

Flushing ring

For flange-connection diaphragm seals

Model 910.27

WIKA data sheet AC 91.05

Applications

- For flange-connection diaphragm seals with flush diaphragm or cell-type design
- Flushing of process lines to avoid deposits or clogging
- Cleaning deposits off diaphragms
- Measuring location calibration after separation from the process

Special features

- Wide choice of special materials
- Common standards, nominal widths and flushing connections available
- Flushing bores with plug screws
- Flushing ring with mounted valves

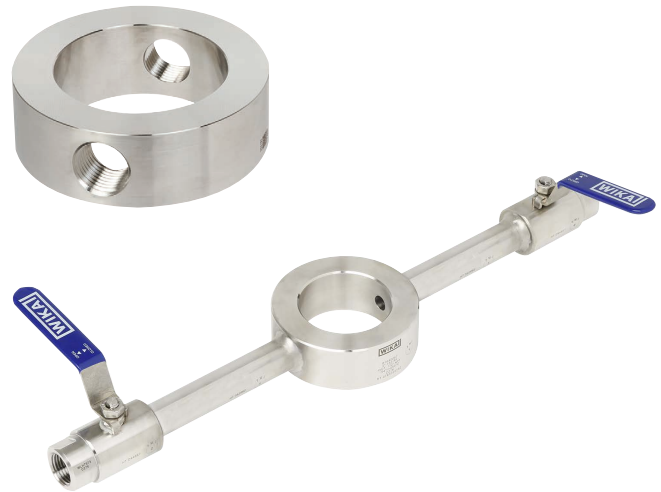


Fig. top: Flushing ring, model 910.27

Fig. bottom: Flushing ring, model 910.27 with mounted valves

Description

The model 910.27 flushing ring is mounted between the diaphragm seal (either flange-type or cell-type design) and the process flange using standardised sealings.

The flushing ring is available with one or two flushing bores located at the side. Deposits, especially those on the diaphragm, can be removed by flushing and cleaning in order to avoid any impairment of the measurement.

Flushing rings with mounted valves extend diaphragm seal systems so that maintenance can be carried out with them still fitted.

Measuring location calibration without dismantling

By using the flushing ring with mounted valves and an upstream shut-off valve, calibration can be performed on-site. In its product portfolio, WIKA has the calibration equipment needed for this e.g. precision digital pressure gauge, model CPG1500 and also the required pressure generation e.g. hand pump, model CPP30 or model CPP1000-H.

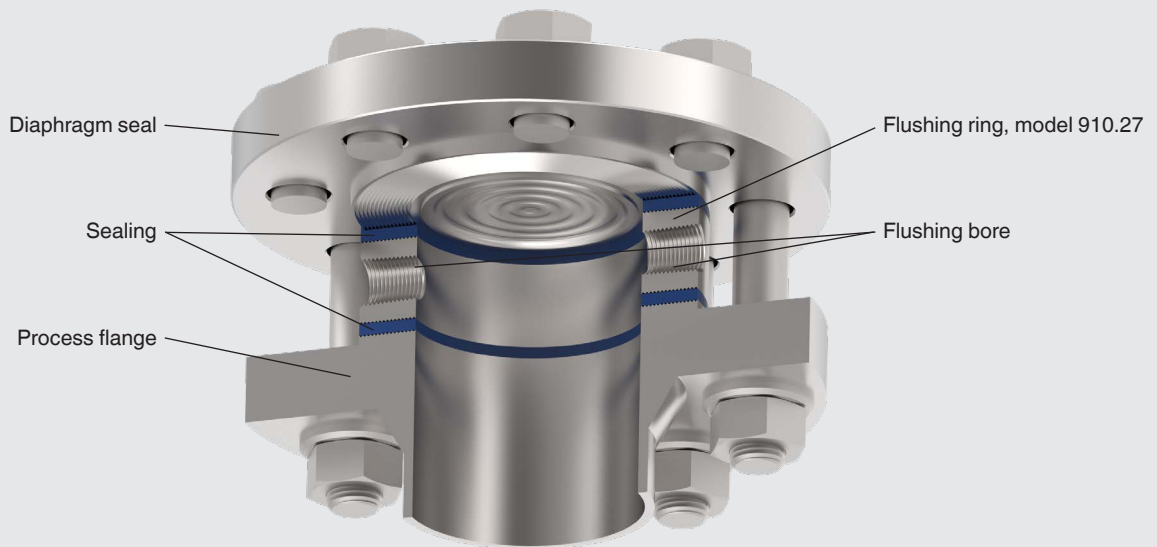
Specifications

Model 910.27		
Process connection		
Following DIN EN 1092-1	DN 40	<ul style="list-style-type: none"> ■ Form A/B1 ¹⁾ ■ Form B2 ■ Form C (tongue) ■ Form D (groove) ■ Form E (spigot) ■ Form F (recess)
	DN 50	
	DN 80	
	DN 100	
	DN 125	
Following ASME B16.5	1 ½"	<ul style="list-style-type: none"> ■ RF 125 ... 250 AA ■ RFSF ■ Flat face ■ Small tongue ■ Small male face ■ Small groove ■ Small female face ■ Large tongue ■ Large male face ■ Large groove ■ Large female face ■ RJF groove
	2"	
	2 ½"	
	3"	
	4"	
	5"	
Flushing bore		
Version	<ul style="list-style-type: none"> ■ On one side ■ On both sides 	
Female thread	<ul style="list-style-type: none"> ■ ½ NPT ■ ¼ NPT ■ ⅛ NPT ■ ¾ NPT ■ G ½ ■ G ¼ ■ G ⅛ others on request 	
Male thread (with adapter)	<ul style="list-style-type: none"> ■ ½ NPT ■ ¼ NPT ■ G ½ ■ G ¼ others on request 	
Plug screw	<ul style="list-style-type: none"> ■ Without ■ With plug screw matching the flushing bore 	
Valve mounting	<ul style="list-style-type: none"> ■ Without ■ On one side ■ On both sides 	
Valve	<ul style="list-style-type: none"> ■ Model IV10, needle valve; see data sheet AC 09.22 ■ Model IV11, multiport valve; see data sheet AC 09.22 ■ Model BV, ball valve; see data sheet AC 09.28 	
Materials	<ul style="list-style-type: none"> ■ Stainless steels 1.4571 (316Ti), 1.4404 (316L), 1.4435 (316L), 1.4541 (321) ■ Hastelloy C22 (2.4602), C276 (2.4819) ■ Monel 400 (2.4360) ■ Nickel 200 (2.4060, 2.4066) ■ Titanium grade 2 (3.7035) 	

1) For flushing rings model 910.27 the sealing faces of forms A and B1 are technically and constructively identical.

Other process connections and materials on request

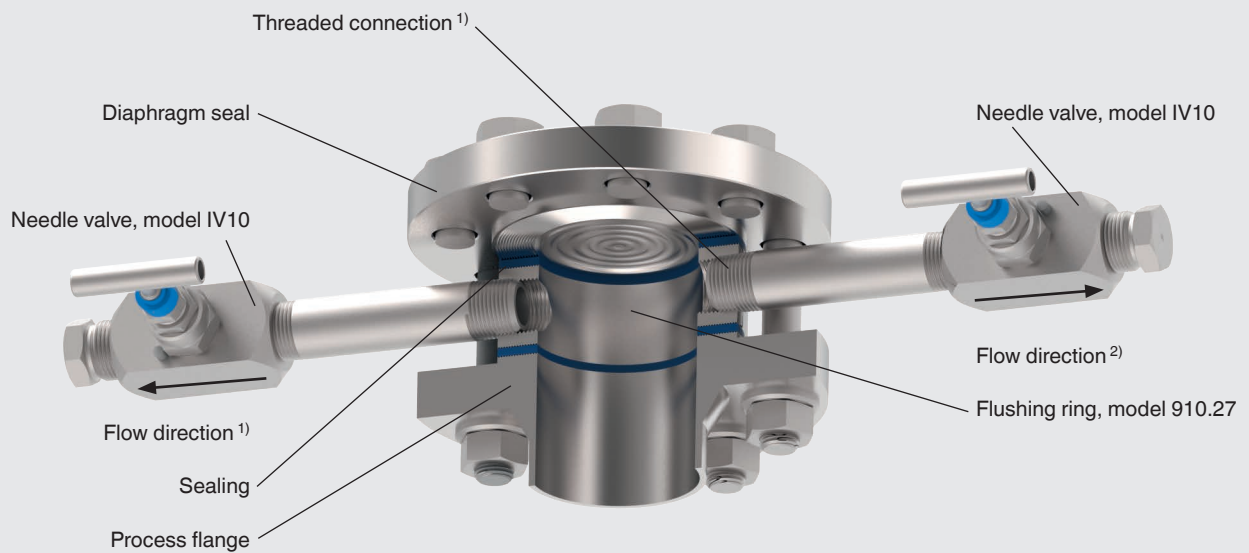
Installation example, model 910.27 with flushing bores, assembled with a diaphragm seal



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Diaphragm seal, sealings and clamping elements are not included in the delivery.

Installation example, model 910.27 with mounted needle valves, assembled with a diaphragm seal



1) With tapered threaded connection, the alignment of the valves can differ slightly.

2) Needle valves are designed for a preferred flow direction (unidirectional). For optimum shut-off of the medium, the valves are therefore mounted as shown.

Approvals

Optional approvals

Logo	Description	Region
	EAC	Eurasian Economic Community
	Pressure equipment directive	

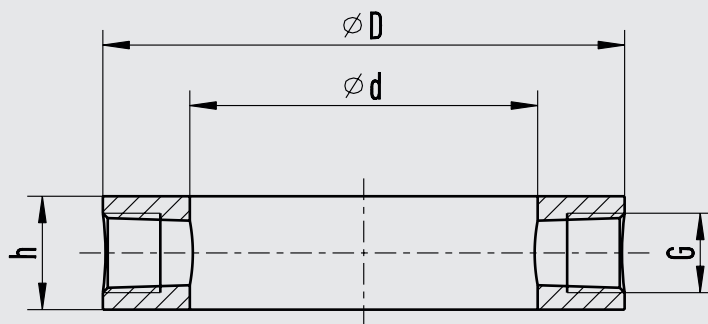
Certificates (option)

Certificates	
Certificates	<ul style="list-style-type: none">■ 2.2 test report per EN 10204■ 3.1 inspection certificate per EN 10204

→ Approvals and certificates, see website

Dimensions in mm [in]

Flushing ring, model 910.27 with flushing bore(s)



The "G" thread can be delivered on one side or both sides of the flushing ring.
Available threads, see page 2

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Flange connection following DIN EN 1092-1

DN	PN in bar	Dimensions in mm [in]			Weight in kg [lbs]
		D	d	h	
25	10 ... 100	68 [6.667]	25 [0.984]	30 [1,181]	0.7 [1.54]
40	10 ... 100	88 [3.464]	49 [1.929]	30 [1,181]	0.9 [1.98]
50	10 ... 100	102 [4.016]	62 [2.441]	30 [1,181]	1.10 [2.43]
80	10 ... 100	138 [5.433]	92 [3.622]	30 [1,181]	1.90 [4.19]
100	10 ... 100	162 [6.378]	92 [3.622]	30 [1,181]	3.15 [6.95]
125	10 ... 100	188 [7.402]	126 [4.961]	30 [1,181]	3.50 [7.72]

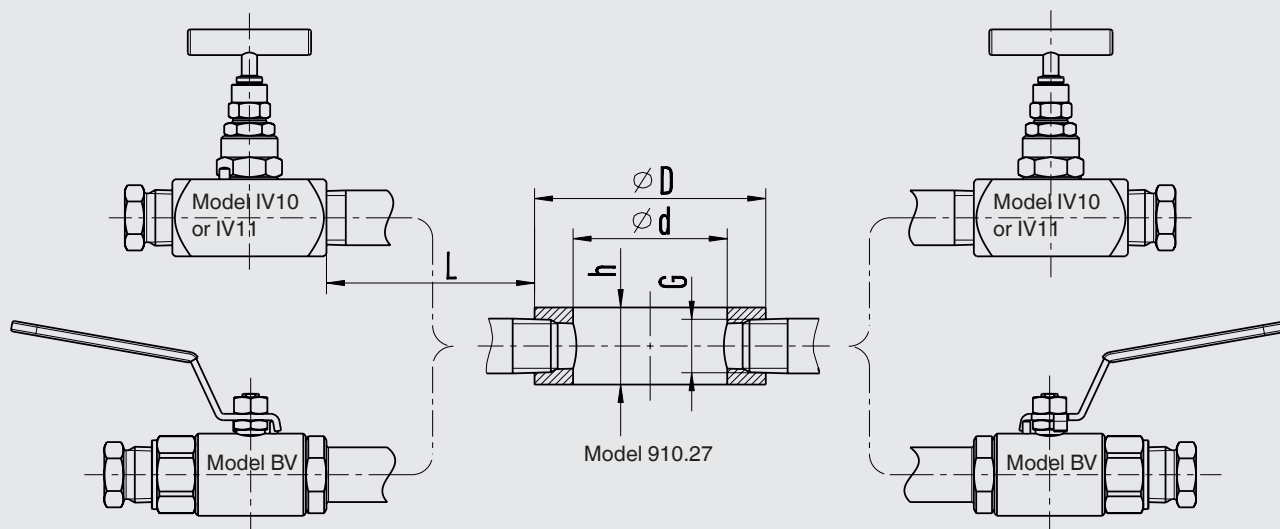
Flange connection per ASME B16.5

DN	Class	Dimensions in mm [in]			Weight in kg [lbs]
		D	d	h	
1"	150 ... 600	51 [2.007]	25 [0.984]	30 [1,181]	0.3 [0.66]
1 ½"	150 ... 600	73 [2.874]	40 [1.574]	30 [1,181]	0.6 [1.32]
2"	150 ... 600	92 [3.622]	62 [2.441]	30 [1,181]	0.60 [1.323]
3"	150 ... 600	127 [5.000]	92 [3.622]	30 [1,181]	1.05 [2.315]
4"	150 ... 600	157 [6.181]	92 [3.622]	30 [1,181]	2.85 [6.283]
5"	150 ... 600	185.5 [7.303]	126 [4.961]	30 [1,181]	3.30 [7.275]

Further dimensions and higher nominal pressures on request

Dimensions in mm[in]

Flushing ring, model 910.27 with mounted valves



For dimensions of the models IV10, IV11, see data sheet AC 09.22.
For dimensions of the model BV, see data sheet AC 09.28.

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Flange connection following DIN EN 1092-1

DN	PN in bar	Dimensions in mm [in]			
		D	d	h	L
50	16 ... 100	102 [4.016]	62 [2.441]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
80	16 ... 100	138 [5.433]	92 [3.622]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
100	16 ... 100	162 [6.378]	92 [3.622]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
125	16 ... 100	188 [7.402]	126 [4.961]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]

Flange connection per ASME B16.5

DN	Class	Dimensions in mm [in]			
		D	d	h	L
2"	150 ... 600	92 [3.622]	62 [2.441]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
3"	150 ... 600	127 [5.000]	92 [3.622]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
4"	150 ... 600	157 [6.181]	92 [3.622]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]
5"	150 ... 600	185.5 [7.303]	126 [4.961]	30 [1.181]	■ 75 [2.953] ■ 100 [3.937]

Further dimensions and higher nominal pressures on request

Ordering information

Model / Process connection (standard, nominal width, nominal pressure rating) / Sealing face form / Material / Flushing bore / Valve mounting / Plug screw / Options

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