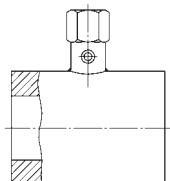


Application:

- In-line seals are especially suitable also for circulating, highly viscous media and such that are inclined to swirl, and for often changing media, since in-line seals are very well cleanable.
- In-line seals for food industry, Biology and pharmacy.

Construction:

The diaphragm tube is flush welded to the cylindrical body.
The complete measuring system is evacuated, completely filled with a suitable filling liquid and hermetically sealed.



Do not open any connection of the system!
Otherwise filling fluid will leak out and the measuring system cannot work properly anymore!

Specifications:

Process Connections

	<i>Norm</i>	<i>Sealing Face</i>	<i>Norm. Size</i>
Pancake type:	DIN EN	PN 16-100: DIN EN 1092-1 Form B2 PN 160-400: DIN 2526 Form E	DN 20...100
	ASME	ASME B 16.5 RF	1"...4"
Flange type:	DIN EN	DIN EN 1092-1 Form B1	DN 20...100
	ASME	ASME B 16.5 RF	DN 1"...4"

Body

316 L Stainless steel

Diaphragm

Diaphragm tube 316 L welded to the cylindrical body

Nominal Pressure

PN 16 to 400 bar and 150 to 2500 lb/sq.in., dependent on model and size, see page 2

Instrument Connection

G ½ female (½" BSP-F), stainless steel 316 L

Filling Liquid

Silicone oil

Pressure Ranges Measuring Instrument

Pressure gauge: 0-1 bar resp. 0-2.5 bar up to PN, dependent on model and size, compare table page 2
(also corresponding pressure/vacuum compound ranges)
Minimum pressure ranges for other measuring instruments upon request

Reference Temperature

+20 °C (+68 °F), dial inscription for pressure gauges: ta 20 °C

Sealings

Not part of our standard supply

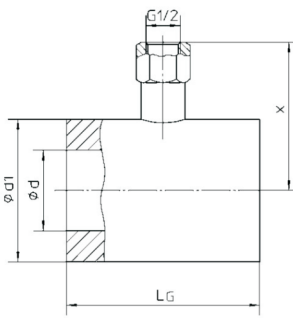
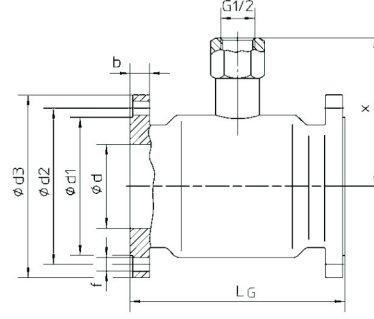
Options

- Female instrument connection G 1/2" B others upon request
- Other materials diaphragm tube and/or body upon request
- Working temperature differing from +20 °C (+68 °F)
- Other filling liquid, e. g. high temperature oil
- Tongue or groove DIN EN 1092-1 / DIN 2512, ring groove ASME B 16.5 form RJF
- Other nominal sizes (compare page 2) upon request
- Special fitting length
- Capillary line between diaphragm seal and instrument (length limit upon request), or cooling element strongly recommended for medium temperatures >+100 °C (>+212 °F)



Dimensional Data, Weight, Minimum Pressure Ranges for Pressure Gauges

Dimensional Data mm / inches , Weight kg / lb, Minimum Pressure Ranges for Bourdon tube pressure gauges

Model	DN	PN	b	d	d1	d2	d3	d5	f	L _G ^{±0.5}	x	MA ¹⁾	Weight (approx.)						
<div>Pancake type</div> <div></div> <div><div>DIN EN 1092-1 Form B2 (PN 16-PN 100)</div><div>DIN 2526 From E (PN 160-PN 400)</div><div>ASME B 16.5 RF</div></div>	20	16 - 40	18	19.8 .78	58 2.28	—	—	—	—	126 4.96	76 2.99	2.5 bar 30 psi	1.56 3.44						
	25	16 - 400		26.2 1.03	63 2.48						—	—	—	—	100 3.94	78.5 3.09	2.46 5.42		
	40			38.5 1.52	85 3.35											89.5 3.52	4.19 9.24		
	50			50.7 2	95 3.74											94.5 3.72	3.77 8.31		
	80	16 - 320		79.7 3.14	130 5.12						—	—	—	—	100 3.94	139.5 5.49	3.92 8.64		
		400														112 4.41	6.18 13.62		
	100	16 - 250		99.7 3.93	150 5.91						—	—	—	—	100 3.94	157 6.18	6.33 13.96		
		320 - 400														122 4.8	7.18 15.83		
	100	16 - 160		99.7 3.93	150 5.91						—	—	—	—	100 3.94	167 6.57	7.33 16.16		
		250 - 400																	
	1"	150 - 2500	20	26.2 1.03	63 2.48	—	—	—	—	126 4.96	78.5 3.09	1 bar 15 psi	2.41 5.31						
		1 1/2"		150	38.5 1.52						82 3.23		89.5 3.52	4.04 8.91					
				300 - 2500	85 3.35								4.43 9.77						
		2"		150 - 1500	50.7 2						95 3.74		—	—	—	—	100 3.94	94.5 3.72	3.77 8.31
				2500														139.5 5.49	3.92 8.64
		3"		150 - 1500	79.7 3.14						130 5.12		—	—	—	—	100 3.94	112 4.41	6.18 13.62
				2500														157 6.18	6.33 13.96
		4"		150 - 600	99.7 3.93						150 5.91		—	—	—	—	100 3.94	122 4.80	7.18 15.83
900 - 2500											167 6.57							7.33 16.16	
<div>Flange type</div> <div></div> <div><div>DIN EN 1092-1 From B1</div><div>ASME B 16.5 RF</div></div>		20		16 - 40	18						19.8 .78		58 2.28	75 2.95	105 4.13	50 1.97	4 x 14 .55	126 4.96	72 2.83
	25	26.2 1.03	68 2.68			85 3.35	115 4.53	60 2.36	4 x 18 .71	100 3.94	77 3.03	1 bar 15 psi	4.46 9.83						
	40	38.5 1.52	88 3.46			110 4.33	150 5.91	70 2.76			82 3.23		6.55 14.44						
	50	16	20	50.7 2	102 4.02	125 4.92	165 6.5	90 3.54			92 3.62		7.44 16.40						
	40									7.54 16.62									
	80	16	24	79.7 3.14	138 5.43	160 6.3	200 7.87	124 4.88	109 4.29	10.73 23.66									
	40									11.98 26.41									
	100	16	20	99.7 3.93	158 6.22	180 7.09	220 8.66	150 5.91	122 4.8	13.14 28.97									
	1"	150	14,2	26.2 1.03	51 2.01	79 3.11	108 4.25	45 1.77	4 x 16 .63	126 4.96	69.5 2.74	2.5 bar 30 psi	2.40 5.29						
		300 - 600		89 3.50	124 4.88		4 x 19 .75		3.38 7.45										
		150	17,5	38.5 1.52	73 2.87	98.6 3.88	127 5	65 2.56	4 x 16 .63	126 4.96	79.5 3.13		4.27 9.41						
		300											6.35 14.00						
		600	22,4	114 4.49	155 6.10		4 x 22.4 .88		7.45 16.42										
		2"	150	19,1	50.7 2	92 3.62	121 4.76	152 5.98	84 3.31	4 x 19 .75	100 3.94		89 3.5	1 bar 15 psi	6.00 13.23				
			300	22,8			127 5	165 6.5		8 x 19 .75					7.17 15.81				
			600	25,4												8.89 19.60			
		3"	150	23,9	79.7 3.14	127 5	152 5.98	191 7.52	117 4.61	4 x 19 .75	140 5.51		106 4.17		10.30 22.71				
			300	28,4			168 6.61	210 8.27		8 x 22.4 .88					15.17 33.44				
			600	31,8												17.76 39.15			
		4"	150	23,9	99.7 3.93	157 6.18	191 7.52	254 10	145 5.71	8 x 19 .75	100 3.94		120 4.72		14.57 32.12				
	300		31,8	200 7.87			273 10.75	8 x 22.4 .88		24.21 53.37									
	600		38,1	216 8.5			273 10.75	8 x 25.4 1		34.26 75.53									

Note: also valid for corresponding vacuum and vacuum / pressure compound ranges Date for other pressure measuring instruments upon request.

Ordering Code D86 Series

Item No.	Field No.	Code	Description				
1.			Gauge Connection				
		2G	G 1/2" B (F)				
2.			Process Connection Type				
		PT	Pancake type				
		FT	Flange type				
3.			Process Connection				
			Pancake type (Code: PT)				
		DIN EN 1092-1(PN16~100) DIN EN 2526 (PN160~400)		ASME B 16.5 RF			
		Code	DN	PN	Code	NPS	CLASS
		PTA	20	16~40	PT1	1"	150~2500
		PTB	25	16~400	PT2	1.5"	150
		PTC	40				300~2500
		PTD	50	16~320	PT3	2"	150~1500
				400			2500
		PTE	80	16~250	PT4	3"	150~1500
				320~400			2500
		PTF	100	16-160	PT5	4"	150-600
				250-400			900-2500
		Flange type (Code: FT)					
		DIN EN 1092-1			ASME B 16.5 RF		
		Code	DN	PN	Code	NPS	CLASS
		FTA	20	16~40	FT1	1"	150
		FTB	25				300~600
		FTC	40				150
		FTD	50	16	FT2	1.5"	300
				40			600
		FTF	80	16	FT3	2"	150
				40			300
		FTD	100	16	FT4	3"	600
							150
					FT4	3"	300
							600
							150
					FT5	4"	300
							600
							150
		4.			Diaphragm Material		
				L	ANSI 316L SS		
		5.			Body Material		
				L	ANSI 316L SS		
		6.			Option		
			1		1m SS Remote Capillary		
			6		1.6m SS Remote Capillary		
			2		2m SS Remote Capillary		
			3		3m SS Remote Capillary		
			4		4m SS Remote Capillary		
5			5m SS Remote Capillary				
8			8m SS Remote Capillary				
X			Others				
	0		No Armor				
	S		SS Armor				
A			Glycerine / Water Filled (Temperature limits -10 / 120°C)				
B			Silicone Filled (Temperature limits -20 / 200°C)				
C			Silicone Filled (Temperature limits -90 / 100°C)				
D			Halocarbon (Temperature limits -40 / 175°C)				
E			Fluoroluble Filled				
F			High Temperature oil (Temperature limits -20 / 400°C)				
G			Food compatible fluid				