

TMI FLANGE SYSTEM

SAE 1000

Page: 69-82

1.1/2"- 10" TMI Flange System

Flanges flare		FFC14 1.1/2"-5" FFC16 6" FFC18 8"-10"
Cone Inserts		CO O-RING CD Doble CF Flat face CPO Pilot port CPF Pilot port
Flanges retain ring		RFC14 1.1/2"-3" RFC34 4"-50" RFC166" RFC18 8-10" LR
Retain ring connection parts Male / Female Weld adaptor		FBTA BSP female BTA BSP male NTA NPT male BWAR Weld adapter
Elbow, Tee, Reducer Bulkhead		LRFBH Bulkhead LLR Reducer LRE 90degree bend LRFE Elbow LRFT Tee
SAE 3000 Blocks Tee,Elbow,Reducer Transition Plates		BE34 Elbow SFE34 BTE34 T-block BTR34 T-block reducer TP034/TPR34 Reducer block
Components Seals Adapter Bolts		LOCP-O-ring adapter p OSH-O-ring spacer p OSP-Pilot port CP34-Connector plate p
Nuts-Bolts		
Blanking		BF034/BF016/BF018 BFF34/BFF16/BFF18









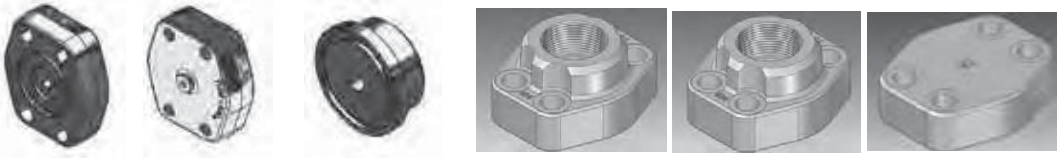
PYPLOK
FLANGES
PIPES & TUBES
CLAMPS
VALVES
BITE TYPE FITTINGS
HP HOSES
QUICK COUPL.
TEST POINTS
ADAPTORS
MACHINES
OTHER PRODUCTS

TMI FLANGE SYSTEM

SAE 3000

1/2" - 3" SAE J518 Code 61 /ISO 6162-1 TMI Flange System

Page: 83-155








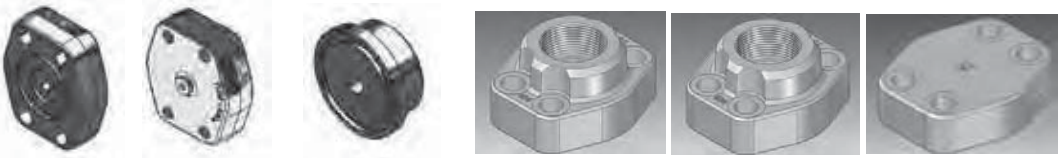
<p>Flanges flare split</p>	 <p>FFC34 1/2"- 3"</p>					
<p>Cone Inserts</p>	 <p>CO O-RING CD Doble CF Flat face CPO Pilot port CPF Pilot port</p>					
<p>Flanges retain ring</p>	 <p>RFC34 1/2"-3" R-</p>					
<p>Retain ring connection parts Male / Female Weld adaptor</p>	 <p>FBTA BSP female BTA BSP male NTA NPT male BWAR Weld adapter</p>					
<p>Elbow, Tee, Reducer Bulkhead</p>	 <p>RFBH Bulkhead CR Reducer RFE 90degree bend RRFE Elbow RRFT Tee</p>					
<p>SAE 3000 Blocks Tee,Elbow,Reducer Transition Plates</p>	 <p>BE34 Elbow SFE34 BTE34 T-block BTR34 T-block reducer TPO34/TPR34 Reducer block</p>					
<p>Components Seals Adapter Bolts</p>	 <p>OS-Seal retainer OCP-O-ring adapter OSH-O-ring spacer OSP- Pilot port CP34-Connector plate</p>					<p>Nuts-Bolts</p> 
<p>Blanking - Thread</p>	 <p>BF034 O-ring BFF34 Flat face SFP34 Plug HP3..13A BSP O-ring HP3..13B BSP flat face HP3..25A- Blind flange</p>					

TMI FLANGE SYSTEM

SAE 6000

12" - 2" SAE J518 Code 62 / ISO 6162-2 TMI Flange System

Page: 157-224

<p>Flanges flare</p>	 <p>FFC64 1/2" - 2"</p>
<p>Cone Inserts</p>	 <p>CO O-RING CD Doble CF Flat face CPO Pilot port CPF Pilot port</p>
<p>Flanges retain ring</p>	 <p>RFC64 1/2" - 2" R-retain ring</p>
<p>Retain ring connection parts Male / Female Weld adaptor</p>	 <p>FBTA BSP female BTA BSP male NTA NPT male BWAR Weld adaptor</p>
<p>Elbow, Tee, Reducer Bulkhead</p>	 <p>RFBH Bulkhead CR Reducer RFE 90degree bend RRFE Elbow RRFT Tee</p>
<p>SAE 6000 Blocks Tee, Elbow, Reducer Transition Plates</p>	 <p>BE64 Elbow SFE64 BTE64 T-block BTR64 T-block reducer TP064/TP634 Reducer block</p>
<p>Components Seals Adapter Bolts</p>	 <p>OS-Seal retainer OCP-O-ring adapter OSH-O-ring spacer OSP-Pilot port CP64-Connector plate Nuts-Bolts</p>
<p>Blanking - Thread</p>	 <p>BF064 O-ring BFF64 Flat face SFP64 Plug HP6..13A- BSP O-ring HP6..13B- BSP flat face HP6..25A- Blind flange</p>

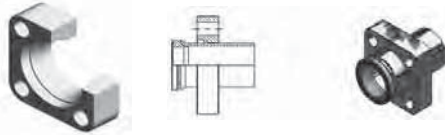







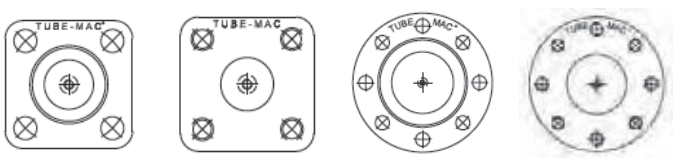
PYPLOK
FLANGES
PIPES & TUBES
CLAMPS
VALVES
BITE TYPE FITTINGS
HP HOSES
QUICK COUPL.
TEST POINTS
ADAPTORS
MACHINES
OTHER PRODUCTS

TMI FLANGE SYSTEM

ISO 6164

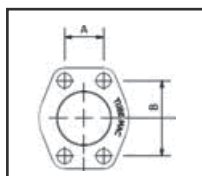
1.1/2" - 10" TMI Flange System

Page: 225-244

<p>Flanges flare</p>						<p>FFC74 1.1/2" - 4"</p>
<p>Cone Inserts</p>						<p>CO O-RING CD Doble CF Flat face CPO Pilot port CPF Pilot port</p>
<p>Flanges retain ring</p>						<p>RFCA48 5" - 8" RFCA412 10" R 1.1/2" - 4 RA 5" - 10"</p>
<p>Retain ring connection parts Male / Female Weld adaptor</p>						<p>FBTA BSP female BTA BSP male NTA NPT male BWAR Weld adapter</p>
<p>Elbow, Tee, Reducer Bulkhead</p>						<p>RFBH Bulkhead CR Reducer RFE 90 degree bend RRFE Elbow RRFT Tee</p>
<p>Blocks Tee, Elbow, Reducer Transition Plates</p>						<p>BE74/BE48 Elbow block BTM74/BTM48 Tee block BTRM74/BTRM48 Tee block reducer</p>
<p>Components Seals Adapter Bolts</p>					<p>Nuts-Bolts</p> 	
<p>Blanking - Thread</p>						<p>BFM074 o-ring BFMF74 flat face BFM0748 o-ring BFMF74 flat face</p>

SAE 1000 PSI Reference Guide

SAE 1000



Flare Flange Dimensions
Page 70



Flare Flange NPS
Page 71
FFC14-FFC34-
FFC16-FFC18



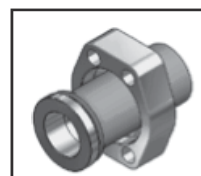
Flare Flange Metric
Page 71
FFCM14-FFCM34
FFCM16-FFCM18



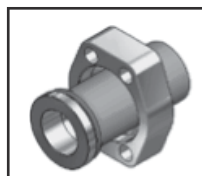
Flare Flange Set O-Ring Cone NPS
Page 72



Flare Flange Set O-Ring Cone Metric
Page 73



Flare Flange Set Flat Face Cone NPS
Page 74



Flare Flange Set Flat Face Cone Metric
Page 75



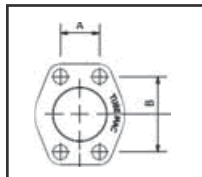
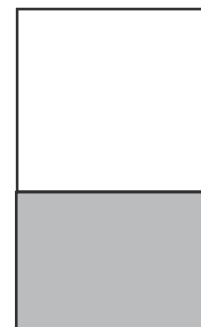
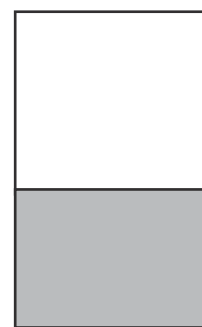
Flare Flange Set Double Cone NPS
Page 76



Flare Flange Set Double Cone Metric
Page 77



Flare Flange Cones CO-CF-CD
Page 78



Retain Ring Flange Dimensions
Page 79



Retain Ring Flange
Page 80
RFC14, RFC34,
RFC16, RFC18



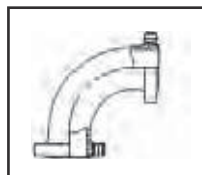
Retain Ring
Page 81



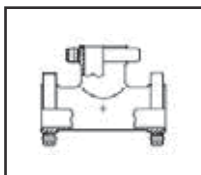
Bump Style Butt Weld Adapter Assembly, NPS
A/LBWA



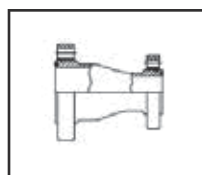
Bump Style Butt Weld Adapter Assembly, Metric
A/LBWA



Retain Ring Flange Elbow Assembly
A/LRE



Flange Tee Assembly NPS, Metric
A/LRT



Retain Ring Flange Concentric Reducer Assembly
A/LR



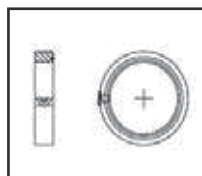
Flare Flange Pipe Assembly NPS, Metric
PAF



Flare Flange Bent Pipe Assembly NPS, Metric
BPAF



O-Ring Connector Plate
LOCP



O-Ring Spacer With Pilot Port NPS, Metric
LOSP, LOSPM

PYPLOK

FLANGES
SAE 1000

PIPES &
TUBES

CLAMPS

VALVES

BITE TYPE
FITTINGS

HP HOSES

QUICK
COUPL.

TEST
POINTS

ADAPTORS

MACHINES

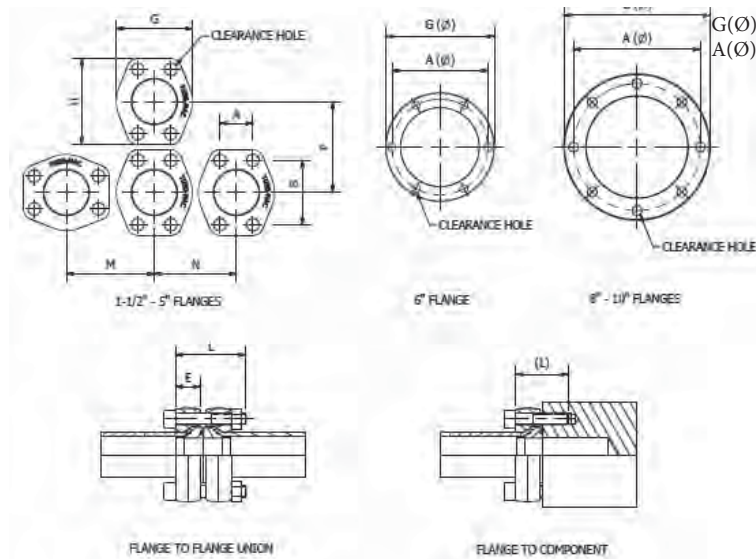
OTHER
PRODUCTS

NOTE !!!

Part.No Equivalence Hydra Pipe (Tube-Mac) - GS-Hydro flange parts on pages 535-545

SAE 1000 PSI Flare Flange Dimensions

1-1/2" through 5" Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Flare Flange Dimensions, NPS										
Size	Dimensions (in)								SHCS Bolt (in)* L (L)	Working Pressure PSI (Bar)
	A	B	G	H	M	N	P	E		
1-1/2"	1.41	2.75	3.25	3.66	3.58	3.35	3.78	0.79	1/2"-13 UNC x 3.00 (2.00)	1000 (70)
2"	1.69	3.06	3.81	4.02	4.02	3.94	4.13	0.98	1/2"-13 UNC x 3.50 (2.00)	1000 (70)
2-1/2"	2.00	3.50	4.28	4.49	4.49	4.37	4.61	1.18	1/2"-13 UNC x 4.00 (2.50)	1000 (70)
3"	2.44	4.19	5.16	5.28	5.35	5.24	5.39	1.18	5/8"-11 UNC x 4.50 (2.75)	1000 (70)
3-1/2"	2.75	4.75	5.50	6.00	5.85	5.60	6.15	1.18	5/8"-11 UNC x 5.00 (2.50)	1000 (70)
4"	3.06	5.13	6.00	6.38	6.30	6.10	6.50	1.44	5/8"-11 UNC x 4.00 (2.75)	1000 (70)
5"	3.63	6.00	7.12	7.24	7.28	7.20	7.32	1.58	5/8"-11 UNC x 4.75 (2.75)	1000 (70)
6"	8.19	-	9.29	-	9.79	9.79	9.79	1.58	5/8"-11 UNC x 4.75 (2.75)	725 (50)
8"	10.83	-	12.48	-	13.00	13.00	13.00	1.58	3/4"-10 UNC x 4.75 (2.75)	725 (50)
10"	13.58	-	16.14	-	16.60	16.60	16.60	2.00	3/4"-10 UNC x 5.50 (3.00)	725 (50)

* SHCS Bolt Specification

Carbon Steel: ASTM A574

316 Stainless Steel: ASTM A193 B8M Class 2

Flare Flange Dimensions, Metric										
Size	Dimensions (mm)								SHCS Bolt (mm)* L (L)	Working Pressure PSI (Bar)
	A	B	G	H	M	N	P	E		
1-1/2"	35.8	69.9	82.6	93.0	90.9	85.1	96.0	20	M12 x 75 (50)	1000 (70)
2"	42.9	77.7	96.8	102.1	102.1	100.1	104.9	25	M12 x 90 (50)	1000 (70)
2-1/2"	50.8	88.9	108.7	114.0	114.0	111.0	117.1	30	M12 x 100 (65)	1000 (70)
3"	62.0	106.4	131.1	134.1	135.9	133.1	136.9	30	M16 x 120 (70)	1000 (70)
3-1/2"	69.9	120.7	139.7	152.4	148.6	142.2	156.2	30	M16 x 130 (65)	1000 (70)
4"	77.7	130.3	152.4	162.1	160.0	154.9	165.1	39	M16 x 100 (70)	1000 (70)
5"	92.1	152.4	180.0	184.0	185.0	183.0	186.0	39	M16 x 120 (70)	1000 (70)
6"	208.0	-	236.0	-	249.0	249.0	249.0	39	M16 x 120 (70)	725 (50)
8"	275.0	-	317.0	-	330.0	330.0	330.0	39	M20 x 120 (70)	725 (50)
10"	345.0	-	410.0	-	422.0	422.0	422.0	50	M20 x 140 (80)	725 (50)

* SHCS Bolt Specification

Carbon Steel: DIN912 / ISO4762 Grade 8.8

316 Stainless Steel: DIN912 / ISO4762 A480

3D step models available upon request

SAE 1000 PSI Flare Flange with Clearance Holes

1-1/2" through 5" Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



FFC14, FFC34, FFC16, FFC18 - Flare Flange with Clearance Holes, NPS

Size	Pipe O.D. in. (mm)	Standard Part Number	Working Pressure PSI (bar)	WT lbs (kg)
1-1/2"	1.900" (48.26)	FFC14-150-*	1000 (70)	1.10 (0.50)
2"	2.375" (60.33)	FFC14-200-*	1000 (70)	1.90 (0.86)
2-1/2"	2.875" (70.03)	FFC14-250-*	1000 (70)	2.17 (0.99)
3"	3.500" (88.90)	FFC14-300-*	1000 (70)	3.80 (1.73)
3-1/2"	4.000" (101.6)	FFC14-350-*	1000 (70)	4.38 (1.99)
4"	4.500" (114.30)	FFC34-400-*	1000 (70)	8.61 (3.91)
5"	5.563" (141.30)	FFC34-500-*	1000 (70)	9.80 (4.45)
6"	6.625" (168.28)	FFC16-600-*	725 (50)	10.50 (4.77)
8"	8.625" (219.08)	FFC18-800-*	725 (50)	23.20 (10.55)
10"	10.750" (273.05)	FFC18-1000-*	725 (50)	51.30 (23.32)

* Materials: Ordering Example: FFC14-150-SS
 Standard, No Designation = Carbon Steel, Clear Zinc * Insert Material _____
 Plated (Cr6 Free).
 HDG = Carbon Steel, Hot Dip Galvanized.
 SS = Stainless Steel, Type 316.

FFCM14, FFCM34, FFCM16, FFCM18 - Flare Flange with Clearance Holes, Metric

Size	Pipe O.D. (mm)	Standard Part Number	Working Pressure PSI (bar)	WT lbs (kg)
1-1/2"	50	FFCM14-150-50MM-*	1000 (70)	1.10 (0.50)
2"	60	FFC14-200-*	1000 (70)	1.90 (0.86)
2-1/2"	75	FFCM14-250-75MM-*	1000 (70)	2.17 (0.99)
3"	90	FFCM14-300-90MM-*	1000 (70)	3.80 (1.73)
3-1-2"	100	FFCM14-350-100MM-*	1000 (70)	4.38 (1.99)
4"	115	FFC34-400-*	1000 (70)	8.61 (3.91)
5"	140	FFCM34-500-140MM-*	1000 (70)	9.80 (4.45)
6"	165	FFCM16-600-165MM-*	725 (50)	10.50 (4.77)
8"	220	FFCM18-800-220MM-*	725 (50)	23.20 (10.55)
10"	273	FFC18-1000-*	725 (50)	51.30 (23.32)

* Materials: Ordering Example: FFCM14-150-50MM-SS
 Standard, No Designation = Carbon Steel, Clear Zinc * Insert Material _____
 Plated (Cr6 Free).
 HDG = Carbon Steel, Hot Dip Galvanized.
 SS = Stainless Steel, Type 316.

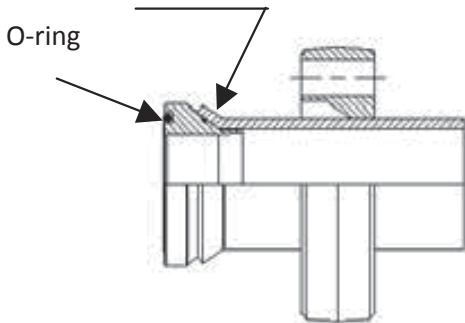
3D step models available upon request

SAE 1000

SAE 1000 PSI Flare Flange Set

O-Ring Face with Clearance Holes, NPS

Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- One (1) Flare Flange
- One (1) O-Ring Face Cone
- One (1) Face O-Ring (O-Ring 2)
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit

See Section

FFC14-CO, FFC34, FFC16-CO, FFC18-CO - Flare Flange Set O-Ring Face with Clearance Holes, NPS

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	O-Ring Face Cone Insert Part Number	O-Ring 1 (VITON) Part Number	O-Ring 2 (Buna) Part Number
1-1/2"	1 1/2" SCH40	FFC14-CO-SCH40-150-*^-^	1.93 (0.88)	FFC14-150-*	CO-SCH40-150-*^-^	ORV-4315	OR^-2-225
2"	2" SCH40	FFC14-CO-SCH40-200-*^-^	2.67 (1.21)	FFC14-200-*	CO-SCH40-200-*^-^	ORV-5615	OR^-2-228
2-1/2"	2 1/2" SCH40	FFC14-CO-SCH40-250-*^-^	4.01 (1.82)	FFC14-250-*	CO-SCH40-250-*^-^	ORV-2-036	OR^-2-232
3"	3" SCH40	FFC14-CO-SCH40-300-*^-^	6.33 (2.87)	FFC14-300-*	CO-SCH40-300-*^-^	ORV-2-041	OR^-2-237
3-1/2"	3 1/2" SCH40	FFC14-CO-SCH40-350-*^-^	6.60 (3.00)	FFC14-350-*	CO-SCH40-350-*^-^	ORV-2-043	OR^-2-241
4"	4" SCH40	FFC34-CO-SCH40-400-*^-^	6.90 (3.13)	FFC34-400-*	CO-SCH40-400-*^-^	ORV-2-044	OR^-2-245
5"	5" SCH40	FFC34-CO-SCH40-500-*^-^	12.20 (5.55)	FFC34-500-*	CO-SCH40-500-*^-^	ORV-2-159	OR^-2-253
6"	6" SCH40	FFC16-CO-SCH40-600-*^-^	14.20 (6.45)	FFC16-600-*	CO-SCH40-600-*^-^	ORV-2-163	OR^-2-259
8"	8" SCH40	FFC18-CO-SCH40-800-*^-^	30.30 (13.77)	FFC18-800-*	CO-SCH40-800-*^-^	ORV-2-171	OR^-3-372
10"	10" SCH40	FFC18-CO-SCH40-1000-*^-^	61.00 (27.73)	FFC18-1000-*	CO-SCH40-1000-*^-^	ORV-2-273	OR^-2-377

*** Materials:**

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

Ordering Example: FFC14-CO-SCH40-200-SS-V*

*Insert Material _____

^ Insert O-Ring 2 Type _____

^ O-Ring 2 Type:

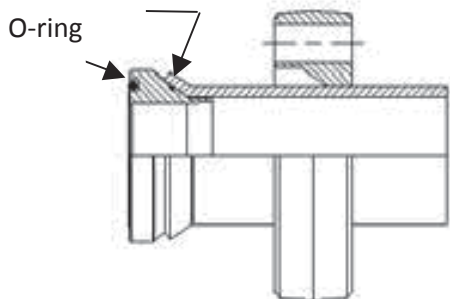
Standard, No Designation = Buna Nitrile.

V = Viton.

3D step models available upon request

SAE 1000 PSI Flare Flange Set O-Ring Face with Clearance Holes, Metric

SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- One (1) Flare Flange
- One (1) O-Ring Face Cone
- One (1) Face O-Ring (O-Ring 2)
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit
- See Section

FFCM14-CO, FFCM34, FFCM16-CO, FFCM18-CO - Flare Flange Set O-Ring Face with Clearance Holes, Metric

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	O-Ring Face Cone Insert Part Number	O-Ring 1 (VITON) Part Number	O-Ring 2 (Buna) Part Number
1-1/2"	50x3.0	FFCM14-CO-50x3.0-150-*^-^	1.91 (0.87)	FFCM34-150-50MM-*	CO-50x3.0-150-*^-^	ORV-4715	OR^-2-225
2"	60x3.0	FFC14-CO-60x3.0-200-*^-^	2.63 (1.20)	FFC14-200-*	CO-60x3.0-200-*^-^	ORV-5715	OR^-2-228
2-1/2"	75x3.0	FFCM14-CO-75x3.0-250-*^-^	4.07 (1.85)	FFCM14-250-75MM-*	CO-75x3.0-250-*^-^	ORV-6915	OR^-2-232
3"	90x3.5	FFCM14-CO-90x3.5-300-*^-^	5.92 (2.69)	FFCM14-300-90MM-*	CO-90x3.5-300-*^-^	ORV-8515	OR^-2-237
3-1/2"	100x4.0	FFCM14-CO-100x4.0-250-*^-^	6.60 (3.00)	FFCM14-350-100MM-*	CO-100x4.0-350-*^-^	ORV-2-043	OR^-2-241
4"	115x4.0	FFC34-CO-115x4.0-400-*^-^	6.90 (3.13)	FFC34-400-*	CO-115x4.0-400-*^-^	ORV-2-044	OR^-2-245
5"	140x4.5	FFCM34-CO-140x4.5-500-*^-^	12.20 (5.55)	FFCM34-500-140MM-*	CO-140x4.5-500-*^-^	ORV-2-159	OR^-2-253
6"	165x5.0	FFCM16-CO-165x5.0-600-*^-^	14.20 (6.45)	FFCM16-600-165MM-*^-^	CO-165x5.0-600-*^-^	ORV-2-163	OR^-2-259
8"	220x6.0	FFCM18-CO-220x6.0-800-*^-^	30.30 (13.77)	FFCM18-800-220MM-*^-^	CO-220x6.0-800-*^-^	ORV-2-171	OR^-3-372
10"	273x6.0	FFC18-CO-273x6.0-1000-*^-^	61.00 (27.73)	FFC18-1000-*^-^	CO-273x6.0-1000-*^-^	ORV-2-273	OR^-2-377

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

Ordering Example: FFCM14-CO-50x3.0-150-SS-V

*Insert Material _____

^ Insert O-Ring 2 Type _____

^ O-Ring 2 Type:

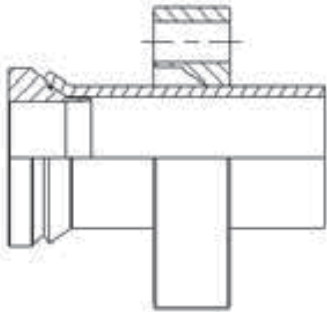
Standard, No Designation = Buna Nitrile.

V = Viton.

SAE 1000

SAE 1000 PSI Flare Flange Set Flat Face with Clearance Holes, NPS

Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- One (1) Flare Flange
- One (1) Flat Face Cone
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit
- See Section

FFC14-CF, FFC34, FFC16-CF, FFC18-CF - Flare Flange Set Flat Face with Clearance Holes, NPS

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	Flat Face Cone Insert Part Number	O-Ring 1 (VITON) Part Number
1-1/2"	1 1/2" SCH40	FFC14-CF-SCH40-150-*	1.93 (0.88)	FFC14-150-*	CF-SCH40-150-*	ORV-4315
2"	2" SCH40	FFC14-CF-SCH40-200-*	2.67 (1.21)	FFC14-200-*	CF-SCH40-200-*	ORV-5615
2-1/2"	2 1/2" SCH40	FFC14-CF-SCH40-250-*	4.01 (1.82)	FFC14-250-*	CF-SCH40-250-*	ORV-2-036
3"	3" SCH40	FFC14-CF-SCH40-300-*	6.33 (2.87)	FFC14-300-*	CF-SCH40-300-*	ORV-2-041
3-1/2"	3-1/2" SCH 40	FFC14CF-SCH40-350-*	6.64 (3.02)	FFC14-350-*	CF-SCH40-350-*	ORV-2-043
4"	4" SCH40	FFC34-CF-SCH40-400-*	6.90 (3.13)	FFC34-400-*	CF-SCH40-400-*	ORV-2-044
5"	5" SCH40	FFC34-CF-SCH40-500-*	12.20 (5.55)	FFC34-500-*	CF-SCH40-500-*	ORV-2-159
6"	6" SCH40	FFC16-CF-SCH40-600-*	14.20 (6.45)	FFC16-600-*	CF-SCH40-600-*	ORV-2-163
8"	8" SCH40	FFC18-CF-SCH40-800-*	30.30 (13.77)	FFC18-800-*	CF-SCH40-800-*	ORV-2-171
10"	10" SCH40	FFC18-CF-SCH40-1000-*	61.00 (27.73)	FFC18-1000-*	CF-SCH40-1000-*	ORV-2-273

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

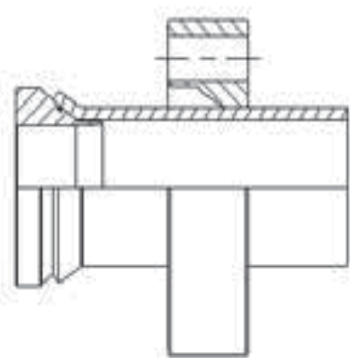
Ordering Example: FFC14-CF-SCH40-200-SS

* Insert
Material

SAE 1000 PSI Flare Flange Set

Flat Face with Clearance Holes, Metric

Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- One (1) Flare Flange
- One (1) Flat Face Cone
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit
- See Section

FFCM14-CF, FFCM34, FFCM16-CF, FFCM18-CF - Flare Flange Set Flat Face with Clearance Holes, Metric

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	Flat Face Cone Insert Part Number	O-Ring 1 (VITON) Part Number
1-1/2"	50x3.0	FFCM14-CF-50x3.0-150-*	1.93 (0.88)	FFCM14-150-50MM-*	CF-50x3.0-150-*	ORV-4315
2"	60x3.0	FFC14-CF-60x3.0-200-*	2.67 (1.21)	FFC14-200-*	CF-60x3.0-200-*	ORV-5615
2-1/2"	75x3.0	FFCM14-CF-75x3.0-250-*	4.01 (1.82)	FFCM14-250-75MM-*	CF-75x3.0-250-*	ORV-2-036
3"	90x3.5	FFCM14-CF-90x3.5-300-*	6.33 (2.87)	FFCM14-300-90MM-*	CF-90x3.5-300-*	ORV-2-041
3-1/2"	100x4.0	FFCM14-CF-100x4.0-350-*	6.64 (3.02)	FFCM14-350-100MM-*	CF-100x4.0-400-*	ORV-2-043
4"	115x4.0	FFC34-CF-115x4.0-400-*	6.93 (3.15)	FFC34-400-*	CF-115x4.0-400-*	ORV-2-044
5"	140x4.5	FFCM34-CF-140x4.5-500-*	12.25 (5.57)	FFCM34-500-140MM-*	CF-140x4.5-500-*	ORV-2-159
6"	165x5.0	FFCM16-CF-165x5.0-600-*	14.25 (6.47)	FFCM16-600-165MM-*	CF-165x5.0-600-*	ORV-2-163
8"	220x6.0	FFCM18-CF-220x6.0-800-*	30.38 (13.81)	FFCM18-800-220MM-*	CF-220x6.0-800-*	ORV-2-171
10"	273x6.0	FFC18-CF-273x6.0-1000-*	61.14 (27.80)	FFC18-1000--*	CF-273x6.0-1000-*	ORV-2-273

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

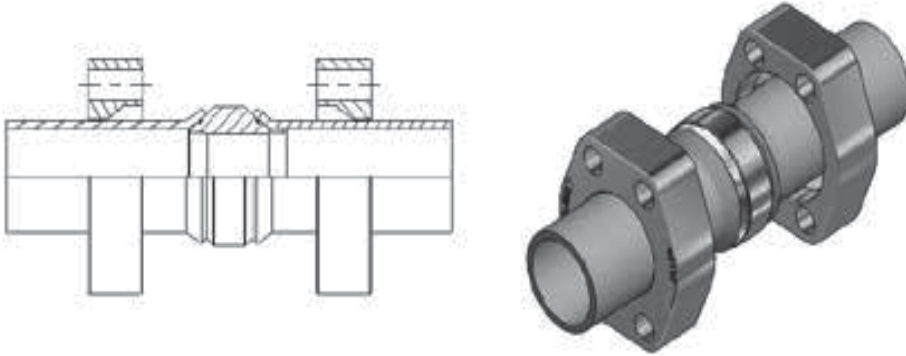
Ordering Example: FFCM14-CF-50x3-150-SS

* Insert
Material

SAE 1000

SAE 1000 PSI Flare Flange Double Cone Union Set with Clearance Holes, NPS

Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- Two (2) Flare Flanges
- One (1) Double Cone
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit
- See Section

FFC14-CD, FFC34-CD, FFC16-CD, FFC18-CD - Flare Flange Double Cone Union Set with Clearance Holes, NPS

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	Double Cone Insert Part Number	O-Ring 1 (VITON) Part Number
1-1/2"	1 1/2" SCH40	FFC14-CD-SCH40-150-*	2.00 (0.91)	FFC14-150-*	CD-SCH40-150-*	ORV-4315
2"	2" SCH40	FFC14-CD-SCH40-200-*	2.90 (1.32)	FFC14-200-*	CD-SCH40-200-*	ORV-5615
2-1/2"	2 1/2" SCH40	FFC14-CD-SCH40-250-*	4.62 (2.10)	FFC14-250-*	CD-SCH40-250-*	ORV-2-036
3"	3" SCH40	FFC14-CD-SCH40-300-*	6.90 (3.13)	FFC14-300-*	CD-SCH40-300-*	ORV-2-041
3-1/2"	3 1/2" SCH40	FFC14-CD-SCH40-350-*	6.94 (3.15)	FFC14-350-*	CD-SCH40-350-*	ORV-2-043
4"	4" SCH40	FFC34-CD-SCH40-400-*	7.86 (3.57)	FFC34-400-*	CD-SCH40-400-*	ORV-2-044
5"	5" SCH40	FFC34-CD-SCH40-500-*	13.40 (6.09)	FFC34-500-*	CD-SCH40-500-*	ORV-2-159
6"	6" SCH40	FFC16-CD-SCH40-600-*	15.90 (7.23)	FFC14-600-*	CD-SCH40-600-*	ORV-2-259
8"	8" SCH40	FFC18-CD-SCH40-800-*	33.80 (15.36)	FFC14-800-*	CD-SCH40-800-*	ORV-2-372
10"	10" SCH40	FFC18-CD-SCH40-1000-*	66.10 (30.04)	FFC14-1000-*	CD-SCH40-1000-*	ORV-2-178

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

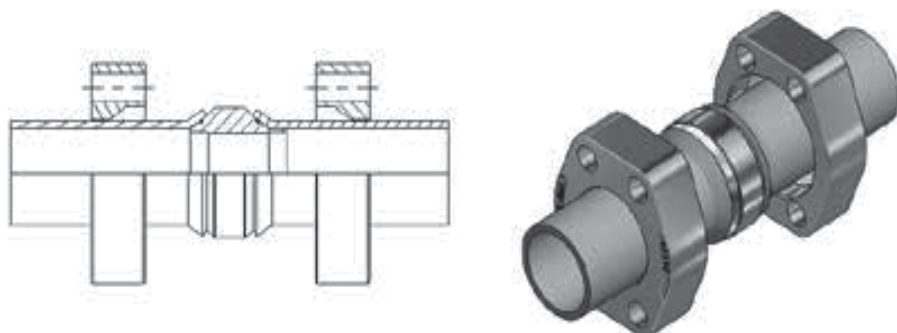
HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

Ordering Example: FFC14-CD-SCH40-200-SS*

*Insert Material _____

SAE 1000 PSI Flare Flange Double Cone Union Set with Clearance Holes, Metric

Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Complete Flange Set Includes:

- Two (2) Flare Flanges
- One (1) Double Cone
- One (1) Back Up O-Ring (O-Ring 1)

To be Ordered Separately:

- Bolt Kit
- See Section

FFCM14-CD, FFCM34-CD, FFCM16-CD, FFCM18-CD - Flare Flange Double Cone Union Set with Clearance Holes, Metric

Size	Pipe Size	Complete Flange Set Part Number	WT/Set lbs (kg)	Flange Part Number	Double Cone Insert Part Number	O-Ring 1 (VITON) Part Number
1-1/2"	50x3.0	FFCM14-CD-50x3.0-150-*	2.00 (0.91)	FFCM14-150-*	CD-50x3.0-150-*	ORV-4315
2"	60x3.0	FFC14-CD-60x3.0-200-*	2.90 (1.32)	FFC14-200-*	CD-60x3.0-200-*	ORV-5615
2-1/2"	75x3.0	FFCM14-CD-75x3.0-250-*	4.62 (2.10)	FFCM14-250-*	CD-75x3.0-250-*	ORV-2-036
3"	90x3.5	FFCM14-CD-90x3.5-300-*	6.90 (3.13)	FFCM14-300-*	CD-90x3.5-300-*	ORV-2-041
3-1/2"	100x4.0	FFCM14-CD-100x4.0-350-*	6.94 (3.15)	FFCM14-350-*	CD-100x4.0-350-*	ORV-2-043
4"	115x4.0	FFC34-CD-115x4.0-400-*	7.86 (3.57)	FFC34-400-*	CD-115x4.0-400-*	ORV-2-044
5"	140x4.5	FFCM34-CD-140x4.5-500-*	13.40 (6.09)	FFCM34-500-*	CD-140x4.5-500-*	ORV-2-159
6"	165x5.0	FFCM16-CD-165x5.0-600-*	15.90 (7.23)	FFCM16-600-*	CD-165x5.0-600-*	ORV-2-163
8"	220x6.0	FFCM18-CD-220x6.0-800-*	33.80 (15.36)	FFCM18-800-*	CD-220x6.0-800-*	ORV-2-171
10"	273x6.0	FFC18-CD-273x6.0-1000-*	66.10 (30.04)	FFC18-1000-*	CD-273x6.0-1000-*	ORV-2-273

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free).

SS = Stainless Steel, Type 316.

ZSS = Carbon Steel Flange with Stainless Steel Cone, Type 316.

HDGSS = Carbon Steel, Hot Dip Galvanized Flange with Stainless Steel Cone, Type 316.

Ordering Example: FFCM14-CD-50x3.0-150-SS

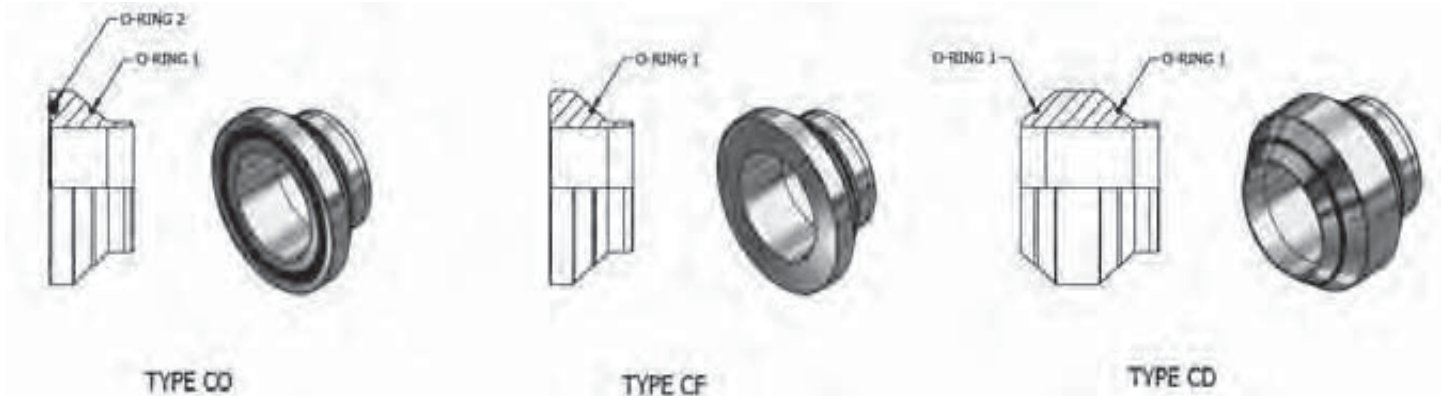
*Insert Material _____

SAE 1000

SAE 1000 PSI Cone Inserts

for Flare Flange Connections, NPS

SAE J518 Code 61 (ISO 6162-1)



CO, CF and CD – Cone Inserts for Flare Flange Connections, NPS

Size	Pipe Size	O-Ring Face Cone Insert Part Number (Type CO)	WT lbs (kg)	Flat Face Cone Insert Part Number (Type CF)	Weight lbs (kg)	Double Cone Insert Part Number (Type CD)	Weight lbs (kg)	O-Ring 1 (VITON) Part Number	O-Ring 2 (Buna) Part Number
1-1/2"	1 1/2" SCH40	CO-SCH40-150-*^-^	0.41 (0.19)	CF-SCH40-150-*	0.45 (0.20)	CD-SCH40-150-*	0.72 (0.33)	ORV-4315	OR^-2-225
2"	2" SCH40	CO-SCH40-200-*^-^	0.47 (0.21)	CF-SCH40-200-*	0.52 (0.24)	CD-SCH40-200-*	0.84 (0.38)	ORV-5615	OR^-2-228
2-1/2"	2 1/2" SCH40	CO-SCH40-250-*^-^	0.99 (0.45)	CF-SCH40-250-*	1.01 (0.46)	CD-SCH40-250-*	1.60 (0.73)	ORV-2-036	OR^-2-232
3"	3" SCH40	CO-SCH40-300-*^-^	1.33 (0.60)	CF-SCH40-300-*	1.39 (0.63)	CD-SCH40-300-*	2.17 (0.99)	ORV-2-041	OR^-2-237
3-1/2"	3-1/2" SCH40	CO-SCH40-350-*^-^	1.50 (0.68)	CF-SCH40-350-*	1.60 (0.73)	CD-SCH40-350-*	2.50 (1.14)	ORV-2-043	OR^-2-241
4"	4" SCH40	CO-SCH40-400-*^-^	1.80 (0.82)	CF-SCH40-400-*	1.90 (0.86)	CD-SCH40-400-*	3.00 (1.36)	ORV-2-044	OR^-2-245
5"	5" SCH40	CO-SCH40-500-*^-^	2.40 (1.09)	CF-SCH40-500-*	2.50 (1.14)	CD-SCH40-500-*	3.90 (1.77)	ORV-2-159	OR^-2-253
6"	6" SCH40	CO-SCH40-600-*^-^	4.70 (2.14)	CF-SCH40-600-*	4.80 (2.18)	CD-SCH40-600-*	7.40 (3.36)	ORV-2-163	OR^-2-259
8"	8" SCH40	CO-SCH40-800-*^-^	7.10 (3.23)	CF-SCH40-800-*	7.30 (3.32)	CD-SCH40-800-*	11.68 (5.31)	ORV-2-171	OR^-3-372
10"	10" SCH40	CO-SCH40-1000-*^-^	16.80 (7.64)	CF-SCH40-1000-*	17.00 (7.73)	CD-SCH40-1000-*	27.20 (12.36)	ORV-2-273	OR^-2-377

* Materials:

Standard, No Designation = All Carbon Steel, Clear Zinc Plated (Cr6 Free). SS = Stainless Steel, Type 316.

Ordering Example: CO-SCH40-200-SS-V

* Insert
Material
^ Insert O-Ring 2 Type

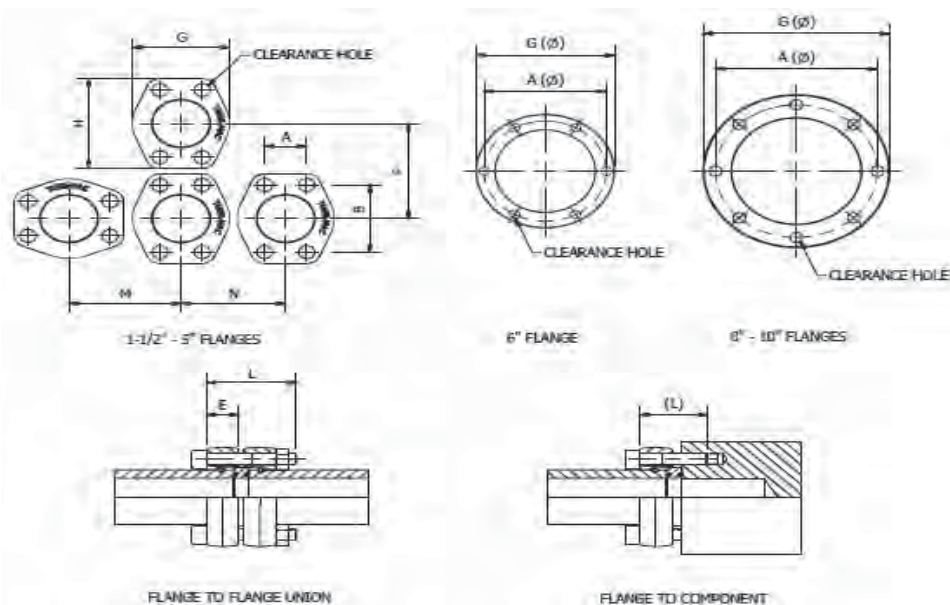
^ O-Ring 2 Type

Standard, No Designation = Buna Nitrile. V = Viton.

3D step models available upon request

SAE 1000 PSI Retain Ring Flange Dimensions

1-1/2" through 5" Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



Retain Ring Flange Dimensions, NPS

Size	Dimensions (in)								SHCS Bolt (in)* L (L)	Working Pressure PSI (Bar)
	A	B	G	H	M	N	P	E		
1-1/2"	1.41	2.75	3.25	3.66	3.58	3.35	3.78	0.79	1/2"-13 UNC x 3.00 (2.00)	1000 (70)
2"	1.69	3.06	3.81	4.02	4.02	3.94	4.13	0.79	1/2"-13 UNC x 3.50 (2.00)	1000 (70)
2-1/2"	2.00	3.50	4.28	4.49	4.49	4.37	4.61	0.79	1/2"-13 UNC x 4.00 (2.50)	1000 (70)
3"	2.44	4.19	5.16	5.28	5.35	5.24	5.39	1.00	5/8"-11 UNC x 4.50 (2.75)	1000 (70)
4"	3.06	5.13	6.00	6.38	6.30	6.10	6.50	1.18	5/8"-11 UNC x 4.00 (2.75)	1000 (70)
5"	3.63	6.00	7.09	7.24	7.28	7.20	7.32	1.57	5/8"-11 UNC x 4.75 (2.75)	1000 (70)
6"	8.19	-	9.29	-	-	-	-	1.57	5/8"-11 UNC x 4.75 (2.75)	725 (50)
8"	10.83	-	12.48	-	-	-	-	1.57	3/4"-10 UNC x 4.75 (2.75)	725 (50)
10"	13.58	-	16.14	-	-	-	-	2.00	3/4"-10 UNC x 5.50 (3.00)	725 (50)

* SHCS Bolt Specification

Carbon Steel: ASTM A574

316 Stainless Steel: ASTM A193 B8M Class 2

Retain Ring Flange Dimensions, Metric

Size	Dimensions (mm)								SHCS Bolt (mm)* L (L)	Working Pressure PSI (Bar)
	A	B	G	H	M	N	P	E		
1-1/2"	35.8	69.9	82.6	93.0	90.9	85.1	96.0	20	M12 x 75 (50)	1000 (70)
2"	42.9	77.7	96.8	102.1	102.1	100.1	104.9	20	M12 x 90 (50)	1000 (70)
2-1/2"	50.8	88.9	108.7	114.0	114.0	111.0	117.1	20	M12 x 100 (65)	1000 (70)
3"	62.0	106.4	131.1	134.1	135.9	133.1	136.9	25	M16 x 120 (70)	1000 (70)
4"	77.7	130.3	152.4	162.1	160.0	154.9	165.1	30	M16 x 100 (70)	1000 (70)
5"	92.1	152.4	180.0	184.0	185.0	183.0	186.0	40	M16 x 120 (70)	1000 (70)
6"	208.0	-	236.0	-	-	-	-	40	M16 x 120 (70)	725 (50)
8"	275.0	-	317.0	-	-	-	-	40	M20 x 120 (70)	725 (50)
10"	345.0	-	410.0	-	-	-	-	50	M20 x 140 (80)	725 (50)

* SHCS Bolt Specification

Carbon Steel: DIN912 / ISO4762 Grade 8.8

316 Stainless Steel: DIN912 / ISO4762 A480

3D step models available upon request

SAE 1000

SAE 1000 PSI Retain Ring Flange with Clearance Holes

1-1/2" through 5" Flange pattern according to SAE J518 Code 61 (ISO 6162-1)



RFC14, RFC34, RFC16, RFC18 - Flare Flange with Clearance Holes, NPS			
Size	Standard Part Number	Working Pressure PSI (Bar)	Weight lbs (kg)
1-1/2"	RFC14-150-*	1000 (70)	1.10 (0.50)
2"	RFC14-200-*	1000 (70)	1.90 (0.86)
2-1/2"	RFC14-250-*	1000 (70)	2.17 (0.99)
3"	RFC14-300-*	1000 (70)	3.80 (1.73)
4"	RFC34-400-*	1000 (70)	8.61 (3.91)
5"	RFC34-500-*	1000 (70)	9.80 (4.45)
6"	RFC16-600-*	725 (50)	10.50 (4.77)
8"	RFC18-800-*	725 (50)	23.20 (10.55)
10"	RFC18-1000-*	725 (50)	51.30 (23.32)

* Materials:

Carbon Steel,

Ordering Example: RFC14-150-SS

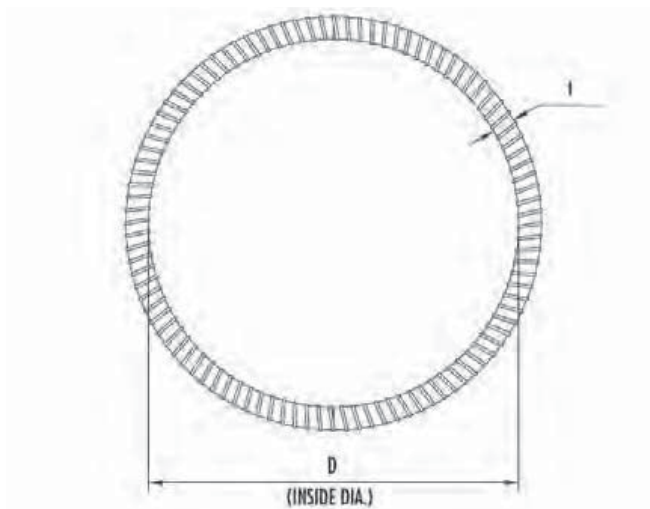
* Insert Material

Clear Zinc Plated (Cr6 Free).

HDG = Carbon Steel, Hot Dip Galvanized. SS = Stainless Steel, Type 316.

3D step models available upon request

SAE 1000 PSI Retain Ring



Flange Dimensions , NPS

Size	Retain Ring Part Number	Dimensions in (mm)		WT lbs (kg)
		D	t	
1-1/2"	LR-150	2.165 (55)	.158 (4)	0.02 (0.01)
2"	LR-200	2.560 (65)	.158 (4)	0.03 (0.014)
2-1/2"	LR-250	2.992 (76)	.158 (4)	0.04 (0.02)
3"	LR-300	3.622 (92)	.197 (5)	0.09 (0.04)
4"	LR-400	4.685 (119)	.197 (5)	0.11 (0.05)
5"	LR-500	5.630 (143)	.236 (6)	0.19 (0.09)
6"	LR-600	6.811 (173)	.236 (6)	0.21 (0.10)
8"	LR-800	9.110 (231)	.315 (8)	0.59 (0.27)
10"	LR-1000	11.299 (287)	.315 (8)	1.18 (0.54)

Materials:
Stainless Steel – AISI 302/304 Spring Temper

More pages under constructions.....