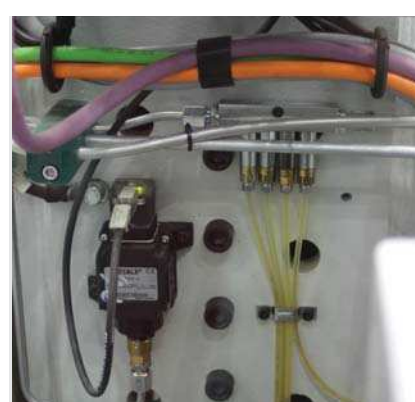


## Sockets

# Electric Plug and Socket Connectors

For pressure switches, level switches, flow sensors, directional control valves and filters



# Electric Plug and Socket Connectors

Electric plugs or sockets are required for the actuation of various models of hydraulic equipment used in the field of central lubrication technology and for the evaluation of switching signals.

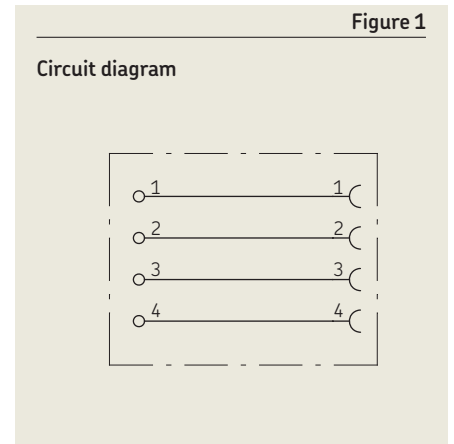
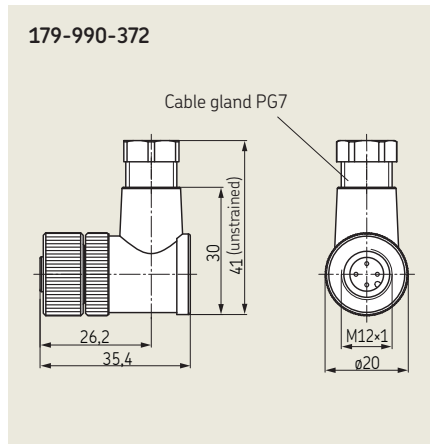
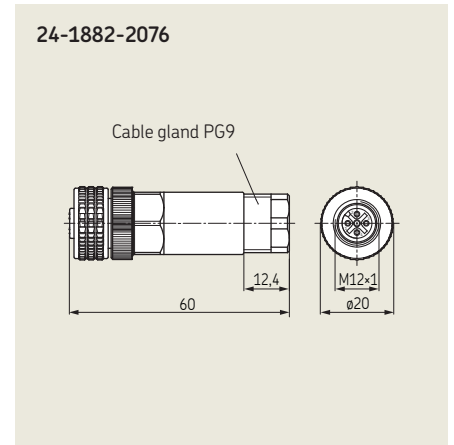
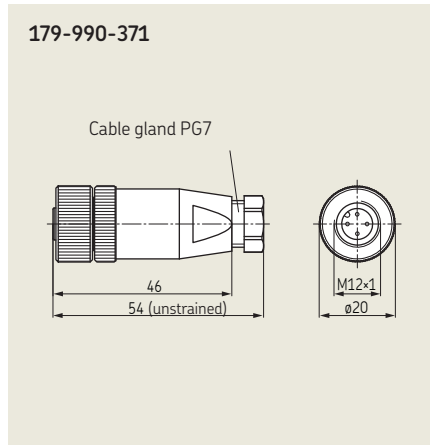
## Product overview

Overview coupler sockets		Application										Page
Order No.	Standard design / type	Pressure switch	Flow sensor	Filter monitor	Lubricant level switch	Piston distributor	Oil-streak sensor	Flow monitor	Directional control valve	Cycle switch	Pumps (KFG)	
179-990-371 straight 179-990-372 angled	DIN EN61076-2-101 4-pole, M12x1	•	•	•	•	•	•	•		•		3
24-1882-2076 straight	DIN EN60947-5-2 DIN EN61076-2-101 5-pole, M12x1								•			3
179-990-381 straight 179-990-382 angled	DIN EN61076-2-101 3-pole, M12x1 (with integrally extruded line)	•	•	•	•	•	•	•		•		4
179-990-600 straight 179-990-601 angled 179-990-603 straight	IEC60228, DIN13802, DIN IEC60757, IEC60332-2 4-pole, M12x1 (with integrally extruded line)	•	•	•	•	•	•	•		•		5
179-990-033 179-990-147 179-990-657	DIN EN 175301-803- A/ ISO 4400	•	•	•	•					•		6
179-990-110+410 179-990-111+924	DIN EN 175301-803 -A/ ISO 4400							•				7
179-990-416	DIN EN 175301-803 -A/ ISO 4400 (with integrally extruded line)								•			8

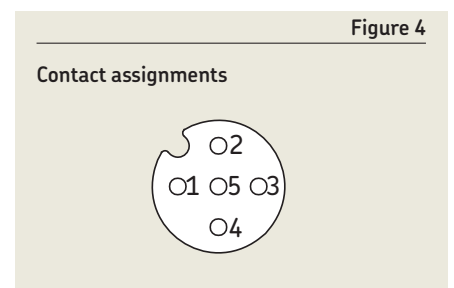
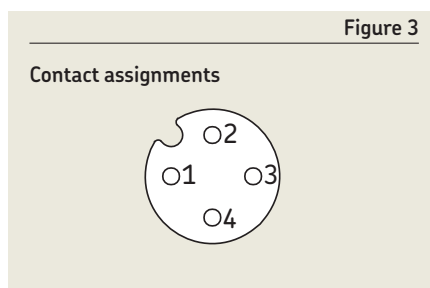
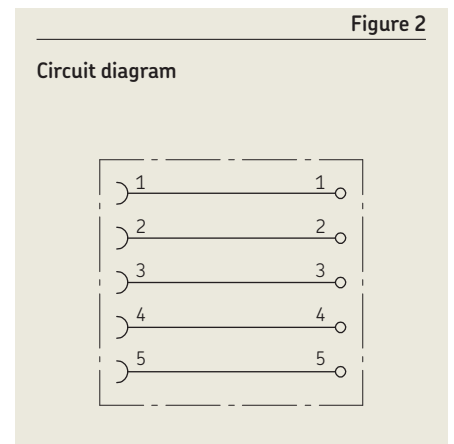
Overview circular connectors and device adapters		Application										Page
Order No.	Standard design / type	Pressure switch	Flow sensor	Filter monitor	Lubricant level switch	Piston distributor	Oil-streak sensor	Flow monitor	Directional control valve	Cycle switch	Pumps (KFG)	
179-990-663 straight 179-990-765 angled	DIN EN61076-2-101 4-pole, M12x1										•	9
179-990-458 179-990-461 179-990-776	DIN EN 175301-803 A/M12x1								•			10

# Circular plug M12×1 acc. to DIN EN61076-2-101

## Socket contacts

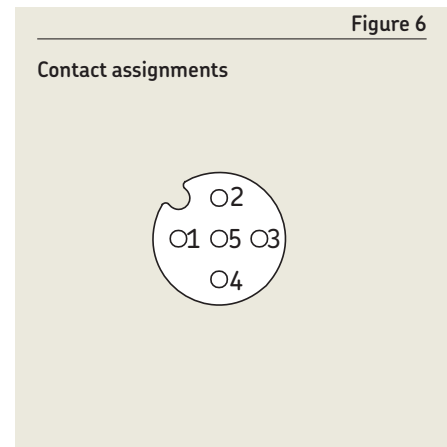
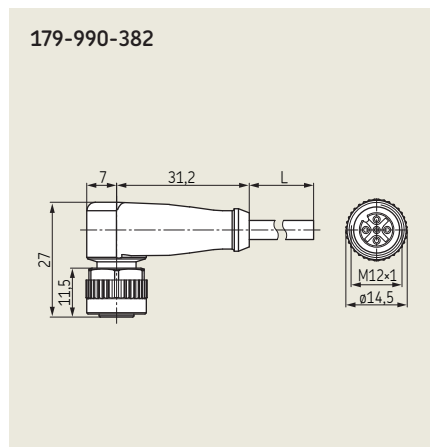
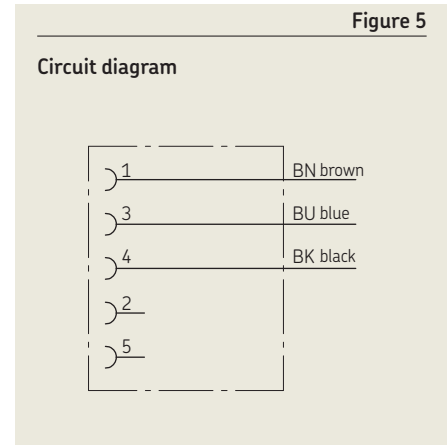
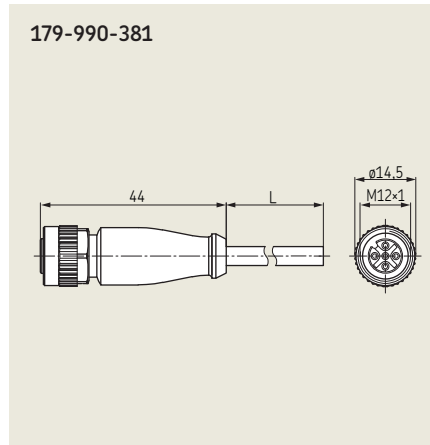


Technical data	179-990-371 / 179-990-372	24-1882-2076
Order No.	179-990-371 / 179-990-372	24-1882-2076
Pole	4	5
Conductor cross section max.	4x 0.75 mm <sup>2</sup>	5x 0.75 mm <sup>2</sup>
Line diameter	4 to 6 mm	6 to 8 mm
Max. rated operating voltage	250 V AC/DC	60 V AC/DC
Max. operating current	4 A	4 A
Housing material	PA, black	PA, black
Type of terminal	Screw terminal	Screw terminal
IP enclosure	IP 68 (installed)	IP 67 (installed)
Temperature range	-25 to +85 °C	-25 to +90 °C
Approval	UL	-
Color coding	→ Figure 1	→ Figure 2
Contact assignments	→ Figure 3	→ Figure 4



# Circular plug M12×1 acc. to DIN EN61076-2-101

with integrally extruded line, socket contacts

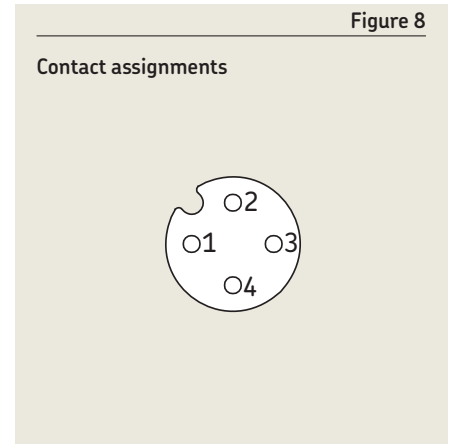
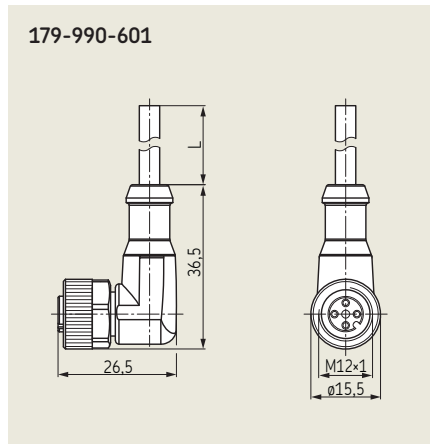
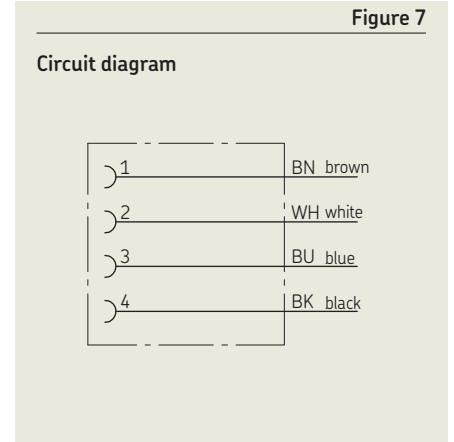
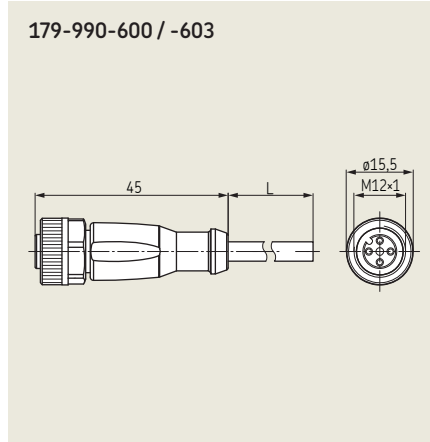


**Technical data**

<b>Order No.</b>	<b>179-990-381 / 179-990-382</b>
Pole	3
Conductor cross section max.	3x 0.34 mm <sup>2</sup>
Line diameter /length	4.5 mm / 5 m
Max. rated operating voltage	250 V AC/DC
Max. operating current	4 A
Housing material	PUR, black
IP enclosure DIN60529	IP 68 (installed)
Temperature range	-50 to +90 °C
Approval	UL
Color coding	→ Figure 5
Contact assignments	→ Figure 6

# Circular plug M12×1 acc. to IEC60228,

DIN13802, DIN IEC60757, IEC60332-2; with integrally extruded line, socket contacts



## Technical data

Order No.	179-990-600	179-990-603	179-990-601
Pole	4	4	4
Conductor cross section max.	4x 0.34 mm <sup>2</sup>	4x 0.34 mm <sup>2</sup>	4x 0.34 mm <sup>2</sup>
Line diameter / length	4.9 mm / 5 m	4.9 mm / 10 m	4.9 mm / 5 m
Max. rated operating voltage	250 V AC/300 V DC	250 V AC/300 V DC	250 V AC/300 V DC
Max. operating current	4 A	4 A	4 A
Housing material	TPU, orange	TPU, orange	TPU, orange
Line material	PUR, black	PUR, black	PUR, black
IP enclosure DIN60529	IP 68 (installed)	IP 68 (installed)	IP 68 (installed)
Temperature range	-25 to +90 °C	-25 to +90 °C	-25 to +90 °C
Approval	UL	UL	UL
Color coding	→ Figure 7	→ Figure 7	→ Figure 7
Contact assignments	→ Figure 8	→ Figure 8	→ Figure 8

# Rectangular connectors acc. to DIN EN175301-803-A

Form A, socket contacts, supplied with flat packing and fixing screw

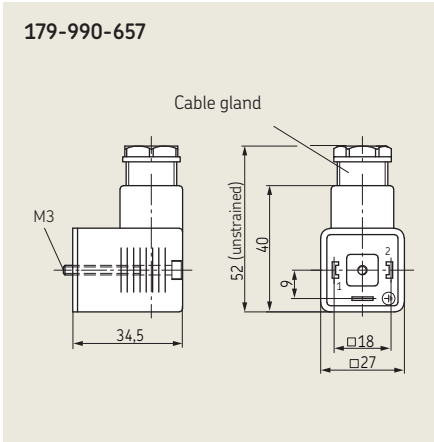
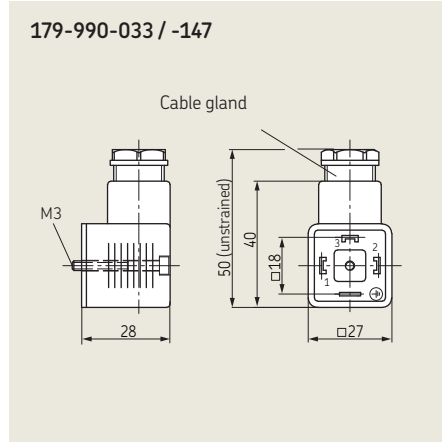


Figure 9

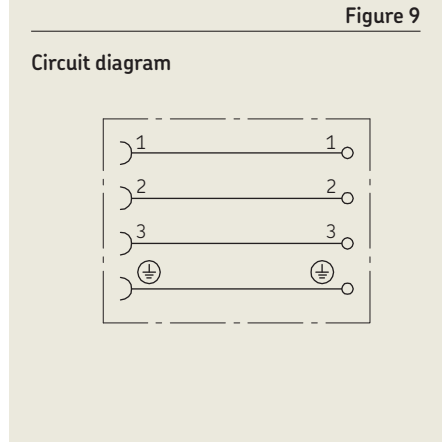
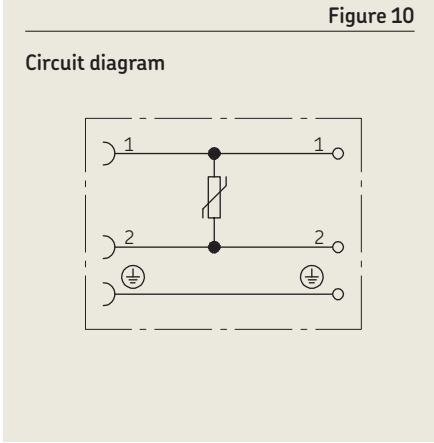


Figure 10



**Technical data**

**Order No.**

Version  
Pole  
Conductor cross section max.  
Line diameter  
Cable gland  
Max. rated operating voltage  
Max. operating current

Housing material  
Seal  
Type of terminal  
IP enclosure DIN60529  
Temperature range  
Approval  
Color coding

**179-990-033**

Insert rotatable 4x 90°  
3+PE  
4x 1.5 mm<sup>2</sup>  
6 to 10 mm  
M16x1.5  
250 VAC/DC  
10 A

PA, black  
attached, NBR  
Screw terminal  
IP 65 (installed)  
-40 to +100 °C  
UL/CSA/ESTI+  
→ Figure 9

**179-990-147**

Insert rotatable 4x 90°  
3+PE  
4x 1.5 mm<sup>2</sup>  
6 to 8 mm  
PG9  
250 VAC/DC  
10 A

PA, black  
attached, NBR  
Screw terminal  
IP 65 (installed)  
-30 to +120 °C  
UL/CSA/ESTI+  
→ Figure 9

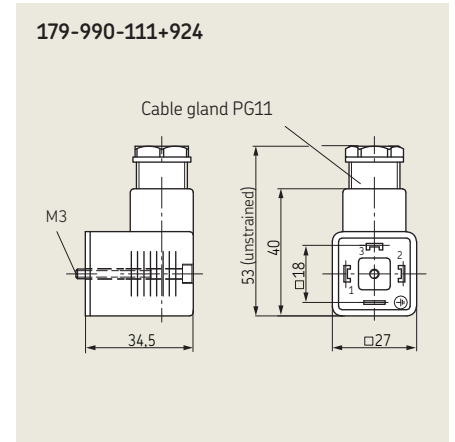
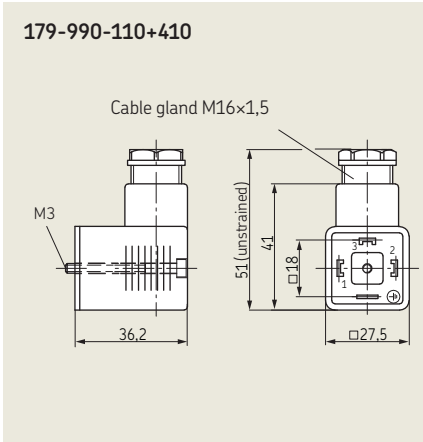
**179-990-657**

Insert rotatable 4x 90°  
2+PE  
3x 1.5 mm<sup>2</sup>  
6 to 9 mm  
PG11  
120 VAC/DC  
10 A

PA, black  
attached, Silikon  
Screw terminal  
IP 65 (installed)  
-40 to +80 °C  
-  
→ Figure 10

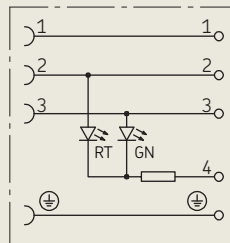
# Rectangular connectors acc. to DIN EN175301-803-A

## Form A, socket contacts, supplied with fixing screw



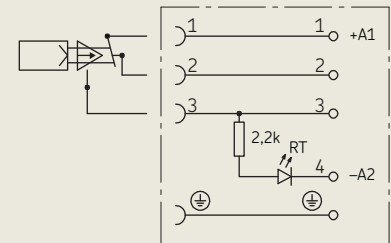
**Figure 11**

**Circuit diagram**



**Figure 12**

**Circuit diagram**

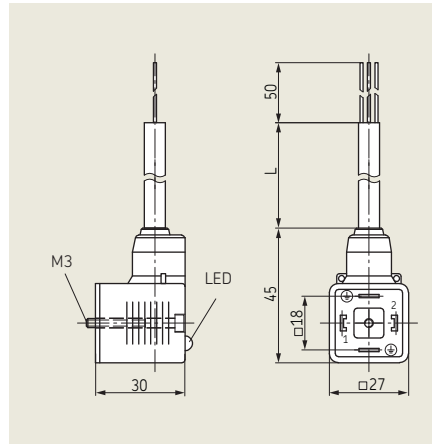


**Technical data**

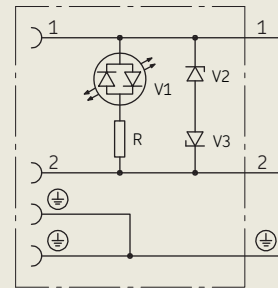
Order No.	179-990-110+410	179-990-111+924
Version	Insert rotatable 4x 90°	Insert rotatable 4x 90°
Pole	3+PE	3+PE
Conductor cross section max.	4x 1.5 mm <sup>2</sup>	4x 1.5 mm <sup>2</sup>
Line diameter	4,5 to 10 mm	8 to 10 mm
Max. rated operating voltage	250 V DC	24 V DC
Max. operating current	8 A	10 A
Operating display	LED red / green, each <5 mA	LED red, <20 mA
Housing material	PA 6 GF, transparent/black	PA, transparent
Seal	NBR	attached, NBR
Type of terminal	Screw terminal	Screw terminal
IP enclosure	IP 65 (installed)	IP 65 (installed)
Temperature range	-40 to +90 °C	-25 to +85 °C
Approval	UL	-
Color coding	→ Figure 11	→ Figure 12

# Rectangular connectors acc. to DIN EN175301-803-A

Form A, socket contacts, supplied with flat packing and fixing screw



Circuit diagram



## Technical data

### Order No.

**179-990-416**

Pole  
Conductor cross section max.  
Line diameter /length  
Rated voltage  
Max. rated operating voltage  
Max. operating current

2+PE  
3x 0.75 mm<sup>2</sup>  
5.9 mm / 3 m  
24 VAC/DC  
30 VAC/DC  
4 A

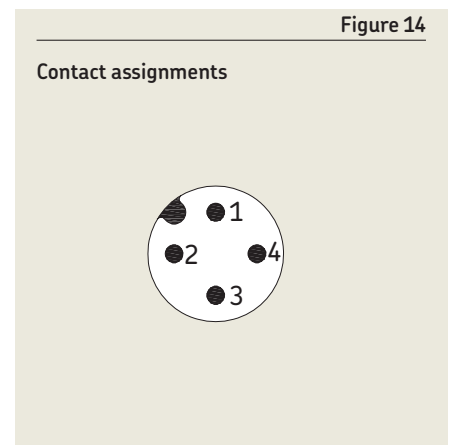
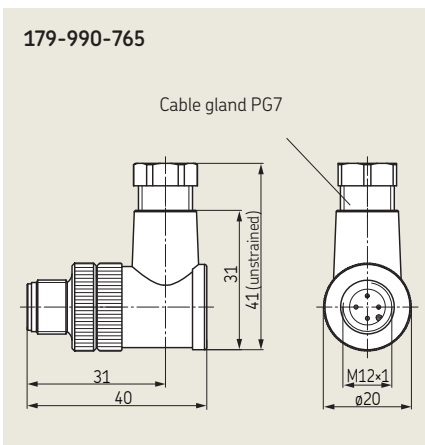
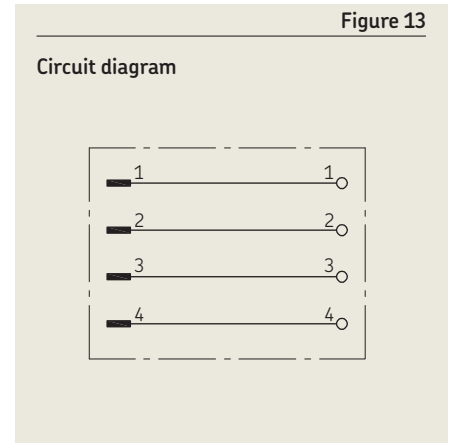
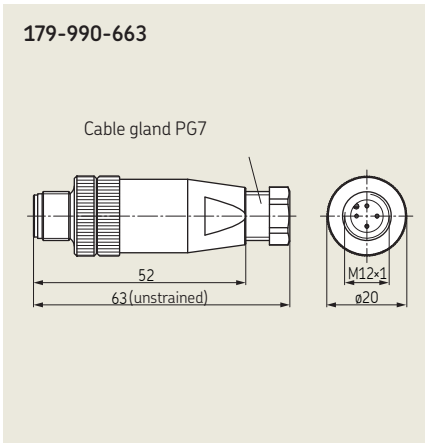
Operating display  
Housing material  
Seal  
Type of terminal  
IP enclosure DIN60529  
Temperature range

LED yellow, <12 mA  
PBT, black  
permanently connected, TPU  
Screw terminal  
IP 67 (installed)  
-25 to +85 °C



# Circular plug M12×1 acc. to DIN EN61076-2-101

## Plug contacts



### Technical data

<b>Order No.</b>	<b>179-990-663 / 179-990-765</b>
Pole	4
Conductor cross section max.	4x 0.75 mm <sup>2</sup>
Line diameter	4 to 6 mm
Max. rated operating voltage	250 VAC/DC
Max. operating current	4 A
Housing material	PA, black
Seal	FPM
Type of terminal	Screw terminal
IP enclosure DIN60529	IP 68 (installed)
Temperature range	-25 to +85 °C
Approval	UL
Color coding	→ Figure 13
Contact assignments	→ Figure 14

# Adapter plug acc. to DIN EN175301-803-A / M12x1

Form A, supplied with flat packing and fixing screw

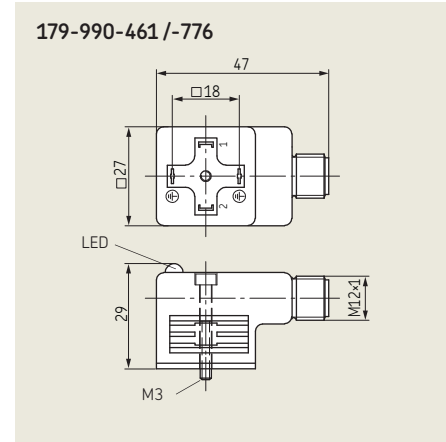
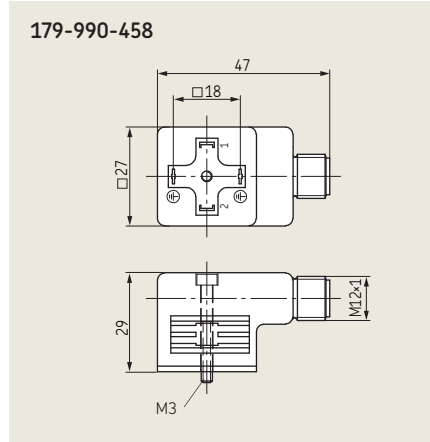


Figure 15

Circuit diagram

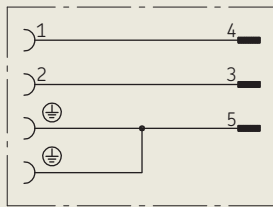


Figure 16

Circuit diagram

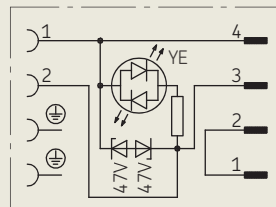
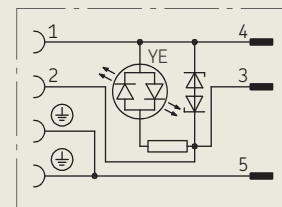


Figure 17

Circuit diagram



## Technical data

Order No.	179-990-458	179-990-461	179-990-776
Pole	2+PE (coupler socket) 2+PE (M12x1 plug)	2 (coupler socket) 4 (M12x1 plug)	2+PE (coupler socket) 2+PE (M12x1 plug)
Rated voltage	-	-	24 VAC/DC
Max. rated operating voltage	110 VAC/DC	24 VAC/DC	28.8 V AC / 30 V DC
Max. operating current	4 A	4 A	4 A
Operating display	-	LED yellow, <15 mA	LED yellow, <12 mA
Housing material	PBT, black	PBT, black	PBT, black
Seal	TPU, permanently connected	TPU, attached	TPU, permanently connected
IP enclosure DIN60529	IP 67 (installed)	IP 65 (installed)	IP 67 (installed)
Temperature range	-25 to +85 °C	-25 to +90 °C	-25 to +90 °C
Approval	CSA	-	CSA
Color coding	→ Figure 15	→ Figure 16	→ Figure 17
Contact assignments	→ Figure 18	→ Figure 19	→ Figure 18

Figure 18

Contact assignments

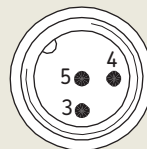
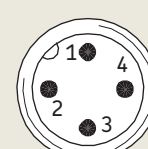


Figure 19

Contact assignments







#### **Important information on product usage**

SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.



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