



Non-Asbestos Kit

Gasket: APG style CNA-750

- Constructed of aramid and other synthetic fibers and bonded with nitrile rubber (NBR)
- Max temperature rating: 750°F
- (Continuous temp max: 460°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 Kit

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

Bolt & Gasket Kits

Flange Compatibility Charts

A.S.A Flanged Fittings • Class 125 Cast Iron Flanges and Fittings									
Dimensions of Cast Iron Flanges, Bolts, and Ring Gaskets									
Nomi- nal 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	2-1/2	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	3-1/4	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 are given in inches.

A.S.A Flanged Fittings • Class 300 Cast Iron Flanges and Fittings									
Dimensions of Cast Iron Flanges, Bolts, and Ring Gaskets									
Nomi- nal 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	6-1/2	5/8	5.00	8	0.62	0.75	3	2 x 4-1/8	2-3/8 x 6
2-1/2	7-1/2	3/4	5.88	8	0.75	0.88	3-1/4	2-1/2 x 4-7/8	2-7/8 x 7
3	8 1/4	3/4	6.62	8	0.75	0.88	3-1/2	3 x 5-3/8	3-1/2 x 7-1/2
3-1/2	-	-	7.25	8	0.75	0.88	-	3-1/2 x 6-3/8	
4	10	3/4	7.88	8	0.75	0.88	3-3/4	4 x 6-7/8	4-1/2 x 9
5	11	3/4	9.25	8	0.75	0.88	4-1/2	5 x 7-3/4	5-9/16 x 10
6	12-1/2	3/4	10.62	12	0.75	0.88	4-1/2	6 x 8-3/4	6-5/8 x 11
8	15	7/8	13.00	12	0.88	1.00	4-1/2	8 x 11	5-5/8 x 13-1/2
10	17-1/2	-	15.25	16	1.00	1.12	-	10 x 13-3/8	10-3/4 x 16
12	20-1/2	-	17.75	16	1.12	1.25	-	12 x 16-1/8	12-3/4 x 19
14	23	-	20.25	20	1.12	1.25	-	14 x 17-3/4	14 x 21
16	25-1/2	-	22.50	20	1.25	1.38	-	16 x 20-1/4	16 x 23-1/2
18	28	-	24.75	24	1.25	1.38	-	18 x 21-5/8	18 x 25
20	30-1/2	-	27.00	24	1.25	1.38	-	20 x 23-7/8	20 x 27-1/2
24	36	-	32.00	24	1.50	1.62	-	24 x 28-1/4	24 x 32

All dimensions are given in inches.

Bolt & Gasket Kits

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.

Specifications					
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

Bolt & Gasket Kits

Boltpacks

CATEGORY	WEBB #	MFR #	DESCRIPTION
1/8" FULL FACE RED RUBBER 150#	76041	PROFKFR2-18HZP	BOLTPAK 2" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76042	PROFKFR2.5-18HZP	BOLTPAK 2-1/2" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76043	PROFKFR3-18HZP	BOLTPAK 3" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76044	PROFKFR4-18HZP	BOLTPAK 4" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76045	PROFKFR5-18HZP	BOLTPAK 5" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76046	PROFKFR6-18HZP	BOLTPAK 6" FF 150 1/8" RR ZP
1/8" FULL FACE RED RUBBER 150#	76047	PROFKFR8-18HZP	BOLTPAK 8" FF 150 1/8" RR ZP
1/8" FULL FACE NON ASBESTOS 150#	76067	PROFKFNA2-18HZP	BOLTPAK 2" FF 150 1/8" NASB ZP
1/8" FULL FACE NON ASBESTOS 150#	76068	PROFKFNA2.5-18HZP	BOLTPAK 2-1/2" FF 150 1/8" NASB ZP
1/8" FULL FACE NON ASBESTOS 150#	76069	PROFKFNA3-18HZP	BOLTPAK 3" FF 150 1/8" NASB ZP
1/8" FULL FACE NON ASBESTOS 150#	76070	PROFKFNA4-18HZP	BOLTPAK 4" FF 150 1/8" NASB ZP
1/8" FULL FACE NON ASBESTOS 150#	76071	PROFKFNA5-18HZP	BOLTPAK 5" FF 150 1/8" NASB ZP
1/8" FULL FACE NON ASBESTOS 150#	76072	PROFKFNA6-18HZP	BOLTPAK 6" FF 150 1/8" NASB ZP
1/8" RING RED RUBBER 150#	76029	PROFKR2.5-18HZP	BOLTPAK 2-1/2" RING 150 1/8" RR ZP
1/8" RING RED RUBBER 150#	76030	PROFKR3-18HZP	BOLTPAK 3" RING 150 1/8" RR ZP
1/8" RING RED RUBBER 150#	76031	PROFKR4-18HZP	BOLTPAK 4" RING 150 1/8" RR ZP
1/16" RING NON ASBESTOS 150#	76052	PROFKNA1.25-116ZP	BOLTPAK 1-1/4" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268851	PROFKNA1.5-116ZP	BOLTPAK 1-1/2" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268852	PROFKNA2-116ZP	BOLTPAK 2" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268853	PROFKNA2.5-116ZP	BOLTPAK 2-1/2" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268854	PROFKNA3-116ZP	BOLTPAK 3" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268856	PROFKNA4-116ZP	BOLTPAK 4" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268857	PROFKNA5-116ZP	BOLTPAK 5" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268855	PROFKNA6-116ZP	BOLTPAK 6" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268858	PROFKNA8-116ZP	BOLTPAK 8" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268859	PROFKNA10-116ZP	BOLTPAK 10" RING 150 1/16" NASB ZP
1/16" RING NON ASBESTOS 150#	268860	PROFKNA12I-116ZP	BOLTPAK 12" RING 150 1/16" NASB ZP
1/8" RING NON ASBESTOS 150#	76053	PROFKNA1.5-18HZP	BOLTPAK 1-1/2" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76061	PROFKNA10-18HZP	BOLTPAK 10" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76062	PROFKNA12I-18HZP	BOLTPAK 12" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76055	PROFKNA2.5-18HZP	BOLTPAK 2-1/2" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76054	PROFKNA2-18HZP	BOLTPAK 2" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76056	PROFKNA3-18HZP	BOLTPAK 3" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76057	PROFKNA4-18HZP	BOLTPAK 4" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76058	PROFKNA5-18HZP	BOLTPAK 5" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76059	PROFKNA6-18HZP	BOLTPAK 6" RING 150 1/8" NASB ZP
1/8" RING NON ASBESTOS 150#	76060	PROFKNA8-18HZP	BOLTPAK 8" RING 150 1/8" NASB ZP