



BOURDON
The Original by Baumer



Main Features

- High pressure version
- Pressure range from 4 bar to 400 bar
- Temperature -60 °C ... 400 °C
- Class 150 to 2500
- NPS 1/2" to 1"
- DN15 to DN25

Applications

- Oil & Gas / Chemical
- Water / Waste water
- Energy
- Process technic

Technical Data

The diaphragm seals are used to protect the measuring instrument from high temperature, aggressive, crystalizing or corrosive media.

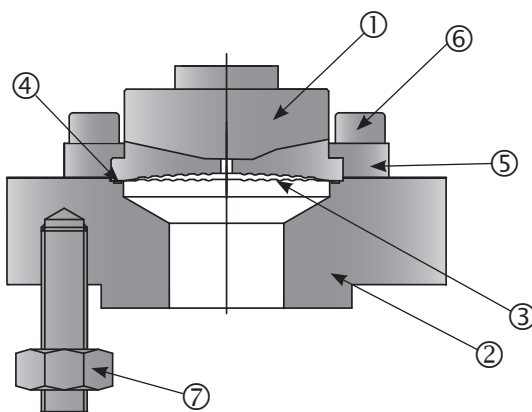
The design of the process flange allows direct mounting on standardized flange connections of pipes or tanks.

The series D418 should be used especially for the measurement of medium and high pressure on process flanges with small diameters and high pressure ratings. These products can also be used in processes with fluid temperatures > 200 °C. For applications with lower temperatures and pressure ratings, it is recommended to check, if the series D415 or D425 can be used.

The filling fluid of the measuring system has to be chosen compatible to the application.

Pressure ranges	0 ... 4 bar to 0 ... 400 bar (min. -1 ... 5 bar for compound pressure)
Temperature	-60 °C ... +400 °C
Filling liquids	LRS1: -15 °C ... +150 °C LRS9: -40 °C ... +400 °C high temperature oil Other liquids on request
Mounting	Direct
Process flange	Stainless steel 1.4404 (AISI 316L) ¹⁾
Flange types	ASME B16.5 / EN1759-1 : class 150 to 2500, NPS 1/2" to 1" (DN15 to DN25) Available flange faces see table on page 2. Other flange types on request.
Diaphragm	Stainless steel 1.4435 (AISI 316L) Option: Hastelloy
Maximum pressure	According to the class of the flange and its standardized pressure temperature relation

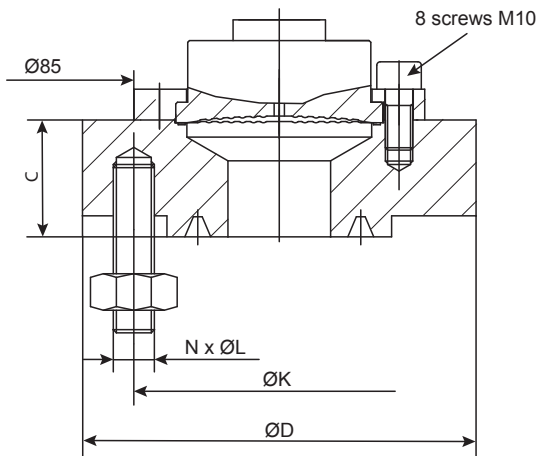
Materials



	N°	D418
Upper part	①	Stainless steel 1.4404
Process flange	②	Stainless steel 1.4404 ¹⁾
Diaphragm	③	Stainless steel 1.4435 ¹⁾
Gasket	④	Graphite
Fixing flange	⑤	Stainless steel 1.4404
Screws	⑥	Stainless steel A4-70
Screws / nuts	⑦	ASTM A 193 B7M / A 194 2HM

¹⁾ Others materials see ordering details on page 3.

Dimensions (mm)



Flange dimensions (mm) ANSI B16-5 / EN 1759-1

DN	Class	Ø D	Ø K	C	Ø L		N	Weight (kg)
					ISO ¹⁾	ASME ¹⁾		
1/2" (DN15)	150	89	60.3	35	M14	1/2 UNC	4	2.3
	300	95	66.7	37	M14	1/2 UNC	4	2.6
	600	95	66.7	37	M14	1/2 UNC	4	2.8
	900	121	82.6	38	M20	3/4 UNC	4	3.8
	1500	121	82.6	38	M20	3/4 UNC	4	3.8
	2500	133	88.9	38	M20	3/4 UNC	4	4.4
3/4" (DN20)	150	99	69.8	38	M14	1/2 UNC	4	2.7
	300	117	82.6	38	M16	5/8 UNC	4	3.6
	600	117	82.6	38	M16	5/8 UNC	4	3.6
	900	121	82.6	38	M20	3/4 UNC	4	4.3
	1500	121	82.6	38	M20	3/4 UNC	4	4.3
	2500	133	88.9	38	M20	3/4 UNC	4	5
1" (DN25)	150	108	79.4	38	M14	1/2 UNC	4	3.1
	300	124	88.9	38	M16	5/8 UNC	4	3.9
	600	124	88.9	38	M16	5/8 UNC	4	3.9
	900	121	82.6	40	M24	7/8 UNC	4	5.4
	1500	121	82.6	40	M24	7/8 UNC	4	5.4
	2500	133	88.9	40	M24	7/8 UNC	4	6.1

⁽¹⁾ see codification on page 3.

Ordering codes for flange faces

Face Type	Drawing	ANSI B16-5		EN 1759-1	
			Codes		Codes
Raised face		Raised face (2) ⁽¹⁾ Raised face (7) ⁽²⁾ Ra = 3.2...6.3 µm	G R	Type B (1.6) ⁽¹⁾ Type B (6.4) ⁽²⁾ Ra = 3.2...6.3 µm	G R
Ring joint face		Ring joint face Ra = 0.4...1.6 µm	Q	Type J Ra = 0.4...1.6 µm	Q

⁽¹⁾ Class 150 and 300

⁽²⁾ Class 600, 900, 1500 and 2500

Ordering details D418

[illegible]

1) Except class 2500

²⁾ Except flange ANSI B16-5

³⁾ Only for class 150, 300, 600 and 900