

2022

FIRE PROTECTION
AND MECHANICAL
TECHNOLOGIES

ALEUM 
COUPLINGS AND FITTINGS

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ALEUM 

COUPLINGS AND FITTINGS
QUICKCONNECT

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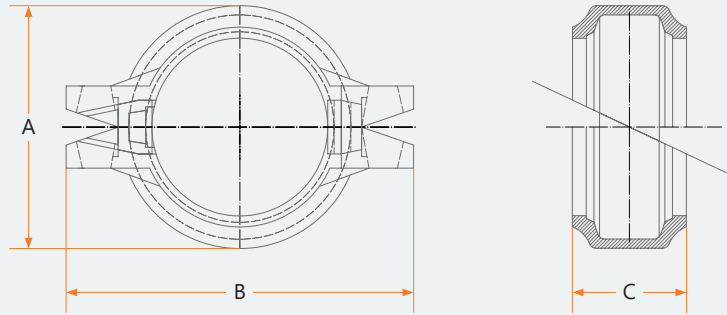
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ALAPC Angle Pad Coupling

- **Model** | ALAPC
- **Size** | 1" thru 12"
- **Approvals** | UL, ULC, FM
- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Gasket** | Prelubricated EPDM - ANSI / NSF 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red



Angle Pad Coupling

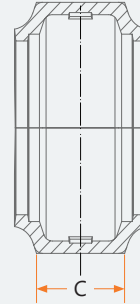
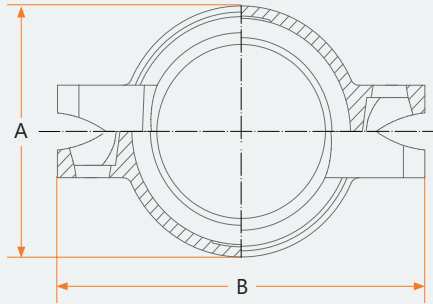
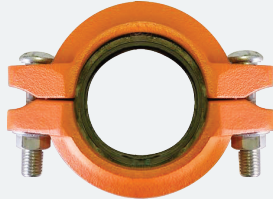
Nominal Size		Pipe OD.		Dimensions						Bolt		Axial Displacement	
in	mm	in	mm	A		B		C		Inches	mm	Inches	mm
				in	mm	in	mm	in	mm				
1	25	1.327	33.7	2.28	58	3.85	98	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6
1 1/4	32	1.669	42.4	2.68	68	4.17	106	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6
1 1/2	40	1.9	48.3	2.91	74	4.49	114	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6
2	50	2.375	60.3	3.39	86	5.04	128	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6
2 1/2	65	2.875	73	3.86	98	5.39	137	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6
2 1/2	65	3	76.1	4.06	103	5.55	141	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6
3	80	3.5	88.9	4.57	116	6.22	158	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6
4	100	4.5	114.3	5.55	141	7.56	192	1.96	50	1/2x2 1/2	12x65	0~0.13	0~3.2
5	125	5.563	141.3	6.81	173	8.86	225	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2
6	150	6.5	165.1	7.83	199	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2
6	150	6.625	168.3	7.95	202	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2
8	200	8.625	219.1	10.16	258	12.67	322	2.28	58	5/8x3 3/4	16x95	0~0.13	0~3.2
10	250	10.75	273	12.51	318	15.43	392	2.28	58	3/4x4 1/4	20x110	0~0.13	0~3.2
12	300	12.539	323.9	14.53	369	17.72	450	2.28	58	3/4x4 1/4	20x110	0~0.13	0~3.2

ALFC Flexible Coupling



- Model | ALFC
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa

- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Gasket | Prelubricated EPDM - ANSI / NSF 61
- Bolt / Nut | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- Paint Color | Orange Enamel, Optional : Red

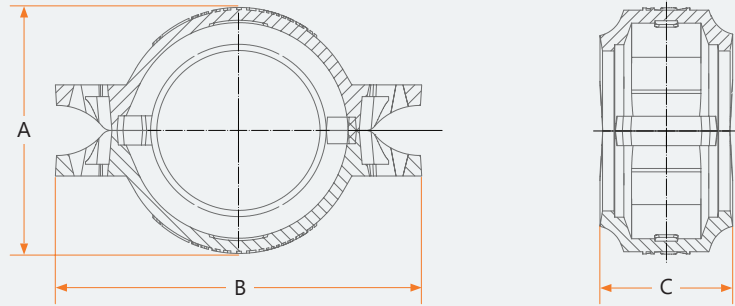


Flexible Coupling

Nominal Size		Pipe OD.		Dimensions						Bolt		Axial Displacement		Pipe Sched	Wall Thick	Max. Work Press	
in	mm	in	mm	A		B		C		Inches	mm	Inches	mm	Sch	mm	Bar	Psi
				in	mm	in	mm	in	mm								
1	25	1.327	33.7	2.28	58	3.85	98	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.38	35	500
														10	2.77	35	500
1 1/4	32	1.669	42.4	2.68	68	4.17	106	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.56	35	500
														10	2.77	35	500
1 1/2	40	1.9	48.3	2.91	74	4.49	114	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.68	35	500
														10	2.77	35	500
2	50	2.375	60.3	3.39	86	5.04	128	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	3.91	35	500
														10	2.77	35	500
2 1/2	65	2.875	73	3.86	98	5.39	137	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	5.16	35	500
														10	3.05	35	500
2 1/2	65	3	76.1	4.06	103	5.55	141	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	-	6.35	-	-
														-	5.08	35	500
														-	3.81	35	500
3	80	3.5	88.9	4.57	116	6.22	158	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	5.49	35	500
														10	3.05	35	500
4	100	4.5	114.3	5.55	141	7.56	192	1.96	50	1/2x2 1/2	12x65	0~0.13	0~3.2	40	6.02	35	500
														10	3.05	35	500
5	125	5.563	141.3	6.81	173	8.86	225	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	40	6.55	31	450
														10	3.40	31	450
6	150	6.5	165.1	7.83	199	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	-	6.35	31	450
														-	5.08	31	450
6	150	6.625	168.3	7.95	202	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	40	7.11	31	450
														10	3.40	31	450
8	200	8.625	219.1	10.16	258	12.67	322	2.28	58	5/8x3 3/4	16x95	0~0.13	0~3.2	40	8.18	31	450
														30	7.04	31	450
														10	4.77	20	300
10	250	10.75	273	12.51	318	15.43	392	2.28	58	5/8x3 3/4	20x110	0~0.13	0~3.2	40	9.27	20	300
														30	7.80	20	300
														10	4.77	20	300
12	300	12.539	323.9	14.53	369	17.72	450	2.28	58	5/8x3 3/4	20x110	0~0.13	0~3.2	40	10.31	20	300
														STD	9.53	20	300
														30	6.35	20	300
														10	4.77	20	300

ALRC Rigid Coupling

- **Model** | ALRC
- **Size** | 1" thru 12"
- **Approvals** | UL, ULC, FM
- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Gasket** | Prelubricated EPDM - ANSI / NSF - 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red



Rigid Coupling

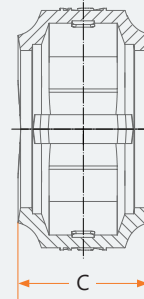
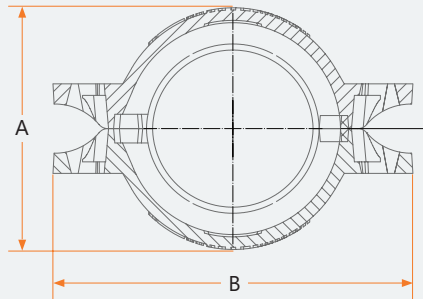
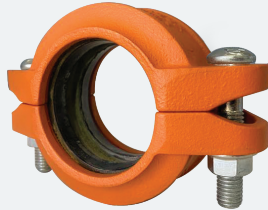
Nominal Size		Pipe OD.		Dimensions						Bolt		Axial Displacement		Pipe Sched	Wall Thick	Max. Work Press	
in	mm	in	mm	A		B		C		Inches	mm	Inches	mm	Sch	mm	Bar	Psi
				in	mm	in	mm	in	mm								
1	25	1.327	33.7	2.28	58	3.85	98	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.38	35	500
														10	2.77	35	500
1 1/4	32	1.669	42.4	2.68	68	4.17	106	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.56	35	500
														10	2.77	35	500
1 1/2	40	1.9	48.3	2.91	74	4.49	114	1.77	45	3/8x1 3/4	10x45	0~0.06	0~1.6	40	3.68	35	500
														10	2.77	35	500
2	50	2.375	60.3	3.39	86	5.04	128	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	3.91	35	500
														10	2.77	35	500
2 1/2	65	2.875	73	3.86	98	5.39	137	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	5.16	35	500
														10	3.05	35	500
2 1/2	65	3	76.1	4.06	103	5.55	141	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	-	6.35	-	-
														-	5.08	35	500
														-	3.81	35	500
3	80	3.5	88.9	4.57	116	6.22	158	1.77	45	3/8x2 1/4	10x55	0~0.06	0~1.6	40	5.49	35	500
														10	3.05	35	500
4	100	4.5	114.3	5.55	141	7.56	192	1.96	50	1/2x2 1/2	12x65	0~0.13	0~3.2	40	6.02	35	500
														10	3.05	35	500
5	125	5.563	141.3	6.81	173	8.86	225	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	40	6.55	31	450
														10	3.40	31	450
6	150	6.5	165.1	7.83	199	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	-	6.35	31	450
														-	5.08	31	450
6	150	6.625	168.3	7.95	202	9.92	252	1.96	50	1/2x3.0	12x75	0~0.13	0~3.2	40	7.11	31	450
														10	3.40	31	450
8	200	8.625	219.1	10.16	258	12.67	322	2.28	58	5/8x3 3/4	16x95	0~0.13	0~3.2	40	8.18	31	450
														30	7.04	31	450
														10	4.77	20	300
10	250	10.75	273	12.51	318	15.43	392	2.28	58	5/8x3 3/4	20x110	0~0.13	0~3.2	40	9.27	20	300
														30	7.80	20	300
														10	4.77	20	300
12	300	12.539	323.9	14.53	369	17.72	450	2.28	58	5/8x3 3/4	20x110	0~0.13	0~3.2	40	10.31	20	300
														STD	9.53	20	300
														30	6.35	20	300
														10	4.77	20	300

ALREC Reducing Flexible Coupling



- **Model** | ALREC
- **Size** | 2" x 1 1/4" thru 8" x 6"
- **Approvals** | UL, ULC, FM
- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa

- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Gasket** | Prelubricated EPDM - ANSI / NSF 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red

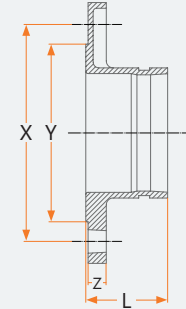
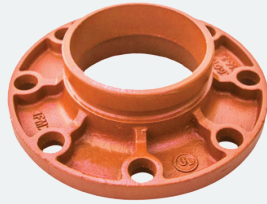


Reducing Flexible Coupling

Nominal Size		Pipe OD.		Dimensions						Bolt		Pipe Sched	Wall Thick	Max. Work Press	
in	mm	in	mm	A		B		C		Inches	mm	Sch	mm	Bar	Psi
				in	mm	in	mm	in	mm						
2 x 1¼	50 x 32	2.375 x 1.660	60.3 x 42.4	3.39	86	4.93	125	1.74	44	3/8 x 2.1	M10 x 2.2	40	3.56	35	500
												10	2.77	35	500
2 x 1½	50 x 40	2.375 x 1.900	60.3 x 48.3	3.39	86	4.93	125	1.74	44	3/8 x 2.1	M10 x 2.2	40	3.68	35	500
												10	2.77	35	500
2½ x 1	65 x 25	2.875 x 1.327	73.0 x 33.7	3.94	100	5.44	138	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.38	35	500
												10	2.77	35	500
2½ x 1¼	65 x 32	2.875 x 1.660	73.0 x 42.4	3.94	100	5.44	138	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.56	35	500
												10	2.77	35	500
2½ x 1½	65 x 40	2.875 x 1.900	73.0 x 48.3	3.94	100	5.44	138	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.68	35	500
												10	2.77	35	500
2½ x 2	65 x 50	2.375 x 2.375	73.0 x 60.3	3.94	100	5.44	138	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.91	35	500
												10	2.77	35	500
2½ x 1	65 x 25	3.000 x 1.327	76.0 x 33.7	4.02	102	5.51	140	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.38	35	500
												10	2.77	35	500
2½ x 1½	65 x 40	3.000 x 1.900	76.1 x 48.3	4.02	102	5.51	140	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.68	35	500
												10	2.77	35	500
2½ x 2	65 x 50	3.000 x 2.375	76.1 x 60.3	4.02	102	5.51	140	1.78	45	3/8 x 2.1	M10 x 2.2	40	3.91	35	500
												10	2.77	35	500
3 x 1	80 x 25	3.500 x 1.327	88.9 x 33.7	4.53	115	6.61	168	1.81	46	1/2 x 2.7	M12 x 2.7	40	3.38	35	500
												10	2.77	35	500
3 x 1½	80 x 40	3.500 x 1.900	88.9 x 48.3	4.53	115	6.61	168	1.81	46	1/2 x 2.7	M12 x 2.7	40	3.68	35	500
												10	2.77	35	500
3 x 2	80 x 50	3.500 x 2.375	88.9 x 60.3	4.53	115	6.61	168	1.81	46	1/2 x 2.7	M12 x 2.7	40	3.91	35	500
												10	2.77	35	500
3 x 2½	80 x 65	3.500 x 2.875	88.9 x 73.0	4.53	115	6.61	168	1.81	46	1/2 x 2.7	M12 x 2.7	40	5.16	35	500
												10	3.05	35	500
3 x 2½	80 x 65	3.500 x 3.000	88.9 x 76.1	4.53	115	6.61	168	1.81	46	1/2 x 2.7	M12 x 2.7	-	6.35	35	500
												-	5.08	35	500
4 x 1	100 x 25	4.500 x 1.327	114.3 x 33.7	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	-	3.81	35	500
												40	3.38	35	500
4 x 1½	100 x 40	4.500 x 1.900	114.3 x 48.3	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	40	2.77	35	500
												10	3.68	35	500
4 x 2	100 x 50	4.500 x 2.375	114.3 x 60.3	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	40	2.77	35	500
												10	3.91	35	500
4 x 2½	100 x 65	4.500 x 2.875	114.3 x 73.0	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	40	5.16	35	500
												10	3.05	35	500
4 x 2½	100 x 65	4.500 x 3.000	114.3 x 76.1	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	-	6.35	35	500
												-	5.08	35	500
4 x 3	100 x 80	4.500 x 3.500	114.3 x 88.9	5.67	144	7.8	198	1.97	50	1/2 x 2.7	M12 x 2.7	-	3.81	35	500
												40	5.49	35	500
6 x 3	150 x 80	6.500 x 3.500	165.1 x 88.9	7.87	200	10.24	260	2.01	51	5/8 x 3.3	M16 x 3.3	40	3.05	35	500
												10	5.49	35	500
6 x 4	150 x 100	6.500 x 4.500	165.1 x 114.3	7.97	202.5	10.55	268	2.07	52.5	5/8 x 3.3	M16 x 3.3	40	3.05	35	500
												10	6.02	35	500
8 x 6	200 x 150	8.625 x 6.500	219.1 x 165.1	10.24	260	13.31	338	2.36	60	3/4 x 4.5	M20 x 4.5	-	6.35	31	450
												-	5.08	31	450
8 x 6	200 x 150	8.625 x 6.625	219.1 x 168.3	10.24	260	13.31	338	2.36	60	3/4 x 4.5	M20 x 4.5	40	7.11	31	450
												10	3.4	31	450

ALFLAG150 Class 150 Adapter Flange

- Model | ALFLAG150
- Size | 2" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red

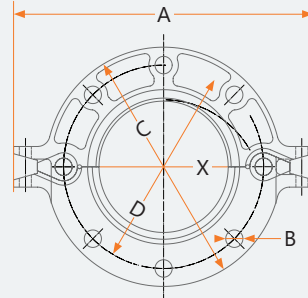


Adaptor Flange

Nominal Size		Pipe OD.		Dimensions								Flange Mating Bolts	
in	mm	in	mm	L		Flange O.D (X)		Bolt Circle (Y)		Bolt Hole (Z)		No.	Inches mm
				in	mm	in	mm	in	mm	in	mm		
2	50	2.375	60.3	2.559	65	6.0	152	4.74	120.5	0.63	16	4	.563" M16
2½	65	2.875	73.0	2.559	65	7.28	185	5.50	139.7	0.63	16	4	.563" M16
3	80	3.500	88.9	2.559	65	7.87	200	6.00	152.4	0.63	16	4	.563" M16
4	100	4.500	114.3	2.756	70	9.01	229	7.50	190.5	0.63	16	8	.563" M16
6	150	6.625	168.3	2.756	70	11.10	282	9.50	241.3	0.71	18	8	.750" M20
8	200	8.625	219.1	2.95	75	13.39	340	11.75	298.5	0.75	19	8	.750" M20
10	250	10.75	273.0	3.35	85	15.98	406	14.25	362	1	26	12	1.00" M24
12	300	12.75	323.9	3.94	100			17.00	431.8	1	26	12	1.00" M24

ALGF150 Class 150 Split Flange

- **Model** | ALGF150
- **Size** | 2" thru 12"
- **Approvals** | UL, ULC, FM
- **Working Pressure** | 300 PSI / 2.07 Mpa
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Gasket** | EPDM - ANSI / NSF - 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red



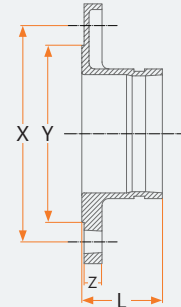
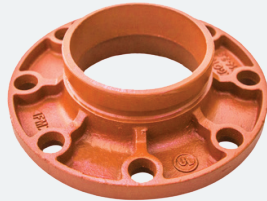
Split Flange

Nominal Size		Pipe OD.		Dimensions										Flange Mating Bolt	
in	mm	in	mm	BHC (X)		OAL. (A)		Bolt Hole (B)		Flange O.D (C)		Bolt Circle (D)		No.	Inches
				in	mm	in	mm	in	mm	in	mm	in	mm		mm
2	50	2.375	60.3	6.02	165	8.11	206	0.75	19	5.98	152	4.76	121	4	.563"
															M16
2½	65	2.875	73.0	6.89	185	9.05	230	0.75	19	7	178	5.51	140	4	.563"
															M16
3	80	3.5	88.9	7.48	200	9.68	246	0.75	19	7.52	191	5.98	152	4	.563"
															M16
4	100	4.5	114.3	8.58	220	11.02	280	0.75	19	9	229	7.52	191	8	.563"
															M16
5	125	5.563	141.3	8.58	250	12.60	320	0.87	22	10	254	8.5	216	8	.750"
															M20
6	150	6.625	168.3	11.10	285	13.62	346	0.94	24	11	280	9.5	241.3	8	.750"
															M20
8	200	8.625	219.1	13.11	340	16.31	414.3	1.18	30	13.44	341.4	11.75	298.5	8	.750"
															M20
10	250	10.75	273	15.63	405	18.94	481.2	1.19	30.3	15.97	405.6	14.25	361.95	12	1.00"
															M24
12	300	12.75	323.9	18.11	460	21.78	553.3	1.2	30.4	19	482.6	17	431.8	12	1.00"
															M24

ALFLAG PN16 Adapter Flange

- Model | ALFLAG
- Size | 2" thru 12"
- Approvals | UL, ULC, FM

- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure | 250 PSI / 1.60 Mpa
- Paint Color | Orange Enamel, Optional : Red



PN stands for Nominal Pressure and roughly equates to the number of bar. (i.e. the cold working pressure of PN16 is 16 bar = 232 psi)

Adaptor Flange

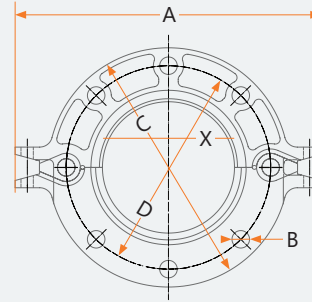
Nominal Size		Pipe OD.		Dimensions								Mating Bolt Dia.	
in	mm	in	mm	L		Flange O.D (X)		Bolt Circle (Y)		Bolt Hole (Z)		No.	mm
				in	mm	in	mm	in	mm	in	mm		
2	50	2.375	60.3	1.97	50	6.02	165	4.92	125	0.51	13	4	M16
2½	65	2.875	73	1.97	50	6.89	185	5.71	145	0.51	13	4	M16
2½	65	3	76.1	1.97	50	6.89	185	5.71	145	0.51	13	4	M16
3	80	3.5	88.9	2.36	60	7.48	200	6.3	160	0.51	13	4	M16
4	100	4.25	108	2.76	70	8.27	220	7.09	180	0.71	18	4	M16
4	100	4.5	114.3	2.76	70	8.58	220	7.09	180	0.71	18	8	M16
5	125	5.25	133	2.76	70	8.58	250	7.09	210	0.71	18	8	M16
5	125	5.5	139.7	2.76	70	8.58	250	7.09	210	0.71	18	8	M16
5	125	5.563	141.3	2.76	70	8.58	250	7.09	210	0.71	18	8	M20
6	150	6.25	159	2.76	70	11.1	285	9.44	240	0.71	18	8	M20
6	150	6.5	165.1	2.76	70	11.1	285	9.44	240	0.71	18	8	M20
6	150	6.625	168.3	2.76	70	11.1	285	9.44	240	0.71	18	8	M20
8	200	8.625	219.1	3.15	80	13.11	340	11.61	295	0.75	19	12	M20
10	250	10.75	273	3.54	90	15.63	405	13.98	355	0.79	20	12	M24
12	300	12.75	323.9	3.94	100	18.11	460	16.14	410	0.91	23	12	M24

ALGFPN PN16 Split Flange



- **Model** | ALGFPN
- **Size** | 1 1/2" thru 12"
- **Approvals** | UL, ULC, FM
- **Working Pressure** | 250 PSI / 1.60 Mpa

- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Gasket** | EPDM - ANSI / NSF - 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red



PN stands for Nominal Pressure and roughly equates to the number of bar. (i.e. the cold working pressure of PN16 is 16 bar = 232 psi)

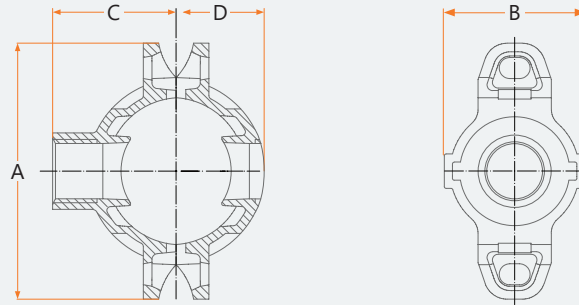
Split Flange

Nominal Size		Pipe OD.		Dimensions										Mating Bolt Dia.	
in	mm	in	mm	BHC (X)		OAL (A)		Bolt Hole (B)		Flange O.D (C)		Bolt Circle (D)		No.	mm
				in	mm	in	mm	in	mm	in	mm	in	mm		
1½	40	1.9	48.3	5.90	150	7.68	195	0.73	18.5	5.90	150	4.33	110	4	M16
2	50	2.375	60.3	6.02	165	8.66	220	0.73	18.5	6.50	165	4.92	125	4	M16
2½	65	3	76.1	6.89	185	9.25	235	0.73	18.5	7.28	185	5.71	145	4	M16
3	80	3.5	88.9	7.48	200	10.04	255	0.73	18.5	7.68	195	6.30	160	4	M16
4	100	4.25	108	8.27	220	10.98	279	0.73	18.5	8.66	220	7.09	180	4	M16
4	100	4.5	114.3	8.27	220	10.98	279	0.73	18.5	8.82	224	7.09	180	8	M16
5	125	5.25	133	8.58	250	12.28	312	0.85	25	9.84	250	8.27	210	8	M16
5	125	5.5	139.7	8.58	250	12.60	320	0.91	23	9.84	250	8.27	210	8	M16
6	150	6.25	159	11.1	285	13.62	346	0.85	21.5	11.00	280	9.45	240	8	M20
6	150	6.5	165.1	11.1	285	13.62	346	0.85	21.5	11.00	280	9.45	240	8	M20
6	150	6.625	168.3	11.1	285	13.62	346	0.94	24	11.00	280	9.45	240	8	M20
8	200	8.625	219.1	13.11	340	16.32	414.3	1.18	30	13.39	340	11.61	295	12	M20
10	250	10.75	273	15.63	405	18.90	480	1.00	25.5	15.94	405	13.98	355	12	M24
12	300	12.75	323.9	18.11	460	20.88	530.5	1.00	25.5	18.11	460	16.14	410	12	M24

ALGMT Mechanical Tee Grooved Outlet

- Model | ALMTG
- Size | 2" x 1 1/4" thru 8" x 3"
- Approvals | UL, ULC, FM
- Working Pressure | 300 PSI / 2.07 Mpa
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12

- Gasket | EPDM - ANSI / NSF 61
- Bolt / Nut | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- Paint Color | Orange Enamel, Optional : Red



Mechanical Tee Grooved Outlet

Nominal Size	Pipe OD.	Hole Dia.	Dimensions				Bolt Size
			A	B	C	D	
in	in	in	in	in	in	in	in
mm	mm	mm	mm	mm	mm	mm	mm
2x1¼	2.375x1.660	1.77	4.57	2.72	2.68	1.57	¾x55
50x32	60.3x42.4	45	116	69	68	40	M10x55
2x1½	2.375x1.900	1.77	4.57	2.72	2.7	1.57	¾x55
50x40	60.3x48.3	45	116	69	68.5	40	M10x55
2½x1	3.000x1.315	1.5	5.67	2.72	2.99	1.93	½x70
65x25	76.1x33.7	38	144	69	76	49	M12x70
2½x1¼	3.000x1.660	2.01	5.67	2.72	2.99	1.93	½x70
65x32	76.1x42.4	51	144	69	76	49	M12x70
2½x1½	3.000x1.900	2.01	5.67	3.15	2.99	1.93	½x70
65x40	76.1x48.3	51	144	80	76	49	M12x70
3x1¼	3.500x1.660	2.01	5.75	3.39	3.35	2.17	½x70
80x32	88.9x42.4	51	146	86	85	55	M12x70
3x1½	3.500x1.900	2.01	5.75	3.39	3.35	2.17	½x70
80x40	88.9x48.3	51	146	86	85	55	M12x70
3x2	3.500x2.375	2.52	5.75	3.78	3.35	2.17	½x70
80x50	88.9x60.3	64	146	96	85	55	M12x70
4x1¼	4.500x1.660	2.01	7.01	3.23	3.78	2.72	½x75
100x32	114.3x42.4	51	178	82	96	69	M12x75
4x1½	4.500x1.900	2.01	7.01	3.23	3.78	2.72	½x75
100x40	114.3x48.3	51	178	82	96	69	M12x75
4x2	4.500x2.375	2.52	7.01	3.74	3.82	2.72	½x75
100x50	114.3x60.3	64	178	95	97	69	M12x75
4x2½	4.500x2.875	2.76	7.01	4.45	3.82	2.72	½x75
100x65	114.3x73.0	70	178	113	97	69	M12x75
4x2	4.500x3.000	2.76	7.01	4.45	3.82	2.72	½x75
100x65	114.3x76.1	70	178	113	97	69	M12x75
4x2½	5.500x1.660	2.01	8.03	3.23	4.33	3.19	¾x85
125x32	139.7x42.4	51	204	82	110	81	M16x85
4x2½	5.500x1.900	2.01	8.03	3.23	4.33	3.19	¾x85
125x40	139.7x48.3	51	204	82	110	81	M16x85
5x1½	5.500x2.375	2.52	8.03	3.74	4.33	3.19	¾x85
125x50	139.7x60.3	64	204	95	110	81	M16x85
5x2½	5.500x2.875	2.76	8.03	4.45	4.33	3.19	¾x85
125x65	139.7x73.0	70	204	113	110	81	M16x85
5x2½	5.500x3.000	2.76	8.03	4.45	4.33	3.19	¾x85
125x65	139.7x76.1	70	204	113	110	81	M16x85

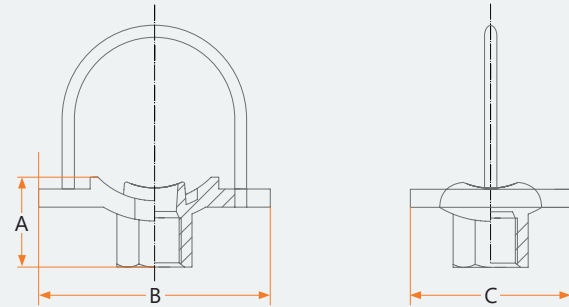
Nominal Size	Pipe OD.	Hole Dia.	Dimensions				Bolt Size
			A	B	C	D	
in	in	in	in	in	in	in	in
mm	mm	mm	mm	mm	mm	mm	mm
5x1¼	5.563x1.660	2.01	8.03	3.23	4.33	3.19	¾x85
125x32	141.3x42.4	51	204	82	110	81	M16x85
5x1½	5.563x1.900	2.01	8.03	3.23	4.33	3.19	¾x85
125x40	141.3x48.3	51	204	82	110	81	M16x85
5x2	5.563x2.375	2.52	8.03	3.74	4.33	3.19	¾x85
125x50	141.3x60.3	64	204	95	110	81	M16x85
5x2½	5.563x2.875	2.76	8.03	4.45	4.33	3.19	¾x85
125x65	141.3x73.0	70	204	113	110	81	M16x85
5x2½	5.563x3.000	2.76	8.03	4.45	4.33	3.19	¾x85
125x65	141.3x76.1	70	204	113	110	81	M16x85
6x1¼	6.500x1.660	2.01	9.37	3.23	4.76	3.74	¾x105
150x32	165.1x42.4	51	238	82	121	95	M16x105
6x1½	6.500x1.900	2.01	9.37	3.23	4.76	3.74	¾x105
150x40	165.1x48.3	51	238	82	121	95	M16x105
6x2	6.500x2.375	2.52	9.37	3.74	4.8	3.74	¾x105
150x50	165.1x60.3	64	238	95	122	95	M16x105
6x2½	6.500x2.875	2.76	9.37	4.45	4.8	3.74	¾x105
150x65	165.1x73.0	70	238	113	122	95	M16x105
6x2½	6.500x3.000	2.76	9.37	4.45	4.8	3.74	¾x105
150x65	165.1x76.1	70	238	113	122	95	M16x105
6x1¼	6.625x1.660	2.01	9.37	3.23	4.76	3.74	¾x105
150x32	168.3x42.4	51	238	82	121	95	M16x105
6x1½	6.625x1.900	2.01	9.37	3.23	4.76	3.74	¾x105
150x40	168.3x48.3	51	238	82	121	95	M16x105
6x2	6.625x2.375	2.52	9.37	3.74	4.8	3.74	¾x105
150x50	168.3x60.3	64	238	95	122	95	M16x105
6x2½	6.625x2.875	2.76	9.37	4.45	4.8	3.74	¾x105
150x65	168.3x73.0	70	238	113	122	95	M16x105
6x2½	6.625x3.000	2.76	9.37	4.45	4.8	3.74	¾x105
150x65	168.3x76.1	70	238	113	122	95	M16x105
8x1¼	8.625x1.660	2.01	12.21	3.23	5.98	4.88	¾x115
200x32	219.1x42.4	51	301	82	152	124	M20x115
8x1½	8.625x1.900	2.01	12.21	3.23	5.98	4.88	¾x115
200x40	219.1x48.3	51	301	82	152	124	M20x115
8x2	8.625x2.375	2.52	12.21	3.82	5.98	4.88	¾x115
200x50	219.1x60.3	64	301	97	152	124	M20x115
8x2½	8.625x2.875	2.76	12.21	4.53	5.98	4.88	¾x115
200x65	219.1x73.0	70	301	115	152	124	M20x115
8x2½	8.625x3.000	2.76	12.21	4.53	5.98	4.88	¾x115
200x65	219.1x76.1	70	301	115	152	124	M20x115
8x3	219.1x88.9	3.5	12.21	5	5.98	4.88	¾x115
200x80	8.625x3.500	89	301	127	152	124	M20x115



ALUTMT U Bolt Mechanical Tee

- **Model** | ALUTMT
- **Size** | 1 1/4" x 1/2" thru 2 1/2" x 1"
- **Approvals** | UL, ULC, FM
- **Working Pressure** | 300 PSI / 2.07 Mpa
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12

- **Gasket** | EPDM - ANSI / NSF 61
- **Bolt / Nut** | Carbon Steel heat treated & zinc electroplated, ASTM A183 Gr. 2; Hex Nuts ASTM A563, Gr. B
- **Paint Color** | Orange Enamel, Optional : Red



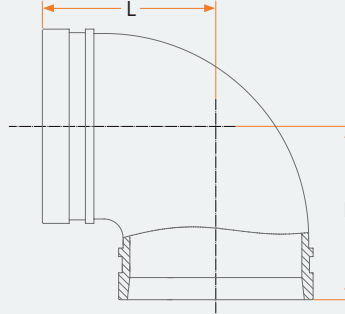
U Bolt Mechanical Tee

Nominal Size		Pipe OD.		Hole Dia.		Dimensions						U - Bolt Size	Bolt Torque
in	mm	in	mm	+0.063,-0	+1.6,-0	A		B		C		mm	Lb-ft
				in	mm	in	mm	in	mm	in	mm		N-mm
1 1/4 x 1/2	32 x 15	1.660	42.4	1.18	30	1.69	43	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
1 1/4 x 3/4	32 x 20	1.660	42.4	1.18	30	1.69	43	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
1 1/4 x 1	32 x 25	1.66	42.4	1.18	30	2.01	51	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
1 1/2 x 1/2	40 x 15	1.900	48.3	1.18	30	1.81	46	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
1 1/2 x 3/4	40 x 20	1.900	48.3	1.18	30	1.93	49	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
1 1/2 x 1	40 x 25	1.900	48.3	1.18	30	2.13	54	3.54	90	2.2	56	0.375"	20-30
												M10	15-22
2 x 1/2	50 x 15	2.375	60.3	1.18	30	2.05	52	3.78	96	2.2	56	0.375"	20-30
												M10	15-22
2 x 3/4	50 x 20	2.375	60.3	1.18	30	2.05	52	3.78	96	2.2	56	0.375"	20-30
												M10	15-22
2 x 1	50 x 25	2.375	60.3	1.18	30	2.36	60	3.78	96	2.2	56	0.375"	20-30
												M10	15-22
2 1/2 x 1/2	65 x 15	3.000	76.1	1.18	30	2.36	60	4.41	112	2.2	56	0.375"	20-30
												M10	15-22
2 1/2 x 3/4	65 x 20	3.000	76.1	1.18	30	2.36	60	4.41	112	2.2	56	0.375"	20-30
												M10	15-22
2 1/2 x 1	65 x 25	3.000	76.1	1.18	30	2.68	68	4.41	112	2.2	56	0.375"	20-30
												M10	15-22

* Do not exceed recommended Bolt Torque.

AL90ESR / AL90ESTDR 90° Elbow (Short / Long)

- Model | AL90ESR / AL90ESTDR
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



90° Elbow (Short) | AL90ESR

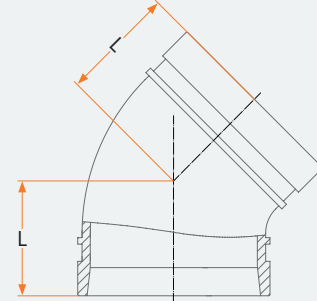
Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L	
				in	mm
1	25	1.327	33.7	2.24	57
1¼	32	1.669	42.4	2.36	60
1½	40	1.9	48.3	2.36	60
2	50	2.375	60.3	2.76	70
2½	65	2.875	73	2.99	76
2½	65	3	76.1	2.99	76
3	80	3.5	88.9	3.39	86
4	100	4.25	108	4.02	102
4	100	4.5	114.3	4.02	102
5	125	5.25	133	4.76	121
5	125	5.5	139.7	4.76	121
5	125	5.563	141.3	4.76	121
6	150	6.25	159	5.51	140
6	150	6.5	165.1	5.51	140
6	150	6.625	168.3	5.51	140
8	200	8.625	219.1	6.89	175
10	250	10.75	273	8.46	215
12	300	12.75	323.9	9.65	245

90° Elbow (Long) | AL90ESTDR

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L	
				in	mm
1	25	1.327	33.7	2.76	70
1¼	32	1.669	42.4	2.76	70
1½	40	1.9	48.3	2.76	70
2	50	2.375	60.3	3.23	82
2½	65	2.875	73	3.74	95
2½	65	3	76.1	3.74	95
3	80	3.5	88.9	4.25	108
4	100	4.25	108	5	127
4	100	4.5	114.3	5	127
5	125	5.25	133	5.51	140
5	125	5.5	139.7	5.51	140
5	125	5.563	141.3	5.51	140
6	150	6.25	159	6.5	165
6	150	6.5	165.1	6.5	165
6	150	6.625	168.3	6.5	165
8	200	8.625	219.1	7.76	197
10	250	10.75	273	9.02	229
12	300	12.75	323.9	10	254

AL45E 45° Elbow

- Model | AL45E
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



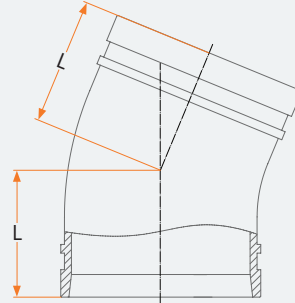
45° Elbow

Nominal Size		Pipe OD.		Dimensions (L)	
in	mm	in	mm	in	mm
1	25	1.327	33.7	1.77	45
1¼	32	1.669	42.4	1.77	45
1½	40	1.9	48.3	1.77	45
2	50	2.375	60.3	2.01	51
2½	65	2.875	73	2.24	57
2½	65	3	76.1	2.24	57
3	80	3.5	88.9	2.51	64
4	100	4.25	108	3	76
4	100	4.5	114.3	3	76
5	125	5.25	133	3.24	82.5
5	125	5.5	139.7	3.24	82.5
5	125	5.563	141.3	3.24	82.5
6	150	6.25	159	3.5	89
6	150	6.5	165.1	3.5	89
6	150	6.625	168.3	3.5	89
8	200	8.625	219.1	4.25	108
10	250	10.75	273	4.74	120.5
12	300	12.75	323.9	5.23	133

AL225E 22.5° Elbow



- Model | AL225E
- Size | 1 1/4" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red

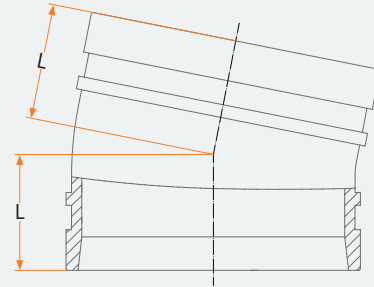


22.5° Elbow

Nominal Size		Pipe OD.		Dimensions (L)	
in	mm	in	mm	in	mm
1¼	32	1.669	42.4	1.57	40
1½	40	1.9	48.3	1.77	45
2	50	2.375	60.3	1.97	50
2½	65	2.875	73	1.97	50
2½	65	3	76.1	1.97	50
3	80	3.5	88.9	2.36	60
4	100	4.25	108	2.76	70
4	100	4.5	114.3	2.76	70
5	125	5.25	133	2.76	70
5	125	5.5	139.7	2.76	70
6	150	6.25	159	3.5	89
6	150	6.5	165.1	3.5	89
6	150	6.625	168.3	3.5	89
8	200	8.625	219.1	3.85	98
10	250	10.75	273	4.72	120
12	300	12.75	323.9	4.72	120

AL1125E 11.25° Elbow

- Model | AL1125E
- Size | 1 1/4" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



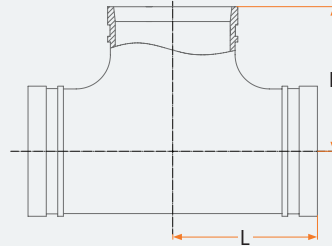
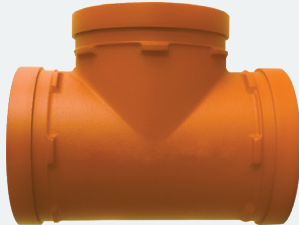
11.25° Elbow

Nominal Size		Pipe OD.		Dimensions (L)	
in	mm	in	mm	in	mm
1 1/4	32	1.669	42.4	1.38	35
1 1/2	40	1.9	48.3	1.57	40
2	50	2.375	60.3	1.57	40
2 1/2	65	2.875	73	1.57	40
2 1/2	65	3	76.1	1.57	40
3	80	3.5	88.9	1.57	40
4	100	4.25	108	1.77	45
4	100	4.5	114.3	1.77	45
5	125	5.25	133	1.97	50
5	125	5.5	139.7	1.97	50
6	150	6.25	159	1.97	50
6	150	6.5	165.1	1.97	50
6	150	6.625	168.3	1.97	50
8	200	8.625	219.1	1.97	50
10	250	10.75	273	3.15	80
12	300	12.75	323.9	3.15	80

ALETSR / ALETSTDR Tee



- Model | ALETSR / ALETSTDR
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



Tee (Short) | ALETSR

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L	
				in	mm
1	25	1.327	33.7	2.24	57
1¼	32	1.669	42.4	2.36	60
1½	40	1.9	48.3	2.36	60
2	50	2.375	60.3	2.76	70
2½	65	2.875	73	2.99	76
2½	65	3	76.1	2.99	76
3	80	3.5	88.9	3.39	86
4	100	4.25	108	4.02	102
4	100	4.5	114.3	4.02	102
5	125	5.25	133	4.76	121
5	125	5.5	139.7	4.76	121
5	125	5.563	141.3	4.76	121
6	150	6.25	159	5.51	140
6	150	6.5	165.1	5.51	140
6	150	6.625	168.3	5.51	140
8	200	8.625	219.1	6.89	175
10	250	10.75	273	8.46	215
12	300	12.75	323.9	9.65	245

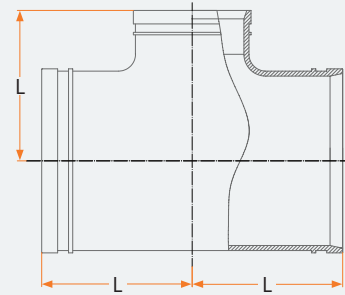
Tee (Long) | ALETSTDR

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L	
				in	mm
1	25	1.327	33.7	2.76	70
1¼	32	1.669	42.4	2.76	70
1½	40	1.9	48.3	2.76	70
2	50	2.375	60.3	3.23	82
2½	65	2.875	73	3.74	95
2½	65	3	76.1	3.74	95
3	80	3.5	88.9	4.25	108
4	100	4.25	108	5	127
4	100	4.5	114.3	5	127
5	125	5.25	133	5.51	140
5	125	5.5	139.7	5.51	140
5	125	5.563	141.3	5.51	140
6	150	6.25	159	6.5	165
6	150	6.5	165.1	6.5	165
6	150	6.625	168.3	6.5	165
8	200	8.625	219.1	7.76	197
10	250	10.75	273	9.02	229
12	300	12.75	323.9	10	254

ALRTG Grooved Reducing Tee

- **Model** | ALRTG
- **Size** | 2" x 1" thru 10" x 6"
- **Approvals** | UL, ULC, FM
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12

- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- **Paint Color** | Orange Enamel, Optional : Red



Grooved Reducing Tee

Nominal Size		Pipe OD.		Dimensions			
in	mm	in	mm	L1		L2	
				in	mm	in	mm
2x1	50x25	2.375x1.315	60.3x33.7	3.23	82	3.23	82
2x1¼	50x32	2.375x1.660	60.3x42.4	3.23	82	3.23	82
2x1½	50x40	2.375x1.900	60.3x48.3	3.23	82	3.23	82
2½x1¼	65x32	2.875x1.660	73.0x42.4	3.74	95	3.74	95
2½x1½	65x40	2.875x1.900	73.0x48.3	3.74	95	3.74	95
2½x2	65x25	2.875x2.375	76.1x60.3	3.74	95	3.74	95
2½x1¼	65x50	3.000x1.660	76.1x42.4	3.74	95	3.74	95
2½x1½	65x32	3.000x1.900	76.1x48.3	3.74	95	3.74	95
2½x2	65x40	3.000x2.375	76.1x60.3	3.74	95	3.74	95
3x½	65x50	3.500x1.900	88.9x48.3	4.25	108	4.25	108
3x2	80x40	3.500x2.375	88.9x60.3	4.25	108	4.25	108
3x2½	80x50	3.500x3.000	88.9x76.1	4.25	108	4.25	108
4x2½	100x65	4.250x3.000	108.0x76.1	5	127	5	127
4x3	100x80	4.250x3.500	108.0x88.9	5	127	5	127
4x2	100x50	4.500x2.375	114.3x60.3	5	127	5	127
4x2½	100x65	4.500x3.000	114.3x76.1	5	127	5	127
4x3	100x80	4.500x3.500	114.3x88.9	5	127	5	127
5x2	125x50	5.250x2.375	133.0x60.3	5.51	140	5.51	140
5x2½	125x65	5.250x3.000	133.0x76.1	5.51	140	5.51	140
5x4	125x100	5.250x4.250	133.0x108.0	5.51	140	5.51	140
5x4	125x100	5.250x4.500	133.0x114.3	5.51	140	5.51	140
5x2	125x50	5.500x2.375	139.7x60.3	5.51	140	5.51	140
5x2½	125x65	5.500x3.000	139.7x76.1	5.51	140	5.51	140
5x3	125x80	5.500x3.500	139.7x88.9	5.51	140	5.51	140
5x4	125x100	5.500x4.500	139.7x114.3	5.51	140	5.51	140

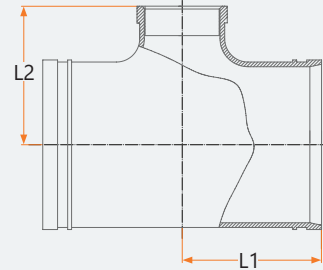
Nominal Size		Pipe OD.		Dimensions			
in	mm	in	mm	L1		L2	
				in	mm	in	mm
5x2	125x50	5.563x2.375	141.3x60.3	3.23	140	3.23	140
5x2½	125x65	5.563x2.875	141.3x70.3	3.23	140	3.23	140
5x2½	125x65	5.563x3.000	141.3x76.1	3.23	140	3.23	140
5x3	125x80	5.563x3.500	141.3x88.9	3.74	140	3.74	140
5x2½	125x100	5.563x4.500	141.3x114.3	3.74	140	3.74	140
6x2½	150x65	6.250x3.000	159.0x76.1	3.74	165	3.74	165
6x3	150x80	6.250x3.500	159.0x88.9	3.74	165	3.74	165
6x4	150x100	6.250x4.250	159.0x108.0	3.74	165	3.74	165
6x4	150x100	6.250x4.500	159.0x114.3	3.74	165	3.74	165
6x2	150x50	6.500x2.375	165.1x60.3	4.25	165	4.25	165
6x2½	150x65	6.500x3.000	165.1x76.1	4.25	165	4.25	165
6x3	150x80	6.500x3.500	165.1x88.9	4.25	165	4.25	165
6x4	150x100	6.500x4.500	165.1x114.3	5	165	5	165
6x5	150x125	6.500x5.500	165.1x139.7	5	165	5	165
6x2	150x50	6.625x2.375	168.3x60.3	5	165	5	165
6x2½	150x65	6.625x3.000	168.3x76.1	5	165	5	165
6x3	150x80	6.625x3.500	168.3x88.9	5	165	5	165
8x2½	200x65	8.625x3.000	219.1x76.1	5.51	197	5.51	197
8x3	200x80	8.625x3.500	219.1x88.9	5.51	197	5.51	197
8x4	200x100	8.625x4.500	219.1x114.3	5.51	197	5.51	197
8x5	200x125	8.625x5.500	219.1x139.7	5.51	197	5.51	197
8x6	200x150	8.625x6.500	219.1x165.1	5.51	197	5.51	197
8x6	200x150	8.625x6.625	219.1x168.3	5.51	197	5.51	197
10x4	250x100	10.750x4.500	273.0x114.3	5.51	229	5.51	229
10x5	250x125	10.750x5.500	273.0x139.7	5.51	229	5.51	229
10x6	250x150	10.750x6.500	273.0x165.1	5.51	229	5.51	229

ALRTT Threaded Reducing Tee



- Model | ALRTT
- Size | 1 1/2" x 1" thru 8" x 3"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12

- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



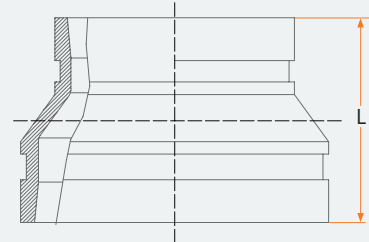
Threaded Reducing Tee

Nominal Size		Pipe OD.		Dimensions			
in	mm	in	mm	L1		L2	
				in	mm	in	mm
1½x1	40x25	5.500x3.500	139.7x88.9	5.51	140	5.51	140
1½x1 ¼	40x32	5.500x4.500	139.7x114.3	5.51	140	5.51	140
2x1	50x25	2.375x1.315	60.3x33.7	3.23	82	3.23	82
2x1¼	50x32	2.375x1.660	60.3x42.4	3.23	82	3.23	82
2x1½	50x40	2.375x1.900	60.3x48.3	3.23	82	3.23	82
2½x1	65x25	2.875x1.315	73.0x33.7	3.74	95	3.74	95
2½x1¼	65x32	2.875x1.660	73.0x42.4	3.74	95	3.74	95
2½x1½	65x40	2.875x1.900	73.0x48.3	3.74	95	3.74	95
2½x2	65x50	2.875x2.375	73.0x60.3	3.74	95	3.74	95
2½x1	65x25	3.000x1.315	76.1x33.7	3.74	95	3.74	82
2½x1¼	65x50	3.000x1.660	76.1x42.4	3.74	95	3.74	95
2½x1½	65x32	3.000x1.900	76.1x48.3	3.74	95	3.74	95
2½x2	65x40	3.000x2.375	76.1x60.3	3.74	95	3.74	95
3x1	80x25	3.500x1.315	88.9x33.7	4.25	108	4.25	108
3x1¼	80x32	3.500x1.660	88.9x42.4	4.25	108	4.25	108
3x1½	80x40	3.500x1.900	88.9x48.3	4.25	108	4.25	108
3x2	80x40	3.500x2.375	88.9x60.3	4.25	108	4.25	108
3x2½	80x50	3.500x3.000	88.9x76.1	4.25	108	4.25	108
4x2½	100x65	4.250x3.000	108.0x76.1	5	127	5	127
4x3	100x80	4.250x3.500	108.0x88.9	5	127	5	127
4x1	100x25	4.500x1.315	114.3x33.7	5	127	5	127
4x1¼	100x32	4.500x1.660	114.3x42.4	5	127	5	127
4x1½	100x40	4.500x1.900	114.3x48.3	5	127	5	127
4x2	100x50	4.500x2.375	114.3x60.3	5	127	5	127
4x2½	100x65	4.500x3.000	114.3x76.1	5	127	5	127
4x3	100x80	4.500x3.500	114.3x88.9	5	127	5	127
5x1	125x25	5.500x1.315	139.7x33.7	5.51	140	5.51	140

Nominal Size		Pipe OD.		Dimensions			
in	mm	in	mm	L1		L2	
				in	mm	in	mm
5x1¼	125x32	5.500x1.660	139.7x42.4	5.51	140	5.51	140
5x2½	125x40	5.500x1.900	139.7x48.3	5.51	140	5.51	140
5x2	125x50	5.500x2.375	139.7x60.3	5.51	140	5.51	140
5x2½	125x65	5.500x3.000	139.7x76.1	5.51	140	5.51	140
5x3	125x80	5.500x3.500	139.7x88.9	5.51	140	5.51	140
5x1	125x25	5.563x1.315	141.3x33.7	5.51	140	5.51	140
5x1¼	125x32	5.563x1.315	141.3x42.4	5.51	140	5.51	140
5x1½	125x40	5.563x1.900	141.3x48.3	5.51	140	5.51	140
5x2	125x50	5.563x2.375	141.3x60.3	5.51	140	5.51	140
5x2½	125x65	5.563x2.875	141.3x73.0	5.51	140	5.51	140
5x2½	125x65	5.563x3.000	141.3x76.1	5.51	140	5.51	140
6x2½	150x65	6.250x3.000	159.0x76.1	6.5	165	6.5	165
6x3	150x80	6.250x3.500	159.0x88.9	6.5	165	6.5	165
6x1	150x25	6.500x1.315	165.1x33.7	6.5	165	6.5	165
6x1¼	150x32	6.500x1.660	165.1x42.4	6.5	165	6.5	165
6x1½	150x40	6.500x1.900	165.1x48.3	6.5	165	6.5	165
6x2	150x50	6.500x2.375	165.1x60.3	6.5	165	6.5	165
6x2½	150x65	6.500x3.000	165.1x76.1	6.5	165	6.5	165
6x3	150x80	6.500x3.500	165.1x88.9	6.5	165	6.5	165
6x4	150x100	6.500x4.500	165.1x114.3	6.5	165	6.5	165
6x1	150x25	6.625x1.315	168.3x33.7	6.5	165	6.5	165
6x1¼	150x32	6.625x1.660	168.3x42.4	6.5	165	6.5	165
6x1½	150x40	6.625x1.900	168.3x48.3	6.5	165	6.5	165
6x2	150x50	6.625x2.375	168.3x60.3	6.5	165	6.5	165
8x2	200x50	8.625x2.375	219.1x60.3	7.76	197	7.76	197
8x2½	200x65	8.625x3.000	219.1x76.1	7.76	197	7.76	197
8x3	200x80	8.625x3.500	219.1x88.9	7.76	197	7.76	197

ALRG Grooved Concentric Reducer

- **Model** | ALRG
- **Size** | 1 1/4" x 1" thru 8" x 6"
- **Approvals** | UL, ULC, FM
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- **Paint Color** | Orange Enamel, Optional : Red



Grooved Concentric Reducer

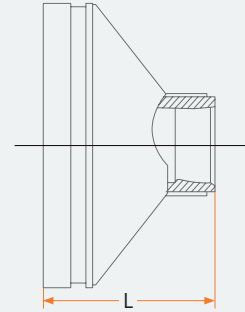
Nominal Size		Pipe OD		Dimensions		Nominal Size		Pipe OD		Dimensions		Nominal Size		Pipe OD		Dimensions	
in	mm	in	mm	L		in	mm	in	mm	L		in	mm	in	mm	L	
				in	mm					in	mm						
1 1/4x1	32x25	1.660x1.315	42.4x33.7	2.51	64	4x1 1/2	100x40	4.500x1.900	114.3x48.3	2.99	76	6x2 1/2	150x65	6.500x3.000	165.1x76.1	4.01	102
1 1/2x1	40x25	1.900x1.315	48.3x33.7	2.51	64	4x2	100x50	4.500x2.375	114.3x60.3	2.99	76	6x3	150x80	6.500x3.500	165.1x88.9	4.01	102
1 1/2x1 1/4	40x32	1.900x1.660	48.3x42.4	2.51	64	4x2 1/2	100x65	4.500x3.000	114.3x76.1	2.99	76	6x4	150x100	6.500x4.500	165.1x114.3	4.01	102
2x1	50x25	2.375x1.315	60.3x33.7	2.51	64	4x3	100x80	4.500x3.500	114.3x88.9	2.99	76	6x5	150x125	6.500x5.500	165.1x139.7	4.01	102
2x1 1/4	50x32	2.375x1.660	60.3x42.4	2.51	64	5x2	125x50	5.500x2.375	139.7x60.3	3.5	89	6x2	150x50	6.625x2.375	168.3x60.3	4.01	102
2x1 1/2	50x40	2.375x1.900	60.3x48.3	2.51	64	5x2 1/2	125x65	5.500x3.000	139.7x76.1	3.5	89	6x2 1/2	150x65	6.625x3.000	168.3x76.1	4.01	102
2 1/2x1	65x25	2.875x1.315	73.0x33.7	2.51	64	5x3	125x80	5.500x3.500	139.7x88.9	3.5	89	6x3	150x80	6.625x3.500	168.3x88.9	4.01	102
2 1/2x1 1/4	65x32	2.875x1.660	73.0x42.4	2.51	64	5x4	125x100	5.500x4.500	139.7x114.3	3.5	89	6x4	150x100	6.625x4.500	168.3x114.3	4.01	102
2 1/2x1 1/2	65x40	2.875x1.900	73.0x48.3	2.51	64	5x4	125x50	5.563x2.375	141.3x60.3	3.5	89	6x5	150x125	6.625x5.500	168.3x139.7	4.01	102
2 1/2x2	65x50	2.875x2.375	73.0x60.3	2.51	64	5x2 1/2	125x65	5.563x3.000	141.3x76.1	3.5	89	8x2	200x50	8.625x2.375	219.1x60.3	5	127
2 1/2x1 1/4	65x32	3.000x1.660	76.1x42.4	2.51	64	5x3	125x80	5.563x3.500	141.3x88.9	3.5	89	8x2 1/2	200x65	8.625x3.000	219.1x76.1	5	127
2 1/2x1 1/2	65x40	3.000x1.900	76.1x48.3	2.51	64	5x2 1/2	125x100	5.563x4.500	141.3x114.3	3.5	89	8x3	200x80	8.625x3.500	219.1x88.9	5	127
2 1/2x2	65x50	3.000x2.375	76.1x60.3	2.51	64	6x2	150x50	6.250x2.375	159.0x60.3	4.01	102	8x4	200x100	8.625x4.250	219.1x108.0	5	127
3x1 1/4	80x32	3.500x1.660	88.9x42.4	2.51	64	6x2 1/2	150x65	6.250x3.000	159.0x76.1	4.01	102	8x4	200x100	8.625x4.500	219.1x114.3	5	127
3x1 1/2	80x40	3.500x1.900	88.9x48.3	2.51	64	6x3	150x80	6.250x3.500	159.0x88.9	4.01	102	8x5	200x125	8.625x5.500	219.1x139.7	5	127
3x2	80x50	3.500x2.375	88.9x60.3	2.51	64	6x4	150x100	6.250x4.250	159.0x108.0	4.01	102	8x6	200x150	8.625x6.250	219.1x159.0	5	127
3x2 1/2	80x65	3.500x3.000	88.9x76.1	2.51	64	6x4	150x100	6.250x4.500	159.0x114.3	4.01	102	8x6	200x150	8.625x6.500	219.1x165.1	5	127
4x2 1/2	100x65	4.250x3.000	108.0x76.1	2.99	76	6x5	150x125	6.250x5.250	159.0x133.0	4.01	102	8x6	200x150	8.625x6.625	219.1x168.3	5	127
4x3	100x80	4.250x3.500	108.0x88.9	2.99	76	6x5	150x125	6.250x5.500	159.0x139.7	4.01	102						
4x1 1/4	100x32	4.500x1.660	114.3x42.4	2.99	76	6x2	150x50	6.500x2.375	165.1x60.3	4.01	102						

ALRT Threaded Concentric Reducer



- Model | ALRT
- Size | 1 1/4" x 1" thru 8" x 4"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12

- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red

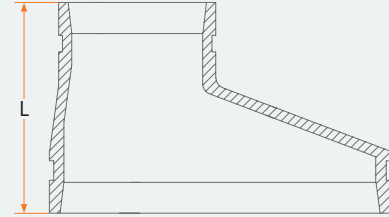


Threaded Concentric Reducer

Nominal Size		Pipe OD.		Dimensions		Nominal Size		Pipe OD.		Dimensions		Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L		in	mm	in	mm	L		in	mm	in	mm	L	
				in	mm					in	mm						
1 1/4x1	32x25	1.660x1.315	42.4x33.7	2.51	64	4x1	100x25	4.500x1.315	114.3x33.7	2.99	76	6x1 1/4	150x32	6.250x1.660	159.0x42.4	4.01	102
1 1/2x1 1/4	40x32	1.900x1.660	48.3x42.4	2.51	64	4x1 1/4	100x32	4.500x1.660	114.3x42.4	2.99	76	6x1 1/2	150x40	6.250x1.900	159.0x48.3	4.01	102
2x1	50x25	2.375x1.315	60.3x33.7	2.51	64	4x1 1/2	100x40	4.500x1.900	114.3x48.3	2.99	76	6x2	150x50	6.250x2.375	159.0x60.3	4.01	102
2x1 1/4	50x32	2.375x1.660	60.3x42.4	2.51	64	4x2	100x50	4.500x2.375	114.3x60.3	2.99	76	6x2 1/2	150x65	6.250x3.000	159.0x76.1	4.01	102
2x1 1/2	50x40	2.375x1.900	60.3x48.3	2.51	64	4x2 1/2	100x65	4.500x3.000	114.3x76.1	2.99	76	6x3	150x80	6.250x3.500	159.0x88.9	4.01	102
2 1/2x1	65x25	2.875x1.315	73.0x33.7	2.51	64	4x3	100x80	4.500x3.500	114.3x88.9	2.99	76	6x1	150x25	6.500x1.315	165.1x33.7	4.01	102
2 1/2x1 1/4	65x32	2.875x1.660	73.0x42.4	2.51	64	5x1	125x25	5.250x1.315	133.0x33.7	3.5	89	6x1 1/4	150x32	6.500x1.660	165.1x42.4	4.01	102
2 1/2x2 1/2	65x40	2.875x1.900	73.0x48.3	2.51	64	5x1 1/4	125x32	5.250x1.660	133.0x42.4	3.5	89	6x1 1/2	150x40	6.500x1.900	165.1x48.3	4.01	102
2 1/2x2	65x50	2.875x2.375	73.0x60.3	2.51	64	5x1 1/2	125x40	5.250x1.900	133.0x48.3	3.5	89	6x2	150x50	6.500x2.375	165.1x60.3	4.01	102
2 1/2x1	65x25	3.000x1.315	76.1x33.7	2.51	64	5x2	125x50	5.250x2.375	133.0x60.3	3.5	89	6x2 1/2	150x65	6.500x3.000	165.1x76.1	4.01	102
2 1/2x1 1/4	65x32	3.000x1.660	76.1x42.4	2.51	64	5x1	125x25	5.500x1.315	139.7x33.7	3.5	89	6x3	150x80	6.500x3.500	165.1x88.9	4.01	102
2 1/2x1 1/2	65x40	3.000x1.900	76.1x48.3	2.51	64	5x1 1/4	125x32	5.500x1.660	139.7x42.4	3.5	89	6x4	150x100	6.500x4.500	165.1x114.3	4.01	102
2 1/2x2	65x50	3.000x2.375	76.1x60.3	2.51	64	5x1 1/2	125x40	5.500x1.900	139.7x48.3	3.5	89	6x1	150x25	6.625x1.315	168.3x33.7	4.01	102
3x1	80x25	3.500x1.315	88.9x33.7	2.51	64	5x2	125x50	5.500x2.375	139.7x60.3	3.5	89	6x1 1/4	150x32	6.625x1.660	168.3x42.4	4.01	102
3x1 1/4	80x32	3.500x1.660	88.9x42.4	2.51	64	5x2 1/2	125x65	5.500x3.000	139.7x76.1	3.5	89	6x1 1/2	150x40	6.625x1.900	168.3x48.3	4.01	102
3x1 1/2	80x40	3.500x1.900	88.9x48.3	2.51	64	5x3	125x80	5.500x3.500	139.7x88.9	3.5	89	6x2	150x50	6.625x2.375	168.3x60.3	4.01	102
3x2	80x50	3.500x2.375	88.9x60.3	2.51	64	5x4	125x100	5.500x4.500	139.7x114.3	3.5	89	8x1	200x25	8.625x1.315	219.1x33.7	5	127
3x2 1/2	80x65	3.500x3.000	88.9x76.1	2.51	64	5x1	125x25	5.563x1.315	141.3x33.7	3.5	89	8x1 1/4	200x32	8.625x1.660	219.1x42.4	5	127
4x1	100x25	4.250x1.315	108.0x33.7	2.99	76	5x1 1/4	125x32	5.563x1.660	141.3x42.4	3.5	89	8x1 1/2	200x40	8.625x1.900	219.1x48.3	5	127
4x1 1/4	100x32	4.250x1.660	108.0x42.4	2.99	76	5x1 1/2	125x40	5.563x1.900	141.3x48.3	3.5	89	8x2	200x50	8.625x2.375	219.1x60.3	5	127
4x1 1/2	100x40	4.250x1.900	108.0x48.3	2.99	76	5x2	125x50	5.563x2.375	141.3x60.3	3.5	89	8x2	200x50	8.625x2.375	219.1x60.3	5	127
4x2	100x50	4.250x2.375	108.0x60.3	2.99	76	5x2 1/2	125x65	5.563x3.000	141.3x76.1	3.5	89	8x2 1/2	200x65	8.625x3.000	219.1x76.1	5	127
4x2 1/2	100x65	4.250x3.000	108.0x76.1	2.99	76	5x3	125x80	5.563x3.500	141.3x88.9	3.5	89	8x3	200x80	8.625x3.500	219.1x88.9	5	127
4x3	100x80	4.250x3.500	108.0x88.9	2.99	76	6x1	150x25	6.250x2.375	159.0x33.7	4.01	102	8x4	200x100	8.625x4.500	219.1x114.3	5	127

ALEGR Grooved Eccentric Reducer

- **Model** | ALEGR
- **Size** | 1 1/4" x 1" thru 8" x 6"
- **Approvals** | UL, ULC, FM
- **Housing** | Ductile Iron ASTM A536 Gr. 65-45-12
- **Working Pressure**
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- **Paint Color** | Orange Enamel, Optional : Red



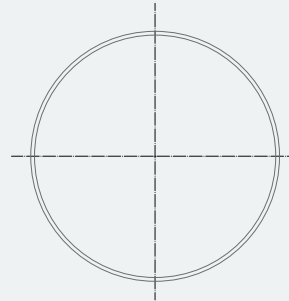
Grooved Eccentric Reducer

Nominal Size		Pipe OD.		Dimensions		Nominal Size		Pipe OD.		Dimensions		Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L		in	mm	in	mm	L		in	mm	in	mm	L	
				in	mm					in	mm						
1 1/4 x 1	32x25	1.660x1.315	42.4x33.7	2.51	64	4 x 1 1/2	100x40	4.500x1.900	114.3x48.3	2.99	76	6 x 2 1/2	150x65	6.500x3.000	165.1x76.1	4.01	102
1 1/2 x 1	40x25	1.900x1.315	48.3x33.7	2.51	64	4 x 2	100x50	4.500x2.375	114.3x60.3	2.99	76	6 x 3	150x80	6.500x3.500	165.1x88.9	4.01	102
1 1/2 x 1 1/4	40x32	1.900x1.660	48.3x42.4	2.51	64	4 x 2 1/2	100x65	4.500x3.000	114.3x76.1	2.99	76	6 x 4	150x100	6.500x4.500	165.1x114.3	4.01	102
2 x 1	50x25	2.375x1.315	60.3x33.7	2.51	64	4 x 3	100x80	4.500x3.500	114.3x88.9	2.99	76	6 x 5	150x125	6.500x5.500	165.1x139.7	4.01	102
2 x 1 1/4	50x32	2.375x1.660	60.3x42.4	2.51	64	5 x 2	125x50	5.500x2.375	139.7x60.3	3.5	89	6 x 2	150x50	6.625x2.375	168.3x60.3	4.01	102
2 x 1 1/2	50x40	2.375x1.900	60.3x48.3	2.51	64	5 x 2 1/2	125x65	5.500x3.000	139.7x76.1	3.5	89	6 x 2 1/2	150x65	6.625x3.000	168.3x76.1	4.01	102
2 1/2 x 1	65x25	2.875x1.315	73.0x33.7	2.51	64	5 x 3	125x80	5.500x3.500	139.7x88.9	3.5	89	6 x 3	150x80	6.625x3.500	168.3x88.9	4.01	102
2 1/2 x 1 1/4	65x32	2.875x1.660	73.0x42.4	2.51	64	5 x 4	125x100	5.500x4.500	139.7x114.3	3.5	89	6 x 4	150x100	6.625x4.500	168.3x114.3	4.01	102
2 1/2 x 1 1/2	65x40	2.875x1.900	73.0x48.3	2.51	64	5 x 4	125x50	5.563x2.375	141.3x60.3	3.5	89	6 x 5	150x125	6.625x5.500	168.3x139.7	4.01	102
2 1/2 x 2	65x50	2.875x2.375	73.0x60.3	2.51	64	5 x 2 1/2	125x65	5.563x3.000	141.3x76.1	3.5	89	8 x 2	200x50	8.625x2.375	219.1x60.3	5	127
2 1/2 x 1 1/4	65x32	3.000x1.660	76.1x42.4	2.51	64	5 x 3	125x80	5.563x3.500	141.3x88.9	3.5	89	8 x 2 1/2	200x65	8.625x3.000	219.1x76.1	5	127
2 1/2 x 1 1/2	65x40	3.000x1.900	76.1x48.3	2.51	64	5 x 2 1/2	125x100	5.563x4.500	141.3x114.3	3.5	89	8 x 3	200x80	8.625x3.500	219.1x88.9	5	127
2 1/2 x 2	65x50	3.000x2.375	76.1x60.3	2.51	64	6 x 2	150x50	6.250x2.375	159.0x60.3	4.01	102	8 x 4	200x100	8.625x4.250	219.1x108.0	5	127
3 x 1 1/4	80x32	3.500x1.660	88.9x42.4	2.51	64	6 x 2 1/2	150x65	6.250x3.000	159.0x76.1	4.01	102	8 x 4	200x100	8.625x4.500	219.1x114.3	5	127
3 x 1 1/2	80x40	3.500x1.900	88.9x48.3	2.51	64	6 x 3	150x80	6.250x3.500	159.0x88.9	4.01	102	8 x 5	200x125	8.625x5.500	219.1x139.7	5	127
3 x 2	80x50	3.500x2.375	88.9x60.3	2.51	64	6 x 4	150x100	6.250x4.250	159.0x108.0	4.01	102	8 x 6	200x150	8.625x6.250	219.1x159.0	5	127
3 x 2 1/2	80x65	3.500x3.000	88.9x76.1	2.51	64	6 x 4	150x100	6.250x4.500	159.0x114.3	4.01	102	8 x 6	200x150	8.625x6.500	219.1x165.1	5	127
4 x 2 1/2	100x65	4.250x3.000	108.0x76.1	2.99	76	6 x 5	150x125	6.250x5.250	159.0x133.0	4.01	102	8 x 6	200x150	8.625x6.500	219.1x165.1	5	127
4 x 3	100x80	4.250x3.500	108.0x88.9	2.99	76	6 x 5	150x125	6.250x5.500	159.0x139.7	4.01	102	8 x 6	200x150	8.625x6.500	219.1x165.1	5	127
4 x 1 1/4	100x32	4.500x1.660	114.3x42.4	2.99	76	6 x 2	150x50	6.500x2.375	165.1x60.3	4.01	102	8 x 6	200x150	8.625x6.625	219.1x168.3	5	127

ALC Cap



- Model | ALC
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red

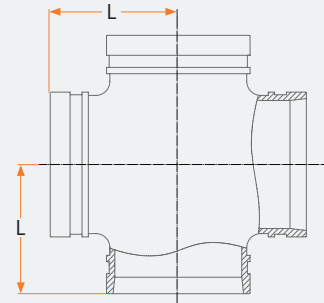


Cap

Nominal Size		Pipe OD.		Dimensions (L)	
in	mm	in	mm	in	mm
1	25	1.327	33.7	0.98	25
1¼	32	1.669	42.4	0.98	25
1½	40	1.9	48.3	0.98	25
2	50	2.375	60.3	0.98	25
2½	65	2.875	73	0.98	25
2½	65	3	76.1	0.98	25
3	80	3.5	88.9	0.98	25
4	100	4.25	108	1.06	27
4	100	4.5	114.3	1.06	27
5	125	5.25	133	1.06	27
5	125	5.5	139.7	1.06	27
5	125	5.563	141.3	1.06	27
6	150	6.25	159	1.06	27
6	150	6.5	165.1	1.06	27
6	150	6.625	168.3	1.06	27
8	200	8.625	219.1	1.22	31
10	250	10.75	273	1.3	33
12	300	12.75	323.9	1.3	33

ALEC Equal Cross

- Model | ALEC
- Size | 1" thru 12"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red

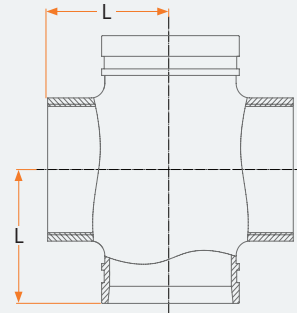
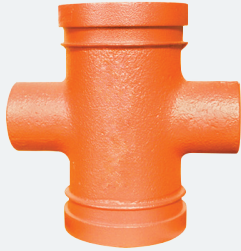


Equal Cross

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	in	mm
1	25	1.327	33.7	2.76	70
1¼	32	1.669	42.4	2.76	70
1½	40	1.9	48.3	2.76	70
2	50	2.375	60.3	3.23	82
2½	65	2.875	73	3.74	95
2½	65	3	76.1	3.74	95
3	80	3.5	88.9	4.25	108
4	100	4.25	108	5	127
4	100	4.5	114.3	5	127
5	125	5.25	133	5.51	140
5	125	5.5	139.7	5.51	140
5	125	5.563	141.3	5.51	140
6	150	6.25	159	6.5	165
6	150	6.5	165.1	6.5	165
6	150	6.625	168.3	6.5	165
8	200	8.625	219.1	7.76	197
10	250	10.75	273	9.02	229
12	300	12.75	323.9	10	254

ALRCT Threaded Reducing Cross

- Model | ALRCT
- Size | 4" x 1" thru 6" x 3"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



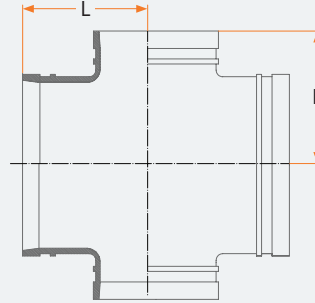
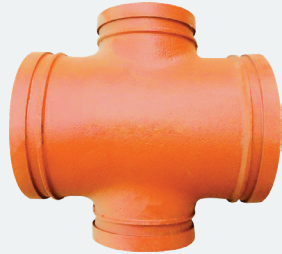
Threaded Reducing Cross

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	in	mm
4 x 1	100 x 25	4.500 x 1.135	114.3 x 33.7	5	127
4 x 1¼	100 x 32	4.500 x 1.135	114 x 42.4	5	127
4 x 1½	100 x 40	4.500 x 1.900	114 x 48.3	5	127
4 x 2	100 x 50	4.500 x 2.375	114 x 60.3	5	127
4 x 2½	100 x 65	4.500 x 3.000	114 x 76.1	5	127
4 x 3	100 x 80	4.500 x 3.500	114 x 88.9	5	127
5 x 1¼	125 x 32	5.500 x 1.135	139.7 x 42.4	5.51	140
5 x 1½	125 x 40	5.500 x 1.900	139.7 x 48.3	5.51	140
5 x 2	125 x 50	5.500 x 2.475	139.7 x 60.3	5.51	140
5 x 2½	125 x 65	5.500 x 3.000	139.7 x 76.1	5.51	140
5 x 3	125 x 80	5.500 x 3.500	139.7 x 88.9	5.51	140
6 x 1	150 x 25	6.500 x 1.135	165.1 x 33.7	6.5	165
6 x 1¼	150 x 32	6.500 x 1.135	165.1 x 42.4	6.5	165
6 x 1½	150 x 40	6.500 x 1.900	165.1 x 48.3	6.5	165
6 x 2	150 x 50	6.500 x 2.375	165.1 x 60.3	6.5	165
6 x 2½	150 x 65	6.500 x 3.000	165.1 x 76.1	6.5	165
6 x 3	150 x 80	6.500 x 3.500	165.1 x 88.9	6.5	165

ALRCG Grooved Reducing Cross



- Model | ALRCG
- Size | 4" x 2" thru 6" x 4"
- Approvals | UL, ULC, FM
- Housing | Ductile Iron ASTM A536 Gr. 65-45-12
- Working Pressure
 - UL, ULC, FM | 300 PSI / 2.07 Mpa
 - Mechanical | 500 PSI / 3.45 Mpa
- Paint Color | Orange Enamel, Optional : Red



Grooved Reducing Cross

Nominal Size		Pipe OD.		Dimensions	
in	mm	in	mm	L	
				in	mm
4 x 2	100 x 50	4.500 x 2.375	114.3 x 60.3	5	127
4 x 1/2	100 x 65	4.500 x 3.000	114.3 x 76.1	5	127
4 x 3	100 x 80	4.500 x 3.500	114.3 x 88.9	5	127
6 x 4	150 x 100	6.500 x 4.500	165.1 x 114.3	6.5	165
6 x 2	150 x 50	6.625 x 2.375	165.3 x 60.3	6.5	165
6 x 2 1/2	150 x 65	6.625 x 3.000	165.3 x 76.1	6.5	165
6 x 3	150 x 80	6.625 x 3.500	165.3 x 88.9	6.5	165
6 x 4	150 x 100	6.625 x 4.500	165.3 x 114.3	6.5	165

Pressure Ratings and End loads for Mech Couplings on Steel Pipe

1.01 | ALAPC (Angle Pad Coupling)

1.02 | ALFC (Flexible Coupling)

1.03 | ALRC (Rigid Coupling)

Size	Pipe Sch.	Pressure Rating	
		UL, ULC, FM	Mechanical
in ----- mm	Cut or roll Groove		
1" - 4" 25 - 100mm	10 - 40	300 Psi 20 Bar	500 Psi 35 Bar
	2.77 - 6.02		
5" - 6" 125 - 150mm	10	300 Psi 20 Bar	450 Psi 31 Bar
	3.4		
	40		
	6.55 - 7.11		
8" 200mm	10	300 Psi 20 Bar	300 Psi 20 Bar
	4.77		
	40		450 Psi 31 Bar
	8.18		
10" 250mm	10 - 40	300 Psi 20 Bar	300 Psi 20 Bar
	4.77 - 9.27		
12" 300mm	10	N/A	300 Psi 20 Bar
	4.77		
	20 - STD	300 Psi 20 Bar	
	6.35 - 9.53		

Couplings Notes

| RIGID COUPLINGS |

Quickconnect rigid couplings provide rigid installation of pipe joints. The rigid couplings are designed to clamp securely in the grooves on the pipes outside diameter. Rigid couplings provide a secure joint which resists flexural and tensional loads, permitting longer spacing between pipe hangers. They are applicable in power piping systems, building service systems, sprinkler systems and many others.

- 1 Rigid couplings in straight runs should be supported similar to welded or flanged piping. Refer to : ANSI B31.1, ANSI B31.9, NFPA 13.
- 2 Rigid couplings do not provide longitudinal movement. However, a gap exists between pipe ends and should be considered when calculating axial displacement common in heating and cooling systems.
- 3 Rigid couplings are recommended in areas of concentrated weight, where flexibility is not desired and when it is desirable to hold plumb and pitch-for-drainage.
- 4 Rigid couplings should be used to install valves, especially those with large actuators, to prevent rotation.
- 5 If power nut-drivers are used to close the bolt pads, the following torque should not be exceeded. Excessive tightening of the nuts could result in joint failure.

Values Lb-ft.	3/8" = 30-40	1/2" = 90-105	5/8" = 100-130	3/4" = 150-200	7/8" = 180-220
Nm	M8 = 5-7	M14 = 15-18	M16 = 17-22	M20 = 26-35	M22 = 31-38

- 6 Coating options: Epoxy, Paint, Dacromet, Hot-Dip Galvanized, Powder Coating.
- 7 Maximum working pressures shown in this catalog are round numbers rather than those specified in ASME/ANSI standards. All pressure ratings shown in this catalog are based on use of cut or roll-grooved standard weight carbon steel pipe.

| FLEXIBLE COUPLINGS |

Quickconnect flexible couplings can be used as expansion joints, allowing linear or angular movement of the pipe. Flexible couplings are designed so the "Key" area floats in the grooves, while still providing a restrained mechanical joint. Therefore, flexible couplings allow for small amounts of pipe expansion and/or contraction, vibration absorption and misalignment of pipes.

- 1 Flexible couplings in straight runs should be supported as close to the couplings as possible, or within the distance of 1/6 the span, and evenly spaced.
- 2 Flexible couplings provide either axial or longitudinal movement, but not both congruently. The available movement for roll-grooved joints is 1/2 of cut-groove dimensions per ANSI/AWWA C606-06.
- 3 If power nut-drivers are used to close the bolt pads, the following torque should not be exceeded. Excessive tightening of the nuts could result in joint failure.

Values Lb-ft.	3/8" = 50-59	1/2" = 81-92	5/8" = 147-190	3/4" = 177-179	7/8" = 202-221
Nm	M8 = 5-7	M14 = 15-18	M16 = 17-22	M20 = 26-35	M22 = 31-38

- 4 Flexible couplings are not suitable for end-of-run with an end-cap. Vacuum could draw the end cap into the coupling.
- 5 Coating options: Epoxy, Paint, Dacromet, Hot-Dip Galvanized, Powder Coating.

| MAXIMUM END LOAD |

Figures indicating maximum end load refer to standard weight steel pipe with cut grooves per ANSI/AWWA C-606 and in accordance with Quickconnect® pipe Preparations and Installation Instructions.

| ALLOWED PIPE END SEPARATION |

Figures indicating allowable pipe end separation refer to standard weight steel pipe with standard cut grooves per ANSI/AWWA C-606 and in accordance with Quickconnect® Preparation and Installation Instructions. Figures for standard roll groove will be one half of the above mentioned cut-groove values.

| WARNING |

Always read and understand the installation instructions. Rubber gaskets have to be lubricated with a soap-based lube, on the inside and outside prior to installation.

Helpful Information to Ease Assembly



Always read and understand the installation instructions before starting to work with Quikconnect products.

Always depressurize and drain the piping system from all fluids before starting to work with Quikconnect products.

Protect yourself during work. Wear safety clothing.

Always check rubber gaskets carefully for defaults, cuts or holes before installing them in the system. Do not use damaged products!

Not following these warnings and installation instructions can lead to system failure, personal injury and/or other damages.

While every effort has been made to ensure the accuracy regarding the information in this catalog, anyone that uses the information contained in this catalog does so at their own risk and assumes any liability that results from such use.

Gasket Data

01 | EPDM

Temperature Range -30°F(-34°C) to +230°F(+110°C)

Suitable for water, dilute acids, water with chlorine, deionized water, wastewater, sea water oil-free air and many chemicals.

DO NOT USE FOR HYDROCARBON SERVICES.

02 | NITRILE

Temperature Range -20°F(-29°C) to +180°F(+82°C)

Suitable for petroleum oils, mineral and vegetable oils, non-aromatic hydrocarbons, select acids and water to +150°F(+65°C).

03 | SILICONE

Temperature Range -30°F(-34°C) to +350°F(+177°C)

Suitable for high temperature hot water and air, select high temperature chemicals.

DO NOT USE FOR HYDROCARBON SERVICES.

04 | ALWAYS

Lubricate gaskets with inert soap-based lube to avoid pinching during installation.

DOES NOT APPLY TO PRELUBRICATED GASKETS.



Material Composition	Applicable Temperature	Color Code	General Service Recommendations
EPDM (E)	-30°F(-34°C) to +230°F(+110°C)	Green Stripe	Recommended for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold +86°F(+30°C) and hot 180°F (+82°C) potable water service. Not recommend for petroleum service.
Silicon Rubber (L)	-30°F(-34°C) to +350°F(+177°C)	Red Gasket	Recommended for high temperature hot dry air without hydrocarbons and some high temperature chemical products.
Nitrile Rubber (T)	-20°F(-29°C) to +180°F(+82°C)	Orange Stripe	Recommended for petroleum products, mineral oil, vegetable oil, many and water +150°F(+65°C).

Notes | Special gaskets are available upon request.

Bolt and Nut

01 | Bolts

Carbon steel, heat treated & Zinc electroplated conforming to ASTM A183, Gr.2

02 | Hex Nuts

Conform to ASTM A563 Br. B

03 | Threads

Adhere to UNC (Unified National Coarse) as put forth by ASME/ANSI.






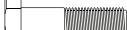




04 | Tensile Strength

110,000 psi; Yield = 80,000 psi; Elongation = 12%

As for the Oval-Neck Track-Head bolts and nuts, we use 40 Cr. As for the Oval-Neck Track-Head bolts and nuts, we use 40 Cr. Mechanical property of the bolts and nuts can reach to grade 8.8 after heat treatment. A single wrench is all that is required to tighten them. These bolts and nuts are much higher quality than standard.



Bolt Conversions

Diameters		
Decimal Equivalent (Inches)	Diameters (mm)	Metric Bolt Numbers
0.2500	7	M7 
0.3125	8	M8 
0.3750	10	M10 
0.4118	12	M12 
0.5000	14	M14 
0.5625	16	M16 
0.6250	18	M18 
0.7500	20	M20 
0.8750	22	M22 
1.0000	24	M24 

Lengths			
Inches	mm	Inches	mm
1.7500	45	3.3750	85
2.0000	50	3.5000	90
2.1250	55	3.7500	95
2.2500	60	4.0000	100
2.5000	65	4.1250	105
2.7500	70	4.3750	110
3.0000	75	4.5000	115
3.1250	80	4.7500	120

Installation Instruction for Rigid & Flexible Coupling

1. Pipe Preparation

Check pipe end for proper groove dimensions and to assure that pipe end is free of indentations and projections that would prevent proper sealing.

2. Lubricate Gasket

Check gasket to be sure it's compatible for the intended service. Apply a thin film of lubricant to the outside and sealing lips of the gasket. Keep in mind that prelubricated gaskets do not require additional lube.

3. Gasket Installation

Slip the gasket over one pipe, make sure the gasket does not over-hang the pipe end. Quickconnect couplings that have gaskets with center legs are meant to push on and not be taken apart.

4. Alignment

After aligning two pipe ends together, pull the gasket into position, centering between the grooves on each pipe. The gasket should not extend into the groove on either pipe. Quickconnect couplings that have gaskets with center legs are meant to push on and not be taken apart.

5. Housing Installation

Remove one bolt & nut and loosen the other nut. Place one housing over the gasket, making sure the housing keys fit into the pipe grooves. Swing the other housing over the gasket and into the grooves on both pipes. Reinsert the bolt and connect the two housings. Quickconnect couplings that have gaskets with center legs are meant to push on and not be taken apart.

6. Tighten Nuts

Tighten nuts by hand make sure the oval neck of the bolt completely fits into the bolt hole. Then securely tighten nuts, alternatively and equally, not to exceed the specified bolt torque.

7a. Assembly Angle-Pad Rigid and Flexible Couplings

For both rigid and flexible couplings, both housings should be bolt-pad to bolt-pad when correctly assembled, with no part of the gasket visible. When properly installed with bolt-pads touching, a torque-wrench is not required.

7b. Assembly Tongue and Groove and Flexible Couplings

When installing Tongue and Groove rigid couplings, Bolt pads will not touch when correctly assembled. Keep the gaps on either side evenly spaced with no part of the gasket visible.

Installation Instruction for U-bolt & Threaded / Grooved Mechanical Tee

1. Pipe Preparation

Clean the gasket sealing surface within 0.60"(16mm) of the hole and visually inspect the sealing surface for defects that may prevent proper sealing of the gasket. Don't drill the hole on the pipe's weld line.

2. Remove Burrs

Any burrs from at the pipe hole with the round file or sanding clothe, please remove them prior to assembly, to protect the gasket and avoid leakage.

3. Gasket Installation

Lubricate the gasket, insert into the housing making sure the tab in the gasket line up with the tab recesses in the housing. Align outlet housing over the pipe hole making sure that the locating collar is in the pipe hole.

4. Alignment

Align the strap around the pipe, insert the bolt and tighten the nuts finger tight.

5. Tighten Nuts

Alternatively and evenly tighten the nuts to the specified bolt torque.
U-Bolt = 15-22lb-ft. ; 20-30N-mm / mechanical-Tees = 20lb-ft / 27N-mm.

6. Assembly Completed

There should be even gaps on two sides between upper and lower housings.

Installation Instruction for Grooved Flange

1. Pipe Preparation

Check pipe end for proper groove dimensions and to assure that pipe end is free of indentations and projections that would prevent proper sealing.

2. Lubricate Gasket

Check gasket to be sure it's compatible for the intended service. Apply a thin film of lubricant to the outside and sealing lips of the gasket.

3. Gasket Installation

Slip the gasket over pipe end, with the gasket opening side towards the pipe end. Make sure the gasket face lip is even with pipe end.

4. Housing Installation

Remove bolts & nuts, Place two housings over the gasket, making sure the housing keys fit into the pipe grooves. Re-insert the bolts and hand tighten the nuts.

5. Tighten Nuts

Securely tighten nuts alternatively and equally to the specified bolt torque.

6. Connect Mating Flange

Align flange bolt holes with mating flange bolt holes. Insert a standard flange bolt through bolt hole and hand tighten a nut. Insert another bolt opposite the first and hand tighten a nut. Continue this until all bolt holes are fitted. Tighten nuts evenly to specified bolt torque, so flange faces remain parallel. Assembly completed.


Grooved Couplings and Fittings Submittal Summary

- ALAPC Angle Pad Coupling
- ALFC Flexible Coupling
- ALRC Rigid Coupling
- ALREC Reducing Flexible Coupling
- ALFLAG150 Class 150 Adapter Flange
- ALGF150 Class 150 Split Flange
- ALFLAG PN16 Adapter Flange
- ALGFPN PN16 Split Flange
- ALTMT Mechanical Tee Threaded Outlet
- ALGMT Mechanical Tee Grooved Outlet
- ALUTMT U Bolt Mechanical Tee
- AL90ESR / AL90ESTDR 90° Elbow (Short / Long)
- AL45E 45° Elbow
- AL225E 22.5° Elbow
- AL1125E 11.25° Elbow
- ALETSR / ALETSTDR Tee (Short / Long)
- ALRTG Grooved Reducing Tee
- ALRTT Threaded Reducing Tee
- ALRG Grooved Concentric Reducer
- ALRT Threaded Concentric Reducer
- ALEGR Grooved Eccentric Reducer
- ALC Cap
- ALEC Equal Cross
- ALRCT Threaded Reducing Cross
- ALRCG Grooved Reducing Cross

REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

System No.		Location	
Submitted By		Date	



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