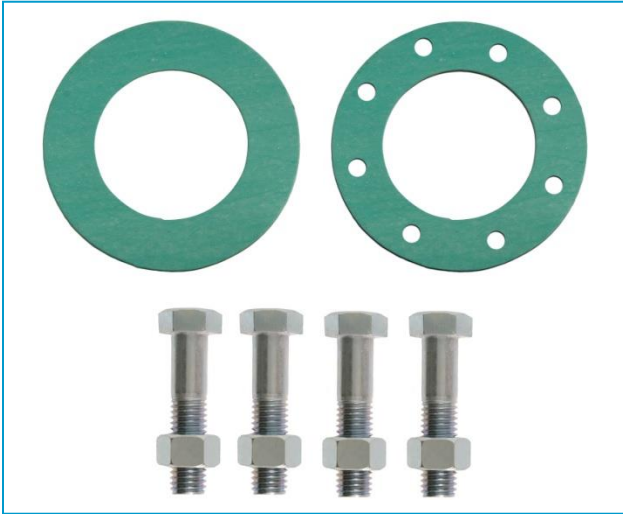


Bolt & Gasket Sets

Specification Sheet

Non-Asbestos



Gasket: APG style CNA-750

- Constructed of aramid and other synthetic fibers and bonded with nitrile rubber (NBR).
- Max temperature rating: 750 degrees F
- (Continuous temp max: 460 degrees F)
- Max pressure limit: 1595 PSI
- (Continuous pressure max: 725 PSI)
- Suitable for: Water, air, and a variety of industrial gases and fluids; suitable for steam depending on operating conditions
- Meets ASTM F152
- Comparable products: Klinger C-4401, Garlock 3000

Bolts: ASTM A307 Grade A zinc plated carbon steel

- Minimum tensile strength: 60,000 PSI

Nuts: ASTM A563, Grade A, zinc plated carbon steel
Finished Hex Nut (Standard Factory furnished)

ASTM A563, Grade A, zinc plated carbon steel
HEAVY HEX NUT (Available upon request)

Packaging:

- Box: Folding tab white mottled boxes
- Bolts are packaged in sealed poly bags
- Nuts are packaged in sealed poly bags

Red Rubber



Gasket: APG style 0700

- Constructed of SBR (Styrene Butadiene Rubber)
- “Smooth” red rubber finish as opposed to rough “cloth” finish
- Max temperature rating: -20 to 170 degrees F, 210 degrees F intermittent
- Tensile Strength: 500 PSI
- Suitable for: hot & cold water, air, and neutral fluids
- Meets ASTM D-1330

Bolts: ASTM A307 Grade A zinc plated carbon steel

- Minimum tensile strength: 60,000 PSI

Nuts: ASTM A563, Grade A, zinc plated carbon steel
Finished Hex Nut (Standard Factory furnished)

ASTM A563, Grade A, zinc plated carbon steel
HEAVY HEX NUT (Available upon request)

Packaging:

- Box: Folding tab white mottled boxes
- Bolts are packaged in sealed poly bags
- Nuts are packaged in sealed poly bags



Flange Compatibility Chart

Specification Sheet

A.S.A Flanged Fittings
Class 125 Cast Iron Flanges and Fittings
Dimensions of Cast Iron Flanges, Bolts, and Ring Gaskets

Nominal Pipe Size	Diam. of Flange	Thickness ¹ of Flanges (Min.)	Diam. of Bolt Circle	Number ² of Bolts	Diam. of Bolts	Diam. ² of Bolt Holes	Length ^{3,4} of Bolts	Size of Flat Ring Gasket	Size of Full Face Ring Gasket
2	6	5/8	4 3/4	4	5/8	3/4	2 1/4	2 x 4-1/8	2-3/8 x 6
2 1/2	7	11/16	5 1/2	4	5/8	3/4	3	2-1/2 x 4-7/8	2-7/8 x 7
3	7 1/2	3/4	6	4	5/8	3/4	3	3 x 5-3/8	3-1/2 x 7-1/2
3 1/2	8 1/2	13/16	7	8	5/8	3/4	3	3-1/2 x 6-3/8	
4	9	15/16	7 1/2	8	5/8	3/4	3	4 x 6-7/8	4-1/2 x 9
5	10	15/16	8 1/2	8	3/4	7/8	3	5 x 7-3/4	5-9/16 x 10
6	11	1	9 1/2	8	3/4	7/8	3 1/2	6 x 8-3/4	6-5/8 x 11
8	13 1/2	1 1/3	11 3/4	8	3/4	7/8	3 1/2	8 x 11	5-5/8 x 13-1/2
10	16	1 3/16	14 1/4	12	7/8	1	4	10 x 13-3/8	10-3/4 x 16
12	19	1 1/4	17	12	7/8	1	4	12 x 16-1/8	12-3/4 x 19
14 OD	21	1 3/8	18 3/4	12	1	1 1/8	4 1/2	14 x 17-3/4	14 x 21
16 OD	23 1/2	1 7/16	21 1/4	16	1	1 1/8	4 1/2	16 x 20-1/4	16 x 23-1/2
18 OD	25	1 9/16	22 3/4	16	1 1/8	1 1/4	5	18 x 21-5/8	18 x 25
20 OD	27 1/2	1 11/16	25	20	1 1/8	1 1/4	5	20 x 23-7/8	20 x 27-1/2
24 OD	32	1 7/8	29 1/2	20	1 1/4	1 3/8	5 1/2	24 x 28-1/4	24 x 32

All dimensions given in inches.



Flange Compatibility Chart

Specification Sheet

A.S.A Flanged Fittings Class 300 Cast Iron Flanges Dimensions of Cast Iron Flanges, and Bolts

Nominal Pipe Size	Diam. of Flange	Thickness of Flanges (Min.)	Diam. of Bolt Circle	Number of Bolts	Diam. of Bolts	Diam. of Bolt Holes	Length of Bolts
2	6 1/2	5/8	5.00	8	0.62	0.75	3
2 1/2	7 1/2	3/4	5.88	8	0.75	0.88	3 1/4
3	8 1/4	3/4	6.62	8	0.75	0.88	3 1/2
3 1/2	-	-	7.25	8	0.75	0.88	-
4	10	3/4	7.88	8	0.75	0.88	3 3/4
5	11	3/4	9.25	8	0.75	0.88	4
6	12 1/2	3/4	10.62	12	0.75	0.88	4 1/4
8	15	7/8	13.00	12	0.88	1.00	4 3/4
10	17 1/2	-	15.25	16	1.00	1.12	-
12	20 1/2	-	17.75	16	1.12	1.25	-
14	23	-	20.25	20	1.12	1.25	-
16	25 1/2	-	22.50	20	1.25	1.38	-
18	28	-	24.75	24	1.25	1.38	-
20	30 1/2	-	27.00	24	1.25	1.38	-
24	36	-	32.00	24	1.50	1.62	-

*All dimensions given in inches

Torque Specifications

The estimated torque calculations chart below is only offered as a guide. Use of its content is the sole responsibility of that person, and they assume all risk. Due to many variables that affect torque-tension relationship like human error, surface texture, and lubrication the only way to determine the correct torque is through experimentation under actual joint and assembly conditions.

Nominal Dia (in)	Threads per inch	Clamp Load (Lbs)	Tightening Torque ASTM A307 Grade A		
			K = 0.15 (Lubricated)	K = 0.17 (Plated)	K = 0.20 (Plain)
1/2"	13	3831	24	27	32
5/8"	11	6102	48	54	64
3/4"	10	9030	85	96	113
7/8"	9	12467	136	155	182

Clamp load calculated as 75% of the proof load when specified by the standard. ASTM A307 utilized 75% of 36,000 PSI. All torque values calculated from the formula $T = KDF$, where:

K=0.15 for "lubricated conditions"

K=0.17 for "zinc plated"

K=0.20 for "plain and dry conditions"

D=Nominal Diameter

F=Clamp Load

