

Diaphragm Seal

990.24 Varivent connection
with pressure transmitter S-20

E 06.10.02

Ed.17.01

Design	Diaphragm Seal with sterile process connection Varivent connection Form F or N. Pressure transmitter S-20 in stainless steel
Type	990.24
Pressure rate	PN 25 for pressure range from 0-1 bar to 0-25 bar
Material standard	Upper part of stainless steel 1.4404 (316L) Lower part and connection stainless steel 1.4435 (316L) Diaphragm of stainless steel 1.4435 (316L)
Level of cleanliness	Oil and grease free per ASTM G93-03 level E (< 550 mg/m ²)
Connection Form F	Connection Form F dim Ø 50 mm, flange Ø 66 mm for installation in Varinline access-unit DN 25
Connection Form N	Connection Form N dim Ø 68 mm, flange Ø 84 mm for installation in Varinline access-unit DN 40-DN 125
Surface roughness	Diaphragm Ra ≤ 0.76 µm per ASME BPE SF3
Process temperature	Max +80°C, in sterilisation (SIP) max +130°C
Ambient temperature	Ambient temperature standard +10+40°C
Working Pressure	90% of full scale range by fluctuating pressure full scale value by short time pressure
Filling media	KN 92 white minerale oil (FDA 21 CFR 172.878) KN 59 Neobee M-20 (FDA 21 CFR 172.856) KN 7 glycerine (FDA 21 CFR 182.1320)
Certificate (option)	EN 10204-2.2 FDA-approval filling media EN 10204-2.2 Surface roughness of wetted parts EN 10204-2.2 Test report State-of-the-art EN 10204-3.1 Certificate wetted parts incl. chemical analysis EN 10204-3.1 Certification of class and accuracy EN 10204-3.1 Accuracy calibration values listed EN 10204-3.1 Pressure and stability test EN 10204-3.1 Helium leak test
More options	Electropolished diaphragm surface roughness Ra ≤ 0,38 µm Origen of wetted parts from EU, Schweiz or USA



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Pressure transmitter S-20 for diaphragm seal 990.24

Design	Stainless steel pressure transmitter for universal use
Type	S-20
Accuracy	0,25% (BFSL) 0,5% including non-linearity, hysteresis, zero offset and end value deviation
Wetted parts	Wetted parts in stainless steel 316 L
Output signal	4-20 mA (2-wire) or 0-10 V (3-wire) Option: 0-5 V, 1-5 V, 0-5-4,5 V (RAT) or 20-4 mA
Power supply	8-36 VDC (12-36 VDC in 0-10 V)
Temperature range	Process temperature -30+100°C Ambient temperature -30+100°C Compensated range 0+80°C
Temperature influence	≤ 0,2%/10K for zeropoint, ≤ 0,2%/10K for span Pressure range < 0,4 = ≤ 0,4%/10K for zeropoint
Permissible load	4-20 mA $RA[\text{Ohm}] = (UB[V]-7,5 \text{ V})/0,023 \text{ A}$ 0-10 V $RA \geq \max 10 \text{ V}/1 \text{ mA}$
Setting time (10-90%)	≤ 3 ms with 4-20 mA, ≤ 2 ms with 0-10 V (1 ms as option)
Long-term drift	≤ 0,1% of end value each year
Service life	100 million load cycles
Overpressure limits	3 times overpressure safe in pressure range max 6 bar 2 times overpressure safe in pressure range max 6 bar
Elanslutning	Angular connector DIN EN 175301-803 A (IP 65) Circular connector M12x1 (IP 67) Cable entry IP 67 or IP 68
Electrical protective	Short-circuit resistance, reverse polarity protection, resistance to overvoltage and insulation voltage
Transmission fluid	Synthetic oil Option food-compatible transmission fluid Option oxygen, oil and grease free Option silicone free filling
Shock resistance	Mechanical shock 500 g
Vibration resistance	Vibration safe 20 g
CE-mark	PED 97/23/EG EMC 2004/108/EEC, EN 61326, EM 30 V/m
RoHs	RoHs-conformity 2011/65/EU



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Standard versions 990.24 Varivent

Diaphragm seal 990.24 Varivent connection Form F or Form N Surface roughness $R_a \leq 0.76 \mu\text{m}$ Temp $+80^\circ\text{C}$ (SIP) max $+130^\circ\text{C}$ Filling KN 59 FDA Pressure transmitter S-20 Output signal 4-20 mA (2-wire) Connector DIN 175301-803 A		
	Form F	Form N
Tryckområde	Artikelnr	Artikelnr
0-1 bar	40346002	40347002
0-1,6 bar	40346003	40347003
0-2,5 bar	40346004	40347004
0-4 bar	40346006	40347006
0-6 bar	40346007	40347007
0-10 bar	40346008	40347008
0-16 bar	40346011	40347011
0-25 bar	40346013	40347013
-1/0 bar	40346040	40347040
-1/+1,5 bar	40346066	40347066
-1/+3 bar	40346067	40347067
-1/+5 bar	40346068	40347068
-1/+9 bar	40346069	40347069

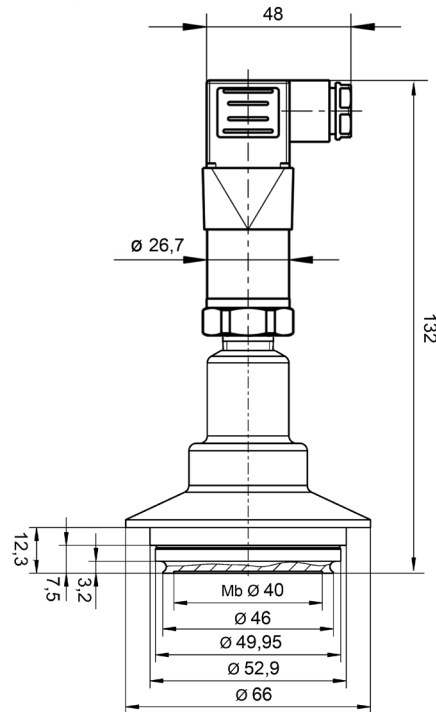
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Diaphragm Seal 990.24 Varivent Form F with pressure transmitter S-20



Diaphragm Seal 990.24 Varivent Form N with pressure transmitter S-20

