

Product Catalogue

CHEMSEAL® Diaphragm Seals



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CHEMSEAL Diaphragm Seal Type ET



Description

Diaphragm seal with thread connection

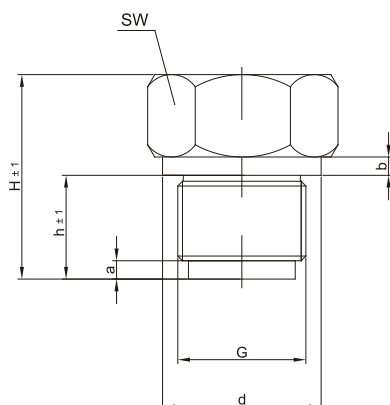
Anwendung

- for general applications
- for pressure switches, pressure transmitters or pressure gauges.
- for hot, polluted or aggressive media
- especially for high pressure

Technical Data	Standard	Options
Type	Diaphragm seal with thread connection;	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Diaphragm coating	on request	
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	PN 600 - PN 1000	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-oil; Halocarbon
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

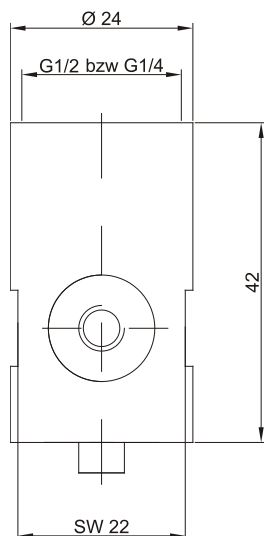
Body / Welding connection



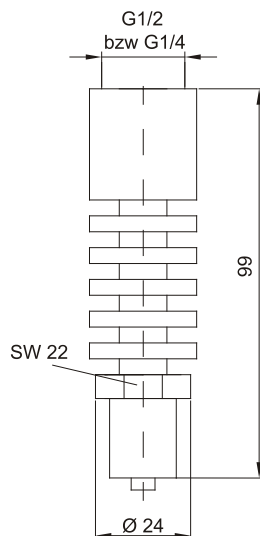
G	d	h	H	a	b	SW
1/2" BSP male	26	17	33,5	3	3	27
3/4" BSP male	32	19	34	3	3	32
1" BSP male	39	21	36	3	3	41
1 1/2" BSP male	55	25	48	3	3	55
2" BSP male	68	27	56	3	3,5	70

MOUNTING OPTIONS

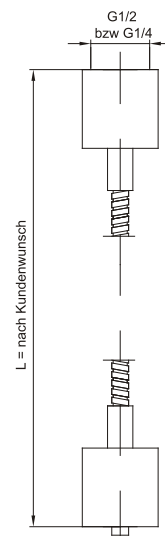
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	02	x	x	-	x	-	x	x	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)		2										
	Body / Diaphragm 1.4404 (316L)		5										
	Body 1.4571 (316Ti) / Diaphragm Tantalum		A										
Mounting	direct				A								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure	PN 40						002						
	PN 400						047						
Instrument connection	1/4" BSP female								4				
	1/2" BSP female								K				
	welding connection								S				
Process connection	1/2" BSP male									D			
	3/4" BSP male									I			
Fill fluid	without										O		
	Multi purpose oil										A		
	Low temperature oil										C		
	High temperature oil										D		
	Halocarbon										E		
Diaphragm coating	without											O	
	PTFE											A	
	PFA											B	
Further options	no further options												O
	further options in text												#

CHEMSEAL Diaphragm Seal Type UT



Description

Diaphragm Seal with thread connection in completely welded version

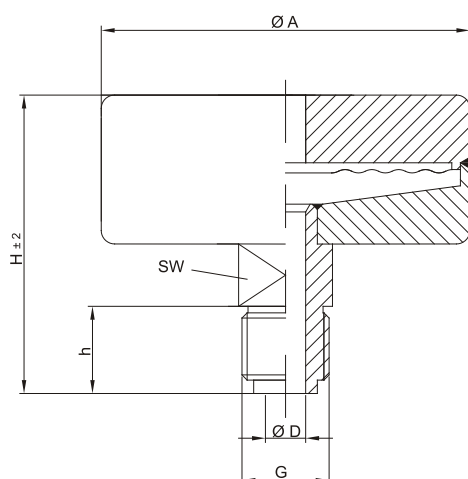
Application

- for general applications, mechanical engineering as well as chemical and petrochemical industry
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal with thread connection; diaphragm inside body, welded	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	PN 40 ; PN 400	
Filling fluid	Multi purpose oil (-20°C - +200°C)	LT- / HT-oil; Halocarbon
Further Options		
Capillary		
Cooling element		

DIMENSIONAL DRAWINGS

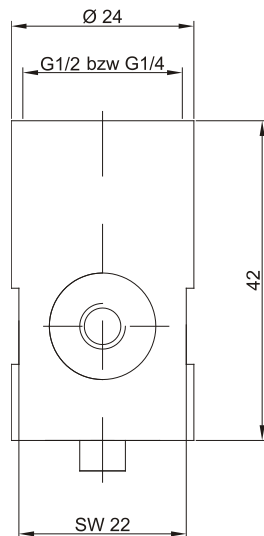
Body / Welding Connection



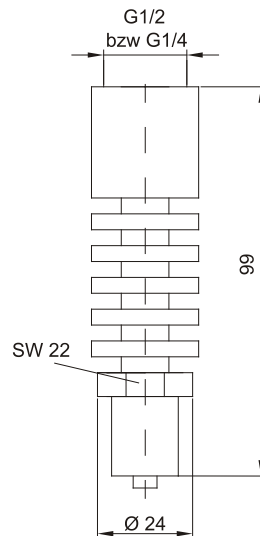
PN	G	ØA	ØD	h	H	SW
40	1/4" BSP male	55	6	13	44,5	14
40	1/2" BSP male	55	10	20	51,5	14
400	1/4" BSP male	40	6	13	44,5	22
400	1/2" BSP male	40	10	20	51,5	22

MOUNTING OPTIONS

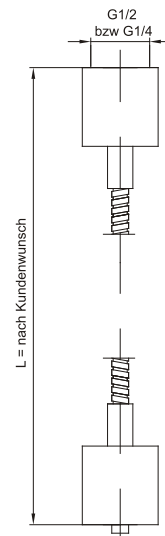
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	03	x	x	-	x	-	x	x	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)			2									
	Body / Diaphragm 1.4404 (316L)			5									
	Body 1.4571 (316Ti) / Diaphragm Tantalum			A									
Mounting	direct				A								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure	PN 40						002						
	PN 400						047						
Instrument connection	1/4" BSP female								4				
	1/2" BSP female								K				
	welding connection								S				
Process connection	1/2" BSP male									D			
	3/4" BSP male									I			
	1/2" BSP male (bore 10 mm)									H			
	M20 x 1,5 (bore 13 mm)									A			
Fill fluid	without										O		
	Multi purpose oil										A		
	Low temperature oil										C		
	High temperature oil										D		
	Halocarbon										E		
Diaphragm coating	without											O	
	PTFE											A	
	PFA											B	
Further options	no further options												O
	further options in text												#

CHEMSEAL Diaphragm Seal Type ST



Description

Diaphragm Seal with thread connection.
Threaded version, disassemblable

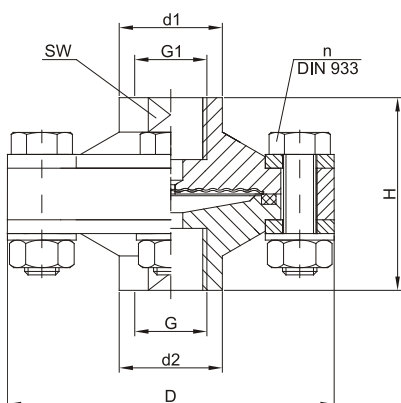
Application

- for general applications, mechanical engineering as well as chemical and petrochemical industry
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal in threaded version with thread connection; diaphragm inside body, welded	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Material seal	FKM	on request
Instrument connection	see dimensional drawings	
Process connection	see dimensional drawings	
Nominal pressure	PN 25 ; PN 250	
Filling fluid	Multi purpose oil (-20°C - +200°C)	LT- / HT-oil
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

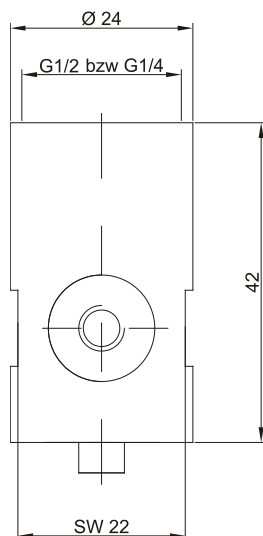
Body / Welding connection



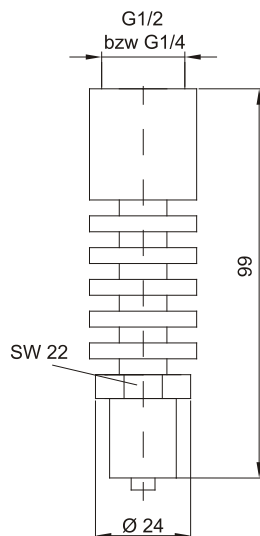
PN	G	G1	d1/ d2	D	H	n	SW
25	1/2" BSP female	1/2" BSP female	30	95	56	4x M10	27
25	1/2" BSP male	1/2" BSP female	30	95	79	4x M10	27
25	1/2" NPT male	1/2" BSP female	30	95	76	4x M10	27
250	1/2" BSP female	1/2" BSP female	30	95	56	8x M10	27
250	1/2" BSP male	1/2" BSP female	30	95	79	8x M20	27
250	1/2" NPT male	1/2" BSP female	30	95	76	8x M10	27

MOUNTING OPTIONS

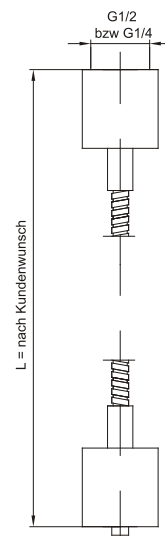
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	04	x	x	-	x	-	x	x	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)			2									
	Body / Diaphragm 1.4404 (316L)			5									
	Body 1.4571 (316Ti) / Diaphragm Tantalum			A									
Mounting	direct				A								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure	PN 25						009						
	PN 250						022						
Instrument connection	1/2" BSP female								K				
	welding connection								S				
Process connection	1/2" BSP female									K			
	1/2" BSP male									D			
	1/2" NPT male									V			
Fill fluid	without										O		
	Multi purpose oil										A		
	Low temperature oil										C		
	High temperature oil										D		
Diaphragm coating	without											O	
	PTFE											A	
	PFA											B	
Further options	no further options												O
	further options in text												#

CHEMSEAL Diaphragm Seal Type FT (DIN EN 1092-1 Form B2)



Description

Diaphragm seal with flange connection

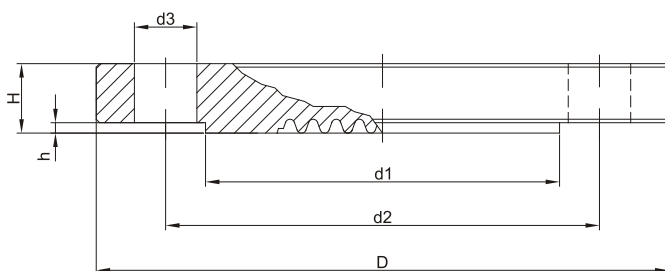
Application

- for general applications as well as the chemical and petrochemical industry and power plant technology
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal with flange connection; front facing diaphragm	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Diaphragm coating	PTFE, PFA, ECTFE, Gold, Silver	
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	see table	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-oil; Halocarbon: NU52
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

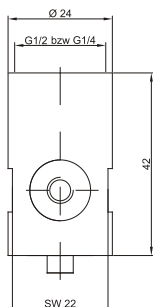
Body / Welding connection



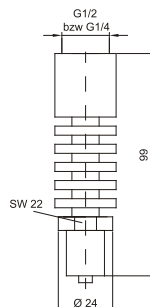
DN	PN	D	d1	d2	d3	H	h
25	40	115	68	85	4x14	18	2
25	100	140	68	100	4x18	24	2
25	160	140	68	100	4x18	24	2
40	40	150	88	110	4x18	18	2
40	100	170	88	125	4x22	26	3
40	160	170	88	125	4x22	28	3
50	40	165	102	125	4x18	20	3
50	64	180	102	135	4x22	26	3
50	100	195	102	145	4x26	28	3
80	16	200	138	145	8x18	20	3
80	40	200	138	160	8x18	24	3
80	64	215	138	160	8x22	28	3
100	16	220	158	180	8x18	20	3
100	40	235	162	190	8x22	24	3
100	64	250	162	200	8x26	30	3
125	16	250	188	210	8x18	22	3
125	40	270	188	220	8x26	26	3
125	64	295	188	240	8x30	34	3

MOUNTING OPTIONS

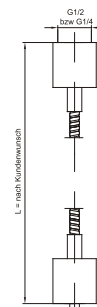
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code			CS	05	x	x	-	x	-	x	F	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)				2									
	Body / Diaphragm 1.4404 (316L)				5									
	Body 1.4571 (316Ti) / Diaphragm Tantalum				A									
Mounting	direct					A								
	capillary 1m					B								
	capillary 2m					C								
	capillary 3m					D								
	capillary 4m					E								
	capillary 5m					F								
	capillary 10m					K								
Nominal pressure / Nominal size	PN	DN												
	25	40						004						
	25	100						014						
	40	40						006						
	40	100						051						
	40	160						052						
	50	40						000						
	50	64						045						
	50	100						053						
	80	16						012						
	80	40						003						
	100	16						055						
	100	40						056						
	125	16						050						
	125	64						048						
Instrument connection	1/2" BSP female									K				
	1/2" NPT female									1				
	M20 x 1,5									M				
	welding connection									S				
Fill fluid	without											O		
	Multi purpose oil											A		
	Low temperature oil											C		
	High temperature oil											D		
	Halocarbon											E		
	NU52											G		
Diaphragm coating	without												O	
	PFA												B	
	Gold												C	
Further options	no further options													O
	further options in text													#

CHEMSEAL Diaphragm Seal Type FT (ASME B16.5 RF)



Description

Diaphragm seal with flange connection

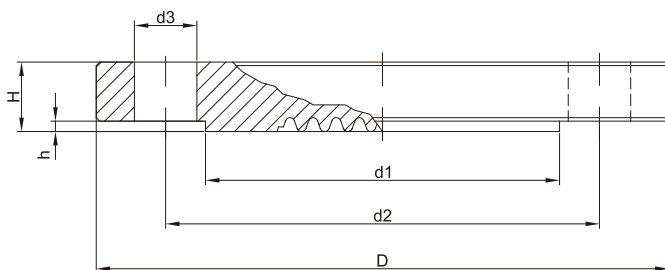
Application

- for general applications as well as the chemical and petrochemical industry and power plant technology
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal with flange connection; front facing diaphragm	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Diaphragm coating	PTFE, PFA, ECTFE, Gold, Silver	
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	see table	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-oil; Halocarbon: NU52
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

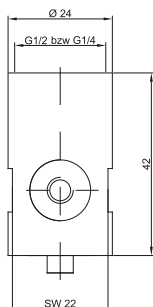
Body / Welding connection



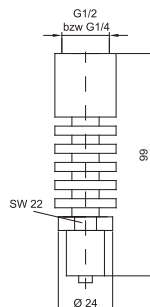
DN	CL	D	d1	d2	d3	H	h
1"	150	108	51	79	4x16	14	1,5
1"	300	124	51	89	4x19	18	1,5
1"	600	124	51	89	4x19	18	6,3
1,5"	150	127	73	98	4x16	17	1,5
1,5"	300	155	73	114	4x22	21	1,5
1,5"	600	155	73	114	4x22	22	6,3
2"	150	152	92	121	4x19	19	1,5
2"	300	165	92	127	8x19	22	1,5
2"	600	165	92	127	8x19	25	6,3
3"	150	190	127	152	4x19	24	1,5
3"	300	210	127	168	8x22	28	1,5
3"	600	210	127	168	8x22	32	6,3
4"	150	229	157	190	8x19	24	1,5
4"	300	254	157	200	8x22	32	1,5
4"	600	254	157	200	8x25	35	6,3
5"	150	254	186	216	8x22	24	1,5
5"	300	279	186	235	8x22	35	1,5
5"	400	279	186	235	8x25	38	6,3

MOUNTING OPTIONS

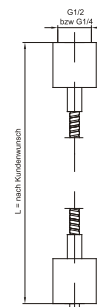
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code			CS	06	x	x	-	x	-	x	F	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)				2									
	Body / Diaphragm 1.4404 (316L)				5									
	Body 1.4571 (316Ti) / Diaphragm Tantalum				A									
Mounting	direct					A								
	capillary 1m					B								
	capillary 2m					C								
	capillary 3m					D								
	capillary 4m					E								
	capillary 5m					F								
	capillary 10m					K								
Nominal pressure / Nominal size	DN	CL												
	1"	150					032							
	1"	300					005							
	1,5"	150					031							
	1,5"	300					035							
	1,5"	600					059							
	2"	150					036							
	2"	300					037							
	2"	600					060							
	3"	150					038							
	3"	300					039							
	4"	150					040							
	4"	300					041							
	5"	150					063							
	5"	300					064							
Instrument connection	1/2" BSP female									K				
	1/2" NPT female									1				
	M20 x 1,5									M				
	welding connection									S				
Fill fluid	without											O		
	Multi purpose oil											A		
	Low temperature oil											C		
	High temperature oil											D		
	Halocarbon											E		
	NU52											G		
Diaphragm coating	without												O	
	PFA												B	
	Gold												C	
Further options	no further options													O
	further options in text													#

CHEMSEAL Diaphragm seal Type WT (DIN EN 1092-1)



Description

Diaphragm seal cell-type with flange connection

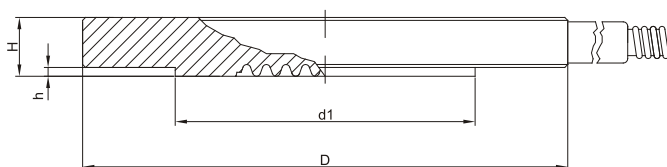
Application

- for general applications as well as the chemical and petrochemical industry and power plant technology
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal cell-type with flange connection; front facing diaphragm	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Diaphragm coating	PTFE, PFA, ECTFE, Gold, Silver	
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	see table	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-oil; Halocarbon: NU52

DIMENSIONAL DRAWING

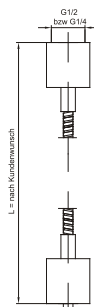
Body



DN	PN	D	d1	H	h
25	40	115	68	18	2
25	100	140	68	24	2
25	160	140	68	24	2
40	40	150	88	18	2
40	100	170	88	26	3
40	160	170	88	28	3
50	40	165	102	20	3
50	64	180	102	26	3
50	100	195	102	28	3
80	16	200	138	20	3
80	40	200	138	24	3
80	64	215	138	28	3
100	16	220	158	20	3
100	40	235	162	24	3
100	64	250	162	30	3
125	16	250	188	22	3
125	40	270	188	26	3
125	64	295	188	34	3

MOUNTING OPTIONS

Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	07	x	x	-	x	-	x	F	x	x	x
Materials	Body / Diaphragm 1.4571 (316Ti)			2									
	Body / Diaphragm 1.4404 (316L)			5									
	Body 1.4571 (316Ti) / Diaphragm Tantalum			A									
Mounting	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure / Nominal size	PN	DN											
	25	40					004						
	25	100					014						
	40	40					006						
	40	100					051						
	40	160					052						
	50	40					000						
	50	64					045						
	50	100					053						
	80	16					012						
	80	40					003						
	100	16					055						
	100	40					056						
	125	16					050						
	125	64					048						
Instrument connection	1/2" BSP female								K				
	1/2" NPT female								1				
	M20 x 1,5								M				
	welding connection								S				
Fill fluid	without										O		
	Multi purpose oil										A		
	Low temperature oil										C		
	High temperature oil										D		
	Halocarbon										E		
	NU52										G		
Diaphragm coating	without											O	
	PFA											B	
	Gold											C	
Further options	no further options												O
	further options in text												#

CHEMSEAL Diaphragm seal Type WT (ASME B16.5 RF)



Description

Diaphragm seal cell-type with flange connection

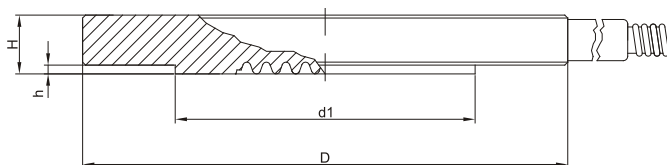
Application

- for general applications as well as the chemical and petrochemical industry and power plant technology
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Type	Diaphragm seal cell-type with flange connection; front facing diaphragm	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Diaphragm coating	PTFE, PFA, ECTFE, Gold, Silver	
Instrument connection	1/2" BSP female	1/4" BSP female; welding connection
Process connection	see dimensional drawings	
Nominal pressure	see table	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-oil; Halocarbon: NU52

DIMENSIONAL DRAWING

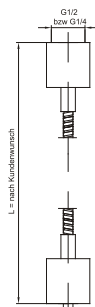
Body



DN	CL	D	d1	d2	d3	H	h
1"	150	108	51	79	4x16	14	1,5
1"	300	124	51	89	4x19	18	1,5
1"	600	124	51	89	4x19	18	6,3
1,5"	150	127	73	98	4x16	17	1,5
1,5"	300	155	73	114	4x22	21	1,5
1,5"	600	155	73	114	4x22	22	6,3
2"	150	152	92	121	4x19	19	1,5
2"	300	165	92	127	8x19	22	1,5
2"	600	165	92	127	8x19	25	6,3
3"	150	190	127	152	4x19	24	1,5
3"	300	210	127	168	8x22	28	1,5
3"	600	210	127	168	8x22	32	6,3
4"	150	229	157	190	8x19	24	1,5
4"	300	254	157	200	8x22	32	1,5
4"	600	254	157	200	8x25	35	6,3
5"	150	254	186	216	8x22	24	1,5
5"	300	279	186	235	8x22	35	1,5
5"	400	279	186	235	8x25	38	6,3

MOUNTING OPTIONS

Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code				CS	07	x	x	-	x	-	x	F	x	x	x	
Materials	Body / Diaphragm 1.4571 (316Ti)					2										
	Body / Diaphragm 1.4404 (316L)					5										
	Body 1.4571 (316Ti) / Diaphragm Tantalum					A										
Mounting	capillary 1m					B										
	capillary 2m					C										
	capillary 3m					D										
	capillary 4m					E										
	capillary 5m					F										
	capillary 10m					K										
Nominal pressure / Nominal size	DN	CL														
	1"	150														032
	1"	300														005
	1,5"	150														031
	1,5"	300														035
	1,5"	600														059
	2"	150														036
	2"	300														037
	2"	600														060
	3"	150														038
	3"	300														039
	4"	150														040
	4"	300														041
	5"	150														063
	5"	300														064
Instrument connection	1/2" BSP female										K					
	1/2" NPT female										1					
	M20 x 1,5										M					
	welding connection										S					
Fill fluid	without												O			
	Multi purpose oil												A			
	Low temperature oil												C			
	High temperature oil												D			
	Halocarbon												E			
	NU52												G			
Diaphragm coating	without												O			
	PFA												B			
	Gold												C			
Further options	no further options														O	
	further options in text														#	

CHEMSEAL Diaphragm Seal Type MT (DIN 11851)



Description

Diaphragm seal according to DIN 11851 for food stuff fitting / tubing

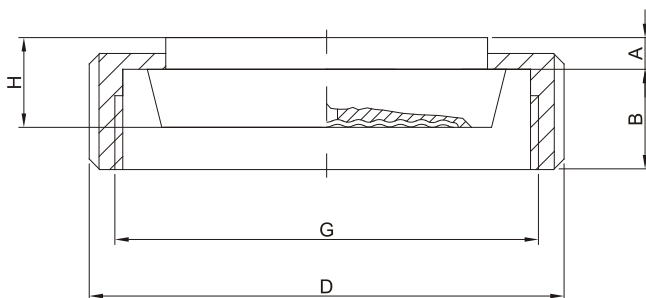
Application

- media separator for hot, liquid food stuff or pharmaceutical products..
- FDA approved filling fluid
- for pressure switches, pressure gauges and pressure transmitters.

Technical Data	Standard	Options
Type	Diaphragm seal according to DIN 11851 for food stuff fitting / tubing acc. to DIN 11850; flush diaphragm, welded	
Material body	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material diaphragm	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material nut	Stainless steel 1.4301 (AISI 304)	on request
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Process connection	DIN 11851 (with nut)	
Nominal pressure	see dimensional drawings	
Filling fluid	NEOBEE® M-20 (FDA)	on request
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

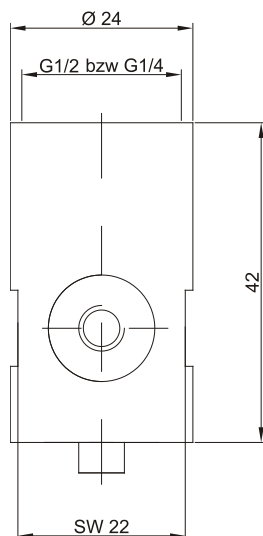
Body / Welding connection



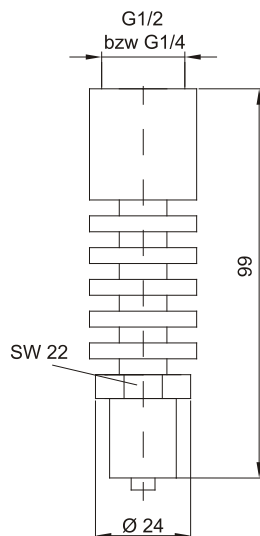
DN	PN	G [Rd]	D	H
25	40	52x1/6"	63	14
32	40	58x1/6"	70	14
40	40	65x1/6"	78	14
50	25	78x1/6"	92	15
65	25	95x1/6"	112	15
80	25	110x1/4"	127	17
100	25	130x1/6"	149	19

MOUNTING OPTIONS

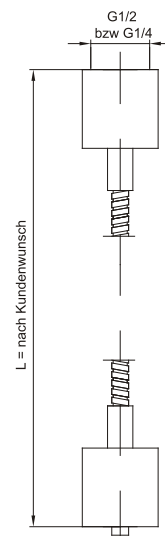
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	09	x	x	-	x	-	x	F	x	O	x
Materials	Body / Diaphragm 1.4571 (316Ti)			2									
	Body / Diaphragm 1.4404 (316L)			5									
	Body / Diaphragm 1.4435 (316L)			7									
Mounting	direct				A								
	direct with cooling element +200°C				L								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure / Nominal size	DN	PN											
	25	40					004						
	32	40					026						
	40	40					006						
	50	25					021						
	65	25					024						
	80	25					027						
	100	25					029						
Instrument connection	1/2" BSP female								K				
	1/4" BSP female								4				
	welding connection								S				
Fill fluid	without										O		
	NEOBEE®-M20, FDA-approved										I		
Further options	no further options												O
	surface roughness $RA \leq 0,8 \mu m$												B
	surface roughness $RA \leq 0,4 \mu m$												C
	further options in text												#

CHEMSEAL Diaphragm Seal Type MT (IDF ISO 2853)



Description

Diaphragm seal according to IDF ISO 2853 for food stuff fitting / tubing

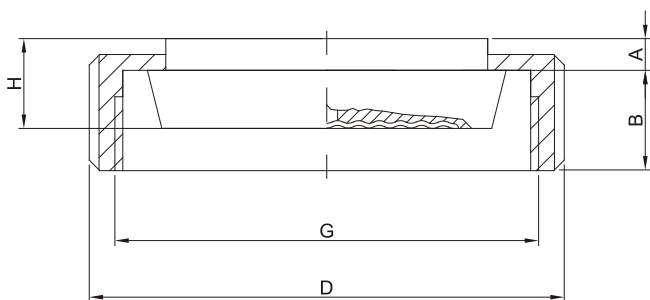
Application

- media separator for hot, liquid food stuff or pharmaceutical products..
- FDA approved filling fluid
- for pressure switches, pressure gauges and pressure transmitters.

Technische Daten	Standardausführung	Optionen
Ausführung	Diaphragm seal according to IDF-Norm ISO 2853 for food stuff fitting / tubing acc. to BS 4825 P3 or O.D. Tube; flush diaphragm, welded	
Material body	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material diaphragm	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material nut	Stainless steel 1.4301 (AISI 304)	on request
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Prozessanschluss	IDF Norm ISO 2853 (with nut)	
Nenndruck	see table	
Filling fluid	NEOBEE® M-20 (FDA)	on request
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

Body / Welding connection



DN [inch]	DN [mm]	PN	G [IDF]	B	H
1"	25	40	1"	30	21
1 1/2"	38	40	1 1/2"	30	13,5
2"	51	25	2"	30	15
2 1/2"	63,5	25	2 1/2"	30	20
3"	76,1	25	3"	30	22

CHEMSEAL Diaphragm Seal Type MT (SMS)



Description

Diaphragm seal according to SMS norm
for food stuff fitting / tubing

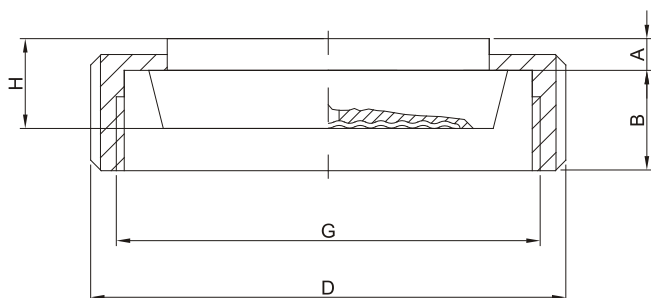
Application

- media separator for hot, liquid food stuff or pharmaceutical products..
- FDA approved filling fluid
- for pressure switches, pressure gauges and pressure transmitters.

Technische Daten	Standardausführung	Optionen
Ausführung	Diaphragm seal according to SMS Norm for food stuff fitting / tubing acc. to BS 4825 P3 or O.D. Tube; flush diaphragm, welded	
Material body	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material diaphragm	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material nut	Stainless steel 1.4301 (AISI 304)	on request
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Prozessanschluss	SMS (with nut)	
Nennndruck	see table	
Filling fluid	NEOBEE® M-20 (FDA)	on request
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

Body / Welding connection



DN [inch]	PN	G [Rd]	B	H
1"	40	40x1/6"	19	16
1 1/2"	40	60x1/6"	23	16
2"	25	70x1/6"	24	16
2 1/2"	25	85x1/6"	28	16
3"	25	98x1/6"	30	20

CHEMSEAL Diaphragm seal Type CT (Tri-Clamp)



Description

Diaphragm seal with quick lock according to „Tri-Clamp“-specification for food stuff fitting / tubing

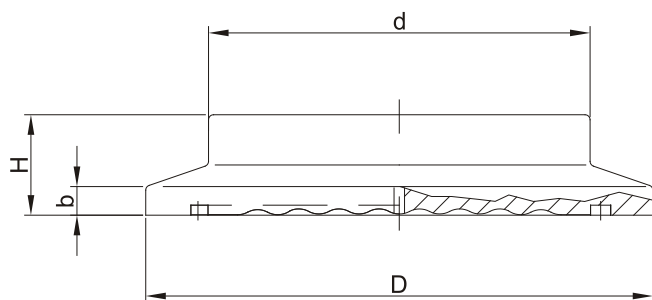
Application

- media separator for hot, liquid food stuff or pharmaceutical products.
- FDA approved filling fluid
- for pressure switches, pressure gauges and pressure transmitters.

Technical Data	Standard	Options
Type	Diaphragm seal with quick lock according to „Tri-Clamp“-specification for food stuff fitting / tubing according to BS 4825 P3 and ASME BPE; flush diaphragm, welded	
Material body	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Material diaphragm	Stainless steel 1.4404 (AISI 316L)	Stainless steel 1.4435 (AISI 316L);
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Process connection	quick lock according to „Tri-Clamp“-specification	
Nominal pressure	see dimensional drawings	
Filling fluid	NEOBEE® M-20 (FDA)	on request
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

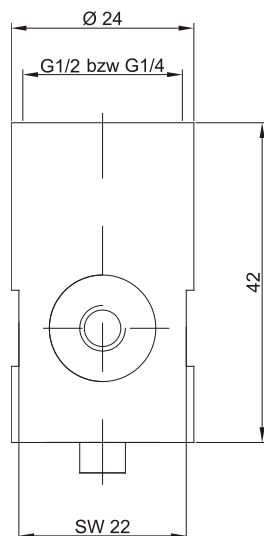
Body / Welding connection



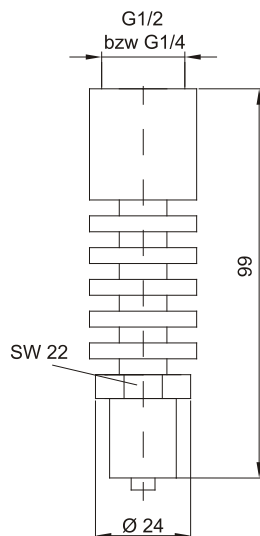
DN	PN	D	d	H	b
3/4"	40	25	38	10	2,85
1"	40	50,5	38	10	2,85
1 1/2"	40	50,5	38	10	2,85
2"	40	64	38	10	2,85
2 1/2"	25	77,5	38	10	2,85
3"	25	91	38	10	2,85

MOUNTING OPTIONS

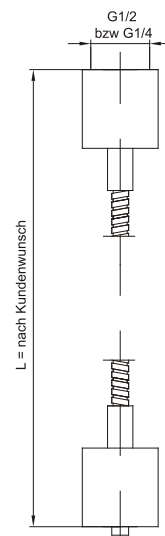
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	10	x	x	-	x	-	x	F	x	O	x
Materials	Body / Diaphragm 1.4571 (316Ti)			2									
	Body / Diaphragm 1.4404 (316L)			5									
	Body / Diaphragm 1.4435 (316L)			7									
Mounting	direct				A								
	direct with cooling element +200°C				L								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal pressure / Nominal size	DN	PN											
	3/4"	40			015								
	1"	40			016								
	1 1/2"	40			017								
	2"	25			018								
	2 1/2"	25			019								
	3"	25			020								
Instrument connection	1/2" BSP female								K				
	1/4" BSP female								4				
	welding connection								S				
Fill fluid	without										O		
	NEOBEE®-M20, FDA-approved										I		
Further options	no further options												O
	surface roughness $RA \leq 0,8 \mu m$												B
	surface roughness $RA \leq 0,4 \mu m$												C
	further options in text												#

CHEMSEAL Diaphragm seal Type VT



Description

Diaphragm seal for VARIVENT® in-line housing

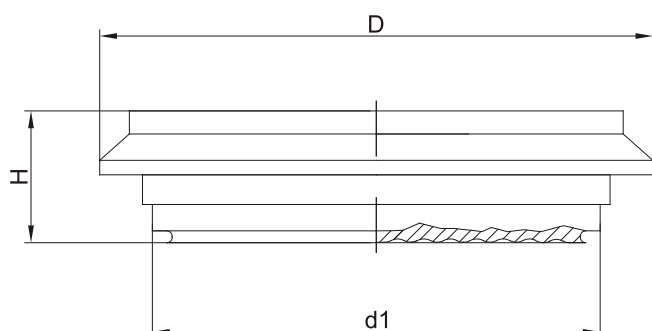
Application

- media separator for hot, liquid food stuff or pharmaceutical products.
- FDA approved filling fluid
- for pressure switches, pressure gauges and pressure transmitters.

Technical Data	Standard	Options
Type	Diaphragm seal for VARIVENT® In-Line housing; flush diaphragm, welded	
Material body	Stainless steel 1.4571 (AISI 316Ti)	Stainless steel 1.4404 (AISI 316L); Stainless steel 1.4435 (AISI 316L);
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	Stainless steel 1.4404 (AISI 316L); Stainless steel 1.4435 (AISI 316L);
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Process connection	for VARIVENT® In-Line housing	
Nominal pressure	depending on VARIVENT® In-Line housing;	
Filling fluid	NEOBEE®-M20, FDA-konform	on request
Further options		
Capillary		
Cooling element		

DIMENSIONAL DRAWING

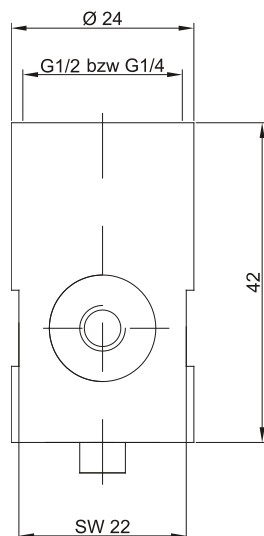
Body / Welding connection



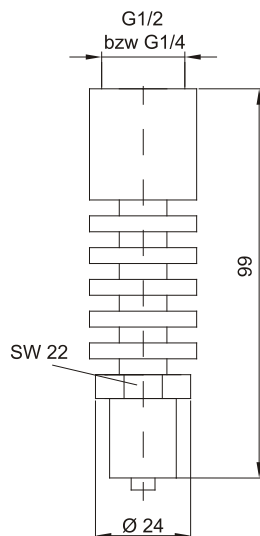
DN	D	d1	H
25 / 1"	66	50	19
40 - 125 / 1 1/2" - 6"	84	68	19

MOUNTING OPTIONS

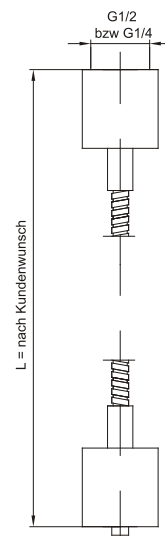
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	11	x	x	-	x	-	x	F	x	O	x
Materials	Body / Diaphragm 1.4571 (316Ti)												
	Body / Diaphragm 1.4404 (316L)												
	Body / Diaphragm 1.4435 (316L)												
Mounting	direct				A								
	direct with cooling element +200°C				L								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Nominal size	for housing DN 25 / 1"						015						
	for housing DN 40 - DN 125 / 1 1/2" - 6"						016						
Instrument connection	1/2" BSP female								K				
	1/4" BSP female								4				
	welding connection								S				
Fill fluid	without										O		
	NEOBEE®-M20, FDA-approved										I		
Further options	no further options												O
	surface roughness $RA \leq 0,8 \mu m$												B
	surface roughness $RA \leq 0,4 \mu m$												C
	further options in text												#

CHEMSEAL Diaphragm seal Type PT



Description

Diaphragm seal for paper and pulp industry

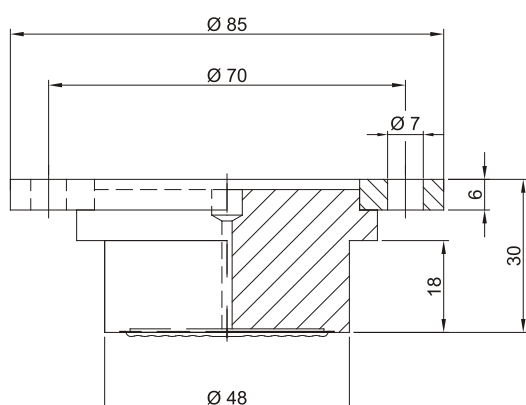
Anwendung

- special diaphragm seal for liquefied fiber and cellulosic suspensions
- for pressure switches, pressure gauges and pressure transmitters
- for hot, polluted or aggressive media

Technical Data	Standard	Options
Ausführung	special diaphragm seal for liquefied fiber and cellulosic suspensions, front facing diaphragm, welded	
Material body	Stainless steel 1.4571 (AISI 316Ti)	on request
Material diaphragm	Stainless steel 1.4571 (AISI 316Ti)	on request
Material clamping flange	Stainless steel 1.4301 (AISI 304)	on request
Instrument connection	1/2" BSP female	Welding connection; 1/4" BSP female
Process connection	DN 48	on request
Nominal pressure	PN 40	
Filling fluid	Multi purpose oil (-20°C - +200°C)	NT- / HT-Öl
Further options		
Capillary		
Cooling element		

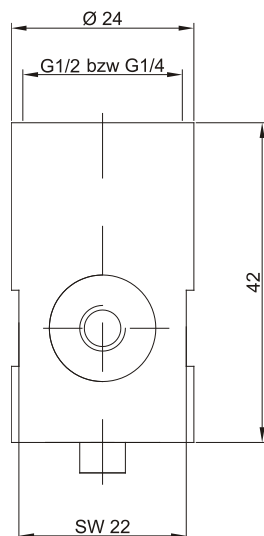
DIMENSIONAL DRAWING

Body / Welding connection

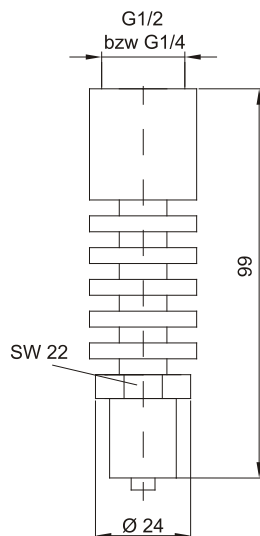


MOUNTING OPTIONS

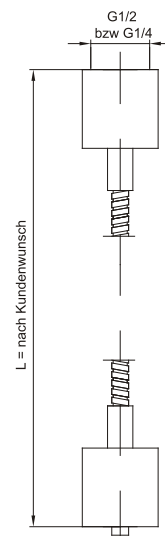
Instrument Connection, threaded



Instrument Connection, threaded,
with cooling element



Instrument Connection, threaded,
with capillary



ORDER CODES

(most common options)

order code		CS	08	x	x	-	002	-	x	F	x	O	x
Materials	Body / Diaphragm 1.4571 (316Ti)												
	Body / Diaphragm 1.4404 (316L)												
	Body 1.4571 (316Ti) / Diaphragm Tantalum												
Mounting	direct				A								
	capillary 1m				B								
	capillary 2m				C								
	capillary 3m				D								
	capillary 4m				E								
	capillary 5m				F								
	capillary 10m				K								
Instrument connection	1/2" BSP female								K				
	1/4" BSP female								4				
	welding connection								S				
Fill fluid	without												
	Multi purpose oil												
	Low temperature oil												
	High temperature oil												
Further options	no further options												O
	further options in text												#

CONVERSION TABLE FOR PRESSURE UNITS

		Standard International Units					Technical Units					
		mbar	bar	Pa	kPa	MPa	mm WC	m WC	kp/cm²	atm	Torr	psi
Standard International Units	mbar	•	0,001	100	0,1	0,0001	10,197	10,197 x 10 ⁻³	1,0197 x 10 ⁻³	0,98692 x 10 ⁻³	0,75006	14,504 x 10 ⁻³
	bar	1.000	•	100.000	100	0,1	10,197 x 10 ³	10,197	1,0197	0,9869	750,06	14,504
	Pa	0,01	0,00001	•	0,001	0,000001	0,10197	0,10197 x 10 ⁻³	0,10197 x 10 ⁻⁶	9,8692 x 10 ⁻⁶	7,5006 x 10 ⁻³	0,14504 x 10 ⁻³
	kPa	10	0,01	1.000	•	0,001	0,10197 x 10 ³	0,10197	10,197 x 10 ⁻³	9,8692 x 10 ⁻³	7,5006	0,14504
	MPa	10.000	10	1.000.000	1.000	•	0,10197 x 10 ⁶	0,10197 x 10 ³	10,197	9,8692	7,5006 x 10 ³	0,14504 x 10 ³
		mm WS	98,067 x 10 ⁻³	98,067 x 10 ⁻⁶	9,8067	9,8067 x 10 ⁻³	9,8067 x 10 ⁻⁶	10 ⁻³	10 ⁻⁴	96,784 x 10 ⁻⁶	73,556 x 10 ⁻³	1,4223 x 10 ⁻³
		m WS	98,067	98,067 x 10 ⁻³	9,8067 x 10 ³	9,8067 x 10 ⁻³	10 ³	•	10 ⁻¹	96,784 x 10 ⁻³	73,556	1,4223
		kp/cm²	0,98067 x 10 ³	0,98067	98,067 x 10 ³	98,067 x 10 ⁻³	10 ⁴	10	•	0,96784	735,56	14,223
Technical Units		atm	1,0133 x 10 ³	1,0133	0,10133 x 10 ⁶	0,10133 x 10 ³	10,332 x 10 ³	10,332	1,0332	•	760	14,693
		Torr	1,3332	1,3332 x 10 ⁻³	0,10133 x 10 ³	0,10133 x 10 ⁻³	0,13332 x 10 ⁻³	13,595	1,3595 x 10 ⁻³	1,3158 x 10 ⁻³	•	19,34 x 10 ⁻³
		psi	68,948	68,948 x 10 ⁻³	6,8948 x 10 ³	6,8948	6,8948 x 10 ⁻³	0,70307 x 10 ³	0,70307	0,70307 x 10 ⁻³	0,70307 x 10 ⁻⁶	51,715

INQUIRY CHECKLIST CHEMICAL SEALS (BY FAX TO +49-6262-92670-99)

Company's name and address	contact person
	telephone, fax
inquiry no. / project no.	E-Mail
application	measured media
wetted parts material	housing material
media temperature T_{min} T_{max}	environmental temperatur T_{min} T_{max}
pressure load static: dynamic: from to	vacuum <input type="checkbox"/> Yes <input type="checkbox"/> No
special requirements	

Design chemical seal - information on the instrument

PINTER instrument <input type="checkbox"/> MANOCOMB® <input type="checkbox"/> INDUSWITCH <input type="checkbox"/> PTM <input type="checkbox"/> Gauge NG63 <input type="checkbox"/> NG100 <input type="checkbox"/> NG160	other brand (please state brand, model and type)
model and type	
pressure / indicator range	differential pressure <input type="checkbox"/> yes <input type="checkbox"/> no

Design chemical seal - information on chemical seal and mounting

process connection (please state thread type and size and / or nominal size und nominal pressure)		
material (chemical seal body)		material (membrane und membrane coating)
direct mounting <input type="checkbox"/> yes <input type="checkbox"/> no	cooling element <input type="checkbox"/> yes <input type="checkbox"/> no	capillary <input type="checkbox"/> yes, _____ meter <input type="checkbox"/> no
adjustment temperature <input type="checkbox"/> Standard +20°C <input type="checkbox"/> others: _____		fill fluide <input type="checkbox"/> Standard <input type="checkbox"/> others: _____
other		
Quotation for pieces _____		<input type="checkbox"/> annual demand <input type="checkbox"/> single demand <input type="checkbox"/> project demand <input type="checkbox"/> spare parts

FURTHER PRODUCTS FROM PINTER



PRESSURE SWITCHES

are signal elements which are used for pressure measuring in pressure lines for gases, vapours, liquids or suspensions. The switch points are transformed into an electric or pneumatic output signal which is necessary for the control and regulation of processes, e.g. safety and alarm devices.



PRESSURE GAUGES

are mechanical pressure indicators. The actual process pressure acts on a measuring element and deforms it. The deformation is converted into a 270° rotating motion by the attached movement.

Due to the electricity-free function, pressure gauges even remain fully functional in total damage occurrence.



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DIAPHRAGM SEALS

are mechanical process separating elements which are mounted on measuring instruments directly or via capillary; with diaphragm seals the measuring instrument is separated from the actual process to protect the instrument from hot, polluted, aggressive or crystallizing media.



INDICATORS AND SIGNALPROCESSORS

are interfaces between measuring instruments and the process control. Supply isolation amplifiers provide pressure transmitters with the required operating voltage. With graphics displays most diverse information can be visualized and archived among other things. For safety relevant functions PINTER offers proven and tested signal processors with SIL 2 classification.



SYSTEM SOLUTIONS

PINTER is a specialist for industrial measurement and controls and offers a suitable instrument including necessary accessories for almost any application:

From standard to the tailor-made solution for your application. PINTER develops and manufactures complete measuring and control systems for you - competently, efficiently and with most modern tools and machinery.

IMPRINT

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