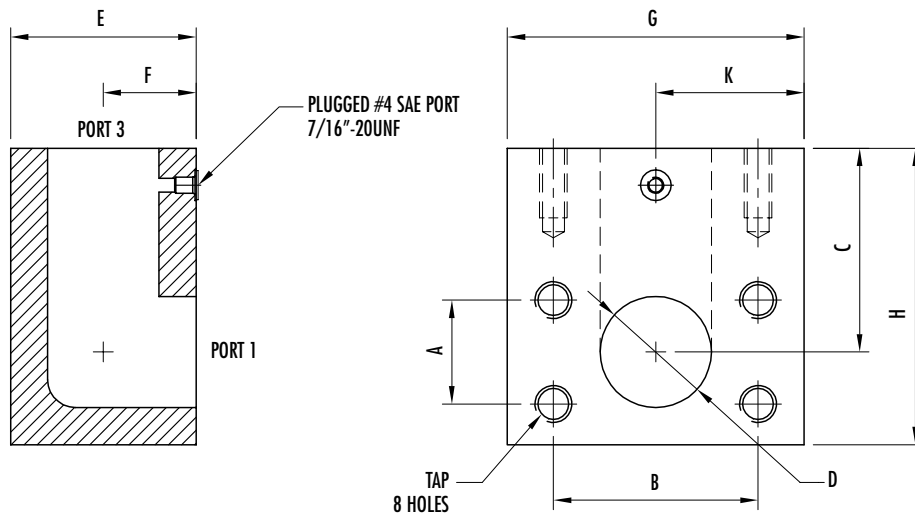




Block Elbow

SAE Flange Style



BE34 Block Elbow - SAE Code 61 Flat Face With Tapped Holes

Complete With #4 SAE Port (Plugged)

Size	Block Elbow Part No.	Dimensions (in)									Tap UNC-2B	WT. lbs/pc	Working Pressure PSI (bar)
		A	B	C	D	E	F	G	H	K			
1/2"	BE34-050-*	0.69	1.50	1.88	0.50	2.00	1.00	2.50	2.50	1.25	5/16"-18	3.10	5000 (350)
3/4"	BE34-075-*	0.88	1.88	2.25	0.75	2.00	1.00	3.00	3.25	1.50	3/8"-16	4.78	5000 (350)
1"	BE34-100-*	1.03	2.06	2.25	0.94	2.00	1.00	3.00	3.25	1.50	3/8"-16	4.52	5000 (350)
1 1/4"	BE34-125-*	1.19	2.31	2.75	1.25	2.25	1.13	3.00	4.00	1.50	7/16"-14	5.78	4000 (275)
1 1/2"	BE34-150-*	1.41	2.75	2.75	1.50	2.50	1.25	4.00	4.00	2.00	1/2"-13	8.42	3000 (210)
2"	BE34-200-*	1.69	3.06	3.00	1.94	3.00	1.50	4.00	4.50	2.00	1/2"-13	10.66	3000 (210)
2 1/2"	BE34-250-*	2.00	3.50	3.25	2.38	3.50	1.75	5.00	5.00	2.50	1/2"-13	17.65	2500 (175)
3"	BE34-300-*	2.44	4.19	3.75	2.88	4.00	2.00	5.50	6.00	2.75	5/8"-11	24.95	2000 (140)

BE64 Block Elbow - SAE Code 62 Flat Face With Tapped Holes

Complete With #4 SAE Port (Plugged)

Size	Block Elbow Part No.	Dimensions (in)									Tap UNC-2B	WT. lbs/pc	Working Pressure PSI (bar)
		A	B	C	D	E	F	G	H	K			
1/2"	BE64-050-*	0.72	1.59	1.88	0.50	2.00	1.00	2.50	2.50	1.25	5/16"-18	3.10	6000 (420)
3/4"	BE64-075-*	0.94	2.00	2.25	0.75	2.00	1.00	3.00	3.25	1.50	3/8"-16	4.74	6000 (420)
1"	BE64-100-*	1.09	2.25	2.50	0.94	2.25	1.13	3.00	4.00	1.50	7/16"-14	6.42	6000 (420)
1 1/4"	BE64-125-*	1.25	2.63	2.75	1.25	2.50	1.25	4.00	4.00	2.00	1/2"-13	9.18	6000 (420)
1 1/2"	BE64-150-*	1.44	3.13	3.00	1.50	3.00	1.50	4.00	4.50	2.00	5/8"-11	11.66	6000 (420)
2"	BE64-200-*	1.75	3.81	3.38	1.94	3.00	1.50	5.00	5.00	2.50	3/4"-10	14.97	6000 (420)

* INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING FOR #4 SAE PLUG

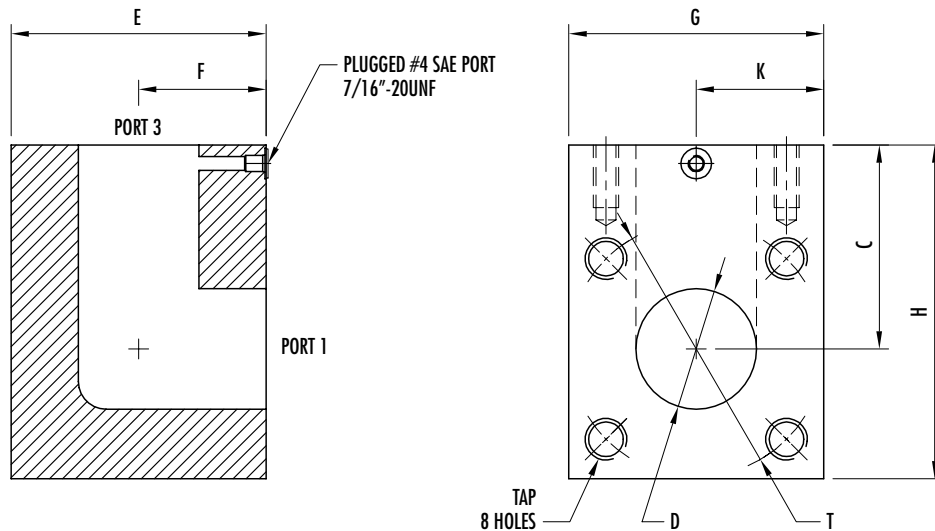
• OTHER BLOCK ELBOWS ARE AVAILABLE (CONSULT FACTORY)

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Block Elbow

ISO 6164 Flange Style



BE74 Block Elbow - ISO 6164 Flat Face With Tapped Holes Complete With #4 SAE Port (Plugged)

Size	Block Elbow Part No.	Dimensions (in)								Tap UNC-2B	WT. lbs/pc	Working Pressure PSI (bar)
		T	C	D	E	F	G	H	K			
2 1/2"	BE74-250-*	4.65	4.13	2.38	5.00	2.50	5.00	6.50	2.50	3/4"-10	36.82	5800 (400)
3"	BE74-300-*	5.71	5.00	2.88	6.00	3.00	6.00	8.00	3.00	1"-8	65.40	5800 (400)
4"	BE74-400-*	6.89	5.50	3.50	7.00	3.50	7.00	9.00	3.50	1 1/8"-7	92.60	5800 (400)

* INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING FOR #4 SAE PLUG

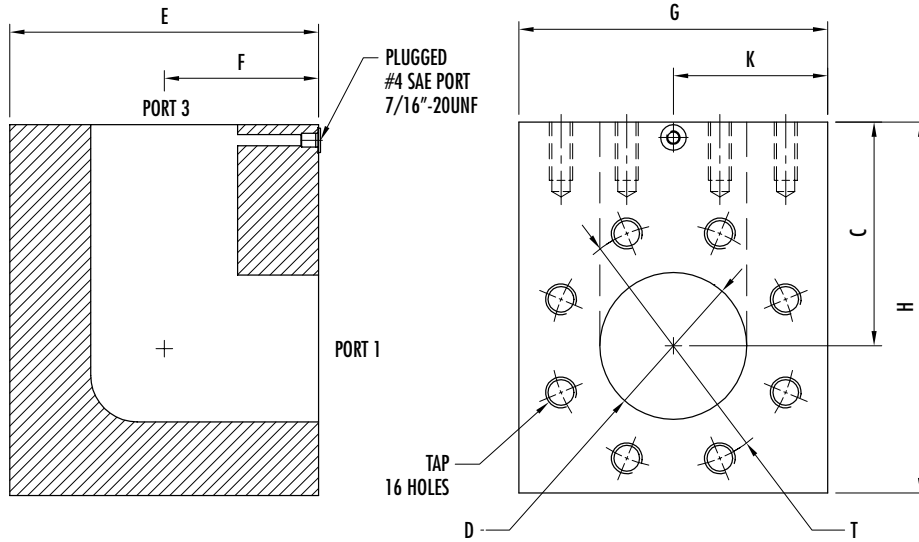
• OTHER BLOCK ELBOWS ARE AVAILABLE (CONSULT FACTORY)

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Block Elbow

TMI® 8-Bolt Flange Style



BE48 Block Elbow - TMI® 8-Bolt Flat Face With Tapped Holes

Complete With #4 SAE Port (Plugged)

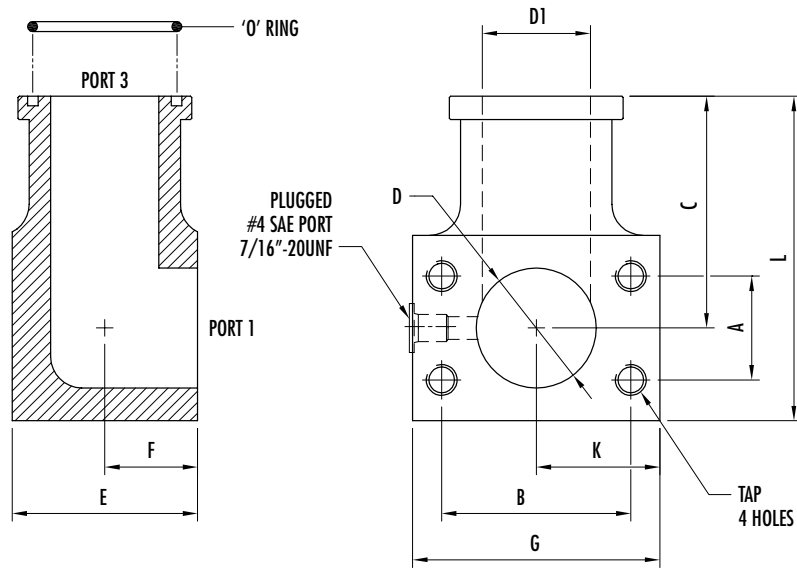
Size	Block Elbow Part No.	Dimensions (in)								Tap UNC-2B	WT. lbs/pc	Working Pressure PSI (bar)
		T	C	D	E	F	G	H	K			
5"	BE48-500-*	7.88	7.13	4.00	9.75	4.88	9.75	12.00	4.88	1"-8	274.50	4000 (275)
6"	BE48-600-*	9.65	8.00	4.90	11.88	5.94	11.88	14.00	5.94	1 1/8"-7	475.10	3700 (255)
8"	BE48-800-*	12.40	10.25	6.81	15.00	7.50	15.00	18.00	7.50	1 1/2"-6	980.00	3500 (240)

- FOR SIZES 10" OR LARGER CONSULT FACTORY
 - * INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING FOR #4 SAE PLUG
 - OTHER BLOCK ELBOWS ARE AVAILABLE (CONSULT FACTORY)
- MATERIAL:** CARBON STEEL, PRIME PAINTED, (STAINLESS STEEL AVAILABLE)



Split Flange Elbow

SAE Code 61 Flange Style - Body Only



SFE34 Split Flange Elbow - SAE Code 61 Flat Face With Tapped Holes

Complete With Buna 'O' Ring (Standard) and #4 SAE Port (Plugged)

Size	Elbow Part No.	Dimensions (in)										Tap UNC-2B	'O' Ring (Buna) Part No.	WT. lbs/pc	Working Pressure PSI (bar)
		A	B	C	D	D1	E	F	G	K	L				
1/2"	SFE34-050-*	0.69	1.50	2.50	0.50	0.38	2.00	1.00	2.50	1.25	3.50	5/16"-18	OR*-2-210	2.87	5000 (350)
3/4"	SFE34-075-*	0.88	1.88	2.75	0.75	0.63	2.00	1.00	3.00	1.50	3.75	3/8"-16	OR*-2-214	3.42	5000 (350)
1"	SFE34-100-*	1.03	2.06	2.75	0.94	0.88	2.00	1.00	3.00	1.50	3.75	3/8"-16	OR*-2-219	3.45	5000 (350)
1 1/4"	SFE34-125-*	1.19	2.31	3.13	1.25	1.13	2.25	1.13	3.00	1.50	4.25	7/16"-14	OR*-2-222	3.89	4000 (275)
1 1/2"	SFE34-150-*	1.41	2.75	3.25	1.50	1.38	2.50	1.25	4.00	2.00	4.50	1/2"-13	OR*-2-225	6.11	3000 (210)
2"	SFE34-200-*	1.69	3.06	3.50	1.94	1.88	3.00	1.50	4.00	2.00	5.00	1/2"-13	OR*-2-228	8.00	3000 (210)
2 1/2"	SFE34-250-*	2.00	3.50	4.00	2.38	2.38	3.50	1.75	4.50	2.25	5.75	1/2"-13	OR*-2-232	11.50	2500 (175)
3"	SFE34-300-*	2.44	4.19	4.50	2.88	2.88	4.00	2.00	5.50	2.75	6.50	5/8"-11	OR*-2-237	18.04	2000 (140)

* INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING

- OTHER SPLIT FLANGE ELBOWS ARE AVAILABLE (CONSULT FACTORY)
- TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G7
- FOR SPLIT FLANGES REFERENCE PAGE N20

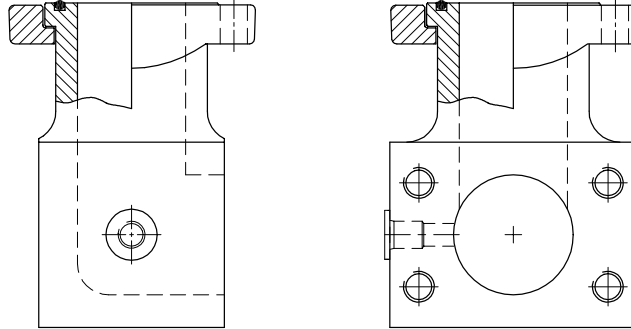
MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Split Flange Elbow Assembly

SAE Code 61 Flange Style

Typical A/SFE34 Assembly



COMPLETE ASSEMBLY CONSISTS OF:

- SAE CODE 61 SPLIT FLANGE ELBOW BODY (REF. PAGE G6)
- ONE SET (2 HALVES) SAE CODE 61 SPLIT FLANGES (REF. PAGE N20)
- ONE (1) BUNA 'O' RING (STANDARD)
- ONE (1) COMPONENT BOLT KIT

A/SFE34 Split Flange Elbow - SAE Code 61 Assembly

Size	Complete Assembly Part No.	WT. (Assembly) lbs/pc
1/2"	A/SFE34-050-*	3.25
3/4"	A/SFE34-075-*	3.99
1"	A/SFE34-100-*	4.10
1 1/4"	A/SFE34-125-*	4.78
1 1/2"	A/SFE34-150-*	7.55
2"	A/SFE34-200-*	9.56
2 1/2"	A/SFE34-250-*	13.64
3"	A/SFE34-300-*	21.69

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RING

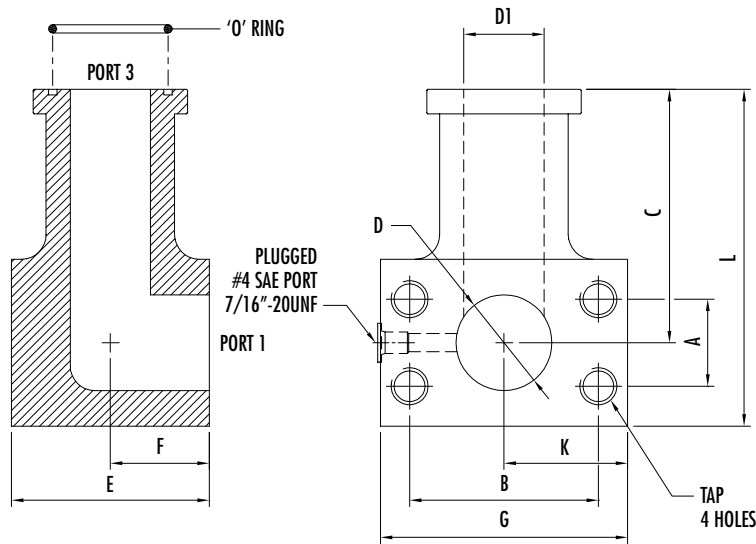
- ASSEMBLY WORKING PRESSURE RATINGS ARE SUBJECT TO THE LESSER OF THE FLANGE OR BODY RATINGS
- SEE REFERENCE PAGES INDICATED ABOVE FOR PRESSURE RATINGS

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Split Flange Elbow

SAE Code 62 Flange Style - Body Only



SFE64 Split Flange Elbow - SAE Code 62 Flat Face With Tapped Holes

Complete With Buna 'O' Ring and #4 SAE Port (Plugged)

Size	Elbow Part No.	Dimensions (in)										Tap UNC-2B	'O' Ring (Buna) Part No.	WT. lbs/pc	Working Pressure PSI (bar)
		A	B	C	D	D1	E	F	G	K	L				
1/2"	SFE64-050-*	0.72	1.59	2.75	0.50	0.38	2.00	1.00	2.50	1.25	3.75	5/16"-18	OR*-2-210	2.91	6000 (420)
3/4"	SFE64-075-*	0.94	2.00	3.00	0.75	0.63	2.00	1.00	3.00	1.50	4.00	3/8"-16	OR*-2-214	3.53	6000 (420)
1"	SFE64-100-*	1.09	2.25	3.38	0.94	0.88	2.25	1.13	3.00	1.50	4.50	7/16"-14	OR*-2-219	4.40	6000 (420)
1 1/4"	SFE64-125-*	1.25	2.63	3.50	1.25	1.13	2.50	1.25	4.00	2.00	4.75	1/2"-13	OR*-2-222	6.52	6000 (420)
1 1/2"	SFE64-150-*	1.44	3.13	4.25	1.50	1.38	3.00	1.50	4.00	2.00	5.75	5/8"-11	OR*-2-225	9.40	6000 (420)
2"	SFE64-200-*	1.75	3.81	4.75	1.94	1.88	3.00	1.50	5.00	2.50	6.25	3/4"-10	OR*-2-228	11.78	6000 (420)

- * INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING
- OTHER SPLIT FLANGE ELBOWS ARE AVAILABLE (CONSULT FACTORY)
- TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G9
- FOR SPLIT FLANGES REFERENCE PAGE N20

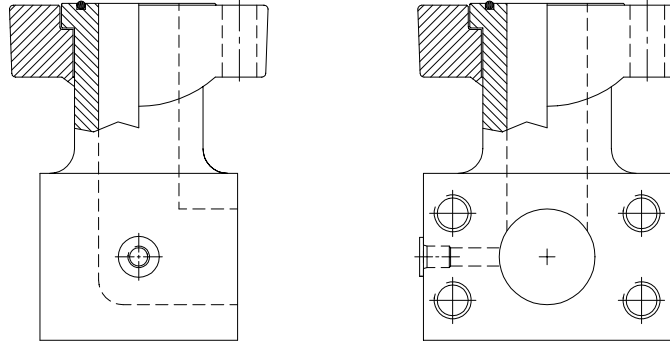
MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Split Flange Elbow Assembly

SAE Code 62 Flange Style

Typical A/SFE64 Assembly



COMPLETE ASSEMBLY CONSISTS OF:

- SAE CODE 62 SPLIT FLANGE ELBOW BODY (REF. PAGE G8)
- ONE SET (2 HALVES) SAE CODE 62 SPLIT FLANGES (REF. PAGE N20)
- ONE (1) BUNA 'O' RING (STANDARD)
- ONE (1) COMPONENT BOLT KIT

A/SFE64 Split Flange Elbow - SAE Code 62 Assembly

Size	Complete Assembly Part No.	WT. (Assembly) lbs/pc
1/2"	A/SFE64-050-*	3.46
3/4"	A/SFE64-075-*	4.46
1"	A/SFE64-100-*	5.86
1 1/4"	A/SFE64-125-*	8.78
1 1/2"	A/SFE64-150-*	13.31
2"	A/SFE64-200-*	18.26

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RING

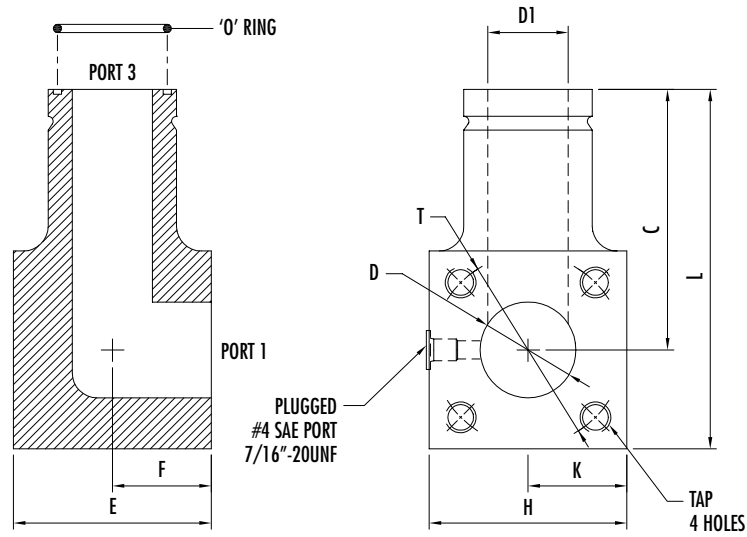
- ASSEMBLY WORKING PRESSURE RATINGS ARE SUBJECT TO THE LESSER OF THE FLANGE OR BODY RATINGS
- SEE REFERENCE PAGES INDICATED ABOVE FOR PRESSURE RATINGS

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Retain Ring Flange Elbow

ISO 6164 Flange Style - Body Only



RE74 Retain Ring Flange Elbow - ISO 6164 Flat Face With Tapped Holes

Complete With Buna 'O' Ring (Standard) and #4 SAE Port (Plugged)

Size	Elbow Part No.	Dimensions (in)									Tap UNC-2B	'O' Ring (Buna) Part No.	WT. lbs/pc	Working Pressure PSI (bar)
		T	C	D	D1	E	F	H	K	L				
2 1/2"	RE74-250-*	4.65	6.75	2.38	2.25	5.00	2.50	5.00	2.50	9.25	3/4"-10	OR*-2-232	31.37	5800 (400)
3"	RE74-300-*	5.71	8.00	2.88	2.75	6.00	3.00	6.00	3.00	11.00	1"-8	OR*-2-237	44.26	5800 (400)
4"	RE74-400-*	6.89	8.50	3.50	3.25	7.00	3.50	7.00	3.50	12.00	1 1/8"-7	OR*-2-241	81.02	5800 (400)

* INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING

♦ MUST BE USED WITH OSHS 'O' RING SEAL RETAINER FOR CONNECTION TO STAUFF BALL VALVE (BBVG27), REFERENCE OSHS-400 PAGE G19

• OTHER RETAIN RING FLANGE ELBOWS ARE AVAILABLE (CONSULT FACTORY)

• TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G11

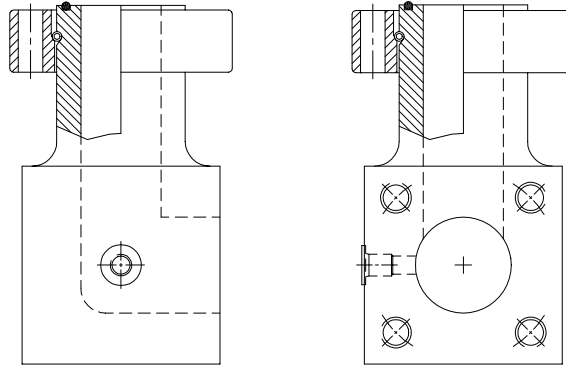
MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Retain Ring Flange Elbow Assembly

ISO 6164 Flange Style

Typical A/RE74 Assembly



COMPLETE ASSEMBLY CONSISTS OF:

- ISO 6164 RETAIN RING FLANGE ELBOW BODY (REF. PAGE G10)
- ONE (1) ISO 6164 RETAIN RING FLANGE (REF. PAGE C10)
- ONE (1) RETAIN RING
- ONE (1) BUNA 'O' RING (STANDARD)

A/RE74 Retain Ring Flange Elbow - ISO 6164 Assembly

Size	Complete Assembly Part No.	WT. (Assembly) lbs/pc
2 1/2"	A/RE74-250-*	36.16
3"	A/RE74-300-*	52.14
4"	A/RE74-400-*	95.43

* INSERT 'V' TO INDICATE OPTIONAL VITON 'O' RING

- ♦ MUST BE USED WITH OSHS 'O' RING SEAL RETAINER FOR CONNECTION TO STAUFF BALL VALVE (BBVG27), REFERENCE OSHS-400 PAGE G19
- ASSEMBLY WORKING PRESSURE RATINGS ARE SUBJECT TO THE LESSER OF THE FLANGE OR BODY RATINGS
- SEE REFERENCE PAGES INDICATED ABOVE FOR PRESSURE RATINGS

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Flare Flange Elbow Assembly

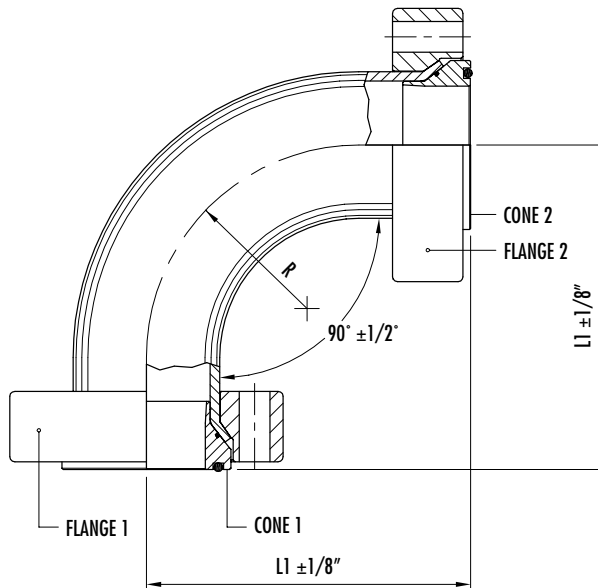
Short Radius Bent Elbow

Typical A/FFE Assembly

For field bent pipe assemblies
Ref. page B22

COMPLETE ASSEMBLY CONSISTS OF:

- FLARE FLANGE 90° ELBOW BODY
- TWO (2) FLARE FLANGES
- TWO (2) CONES
(REF. PGS B12-B15 FOR TYPE OF CONE)
- ENDS SEALED WITH 6 MIL HEAT SHRINK MATERIAL



PART NO. (EXAMPLE): A/FFE - SCH40-050 - FC34 - FC34 - CO - CO

FFE Flare Flange Elbow Body

Size	Dimensions (in)		WT. *(Body Only) lbs/pc		Working Pressure *(Body Only) PSI (bar)	
	L1	R	SCH 40	SCH 80	SCH 40	SCH 80
1/2"	5.00	2.625	0.63	0.81	6000 (420)	6000 (420)
3/4"	5.00	3.125	0.81	1.06	5000 (350)	6000 (420)
1"	5.00	2.625	1.24	1.60	4700 (325)	6000 (420)
1 1/4"	6.00	3.375	2.00	2.63	3900 (270)	6000 (420)
1 1/2"	6.50	3.815	2.57	3.45	3500 (240)	6000 (420)
2"	8.00	4.750	4.23	5.82	2900 (200)	5800 (400)
2 1/2"	11.00	7.500	9.08	12.01	2600 (180)	4500 (310)
3"	12.50	9.000	13.30	18.02	2300 (160)	3900 (270)

* BODY ONLY CONSISTS OF BENT FLARED PIPE SECTION AND CONES. FOR TOTAL ASSEMBLY WEIGHT, ADD APPROPRIATE FLANGE WEIGHTS TO BODY WEIGHT.

- TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G13
- OTHER RADII AVAILABLE (CONSULT FACTORY)

MATERIAL: CARBON STEEL, (STAINLESS STEEL AVAILABLE)

• REDUCING FLANGES AND CONES ARE AVAILABLE (REFERENCE PAGES B16-B19)

FOR FLARE FLANGE ASSEMBLIES UTILIZING REDUCING FLANGES AND CONES ADD (R) TO FLANGE AND CONE CODE NUMBERS.

ie. SAE code 61 flare flange with clearance holes - code number FC34 would be FCR34-(flange size)

REDUCING PART NO. (EXAMPLE): A/FFE - SCH40-050 - FCR34-075 - FC34 - COR - CO

Consult factory for ordering assistance



Flare Flange Elbow Assembly

Complete Assembly Part Number

		Code	A	/	FFE	-	Body & Cone Material	-	Size & Schedule	-	Flange 1	-	Flange 2	-	Cone 1	-	Cone 2	-	Options	
Assembly		A																		
Flare Flange Elbow		FFE																		
Body & Cone Material Carbon Steel (Standard) Ref. page (G12)	No Designation Required																			
Body & Cone Material Stainless Steel (Optional) Ref. page (B7)	TMP304SS	304																		
	TMP316SS	316																		
	†TMP2205SS	2205																		
Body Size & Schedule	1/2"	SCH40-050 SCH80-050																		
	3/4"	SCH40-075 SCH80-075																		
	1"	SCH40-100 SCH80-100																		
	1 1/4"	SCH40-125 SCH80-125																		
	1 1/2"	SCH40-150 SCH80-150																		
	2"	SCH40-200 SCH80-200																		
	2 1/2"	SCH40-250 SCH80-250																		
	3"	SCH40-300 SCH80-300																		
	Flange Type Carbon Steel Yellow Zinc Dicromate Plated Ref. pages (B8-B11)	FFC34 SAE Code 61 W/Clearance Holes	FC34																	
*FFT34 SAE Code 61 W/Tapped Holes		FT34																		
FFC64 SAE Code 62 W/Clearance Holes		FC64																		
*FFT64 SAE Code 62 W/Tapped Holes		FT64																		
FFC74 ISO 6164 W/Clearance Holes		FC74																		
**FFC49 TMI® 9-Bolt W/Clearance Holes		FC49																		
Cone Type Ref. pages (B12-B15)	Cone - Flat Face	CF																		
	Cone - 'O' Ring Face	CO																		
Options	Viton	V																		
	Painted (Specify)	P																		
Complete Stainless Steel Assembly: (including flanges)		SS																		

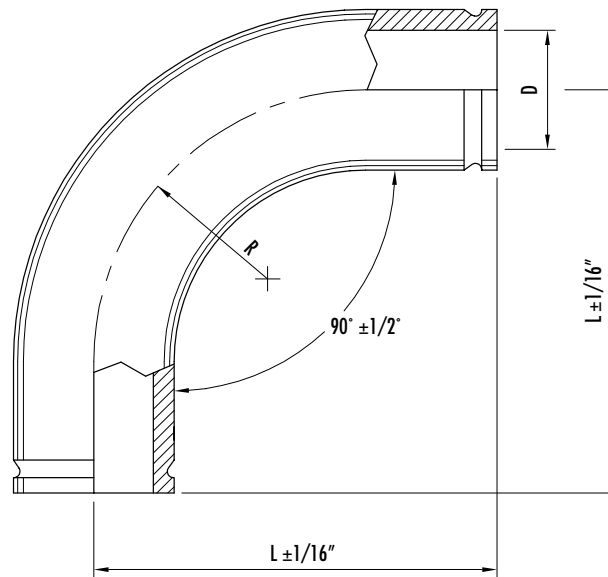
- † TMP2205SS PIPE IS ONLY AVAILABLE IN 1 1/4" - 2" SCHEDULE 80 SIZES
 - ** FOR USE ONLY WITH 9-BOLT BALL VALVE CONNECTION (REF. PAGE P10)
 - * NORMALLY USED FOR CONNECTION TO SPLIT FLANGE TYPE ENDS
- PART NO. (EXAMPLE): A/FFE - SCH40-050 - FC34 - FC34 - CO - CO**

- ASSEMBLY WORKING PRESSURE RATINGS ARE SUBJECT TO THE LESSER OF THE FLANGE OR BODY RATINGS
- SEE REFERENCE PAGES INDICATED ABOVE FOR PRESSURE RATINGS
- FOR BOLT KITS - REFERENCE SECTION R



Retain Ring Flange Elbow

Long Radius Bent Elbow - Body Only



RFE Retain Ring Flange Elbow - Body Only

Size	Body Only Part No.	Dimensions (in)			WT. (Body Only) lbs/pc	Working Pressure (Body Only) PSI (bar)
		L	R	D		
1 1/2"	RFE-150	12.50	8.25	1.54	11.50	6000 (420)
2"	RFE-200	14.00	9.50	1.93	15.59	6000 (420)
2 1/2"	RFE-250	17.00	12.50	2.36	26.67	5800 (400)
3"	RFE-300	20.00	15.00	2.88	45.80	5800 (400)
4"	RFE-400	25.00	20.00	3.35	83.51	5800 (400)
5"	RFE-500	25.00	20.00	4.06	121.49	4000 (275)
6"	RFE-600	30.00	24.00	4.90	206.32	3700 (255)
8"	RFE-800	40.00	32.00	6.81	391.35	3500 (240)

- OTHER RADII AVAILABLE (CONSULT FACTORY)
- TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G15

MATERIAL: CARBON STEEL, (STAINLESS STEEL AVAILABLE - CONSULT FACTORY)



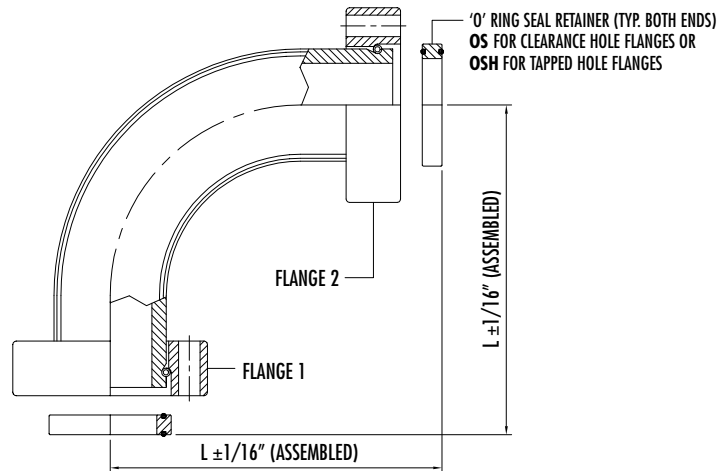
Retain Ring Flange Elbow Assembly

Complete Assembly Part Number

Typical A/RFE Assembly

COMPLETE ASSEMBLY CONSISTS OF:

- ONE (1) RETAIN RING FLANGE ELBOW BODY (REF. PAGE G14)
- TWO (2) RETAIN RING FLANGES (REF. PAGES C8-C12)
- TWO (2) RETAIN RINGS
- TWO (2) 'O' RING SEAL RETAINERS (REF. PAGES G18-G19)
- ENDS SEALED WITH 6 MIL HEAT SHRINK MATERIAL (1 1/2" - 3")
- ENDS SEALED WITH POSITIVE CLOSURE (4" - 8")



Code		A	/	RFE	-	Body Material	-	Size	-	Flange 1	-	Flange 2	-	Options
Assembly		A												
Retain Ring Flange Elbow		RFE												
Body Material Carbon Steel (Standard)	No Designation Required													
Body Material Stainless Steel (Optional) Ref. page (C7)	TMP304SS	304												
	TMP316SS	316												
Body Size	1 1/2"	150												
	2"	200												
	2 1/2"	250												
	3"	300												
	4"	400												
	5"	500												
	6"	600												
	8"	800												
Flange Type Carbon Steel Yellow Zinc Dicromate Plated Ref. pages (C8-C12)	RFC34 SAE Code 61 W/Clearance Holes	FC34												
	*RFT34 SAE Code 61 W/Tapped Holes	FT34												
	RFC64 SAE Code 62 W/Clearance Holes	FC64												
	*RFT64 SAE Code 62 W/Tapped Holes	FT64												
	RFC74 ISO 6164 W/Clearance Holes	FC74												
	RFAC48 TMI® 8-Bolt W/Clearance Holes	FAC48												
	**RFC49 TMI® 9-Bolt W/Clearance Holes	FC49												
	**RFAC49 TMI® 9-Bolt W/Clearance Holes	FAC49												
Options	Viton	V												
	Painted (Specify)	P												
♦ Complete Stainless Steel Assembly: (including flanges, 'O' Ring seal retainers)		SS												

L Dimension will vary if OSH 'O' Ring Seal Retainer is used. (reference page G19)

Size	Dimensions (in)
	L (OS/OSA)
1 1/2"	13.00
2"	14.50
2 1/2"	18.00
3"	21.00
4"	26.00
5"	26.50
6"	31.50
8"	41.50

- ♦ STAINLESS STEEL IS AVAILABLE (CONSULT FACTORY)
- ** FOR USE ONLY WITH 9-BOLT BALL VALVE CONNECTION (REFERENCE PAGE P10)
- * NORMALLY USED FOR CONNECTION TO SPLIT FLANGE TYPE ENDS (SUPPLIED WITH OSH STYLE 'O' RING SEAL RETAINER)

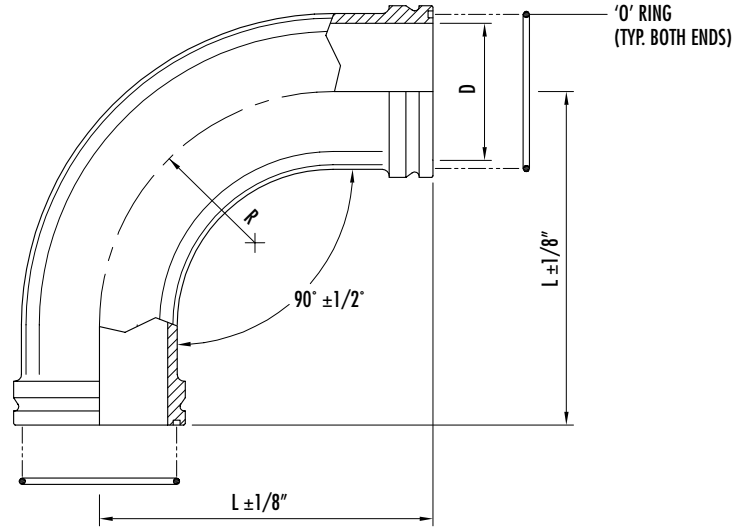
PART NO. (EXAMPLE):
A/RFE - 250 - FC34 - FC34

- ASSEMBLY WORKING PRESSURE RATINGS ARE SUBJECT TO THE LESSER OF THE FLANGE OR BODY RATINGS
- SEE REFERENCE PAGE INDICATED ABOVE FOR PRESSURE RATINGS
- FOR BOLT KITS - REFERENCE SECTION R



Low Pressure Retain Ring Flange Elbow

Body Only



LRE Low Pressure Retain Ring Flange Elbow - Body Only (segmentally welded)

Complete with Buna 'O' Rings (Standard)

Size	Elbow Body Part No.	Dimensions (in)			'O' Ring (Buna) Part No.	WT. lbs/pc	Working Pressure PSI (bar)
		L	R	D			
2 1/2"	LRE-250-*	5.22	3.75	2.47	OR*-2-232	5.29	750 (52)
3"	LRE-300-*	6.17	4.50	3.07	OR*-2-237	7.85	750 (52)
4"	LRE-400-*	7.67	6.00	4.03	OR*-2-245	13.24	750 (52)
5"	LRE-500-*	9.36	7.50	5.05	OR*-2-253	22.14	750 (52)
6"	LRE-600-*	11.06	9.00	6.07	OR*-2-259	35.37	700 (48)
8"	LRE-800-*	14.45	12.00	7.98	OR*-2-372	69.95	600 (40)

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RINGS

- TO ORDER COMPLETE ASSEMBLY REFERENCE PAGE G17
- ELBOW BODY INCLUDES BUTT WELD ADAPTERS (REF. PAGES D10-D13)

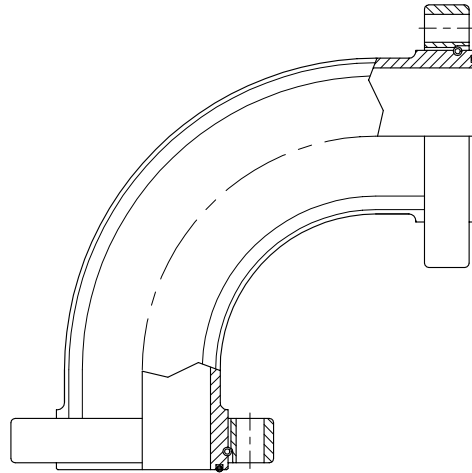
MATERIAL: CARBON STEEL, (STAINLESS STEEL AVAILABLE)



Low Pressure Retain Ring Flange Elbow Assembly

Complete Assembly Part Number

Typical A/LRE Assembly



COMPLETE ASSEMBLY CONSISTS OF:

- ONE (1) LOW PRESSURE RETAIN RING FLANGE ELBOW BODY
- TWO (2) LOW PRESSURE RETAIN RING FLANGES (REF. PAGES D8-D9)
- TWO (2) LOW PRESSURE RETAIN RINGS
- TWO (2) BUNA 'O' RINGS (STANDARD)
- ENDS SEALED WITH 6 MIL HEAT SHRINK MATERIAL (2 1/2" & 3")
- ENDS SEALED WITH POSITIVE CLOSURE (4"-8")

A/LRE Low Pressure Retain Ring Flange Elbow Assembly

Size	Complete Assembly Part No.	WT. (Assembly) lbs/pc	Working Pressure PSI (bar)
2 1/2"	A/LRE-250-*	9.62	750 (52)
3"	A/LRE-300-*	11.65	750 (52)
4"	A/LRE-400-*	19.85	750 (52)
5"	A/LRE-500-*	30.75	750 (52)
6"	A/LRE-600-*	45.17	700 (48)
8"	A/LRE-800-*	89.20	600 (40)

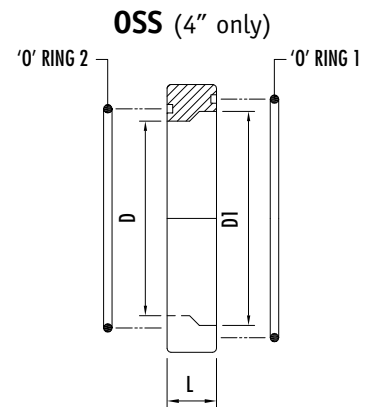
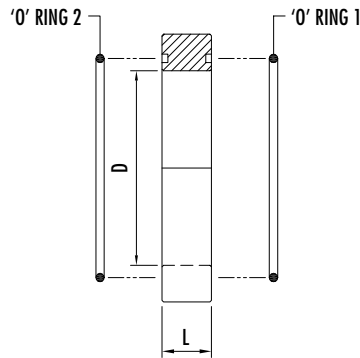
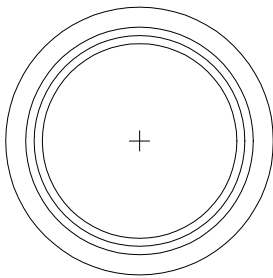
* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RINGS

MATERIAL: CARBON STEEL, (STAINLESS STEEL AVAILABLE)



'O' Ring Seal Retainer

OS/OSA



OS 'O' Ring Seal Retainer for Retain Ring Pipe - 1 1/2" - 4"

Complete with Buna 'O' Rings (Standard)

OSA 'O' Ring Seal Retainer for Retain Ring Pipe - 5" - 8"

Complete with Buna 'O' Rings (Standard)

Size	Retainer Part No.	Dimensions (in)		'O' Rings 1&2 (Buna) Part No.	WT. lbs/pc
		D	L		
1 1/2"	OS-150-*	1.54	0.50	OR*-3-924	0.24
2"	OS-200-*	1.93	0.50	OR*-3-928	0.29
2 1/2"	OS-250-*	2.36	1.00	OR*-2-232	0.53
3"	OS-300-*	2.88	1.00	OR*-2-237	0.78
4"	OS-400-*	3.35	1.00	OR*-2-241	1.22
5"	OSA-500-*	4.06	1.50	OR*-2-353	5.73
6"	OSA-600-*	4.90	1.50	OR*-2-359	6.80
8"	OSA-800-*	6.81	1.50	OR*-2-368	10.34

• FOR SIZES 10" OR LARGER CONSULT FACTORY

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RINGS

♦ CANNOT BE USED FOR CONNECTION TO STAUFF BALL VALVE (BBVG27), REFERENCE OSS-400 (SEE BELOW)

OSS 'O' Ring Seal Retainer for Retain Ring Pipe - 4"

For use with Retain Ring Connection to 9-Bolt Ball Valve BBVG27 (reference page P10)

Complete with Buna 'O' Rings (Standard)

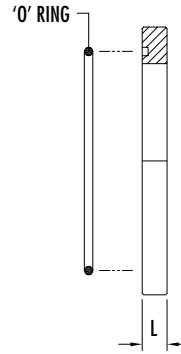
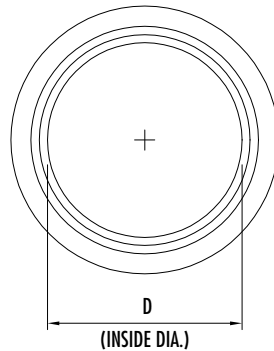
Size	Retainer Part No.	Dimensions (in)			'O' Ring 1 (Buna) Part No.	'O' Ring 2 (Buna) Part No.	WT. lbs/pc
		D	D1	L			
4"	OSS-400-*	3.35	3.80	1.00	OR*-2-243	OR*-2-241	1.22

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RINGS

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



'O' Ring Seal Retainer



OSH 'O' Ring Seal Retainer for Retain Ring Pipe Complete with Buna 'O' Ring (Standard)

Size	Retainer Part No.	Dimensions (in)		'O' Ring (Buna) Part No.	WT. lbs/pc
		D	L		
1 1/2"	OSH-150-*	1.54	0.25	OR*-3-924	0.12
2"	OSH-200-*	1.93	0.25	OR*-3-928	0.15
2 1/2"	OSH-250-*	2.36	0.50	OR*-2-232	0.26
3"	OSH-300-*	2.88	0.50	OR*-2-237	0.39
4"	OSH-400-*	3.35	0.50	OR*-2-241	0.60

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RING

♦ CANNOT BE USED FOR CONNECTION TO STAUFF BALL VALVE (BBVG27), REFERENCE OSHS-400 (SEE BELOW)

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)

OSHS 'O' Ring Seal Retainer for Retain Ring Component - 4"

For use with Retain Ring Component Connection to 9-Bolt Ball Valve BBVG27 (reference page P10)
Complete with Buna 'O' Ring (Standard)

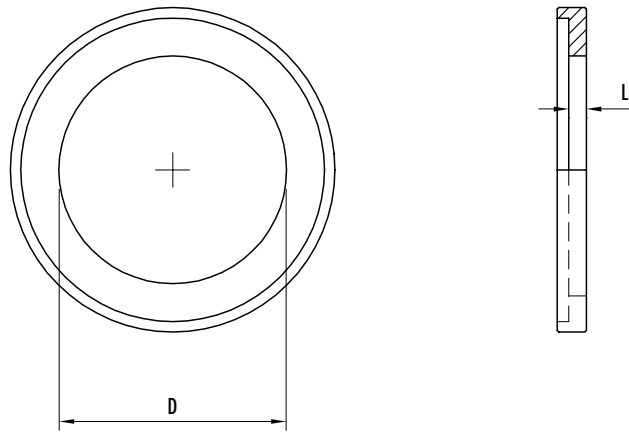
Size	Retainer Part No.	Dimensions (in)		'O' Ring (Buna) Part No.	WT. lbs/pc
		D	L		
4"	OSHS-400-*	3.80	0.50	OR*-2-243	0.60

* INSERT ' V ' TO INDICATE OPTIONAL VITON 'O' RINGS

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



'O' Ring Connector Plate



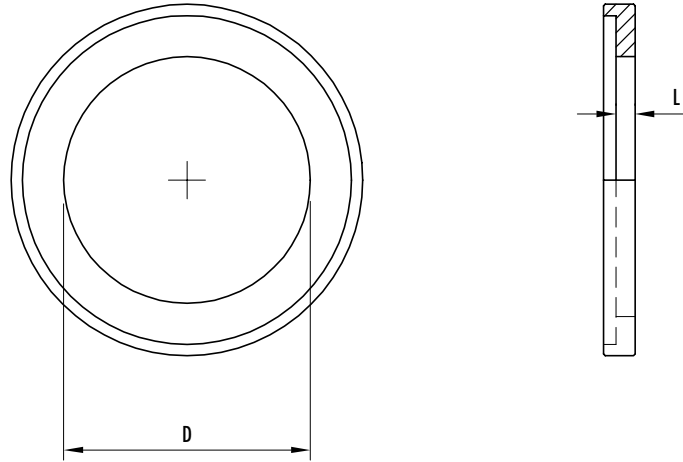
OCP 'O' Ring Connector Plate

Size	Connector Plate Part No.	Dimensions (in)		WT. lbs/pc
		D	L	
1/2"	OCP-050	0.50	0.13	0.04
3/4"	OCP-075	0.75	0.13	0.06
1"	OCP-100	0.94	0.13	0.07
1 1/4"	OCP-125	1.20	0.13	0.08
1 1/2"	OCP-150	1.50	0.13	0.11
2"	OCP-200	1.94	0.13	0.13
2 1/2"	OCP-250	2.36	0.13	0.17
3"	OCP-300	2.88	0.13	0.25
4"	OCP-400	3.35	0.13	0.34

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



Low Pressure 'O' Ring Connector Plate



LOCP Low Pressure 'O' Ring Connector Plate

Size	Connector Plate Part No.	Dimensions (in)		WT. lbs/pc
		D	L	
2 1/2"	LOCP-250	2.47	0.13	0.15
3"	LOCP-300	3.07	0.13	0.21
4"	LOCP-400	4.03	0.13	0.32
5"	LOCP-500	5.05	0.19	0.58
6"	LOCP-600	6.07	0.19	0.79
8"	LOCP-800	7.98	0.19	1.35

MATERIAL: CARBON STEEL, YELLOW ZINC DICHROMATE PLATED, (STAINLESS STEEL AVAILABLE)



