Diaphragm Seal

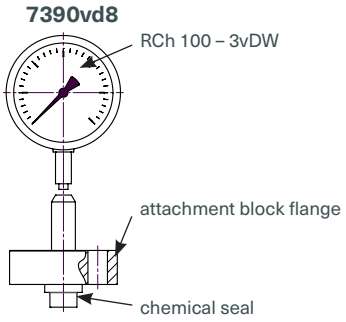
For homogenising machines

MDM 7390v

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

Construction

The chemical seal model 7390vd8 has an orifice d8 as instrument connection for welding to a pressure gauge, e.g. RCh 100 – 3vDW, or a capillary line.
Leakage cannot occur at the welded connection of pressure gauge / chemical seal / capillary line and the filling port that is not accessible externally. After disassembly, the parts can be easily cleaned-out-of-place (COP).



Standard Versions

Chemical Seal and Process Connection
Stainless steel 316L (1.4435)

Instrument Connection
Orifice d8

Diaphragm
Stainless steel 316L (1.4435) flush welded with chemical seal
Helium leak detection up to 10^{-9} mbar l/s
Effective diaphragm diameter dM, see table on page 2

Process Connection
Versions see table on page 2

Attachment Block Flange
Stainless steel 316L

Nominal Pressure
PN 1600

Pressure Ranges
0 – 100, 0 – 160, 0 – 250, 0 – 400, 0 – 600, 0 – 1000, 0 – 1600 bar

Filling
Glycerin

Options

- Calculation of the temperature-related additional error for the entire pressure measuring system
- Version pressure transmitter DMU with analogue output 4...20 mA (not autoclavable)

Special Versions Upon Request

- Reinforced attachment block flange
- Attachment block flange with 4 orifices or union nut
- Other instrument connections (without attachment)
- Version with custom dimensions

Accessory

Capillary line see data sheet 7.7003
Process connection parts, screws and sealings are not part of the supply range

Mounting / Filling / Certificates

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

Ordering Information Chemical Seals

Please regard our detailed ordering information
- in model overview 7000
- in the checklists for pressure measuring instruments with chemical seal
- in the data sheet of the required pressure measuring instrument

and add the information for the respective chemical seal,
e.g. MDM 7390v

The reference temperature is +20 °C (+68 °F). Please specify if an operating temperature (t_A) deviating from +20 °C (+68 °F) is required (dial inscription t_A...). The COP temperature for the autoclavable version is max. +134 °C (+273.2 °F).

Example

Pressure gauge	RCh 100 – 3vDW
Chemical seal	MDM 7390vd8
Options, if necessary	t_A +80 °C

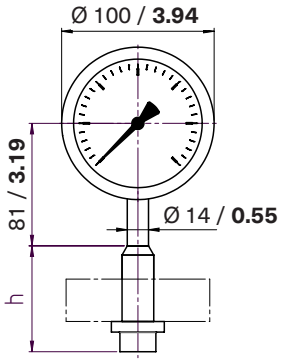
ARMANO Messtechnik GmbH
Location Beierfeld
Am Gewerbepark 9 • 08344 Grünhain-Beierfeld
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545
mail@armano-beierfeld.com

Location Wesel
Manometerstraße 5 • 46487 Wesel-Ginderich
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035
mail@armano-wesel.com

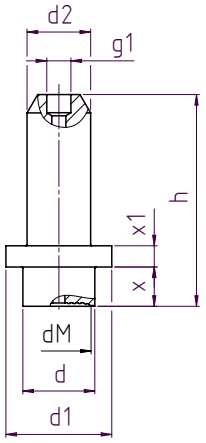
Connection, Dimensional Data and Weight

Chemical Seals

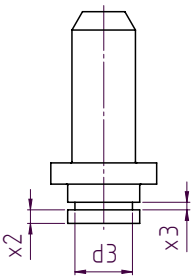
complete view



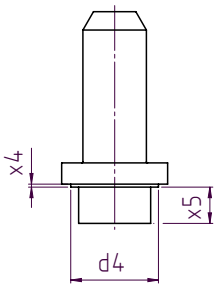
MDM 7390.56, MDM 7390.57



MDM 7390.23



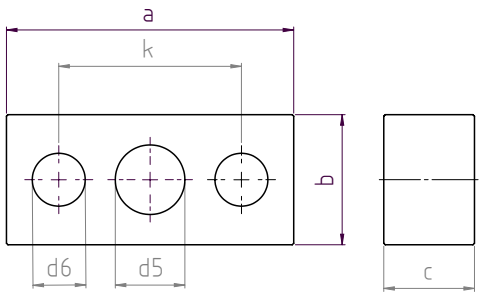
MDM 7390.53



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

type	d	d1	d2	d3	d4	dM	h	g1	x	x1	x2	x3	x4	x5	weight
7390.56	23.8 **0.94**	33 **1.3**	21 **0.83**	–	–	21 **0.83**	99 **3.9**	d8	13 **0.51**	7 **0.28**	–	–	–	–	0.29 **0.64**
7390.57	23.8 **0.94**	40 **1.57**	21 **0.83**	–	–	21 **0.83**	99 **3.9**	d8	13 **0.51**	7 **0.28**	–	–	–	–	0.31 **0.68**
7390.23	24 **0.94**	34.8 **1.37**	21.5 **0.85**	18.8 **0.74**	–	21 **0.83**	67 **2.64**	d8	20 **0.79**	7.5 **0.3**	5 **0.2**	4.4 **0.17**	–	–	0.21 **0.46**
7390.46	24 **0.94**	28.3 **1.11**	21 **0.83**	18.8 **0.74**	–	21 **0.83**	65 **2.56**	d8	18 **0.71**	7.5 **0.3**	5 **0.2**	4.4 **0.17**	–	–	0.18 **0.4**
7390.53	26 **1.02**	37.5 **1.48**	31 **1.22**	–	34 **1.34**	21 **0.83**	86 **3.39**	d8	11 **0.43**	10 **0.39**	–	–	1 **0.04**	10 **0.39**	0.49 **1.08**

Attachment Block Flange



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

type	a	b	c	d5	d6	k	weight
ARMANO	95 **3.74**	43 **1.69**	28 **1.1**	24 **0.94**	17.5 **0.69**	60.5 **2.38**	0.69 **1.52**
T17610	95 **3.74**	43 **1.69**	30 **1.18**	23 **0.91**	17.5 **0.69**	60.4 **2.38**	0.71 **1.57**
T17612	115 **4.53**	45 **1.77**	42 **1.65**	23 **0.91**	22 **0.87**	75 **2.95**	1.32 **2.91**
T17620	95 **3.74**	43 **1.69**	30 **1.18**	23 **0.91**	22 **0.87**	60.4 **2.38**	0.68 **1.5**