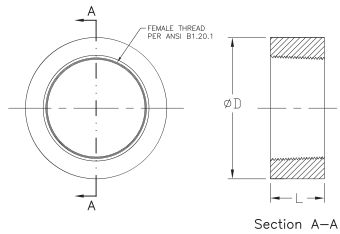


Fittings & Accessories





Half Couplings

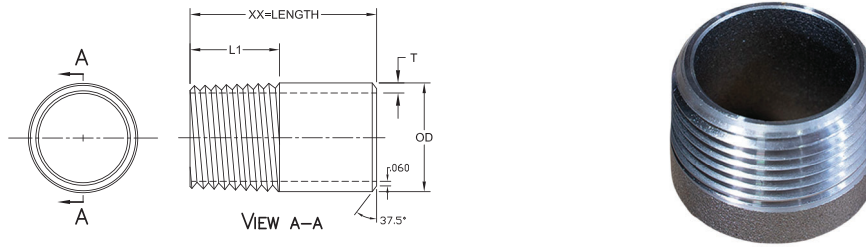
O.D. TUBE SIZES

API Part Number	Nominal Pipe Size (inches)	OD	End to End Length	Threads per Inch
THC0025	0.25	0.710	0.57	18.0
THC0050	0.5	1.060	0.75	14.0
THC0075	0.75	1.310	0.81	14.0
THC0100	1	1.570	1.00	11.5
THC0125	1.25	1.900	1.00	11.5
THC0150	1.5	2.200	1.00	11.5
THC0200	2	2.750	1.06	11.5
THC0250	2.5	3.250	1.06	8.0
THC0300	3	4.000	1.63	8.0
THC0400	4	5.000	1.75	8.0
THC0500	5	6.290	1.90	8.0
THC0600	6	7.390	2.00	8.0
THC0800	8	9.610	2.63	8.0

Notes:

- a. Coupling material is mild steel.
- b. Threads conform to ANSI B1.20.1.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.



Thread One End Nipples

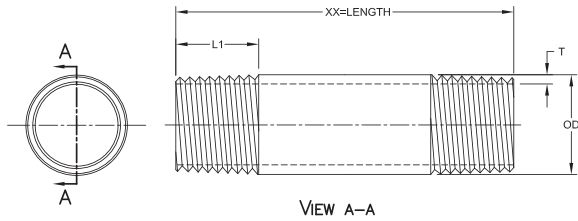
O.D. TUBE SIZES

API Part Number	Nominal Pipe Size (inches)	OD	End to End Length	Threads Per Inch	Min. Thread Length	Min. Wall Thickness
TOE0075-1.0	0.75	1.050	1.00	14.0	0.65	0.113
TOE0100-1.0	1	1.315	1.00	11.5	0.65	0.133
TOE0100-6.0	1	1.315	6.00	11.5	1.00	0.133
TOE0125-1.5	1.25	1.66	1.50	11.5	0.93	0.140
TOE0150-1.5	1.5	1.900	1.50	11.5	1.00	0.145
TOE0200-2.0	2	2.375	2.00	11.5	1.10	0.154
TOE0250-2.0	2.5	2.875	2.00	8.0	1.30	0.203
TOE0300-3.0	3	3.500	3.00	8.0	1.65	0.216
TOE0300-4.0	3	3.500	4.00	8.0	1.65	0.216
TOE0400-3.0	4	4.500	3.00	8.0	1.75	0.237
TOE0400-4.0	4	4.500	4.00	8.0	1.75	0.237
TOE0400-5.0	4	4.500	5.00	8.0	1.75	0.237
TOE0500-4.0	5	5.563	4.00	8.0	1.85	0.258
TOE0600-4.0	6	6.625	4.00	8.0	2.00	0.280
TOE0600-4.5	6	6.625	4.50	8.0	2.00	0.280
TOE0600-6.0	6	6.625	6.00	8.0	2.00	0.280
TOE0800-4.0	8	8.625	4.00	8.0	2.15	0.322
TOE0800-6.0	8	8.625	6.00	8.0	2.15	0.322

Notes:

- a. Nipple material is mild steel.
- b. NPT threads in accordance with ANSI B2.1.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.



Threaded Both End Nipples

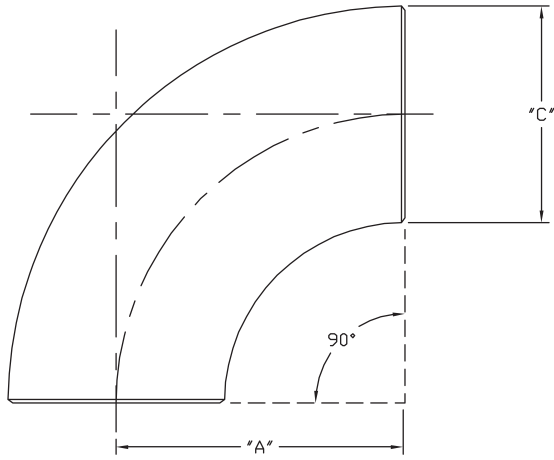
O.D. TUBE SIZES

API Part Number	Nominal Pipe Size (inches)	OD	End to End Length	Threads per Inch	Min. Thread Length	Min. Wall Thickness
TBE0075-1.38	0.75	1.050	1.38	14.0	0.75	0.113
TBE0075-2.0	0.75	1.050	2.00	14.0	0.75	0.113
TBE0075-3.0	0.75	1.050	3.00	14.0	0.75	0.113
TBE0100-4.0	1	1.315	4.00	11.5	1.00	0.133
TBE0100-12.0	1	1.315	12.00	11.5	1.00	0.133
TBE0250-6.0	2.5	2.875	6.00	8.0	1.60	0.209
TBE0400-8.0	4	4.500	8.00	8.0	1.75	0.237

Notes:

- a. Nipple material is mild steel.
- b. NPT threads in accordance with ANSI B2.1.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.



LONG RADIUS 90°

Long Radius 304L Stainless Steel 90° Elbows (LRE Series)

DIMENSIONS

API Part Number	NOM. PIPE SIZE	OUTSIDE DIAMETER (O.D)	CENTER TO END (C to E)	INSIDE DIAMETER (I.D)	WALL THICKNESS (T)
LRE0100-90	1	1.315	1.500	1.097	0.109
LRE0125-90	1.25	1.660	1.875	1.442	0.109
LRE0150-90	1.5	1.900	2.250	1.682	0.109
LRE0200-90	2	2.375	3.000	2.157	0.109
LRE0250-90	2.5	2.875	3.750	2.635	0.120
LRE0300-90	3	3.500	4.500	3.260	0.120
LRE0400-90	4	4.500	6.000	4.260	0.120
LRE0500-90	5	5.563	7.500	5.295	0.134
LRE0600-90	6	6.625	9.000	6.357	0.134
LRE0800-90	8	8.625	12.000	8.329	0.148
LRE1000-90	10	10.750	15.000	10.420	0.165
LRE1200-90	12	12.750	18.000	12.390	0.180

- ANSI B16.9
- MSS SP-43
- Schedule 10S

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.

MATERIALS

- ASTM A403
- WP304
- WP304H
- WP304L
- WP316
- WP316L



Gaskets

API stocks a variety of sizes of full face and ring gaskets in green Non-Asbestos (GNA Series) and SBR (GRR Series) materials.

Nominal Pipe Size I.D. (old style)	ANSI Size I.D. (newstyle)	Full Face Gaskets - (125/150#)				Full Face Gaskets - (250/300#)				Ring Gaskets	
		O.D	# B.H	Ø B.H.	Ø B.H.C.	O.D	# B.H	Ø B. H.	Ø B.H. C.	125/150# (OD)	250/300# (OD)
0.5	0.878	3.50	4	0.625	2.375	3.750	4	0.625	2.625	1.875	2.125
0.75	1.062	3.88	4	0.625	2.750	4.625	4	0.750	3.250	2.250	2.625
1	1.313	4.25	4	0.625	3.125	4.875	4	0.750	3.500	2.625	2.875
1.25	1.683	4.63	4	0.625	3.500	5.250	4	0.750	3.875	3.000	3.250
1.5	1.943	5.00	4	0.625	3.875	6.125	4	0.875	4.500	3.375	3.750
2	2.375	6.00	4	0.750	4.750	6.500	8	0.875	5.000	4.125	4.375
2.5	2.875	7.00	4	0.750	5.500	7.500	8	0.875	5.875	4.875	5.125
3	3.500	7.50	4	0.750	6.000	8.250	8	0.875	6.625	5.375	5.875
3.5	4.000	8.50	8	0.750	7.000	9.000	8	0.875	7.250	6.375	6.500
4	4.500	9.00	8	0.750	7.500	10.00	8	0.875	7.875	6.875	7.125
5	5.563	10.00	8	0.875	8.500	11.00	8	0.875	9.250	7.750	8.500
6	6.625	11.00	8	0.875	9.500	12.50	12	0.875	10.63	8.750	9.875
8	8.650	13.50	8	0.875	11.75	15.00	12	1.000	13.00	11.000	12.125
10	10.750	16.00	12	1.000	14.25	17.50	16	1.125	15.25	13.380	14.250
12	12.750	19.00	12	1.000	17.00	20.50	16	1.250	17.75	16.130	16.625
14	14.000	21.00	12	1.125	18.75	23.00	20	1.250	20.25	17.750	19.125
16	16.000	23.50	16	1.125	21.25	25.50	20	1.375	22.50	20.500	21.250
18	18.000	25.00	16	1.250	22.75	28.00	24	1.375	24.75	21.630	23.500
20	20.000	27.50	20	1.250	25.00	30.50	24	1.375	27.00	23.880	25.750
22	22.000	29.50	20	1.375	27.25	33.00	24	1.625	29.25	26.000	27.625
24	24.000	32.00	20	1.375	29.50	36.00	24	1.625	32.00	28.250	30.500
26	26.000	34.75	24	1.375	31.75	38.25	28	1.750	34.50	30.500	32.875
28	28.000	36.50	28	1.375	34.00	40.75	28	1.750	37.00	32.750	35.375
30	30.000	38.75	28	1.375	36.00	43.00	28	1.875	39.50	34.750	37.500
32	32.000	41.75	28	1.625	38.50	45.25	28	2.000	41.50	38.000	39.625
34	34.000	43.75	32	1.625	40.50	47.50	28	2.000	43.50	39.000	41.625
36	36.000	46.00	32	1.625	42.75	50.00	32	2.125	46.00	41.250	44.000
38	38.000	48.75	36	1.625	45.25	52.25	32	2.250	48.00	43.630	46.125
40	40.000	50.75	36	1.625	47.25	54.25	36	2.250	50.25	45.630	48.750
42	42.000	53.00	36	1.625	49.50	57.00	36	2.250	52.75	48.000	50.750
44	44.000	55.25	40	1.625	51.75	59.25	36	2.250	55.00	50.130	53.000
46	46.000	57.25	40	1.625	53.75	61.50	40	2.250	57.75	52.130	55.250
48	48.000	59.50	44	1.625	56.00	65.00	40	2.250	60.75	54.500	58.500

Note:

- a. Dimensions per ANSI B 16.5 and AWWA C110 standards for pipe flanges and gaskets.
- b. Dimensional tolerances (unless otherwise stated): Up to 1" @ +/- .0325"; 1.25" thru 12" @ +/- .0625"; 14" thru 24" @ +/- .0975"; 24" and above @ +/- .25".
- c. Standard gasket material is SBR (Red Rubber) or Non-Asbestos (Green), but Neoprene, EPDM, Buna N, Silicone, Viton Teflon and other compounds are readily available.
- d. Standard thicknesses are 1/16" and 1/8", but other thickness are available.
- e. Sizes above 24" available upon request (minimum order quantity may apply).

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.

Gaskets - Basic Compounds & Properties

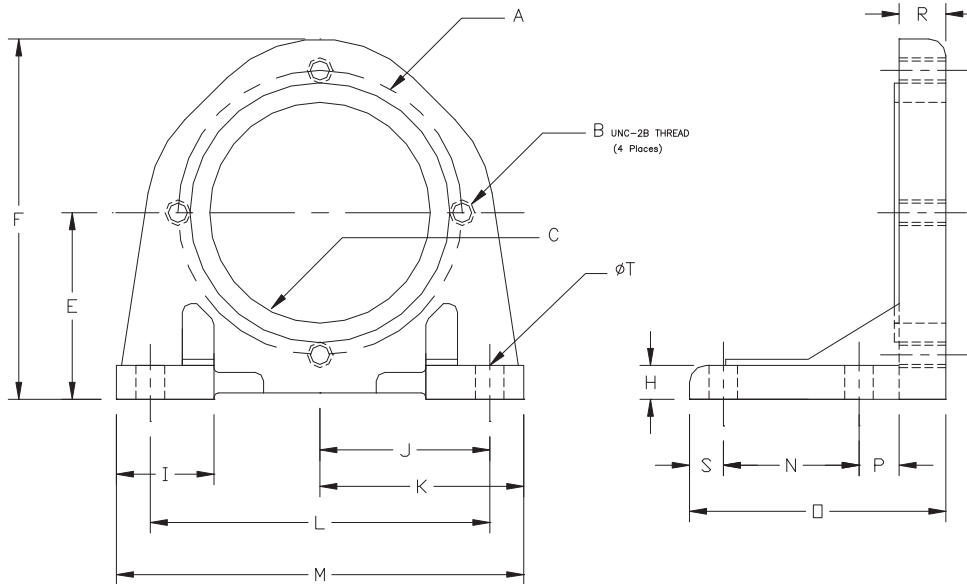
				General Chemical Resistance	
Common Name (s)	Designation	Composition	General Properties	Resistance to	Attacked by:
Neoprene	CR	Chloroprene	Good weathering resistance and flame retarding. Good resistance to petroleum based fluids.	Moderate chemicals and acids, ozone, oils, fats, greases and many solvents.	Strong oxidizing acids, esters, ketones, chlorinated, aromatic and nitro hydrocarbons.
EPDM	EPM	Ethylene-propylene-diene-molimers	Excellent ozone, chemical and aging resistance. Excellent heat resistance. Poor resistance to petroleum based fluids.	Heat, ozone, strong oxidizing chemicals and acetone.	Petroleum based fluids, animal fats, solvents and greases.
Buna-N	NBR	Nitrile-butadiene	Excellent resistance to petroleum based fluids. Good physical properties.	Many hydrocarbons, fats, oils, hydraulic fluids and chemicals.	Ozone (except PVC blends), ketones, esters, aldehydes, chlorinated and nitro hydrocarbons.
Silicones	Q, Si	Polysiloxane	Excellent high and low temperature properties. Good oil resistance. FDA compound. Good physical properties.	Moderate chemicals and acids, ozone, oils, fats, greases and concentrated sodium hydroxide.	Many solvents, high aromatic hydrocarbons, concentrated acids, dilute sodium hydroxide.
SBR (Red Rubber)	SBR	Styrene-butadiene	Good physical properties and abrasion resistance. Poor resistance to petroleum based fluids.	Most moderate chemicals wet or dry, organic acids, alcohols, ketones and aldehydes.	Ozone, strong acids, animal fats, oils, greases and most hydrocarbons.
Viton (Fluoro-elastomer)	FPM	Hexafluoropropylene-vinylidene fluoride	Excellent oil and air resistance at low and high temperatures. Excellent chemical resistance.	All aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils.	Ketones, low molecular weight esters and nitro containing compounds
Teflon® (Fluorocarbon resin)	TFE	Polytetra-fluoroethylene	Excellent chemical and solvent resistance. Resistant to very high temperatures.	Inert to most chemicals, smooth anti-adhesive surface. Easily cleaned.	Acetates, NA-K and some amino acids.
Non-Asbestos	NA	Aramid fiber and synthetic fibers bonded with NBR.	General service water & oil gasket. Pressures to 1595 psi, Temp to 750o F.	Mild acids, Alkalis, Oils, general chemicals & petroleum derivatives and steam.	Consult customer service for chemical compatibility.

Notes:

- The chemical guidelines in this table are offered as a general indication of the compatibility of various materials with chemicals and fluids listed.
- When in doubt a sample of the compound should always be tested with the particular chemical it is to handle.
- API stocks Non-Asbestos (GNA Series) and SBR (GRR Series) gaskets, but others are available upon request (minimum order quantity may apply).

PART NUMBER STRUCTURE

Part Number Section	Options
Material	GNA = Green Non-Asbestos GRR = Red Rubber
Size	XXXX = Size in inches going out 2 decimal places
Type	FF = Full Face R = Ring
Thickness	XXX = Size in inches going out 3 decimal places



Hydraulic Motor Pump Brackets

DIMENSIONS

API Part Number	A	B	C	E	F	H	I	J	K	L	M	N	O	P	R	S	T	Weight (lbs)
HB-A	4.19	.38-16	3.25	2.75	5.31	0.50	1.44	2.50	3.00	5.00	6.00	2.00	3.78	0.59	0.69	0.50	0.43	4
HB-B	5.75	.50-13	4.00	3.63	7.12	0.50	1.44	2.88	3.38	5.75	6.75	2.00	3.77	0.59	0.69	0.50	0.43	5
HB-C	7.13	.62-11	5.00	4.31	8.50	0.62	2.00	4.63	5.22	9.25	10.44	3.00	5.18	0.75	0.75	0.68	0.69	12

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED.

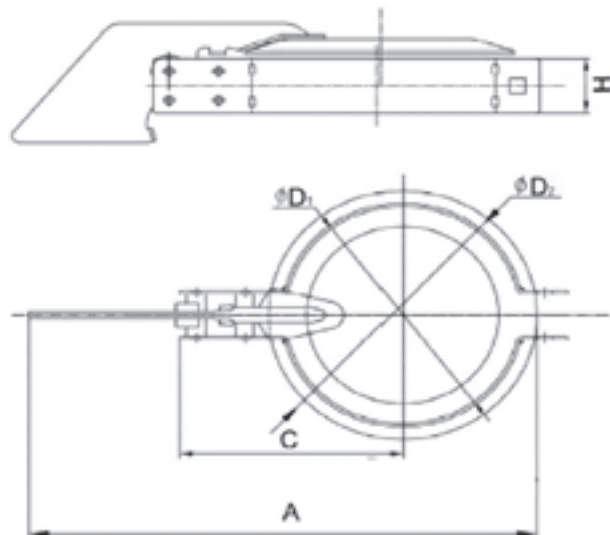
MATERIALS

Part	Material
Body	Cast Iron



Notes:

SAE-J744, 3 sizes for the same specification for Gear Pump, Vickers Piston Pump, or Vane Pump & Motors.



Exhaust Rain Caps

DIMENSIONS

API Part Number	Size	"A"	"C"	"H"	"D1"	"D2"
RC0100-x	1	5.63	2.91	1.26	1.14	1.57
RC0150-x	1.5	5.98	2.95	1.26	1.50	1.65
RC0200-x	2	6.69	3.19	1.26	2.03	2.52
RC0250-x	2.5	7.17	3.46	1.26	2.52	2.99
RC0300-x	3	7.68	3.74	1.26	3.01	3.50
RC0350-x	3.5	8.19	3.94	1.26	3.52	4.02
RC0400-x	4	9.61	4.27	1.26	4.02	4.72
RC0450-x	4.5	10.43	4.61	1.26	4.50	5.31
RC0500-x	5	10.81	4.78	1.26	5.02	5.75
RC0550-x	5.5	11.30	5.20	1.26	5.63	6.26
RC0600-x	6	11.61	5.31	1.26	5.98	6.69
RC0650-x	6.5	12.36	5.71	1.26	6.61	7.64
RC0800-x	8	13.78	6.30	1.26	7.99	8.66

"x" = **G** (Electro-Galvanized/Zink-Plated Q235 Steel)
S (304 Stainless Steel)

TEMPERATURE RATINGS

Electro-Galvanized/ Zink-Plated Q235 Steel	750° F
304 Stainless Steel	1100° F

APPLICATIONS

- Used to prevent dirt, dust, rain and other debris from falling into exposed stack pipes

Notes:

- Rain Caps rated for 2,000,000 cycles.