

## D912 Flanged chemical seals

### Main features

- Pressure range from 10 mbar to 100 bar
- Flange class 150 to 600
- DN15 to DN50
- Temperature -40 °C to +400 °C
- Stainless steel 1.4404 NACE



### Applications

Pressure, level or flow measurement.  
Mounted on differential, absolute or gauge pressure transmitters.

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| <ul style="list-style-type: none"> <li>■ <b>Process technic</b></li> <li><input type="checkbox"/> Hydraulic</li> <li><input type="checkbox"/> Pneumatic</li> <li><input type="checkbox"/> Refrigeration</li> <li><input type="checkbox"/> Water treatment</li> <li><input type="checkbox"/> Car industry</li> <li><input type="checkbox"/> Test benches</li> <li><input type="checkbox"/> Safety</li> <li><input type="checkbox"/> Aerospace</li> <li><input type="checkbox"/> Railways</li> <li><input type="checkbox"/> Shipbuilding</li> <li><input type="checkbox"/> Heavy vehicle</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Health care</li> <li><input type="checkbox"/> Biotechnology</li> <li><input type="checkbox"/> Food</li> <li><input type="checkbox"/> Beverage</li> <li><input type="checkbox"/> Pharmaceutical</li> <li>■ <b>Petro-chemical</b></li> <li>■ <b>Chemical</b></li> <li><input type="checkbox"/> HVAC</li> <li>■ <b>Energy</b></li> <li><input type="checkbox"/> Medical gas</li> <li><input type="checkbox"/> Agriculture vehicles</li> <li><input type="checkbox"/> Pumps and compressors</li> </ul> |
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### Main characteristics (20° C)

Measurement ranges	Gauge or differential pressure: min. 10 mbar Absolute pressure: min. 50 mbar
Flanges	EN 1759-1 Class 150 to 600 NPS 1/2" to 2" Stainless steel 1.4404
Temperature	-40 °C ... +400 °C
Filling liquids	Suitable for high temperature or vacuum applications
Capillary	1.5 to 15 m

**Ordering details - D912**
**D912** x

<b>Top housing material</b>		
Hot-rolled NACE compliant 1.4404 stainless steel EN10088-3 (Table A4)	L	
Forged NACE compliant 1.4404 stainless steel	M	
<b>Capillary type</b>		
Stainless steel capillary tube with stainless steel protection	A	
Stainless steel capillary tube with stainless steel protection and white plastic ATEX sheath	D	
Stainless steel capillary tube with reinforced stainless steel protection	F	
Stainless steel capillary tube with stainless steel heat-insulated protection	M	
Stainless steel capillary tube with stainless steel traced/heat-insulated protection	P	
<b>Outlet position</b>		
Axial outlet	0	
Side outlet	1	
<b>Capillary length</b>		
Length 1.5 m	E	
Length 3 m	3	
Length 4.5 m	F	
Length 6 m	6	
Length 9 m	9	
Length 12 m	D	
Length 15 m	G	
<b>Connection on measuring instrument side</b>		
Connection for transmitter ABB 265 DR	H	
Connection for transmitter ABB 265 GR - 265 VS	J	
Connection for transmitter BAUMER EDD575	K	
Connection for transmitter BAUMER Flexbar 3501	M	
Connection for transmitter Honeywell STD 1xx and 9xx	A	
Connection for transmitter Honeywell STG 944/974	D	
Connection for transmitter Honeywell STG 140/170/180	E	
Connection for transmitter Honeywell STA 140/940	G	
Connection for transmitter SIEMENS SITRANS Differential	7	
Connection for transmitter SIEMENS SITRANS Gauge/Absolute	8	
Connection for transmitter YOKOGAWA EJX110 (low volumes) capsules M, H, V	F	
Connection for transmitter YOKOGAWA EJX 430 (low volumes)	V	
Connection for transmitter YOKOGAWA EJX 110 (standard flanges) capsules M, H, V	P	
Connection for transmitter YOKOGAWA EJX 310/430 (standard flanges)	Q	
Connection for transmitter YOKOGAWA EJX 440 (standard flanges)	W	
<b>Filling liquids</b>		
LRS9 high temperature oil	9	
LRS8 vacuum oil	8	
LRS4 fluorocarbene oil <sup>(1)</sup>	4	
<b>Diaphragm material</b>		
Stainless steel 316L (1.4435) diaphragm	2	
Hastelloy C276 (2.4819) diaphragm	6	
Stainless steel 316 L (P<25 mbar) diaphragm	C	
Hastelloy C276 (P<25 mbar) diaphragm	D	
<b>Diaphragm coating</b>		
No coating diaphragm	0	
Diaphragm with 15 µm thick GOLD coating	7	
<b>Flange Standard</b>		
ANSI B16-5	2	
EN 1759-1 flange	6	
<b>Flange Material</b>		
Hot-rolled NACE compliant 1.4404 stainless steel EN10088-3 (Table A4)	L	
Forged NACE compliant 1.4404 stainless steel	M	
<b>PN / Class</b>		
Class 150	1	
Class 300	2	
Class 600	3	
<b>DN / NPS</b>		
NPS 1/2" (DN15)	2	
NPS 3/4" (DN20)	3	
NPS 1" (DN25)	4	
NPS 1 1/2" (DN40)	6	
NPS 2" (DN50)	7	
<b>Flange Face Type</b>		
Face raised by 1.6 (RF) (standard machining) class 150-300	G	
6.4 raised face (RF) (standard machining), Class 600	R	
Ring joint face (RTJ), Class 150-300-600 <sup>(2)</sup>	Q	
<b>Flange Face Finish</b>		
Standard finish	0	
<b>Bolts</b>		
ISO (metric) <sup>(3)</sup>	M	
ASME (UNC)	A	
<b>Heat Tracing Circuit</b>		
None	0	
With	1	
<b>Drain Valve</b>		
None	0	
1 SW1/4" OD10 valve	1	
1 SW1/4" OD3/8" valve	9	
<b>Vent</b>		
None	0	
1 SW1/4" OD10 valve	1	
1 SW1/4" OD3/8" valve	9	

<sup>(1)</sup> Compulsory for oxygen cleanliness

<sup>(2)</sup> Except NPS 1/2" and 3/4" class 150

<sup>(3)</sup> Except flanges ANSI B16-5

**Model / type D912**
**Technical specification**

<b>Connecting flange</b>	<ul style="list-style-type: none"> <li>• Class 150 to 600 as per EN1759-1 NPS ½" to NPS 2" / DN15 to DN50</li> <li>• Raised face (B/RF type) or ring joint face (J/RTJ type)</li> <li>• Integrated U-shaped steam tracing circuit: ¼NPT inlet / outlet, Ø8 mm drilling</li> <li>• Stainless steel needle drain valve 316L NACE SW¼" OD10 or OD3/8"</li> <li>• Bolts ASTM A193 B7M / A194 2HM</li> </ul>
<b>Measuring ranges</b>	<ul style="list-style-type: none"> <li>• Gauge and differential pressure: minimum 10 mbar</li> <li>• Absolute pressure: minimum 50 mbar</li> </ul>
<b>Max. pressure</b>	In compliance with the Pressure/ Temperature/Class 600 ratio of EN 1759-1 for 1.4404 stainless steel

**Environment**

<b>Process temperature</b>	-40 °C to +400 °C
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**Material**

<b>Top housing</b>	Hot-rolled 1.4404 stainless steel according to EN10088-3 Compliant with NACE 0103 or 0175
<b>Diaphragm</b>	Active diameter 95 mm Stainless steel 1.4435 or Hastelloy C276 (2.4819)
<b>Sealing joint</b>	Graphite
<b>Capillary</b>	<ul style="list-style-type: none"> <li>• Length 1.5 - 3 - 4.5 - 6 - 9 - 12 and 15 metres</li> <li>• Stainless steel capillary tube and protection</li> <li>• White plastic outer sheath UL94V0</li> </ul>
<b>Flange</b>	Hot-rolled 1.4404 stainless steel according to EN10088-3 Compliant with NACE MR 0103 or MR 0175
<b>Filling liquid</b>	<ul style="list-style-type: none"> <li>• LRS8: 0 °C +300 °C vacuum and absolute pressure oil</li> <li>• LRS9: -40 °C +400 °C high temperature oil</li> <li>• LRS4 : -20 °C +60 °C oxygen use</li> </ul>

**Options**

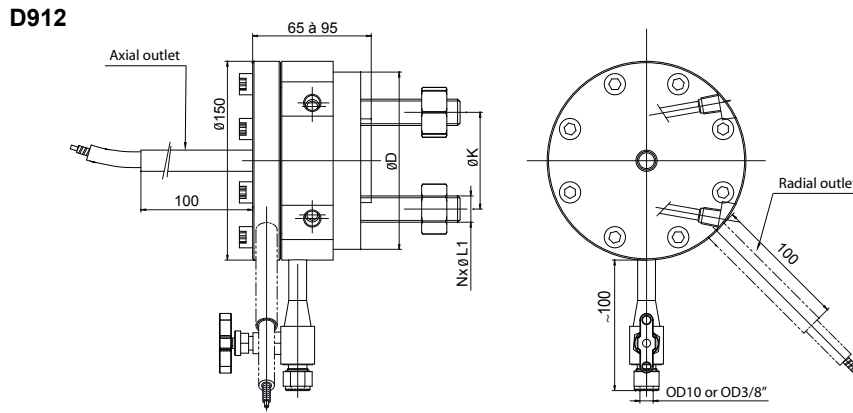
<b>Diaphragm coating</b>	Gold, 15 µm thickness
<b>Capillary</b>	<ul style="list-style-type: none"> <li>• Capillary with low-temperature controlled electric heat tracing</li> <li>• Decrease in effects of outside temperature:               <ul style="list-style-type: none"> <li>at -40 °C, capillary tube temperature over 30 °C</li> <li>at +40 °C, capillary tube temperature below 60 °C</li> </ul> </li> <li>• Approx. Ø25 mm heat insulation</li> <li>• Sealed outer sheath</li> </ul>
<b>Oxygen cleanliness</b>	Code 0765 (LRS4 filling oil compulsory)

**Approvals**

<b>CE compliant</b>	Compliant with Pressure Equipment Directive 97/23/CE and ATEX Directive 94/9/CE for II 2 GD c use (the associated transmitter must comply with the ATEX zone where it is used)
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**Model / type D912**

**Dimensions (mm), Connections**



**Flange dimensions**

DN	Class	ØD	ØK	ØL1 ISO	ØL1 ASME	N	Weight kg	N° GRTJ
15 1/2"	150	89	60.3	M14	1/2 UNC	4	7,8	NA
	300	95	66.7	M14	1/2 UNC	4	8,2	R11
	600	95	66.7	M14	1/2 UNC	4	8,2	R11
20 3/4"	150	99	69.8	M14	1/2 UNC	4	9	NA
	300	117	82.6	M16	5/8 UNC	4	9,4	R13
	600	117	82.6	M16	5/8 UNC	4	9,4	R13
25 1"	150	108	79.4	M14	1/2 UNC	4	9,5	R15
	300	124	88.9	M16	5/8 UNC	4	10,5	R16
	600	124	88.9	M16	5/8 UNC	4	10,5	R16
40 1 1/2"	150	127	98.4	M14	1/2 UNC	4	11	R19
	300	156	114.3	M20	3/4 UNC	4	14	R20
	600	156	114.3	M20	3/4 UNC	4	14	R20
50 2"	150	152	120.6	M16	5/8 UNC	4	13	R22
	300	165	127	M16	5/8 UNC	8	10,2	R23
	600	165	127	M16	5/8 UNC	8	10,2	R23

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