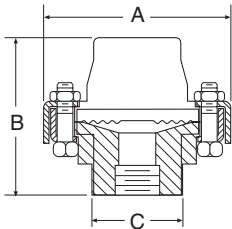


Diaphragm Seals Style Chart

- Threaded
- Flanged
- In-line
- Saddle
- Quick-Connect
- All Welded
- Mini-Seal
- Iso-Ring/Iso-Spool

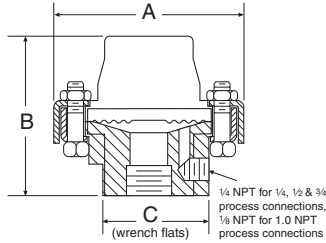
Types 100, 200, 300, 400



Types 100, 200, 300, 400 – Threaded 1/4, 1/2, 3/4, 1 NPT

in	A mm	in	B mm	in	C mm
3/4	(95)	2 7/8	(73)	1 13/16	(46)

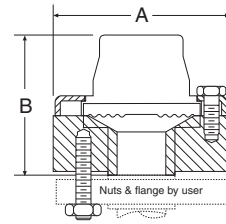
Types 101, 201, 301, 401



Types 101, 201, 301, 401 – Threaded 1/4, 1/2, 3/4, 1 NPT with flushing connection

in	A mm	in	B mm	in	C mm
3/4	(95)	2 7/8	(73)	1 13/16	(46)

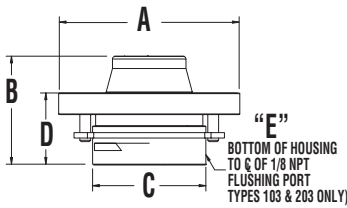
Types 102, 202, 302



Types 102, 202, 302 – Flanged 1/2, 3/4

Flange Size	Rating #	in A	mm A	in B	mm B
1/2"	150	3 1/2	(89)	2 15/16	(75)
300 or 600		3 3/4	(95)	3	(76)
900 or 1500		4 3/4	(121)	3 3/16	(81)
150		3 7/8	(98)	2 13/16	(71)
3/4"	300 or 600	4 5/8	(117)	3	(76)
900 or 1500		5 1/8	(130)	3 3/16	(81)

Types 102, 202, 103, 203

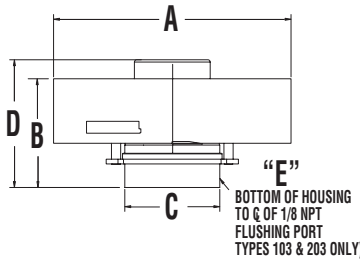


Types 102, 202, 103, 203 – Flanged 1" (raised face only) (1 piece bottom housing) with and without flushing connection

Flange Size	Rating #	in. A	mm A	in. B	mm B	in. C	mm C
1	150	4-1/4	(100)	2-9/16	(65)	1-23/32	(69)
	300 or 600	5	(127)				

103 & 203 only					
Flange Size	Rating #	in. D	mm D	in. E	mm E
1	150	1-5/8	(41)	3/8	(9)
	300 or 600				

Types 102, 202, 103, 203

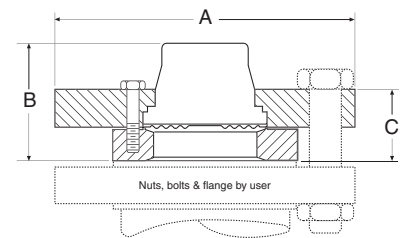


Types 102, 202, 103, 203 – Flanged 1" (raised face only) (1 piece bottom housing) with and without flushing connection

Flange Size	Rating #	in. A	mm A	in. B	mm B	in. C	mm C
1	900 or 1500	5-7/8	(149)	2-7/8	(73)	2-1/4	(57)
	2500	6-1/4	(159)				

103 & 203 only					
Flange Size	Rating #	in. D	mm D	in. E	mm E
1	900 or 1500	3-3/8	(86)	3/8	(9)
	2500				

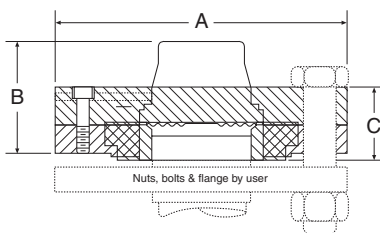
Types 102, 202, 302



Types 102, 202, 302 – Flanged (one piece bottom housing) – 1 1/2", 2", 3" (raised face only) – all materials except PVC, Teflon and Kynar.

Flange Size	Rating #	in A	mm A	in B	mm B	in C	mm C
150		5	(127)			1 1/2	(38)
1 1/2"	300 or 600	6 1/4	(159)	2 3/8	(61)	1 1/2	(38)
900 or 1500		7	(178)			1 1/2	(38)
150		6	(152)			1 3/8	(35)
2"	300 or 600	6 1/2	(165)	1 15/16	(49)	1 1/2	(38)
900 or 1500		8 1/2	(216)			2 1/8	(54)
150		7 1/2	(191)	2	(51)	1 5/8	(41)
3"	300 or 600	8 1/4	(206)	2 1/16	(52)	1 7/8	(47)
900 or 1500		10 1/2	(267)	2 1/16	(68)	3 1/4	(82)

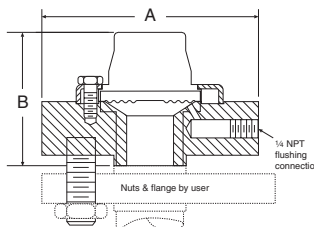
Types 102, 202, 302



Types 102, 202, 302 – Flanged (raised face only) (two piece bottom housing) – 1 1/2", 2" – PVC, Teflon and Kynar

Flange Size	Rating #	in A	mm A	in B	mm B	in C	mm C
1"	150	4 1/4	(100)	2 3/16	(56)	1 3/8	(35)
1 1/2"	150	5	(127)	2 5/16	(59)	1 13/32	(39)
2"	150	6	(152)	2 1/8	(54)	1 9/16	(40)

Types 103, 203, 303



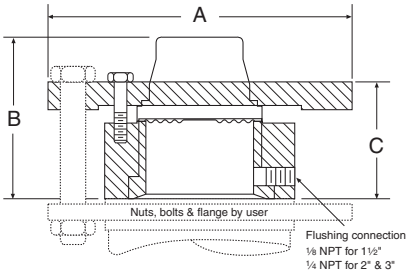
Types 103, 203, 303 – Flanged 1/2", 3/4" with flushing connection

Flange Size	Rating #	in A	mm A	in B	mm B
1/2"	150	3 1/2	(89)	2 15/16	(75)
300 or 600		3 3/4	(95)	3	(76)
900 or 1500		4 3/4	(121)	3 3/16	(81)
150		3 7/8	(98)	2 13/16	(71)
3/4"	300 or 600	4 5/8	(117)	3	(76)

Diaphragm Seals Style Chart

- Threaded
- Flanged
- In-line
- Saddle
- All Welded
- Mini-Seal
- Iso-Ring/Iso-Spool
- Quick-Connect

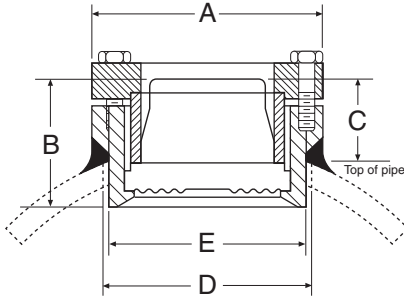
Types 103, 203, 303



Types 103, 203, 303 – Flanged 1½, 2, 3”
(raised face only) (one piece bottom housing with flushing connection)

Flange Size	Rating #	A		B		C	
		in	mm	in	mm	in	mm
150		5	(127)				
1½”	300 or 600	6¼	(159)	3	(76)	2½	(52)
	900 or 1500	7	(178)				
2”	300 or 600	6	(152)				
	900 or 1500	6½	(165)	3½	(84)	2¾	(60)
		8½	(215)				
3”	300 or 600	7½	(191)	3¾	(79)	2¾	(56)
	900	8¼	(210)	3¾	(81)	2¾	(57)
	1500	9½	(241)	3¾	(81)	2¾	(57)
		10½	(267)	3¾	(81)	2¾	(57)

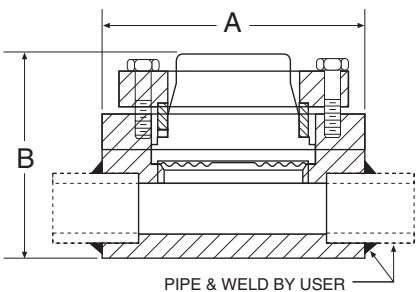
Types 105, 205



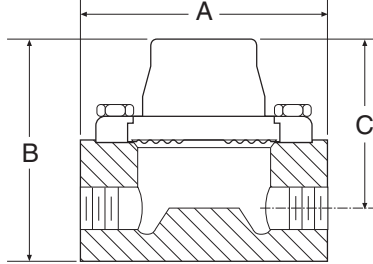
Types 105, 205 – Saddle – 4” Pipe only

A	B	C	D	E
in	mm	in	mm	in
3½	(89)	1½	(50)	1¾
				(31)
			3	(76)
				2¾
				(75)

Types 107, 207



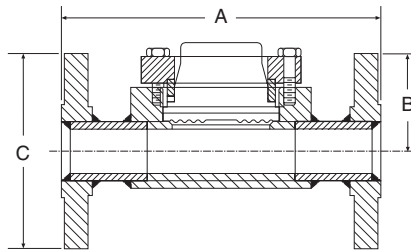
Types 104, 204, 304



Types 104, 204, 304 – In-Line Threaded
¼, ½, ¾, 1 NPT

Process Connection	A		B		C	
	in	mm	in	mm	in	mm
¼ NPT			2¾	(67)	2½	(54)
½ NPT			3¾	(92)	2¾	(70)
¾ NPT	4	(102)	3¾	(98)	3	(76)
1 NPT			3¾	(98)	3	(76)

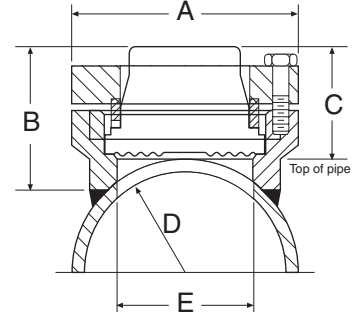
Types 106, 206



Types 106, 206 – In-Line Flanged –
½, 1, 1½, 2, 3”

Flange Size	Rating #	A		B		C	
		in	mm	in	mm	in	mm
½”	150	7	(178)	2¾	(62)	3½	(89)
	300	7	(178)	2¾	(62)	3¾	(98)
1”	150	7	(178)	2¾	(62)	4¼	(108)
	300	8	(203)	2¾	(62)	4¾	(123)
1½”	150	8	(203)	2¾	(62)	5	(127)
	300	9	(229)	2¾	(62)	6½	(155)
2”	150	9	(229)	2¾	(62)	6	(152)
	300	10	(254)	2¾	(62)	6½	(165)
3”	150	11	(279)	3¾	(92)	7½	(229)
	300	12	(305)	3¾	(92)	8¼	(254)

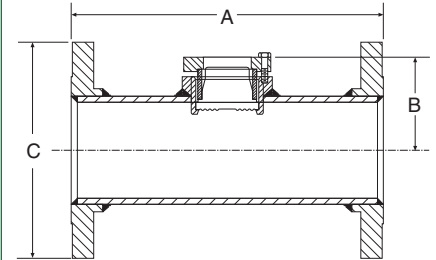
Types 105, 205



Types 105, 205 – Saddle – 3” Pipe only

A	B	C	D	E
in	mm	in	mm	in
3½	(89)	2¼	(57)	1¾
				(44)
			1¾	(44)
				2½
				(54)

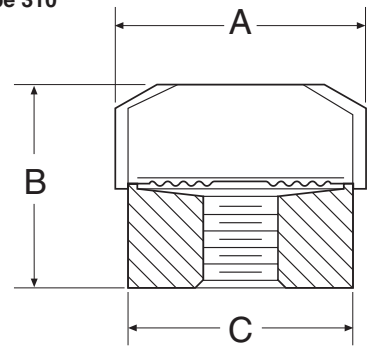
Types 106, 206



Types 106, 206 – In-Line Flanged –
4, 6, 8”

Flange Size	Rating #	A		B		C	
		in	mm	in	mm	in	mm
4”	150	13	(330)	3¾	(86)	9	(229)
	300	14	(356)	3¾	(86)	10	(254)
6”	150	16	(406)	4¾	(113)	11	(279)
	300	17	(432)	4¾	(113)	12½	(318)
8”	150	16	(406)	5¾	(138)	13½	(343)

Type 310

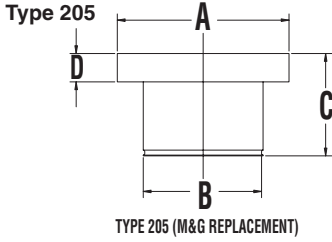


Type 310 Mini-seal – Threaded –
¼, ½ NPT

A	B	C
in	mm	in
1½	(38)	1¾
		(30)
		1½
		(34)

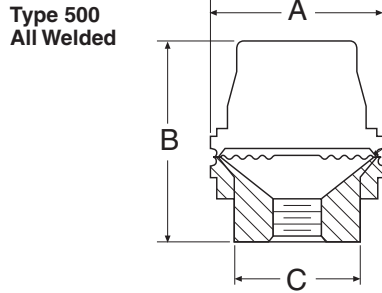
Diaphragm Seals Style Chart

- Threaded
 - Flanged
 - In-line
 - Saddle
- Quick-Connect
 - All Welded
 - Mini-Seal
 - Iso-Ring/Iso-Spool



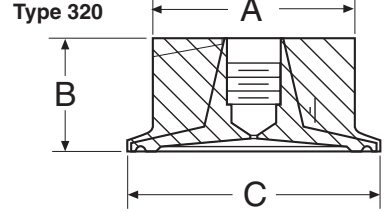
Type 205 M&G Replacement Saddle 3" (4" and Larger)

Size*	in	A mm	B mm	C mm	D mm
3"	3.44	(87)	2.44	1.35 (34)	0.57 (14)
4"				2.05 (52)	



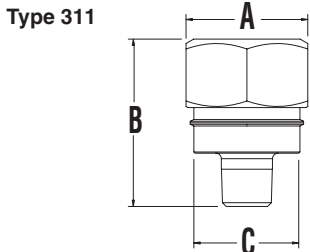
Type 500 All Welded – 1/4, 1/2, 3/4, 1 NPT

in	A mm	B mm	C mm
2 1/2"	(63)	2 7/8 (73)	1 1 3/16 (46)



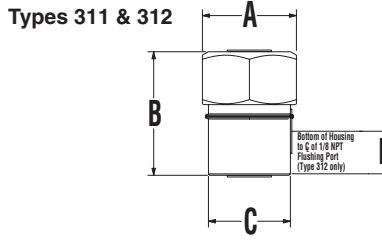
Type 320 Quick Connect – 1/4, 1/2 NPT

Size*	in	A mm	B mm	C mm
1 1/2"	1 21/32	(42)	7/8 (22)	2 (50)
2"	2	(51)	1 1/8 (29)	2 1/2 (63)



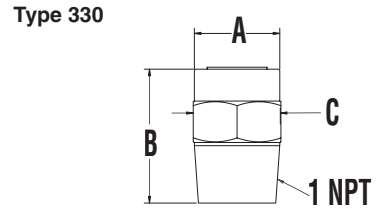
Type 311 Midi-Seal – Male NPT Process Connection

Size	Code	in	A mm	B mm	C mm
1/4	02				
1/2	04				
3/4	06	2	(51)	1 1/8 (35)	1 3/4 (44)
1	08				



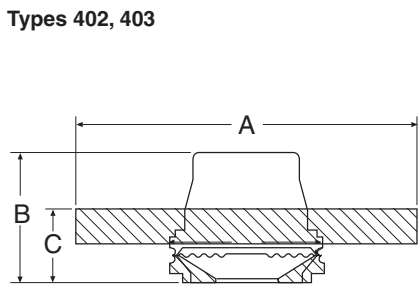
Types 311 & 312 – Female NPT Process Connection

in	A mm	B mm	C mm	D mm
2.00	(51)	2.65 (67)	1.75 (44)	0.94 (24)



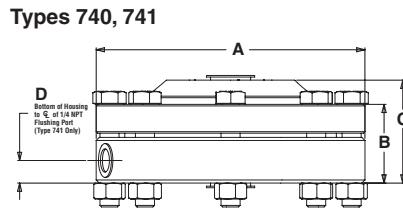
Type 330 Flush Mini-Seal – Threaded 1/4" & 1/2" Instrument Connection

in	A mm	B mm	C mm
2 1/2"	(63)	2 7/8 (73)	1 1 3/16 (46)



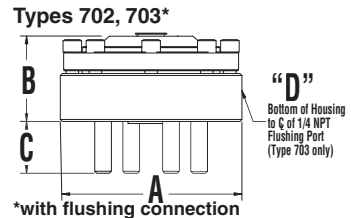
Types 402, 403 Raised Face – Flanged – 1", 1 1/2", 2"

Size	Flange Rating (#)	Type 402			Type 403				
		in	A mm	B mm	in	A mm	B mm	C mm	
1"	150	4 1/4	(108)	2 1/8 (54)	1 3/16	(30)	4 1/4	(108)	
	300 or 600	5	(127)		1 1/4	(32)	5	(127)	2 1/8 (73)
	900 or 1500	6	(152)		1 1/4	(32)	6	(152)	2 (51)
1 1/2"	150	5	(127)	2 1/8 (62)	5	(127)	6 1/4	(159)	2 1/8 (75)
	300 or 600	6 1/4	(159)		6 1/4	(159)	7	(178)	2 1/8 (75)
	900 or 1500	7	(178)		6	(152)	7	(178)	2 1/8 (75)
2"	150	6	(152)	2 1/2 (63)	6	(152)	6 1/2	(165)	2 1/8 (56)
	300 or 600	6 1/2	(165)		6 1/2	(165)	7 1/2	(191)	2 1/8 (56)
	900 or 1500	8 1/2	(216)		8 1/2	(216)	8 1/2	(216)	2 1/8 (56)



Types 740, 741 – High Displacement – Threaded – 1/4", 1/2", 3/4", 1"

in	A mm	B mm	C mm	D mm
5.25	(133)	1.5 (38)	2.0 (51)	0.437 (11)



Types 702, 703 – Flanged – 1/2" through 3"

Rating #	Size	in	A mm	in	B mm	in	C mm	in	D mm
150#	1/2"	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
	3/4"	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
	1"	5-5/16	(135)	2-1/2	(64)	1-15/32	(37)	1	(25)
703 Only, All Sizes	1-1/2"	5-5/16	(135)	2-1/2	(64)	1-15/32	(37)	1	(25)
	2"	6	(152)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
	2-1/2"	7-1/2	(191)	2-1/2	(64)	2-1/16	(52)	1	(25)
3"	7-1/2	(191)	2-3/8	(60)	2-1/16	(52)	1-1/16	(27)	

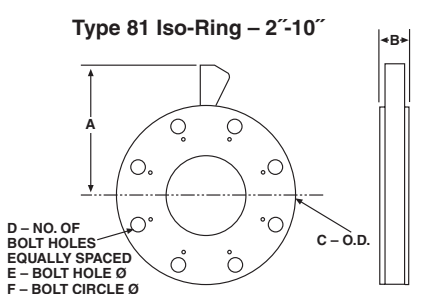
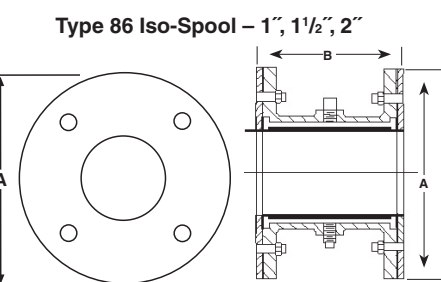
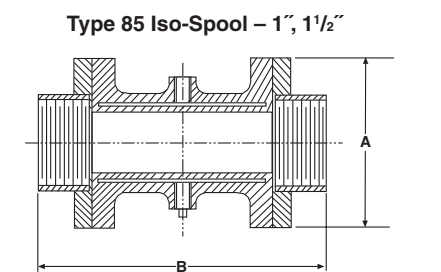
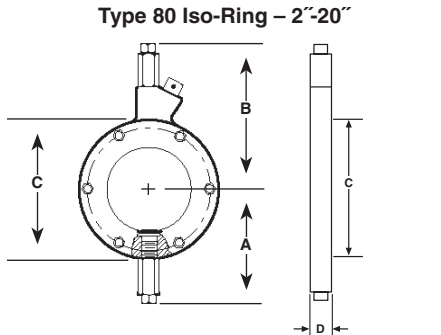
Rating #	Size	in	A mm	in	B mm	in	C mm	in	D mm
300#	1/2"	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
	3/4"	5-5/16	(135)	2-3/4	(70)	2-1/16	(52)	1-1/16	(27)
	1"	5-5/16	(135)	2-3/4	(70)	2-1/16	(52)	1	(25)
703 Only, All Sizes	1-1/2"	6-1/2	(165)	2-3/4	(70)	2-1/16	(52)	1	(25)
	2"	6-1/2	(165)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
	2-1/2"	7-1/2	(191)	2-5/8	(67)	2-1/16	(52)	1	(25)
3"	8-1/2	(216)	2-5/8	(67)	2-1/16	(52)	1-1/16	(27)	

Rating #	Size	in	A mm	in	B mm	in	C mm	in	D mm
600#	1/2"	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1-1/16	(27)
	3/4"	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1-1/16	(27)
	1"	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1	(25)
703 Only, All Sizes	1-1/2"	6-1/2	(165)	2-3/4	(70)	1-15/32	(37)	1	(25)
	2"	6-1/2	(165)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
	2-1/2"	7-1/2	(191)	2-5/8	(67)	2-1/16	(52)	1	(25)
3"	8-1/2	(216)	2-5/8	(67)	2-1/16	(52)	1-1/16	(27)	

- Threaded
 - Flanged
 - In-line
 - Saddle
- Quick-Connect
 - All Welded
 - Mini-Seal
 - Iso-Ring/Iso-Spool

Dimensions: Table A⁽¹⁾

Type	Nominal Pipe Size	A	B	C	D		Approximate Shipping Weight	
					Chlorinated PVC Thickness	Carbon Steel/316SS Thickness		
Type 800 Iso-Ring*	2"	3.69" (94mm)	5.22" (133mm)	4.22" (107mm)	2.25" (57mm)	2.00" (51mm)	3 lbs (1.35kg)	
	3"	4.31" (110mm)	5.84" (148mm)	5.47" (139mm)	2.25" (57mm)	2.00" (51mm)	6 lbs (2.7kg)	
	4"	4.72" (120mm)	6.25" (159mm)	6.28" (160mm)	1.75" (44mm)	1.50" (38mm)	8 lbs (3.6kg)	
	6"	5.78" (147mm)	7.34" (187mm)	8.44" (214mm)	1.75" (44mm)	1.50" (38mm)	12 lbs (5.4kg)	
	8"	6.84" (174mm)	8.38" (213mm)	10.53" (267mm)	1.75" (44mm)	1.50" (38mm)	16 lbs (7.3kg)	
	10"	7.97" (202mm)	9.53" (242mm)	12.81" (325mm)	1.75" (44mm)	1.50" (38mm)	20 lbs (9.7kg)	
	12"	9.00" (229mm)	10.53" (267mm)	14.84" (377mm)	N/A	1.75" (44mm)	25 lbs (11.4kg)	
	14"	10.16" (258mm)	11.72" (298mm)	17.20" (437mm)	N/A	1.75" (44mm)	50 lbs (22.7kg)	
	16"	11.19" (284mm)	12.72" (323mm)	19.22" (488mm)	N/A	1.75" (44mm)	60 lbs (27.2kg)	
	18"	12.31" (313mm)	13.88" (352mm)	21.50" (546mm)	N/A	1.75" (44mm)	70 lbs (31.8kg)	
Type 850 Iso-Spool (Female Threaded)	1"	3.56" (90mm)	7.63" (194mm)				10 lbs (4.5kg)	
	1½"	4.38" (111mm)	7.88" (200mm)				12 lbs (5.4kg)	
Type 860 Iso-Spool (Flanged**)		Class 150	Class 300				Class 150	Class 300
	1"	4.25" (108mm)	4.88" (124mm)	5.38" (136mm)			8 lbs (3.6kg)	8 lbs (3.6kg)
	1½"	5" (127mm)	6.13" (156mm)	5.38" (136mm)			10 lbs (4.5kg)	12 lbs (5.4kg)
	2"	6" (152mm)	-	5.38" (136mm)			15 lbs (6.8kg)	



*Centering gages supplied with Iso-Ring.
 **Specify FF (Flat Face Flange) or RF (Raised Face Flange) when ordering.
 (1) All dimensions ±.12" (3mm).

Dimensions: Table B

Type	Nominal Pipe Size	A	B	B (w/CPVC End Flanges)	C	D	E	F
Type 810 Iso-Ring	2"	5.06" (129mm)	2.00" (51mm)	2.25" (57mm)	6.00" (152mm)	4	.75" (19mm)	4.75" (121mm)
	3"	5.81" (148mm)	2.00" (51mm)	2.25" (57mm)	7.50" (191mm)	4	.75" (19mm)	6.00" (152mm)
	4"	6.56" (167mm)	1.50" (38mm)	1.75" (44mm)	9.00" (229mm)	8	.75" (19mm)	7.50" (191mm)
	6"	7.56" (192mm)	1.50" (38mm)	1.75" (44mm)	13.00" (330mm)	8	.88" (22mm)	9.50" (241mm)
	8"	8.75" (222mm)	1.50" (38mm)	1.75" (44mm)	13.50" (343mm)	8	.88" (22mm)	11.75" (298mm)
	10"	10.00" (254mm)	1.50" (38mm)	1.75" (44mm)	16.00" (406mm)	12	1.00" (25mm)	14.25" (362mm)

Specifications: Table C

	Iso-Ring	Iso-Spool	Code
Housing	Carbon Steel	Carbon Steel	
Assembly Flanges	Carbon Steel 316 Stainless Steel Chlorinated Polyvinyl Chloride ⁽²⁾	Carbon Steel 316 Stainless Steel Chlorinated Polyvinyl Chloride Teflon Encased ^(1,3)	B S CP CT
Inner Flexible Wall⁽⁴⁾	Buna N up to 225°F (107°C) Teflon ^(1,2) up to 350°F (177°C) Silicone ⁽³⁾ up to 450°F (232°C) Viton ⁽¹⁾ up to 350°F (177°C) White Neoprene up to 225°F (107°C) Natural Rubber up to 212°F (100°C)		E T SI Y CR NR
Fill Fluid⁽⁴⁾	Glycerin 0°F to 400°F (-5°C to 204°C) Silicone -40°F to 600°F (-29°C to 316°C) Halocarbon -70°F to 300°F (-29°C to 149°C) Food Grade Silicone 0°F to 300°F (-5°C to 149°C) Distilled Water 45°F to 180°F (-5°C to 82°C) Ethyl Glycol and Water -30°F to 220°F (-34°C to 105°C) Propylene Glycol -50°F to 200°F (-45°C to 93°C)		CG CK CF CZ FJ CT CV

(1) Trademark of E. I. DuPont de Nemours and Company. (2) Iso-Spool only.
 (3) Not available in sizes 12" or larger. (4) Temperature limits of both wall and fill fluid must not be exceeded.