

Model 300BT

Diaphragm Seals for Flanged Off-Line Process Connections 3" (76.20mm) 150# and 3" (76.20mm) 300#

Process Connection Sizes

3" ASME/ANSI Flange Ratings 150# and 300#
Other flange ratings available, consult the factory

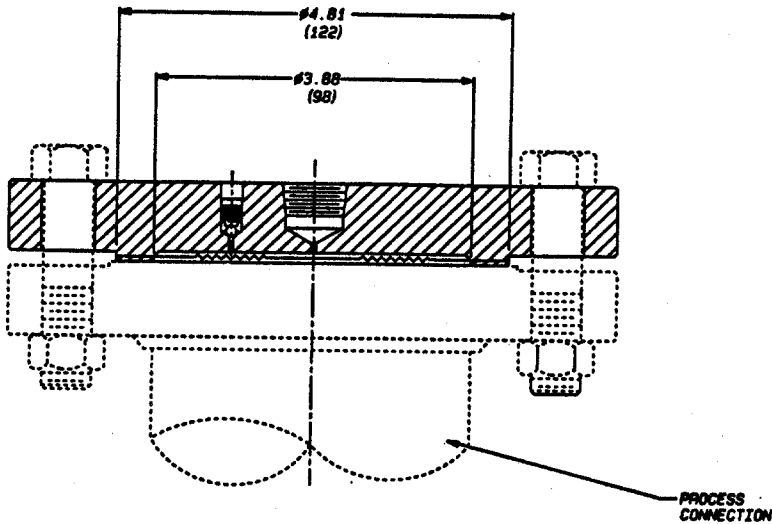
Maximum Working Pressure

Conforms to Flange Pressure-Temperature Ratings per ASME/ANSI B16.5

Flange Faces

Raised Face
Flat Face

Dimensional Data



() Dimensions in millimeters

Standard Features and Options

This flanged connection, off-line seal has a diaphragm welded to a carbon steel or stainless steel body. This is a single piece design, similar to the 300BP Series, with a cost and installation advantage. The displacement capability of this series of diaphragm seal is 0.25 cubic inches utilizing a 4.81" (122.17mm) diameter diaphragm. These seals are designed for direct connection to standard raised face ASME/ANSI flanges in 3" (76.20mm) sizes, with 150# and 300# ratings. When a Tantalum diaphragm is required, the 300BT o-ring style is required. The seal-off feature is standard.

Offerings

Body Materials: Carbon Steel or 316 Stainless Steel

Diaphragm Materials: All metallic except Tantalum

Instrument Connection: 1/4" or 1/2" NPTF

CONTROL ENGINEERING DATA

D700 B 4 2 J 0 C 0 0 0 0 N

- (15) **FILL LIQUID**
N = (Standard)
- (14) **PLATING OPTIONS**
0 = None (Standard)
G = Gold Plating Diaphragm Only
- (13) **TEFLON COATING (See Note 4)**
0 = None (Standard)
A = Teflon Coated Diaphragm Only
- (12) **FUTURE OPTION**
0 = Not Applicable
- (11) **FUTURE OPTION**
0 = Not Applicable
- (10) **Housing Material**
C = Carbon Steel
S = 316 Stainless Steel
M = Monel 400 (See Note 1)
- (9) **FUTURE OPTION**
0 = Not Applicable
- (8) **SEAL DIAPHRAGM MATERIAL**
H = Hastelloy B3
D = Hastelloy C-276
I = Inconel 600
M = Monel 400 (See Note 1)
N = Nickel 200
J = 316L Stainless Steel
- (7) **SEAL INSTRUMENT CONNECTION**
1 = 1/4" NPTF with bleed
2 = 1/2" NPTF with bleed
- (6) **SEAL FLANGE PRESSURE RATING (See Note 3)**
1 = 150# RF
X = 150# FF
4 = 300# RF
W = 300# FF
- (5) **SEAL PROCESS CONNECTION**
B = 3"
- (3-4) **FUTURE OPTION**
00 = Not applicable
- (1-2) **DIAPHRAGM SEAL DESIGN**
D7 = 300BT Flanged "T" type

CATALOG NUMBERS AS RECEIVED
FOR 300BT SERIES SEAL MUST
CONTAIN FIFTEEN (15) CHARACTERS.

Notes:

1. When a Monel diaphragm is chosen in position 8, then a Monel body is required.
2. N.A.C.E. - Welded diaphragm seals with Hastelloy C-276 or Monel wetted materials of construction will meet the requirements of N.A.C.E. International Document MR-0175-1995. 316 Stainless Steel construction will NOT BE offered in a welded design as meeting N.A.C.E. MR-0175-1995 requirements as the weld area of the diaphragm seal will not meet the maximum hardness specifications within this document.
3. Refer to Miscellaneous Data Section for Pressure-Temperature Rating Guide.
4. Teflon-S® Coating (FEP Grade).

Model 300BT

Diaphragm Seals for Flanged Off-Line Process Connections Tantalum Diaphragm 3" (76.20mm) 150# and 3" (76.20mm) 300#

Process Connection Sizes

3" ASME/ANSI Flange Ratings 150# and 300#
Other flange ratings available, consult the factory

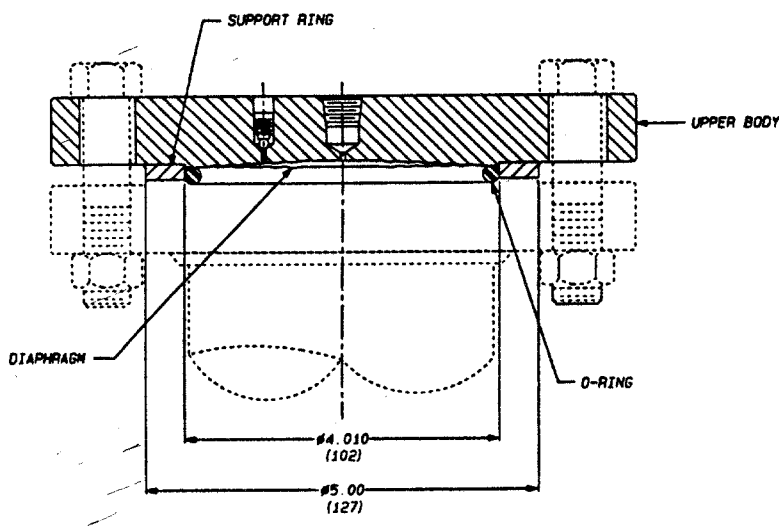
Maximum Working Pressure

Conforms to Flange Pressure-Temperature Ratings per ASME/ANSI B16.5

Flange Faces

Raised Face

Dimensional Data



() Dimensions in millimeters

Standard Features and Options

This flanged connection, off-line seal has a diaphragm welded to a carbon steel or stainless steel body. This is a single piece design, similar to the 300BP Series, with a cost and installation advantage. When tantalum diaphragms are required, the metallurgical properties prohibit the use of a weld ring as a gasketing surface. An o-ring supported by a non-wetted support ring is then used. The displacement capability of this series of diaphragm seal is 0.25 cubic inches utilizing a 4.00" (101.60mm) diameter diaphragm. These seals are designed for direct connection to standard raised face ASME/ANSI flanges in 3" (76.20mm) sizes, with 150# and 300# ratings. The standard o-ring material is Teflon. The seal-off feature is standard.

Offerings

Body Materials: Carbon Steel or 316 Stainless Steel

Diaphragm Material: Tantalum

O-Ring Materials: Teflon, Buna N and Viton

Instrument Connection: 1/4" or 1/2" NPT

CONTROL ENGINEERING DATA

D700 B X 2 T Z C 0 0 0 0 N

- (15) **FILL LIQUID**
N = (Standard)
- (14) **PLATING OPTIONS**
0 = None (Standard)
- (13) **TEFLON COATING (See Note 2)**
0 = None (Standard)
A = Teflon Coated Diaphragm Only
- (12) **FUTURE OPTION**
0 = Not Applicable
- (11) **FUTURE OPTION**
0 = Not Applicable
- (10) **Housing Material**
C = Carbon Steel
S = 316 Stainless Steel
- (9) **O-RING MATERIAL**
Z = Teflon (Standard)
B = Buna N
T = Teflon
- (8) **SEAL DIAPHRAGM MATERIAL**
T = Tantalum
- (7) **SEAL INSTRUMENT CONNECTION**
1 = 1/4" NPTF with bleed
2 = 1/2" NPTF with bleed
- (6) **SEAL FLANGE PRESSURE RATING (See Note 1)**
1 = 150# RF
X = 150# FF
4 = 300# RF
W = 300# FF
- (5) **SEAL PROCESS CONNECTION**
B = 3"
- (3-4) **FUTURE OPTION**
00 = Not applicable
- (1-2) **DIAPHRAGM SEAL DESIGN**
D7 = 300BT Flanged "T" Type

CATALOG NUMBERS AS RECEIVED FOR 300BT SERIES SEAL MUST CONTAIN FIFTEEN (15) CHARACTERS.

Note:

1. Refer to Miscellaneous Data Section for Pressure-Temperature Rating Guide.
2. Teflon-S® Coating (FEP Grade).