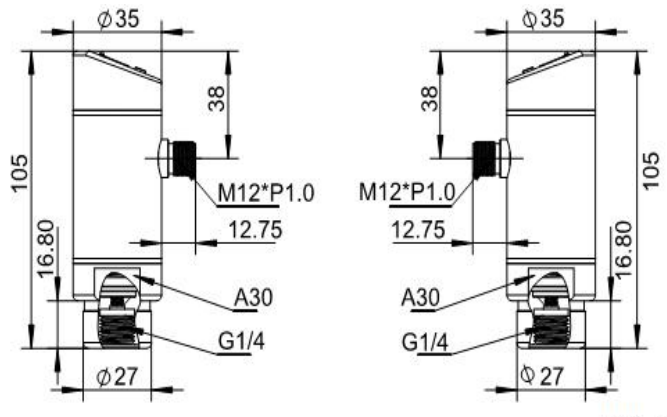
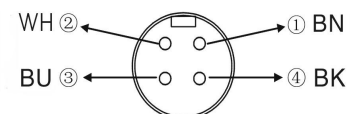
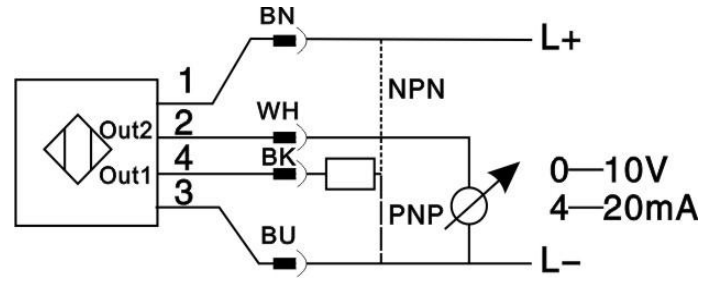



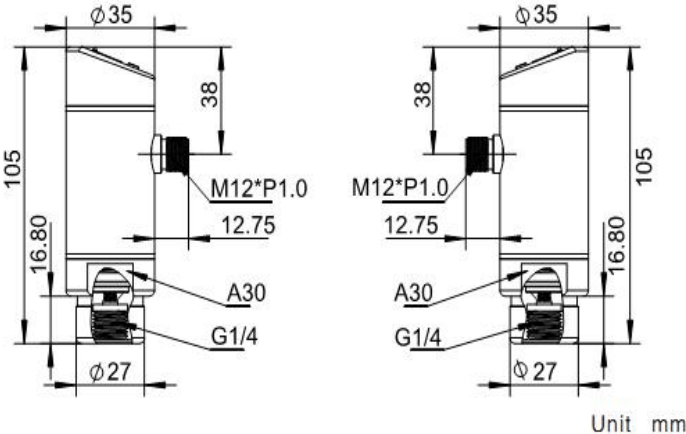
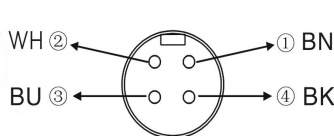
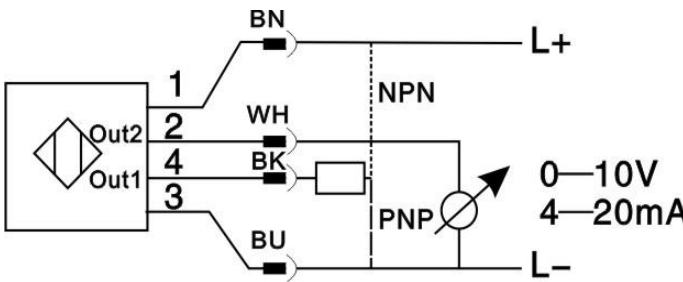





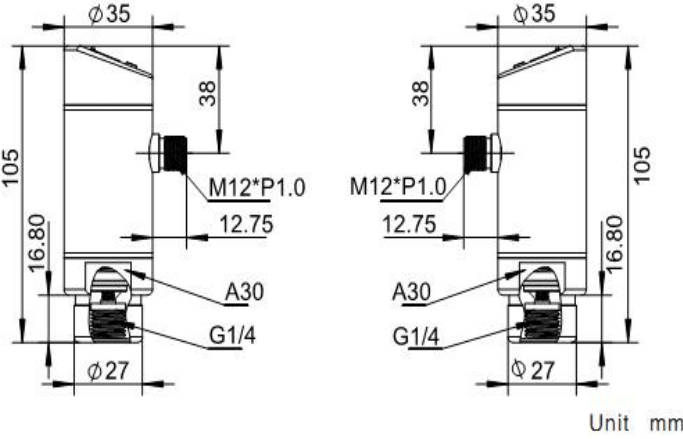
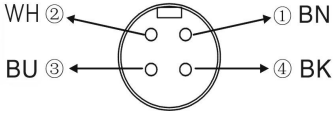
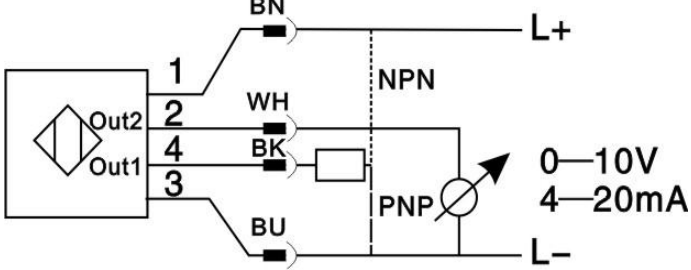
<p>PA1140                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  -1...1 bar                  -14...14 Psi                  -1...1 kgf/cm<sup>2</sup></p>	 <p>CE RoHS</p>
Applications	Negative pressure: corresponding pressure
Electric design	Liquid and gas
Output	DC PNP / NPN
Supply voltage[V]	NO  / NC  programmable, 4...20mA or 0...10V
Short-circuit protection	18...36DC
Reverse polarity protection	Pulsed
Overload protection	Yes
Watchdog	Yes
Voltage drop[V]	Yes
Current consumption[mA]	<2
Overloading Pressure [bar]	<60
Burst pressure [bar]	4
Analogue output OUT2	5
Overload of analogue output[Ohm]	4...20 mA / 0...10V
Switching output OUT1	4...20 mA:Max. (U <sub>b</sub> -10V) x 50 / 0...10V:Min. 2000
Overload of switching output [mA]	NPN/PNP
Setting range	300
Switching point (SP)	Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output
Reset point (rP)	-0.98...1bar
In steps of	-0.99...0.99bar
Programming options	0.01bar
Deviations (% of final value measured)	
Accuracy of switching point	< ±0.5
Characteristic deviation	< ±0.5
Hysteresis	< ±0.25
Stability of long-time use	< ±0.5
Ambient temperature [°C/°F]	-25...80/-13...176
Medium temperature [°C/°F]	-25...80/-13...176
Storage temperature[°C/°F]	-40...100/-40...212
Protection/Enclosure Rating	IP68
Insulation resistance[MΩ]	> 100(500 V DC)




<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	

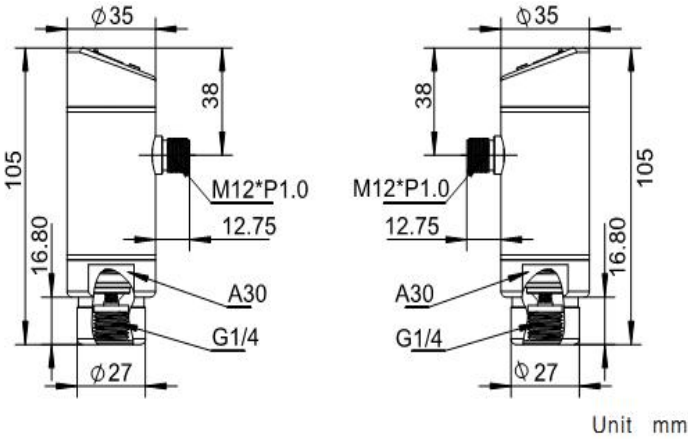
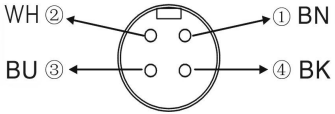
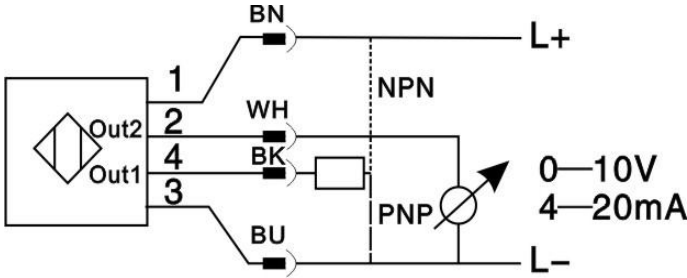
<p>PA1141                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...2 bar                  0...29 Psi                  0...2 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>4</p>
<p>Burst pressure [bar]</p>	<p>8</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	
<p>Switching point (SP)</p>	<p>0.02...2bar</p>
<p>Reset point (rP)</p>	<p>0.01...1.99 bar</p>
<p>In steps of</p>	<p>0.01bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display;                  Output 2 setting: Current / Voltage output;                  Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	<p></p>
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	<p></p>
<p>Core color</p> 	 <p style="text-align: right;">0—10V 4—20mA</p>


<p>PA1142                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...5 bar                  0...73 Psi                  0...5 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>10</p>
<p>Burst pressure [bar]</p>	<p>20</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.04...5bar                  Reset point (rP) 0.02...4.98 bar                  In steps of 0.02bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	<p></p>
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	<p></p>
<p>Core color</p> 	 <p>0—10V          4—20mA</p>




<p>PA1143 Electronic Pressure Sensor M12 socket Connection: Internal thread G1/4 Programmable Switching + Analogue output 3 digit display Sensing range 0...10 bar 2...145 Psi 0...10 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>20</p>
<p>Burst pressure [bar]</p>	<p>35</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.1...10bar Reset point (rP) 0.05...9.95 bar In steps of 0.05bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5 Characteristic deviation &lt; ±0.5 Hysteresis &lt; ±0.25 Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	






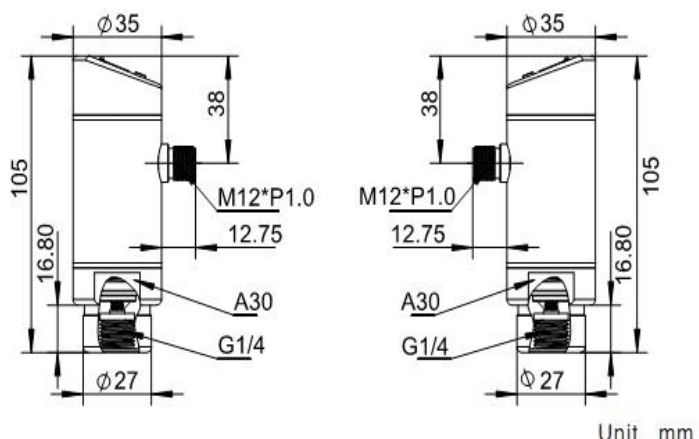
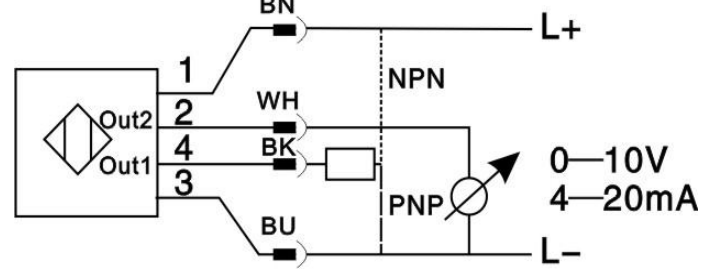
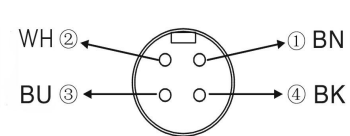
PA1144 Electronic Pressure Sensor M12 socket Connection: Internal thread G1/4 Programmable Switching + Analogue output 3 digit display Sensing range 0...20 bar 0...290 Psi 0...20 kgf/cm2	 <p>CE RoHS</p>
Applications	Pressure: corresponding pressure
Electric design	Liquid and gas
Output	DC PNP / NPN
Supply voltage[V]	18...36DC
Short-circuit protection	Pulsed
Reverse polarity protection	Yes
Overload protection	Yes
Watchdog	Yes
Voltage drop[V]	<2
Current consumption[mA]	<60
Overloading Pressure [bar]	40
Burst pressure [bar]	60
Analogue output OUT2	4...20 mA / 0...10V
Overload of analogue output[Ohm]	4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000
Switching output OUT1	NPN/PNP
Overload of switching output [mA]	300
Setting range	
Switching point (SP)	0.2...20bar
Reset point (rP)	0.1...19.9 bar
In steps of	0.1bar
Programming options	Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output
Deviations (% of final value measured)	
Accuracy of switching point	< ±0.5
Characteristic deviation	< ±0.5
Hysteresis	< ±0.25
Stability of long-time use	< ±0.5
Ambient temperature [°C/°F]	-25...80/-13...176
Medium temperature [°C/°F]	-25...80/-13...176
Storage temperature[°C/°F]	-40...100/-40...212
Protection/Enclosure Rating	IP68
Insulation resistance[MΩ]	> 100(500 V DC)




<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p>	

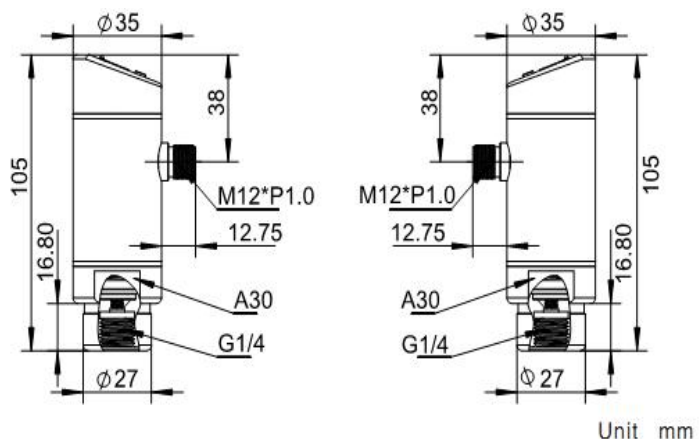
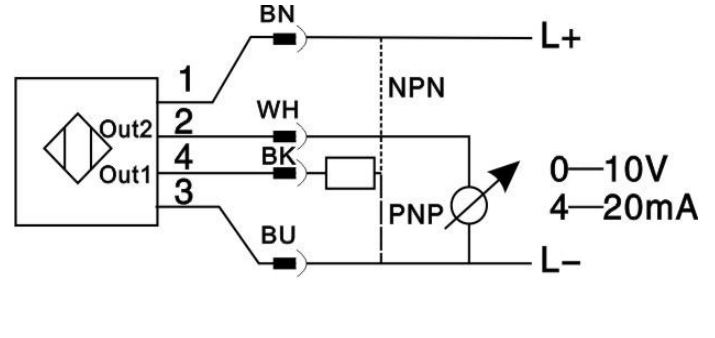
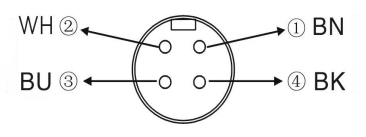
<p>PA1145                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...50 bar                  0...725 Psi                  0...50 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>100</p>
<p>Burst pressure [bar]</p>	<p>140</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.4...50bar                  Reset point (rP) 0.2...49.8 bar                  In steps of 0.2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p>	




<p>PA1146                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...100 bar                  0...1450 Psi                  0...100 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>150</p>
<p>Burst pressure [bar]</p>	<p>300</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 1...100bar                  Reset point (rP) 0.5...99.5 bar                  In steps of 0.5bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

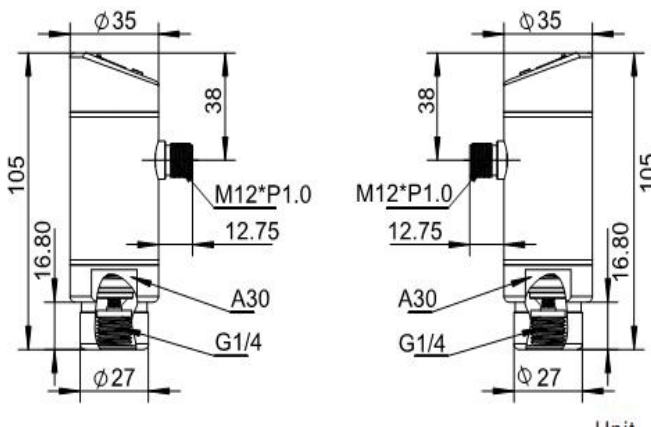
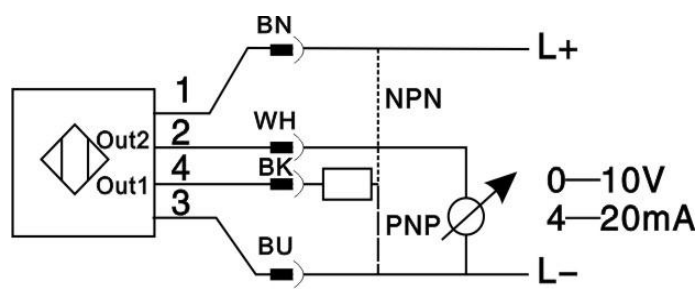
<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	




<p>PA1147                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...200 bar                  0...2900 Psi                  0...203 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>300</p>
<p>Burst pressure [bar]</p>	<p>400</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p></p>
<p>Switching point (SP)</p>	<p>2...200bar</p>
<p>Reset point (rP)</p>	<p>1...199bar</p>
<p>In steps of</p>	<p>1bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p></p>
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

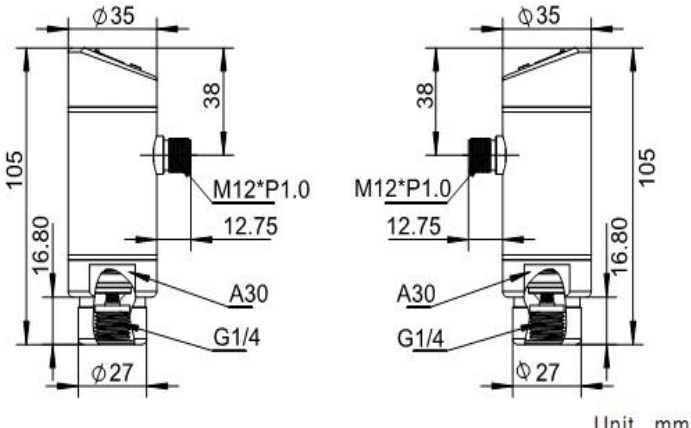
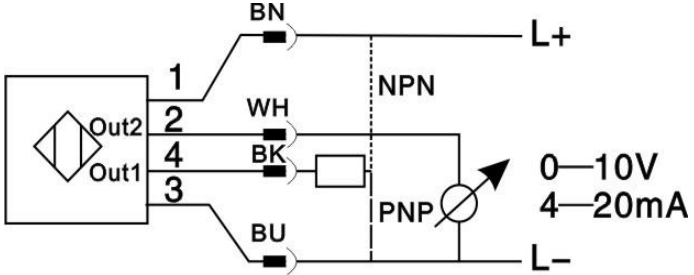
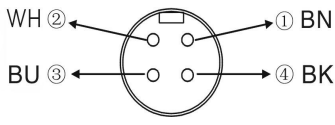
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	






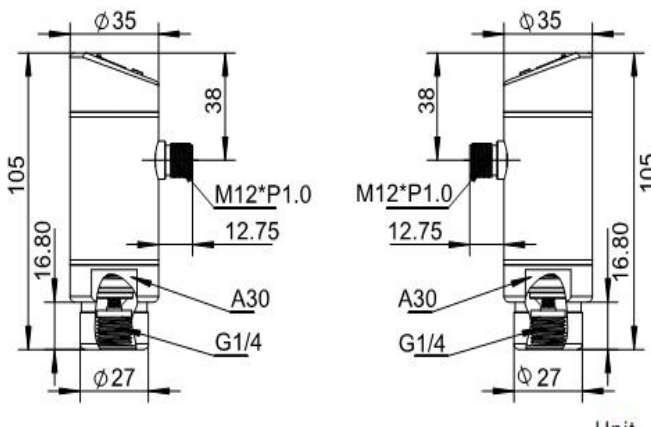
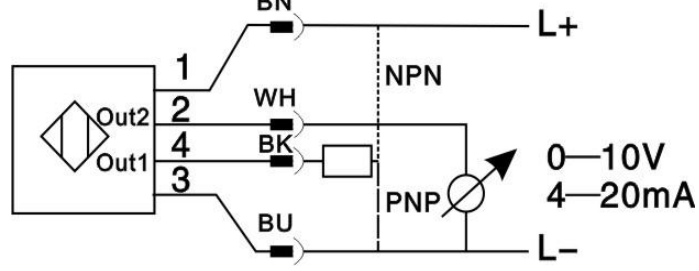
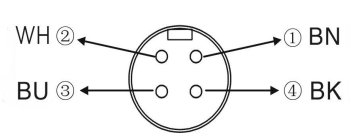
<p>PA1148                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...250 bar                  0...3625 Psi                  0...255 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>375</p>
<p>Burst pressure [bar]</p>	<p>500</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 2...250bar                  Reset point (rP) 1...249bar                  In steps of 1bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>




<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p>	

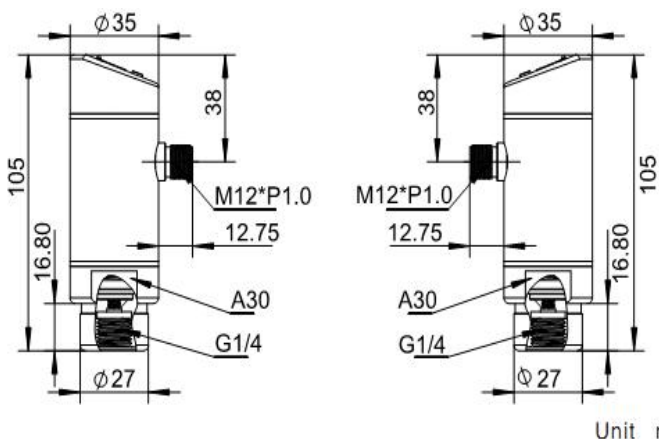
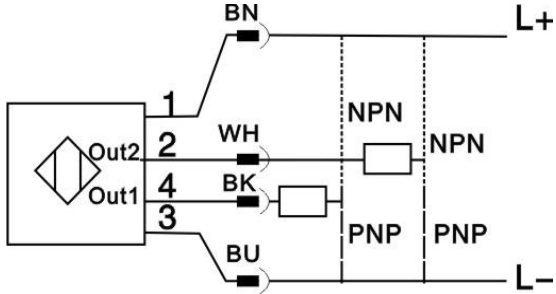
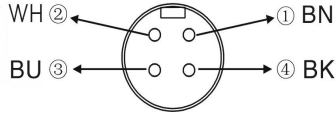
<p>PA1149                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...400 bar                  0...5800 Psi                  0...408 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  / NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>500</p>
<p>Burst pressure [bar]</p>	<p>650</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 4...400bar                  Reset point (rP) 2...398bar                  In steps of 2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED                  System pressure, function LED                  Connection</p>	<p>2 red LED                  3 digit segment                  M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	




<p>PA1150                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...600 bar                  0...8700 Psi                  0...612 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable, 4...20mA or 0...10V</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>880</p>
<p>Burst pressure [bar]</p>	<p>880</p>
<p>Analogue output OUT2</p>	<p>4...20 mA / 0...10V</p>
<p>Overload of analogue output[Ohm]</p>	<p>4...20 mA:Max. (Ub-10V) x 50 / 0...10V:Min. 2000</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p></p>
<p>Switching point (SP)</p>	<p>4...600bar</p>
<p>Reset point (rP)</p>	<p>2...598bar</p>
<p>In steps of</p>	<p>2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: Current / Voltage output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p></p>
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	




<p>PA1160                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  -1...1 bar                  -14...14 Psi                  -1...1 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Negative pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>4</p>
<p>Burst pressure [bar]</p>	<p>5</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p></p>
<p>Switching point (SP)</p>	<p>-0.98...1bar</p>
<p>Reset point (rP)</p>	<p>-0.99...0.99 bar</p>
<p>In steps of</p>	<p>0.01bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p></p>
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

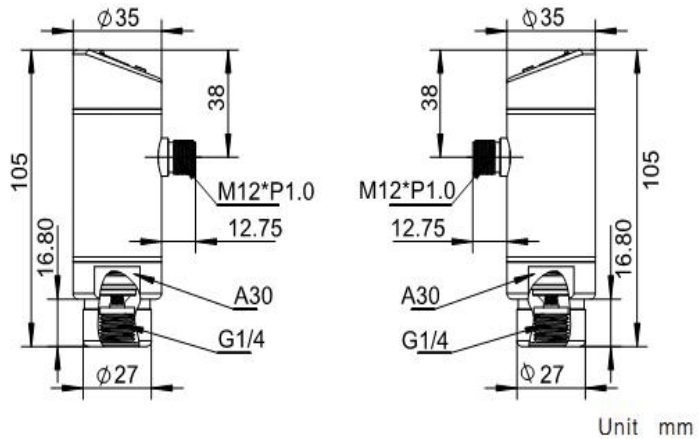
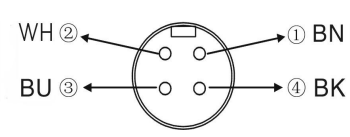
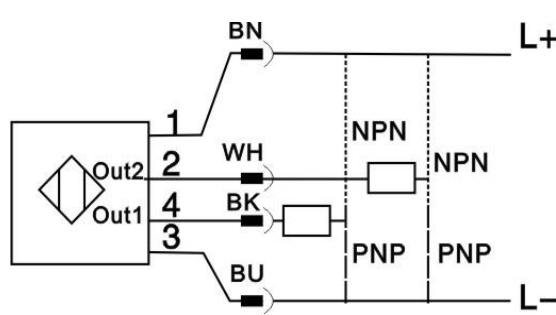
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	






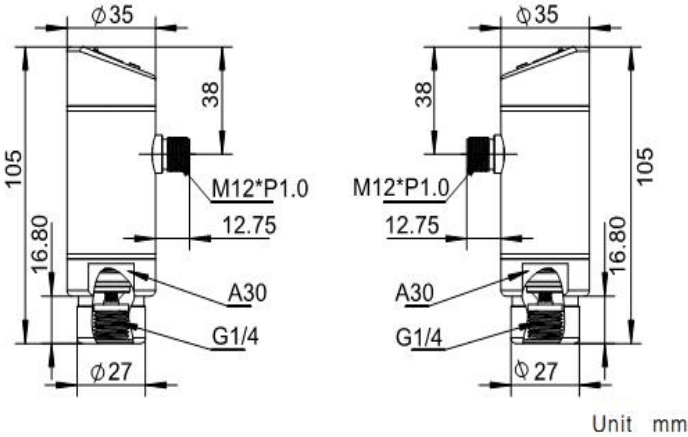
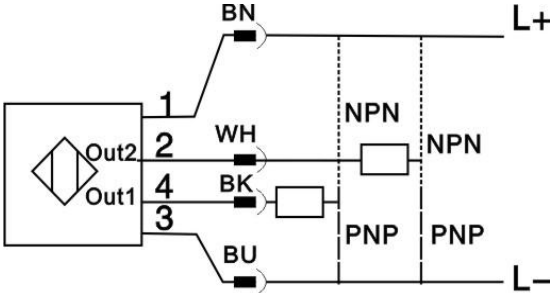
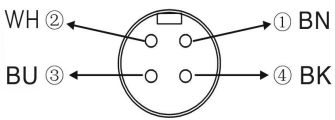
<p>PA1161                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...2 bar                  0...29 Psi                  0...2 kgf/cm2</p>	 <p>CE RoHS</p>
Applications	Pressure: corresponding pressure
Electric design	Liquid and gas
Output	DC PNP / NPN
Supply voltage[V]	NO  /NC  programmable
Short-circuit protection	18...36DC
Reverse polarity protection	Pulsed
Overload protection	Yes
Watchdog	Yes
Voltage drop[V]	Yes
Current consumption[mA]	<2
Overloading Pressure [bar]	<60
Burst pressure [bar]	4
Analogue output OUT2	8
Overload of analogue output[Ohm]	NPN/PNP
Switching output OUT1	300
Overload of switching output [mA]	NPN/PNP
Setting range	300
Switching point (SP)	0.02...2bar
Reset point (rP)	0.01...1.99 bar
In steps of	0.01bar
Programming options	Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output
Deviations (% of final value measured)	
Accuracy of switching point	< ±0.5
Characteristic deviation	< ±0.5
Hysteresis	< ±0.25
Stability of long-time use	< ±0.5
Ambient temperature [°C/°F]	-25...80/-13...176
Medium temperature [°C/°F]	-25...80/-13...176
Storage temperature[°C/°F]	-40...100/-40...212
Protection/Enclosure Rating	IP68
Insulation resistance[MΩ]	> 100(500 V DC)


<p>Dimension</p>	<p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p>	

<p>PA1162                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...5 bar                  0...73 Psi                  0...5 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>10</p>
<p>Burst pressure [bar]</p>	<p>20</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range                  Switching point (SP)                  Reset point (rP)                  In steps of</p>	<p>0.04...5bar                  0.02...4.98 bar                  0.02bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	


<p>PA1163                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...10 bar                  0...145 Psi                  0...10 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>20</p>
<p>Burst pressure [bar]</p>	<p>35</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.1...10bar                  Reset point (rP) 0.05...9.95 bar                  In steps of 0.05bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

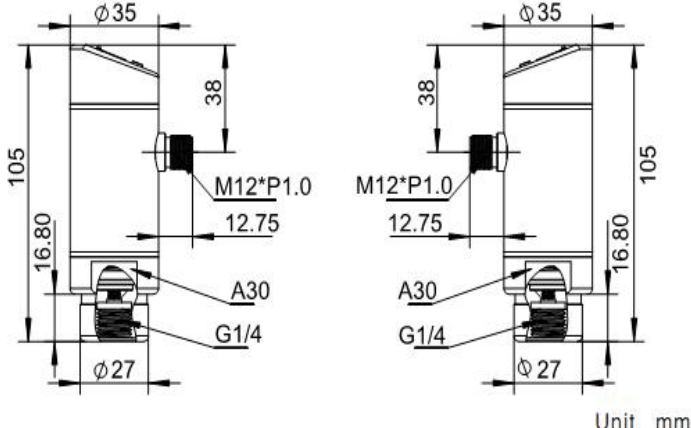
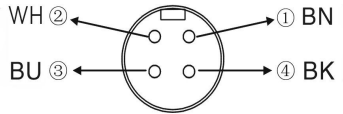
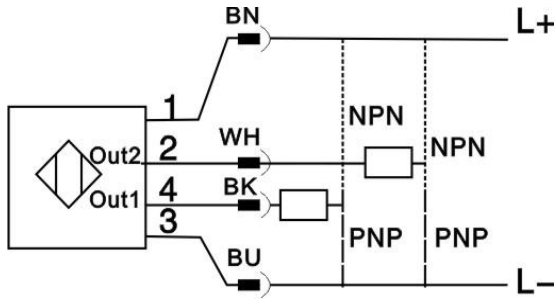
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	




<p>PA1164                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...20 bar                  0...290 Psi                  0...20 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>40</p>
<p>Burst pressure [bar]</p>	<p>60</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.2...20bar                  Reset point (rP) 0.1...19.9 bar                  In steps of 0.1bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

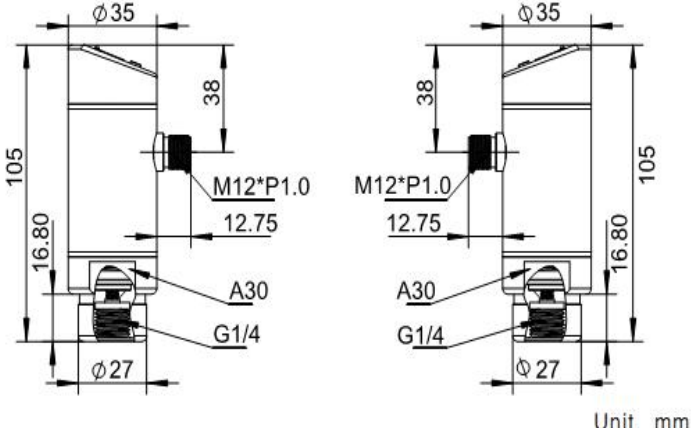
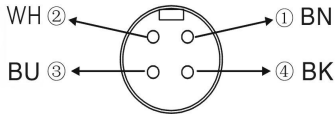
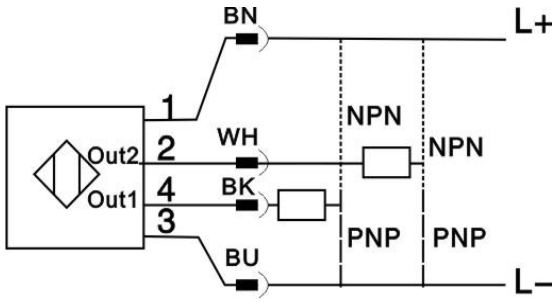
<p>Dimension</p>	
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p>	





<p>PA1165                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...50 bar                  0...725 Psi                  0...50 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>100</p>
<p>Burst pressure [bar]</p>	<p>140</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 0.4...50bar                  Reset point (rP) 0.2...49.8 bar                  In steps of 0.2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

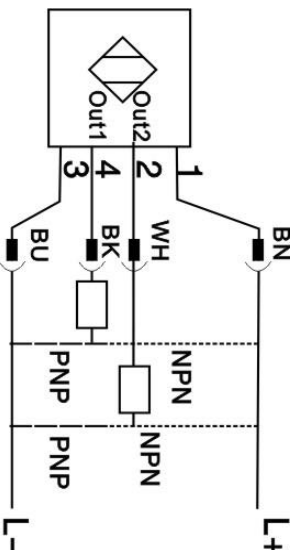
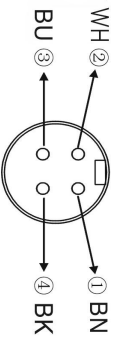
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	

<p>PA1166                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...100 bar                  0...1450 Psi                  0...100 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>150</p>
<p>Burst pressure [bar]</p>	<p>300</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 1...100bar                  Reset point (rP) 0.5...99.5 bar                  In steps of 0.5bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

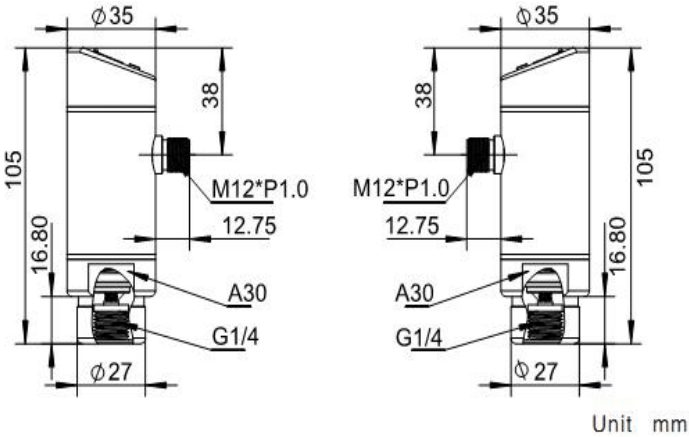
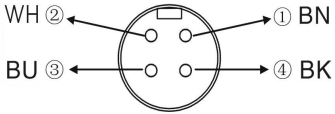
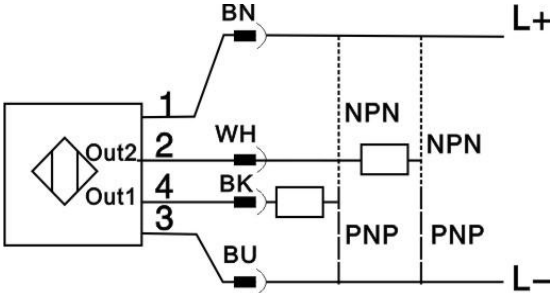
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	

<p>PA1167                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...200 bar                  0...2900 Psi                  0...203 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>300</p>
<p>Burst pressure [bar]</p>	<p>400</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 2...200bar                  Reset point (rP) 1...199 bar                  In steps of 1bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>


Dimension	
ESD[KV]	III
EFT[KV]	III
Walkie talkie experiment[M]	1
Shock resistance[g]	50
Vibration resistance[g]	20
Housing material	Stainless steel 304
Probe material/Wetted Parts	Stainless steel 316L
Medium contacting material	Ceramic/S316L/GFKM
Function Display	
Switching status LED	2 red LED
System pressure, function LED	3 digit segment
Connection	M12 socket
Wiring	
Core color	

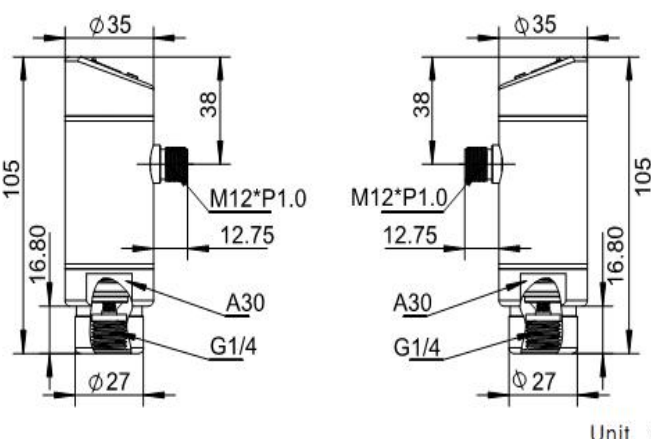
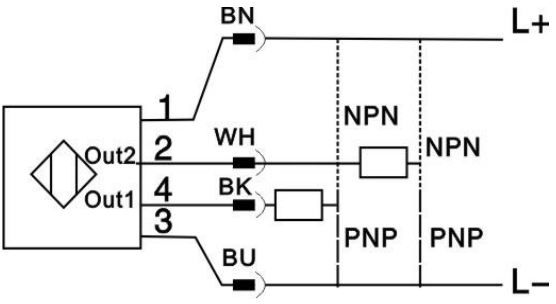
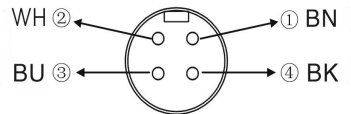



<p>PA1168                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...250 bar                  0...3625 Psi                  0...255 kgf/cm2</p>	 <p>CE RoHS</p>
Applications	Pressure: corresponding pressure
Electric design	Liquid and gas
Output	DC PNP / NPN
Supply voltage[V]	NO  /NC  programmable
Short-circuit protection	18...36DC
Reverse polarity protection	Pulsed
Overload protection	Yes
Watchdog	Yes
Voltage drop[V]	Yes
Current consumption[mA]	<2
Overloading Pressure [bar]	<60
Burst pressure [bar]	375
Analogue output OUT2	500
Overload of analogue output[Ohm]	NPN/PNP
Switching output OUT1	300
Overload of switching output [mA]	NPN/PNP
Setting range	300
Switching point (SP)	2...250bar
Reset point (rP)	1...249 bar
In steps of	1bar
Programming options	Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output
Deviations (% of final value measured)	
Accuracy of switching point	< ±0.5
Characteristic deviation	< ±0.5
Hysteresis	< ±0.25
Stability of long-time use	< ±0.5
Ambient temperature [°C/°F]	-25...80/-13...176
Medium temperature [°C/°F]	-25...80/-13...176
Storage temperature[°C/°F]	-40...100/-40...212
Protection/Enclosure Rating	IP68
Insulation resistance[MΩ]	> 100(500 V DC)

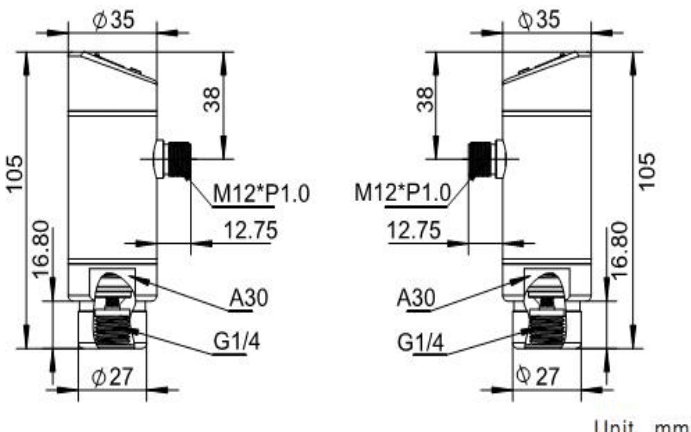
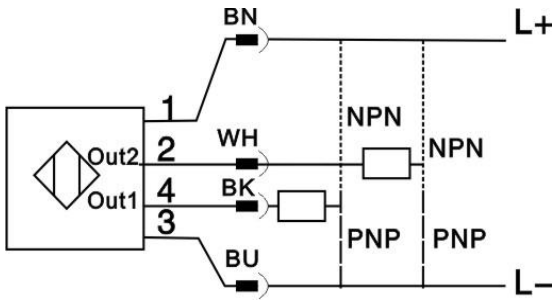
<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	



<p>PA1169                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...400 bar                  0...5800 Psi                  0...408 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>500</p>
<p>Burst pressure [bar]</p>	<p>650</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	
<p>Switching point (SP)</p>	<p>4...400bar</p>
<p>Reset point (rP)</p>	<p>2...398 bar</p>
<p>In steps of</p>	<p>2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	
<p>Accuracy of switching point</p>	<p>&lt; ±0.5</p>
<p>Characteristic deviation</p>	<p>&lt; ±0.5</p>
<p>Hysteresis</p>	<p>&lt; ±0.25</p>
<p>Stability of long-time use</p>	<p>&lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 	

<p>PA1170                  Electronic Pressure Sensor                  M12 socket                  Connection: Internal thread G1/4                  Programmable                  Switching + Analogue output                  3 digit display                  Sensing range                  0...600 bar                  0...8700 Psi                  0...612 kgf/cm2</p>	 <p>CE RoHS</p>
<p>Applications</p>	<p>Pressure: corresponding pressure                  Liquid and gas</p>
<p>Electric design</p>	<p>DC PNP / NPN</p>
<p>Output</p>	<p>NO  /NC  programmable</p>
<p>Supply voltage[V]</p>	<p>18...36DC</p>
<p>Short-circuit protection</p>	<p>Pulsed</p>
<p>Reverse polarity protection</p>	<p>Yes</p>
<p>Overload protection</p>	<p>Yes</p>
<p>Watchdog</p>	<p>Yes</p>
<p>Voltage drop[V]</p>	<p>&lt;2</p>
<p>Current consumption[mA]</p>	<p>&lt;60</p>
<p>Overloading Pressure [bar]</p>	<p>880</p>
<p>Burst pressure [bar]</p>	<p>880</p>
<p>Analogue output OUT2</p>	<p>NPN/PNP</p>
<p>Overload of analogue output[Ohm]</p>	<p>300</p>
<p>Switching output OUT1</p>	<p>NPN/PNP</p>
<p>Overload of switching output [mA]</p>	<p>300</p>
<p>Setting range</p>	<p>Switching point (SP) 4...600bar                  Reset point (rP) 2...598 bar                  In steps of 2bar</p>
<p>Programming options</p>	<p>Hysteresis range / Window function; NO / NC; Calibration; Unit display; Output 2 setting: NPN / PNP output; Output 1 setting: NPN / PNP output</p>
<p>Deviations (% of final value measured)</p>	<p>Accuracy of switching point &lt; ±0.5                  Characteristic deviation &lt; ±0.5                  Hysteresis &lt; ±0.25                  Stability of long-time use &lt; ±0.5</p>
<p>Ambient temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Medium temperature [°C/°F]</p>	<p>-25...80/-13...176</p>
<p>Storage temperature[°C/°F]</p>	<p>-40...100/-40...212</p>
<p>Protection/Enclosure Rating</p>	<p>IP68</p>
<p>Insulation resistance[MΩ]</p>	<p>&gt; 100(500 V DC)</p>

<p>Dimension</p>	 <p style="text-align: right;">Unit mm</p>
<p>ESD[KV]</p>	<p>III</p>
<p>EFT[KV]</p>	<p>III</p>
<p>Walkie talkie experiment[M]</p>	<p>1</p>
<p>Shock resistance[g]</p>	<p>50</p>
<p>Vibration resistance[g]</p>	<p>20</p>
<p>Housing material</p>	<p>Stainless steel 304</p>
<p>Probe material/Wetted Parts</p>	<p>Stainless steel 316L</p>
<p>Medium contacting material</p>	<p>Ceramic/S316L/FGFKM</p>
<p>Function Display</p>	
<p>Switching status LED</p>	<p>2 red LED</p>
<p>System pressure, function LED</p>	<p>3 digit segment</p>
<p>Connection</p>	<p>M12 socket</p>
<p>Wiring</p>	
<p>Core color</p> 