



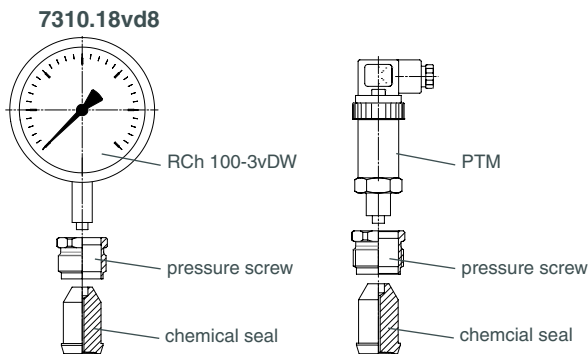
Standard Version

Information on applications, features, metrological influences as temperature, level difference, floating time and others can be found in model overview 7000. Furthermore you will also find advice on other chemical seal versions.

Construction

Model 7310.18vd8 has an orifice d8 as instrument connection for welding to a pressure transmitter or a pressure gauge with process connection d8x5, e.g. RCh 100-3vDW. With the welded connection of pressure gauge / chemical seal and a filling port which is not accessible externally no leakage can occur. The parts are easy to clean externally.

Examples:



Chemical Seal and Process Connection

1.4435 (316L stainless steel)

Instrument Connection

7310.18vd8: orifice d8

Diaphragm

1.4435 (316L stainless steel) flush welded, welded to chemical seal, He-leak detection up to 10^{-9} mbar l/s effective diaphragm diameter dM 21 mm (0.83")

Surface Roughness of the Wetted Parts

Ra < 0.8 µm

Process Connection

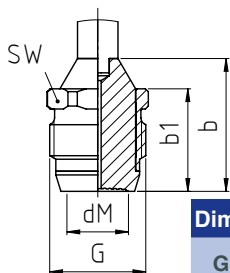
G 1" with sealing cone, pressure screw turnable

Nominal Pressure

PN 600

Minimum Span Pressure Gauges

0 - 4 bar (0 - 60 psi) for bourdon tube pressure gauges RCh/RChG 100-3 without limit switch contact assembly, for other pressure gauges upon request



Dimensional Data (mm) and Weight (kg)

G	dM	b	b1	SW	Weight approx.
1"	21	29	46	32	0.24



t_c-value (mbar/10K) (temperature coefficient of the chemical seal)

5.50 mbar / 10 K (for vegetable oil FN 1)

Advantage

- Achievement of a crevice free metallic sealing which connects the chemical seal helium tight with the connection shape, an o-ring is no longer necessary
- The pressure gauge can be easily adjusted due to the cone-seat-principle
- Multiple system concept for all usual process connections, see reverse side

Options

- Wetted parts Ra < 0.4 µm
- Wetted parts electropolished
- Calculation of the temperature-related additional error for the whole pressure measuring system
- Reinforced diaphragm upon request e.g. for process media containing particles

Construction / Filling / Certificates

Information concerning mounting, filling and certificates are available upon request.

Ordering Information Chemical Seals

Please regard our detailed ordering information

- in model overview 7000
- in the check lists for pressure measuring instruments with chemical seals and
- in the data sheets of the requested pressure measuring instruments and add the information for the particular chemical seal:

- Model: e.g. MDM 7310.18vd8

The reference temperature is +20 °C (+68 °F). Please specify if a +20 °C (+68 °F) deviating working temperature (tA) is required (dial inscription tA...) or the cleaning temperature (tR max) is +150 °C (302 °F) and above (dial inscription tR max).

Example: pressure gauge..., chemical seal: MDM 7310.18vd8, tA +80 °C, wetted parts electropolished



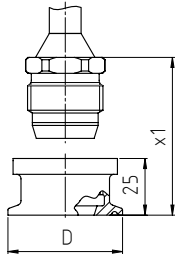


The chemical seal 7310.18 can be connected to a hygienic connection adapter by the use of this pressure screw.

Following connection shapes are currently available (more upon request)

- Clamp connection
- Conical coupling with groove nut
- Attachment flange

Chemical Seal with Clamp Connection

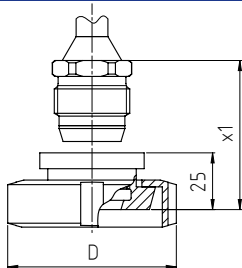


ISO 2852 for tubes according to ISO 2037 and BS 4825							
Order number	DN	PN	for tube male-Ø x wall thickness	tube female-Ø	D	x1	Weight approx.
700 000 02 93	38	16/40	38 x 1.2	35.6	50.5	36	0.16
700 000 02 94	51		51 x 1.2	48.6	64		0.22
700 000 02 95	63.5	10/25	63.5 x 1.6	60.3	77.5		0.31
700 000 02 96	76.1		76.1 x 1.6	72.9	91		0.34

DIN 32 676, Series A for tubes according to DIN 11 850							
Order number	DN	PN	for tube male-Ø x wall thickness	tube female-Ø	D	x1	Weight approx.
700 000 02 97	40	16/40	41 x 1.5	38	50.5	36	0.16
700 000 02 98	50		53 x 1.5	50	64		0.22
700 000 02 99	65	10/25	70 x 2	66	91		0.34
700 000 03 00	80		85 x 2	81	106		0.63

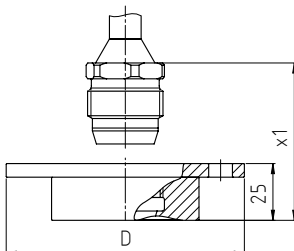
Tri-Clamp for tubes according to BS4825 and O.D.-Tube; ASME BPE and ISO 1127										
Order number	NPS	DN	PN	for tube male-Ø x wall thickness		tube female-Ø		D	x1	Weight approx.
				BS 4825 and O.D.-Tube / ASME BPE	ISO 1127	BS 4825 and O.D.-Tube / ASME BPE	ISO 1127			
700 000 03 01	1½"	38	16/40	38.1 x 1.6	42.4 x 2	34.8	38.4	50.5	36	0.16
700 000 03 02	2"	51		50.8 x 1.6	48.3 x 2	47.5	44.3	64		0.22
700 000 03 03	2½"	63.5	10/25	63.5 x 1.6	60.3 x 2	60.3	56.3	77.5		0.31
700 000 03 04	3"	76.1		76.2 x 1.6	76.1 x 2	73.0	72.1	91		0.34

Conical Coupling with Groove Nut



DIN 11 851 conical coupling and groove nut							
Order number	DN	PN	for tube male-Ø x wall thickness	tube female-Ø	D	x1	Weight approx.
700 000 03 05	40	40	41 x 1.5	38	79	36	0.45
700 000 03 06	50	25	53 x 1.5	50	92		0.51
700 000 03 07	65		70 x 2	66	112		0.58
700 000 03 08	80	85 x 2	81	127	0.65		

Chemical Seal with Attachment Flange



DRD					
Order number	DN	PN	D	x1	Weight approx.
700 000 03 09	50	40	105	36	0.32

The ordering code of page 1 is completed by the order number for the requested connection adapter
 e. g.: ... + 700 000 02 93 (chemical seal with clamp connection ISO 2852, DN 38, PN 16/40)



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