



DK - 2700

Diaphragm Seal with compact process flanges

Introduction

- Pressure range ...160 bar
- temperature - 60 °C ...200 °C
- Class 150 to 900
- NPS 1/2" to 2"1/2

Applications

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



Technical Data

This diaphragm seal with flanged process connection are used to protect pressure gauges from high temperatures, aggressive or corrosive fluids.

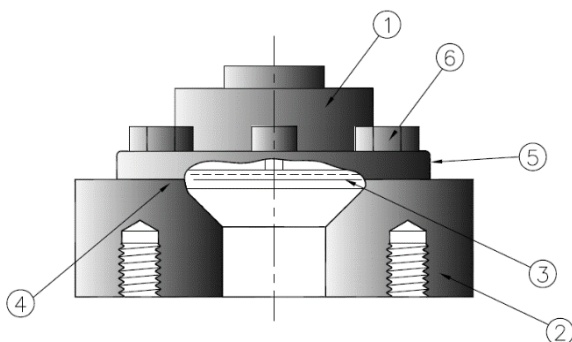
The design of the process flange allows direct mounting on standardized flange connection of pipes or tanks.

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

Filling liquids LRS1 : -15 °C..+ 150 °C
 LRS9 : -40 °C..+ 200 °C high temp.oil
 Other liquids on request

Mounting	Direct
Process flange	316L
Flanged types	ASME B16.5 / EN 1759-1 : class 150 to 900, NPS 1/2" to 2"1/2
Diaphragm	316L
	Option (see ordering table)

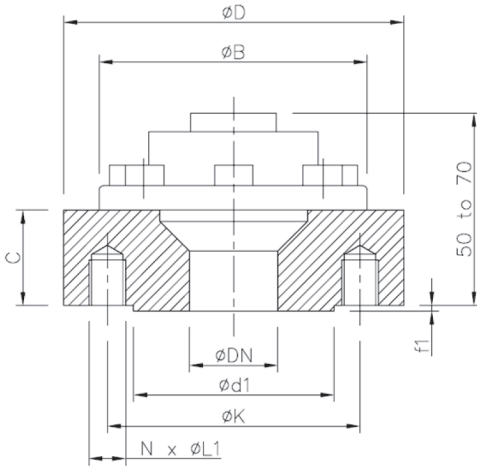
Materials



	NO.	2701	2702	2703
Upper part	①	316L		
Process flange	②	316L		
Diaphragm	③	316L		
Gaskets	④	PTFE		
Fixing flanges	⑤	304 SS	-	
screws / nuts	⑥	304 SS		



Dimension (mm)



Pressure limitations and dimensions of upper part

Type	Min. pressure ranges ^{note1}		P _{max}	Φ B
	Gauge	Compound		
2701	0 ... 10 bar	-1 ...9 bar	160 bar	85
2702	0 ... 1 bar	-1 ...3 bar	40 bar	85
2703	0 ... 0.16 bar	-1 ...0 bar	25 bar	120

note 1 Fluid temperature - 20 ..100 °C, ambient temperature - 10 ... 50 °C
for pressure gauges DN 100/150/160. other on request.

P max. The maximum pressure is also limited by the process flange.

Flange dimensions(mm) ANSI B 16.5 / EN 1759-1

DN	Class	φ D	φ K	φ L	N	EN1759-1		ANSI B16-5		φ d1	Weight in kg		
						c	f1	c	f1		2601	2602	2603
1/2"	150	89	60.3	15.9	4	11.1	1.6	13.2	2	35.1	-	1.6	1.9
	300	95	66.7	15.9	4	14.3	1.6	14.7	2	35.1	1.9	-	-
	600	95	66.7	15.9	4	20.7	6.4	21.3	7	35.1	2.1	-	-
	900	121	82.6	22.2	4	28.6	6.4	29.3	7	35.1	3	-	-
3/4"	150	99	69.8	15.8	4	12.7	1.6	14.7	2	42.9	-	1.8	2.1
	300	117	82.6	19	4	15.9	1.6	16.3	2	42.9	2.4	-	-
	600	117	82.6	19	4	22.3	6.4	22.9	7	42.9	2.6	-	-
	900	130	88.9	22.2	4	31.8	6.4	32.4	7	42.9	2.7	-	-
1"	150	108	79.4	15.9	4	14.3	1.6	16.3	2	50.8	-	2.1	1.4
	300	124	88.9	19	4	17.5	1.6	17.9	2	50.8	2.7	-	-
	600	124	88.9	19	4	23.9	6.4	24.5	7	50.8	2.9	-	-
	900	149	101.6	25.4	4	35	6.4	35.6	7	50.8	4.9	-	-
1"1/4	150	117	88.9	15.9	4	15.9	1.6	17.9	2	63.5	-	2.4	2.7
1"1/2	150	127	98.4	15.9	4	17.5	1.6	19.5	2	73.2	-	2.7	3
2"	150	152	120.6	19	4	19	1.6	21.1	2	91.9	-	-	3.9
2"1/2	150	178	139.7	19	4	22.2	1.6	24.3	2	104.6	-	-	5.5



Ordering details

	DK		-	2				
Model								
Low pressure type	2701							
Medium pressure type	2702							
High pressure type	2703							
Upper part material								
316L			2					
Instrument connection								
1/2" PF					A			
1/2" NPT					B			
1/4" PF					C			
1/4" NPT					D			
Diaphragm material								
316L						1		
Tantalum						2		
Hastelloy C						3		
Monel 400						4		
Diaphragm coating								
no coating							0	
PTFE (Thin anti-sticking coating. Limited corrosion resistance)							1	
Process flange standard								
ANSI B 16-5							1	
EN 1759-1							2	
PN / Class								
ANSI B 16-5/EN 1759-1								0
Class 150								1
class 300								2
Class 600								3
Class 900								4