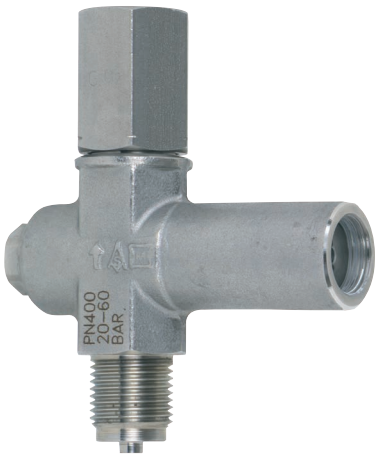
Overpressure protector, adjustable
Model 910.13, brass or stainless steel

Applications

- Protection against overpressures which occur beyond the scale range of the pressure measuring instrument
- Stainless steel version for aggressive media, also in aggressive environments
- Machine building, general plant construction, chemical industry, petrochemical industry, power plants, mining, on-/offshore and environmental technology

Special features

- Version with pressure connection thread in form A or form B
- 7 different setting ranges selectable
- Nominal pressures to 600 bar
- Overpressure safety up to 1,000 bar
- Vacuum protected



Overpressure protector, adjustable, form A, LH-RH union/male G ½ B

Configurator

Standard articles

Description

The overpressure protector for pressure measuring instruments is a piston valve. Through a helical spring, the outlet position is maintained until the pressure acting on the piston overcomes the back pressure of the spring, thus closing the valve.
Once the pressure drops below the closing pressure by approx. 25 %, the valve opens again and the piston returns to its rest position under the action of the spring force.

Factory setting
The closing pressure is set to half of the span of the respective setting range.

Set values for factory mounting
When mounted onto a pressure measuring instrument by WIKA, the overpressure protector is set to 1.1 times the full scale value of the pressure measuring instrument.

Setting the closing pressure
If the adjustment screw is turned clockwise, the spring force of the helical spring increases and, with it, the closing pressure. By turning the adjustment screw anti-clockwise, the closing pressure is reached at lower pressure values.

For the setting of the optimal closing pressure, the temperature at the measuring location must be taken into account.

This overpressure protector is not suitable for use as a controller or for control and regulation purposes.

Specifications

Process connection
Form A: LH-RH union/male, G ½ / G ½ B
Form B: Female/male, ½ NPT / ½ NPT
(see dimensions on page 3)

Valve body (wetted part)
Material: brass (with LH-RH union from steel, rust-protected) or stainless steel (with LH-RH union from stainless steel 1.4571).

O-ring
Material: FPM

Load capacity

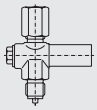
Wetted parts	Nominal pressure bar	Overpressure safety bar
Brass	PN 400	600
1.4571	PN 400/600	1,000

Permissible temperatures
+80 °C maximum

Other versions

- Other connection threads on request
- Higher permissible temperatures to +130 °C (from setting range 2 ... 6 bar)
- DVGW certificate (only with form A version)
- Acceptance test certificate per EN 10204 / DIN 55350 - 18
- Oil and grease free version in accordance with the footnotes in the following table
- Version in Monel
- Version per NACE

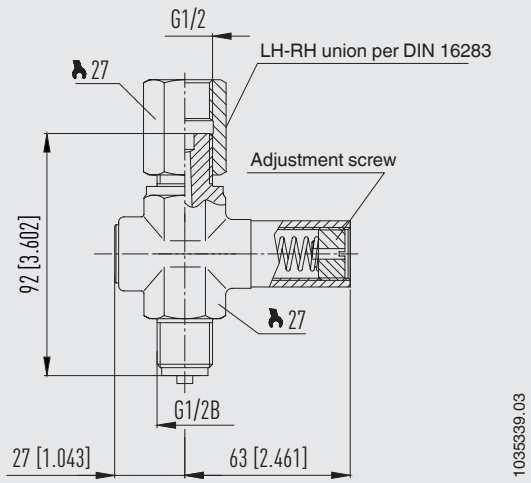
Ordering information

Version	Wetted parts	Order number						
Nominal pressure in bar		**PN 400**						**PN 600**
Setting range in bar		0.4 ... 2.5	2 ... 6	5 ... 25	20 ... 60	50 ... 250	240 ... 400	400 ... 600
Factory setting in bar		1.45	4	15	40	150	320	500
Form A 	Brass	9091645	9091653	9091661	9091670	9091688	9091696	–
	1.4571	9091513	9091521	9091530	9091548	9091556	9091564	2491546
	1.4571 OEF	9091335 1)	9091343 1)	9091351 1)	9091378 2)	–	–	–
Form B 	1.4571	9091963	9091971	9091980	0690600	0690619	1615130	–

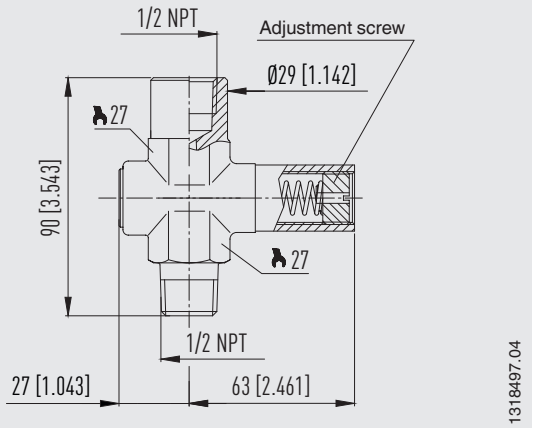
OEF Oil and grease free version
1) Oil and grease free for oxygen service to max. 60 °C
2) Oil and grease free for oxygen service to max. 60 °C, however setting range only 20 … 49 bar

Dimensions in mm [in]

Form A, LH-RH union/male



Form B, female/male



Ordering information

To order the described product the order number is sufficient.
Other versions require additional specification.

Standard article

Configurator

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
info@wika.com
www.wika.com

Syphons and connecting pipes
For pressure measuring instruments
Model 910.15

Applications

- Cooling element for protection from excessive heating of liquids, gases and vapours
- Protection from pressure spikes and pulsations
- Direct process connection of pressure measuring instruments or in combination with other instrumentation accessories (e.g. valves)

Special features

- Compact version suitable for vibration applications
- Customer-specific combination of valves and measuring instruments (instrument hook-up) on request
- Permissible temperatures to 550 °C [1,022 °F]
- Nominal pressures to 420 bar [6,091 psi]

Syphons, model 910.15, stainless steel
Fig. left: compact form
Fig. centre: U-form, DIN 16282 form A
Fig. right: trumpet form, DIN 16282 form C

Configurator

Standard articles

Description

The geometries of the syphons in accordance with DIN 16282 are divided into U-form, trumpet form and compact form. These syphon versions are available with threaded connection (forms A and C) or weld-in connection (forms B and D) to the process side.

In addition to the standardised syphons, connections for NPT threads following DIN 16282 and industrial standard variants are available.

Inside the syphon, condensate is collected, which prevents the ingress of hot media into the pressure measuring instrument. It is recommended to fill the syphon with a cooling barrier liquid before commissioning the pressure line.

U-form syphons are intended for horizontal pressure tapping; trumpet-form syphons are intended for vertical pressure tapping.

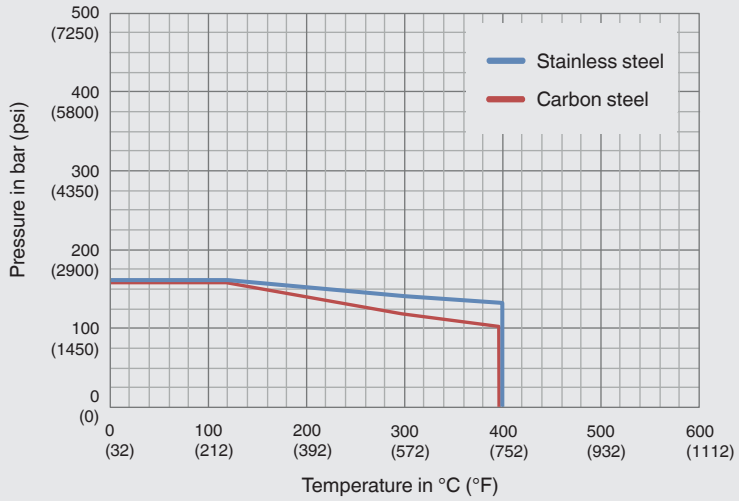
The length-optimised compact form minimises the influence of vibrations and protects the pressure measuring instrument from pressure spikes and pulsations.

For applications that do not require a syphon, WIKA offers connecting pipes in a straight or angular (pipe elbow 90°) form.

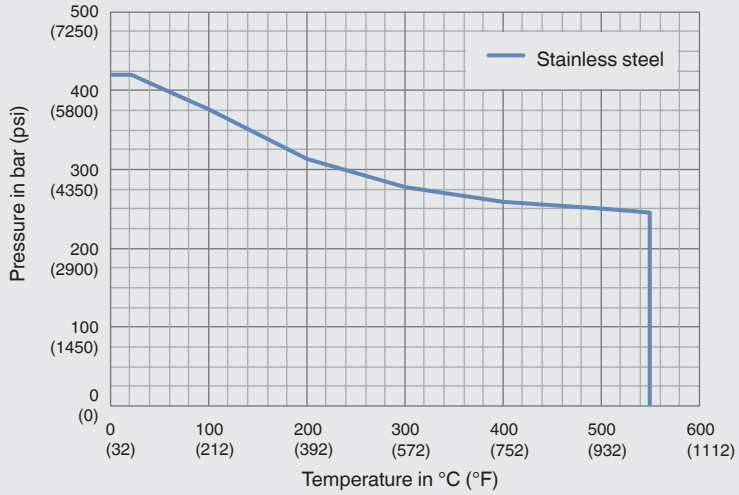
Individual customer versions
Based on many years of experience in manufacturing and development, WIKA is happy to offer support in the construction and production of customer-specific solutions.

Pressure-temperature diagrams

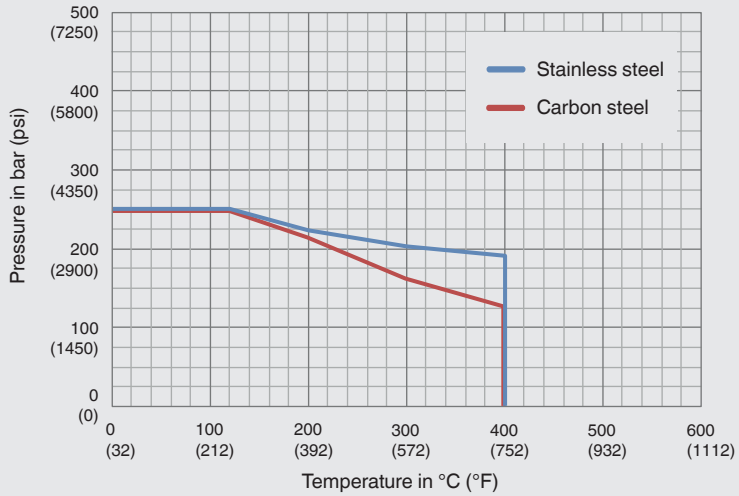
Syphon: U-form, trumpet form



Syphon: compact form



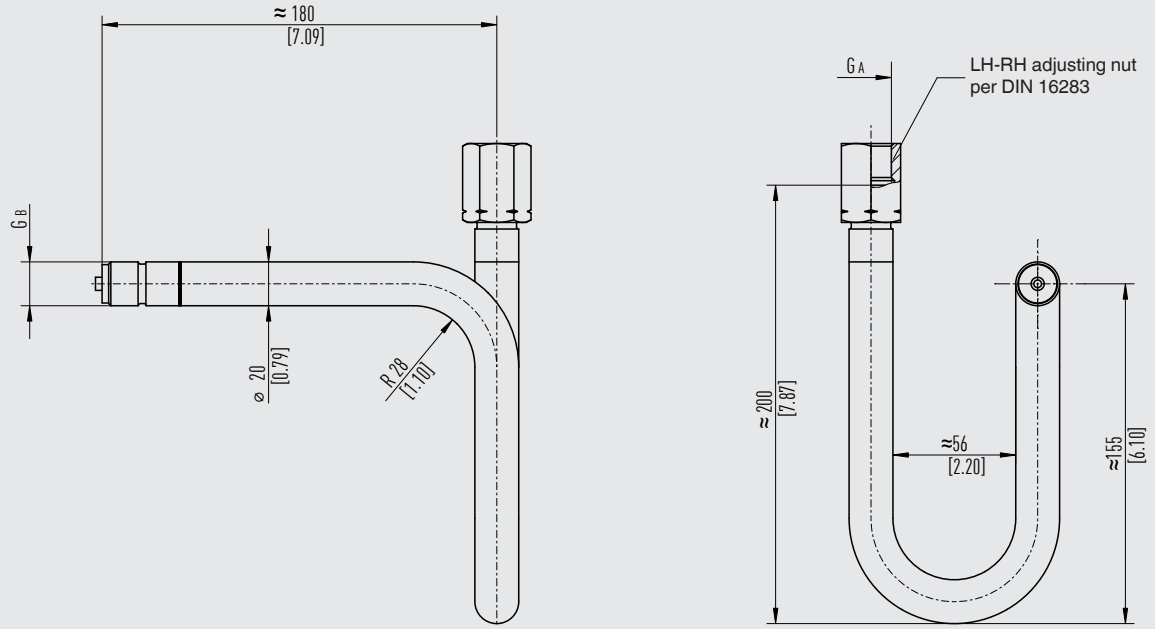
Connecting pipe: straight form and angular form



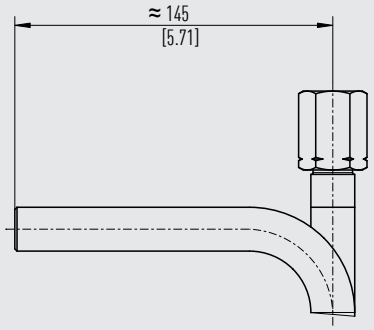
Designs per DIN 16282

Dimensions in mm [in]

U-form
Form A



Form B

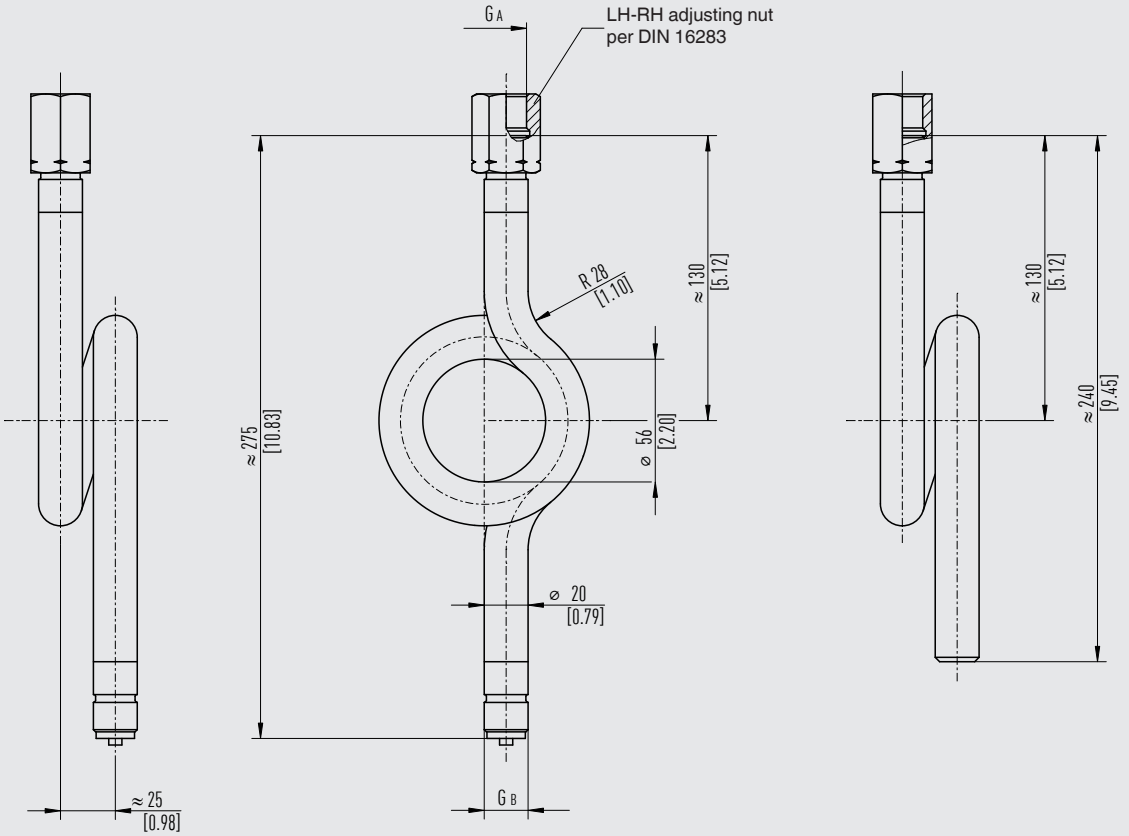


Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

Version	G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
				Carbon steel, phosphated		Stainless steel 316L	
				Standard	With 3.1 [1]	Standard	With 3.1 [1]
Form A	G ½, LH-RH adjusting nut	G ½ B	160 [2,320]	9091181	2141736	9091220	2057841
Form A	M20 x 1.5, LH-RH adjusting nut	M20 x 1.5	160 [2,320]	On request	On request	On request	14160861
Form B	G ½, LH-RH adjusting nut	Weld-in, 2 x 45°	160 [2,320]	9091190	2057876	1323270	2194023

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

Trumpet form
Form C



Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

Version	G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
				Carbon steel, phosphated		Stainless steel 316L	
				Standard	With 3.1 [1]	Standard	With 3.1 [1]
Form C	G ½, LH-RH adjusting nut	G ½ B	160 [2,320]	9091203	2329039	9091238	1323997
Form C	M20 x 1.5, LH-RH adjusting nut	M20 x 1.5	160 [2,320]	On request	14182633	On request	14137620
Form D	G ½, LH-RH adjusting nut	Weld-in, 2 x 45°	160 [2,320]	9091211	1614940	1440497	1614924

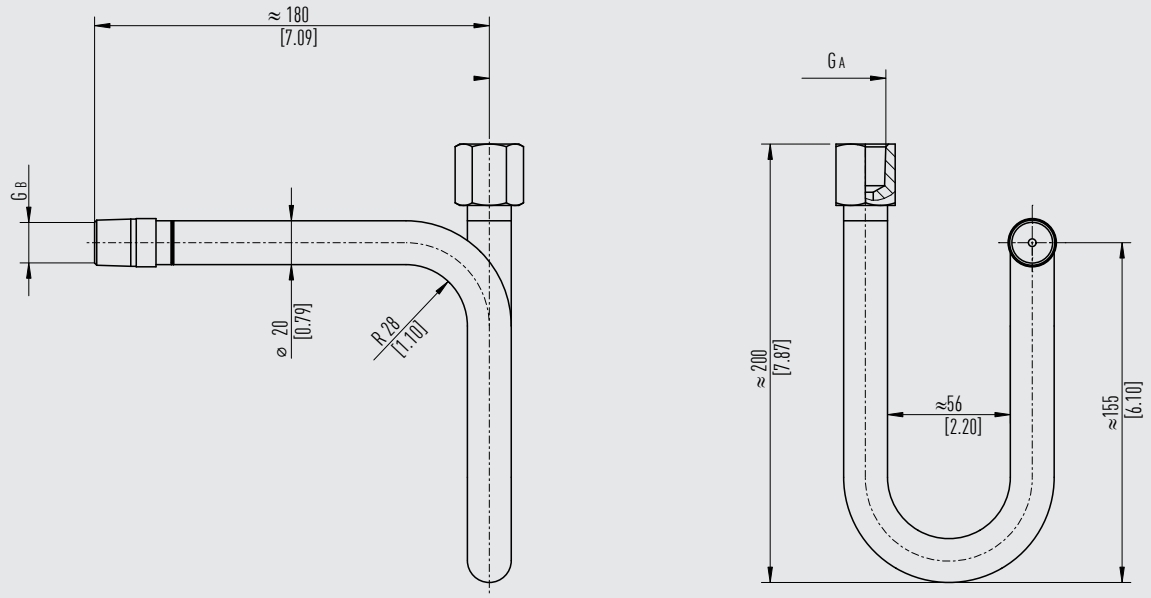
1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

Designs following DIN 16282

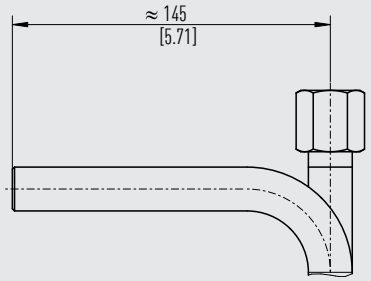
Connection thread ½ NPT

Dimensions in mm [in]

U-form
Form A



Form B



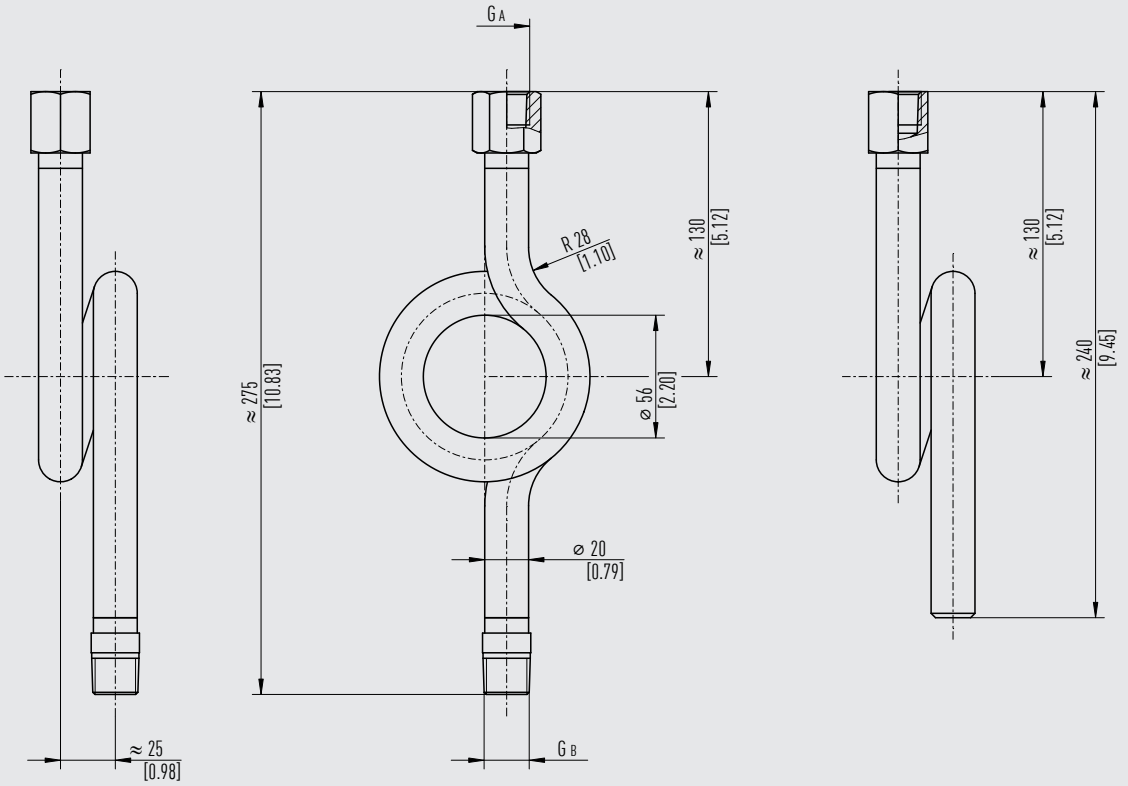
Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

Version	G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
				Carbon steel, phosphated		Stainless steel 316L	
				Standard	With 3.1 [1)]	Standard	With 3.1 [1)]
Form A	½ NPT, connection sleeve	½ NPT, male	160 [2,320]	On request	On request	0731277	11037431
Form B	½ NPT, connection sleeve	Weld-in, 2 x 45°	160 [2,320]	14107087	On request	On request	14115561

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

Trumpet form
Form C

Form D



Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

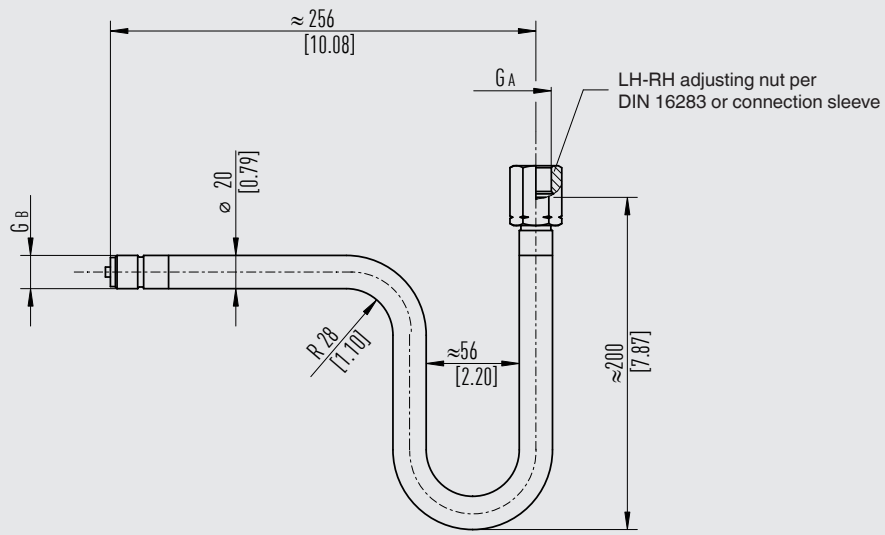
Version	G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
				Carbon steel, phosphated		Stainless steel 316L	
				Standard	With 3.1 [1)]	Standard	With 3.1 [1)]
Form C	½ NPT, connection sleeve	½ NPT, male	160 [2,320]	1034227	2449532	0763349	1323660
Form D	½ NPT, connection sleeve	Weld-in, 2 x 45°	160 [2,320]	2062014	On request	1643150	1614932

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

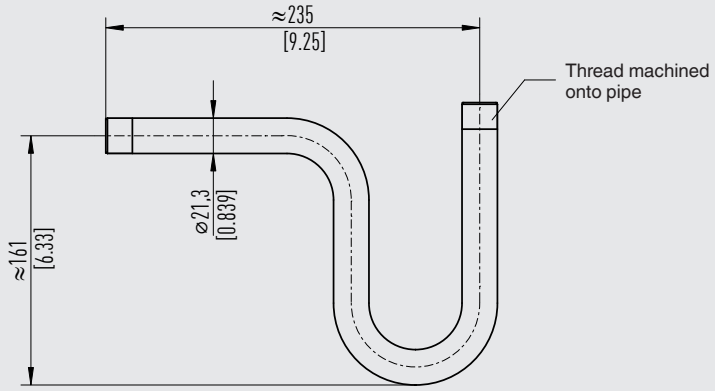
Industrial standard designs

Dimensions in mm [in]

U-form, straight
With LH-RH adjusting nut or connection sleeve



With thread machined onto pipe



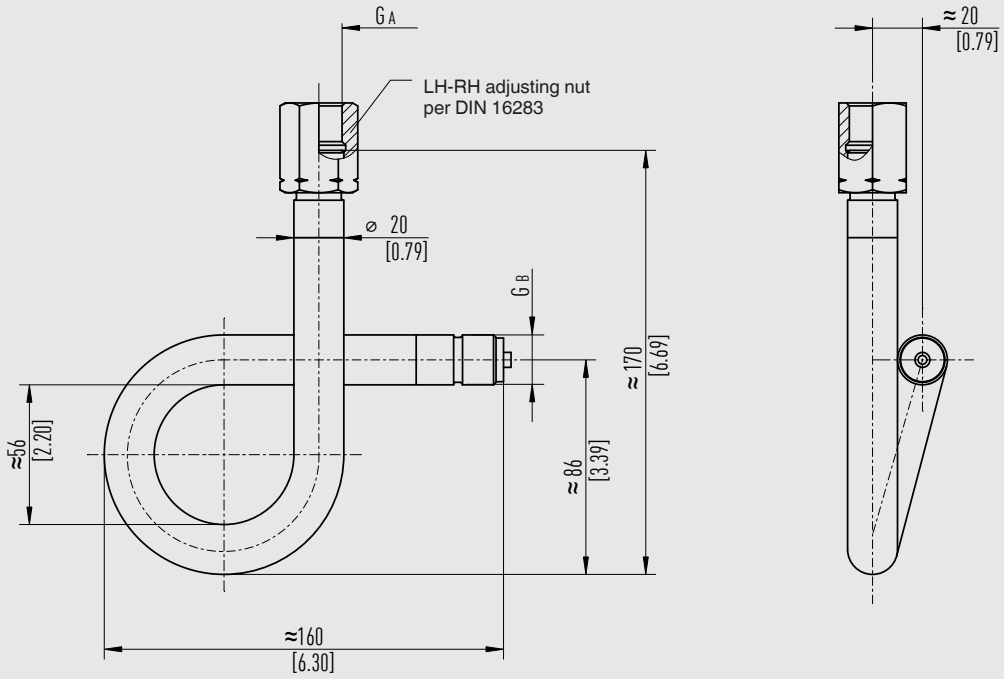
Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
			Carbon steel, phosphated		Stainless steel 316L	
			Standard	With 3.1 [1]	Standard	With 3.1 [1]
G ½, LH-RH adjusting nut	G ½ B	160 [2,320]	9090673	On request	On request	On request
G ½, LH-RH adjusting nut	Weld-in, 2 x 45°	160 [2,320]	9090681	2446222	14130264	On request
½ NPT, connection sleeve	½ NPT, male	160 [2,320]	On request	On request	2344969	On request
G ½, LH-RH adjusting nut	G ½ B, machined onto pipe	25 [362]	9090665	On request	On request	On request
G ½, machined onto pipe	G ½ B, machined onto pipe	25 [362]	9090657 [2]	83129582 [2]	On request	On request

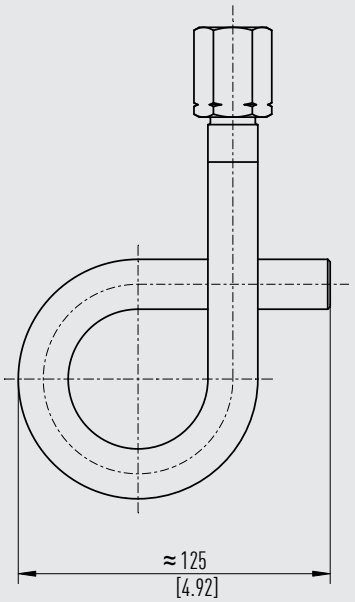
1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts
2) Carbon steel, not phosphated

270° loop form

With LH-RH adjusting nut on instrument connection and threaded process connection



With LH-RH adjusting nut on instrument connection and weld-in process connection

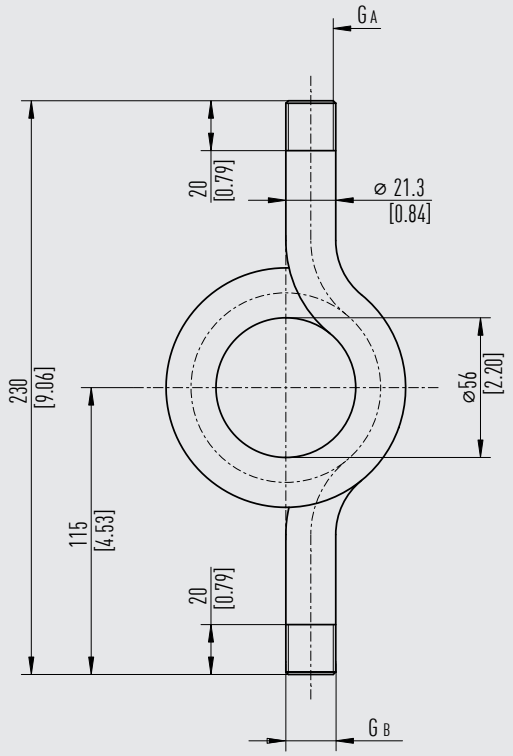


Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
			Carbon steel, phosphated		Stainless steel 316L	
			Standard	With 3.1 [1]	Standard	With 3.1 [1]
G ½, LH-RH adjusting nut	G ½ B	160 [2,320]	On request	On request	On request	On request
G ⅜, LH-RH adjusting nut	G ⅜ B	160 [2,320]	On request	On request	On request	On request
G ½, LH-RH adjusting nut	Weld-in, 90°	160 [2,320]	On request	On request	On request	On request
G ⅜, LH-RH adjusting nut	Weld-in, 90°	160 [2,320]	On request	On request	On request	On request

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

Trumpet form
With thread machined onto pipe



Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

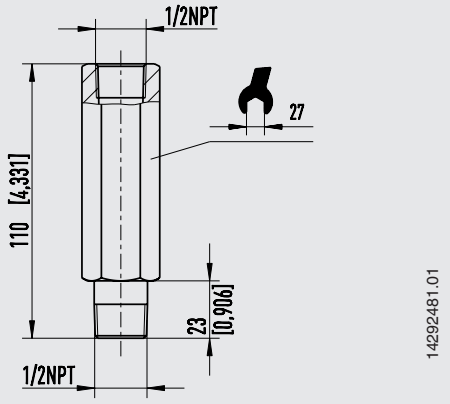
G_A Instrument connection	G_B Process connection	Max. operating pressure in bar [psi]	Order number			
			Carbon steel, phosphated		Stainless steel 316L	
			Standard	With 3.1 [1]	Standard	With 3.1 [1]
G ½ B, machined onto pipe	G ½ B, machined onto pipe	25 [362]	9090606	35126014	On request	On request

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

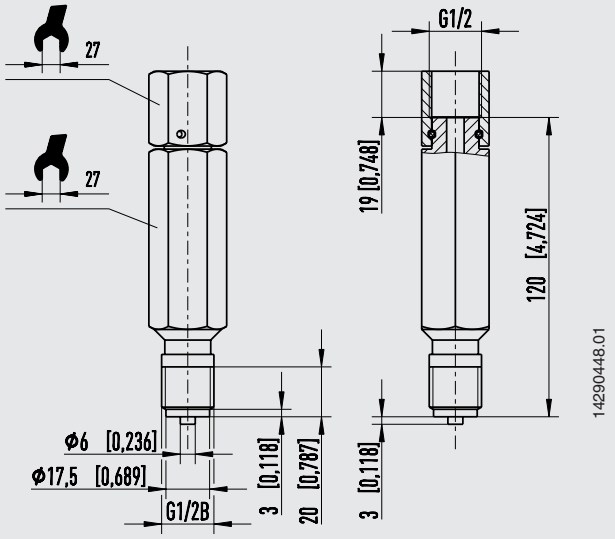
Compact form

Dimensions in mm [in]

Fixed connection threads



With LH-RH adjusting nut on instrument side

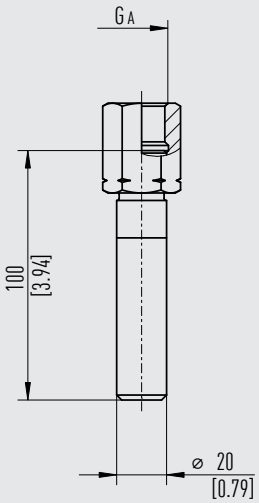


Version	Instrument connection	Process connection	Max. operating pressure in bar [psi]	Order number
				Stainless steel 316Ti
Compact form	½ NPT, female	½ NPT, male	420 [6,091]	11585791
	G ½, LH-RH adjusting nut	G ½ B, male	420 [6,091]	14114184

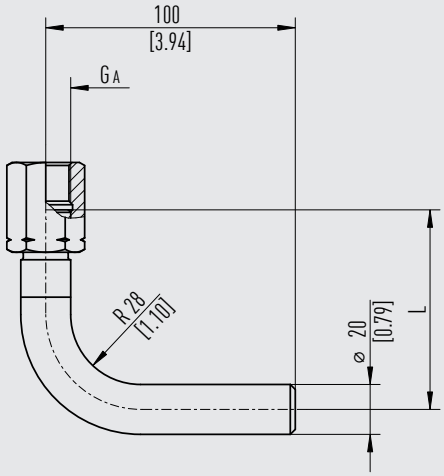
Connecting pipes for pressure measuring instruments

Dimensions in mm [in]

Straight form



Angular form (pipe elbow 90°)



Due to the manufacturing process, the pipe dimensions at the bending points are slightly changed.

Version	G_A Instrument connection	Process connection	Max. operating pressure in bar [psi]	Order number			
				Carbon steel, phosphated		Stainless steel 316L	
				Standard	With 3.1 [1]	Standard	With 3.1 [1]
Straight form	G ½, LH-RH adjusting nut	Weld-in, 90°	250 [3,625]	2243679	On request	2112892	2333711
Straight form	½ NPT, connection sleeve	Weld-in, 2 x 45°	250 [3,625]	14147261	On request	On request	On request
Angular form	G ½, LH-RH adjusting nut	Weld-in, 2 x 45°	250 [3,625]	14600744	14657860	On request	14646799

1) Including 3.1 inspection certificate per EN 10204, material proof for wetted metal parts

Ordering information

To order the described product the order number is sufficient.
Options require additional specification.

Standard articles

Configurator

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
info@wika.de
www.wika.de

Pressure Gauge In-Line Filters Model 910.22

Applications

- For mounting to pressure gauges in dirt-sensitive hydraulic and pneumatic systems
- To filter out solid substances from gaseous and liquid media (retention of particulates)

Special Features

- They avoid:
  - Plugging of small gauge pressure entries and capillary throttles
  - Accumulation of particles in dirt-sensitive gauge interiors and its consequences
- Furthermore they have an effect of a throttle and damp shock pressure

Pressure Gauge In-Line Filters, Model 910.22

Description

Filter body
Stainless steel 1.4571

Filter disk
Stainless steel 1.4404

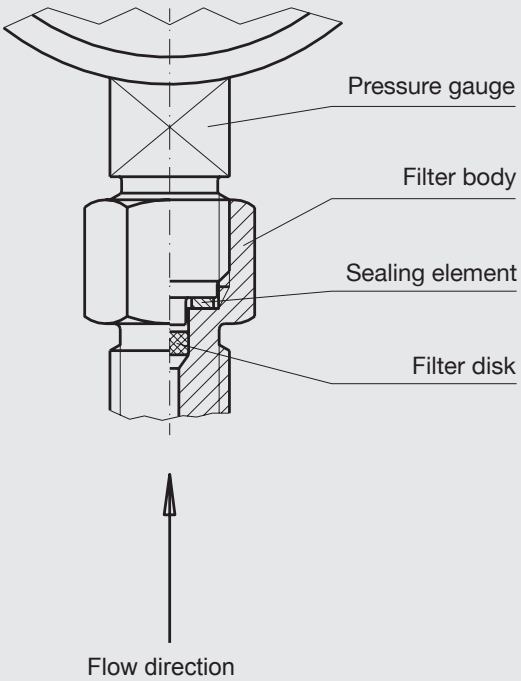
Grade of filtration
200 µm

Porosity
30 … 50 %

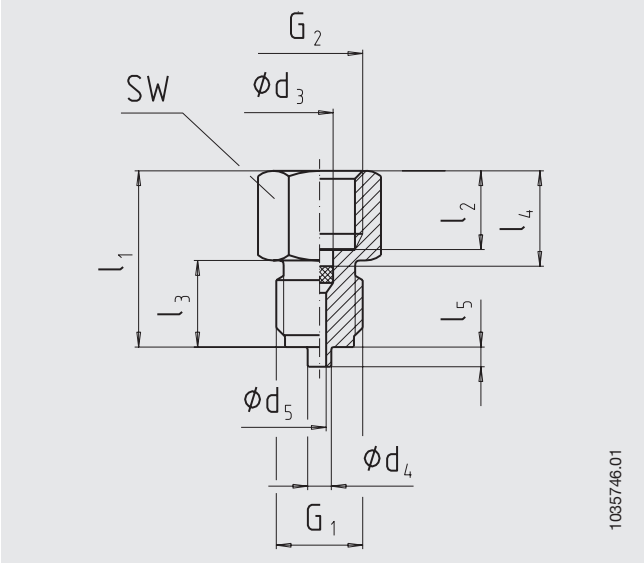
Temperature range
-25 … +200 °C

Operating pressure
depends on the sealing washer the customer uses
- Sealing element PTFE: PN max. 100 bar
- Sealing element stainless steel 1.4571: PN max. 1600 bar

Process connection
Male and female thread per EN 837-1
or male thread NPT



Dimensions in mm



Process connection		Dimensions in mm									Order no.
G_1	G_2	d_3	d_4	d_5	l_1	l_2	l_3	l_4	l_5	SW	
G ½ B	G ½	7	6	3.5	46	19	20	22	3	27	9092005
M20 x 1.5	G ½	7	6	3.5	46	19	20	22	3	27	9092013
½ NPT	G ½	7	–	3.5	44	19	19	22	–	27	9092021
G ¼ B	G ¼	5.5	5	3	32	13	13	15	2	17	9092030
M12 x 1.5	G ¼	5.5	5	3	32	13	13	15	2	17	9092048
¼ NPT	G ¼	5.5	–	3	30	13	13	15	–	17	9092056

Sealing elements

Sealing elements for thread G_2	PN in bar	Material	Order no.
G ½	100	PTFE	9091173
G ½	1600	stainless steel 1.4571	9092099
G ¼	100	PTFE	9092080
G ¼	1600	stainless steel 1.4571	9092161

Spare parts

Disk for thread G_2	Material	Order no.
G ½	stainless steel 1.4404	9092064
G ¼	stainless steel 1.4404	9092072

Ordering information

To order the described products the 7-digit order number is sufficient. Options should be stated separately.

WIKA Alexander Wiegand GmbH & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. (+49) 9372/132-0
Fax (+49) 9372/132-406
E-mail info@wika.de
www.wika.de

9019545 03/2008 GB

Snubber for pressure measuring instruments Model 910.12, brass, steel or stainless steel

Applications

- Snubbers protect pressure measuring instruments from pressure surges and pulsations in the medium
- Stainless steel version for aggressive media, even in aggressive environments
- Process industry: Machine building, general plant construction, chemical industry, petrochemical industry, power plants, mining, on-/offshore and environmental technology

Special features

- Max. temperature 120 °C
- Nominal pressures to 400 bar

Fig. left: Brass version
Fig. right: Stainless steel version

Configurator

Standard articles

Description

Snubbers are adjustable (modification of the flow cross-section) and can thus be adapted individually to the respective operating conditions. A readjustment during operation, if required, is possible at any time.
The pulsations and pressure surges in the medium, occurring e.g. in compressors, steam engines, hydraulic presses, tensile testing machines etc., are largely compensated by this device. Snubbers ensure a considerably prolonged service life of the pressure measuring instruments and improve the reading accuracy of pressure gauges.

Standard version

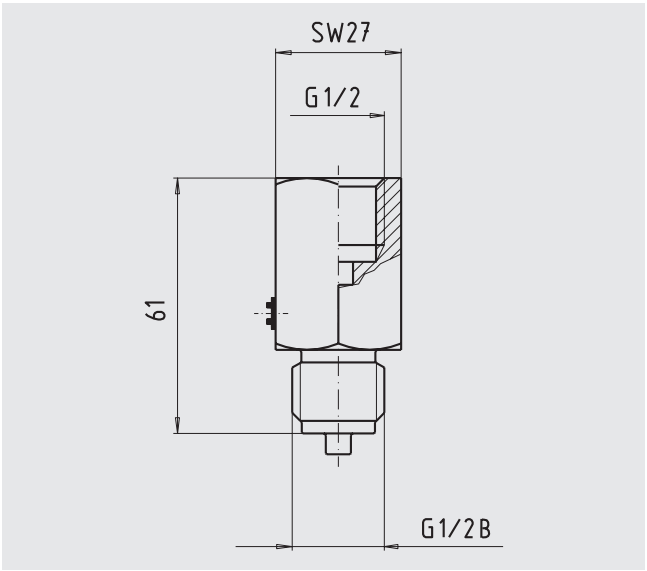
Connection to the pressure measuring instrument
G ½ female per EN 837-1/7.3

Process connection
G ½ B per EN 837-1/7.3

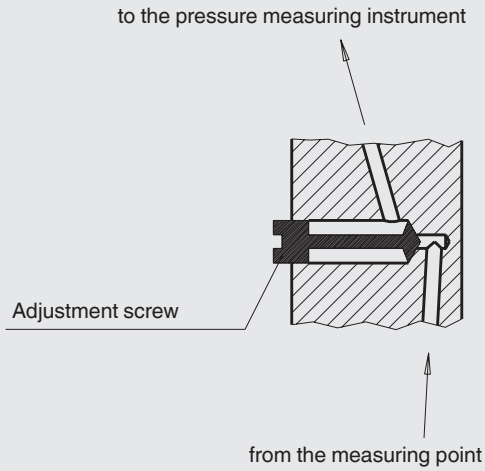
Options

- Material: Monel
- Other process connection: G ¼, G ⅜ per EN 837-1/7.3, M20 x 1.5, ¼ NPT, ½ NPT
- Oil and grease free for oxygen: max. 50 bar or +60 °C (for brass and 1.4571 materials only)
- Inspection certificate per DIN 50049 / EN 10204 3.1

Dimensions in mm



Operating principle



Material			PN	Temperature range	Order number
Body	Spindle	Sealing	bar		
Brass	1.4404 [2]	NBR	400	-10 … +120 °C	9090185
Steel [1]	1.4404 [2]	NBR	400	-10 … +120 °C	9090193
1.4571 [2]	1.4404 [2]	FPM	400	-10 … +120 °C	9091262

1) Rust-protected
2) Stainless steel

Ordering information
To order the described product the order number is sufficient.
Options require additional specification.

Standard article

Configurator

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
info@wika.com
www.wika.com

Cooling element for pressure measuring instruments Model 910.32, for threaded attachment

Applications

For screwing onto pressure measuring instruments at increased medium temperatures.

Special features

- For medium temperatures up to 200 °C
- Can work with pressures up to 600 bar
- Connections for G ½ B (EN 837)

Cooling elements with 3 and 5 cooling fins

Description

Cooling elements are used when the medium temperature would exceed the permissible temperature limit of the pressure measuring instrument.

Through air circulation and heat radiation at the cooling element, the medium temperature is lowered sufficiently so that the temperature limits are not exceeded and any possible temperature error is reduced.

The cooling element can also be used for warming very cold media, provided that the ambient temperature is higher than that of the media.

Specifications

Max. medium temperature and connections

Selectable versions Max. medium temperature	Process connection	Measuring instrument connection	Order no.
150 °C (3 cooling fins)	G ½ B (EN 837)	G ½ B female (EN 837)	14109813
200 °C (5 cooling fins)	G ½ B (EN 837)	G ½ B female (EN 837)	14109815

Other connections on request.

Max. load
600 bar

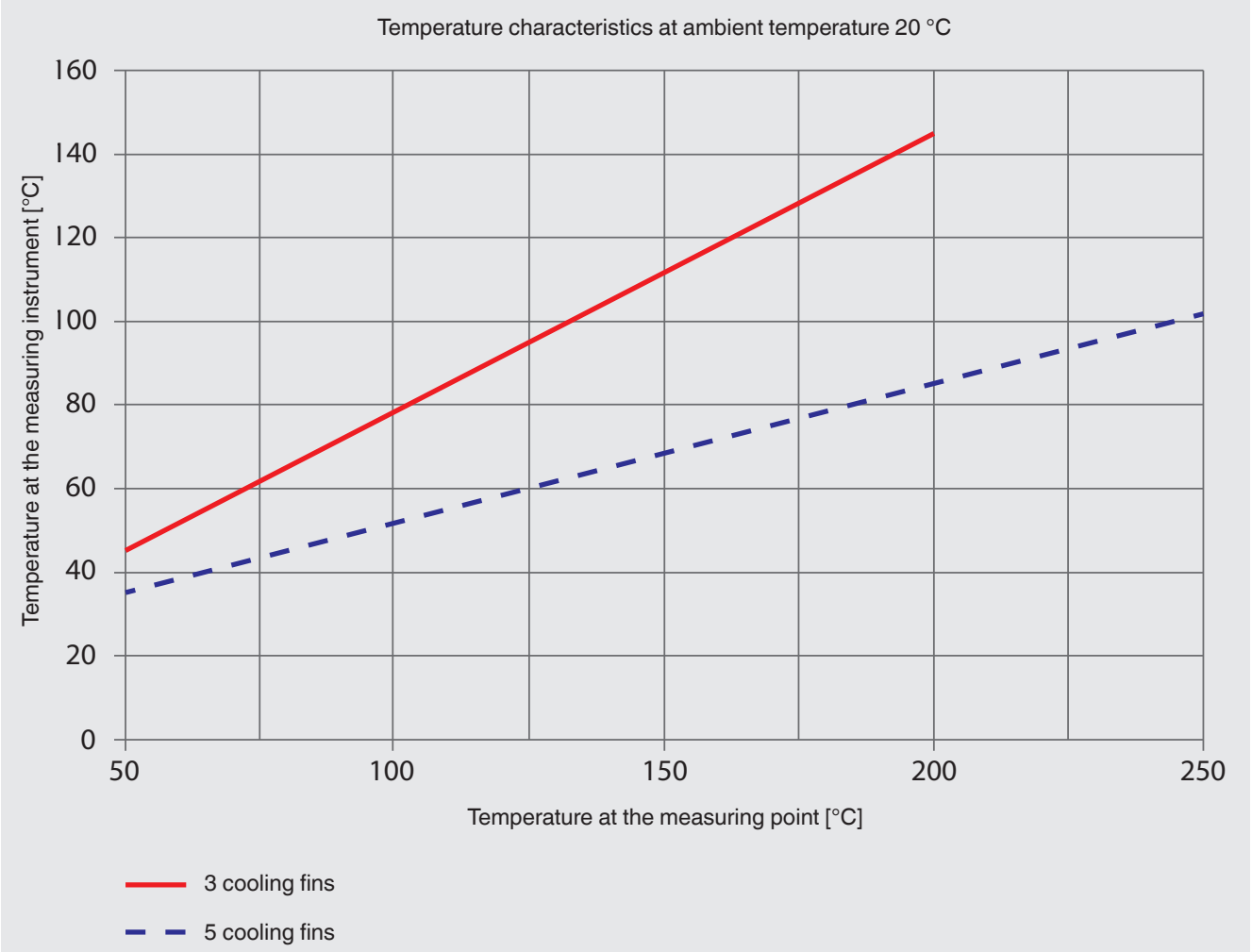
This value is only valid with suitable sealing in accordance with EN 837 and a temperature range < 100 °C at the measuring instrument.

Pressure port
3.5 mm

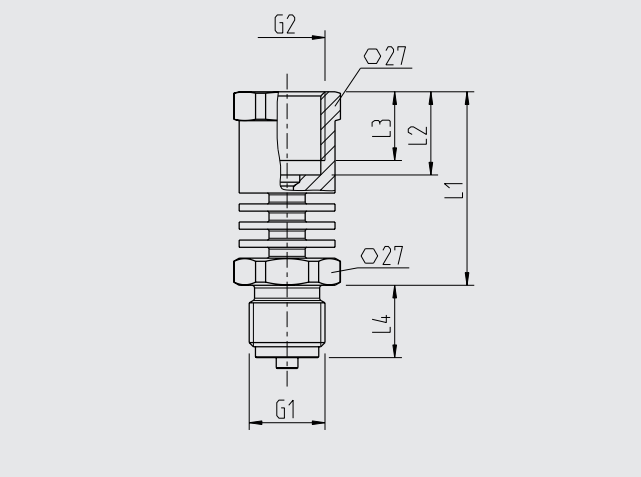
Material
Stainless steel 1.4571

Weight
3 cooling fins: approx. 180 g
5 cooling fins: approx. 200 g

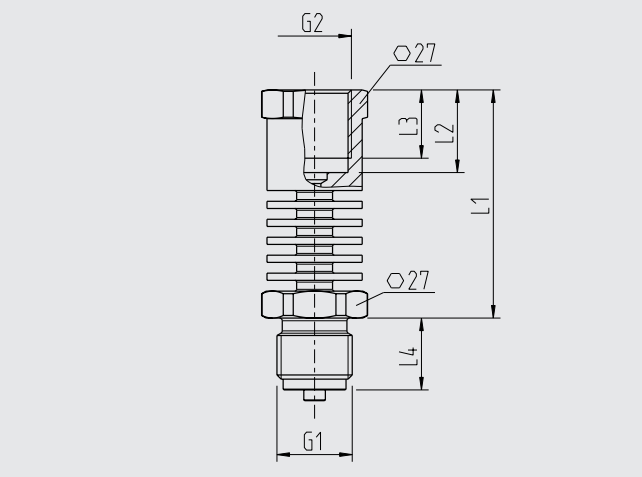
Characteristic curve



Dimensions in mm



G1	G2	L1	L2	L3	L4
G ½ B (EN 837)	G ½ B female (EN 837)	53.5	23	19	20



G1	G2	L1	L2	L3	L4
G ½ B (EN 837)	G ½ B female (EN 837)	63.5	23	19	20

Ordering informations

To order the described product the order number is sufficient.

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
Fax +49 9372 132-406
info@wika.de
www.wika.de

Case protector for pressure gauge Model 910.18

Applications

- Ranges of use that require protection from impact, shock, corrosion and weather conditions
- For pressure gauges on pressure reducing valves

Special features

- Use enables a longer service life of the instruments
- For nominal sizes 50 [2"], 63 [2 ½"], 80 [3"] and 100 [4"]
- For instruments with radial or back mount connection locations
- Simple fitting

Case protector model 910.18

Description

The model 910.18 case protector is fitted to the pressure gauge before mounting.

The smooth outer surface is broken up by rubber beading and the inner surface is grooved. Thanks to the open back, the case protector can be used for instruments with radial and back mount connection locations without compromising safety functions. All instrument specifications in accordance with EN 837 or in accordance with ISO 5171 or ISO 7291 continue to be met through the use of the model 910.18.

The colour of the case protector for instruments in accordance with ISO 5171 or ISO 7291 is defined in the standards.

Specifications

Basic information	
Nominal size	■ Ø 50 [2"] ■ Ø 63 mm [2 ½"] ■ Ø 80 mm [3"] ■ Ø 100 mm [4"]
Material	Rubber
Colours	■ Black, similar to RAL 9005 to RAL 7021 ■ Blue (for oxygen), similar to RAL 5009 ■ Red (for acetylene and other gases), similar to RAL 3013

Order numbers

The case protector can be used for both radial and back mount connection locations.

Nominal size	Model	Colour	Order number
50 [2"]	111.10, 111.12	Black	0091111
	111.11	Black	0091111
	111.31	Black	0091111
63 [2 ½"]	111.10, 111.12	Black	11329573
	131.11	Black	11329573
	213.40	Black	11329573
	213.53, 213.57	Black	11329573
	111.10, 111.12	Blue	9090894
	131.11	Blue	9090894
	213.40	Blue	9090894
	213.53, 213.57	Blue	9090894
	111.10, 111.12	Red	9090886
	131.11	Red	9090886
	213.40	Red	9090886
	213.53, 213.57	Red	9090886
80 [3"]	111.10, 111.12	Blue	9090908
	111.14	Blue	9090908
100 [4"]	213.53	Black	14063622
	23x.50	Black	14063622
	213.53	Blue	9090916
	23x.50	Blue	9090916

Ordering information

To order the described product the order number is sufficient. Options require additional specification.

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
info@wika.de
www.wika.com

Check valve
Model CV

Applications

- Oil and gas industry, chemical and petrochemical industries, power plants
- Prevents the backflow of gases or liquids in measuring circuits
- For injection systems, actuator controls, test benches, hydraulic power packs

Special features

- Safety factor 4:1 for pressurised parts
- One-piece, robust case construction prevents leaks
- High repeatability and bubble-tight sealing through self-centring piston
- Redundant sealing with O-ring and metal cone
- Leak-tested tightness in accordance with BS6755 / ISO 5208 leakage rate A

Check valve, model CV

Description

The model CV check valves have been developed for the requirements of the process industry. The wetted parts are suited specifically for applications with natural gas and aggressive fluids, but also for water and hydraulic oil.

The simple and robust design, with a safety factor of 4:1, enables model CV check valves a wide spectrum of use. The valve design and the high-quality sealing materials ensure high durability and tightness.

The sealing element (piston) has a double sealing system from an elastic O-ring and a metal cone. With any back pressure, the soft O-ring and then the sealing face of the metal cone prevent the reverse flow of the medium. This principle of double sealing ensures reliable leak tightness.

Data sheets showing similar products:
Monoflange, process and instrument version; model IVM; data sheet AC 09.17

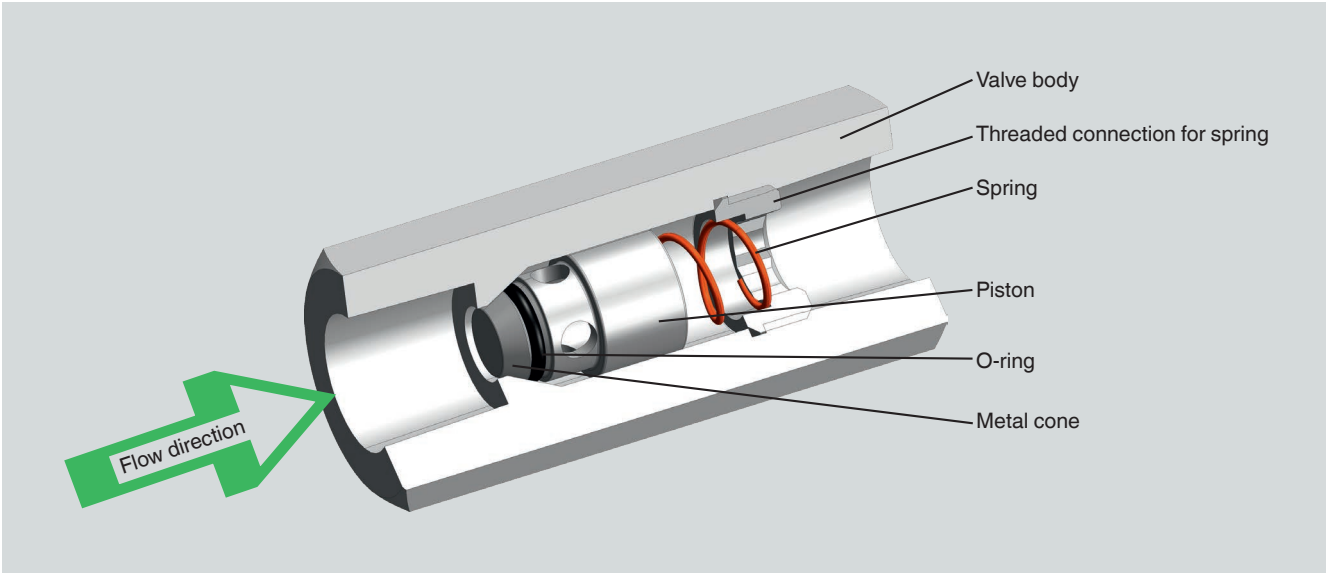
Specifications

Model CV	
Standards used	
Design	■ ASME B16.34, valves - flanged, threaded and welding end ■ MSS SP-99, valves for measuring instruments ■ ASME B1.20.1, pipe threads, general purpose (inch)
Tests	■ API 598, valve inspection and testing ■ ISO 5208, pressure testing of metallic valves with leakage rate A ■ MSS SP-61, pressure testing of valves ■ DIN EN 12266-1, pressure tests, test procedures and acceptance criteria for industrial valves
Material requirements	■ NACE MR0175 / ISO 15156, use in H_2S-containing environments in oil and gas production ■ NORSOK M-630, specification for use in pipelines (Norway)
Marking	ASME B16.34, valves - flanged, threaded and welding end
Nominal pressure	10,000 psi [690 bar]
Nominal width (DN)	■ ¼" ■ ⅜" ■ ½" ■ ¾" ■ 1"
Valve bore size	■ 5 mm [0.197 in] ■ 6 mm [0.236 in] ■ 10 mm [0.394 in]
Pressure-temperature limits (for diagram, see page 5)	The limits for operating pressure and temperature depend on the version and the sealing material.
Connection type	■ Threaded connection per ISO 228-1, code G ■ Threaded connection per ANSI / ASME B1.20.1, code NPT ■ Compression fitting with ferrule
Cracking pressure	20 psi [1.38 bar] ± 30 %
Features	■ Sealing through self-centring piston ■ Bubble-tight shut-off ■ Flow direction marked on valve body ■ Hydrostatically tested ■ 100 % material traceability for wetted parts ■ Tight tolerances and the guided spring prevent the piston from jamming or seizing ■ Resistance against explosive decompression (AED sealing) ■ Other specification for cracking pressure (option)

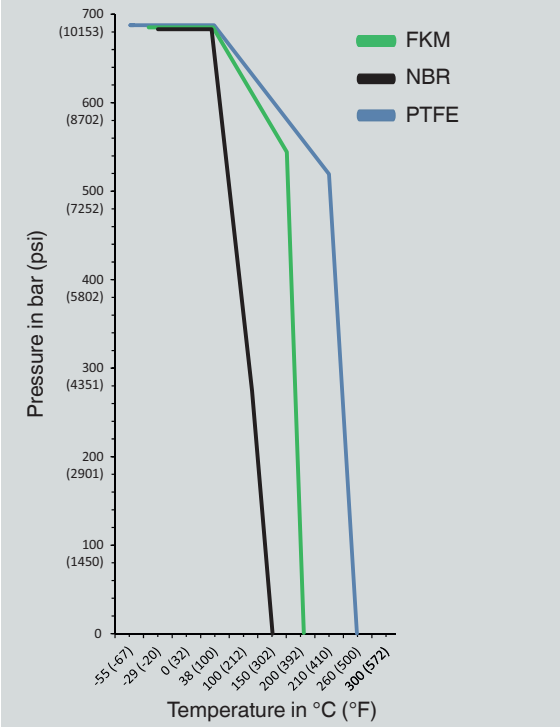
Materials	
Wetted parts	
Valve body and fittings, piston	■ Stainless steel 316L [1)] ■ Duplex F51 (1.4462) ■ Super Duplex F55 (1.4501) ■ Hastelloy C276 (2.4819) ■ Monel 400 (2.4360) ■ Stainless steel 6Mo (1.4547) ■ Alloy 625 (2.4856) ■ Alloy 825 (2.4858)
Spring [1)]	■ AISI 302 (1.4310) ■ Inconel X-750
Sealing [2)]	■ NBR, temperature range: -55 ... +120 °C [-67 ... +248 °F] ■ FKM [3)], temperature range: -55 ... +180 °C [-67 ... +356 °F] ■ PTFE, temperature range: -55 ... +210 °C [-67 ... +410 °F]

1) Check valves with wetted parts from 316L stainless steel are fitted with a spring from AISI 302 (1.4310). Other material variants contain a spring from Inconel X-750.
2) Other materials available on request
3) Resistance against explosive decompression (AED sealing)

Valve design



Pressure-temperature diagram



	Sealing material	Max. permissible operating pressure in bar at temperature in °C	Max. permissible operating pressure in bar at temperature in °C
Sealing	NBR [1]	690 bar at 38 °C	10,000 psi at 100 °F
		276 bar at 120 °C	8,920 psi at 248 °F
	FKM [2]	690 bar at 38 °C	10,000 psi at 100 °F
		543 bar at 180 °C	7,875 psi at 356 °F
	PTFE	690 bar at 38 °C	10,000 psi at 100 °F
		520 bar at 210 °C	7,542 psi at 410 °F

1) Acrylonitrile butadiene rubber
2) Resistance against explosive decompression (AED sealing)

The minimum design temperature is -55 °C [-67 °F]. For permanently low operating temperatures of ≤ -55 °C [≤ -67 °F] a special design is required.

Manufacturer‘s information and certifications

Logo	Description
-	**PMI [1] test certificate (option)** All wetted parts

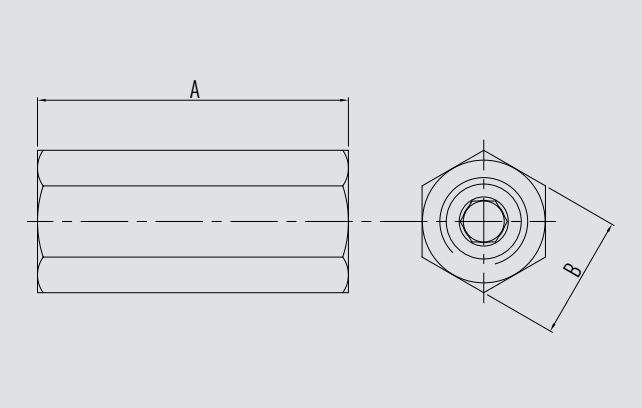
1) Positive material identification

Certificates

- 3.1 inspection certificate per EN 10204 (option)
  - Material certificate for all wetted parts per NACE MR0103/MR0175
  - Confirmation of pressure tests per API 598 [2]

2) Shell test: 15 s test duration with 1.5 times the permissible working air pressure
Seat test: 15 s test duration with 6 bar air/nitrogen

Dimensions in mm [in]



DN	Dimensions in mm [in]			Cv in USG/min	Kv in m³/h	Weight in kg [lb]
	A	B	Bore size			
¼"	59 [2.323]	22.2 [0.875]	5 [0.197]	0.53	0.45	0.2 [0.44]
⅜"	64 [2.520]	22.2 [0.875]	6 [0.236]	0.95	0.82	0.3 [0.66]
½"	76 [2.992]	30.2 [1.187]	10 [0.394]	1.70	1.5	0.4 [0.88]
¾"	85 [3.346]	34.9 [1.375]	10 [0.394]	1.70	1.5	0.7 [1.54]
1"	95 [3.740]	44.5 [1.750]	10 [0.394]	1.70	1.5	1.2 [2.65]

Ordering information

Model / Nominal width (DN) / Options

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
Fax +49 9372 132-406
info@wika.de
www.wika.de