

Threaded connection, diaphragm seal

Model 990.40, threaded design, large working volume

WIKA data sheet DS 99.06

Applications

- For assembly (direct assembly, via a cooling element or a capillary) with measuring instruments for low pressures and with differential pressure measuring instruments
- For aggressive, contaminated or hot media
- Filter monitoring
- Level measurement

Special features

- Internal diaphragm with large working volume
- Special materials available
- Low temperature error due to large diaphragm diameter (realisation of low measuring ranges possible)
- Wide temperature application range due to large working volume
- Integrated flushing connections (optional)



Diaphragm seal model 990.40

Description

Process connection

Thread

Nominal pressure

PN 100 with diaphragm Ø 89 mm

Pressure ranges

max. 0 ... 100 bar

Upper body

Stainless steel 316L

Diaphragm

Stainless steel 316L, welded with upper body

Sealing

PTFE (up to a maximum of 260 °C)

Lower body (process connection)

Stainless steel 316L,

G ½, ½ NPT (female)

G ½ B, ½ NPT or M20 x 1.5 (male)

Screws

Stainless steel 1.4571

Measuring instrument connection

Direct assembly (weld-in connection)

Options

Nominal pressure

PN 16 with diaphragm Ø 124 mm,

PN 40 with diaphragm Ø 72 mm

Upper body

- Stainless steel 1.4571, 1.4541, Duplex 2205 (1.4462)

Material of wetted parts

■ Diaphragm

Process temperature limit 400 °C

Stainless steel 1.4435, 1.4541, 1.4571, 1.4539,
Monel 400, Hastelloy C276, Inconel 600, Inconel 625,
Incoloy 825, gold plating (approx. 25 µm)

Process temperature limit 300 °C

Tantalum, Duplex 2205 (1.4462)

Process temperature limit 260 °C

Hastelloy C22, nickel, PTFE foil (≤ 100 bar), PFA coating

Process temperature limit 150 °C

Titanium, zircon, ECTFE (Halar®) coating

■ Lower body (process connection)

- Solid:

Stainless steel 1.4435, 1.4541, 1.4571, 1.4539,
Monel 400, Hastelloy C276, Inconel 600, Inconel 625,
Incoloy 825, titanium

- Lining:

PTFE (others on request)

Further materials and process temperature limits on request

Process connection

- Integrated flushing connections (not with lining)

Sealing

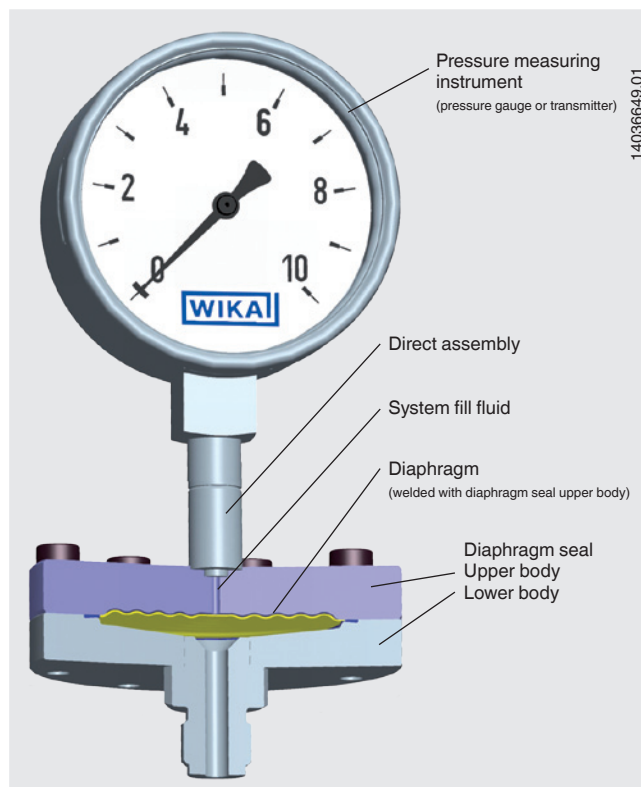
- Graphite (up to a maximum of 400 °C)

Measuring instrument connection

- Assembly via cooling element
- Assembly via capillary (specify capillary length)

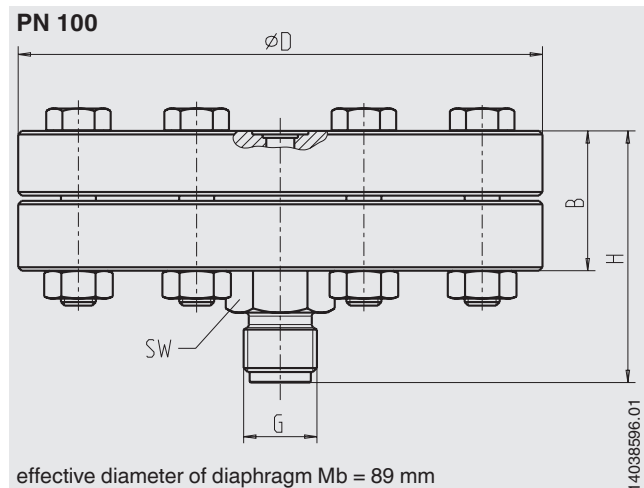
Illustration of the principle

Diaphragm seal, threaded connection model 990.40 with pressure gauge



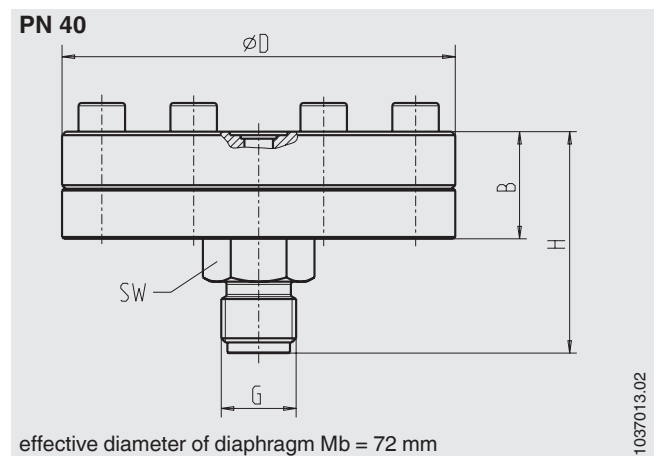
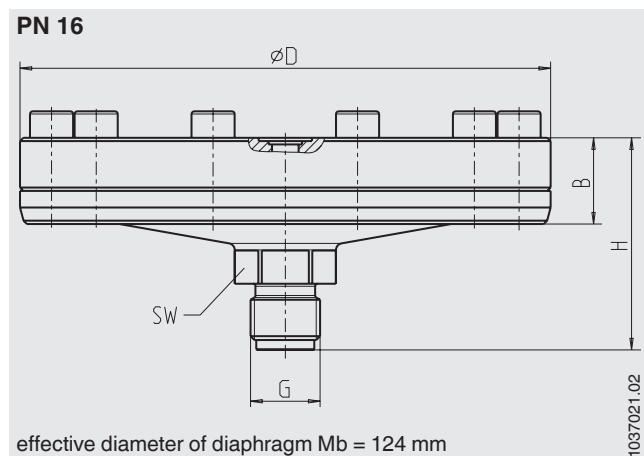
Dimensions in mm

Standard version ¹⁾



1) Dimensions for special materials on request

Option ¹⁾



1) Dimensions for special materials on request

PN in bar	Dimensions in mm				H (with process connection)				
	D	Mb	B	SW	G 1/2 female	G 1/2 male	1/2 NPT female	1/2 NPT male	M20 x 1.5 male
16	160	124	26	27	55.5	64	55.5	63	64
40	110	72	30	27	55	62	55	61	62
100	150	89	40	27	65	72	65	71	72

Ordering information

Model / Process connection (standard, nominal size, nominal pressure) / Material (wetted parts) / Instrument connection: Direct assembly, via cooling element or via capillary, capillary length / System fill fluid / Assembly with pressure measuring instrument ... / Operating conditions: Application, max. and min. process temperature, max. and min. ambient temperature / Options

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