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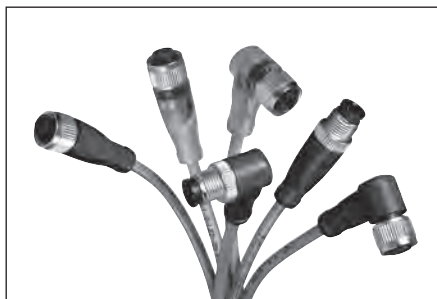


Accessories

10

Accessories

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Product Diversity – Always the Right Connection

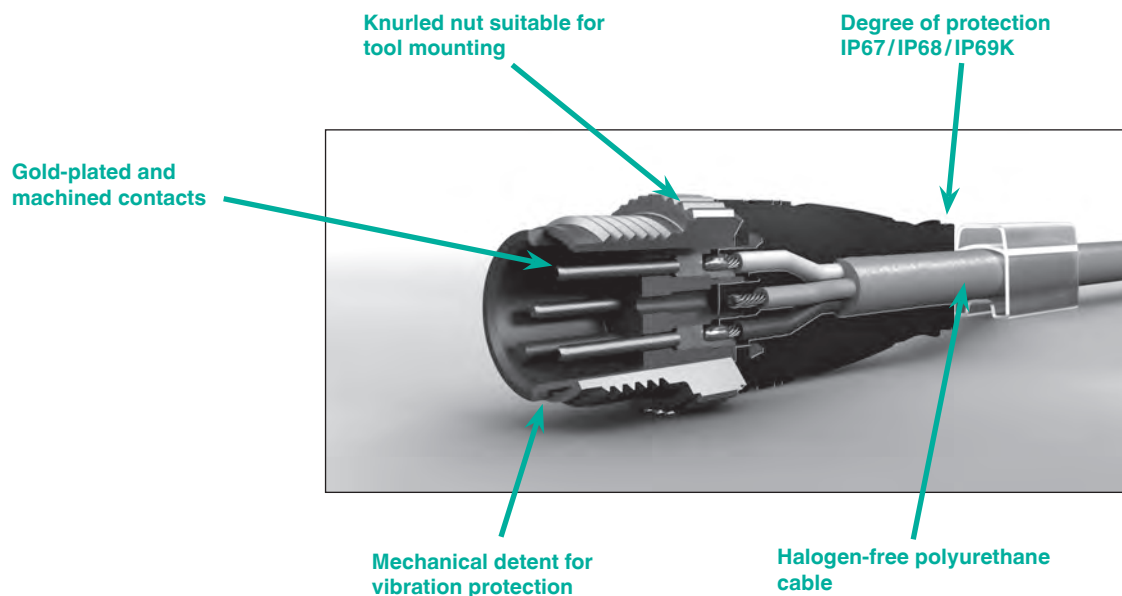
Pepperl+Fuchs offers a comprehensive range of sensor-actuator cables for machine and plant installations. In addition to the common M8, M12, and valve connector designs, ready-made 1/2" and 7/8" connectors are also available in stock as standard. Our recently introduced "LEAN Production" philosophy will enable us to manufacture and deliver customized versions with short delivery times.

Our range includes:

- Shielded versions
- Versions with stainless steel coupling nut
- Versions with indicators for operation and function.


In conjunction with our wide range of cable types, these options mean that we can provide the optimum solution for virtually any application.

The New Generation – Connectors with Impressive Properties



- Optimized size and a rounded body designed for a secure grip enable the connector to be used in the tightest of spaces
- Gold-plated, machined contacts ensure contact resistances < 5 mΩ
- Halogen-free PUR cables prevent toxic vapors being released in the event of a fire
- The knurled nut enables a torque wrench to be used to securely tighten our connectors
- Highly effective integrated vibration protection

Benefits at a Glance

- Flexibility – we are happy to customize our products to your specifications
- Shortest delivery times – even for customized products
- Quality – exhaustive functional testing of all connectors
- Products are approved for the American market – 
- Reliably sealed to IP67 or higher

The Correct Cable for Every Application

Choosing the right cable is crucial in terms of the service life you can expect from a sensor-actuator cable. This is why it pays to familiarize yourself with our extensive range of cables. It will save you time as well as money!



PVC – for straightforward applications

Application areas:

For use in areas subject to moderate mechanical strain, e.g., packaging machines, assembly, and production lines.

- ➔ Affordable cable quality
- ➔ Effective resistance to chemicals
- ➔ Suitable for the food industry




Features:

- Easily strippable
- Excellent flame retardance
- Suitable for flexible installation to some extent
- Limited resistance to oil and lubricant

Temperature range

Fixed installed	-25 °C ... 70 °C
	-25 °C ... 105 °C for indicated cable types
Flexible installed	-5 °C ... 70 °C
Minimum bending radius	10 x D

PVC

Cable type	Structure	Diameter	Use
PVC, gray, 70 °C	3/4/5 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M12
PVC, gray, 70 °C	3/4 x 0.25 mm ² (14 x 0.15 mm)	Ø = 4.3 mm	M8
PVC, black, 80 °C	2+1 x 0.5 mm ² (16 x 0.2 mm)	Ø = 4.8 mm	Valve connectors
PVC, black, 80 °C	3+1/4+1 x 0.5 mm ² (28 x 0.15 mm)	Ø = 4.9 mm / 5.3 mm	Valve connectors
PVC-U, black, 70 °C	 3/4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.3 mm	M8 / M12
PVC-U, yellow, 70 °C	 3/4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.3 mm	M8 / M12
PVC, blue (NAMUR), 70 °C	2/4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M8 / M12
PVC-U, yellow, 105 °C	 3/4/5 x 0.34 mm ² (42 x 0.1 mm)	Ø = 5.2 mm/5.5 mm/5.9 mm	1/2"

For available raw cable rings, see page 972.



PUR – for complex applications

Application areas:

Suitable for long-term flexible use in the most challenging of environments such as with machine tools, redary tables and swivel tables. Shielded versions available to meet additional EMC requirements.

- ➔ Halogen-free
- ➔ Capable of withstanding a high level of mechanical stress
- ➔ Effective resistance to chemicals
- ➔ Effective resistance to oil
- ➔ UL cable types are extremely flame-retardant

Features:

- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis
- UV-resistant







Temperature range

fixed installed	-40 °C ... 80 °C
flexible installed	-20 °C ... 80 °C
Minimum bending radius	10 x D

Additional data for UL-approved cable types (unshielded):

Min. no. of bending cycles	5 million
Distance	5 m
Acceleration	5 m/s ²
Speed	3.33 m/s
Torsion	±180°/m tested at 20 °C ... 25 °C

PUR

Cable type	Structure	Diameter	Use
PUR, gray, 80 °C	3/4/5 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M12
PUR, gray, 80 °C	3/4 x 0.25 mm ² (14 x 0.15 mm)	Ø = 4.3 mm	M8
PUR-U, black, 80 °C	 8 x 0.25 mm ² (14 x 0.15 mm)	Ø = 6.0 mm	M12
PUR-U, black, 80 °C	 3/4 x 0.34 mm ² (42 x 0.1 mm)	Ø = 4.3 mm	M8 / M12
PUR-U, yellow, 80 °C	 4 x 0.34 mm ² (42 x 0.1 mm)	Ø = 4.3 mm	M8 / M12
PUR, blue (NAMUR), 80 °C	2/4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M8 / M12
PUR-ABG, gray, shielded, 80 °C	4/5 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M8 / M12
PUR-U/ABG, black, shielded, 80 °C	 8 x 0.25 mm ² (14 x 0.15 mm)	Ø = 6.0 mm	M12
PUR-U/0.75, black, 80 °C	 5 x 0.75 mm ² (42 x 0.15 mm)	Ø = 6.0 mm	M12
PUR, black, 80 °C	 2+1/3+1/4+1 x 0.5 mm ² (28 x 0.15 mm)	Ø = 4.5 mm / 4.9 mm / 5.3 mm	Valve connectors

For available Raw cable rings, see page 972.



Irradiated PUR – for extreme applications

Application areas:

This cable boasts properties that are better than those of conventional PUR cables, making this highly flexible control cable also suitable for use in robot applications and particularly with welding robots.

- **Weld-slag resistant**
- **Resistant to high temperatures**
- **Capable of withstanding mechanical stress**
- **Robot-compatible**
- **Halogen-free**


Features:

- Effective resistance to oil
- Effective resistance to chemicals
- UV-resistant
- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis

Temperature range

Fixed installed	-50 °C ... 105 °C	
	-50 °C ... 80 °C	for UL cable types
Flexible installed	-40 °C ... 105 °C	
	-40 °C ... 80 °C	for UL cable types
Minimum bending radius	10 x D	
Min. no. of bend cycles	5 million	
Distance	10 m	
Acceleration	10 m/s ²	
Speed	3 m/s	
Torsion	±360°/m tested at 20 °C ... 25 °C	

Irradiated PUR

Cable type	Structure	Diameter	Use
PUR-H/S, orange, irradiated, 80 °C	4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M8 / M12
PUR-H/S, yellow, irradiated, 80 °C	 3/4/5 x 0.75 mm ² (42 x 0.15 mm)	Ø = 5.8 mm	1/2"

For available raw cable rings, see page 972.



POC weld-slag resistant – for the most challenging scenarios

Application areas:

This special cable comes into its own for applications in the welding sector that cannot be solved with irradiated PUR cables.

- **Weld-slag resistant**
- **Resistant to high temperatures**
- **Capable of withstanding mechanical stress**
- **Robot-compatible**
- **Excellent flame retardance**

Features:

- Effective resistance to oil
- Effective resistance to chemicals
- UV-resistant
- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis

Temperature range

Fixed installed	-40 °C ... 150 °C
Flexible installed	-15 °C ... 150 °C
Minimum bending radius	10 x D
Torsion	±360°/m tested at 20 °C ... 25 °C

POC

Cable type	Structure	Diameter	Use
POC, orange, 105 °C	4 x 0.34 mm ² (19 x 0.15 mm)	Ø = 4.8 mm	M8 / M12

For available Raw cable rings, see page 972.



STOOW – THE cable for the American market

Application areas:

This type of cable uses an extremely resilient PVC mixture that is used predominantly in the American market.

- **Extremely resilient PVC mixture acc. to STOOW-A**
- **Tried and tested for outdoor use**
- **Approved up to 600 V**
- **Excellent flame retardance**

Features:

- Effective resistance to oil
- Effective resistance to chemicals

Temperature range

Fixed installed	-25 °C ... 105 °C
Flexible installed	-5 °C ... 105 °C
Minimum bending radius	10 x D

STOOW

Cable type	Structure	Diameter	Use
STOOW, yellow, 105 °C	3/4/5 x AWG16 (~1.25 mm ² , 19 x 0.29 mm)	Ø = 9.9 mm / 10.7 mm / 12.9 mm	7/8"

Instructions on Connecting and Routing Cables

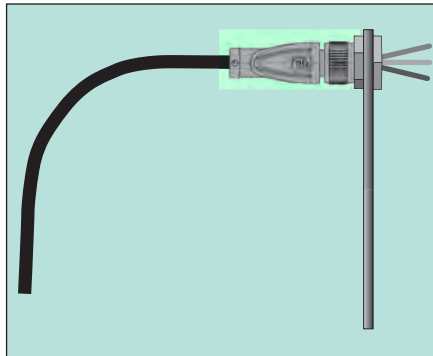
Avoid common mistakes when connecting and routing cables

Properly connecting, routing, and maintaining cable systems is the best way to ensure their reliability and long service life.

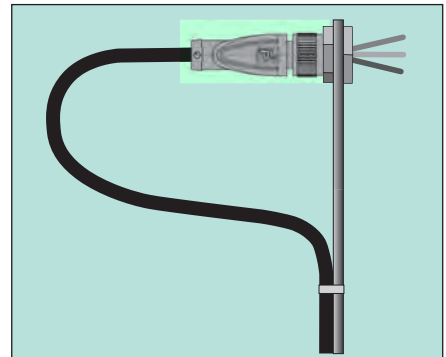
Bending radius

By using an appropriate bending radius, you can reduce the tensions that arise from bending, and extend the cable's service life.

Recommended flexible installation



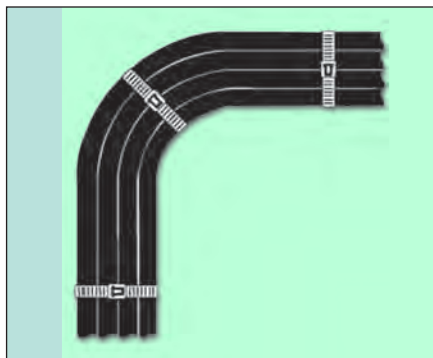
Recommended fixed installation



Bundling

When individual cables are connected to a device and when securing cables together, take care to avoid deforming the cables with the cable ties. When cables are secured correctly it should be possible to move them easily and without using much force; this will extend their service life.

Correct bundling



Incorrect bundling

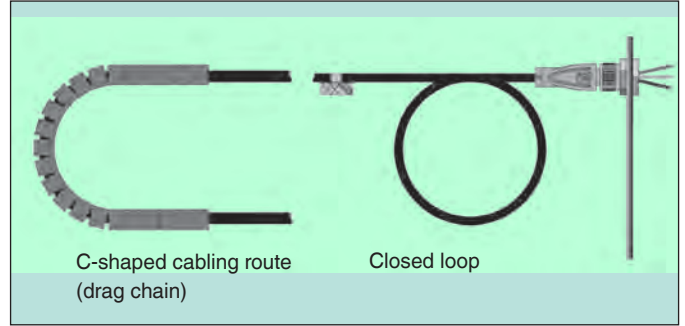
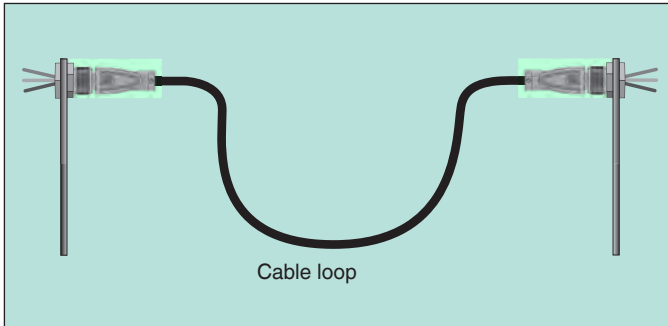
Cable ties that are too tight should be loosened, and those that are too slack should be tightened



Connecting cables to portable devices

Connecting cables that are subject to movement between two points must be long enough to avoid excessive strain on the cables and connectors.

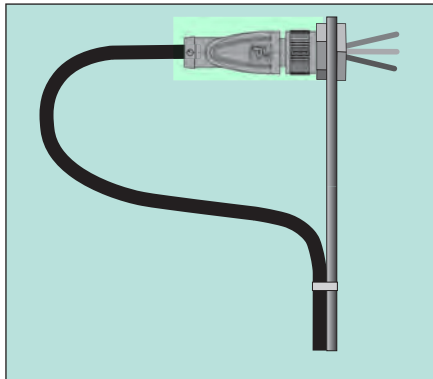
In this situation, it is advisable to form loops in the cable and route sections in the shape of the letter C.



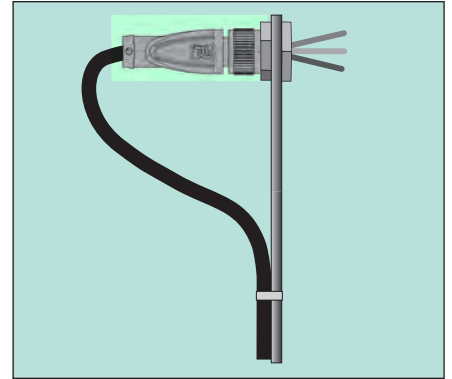
Strains

If a sufficiently large loop is formed at connection points, then excessive wear and common problems due to the strains illustrated below can be avoided. Pepperl+Fuchs connecting cables feature rugged, pre-fitted easy-grip body. If these are combined with correctly formed loops, the result is that both connector and cable are relieved very effectively of strain.

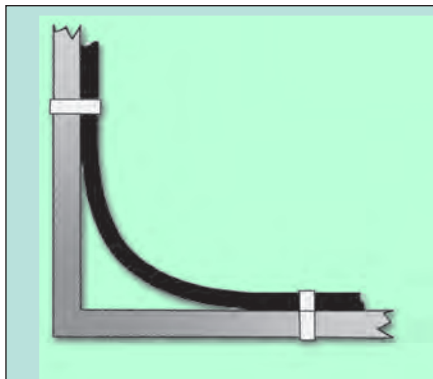
Correct strain relief loop



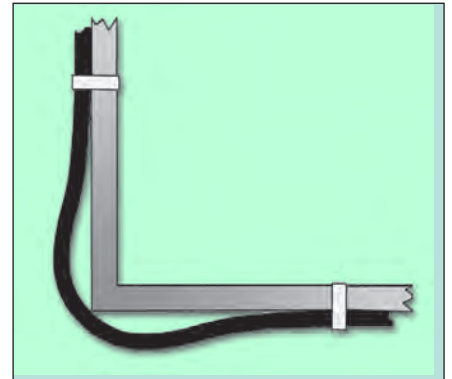
Incorrect strain relief loop



Recommended: Routing inside corner



Routing the cable round the outside of a corner is not recommended





Properties

- M12 x 1 single-ended cordset
- Female straight and angled versions
- A-coded

Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

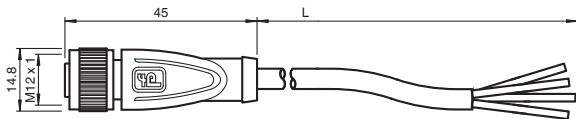
General Data

Ambient conditions	
Ambient temperature	-40 °C °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67 / IP68 / IP69K (IP67 only shielded version)
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

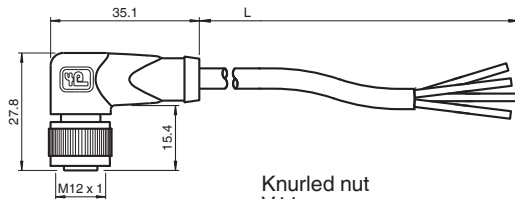
Order codes

Number of pins	3	●				
	4		●			
	5			●		
	7 + Shield				●	
	8					●
Electrical data						
Max. operating voltage	30 V				●	●
	60 V				●	●
	250 V	●	●	●		
Max. operating current	2 A	●	●	●	●	●
	4 A	●	●	●	●	●
Stainless steel V4A style			●			

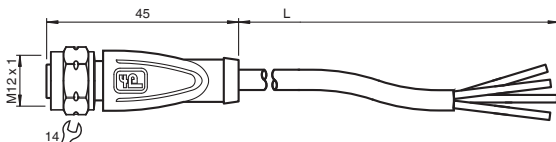
Dimensions



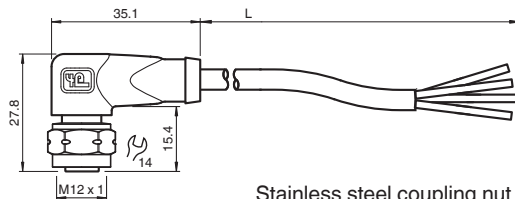
Knurled nut
V11-...
V1-...
V15-...
V17-...
V19-...



Knurled nut
V11-...
V1-...
V15-...
V17-...
V19-...



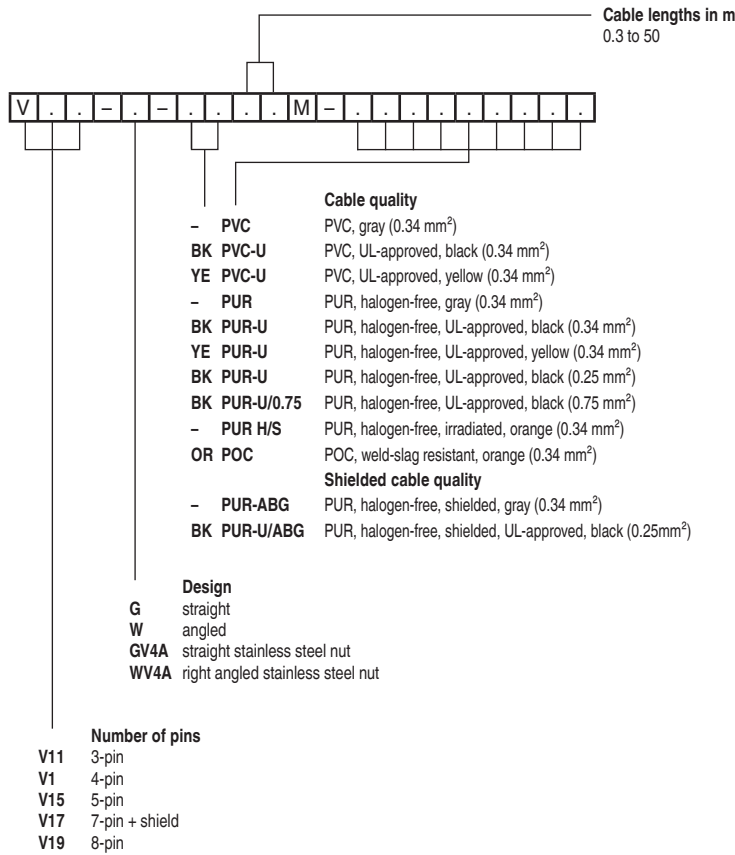
Stainless steel coupling nut
GV4A version
V1-...



Stainless steel coupling nut
WV4A version
V1-...



Order codes

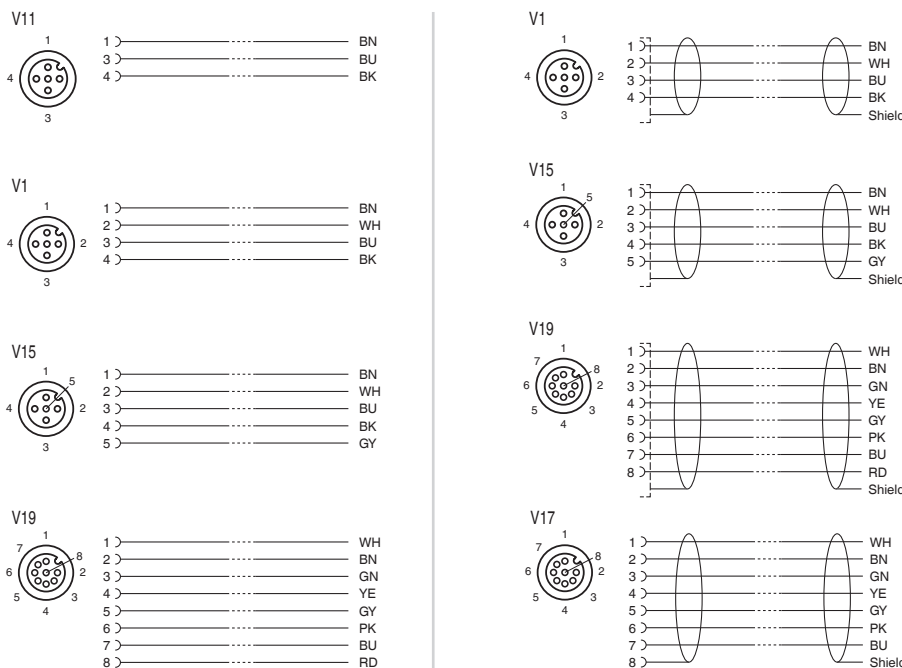


Availability

V11	V1	V15	V17	V19
◆	◆	◆	-	-
◆	◆	-	-	-
◆	◆	-	-	-
◆	◆	◆	-	-
◆	◆	-	-	-
◇	◇	-	-	-
-	-	-	-	◆
-	◆	-	-	-
-	◆	-	-	-
-	-	-	-	-
-	-	-	◆	◆

◆ Standard, cable lengths of 2 m, 5 m, and 10 m available in stock
 ◇ Available
 - Not available

Electrical connection





Properties

- M12 x 1 single-ended cordset
- Male straight and angled versions
- A-coded

Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

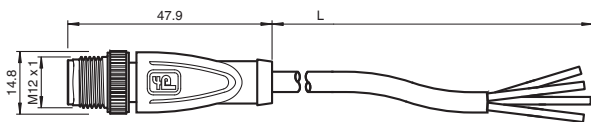
General Data

Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning no page 972
Mechanical data	
Pin diameter	1 mm
Degree of protection	IP67 / IP68 / IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

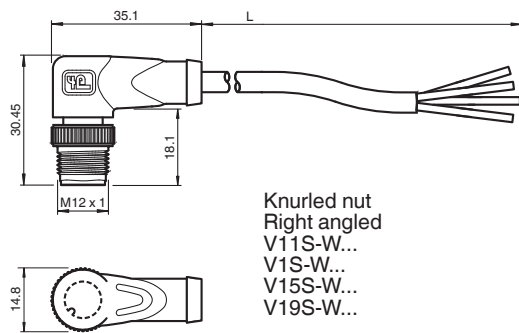
Order codes

Number of pins		V11S...	V1S...	V15S...	V19S...
3		●			
4			●		
5				●	
8					●
Electrical data					
Max. operating voltage	30 V				●
	60 V			●	
	250 V	●	●		
Max. operating current	2 A				●
	4 A	●	●	●	

Dimensions



Knurled nut
Straight
V11S-G...
V1S-G...
V15S-G...
V19S-G...



Knurled nut
Right angled
V11S-W...
V1S-W...
V15S-W...
V19S-W...

Order codes

Cable lengths in m
0.3 to 50

V . . S - M -

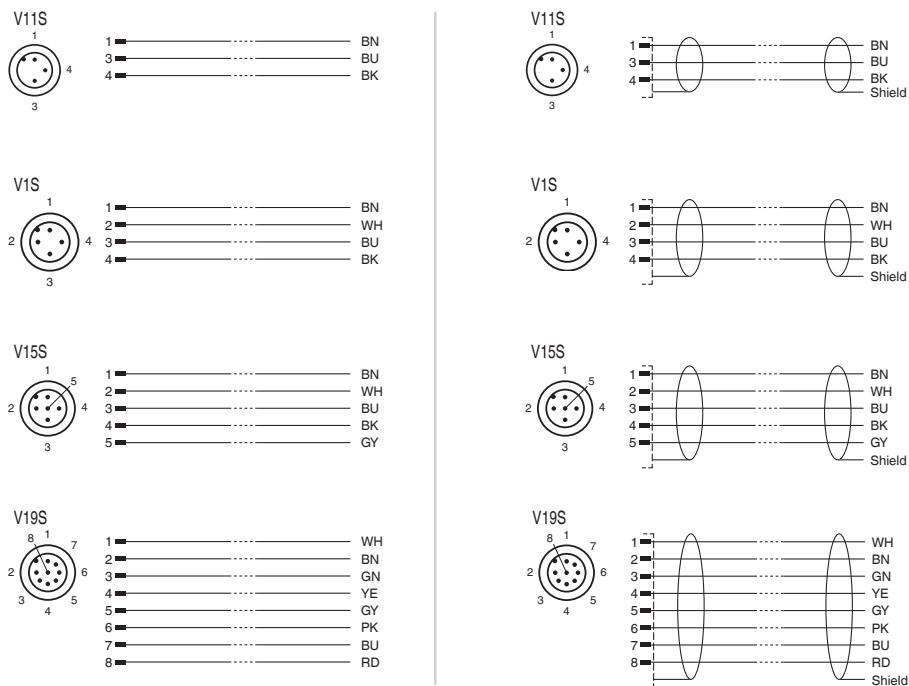
Cable quality		Availability			
		V11S	V1S	V15S	V19S
- PVC	PVC, gray (0.34 mm ²)	◇	◇	◇	-
BK PVC-U	PVC, UL-approved, black (0.34 mm ²)	◆	◆	-	-
YE PVC-U	PVC, UL-approved, yellow (0.34 mm ²)	◇	◇	-	-
- PUR	PUR, halogen-free, gray (0.34 mm ²)	◆	◆	◆	-
BK PUR-U	PUR, halogen-free, UL-approved, black (0.34 mm ²)	◆	◆	-	-
YE PUR-U	PUR, halogen-free, UL-approved, yellow (0.34 mm ²)	◇	◇	-	-
BK PUR-U	PUR, halogen-free, UL-approved, black (0.25 mm ²)	-	-	-	◆
BK PUR-U/0.75	PUR, halogen-free, UL-approved, black (0.75 mm ²)	-	-	◇	-
- PUR H/S	PUR, halogen-free, irradiated, orange (0.34 mm ²)	-	◇	-	-
OR POC	POC, weld-slag resistant, orange (0.34 mm ²)	-	◇	-	-
Shielded cable quality					
- PUR-ABG	PUR, halogen-free, shielded, gray (0.34 mm ²)	-	◇	◇	-
BK PUR-U/ABG	PUR, halogen-free, shielded, UL-approved, black (0.25mm ²)	-	-	-	◇

Design
G straight
W angled

Number of pins
V11S 3-pin
V1S 4-pin
V15S 5-pin
V19S 8-pin

◆ Standard, cable lengths of 2 m, 5 m, and 10 m available in stock
◇ Available
- Not available

Electrical connection



Refer to General Notes Relating to Product Information

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PEPPERL+FUCHS
SENSING YOUR NEEDS



Properties

- M12 x 1 single-ended cordset
- Female straight and angled versions
- A-coded
- LED

Benefits

- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

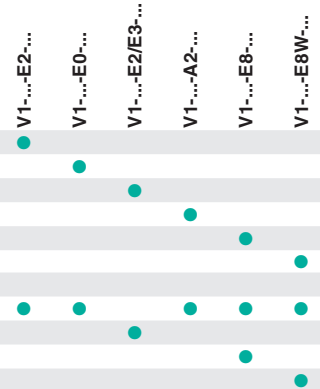
For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

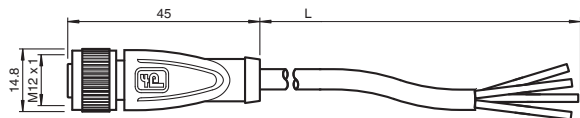
Display/controls	
LED green	Operating display
Electrical data	
Max. operating voltage	24 VDC ± 15%
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67 / IP68 / IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent
Coupling nut	Die-cast zinc

Order codes

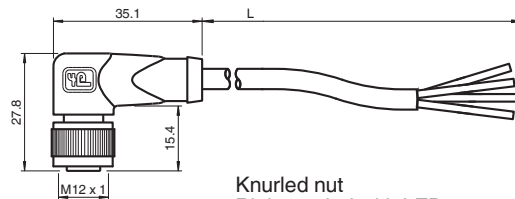
Number of pins	3 (E2)					
	3 (E0) NPN					
	4 (E2, E3)					
	4 (A2)					
	4 (E8)					
	4 (E8W)					
Display/controls						
LED yellow	NO contact function display	Pin 4				
	NO/NC contact function display					
LED red	NO contact function display	Pin 2				
LED white	NO contact function display	Pin 2				



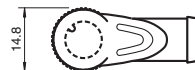
Dimensions



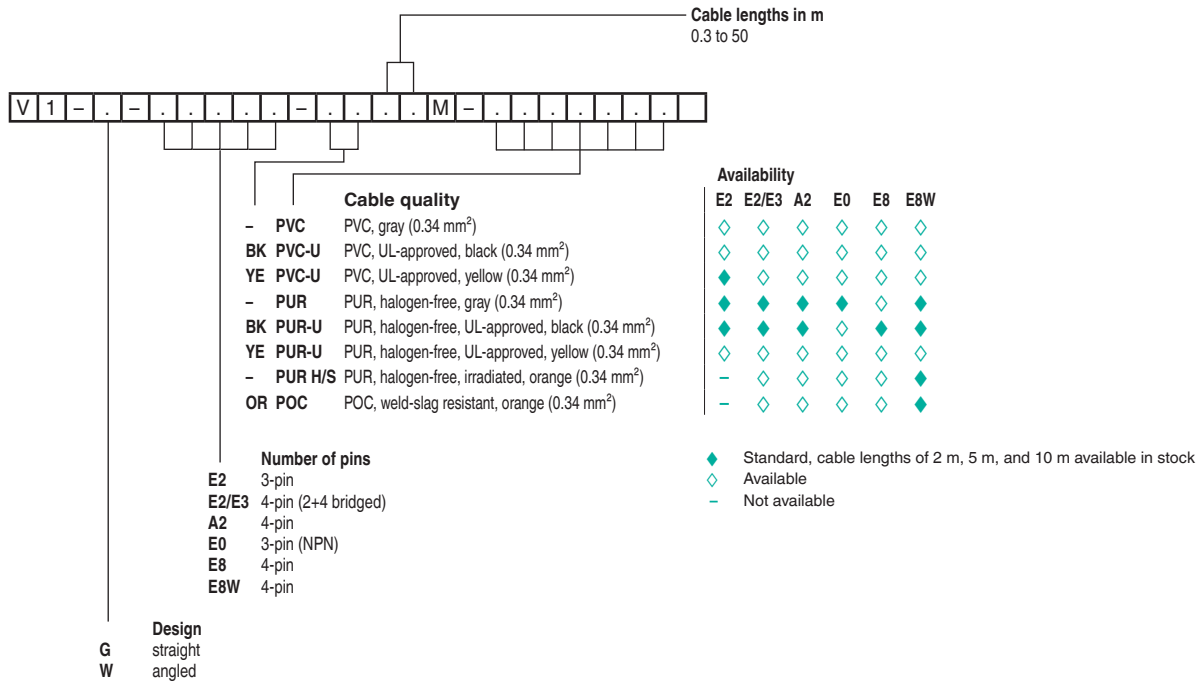
Knurled nut
Straight with LED
V1-G-E...



Knurled nut
Right angled with LED
V1-W-E...

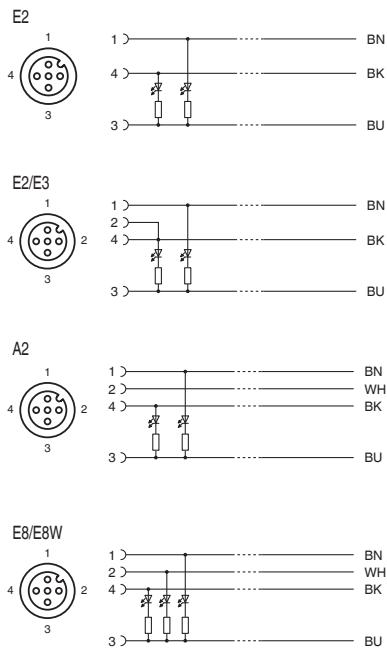


Order codes

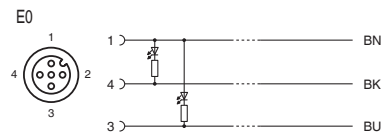


Electrical connection

PNP



NPN





Properties

- M12 x 1 single-ended cordset
- Male straight and angled versions
- A-coded
- LED

Benefits

- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

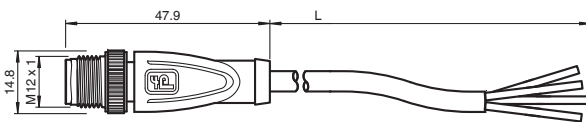
General Data

Display/controls	
LED green	Operating display
Electrical data	
Max. operating voltage	24V DC ± 15%
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 °C... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Pin diameter	1 mm
Degree of protection	IP67 / IP68 / IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent
Coupling nut	Die-cast zinc

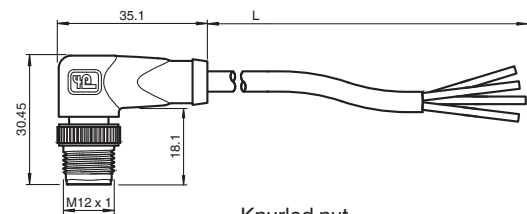
Order codes

Number of pins	3 (E2) PNP 3 (E0) NPN	V1S-...-E2-...	V1S-...-E0-...
Display/controls	LED yellow	●	●
	NO contact function display NO/NC contact function display	●	●

Dimensions



Knurled nut
Straight with LED
V1S-G-E...



Knurled nut
Right angled with LED
V1S-W-E...





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating voltage	250 V
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67 / IP68 / IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

Properties

- M12 x 1 single-ended cordset
- Female straight and angled versions
- A-coded
- NAMUR

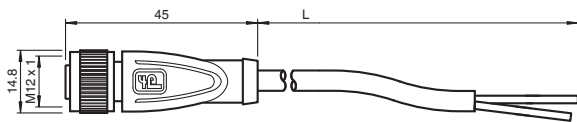
Benefits

- Suitable for NAMUR sensors
- Blue cable jacket
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

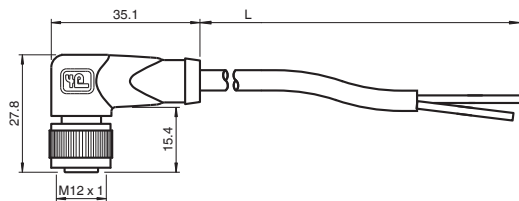
Order codes

Number of pins	2	V1-...-N-...	V1-...-N4-...
	4	●	●

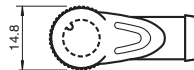
Dimensions



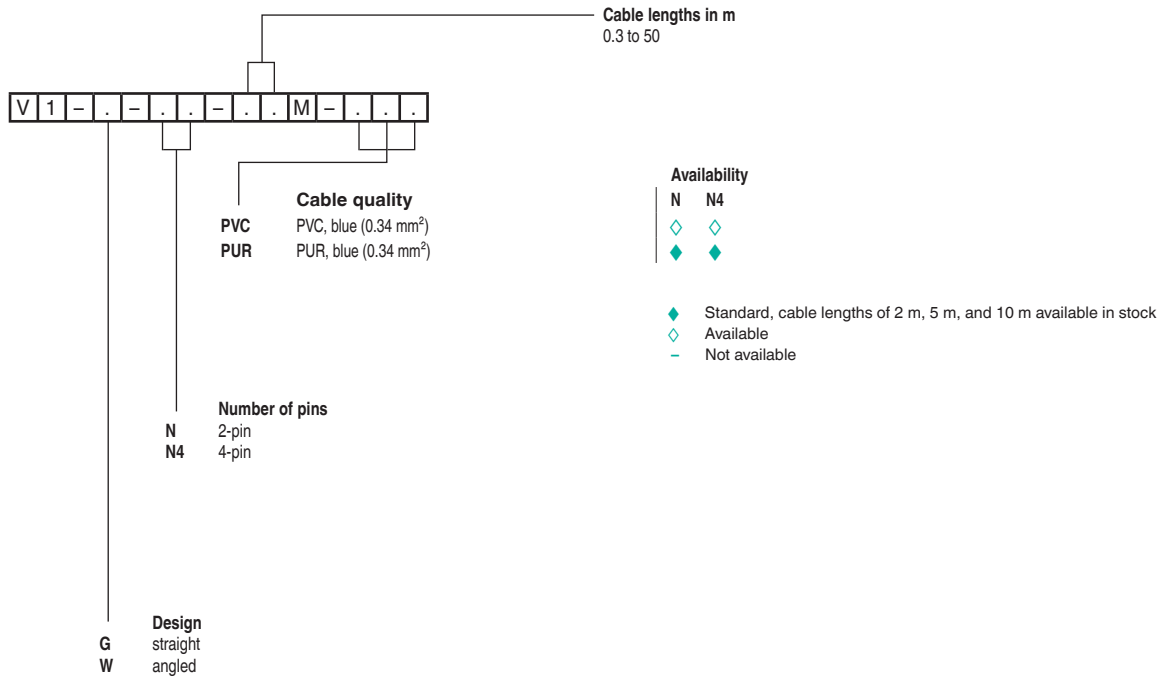
Knurled nut
Straight
V1-G-...



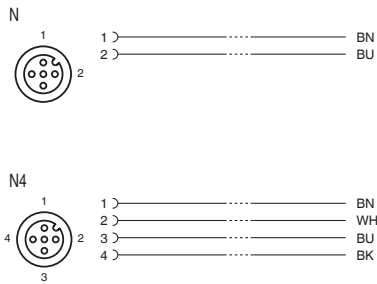
Knurled nut
Right angled
V1-W-...



Order codes



Electrical connection





Properties

- M12 x 1 double-ended cordset
- Straight and angled versions
- A-coded

Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

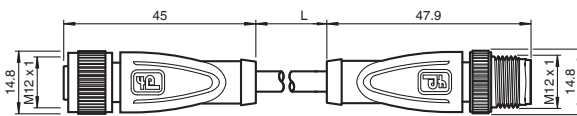
General Data

Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67 / IP68 / IP69K (IP67 only shielded version)
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

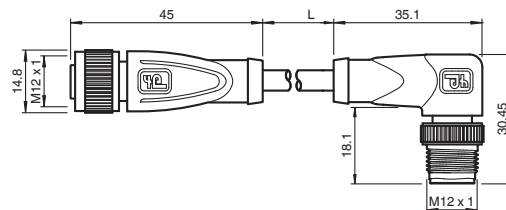
Order codes

Number of pins	3	●			
	4		●		
	5			●	
	8				●
Electrical data					
Max. operating voltage	30 V				●
	60 V				
	250 V	●	●	●	
Max. operating current	2 A				●
	4 A	●	●	●	●

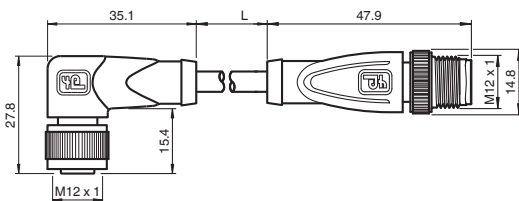
Dimensions



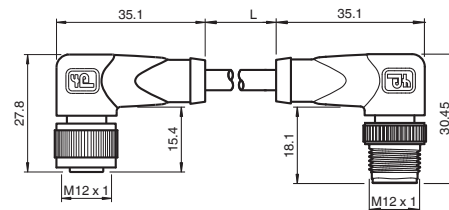
M12 female to M12 male
Straight to straight
V1-G ... V1-G
V11-G ... V11-G
V15-G ... V15-G
V19-G ... V19-G



M12 female straight to M12 male right angled



M12 female right angled to M12 male straight



M12 female right angled to M12 male right angled



Refer to General Notes Relating to Product Information

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Order codes

Cable lengths in m
0.3 to 50

V M V

		Availability			
		V11	V1	V15	V19
-	PVC	◆	◆	◆	-
BK	PVC-U	◆	◆	-	-
YE	PVC-U	◆	◆	-	-
-	PUR	◆	◆	◆	-
BK	PUR-U	◆	◆	-	-
YE	PUR-U	◇	◇	-	-
BK	PUR-U	-	-	-	◆
BK	PUR-U/0.75	-	◆	-	-
-	PUR H/S	-	◆	-	-
OR	POC	-	◆	-	-
Shielded cable quality					
BK	PUR-U/ABG	-	-	-	◆
-	PUR-ABG	-	◆	◆	-

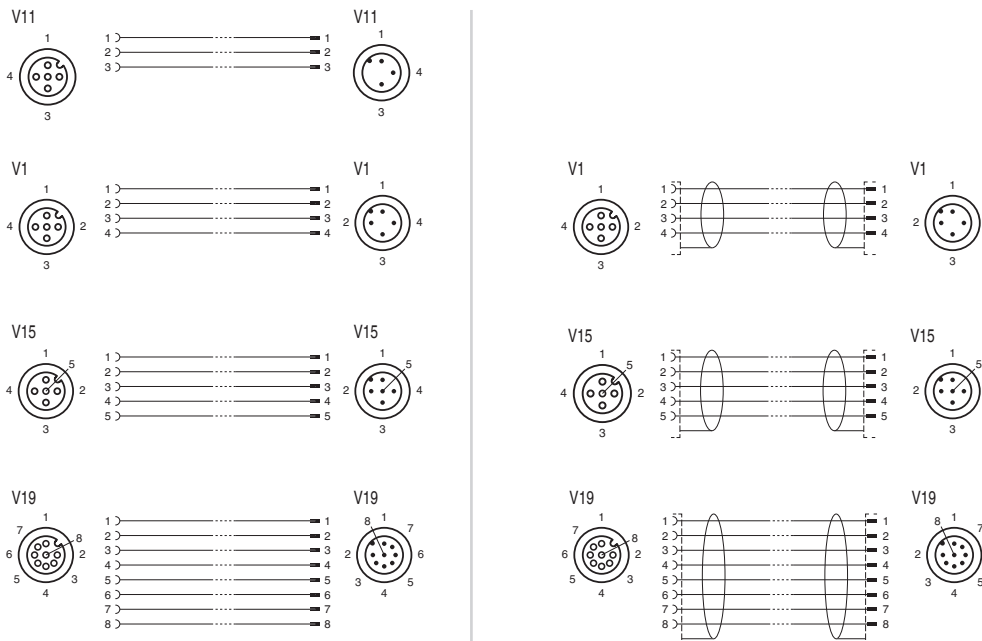
Design
G straight
W angled

Number of pins
V11 3-pin
V1 4-pin
V15 5-pin
V19 8-pin

◆ Standard, cable lengths of 0.6 m, 1 m and 2 m available in stock
◇ Available
- Not available

Electrical connection

Shielded





Properties

- M12 x 1 double-ended cordset
- Straight and angled versions
- A-coded
- LED

Benefits

- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

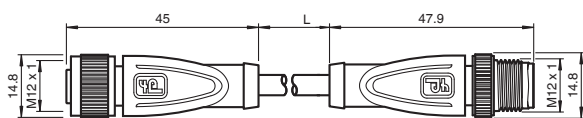
General Data

Display/controls	
LED green	Operating display
Electrical data	
Max. operating voltage	24 V DC ± 15%
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67 / IP68 / IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent/black
Coupling nut	Die-cast zinc

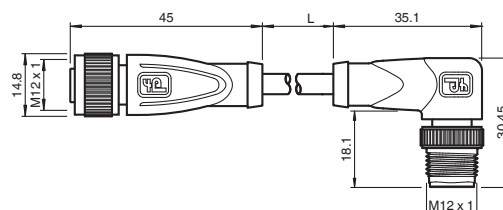
Order codes

Number of pins	3 (E2)	●	V1...E2...V1...					
	3 (E0) NPN	●	V1...E0...V1...					
	4 (E2, E3)	●	V1...E2/E3...V1...					
	4 (A2)	●	V1...A2...V1...					
	4 (E8)	●	V1...E8...V1...					
	4 (E8W)	●	V1...E8W...V1...					
Display/controls	LED yellow	NO contact function display	Pin 4	●	●	●	●	●
		NO/NC contact function display			●			
	LED red	NO contact function display	Pin 2				●	
	LED white	NO contact function display	Pin 2					●

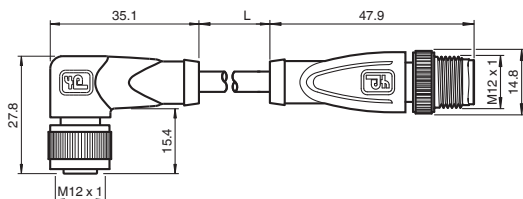
Dimensions



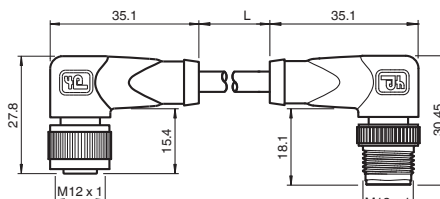
M12 female with LED to M12 male without LED
V1-G ... V1-G



M12 female with LED to M12 male without LED
V1-G ... V1-W



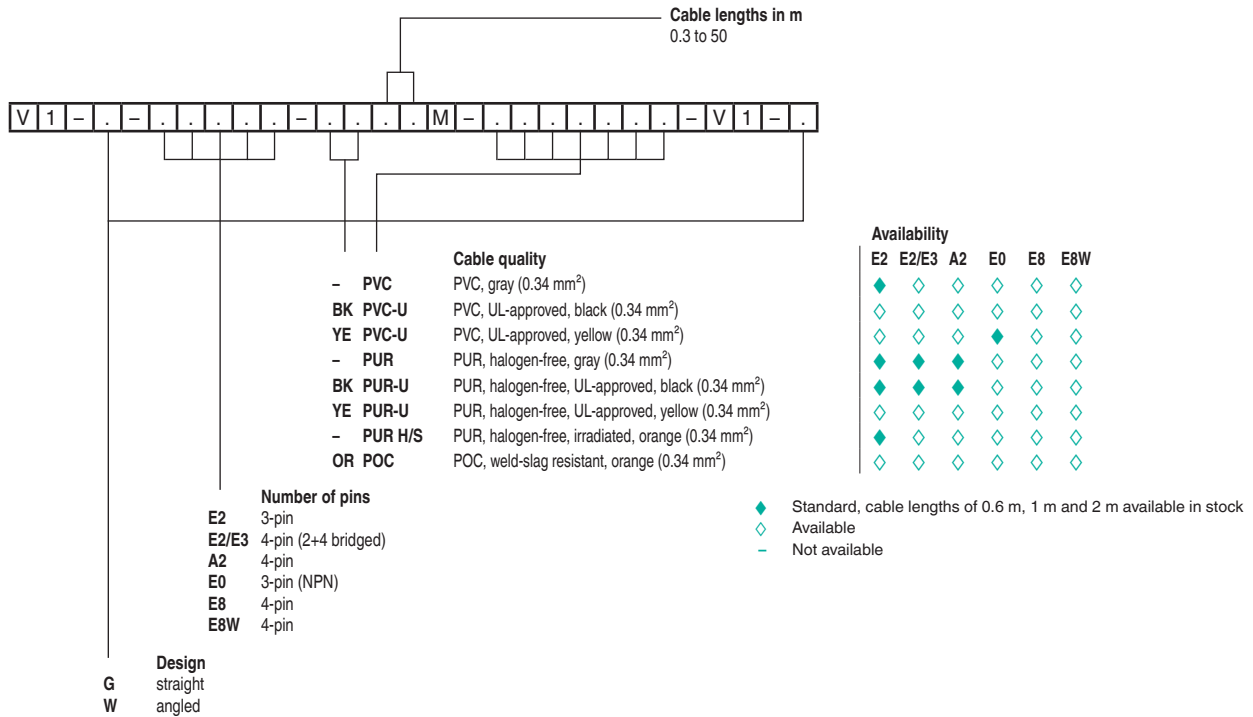
M12 female with LED to M12 male without LED
V1-W ... V1-G



M12 female with LED to M12 male without LED
V1-W ... V1-W

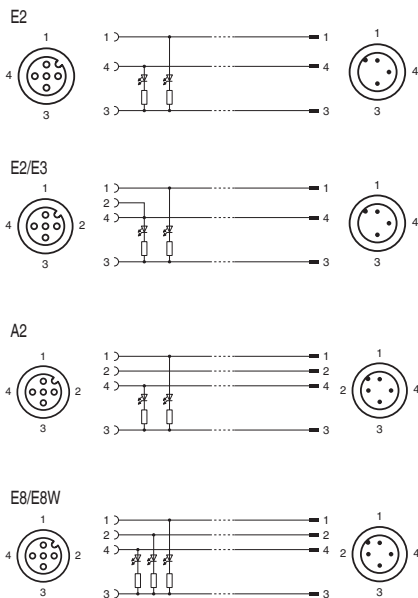


Order codes

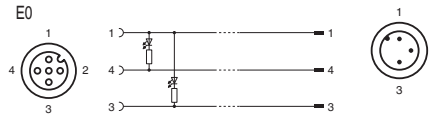


Electrical connection

PNP



NPN





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Pin diameter	1 mm
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

Properties

- M12-M8 adapter cordset
- M12 female to M8 male
- A-coded

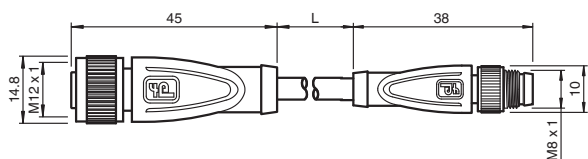
Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

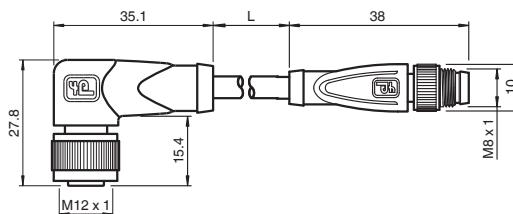
Order codes

Number of pins	3	●	V11-...-V3-GM	●	V11-...-V31-GM
	4				
Electrical data					
Max. operating voltage	30 V				
	60 V	●		●	

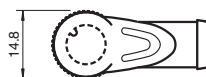
Dimensions



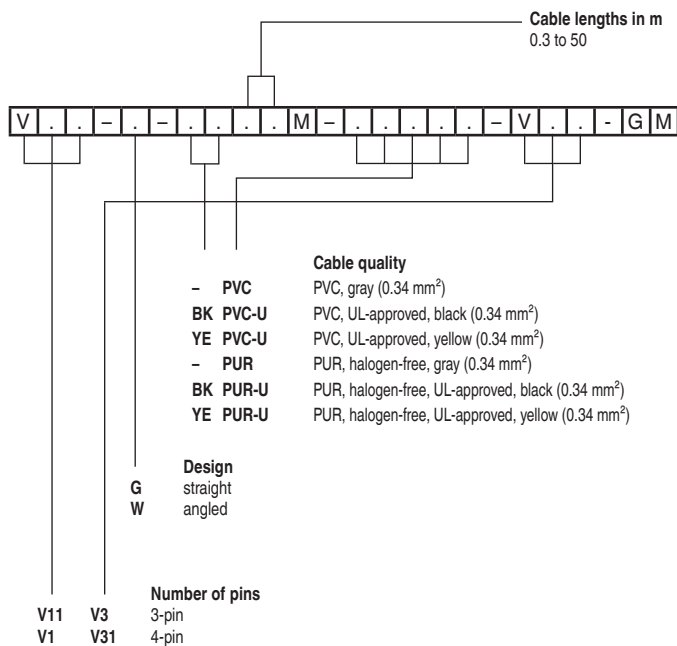
M12 female to M8 male
V1-G ... V31-GM
V11-G ... V3-GM



M12 female to M8 male
V1-W ... V31-GW
V11-W ... V3-GW



Order codes

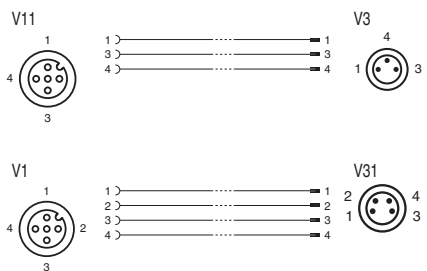


Availability

V11-V3	V1-V31
◆	◆
◆	◆
◇	◇
◇	◇
◆	◆
◇	◇

- ◆ Standard, cable lengths of 0.6 m, 1 m and 2 m available in stock
- ◇ Available
- Not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Pin diameter	1 mm
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

Properties

- M8-M12 adapter cordset
- M8 female to M12 male
- A-coded

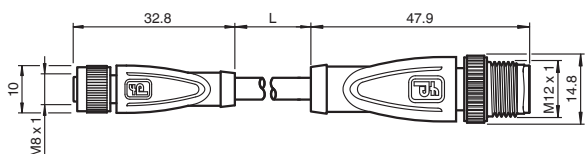
Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

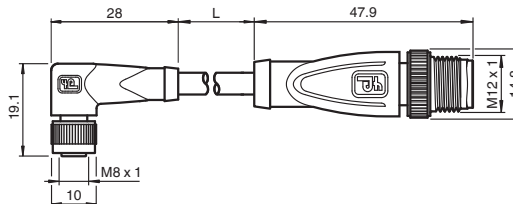
Order codes

Number of pins	3	V3-...-...-V11-G	V31-...-...-V1-G
	4	●	●
Electrical data			
Max. operating voltage	30 V		●
	60 V	●	

Dimensions

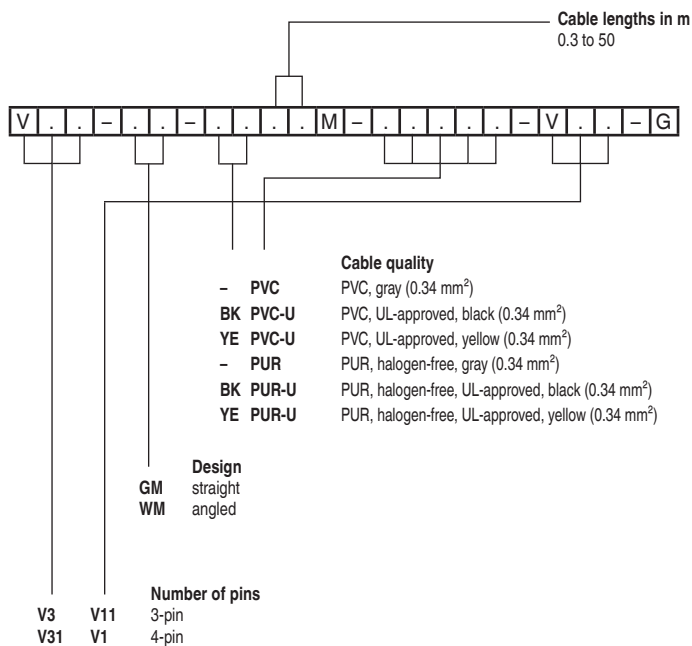


M8 female to M12 male
V3-G ...V11-G
V31-G ...V1G



M8 female to M12 male
V3-W ...V11-G
V31-W ...V1G

Order codes

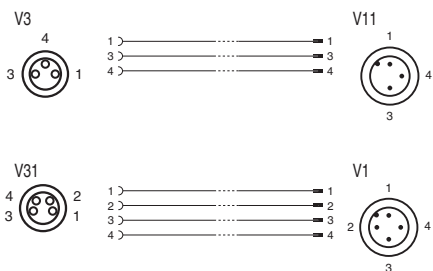


Availability

V3-V11	V31-V1
◇	◇
◇	◇
◇	◇
◆	◆
◆	◆
◇	◇

- ◆ Standard, cable lengths of 0.6 m, 1 m and 2 m available in stock
- ◇ Available
- Not available

Electrical connection





Properties

- M8 x 1 single-ended cordset
- Female straight and angled versions

Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

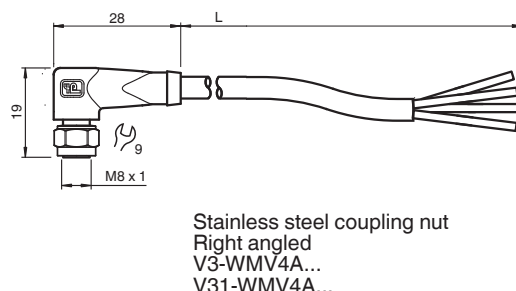
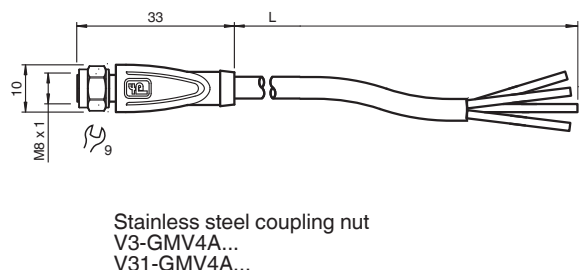
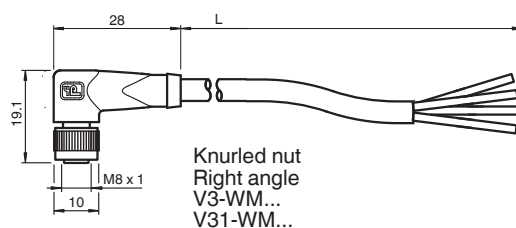
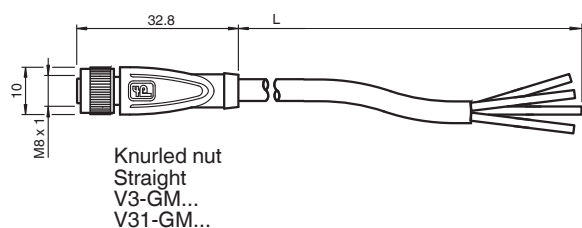
General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

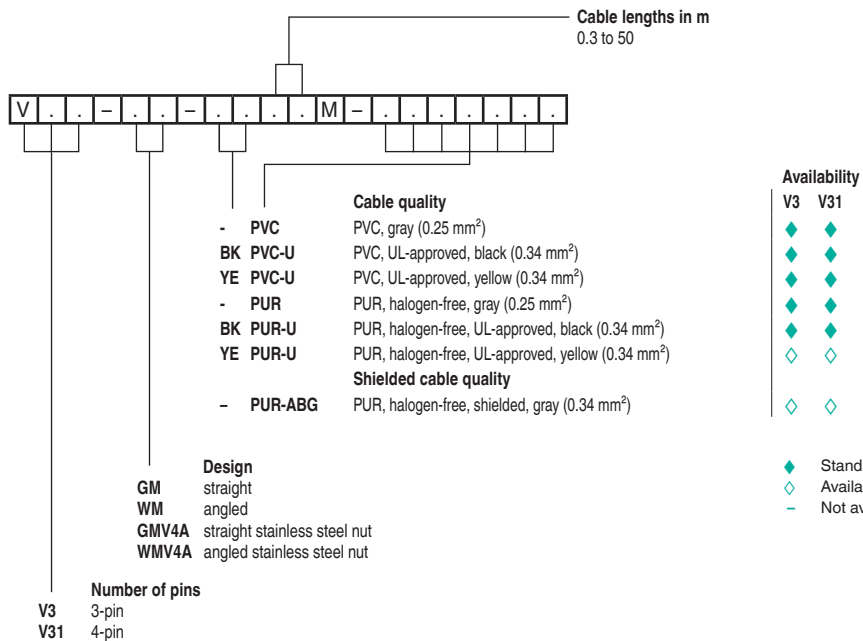
Order codes

Number of pins	3	V3-...	V31-...
	4	●	●
Electrical data			
Max. operating voltage	30 V		●
	60 V	●	

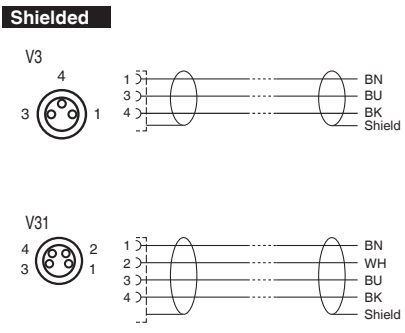
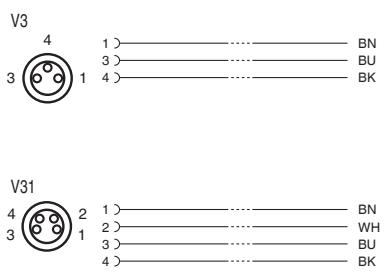
Dimensions



Order codes



Electrical connection



Accessories, Connectors, Cordsets, Splitters

10

1



Properties

- M8 x 1 single-ended cordset
- Male straight and angled versions

Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

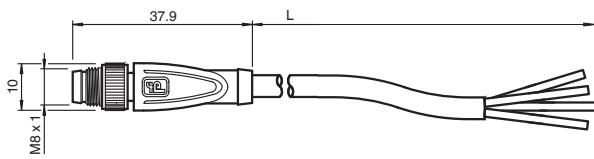
General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Pin diameter	1 mm
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

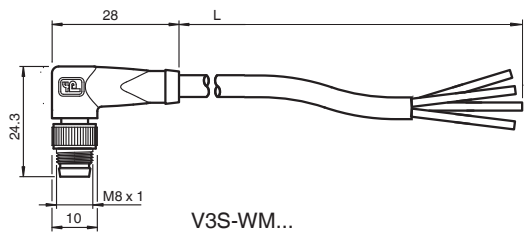
Order codes

Number of pins	3	V3S-...	V31S-...
	4	●	●
Electrical data			
Max. operating voltage	30 V		●
	60 V	●	

Dimensions



V3S-GM...
V31S-GM...



V3S-WM...
V31S-WM...



Properties

- M8 x 1 single-ended cordset
- Female straight and angled versions
- LED

Benefits

- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Display/controls

LED green	Operating display
LED yellow	NO contact function display

Electrical data

Max. operating voltage	24 V DC ± 15%
Max. operating current	3 A

Ambient conditions

Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
---------------------	--

Mechanical data

Contact elements	Spring-loaded contact sockets
Degree of protection	IP67

Material

Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent
Coupling nut	Die-cast zinc

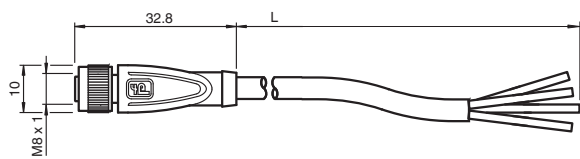
Order codes

Number of pins	3 (E2)
	4 (A2)

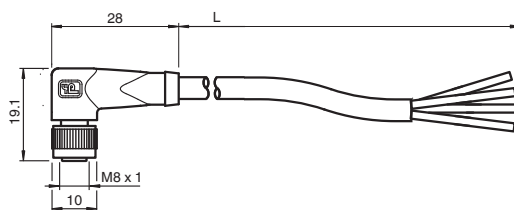
V3-E2-...

V31-A2-...

Dimensions

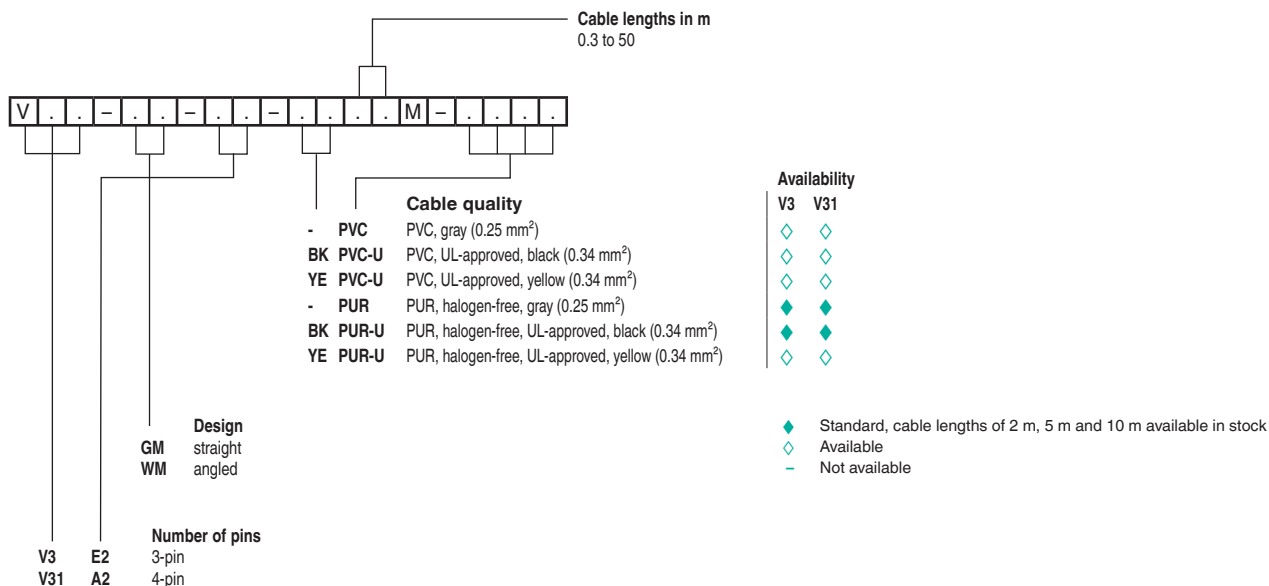


V3S-GM...
V31S-GM...

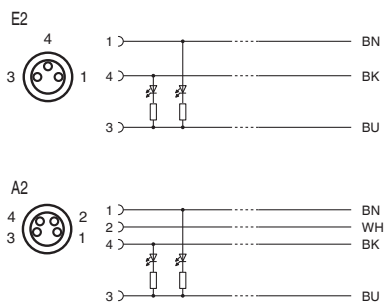


V3S-WM...
V31S-WM...

Order codes



Electrical connection





Properties

- M8 x 1 single-ended cordset
- Male straight and angled versions
- LED

Benefits

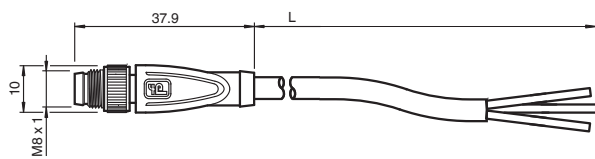
- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

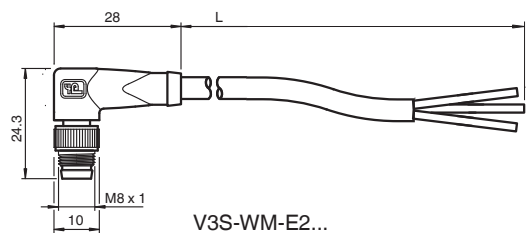
For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model Number	V35-*
Number of pins	3 (E2)
Display/controls	
LED green	Operating display
LED yellow	NO contact function display
Electrical data	
Max. operating voltage	24 V DC ± 15%
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Pin diameter	1 mm
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent
Coupling nut	Die-cast zinc

Dimensions

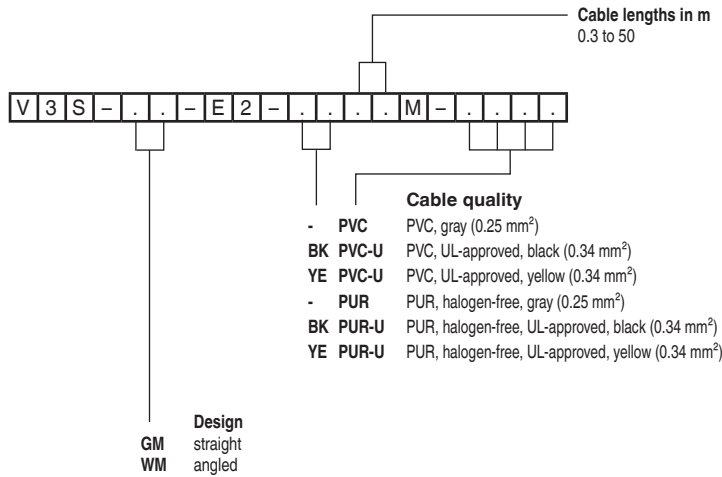


V3S-GM-E2...
V31S-GM-E2...

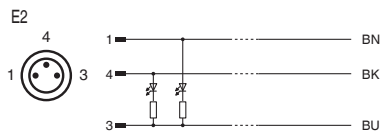


V3S-WM-E2...
V31S-WM-E2...

Order codes



Electrical connection





Properties

- M8 x 1 single-ended cordset
- Male straight and angled versions
- Snap-on

Benefits

- Snap locking

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

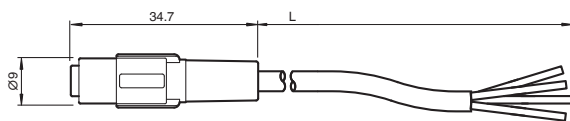
General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-25 ... 70 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP65
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	PUR, black

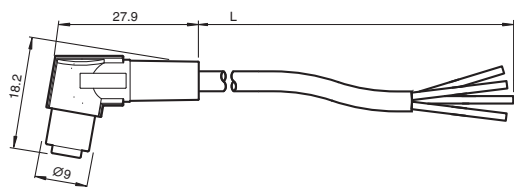
Order codes

Number of pins	3	V3...GL...	V3...WL...	V31...GR...	V31...WR...
	4	●	●	●	●
Electrical data					
Max. operating voltage	30 V			●	●
	60 V	●	●		

Dimensions



V3...GR
V31...GR



V3...WR
V31...WR



Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, black
Coupling nut	Die-cast zinc

Properties

- M8 x 1 double-ended cordset
- Straight and angled versions

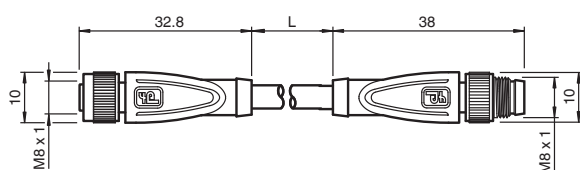
Benefits

- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

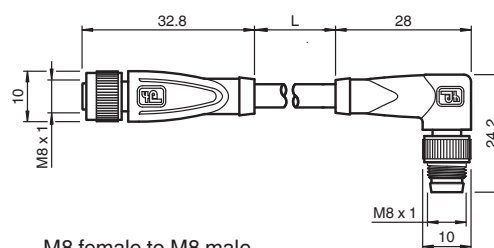
Order codes

Number of pins	3	●	V3-...-V3-...	●	V31-...-V31-...
	4				
Electrical data					
Max. operating voltage	30 V				
	60 V	●		●	

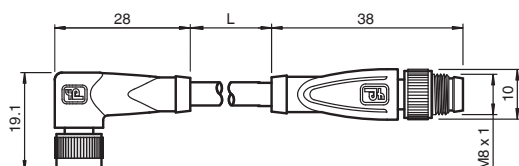
Dimensions



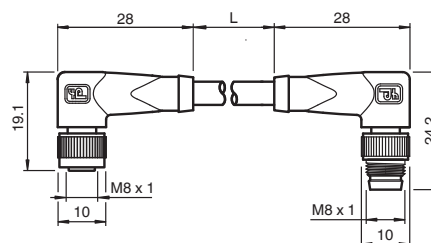
M8 female to M8 male
V3-GM...V3-GM
V31-GM...V31-GM



M8 female to M8 male
V3-GM...V3-WM
V31-GM...V31-WM

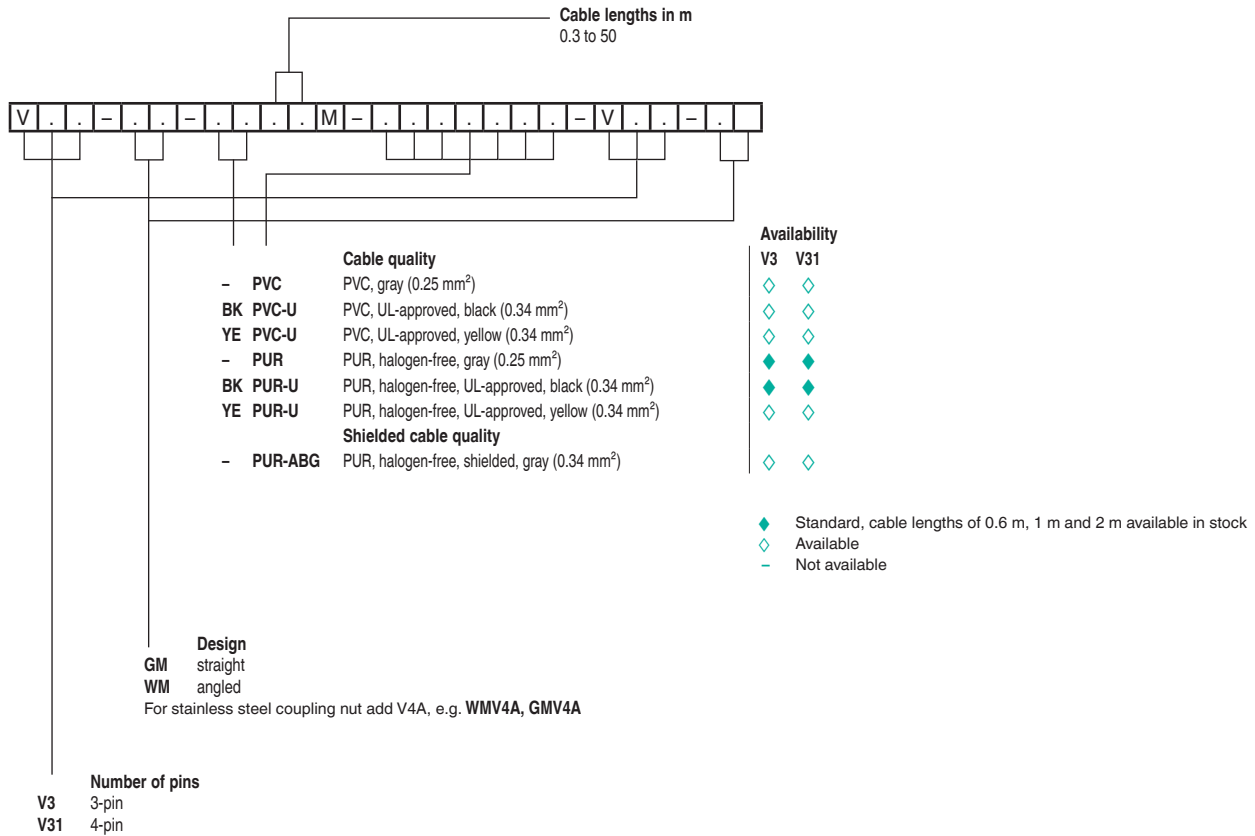


M8 right female to M8 male
V3-WM...V3-GM
V31-WM...V31-GM

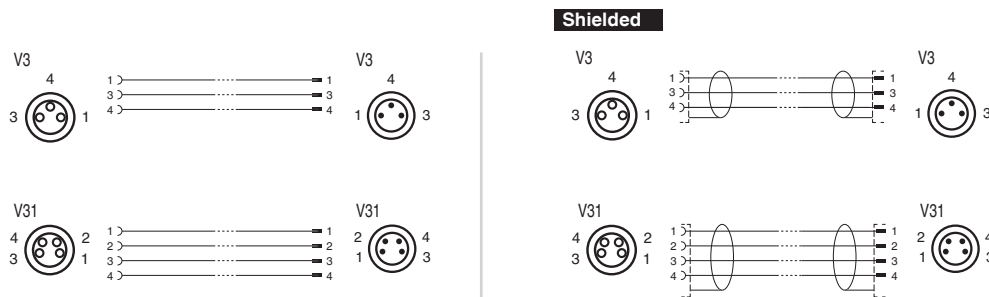


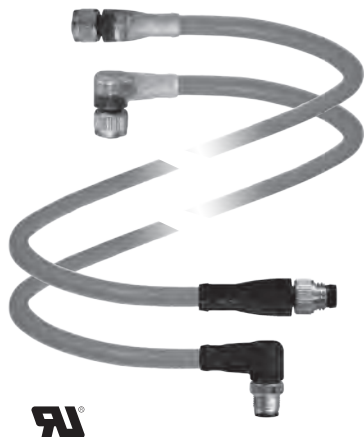
M8 female to M8 male
V3-WM...V3-WM
V31-WM...V31-WM

Order codes



Electrical connection





Properties

- M8 x 1 double-ended cordset
- Straight and angled versions
- LED

Benefits

- Built-in LED for power and status indication
- Knurled nut suitable for fast and easy mounting
- Mechanical detent for vibration protection
- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

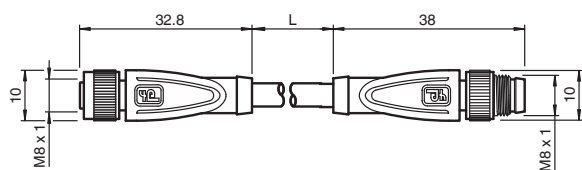
General Data

Display/controls	
LED green	Operating display
LED yellow	NO contact function display
Electrical data	
Max. operating voltage	24 V DC ± 15%
Max. operating current	3 A
Ambient conditions	
Ambient temperature	-40 °C ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, transparent/black
Coupling nut	Die-cast zinc

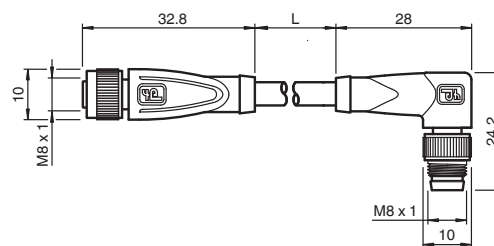
Order codes

Number of pins	3 (E2)	● V3-E2...-V3-...	V31-A2...-V31-...
	4 (A2)		●

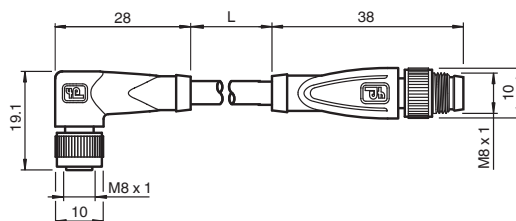
Dimensions



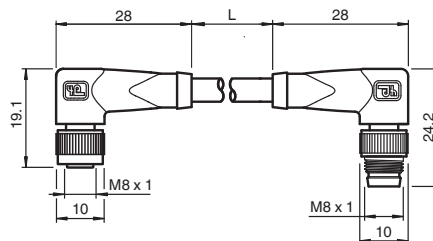
M8 female with LED to M8 male without LED
V3-GM...V3-GM
V31-GM...V31-GM



M8 female with LED to M8 male without LED
V3-GM...V3-WM
V31-GM...V31-WM

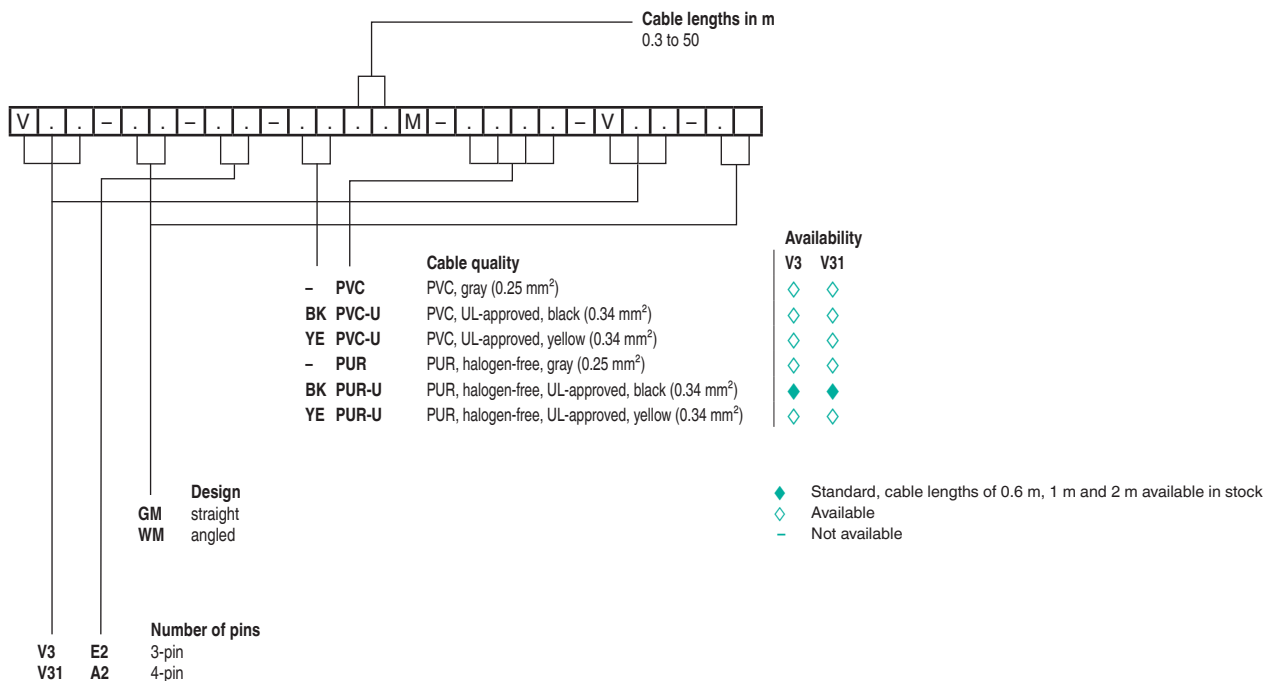


M8 female with LED to M8 male without LED
V3-WM...V3-GM
V31-WM...V31-GM

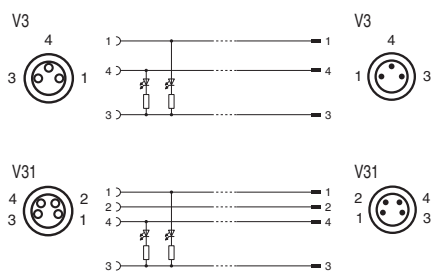


M8 female with LED to M8 male without LED
V3-WM...V3-WM
V31-WM...V31-WM

Order codes



Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-25 ... 90 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67/IP69K
Material	
Contacts	CuSn / Au
Contact surface	Au
Body	TPU, yellow
Coupling nut	Brass, nickel-plated

Properties

- 1/2" single-ended and double-ended cordset versions
- Straight and angled versions

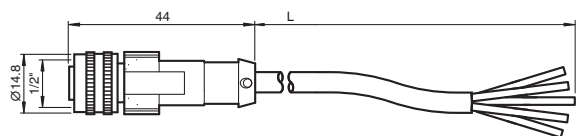
Benefits

- Knurled nut suitable for fast and easy mounting
- Micro AC dual key
- Yellow body and cable jacket
- Gold-plated contacts

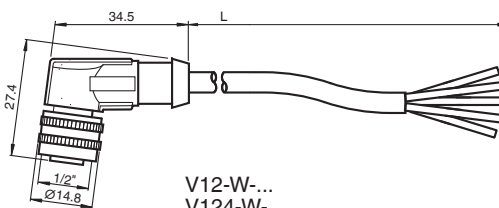
Order codes

		V12-...	V124-...	V125-...
Number of pins	3	●		
	4		●	
	5			●
Electrical data	Max. operating voltage	60 V AC/DC	250 V AC/DC	250 V AC/DC
		●	●	●

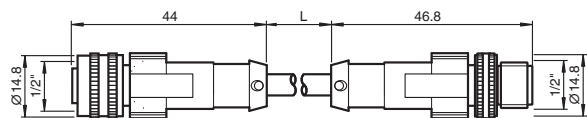
Dimensions



V12-G-...
V124-G-...
V125-G-...

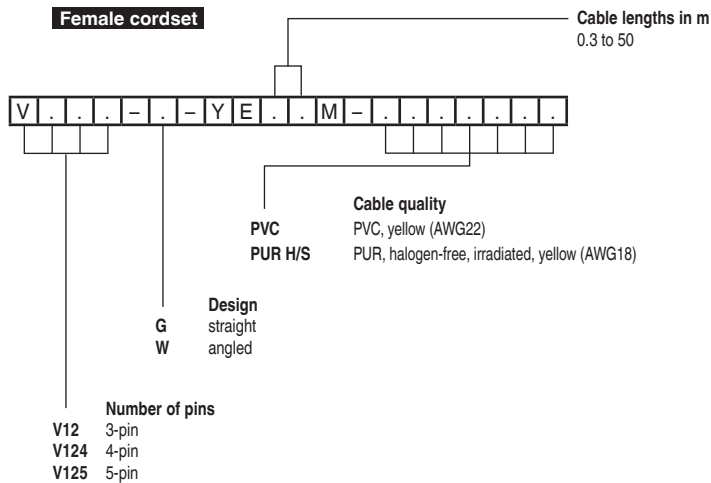


V12-W-...
V124-W-...
V125-W-...



V12-G-...V12-G
V124-G-...V124-G
V125-G-...V125-G

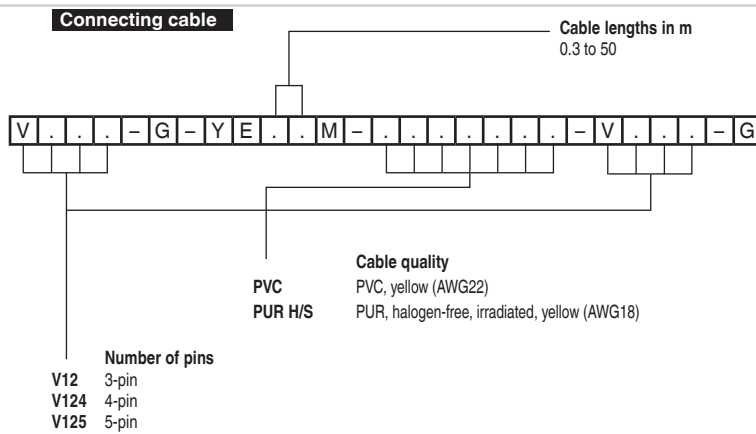
Order codes



Availability

V12	V124	V125
◆	◆	◆
◆	◆	◆
-	-	-

◆ Standard, cable lengths of 2 m, 5 m and 10 m available in stock
 ◆ Available
 - Not available

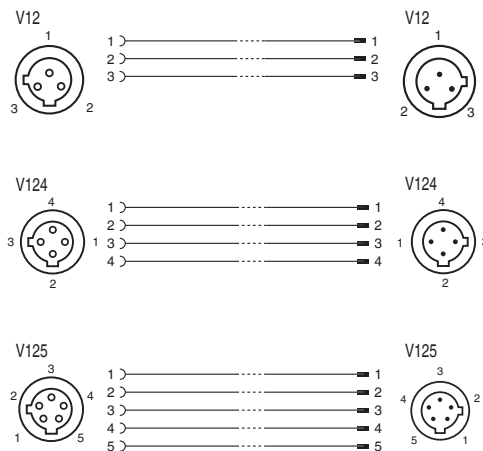
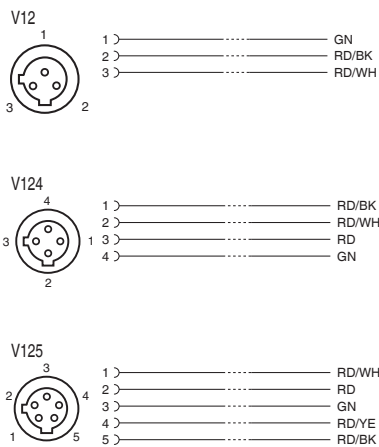


Availability

V12	V124	V125
◆	◆	◆
◆	◆	◆
-	-	-

◆ Standard, cable lengths of 0.6 m, 1 m and 2 m available in stock
 ◆ Available
 - Not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating voltage	600 V AC/DC
Ambient conditions	
Ambient temperature	-40 °C ... 105 °C for body, information on cable ratings can be found beginning on page 972
Mechanical data	
Contact elements	Spring-loaded contact sockets
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	PVC, yellow
Coupling nut	Aluminum, anodized

Properties

- 7/8" single-ended and double-ended cordset versions
- Straight and angled versions

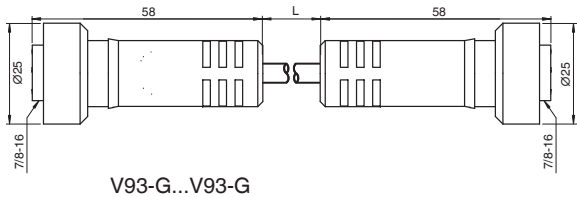
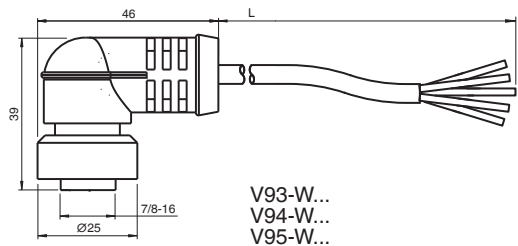
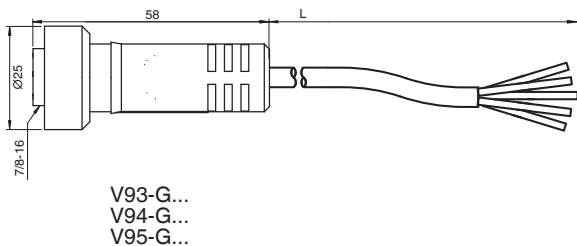
Benefits

- Mini connector
- Immunity to vibration
- Gold-plated contacts
- Heavy-gauge wire

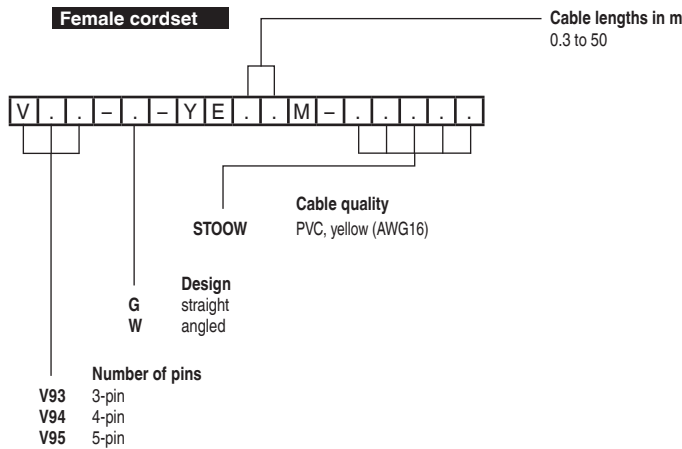
Order codes

	V93...	V94...	V95...
Number of pins	3		
	4		
	5		
Electrical data			
Max. operating current	8 A		
	10 A		
	13 A		

Dimensions



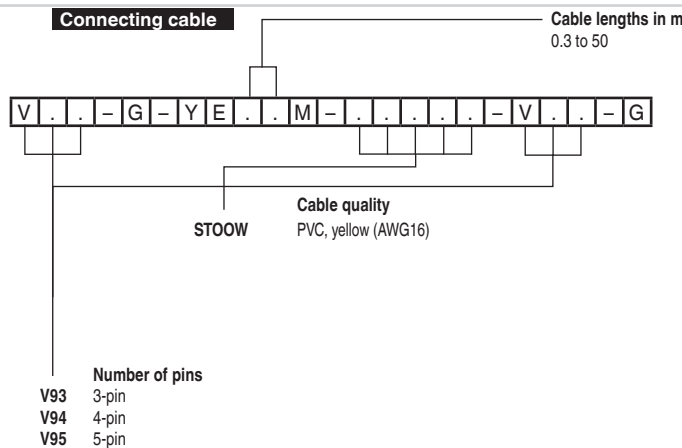
Order codes



Availability

V93	V94	V95
◆	◆	◆

- ◆ Standard, cable lengths of 2 m, 4 m and 6 m available in stock
- ◇ Available
- Not available

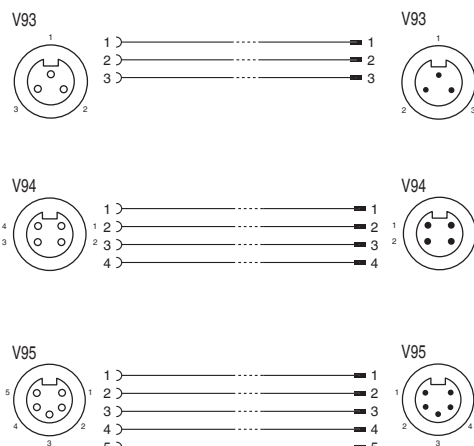
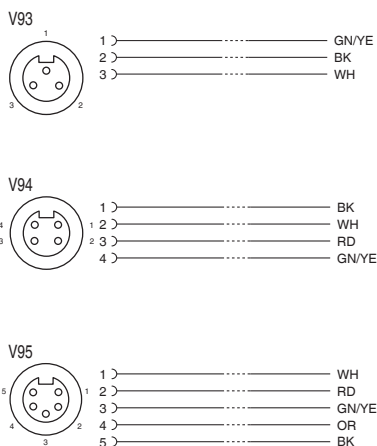


Availability

V93	V94	V95
◇	◇	◇

- ◆ Standard, cable lengths of 2 m, 4 m and 6 m available in stock
- ◇ Available
- Not available

Electrical connection





Properties

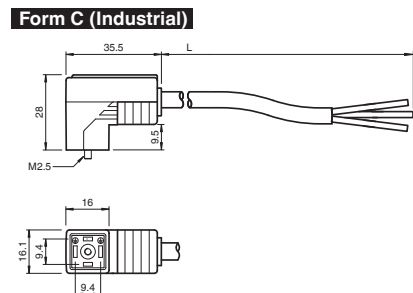
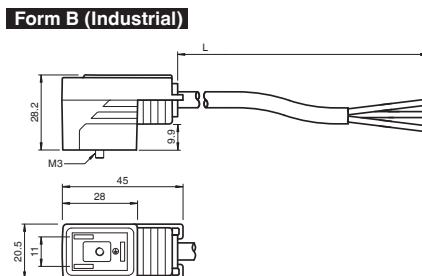
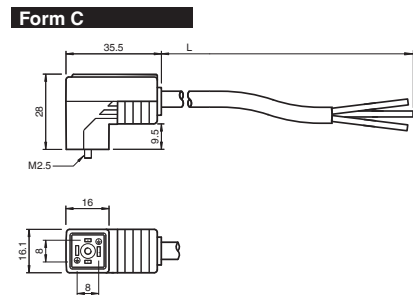
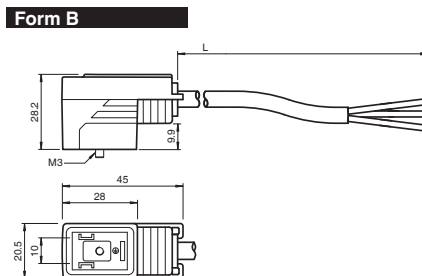
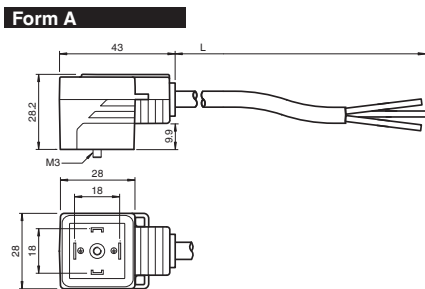
- Valve connector cordsets acc. EN 175301-803 A/ISO 4400
- Form A, B and C versions, DIN and industrial versions
- Unwired, Z diode, varistor, and pressure switch versions
- PUR and PVC cable versions

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

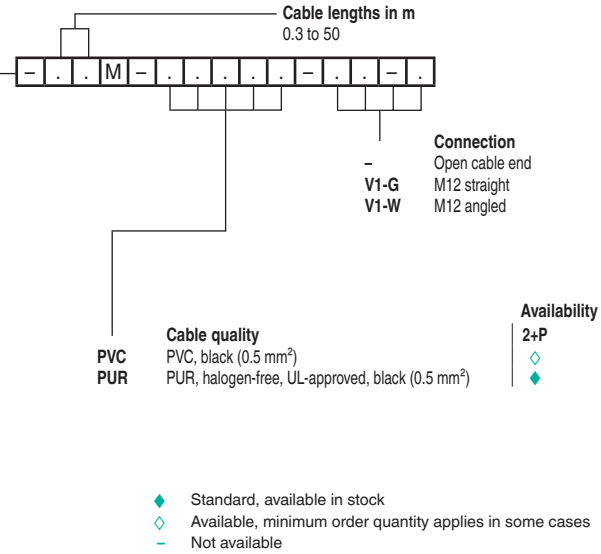
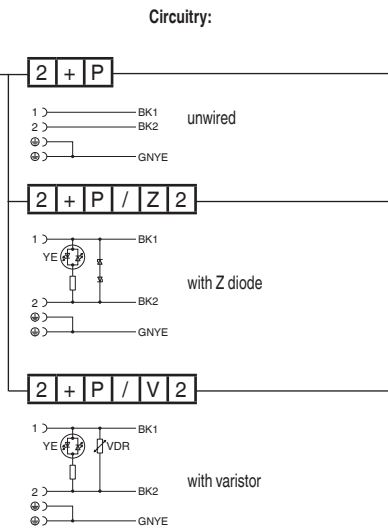
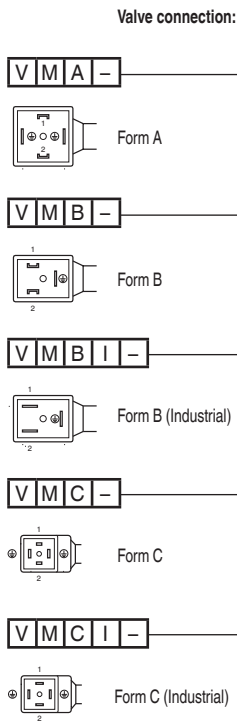
Application	Valve			Pressure switch	
	unwired	Z diode	Varistor	unwired	LED
Number of pins	2+P	2+P/Z2	2+P/V2	3+P	3+P/L1
Display/controls					
Indicator	No	LED	LED	No	LED
Electrical data					
Max. operating voltage	230 V AC/DC	24 V AC/DC		230 V AC/DC	24 V AC/DC
Max. operating current open end cable	6 A	4 A		6 A	4 A
Max. operating current M12 body	4 A				
Volume resistance	≤ 5 mΩ				
Ambient conditions					
Ambient temperature	-20 ... 85 °C for valve plug, Information on cable ratings can be found beginning on page 972				
Mechanical data					
Degree of protection	IP65/IP67				
Material					
Contacts	CuSn				
Contact surface	Sn				
Body	TPU, black-transparent				

Dimensions

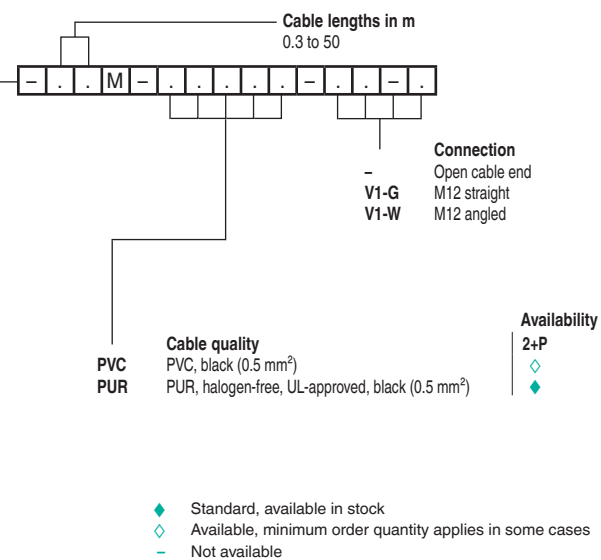
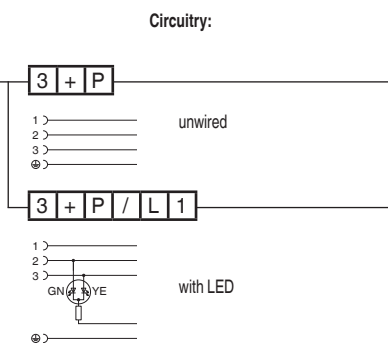
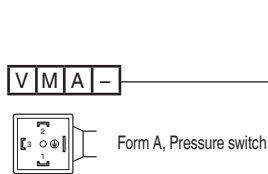


Order codes

Valve connector



Pressure switch connector





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	PA
Coupling nut	CuZn, nickel-plated

Properties

- M12 x 1 field connector
- Female and male, straight and angled versions
- A-coded

Benefits

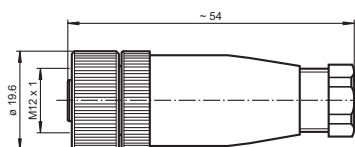
- Screw terminal connection
- Gold-plated contacts

Order codes

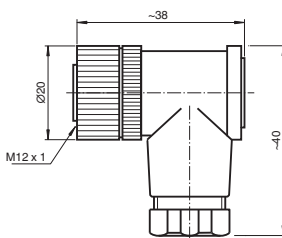
		V1-...	V15-...	V17-...	V1S-...	V15S-...	V17S-...	
Number of pins	4	●			●			
	5		●			●		
	8			●			●	
Electrical data	Max. operating voltage	30 V AC/DC						
		60 V AC/DC		●				
		250 V AC/DC	●		●	●	●	
Max. operating current	2 A			●			●	
	4 A	●	●		●	●	●	
Mechanical data	Connection	Screw terminals for max. 0.5 mm ²			●		●	
		Screw terminals for max. 0.75 mm ²	●	●		●	●	
		1 x M12 socket	●	●	●		●	
		1 x M12 plug				●	●	●

Note: See maximum cable diameter, next page.

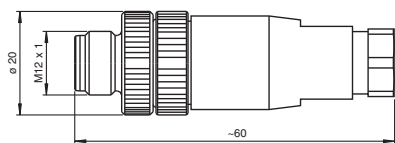
Dimensions



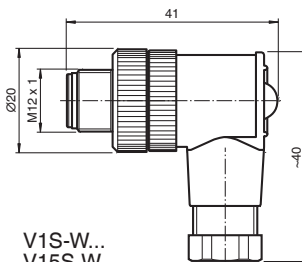
V1-G...
V15-G...
V17-G...



V1-W...
V15-W...
V17-W...

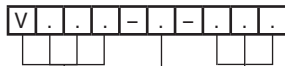


V1S-G...
V15S-G...
V17S-G...



V1S-W...
V15S-W...
V17S-W...

Order codes



- Number of pins**
- V1 4-pin socket
 - V15 5-pin socket
 - V17 8-pin socket
 - V1S 4-pin plug
 - V15S 5-pin plug
 - V17S 8-pin plug

Design
 G straight
 W angled

PG9

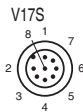
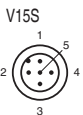
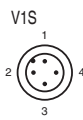
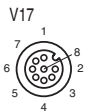
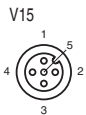
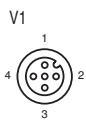
Cable diameter
 - 4 ... 6 mm
 PG9 6 ... 8 mm

Availability

V1	V15	V17	V1S	V15S	V17S
◆	◆	-	◆	◆	-
◇	◇	◆	◇	◇	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	Die-cast zinc, nickel-plated
Coupling nut	CuZn, nickel-plated
Cable	
Cable diameter	5 ... 8 mm

Properties

- M12 x 1 field connector
- Shielded
- Female and male, straight and angled versions
- A-coded

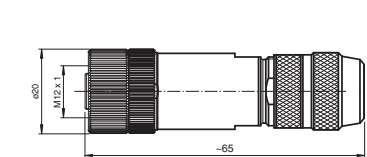
Benefits

- Screw terminal connection
- Iris spring provides easy shield bonding
- Gold-plated contacts

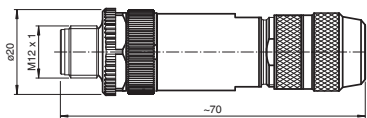
Order codes

		V1-...	V15-...	V19-...	V1S-...	V15S-...	V19S-...
Number of pins	4	●			●		
	5		●				
	8			●			●
Electrical data	Max. operating voltage			●			●
	30 V AC/DC		●				
	60 V AC/DC			●			
Max. operating current	2 A	●		●	●		
	4 A	●	●		●	●	●
Mechanical data	Connection			●			●
	Screw terminals for max. 0.5 mm ²	●	●		●	●	●
	Screw terminals for max. 0.75 mm ²	●	●	●	●	●	●
	1 x M12 socket	●	●	●			
	1 x M12 plug				●	●	●

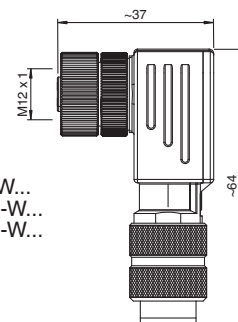
Dimensions



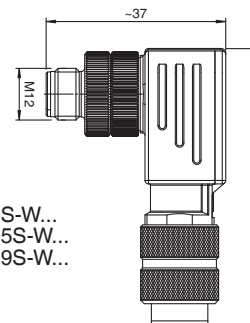
V1-G...
V15-G...
V19-G...



V1S-G...
V15S-G...
V19S-G...



V1-W...
V15-W...
V19-W...



V1S-W...
V15S-W...
V19S-W...

Order codes

V . . . - . - A B G - P G 9

Design

G straight
W angled

Availability

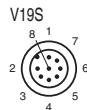
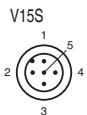
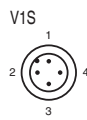
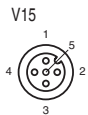
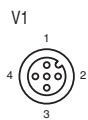
V1	V15	V19	V1S	V15S	V19S
◆	◆	◆	◆	◆	◆
◆	◆	◆	◆	◆	◆

◆ Standard, available in stock
◇ Available, minimum order quantity applies in some cases
- Not available

Number of pins

V1 4-pin socket
V15 5-pin socket
V19 8-pin socket
V1S 4-pin plug
V15S 5-pin plug
V19S 8-pin plug

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Number of pins	4
Electrical data	
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Degree of protection	IP65 / IP67
Material	
Contacts	CuSn
Contact surface	Ni/Au
Body	PA66, black
Coupling nut	Die-cast zinc

Properties

- M12 x 1 field connector
- Quick connection
- Female and male, straight and angled versions
- A-coded

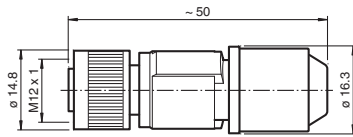
Benefits

- Time-saving insulation displacement connection technology
- No screwdriver required
- Gold-plated contacts

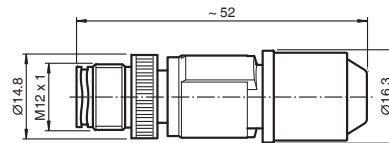
Order codes

		V1-G-Q2	V1S-G-Q2	V1-G-Q3	V1S-G-Q3
Electrical data					
Max. operating voltage	125 V AC/DC			●	●
	250 V AC/DC	●	●		
Mechanical data					
Connection	Insulation displacement for 0.14 ... 0.34 mm ²			●	●
	Insulation displacement for 0.34 ... 0.75 mm ²	●	●		
	1 x M12 socket	●		●	
	1 x M12 plug		●		●
Cable					
Cable diameter	3.5 ... 6 mm			●	●
	4 ... 8 mm	●	●		

Dimensions

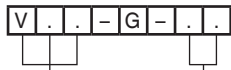


V1-G-Q...



V1S-G-Q...

Order codes



Core cross-section

Q2 0.34 ... 0.75 mm²

Q3 0.14 ... 0.34 mm²

◆ Standard, available in stock

◇ Available, minimum order quantity applies in some cases

- Combination not available

Availability

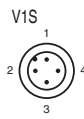
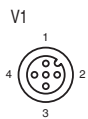
V1	V1S
◆	◆
◆	◆

Number of pins

V1 4-pin socket

V1S 4-pin plug

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Connection	Straight design: screw terminals < 0.5 mm ² Angled design: solder connection 0.25 mm ²
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	PA
Coupling nut	CuZn, nickel-plated
Cable	
Cable diameter	3.5 ... 5 mm

Properties

- M8 x 1 field connector
- Female and male, straight and angled versions
- Screw terminal and solder connection versions

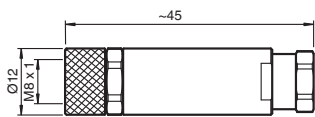
Benefits

- Gold-plated contacts

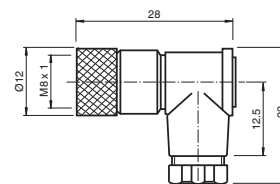
Order codes

Number of pins	3	V3-...	V31-...	V3S-...	V31S-...
	4	●	●	●	●
Electrical data					
Max. operating voltage	30 V AC/DC		●		●
	60 V AC/DC	●		●	●
Mechanical data					
Connection	1 x M8 plug			●	●
	1 x M8 socket	●	●		

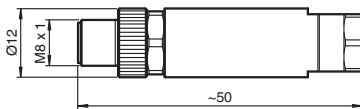
Dimensions



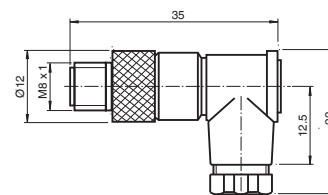
V3-GM...
V31-GM...



V3-WM...
V31-WM...



V3S-GM...
V31S-GM...



V3S-WM...
V31S-WM...

Order codes



Design
 straight
 angled
 G
 W

Connectiontype
 Screw terminals
 Solder connection

Availability			
V3	V31	V3S	V31S
◆	◆	◆	◆
◆	◆	◆	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Number of pins	
V3	3-pin socket
V31	4-pin socket
V3S	3-pin plug
V31S	4-pin plug

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data

Max. operating current 4 A

Ambient conditions

Ambient temperature -25 ... 85 °C

Mechanical data

Connection Straight design: screw terminals < 0.5 mm²
Angled design: solder connection 0.25 mm²

Degree of protection IP67

Material

Contacts CuZn

Contact surface Au

Body PA

Coupling nut CuZn, nickel-plated

Cable

Cable diameter 3.5 ... 5 mm

Properties

- M8 x 1 field connector
- Shielded
- Female and male, straight and angled versions
- Screw terminal and solder connection versions

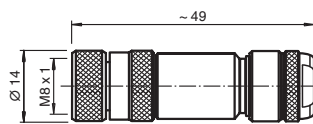
Benefits

- Gold-plated contacts

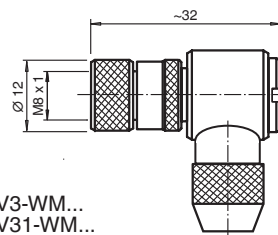
Order codes

		V3-...	V31-...	V3S-...	V31S-...
Number of pins	3	●			
	4		●		●
Electrical data					
Max. operating voltage	30 V AC/DC		●		●
	60 V AC/DC	●		●	
Mechanical data					
Connection	1 x M8 plug			●	●
	1 x M8 socket	●	●		

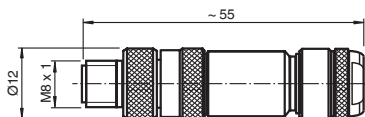
Dimensions



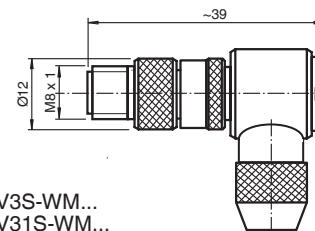
V3-GM...
V31-GM...



V3-WM...
V31-WM...



V3S-GM...
V31S-GM...



V3S-WM...
V31S-WM...

Order codes

V . . . - . M - A B G



Design
G straight
W angled

Connectiontype
Screw terminals
Solder connection

Availability			
V3	V31	V3S	V31S
◆	◆	◆	◆
◆	◆	◆	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Number of pins

- V3 3-pin socket
- V31 4-pin socket
- V3S 3-pin plug
- V31S 4-pin plug

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Contact elements	Insulation piercing technology 0.14 ... 0.34 mm ²
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	PA
Coupling nut	ZnAl / Ni
Cable	
Cable diameter	4 ... 5 mm

Properties

- M8 x 1 field connector
- Female and male, straight and angled versions
- MiniQuick technology

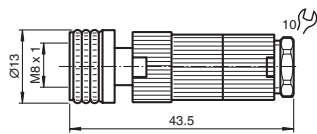
Benefits

- Time-saving axial wire contact technology
- Gold-plated contacts

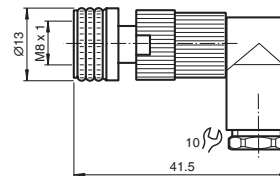
Order codes

	V3-...	V31-...	V3S-...	V31S-...
Number of pins	3	4	4	4
Electrical data				
Max. operating voltage	30 V AC/DC	60 V AC/DC	60 V AC/DC	60 V AC/DC
Mechanical data				
Connection	1 x M8 plug	1 x M8 socket	1 x M8 socket	1 x M8 socket

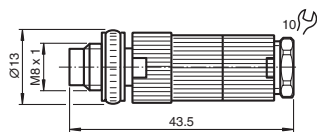
Dimensions



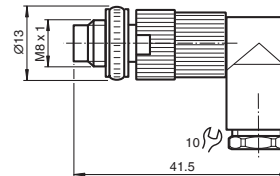
V3-GM...
V31-GM...



V3-WM...
V31-WM...

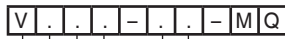


V3S-GM...
V31S-GM...



V3S-WM...
V31S-WM...

Order codes



Design
GM straight
WM angled

Availability

V3	V31	V3S	V31S
◆	◆	◆	◆
◆	◆	◆	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Number of pins

- V3 3-pin socket
- V31 4-pin socket
- V3S 3-pin plug
- V31S 4-pin plug

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data	
Number of pins	3
Electrical data	
Max. operating voltage	250 V AC/DC
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 ... 85 °C
Mechanical data	
Connection	Screw terminals for max. 0.75 mm ² PG7 cable gland
Degree of protection	IP67
Material	
Contacts	CuSn
Contact surface	Au
Body	PA
Coupling nut	CuSn, nickel-plated
Cable	
Cable diameter	4 ... 6 mm

Properties

- 1/2" field connector
- Female and male, straight and angled versions

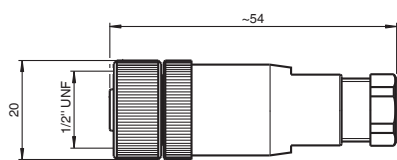
Benefits

- Gold-plated contacts

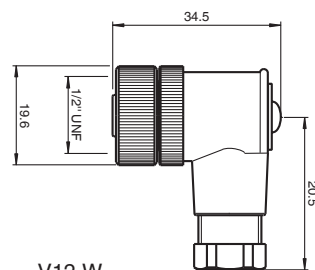
Order codes

Mechanical data		V12-...	V12S-...
Connection	1 x M12 socket	●	
	1 x M12 plug		●

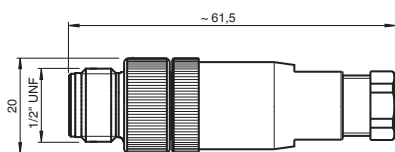
Dimensions



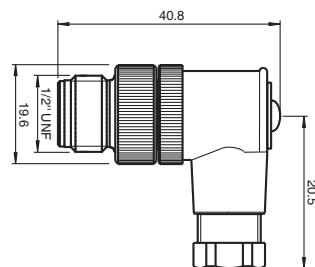
V12-G...



V12-W...



V12S-G...



V12S-W...

Order codes



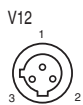
Number of pins
 V12 3-pin socket
 V12S 3-pin plug

Design
 G straight
 W angled

Availability	
V12	V12S
◆	◆
◇	◆
-	

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating voltage	600 V AC/DC
Ambient conditions	
Ambient temperature	-40 ... 90 °C
Mechanical data	
Connection	1 x 7/8" socket, screw terminals < 2.0 mm ² 1 x 7/8" plug, internal or external thread, screw terminals < 2.0 mm ² , PG9 cable gland
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Body	PA
Coupling nut	Al, anodized
Cable	
Cable diameter	5 ... 13 mm

Properties

- 7/8" field connector
- Female and male, straight and angled versions

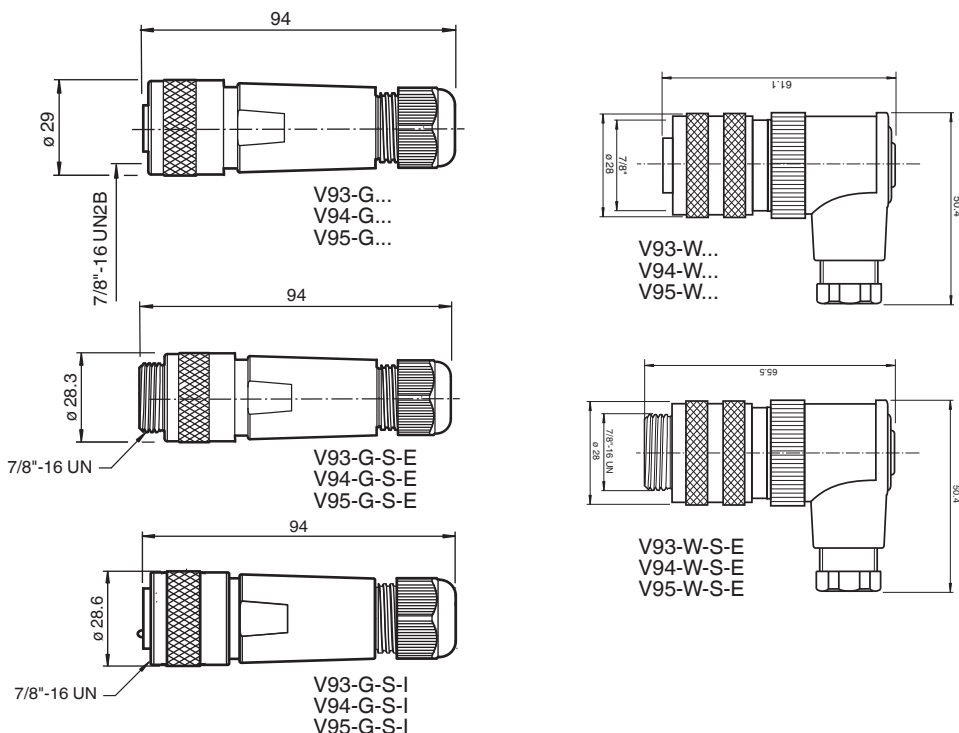
Benefits

- Gold-plated contacts
- Suitable for heavy-gauge wires

Order codes

	V93-...	V94-...	V95-...
Number of pins	3	4	5
Electrical data			
Max. operating voltage	12 A	15 A	18 A

Dimensions



Refer to General Notes Relating to Product Information

Pepperl+Fuchs Group
www.pepperl-fuchs.com

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fa-info@us.pepperl-fuchs.com

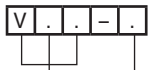
Germany: +49 621 776-4411
fa-info@de.pepperl-fuchs.com

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Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com



Order codes

Socket



Design
 G straight
 W angled

Number of pins
 V93 3-pin
 V94 4-pin
 V95 5-pin

Availability

V93	V94	V95
◆	◆	◆
◇	◇	◇

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Plug



Design
 G straight
 W angled

Number of pins
 V93 3-pin
 V94 4-pin
 V95 5-pin

Type of thread
 I internal
 E external

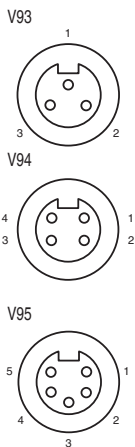
Availability

V93	V94	V95
◆	◆	◆
◇	◇	◇

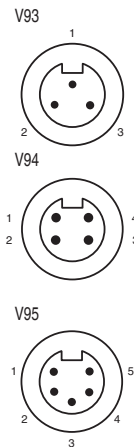
- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection

Socket



Plug





Properties

- M18 x 1 field connector
- Female, straight, and angled versions

Benefits

- Gold-plated contacts

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

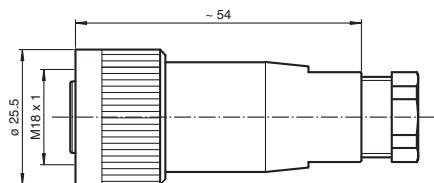
General Data

Number of pins	4
Electrical data	
Max. operating voltage	250 V AC/DC
Max. operating current	16 A
Ambient conditions	
Ambient temperature	-25 ... 85 °C
Mechanical data	
Connection	1 x M18-socket Screw terminals for max. 1.5 mm ² PG9 cable gland
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	CuSnZn
Body	PA
Coupling nut	PA
Cable	
Cable diameter	6 ... 8 mm

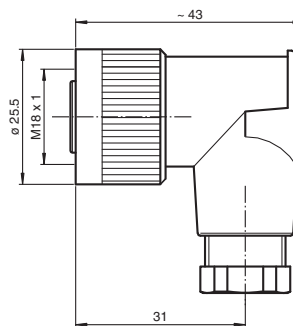
Order codes

Design	straight	V18-G	V18-W
	angled		

Dimensions



V18-G



V18-W

Order codes

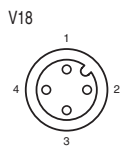
V 1 8 - .

Design
 G straight
 W angled

Availability
 V18

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Number of pins	6 + PE
Electrical data	
Max. operating voltage	250 V AC/DC
Max. operating current	10 A
Ambient conditions	
Ambient temperature	-40 ... 100 °C
Mechanical data	
Connection	Screw terminals < 1.5 mm ² PG9 cable gland
Degree of protection	IP65 / IP67
Material	
Contacts	CuZn
Contact surface	Ag
Body	PBT
Cable	
Cable diameter	6 ... 8 mm

Properties

- Rd24 field connector
- Female and male, straight and angled versions

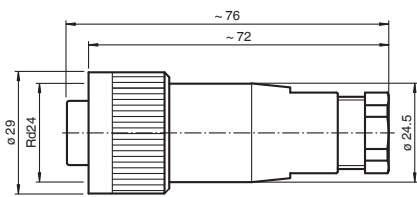
Benefits

- Silver-plated contacts

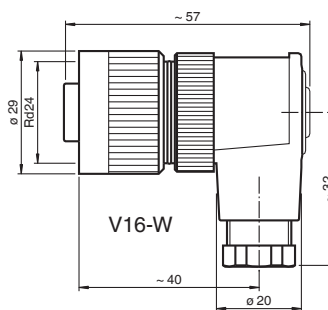
Order codes

Mechanical data		V16-...	V16S-...
Connection	1 x Socket, Rd24 x 1/8"	●	
	1 x Plug, Rd24 x 1/8"		●

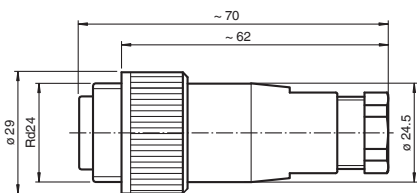
Dimensions



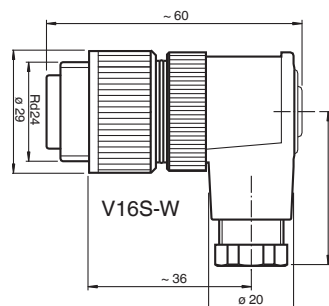
V16-G



V16-W

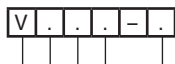


V16S-G



V16S-W

Order codes



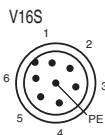
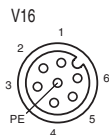
Number of pins
 V16 6-pin + PE socket
 V16S 6-pin + PE plug

Design
 G straight
 W angled

Availability	
V16	V16S
◆	◆
◇	◇
-	-

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Properties

- Valve field connector acc. to EN 175301-803
- Form A, B, and C versions, DIN and industrial versions
- Unwired and varistor versions

Benefits

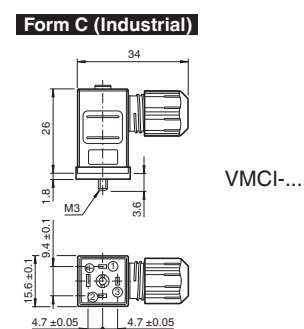
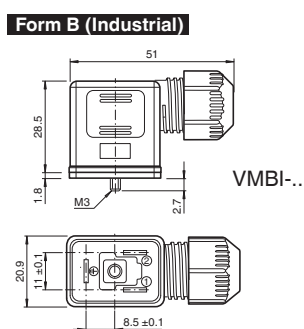
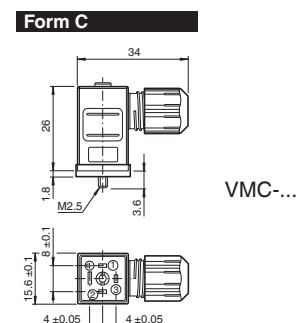
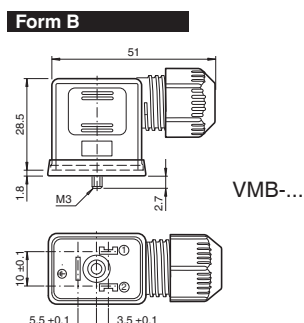
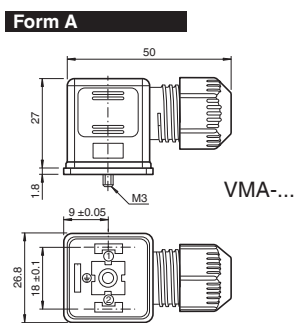
- Integrated seal

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Application	Valve	Varistor	Pressure switch
Circuitry	unwired		unwired
Number of pins	2+P	2+P/V2	3+P
Display/controls			
LED	-	Function display	-
Electrical data			
Max. operating voltage	250 V AC/300 V DC	24 V AC/DC	250 V AC/300 V DC
Max. operating current			
Form A	16 A		
Form B	16 A		
Form C	10 A		
Ambient conditions			
Ambient temperature	-25 ... 90 °C		
Storage temperature	-40 ... 125 °C		
Mechanical data			
Degree of protection	IP67		
Material			
Contact surface	Ag		
Seal	NBR		
Body	PA6, black	PA6, transparent	PA6, black
Cable diameter			
Form A+B	4 ... 9 mm		
Form C	3 ... 5.5 mm		

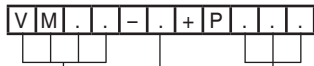
Dimensions



Accessories, Connectors, Cordsets, Splitters

10
.1

Order codes



Circuitry
 - none
 /V2 Varistor

Number of poles
 2 2 + PE
 3 3 + PE (Form A and Form C only)

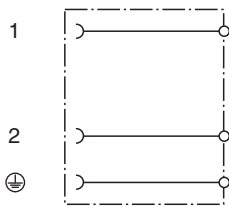
Valve connection
VMA Form A
VMB Form B
VMBI Form B (Industrial)
VMC Form C
VMCI Form C (Industrial)

Availability				
VMA	VMB	VMBI	VMC	VMCI
◆	◆	◆	◆	◆
-	-	-	◆	-

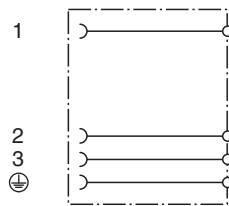
- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

Electrical connection

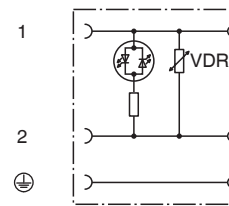
2+P



3+P



2+P/V2





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Ambient conditions	
Ambient temperature	-25 ... 80 °C
Mechanical data	
Connection	Single strand leads
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Housing	Brass, nickel-plated
Cable	
Insulation type	TPE stranded wire
Length L	500 mm

Properties

- M12 x 1 receptacles, A-coded
- Female and male versions
- Front and rear panel mounting
- Thread M16 or PG9 mounting

Benefits

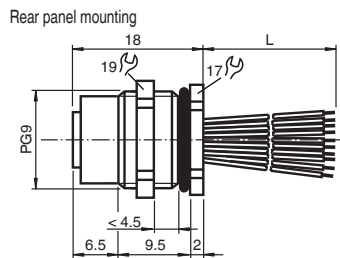
- Halogen-free
- Degree of protection IP67

Order codes

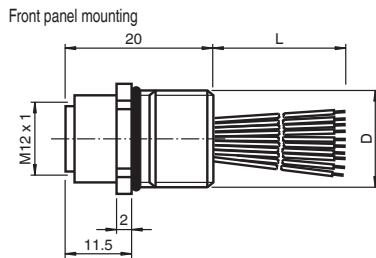
		V1-...	V15-...	V19-...	V1S-...	V15S-...	V19S-...
Number of pins	4	●			●		
	5		●			●	
	8			●			●
Electrical data	Max. operating voltage	30 V AC/DC		●			●
	60 V AC/DC		●			●	
	250 V AC/DC	●			●		●
Max. operating current	2 A			●			●
	4 A	●	●		●	●	●
Mechanical data	Connection	1 x M12 socket	●	●	●	●	●
	1 x M12 plug				●	●	●
Cable	Leads	4 x 0.34 mm ²	●		●		
	5 x 0.34 mm ²		●			●	
	8 x 0.25 mm ²			●			●

Note: Nuts not included

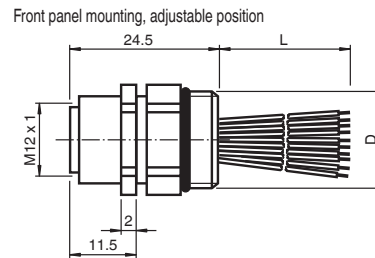
Dimensions



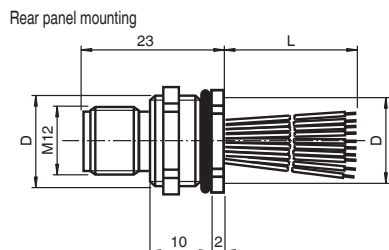
V1-M16H-500



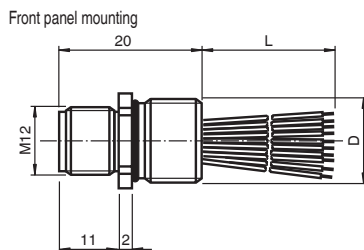
V1-M16-500



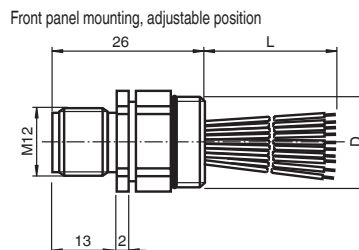
V1-M16P-500



V1S-M16H-500



V1S-M16-500



V1S-M16P-500

Refer to General Notes Relating to Product Information

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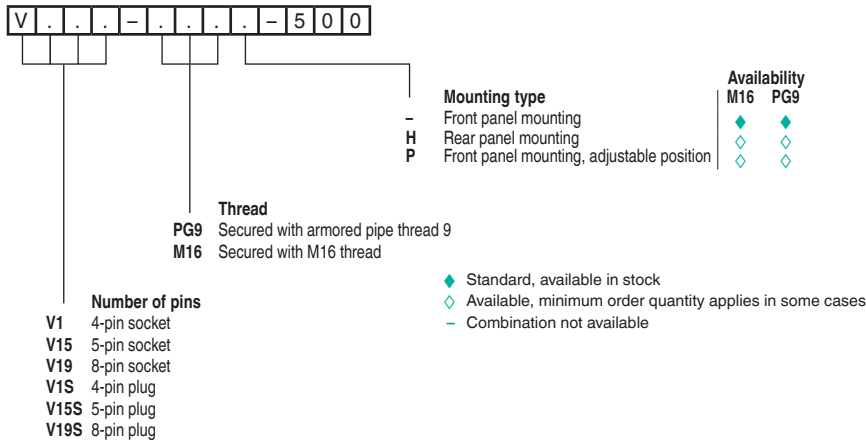
USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411
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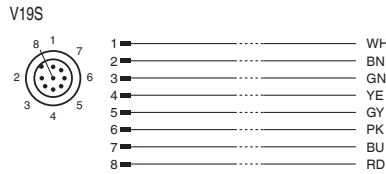
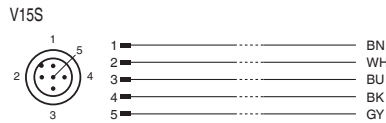
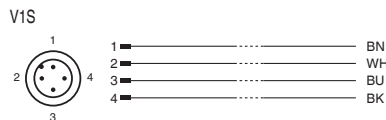
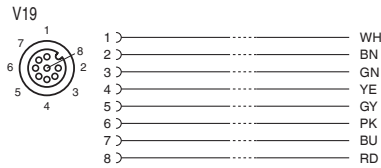
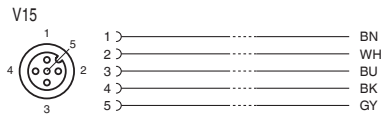
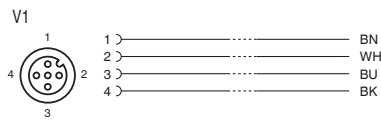


Order codes



See also 1/2" NPT series on page 1044

Electrical connection





Properties

- M8 x 0.5 receptacles
- Female and male versions
- Front panel mounting
- Thread M8 mounting

Benefits

- Halogen-free
- Degree of protection IP67

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

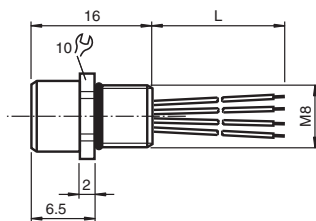
Electrical data	
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-25 ... 80 °C
Mechanical data	
Connection	M8 x 0.5 mounting thread, single strand leads
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Housing	Brass, nickel-plated
Cable	
Insulation type	TPE stranded wire
Length L	500 mm

Order codes

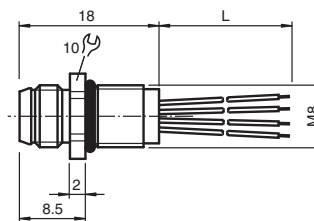
	V3-...	V31-...	V3S-...	V31S-...
Number of pins	3	4	3	4
Electrical data				
Max. operating voltage	30 V AC/DC	60 V AC/DC	30 V AC/DC	60 V AC/DC
Mechanical data				
Connection	1 x M8 socket	1 x M8 plug	1 x M8 socket	1 x M8 plug
Cable				
Leads	3 x 0.25 mm ²	4 x 0.25 mm ²	3 x 0.25 mm ²	4 x 0.25 mm ²

Note: Nuts not included

Dimensions

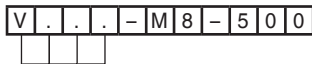


V3-M8-500
V31-M8-500



V3S-M8-500
V31S-M8-500

Order codes



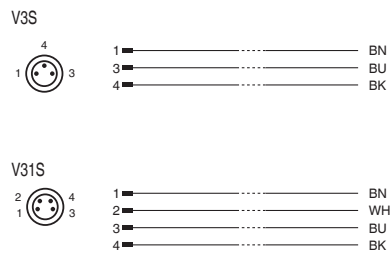
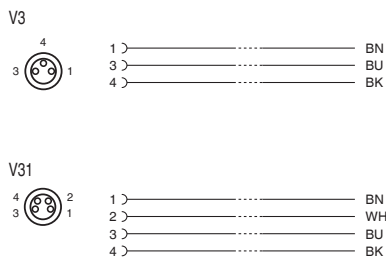
	Number of pins
V3	3-pin socket
V31	4-pin socket
V3S	3-pin plug
V31S	4-pin plug

Availability



- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating voltage	600 V AC/DC
Ambient conditions	
Ambient temperature	-40 ... 105 °C
Mechanical data	
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Housing	Al, anodized
Cable	
Length L	300 mm

Properties

- 7/8"-16 UN receptacles
- Female and male versions
- Front panel mounting
- Thread 1/2" NPT mounting

Benefits

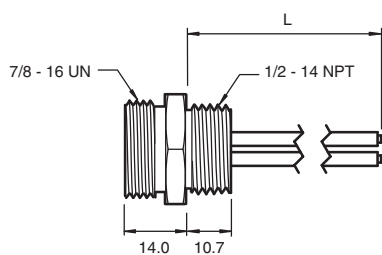
- Gold-plated contacts

Order codes

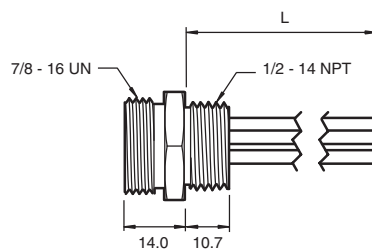
		1/2" NPT-V93-G-.3M	1/2" NPT-V94-G-.3M	1/2" NPT-V95-G-.3M	1/2" NPT-V93-G-S-.3M	1/2" NPT-V94-G-S-.3M	1/2" NPT-V95-G-S-.3M
Number of pins	3	●			●		
	4		●			●	
	5			●			●
Electrical data	Max. operating current		8 A		●		
			10 A	●			
			13 A			●	●
Mechanical data	Connection		7/8"-16 UN socket	●	●	●	●
			7/8"-16 UN plug			●	●
Cable	Leads		3 x 1.5 mm ²	●		●	
			4 x 1.5 mm ²		●		●
			5 x 1.5 mm ²				●

Note: Nuts not included

Dimensions



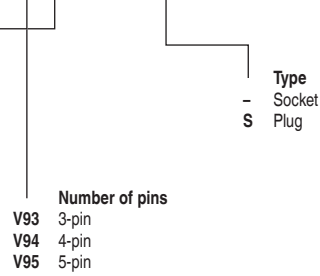
1/2" NPT-V93-G-.3M
1/2" NPT-V94-G-.3M
1/2" NPT-V95-G-.3M



1/2" NPT-V93-G-S-.3M
1/2" NPT-V94-G-S-.3M
1/2" NPT-V95-G-S-.3M

Order codes

1 / 2 " N P T - V . . - G - . - . 3 M

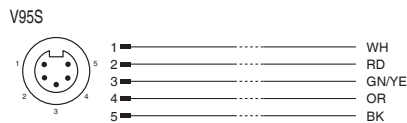
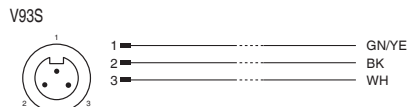
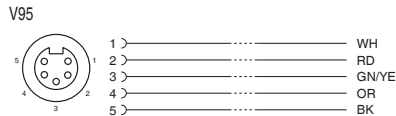
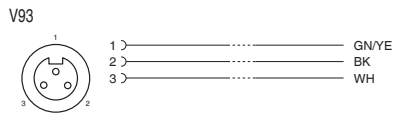


Availability

V93	V94	V95
◆	◆	◆
◆	◆	◆
-	-	-

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data	
Max. operating voltage	300 V AC/DC
Max. operating current	4 A
Ambient conditions	
Ambient temperature	-40 ... 105 °C (-40 ... 221 °F)
Mechanical data	
Degree of protection	IP67
Material	
Contacts	CuZn
Contact surface	Au
Housing	Al, anodized
Cable	
Core cross-section	0,34 mm ² (22 AWG)
Length L	300 mm

Properties

- M12 x 1 and 1/2" - 20 UNF receptacles
- Female and male versions
- Front panel mounting
- Thread 1/2" NPT mounting

Benefits

- Gold-plated contacts

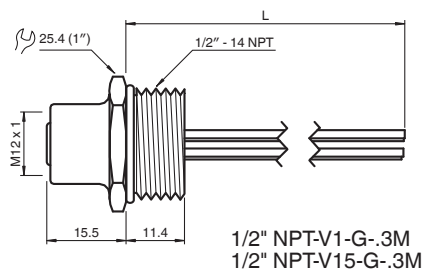
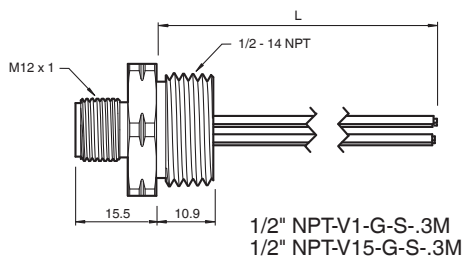
Order codes

Number of pins	4	1/2" NPT-V1-G-S-.3M	1/2" NPT-V15-G-S-.3M	1/2" NPT-V12-G-S-.3M	1/2" NPT-V1-G-S-S-.3M	1/2" NPT-V15-G-S-S-.3M	1/2" NPT-V12-G-S-S-.3M
	5						
	3						
Mechanical data							
Connection	M12 x 1 socket						
	M12 x 1 plug						
	1/2" - 20 UNF socket						
	1/2" - 20 UNF plug						

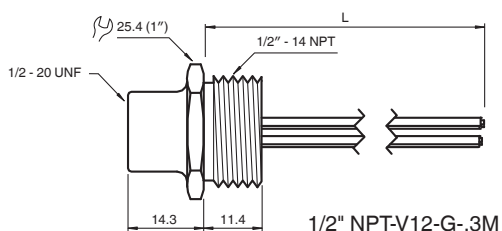
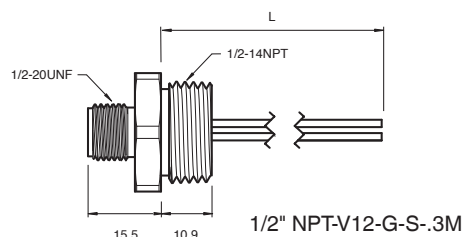
Note: Nuts not included

Dimensions

M12 x 1

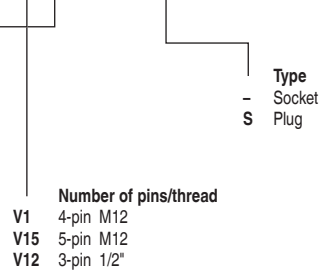


1/2" - 20 UNF



Order codes

1 / 2 " N P T - V . . - G - . - . 3 M

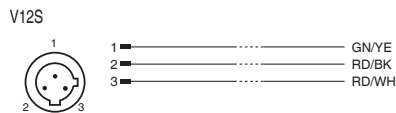
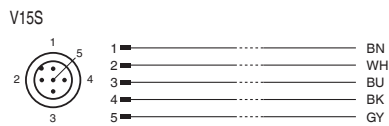
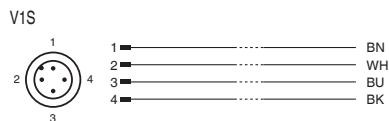
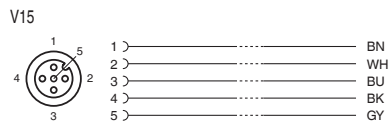
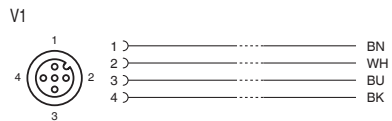


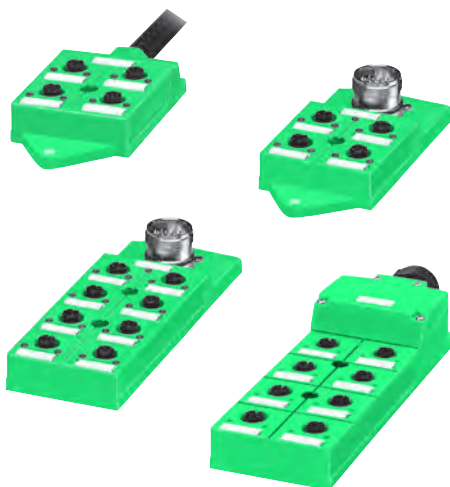
Availability

V1	V15	V12
◆	◆	◆
◆	◆	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Combination not available

Electrical connection





Properties

- M12 junction blocks
- 4, 6, and 8 port versions, single and dual PNP input
- Master cable, M23 connector and cage terminal versions

Benefits

- Flat design
- LED indication for module supply and I/O status

Technical data

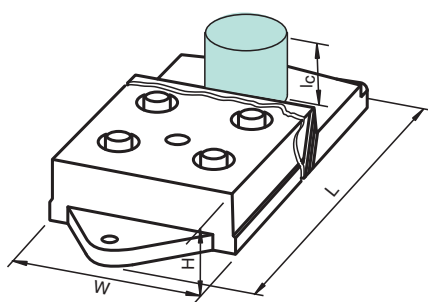
For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Number of pins	4, 5
Display/controls	
LED green	Supply voltage per module
LED yellow	I/O status indication
Electrical data	
Operating voltage	24 V DC, max. 30 V DC
Max. operating current	5 mA per channel status indicator
Max. current loading	2 A per channel, 4 A per port, 12 A total current per block
Ambient conditions	
Ambient temperature	-25 ... 75 °C
Mechanical data	
Sockets	M12 x 1
Degree of protection	IP65 / IP67
Material	
Contacts	CuSn
Contact surface	Ni/Au
Housing	PA, green

Order codes

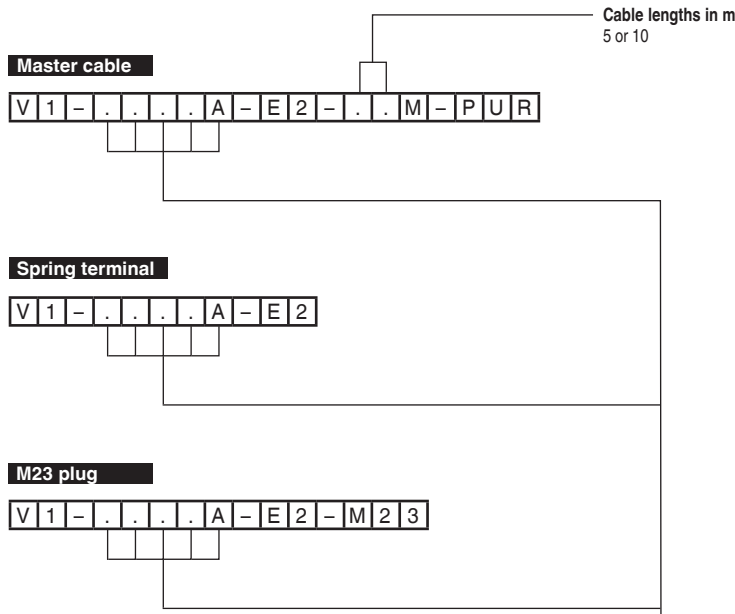
	V1-...A-E2-...M-PUR	V1-...A-E2	V1-...A-E2-M23
Connection			
Master cable	●		
Cage terminal		●	
M23 plug			●
Mechanical data			
Connection			
Cable: stranded wire	●		
Cage terminal		●	
M23 plug			●
Cable			
Material	●		
Leads	●		
Signal line: 0.34 mm ²			
Supply line: 0.75 mm ²	●		



Note: V1-4A-E2-M23 shown

Dimensions	Master cable						Spring terminal			M23 plug			
	Slots	4	6	8	4/8	6/12	8/16	4	6	8	4	6	8
Length L [mm]	82	100	126.5	116.5	128.5	155	116.5	128.5	155	116.5	128.5	155	
Width W [mm]	54	54	54	54	54	54	54	54	54	54	54	54	
Height H [mm]	18.5	18.5	18.5	18.5	18.5	18.5	32	32	32	18.5	18.5	18.5	
Connector height l _c [mm]	-	-	-	-	-	-	-	-	-	-	7.5	7.5	7.5

Order codes

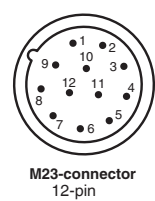
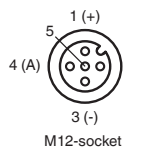


Ports/Signal inputs	Availability
4	4 ports/4 signal inputs
6	6 ports/6 signal inputs
8	8 ports/8 signal inputs
4/8	4 ports/8 signal inputs (dual inputs)
6/12	6 ports/12 signal inputs (dual inputs)
8/16	8 ports/16 signal inputs (dual inputs)

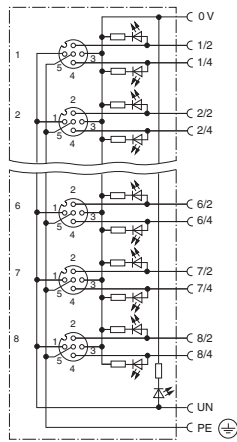
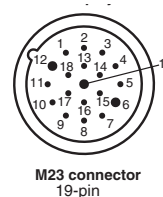
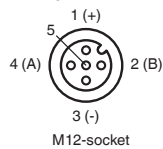
◆ Standard, available in stock
◇ Available, minimum order quantity applies in some cases
- Not available

Electrical connection

Single input:



Dual inputs:



Master cable

Slot/Signal input	color
1/4 (A)	WH
1/2 (B)	GY/PK
2/4 (A)	GN
2/2 (B)	RD/BU
3/4 (A)	YE
3/2 (B)	WH/GN
4/4 (A)	GY
4/2 (B)	BN/GN
5/4 (A)	PK
5/2 (B)	WH/YE
6/4 (A)	RD
6/2 (B)	YE/BN
7/4 (A)	BK
7/2 (B)	WH/GY
8/4 (A)	VT
8/2 (B)	GY/BN
1-8/1 (UN)	BN
1-8/3 (0V)	BU
1-8/5 (PE)	GN/YE

(B) with double layout ports

Spring terminal

Slot/Signal input	Terminal
1/4 (A)	1/4
1/2 (B)	1/2
2/4 (A)	2/4
2/2 (B)	2/2
3/4 (A)	3/4
3/2 (B)	3/2
4/4 (A)	4/4
4/2 (B)	4/2
5/4 (A)	5/4
5/2 (B)	5/2
6/4 (A)	6/4
6/2 (B)	6/2
7/4 (A)	7/4
7/2 (B)	7/2
8/4 (A)	8/4
8/2 (B)	8/2
1-8/1 (UN)	UN
1-8/3 (0V)	0V
1-8/5 (PE)	PE

(B) with double layout ports

M23 plug

Slot/Signal input	Pin 12-pin	Pin 19-pin
1/4 (A)	1	15
1/2 (B)		7
2/4 (A)	2	5
2/2 (B)		4
3/4 (A)	3	16
3/2 (B)		8
4/4 (A)	4	3
4/2 (B)		14
5/4 (A)	5	17
5/2 (B)		9
6/4 (A)	6	2
6/2 (B)		13
7/4 (A)	7	11
7/2 (B)		10
8/4 (A)	8	1
8/2 (B)		18
1-n/1 (UN)	11	19
1-n/3 (0V)	9+10	6
1-n/5 (PE)	12	12

12-pin with single layout ports, 19-pin with dual input ports

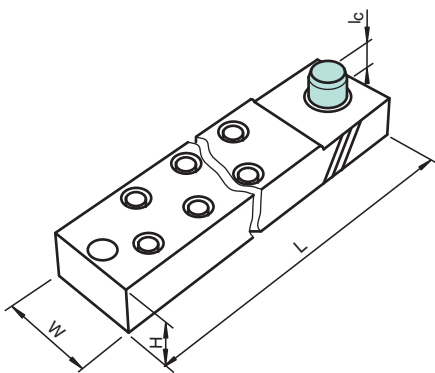


Properties

- M8 junction blocks
- 4, 6, and 8 port versions, single PNP input
- Master cable and M12 connector versions

Benefits

- LED indication for module supply and I/O status



Note: V3-6A-E2-V19 shown

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Number of pins	3
Display/controls	
LED green	Supply voltage per module
LED yellow	I/O status indication
Electrical data	
Operating voltage	24 V DC, max. 30 V DC
Max. operating current	5 mA per channel display element
Ambient conditions	
Ambient temperature	-30 ... 80 °C
Mechanical data	
Sockets	M8, 3-pin
Degree of protection	IP65 / IP67
Material	
Contacts	CuSn
Contact surface	Ni/Au
Housing	PBT

Order codes	V3-...A-E2-...M-PUR	V3-...A-E2-V19
Connection	Master cable M12 plug	
Electrical data		
Max. current loading	2 A per channel, 2 A per port, 4 A total current per block	
	2 A per channel, 2 A per port, 6 A total current per block	
Mechanical data		
Connection	Cable: stranded wire Plug M12 x 1, 8-pin	
Cable		
Material	PUR black	
Leads	Signal line: 0.34 mm ² Supply line: 0.75 mm ²	

Dimensions	Master cable			M12 plug		
	Slots	4	6	8	4	6
Length L [mm]		102	122	141	92.2	111.8
Width W [mm]		30	30	30	30	30
Height H [mm]		22	22	22	20	20
Connection height l _c [mm]		-	-	-	7	7

Order codes

Master cable

V 3 - . A - E 2 - . . M - P U R

Cable lengths in m
5 or 10

Slots/Signal inputs	Availability
4 4 ports/4 signal inputs	V3 ◆
6 6 ports/6 signal inputs	◆
8 8 ports/8 signal inputs	◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

M12 plug

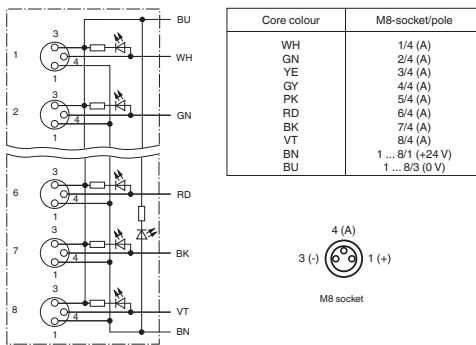
V 3 - . A - E 2 - V 1 9

Slots/Signal inputs	Availability
4 4 ports/4 signal inputs	V3 ◆
6 6 ports/6 signal inputs	◆

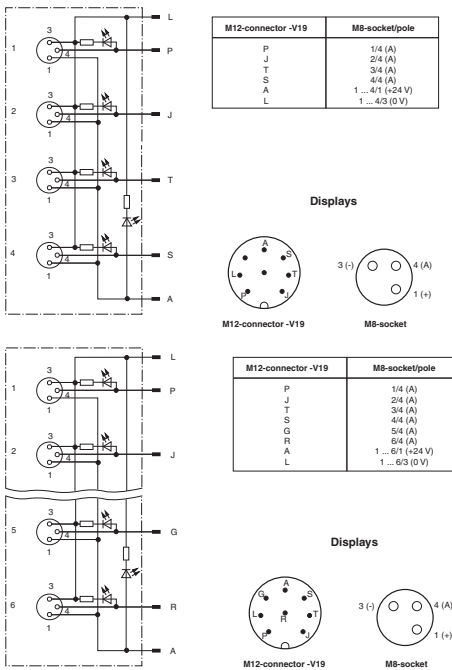
- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

Electrical connection

Master cable



M12 plug





Properties

- Parallel splitter
- M12, 4-pin and 5-pin versions

Benefits

- Immunity to vibration
- 5-pin: compatible with DeviceNet and CANopen

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Electrical data

Max. operating voltage 60 V AC/DC

Max. operating current 4 A

Ambient conditions

Ambient temperature -25 ... 85 °C

Mechanical data

Degree of protection IP67

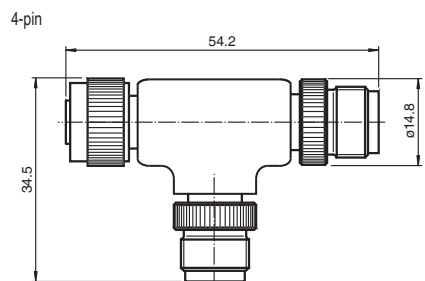
Order codes

Number of pins	4	●	●
	5		
Mechanical data	Connection	1 x M12 plug	
		1 x M12 plug / 1 x M12 socket	●
		1 x M12 socket	
		1 x M12 plug / 1 x M12 socket	●

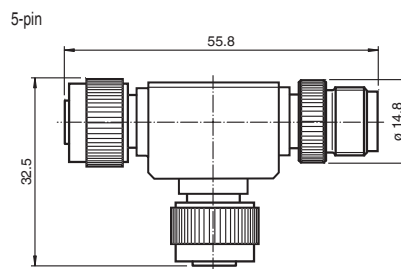
V1S-TEE-V...

V15S-TEE-V...

Dimensions

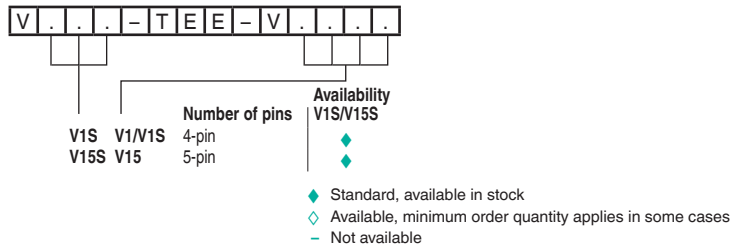


V1S-TEE-V1/V1S

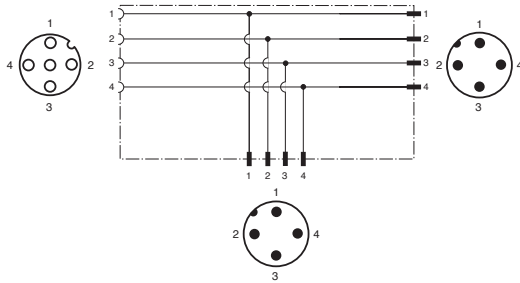


V15S-TEE-V15

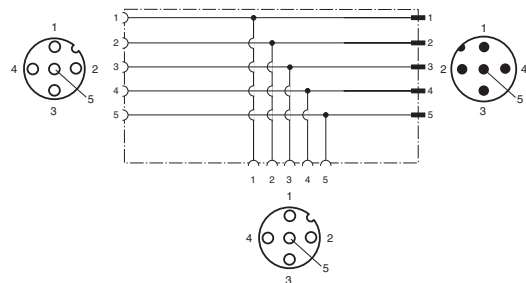
Order codes



Electrical connection



V1S-TEE-V1/V1S



V15S-TEE-V15



Properties

- Parallel splitter
- M12 to M12 and M8 to M8 versions
- 3-pin, 4-pin, and 5-pin versions

Benefits

- Efficiently combines two signals on to one slot
- Immunity to vibration

Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

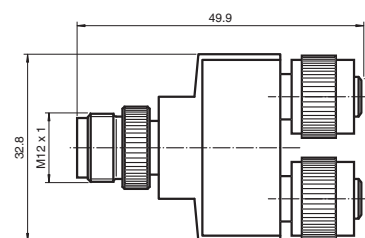
Ambient conditions	
Ambient temperature	-25 ... 90 °C
Mechanical data	
Degree of protection	IP65/IP67

Order codes

		V1S-TV1	V11S-TV11	V15S-TV15	V15S-YEE-V15	V31S-TV3	V3S-YEE-V3	V31S-YEE-V31
Connectionsize	M8							
	M12	●	●	●	●			
Number of pins	3		●			●		
	3 + PE	●						
	4 + PE			●				
	3 (parallel)						●	
	4 (parallel)							●
	5 (parallel)				●			●
Electrical data								
Max. operating voltage	30 V AC/DC					●	●	●
	60 V AC/DC	●	●	●	●			
Max. operating current	3 A					●	●	●
	4 A	●	●	●	●			
Mechanical data								
Connection	1 x M12 plug							
	1 x M12 socket / 1 x M12 socket	●	●	●				
	1 x M12 socket							
	1 x M12 plug / 1 x M12 socket				●			
	1 x M8 plug						●	●
	2 x M8 socket						●	●

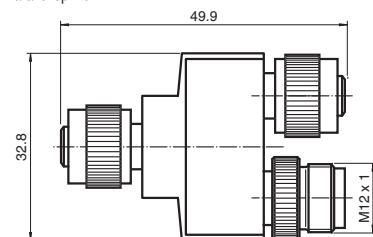
Dimensions

M12



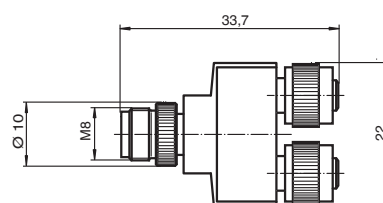
V1S-T-V1
V11S-T-V11
V15S-T-V15

Parallel splitter



V15S-YEE-V15

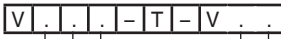
M8



V31S-T-V3
V31S-YEE-V31
V3S-YEE-V3

Order codes

M12



Number of pins
 V11S V11 3-pin
 V1S V1 3-pin + PE
 V15S V15 4-pin + PE (Pins 2+4 bridged)

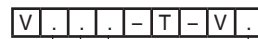
Availability
 ◆
 ◆



Number of pins
 V15S V15 5-pin

Availability
 ◆

M8



Number of pins
 V31S V3 3-pin

Availability
 ◆



Number of pins
 V3S V3 3-pin
 V31S V31 4-pin

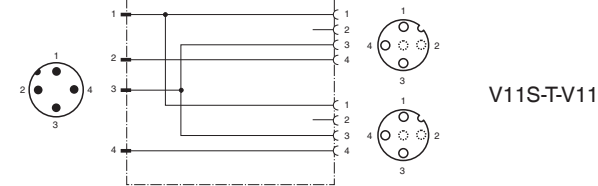
Availability
 ◆
 ◆

- ◆ Standard, available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

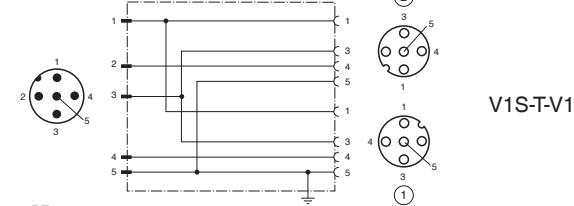
Electrical connection

M12

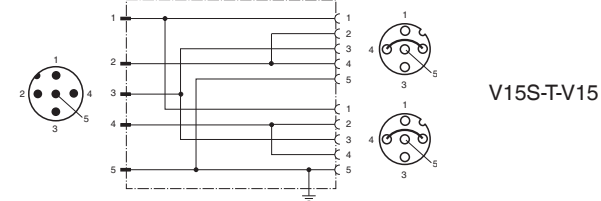
3-pin



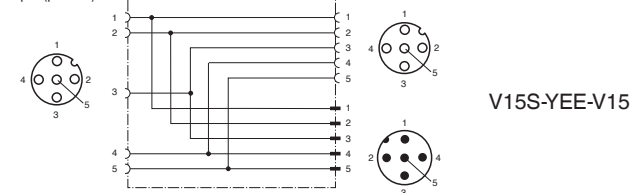
3 + PE



4 + PE

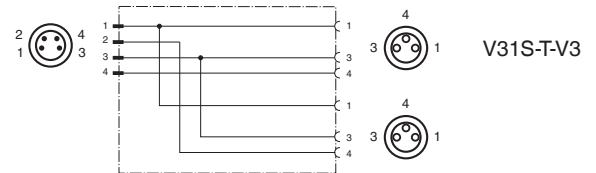


5-pin (parallel)

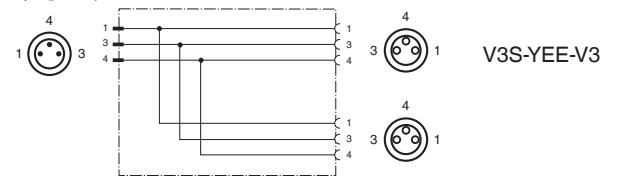


M8

3-pin



3-pin (parallel)



4-pin (parallel)



Refer to General Notes Relating to Product Information

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PEPPERL+FUCHS
 SENSING YOUR NEEDS



Properties

- Y-Splitter
- M12 and M12 to M8 versions
- 3-pin, 4-pin, and 5-pin versions

Benefits

- Efficiently combines two signals on to one M12 slot
- Immunity to vibration

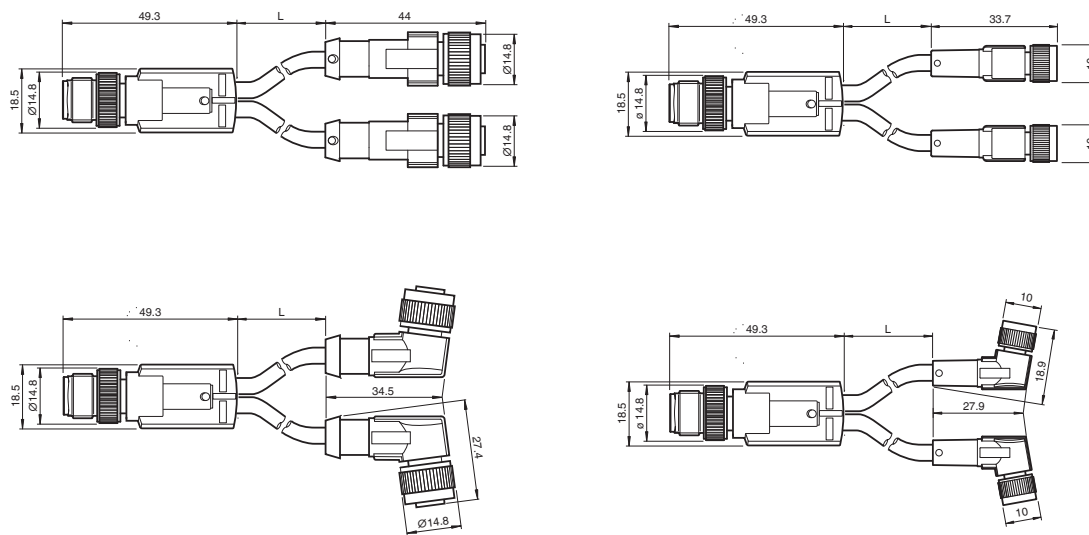
Technical data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

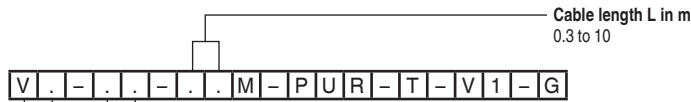
Ambient conditions	
Ambient temperature	-40 ... 80 °C fixed -5 ... 80 °C non-fixed
Mechanical data	
Degree of protection	IP67/IP68/IP69K

Order codes		V1-...-...M-PUR-T-V1-G	V3-...-...M-PUR-T-V1-G
Type	M12-M12 M12-M8	●	●
Number of pins	3 4 (2+4 bridged)	●	●
Electrical data			
Max. operating voltage	60 V AC/DC 250 V AC/DC	●	●
Max. operating current	3 A 4 A	●	●
Mechanical data			
Connection	1 x M12 plug 2 x M12 socket 1 x M12 plug 2 x M8 socket	●	●

Dimensions



Order codes

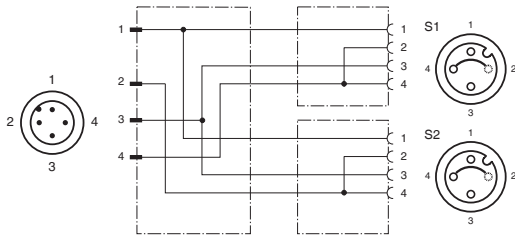


V1	Number of pins	Design	Availability	
			V1	V3
V1	M12, 4-pin (2+4 bridged)	G straight	◆	-
		W angled	◆	-
V3	M12-M8, 3-pin	GM straight	-	◆
		WM angled	-	◆

- ◆ Standard cable lengths of 0.3 m, 0.6 m, and 1 m available in stock
- ◇ Available, minimum order quantity applies in some cases
- Not available

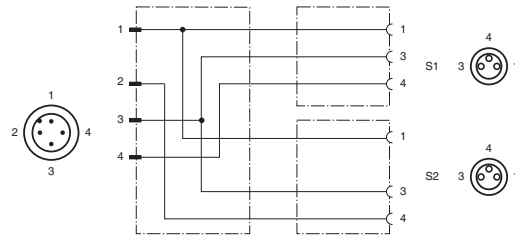
Electrical connection

M12



V1-G-XM-PUR-T-V1-G
V1-W-XM-PUR-T-V1-G

M12-M8



V3-GM-XM-PUR-T-V1-G
V3-WM-XM-PUR-T-V1-G

Ethernet

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us
**INDUSTRIAL
ETHERNET**

Double-ended Cordsets

Type	Order codes	Cable length available
Ethernet cable, M12-M12	V1SD-G-..M-PUR-ABG-V1SD-G	0.5 ... 60 m ¹⁾
Ethernet cable, M12-RJ45	V1SD-G-..M-PUR-ABG-V45-G, V1SD-G-..M-PUR-ABG-V45X G (crossed)	0.5 ... 60 m ¹⁾
Ethernet cable, RJ45-RJ45	V45-G-..M-V45-G	0.5 ... 30 m ¹⁾

¹⁾ = cable lengths of 2m, 5m and 10m available in stock

Field Connectors

Type	Order codes
RJ45 field connector - male	V45-G V45-GP (Push-Pull)
M12 x 1 field connector - male, D-coded	V1SD-G-ABG-PG9 V1SD-W-ABG-PG9

PROFIBUS

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us
**PROFI
BUS**

Double-ended Cordsets

Type	Order codes	Cable length available
PROFIBUS bus cable, M12-M12	V15B-G-..M-PUR-ABG-V15B-G	0.2 ... 40 m ¹⁾

¹⁾ = cable lengths of 2m, 5m and 10m available in stock

Field Connectors

Type	Order codes
M12 field connector - male/female, B-coded	V15B-G-ABG-PG9 V15SB-G-ABG-PG9 V15B-W-ABG-PG9 V15SB-W-ABG-PG9
Sub-D field connector - male, D-coded switchable terminal resistor	VAZ-PB-DB9-W

Splitter

Type	Order codes
Y-splitter cordset	ICZ-3T-0.2M-PUR ABG-V15B-G
Y-splitter	ICZ-3T-V15B

Terminal resistor

Type	Order codes	Cable length available
Terminal resistor	ICZ-TR-V15B	-
Terminal resistor cordset	ICZ-2T/TR-0.2M-PUR ABG-V15B-G	0.2 m

DeviceNet / CANopen

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Double-ended Cordsets

Type	Order codes	Cable length available
DeviceNet/CANopen bus cable, M12-M12	V15-G-...M-PUR-CAN-V15-G	0.2 ... 40 m ¹⁾

¹⁾ = cable lengths of 2m, 5m and 10m available in stock



Field Connectors

Type	Order codes
M12 field connector male/female, A-coded	V15-G-ABG-PG9 V15S-G-ABG-PG9 V15-W-ABG-PG9 V15S-W-ABG-PG9



Splitter

Type	Order codes
T-Splitter	V15S-T-CAN/DN-V15



Terminal resistor

Type	Order codes
Terminal resistor	ICZ-TR-CAN/DN-V15

DeviceNet™
CANopen

Mounting tools



For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

General Data

Length	Blade: 100 mm
Drive	4 mm hexagonal

Properties

- Tightening tool for round plug connectors with knurled coupling nuts
- Acoustic signal on reaching the preset torque

Order codes

		MH V1-SCREWDRIVER	MH V3-SCREWDRIVER
Preset torque	0.2 Nm		●
	0.4 Nm	●	
Weight	Approx. 93 g	●	
	Approx. 95 g		●
Matching nut	MH V1-BIT M12	●	
	MH V3-BIT M8		●

Threaded plug, threaded cap

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Order codes

		V1-B	V1S-B	V3-B	V3S-B
Thread					
Size	M8 x 1			●	●
	M12 x 1	●	●		
Type	Internal thread		●		●
	External thread	●		●	

i Suitable for M8 and M12 connectors and splitter boxes

Labels, label holder

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Order codes

		V1/V3-LABELHOLDER	V1/V3-LABEL	V1-BOX LABEL	V3-BOX LABEL
Color	Transparent	●			
	White		●	●	●
Cable diameter	4.0 - 6.0 mm	●			
Length	23 mm	●			
Material	TPE	●			
	PC		●	●	●
Suitable for	M8/M12 connectors	●	●		
	Splitter boxes M8				●
	Splitter boxes M12			●	

Lock nut

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



General Data

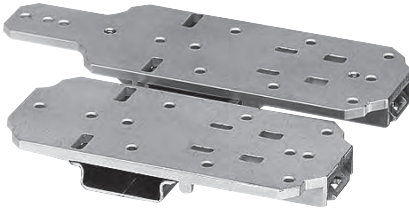
Material Brass, nickel-plated

Order codes

		LOCKNUT M8 NICKEL BRASS	LOCKNUT PG9 NICKEL BRASS	LOCKNUT M16 NICKEL BRASS
Thread	M8 x 0.5	●		
	PG9		●	
	M16 x 1.5			●
Width across the flats	10	●		
	18		●	
	19			●
Thickness	2.2 mm	●		
	2.8 mm		●	●

Mounting base - junction blocks on DIN Rail

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



General Data

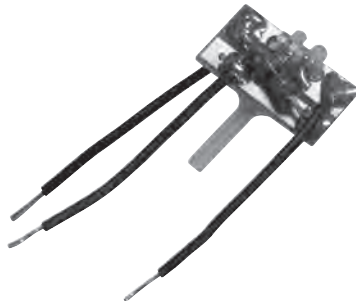
Material Die-cast zinc

Order codes

		MH 05-SACB-4	MH 05-SACB-8
Weight	approx. 130 g	●	
	approx. 150 g		●
Dimensions	107 x 52 x 3 mm	●	
	136 x 52 x 3 mm		●
Suitable for splitter boxes	V1-4A-...	●	
	V1-8A-...		●

PCB with LED - fits M12 connectors with screw terminal connection

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



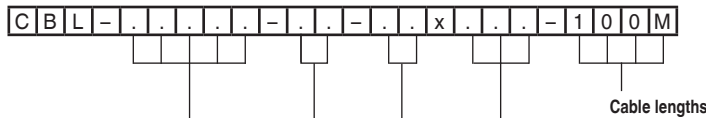
Order codes

	V1-E/E2-LED
LED green	Operating display
LED yellow	NO contact function display
Max. operating voltage	24 V DC ± 15%
Max. operating current	4 A

i Fits in M12 connectors with screw terminal connections



Order codes



Core cross-section

025	0.25 mm ²
034	0.34 mm ²
050	0.5 mm ²
075	0.75 mm ²

Number of leads

03	3
04	4
05	5
08	8

i All combinations of lengths, number of leads, and cable qualities available only on request

			Availability			
			Number of leads → Core cross-section			
			3	4	5	8
PVC	-	PVC, gray	0.25 mm ² / 0.34 mm ²	0.25 mm ² / 0.34 mm ²	0.34 mm ²	-
PVC-U	BK	PVC, UL-approved, black	0.34 mm ²	0.34 mm ²	-	-
PVC-U	YE	PVC, UL-approved, yellow	0.34 mm ²	0.34 mm ²	-	-
PUR	-	PUR, halogen-free, gray	0.25 mm ² / 0.34 mm ²	0.25 mm ² / 0.34 mm ²	0.34 mm ²	-
PUR-U	BK	PUR, halogen-free, UL-approved, black	0.34 mm ²	0.34 mm ²	-	0.25 mm ²
PUR-U	YE	PUR, halogen-free, UL-approved, yellow	-	0.34 mm ²	-	-
PUR-U/0.75	BK	PUR, halogen-free, UL-approved, black	-	-	0.75 mm ²	-
PUR H/S	-	PUR, halogen-free, irradiated, orange	-	0.34 mm ²	-	-
POC	OR	POC, welding bead resistant, orange	-	0.34 mm ²	-	-
Shielded cable quality						
PUR-ABG	-	PUR, halogen-free, shielded, gray	-	0.34 mm ²	0.34 mm ²	0.25 mm ²
PUR-U/ABG	BK	PUR, halogen-free, shielded, UL-approved, black	-	-	-	0.25 mm ²

Examples for order codes

CBL-PVC-GY-04x025-100M	PVC cable coil, 100 m, 4 x 0.25 mm ²
CBL-PVC-GY-04x034-100M	PVC cable coil, 100 m, 4 x 0.34 mm ²
CBL-PVC-U-BK-04x034-100M	PVC cable coil with UL, 100 m, 4 x 0.34 mm ²
CBL-PUR-GY-04x025-100M	PUR cable coil, 100 m, 4 x 0.25 mm ²
CBL-PUR-GY-04x034-100M	PUR cable coil, 100 m, 4 x 0.34 mm ²
CBL-PUR-U-BK-04x034-100M	PUR cable coil with UL, 100 m, 4 x 0.34 mm ²
CBL-PUR-OR-04x034-100M	PUR cable coil welding bead resistant, 100 m, 4 x 0.34 mm ²
CBL-PUR-ABG-GY-04x034-100M	PUR cable coil shielded, 100 m, 4 x 0.34 mm ²

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Technical Information

The user must follow the appropriate equipment instructions when using connectors. We reserve the right to alter designs for quality improvement, product enhancement and technology improvements. The technical information listed in the catalog is based on connectors that are not allowed to be connected or disconnected in energized condition.

The distance to conductive parts should not be minimized by stripping the insulation. Take care when soldering cables to ensure that no individual strands are loose or exposed, making possible the risk of short-circuits. Listed below are the key standards and regulations to which our products are produced and tested.

Product-Specific Standards

DIN IEC 61076-2-101 / DIN EC 61076-2-104

Connectors for electronic equipment

Part 2-101: Circular connectors – design specification for screw-locking M12 connectors for low-voltage applications

Part 2-104: Circular connectors – design specification for screw or snap-locking M8 connectors for low-voltage applications

These standards specify the design guidelines for M12 and M8 connectors. They also serve as the basis for the test specifications.

DIN EN 175301-803

Design specification:

Rectangular connectors – 0.8 mm-thick flat contacts, captive-locking screws

This standard specifies the design guidelines for valve connectors. It also serves as the basis for the test specification.

DIN EN 60664-1

Coordination of the insulation of electronic equipment in low-voltage systems – Part 1:

Principles, requirements and tests

This standard replaces DIN VDE 0110-1, which was valid until the end of the transitional period in May 2006. These standards define the air and creepage distances depending on area of application, material and degree of pollution.

DIN EN 61984

Connectors – Safety requirements and tests

This standard replaces DIN VDE 0627, which was valid until the end of the transitional period in October 2004.

In addition to the product-specific standards for connectors, this standard specifies further design requirements and calls for individual testing.

DIN EN 60512

Connectors for electronic equipment – Tests and measurements

This standard specifies the test requirements for connectors. The test program includes: climate/mechanical tests, test description of the mechanical characteristics of connectors such as max. current and insulation resistance.

DIN EN 60068

Environmental tests

In this series of tests the possible influences on the environment are defined. Among other things, this includes climatic influences such as dry heat, coldness, moist heat and temperature cycles as well as mechanical influences such as vibration and shock. With these tests, the influences from the location to be used are checked in the laboratory.

DIN EN 60529

Degree of protection due to housing (IP code)

In this standard the IP code is defined. The test setup and the test conditions necessary to comply with the IP coding are prescribed.

Calculating American Wire Gauge (AWG) in mm²

Certain branches of industry also use the American Wire Gauge (AWG) for lines and wires.

The table below demonstrates how to convert AWG to mm².

AWG	Cable Structure [mm]	Cable diameter [mm]	Conductor Cross-Section [mm ²]
30	1 x 0.25	0.25	0.05
	7 x 0.10	0.36	0.06
28	1 x 0.32	0.32	0.08
	7 x 0.13	0.38	0.09
26	1 x 0.4	0.40	0.13
	7 x 0.16	0.48	0.14
24	1 x 0.51	0.51	0.21
	17 x 0.20	0.61	0.22
	19 x 0.13	0.64	0.25
22	1 x 0.64	0.64	0.33
	7 x 0.25	0.76	0.34
	19 x 0.16	0.81	0.38
20	1 x 0.81	0.81	0.52
	7 x 0.32	0.97	0.56
	19 x 0.20	1.02	0.60
18	1 x 1.02	1.02	0.82
	19 x 0.25	1.27	0.93
16	19 x 0.29	1.44	1.25
14	19 x 0.36	1.80	1.93
12	19 x 0.46	2.29	3.16
10	37 x 0.40	3.10	4.65

Please note that cables with the same AWG number may have different cross-sections due to their differing structures.

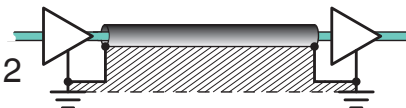
Cable Structure Data

VDE standard 0295 specifies that only the maximum single wire diameter and the corresponding highest-permissible electrical resistance have to be determined for each cable cross-section.

Cables Made of Uninsulated or Tin-Plated Copper Wires Number of Wires x Wire Diameter [mm] VDE 0295							
Conductor Cross-Section [mm ²]	Single wire Class 1	Stranded Class 2	Finely-Stranded* Class 5	Extra Finely-Stranded* Class 6			
0.10			14 x 0.10		26 x 0.07	50 x 0.05	
0.14			18 x 0.10		36 x 0.07	72 x 0.05	
0.25			14 x 0.15	32 x 0.10	65 x 0.07	128 x 0.05	
0.34		7 x 0.25	19 x 0.15	43 x 0.10	88 x 0.07	180 x 0.05	
0.50	1 x 0.80	7 x 0.30	16 x 0.20	28 x 0.15	63 x 0.10	129 x 0.07	258 x 0.05
0.75	1 x 1.00	7 x 0.37	24 x 0.20	42 x 0.15	95 x 0.10	196 x 0.07	384 x 0.05
1.00	1 x 1.13	7 x 0.43	32 x 0.20	56 x 0.15	127 x 0.10	258 x 0.07	512 x 0.05
1.50	1 x 1.38	7 x 0.52	30 x 0.25	84 x 0.15	191 x 0.10	385 x 0.07	768 x 0.05
2.50	1 x 1.78	7 x 0.67	50 x 0.25	140 x 0.15	320 x 0.10	651 x 0.07	1281 x 0.05
4.00	1 x 2.26	7 x 0.85	56 x 0.30	224 x 0.15	512 x 0.10	1036 x 0.07	
6.00	1 x 2.77	7 x 1.05	84 x 0.30	192 x 0.20	765 x 0.10	1561 x 0.07	
10.00	1 x 3.57	7 x 1.35	80 x 0.40	320 x 0.20	1275 x 0.10		

* The number of wires in finely and extra finely-stranded cable structures are preferred values.

Shield Connection



The type of shield connection is primarily decided by the nature of the expected interference.

To suppress electrical fields, the shield must be grounded (1) at one end.

However, interference caused by a magnetic alternating field can only be suppressed if the shield is connected at both ends (2).

A ground loop, including all its known disadvantages, is created when a shield is connected at both ends. The useful signal is particularly susceptible to noise on the reference voltage. Triaxial cables (4) combat this effect. The internal shield is connected at one end, whereas the external shield is connected at both ends.

Interference of this nature when a cable shield is connected at both ends is often reduced by also connecting one end of the shield to the reference potential via a capacitor (3). This breaks the ground loop, at least for direct currents and low-frequency currents.

Chemical resistance

The chemical resistance of the plastics, elastomers, and outer sheath are shown in the table below:

Outer Sheath	PVC	PUR	TPU	Polyamide	NBR	Fluorinated rubber (FPM)
10% acetic acid	◆	◆	◆◆	◇	◆◆	◆◆
10% potassium hydroxide	◆◆	◆◆				
ATE brake fluid	◆	-				
Cleaning agents			◆◆	◆◆	◆◆	
Citric acid		◆◆	◆◆	◆◆	◆◆	
Detergent			◆◆	◆◆	◆◆	
Diesel oil/heating oil	-	◆	◆◆	◆◆	◆◆	◆◆
Ethanol	-	◆	-	◇	◆◆	◆◆
Gasoline, normal		◆◆	◆◆	◆◆	◆◆	
Hydraulic oils		◆◆	◆◆			
Isopropanol	-	◇	◇	◇	◆◆	◆◆
Mineral oils		◆◆	◆◆	◆◆	◇	
Ozone	◆◆	◆◆				
Seawater		◆◆	◆◆	◆◆	◆◆	

◆◆ = resistant ◆ = largely resistant ◇ = offers limited resistance - = not resistant

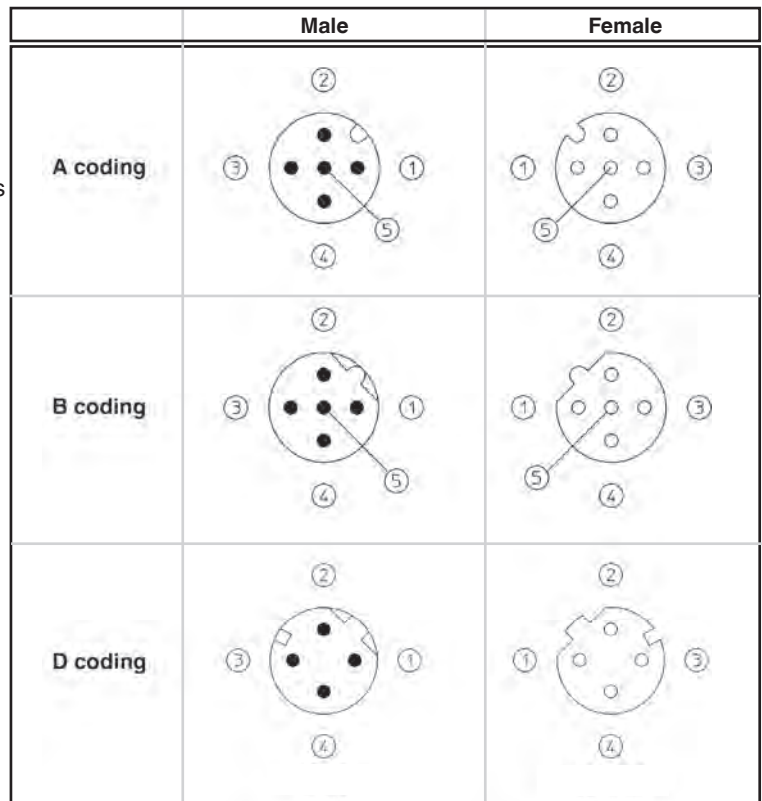
The research was carried out, unless otherwise indicated, at room temperature. Resistances may change when different mediums converge, hence we can assume no liability with regard to this information

Coding M12 Connectors

Coding M12 connectors with a pin or groove on the contact body prevents similar M12-style connectors from being mixed up and erroneously connected. Distinctions are made between "A" standard coding, "B" coding (reverse key) for fieldbus applications such as PROFIBUS, "C" coding (double key; also known as "U" coding) and "D" coding for Ethernet applications.

Other connector sizes include:

- M8
- 1/2" Micro AC
- 7/8" Mini AC



Testing Devices for Sensors

Our battery-operated sensor tester can be used to verify the functionality of a variety of sensors without an external power supply.

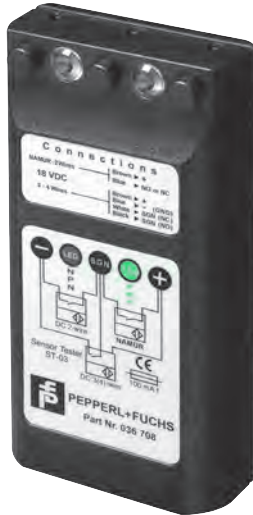
The testing device indicates the switching state of the sensor both visually and audibly.

This enables you to test sensors quickly and easily, even if the sensors are mounted in difficult-to-see locations. This allows the user to easily locate faults and replace the corresponding devices.

With the sensor tester, you can also adjust the sensor position before the electrical installation is fully completed.

Sensor tester

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	ST 03
Operating voltage	18 V, two 9 V block batteries included with delivery
Current loading	Output current max. 100 mA
Connection	Three terminals for 0 V, 18 V, and signal input

Properties

- Tests all 2-, 3- and 4-wire NPN and PNP sensors as well as NAMUR sensors
- Two LEDs (NPN/PNP) for displaying the switching state

Benefits

- Visual and audible signaling
- Battery-operated portable testing device, includes two 9 V block batteries
- Sensor adjustment prior to completion of the electrical installation
- Detection of wiring faults
- Test function control/battery test

Tools

Screwdriver



Model number	Screwdriver 0.5 mm x 3.0 mm
Length	Blade: Ø 3 mm x 80 mm
Weight	approx. 28 g

Properties

- Slot screwdriver
- Easy handle grip

Refer to General Notes Relating to Product Information

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PEPPERL+FUCHS
SENSING YOUR NEEDS

Mounting brackets for adjustable cylindrical sensors

These brackets enable direct mounting of cylindrical sensors and easy sensor adjustment using just two screws.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

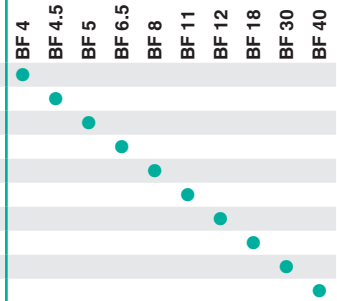


Common data

Ambient temperature	-25 °C ... 85 °C (-13 °F ... 185 °F)
Material	Mounting base: PBTB (green) Top: PC (transparent)

Model number

Diameter Ø	4 mm
	4.5 mm
	5 mm
	6.5 mm
	8 mm
	11 mm
	12 mm
	18 mm
	30 mm
	40 mm



Universal mounting brackets

The BF 5-30 universal mounting bracket includes inserts for use with 5, 8, 12, 18, and 30 mm diameter sensors. The sensors can be adjusted 360° in two axes.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number

Model number	BF 5-30
Ambient temperature	-25 °C ... 85 °C (-13 °F ... 185 °F)
Parts included	2 mounting heads (ø 18 mm, ø 30 mm) 4 adapter sockets (ø 5 mm, ø 8 mm, ø 12 mm, ø 14 mm)

i Also suitable for KT10, GLV12, VL18, 18GM60, CP18, and GLV30 series threaded photoelectric sensors.

Snap lever brackets

The snap lever bracket allows easy sensor replacement while maintaining the initial installation position. These brackets have a maximum adjustment range of 8 mm.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

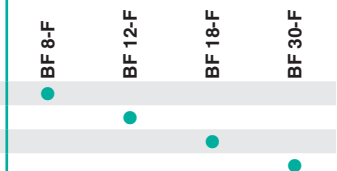


Common data

Ambient temperature	-25 °C ... 85 °C (-13 °F ... 185 °F)
Material	PC (Polycarbonat)

Model number

Diameter Ø	8 mm
	12 mm
	18 mm
	30 mm



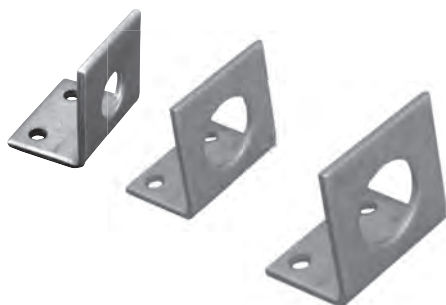
Mounting brackets for adjustable cylindrical sensors

Right angle brackets

Angle brackets are available in three diameter sizes and made of stainless steel. Sensors can be adjusted by using lock nuts supplied with sensor. Order by model number shown.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material: Stainless steel

Model number

Diameter Ø	12 mm	18 mm	30 mm
	AB-12	AB-18	AB-30
	●	●	●

Adjustable brackets

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material: Clamping cylinder: die-cast zinc
Mounting bracket: steel

Description: For mounting sensors to a 12 mm diameter steel rod, two-axes sensor adjustment.

Model number

Diameter Ø	12 mm	18 mm	30 mm
	MH01-12	MH01-18	MH01-30
	●	●	●

Adjustable brackets are available for cube sensors. See *Mounting brackets for limit switch sensors*, beginning on page 1072.

Note: Rod not included

Cushioned mounting brackets

Two sleeves made of anodized aluminum and nickel-plated jam nuts will thread on standard inductive proximity sensors (see ordering information table). The end cap is a fiberglass reinforced nylon material and is tapered at 30° to protect the sensor face from shearing. The mounts provide up to 10 mm of protection against overtravel of the target.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material: Sleeves: Anodized aluminum
Jam nuts: Nickel-plated metal
End cap: Fiberglass reinforced nylon

Model number

Diameter Ø	8 mm	12 mm	18 mm	30 mm
	CM-08	CM-12	CM-18	CM-30
	●	●	●	●

Mounting brackets for adjustable cylindrical sensors

Teflon sensor caps

These sensor caps repel weld slag and protect sensors from impact damage.



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Common data

Material PTFE

Model number

Diameter Ø	12 mm	18 mm	30 mm
	TC-12-U		
		TC-18-U	
			TC-30-U

Teflon sensor caps are available for cube sensors
See *Mounting brackets for limit switch sensors*, page 1073.

1/2" NPT conduit adapters

For 12 mm, 18 mm, 30 mm diameter and Pg 9 to 1/2" NPT conduit



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Common data

Material Stainless steel

Model number

Diameter Ø	12 mm diameter to 1/2" NPT conduit	18 mm diameter to 1/2" NPT conduit	30 mm diameter to 1/2" NPT conduit	Pg 9 to 1/2" NPT conduit
	M12 – 1/2" NPT			
		M18 – 1/2" NPT		
			M30 – 1/2" NPT	
				PG 9 – 1/2" NPT

Probe tip adapter

The probe tip adapter attaches to 8 mm or 12 mm shielded inductive sensor to create a probe-style limit switch. The adapter has a 50 mm spring-loaded stainless steel probe that activates the sensor when displaced. The probe tip adapter is ideal for in-die sensing or other space-critical applications.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material Stainless steel

Model number

Diameter Ø	8 mm	12 mm
	PTA-08-50	
		PTA-12-50

Mounting brackets for adjustable cylindrical sensors

Exchanger brackets

Exchanger brackets permit easy installation and removal of standard cylindrical shielded inductive sensors. Designed for situations where periodic sensor removal is required, the bracket's collet-style locknut secures the sensor in place, eliminating the need to readjust the sensor after reinstallation. The bracket also features a stop shoulder to maintain the sensing gap during sensor removal and installation.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material Nickel-plated brass

Model number

		EXG-08	EXG-12	EXG-18	EXG-30
Diameter Ø	8 mm	●			
	12 mm		●		
	18 mm			●	
	30 mm				●

End stop adapter

The end stop adapter turns a standard 8 mm diameter shielded inductive sensor into a durable mechanical stop switch. Using a hardened screw and spring-loaded piston, the adapter threads over the sensor. When the spring-loaded piston is depressed, an internal target moves and the sensor is triggered. These adapters are useful for applications where end-of-travel signals are required and are available in 25 mm and 50 mm lengths. Sensor activation point is dependent upon the insertion depth (0-1.5 mm). **Note:** Requires 9 oz. to activate.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material Heat-treated alloy steel

Model number

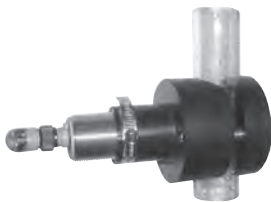
		ES-08-25	ES-08-50
Barrel length	25 mm	●	
	50 mm		●

Sight mount glass

The sight glass mount allows a 30 mm diameter capacitive sensor to be attached to a sight glass for level detection. The mount is made of plastic, includes stainless steel fasteners, and accommodates 24.4 mm to 44.5 mm diameter plastic or glass tubes. This mounting method allows easy sensor adjustment without disturbing the fluid inside the tank.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number

SG30

Material Mount: Plastic
Fasteners: Stainless steel

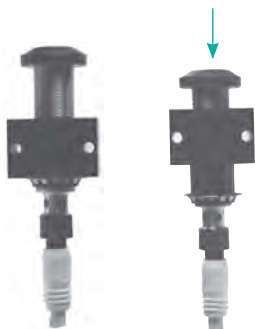
Mounting brackets for adjustable cylindrical sensors

Block cushion mount

The spring loaded block cushion mount provides surface-mountable protection against accidental target contact for standard shielded inductive sensors. This mount incorporates a block-shaped outer housing, an inner sleeve that secures the sensor, and a plastic protective cap for the sensor face.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Common data

Material Housing: Anodized steel
Protective cap: Plastic

Model number

Diameter Ø 8 mm
12 mm
18 mm

	BCM-08	BCM-12	BCM-18
8 mm	●		
12 mm		●	
18 mm			●

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number

OMH04

Material Nickel-plated sheet steel
Aluminum

Description For mounting M18 sensors to a 12 mm diameter steel rod, adjustable in all directions, can be clamped to sheet

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number

OMH-VL18

Material Sheet steel/stainless steel

Description Mounting bracket with swivel adjustment for mounting M18 sensors

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number

CPZ18B03

Material Plastic

Description Mounting bracket with swivel adjustment for mounting M18 sensors

Cable Protectors

Mount to the back of cylindrical sensors to prevent cable from bending too close to the sensor.
Hose connections are available for sensors with M8, M12, M18, and M30 thread.



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Common data

Material Housing: stainless steel 1.4305 / AISI 303 (V2A)
Seal: NBR

Model number

		SM8	SM12	SM18	SM30
For sensor diameter	8 mm	●			
	12 mm		●		
	18 mm			●	
	30 mm				●

Mounting brackets for limit switch sensors

Mounting bracket for limit switch, +U1, +U24, and +U4 style bases and cube style L2, L2M, and L3 and L3M style sensors, 360° rotation



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number

MH 04-2681F

Material Chrome-plated die-cast zinc

Description Mounting assemblies for all limit switch sensors. Bracket mounts to C-profile rail, in accordance with EN 50024 and DIN 43662.

Mounting bracket for limit switch and -M1K- sensors, 12 mm adjustment range



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number

MH 04-3742A

Material Aluminum

Description Enables sensor adjustment after mounting



Used to mount M1k style sensors.

Mounting bracket for limit switch and +U1 sensors, 30 mm adjustment range



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number

MH 04-2057B

Material Aluminum

Description Mounting assemblies with adjustable slide bracket

Mounting brackets for limit switch sensors

Mounting bracket for L style cube sensors, sensor can be mounted lengthwise or crosswise on the profile section, 60 mm adjustment range.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	MH 02-L
Material	Profile rail: aluminum Base: die-cast zinc
Description	Adjustable mounting assembly suitable for C-profile rails in accordance with EN 50024 and DIN 43662.

One-meter profile rail, sensors can be arranged and moved as needed.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



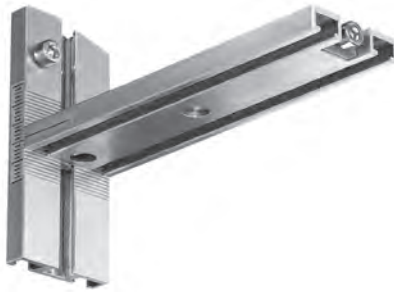
Model number	MH 03-U1/L
Material	Aluminum
Description	Adjustable mounting bracket , one meter length

i Installation kit MHZ 03-U1/L (screws and t-slides) required

Modular mounting bracket for limit switch and cube-style sensors. Easy adjustments in all three axes

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



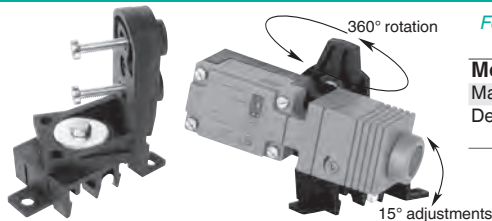
Model number	MHW 01
Material	Aluminum
Description	Modular mounting bracket for mounting sensors on DIN rails

i Standard dimensions:
height: 107 mm
arm: 155 mm

Rotating This mounting bracket is used to provide adjustment of the sensor after mounting. Can be surface mounted or mounted on 35 mm DIN rail.

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	OMH 4-4950
Material	Plastic
Description	Rotating mounting bracket

i Mounts to 35 mm DIN rail.

Mounting brackets for limit switch sensors

Mounting bracket for flat pack sensors enables flexible mounting.

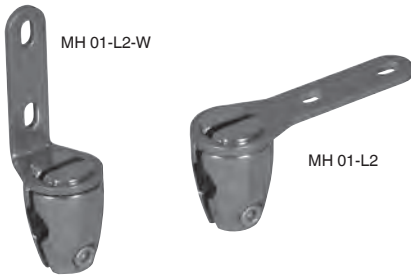


Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number	AB-FP
Material	Black powder-coated steel
Description	Mounting bracket for flat pack sensors

Adjustable mounting bracket for L2-style cube sensors enables simple and flexible mounting.



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Common data	
Material	Clamping cylinder: die-cast zinc Mounting bracket: steel
Description	For mounting L2 cube sensors to a 12 mm diameter steel rod

Model number

	Straight	MH 01-L2	MH 01-L2-W
	Angled	●	●

Note: Rod not included

Adjustable brackets are available for cylindrical sensors
See *Mounting brackets for adjustable cylindrical sensors*, page 1067

Benefits

- Adjustable bracket
- Mount L2-style cube sensors
- Simple and flexible mounting

Teflon cover protects cube-style sensors from impact damage. Repels weld slag.



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number	TC-Rhino
Material	PTFE
Description	Teflon sensor cap for cube-style sensors

Teflon sensor caps are available for cylindrical sensors
See *Mounting brackets for adjustable cylindrical sensors*, page 1068

Model number



AB-30-L3M-C
Mounting aid

Mechanical specifications

Material: Stainless steel, PTFE coated

Model number



M 12-1/2" NPT ALUM.
Conduit adapter

Mechanical specifications

Material: aluminum

Model number



M 18-1/2" NPT ALUM.
Conduit adapter

Mechanical specifications

Material: aluminum

Model number



OMH-ML3
Mounting bracket

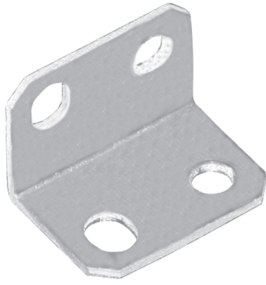
Mechanical specifications

Material: Aluminum
Mass: approx. 2 g

Suitable series

Series: ML3

Model number



OMH-ML3-1
Mounting bracket

Mechanical specifications

Material	Aluminum
Mass	approx. 2 g

Suitable series

Series	ML3
--------	-----

Model number



OMH-ML3-2
Mounting bracket

Mechanical specifications

Material	Aluminum
Mass	approx. 2 g

Suitable series

Series	ML3
--------	-----

Model number



Bracket SU
Mounting bracket for DIN rail

Mechanical specifications

Material	stainless steel 1.4301 / AISI 304
Mass	approx. 5 g

Suitable series

Series	SU18 ; SU18/35 ; SU19
--------	-----------------------

Model number



MH-R2-01
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	OB*-R2
--------	--------

Model number



MH-R2-02
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	OB*-R2
--------	--------

Model number



MH-R2-03
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	OB*-R2
--------	--------

Model number



MH-R2-04
Mounting bracket

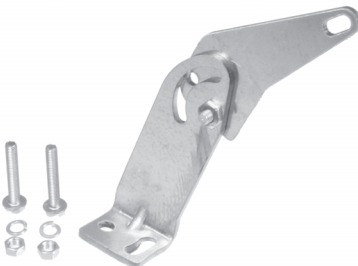
Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	OB*-R2
--------	--------

Model number



OMH-RL2-H
Mounting bracket

Mechanical specifications

Material	Metal sheet (steel), zinc-plated
Mounting	Mounting accessories included

Model number



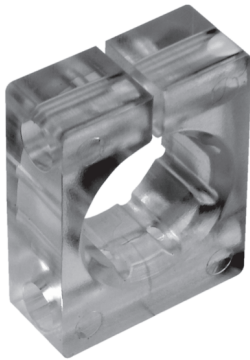
OMH-RL2-S

Protective Shroud Bracket with 360° Rotating Half-Clamp

Mechanical specifications

Material Stainless steel shroud, nickel-plated zinc half-clamp, zinc-plated steel screws and nuts

Model number



OMH-4.1

Mounting Clamp

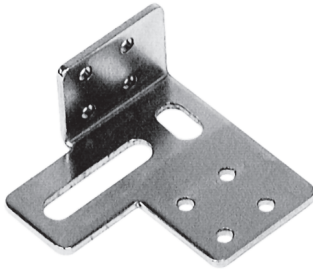
Mechanical specifications

Material plastic
 Mass approx. 2 g
 Dimensions 14 mm x 18 mm x 6 mm

Suitable series

Series ML4.1
 ML4.2
 ML6

Model number



OMH-ML6

Mounting bracket

Mechanical specifications

Material nickel-plated steel
 Mass approx. 10 g

Suitable series

Series ML6
 ML4.1
 ML4.2

Model number



OMH-ML6-U

Mounting bracket

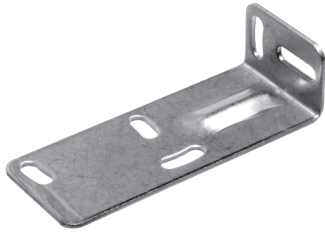
Mechanical specifications

Material nickel-plated steel

Suitable series

Series ML6
 ML4.1
 ML4.2

Model number



OMH-ML7-01
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	ML7 ML8
--------	------------

Model number



OMH-ML7-02
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 8 g
Mounting	Mounting accessories included

Suitable series

Series	ML71 ML8
--------	-------------

Model number



OMH-GL
Mounting bracket for glass fiber optics

Mechanical specifications

Material	aluminum
Mass	approx. 20 g

Suitable series

Series	Glass fiber optic
--------	-------------------

Model number



OMH-ML17
Mounting bracket

Mechanical specifications

Material	Stainless steel
----------	-----------------

Suitable series

Series	ML17
--------	------

Model number



OMH-ML17-1
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mounting	Mounting accessories included

Suitable series

Series	ML17
--------	------

Model number



OMH-ML17-EZ
Mounting bracket

Mechanical specifications

Material	ABS
----------	-----

Suitable series

Series	ML17
--------	------

Model number



OMH-40
Mounting bracket

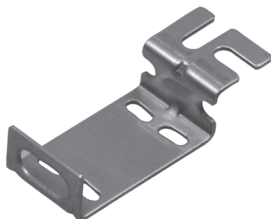
Mechanical specifications

Material	nickel-plated steel
Mass	approx. 30 g
Dimensions	136 mm x 52 mm x 3 mm
Mounting	Mounting accessories included

Suitable series

Series	MLV40
--------	-------

Model number



OMH-ML100-01
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 12 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
--------	-------

Model number



OMH-ML100-02
Mounting bracket

Mechanical specifications

Material	Stainless steel
Mass	approx. 23 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
--------	-------

Model number



OMH-ML100-03
Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm

Mechanical specifications

Material	Stainless steel
Mass	approx. 20 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
--------	-------

Model number



OMH-ML100-04
Mounting bracket

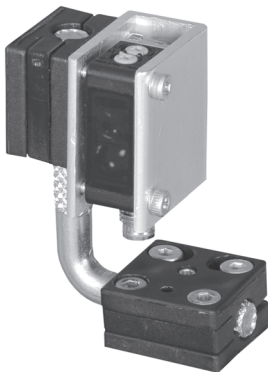
Mechanical specifications

Material	Stainless steel
Mass	approx. 10 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
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Model number



OMH-ML100-S1
Mounting bracket

Mechanical specifications

Material	Aluminum shroud, stainless steel L-pin, ABS mounting head and foot
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Model number



OMH-ML100-05
Mounting bracket

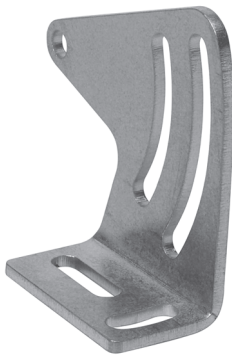
Mechanical specifications

Material	Stainless steel
Mass	approx. 12 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
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Model number



OMH-VDM18-01
Mounting accessory, distance measuring devices Series VDM18

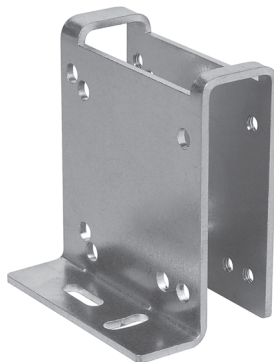
Mechanical specifications

Material	Stainless steel
Mass	approx. 24 g
Mounting	Mounting accessories included

Suitable series

Series	VDM18
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Model number



OMH-VDM18-02
Mounting accessory, distance measuring devices Series VDM18

Mechanical specifications

Material	Stainless steel
Mass	approx. 119 g
Mounting	Mounting accessories included

Suitable series

Series	VDM18
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Model number



OMH-05

Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm

Mechanical specifications

Material	Metal sheet (steel), zinc-plated aluminum
Mass	approx. 50 g

Suitable series

Series	RL23 RL28 RL29 RL30 RL32
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Model number



OMH-06

Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm

Mechanical specifications

Material	Metal sheet (steel), zinc-plated aluminum
Mass	approx. 50 g
Mounting	Mounting accessories included

Suitable series

Series	MLV12
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Model number



OMH-07

Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm

Mechanical specifications

Material	Metal sheet (steel), zinc-plated aluminum
Mass	approx. 120 g

Suitable series

Series	RL23 RL28 RL29 RL30 RL32
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Model number



OMH-08

Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm

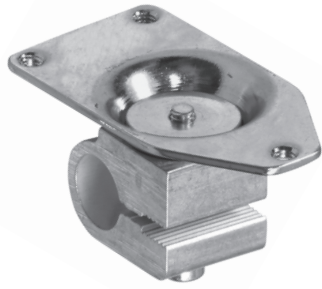
Mechanical specifications

Material	Metal sheet (steel), zinc-plated aluminum
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Suitable series

Series	ML7 ML71 ML8
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Model number



OMH-09

Mounting bracket for Sensors series MLV41 for M12 rod mounting

Mechanical specifications

Material	Metal sheet (steel), zinc-plated
Mass	approx. 20 g

Suitable series

Series	MLV41
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Model number



OMH-10

Mounting aid

Mechanical specifications

Material	Stainless steel
Mass	approx. 15 g
Mounting	Mounting accessories included

Suitable series

Series	ML100
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Model number



OMH-21

Mounting bracket

Mechanical specifications

Material	Powder coated steel
Mass	approx. 175 g
Mounting	Mounting accessories included

Suitable series

Series	RL23 RL28 RL29
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Model number



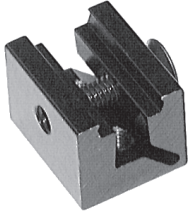
OMH-21-T

High-Profile Right-Angled Mounting Bracket

Mechanical specifications

Material	Stainless steel 1.4305 / AISI 303
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Model number



OMH-K01
dove tail mounting clamp

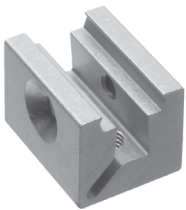
Mechanical specifications

Material	anodized aluminium
Mass	approx. 10 g

Suitable series

Series	MLV12
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Model number



OMH-MLV11-K
dove tail mounting clamp

Mechanical specifications

Material	aluminum
Mass	approx. 8 g

Suitable series

Series	MLV11 MLV12 RL28 RL29
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Model number



OMH-MLV12-HWG
Mounting bracket for series MLV12 sensors

Mechanical specifications

Material	nickel-plated steel
Mass	approx. 15 g

Suitable series

Series	MLV12
--------	-------

Model number



OMH-MLV12-HWK
Mounting bracket for series MLV12 sensors

Mechanical specifications

Material	nickel-plated steel
Mass	approx. 10 g

Suitable series

Series	MLV12
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Model number



OMH-RL28-C

Weld slag cover model

Mechanical specifications

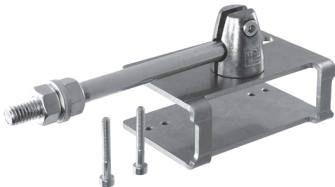
Material

Housing	Metal sheet (steel), black-coated
Optical face	glass

Suitable series

Series	RL28 RL29
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Model number



OMH-RL29-06

Mounting bracket

Mechanical specifications

Material	Stainless steel
Mounting	Mounting accessories included

Suitable series

Series	Series 28/29
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Model number



OMH-RLK29-HW

Mounting bracket for rear wall mounting

Mechanical specifications

Material	Stainless steel
Mass	approx. 150 g
Dimensions	136 mm x 52 mm x 3 mm

Suitable series

Series	RL23 RL28 RL29 RL32
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Model number



OMH-RL31-01

Mounting bracket

Mechanical specifications

Material	Metal sheet (steel), zinc-plated
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Suitable series

Series	Series 31
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Model number



OMH-RL31-03
Mounting bracket narrow

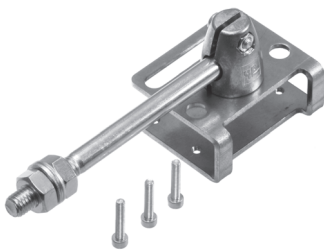
Mechanical specifications

Material Metal sheet (steel), zinc-plated

Suitable series

Series Series 31

Model number



OMH-RL31-06
Stainless steel mounting bracket with adjustable half clamp on the side

Mechanical specifications

Material Stainless steel

Mass approx. 303 g

Mounting Mounting accessories included

Suitable series

Series Series 31

Model number



OMH-RL36
Mounting bracket

Mechanical specifications

Material Metal sheet (steel), zinc-plated

Mass approx. 95 g

Mounting Mounting accessories included

Suitable series

Series RL36
EDM3,5
EDM5
EDM20

Model number



OMH-RL39
Mounting bracket for RL39 series Sensors

Mechanical specifications

Material Metal sheet (steel), zinc-plated

Mass approx. 85 g

Mounting Mounting accessories included

Suitable series

Series RL39

Model number



OMH-DAD10
Mounting bracket

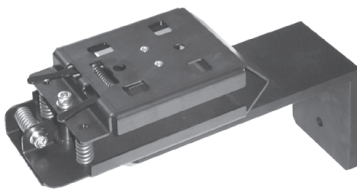
Mechanical specifications

Material	aluminum
Mass	approx. 50 g

Suitable series

Series	DAD10 DAD15
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Model number



OMH-LS610-01
Mounting bracket for optical data coupler

Mechanical specifications

Material	black coated aluminum zinc-plated black steel
Mass	approx. 1500 g

Suitable series

Series	LS610 LS611 VDM100
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Model number



OMH-LS610-02
Direct mounting set consisting of 4 x M4 threaded inserts

Mechanical specifications

Material	brass
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Suitable series

Series	LS610 LS611 VDM100
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Model number



OMH-LS610-03
Mounting bracket with deviation mirror for optical data coupler

Mechanical specifications

Material	Stainless steel
Mass	approx. 1580 g

Suitable series

Series	LS610 LS611
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Model number



OMH-LS230-DA

Mounting bracket for optical data coupler

Mechanical specifications

Material	black coated aluminum zinc-plated black steel
Mass	approx. 500 g

Suitable series

Series	LS230
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Model number



OMH-SBL-01

Mounting bracket for sensors of SBL series

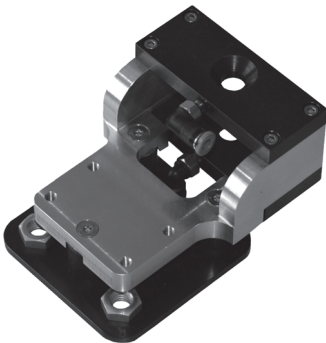
Mechanical specifications

Material	Metal sheet (steel), zinc-plated
Mass	approx. 70 g

Suitable series

Series	SBL
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Model number



OMH-WTS10-01

Mounting bracket for sensors of WTS10 series

Mechanical specifications

Material	Aluminium / steel
Mass	523 g

Suitable series

Series	WTS10
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Model number



OMH-DK50

Right-Angled Mounting Bracket

Mechanical specifications

Material	Stainless steel 1.4305 / AISI 303
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Model number



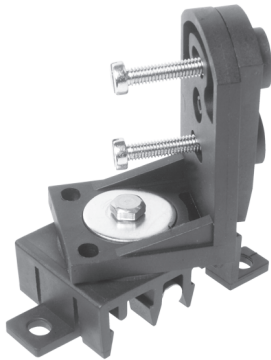
OMH-LGS-01

Attachment aid for light grid series LGS/LGM

Mechanical specifications

Material	Stainless steel
Mass	approx. 12 g
Mounting	Mounting accessories included

Model number



OMH 4-4950

Retainer

Mechanical specifications

Material	plastic
Mass	approx. 50 g
Mounting	Mounting accessories included

Suitable series

Series	Mini cube style
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Model number

**KFA6-SR-2.3L.FA**

Switch Amplifier

Features

- 2-channel
- 230 V AC supply
- 3-wire PNP/NPN sensor or push-pull input
- Relay contact output
- DIP switch selectable functions
- Minimum/maximum control
- Up to SIL2 acc. to IEC 61508

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number

**KFD2-SR2-2.W.SM**

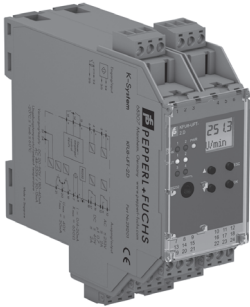
Standstill and Rotational Direction Monitor

Features

- 2-channel signal conditioner
- 24 V DC supply
- PNP/push-pull, dry contacts or NAMUR inputs
- Selectable frequency trip values
- 2 relay contact outputs
- Start-up override
- Selectable mode of operation
- Up to SIL2 acc. to IEC 61508

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Model number

**KFU8-UFT-2.D.FA**

Frequency Converter with Direction and Synchronization Monitor

Features

- 2-channel signal conditioner
- Universal usage at different power supplies
- Dry contact or NAMUR inputs
- Input frequency 1 mHz ... 1 kHz
- Current output 0/4 mA ... 20 mA
- Relay and transistor output
- Start-up override
- Configurable by **PACTware™** or keypad
- Line fault detection (LFD)

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us

Noncontact Energy and Data Transfer

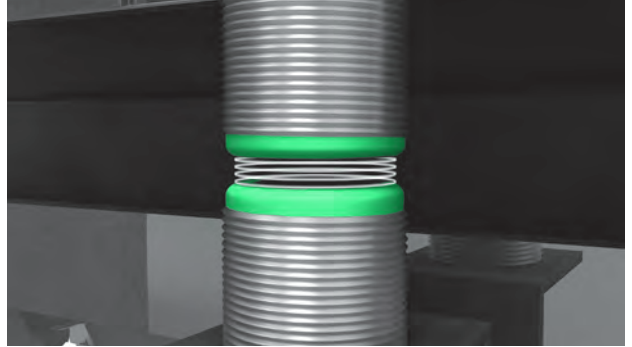
Wired connection of sensors on moving machine parts is a challenge in automation machinery. Because of their mechanical nature, conventional solutions with drag chains or slip rings have the disadvantage of a considerable reduction in service life, causing regular maintenance and replacement costs. The wireless inductive system (WIS) from Pepperl+Fuchs eliminates the disadvantages associated with these mechanical connection systems.

Greater freedom in plant design

The system consists of four components and enables noncontact power and simultaneous communication with sensors on moving machine parts. Up to 1.5 W can be transferred with a maximum operating distance of 5 mm (NDP5-30GM-5M) and of 20 mm (NDP20-FP-V1). Inductive, capacitive, photoelectric, or ultrasonic sensors can be powered across an air gap and their signal states evaluated.

WIS offers a wear-free solution for the operation of up to eight sensors

- Interchangeable tools for rotary tables and presses
- Object detection on workpiece carriers
- Component manufacture
- Robotic gripper arms



Primary side components

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	NDP-KE2-8E2	NDP-KE2-8E2-FP
Operating voltage	24 VDC ± 10%	
Current consumption	Max. 1000 mA	
Number of signal channels	8	
Signal transfer direction	From the secondary side to the primary side	
For transmitter	NDP5-30GM-5M	NDP20-FP-V1

NOTE: Selection of NDP module must match selection of the NDP primary side transmitter module.

Properties

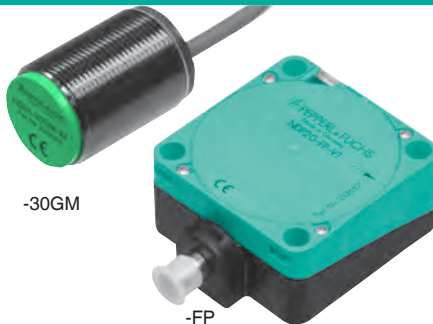
- 8 channels
- 9 outputs
- LED display of output states and communication

Benefits

- Deactivation option
- DIN mount housing
- 1 connectable transmitter head

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	NDP5-30GM-5M	NDP20-FP-V1
Transfer distance	0 mm to 5 mm	0 mm to 20 mm
Housing design	M30	FP
Installation	Non-flush	Non-flush
Connection	5 m cable	M12 x 1 plug
Degree of protection	IP67	IP67

Properties

- Transfer range up to 20 mm

Benefits

- Compact housing design

Refer to General Notes Relating to Product Information

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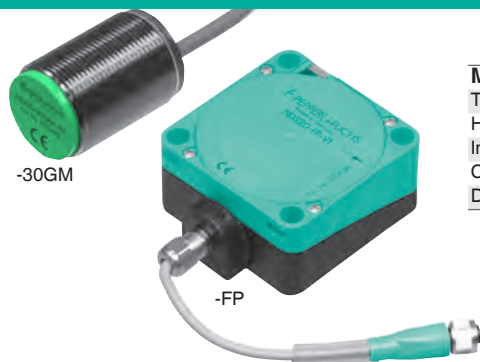
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SENSING YOUR NEEDS

Secondary side components

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	NDS5-30GM-1M-V1	NDS20-FP-V1
Transfer distance	0 mm to 5 mm	0 mm to 20 mm
Housing design	M30	FP
Installation	Non-flush	Non-flush
Connection	Cable 1 m with 1 x M12 plug, 4-pin	Cable with M12 x 1 plug
Degree of protection	IP67	IP67

Properties

- Transfer range up to 20 mm

Benefits

- Connection via M12 x 1 plug

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.us



Model number	NDS-F146-8E2-V1
Sensor supply voltage	12 VDC \pm 10%, overload and short-circuit proof
Transferred power	max. 2.5 W (1.5 W with 5 mm)
Number of signal channels	8
Signal transfer direction	From the secondary side to the primary side

Example system components

30GM Style

- NDP-KE2-8E2
- NDP5-30GM-5M
- NDS5-30GM-1M-V1
- NDS-F146-8E2-V1

Flat Pack Style

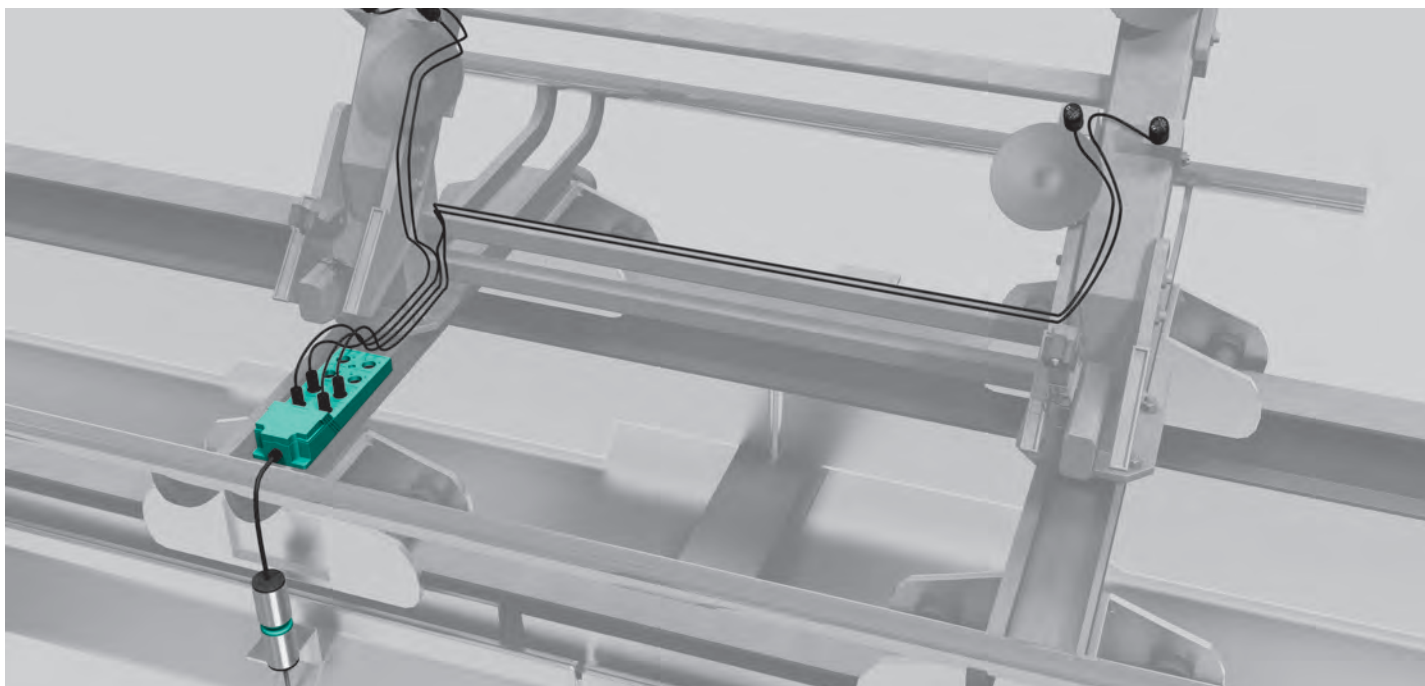
- NDP-KE2-8E2-FP
- NDP20-FP-V1
- NDS20-FP-V1
- NDS-F146-8E2-V1

Properties

- 8 channels
- 8 sensor inputs

Benefits

- Fast, flexible installation/separation



Refer to General Notes Relating to Product Information

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