

Diaphragm seals MD 21/22 compact version



Type MD 21

Application For use with Bourdon tube pressure gauges, pressure transducers or pressure switches. For corrosive, hot and polluted media at high pressures. Specially suitable for mechanical engineering and chemical industry applications.

Technical specifications

Process connection
Stainless steel 316 Ti/316 L
G½B to G2B, DIN 3852 type A
Fixed male thread

Diaphragm
Stainless steel 316 L,
welded flush to upper body,
no dead space

Instrument connection
Welded connection

Pressure transmission liquid
Paraffin oil (FM 09), FDA-listed

Pressure ranges
See price list section

Nominal pressure
PN 600 to PN 1000

Options

- Adapter for instrument connection G¼B/G½B
- Cooling element (> 100 °C)
- Capillary tube
- Other threads
- Other materials
- Other filling liquids



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Type MD 22

For use with Bourdon tube pressure gauges, pressure transducers or pressure switches. For corrosive, hot and polluted media at medium pressures. Specially suitable for mechanical engineering and chemical industry applications.

Process connection
Stainless steel 316 L
G½B, fixed male thread

Upper body and lower body
Stainless steel 316 L

Diaphragm
Stainless steel 316 Ti/316 L
Internal, welded

Instrument connection
Welded connection

Pressure transmission liquid
Paraffin oil (FM 09), FDA-listed

Pressure ranges
See price list section

Nominal pressure
PN 40 to PN 250

▪ Adapter for instrument connection G¼B/G½B

- Cooling element (> 100 °C)
- Capillary tube
- Other threads
- Other materials
- Other filling liquids



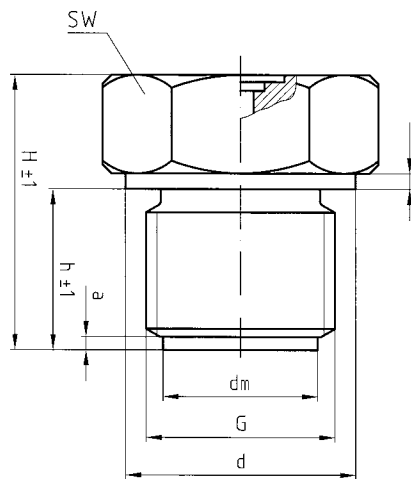
See page 167 for prices.

Diaphragm seals MD 21/22

Types and dimensions (mm)

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Type MD 21



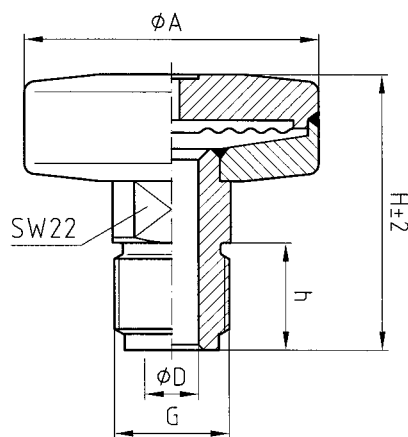
Pipe thread as per DIN 3852 type A or ISO 228-1

G	d	dm	h	H	a	b	SW
G½B	26	17.2	17	33.5	3	3	27
G¾B	32	23.5	19	34	3	3	32
G1B	39	28	21	36	3	3	41
G1½B	55	40	25	48	3	3	55
G2B	68	50	27	56	3	3.5	70

Pipe thread as per ANSI/ASME B1.20.1

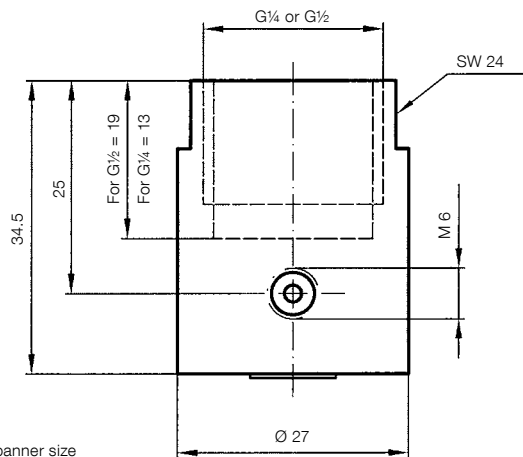
G	d	dm	h	H	a	b	SW
1"NPT	-	23.5	24	36	-	-	41
1½"NPT	-	35	25	45	-	-	55
2"NPT	-	48	26	50	-	-	70

Type MD 22



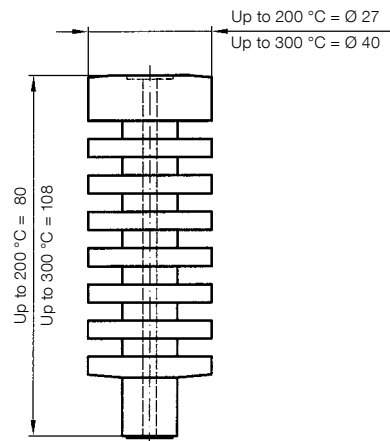
PN	G	ØA	ØD	h	H
40	G¼B	55	6	13	44.5
40	G¾B	55	6	16	47.5
40	G½B	55	10	20	51.5
40	¼"NPT	55	6	15	46.5
40	½"NPT	55	10	20	51.5
250	G¼B	40	6	13	44.5
250	G¾B	40	6	16	47.5
250	G½B	40	10	20	51.5
250	¼"NPT	40	6	15	46.5
250	½"NPT	40	10	20	51.5

Adapter for instrument connection G¼/G½ with filling port



Ⓞ Spanner size

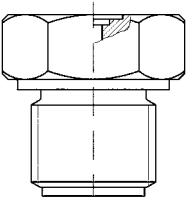
Cooling element, can be welded at both ends

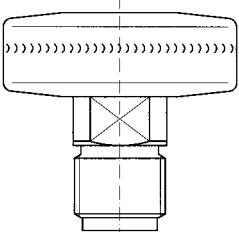


Diaphragm seals MD 21/22

DG: M, PG: 3

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	MD 21 compact version diaphragm stainless steel 316 Ti/316 L, welded								
	Nominal pressure	Process connection	Instrument connection	Minimum range* (in bar) at nominal size				Part no.	Price €
				63	100	160	DMU		
	PN 600	G1½B	welded	10	100	100	1	31415W	
	PN 1000	G¾B	welded	4	100	100	1	31416W	
	PN 1000	G1B	welded	4	4	4	1	31328W	
	PN 600	G1½B	welded	0.6	1.6	1.6	0.6	31329W	
PN 600	G2B	welded	0.6	0.6	0.6	0.6	31330W	On request	

	MD 22 compact version diaphragm stainless steel 316 Ti/316 L, internal, welded								
	Nominal pressure	Process connection	Instrument connection	Minimum range* (in bar) at nominal size				Part no.	Price €
				63	100	160	DMU		
	PN 40	G¼B	welded	0.6	0.6	0.6	0.6	31997W	
	PN 40	G½B	welded	0.6	0.6	0.6	0.6	31998W	
	PN 40	½-14 NPT	welded	0.6	0.6	0.6	0.6	31999W	
	PN 250	G¼B	welded	4	4	4	4	32000W	
PN 250	G½B	welded	4	4	4	4	32001W		
PN 250	½-14 NPT	welded	4	4	4	4	32002W		

* Valid for standard pressure transmission liquid with direct mounting (without capillary tube) at a room temperature and temperature of the medium of 20 °C.

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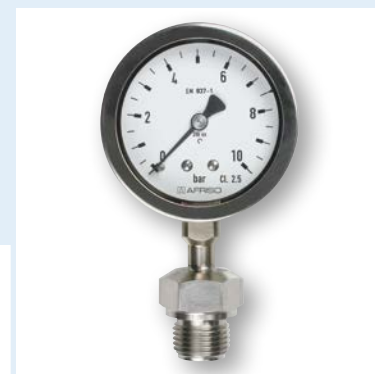
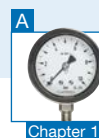
See page 190 for extra charges for options, mounting and accessories.

Piston type chemical seals KD 21

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- **Piston instead of diaphragm:**
For extremely rough conditions with abrasive media
- For pressures from 10 bar to 600 bar
- Robust and reliable pressure measurement
- Shock- and vibration-resistant



Application For use with Bourdon tube pressure gauges, pressure transducers or pressure switches. For corrosive, polluted and abrasive suspensions at high pressures. Specially for pressure measurements in waste water, drilling water, sludge, concrete, plaster and minerals.

Technical specifications

Process connection

Stainless steel 316 L
Thread G $\frac{1}{2}$ B to G2B, $\frac{1}{2}$ -14 NPT to 2-11 $\frac{1}{2}$ NPT

Seal

FKM (Viton)

Pressure connection

Stainless steel 316 L
Flush

Instrument connection

Welded connection

Pressure transmission liquid

Paraffin oil (FM 09), FDA-listed

Pressure ranges

0/10 bar to 0/600 bar

Nominal pressure

PN 600

Accuracy

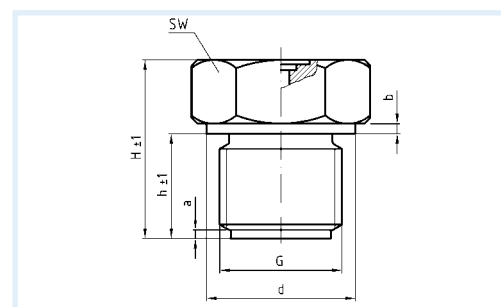
With pressure gauge Cl. 2.5
With pressure transducer 1.0 % FSO

Can be mounted to

- Bourdon tube pressure gauges NG 50, 63, 80, 100, 160 and RF 130 PG
- Pressure transducer DMU
- Pressure switch DS

Options

- Adapter for instrument connection G $\frac{1}{4}$ /G $\frac{1}{2}$
- Capillary tube
- Flange connections EN, ASME, JIS
- Other process connections
- Other materials
- Other filling liquids, except for Neobee M20 (FM 10)
- Other measuring ranges



DG: M, PG: 3

Nominal pressure	Process connection	d	h	H	a	b	SW	Instrument connection	Minimum range* (in bar) at nominal size				Part no.	Price €
									63	100	160	DMU		
PN 600	G $\frac{1}{2}$ B	26	17	33.5	3	3	27	welded	10	16	16	10	31420W	
PN 600	G $\frac{3}{4}$ B	32	19	34	3	3	32	welded	10	16	16	10	31421W	
PN 600	G1B	39	21	36	3	3	41	welded	10	16	16	10	31422W	
PN 600	G1 $\frac{1}{2}$ B	55	25	48	3	3	55	welded	10	16	16	10	31423W	On request
PN 600	G2B	68	27	56	3	3.5	70	welded	10	16	16	10	31424W	On request
PN 600	$\frac{1}{2}$ -14 NPT	-	20	33.5	-	-	27	welded	10	16	16	10	31425W	
PN 600	$\frac{3}{4}$ -14 NPT	-	-	-	-	-	-	welded	10	16	16	10	31426W	
PN 600	1-11 $\frac{1}{2}$ NPT	-	24	36	-	-	41	welded	10	16	16	10	31427W	On request
PN 600	1 $\frac{1}{2}$ -11 $\frac{1}{2}$ NPT	-	25	45	-	-	55	welded	10	16	16	10	31428W	On request
PN 600	2-11 $\frac{1}{2}$ NPT	-	26	50	-	-	70	welded	10	16	16	10	31429W	On request

* Valid for standard pressure transmission liquid with direct mounting (without capillary tube) at a room temperature and temperature of the medium of 20 °C.