

# DIAPHRAGM SEAL

DIRECT FLANGED INSERT TYPE



BBX



## SPECIAL FEATURES

- WELDED DIAPHRAGM
- WIDE RANGE OF DAPHRAGM MATERIAL
- MOST SUITABLE FOR SLURRY & CORROSIVE SERVICE

## APPLICATIONS

DIAPHRAGM SEALS ARE PROVIDED IN THE INSTRUMENTS LIKE PRESSURS GAUGES, SWITCHES, TRANSMITTERS IN ORDER TO ISOLATE THE SENSING ELEMENT FROM THE MAIN SERVICE DUE TO ITS CORROSIVE, VISCOUS AND SEDIMENTED NATURE AND TO AVOID CLOGGING AND SOLIDIFICATION. THESE KIND OF SEALS ARE WIDELY USED IN THE VISCOUS & CORROSIVE SERVICES WHERE FLUSHING IS REQUIRED PERIODICALLY & FREQUENTLY.

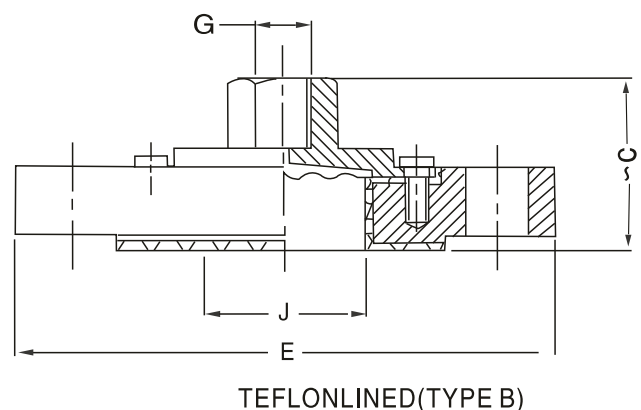
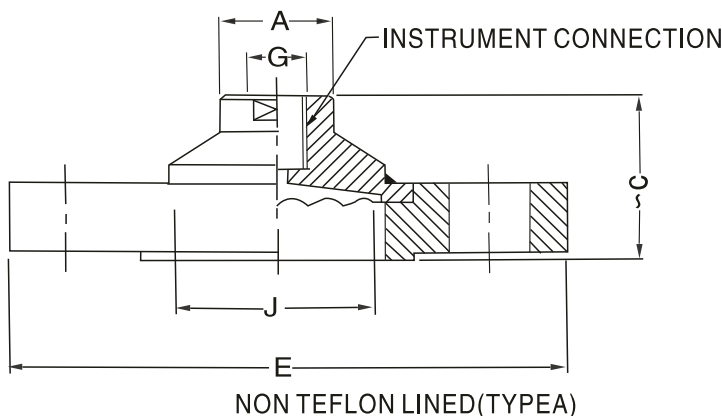


## SPECIAL FEATURES

### STANDARD VERSION:(FOR FLANGE SIZE 1/2"~2" AND ABOVE)

Range	: -1kg/cm <sup>2</sup> to 21kg/cm <sup>2</sup>
Process Temperature	: -40°C to 200°C or as per fill fluid
Instrument Connection	: 3/8" BSP (F)
Process Connection	: Flange(as per DIN/BS/ANSI/JIS)
	: Finish 125-250AARN
	: 32NB(1 1/4") to 80NB(3") (as required)

Diaphragm	: AISI 316L SS
Seal Chamber	: AISI 316 SS
Fill Fluid	: Silicon Oil -DC200



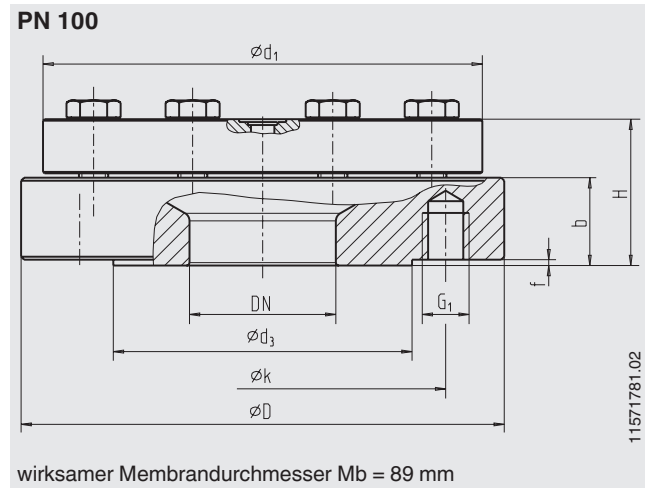
A	~C	E	G	J
30	44.5	**	3/8" BSP (M)	***

\*\* as per standard flange table ANSI, DIN, BS, JIS Etc.,  
 \*\*\* DIAPHRAGM DIA. TO SUIT FLANGE

**Note:** • Due to continuous improvement, the specification may vary from time to time.

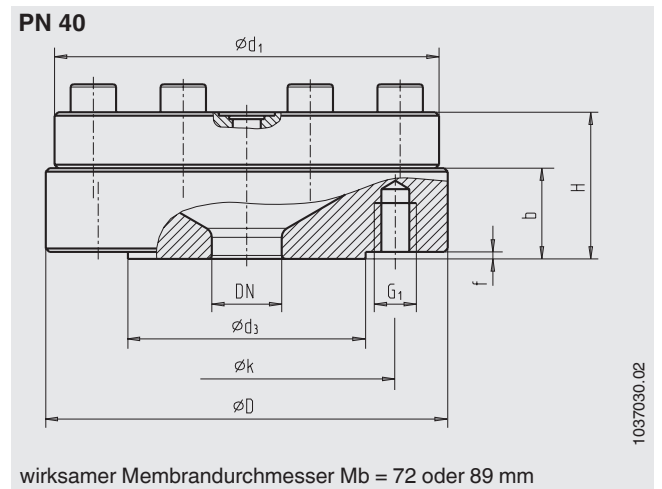
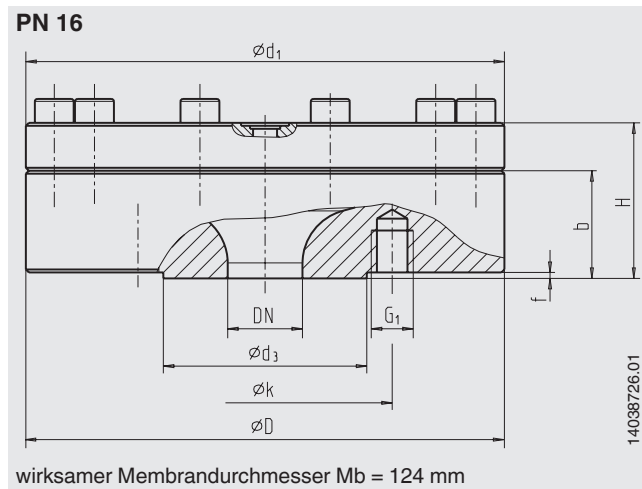
# Abmessungen in mm

## Standardausführung 1)



1) Abmessungen für Sonderwerkstoffe auf Anfrage

## Option 1)



1) Abmessungen für Sonderwerkstoffe auf Anfrage

## Anschluss nach EN 1092-1

DN in mm	PN in bar	Maße in mm			Gewinde/Bohrungen							
		D	Mb	d <sub>1</sub>	d <sub>3</sub>	k	H	b	f	G <sub>1</sub>	Anzahl	
15	16	160	124	160	45	65	52	36	2	M12	4	
	40	110	72	110	45	65	48	32	2	M12	4	
	40	150	89	150	45	65	52	34	2	M12	4	
	100	150	89	150	45	75	52	32	2	M12	4	
25	16	160	124	160	68	85	52	36	2	M12	4	
	40	115	72	110	68	85	42	26	2	M12	4	
	40	150	89	150	68	85	52	32	2	M12	4	
	100	150	89	150	68	100	52	32	2	M16	4	
40	16	160	124	160	88	110	51	35	2	M16	4	
	40	150	72	110	88	110	44	28	2	M16	4	
	40	150	89	150	88	110	52	32	2	M16	4	
	100	170	89	150	88	125	58	38	2	M20	4	
50	16	165	124	160	102	125	51	35	2	M16	4	
	40	165	72	110	102	125	44	28	2	M16	4	
	40	165	89	150	102	125	50	30	2	M16	4	
	100	195	89	150	102	145	48	28	2	M24	4	

**HOW TO ORDER  
BASIC MODEL**

**OPTIONS**

FOR NON STANDARD PRODUCTS/OPTIONAL ITEMS, PLEASE CONTACT FACTORY FOR DELIVERY AND MINIMUM QUANTITY OF ORDER.

**FLANGE**

- |                        |  |
|------------------------|--|
| <b>L1</b> AISI 316L SS | <b>L4</b> CARBON STEEL                 |
| <b>L2</b> AISI 316 SS  | <b>L6</b> AISI 316L SS + TEFLON LINING |

**DIAPHRAGM**

- |                        |                  |                                 |
|------------------------|------------------|---------------------------------|
| <b>M1</b> AISI 316L SS | <b>M2</b> NICKEL | <b>M3</b> TITANIUM              |
| <b>M4</b> HASTELLOY'C' | <b>M5</b> SILVER | <b>M6</b> AISI 316L SS + TEFLON |
| <b>M6</b> MONEL        |                  |                                 |

**INSTRUMENT CONNECTION**

- |                      |                      |
|----------------------|----------------------|
| <b>Q1</b> 1/2"BSP(F) | <b>Q5</b> 3/8"NPT(F) |
| <b>Q2</b> 1/4"BSP(F) | <b>Q4</b> 1/2"NPT(F) |
| <b>Q6</b> 3/8NPT(F)  | <b>Q3</b> 1/4"NPT(F) |

**PROCESS CONNECTION**

AS PER DIN/BS/ANS/JIS ETC.STANDARD  
32NB(1 1/4")to 80NB(3")(As required)

**FLUSHING RING**

- |  |  |
|--|--|
| <b>S1</b> FLUSHING RING WITH 1/2"NPT PLUG(AISI 304 SS) | <b>S2</b> FLUSHING RING WITH 1/4"NPT PLUG(AISI 304 SS)     |
| <b>S3</b> FLUSHING RING WITH 1/2"NPT PLUG( MONEL )     | <b>S4</b> FLUSHING RING WITH 1/4"NPT PLUG(AISI 316 SS)Std. |

**FILLING FLUIDS**

- |  |   |
|--|---|
| <b>T1</b> FLUROLUBE 4.2[-45 TO 175°C/-49 TO374 ° F]      | <b>T2</b> SILICON DC 704 [0 TO 205°C/-32 TO401 ° F] |
| <b>T3</b> FLUROLUBE 6.3[-40 TO 235°C/-40 TO455 ° F]      | <b>T4</b> SILICON DC 710 [5TO 400°C]                |
| <b>T5</b> FLUROLUBE FS5[-40 TO 150°C/-40 TO302 ° F]      | <b>T6</b> SYLTHERM 800 [-45 TO205°C/-49 TO401° F]   |
| <b>T7</b> FOOD GRADE OIL[-20 TO 140°C/-4 TO284 ° F]      | <b>T8</b> SYLTHERM XLT [-75 TO150°C/-102TO302° F]   |
| <b>T9</b> SILICON DC200-10CS[-40 TO 205°C/-40 TO401 ° F] | <b>T10</b> HALOCARBON OIL                           |

**PROTECTION ON WETTED PARTS**

- |  |   |
|--|---|
| <b>U1</b> MONEL LINING ON FLANGE-2mm THICK | <b>U3</b> PTFE PROTECTION FOR DIAPHRAGM |
|--|---|

**DIAPHRAGM MATERIAL**

- |                         |                     |                        |                         |
|-------------------------|---------------------|------------------------|-------------------------|
| <b>AD1</b> AISI 304     | <b>AD6</b> MONEL    | <b>AD7</b> HASTELLOYC  | <b>AD2</b> CARBON STEEL |
| <b>AD5</b> AISI 316L SS | <b>AD3</b> TITANIUM | <b>AD4</b> AISI 316 SS | <b>AD8</b> TANTALUM     |

**TYPE**

- |                             |                          |
|-----------------------------|--------------------------|
| <b>G1</b> WITHOUT CAPILLARY | <b>G2</b> WITH CAPILLARY |
|-----------------------------|--------------------------|

**CAPILLARY**

- |                       |                       |
|-----------------------|-----------------------|
| <b>H1</b> AISI 304 SS | <b>H2</b> AISI 316 SS |
|-----------------------|-----------------------|

**CAPILLARY COVERED WITH ARMOUR**

- |                       |                       |               |
|-----------------------|-----------------------|---------------|
| <b>I1</b> AISI 304 SS | <b>I2</b> AISI 316 SS | <b>I3</b> PVC |
|-----------------------|-----------------------|---------------|

**CAPILLARY LENGTH(Max up to 6Mtrs.)**

IN METERS (e.g.1.5= 1.5METERS 2.0=2METERS)

**OTHER ORTIONS**

- |                            |  |
|----------------------------|--|
| <b>K3</b> HELIUM LEAK TEST | <b>K4</b> DRY SEAL ONLY WITHOUT INSTRUMENT |
|----------------------------|--|

**Ordering Example:**

**BBX-L1-M1-Q1-B27-S1-T1-U1-AD1-G1-H1-I1-3Mtr.-K3**

Note: · Due to continuous improvement, the specification may vary from time to time.

BBX

L1

M1

Q1

B27

S1

T1

U1

AD1

G1

H1

I1

3Mtr.

K3