

# Inline Seals

This data sheet contains the dimensional data, drawings and specifications of our inline seals, model series 7631 to 7695.

Further important information about advantages, performances and ordering of chemical seals can be found on our **general information leaflet**. There you will also find user instructions and a complete overview of our chemical seal models.

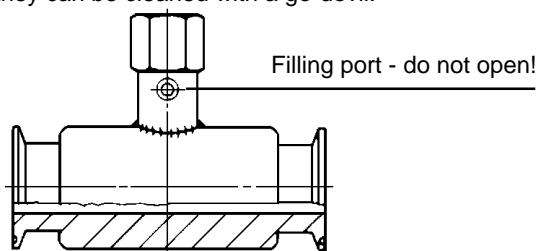
## Application

Inline seals model series RDM 76.. are suitable for flowing and viscous media. Dead spaces can be completely excluded, since the inline seal becomes part of the process line.

Pressure gauges can be attached, but also pressure switches or transmitters.

## Construction

The membrane (shaped tube) is flush welded to the cylindrical coat. The complete system is filled through the filling port (compare drawing below). The inline seal has to be mounted directly into the process line. Our inline seals are piggable, i.e. they can be cleaned with a go-devil.



## Standard Configuration

### Instrument Connection

AISI 316 Ti (1.4571); ½" BSP female

### Body

Cylindrical coat 316 Ti (1.4571)

### Membrane

Profile shaped tube stainless steel, welded to the cylindrical coat

### Pressure Ranges

1 bar (15 psi) resp. 2,5 bar (40 psi) up to PN; minimum pressure range and PN depending on model and size, compare below and table on the following pages

### Process Connections

- Male thread DIN 11851  
DN 20 up to DN 100, PN 40 RDM 7631
- Male thread APV-ISS-standard  
DN 1" up to DN 2", PN 40 RDM 7632
- Male thread SMS-standard  
DN 1" up to DN 2", PN 40 RDM 7637
- Clamp for DIN-tubes  
DN 20 up to DN 65, PN 40 RDM 7635
- Clamp for inch-sized tubes  
DN 1" up to DN 4", PN 40 RDM 7636
- Flange with sealing face DIN 2526, Form D  
DN 20 up to DN 100 RDM 7690
- Flange with sealing face ANSI B 16. RF  
DN 1" up to DN 4" RDM 7695

### Gasket

The gaskets are not part of standard supply.

### Filling Fluid

Silicone oil

### Calibration Temperature

Approximately +20° C (68° F); dial inscription: tA 20°C

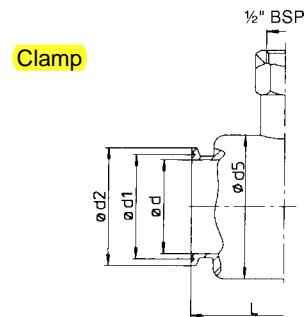
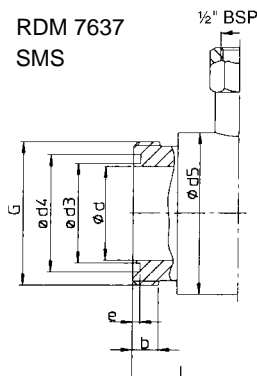
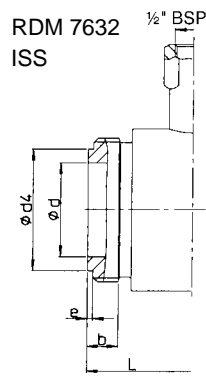
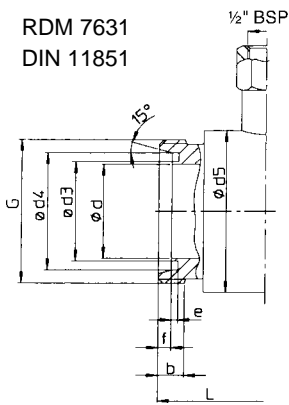


## Optional Special Configurations

- Instrument connection ¼" NPT , ½" NPT or ¼" BSP female
- Membrane tantalum, hastelloy B2, hastelloy C 276 or others, welded to the cylindrical coat, upon request
- Membrane plane, not embossed
- Complete body tantalum, hastelloy B2, hastelloy C4 or others upon request
- Other calibration temperature than +20 °C (68 °F)
- Filling fluid glycerine, halocarbon or others, compatible to the medium
- Process connection: other sizes or forms, e.g. according to DIN 11864-1 or other standards, upon request
- Length different from standard models (compare tables on the following pages; in some cases a differing length may exclude piggability!)
- Capillary line between inline seal and measuring instrument [Please take into consideration that you will need a mounting device like a gauge holder bracket, a rear flange or a front flange for mounting the measuring instrument.]
- Cooling element [strongly recommended for medium temperature ≥ +100 °C (212° F), in case that the chemical seal shall be mounted to the measuring instrument without capillary line]

**Dimensional drawings** see reverse side.

# Inline Seals for Food Industries, Dairy Industries, Sanitary Processes



Dimensional Data (mm / inches) and Weight (kg/lb)

Model	DN	b	G	d	d1	d2	d3	d4	d5	e	f	L	Minimum <sup>1)</sup> Pressure Range	tR max. <sup>2)</sup>	Weight (kg / lb)			
RDM 7631 DIN 11851	20	14 .55	Rd <sup>3)</sup> 44 x 1/6	19.8 .78	-	-	23 .91	32.8 1.29	53 2.09	3 .12	6 .24	138 5.43	2.5 bar 40 psi	-	1.650 3.6			
	25		Rd <sup>3)</sup> 52 x 1/6	26.2 1.03			30 1.18	39.8 1.57	58 2.28						1.780 3.9			
	32		Rd <sup>3)</sup> 58 x 1/6	31.8 1.25			36 1.42	45.8 1.80	68 2.68						2.330 5.1			
	40		Rd <sup>3)</sup> 65 x 1/6	38.0 1.50			42 1.65	51.8 2.04	78 3.07						3.200 7.1			
	50	16 .63	Rd <sup>3)</sup> 78 x 1/6	50.7 2.00			54 2.13	63.8 2.51	88 3.47	3.5 .14	8 .32	114 4.49			1 bar 15 psi	2.550 5.6		
	65		Rd <sup>3)</sup> 95 x 1/6	65.7 2.59			71 2.80	80.8 3.18	100 3.94							2.920 6.4		
	80		Rd <sup>3)</sup> 110 x 1/4	79.7 3.14			85 3.35	94.8 3.73	116 4.57							3.740 8.2		
	100	Rd <sup>3)</sup> 130 x 1/4	99.7 3.93	104 4.10			113.8 4.48	138 5.43	4 .16	10 .39	120 4.72	4.690 10.3						
RDM 7632 APV-ISS	1"	17 .67	1 <sup>15</sup> / <sub>32</sub>	22.5 .89	-	-	-	29 1.14	48 1.89	2.6 .10	-	126 4.96	2.5 bar 40 psi	150°C 302°F	1.010 2.2			
	1 1/2"		1 <sup>63</sup> / <sub>64</sub>	35.5 1.40				43 1.69	68 2.68						1.620 3.6			
	2"		2 <sup>17</sup> / <sub>32</sub>	48.6 1.91				56 2.21	78 3.07						1.430 3.2			
RDM 7637 SMS	1"	11 .43	Rd <sup>3)</sup> 40 x 1/6	22.5 .89	-	-	-	25 .98	32 1.26	48 1.89	3 .12	-	126 4.96	2.5 bar 40 psi	1.120 2.5			
	1 1/2"		Rd <sup>3)</sup> 60 x 1/6	35.5 1.40				38 1.50	48 1.89	68 2.68					1.970 4.3			
	2"		Rd <sup>3)</sup> 70 x 1/6	48.6 1.91				51 2.01	61 2.40	78 3.07					1.720 3.8			
RDM 7635 Clamp DIN 32676	20	-	-	19.8 .78	43.5 1.71	50.5 1.99	-	-	54 2.13	-	-	126 4.96	2.5 bar 40 psi	-	1.860 4.1			
	25			26.2 1.03											30 1.18	39.8 1.57	58 2.28	1.480 3.3
	32			31.8 1.25											36 1.42	45.8 1.80	68 2.68	1.190 2.6
	40			38.0 1.50											42 1.65	51.8 2.04	78 3.07	0.840 1.9
	50			50.7 2.00											54 2.13	63.8 2.51	88 3.47	1.450 3.2
	65			65.7 2.59											71 2.80	80.8 3.18	100 3.94	2.610 5.8
RDM 7636 Clamp Zoll	1"	-	-	22.5 .89	43.5 1.71	50.5 1.99	-	-	54 2.13	-	-	126 4.96	2.5 bar 40 psi	-	1.700 3.8			
	1 1/2"			35.5 1.40											38 1.50	48 1.89	68 2.68	0.990 2.2
	2"			48.6 1.91											51 2.01	61 2.40	78 3.07	1.690 3.7
	2 1/2"			59.7 2.35											70.6 2.78	77.4 3.05	92 3.62	2.240 4.9
	3"			65.7 2.59											83.5 3.29	91 3.58	98 3.86	2.430 5.4
	4"			99.7 3.93											110 4.33	119 4.69	133 5.24	3.090 6.8

<sup>1)</sup> related to pressure gauges 100 mm (4") and valid also for vacuum and compound range

<sup>2)</sup> valid for silicone oil-filling and positive overpressure, gauges for negative overpressure upon request

<sup>3)</sup> round thread according to DIN 405

(outside diameter nominal size in mm x lead in inches)

