

# Pressure transmitter

## For general industrial applications

### Model A-10

WIKA data sheet PE 81.60



for further approvals  
see page 9

#### Applications

- Machine building
- Shipbuilding
- Measurement and control technology
- Hydraulics and pneumatics
- Pumps and compressors

#### Special features

- Measuring ranges from 0 ... 0.05 to 0 ... 1,000 bar [0 ... 1 to 0 ... 15,000 psi]
- Non-linearity 0.25 % or 0.5 %
- Output 4 ... 20 mA, DC 0 ... 10 V, DC 0 ... 5 V and others
- Electrical connection: Angular connector form A and C, circular connector M12 x 1, cable outlet 2 m [6 ft]
- Process connection G 1/4 A DIN EN ISO 1179-2, 1/4 NPT and others



Pressure transmitter, model A-10

#### Description

The model A-10 pressure transmitter for general industrial applications is not only notable for its compact design, but it also offers excellent quality at an extremely competitive price.

The user can choose between a non-linearity of 0.25 % and 0.5 %. A free test protocol provides information on the measuring points recorded during manufacture.

The model A-10 is set up for worldwide use through the international cULus and EAC certification. The various pressure units and process connections required for particular operating conditions are available at short notice.

## Specifications

Optionally the model A-10 is available with an improved non-linearity. Depending on the selected non-linearity the following values result:

Accuracy specifications	Non-linearity $\leq \pm 0.5$ % of span	Non-linearity $\leq \pm 0.25$ % of span
<b>Non-linearity per BFSL per IEC 61298-2</b>		
Measuring range $\leq 0.1$ bar [ $\leq 1.45$ psi]	$\leq \pm 0.5$ % of span	-
Measuring range $> 0.1$ bar [ $> 1.45$ psi]	$\leq \pm 0.5$ % of span	$\leq \pm 0.25$ % of span <sup>1)</sup>
<b>Accuracy</b>	→ See "Max. measuring error per IEC 61298-2"	
<b>Max. measured error per IEC 61298-2</b>		
Measuring range $\geq 0.6$ bar [ $\geq 8.7$ psi]	$\leq \pm 1$ % of span	$\leq \pm 0.5$ % of span
Measuring range $\geq 0.4$ bar [ $\geq 5.8$ psi]	$\leq \pm 1.2$ % of span	$\leq \pm 0.7$ % of span
Measuring range $\geq 0.25$ bar [ $\geq 3.6$ psi]	$\leq \pm 1.3$ % of span	$\leq \pm 0.8$ % of span
Measuring range $\geq 0.16$ bar [ $\geq 2.3$ psi]	$\leq \pm 1.5$ % of span	$\leq \pm 1$ % of span
Measuring range $\geq 0.1$ bar [ $\geq 1.45$ psi]	$\leq \pm 1.8$ % of span	-
Measuring range $\geq 0.05$ bar [ $\geq 0.73$ psi]	$\leq \pm 2.4$ % of span	-
<b>Zero point error <sup>2) 3)</sup></b>		
4 ... 20 mA / DC 1 ... 5 V / DC 0.5 ... 4.5 V / DC 0.5 ... 4.5 V ratiometric	$\leq \pm 0.3$ % of span	$\leq \pm 0.2$ % of span
DC 0 ... 10 V	$\leq \pm 0.5$ % of span	$\leq \pm 0.4$ % of span
DC 0 ... 5 V <sup>4)</sup>	$\leq \pm 0.6$ % of span	-

1) Not possible with output signal DC 0 ... 5 V.

2) Measuring ranges  $\leq 0.1$  bar [ $\leq 1.45$  psi] (or equivalent) only possible with  $\leq \pm 0.5$  % of span.

3) Outside reference conditions add the temperature hysteresis for measuring ranges  $< 0.6$  bar [ $< 8.7$  psi].

4) Not possible with measuring ranges  $\leq 0.1$  bar [ $\leq 1.45$  psi] (or equivalent).

In case of occasional faults due to electrostatic discharges, a temporary additional measuring error of up to  $\pm 2.5$  % can occur.

<b>Further details on: Accuracy specifications</b>		
<b>Signal noise</b>	$\leq \pm 0.2$ % of span	
<b>Non-repeatability per IEC 61298-2</b>		
Measuring range $\leq 0.1$ bar [ $\leq 1.45$ psi]	$\leq 0.2$ % of span	
Measuring range $> 0.1$ bar [ $> 1.45$ psi]	$\leq 0.1$ % of span	
<b>Temperature error at 0 ... 80 °C [32 ... 176 °F]</b>		
Typical	$\leq \pm 1$ % of span	
Maximum	$\leq \pm 1.5$ % of span	
<b>Temperature hysteresis -30 ... +100°C [-22 ... +212 °F] for measuring ranges <math>&lt; 0.6</math> bar [<math>&lt; 8.7</math> psi]</b>		
Measuring range $< 0.6$ bar [ $< 8.7$ psi]	Gauge pressure	$\leq \pm 0.2$ % of span
	Absolute pressure	$\leq \pm 0.2$ % of span
Measuring range $< 0.4$ bar [ $< 5.8$ psi]	Gauge pressure	$\leq \pm 0.3$ % of span
	Absolute pressure	$\leq \pm 0.3$ % of span
Measuring range $< 0.25$ bar [ $< 3.6$ psi]	Gauge pressure	$\leq \pm 0.5$ % of span
	Absolute pressure	$\leq \pm 0.5$ % of span
Measuring range $< 0.16$ bar [ $< 2.3$ psi]	Gauge pressure	$\leq \pm 0.7$ % of span
	Absolute pressure	$\leq \pm 0.8$ % of span
Measuring range $< 0.1$ bar [ $< 1.45$ psi]	Gauge pressure	$\leq \pm 1.4$ % of span
<b>Long-term drift per IEC 61298-2</b>		
Measuring ranges $\leq 0.1$ bar [ $\leq 1.45$ psi]	$\leq \pm 0.5$ % of span <sup>1)</sup>	
Measuring ranges $\leq 0.4$ bar [ $\leq 5.8$ psi]	$\leq \pm 0.2$ % of span	
Measuring ranges $> 0.4$ bar [ $> 5.8$ psi]	$\leq \pm 0.1$ % of span	

## Further details on: Accuracy specifications

### Additional zero point error depending on the mounting position for measuring ranges $\leq 1$ bar [15 psi]

Mounting position 180°, vertical, top process connection	$\leq 1$ mbar [ $\leq 0.015$ psi]
Mounting position 90°, horizontal	$\leq 0.6$ mbar [ $\leq 0.009$ psi]
<b>Reference conditions</b>	Per IEC 61298-1

1) Outside reference conditions the temperature hysteresis has to be added for measuring ranges  $\leq 0.1$  bar [ $\leq 1.45$  psi].

### Measuring ranges, gauge pressure

bar	
0 ... 0.05	0 ... 10 <sup>1)</sup>
0 ... 0.1	0 ... 16 <sup>1)</sup>
0 ... 0.16	0 ... 25 <sup>1)</sup>
0 ... 0.25	0 ... 40
0 ... 0.4	0 ... 60
0 ... 0.6	0 ... 100
0 ... 1	0 ... 160
0 ... 1.6	0 ... 250
0 ... 2.5	0 ... 400
0 ... 4	0 ... 600
0 ... 6	0 ... 1,000

1) If the medium water is measured, a higher overpressure limit is recommended.

psi	
0 ... 1	0 ... 300 <sup>1)</sup>
0 ... 5	0 ... 500
0 ... 15	0 ... 1,000
0 ... 25	0 ... 1,500
0 ... 30	0 ... 2,000
0 ... 50	0 ... 3,000
0 ... 100	0 ... 5,000
0 ... 160 <sup>1)</sup>	0 ... 10,000
0 ... 200 <sup>1)</sup>	0 ... 15,000

1) If the medium water is measured, a higher overpressure limit is recommended.

inWC	
0 ... 20	0 ... 120
0 ... 40	0 ... 150
0 ... 60	0 ... 200
0 ... 80	0 ... 250
0 ... 100	0 ... 400

### Measuring ranges, absolute pressure

bar abs.	
0 ... 0.1	0 ... 2.5
0 ... 0.16	0 ... 4
0 ... 0.25	0 ... 6
0 ... 0.4	0 ... 10
0 ... 0.6	0 ... 16
0 ... 1	0 ... 25
0 ... 1.6	

psi abs.	
0 ... 5	0 ... 100
0 ... 15	0 ... 150
0 ... 25	0 ... 200
0 ... 30	0 ... 300
0 ... 50	

inWC abs.	
0 ... 40	0 ... 150
0 ... 60	0 ... 200
0 ... 80	0 ... 250
0 ... 100	0 ... 400
0 ... 120	

## Vacuum and +/- measuring ranges

bar	
-0.025 ... +0.025	-0.3 ... +0.3
-0.05 ... 0	-0.4 ... 0
-0.05 ... +0.05	-0.5 ... +0.5
-0.05 ... +0.15	-0.6 ... 0
-0.05 ... +0.2	-1 ... 0
-0.05 ... +0.25	-1 ... +0.6
-0.1 ... 0	-1 ... +1.5
-0.1 ... +0.1	-1 ... +3
-0.15 ... +0.15	-1 ... +5
-0.16 ... 0	-1 ... +9 <sup>1)</sup>
-0.2 ... +0.2	-1 ... +15 <sup>1)</sup>
-0.25 ... 0	-1 ... +24 <sup>1)</sup>

1) If the medium water is measured, a higher overpressure limit is recommended.

psi	
-1 ... 0	-30 inHg ... +100
-30 inHg ... 0	-30 inHg ... +160 <sup>1)</sup>
-30 inHg ... +15	-30 inHg ... +200 <sup>1)</sup>
-30 inHg ... +30	-30 inHg ... +300 <sup>1)</sup>
-30 inHg ... +60	

1) If the medium water is measured, a higher overpressure limit is recommended.

inWC	
-10 ... +10	-80 ... 0
-20 ... 0	-100 ... 0
-20 ... +20	-100 ... +100
-40 ... 0	-120 ... 0
-40 ... +40	-125 ... +125
-50 ... +50	-150 ... 0
-60 ... 0	-200 ... +200
-75 ... +75	-250 ... 0

Other measuring ranges on request.

Further details on: Measuring range		
<b>Units</b>	bar, psi, inWC, mbar, kg/cm <sup>2</sup> , MPa, kPa	
<b>Overpressure limit<sup>1)</sup></b>		
bar	Measuring ranges ≤ 0.1 bar	0.2 bar
	Measuring ranges ≤ 0.4 bar	1 bar
	Measuring ranges < 1.6 bar	3 bar
	Measuring ranges ≥ 1.6 bar	2 times
	Measuring range 1,000 bar	1.43 times
bar abs.	Measuring ranges ≤ 0.4 bar abs.	1 bar abs.
	Measuring ranges < 1.6 bar abs.	3 bar abs.
	Measuring ranges ≥ 1.6 bar abs.	2 times
psi	Measuring ranges ≤ 1 psi	3 psi
	Measuring ranges ≤ 5 psi	14.5 psi
	Measuring ranges < 25 psi	45 psi
	Measuring ranges ≥ 25 psi	2 times
	Measuring ranges 160 psi, 1,000 psi, 1,500 psi and 10,000 psi	1.7 times
	Measuring range 15,000 psi	1.43 times
psi abs.	Measuring ranges ≤ 5 psi abs.	14.5 psi abs.
	Measuring ranges < 25 psi abs.	45 psi abs.
	Measuring ranges ≥ 25 psi abs.	2 times
inWC	Measuring ranges ≤ 40 inWC	80 inWC
	Measuring ranges ≤ 200 inWC	400 inWC
	Measuring ranges ≤ 400 inWC	1,200 inWC
inWC abs.	Measuring ranges ≤ 200 inWC abs.	400 inWC abs.
	Measuring ranges ≤ 400 inWC abs.	1,200 inWC abs.
<b>Vacuum resistance</b>	Yes (limitation with measuring ranges ≤ 0.1 bar [≤ 1 psi, ≤ 40 inWC]: -0.2 bar [-3 psi, -80 inWC])	

1) 3-fold overpressure limit on request.

Process connection				
Standard	Thread size	Max. measuring range	Overpressure limit	Sealing
EN 837	G 1/8 B	400 bar [5,800 psi]	572 bar [8,290 psi]	Copper
	G 1/4 B	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	■ Copper ■ Stainless steel
	G 1/4 female thread	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	Without
	G 3/8 B	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	■ Copper ■ Stainless steel
	G 1/2 B	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	■ Copper ■ Stainless steel
DIN EN ISO 1179-2 (formerly DIN 3852-E)	G 1/4 A	600 bar [8,700 psi]	858 bar [12,440 psi]	■ NBR ■ EPDM
		1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	FPM/FKM
DIN EN ISO 9974-2 (formerly DIN 3852-E)	M14 x 1.5	600 bar [8,700 psi]	858 bar [12,440 psi]	■ NBR ■ FPM/FKM ■ EPDM
		1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
ANSI/ASME B1.20.1	1/8 NPT	400 bar [5,800 psi]	572 bar [8,290 psi]	-
	1/4 NPT	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
	1/4 NPT female thread	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
	1/2 NPT	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
DIN 16288	M20 x 1.5	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	■ Copper ■ Stainless steel
ISO 7	R 1/4	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	-
	R 3/8	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
	R 1/2	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
KS	PT 1/4	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	-
	PT 1/2	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
	PT 3/8	1,000 bar [15,000 psi]	1,480 bar [21,400 psi]	
SAE J514 E	7/16-20 UNF O-ring BOSS	600 bar [8,700 psi]	858 bar [12,440 psi]	FPM/FKM
-	Flange connection	100 bar [1,450 psi]	143 bar [2,070 psi]	Without

Further details on: Process connection	
Max. measuring range	→ See above
Overpressure limit	→ See above
Sealing	→ See above
Pressure port diameter	<ul style="list-style-type: none"> <li>■ 3.5 mm (standard for all process connections)</li> <li>■ 0.6 mm (compatible with all male threads)</li> <li>■ 0.3 mm (compatible with all male threads)</li> <li>■ 6 mm (compatible with G 1/4 A and 1/4 NPT)</li> <li>■ T-restrictor possible (for process connections G 1/4 B, G 3/8 B, G 1/2 B and M20 x 1.5)</li> </ul>
Possible limitations	Depending on the choice of sealing on the process connection, there may be limitations in the permissible temperature range
NBR	-30 ... +100 °C [-22 ... +212 °F]
FPM/FKM	-20 ... +100 °C [-4 ... +212 °F]
EPDM	-40 ... +100 °C [-40 ... +212 °F]
Copper	-40 ... +100 °C [-40 ... +212 °F]
Stainless steel	-40 ... +100 °C [-40 ... +212 °F]

Output signal		
<b>Signal type</b>		
Current (2-wire)	4 ... 20 mA	
Voltage (3-wire)	<ul style="list-style-type: none"> <li>■ DC 0 ... 10 V</li> <li>■ DC 0 ... 5 V</li> <li>■ DC 1 ... 5 V</li> <li>■ DC 0.5 ... 4.5 V</li> </ul>	
Ratiometric (3-wire)	DC 0.5 ... 4.5 V	
<b>Load in <math>\Omega</math></b>		
Current (2-wire)	$\leq (\text{supply voltage} - 8 \text{ V}) / 0.02 \text{ A}$	
Voltage (3-wire)	$> \text{maximum output signal} / 1 \text{ mA}$	
Ratiometric (3-wire)	$> 10\text{k}$	
<b>Voltage supply</b>		
Supply voltage	Output signal 4 ... 20 mA	<ul style="list-style-type: none"> <li>■ DC 8 ... 30 V</li> <li>■ DC 8 ... 35 V <sup>1) 2)</sup></li> </ul>
	Output signal DC 0 ... 5 V <sup>1) 3)</sup>	<ul style="list-style-type: none"> <li>■ DC 8 ... 30 V</li> <li>■ DC 8 ... 35 V</li> </ul>
	Output signal DC 1 ... 5 V	<ul style="list-style-type: none"> <li>■ DC 8 ... 30 V</li> <li>■ DC 8 ... 35 V</li> </ul>
	Output signal DC 0.5 ... 4.5 V	<ul style="list-style-type: none"> <li>■ DC 8 ... 30 V</li> <li>■ DC 8 ... 35 V</li> </ul>
	Output signal DC 0 ... 10 V	<ul style="list-style-type: none"> <li>■ DC 14 ... 30 V</li> <li>■ DC 14 ... 35 V</li> </ul>
	Output signal DC 0.5 ... 4.5 V, ratiometric	DC 5 V $\pm 10\%$
Current supply	Current (2-wire)	Signal current, max. 25 mA
	Voltage (3-wire)	8 mA
	Ratiometric (3-wire)	8 mA
<b>Dynamic properties</b>		
Settling time per IEC 61298-2	Measuring range $\geq 0.4 \text{ bar}$ [ $\geq 5.8 \text{ psi}$ ]	$< 1 \text{ ms}$
	Measuring range $< 0.4 \text{ bar}$ [ $< 5.8 \text{ psi}$ ]	$< 1 \text{ min}$
Switch-on time	Measuring range $\geq 0.4 \text{ bar}$ [ $\geq 5.8 \text{ psi}$ ]	$< 15 \text{ ms}$
	Measuring range $< 0.4 \text{ bar}$ [ $< 5.8 \text{ psi}$ ]	$< 1 \text{ min}$

1) Not possible with non-linearity 0.25 % BFSL.

2) Only possible for temperatures up to 80 °C [176 °F].

3) Not possible with measuring ranges  $\leq 0.1 \text{ bar}$  [ $\leq 1.45 \text{ psi}$ ] (or equivalent).

Other output signals on request.

The power supply for the pressure transmitter must be made via an energy-limited electric circuit in accordance with section 9.3 of UL/EN/IEC 61010-1 or an LPS per UL/EN/IEC 60950-1 or class 2 in accordance with UL1310/UL1585 (NEC or CEC). The power supply must be suitable for operation above 2,000 m should the pressure transmitter be used at this altitude.

Electrical connection				
Connection type	IP code <sup>1)</sup>	Wire cross-section	Cable diameter	Cable material
<b>Angular connector DIN 175301-803 A</b>				
With mating connector, PG9 (standard)	IP65	To max. 1.5 mm <sup>2</sup>	6 ... 8 mm	-
With mating connector, PG11	IP65	To max. 1.5 mm <sup>2</sup>	8 ... 10 mm	
With mating connector, PG13.5 <sup>2)</sup>	IP65	To max. 1.5 mm <sup>2</sup>	10 ... 14 mm	
With moulded cable	IP65	3 x 0.75 mm <sup>2</sup>	6 mm	PUR
<b>Angular connector DIN 175301-803 C</b>				
With mating connector <sup>3)</sup>	IP65	To max. 0.75 mm <sup>2</sup>	4.5 ... 6 mm	-
With moulded cable	IP65	4 x 0.5 mm <sup>2</sup>	6.2 mm	PUR
<b>Circular connector M12 x 1 (4-pin)</b>				
Without mating connector	IP67	-	-	-
Straight with moulded cable	IP67	3 x 0.34 mm <sup>2</sup>	4.3 mm	PUR
Angled with moulded cable	IP67	3 x 0.34 mm <sup>2</sup>	4.3 mm	PUR
<b>Cable outlet</b>				
Unshielded <sup>3)</sup>	IP67	3 x 0.34 mm <sup>2</sup>	4 mm	PUR
OEM version, unshielded <sup>4)</sup>	IP67	3 x 0.14 mm <sup>2</sup>	2.85 mm	TPU

1) The stated IP codes only apply when plugged in using mating connectors that have the appropriate IP code.

2) Not feasible with cULus approval.


3) Not feasible with GL approval.


4) To max. 90 °C [194 °F].


Further details on: Electrical connection	
Connection type	→ See above
Wire cross-section	→ See above
Cable diameter	→ See above
Pin assignment	→ See below
Ingress protection (IP code) per IEC 60529	→ See above
Short-circuit resistance	S+ vs. 0V
Reverse polarity protection	U <sub>B</sub> vs. 0V No reverse polarity protection with ratiometric output signal
Insulation voltage	DC 500 V

## Pin assignment

All connectors with moulded cable have the same colour assignment as the unshielded cable outlet.

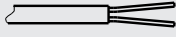
Angular connector DIN 175301-803 A			
		2-wire	3-wire
	U <sub>B</sub>	1	1
	0V	2	2
	S+	-	3

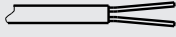
Angular connector DIN 175301-803 C			
		2-wire	3-wire
	U <sub>B</sub>	1	1
	0V	2	2
	S+	-	3

Circular connector M12 x 1 (4-pin)			
		2-wire	3-wire
	U <sub>B</sub>	1	1
	0V	3	3
	S+	-	4

### Legend

- U<sub>B</sub> Positive power supply terminal
- 0V Negative power supply terminal
- S+ Analogue output

Cable outlet, unshielded			
		2-wire	3-wire
	U <sub>B</sub>	Brown	Brown
	0V	Blue	Blue
	S+	-	Black

Cable outlet, OEM version, unshielded			
		2-wire	3-wire
	U <sub>B</sub>	Brown	Brown
	0V	Blue	Blue
	S+	-	Black

Material	
<b>Material (wetted)</b>	
< 10 bar [150 psi]	Stainless steel 316L
≥ 10 bar [150 psi]	Stainless steel 316L and PH grade steel
≤ 25 bar abs. [400 psi]	Stainless steel 316L
<b>Material (in contact with the environment)</b>	<ul style="list-style-type: none"> <li>■ Stainless steel 316L</li> <li>■ HNBR</li> <li>■ PA and PBT</li> </ul>
<b>Pressure transmission medium</b>	
< 10 bar [150 psi]	Synthetic oil
≥ 10 bar [150 psi]	Dry measuring cell
≤ 25 bar abs. [400 psia]	Synthetic oil

Operating conditions			
<b>Permissible temperature ranges</b> <sup>1)</sup>	Depending on the selected medium temperature range the following values result		
	<b>Standard</b>	<b>With voltage signal</b>	<b>With current signal</b> <sup>2) 3)</sup>
<b>Medium temperature range</b>	0 ... 80 °C [32 ... 176 °F]	-30 ... +100 °C [-22 ... +212 °F]	-40 ... +100 °C [-40 ... +212 °F] <sup>4)</sup>
<b>Ambient temperature range</b> <sup>5)</sup>	0 ... 80 °C [32 ... 176 °F]	-30 ... +100 °C [-22 ... +212 °F]	-40 ... +100 °C [-40 ... +212 °F] <sup>4)</sup>
<b>Storage temperature range</b>	-40 ... +70 °C [-40 ... +158 °F]	-40 ... +70 °C [-40 ... +158 °F]	-40 ... +70 °C [-40 ... +158 °F]

1) Limitations of the temperature ranges due to the sealing used → see "Further details on: Process connection".

2) With cULus approval the minimum ambient and medium temperature is -30 °C [-22 °F].

3) Only with supply voltage DC 8 ... 30 V.

4) Only with housed installation site that is protected from condensation.

5) Limitations and derating of the ambient temperature depend on the medium temperature.



Further details on: Operating conditions		
<b>Vibration resistance per IEC 60068-2-6</b>	<ul style="list-style-type: none"> <li>■ 10 g <sup>1)</sup></li> <li>■ 20 g (<math>\geq -30\text{ °C}</math> [<math>-22\text{ °F}</math>]) <sup>2)</sup> on request</li> </ul>	
<b>Shock resistance per IEC 60068-2-27</b>	With $\geq -30\text{ °C}$ [ $-22\text{ °F}$ ]	500 g
	With $< -30\text{ °C}$ [ $-22\text{ °F}$ ]	100 g
<b>Ingress protection (IP code) per IEC 60529</b>	→ See “Electrical connection”	
<b>Service life</b>		
Measuring range $\geq 600\text{ bar}$ [ $\geq 8,700\text{ psi}$ ]	10 million load cycles	
Measuring range $> 0.1\text{ bar}$ [ $> 1.45\text{ psi}$ ]	100 million load cycles	
Measuring range $\leq 0.1\text{ bar}$ [ $\leq 1.45\text{ psi}$ ]	10 million load cycles	




1) With GL approval and measuring range 0 ... 0.6 bar [0 ... 8.7 psi] only feasible with an accuracy of 1 %.

2) With GL approval only feasible for measuring range  $> 0 \dots 1\text{ bar}$  [ $> 0 \dots 14.5\text{ psi}$ ].




Packaging and instrument labelling	
<b>Packaging</b>	<ul style="list-style-type: none"> <li>■ Individual packaging</li> <li>■ Multiple packaging (up to 20 pieces possible)</li> </ul>
<b>Instrument labelling</b>	<ul style="list-style-type: none"> <li>■ WIKA product label, glued</li> <li>■ Customer-specific product label on request</li> </ul>

## Approvals

### Approvals included in the scope of delivery

Logo	Description	Country
	<b>EU declaration of conformity</b>	European Union
	EMC directive	
	EN 61326 emission (group 1, class B) and immunity (industrial application)	
	Pressure equipment directive	
	<b>EAC</b>	Eurasian Economic Community
	EMC directive	
	<b>UL</b> Safety (e.g. electr. safety, overpressure, ...)	USA and Canada

## Optional approvals

Logo	Description	Country
	<b>GOST</b> Metrology, measurement technology	Russia
	<b>KazInMetr</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS</b> Permission for commissioning	Kazakhstan
	<b>BelGIM</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO</b> Metrology, measurement technology	Ukraine
	<b>Uzstandard</b> Metrology, measurement technology	Uzbekistan
	<b>DNV GL</b> <sup>1)</sup> Ships, shipbuilding (e.g. offshore)	Germany
-	<b>CRN</b> Safety (e.g. electr. safety, overpressure, ...)	Canada

1) Not for measuring ranges < 0.6 bar [< 8.7 psi] and not for medium temperature range -40 ...+100 °C [-40 ... +212 °F].

## Manufacturer's information

Logo	Description
-	<b>China RoHS directive</b>

## Test report

Test report	
<b>Non-linearity 0.5 %</b>	3 measuring points
<b>Non-linearity 0.25 %</b>	5 measuring points

## Certificates (option)

Certificates	
<b>Certificate</b>	2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)

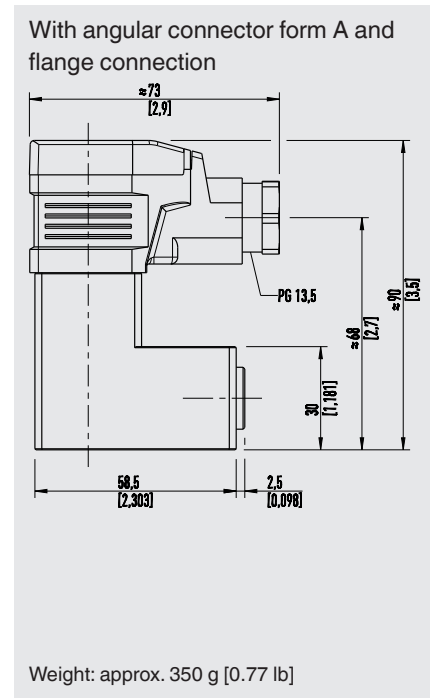
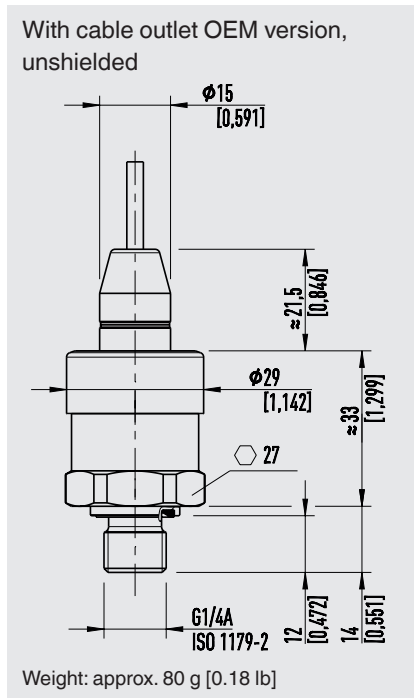
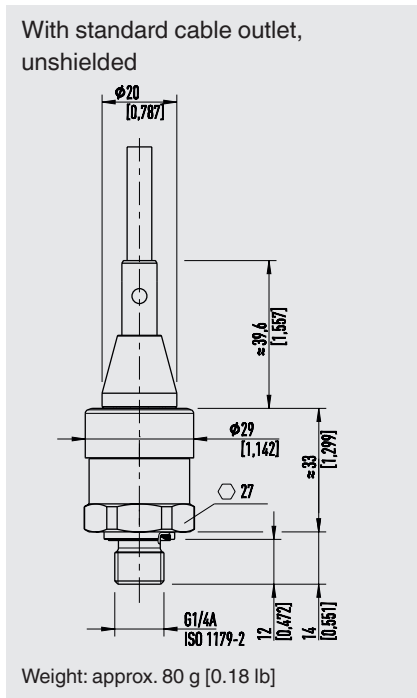
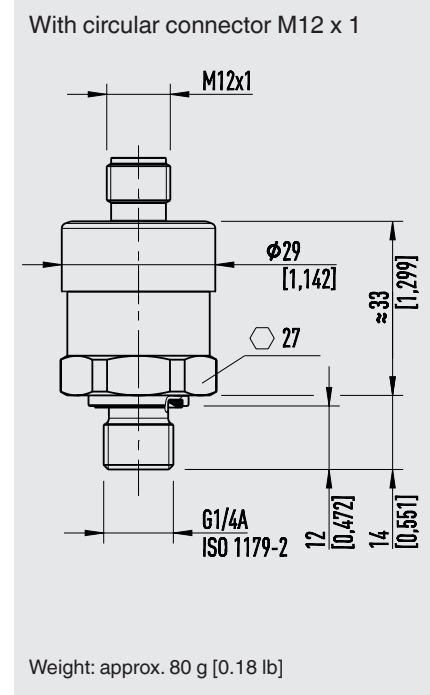
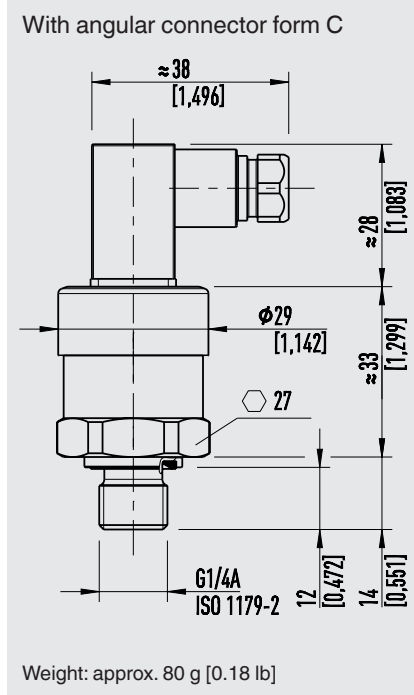
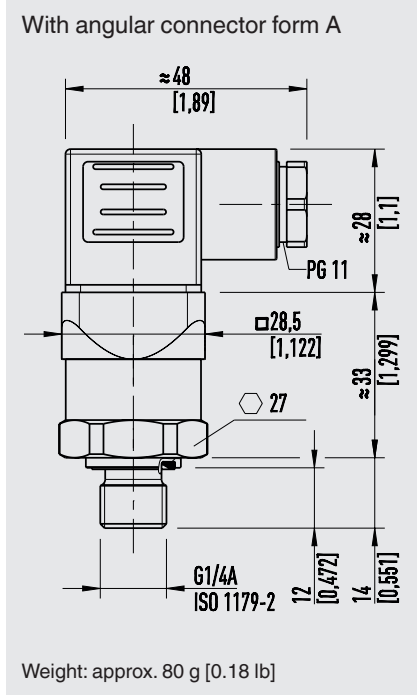
## Safety-related characteristic values

Safety-related characteristic values	
<b>MTTF</b>	> 100 years

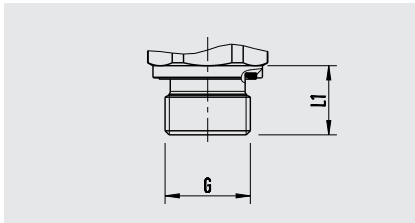
→ Approvals and certificates, see website

# Dimensions in mm [in]

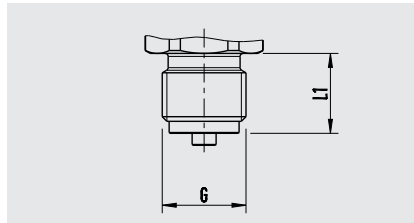
## Pressure transmitter



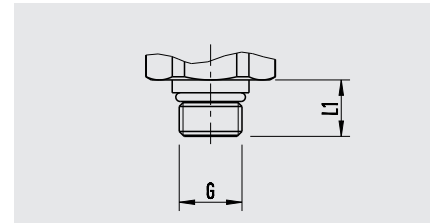
## Process connections



G	L1
G ¼ A DIN EN ISO 1179-2	14 [0.55]
G ½ A DIN EN ISO 1179-2	17 [0.67]
M14 x 1.5 DIN EN ISO 9974-2	14 [0.55]

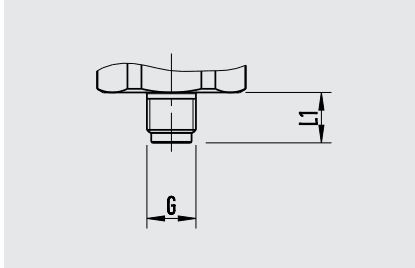


G	L1
G ¼ B EN 837	13 [0.51]
G ⅜ B EN 837	16 [0.63]
G ½ B EN 837	20 [0.79]
M20 x 1.5 DIN 16288	20 [0.79]

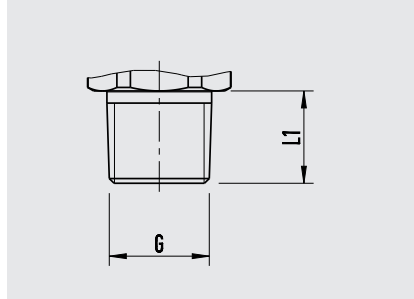


G	L1
7/16-20 UNF BOSS SAE J514 E	12.06 [0.48]

EN 837

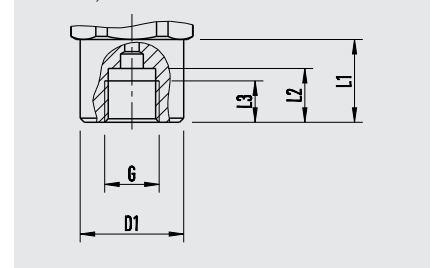


G	L1
G ⅜ B	10 [0.39]



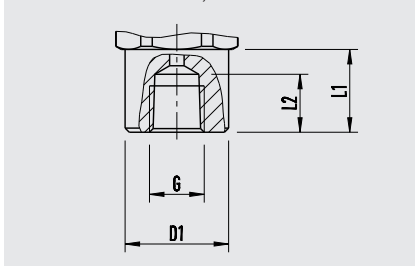
G	L1
⅛ NPT ANSI/ASME B1.20.1	10 [0.39]
¼ NPT ANSI/ASME B1.20.1	13 [0.51]
½ NPT ANSI/ASME B1.20.1	19 [0.75]
R ¼ ISO 7	13 [0.51]
R ⅜ ISO 7	15 [0.59]
R ½ ISO 7	19 [0.75]
PT ¼ KS	13 [0.51]
PT ⅜ KS	15 [0.59]
PT ½ KS	19 [0.75]

EN 837, female thread

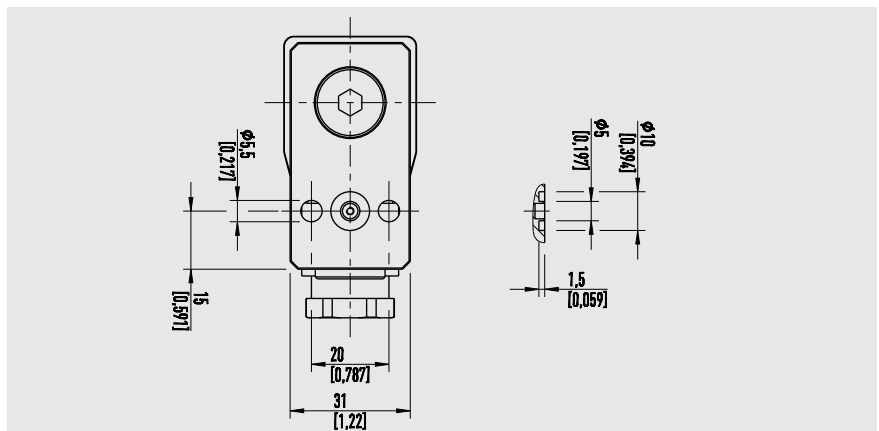


G	L1	L2	L3	D1
G ¼	20 [0.79]	13 [0.51]	10 [0.39]	Ø 25 [0.98]

ANSI/ASME B1.20.1, female thread



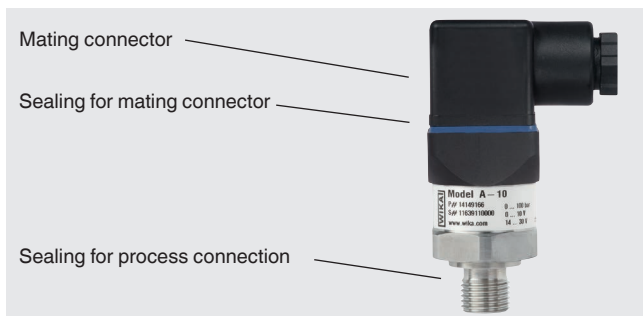
G	L1	L2	D1
¼ NPT	20 [0.79]	14 [0.55]	Ø 25 [0.98]



<b>Flange connection</b>	For dimensions see drawing
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→ For information on tapped holes and welding sockets, see Technical information IN 00.14 at [www.wika.com](http://www.wika.com)

## Accessories and spare parts



Description	Version	Order number
<b>Mating connector</b>		
Angular connector DIN 175301-803 A	Gland PG9	11427567
	Gland PG11	14243778
	Gland PG13.5	1604627
	With 2 m cable	11225793
	With 5 m cable	11250186
	Conduit ½ NPT	11022485
Angular connector DIN 175301-803 C <sup>1)</sup>	Gland PG7	1439081
	With 2 m cable	11225823
	With 5 m cable	11250194
Circular connector M12 x 1, 4-pin, straight	Without cable	2421262
	With 2 m cable	11250780
	With 5 m cable	11250259
Circular connector M12 x 1, 4-pin, angled	Without cable	2421270
	With 2 m cable	11250798
	With 5 m cable	11250232
<b>Sealings for mating connectors, blue (WIKA)</b>		
Angular connector DIN 175301-803 A		1576240
Angular connector DIN 175301-803 C		11169479
<b>Sealings for process connection</b>		
G ¼ EN 837	Copper	11251051
G ¼ B EN 837	Copper	11250810
	Stainless steel	11250844
G ⅜ B EN 837	Copper	11250861
	Stainless steel	11251042
G ½ B EN 837	Copper	11250861
	Stainless steel	11251042
M14 x 1.5 DIN EN ISO 9974-2	NBR	1537857
	FPM/FKM	14045531
	EPDM	14110827
M20 x 1.5 DIN 16288	Copper	11250861
	Stainless steel	11251042
7/16-20 UNF O-ring Boss SAE J514 E	FPM/FKM	14146066
G ¼ A DIN EN ISO 1179-2	NBR	1537857
	FPM/FKM	14045531
	EPDM	14110827

Description	Version	Order number
G ½ A DIN EN ISO 1179-2	NBR	1039067
	FPM/FKM	1039075

1) Connector not permissible for A-10 with GL approval.

Only use the accessories listed above, otherwise it could lead to the loss of the approval.

### Ordering information

Model / Non-linearity / Measuring range / Process connection / Sealing / Permissible medium temperature range / Output signal / Supply voltage / Electrical connection / Certificates / Approvals

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