

Overview



Flushing ring

Flushing rings are required for flange-mounted and sandwich-type remote seals (Article No. 7MF4900 ... 7MF4923) if the danger exists that the process conditions and the geometry of the connection could cause the medium to form deposits or blockages.

The flushing ring is clamped between the process flange and the remote seal.

Deposits can be flushed away from the diaphragm through the holes in the side, or the pressure volume can be vented. Different nominal diameters and forms permit adaptation to the respective process flange.

Process connection

For flanges to EN and ASME:
DN 50, 80, 100, 125; PN 16 ... 100 or
DN 2 inch, 3 inch, 4 inch, 5 inch; Class 150 ... 600

Standard design

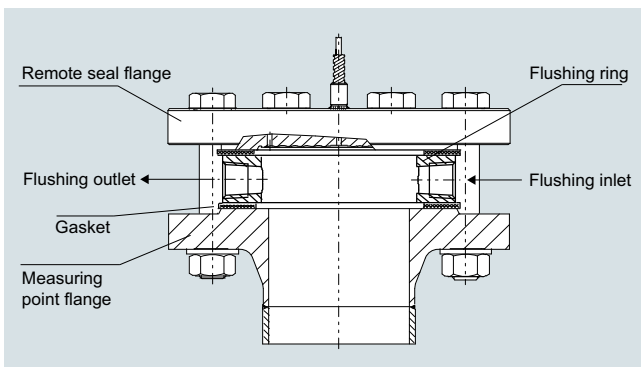
Material: CrNi-Stahl, mat. No. 1.4404/316L
Sealing faces and flushing holes: See Selection and Ordering data

Technical specifications

Flushing ring for remote seals of sandwich and flange design

Nominal diameter	Nominal pressure
• DN 50	PN 16 ... PN 100
• DN 80	PN 16 ... PN 100
• DN 100	PN 16 ... PN 100
• DN 125	PN 16 ... PN 100
• 2 inch	Class 150 ... class 600
• 3 inch	Class 150 ... class 600
• 4 inch	Class 150 ... class 600
• 5 inch	Class 150 ... class 600
Sealing surface	
• To EN 1092-1	Form B1
	Form B2
	Form D/Form D
	Form C/Form C
	Form C/Form C
	Form E
	Form F
• To ASME B16.5	RF 125 ... 250 AA
	RFSF
	RJF ring groove
Flushing holes (2 off), female thread	• G $\frac{1}{4}$
	• G $\frac{1}{2}$
	• $\frac{1}{4}$ -18 NPT
	• $\frac{1}{2}$ -14 NPT
Material	Stainless steel 1.4404/316L

Design



Installation example

Pressure Measurement

Remote seals for pressure transmitters
SITRANS P300, P DS III, P410, P500

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Flushing rings for diaphragm seals

Selection and Ordering data

Article No.Ord. code

Flushing ring

7MF4925 -

for remote seals 7MF4900 to 7MF4923

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Nom. diam.	Nom. press.
• DN 50	PN 16 ... PN 100
• DN 80	PN 16 ... PN 100
• DN 100	PN 16 ... PN 100
• DN 125	PN 16 ... PN 100
• 2 inch	Class 150 ... 600
• 3 inch	Class 150 ... 600
• 4 inch	Class 150 ... 600
• 5 inch	Class 150 ... 600

Only for RJF ring groove, 7MF4925-1*R....:

• 2 inch	Class 150
• 3 inch	Class 150
• 4 inch	Class 150
• 5 inch	Class 150
• 2 inch	Class 300 ... 600
• 3 inch	Class 300 ... 600
• 4 inch	Class 300 ... 600
• 5 inch	Class 300 ... 600

Other version
Add Order code and plain text:
Nominal diameter: ...; Nominal pressure: ...

Sealing surface

- EN 1092-1
 - Form B1
 - Form B2
 - Form C/Form C
 - Form D/Form C
 - Form D/Form D
 - Form E
 - Form F
- ASME B16.5
 - RF 125 ... 250 AA
 - RFSF
 - RJF ring groove

Other version
Add Order code and plain text:
Sealing surface: ...

Flushing holes (2 off)

- Female thread G $\frac{1}{4}$
- Female thread G $\frac{1}{2}$
- Female thread $\frac{1}{4}$ -18 NPT
- Female thread $\frac{1}{2}$ -14 NPT

Material

- Stainless steel 316L
- Other version
Add Order code and plain text:
Material: ...

Further designs

Please add "-Z" to Article No. and specify Order code.

Inspection certificate

to EN 10204, section 3.1

1	A	J 1 Y
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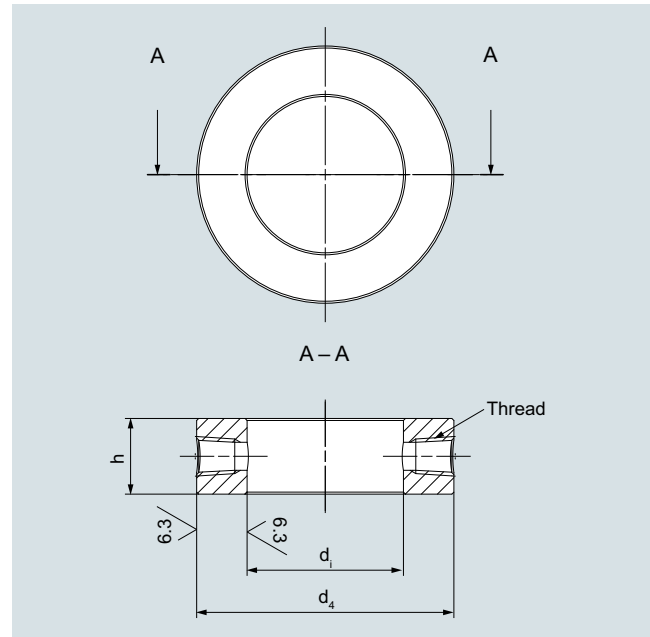
Order code

C12

Dimensional drawings

Connection according to EN 1092-1

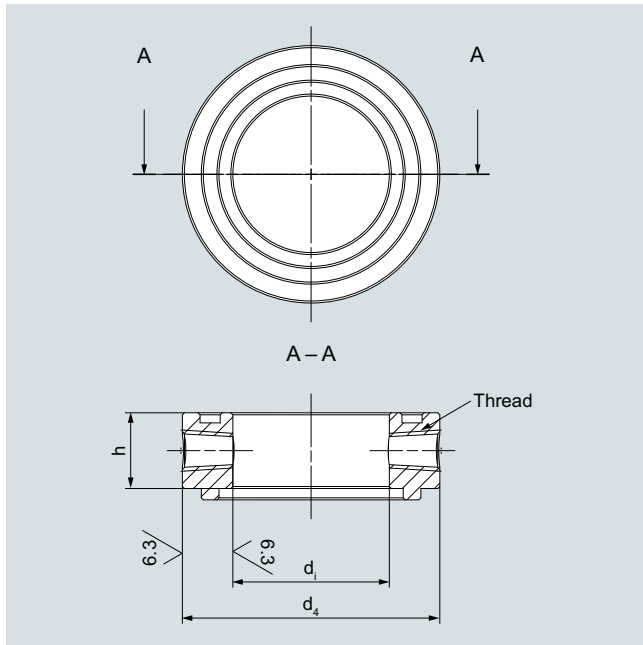
Form B1 and form B2



Flushing ring; sealing surface (EN 1092-1), form B1 and form B2

DN	PN	Thread	d ₄	d _i	h	Weight
mm	bar		Ø in mm (Inch)	Ø in mm (Inch)	Ø in mm (Inch)	kg (lb)
50	16 ... 100	¼ NPT	102 (4.02)	62 (2.44)	30 (1.18)	1.24 (2.73)
80	16 ... 100	¼ NPT	138 (5.43)	92 (3.62)	30 (1.18)	1.99 (4.39)
100	16 ... 100	¼ NPT	162 (6.38)	92 (3.62)	30 (1.18)	3.35 (7.39)
125	16 ... 100	¼ NPT	188 (7.40)	132 (5.2)	30 (1.18)	3.38 (7.45)
50	16 ... 100	½ NPT	102 (4.02)	62 (2.44)	30 (1.18)	1.24 (2.73)
80	16 ... 100	½ NPT	138 (5.43)	92 (3.62)	30 (1.18)	1.99 (4.39)
100	16 ... 100	½ NPT	162 (6.38)	92 (3.62)	30 (1.18)	3.35 (7.39)
125	16 ... 100	½ NPT	188 (7.40)	132 (5.2)	30 (1.18)	3.38 (7.45)

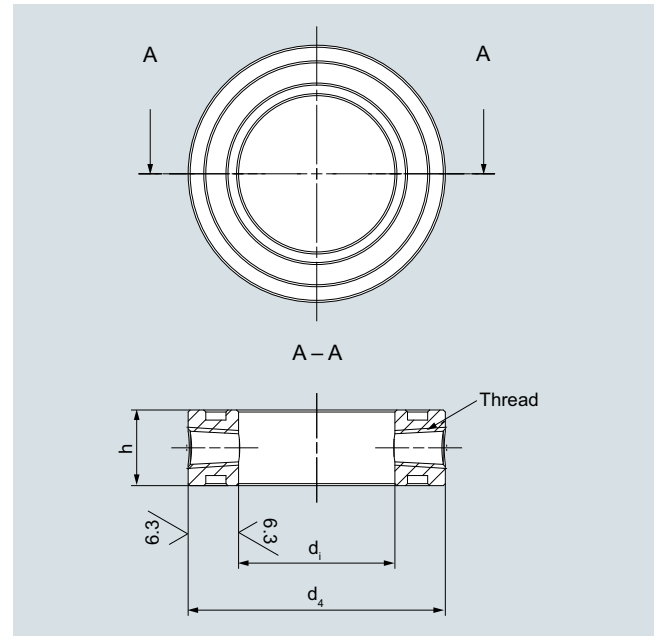
Form D/form C



Flushing ring; sealing surface (EN 1092-1), form D/form C

DN	PN	Thread	d_4	d_i	h	Weight
mm	bar		Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg (lb)
50	16 ... 100	¼ NPT	102 (4.02)	62 (2.44)	35.5 (1.40)	1.46 (3.22)
80	16 ... 100	¼ NPT	138 (5.43)	92 (3.62)	35.5 (1.40)	2.36 (5.2)
100	16 ... 100	¼ NPT	162 (6.38)	92 (3.62)	35.5 (1.40)	3.96 (8.73)
125	16 ... 100	¼ NPT	188 (7.40)	132 (5.2)	35.5 (1.40)	4.00 (8.82)
50	16 ... 100	½ NPT	102 (4.02)	62 (2.44)	40.5 (1.595)	1.67 (3.68)
80	16 ... 100	½ NPT	138 (5.43)	92 (3.62)	40.5 (1.595)	2.69 (5.93)
100	16 ... 100	½ NPT	162 (6.38)	92 (3.62)	40.5 (1.595)	4.52 (9.97)
125	16 ... 100	½ NPT	188 (7.40)	132 (5.2)	40.5 (1.595)	4.56 (10.05)

Form D/form D



Flushing ring; sealing surface (EN 1092-1), form D/form D

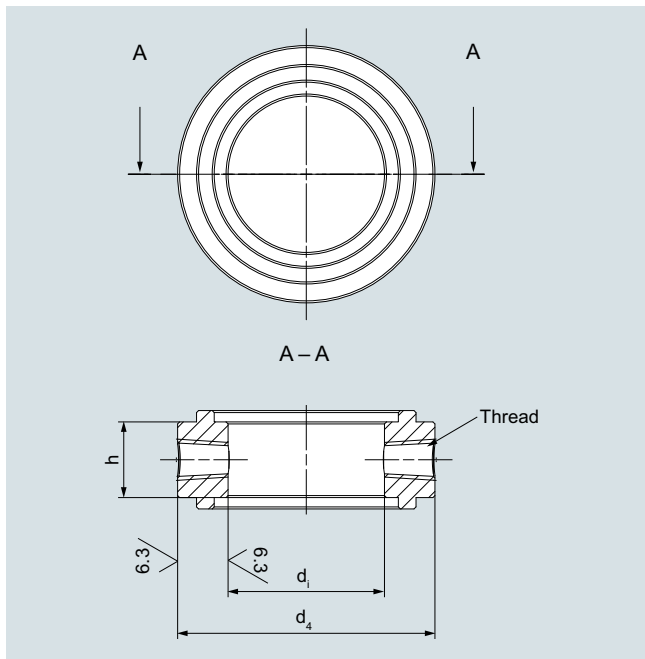
DN	PN	Thread	d_4	d_i	h	Weight
mm	bar		Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg (lb)
50	16 ... 100	¼ NPT	102 (4.02)	62 (2.44)	40 (1.58)	1.65 (3.64)
80	16 ... 100	¼ NPT	138 (5.43)	92 (3.62)	40 (1.58)	2.66 (5.86)
100	16 ... 100	¼ NPT	162 (6.38)	92 (3.62)	40 (1.58)	4.47 (9.86)
125	16 ... 100	¼ NPT	188 (7.40)	132 (5.2)	40 (1.58)	4.50 (9.92)
50	16 ... 100	½ NPT	102 (4.02)	62 (2.44)	40 (1.58)	1.65 (3.64)
80	16 ... 100	½ NPT	138 (5.43)	92 (3.62)	40 (1.58)	2.66 (5.86)
100	16 ... 100	½ NPT	162 (6.38)	92 (3.62)	40 (1.58)	4.47 (9.86)
125	16 ... 100	½ NPT	188 (7.40)	132 (5.2)	40 (1.58)	4.50 (9.92)

Pressure Measurement

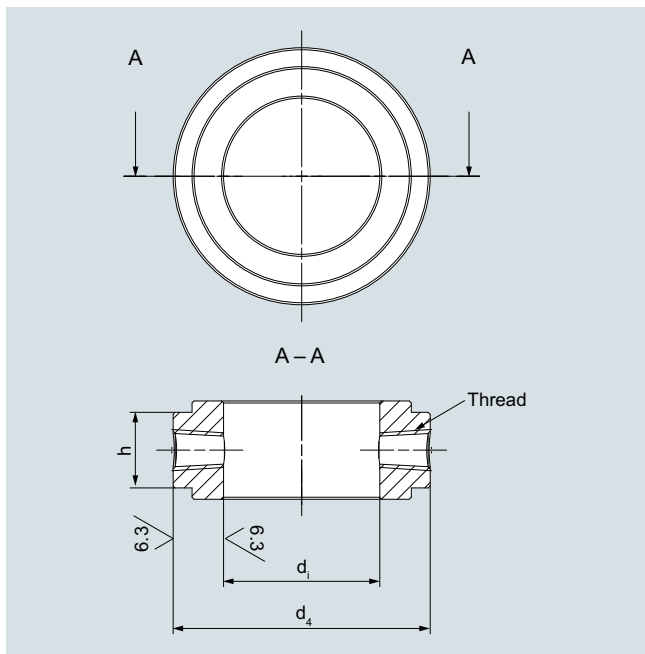
Remote seals for pressure transmitters
SITRANS P300, P DS III, P410, P500

Flushing rings for diaphragm seals

Form C/form C and form E



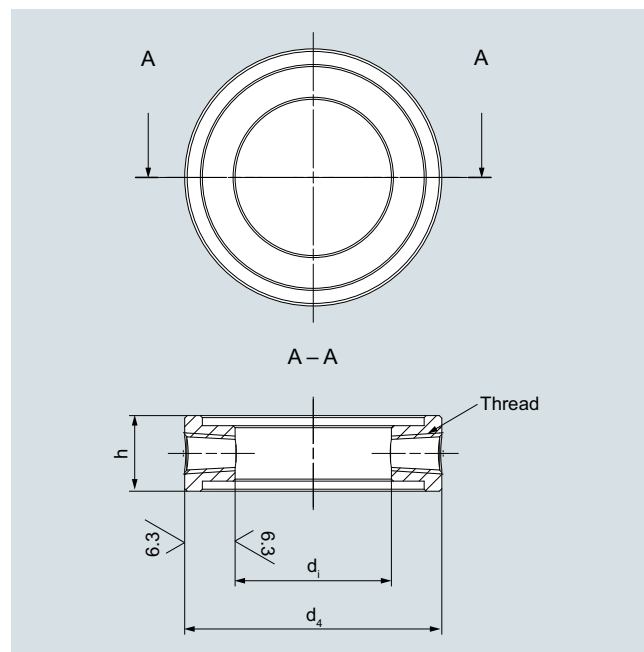
Flushing ring; sealing surface (EN 1092-1), form C/form C



Flushing ring; sealing surface (EN 1092-1), form E

DN	PN	Thread	d ₄	d _i	h	x	f3	Weight
mm	bar		Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg (lb)
50	16 ... 100	¼ NPT	102 (4.02)	62 (2.44)	31 (1.22)	87 (3.43)	4.5 (0.18)	1.49 (3.28)
80	16 ... 100	¼ NPT	138 (5.43)	92 (3.62)	31 (1.22)	120 (4.72)	4.5 (0.18)	2.40 (5.29)
100	16 ... 100	¼ NPT	162 (6.38)	92 (3.62)	30 (1.18)	149 (5.87)	5 (0.2)	4.21 (9.28)
125	16 ... 100	¼ NPT	188 (7.40)	132 (5.2)	30 (1.18)	175 (6.89)	5 (0.2)	4.21 (9.28)
50	16 ... 100	½ NPT	102 (4.02)	62 (2.44)	31 (1.22)	87 (3.43)	4.5 (0.18)	1.49 (3.28)
80	16 ... 100	½ NPT	138 (5.43)	92 (3.62)	31 (1.22)	120 (4.72)	4.5 (0.18)	2.40 (5.29)
100	16 ... 100	½ NPT	162 (6.38)	92 (3.62)	30 (1.18)	149 (5.87)	5 (0.2)	4.21 (9.28)
125	16 ... 100	½ NPT	188 (7.40)	132 (5.2)	30 (1.18)	175 (6.89)	5 (0.2)	3.38 (7.45)

Form F

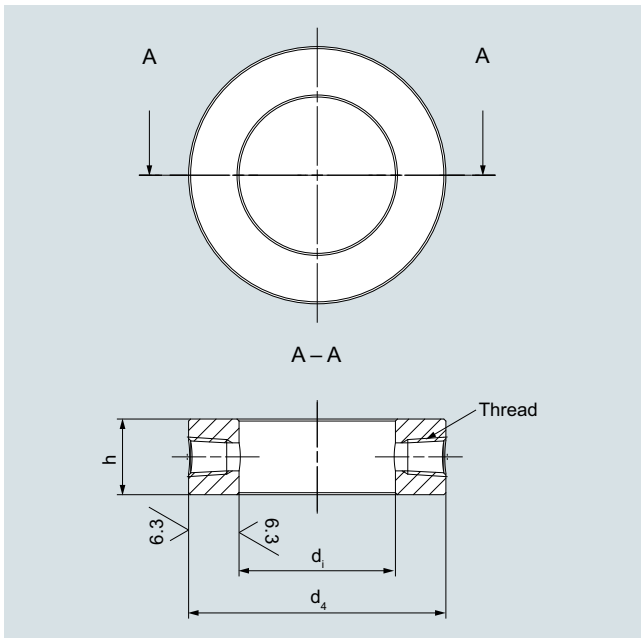


Flushing ring; sealing surface (EN 1092-1), form F

DN	PN	Thread	d ₄	d _i	h	x	f3	Weight
mm	bar		Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg (lb)
50	16 ... 100	¼ NPT	102 (4.02)	62 (2.44)	35 (1.38)	88 (3.46)	4 (0.16)	1.25 (2.76)
80	16 ... 100	¼ NPT	138 (5.43)	92 (3.62)	35 (1.38)	121 (4.76)	4 (0.16)	2.02 (4.45)
100	16 ... 100	¼ NPT	162 (6.38)	92 (3.62)	35 (1.38)	150 (5.91)	4.5 (0.18)	3.11 (6.86)
125	16 ... 100	¼ NPT	188 (7.40)	132 (5.2)	35 (1.38)	175 (6.89)	4.5 (0.18)	3.19 (7.03)
50	16 ... 100	½ NPT	102 (4.02)	62 (2.44)	40 (1.58)	88 (3.46)	4 (0.16)	1.45 (3.2)
80	16 ... 100	½ NPT	138 (5.43)	92 (3.62)	40 (1.58)	121 (4.76)	4 (0.16)	2.35 (5.18)
100	16 ... 100	½ NPT	162 (6.38)	92 (3.62)	40 (1.58)	150 (5.91)	4.5 (0.18)	3.67 (8.09)
125	16 ... 100	½ NPT	188 (7.40)	132 (5.2)	40 (1.58)	175 (6.89)	4.5 (0.18)	3.76 (8.29)

Connection according to ASME B 16.5

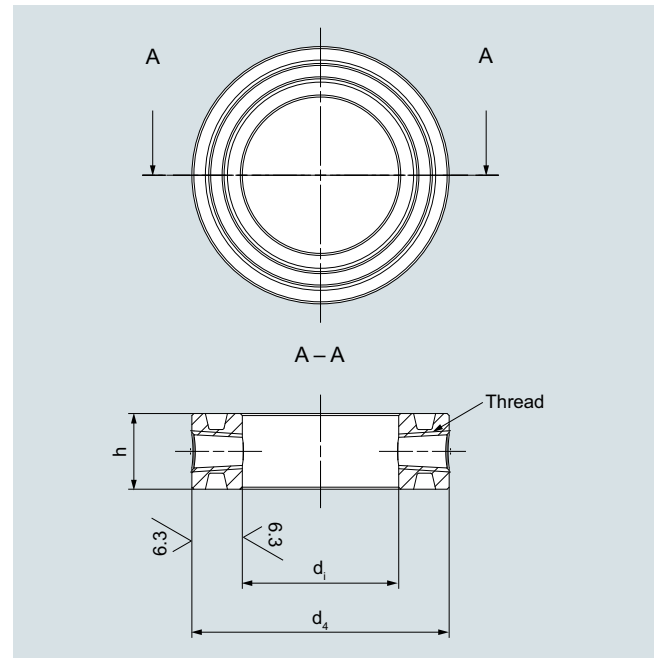
RFSF and RF 125 ... 250 AA



Flushing ring; sealing surface (ASME B 16.5), RFSF and RF 125 to 250 AA

DN	Class	Thread	d ₄	d _i	h	Weight
inch			Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg lb)
2	150 ... 600	¼ NPT	92 (3.62)	62 (2.44)	30 (1.18)	0.87 (1.92)
3	150 ... 600	¼ NPT	127 (5)	92 (3.62)	30 (1.18)	1.44 (3.17)
4	150 ... 600	¼ NPT	157 (6.18)	92 (3.62)	30 (1.18)	3.05 (6.72)
5	150 ... 600	¼ NPT	186 (7.32)	141 (5.55)	30 (1.18)	2.77 (6.11)
2	150 ... 600	½ NPT	92 (3.62)	62 (2.44)	30 (1.18)	0.87 (1.92)
3	150 ... 600	½ NPT	127 (5)	92 (3.62)	30 (1.18)	1.44 (3.17)
4	150 ... 600	½ NPT	157 (6.18)	92 (3.62)	30 (1.18)	3.05 (6.72)
5	150 ... 600	½ NPT	186 (7.32)	141 (5.55)	30 (1.18)	2.77 (6.11)

RJF ring groove



Flushing ring; sealing surface (ASME B 16.5), RJF ring groove

DN	Class	Thread	d ₄	d _i	h	Weight
inch			Ø in mm (inch)	Ø in mm (inch)	Ø in mm (inch)	kg lb)
2	150	¼ NPT	102 (4.02)	62 (2.44)	40 (1.58)	1.65 (3.64)
3	150	¼ NPT	133 (5.24)	92 (3.62)	40 (1.58)	2.32 (5.12)
4	150	¼ NPT	171 (6.73)	92 (3.62)	40 (1.58)	5.22 (11.51)
5	150	¼ NPT	194 (7.64)	141 (5.55)	40 (1.58)	4.46 (9.83)
2	150	½ NPT	102 (4.02)	62 (2.44)	46 (1.81)	1.90 (4.19)
3	150	½ NPT	133 (5.24)	92 (3.62)	46 (1.81)	2.66 (5.86)
4	150	½ NPT	171 (6.73)	92 (3.62)	46 (1.81)	6.00 (13.23)
5	150	½ NPT	194 (7.64)	141 (5.55)	46 (1.81)	5.13 (11.31)
2	300 ... 600	¼ NPT	108 (4.25)	62 (2.44)	40 (1.58)	1.96 (4.32)
3	300 ... 600	¼ NPT	146 (5.75)	92 (3.62)	40 (1.58)	3.23 (7.12)
4	300 ... 600	¼ NPT	175 (6.89)	92 (3.62)	40 (1.58)	5.57 (12.28)
5	300 ... 600	¼ NPT	210 (8.27)	141 (5.55)	40 (1.58)	6.08 (13.4)
2	300 ... 600	½ NPT	108 (4.25)	62 (2.44)	46 (1.81)	2.26 (4.98)
3	300 ... 600	½ NPT	146 (5.75)	92 (3.62)	46 (1.81)	3.71 (8.18)
4	300 ... 600	½ NPT	175 (6.89)	92 (3.62)	46 (1.81)	6.4 (14.11)
5	300 ... 600	½ NPT	210 (8.27)	141 (5.55)	46 (1.81)	7 (15.43)