

PE5



AVENTICS™

AVENTICS Series PE5 Pressure sensors



Series PE5

The AVENTICS Series PE5 is an electronic pressure sensor, which combines electronic precision and versatile functions with ideal user friendliness.

- Simplified navigation in accordance with VDMA
- Protection class increased to IP65 and IP67
- Contains zero point offset function
- PNP, NPN, and push-pull are freely selectable
- Option to switch between current and voltage
- UL approval and PWIS-free
- Compliant with CE, RoHS and Reach



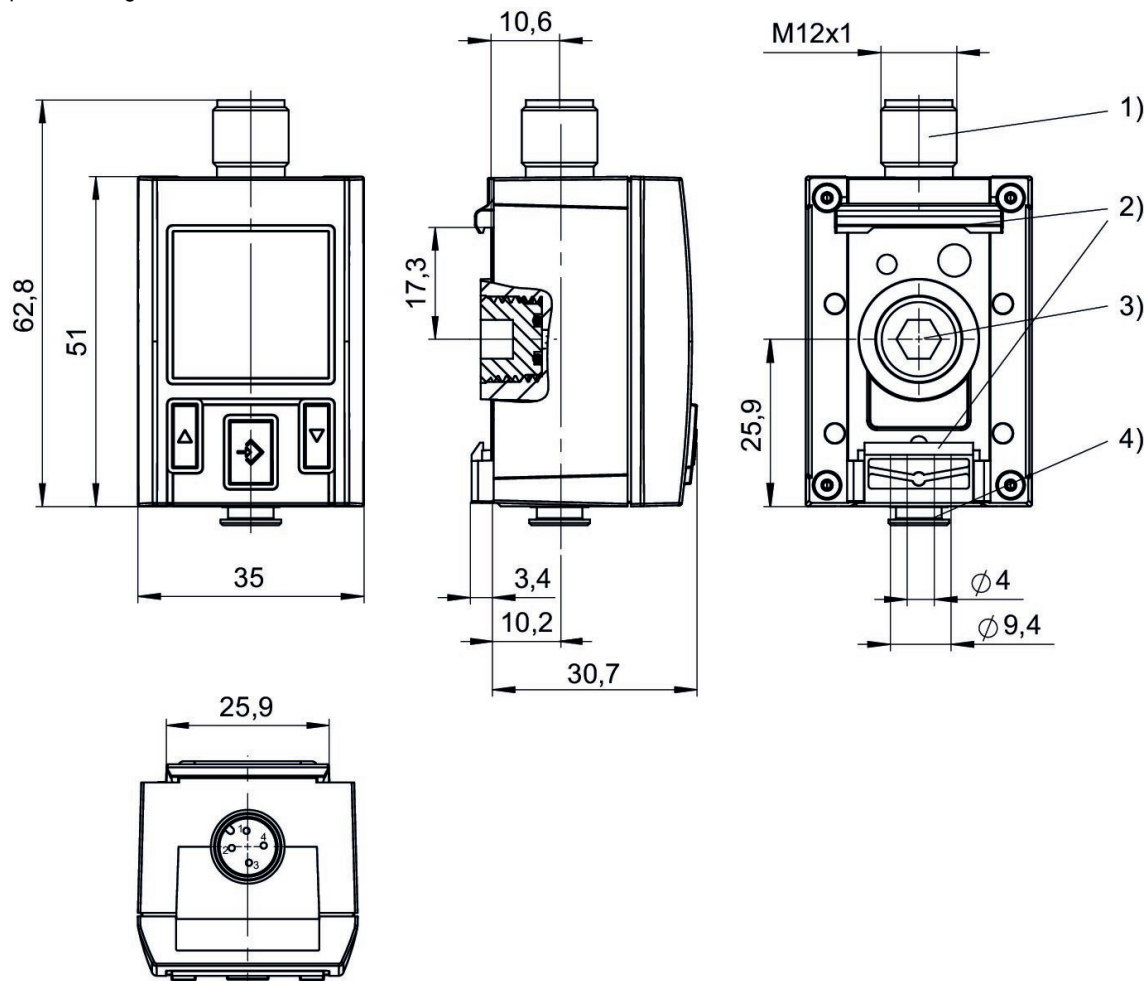
Pressure sensor, Series PE5

Plug
M12x1
CE declaration of conformity
cULus
RoHS
Conforms with REACH
Free of substances that impair surface wetting in the coating process
4-pin



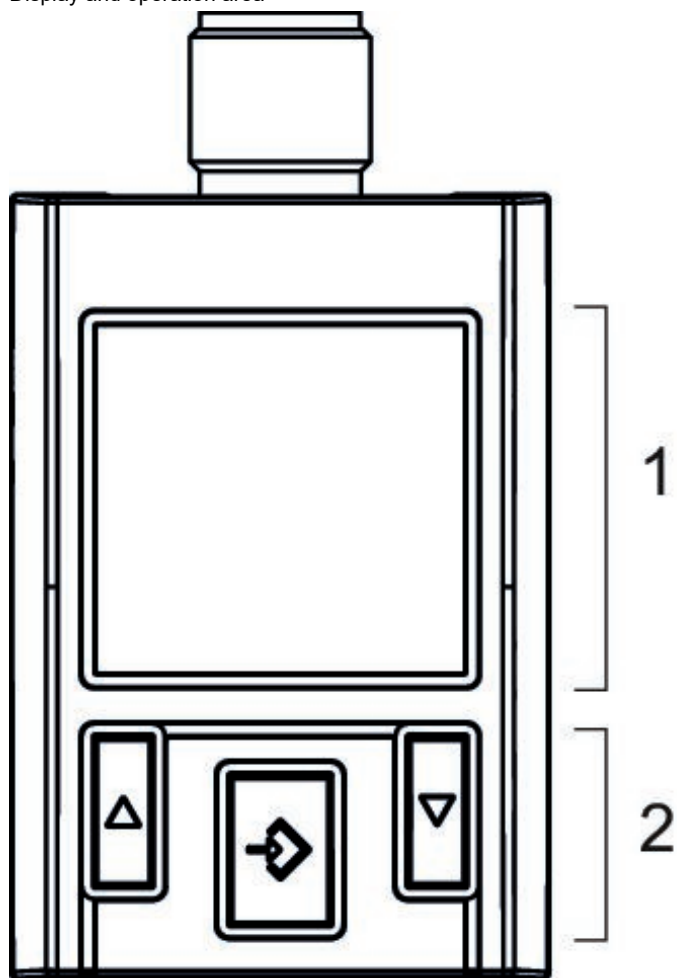
Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Protection against over-pressure	Output signal digital	Hysteresis	Part No.
Ø 4	-1	0	17	30	5 bar	2 x PNP, NPN, Push-pull	adjustable	R412010760
Ø 4	-1	0	17	30	5 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010768
Ø 4	-1	0	17	30	5 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010774
Ø 4	-1	1	17	30	5 bar	2 x PNP, NPN, Push-pull	adjustable	R412010762
Ø 4	0	6	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010770
Ø 4	0	6	17	30	15 bar	2 x PNP, NPN, Push-pull	adjustable	R412010764
Ø 4	0	6	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010776
Ø 4	0	10	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010772
Ø 4	0	10	17	30	15 bar	2 x PNP, NPN, Push-pull	adjustable	R412010766
Ø 4	0	10	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010778
Ø 4	0	12	17	30	16 bar	2 x PNP, NPN, Push-pull	adjustable	R412010781
Ø 4	0	12	17	30	16 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010805

push-in fitting



- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection, tubing ϕ 4 mm

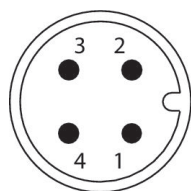
Display and operation area



- 1) LCD display
- 2) Control panel with 3 buttons

R412010760, R412010768, R412010774, R412010762, R412010770, R412010764, R412010776, R412010772, R412010766, R412010778, R412010781, R412010805

Pin assignments



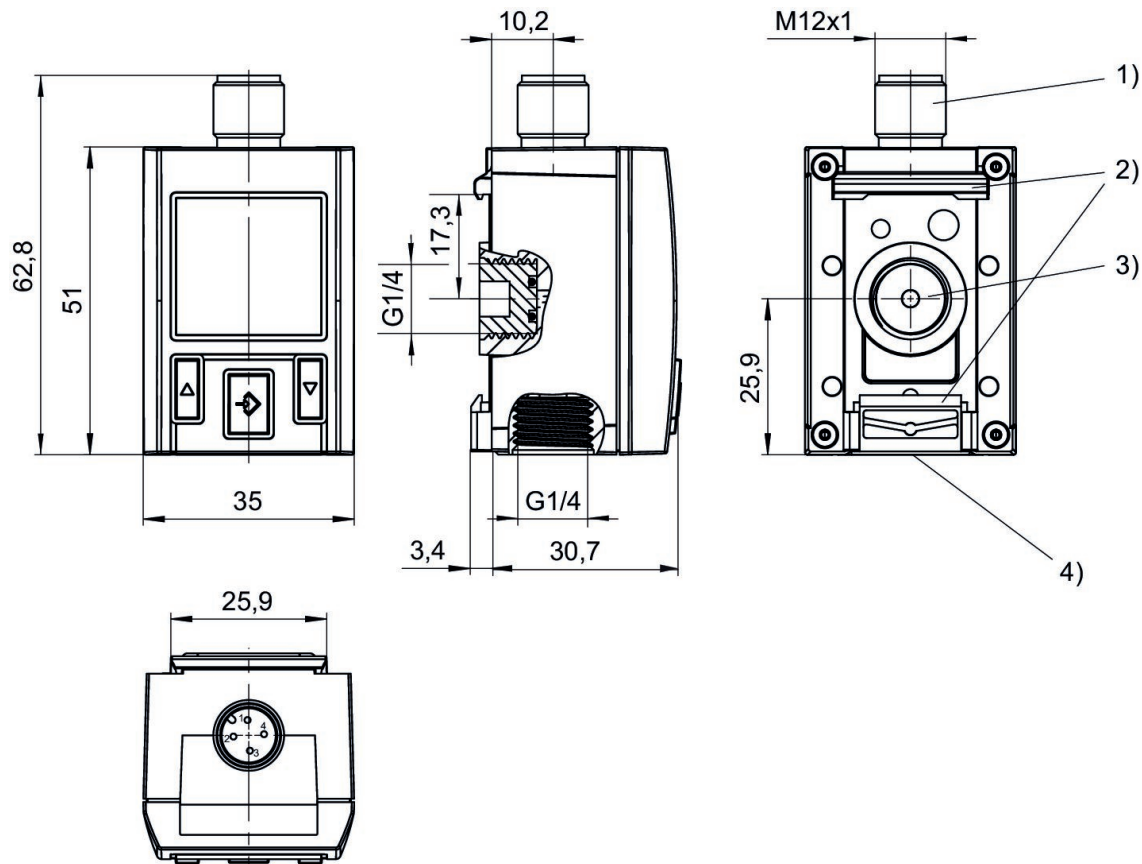
Pressure sensor, Series PE5

Plug
M12x1
CE declaration of conformity
cULus
RoHS
Conforms with REACH
Free of substances that impair surface wetting in the coating process
4-pin



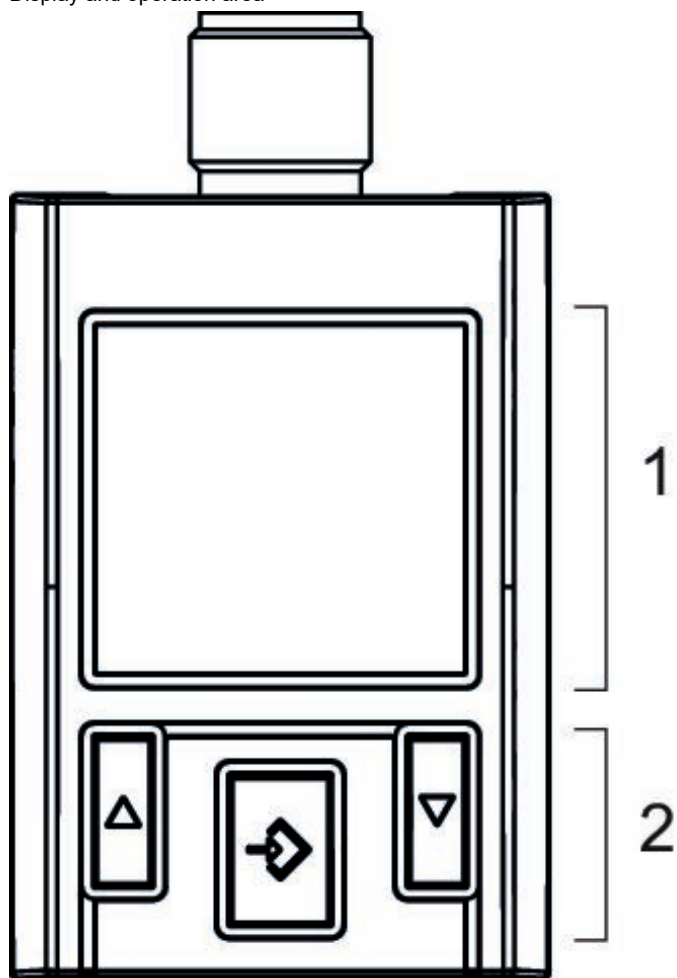
Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Protection against over-pressure	Output signal digital	Hysteresis	Part No.
G 1/4	-1	0	17	30	5 bar	2 x PNP, NPN, Push-pull	adjustable	R412010761
G 1/4	-1	0	17	30	5 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010769
G 1/4	-1	0	17	30	5 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010775
G 1/4	-1	1	17	30	5 bar	2 x PNP, NPN, Push-pull	adjustable	R412010763
G 1/4	0	6	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010771
G 1/4	0	6	17	30	15 bar	2 x PNP, NPN, Push-pull	adjustable	R412010765
G 1/4	0	6	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010777
G 1/4	0	10	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412010773
G 1/4	0	10	17	30	15 bar	2 x PNP, NPN, Push-pull	adjustable	R412010767
G 1/4	0	10	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010779
G 1/4	0	12	17	30	16 bar	2 x PNP, NPN, Push-pull	adjustable	R412010782
G 1/4	0	12	17	30	16 bar	PNP, NPN, push-pull, 1x IO-Link	adjustable	R412010806

Internal thread



- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection G1/4

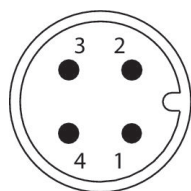
Display and operation area



- 1) LCD display
- 2) Control panel with 3 buttons

R412010761, R412010769, R412010775, R412010763, R412010771, R412010765, R412010777, R412010773, R412010767, R412010779, R412010782, R412010806

Pin assignments



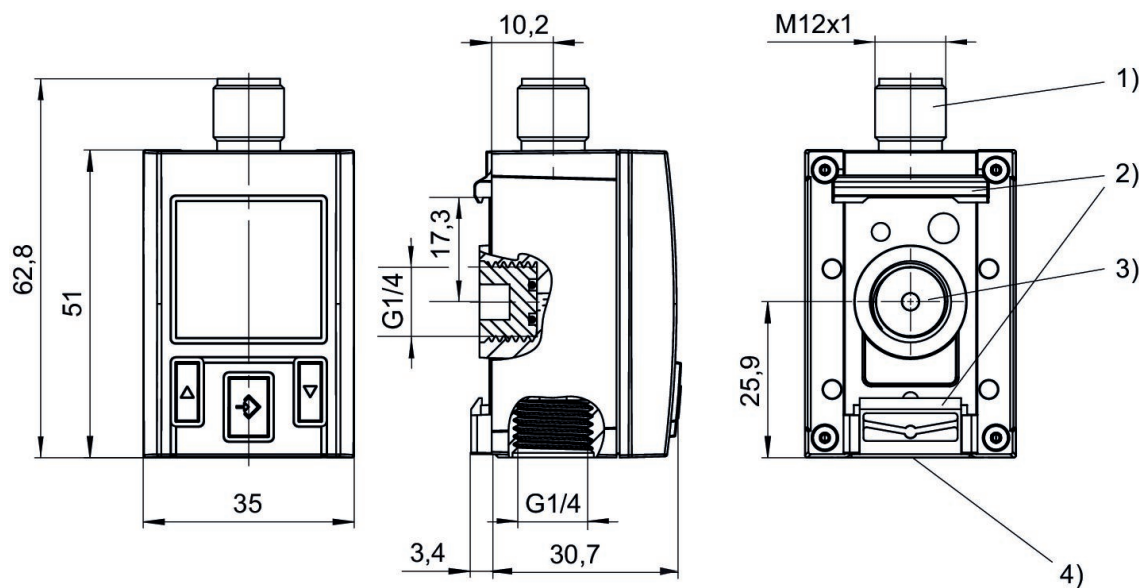
Pressure sensor, Series PE5, suitable for leak tests

Plug
M12x1
CE declaration of conformity
cULus
RoHS
Conforms with REACH
Free of substances that impair surface wetting in the coating process
5-pin

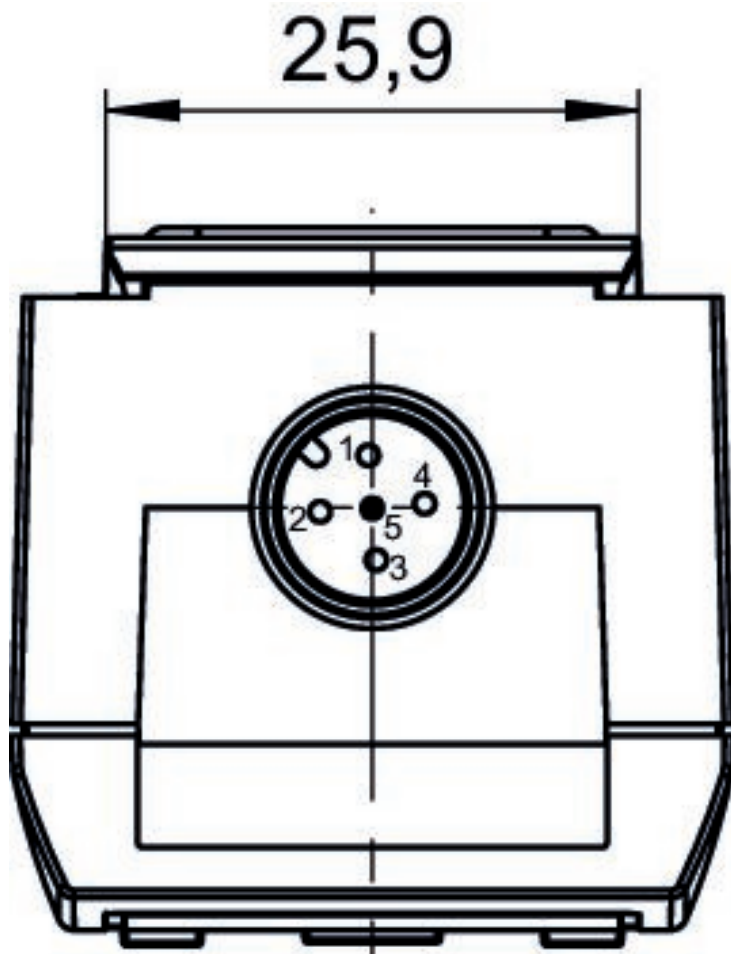


Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Protection against over-pressure	Output signal digital	Hysteresis	Part No.
G 1/4	-1	10	17	30	15 bar	2x PNP, NPN, push-pull in standard mode, 1x in leakage mode, 0 - 10 V DC, 4 ... 20 mA	adjustable	R412026774

Dimensions

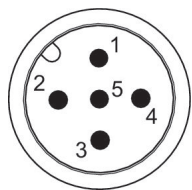


Electr. connection for leak test



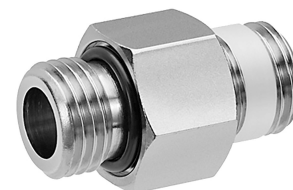
R412026774

Pin assignments



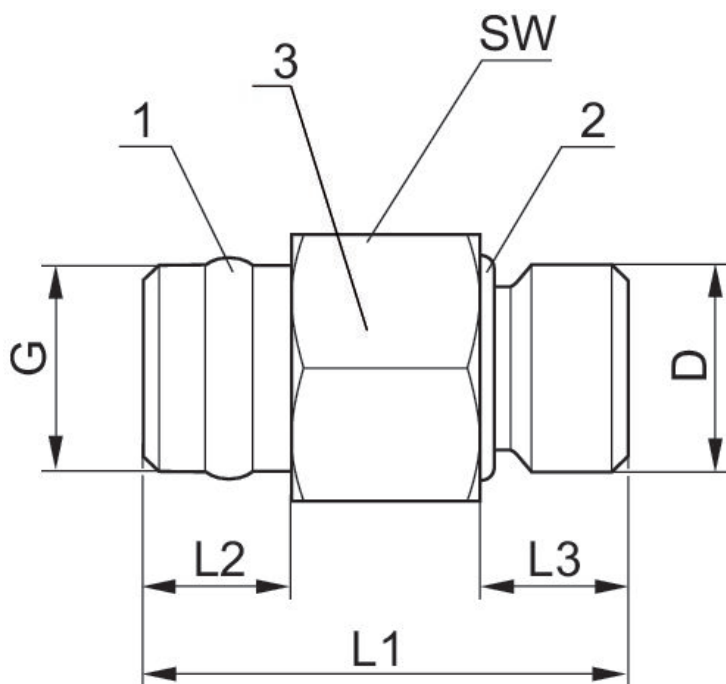
Double nipple, Series PE5

External thread
External thread



G	Ø D	Delivery unit [piece]	Weight [kg]	Part No.
G 1/4	G 1/8	2	0.04	R412010015
G 1/4	G 1/4	2	0.04	R412010016

Dimensions



- 1) sealing ring Polytetrafluorethylen
- 2) O-ring - acrylonitrile butadiene rubber
- 3) Housing - brass, nickel-plated

Part No.	Port G	Port D	L1	L2	L3	SW
R412010015	G 1/4	G 1/8	30	10	8.5	17
R412010016	G 1/4	G 1/4	30	10	8.5	17

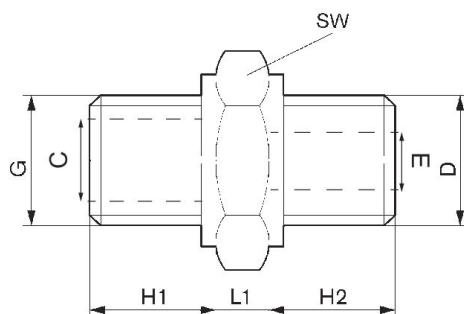
Double nipple

External thread
External thread



G	Ø D	Delivery unit [piece]	Part No.
G 1/4	G 1/8	10	1823391016
G 1/4	G 1/4	10	1823391017

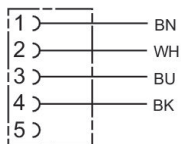
Dimensions



Part No.	Port D	Port G	ØC	ØE	H1	H2	L1	SW
1823391081	M5	M5	-	2	4.5	4.5	4	8
1823391100	M5	G 1/8	-	-	7	5	5	13
1823391015	G 1/8	G 1/8	8	5	7.5	7.5	4	14
1823391016	G 1/8	G 1/4	8	5	10	7	5	17
1823391017	G 1/4	G 1/4	8	7.5	10	10	5	17
1823391018	G 1/4	G 3/8	12	7.5	10	10	5	22
1823391019	G 3/8	G 3/8	12	10	10	10	5	22
1823391020	G 3/8	G 1/2	15	10	12	10	6	27
1823391029	G 1/2	G 1/2	15	13	12	12	6	27
1823391286	G 1/2	G 3/4	20	13	12	12	7	32
1823391287	G 3/4	G 3/4	20	18	12	12	7	32
1823391288	G 3/4	G 1	25	18	15	12	8	41
1823391289	G 1	G 1	25	22	15	15	8	41

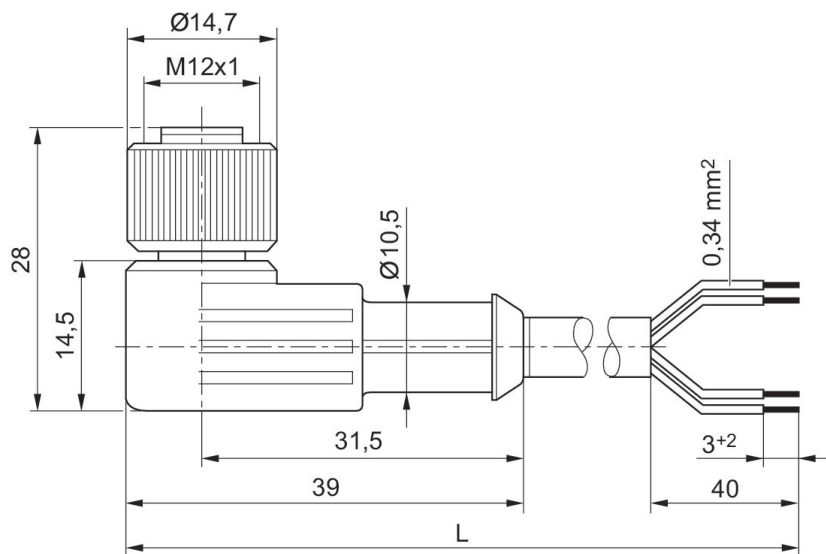
Round plug connector, Series CON-RD

Socket
M12x1
5-pin



Operational voltage	Current [A]	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, coding	Electrical connection 2, type	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
48 V AC/DC	4	unshielded	Socket	M12x1	A-coded	open cable ends	3	5.2	0.34	-40	85	1834484259
48 V AC/DC	4	unshielded	Socket	M12x1	A-coded	open cable ends	5	5.2	0.34	-40	85	1834484260
48 V AC/DC	4	unshielded	Socket	M12x1	A-coded	open cable ends	10	5.2	0.34	-40	85	1834484261

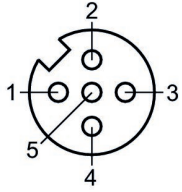
Dimensions



L = length

1834484259, 1834484260, 1834484261

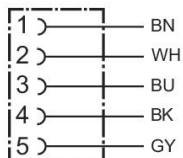
Pin assignment, socket



(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black
(5) not assigned

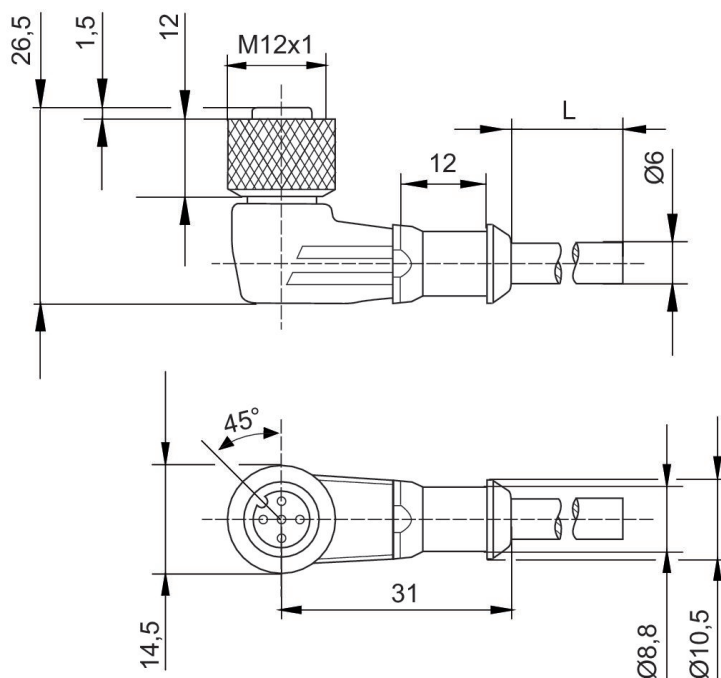
Round plug connector, Series CON-RD

Socket
M12x1
5-pin



Operational voltage	Current [A]	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, coding	Electrical connection 2, type	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
48 V AC/DC	4	shielded	Socket	M12x1	A-coded	open cable ends	2.5	6	0.34	-25	80	R419800109
48 V AC/DC	4	shielded	Socket	M12x1	A-coded	open cable ends	5	6	0.34	-25	80	R419800110
48 V AC/DC	4	shielded	Socket	M12x1	A-coded	open cable ends	10	6	0.34	-25	80	R419800546

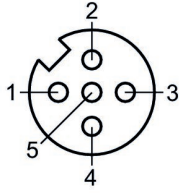
Dimensions



L = length

R419800109, R419800110, R419800546

Pin assignment, socket



(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black (5) GY=grey

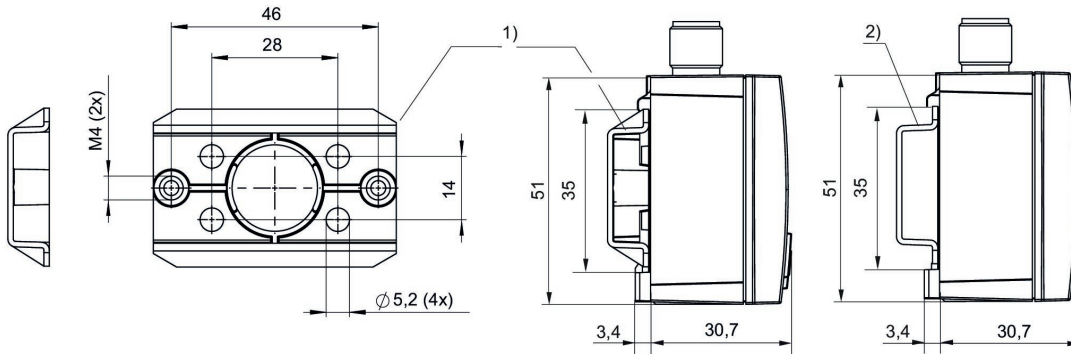
Wall mounting and hat rail

PE5



Delivery unit [piece]	Weight [kg]	Part No.
1	0.004	R412010405

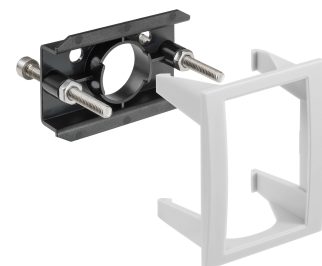
Dimensions



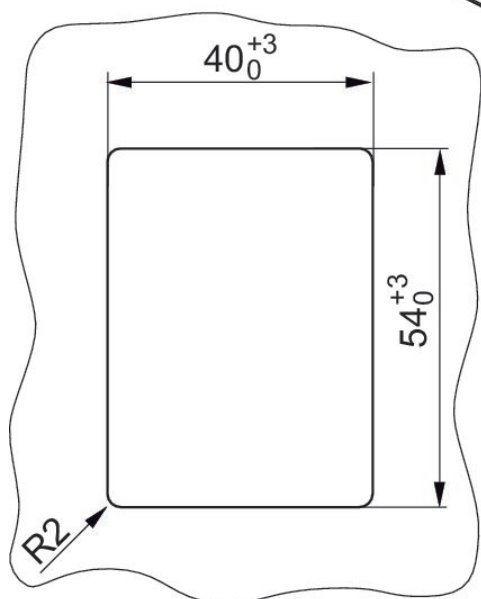
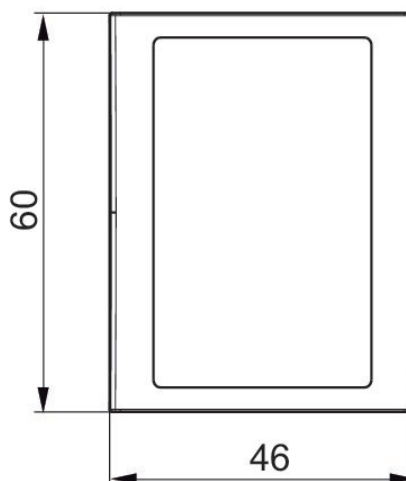
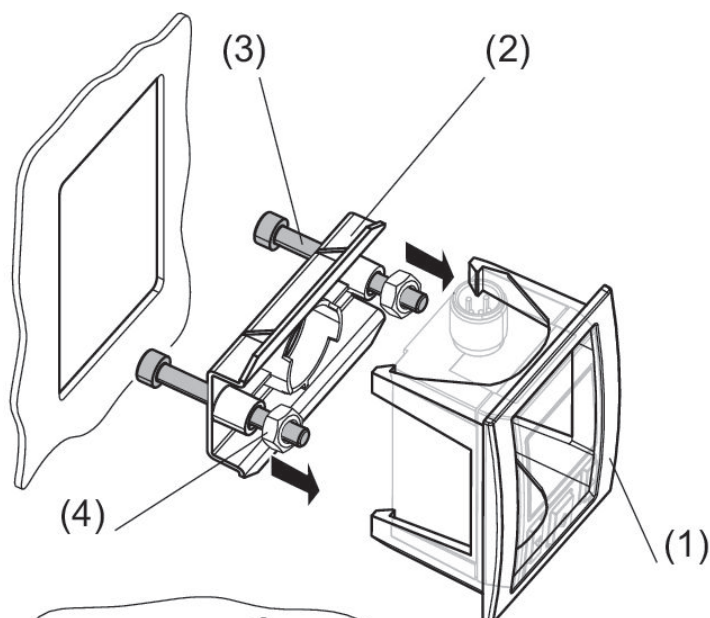
- 1) Wall mounting
- 2) DIN rail

Control panel installation kit

PE5



Delivery unit [piece]	Part No.
1	R412010406



1 front frame (1), 1 wall mounting (2), 2 attachment screws M4x40 (3), 2 hexagonal nuts (4)
Panel plate thickness max. 5.0 mm

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



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