
10B	O AUX4 Auxiliary output Oaux4
11B	I4 Solenoid activation input



**Wiring diagram**



## M8 female connectors with cable

All values in the drawings are in mm



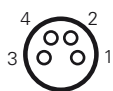
### Technical data:

Polyurethane connector body  
 Class 6 copper conductors acc. to IEC 60228  
 Gold-plated contacts (resistance < 5 mΩ)  
 Self-locking ring nut  
 High flexibility cable with PVC sheath suitable to be used in drag chains, acc. to IEC 60332-3 and CEI 20-22II. With polyurethane sheath on request.

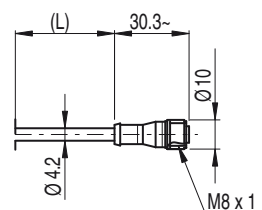
Max. operating voltage:	60 Vac / 75 Vdc
Max. operating current:	4 A
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653 (Protect the cables from direct high-pressure and high-temperature jets)
Ambient temperature:	-25°C ... +80°C for fixed installation -15°C ... +80°C for mobile installation
Wire cross-section:	0.25 mm <sup>2</sup> (23 AWG)
Minimum bending radius:	> cable diameter x 15

### Pin assignment

4 poles



Pin	Colour
1	Brown
2	White
3	Blue
4	Black



### Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

## VF CA4PD3K

<b>No. of poles</b>	<b>4</b> 4 poles	<b>Connection type</b>	<b>K</b> M8x1
<b>Cable sheath</b>	<b>P</b> PVC (standard) <b>U</b> PUR	<b>Cable length (L)</b>	<b>1</b> 1 metre <b>2</b> 2 metres <b>3</b> 3 metres (standard) <b>4</b> 4 metres <b>5</b> 5 metres (standard) ... <b>0</b> 10 metres Other lengths on request
<b>Connector type</b>	<b>D</b> straight		

### Stock items

VF CA4PD3K  
VF CA4PD5K

**Attention!** No stock items, minimum order quantity 100 pcs.



## Field wireable M23 female connectors

All values in the drawings are in mm

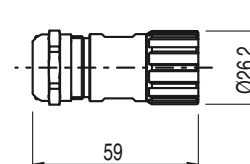


## General data:

- Nickel-plated metal connector body
- Gold-plated contacts
- 12-pole or 19-pole versions

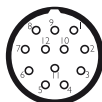
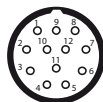
## Technical data:

Max. operating voltage:	250 Vac (12-pole)
Max. operating voltage:	100 Vac (19-pole)
Max. operating current:	8 A
Protection degree:	IP67 / IP69K
Ambient temperature:	-40°C ... +125°C
Tightening torque:	1 ... 1.5 Nm
Contact type:	gold-plated (resistance < 3 mΩ)
Pollution degree:	3
Switching cycles:	> 1000



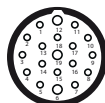
## Pin configuration

12 poles



clockwise numbering    counterclockwise numbering

19-pole



clockwise numbering

Article	Description
VF AC2205	Mounting key. Necessary for opening and wiring the connector.



## Code structure

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

## VF CBSM12TC07

## Connection type

**S** M23x1

## Body material

**M** metal

## No. of poles

**12** 12 poles**19** 19-pole

## Cable diameter

**07** Ø 7 ... Ø 12 mm

## Pin connection type

**C** crimp connection (standard) 0.34 ... 1 mm<sup>2</sup>**S** solder connection 0.34 ... 1 mm<sup>2</sup>

## Connector type

**T** clockwise numbering (standard)**D** counterclockwise numbering

## Stock items

VF CBSM12TC07

VF CBSM19TC07

VF CBSM12TS07

Note: For crimp connections, use, e.g., Knipex pliers, article number 97 52 63.

## M23 female connectors with cable

All values in the drawings are in mm



### General data:

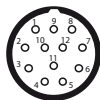
- Polyurethane connector body
- Class 5 copper conductors acc. to VDE 0295 (12-pole)
- Class 2 copper conductors acc. to VDE 0295 (19-pole)
- Gold-plated contacts (resistance < 5 mΩ)
- Self-locking ring nut
- Cable with PVC sheath acc. to IEC 60332-3, CEI 20-22 II e CEI 20-35/1-2 (flame retarding)

### Technical data:

Max. operating voltage:	250 Vac (12-pole) 100 Vac (19-pole)
Max. operating current:	4 A
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653 (Protect the cables from direct high-pressure and high-temperature jets)
Ambient temperature:	-5°C ... +70°C
Wire cross-section:	0.5 mm <sup>2</sup> (20 AWG) (12-pole) 0.34 mm <sup>2</sup> (22 AWG) (19-pole)
Minimum bending radius:	> cable diameter x 15

### Pin assignment

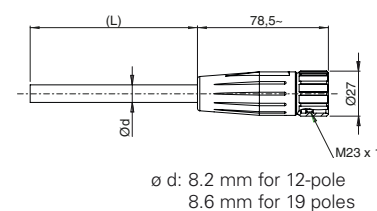
12-pole



19-pole



Pin	Colour	Pin	Colour
1	White	1	White
2	Brown	2	Brown
3	Green	3	Green
4	Yellow	4	Yellow
5	Grey	5	Grey
6	Pink	6	Pink
7	Blue	7	Blue
8	Red	8	Red
9	Black	9	Black
10	Purple	10	Purple
11	Grey-Pink	11	Grey-Pink
12	Red-Blue	12	Red-Blue
		13	White-Green
		14	Brown-Green
		15	White-Yellow
		16	Yellow-Brown
		17	White-Grey
		18	Grey-Brown
		19	White-Pink



### Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

## VF CA12PD20S

No. of poles

**12** 12-pole

**19** 19-pole

Cable sheath

**P** PVC (standard)

Connector type

**D** straight (standard)

Connection type

**S** M23x1

Cable length (L)

**0** 10 metres

**20** 20 metres

Other lengths on request

### Articles

VF CA12PD0S

VF CA12PD20S

VF CA19PD0S

VF CA19PD20S

**Attention!** No stock items, minimum order quantity 50 pcs.

## Strain relief cable glands

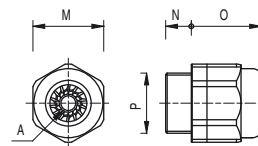
Packs of **10 pcs.**

This particular design ensures high resistance to traction of the cable glands. All cable glands are also suitable for a wide range of cable diameters.

Suitable for circular cross-section cables only.

**Technical data:**

Body and ring material: technopolymer without halogen  
 Protection degree: IP67 acc. to EN 60529  
 Tightening torque: 3 ... 4 Nm (PG 13.5/M20)  
 2 ... 2.5 Nm (PG 11/M16)



	Article	Description	A	Ø <sub>M</sub>	N	O	P
Metric threads	VF PAM25C7N	Cable gland M25x1.5 for a cable from Ø 10 to Ø 17 mm	○	30	10	28	M25x1.5
	VF PAM20C6N	M20x1.5 cable gland for one cable Ø 6 ... 12 mm	○	24	9	24	M20x1.5
	VF PAM20C5N	M20x1.5 cable gland for one cable Ø 5 ... 10 mm	○	24	9	24	M20x1.5
	VF PAM20C3N	M20x1.5 cable gland for one cable Ø 3 ... 7 mm	○	24	9	24	M20x1.5
	VF PAM16C5N	M16x1.5 cable gland for one cable Ø 5 ... 10 mm	○	22	7.5	23	M16x1.5
	VF PAM16C4N	M16x1.5 cable gland for one cable Ø 4 ... 8 mm	○	22	7.5	23	M16x1.5
	VF PAM16C3N	M16x1.5 cable gland for one cable Ø 3 ... 7 mm	○	22	7.5	23	M16x1.5
	VF PAM20CBN	M20x1.5 multi-hole cable gland for 2 cables Ø 3 ... 5 mm	⊗	24	9	23	M20x1.5
	VF PAM20CDN	M20x1.5 multi-hole cable gland for 3 cables Ø 1 ... 4 mm	⊗	24	9	23	M20x1.5
	VF PAM20CEN	M20x1.5 multi-hole cable gland for 3 cables Ø 3 ... 5 mm	⊗	24	9	23	M20x1.5
	VF PAM20CFN	M20x1.5 multi-hole cable gland for 4 cables Ø 1 ... 4 mm	⊗	22	9	23	M20x1.5
	Threads PG	VF PAP13C6N	PG 13.5 cable gland for one cable from Ø 6 ... 12 mm	○	24	9	24
VF PAP13C5N		PG 13.5 cable gland for one cable from Ø 5 ... 10 mm	○	24	9	24	PG 13.5
VF PAP13C3N		PG 13.5 cable gland for one cable from Ø 3 ... 7 mm	○	24	9	24	PG 13.5
VF PAP11C5N		PG 11 cable gland for one cable from Ø 5 ... 10 mm	○	22	7.5	23	PG 11
VF PAP11C4N		PG 11 cable gland for one cable from Ø 4 ... 8 mm	○	22	7.5	23	PG 11
VF PAP11C3N		PG 11 cable gland for one cable from Ø 3 ... 7 mm	○	22	7.5	23	PG 11

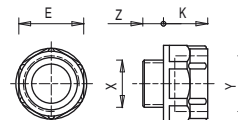
## Thread adapters

Packs of **100 pcs.**

Thread adapters make it possible to fulfil requests for switches with a different thread to those generally found in stock. This means it is possible to offer customers a single product type with various threaded connections, while only having to stock the product itself and many kinds of adapters.

**Technical data:**

Body material: glass fibre reinforced technopolymer  
 Tightening torque: 3 ... 4 Nm



Article	Description	X	Y	Z	K	Ø <sub>E</sub>
VF ADPG13-PG11	Adapter from PG 13.5 to PG 11	PG 13.5	PG 11	9	12	22
VF ADPG13-M20	Adapter from PG 13.5 to M20x1.5	PG 13.5	M20x1.5	9	14	24
VF ADPG13-1/2NPT	Adapter from PG 13.5 to 1/2 NPT	PG 13.5	1/2 NPT	9	14	24
VF ADPG11-1/2NPT	Adapter from PG 11 to 1/2 NPT	PG 11	1/2 NPT	7	14	24
VF ADPG11-PG13	Adapter from PG 11 to PG 13.5	PG 11	PG 13.5	7	14	24
VF ADM20-1/2NPT	Adapter from M20 x 1.5 to 1/2 NPT	M20 x 1.5	1/2 NPT	9	14	24

## Protection caps

Packs of **10 pcs.****Technical data:**

Body material: technopolymer, self-extinguishing  
 Protection degree: IP67 acc. to EN 60529 and IP69K acc. to ISO 20653  
 Tightening torque: 1.2 ... 1.6 Nm  
 Cross-recessed screw: PH3

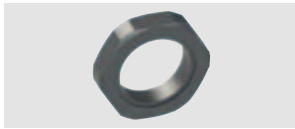


Article	Description	A	B
VF PTM20	Protection cap M20x1.5	24	M20x1.5
VF PTG13.5	Protection cap PG13.5	24	PG 13.5

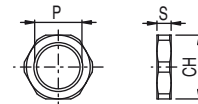
All values in the drawings are in mm

Items with code on **green** background are stock items→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

## Threaded nuts

Packs of **10 pcs.****Technical data:**

Body material: technopolymer  
Tightening torque: 1.2 ... 2 Nm

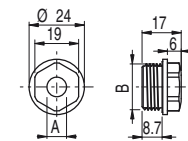


	Article	Description	S	CH	P
Plastic	VF DFPM25	Plastic nut, threaded, M25x1.5	6	32	M25x1.5
	VF DFPM20	Plastic nut, threaded, M20x1.5	6	27	M20x1.5
	VF DFPM16	Plastic nut, threaded, M16x1.5	5	22	M16x1.5
	VF DFPP13	Plastic nut, threaded, PG13.5	6	27	PG 13.5
Metal	VF DFMM20	M20x1.5 threaded nut in nickel-plated brass	3	23	M20x1.5

## Chock plugs

Packs of **100 pcs.****Technical data:**

Body material: technopolymer  
Protection degree: IP54 acc. to EN 60529  
Tightening torque: 0.8 ... 1 Nm



Notes: Use a socket wrench for tightening.

Article	Description	A	B
VF PFM20C8N	M20x1.5 chock plug for cables from Ø 8...Ø 12 mm	7.5	M20x1.5
VF PFM20C4N	M20x1.5 chock plug for cables from Ø 4...Ø 8 mm	3.5	M20x1.5

## Torx safety screws

Packs of **10 pcs.**

Pan head screws with Torx fitting and pin, stainless steel.  
Use a thread locker where required for applications acc. to. EN ISO 14119.

Article	Description
VF VAM4X10BX-X	M4x10 screw, with Torx T20 fitting, AISI 304
VF VAM4X15BX-X	M4x15 screw, with Torx T20 fitting, AISI 304
VF VAM4X20BX-X	M4x20 screw, with Torx T20 fitting, AISI 304
VF VAM4X25BX-X	M4x25 screw, with Torx T20 fitting, AISI 304
VF VAM4X30BX-X	M4x30 screw, with Torx T20 fitting, AISI 304
VF VAM5X10BX-X	M5x10 screw, with Torx T25 fitting, AISI 304
VF VAM5X15BX-X	M5x15 screw, with Torx T25 fitting, AISI 304
VF VAM5X20BX-X	M5x20 screw, with Torx T25 fitting, AISI 304
VF VAM5X25BX-X	M5x25 screw, with Torx T25 fitting, AISI 304
VF VAM5X35BX-X	M5x35 screw, with Torx T25 fitting, AISI 304
VF VAM5X45BX-X	M5x45 screw, with Torx T25 fitting, AISI 304

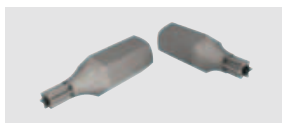
## One-Way safety screws

Packs of **10 pcs.**

Pan head screws with OneWay fitting and pin, stainless steel.  
This screw type cannot be removed or tampered with using common tools. Ideal for fixing safety device actuators in accordance with EN ISO 14119.

Article	Description
VF VAM4X10BW-X	M4x10 screw, with OneWay fitting, AISI 304
VF VAM4X15BW-X	M4x15 screw, with OneWay fitting, AISI 304
VF VAM4X20BW-X	M4x20 screw, with OneWay fitting, AISI 304
VF VAM4X25BW-X	M4x25 screw, with OneWay fitting, AISI 304
VF VAM5X10BW-X	M5x10 screw, with OneWay fitting, AISI 304
VF VAM5X15BW-X	M5x15 screw, with OneWay fitting, AISI 304
VF VAM5X20BW-X	M5x20 screw, with OneWay fitting, AISI 304
VF VAM5X25BW-X	M5x25 screw, with OneWay fitting, AISI 304

## Bits for Torx safety screws



Bits for Torx safety screws with pin, with ¼" hexagonal connection.

Article	Description
VF VAIT1T20	Bits for M4 screws with Torx T20 fitting
VF VAIT1T25	Bits for M5 screws with Torx T25 fitting
VF VAIT1T30	Bits for M6 screws with Torx T30 fitting

Items with code on **green** background are stock items→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

## Fixing plates

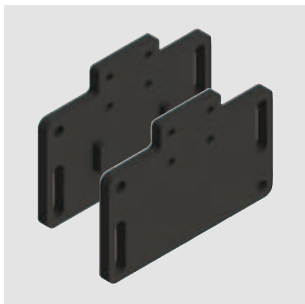


Metal fixing plate, for fixing rope switches on the ceiling.

The plate is provided with bore holes for fastening switches of the FD, FL, FC, FP, FR, FM, FZ, FX, FK series. It is supplied without screws.

Article	Description
VF SFP2	Ceiling fixing plate

## Fixing plates



Fixing plate (complete with fastening screws) provided with long slots for adjusting the operating point.

Each plate is provided with two pairs of fixing holes, one for standard switches and one for switches with reset device. The actuator thus always has the same actuating point.

Article	Description
VF SFP1	Fixing plate (FR series)
VF SFP3	Fixing plate (FX series)

## LED signalling lights

Packs of 5 pcs.



These signalling lights with high luminosity LEDs are used for signalling that an electric contact has changed its state inside the switch. They can be installed only on switches of the FL, FX, FZ, FW, FG, NG or FS series by screwing them on one of the conduit entries not used for electric cables. They can be used for many different purposes: for example, in combination with a rope switch (e.g. FL 1878-M2) they can be used to signal (even from a distance) if the switch has been actuated.

In combination with safety switches with separate actuator (e.g. FL 693-M2), they can instead be used to signal whether or not the protection is closed correctly. In combination with solenoid safety switches (FS, FG or NG series), they can signal if the protection is locked or unlocked. If they are combined with any switch of the FL, FX, FW or FZ series they can be used to calibrate the actuator. The inner part can rotate in such a way that it can be wired and screwed on the switch without any risk of twisting the wires.

**Technical data:**

Protection degree:

IP67 acc. to EN 60529 and IP69K acc. to ISO 20653

Ambient temperature:

-25°C ... +70°C

Operating voltage  $U_n$ :

24 Vac/dc

120 Vac

230 Vac

Tolerance on the supply voltages:

 $\pm 15\%$  of  $U_n$ 

Operating current:

10 mA

Connection system:

PUSH-IN spring type

Cross-section of rigid/flexible wires w. wire-end sleeve:

min. 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)max. 1 x 1.5 mm<sup>2</sup> (1 x AWG 16)

Wire cross-section with pre-insulated wire-end sleeve:

min. 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)max. 1 x 0.75 mm<sup>2</sup> (1 x AWG 18)

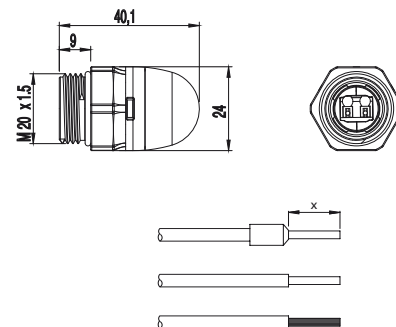
Cable stripping length (x):

min.: 8 mm

max.: 12 mm

Tightening torque:

1.2 ... 2 Nm

**Code structure****Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.**VF SL1A3PA1****Operating voltage**

<b>1</b>	24 Vac/dc
<b>3</b>	120 Vac
<b>4</b>	230 Vac

**Type of light source**

<b>A</b>	standard LED with continuous light
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**Body design**

<b>A</b>	Total height 40 mm, spherical lens, threading M20x1.5mm
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**Connection type**

<b>P</b>	PUSH-IN terminal strip
----------	------------------------

**Lens colour**

<b>2</b>	White
<b>3</b>	Red
<b>4</b>	Green
<b>5</b>	Yellow

**Stock items**

VF SL1A3PA1  
VF SL1A5PA1

Items with code on **green** background are stock items→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)