

Diaphragm Seals For Pulp and Paper Industries

All Stainless Steel, Case With Bayonet Ring

Ø 100 mm (4") and Ø 160 mm (6")

Standard (BID 100 DS / BID 160 DS) or Glycerine Filled (BID 100 LS/BID 160 LS)

Models :
MDM 7590

APPLICATIONS

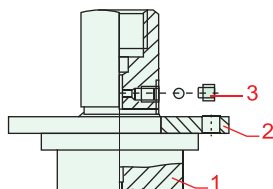
Diaphragm Seals model MDM 7590 are mainly used in the pulp and paper industries.

CONSTRUCTION

The membrane is flush welded to the body.

The diaphragm seals are provided with a filling port at the connection piece for the measuring instrument to simplify the filling of the complete measuring system after mounting and evacuating the system. A special screw closes the filling port afterwards. This screw may not be opened.

An attachment flange is used for mounting the diaphragm seal to the measuring point. The diaphragm seal is made of a collar with connection piece for the measuring instrument and the extension tube, which is 15 mm long, or optional 6.5 mm.



1. Extension tube
2. Attachment flange
3. Filling port with screw plug;
Do not open!

STANDARD CONFIGURATION

BODY (INCLUDING EXTENSION TUBE)

Stainless steel 316 L

INSTRUMENT CONNECTION

½" BSP female

PROCESS CONNECTION

DN 48,
length of extension tube 15 mm or optional 6.5 mm

MEMBRANCE

Stainless steel 316 L flush welded to the body;
effective-Ø dM = 38 mm

MATING

Calibrated for overrange protection

ATTACHEMENT FLANGE

Alloy steel, zinc plated; 6 mm thick, 6 holes Ø 7 mm,
hole circle Ø 70 mm

PRESSURE RANGES

Pressure gauges nom. size 100 (4") : 0/1.6 up to 0/40 bar or
0/30 psi up to 0/600 psi, valid also for corresponding
pressure/vacuum-compound ranges; for other pressure
measuring instruments upon request

FILLING LIQUID

Silicon oil

REFERENCE TEMPERATURE

+20 °C resp. 68 °F

DIMENSIONS AND DRAWINGS : SEE OVERLEAF



OPTIONAL SPECIAL CONFIGURATIONS E.G.

- ⇒ Instrument connection ¼" BSP female, ¼" NPT female or ½" NPT female; others upon request
- ⇒ Capillary line between diaphragm seal and measuring instrument; length and configuration has to be suitable to pressure range and filling fluid
- ⇒ Connection 90° quadrant pipe with vibration damper (only for Bourdon tube pressure gauges <= nom. size 100 (4"); compare drawings overleaf)
- ⇒ Welding counter flange, massive version or with pipe welding socket (compare overleaf); other special versions upon request
- ⇒ Special materials upon request

HOW TO ORDER

Please select :

- | | | | | | |
|---|------------|------------|----------|----------|----------|
| | BID | 100 | D | S | A |
| 1. Model code : BID | _____ | _____ | _____ | _____ | _____ |
| 2. Nominal head diameter
Ø 100 mm (4") or Ø 160 mm (6") | _____ | _____ | _____ | _____ | _____ |
| 3. D : Dry / standard or L : Liquid filled | _____ | _____ | _____ | _____ | _____ |
| 4. Material of diaphragm/membrane
S : Stainless Steel AISI 316 L
TA : Tantalum | _____ | _____ | _____ | _____ | _____ |
| 5. Lower housing with process connection
A : Male thread process connection or
B1, B2 or B3 : Flange process connection
(see page 25) or | _____ | _____ | _____ | _____ | _____ |

MDM number

EXAMPLE OF ORDER NUMBER

Diaphragm Seals for Pulp and Paper
Diameter : 100 mm
Material : all stainless steel
Range : 0 – 6 kg/cm²
Liquid filled
Material diaphragm/membrane in SS in AISI 316 L

Order number :
BID 100 LS 7590, 0 - 6 kg/cm²

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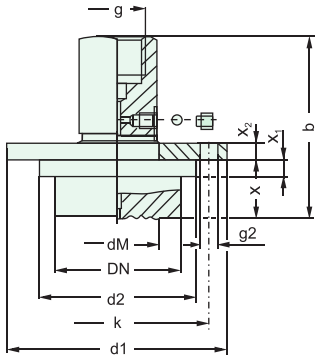
Standard (BID 100 DS / BID 160 DS) or Glycerine Filled (BID 100 LS/BID 160 LS)

Models :
MDM 7590

DIMENSIONAL DRAWINGS, DIMENSIONS AND WEIGHT

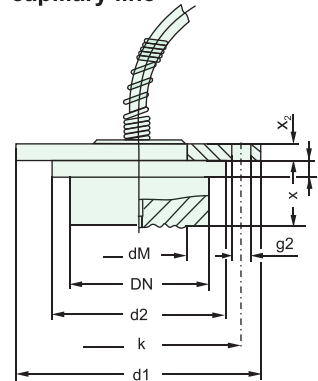
Standard-Version

direct mounting

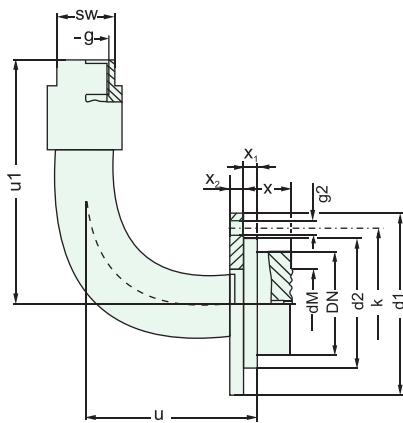


Options :

capillary line

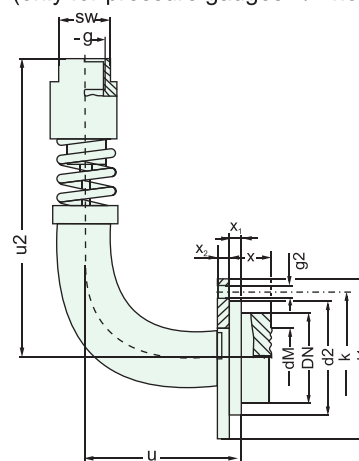


90° quadrant pipe



90° quadrant pipe with vibration damper

(only for pressure gauges <= nom. size 100 / 4")

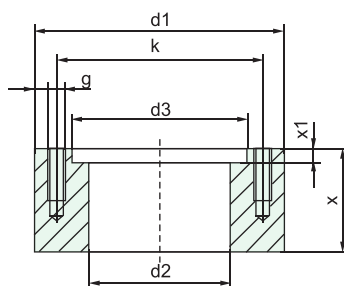


Dimensional Data (mm) and Weight (kg)

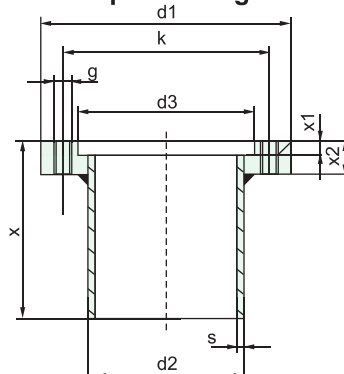
Extension Tube	DN	b±2	d1	d2	dM	g	g2	k±2	u±1	u1±1	u2±1	x	x1	x2	SW	Weight (approx)
15 mm	48	66	85	59	38	G1/2 1/2" BSP female	6 x Ø 7	70	81	107	157	21	6	6	27	0.72
6.5 mm		60										12.5				0.40

Welding Counter Flanges :

Massive



With Pipe Welding Socket



Dimensional Data (mm) and Weight (kg)

Version	d1	d2	d3	g
massive	85	48.5	59.5	6xM6
with pipe welding socket		54	60.4	-

g2	k	s	x	x1	x2
-	70	-	35	5	-
6xØ 7		2	55	7	12