

Pressure transmitter

For applications in hazardous areas

Model IS-3

WIKA data sheet PE 81.58



for further approvals
see page 10

Applications

- Chemical, petrochemical industry
- Oil, natural gas
- Machine building

Special features

- Measuring ranges from 0 ... 0.1 to 0 ... 6,000 bar [0 ... 3 to 0 ... 15,000 psi]
- Approved for use in hazardous areas, e.g. ATEX, IECEx, FM and CSA



Fig. left: With angular connector and flush process connection

Fig. centre: High-pressure version

Fig. right: With field case

Description

For the highest demands

The pressure transmitters of the IS-3 series have been specifically designed for the highest industrial requirements in hazardous areas and feature the common approvals, such as ATEX, IECEx, FM and CSA.

The model IS-3 pressure transmitter is available with measuring ranges up to 6,000 bar and is suitable for applications ranging from general machine building to high-pressure applications.

Design

All wetted parts are manufactured from stainless steel and are fully welded. Internal sealing elements are completely avoided, so that the unit can be used with almost all media. The robust case is also made of stainless steel and provides a minimum ingress protection of IP65. IP68 versions are also available.

The process connections with flush diaphragm are particularly suitable for the measurement of viscous and contaminated media and ensure trouble-free pressure measurement at all times.

The optional field case of the model IS-3 enables operation in extreme environmental conditions and is resistant to acids, bases, oils and solvents. Via the field case connection integrated into the case's head, the electrical cabling can be installed quickly and easily.

Voltage supply

It is recommended that the intrinsically safe variants of the IS-3 series are powered via a suitable repeater power supply. An ideal voltage supply is offered by the intrinsically safe repeater power supply model IS Barrier, see "Accessories".

Measuring ranges

Gauge pressure							
bar	0 ... 0.1	0 ... 0.16	0 ... 0.25	0 ... 0.4	0 ... 0.6	0 ... 1	0 ... 1.6
	0 ... 2.5	0 ... 4	0 ... 6	0 ... 10	0 ... 16	0 ... 25	0 ... 40
	0 ... 60	0 ... 100	0 ... 160	0 ... 250	0 ... 400	0 ... 600	0 ... 1,000 ¹⁾
	1,600 ^{1) 2)}	2,500 ^{1) 2)}	4,000 ^{1) 2)}	5,000 ^{1) 2)}	6,000 ^{1) 2)}		
psi	0 ... 3	0 ... 5	0 ... 10	0 ... 15	0 ... 20	0 ... 25	0 ... 30
	0 ... 50	0 ... 60	0 ... 100	0 ... 150	0 ... 160	0 ... 200	0 ... 250
	0 ... 300	0 ... 400	0 ... 500	0 ... 600	0 ... 750	0 ... 800	0 ... 1,000
	0 ... 1,500	0 ... 2,000	0 ... 3,000	0 ... 4,000	0 ... 5,000	0 ... 6,000	0 ... 7,500
	0 ... 8,000	0 ... 10,000 ¹⁾	0 ... 15,000 ¹⁾				

1) Only for instruments without flush process connection.

2) Only for instruments with ignition protection type Ex i. Not for instruments with SIL 2.

Absolute pressure							
bar	0 ... 0.25	0 ... 0.4	0 ... 0.6	0 ... 1	0 ... 1.6	0 ... 2.5	0 ... 4
	0 ... 6	0 ... 10	0 ... 16	0 ... 25			
psi	0 ... 5	0 ... 10	0 ... 15	0 ... 30	0 ... 60	0 ... 100	0 ... 160
	0 ... 200	0 ... 300					

Vacuum and +/- measuring ranges							
bar	-1 ... 0	-1 ... +0.6	-1 ... +1.5	-1 ... +3	-1 ... +5		
	-1 ... +9	-1 ... +15	-1 ... +24				
psi	-15 inHg ... 0	-30 inHg ... 0	-30 inHg ... 15	-30 inHg ... 30	-30 inHg ... 60		
	-30 inHg ... 100	-30 inHg ... 160	-30 inHg ... 200	-30 inHg ... 300			

Other measuring ranges on request.

Overload safety

The overload safety is based on the sensor element used. Depending on the selected process connection and sealing, restrictions in overload safety can result.

A higher overload safety will result in a higher temperature error.

Measuring ranges ≤ 25 bar [≤ 400 psi]: 3-fold

Measuring ranges 40 ... 600 bar [500 ... 8,000 psi]: 2-fold¹⁾

Measuring ranges $\geq 1,000$ bar [$\geq 10,000$ psi]: 1.15-fold

1) 1.7-fold overload safety with 1,000 psi, 1,500 psi, 4,000 psi and 6,000 psi

Output signal

Analogue signal

4 ... 20 mA

Permissible load in Ω

Model IS-3:

$\leq (\text{supply voltage} - 10 \text{ V}) / 0.02 \text{ A}$ - (cable length in m x 0.14 Ω)

Model IS-3 with field case:

$\leq (\text{supply voltage} - 11 \text{ V}) / 0.02 \text{ A}$

For the test circuit signal of the IS-3 model with field case a load of $\leq 15 \Omega$ applies

Voltage supply

Supply voltage U+

Model IS-3: DC 10 ... 30 V

Model IS-3 with field case: DC 11 ... 30 V

Supply and signal circuit for ATEX/IECEx ignition protection type Ex i (see product label)

Voltage: $U_i = \text{DC } 30 \text{ V}$

Current: $I_i = 100 \text{ mA}$

Power: Group I (mines susceptible to firedamp): $P_i = 800 \text{ mW}$

Group II (explosive gas atmosphere other than mines): $P_i = 800 \text{ mW}$

Group IIIB (explosive gas atmosphere other than mines): $P_i = 800/650 \text{ mW}$

Group IIIC (explosive gas atmosphere other than mines): $P_i = 750/650/550 \text{ mW}$

Effective internal capacitance (version with non-detachable cable connection)

$C_i \leq 16.5 \text{ nF}$

$C_i \leq 16.5 \text{ nF} + 0.2 \text{ nF/m}$

Effective internal inductance (version with non-detachable cable connection)

$L_i = 0 \mu\text{H}$

$L_i = 0 \mu\text{H} + 2 \mu\text{H/m}$

Supply and signal circuit for CSA and FM (see product label)

Entropy/non-incendive parameters:

$V_{\text{max}}/U_i = 30 \text{ V}$

$I_{\text{max}}/I_i = 100 \text{ mA}$ at ambient temperature $\leq 85 \text{ }^\circ\text{C}$ [185 $^\circ\text{F}$]

$I_{\text{max}}/I_i = 87 \text{ mA}$ at ambient temperature $> 85 \text{ }^\circ\text{C}$ [185 $^\circ\text{F}$]

$P_{\text{max}}/P_i = 0.8 \text{ W}$

$C_i = 16.5 \text{ nF}$ (flying leads: + 0.2 nF/m)

$L_i = 0 \mu\text{H}$ (flying leads: + 2 $\mu\text{H/m}$)

Reference conditions (per IEC 61298-1)

Temperature

15 ... 25 $^\circ\text{C}$ [59 ... 77 $^\circ\text{F}$]

Atmospheric pressure

860 ... 1,060 mbar [86 ... 106 kPa/12.5 ... 15.4 psig]

Air humidity

45 ... 75 % r. h. (non-condensing)

Mounting position

Calibrated in vertical mounting position with process connection facing downwards.

Supply voltage

DC 24 V

Time response

Settling time

$\leq 2 \text{ ms}$

$\leq 10 \text{ ms}$ for medium temperatures below $-30 \text{ }^\circ\text{C}$ [$-22 \text{ }^\circ\text{F}$]

Accuracy specifications

Accuracy at reference conditions

Accuracy	
Standard	$\leq \pm 0.5 \%$ of span
Option	$\leq \pm 0.25 \%$ of span ¹⁾

1) Only for measuring ranges $\geq 0.25 \text{ bar}$ [3 psi] and $\leq 1,000 \text{ bar}$ [15,000 psi]

Including non-linearity, hysteresis, zero offset and end value deviation (corresponds to measured error per IEC 61298-2).

Non-linearity (IEC 61298-2)

$\leq \pm 0.2 \%$ of span BFSL

Non-repeatability

$< 0.1 \%$ of span

Mean temperature coefficient of zero point

[0 ... 80 $^\circ\text{C}$ / 32 ... 176 $^\circ\text{F}$]

Measuring range $\leq 0.25 \text{ bar}$: $\leq \pm 0.4 \%$ of span/10 K

Measuring range $> 0.25 \text{ bar}$: $\leq \pm 0.2 \%$ of span/10 K

Mean temperature coefficient of span

[0 ... 80 $^\circ\text{C}$ / 32 ... 176 $^\circ\text{F}$]

$\leq \pm 0.2 \%$ of span/10 K

Long-term stability at reference conditions

$\leq \pm 0.2 \%$ of span/year

Adjustability of zero point and span

Adjustment is made using potentiometers inside the instrument.

Zero point: ±5 %

Span: ±5 %

For use in hydrogen applications, observe the Technical information IN 00.40 at www.wika.com regarding long-term stability.

Process connections

Process connections, standard

Standard	Thread size	Max. nominal pressure	Overload safety
EN 837	G ¼ B	1,000 bar [14,500 psi]	1,400 bar [20,300 psi]
	G ½ B	1,000 bar [14,500 psi]	1,800 bar [26,100 psi]
	G ¾ B	1,000 bar [14,500 psi]	1,400 bar [20,300 psi]
DIN EN ISO 1179-2 (formerly DIN 3852-E)	G ¼ A	600 bar [8,700 psi]	600 bar [8,700 psi]
	G ½ A	600 bar [8,700 psi]	600 bar [8,700 psi]
ANSI/ASME B1.20.1	¼ NPT	1,000 bar [14,500 psi]	1,500 bar [21,700 psi]
	½ NPT	1,000 bar [14,500 psi]	1,500 bar [21,700 psi]
SAE J514 E	7/16-20 UNF BOSS	600 bar [8,700 psi]	600 bar [8,700 psi]
	9/16-18 UNF BOSS	600 bar [8,700 psi]	600 bar [8,700 psi]
DIN 16288	M20 x 1.5	1,000 bar [14,500 psi]	1,800 bar [26,100 psi]
ISO 7	R ¼	1,000 bar [14,500 psi]	1,600 bar [23,200 psi]
	R ¾	1,000 bar [14,500 psi]	1,400 bar [20,300 psi]
JIS B7505-76	G ¼ B	1,000 bar [14,500 psi]	1,000 bar [14,500 psi]
-	G ½ B male thread / G ¼ female thread	1,000 bar [14,500 psi]	1,400 bar [20,300 psi]
	M20 x 1.5 female thread with sealing cone ¹⁾	6,000 bar	15,000 bar
	M16 x 1.5 female thread with sealing cone ¹⁾	6,000 bar	10,000 bar
	9/16-18 UNF female thread F250-C ¹⁾	6,000 bar	10,000 bar
	G ½ B flush	600 bar [8,700 psi]	600 bar [8,700 psi]
	G 1 B flush	1.6 bar [20 psi]	10 bar [145 psi]
	G 1 B flush, hygienic	25 bar [350 psi]	50 bar [725 psi]

1) Not available for psi measuring ranges.

Process connections for the optional medium temperatures (see page 6)

Standard	Thread size	Max. nominal pressure	Overload safety
EN 837	G ¼ B	400 bar [5,800 psi]	800 bar [11,600 psi]
	G ½ B	400 bar [5,800 psi]	800 bar [11,600 psi]
DIN EN ISO 1179-2 (formerly DIN 3852-E)	G ¼ A	400 bar [5,800 psi]	600 bar [8,700 psi]
ANSI/ASME B1.20.1	½ NPT	400 bar [5,800 psi]	800 bar [11,600 psi]
ISO 7	R ¼	400 bar [5,800 psi]	800 bar [11,600 psi]
-	G ½ B flush	600 bar [8,700 psi] ¹⁾	600 bar [8,700 psi] ¹⁾
	G 1 B flush	1.6 bar [20 psi]	10 bar [145 psi]
	G 1 B flush, hygienic	25 bar [350 psi]	50 bar [725 psi]

1) Restrictions depending on sealing material, see table "Sealing material restrictions for G ½ B flush process connection"

Sealings

Process connection	Material	
	Standard	Option
EN 837	Copper	Stainless steel
DIN EN ISO 1179-2 (formerly DIN 3852-E)	NBR ¹⁾	FKM/FPM ²⁾
SAE J514 E	NBR ¹⁾	FKM/FPM ²⁾
G ½ B flush	NBR ^{1) 4)}	FKM/FPM ^{2) 4)} , FFKM ^{2) 4)} , EPDM ^{3) 4)}
G 1 B flush	NBR ¹⁾	FKM/FPM ²⁾ , EPDM ³⁾
G 1 B flush, hygienic	EPDM ³⁾	-

1) Permissible temperature range: -20 ... +100 °C [-4 ... +212 °F]

2) Permissible temperature range: -15 ... +200 °C [5 ... 392 °F]

3) Permissible temperature range: -40 ... +150 °C [-40 ... +302 °F]

4) See also table "Sealing material restrictions for G ½ B flush process connection" with regard to overload safety.

Except for sealings for process connections per EN 837 the sealings listed under "Standard" are included in the delivery.

Sealing material restrictions for G ½ B flush process connection

Material	Overload safety	
	T = -20 ... +80 °C [-4 ... +176 °F]	T = -20 ... +150 °C [-4 ... +302 °F]
NBR	1,200 bar [17,400 psi]	N/A
FKM/FPM	1,200 bar [17,400 psi]	600 bar [8,700 psi]
FFKM	1,200 bar [17,400 psi]	1,200 bar [17,400 psi]
EPDM	800 bar [11,600 psi]	400 bar [5,800 psi]

T = Ambient temperature

N/A = Not applicable

Electrical connections

Available connections

see "Dimensions in mm"

For ignition protection type Ex nA

- Circular connector M16 x 0.75 IEC 61076-2-106
- Cable outlet IP67 with protective cap
- Cable outlet IP68 (permanent use in the medium)

For ignition protection type Ex tc

- Cable outlet IP67 with protective cap
- Cable outlet IP68 (permanent use in the medium)

For measuring ranges > 1,000 bar

- Angular connector DIN EN 175301-803 A
- Circular connector M12 x 1 IEC 61076-2-101 A-COD
- Cable outlet IP67
- Field case


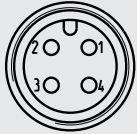
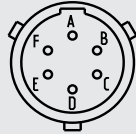
Reverse polarity protection



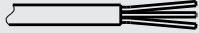
U₊ vs. U₋

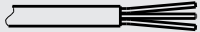
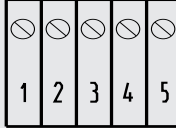
Insulation voltage

DC 500 V

Specifications

	Angular connector DIN EN 175301-803 A	Circular connector M12 x 1 IEC 61076-2-101 A-COD (4- pin)	Bayonet connector MIL-DTL-26482 (6-pin)
Connection diagram			
Assignment (2-wire)	U+ = 1 U- = 2	U+ = 1 U- = 3	U+ = A U- = B
Cable shield	-	-	-
Wire cross-section	Max. 1.5 mm ²	-	-
Cable diameter	6 ... 8 mm Ship approval: 10 ... 14 mm	-	-

	Bayonet connector MIL-DTL-26482 (4-pin)	Circular connector M16 x 0.75 IEC 61076-2-106 (5-pin)	All cable outlets
Connection diagram			
Assignment (2-wire)	U+ = A U- = B	U+ = 3 U- = 1	U+ = brown (BN) U- = green (GN)
Cable shield	-	-	Grey (GY)
Wire cross-section	-	-	0.5 mm ²
Cable diameter	-	-	6.8 mm 7.5 mm (variants for permanent use in the medium)

	Cable outlet IP67 with protective cap	Field case
Connection diagram		
Assignment (2-wire)	U+ = brown (BN) U- = blue (BU)	U+ = 1 U- = 2 Test+ = 3 Test- = 4
Cable shield	Braid	5
Wire cross-section	0.34 mm ²	Max. 1.5 mm ²
Cable diameter	5.5 mm	Cable gland Nickel-plated brass: 7 ... 13 mm Stainless steel: 8 ... 15 mm Plastic: 6.5 ... 12 mm

Legend

U+	Positive power supply terminal
U-	Negative power supply terminal
S+	Analogue output
Test+	Positive test connection
Test-	Negative test connection

Operating conditions

Ingress protection (per IEC 60529)

The ingress protection depends on the respective electrical connection.

The stated ingress protection only applies when plugged in using mating connectors that have the appropriate ingress protection.

IP65 ■ Angular connector DIN EN 175301-803 A

IP67 ■ Circular connector M12 x 1 IEC 61076-2-101 A-COD
■ Circular connector M16 x 0.75 IEC 61076-2-106
■ Cable outlet IP67
■ Cable outlet IP67 with protective cap (precondition: Avoidance of water accumulation in the protective cap)
■ Bayonet connector MIL-DTL-26482

IP68 ■ Cable outlet IP68 cable gland (72 h / 300 mbar)
■ Cable outlet IP68 (permanent use in the medium, max. pressure 2 bar)

IP69K ■ Field case

Ignition protection types ATEX/IECEX

- II 1G Ex ia IIA T4/T5/T6 Ga
- II 1G Ex ia IIC T4/T5/T6 Ga
- II 1/2G Ex ia IIC T4/T5/T6 Ga/Gb
- II 3G Ex ic IIC T4/T5/T6 Gc X
- II 3G Ex nA IIC T4/T5/T6 Gc X
- II 3D Ex tc IIIC T90 °C Dc X
- II 1D Ex ia IIIB T₂₀₀ 135 °C Da
- II 1D Ex ia IIIC T135 °C Da
- II 1/2D Ex ia IIIC T135 °C Da/Db
- II 1/2D Ex ia IIIB T₂₀₀ 135 °C Da/Db
- I M1 Ex ia I Ma

Ignition protection types for other approvals, see "Approvals"

Vibration resistance (per IEC 60068-2-6, vibration under resonance)

- Model IS-3: 20 g
- Model IS-3 with field case and cable outlet IP67 with protective cap: 10 g
- Model IS-3 with measuring range > 1,000 bar: 5 g
- Model IS-3 for optional medium temperature ranges: 5 g
- Model IS-3 for optional medium temperature ranges and with field case: 2 g

Shock resistance (per IEC 60068-2-27, mechanical shock)

- Model IS-3: 1,000 g
- Model IS-3 with field case: 600 g
- Model IS-3 with measuring range > 1,000 bar: 100 g
- Model IS-3 with cable outlet IP67 with protective cap: 100 g
- Model IS-3 for optional medium temperature ranges: 100 g
- Model IS-3 for optional medium temperature ranges and with field case: 50 g

Permissible temperature ranges for operation in accordance with the data sheet specifications (for ignition protection type Ex i)

Available options	
Standard	-20 ... +80 °C [-4 ... +176 °F]
Option 1	-20 ... +150 °C [-4 ... +302 °F] (only for flush process connections and measuring ranges ≤ 600 bar [8,000 psi])
Option 2	-40 ... +150 °C [-40 ... +302 °F] (only for process connections with pressure port and measuring ranges ≤ 400 bar [5,000 psi])
Option 3	-40 ... +200 °C [-40 ... +392 °F] (only for process connections with pressure port and measuring ranges ≤ 400 bar [5,000 psi])
Oxygen	-20 ... +60 °C [-4 ... +140 °F]

- Medium/ ambient: Permissible temperature ranges depend on the option selected above, the EPL, the temperature class and the selected electrical connection.
→ See chapter “Specifications” in the operating instructions.
- Storage: -20 ... +80 °C [-4 ... +176 °F]

Permissible temperature ranges for operation in accordance with the data sheet specifications (for ignition protection types Ex nA and Ex tc)

- Medium: -15 ... +70 °C [5 ... +158 °F] (with oxygen -15 ... +60 °C [5 ... +140 °F])
- Ambient: -15 ... +70 °C [5 ... +158 °F]
- Storage: -15 ... +70 °C [5 ... +158 °F]

Materials

Wetted parts

- Measuring ranges ≤ 25 bar and ≤ 400 psi, process connection G ½ B flush and G 1 B flush: 316Ti
- Measuring ranges ≥ 40 ... ≤ 1,000 bar and ≥ 500 ... ≤ 15,000 psi: 316Ti and S13800
- Measuring ranges > 1,000 bar: S13800
- Process connection G 1 B flush, hygienic: 316L
- Measuring ranges ≤ 25 bar and ≤ 400 psi with process connection with pressure port for optional medium temperature range: 316L and 316Ti
- Measuring ranges > 25 bar and > 400 psi with process connection with pressure port for optional medium temperature range: 316L, 316Ti and S13800













For sealing materials see “Process connections”




Where the medium is hydrogen, contact the manufacturer.

Non-wetted parts

- Case: Stainless steel
- Angular connector DIN EN 175301-803 A: PA6
- Circular connector M12 x 1 adjustable: PA6, stainless steel
- Circular connector M12 x 1 not adjustable: Stainless steel
- Circular connector M16 x 0.75 adjustable: PA6, stainless steel, Zn nickel-plated
- Circular connector M16 x 0.75 not adjustable: Stainless steel, Zn nickel-plated
- Bayonet connector adjustable: PA6, stainless steel, Al nickel-plated
- Cable outlet IP67: PA6, stainless steel, nickel-plated brass
- Cable outlet IP67 with protective cap: Stainless steel, PA66/6-FR
- Cable outlet IP68 cable gland: Stainless steel, nickel-plated brass
- Cable outlet IP68: Stainless steel
- Field case: Stainless steel, nickel-plated brass / stainless steel
- Internal pressure transmission medium
 - No oxygen version: Synthetic oil
 - Oxygen version: Halocarbon oil
 - Instruments with measuring range > 25 bar [400 psi]: Dry measuring cell

Approvals

Logo	Description	Country
	<p>EU declaration of conformity</p> <ul style="list-style-type: none"> ■ EMC directive, EN 61326 emission (group 1, class B) and immunity (industrial application) During interference consider an increased measuring deviation of up to 1 %. ■ Pressure equipment directive, PS > 200 bar; module A, pressure accessory ■ RoHS directive ■ ATEX directive <p>Hazardous areas</p> <ul style="list-style-type: none"> - Ex i Zone 0 gas [II 1G Ex ia IIA T4/T5/T6 Ga] [II 1G Ex ia IIC T4/T5/T6 Ga] Zone 1 mounting to zone 0 gas [II 1/2G Ex ia IIC T4/T5/T6 Ga/Gb] Zone 2 gas [II 3G Ex ic IIC T4/T5/T6 Gc X] Zone 20 dust [II 1D Ex ia IIIB T₂₀₀ 135 °C Da] [II 1D Ex ia IIIC T135 °C Da] Zone 21 mounting to zone 20 dust [II 1/2D Ex ia IIIB T₂₀₀ 135 °C Da/Db] [II 1/2D Ex ia IIIC T135 °C Da/Db] Mining [I M1 Ex ia I Ma] - Ex n Zone 2 gas [II 3G Ex nA IIC T4/T5/T6 Gc X] - Ex t Zone 22 dust [II 3D Ex tc IIIC T90 °C Dc X] 	European Union
	<p>IECEx</p> <p>Hazardous areas</p> <ul style="list-style-type: none"> - Ex i Zone 0 gas [Ex ia IIA T4/T5/T6 Ga] [Ex ia IIC T4/T5/T6 Ga] Zone 1 mounting to zone 0 gas [Ex ia IIC T4/T5/T6 Ga/Gb] Zone 2 gas [Ex ic IIC T4/T5/T6 Gc X] Zone 20 dust [Ex ia IIIB T₂₀₀ 135 °C Da] [Ex ia IIIC T135 °C Da] Zone 21 mounting to zone 20 dust [Ex ia IIIB T₂₀₀ 135 °C Da/Db] [Ex ia IIIC T135 °C Da/Db] Mining [Ex ia I Ma] - Ex n Zone 2 gas [Ex nA IIC T4/T5/T6 Gc X] - Ex t Zone 22 dust [Ex tc IIIC T90 °C Dc X] 	International
	<p>EAC</p> <ul style="list-style-type: none"> ■ EMC directive ■ Hazardous areas (see approval) 	Eurasian Economic Community
	<p>FM</p> <p>Hazardous areas (see approval)</p>	USA
	<p>CSA</p> <ul style="list-style-type: none"> ■ Safety (e.g. electr. safety, overpressure, ...) ■ Hazardous areas (see approval) 	USA and Canada
	<p>GOST</p> <p>Metrology, measurement technology</p>	Russia
	<p>KazInMetr</p> <p>Metrology, measurement technology</p>	Kazakhstan
-	<p>MTSCHS</p> <p>Permission for commissioning</p>	Kazakhstan
	<p>BelGIM</p> <p>Metrology, measurement technology</p>	Belarus
	<p>UkrSEPRO</p> <p>Metrology, measurement technology</p>	Ukraine
	<p>Uzstandard</p> <p>Metrology, measurement technology</p>	Uzbekistan
	<p>INMETRO</p> <p>Metrology, measurement technology (see approval)</p>	Brazil
	<p>NEPSI</p> <p>Hazardous areas (see approval)</p>	China

Logo	Description	Country
	KCs (KOSHA) Hazardous areas (see approval)	South Korea
-	PESO Hazardous areas (see approval)	India
	3-A Sanitary Standard This instrument is 3-A marked, based on a third party verification for conformance to the 3-A standard number 74-07 (sensors and sensor fittings and connections).	USA
	DNV GL Ships, shipbuilding (e.g. offshore)	International
-	CRN Safety (e.g. electr. safety, overpressure, ...)	Canada

Manufacturer's information and certificates

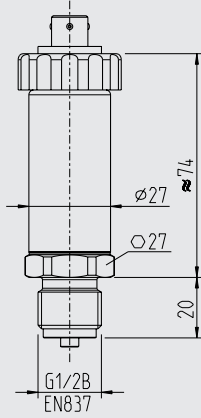
Logo	Description
-	MTTF: > 100 years
-	China RoHS directive

→ Approvals and certificates, see website

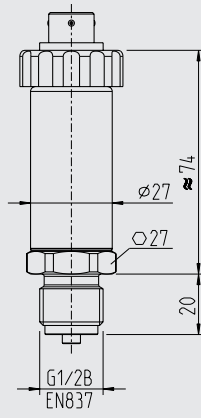
Dimensions in mm

Pressure transmitter

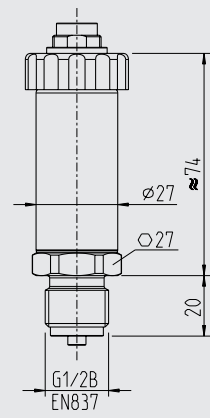
Bayonet connector
MIL-DTL-26482
(4-pin) adjustable



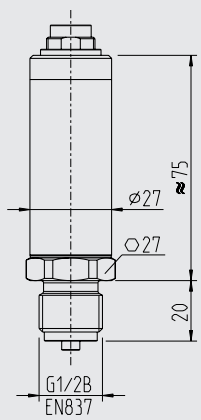
Bayonet connector
MIL-DTL-26482
(6-pin) adjustable



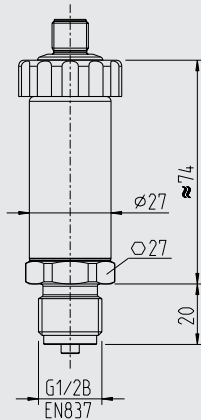
Circular connector M16 x 0.75
IEC 61076-2-106
(5-pin) adjustable



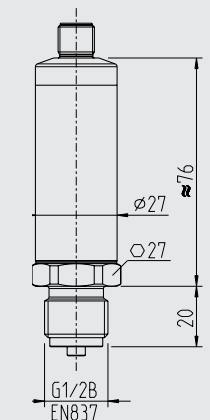
Circular connector M16 x 0.75
IEC 61076-2-106
(5-pin) not adjustable



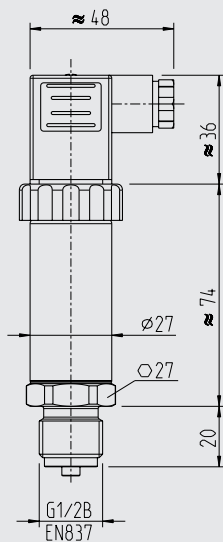
Circular connector M12 x 1
IEC 61076-2-101 A-COD (4-pin)
adjustable



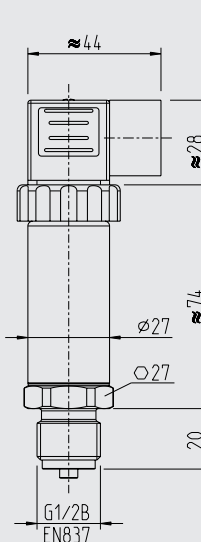
Circular connector M12 x 1
IEC 61076-2-101 A-COD
(4-pin) not adjustable



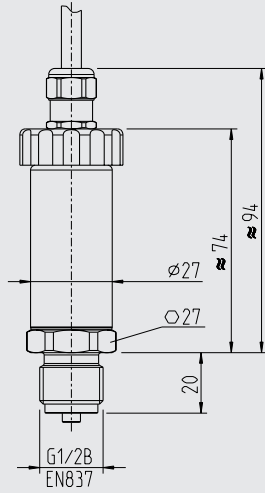
Angular connector
DIN EN 175301-803 A PG 9
adjustable



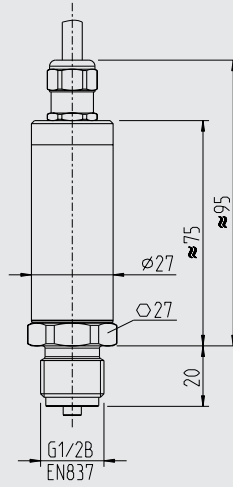
Angular connector
DIN EN 175301-803 A 1/2 NPT
adjustable



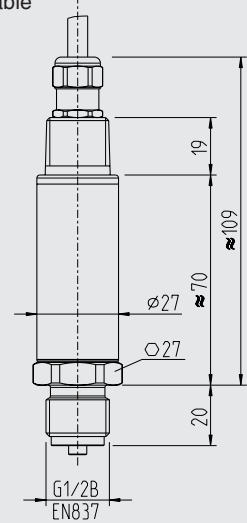
Cable outlet IP67
adjustable



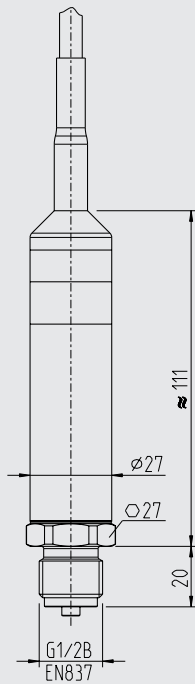
Cable outlet IP68
Cable gland
not adjustable



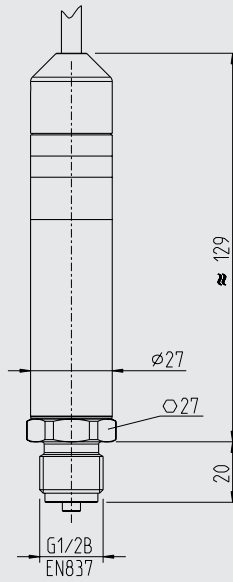
Cable outlet IP68
Cable gland conduit 1/2 NPT
not adjustable



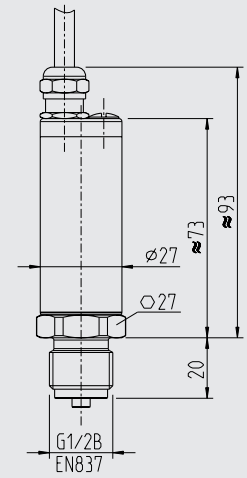
Cable outlet IP68 PUR
(permanent use in the medium)
not adjustable



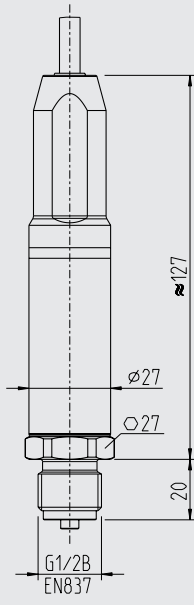
Cable outlet IP68 FEP
(permanent use in the medium)
not adjustable



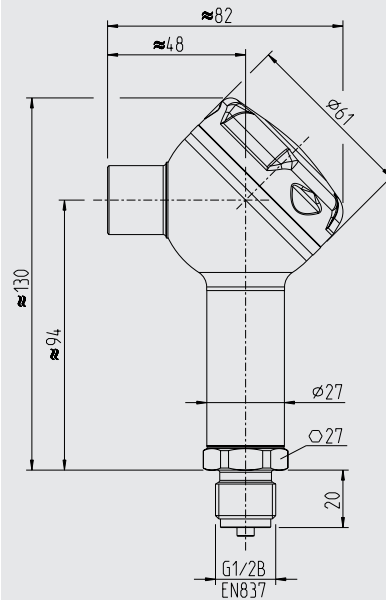
Cable outlet IP68
Cable gland
adjustable



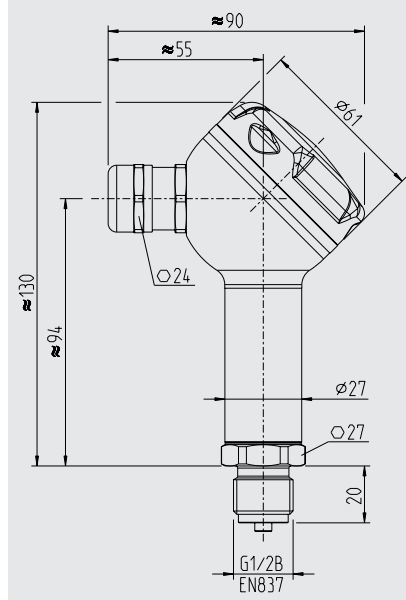
Cable outlet IP67 with protective cap not adjustable



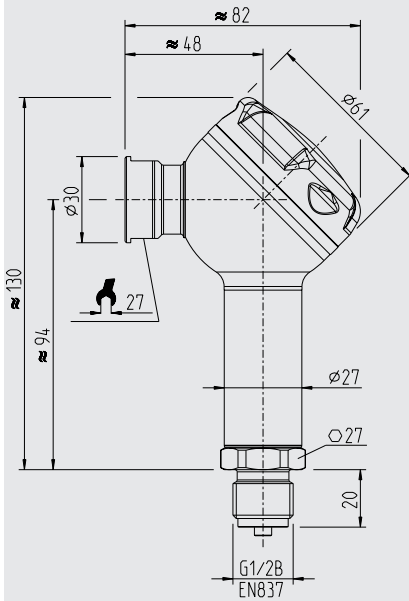
Field case
Conduit 1/2 NPT-I
adjustable



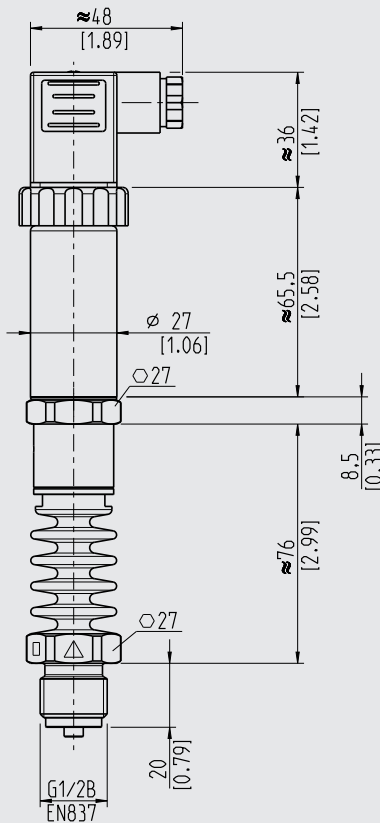
Field case
Cable gland
adjustable



Field case
Conduit M20 x 1.5-I
adjustable

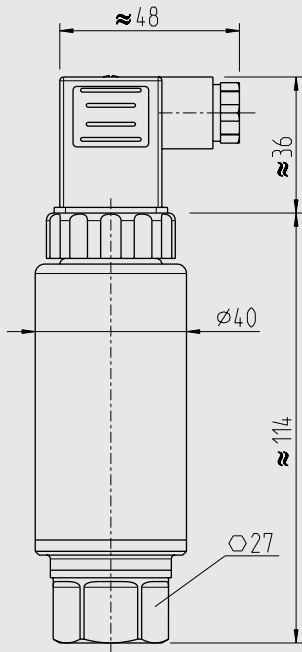


IS-3 for optional medium temperatures
-40 ... +150 °C [-40 ... 302 °F] and
-40 ... +200 °C [-40 ... +392 °F]

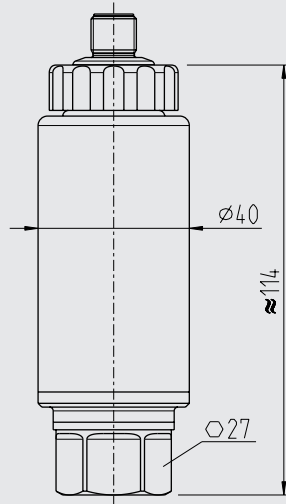


Pressure transmitters in high-pressure version

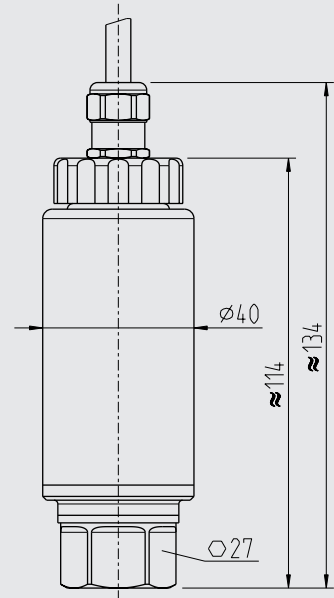
Angular connector
DIN EN 175301-803 A PG 9
adjustable



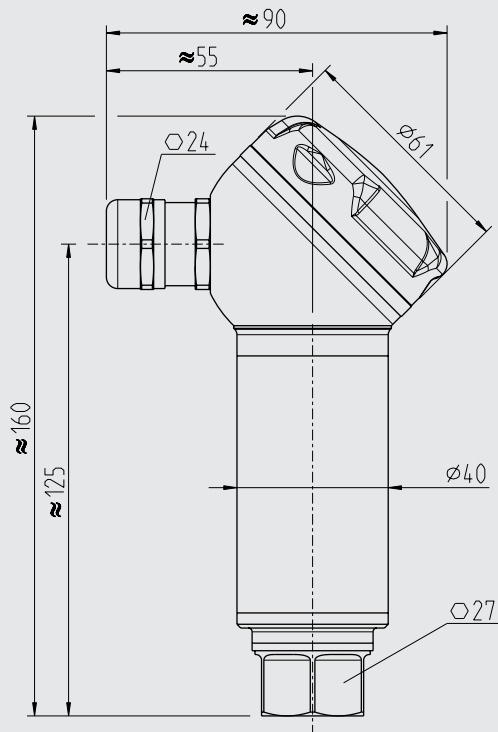
Circular connector M12 x 1
IEC 61076-2-101 A-COD (4-pin)
adjustable



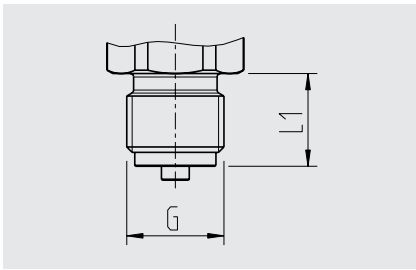
Cable outlet IP67
adjustable



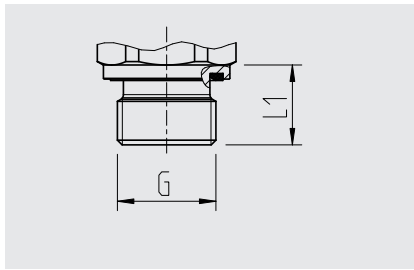
Field case
Cable gland
adjustable



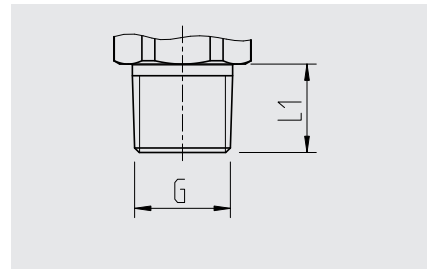
Process connections



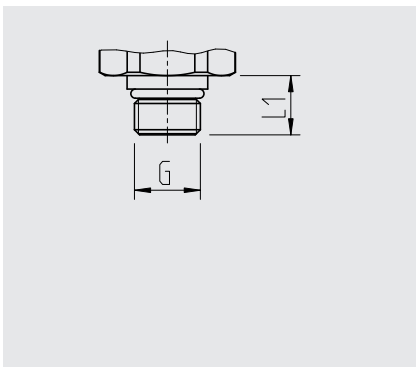
G	L1
G ¼ B EN 837	13
G ½ B EN 837	20
G ¾ B EN 837	16
M20 x 1.5 DIN 16288	20



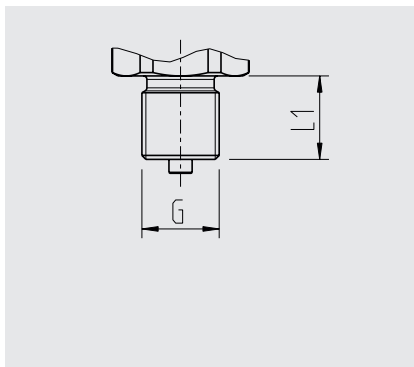
G	L1
G ¼ A	14
G ½ A	17



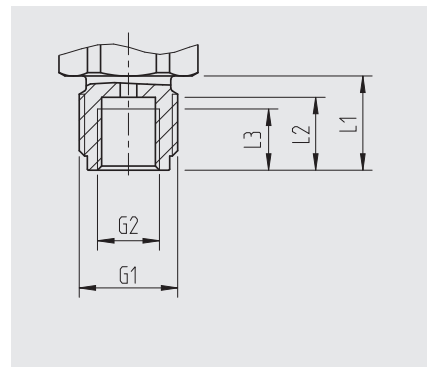
G	L1
¼ NPT	13
½ NPT	19
R ¼	13
R ¾	15



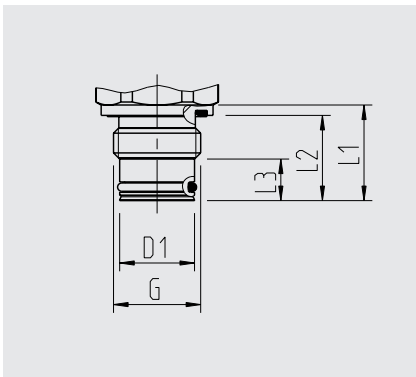
G	L1
7/16-20 UNF BOSS	12.06
9/16-18 UNF BOSS	12.85



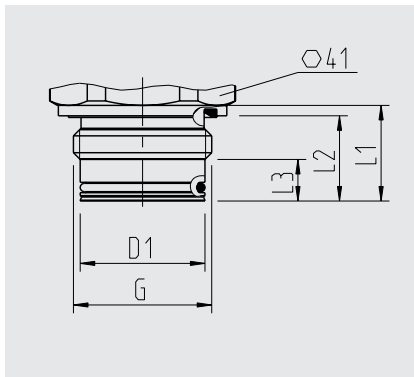
G	L1
G ¼ B JIS B 7505-76	16



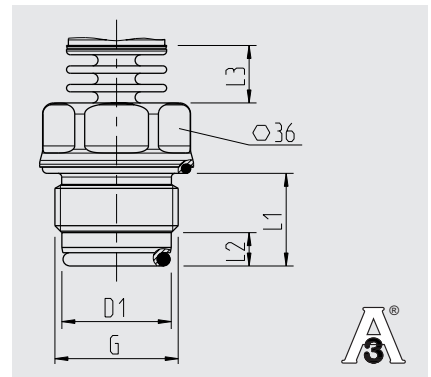
G1	G2	L1	L2	L3
G ½ B	G ¼	20	15.5	13



G	L1	L2	L3	D1
G ½ B	23	20.5	10	18



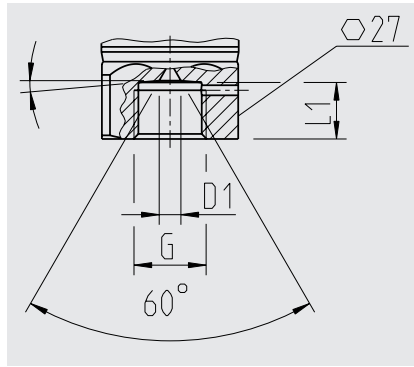
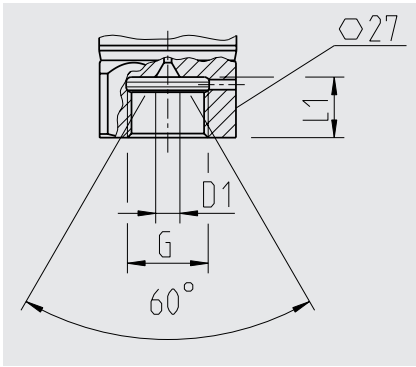
G	L1	L2	L3	D1
G 1 B	23	20.5	10	30



G	L1	L2	L3	D1
G 1 B hygienic	25	9	15.5	29.5

Surface roughness of wetted metal parts, Ra ≤ 0.76 µm

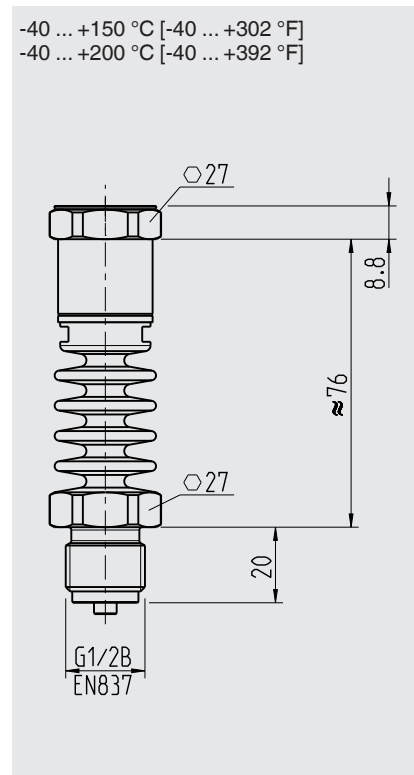
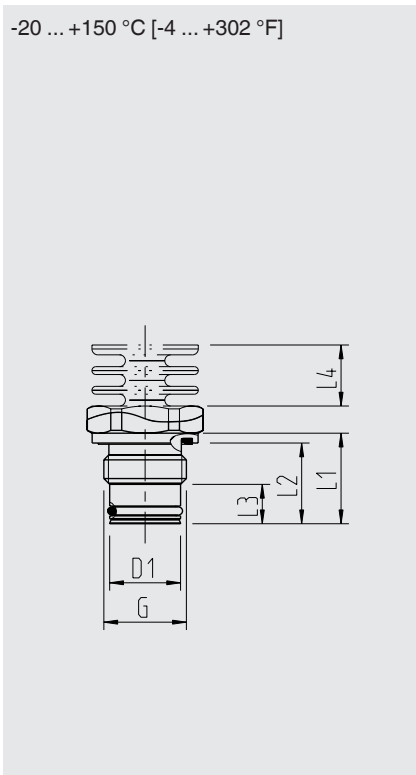
Process connections for measuring ranges > 1,000 bar



G	L1	D1
M16 x 1.5	12	4.8
M20 x 1.5	15	4.8

G	L1	D1
9/16-18 UNF F250-C	11.2	4.3

Process connections for optional medium temperature ranges



G	L1	L2	L3	L4	D1
G ½ B	23	20.5	10	15.5	18
G 1 B	23	20.5	10	15.5	30

G	L1	L2
G ½ B	20	71

For information on tapped holes and welding sockets, see Technical information IN 00.14 at www.wika.com.

Accessories and spare parts

Mating connector (for ignition protection type Ex i)

Designation	Order number
Angular connector DIN EN 175301-803 A	
With gland, metric, with 2 m moulded cable	11225793
With gland, metric, with 5 m moulded cable	11250186
Circular connector M12 x 1	
Angled version, 4-pin, IP67, for self-assembly	2421270
Straight version, 4-pin, IP67, for self-assembly	2421262

Sealings for mating connectors

Description	Order number	
	Blue (WIKA)	Brown (neutral)
Angular connector DIN EN 175301-803 A	1576240	11437902

Sealings for process connection

Process connection	Order number			
	Copper	Stainless steel	NBR	FKM
G ¼ B EN 837	11250810	11250844	-	-
G ½ B EN 837	11250861	11251042	-	-
M20 x 1.5 DIN 16288	11250861	11251042		
G ¼ A	-	-	1537857	1576534
G ½ A	-	-	1039067	1039075

Repeater power supply

Description	Order number
Repeater power supply model IS Barrier	14117118

Welding socket

Description	Order number
Welding socket for G ½ B flush	1192299
Welding socket for G 1 B flush	1192264
Welding socket for G 1 B hygienic flush	14145179
Welding socket for G 1 B hygienic flush with leak-control channel Fulfils the 3-A Sanitary Standards	14145183



Ordering information

Model / Measuring range / Accuracy / Process connection / Sealing / Electrical connection / Temperature range of medium

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