

DUCTILE IRON GROOVED FITTING



GOLDEN HIGHOPÉ INDUSTRIAL INC.
EVERBEST VALVES & FITTINGS MFG. CO., LTD (For China's Shipment)

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球铁沟槽管件

Ductile iron grooved fitting

表面处理代码:

P:喷漆 Painting E:电镀 Electroplate B:黑体 Black

S:喷涂 Epoxy G:热镀锌 Galvanization J:热镀锌+内喷涂 Galvanization+Epoxy



1N
挠性卡箍
Flexible Coupling



1NS
轻型挠性卡箍
Light-duty Flexible Coupling



1N
变径挠性卡箍
Reducing Flexible Coupling



1NS
轻型变径挠性卡箍
Light-duty Reducing Flexible Coupling



1G
刚性卡箍
Rigid Coupling



3GS
轻型沟槽式机械三通
Light-duty Mechanical Tee Grooved Outlet



3J
螺纹式机械三通
Mechanical Tee Threaded Outlet



3JS
轻型螺纹式机械三通
Light-duty Mechanical Tee Threaded Outlet



3L
U型栓机械三通
U-Bolt Mechanical Tee



230
偏心沟槽式异径管固
Grooved Eccentric Reducer



1GS
轻型刚性卡箍
Light-duty Rigid Coupling



90
90° 弯头
90° Elbow



90S
轻型90° 弯头
Light-duty 90° Elbow



90R
90° 异径弯头
90° Reducing Elbow



105
11.25° 弯头
11.25° Elbow



230N
偏心沟槽内螺纹式异径管固
Grooved Eccentric Reducer
With Female Thread



240
沟槽式异径管固
Grooved Concentric Reducer



240N
沟槽内螺纹式异径管固
Grooved Concentric Reducer
With Female Thread



240W
沟槽外螺纹式异径管固
Grooved Concentric Reducer
With Male Thread



300
管帽
Cap



110
22.5° 弯头
22.5° Elbow



120
45° 弯头
45° Elbow



130
三通
Tee



130S
轻型三通
Light-duty Tee



130R
异径三通
Reducing Tee



300
开孔管帽
Cap



300PX
偏开孔管帽
Cap



321
沟槽法兰
Grooved Flange



321G
高频法兰
Adaptor Flange



321S
沟槽法兰
Grooved Flange



131R1
内丝三通
Reducing Tee



180
正四通
Cross



180R
异径四通
Reducing Cross



181
内丝四通
Reducing Cross



3G
沟槽式机械三通
Mechanical Tee Grooved Outlet



Blue



Galvanized



Orange



White



Red



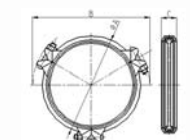
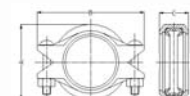
GOLDEN HIGHOPE INDUSTRIAL INC.
EVERBEST VALVES & FITTINGS MFG. CO., LTD



EVERBEST VALVES & FITTINGS MFG. CO., LTD

1N

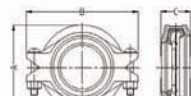
挠性卡箍
Flexible Coupling



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
25 1	33.7 1.327	500 3.45	55 2.16	92 3.62	42 1.65	3/8X55-2	UL FM VdS LPCB
32 1¼	42.4 1.669	500 3.45	65 2.56	104 4.14	44 1.74	3/8X55-2	UL FM VdS LPCB
40 1½	48.3 1.900	500 3.45	70 2.75	110 4.33	44 1.74	3/8X55-2	UL FM VdS LPCB
50 2	60.3 2.375	500 3.45	83 3.27	124 4.88	44 1.74	3/8X55-2	UL FM VdS LPCB
65 2½	73.0 2.875	500 3.45	96 3.78	143 5.63	45 1.78	3/8X55-2	UL FM LPCB
65 2½	76.1 3.000	500 3.45	100 3.94	145 5.71	45 1.78	3/8X55-2	UL FM VdS LPCB
80 3	88.9 3.500	500 3.45	115 4.53	160 6.30	45 1.78	1/2X70-2	UL FM VdS LPCB
100 4	108.0 4.250	500 3.45	138 5.43	190 7.48	50 1.97	1/2X70-2	UL FM LPCB
100 4	114.3 4.500	500 3.45	145 5.71	198 7.80	50 1.97	1/2X70-2	UL FM VdS LPCB
125 5	133 5.250	450 3.10	162 6.38	225 8.86	51.0 2.01	5/8X80-2	UL FM LPCB
125 5	139.7 5.500	450 3.10	169 6.65	230 9.06	52 2.05	5/8X80-2	UL FM VdS LPCB
125 5	141.3 5.563	450 3.10	170 6.69	232 9.13	51 2.01	5/8X80-2	UL FM LPCB
150 6	159.0 6.250	450 3.10	190 7.48	254 10.00	52 2.05	5/8X85-2	UL FM LPCB
150 6	165.1 6.500	450 3.10	196 7.72	260 10.24	52 2.05	5/8X85-2	UL FM LPCB
150 6	168.3 6.625	450 3.10	200 7.87	265 10.43	52 2.05	5/8X85-2	UL FM VdS LPCB
200 8	219.1 8.625	450 3.10	258 10.24	350 13.78	60 2.37	3/4X115-2	UL FM VdS LPCB
250 10	273.0 10.750	300 2.07	337 13.27	406 16.00	65 2.56	7/8X140-2	UL FM VdS
300 12	323.9 12.750	300 2.07	372 14.65	460 18.11	64 2.52	7/8X140-2	UL FM
350 14	377.0 14.842	225 1.6	428 16.85	520 20.45	72 2.85	7/8X140-3	UL FM
400 16	426.0 16.772	225 1.6	476 18.74	570 22.45	73 2.87	7/8X140-3	UL FM

1N

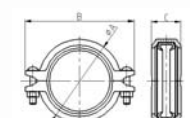
变径挠性卡箍
Reducing Flexible Coupling



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
50X40 2X1½	60.3X48.3 2.375X1.900	300 2.07	86 3.39	125 4.93	44 1.74	3/8X55-2	UL FM LPCB
65×25 2½×1	73.0X33.7 2.875×1.327	300 2.07	100 3.94	138 5.44	45 1.78	3/8X55-2	UL FM
65×50 2½×2	73.0X60.3 2.875×2.375	300 2.07	100 3.94	138 5.43	45 1.78	3/8X55-2	UL FM LPCB
65×25 2½×1	76.1X33.7 3.000×1.327	300 2.07	102 4.02	140 5.51	45 1.78	3/8X55-2	UL FM
65×40 2½×1½	76.1X48.3 3.000×1.900	300 2.07	102 4.02	140 5.51	45 1.78	3/8X55-2	UL FM VdS LPCB
65×50 2½×2	76.1X60.3 3.000×2.375	300 2.07	102 4.02	140 5.51	45 1.78	3/8X55-2	UL FM LPCB
80×25 3×1	88.9X33.7 3.500×1.327	300 2.07	115 4.53	168 6.61	46 1.81	1/2X70-2	UL FM
80×50 3×2	88.9X60.3 3.500×2.375	300 2.07	115 4.53	168 6.61	46 1.81	1/2X70-2	UL FM VdS LPCB
80×65 3×2½	88.9X73.0 3.500×2.875	300 2.07	115 4.53	168 6.61	46 1.81	1/2X70-2	UL FM LPCB
80×65 3×2½	88.9X76.1 3.500×3.000	300 2.07	115 4.53	168 6.61	46 1.81	1/2X70-2	UL FM VdS LPCB
100×25 4×1	114.3×33.7 4.500×1.327	300 2.07	144 5.67	198 7.80	50 1.97	1/2X70-2	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	144 5.67	198 7.80	50 1.97	1/2X70-2	UL FM VdS LPCB
100×65 4×2½	114.3×73.0 4.500×2.875	300 2.07	144 5.67	198 7.80	50 1.97	1/2X70-2	UL FM LPCB
100×65 4×2½	114.3×76.1 4.500×3.000	300 2.07	144 5.67	198 7.80	50 1.97	1/2X70	UL FM VdS LPCB
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	148 5.83	198 7.80	50 1.97	1/2X70	UL FM VdS LPCB
150×100 6×4	165.1×114.3 6.500×4.500	300 2.07	197 7.75	260 10.24	51 2.01	5/8X85-2	UL FM LPCB
150×80 6×3	168.3×88.9 6.625×3.500	300 2.07	200 7.87	268 10.55	51 2.01	5/8X85-2	UL FM VdS LPCB
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	202.5 7.97	268 10.55	52.5 2.07	5/8X85-2	UL FM VdS LPCB
200×150 8×6	219.1×165.1 8.625×6.500	300 2.07	257 10.12	335 13.19	60 2.36	3/4X115-2	UL FM LPCB
200×150 8×6	219.1×168.3 8.625×6.625	300 2.07	257 10.12	335 13.19	60 2.36	3/4X115-2	UL FM LPCB

1NS

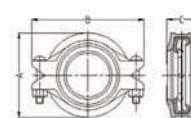
轻型挠性卡箍
Light-duty Flexible Coupling



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
125 5	139.7 5.500	450 3.10	168 6.61	228 8.98	51 2.01	5/8X80-2	UL FM
165 6	168.3 6.625	450 3.10	200 7.87	265 10.43	52 2.05	5/8X85-2	UL FM
250 10	273.0 10.750	300 2.07	320 12.60	395.0 15.55	64 2.52	3/4X120-2	UL FM

1NS

轻型变径挠性卡箍
Light-duty Reducing Coupling



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	200 7.87	268 10.55	51 2.01	5/8X85-2	UL FM



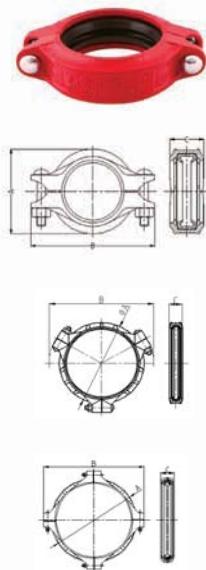
GOLDEN HIGHOPE INDUSTRIAL INC.
EVERBEST VALVES & FITTINGS MFG. CO., LTD



EVERBEST VALVES & FITTINGS MFG. CO., LTD

1G

刚性卡箍
Rigid Coupling



Nominal Size mm/in	Pipe .D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
25	33.7	500	59	100	44	3/8X55-2	UL FM
1	1.327	3.45	2.33	3.94	1.74	VdS LPCB	
32	42.4	500	66	105	45	3/8X55-2	UL FM
1 1/4	1.669	3.45	2.60	4.13	1.78	VdS LPCB	
40	48.3	500	72	112	45	3/8X55-2	UL FM
1 1/2	1.900	3.45	2.84	4.41	1.78	VdS LPCB	
50	60.3	500	85	130	45	3/8X55-2	UL FM
2	2.375	3.45	3.35	5.12	1.78	VdS LPCB	
65	73.0	500	98	140	45	3/8X55-2	UL FM
2 1/2	2.875	3.45	3.86	5.52	1.78	LPCB	
65	76.1	500	101	145	45	3/8X55-2	UL FM
2 1/2	3.000	3.45	3.98	5.71	1.77	VdS LPCB	
80	88.9	500	115.0	168	46	1/2X70-2	UL FM
3	3.500	3.45	4.53	6.62	1.82	VdS LPCB	
100	108.0	500	140	197	52	1/2X70-2	UL FM
4	4.250	3.45	5.51	7.76	2.05	LPCB	
100	114.3	500	146	200	52	1/2X70-2	UL FM
4	4.500	3.45	5.75	7.88	2.05	VdS LPCB	
125	133	450	165	226	52	5/8X85-2	UL FM
5	5.250	3.10	6.50	8.90	2.05	LPCB	
125	139.7	450	170	235	52	5/8X85-2	UL FM
5	5.500	3.10	6.69	9.25	2.05	VdS LPCB	
125	141.3	450	172	235	52	5/8X85-2	UL FM
5	5.563	3.10	6.77	9.25	2.05	LPCB	
150	159.0	450	190	267	52	5/8X85-2	UL FM
6	6.250	3.10	7.48	10.51	2.05	LPCB	
150	165.1	450	198	262	52	5/8X85-2	UL FM
6	6.500	3.10	7.80	10.32	2.05	LPCB	
150	168.3	450	202.0	265	52	5/8X85-2	UL FM
6	6.625	3.10	7.95	10.43	2.05	VdS LPCB	
200	219.1	450	260.0	342	62	3/4X115-2	UL FM
8	8.625	3.10	10.24	13.45	2.44	VdS LPCB	
250A	267.4	300	318	396	63	3/4X120-2	UL FM
10	10.528	2.07	12.52	15.60	2.48		
250	273.0	300	327	420	63	7/8X125-2	UL FM
10	10.750	2.07	12.88	16.54	2.48	LPCB	
300A	318.5	300	364	456	63	7/8X140-2	UL FM
12	12.539	2.07	14.33	17.95	2.48		
300	323.9	300	370	465	63	7/8X140-2	UL FM
12	12.750	2.07	14.57	18.30	2.48		
350	355.6	300	415	510	72	7/8X140-3	UL FM
14	14.000	2.07	16.34	20.08	2.84		
350	377.0	225	435	535	72	7/8X140-3	FM
14	14.842	1.6	17.13	21.05	2.84		
400	406.4	300	468	575	72	7/8X140-3	UL FM
16	16.000	2.07	18.43	22.64	2.84		
400	426.0	225	490	592	72	7/8X140-4	FM
16	16.772	1.6	19.29	23.30	2.84		
500	529.0	225	595	700	76	7/8X140-4	
20	20.827	1.6	23.43	27.56	3.00		

90

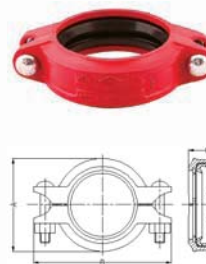
90° 弯头
90° Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
25	33.7	500	57	UL FM
1	1.315	3.45	2.24	VdS
32	42.4	500	70	UL FM
1 1/4	1.660	3.45	2.75	VdS
40	48.3	500	70	UL FM
1 1/2	1.900	3.45	2.75	VdS
50	60.3	500	82.5	UL FM
2	2.375	3.45	3.25	VdS
65	73.0	500	95	UL FM
2 1/2	2.875	3.45	3.74	
65	76.1	500	95	UL FM
2 1/2	3.000	3.45	3.74	VdS
80	88.9	500	108	UL FM
3	3.500	3.45	4.25	VdS
100	114.3	500	127	UL FM
4	4.500	3.45	5.00	VdS
125	133.0	500	122	UL FM
5	5.250	3.45	4.80	
125	139.7	500	140	UL FM
5	5.500	3.45	5.50	VdS
125	141.3	500	140	UL FM
5	5.563	3.45	5.50	
150	165.1	500	165	UL FM
6	6.500	3.45	6.50	
150	168.3	500	165	UL FM
6	6.625	3.45	6.50	VdS
200	219.1	500	197	UL FM
8	8.625	3.45	7.75	VdS
250	267.4	500	229	UL FM
10	10.528	3.45	9.00	
250	273.0	500	229	UL FM
10	10.750	3.45	9.00	VdS
300	318.5	500	254	UL FM
12	12.539	3.45	10.00	
300	323.9	500	254	UL FM
12	12.750	3.45	10.00	VdS
350	377.0	300	279	UL FM
14	14.84	2.07	10.98	
400	426.0	300	305	UL FM
16	16.77	2.07	12.00	

1GS

轻型刚性卡箍
Light-duty Rigid Coupling



Nominal Size mm/in	Pipe .D mm/in	Working Pressure PSI/MPa	Dimensions			Bolt Size No.-Size mm	Certificate
			A mm/in	B mm/in	C mm/in		
规格	管子基本尺寸	工作压力	尺寸			螺栓规格与数量	认证标识
65	76.1	300	100	140	45	3/8X55-2	UL FM
2 1/2	3.000	2.07	3.94	5.52	1.77		
80	88.9	300	114	160	45	3/8X55-2	UL FM
3	3.500	2.07	4.50	6.30	1.78		
100	108.0	300	135	185	50	1/2X70-2	UL FM
4	4.250	2.07	5.30	7.28	1.97		
100	114.3	300	140	187	50	1/2X70-2	UL FM
4	4.500	2.07	5.51	7.36	1.97		
125	139.7	300	168	225	50	1/2X75-2	UL FM
5	5.500	2.07	6.62	8.86	1.97		
125	141.3	300	170	225	50	1/2X75-2	UL FM
5	5.563	2.07	6.69	8.86	1.97		
150	159.0	300	190	252	50	5/8X80-2	UL FM
6	6.250	2.07	7.48	9.92	1.97		
150	165.1	300	195	250	50	1/2X75-2	UL FM
6	6.500	2.07	7.68	9.84	1.97		
150	168.3	300	200	255	50	1/2X75-2	UL FM
6	6.625	2.07	7.87	10.04	1.97		
200A	216.3	300	255	320	58	5/8X85-2	UL FM
8	8.516	2.07	10.04	12.60	2.28		
200	219.1	300	255	322	58	5/8X85-2	UL FM
8	8.625	2.07	10.05	12.68	2.28		
250	273.0	300	318	410	63	3/4X120-2	UL FM
10	10.750	2.07	12.52	16.14	2.48		

90S

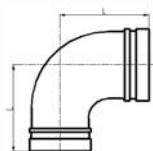
轻型90° 弯头
Light-duty 90° Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
50	60.3	300	70	UL FM VdS
2	2.375	2.07	2.75	
65	73.0	300	76	UL FM
2 1/2	2.875	2.07	3.00	
65	76.1	300	76	UL FM VdS
2 1/2	3.000	2.07	3.00	
80	88.9	300	85.5	UL FM VdS
3	3.500	2.07	3.37	
100	108.0	300	101	UL FM
4	4.500	2.07	3.98	
100	114.3	300	101	UL FM VdS
4	4.500	2.07	3.98	
125	139.7	300	124	UL FM VdS
5	5.500	2.07	4.88	
150	159.0	300	140	UL FM VdS
6	6.500	2.07	5.50	
150	165.1	300	140	UL FM
6	6.500	2.07	5.50	
150	168.3	500	140	UL FM VdS
6	6.625	3.45	5.50	
200	216.3	300	175	UL FM
8	8.625	2.07	6.89	
200	219.1	300	165	UL FM VdS
8	8.625	2.07	6.50	

90R

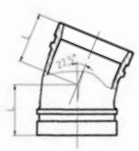
90° 异径弯头
90° Reducing Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
80X65 3X2½	88.9X76.1 3.500X3.000	500 3.45	108 4.25	UL FM
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	127 5.00	UL FM
100X80 4X3	114.3X88.9 4.500X3.500	500 3.45	127 5.00	UL FM
150X100 6X4	165.1X114.3 6.500X4.500	500 3.45	165 6.50	UL FM
150X100 6X4	168.3X114.3 6.625X4.500	500 3.45	165 6.50	UL FM

110

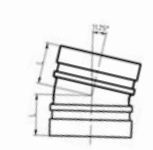
22.5° 弯头
22.5° Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
32	42.4	500	45	UL FM
1¼	1.660	3.45	1.77	
40	48.3	500	45	UL FM
1½	1.900	3.45	1.77	
50	60.3	500	48	UL FM
2	2.375	3.45	1.89	
65	73.0	500	51	UL FM
2½	2.875	3.45	2.00	
65	76.1	500	51	UL FM
2½	3.000	3.45	2.00	VdS
80	88.9	500	57	UL FM
3	3.500	3.45	2.24	VdS
100	108.0	500	73	UL FM
4	4.250	3.45	2.87	
100	114.3	500	73	UL FM
4	4.500	3.45	2.87	VdS
125	139.7	500	73	UL FM
5	5.500	3.45	2.87	VdS
150	159.0	500	79	UL FM
6	6.250	3.45	3.11	
150	165.1	500	79	UL FM
6	6.500	3.45	3.11	
150	168.3	500	79	UL FM
6	6.625	3.45	3.11	
200	219.1	500	98	UL FM
8	8.625	3.45	3.86	VdS

105

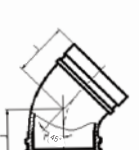
11.25° 弯头
11.25° Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
32 1¼	42.4 1.660	500 3.45	35 1.38	UL FM
40 1½	48.3 1.900	500 3.45	35 1.38	UL FM
50 2	60.3 2.375	500 3.45	35 1.38	UL FM
65 2½	76.1 3.000	500 3.45	38 1.506	UL FM
80 3	88.9 3.500	500 3.45	38 1.50	UL FM
100 4	108.0 4.250	500 3.45	44 1.73	UL FM
100 4	114.3 4.500	500 3.45	44 1.73	UL FM
125 5	139.7 5.500	500 3.45	51 2.00	UL FM
150 6	159.0 6.250	500 3.45	51 2.00	UL FM
150 6	165.1 6.500	500 3.45	51 2.00	UL FM
150 6	168.3 6.625	500 3.45	51 2.00	UL FM
200 8	219.1 8.625	500 3.45	51 2.00	UL FM

120

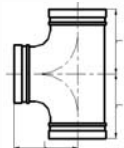
45° 弯头
45° Elbow



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
25	33.7	500	44.5	UL FM
1	1.315	3.45	1.75	VdS
32	42.4	500	44.5	UL FM
1¼	1.660	3.45	1.75	VdS
40	48.3	500	44.5	UL FM
1½	1.900	3.45	1.75	VdS
50	60.3	500	51	UL FM
2	2.375	3.45	2.00	VdS
65	73.0	500	57	UL FM
2½	2.875	3.45	2.24	UL FM
65	76.1	500	57	UL FM
2½	3.000	3.45	2.24	VdS
80	88.9	500	63.5	UL FM
3	3.500	3.45	2.50	VdS
100	108.0	500	76	UL FM
4	4.250	3.45	3.00	
100	114.3	500	76	UL FM
4	4.500	3.45	3.00	VdS
125	133.0	500	82.5	UL FM
5	5.250	3.45	3.25	
125	139.7	500	82.5	UL FM
5	5.500	3.45	3.25	VdS
125	141.3	500	82.5	UL FM
5	5.563	3.45	3.25	
150	159.0	500	89	UL FM
6	6.250	3.45	3.50	
150	165.1	500	89	UL FM
6	6.500	3.45	3.50	
150	168.3	500	89	UL FM
6	6.625	3.45	3.50	VdS
200	216.3	500	108	UL FM
8	8.516	3.45	4.25	
200	219.1	500	108	UL FM
8	8.625	3.45	4.25	VdS
250	267.4	500	120.5	UL FM
10	10.528	3.45	4.75	
250	273.0	500	120.5	UL FM
10	10.750	3.45	4.75	VdS
300	318.5	500	133	UL FM
12	12.750	3.45	5.25	
300	323.9	500	133	UL FM
12	12.750	3.45	5.25	VdS
300	377	300	122	
12	12.750	2.07	4.80	

130

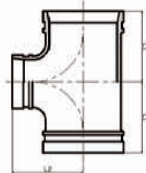
三通
Tee



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
25 1	33.7 1.315	500 3.45	57 2.24	UL FM VdS
32 1¼	42.4 1.660	500 3.45	70 2.75	UL FM VdS
40 1½	48.3 1.900	500 3.45	70 2.75	UL FM VdS
50 2	60.3 2.375	500 3.45	82.5 3.25	UL FM VdS
65 2½	73.0 2.875	500 3.45	95 3.74	UL FM
65 2½	76.1 3.000	500 3.45	95 3.74	UL FM VdS
80 3	88.9 3.500	500 3.45	108 4.25	UL FM VdS
100 4	114.3 4.500	500 3.45	127 5.00	UL FM VdS
125 5	133.0 5.250	500 3.45	122 4.80	UL FM
125 5	139.7 5.500	500 3.45	140 5.50	UL FM VdS
125 5	141.3 5.563	500 3.45	140 5.50	UL FM
150 6	165.1 6.500	500 3.45	165 6.50	UL FM
150 6	168.3 6.625	500 3.45	165 6.50	UL FM VdS
200 8	219.1 8.625	500 3.45	197 7.75	UL FM VdS
250 10	267.4 10.528	500 3.45	229 9.00	UL FM
250 10	273.0 10.750	500 3.45	229 9.00	UL FM VdS
300 12	318.5 12.539	500 3.45	254 10.00	UL FM
300 12	323.9 12.750	500 3.45	254 10.00	UL FM VdS
350 14	377.0 14.84	300 2.07	279 10.98	UL FM
400 16	426.0 16.77	300 2.07	305 12.00	UL FM

130R

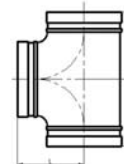
异径三通
Reducing Tee



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
50X25 2X1	60.3X33.7 2.375X1.315	500 3.45	70 2.75	70 2.75	UL FM VdS
50×40 2×1½	60.3×48.3 2.375×1.900	500 3.45	70 2.75	70 2.75	UL FM VdS
65×40 2½×1½	73.0×48.3 2.875×1.900	500 3.45	76 3.00	76 3.00	UL FM
65×50 2½×2	73.0×60.3 3.000×2.375	500 3.45	76 3.00	76 3.00	UL FM
65×32 2½×1¼	76.1×42.4 3.000×1.660	500 3.45	76 3.00	76 3.00	UL FM
65×40 2½×1½	76.1×48.3 3.000×1.900	500 3.45	76 3.00	76 3.00	UL FM VdS
65×50 2½×2	76.1×60.3 3.000×2.375	500 3.45	76 3.00	76 3.00	UL FM VdS
80X32 3X1	88.9X33.7 3.500X1.315	500 3.45	108 4.25	108 4.25	UL FM VdS
80X32 3X1¼	88.9X42.4 3.500X1.660	500 3.45	85.5 3.37	85.5 3.37	UL FM
80X40 3X1½	88.9X48.3 3.500X1.900	500 3.45	85.5 3.37	85.5 3.37	UL FM VdS
80×50 3×2	88.9×60.3 3.500×2.375	500 3.45	85.5 3.37	85.5 3.37	UL FM VdS
80X65 3X2½	88.9X73.0 3.500X2.875	500 3.45	85.5 3.37	85.5 3.37	UL FM
80×65 3×2½	88.9×76.1 3.500×3.000	500 3.45	85.5 3.37	85.5 3.37	UL FM VdS
100×50 4×2	108.0×60.3 4.250×2.375	500 3.45	101 3.98	101 3.98	UL FM
100×80 4×3	108.0×88.9 4.250×3.500	500 3.45	101 3.98	101 3.98	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	500 3.45	101 3.98	101 3.98	UL FM VdS
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	101 3.98	101 3.98	UL FM VdS
100×50 4×2	114.3×60.3 4.500×2.375	500 3.45	101 3.98	101 3.98	UL FM VdS
100X65 4X2½	114.3X73.0 4.500X2.875	500 3.45	101 3.98	101 3.98	UL FM
100×65 4×2½	114.3×76.1 4.500×3.000	500 3.45	101 3.98	101 3.98	UL FM VdS
100×80 4×3	114.3×88.9 4.500×3.500	500 3.45	101 3.98	101 3.98	UL FM VdS
125X50 5X2	133.0X60.3 5.250X2.375	500 3.45	124 4.88	124 4.88	UL FM
125X65 5X2½	133.0X76.1 5.250X3.000	500 3.45	124 4.88	124 4.88	UL FM
125X100 5X4	133.0X108.0 5.250X4.250	500 3.45	124 4.88	124 4.88	UL FM
125X100 5X4	133.0X114.3 5.250X4.500	500 3.45	124 4.88	124 4.88	UL FM
125×40 5×1½	139.7×48.3 5.500×1.900	500 3.45	140 5.50	140 5.50	UL FM
125×50 5×2	139.7×60.3 5.500×2.375	500 3.45	124 4.88	124 4.88	UL FM
125×65 5×2½	139.7×76.1 5.500×3.000	500 3.45	124 4.88	124 4.88	UL FM
125×80 5×3	139.7×88.9 5.500×3.500	500 3.45	124 4.88	124 4.88	UL FM
125×100 5×4	139.7×114.3 5.500×4.500	500 3.45	124 4.88	124 4.88	UL FM VdS
150X60 6X2	159.0X60.3 6.250X2.375	500 3.45	140 5.50	140 5.50	UL FM
150X65 6X2½	159.0X76.1 6.250X3.000	500 3.45	140 5.50	140 5.50	UL FM
150X80 6X3	159.0X88.9 6.250X3.500	500 3.45	140 5.50	140 5.50	UL FM

130S

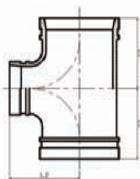
轻型三通
Light-duty Tee



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
50 2	60.3 2.375	300 2.07	70 2.75	UL FM VdS
65 2½	73.0 2.875	300 2.07	76 3.00	UL FM
65 2½	76.1 3.000	300 2.07	76 3.00	UL FM VdS
80 3	88.9 3.500	300 2.07	85.5 3.37	UL FM VdS
100 4	108.0 4.500	300 2.07	101 3.98	UL FM
100 4	114.3 4.500	300 2.07	101 3.98	UL FM VdS
125 5	139.7 5.500	300 2.07	124 4.88	UL FM VdS
150 6	159.0 6.500	300 2.07	140 5.50	UL FM VdS
150 6	165.1 6.500	300 2.07	140 5.50	UL FM
150 6	168.3 6.625	500 3.45	140 5.50	UL FM VdS
200 8	216.3 8.625	300 2.07	175 6.89	UL FM
200 8	219.1 8.625	300 2.07	175 6.89	UL FM VdS

130R

异径三通
Reducing Tee

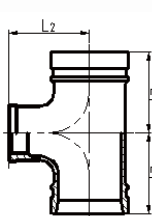


续表

Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
150X100 6X4	159.0X108.0 6.250X4.250	500 3.45	140 5.50	140 5.50	UL FM
150×100 6×4	159.0×114.3 6.250×4.500	500 3.45	140 5.50	140 5.50	UL FM
150×125 6×5	159.0×133.0 6.250×5.250	500 3.45	140 5.50	140 5.50	UL FM VdS
150×50 6×2	165.1×60.3 6.500×2.375	500 3.45	140 5.50	140 5.50	UL FM
150×65 6×2½	165.1×76.1 6.500×3.000	500 3.45	140 5.50	140 5.50	UL FM
150×80 6×3	165.1×88.9 6.500×3.500	500 3.45	140 5.50	140 5.50	UL FM
150×100 6×4	165.1×114.3 6.500×4.500	500 3.45	140 5.50	140 5.50	UL FM
150×125 6×5	165.1×139.7 6.500×5.500	500 3.45	140 5.50	140 5.50	UL FM
150X50 6X2	168.3X60.3 6.625X2.375	500 3.45	140 5.50	140 5.50	UL FM
150×65 6×2½	168.3×73.0 6.625×2.875	500 3.45	140 5.50	140 5.50	UL FM
150×65 6×2½	168.3×76.1 6.625×3.000	500 3.45	140 5.50	140 5.50	UL FM
150X80 6X3	168.3X88.9 6.625X3.500	500 3.45	140 5.50	140 5.50	UL FM VdS
150×100 6×4	168.3×114.3 6.625×4.500	500 3.45	140 5.50	140 5.50	UL FM VdS
150×125 6×5	168.3×141.3 6.625×5.563	500 3.45	140 5.50	140 5.50	UL FM VdS
200×150 8×6	216.3×165.1 8.516×6.500	500 3.45	175 6.89	175 6.89	UL FM VdS
200×50 8×2	219.1×60.3 8.625×2.375	500 3.45	175 6.89	175 6.89	UL FM VdS
200×65 8×2½	219.1×76.1 8.625×3.000	500 3.45	175 6.89	175 6.89	UL FM VdS
200×80 8×3	219.1×88.9 8.625×3.500	500 3.45	175 6.89	175 6.89	UL FM VdS
200×100 8×4	219.1×108.0 8.625×4.250	500 3.45	175 6.89	175 6.89	UL FM VdS
200×100 8×4	219.1×114.3 8.625×4.500	500 3.45	175 6.89	175 6.89	UL FM VdS
200×125 8×5	219.1×133.0 8.625×5.250	500 3.45	175 6.89	175 6.89	UL FM VdS
200×125 8×5	219.1×139.7 8.625×5.500	500 3.45	175 6.89	175 6.89	UL FM VdS
200×150 8×6	219.1×159.0 8.625×6.250	500 3.45	175 6.89	175 6.89	UL FM VdS
200×150 8×6	219.1×165.1 8.625×6.500	500 3.45	175 6.89	175 6.89	UL FM VdS
200×150 8×6	219.1×168.3 8.625×6.625	500 3.45	175 6.89	175 6.89	UL FM VdS
250×150 10×6	273.0×159.0 10.750×6.250	500 3.45	229 9.00	229 9.00	UL FM VdS
250×150 10×6	273.0×165.1 10.750×6.500	500 3.45	229 9.00	229 9.00	UL FM VdS
250×200 10×8	273.0×219.1 10.750×8.625	500 3.45	229 9.00	229 9.00	UL FM VdS
300×150 12×6	323.9×165.1 12.750×6.500	500 3.45	254 10	254 10	UL FM VdS
300×200 12×8	323.9×219.1 12.750×8.625	500 3.45	254 10	254 10	UL FM VdS
300×250 12×10	323.9×273.0 12.750×10.750	500 3.45	254 10	254 10	UL FM VdS

131R-1

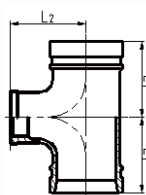
内丝三通
Reducing Tee



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
50×25 2×1	60.3×33.7 2.375×1.315	300 2.07	70 2.75	70 2.75	UL FM
50×32 2×1¼	60.3×42.4 2.375×1.660	300 2.07	70 2.75	70 2.75	UL FM
50×40 2×1½	60.3×48.3 2.375×1.900	300 2.07	70 2.75	70 2.75	UL FM
65×25 2½×1	73.0×33.7 2.875×1.315	300 2.07	76 3.00	76 3.00	UL FM
65×32 2½×1¼	73.0×42.4 2.875×1.660	300 2.07	76 3.00	76 3.00	UL FM
65×25 2½×1	76.1×33.7 3.000×1.315	300 2.07	76 3.00	76 3.00	UL FM
65×32 2½×1¼	76.1×42.4 3.000×1.660	300 2.07	76 3.00	76 3.00	UL FM
65×40 2½×1½	76.1×48.3 3.000×1.900	300 2.07	76 3.00	76 3.00	UL FM
65×50 2½×2	76.1×60.3 3.000×2.375	300 2.07	76 3.00	76 3.00	UL FM
80×25 3×1	88.9×33.7 3.500×1.315	300 2.07	85.5 3.37	85.5 3.37	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	85.5 3.37	85.5 3.37	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	85.5 3.37	85.5 3.37	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	85.5 3.37	85.5 3.37	UL FM
80×65 3×2½	88.9×76.1 3.500×3.000	300 2.07	85.5 3.37	85.5 3.37	UL FM
100×65 4×2½	108.0×76.1 4.250×3.000	300 2.07	100 3.94	96 3.78	UL FM
100×80 4×3	108.0×88.9 4.250×3.500	300 2.07	100 3.94	96 3.78	UL FM
100×65 4×2½	114.3×76.1 4.500×3.000	300 2.07	100 3.94	96 3.78	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	100 3.94	96 3.78	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	300 2.07	175 6.89	175 6.89	FM
200×65 8×2½	219.1×76.1 8.625×3.000	300 2.07	175 6.89	175 6.89	FM
200×80 8×3	219.1×88.9 8.625×3.500	300 2.07	175 6.89	175 6.89	FM

131R-2

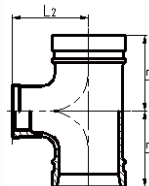
内丝三通
Reducing Tee



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	76 2.99	88 3.47	UL FM
100×32 4×1¼	114.3×42.4 4.500×1.660	300 2.07	76 2.99	88 3.47	UL FM
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	85 3.35	91 3.58	UL FM
100×50 4×2	108.0×60.3 4.250×2.375	300 2.07	85 3.35	91 3.58	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	85 3.35	91 3.58	UL FM
125×50 5×2	133.0×60.3 5.250×2.375	300 2.07	86 3.39	106 4.17	UL FM
125×65 5×2½	133.0×76.1 5.250×3.000	300 2.07	102 4.02	111 4.37	UL FM
125×80 5×3	133.0×88.9 5.250×3.500	300 2.07	102 4.02	111 4.37	UL FM
125×25 5×1	139.7×33.7 5.500×1.315	300 2.07	78 3.07	103 4.06	UL FM
125×32 5×1¼	139.7×42.4 5.500×1.660	300 2.07	78 3.07	103 4.06	UL FM
125×40 5×1½	139.7×48.3 5.500×1.900	300 2.07	86 3.39	106 4.17	UL FM
125×50 5×2	139.7×60.3 5.500×2.375	300 2.07	86 3.39	106 4.17	UL FM

131R

内丝三通
Reducing Tee

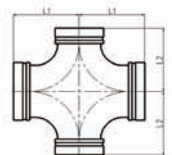


续表

Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
125×65 5×2½	139.7×76.1 5.500×3.000	300 2.07	102 4.02	111 4.37	UL FM
125×80 5×3	139.7×88.9 5.500×3.500	300 2.07	102 4.02	111 4.37	UL FM
150×60 6×2	159.0×60.3 6.250×2.375	300 2.07	92 3.62	124 4.88	UL FM
150×65 6×2½	159.0×76.1 6.250×3.000	300 2.07	107 4.21	129 5.08	UL FM
150×80 6×3	159.0×88.9 6.25×03.500	300 2.07	107 4.21	129 5.08	UL FM
150×25 6×1	165.1×33.7 6.500×1.315	300 2.07	83 3.27	121 4.76	UL FM
150×32 6×1¼	165.1×42.4 6.500×1.660	300 2.07	83 3.27	121 4.76	UL FM
150×40 6×1½	165.1×48.3 6.500×1.900	300 2.07	92 3.62	124 4.88	UL FM
150×50 6×2	165.1×60.3 6.500×2.375	300 2.07	92 3.62	124 4.88	UL FM
150×65 6×2½	165.1×76.1 6.500×3.000	300 2.07	107 4.21	129 5.08	UL FM
150×80 6×3	165.1×88.9 6.500×3.500	300 2.07	107 4.21	129 5.08	UL FM
150×100 6×4	165.1×114.3 6.500×4.500	300 2.07	121 4.76	132 5.20	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	92 3.62	124 4.88	UL FM
150×65 6×2½	168.3×76.1 6.625×3.000	300 2.07	107 4.21	129 5.08	UL FM

180R

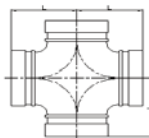
异径四通
Reducing Cross



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
65×50 2½×2	76.1×60.3 3.000×2.375	500 3.45	76 3.00	76 3.00	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	500 3.45	108 4.25	108 4.25	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	500 3.45	101 3.98	101 3.98	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	500 3.45	127 5.00	127 5.00	UL FM
125×100 5×4	139.7×114.3 5.500×4.500	500 3.45	124 4.88	124 4.88	UL FM
150×50 6×2	165.1×60.3 6.500×2.375	500 3.45	140 5.50	140 5.50	UL FM
150×65 6×2½	165.1×76.1 6.500×3.000	500 3.45	165 6.50	165 6.50	UL FM
150×80 6×3	165.1×88.9 6.500×3.500	500 3.45	140 5.50	140 5.50	UL FM
150×100 6×4	165.1×114.3 6.500×4.500	500 3.45	140 5.50	140 5.50	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	500 3.45	197 7.75	197 7.75	UL FM
200×50 8×4	219.1×114.3 8.625×4.500	500 3.45	175 6.89	175 6.89	UL FM
200×100 8×4	219.1×114.3 8.625×4.500	500 3.45	175 6.89	175 6.89	UL FM
200×125 8×5	219.1×139.7 8.625×5.500	500 3.45	175 6.89	175 6.89	UL FM
200×150 8×6	219.1×159.0 8.625×6.250	500 3.45	175 6.89	175 6.89	UL FM
200×150 8×6	219.1×165.1 8.625×6.500	500 3.45	175 6.89	175 6.89	UL FM

180

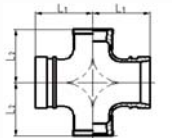
正四通
Cross



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
32 1¼	42.4 1.660	500 3.45	70 2.75	UL FM VdS
40 1½	48.3 1.900	500 3.45	70 2.75	UL FM VdS
50 2	60.3 2.375	500 3.45	70 2.75	UL FM VdS
65 2½	73.0 2.875	500 3.45	76 3.00	UL FM
65 2½	76.1 3.000	500 3.45	76 3.00	UL FM VdS
80 3	88.9 3.500	500 3.45	85.5 3.37	UL FM VdS
100 4	108.0 4.250	500 3.45	101 3.98	UL FM
100 4	114.3 4.500	500 3.45	101 3.98	UL FM VdS
125 5	139.7 5.500	500 3.45	124 4.88	UL FM VdS
125 5	141.3 5.563	500 3.45	124 4.88	UL FM
150 6	159.0 6.250	500 3.45	140 5.50	UL FM
150 6	165.1 6.500	500 3.45	140 5.50	UL FM
150 6	168.3 6.625	500 3.45	140 5.50	UL FM VdS
200 8	219.1 8.625	500 3.45	175 6.89	UL FM VdS
250 10	273.0 10.750	500 3.45	229 9.00	UL FM VdS
300 12	323.9 12.750	500 3.45	254 10.00	UL FM VdS

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内丝四通
Reducing Cross

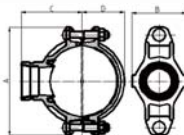


Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L1 mm/in	Dimensions L2 mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	尺寸	认证标识
65×50 2½×2	76.1×60.3 3.000×2.375	300 2.07	76 3.00	76 3.00	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	108 4.25	108 4.25	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	108 4.25	108 4.25	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	85.5 3.37	85.5 3.37	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	76 2.99	88 3.47	UL FM
100×32 4×1¼	114.3×42.4 4.500×1.660	300 2.07	76 2.99	88 3.47	UL FM
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	85 3.35	91 3.58	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	85 3.35	91 3.58	UL FM
100×65 4×2½	114.3×76.1 4.500×3.000	300 2.07	101 3.98	101 3.98	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	101 3.98	101 3.98	UL FM
150×32 6×1¼	165.1×42.4 6.500×1.660	300 2.07	142 5.59	142 5.59	UL FM
150×40 6×1½	165.1×48.3 6.500×1.900	300 2.07	142 5.59	142 5.59	UL FM
150×50 6×2	165.1×60.3 6.500×2.375	300 2.07	142 5.59	142 5.59	UL FM
150×80 6×3	165.1×88.9 6.500×3.500	300 2.07	140 5.50	140 5.50	UL FM



3G

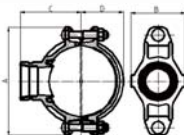
沟槽式机械三通
Mechanical Tee
Grooved Outlet



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/ +0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
50×32 2×1¼	60.3×42.4 2.375×1.660	300 2.07	45 1.75	116 4.57	76 2.99	69.5 2.74	39 1.54	3/8×55	UL FM
50×40 2×1½	60.3×48.3 2.375×1.900	300 2.07	45 1.75	116 4.57	76 2.99	69.5 2.74	39 1.54	3/8×55	UL FM
65×32 2½×1¼	73.0×42.4 2.875×1.660	300 2.07	51 2.00	144 5.67	84.5 3.33	75 2.95	49 1.93	1/2×70	UL FM
65×25 76.1×1	76.1×33.7 3.000×1.315	300 2.07	38 1.50	137 5.39	71 2.80	78 3.07	49.5 1.95	1/2×70	UL FM
65×32 76.1×1¼	76.1×42.4 3.000×1.660	300 2.07	51 2.00	137 5.39	84.5 3.33	78 3.07	49.5 1.95	1/2×70	UL FM
65×40 76.1×1½	76.1×48.3 3.000×1.900	300 2.07	51 2.00	137 5.39	84.5 3.33	78 3.07	49.5 1.95	1/2×70	UL FM
80×25 3×1	88.9×33.7 3.500×1.315	300 2.07	38 1.50	152 5.98	72.5 2.85	84.5 3.33	56.5 2.22	1/2×75	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	51 2.00	152 5.98	85.5 3.37	84.5 3.33	56.5 2.22	1/2×75	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	51 2.00	152 5.98	85.5 3.37	84.5 3.33	56.5 2.22	1/2×75	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	64 2.50	152 5.98	98 3.86	84.5 3.33	56.5 2.22	1/2×75	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	38 1.50	188 7.40	78.4 3.09	102 4.02	70 2.76	1/2×75	UL FM
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	51 2.00	188 7.40	89 3.50	102 4.02	70 2.76	1/2×75	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	64 2.50	188 7.40	104.5 4.11	102 4.02	70 2.76	1/2×75	UL FM
100×65 4×2½	114.3×73.0 4.500×2.875	300 2.07	70 2.75	188 7.40	104.5 4.11	102 4.02	70 2.76	1/2×75	UL FM
100×65 4×76.1	114.3×76.1 4.500×3.000	300 2.07	70 2.75	188 7.40	104.5 4.11	102 4.02	70 2.76	1/2×75	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	89 3.50	188 7.40	124 4.88	102 4.02	70 2.76	1/2×75	UL FM
125×80 133.0×3	133.0×88.9 5.250×3.500	300 2.07	89 3.50	209 8.23	132 5.20	109.5 4.31	77 3.03	5/8×85	UL FM
125×50 139.7×2	139.7×60.3 5.500×2.375	300 2.07	64 2.50	221.5 8.72	112.5 4.43	118 4.65	84 3.31	5/8×85	UL FM
125×65 139.7×6.1	139.7×76.1 5.500×3.000	300 2.07	70 2.75	221.5 8.72	112.5 4.43	118 4.65	84 3.31	5/8×85	UL FM
125×80 139.7×3	139.7×88.9 5.500×3.500	300 2.07	89 3.50	221.5 8.720	136 5.35	122 4.80	84 3.31	5/8×85	UL FM
125×100 139.7×4	139.7×114.3 5.500×4.500	300 2.07	114 4.50	221.5 8.720	160 6.30	125 4.92	84 3.31	5/8×85	UL FM
150×100 159.0×108.0	159.1×108.0 6.250×4.250	300 2.07	114 4.50	244 9.60	154 6.06	133 5.24	94 3.70	5/8×105	UL FM
150×100 159.0×4	159.1×114.3 6.250×4.500	300 2.07	114 4.50	244 9.60	159 6.26	125 4.92	94 3.70	5/8×105	UL FM
150×50 165.1×2	165.1×60.3 6.500×2.375	300 2.07	64 2.50	244 9.60	112.5 4.43	127 5.00	97.5 3.84	5/8×105	UL FM
150×65 165.1×76.1	165.1×76.1 6.500×3.000	300 2.07	70 2.75	244 9.60	112.5 4.43	127 5.00	97.5 3.84	5/8×105	UL FM
150×80 6½O.D×3	165.1×88.9 6.500×3.500	300 2.07	89 3.50	244 9.60	132 5.20	141 5.55	97.5 3.84	5/8×105	UL FM
150×100 6½O.D×4	165.1×114.3 6.500×4.500	300 2.07	114 4.50	244 9.60	154 6.06	135 5.32	97.5 3.84	5/8×105	UL FM
150×40 6×1½	168.3×48.3 6.500×1.900	300 2.07	51 2.00	247 9.72	95 3.74	128 5.04	98.5 3.88	5/8×105	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	64 2.50	247 9.72	114 4.49	134 5.28	98.5 3.88	5/8×105	UL FM
150×65 6×2½	168.3×73.0 6.625×2.875	300 2.07	70 2.75	247 9.72	115 4.53	134 5.28	98.5 3.88	5/8×105	UL FM
150×80 6×3	168.3×88.9 6.625×3.500	300 2.07	89 3.50	247 9.72	132 5.20	141 5.55	98.5 3.88	5/8×105	UL FM
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	114 4.50	247 9.72	156.5 6.16	138 5.43	98.5 3.88	5/8×105	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	300 2.07	64 2.50	322 12.68	118 4.65	158 6.22	125 4.92	3/4×115	UL FM
200×65 8×76.1	219.1×76.1 8.625×3.000	300 2.07	70 2.75	322 12.68	118 4.65	158 6.22	125 4.92	3/4×115	UL FM
200×80 8×3	219.1×88.9 8.625×3.500	300 2.07	89 3.50	322 12.68	136.5 5.37	161 6.34	125 4.92	3/4×115	UL FM
200×100 8×4	219.1×114.3 8.625×4.500	300 2.07	114 4.50	322 12.68	164 6.46	161 6.34	125 4.92	3/4×115	UL FM
250×100 10×4	273.0×114.3 10.750×4.500	300 2.07	114 4.50	376 14.80	164 6.46	189 7.44	155 6.10	3/4×120	UL FM

3GS

轻型沟槽式机械三通
Light-duty Mechanical
Tee Grooved Outlet

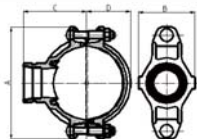


Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
65×25 76.1×1	76.1×33.7 3.000×1.315	300 2.07	38 1.50	137 5.39	71 2.80	78 3.07	49.5 1.95	1/2×70	UL FM
65×32 76.1×1¼	76.1×42.4 3.000×1.660	300 2.07	51 2.00	137 5.39	84.5 3.33	78 3.07	49.5 1.95	1/2×70	UL FM
65×40 76.1×1½	76.1×48.3 3.000×1.900	300 2.07	51 2.00	137 5.39	84.5 3.33	78 3.07	49.5 1.95	1/2×70	UL FM
80×25 3×1	88.9×33.7 3.500×1.315	300 2.07	38 1.50	150 5.91	71.0 2.80	84 3.31	55.5 2.19	1/2×75	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	51 2.00	150 5.91	84.5 3.33	84 3.31	55.5 2.19	1/2×75	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	51 2.00	150 5.91	84.5 3.33	84 3.31	55.5 2.19	1/2×75	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	64 2.50	150 5.91	98 3.86	84 3.31	55.5 2.19	1/2×75	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	38 1.50	178 7.01	77.5 3.05	98 3.86	67.5 2.66	1/2×75	UL FM
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	51 2.00	178 7.01	88 3.46	98 3.86	67.5 2.66	1/2×75	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	64 2.50	178 7.01	88 3.46	98 3.86	67.5 2.66	1/2×75	UL FM
100×65 4×2½	114.3×73.0 4.500×2.875	300 2.07	70 2.75	178 7.01	103.5 4.07	98 3.86	67.5 2.66	1/2×75	UL FM
100×65 4×76.1	114.3×76.1 4.500×3.000	300 2.07	70 2.75	178 7.01	103.5 4.07	98 3.86	67.5 2.66	1/2×75	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	89 3.50	178 7.01	103.5 4.07	98 3.86	67.5 2.66	1/2×75	UL FM
125×80 133.0×3	133.0×88.9 5.250×3.500	300 2.07	89 3.50	203 7.99	132 5.12	110 4.33	77.5 3.05	5/8×85	UL FM
125×50 139.7×2	139.7×60.3 5.500×2.375	300 2.07	64 2.50	210 8.27	110 4.33	113 4.45	82 3.23	5/8×85	UL FM
125×65 139.7×76.1	139.7×76.1 5.500×3.000	300 2.07	70 2.75	210 8.27	110 4.33	113 4.45	82 3.23	5/8×85	UL FM
125×80 139.7×3	139.7×88.9 5.500×3.500	300 2.07	89 3.50	210 8.27	130 5.12	113 4.45	82 3.23	5/8×85	UL FM
125×100 139.7×4	139.7×114.3 5.500×4.500	300 2.07	114 4.50	210 8.27	153 6.02	115 4.52	82 3.23	5/8×85	UL FM
150×100 159.0×108.0	159.1×108.0 6.250×4.250	300 2.07	114 4.50	227 8.94	155 6.10	122.5 4.83	91 3.58	5/8×105	UL FM
150×100 159.0×4	159.1×114.3 6.250×4.500	300 2.07	114 4.50	227 8.94	155 6.10	122.5 4.83	91 3.58	5/8×105	UL FM
150×50 165.1×2	165.1×60.3 6.500×2.375	300 2.07	64 2.50	235 9.25	110 4.33	124.5 4.90	94.5 3.72	5/8×105	UL FM
150×65 165.1×76.1	165.1×76.1 6.500×3.000	300 2.07	70 2.75	235 9.25	110 4.33	124.5 4.90	94.5 3.72	5/8×105	UL FM
150×80 165.1×3	165.1×88.9 6.500×3.500	300 2.07	89 3.50	235 9.25	130 5.12	124.5 4.90	94.5 3.72	5/8×105	UL FM
150×100 165.1×4	165.1×114.3 6.500×4.500	300 2.07	114 4.50	235 9.25	155 6.10	126 4.96	94.5 3.72	5/8×105	UL FM
150×32 6×1¼	168.3×42.4 6.500×1.660	300 2.07	51 2.00	240 9.45	92.5 3.64	126 4.96	96.5 3.80	5/8×105	UL FM
150×40 6×1½	168.3×48.3 6.500×1.900	300 2.07	51 2.00	240 9.45	92.5 3.64	126 4.96	96.5 3.80	5/8×105	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	64 2.50	240 9.45	110 4.33	126 4.96	96.5 3.80	5/8×105	UL FM
150×65 6×2½	168.3×73.0 6.625×2.875	300 2.07	70 2.75	240 9.45	110 4.33	126 4.96	96.5 3.80	5/8×105	UL FM
150×80 6×3	168.3×88.9 6.625×3.500	300 2.07	89 3.50	240 9.45	130 5.12	126 4.96	96.5 3.80	5/8×105	UL FM
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	114 4.50	240 9.45	155 6.10	128 5.04	96.5 3.80	5/8×105	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	300 2.07	64 2.50	300 11.81	115 4.53	155 6.10	123 4.84	5/8×105	UL FM
200×65 8×76.1	219.1×76.1 8.625×3.000	300 2.07	70 2.75	300 11.81	115 4.53	155 6.10	123 4.84	5/8×105	UL FM
200×80 8×3	219.1×88.9 8.625×3.500	300 2.07	89 3.50	300 11.81	133.5 5.25	155 6.10	123 4.84	5/8×105	UL FM
200×100 8×4	219.1×114.3 8.625×4.500	300 2.07	114 4.50	300 11.81	159.5 6.29	160 6.30	123 4.84	5/8×105	UL FM



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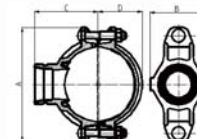
螺纹式机械三通
Mechanical Tee
Threaded Outlet



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
50×15 2×½	60.3×21.3 2.375×0.825	300 2.07	38 1.50	116 4.57	68 2.68	60 2.36	39 1.54	3/8×55	UL FM
50×20 2×¾	60.3×26.9 2.375×1.050	300 2.07	38 1.50	116 4.57	68 2.68	60 2.36	39 1.54	3/8×55	UL FM
50×25 2×1	60.3×33.7 2.375×1.315	300 2.07	38 1.50	116 4.57	68 2.68	60 2.36	39 1.54	3/8×55	UL FM
50×32 2×1¼	60.3×42.4 2.375×1.660	300 2.07	45 1.75	116 4.57	76 2.99	65 2.56	39 1.54	3/8×55	UL FM
50×40 2×1½	60.3×48.3 2.375×1.900	300 2.07	45 1.75	116 4.57	76 2.99	65 2.56	39 1.54	3/8×55	UL FM
65×20 2½×¾	73.0×26.9 2.875×1.050	300 2.07	38 1.50	144 5.67	71 2.76	75 2.72	49 1.93	1/2×70	UL FM
65×25 2½×1	73.0×33.7 2.875×1.315	300 2.07	38 1.50	144 5.67	70 2.76	69 2.72	49 1.93	1/2×70	UL FM
65×32 2½×1¼	73.0×42.4 2.875×1.660	300 2.07	51 2.00	144 5.67	84.5 3.33	73 2.87	49 1.93	1/2×70	UL FM
65×40 2½×1½	73.0×48.3 2.875×1.900	300 2.07	51 2.00	144 5.67	84.5 3.33	73 2.87	49 1.93	1/2×70	UL FM
65×15 2½×¾	76.1×21.3 3.000×0.825	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×20 2½×¾	76.1×26.9 3.000×1.050	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×25 2½×1	76.1×33.7 3.000×1.315	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×32 2½×1¼	76.1×42.4 3.000×1.660	300 2.07	51 2.00	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2×70	UL FM
65×40 2½×1½	76.1×48.3 3.000×1.900	300 2.07	51 2.00	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2×70	UL FM
80×25 3×½	88.9×21.3 3.500×0.825	300 2.07	38 1.50	152 5.98	72.5 2.85	80 3.15	56.5 2.22	1/2×75	UL FM
3×¾	88.9×26.9 3.500×1.050	300 2.07	38 1.50	152 5.98	72.5 2.85	80 3.15	56.5 2.22	1/2×75	UL FM
80×25 3×1	88.9×33.7 3.500×1.315	300 2.07	38 1.50	152 5.98	72.5 2.85	80 3.15	56.5 2.22	1/2×75	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	51 2.00	152 5.98	85.5 3.37	80 3.15	56.5 2.22	1/2×75	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	51 2.00	152 5.98	85.5 3.37	80 3.15	56.5 2.22	1/2×75	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	64 2.50	152 5.98	98 3.86	80 3.15	56.5 2.22	1/2×75	UL FM
100×25 108.0×1	108.1×33.7 4.250×1.315	300 2.07	38 1.50	172 6.77	78.5 3.09	87 3.43	64.5 2.54	1/2×75	UL FM
100×32 108.0×1¼	108.1×42.4 4.250×1.660	300 2.07	51 2.00	172 6.77	89 3.50	87 3.43	64.5 2.54	1/2×75	UL FM
100×40 108.0×1½	108.0×48.3 4.250×1.900	300 2.07	51 2.00	172 6.77	89 3.50	87 3.43	64.5 2.54	1/2×75	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	64 2.50	188 7.40	104.5 4.11	100 3.94	70 2.76	1/2×75	UL FM
100×65 108.0×76.1	108.0×76.1 4.250×3.000	300 2.07	70 2.75	172 6.77	106.5 4.19	100 3.94	64.5 2.54	1/2×75	UL FM
100×15 4×½	114.3×21.3 4.500×0.825	300 2.07	38 1.50	188 7.40	78.5 3.09	90 3.54	70 2.76	1/2×75	UL FM
100×20 4×¾	114.3×26.9 4.500×1.050	300 2.07	38 1.50	188 7.40	78.5 3.09	90 3.54	70 2.76	1/2×75	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	38 1.50	188 7.40	78.5 3.09	93 3.66	70 2.76	1/2×75	UL FM
100×32 4×1¼	114.3×42.4 4.500×1.660	300 2.07	51 2.00	188 7.40	89 3.50	95 3.74	70 2.76	1/2×75	UL FM

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螺纹式机械三通
Mechanical Tee
Threaded Outlet



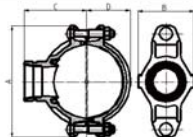
续表

Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	51 2.00	188 7.40	89 3.50	97 3.82	70 2.76	1/2×75	UL FM
100×50 4×2	108.0×60.3 4.250×2.375	300 2.07	64 2.50	172 6.77	106.5 4.19	92 3.62	64.5 2.54	1/2×75	UL FM
100×65 4×2½	114.3×73.0 4.500×2.875	300 2.07	70 2.75	188 7.40	104.5 4.11	102 4.02	70 2.76	1/2×75	UL FM
100×65 4×76.1	114.3×76.1 4.500×3.000	300 2.07	70 2.75	188 7.40	104.5 4.11	102 4.02	70 2.76	1/2×75	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	89 3.50	188 7.40	124 4.88	102 4.02	70 2.76	1/2×75	UL FM
125×25 133.0×1	133.0×33.7 5.250×1.315	300 2.07	38 1.50	209 8.23	78 3.07	105 4.13	77 3.03	5/8×85	UL FM
125×32 133.0×1.25	133.0×42.4 5.250×1.660	300 2.07	51 2.00	209 8.23	93 3.66	105 4.13	77 3.03	5/8×85	UL FM
125×40 133.0×1½	133.0×48.3 5.250×1.900	300 2.07	51 2.00	209 8.23	93 3.66	105 4.13	77 3.03	5/8×85	UL FM
125×50 133.0×2	133.0×60.3 5.250×2.375	300 2.07	64 2.50	209 8.23	112.5 4.43	110 4.33	77 3.03	5/8×85	UL FM
125×65 133.0×76.1	133.0×76.1 5.250×3.000	300 2.07	70 2.75	209 8.23	112.5 4.43	115 4.53	77 3.03	5/8×85	UL FM
125×80 133.0×3	133.0×88.9 5.250×3.500	300 2.07	89 3.50	209 8.23	132 5.20	118 4.65	77 3.03	5/8×85	UL FM
125×25 139.7×1	139.7×33.7 5.500×1.315	300 2.07	38 1.50	221.5 8.72	78 3.07	110 4.33	84 3.31	5/8×85	UL FM
125×32 139.7×1¼	139.7×42.4 5.500×1.660	300 2.07	51 2.00	221.5 8.72	93 3.66	112 4.41	84 3.31	5/8×85	UL FM
125×40 139.7×1½	139.7×48.3 5.500×1.900	300 2.07	51 2.00	221.5 8.72	93 3.66	112 4.41	84 3.31	5/8×85	UL FM
125×50 139.7×2	139.7×60.3 5.500×2.375	300 2.07	64 2.50	221.5 8.72	112.5 4.43	115 4.53	84 3.31	5/8×85	UL FM
125×65 139.7×76.1	139.7×76.1 5.500×3.000	300 2.07	70 2.75	221.5 8.72	112.5 4.43	115 4.53	84 3.31	5/8×85	UL FM
125×80 139.7×3	139.7×88.9 5.500×3.500	300 2.07	89 3.50	221.5 8.72	132 5.20	120 4.72	84 3.31	5/8×85	UL FM
125×100 139.7×4	139.7×114.3 5.500×4.500	300 2.07	114 4.50	221.5 8.72	156 6.30	125 4.92	84 3.31	5/8×85	UL FM
150×25 159.0×1	159.0×33.7 6.250×1.315	300 2.07	38 1.50	244 9.60	78 3.07	116 4.57	94 3.70	5/8×105	UL FM
150×32 159.0×1¼	159.0×42.4 6.250×1.660	300 2.07	51 2.00	244 9.60	93 3.66	118 4.65	94 3.70	5/8×105	UL FM
150×40 159.0×1½	159.0×48.3 6.250×1.900	300 2.07	51 2.00	244 9.60	93 3.66	118 4.65	94 3.70	5/8×105	UL FM
150×50 159.0×2	159.0×60.3 6.250×2.375	300 2.07	64 2.50	244 9.60	112.5 4.43	115 4.92	94 3.70	5/8×105	UL FM
150×65 159.0×76.1	159.0×76.1 6.250×3.000	300 2.07	70 2.75	244 9.60	112.5 4.43	125 4.92	94 3.70	5/8×105	UL FM
150×80 159.0×3	159.0×88.9 6.250×3.500	300 2.07	89 3.50	244 9.60	133 5.20	125 4.92	94 3.70	5/8×105	UL FM
150×100 159.0×4	159.1×114.3 6.250×4.500	300 2.07	114 4.50	244 9.60	156.5 6.16	130 5.12	94 3.70	5/8×105	UL FM
150×15 165.1×½	165.1×21.3 6.500×0.825	300 2.07	38 1.50	244 9.60	78 3.07	115 4.53	97.5 3.84	5/8×105	UL FM



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螺纹式机械三通 Mechanical Tee Threaded Outlet

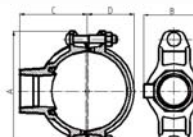


续表

Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
125×20 165.1×¾	165.1×26.9 6.500×1.050	300 2.07	38 1.50	244 9.60	78 3.07	115 4.53	97.5 3.84	5/8×105	UL FM
150×25 165.1×1	165.1×33.7 6.500×1.315	300 2.07	38 1.50	244 9.60	78 3.07	118 4.65	97.5 3.84	5/8×105	UL FM
150×32 165.1×1¼	165.1×42.4 6.500×1.660	300 2.07	51 2.00	244 9.60	93 3.66	118 4.65	97.5 3.84	5/8×105	UL FM
150×40 165.1×1½	165.1×48.3 6.500×1.900	300 2.07	51 2.00	244 9.60	93 3.66	118 4.65	97.5 3.84	5/8×105	UL FM
150×50 165.1×2	165.1×60.3 6.500×2.375	300 2.07	64 2.50	244 9.60	112.5 4.43	128.5 5.43	97.5 3.84	5/8×105	UL FM
150×65 165.1×76.1	165.1×76.1 6.500×3.000	300 2.07	70 2.75	244 9.60	112.5 4.43	128.5 5.43	97.5 3.84	5/8×105	UL FM
150×80 165.1×3	165.1×88.9 6.500×3.500	300 2.07	89 3.50	244 9.60	132 5.20	128.5 5.06	97.5 3.84	5/8×105	UL FM
150×100 165.1×4	165.1×114.3 6.500×4.500	300 2.07	114 4.50	244 9.60	154 6.18	135 5.32	97.5 3.84	5/8×105	UL FM
150×32 6×1¼	168.3×42.4 6.500×1.660	300 2.07	51 2.00	247 9.72	95 3.74	130 5.12	98.5 3.88	5/8×105	UL FM
150×40 6×1½	168.3×48.3 6.500×1.900	300 2.07	51 2.00	247 9.72	95 3.74	122 4.80	98.5 3.88	5/8×105	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	64 2.50	247 9.72	112.5 4.43	132 5.20	98.5 3.88	5/8×105	UL FM
150×65 6×2½	168.3×73.0 6.625×2.875	300 2.07	70 2.75	247 9.72	112.5 4.43	132 5.20	98.5 3.88	5/8×105	UL FM
150×80 6×3	168.3×88.9 6.625×3.500	300 2.07	89 3.50	247 9.72	132 5.20	140 5.51	98.5 3.88	5/8×105	UL FM
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	114 4.50	247 9.72	156.5 6.16	140 5.51	98.5 3.88	5/8×105	UL FM
200×25 8×1	219.0×33.7 8.625×1.315	300 2.07	38 1.50	322 12.68	79.5 3.13	150 5.91	125 4.92	¾×115	UL FM
200×32 8×1¼	219.1×42.4 8.625×1.660	300 2.07	51 2.00	322 12.68	96.5 3.80	150 5.91	125 4.92	¾×115	UL FM
200×40 8×1½	219.1×48.3 8.625×1.900	300 2.07	51 2.00	322 12.68	96.5 3.80	150 5.91	125 4.92	¾×115	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	300 2.07	64 2.50	322 12.68	117 4.61	160 6.30	125 4.92	¾×115	UL FM
200×65 8×76.1	219.1×76.1 8.625×3.000	300 2.07	70 2.75	322 12.68	118 4.65	158.5 6.24	125 4.92	¾×115	UL FM
200×80 8×3	219.1×88.9 8.625×3.500	300 2.07	89 3.50	322 12.68	136.5 5.37	160 6.30	125 4.92	¾×115	UL FM
200×100 8×4	219.1×114.3 8.625×4.500	300 2.07	114 4.50	322 12.68	164 6.46	160 6.30	125 4.92	¾×115	UL FM
250×40 10×1½	273.0×48.3 10.750×1.900	300 2.07	51 2.00	376 14.80	95.5 3.76	180 7.09	155 6.10	¾×120	UL FM
250×50 10×2	273.0×60.3 10.750×2.375	300 2.07	64 2.50	376 14.80	118 4.65	185 7.28	155 6.10	¾×120	UL FM
250×65 10×76.1	273.0×76.1 10.750×3.000	300 2.07	70 2.75	376 14.80	118 4.65	190 7.48	155 6.10	¾×120	UL FM
250×80 10×3	273.0×88.9 10.750×3.500	300 2.07	89 3.50	376 14.80	136.5 5.37	190 7.48	155 6.10	¾×120	UL FM
250×100 10×4	273.0×114.3 10.750×4.500	300 2.07	114 4.50	376 14.80	164 6.46	190 7.48	155 6.10	¾×120	UL FM

3JS

轻型螺纹式机械三通 Light-duty Mechanical Tee Threaded Outlet

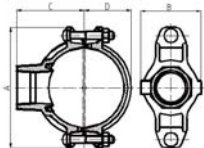


Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
65×15 76.1×¾	76.1×21.3 3.000×0.825	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×20 76.1×¾	76.1×26.9 3.000×1.050	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×25 76.1×1	76.1×33.7 3.000×1.315	300 2.07	38 1.50	137 5.39	71 2.80	75 3.05	49.5 1.95	1/2×70	UL FM
65×32 76.1×1¼	76.1×42.4 3.000×1.660	300 2.07	51 2.00	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2×70	UL FM
65×40 76.1×1½	76.1×48.3 3.000×1.900	300 2.07	51 2.00	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2×70	UL FM
80×15 3×½	88.9×21.3 3.500×0.825	300 2.07	38 1.50	150 5.91	71.0 2.80	68 2.68	55.5 2.19	1/2×75	UL FM
80×20 3×¾	88.9×26.9 3.500×1.050	300 2.07	38 1.50	150 5.91	71.0 2.80	68 2.68	55.5 2.19	1/2×75	UL FM
80×25 3×1	88.9×33.7 3.500×1.315	300 2.07	38 1.50	150 5.91	71.0 2.80	68 2.68	55.5 2.19	1/2×75	UL FM
80×32 3×1¼	88.9×42.4 3.500×1.660	300 2.07	51 2.00	150 5.91	84.5 3.33	74 2.91	55.5 2.19	1/2×75	UL FM
80×40 3×1½	88.9×48.3 3.500×1.900	300 2.07	51 2.00	150 5.91	84.5 3.33	74 2.91	55.5 2.19	1/2×75	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	300 2.07	64 2.50	150 5.91	98 3.86	77 3.03	55.5 2.19	1/2×75	UL FM
100×25 108.0×1	108.1×33.7 4.250×1.315	300 2.07	38 1.50	172 6.77	77.5 3.05	85 3.35	64.5 2.54	1/2×75	UL FM
100×32 108.0×1¼	108.1×42.4 4.250×1.660	300 2.07	51 2.00	172 6.77	88 3.46	85 3.35	64.5 2.54	1/2×75	UL FM
100×40 108.0×1½	108.0×48.3 4.250×1.900	300 2.07	51 2.00	172 6.77	88 3.46	85 3.35	64.5 2.54	1/2×75	UL FM
100×50 108.0×2	108.0×60.3 4.250×2.375	300 2.07	64 2.50	172 6.77	103.5 4.19	89 3.50	64.5 2.54	1/2×75	UL FM
100×65 108.0×76.1	108.0×76.1 4.250×3.000	300 2.07	70 2.75	172 6.77	103.5 4.07	96 3.78	64.5 2.54	1/2×75	UL FM
100×15 4×½	114.3×21.3 4.500×0.825	300 2.07	38 1.50	178 7.01	77.5 3.05	82 3.23	67.5 2.66	1/2×75	UL FM
100×20 4×¾	114.3×26.9 4.500×1.050	300 2.07	38 1.50	178 7.01	77.5 3.05	82 3.23	67.5 2.66	1/2×75	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	300 2.07	38 1.50	178 7.01	77.5 3.05	82 3.23	67.5 2.66	1/2×75	UL FM
100×32 4×1¼	114.3×42.4 4.500×1.660	300 2.07	51 2.00	178 7.01	88 3.46	89.5 3.53	67.5 2.66	1/2×75	UL FM
100×40 4×1½	114.3×48.3 4.500×1.900	300 2.07	51 2.00	178 7.01	88 3.46	89.5 3.53	67.5 2.66	1/2×75	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	300 2.07	64 2.50	178 7.01	103.5 4.07	92 3.62	67.5 2.66	1/2×75	UL FM
100×65 4×2½	114.3×73.0 4.500×2.875	300 2.07	70 2.75	178 7.01	103.5 4.07	98 3.86	67.5 2.66	1/2×75	UL FM
100×65 4×76.1	114.3×76.1 4.500×3.000	300 2.07	70 2.75	178 7.01	103.5 4.07	98 3.86	67.5 2.66	1/2×75	UL FM
100×80 4×3	114.3×88.9 4.500×3.500	300 2.07	89 3.50	178 7.01	124 4.88	100 3.94	67.5 2.66	1/2×75	UL FM
125×25 133.0×1	133.0×33.7 5.250×1.315	300 2.07	38 1.50	203 7.99	77 3.03	98 3.86	77.5 3.05	5/8×85	UL FM
125×32 133.0×1.25	133.0×42.4 5.250×1.660	300 2.07	51 2.00	203 7.99	91 3.58	102 4.01	77.5 3.05	5/8×85	UL FM
125×40 133.0×1½	133.0×48.3 5.250×1.900	300 2.07	51 2.00	203 7.99	91 3.58	102 4.01	77.5 3.05	5/8×85	UL FM
125×50 133.0×2	133.0×60.3 5.250×2.375	300 2.07	64 2.50	203 7.99	110 4.33	105 4.13	77.5 3.05	5/8×85	UL FM
125×65 133.0×76.1	133.0×76.1 5.250×3.000	300 2.07	70 2.75	203 7.99	110 4.33	110 4.33	77.5 3.05	5/8×85	UL FM
125×80 133.0×3	133.0×88.9 5.250×3.500	300 2.07	89 3.50	203 7.99	132 5.12	110 4.33	77.5 3.05	5/8×85	UL FM
125×25 139.7×1	139.7×33.7 5.500×1.315	300 2.07	38 1.50	210 8.27	77 3.03	100 3.94	82 3.23	5/8×85	UL FM
125×32 139.7×1¼	139.7×42.4 5.500×1.660	300 2.07	51 2.00	210 8.27	91 3.58	105 4.13	82 3.23	5/8×85	UL FM



3JS

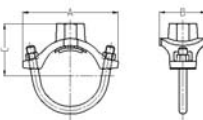
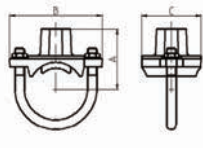
续表
轻型螺纹式机械三通
Light-duty Mechanical Tee
Threaded Outlet



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Hole Dia mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size	Certificate
规格	管子基本尺寸	工作压力	开孔尺寸	A	B	C	D	螺栓规格	认证标识
125×40 139.7×1½	139.7×48.3 5.500×1.900	300 2.07	51 2.00	210 8.27	91 3.58	105 4.13	82 3.23	5/8×85	UL FM
125×50 139.7×2	139.7×60.3 5.500×2.375	300 2.07	64 2.50	210 8.27	110 4.33	108 4.25	82 3.23	5/8×85	UL FM
125×65 139.7×76.1	139.7×76.1 5.500×3.000	300 2.07	70 2.75	210 8.27	110 4.33	115 4.53	82 3.23	5/8×85	UL FM
125×80 139.7×3	139.7×88.9 5.500×3.500	300 2.07	89 3.50	210 8.27	130 5.12	115 4.53	82 3.23	5/8×85	UL FM
125×100 139.7×4	139.7×114.3 5.500×4.500	300 2.07	114 4.50	210 8.27	153 6.02	118 4.65	82 3.23	5/8×85	UL FM
150×25 159.0×1	159.0×33.7 6.250×1.315	300 2.07	38 1.50	227 8.94	77 3.03	110 4.33	91 3.58	5/8×105	UL FM
150×32 159.0×1¼	159.0×42.4 6.250×1.660	300 2.07	51 2.00	227 8.94	92.5 3.64	112 4.41	91 3.58	5/8×105	UL FM
150×40 159.0×1½	159.0×48.3 6.250×1.900	300 2.07	51 2.00	227 8.94	92.5 3.64	112 4.41	91 3.58	5/8×105	UL FM
150×50 159.0×2	159.0×60.3 6.250×2.375	300 2.07	64 2.50	227 8.94	110 4.33	116.5 4.59	91 3.58	5/8×105	UL FM
150×65 159.0×2½	159.0×76.1 6.250×3.000	300 2.07	70 2.75	227 8.94	110 4.33	121.5 4.78	91 3.58	5/8×105	UL FM
150×80 159.0×3	159.0×88.9 6.250×3.500	300 2.07	89 3.50	227 8.94	130 5.12	123.5 4.86	91 3.58	5/8×105	UL FM
150×100 159.0×4	159.1×114.3 6.250×4.500	300 2.07	114 4.50	227 8.94	155 6.10	127 5.00	91 3.58	5/8×105	UL FM
150×15 165.1×½	165.1×21.3 6.500×0.825	300 2.07	38 1.50	235 9.25	77 3.03	115 4.53	94.5 3.72	5/8×105	UL FM
125×20 165.1×¾	165.1×26.9 6.500×1.050	300 2.07	38 1.50	235 9.25	77 3.03	115 4.53	94.5 3.72	5/8×105	UL FM
150×25 165.1×1	165.1×33.7 6.500×1.315	300 2.07	38 1.50	235 9.25	77 3.03	115 4.53	94.5 3.72	5/8×105	UL FM
150×32 165.1×1¼	165.1×42.4 6.500×1.660	300 2.07	51 2.00	235 9.25	92.5 3.64	115 4.53	94.5 3.72	5/8×105	UL FM
150×40 165.1×1½	165.1×48.3 6.500×1.900	300 2.07	51 2.00	235 9.25	92.5 3.64	115 4.53	94.5 3.72	5/8×105	UL FM
150×50 165.1×2	165.1×60.3 6.500×2.375	300 2.07	64 2.50	235 9.25	110 4.33	120 4.72	94.5 3.72	5/8×105	UL FM
150×65 165.1×2½	165.1×76.1 6.500×3.000	300 2.07	70 2.75	235 9.25	110 4.33	125 4.92	94.5 3.72	5/8×105	UL FM
150×80 165.1×3	165.1×88.9 6.500×3.500	300 2.07	89 3.50	235 9.25	130 5.12	125 4.92	94.5 3.72	5/8×105	UL FM
150×100 165.1×4	165.1×114.3 6.500×4.500	300 2.07	114 4.50	240 9.45	155 6.10	130 5.12	94.5 3.72	5/8×105	UL FM
150×25 6×1	168.3×33.7 6.500×1.315	300 2.07	38 1.50	240 9.45	77 3.03	115 4.53	96.5 3.80	5/8×105	UL FM
150×32 6×1¼	168.3×42.4 6.500×1.660	300 2.07	51 2.00	240 9.45	92.5 3.64	115 4.53	96.5 3.80	5/8×105	UL FM
150×40 6×1½	168.3×48.3 6.500×1.900	300 2.07	51 2.00	240 9.45	92.5 3.64	115 4.53	96.5 3.80	5/8×105	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	64 2.50	240 9.45	110 4.33	121 4.76	96.5 3.80	5/8×105	UL FM
150×65 6×2½	168.3×73.0 6.625×2.875	300 2.07	70 2.75	240 9.45	110 4.33	127 5.00	96.5 3.80	5/8×105	UL FM
150×80 6×3	168.3×88.9 6.625×3.500	300 2.07	89 3.50	240 9.45	130 5.12	127 5.00	96.5 3.80	5/8×105	UL FM
150×100 6×4	168.3×114.3 6.625×4.500	300 2.07	114 4.50	240 9.45	155 6.10	143 5.12	96.5 3.80	5/8×105	UL FM
200×25 8×1	219.0×33.7 8.625×1.315	300 2.07	38 1.50	300 11.81	78 3.07	140 5.51	123 4.84	5/8×105	UL FM
200×32 8×1¼	219.1×42.4 8.625×1.660	300 2.07	51 2.00	300 11.81	93 3.66	140 5.51	123 4.84	5/8×105	UL FM
200×40 8×1½	219.1×48.3 8.625×1.900	300 2.07	51 2.00	300 11.81	93 3.66	143 5.63	123 4.84	5/8×105	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	300 2.07	64 2.50	300 11.81	115 4.53	149 5.87	123 4.84	5/8×105	UL FM
200×65 8×2½	219.1×76.1 8.625×3.000	300 2.07	70 2.75	300 11.81	115 4.53	155 6.10	123 4.84	5/8×105	UL FM
200×80 8×3	219.1×88.9 8.625×3.500	300 2.07	89 3.50	300 11.81	133.5 5.25	155 6.10	123 4.84	5/8×105	UL FM
200×100 8×4	219.1×114.3 8.625×4.500	300 2.07	114 4.50	300 11.81	159.5 6.29	160 6.30	123 4.84	5/8×105	UL FM

3L

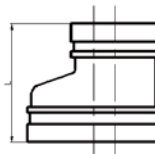
U型栓机械三通
U-Bolt
Mechanical Tee



Nominal Size mm/in	Hole Dia mm/in +1.6,0/+0.063,0	Working Pressure PSI/Mpa	Dimensions			U Bolt Size in	Certificate
			A mm/in	B mm/in	C mm/in		
规格	开孔直径	工作压力	尺寸			U型螺栓	认证标识
32X15 1¼X1/2	30 1.18	300 2.07	54.4 2.14	88.9 3.50	57.2 2.25	3/8X73	UL FM
32X20 1¼X3/4	30 1.18	300 2.07	54.4 2.14	88.9 3.50	57.2 2.25	3/8X73	UL FM
32X25 1½X1	30 1.18	300 2.07	57.7 2.27	88.9 3.50	57.2 2.25	3/8X73	UL FM
40X15 1½X1/2	30 1.18	300 2.07	57.4 2.26	88.9 3.50	57.2 2.25	3/8X73	UL FM
40X20 1½X3/4	30 1.18	300 2.07	57.4 2.26	88.9 3.50	57.2 2.25	3/8X73	UL FM
40X25 1½X1	30 1.18	300 2.07	60.8 2.39	88.9 3.50	57.2 2.25	3/8X73	UL FM
50X15 2X1/2	30 1.18	300 2.07	63.3 2.49	95.3 3.75	57.2 2.25	3/8X90	UL FM
50X20 2X3/4	30 1.18	300 2.07	63.3 2.49	95.3 3.75	57.2 2.25	3/8X90	UL FM
50X25 2X1	30 1.18	300 2.07	66.6 2.62	95.3 3.75	57.2 2.25	3/8X90	UL FM
65X15 2½X1/2	30 1.18	300 2.07	69.9 2.75	108.0 4.25	57.2 2.250	3/8X105	UL FM
65X20 2½X3/4	30 1.18	300 2.07	69.9 2.75	108.0 4.25	57.2 2.250	3/8X105	UL FM
65X25 2½X1	30 1.18	300 2.07	73.2 2.88	108.0 4.25	57.2 2.25	3/8X105	UL FM
65X15 76.1X1/2	30 1.18	300 2.07	69.9 2.75	108.0 4.25	57.2 2.250	3/8X105	UL FM
65X20 76.1X3/4	30 1.18	300 2.07	69.9 2.75	108.0 4.25	57.2 2.250	3/8X105	UL FM
65X25 76.1X1	30 1.18	300 2.07	73.2 2.88	108.0 4.25	57.2 2.25	3/8X105	UL FM
80X25 3X1	38 1.5	300 2.07	145 5.71	73 2.87	79 3.11	1/2X105	UL FM
100X25 4X1	38 1.5	300 2.07	185 7.28	72 2.83	89 3.50	1/2X125	UL FM
100X32 4X1¼	51 2.0	300 2.07	185 7.28	85 3.35	95 3.74	1/2X125	UL FM
100X40 4X1½	51 2.0	300 2.07	185 7.28	85 3.35	95 3.74	1/2X125	UL FM
150X25 6X1	38 1.5	300 2.07	254 10.00	75 2.95	120 4.72	5/8X173	UL FM
150X32 6X1¼	51 2.0	300 2.07	254 10.00	88 3.46	120 4.72	5/8X173	UL FM
150X40 6X1½	51 2.0	300 2.07	254 10.00	88 3.46	120 4.72	5/8X173	UL FM

230

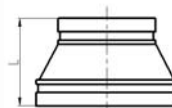
偏心沟槽式
异径管固
Grooved Eccentric
Reducer



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
80X50 3X2	88.9X60.3 3.500X2.375	500 3.45	89 3.50	UL FM
100X65 4X2½	108.0X76.1 4.250X3.000	500 3.45	102 4.00	UL FM
100X80 4X3	108.0X88.9 4.250X3.500	500 3.45	102 4.00	UL FM
100X65 4X2½	114.3X60.3 4.500X2.000	500 3.45	102 4.00	UL FM
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	102 4.00	UL FM
100X80 4X3	114.3X88.9 4.500X3.500	500 3.45	102 4.00	UL FM
125X100 5X4	139.7X114.3 5.500X4.500	500 3.45	127 5.00	UL FM
150X100 6X4	159.0X108.0 6.250X4.250	500 3.45	140 5.50	UL FM
150X100 6X4	159.0X114.3 6.250X4.500	500 3.45	140 5.50	UL FM
150X80 6X3	165.1X88.9 6.500X3.500	500 3.45	140 5.50	UL FM
150X100 6X4	165.1X114.3 6.500X4.500	500 3.45	140 5.50	UL FM
150X125 6X5	165.1X139.7 6.500X5.500	500 3.45	140 5.50	UL FM
150X80 6X3	168.3X88.9 6.625X3.500	500 3.45	140 5.50	UL FM
150X100 6X4	168.3X114.3 6.625X4.500	500 3.45	140 5.50	UL FM
150X125 6X5	168.3X139.7 6.625X5.500	500 3.45	140 5.50	UL FM
200X100 8X4	219.1X114.3 8.625X4.500	500 3.45	215 8.50	UL FM
200X100 8X6	219.1X165.1 8.625X6.500	500 3.45	215 8.50	UL FM
200X100 8X6	219.1X168.3 8.625X6.625	500 3.45	215 8.50	UL FM
200X100 10X8	273.0X219.1 10.750X8.625	500 3.45	330 13.0	UL FM

240

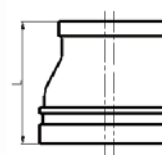
沟槽式异径管固
Grooved Concentric
Reducer



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
32X25 1½X1	42.4X33.7 1.660X1.315	500 3.45	64 2.50	UL FM VdS
40X32 1½X1¼	48.3X42.4 1.900X1.660	500 3.45	64 2.50	UL FM VdS
50X32 2X1¼	60.3X42.4 2.375X1.660	500 3.45	64 2.50	UL FM VdS
50X40 2X1½	60.3X48.3 2.375X1.900	500 3.45	64 2.50	UL FM VdS
65X32 2½X1¼	73.0X42.4 2.875X1.660	500 3.45	64 2.50	UL FM
65X40 2½X1½	73.0X48.3 2.875X1.900	500 3.45	64 2.50	UL FM
65X50 2½X2	73.0X60.3 2.875X2.375	500 3.45	64 2.50	UL FM
65X50 2½X1¼	76.1X42.4 3.000X1.660	500 3.45	64 2.50	UL FM VdS
65X40 2½X1½	76.1X48.3 3.000X1.900	500 3.45	64 2.50	UL FM VdS
65X50 2½X2	76.1X60.3 3.000X2.375	500 3.45	64 2.50	UL FM VdS
80X25 3X1	88.9X33.7 3.500X1.315	500 3.45	64 2.50	UL FM VdS
80X40 3X1½	88.9X48.3 3.500X1.900	500 3.45	64 2.50	UL FM VdS
80X50 3X2	88.9X60.3 3.500X2.375	500 3.45	64 2.50	UL FM VdS
80X65 3X2½	88.9X73.0 3.500X2.875	500 3.45	64 2.50	UL FM
80X65 3X2½	88.9X76.1 3.500X3.000	500 3.45	64 2.50	UL FM VdS
100X50 4X2	108.0X60.3 4.250X2.375	500 3.45	76 3.00	UL FM
100X65 4X2½	108.0X73.0 4.250X2.875	500 3.45	76 3.00	UL FM
100X65 4X2½	108.0X76.1 4.250X3.000	500 3.45	76 3.00	UL FM
100X80 4X3	108.0X88.9 4.250X3.500	500 3.45	76 3.00	UL FM
100X32 4X1¼	114.3X42.4 4.500X1.660	500 3.45	76 3.00	UL FM VdS
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	76 3.00	UL FM VdS
100X50 4X2	114.3X60.3 4.500X2.375	500 3.45	76 3.00	UL FM VdS
100X65 4X2½	114.3X73.0 4.500X2.875	500 3.45	76 3.00	UL FM
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	76 3.00	UL FM VdS
100X80 4X3	114.3X88.9 4.500X3.500	500 3.45	76 3.00	UL FM VdS
125X100 5X4	133.0X108.0 5.250X4.250	500 3.45	89 3.50	UL FM
125X100 15X4	133.0X114.3 5.250X4.500	500 3.45	89 3.50	UL FM
125X50 5X2	139.7X60.3 5.500X2.375	500 3.45	89 3.50	UL FM
125X65 5X2½	139.7X76.1 5.500X3.000	500 3.45	89 3.50	UL FM VdS
125X80 5X3	139.7X88.9 5.500X3.500	500 3.45	89 3.50	UL FM VdS
125X100 5X4	139.7X114.3 5.500X4.500	500 3.45	89 3.50	UL FM VdS
125X65 5X2½	141.3X73.0 5.563X2.875	500 3.45	89 3.50	UL FM
125X80 5X3	141.3X88.9 5.563X3.500	500 3.45	89 3.50	UL FM
125X100 5X4	141.3X114.3 5.563X4.500	500 3.45	89 3.50	UL FM
150X50 6X2	159.0X60.3 6.250X2.375	500 3.45	102 4.00	UL FM

230N

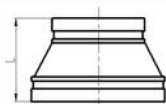
偏心沟槽内螺纹式
异径管固
Grooved Eccentric
Reducer With
Female Thread



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
100X65 108.0X2½	108.0X76.1 4.250X3.000	500 3.45	102 4.00	UL FM
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	102 4.00	UL FM
125X80 5X3	139.7X88.9 5.500X3.500	500 3.45	127 5.00	UL FM
150X80 6X3	165.1X88.9 6.500X3.500	500 3.45	140 5.50	UL FM

240

沟槽式异径管固
Grooved Concentric
Reducer

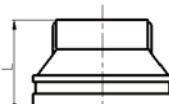


续表

Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
150X65 159.0X2½	159.0X76.1 6.250X3.000	500 3.45	102 4.00	UL FM
150X80 6X3	159.0X88.9 6.250X3.500	500 3.45	102 4.00	UL FM
150X100 6X4	159.0X108 6.250X4.250	500 3.45	102 4.00	UL FM
150X100 6X4	159.0X114.3 6.250X4.500	500 3.45	102 4.00	UL FM
150X125 6X5	159.0X133.0 6.250X5.250	500 3.45	102 4.00	UL FM
150X50 6X2	165.1X60.3 6.500X2.375	500 3.45	102 4.00	UL FM
150X65 6X2½	165.1X76.1 6.500X3.000	500 3.45	102 4.00	UL FM
150X80 6X3	165.1X88.9 6.500X3.500	500 3.45	102 4.00	UL FM
150X100 6X4	165.1X114.3 6.500X4.500	500 3.45	102 4.00	UL FM
150X125 6X5	165.1X139.7 6.500X5.500	500 3.45	102 4.00	UL FM
150X50 6X2	168.3X60.3 6.625X2.375	500 3.45	102 4.00	UL FM VdS
150X65 6X2½	168.3X73.0 6.625X2.875	500 3.45	102 4.00	UL FM
150X65 6X2½	168.3X76.1 6.625X3.000	500 3.45	102 4.00	UL FM VdS
150X80 6X3	168.3X88.9 6.625X3.500	500 3.45	102 4.00	UL FM VdS
150X100 6X4	168.3X114.3 6.625X4.500	500 3.45	102 4.00	UL FM VdS
150X125 6X5	168.3X139.7 6.625X5.500	500 3.45	102 4.00	UL FM VdS
150X125 6X5	168.3X141.3 6.625X5.563	500 3.45	102 4.00	UL FM
200X100 8X4	216.3X114.3 8.516X4.500	500 3.45	127 5.00	UL FM
200X150 8X6	216.3X165.1 8.516X6.500	500 3.45	127 5.00	UL FM
200X65 8X2½	219.1X73.0 8.625X2.875	500 3.45	127 5.00	UL FM
200X80 8X3	219.1X88.9 8.625X3.500	500 3.45	127 5.00	UL FM VdS
200X100 8X4	219.1X114.3 8.625X4.500	500 3.45	127 5.00	UL FM VdS
200X125 8X5	219.1X139.7 8.625X5.500	500 3.45	127 5.00	UL FM VdS
200X125 8X5	219.1X141.3 8.625X5.563	500 3.45	127 5.00	UL FM
200X150 8X6	219.1X159.0 8.625X6.250	500 3.45	127 5.00	UL FM
200X150 8X6	219.1X165.1 8.625X6.500	500 3.45	127 5.00	UL FM
200X150 8X6	219.1X168.3 8.625X6.625	500 3.45	127 5.00	UL FM VdS
250X150 10X6	273.0X159.0 10.750X6.250	500 3.45	127 5.00	UL FM
250X150 10X6	273.0X165.1 10.750X6.500	500 3.45	152 6.00	UL FM
250X150 10X6	273.0X168.3 10.750X6.625	500 3.45	152 6.00	UL FM VdS
250X200 10X8	273.0X219.1 10.750X8.625	500 3.45	152 6.00	UL FM VdS
300X200 12X8	323.9X219.1 12.750X8.625	500 3.45	178 7.00	UL FM VdS
300X250 12X10	323.9X273.0 12.750X10.750	500 3.45	178 7.00	UL FM VdS
350X300 14X12	377.0X323.9 14.850X12.750	300 2.07	127 5.00	UL FM
400X350 16X14	426.0X377.0 16.770X14.850	300 2.07	127 5.00	UL FM

240N

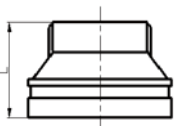
沟槽内螺纹式
异径管固
Grooved Concentric
Reducer With Female Thread



Nominal Size GroovedXThreaded mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimension L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
50X15 2X1/2	60.3X21.3 2.375X0.825	500 3.45	64 2.50	VdS
50X20 2X3/4	60.3X26.9 2.375X1.05	500 3.45	64 2.50	UL FM VdS
50X25 2X1	60.3X33.7 2.375X1.315	500 3.45	64 2.50	UL FM VdS
50X32 2X1¼	60.3X42.4 2.375X1.660	500 3.45	64 2.50	UL FM VdS
50X40 2X1½	60.3X48.3 2.375X1.900	500 3.45	64 2.50	UL FM VdS
65X25 2½X1	73.0X33.7 2.875X1.315	500 3.45	64 2.50	UL FM
65X25 2½X1¼	73.0X42.4 2.875X1.660	500 3.45	64 2.50	UL FM
65X40 2½X1½	73.0X48.3 2.875X1.900	500 3.45	64 2.50	UL FM
65X50 2½X2	73.0X60.3 2.875X2.375	500 3.45	64 2.50	UL FM
65X15 2½X1/2	76.1X21.3 3.000X0.825	500 3.45	64 2.50	UL FM VdS
65X20 2½X3/4	76.1X26.9 3.000X1.05	500 3.45	64 2.50	UL FM VdS
65X25 2½X1	76.1X33.7 3.000X1.315	500 3.45	64 2.50	UL FM VdS
65X32 2½X1¼	76.1X42.4 3.000X1.660	500 3.45	64 2.50	UL FM VdS
65X40 2½X1½	76.1X48.3 3.000X1.900	500 3.45	64 2.50	UL FM VdS
65X50 2½X2	76.1X60.3 3.000X2.375	500 3.45	64 2.50	UL FM VdS
80X15 3X1/2	88.9X21.3 3.500X0.825	500 3.45	64 2.50	VdS
80X20 3X3/4	88.9X26.9 3.500X1.05	500 3.45	64 2.50	UL FM VdS
80X25 3X1	88.9X33.7 3.500X1.315	500 3.45	64 2.50	UL FM VdS
80X32 3X1¼	88.9X42.4 3.500X1.660	500 3.45	64 2.50	VdS
80X40 3X1½	88.9X48.3 3.500X1.900	500 3.45	64 2.50	UL FM VdS
80X50 3X2	88.9X60.3 3.500X2.375	500 3.45	64 2.50	UL FM VdS
80X65 3X2½	88.9X73.0 3.500X2.875	500 3.45	64 2.50	UL FM
80X65 3X2½	88.9X76.1 3.500X3.000	500 3.45	64 2.50	UL FM VdS
100X25 4X1	108.0X33.7 4.250X1.315	500 3.45	76 3.00	UL FM
100X32 4X1¼	108.0X42.4 4.250X1.660	500 3.45	76 3.00	UL FM
100X40 4X1½	108.0X48.3 4.250X1.900	500 3.45	76 3.00	UL FM
100X50 4X2	108.0X60.3 4.250X2.375	500 3.45	76 3.00	UL FM
100X65 4X2½	108.0X76.1 4.250X3.000	500 3.45	76 3.00	UL FM
100X80 4X3	108.0X88.9 4.250X3.500	500 3.45	76 3.00	UL FM
100X15 4X1/2	114.3X21.3 4.500X0.825	500 3.45	76 3.00	UL FM VdS
100X20 4X3/4	114.3X26.9 4.500X1.05	500 3.45	76 3.00	UL FM VdS
100X25 4X1	114.3X33.7 4.500X1.315	500 3.45	76 3.00	UL FM VdS
100X32 4X1¼	114.3X42.4 4.500X1.660	500 3.45	76 3.00	UL FM VdS
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	76 3.00	UL FM VdS
100X50 4X2	114.3X60.3 4.500X2.375	500 3.45	76 3.00	UL FM VdS
100X65 4X2½	114.3X73.0 4.500X2.875	500 3.45	76 3.00	UL FM
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	76 3.00	UL FM VdS
100X80 4X3	114.3X88.9 4.500X3.500	500 3.45	76 3.00	UL FM VdS

240N

沟槽内螺纹式
异径管固
Grooved Concentric
Reducer With Female Thread

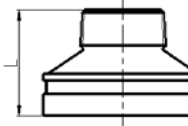


续表

Nominal Size GroovedXThread mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimension L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
125X40 5X1½	133.0X48.3 5.250X1.900	500 3.45	89 3.50	UL FM
125X40 5X2	133.0X60.3 5.250X2.375	500 3.45	89 3.50	UL FM
125X65 5X2½	133.0X76.1 5.250X3.000	500 3.45	89 3.50	UL FM
125X65 5X3	133.0X88.9 5.250X3.500	500 3.45	89 3.50	UL FM
125X25 5X1	139.7X33.7 5.500X1.315	500 3.45	89 3.50	UL FM VdS
125X32 5X1¼	139.7X42.4 5.500X1.660	500 3.45	89 3.50	UL FM VdS
125X40 5X1½	139.7X48.3 5.500X1.900	500 3.45	89 3.50	UL FM VdS
125X50 5X2	139.7X60.3 5.500X2.375	500 3.45	89 3.50	UL FM VdS
125X65 5X2½	139.7X76.1 5.500X3.000	500 3.45	89 3.50	UL FM VdS
125X80 5X3	139.7X88.9 5.500X3.500	500 3.45	89 3.50	UL FM VdS
125X100 5X4	139.7X114.3 5.500X4.500	500 3.45	89 3.50	UL FM VdS
125X100 5X4	141.3X114.3 5.563X4.500	500 3.45	89 3.50	UL FM
150X20 6X3/4	159.0X26.9 6.250X1.05	500 3.45	102 4.00	UL FM
150X25 6X1	159.0X33.7 6.250X1.315	500 3.45	102 4.00	UL FM
150X32 6X1¼	159.0X42.4 6.250X1.660	500 3.45	102 4.00	UL FM
150X40 6X1½	159.0X48.3 6.250X1.900	500 3.45	102 4.00	UL FM
150X50 6X2	159.0X60.3 6.250X2.375	500 3.45	102 4.00	UL FM
150X65 6X2½	159.0X76.1 6.250X3.000	500 3.45	102 4.00	UL FM
150X80 6X3	159.0X88.9 6.250X3.500	500 3.45	102 4.00	UL FM
150X100 6X4	159.0X114.3 6.250X4.500	500 3.45	102 4.00	UL FM
150X15 6X1/2	165.1X21.3 6.500X0.825	500 3.45	102 4.00	UL FM
150X20 6X3/4	165.1X26.9 6.500X1.05	500 3.45	102 4.00	UL FM
150X25 6X1	165.1X33.7 6.500X1.315	500 3.45	102 4.00	UL FM
150X32 6X1¼	165.1X42.4 6.500X1.660	500 3.45	102 4.00	UL FM
150X40 6X1½	165.1X48.3 6.500X1.900	500 3.45	102 4.00	UL FM
150X50 6X2	165.1X60.3 6.500X2.375	500 3.45	102 4.00	UL FM
150X65 6X2½	165.1X76.1 6.500X3.000	500 3.45	102 4.00	UL FM
150X80 6X3	165.1X88.9 6.500X3.500	500 3.45	102 4.00	UL FM
150X100 6X4	165.1X114.3 6.500X4.500	500 3.45	102 4.00	UL FM
150X25 6X1	168.3X33.7 6.625X1.315	500 3.45	102 4.00	UL FM
150X50 6X2	168.3X60.3 6.625X2.375	500 3.45	102 4.00	UL FM VdS
150X125 6X5	168.3X141.3 6.625X5.563	500 3.45	102 4.00	UL FM
200X40 8X1½	219.1X48.3 8.625X1.900	500 3.45	127 5.00	UL FM
200X50 8X2	219.1X60.3 8.625X2.375	500 3.45	127 5.00	UL FM VdS
200X65 8X2½	219.1X73.0 8.625X2.875	500 3.45	127 5.00	UL FM
200X65 8X2½	219.1X76.1 8.625X3.000	500 3.45	127 5.00	UL FM
200X80 8X3	219.1X88.9 8.625X3.500	500 3.45	127 5.00	UL FM VdS
200X100 8X4	219.1X114.3 8.625X4.500	500 3.45	127 5.00	UL FM
200X100 8X6	219.1X168.3 8.625X6.625	500 3.45	127 5.00	UL FM

240W

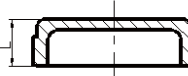
沟槽外螺纹式
异径管固
Grooved Concentric
Reducer With Male Thread



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
65X50 2½X2	73.0X60.3 2.875X2.375	500 3.45	64 2.50	UL、FM
65X50 2½X2	76.1X60.3 3.000X2.375	500 3.45	64 2.50	UL、FM
80X25 3X1	88.9X33.7 3.500X1.315	500 3.45	64 2.50	UL、FM
100X50 4X2	114.3X60.3 4.500X2.375	500 3.45	76 3.00	UL、FM
200X150 8X6	219.1X168.3 8.625X6.625	500 3.45	127 5.00	UL、FM

300

管帽
Cap



Nominal Size mm/in	Pipe O.D. mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
25 1	33.7 1.315	500 3.45	22.1 0.87	UL FM VdS
32 1¼	42.4 1.660	500 3.45	23.5 0.93	UL FM VdS
40 1½	48.3 1.900	500 3.45	23.5 0.93	UL FM VdS
50 2	60.3 2.375	500 3.45	23.5 0.93	UL FM VdS
65 2½	73.0 2.875	500 3.45	23.5 0.93	UL FM
65 2½	76.1 3.000	500 3.45	25.5 1.00	UL FM VdS
80 3	88.9 3.500	500 3.45	25.5 1.00	UL FM VdS
100 4	108.0 4.250	500 3.45	27 1.06	UL FM
100 4	114.3 4.500	500 3.45	27 1.06	UL FM VdS
25 5	133.0 5.250	500 3.45	27 1.06	UL FM
125 5	139.7 5.500	500 3.45	27 1.06	UL FM VdS
125 5	141.3 5.563	500 3.45	27 1.06	UL FM
150 6	159.0 6.250	500 3.45	27 1.06	UL FM
150 6	165.1 6.500	300 2.07	27 1.06	UL FM
150 6	168.3 6.625	300 2.07	24.5 0.97	UL FM VdS
200 8	216.3 8.516	300 2.07	30.2 1.19	UL FM
200 8	219.1 8.625	300 2.07	30.5 1.20	UL FM VdS
250 10	273.0 10.750	300 2.07	32 1.26	UL FM VdS
300 12	323.9 12.750	300 2.07	32 1.26	UL FM VdS



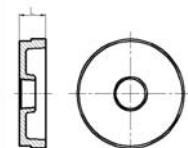
GOLDEN HIGHPE INDUSTRIAL INC.
EVERBEST VALVES & FITTINGS MFG. CO., LTD



EVERBEST VALVES & FITTINGS MFG. CO., LTD

300

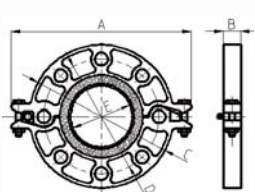
开孔管帽
Cap



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
65×40 2½×1½	76.1×48.3 3.000×1.900	500 3.45	23.5 0.925	UL FM
80X15 3X1/2	88.9X21.3 3.500X0.825	500 3.45	25.4 1.00	UL FM
80X25 3X1	88.9X33.7 3.500X1.315	500 3.45	25.4 1.00	UL FM
80X40 3X1½	88.9X48.3 3.500X1.900	500 3.45	23.5 0.925	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	500 3.45	23.5 0.925	UL FM
100×15 4×1/2	114.3×21.3 4.500×0.825	500 3.45	27.0 1.06	UL FM
100×25 4×1	114.3×33.7 4.500×1.315	500 3.45	27.0 1.06	UL FM
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	25.4 1.00	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	500 3.45	25.4 1.00	UL FM
125×50 5×2	139.7×60.3 5.500×2.375	500 3.45	27 1.06	UL FM
150×15 6×1/2	165.1×21.3 6.500×0.825	300 2.07	27 1.06	UL FM VdS
150×25 6×1	165.1×33.7 6.500×1.315	300 2.07	27 1.06	UL FM VdS
150×40 6×1½	165.1×48.3 6.500×1.900	300 2.07	25.4 1.00	UL FM
150×50 6×2	165.1×60.3 6.500×2.375	300 2.07	27 1.06	UL FM
150×50 6×2	168.3×60.3 6.625×2.375	300 2.07	27 1.06	UL FM

321-PN16

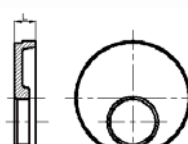
沟槽法兰
GROOVED FLANGE



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions					Bolt/Nut		Certificate
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-SIZE mm		
规格	管子基本尺寸	工作压力	尺寸					螺栓		认证标识
40 1½	48.3 1.900	225 1.6	195 7.68	24 0.95	150 5.90	110 4.33	45.4 1.78	M10X50-2	4-M16	UL FM
50 2	60.3 2.375	225 1.6	220 8.66	24 0.95	165 6.50	125 4.92	57.5 2.26	M10X50-2	4-M16	UL FM
65 2½	76.1 3.000	225 1.6	235 9.25	24 0.95	185 7.28	145 5.71	72.7 2.86	M10X50-2	4-M16	UL FM
80 3	88.9 3.500	225 1.6	252 9.92	24 0.95	200 7.87	160 6.30	85.5 3.37	M10X50-2	8-M16	UL FM
100 4	108.0 4.250	225 1.6	280 11.02	25.5 1.00	220 8.66	180 7.09	104.5 4.11	M12X55-2	8-M16	UL FM
100 4	114.3 4.500	225 1.6	280 11.02	25.5 1.00	229 9.00	180 7.09	110.5 4.35	M12X55-2	8-M16	UL FM
125 5	133.0 5.250	225 1.6	312 12.28	25.5 1.00	250 9.84	210 8.27	129.2 5.08	M12X65-2	8-M16	UL FM
125 5	139.7 5.500	225 1.6	320 12.60	25.5 1.00	254 10.00	210 8.27	135.5 5.33	M12X65-2	8-M16	UL FM
150 6	159.0 6.25	225 1.6	346 13.62	25.5 1.00	280 11.00	240 9.45	154.8 6.10	M12X65-2	8-M20	UL FM
150 6	165.1 6.500	225 1.6	346 13.62	25.5 1.00	280 11.00	240 9.45	160.8 6.33	M12X65-2	8-M20	UL FM
150 6	168.3 6.625	225 1.6	346 13.62	25.5 1.00	280 11.00	240 9.45	164.3 6.47	M12X65-2	8-M20	UL FM
200 8	219.1 8.625	225 1.6	414.3 16.31	30 1.18	341.4 13.44	295 11.61	214.9 8.46	3/8X70-2	12-M20	UL FM VdS
250 10	273.0 10.750	225 1.6	481.2 18.94	30.3 1.19	405.6 15.97	355 13.98	268.9 10.59	3/8X70-2	12-M24	UL FM VdS
300 12	323.9 12.750	225 1.6	530.5 20.88	30.3 1.19	460 18.11	410 16.14	318.9 12.56	3/8X70-2	12-M24	UL FM

300PX

偏心开孔管帽
Cap

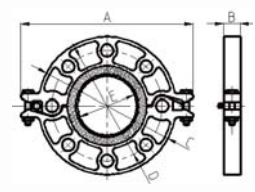


Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions L mm/in	Certificate
规格	管子基本尺寸	工作压力	尺寸	认证标识
80X40 3X1½	88.9X48.3 3.500X1.900	500 3.45	23.5 0.925	UL FM
80×50 3×2	88.9×60.3 3.500×2.375	500 3.45	23.5 0.925	UL FM
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	25.4 1.00	UL FM
100×50 4×2	114.3×60.3 4.500×2.375	500 3.45	25.4 1.00	UL FM
125×40 5×1½	139.7×48.3 5.500×1.900	500 3.45	25.4 1.00	UL FM
125×50 5×2	139.7×60.3 5.500×2.375	500 3.45	25.4 1.00	UL FM
150×40 6×1½	165.1×48.3 6.500×1.900	500 3.45	25.4 1.00	UL FM
150×40 6×1½	168.3×48.3 6.625×1.900	500 3.45	25.4 1.00	UL FM
150×50 6×2	168.3X60.3 6.625X2.375	500 3.45	25.4 1.00	UL FM
200×40 8×1½	219.1×48.3 8.625×1.900	500 3.45	30.2 1.19	UL FM
200×50 8×2	219.1×60.3 8.625×2.375	500 3.45	30.2 1.19	UL FM

321A-ANSI

125/150

沟槽法兰
GROOVED FLANGE



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions					Bolt/Nut		Certificate
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-SIZE mm		
规格	管子基本尺寸	工作压力	尺寸					螺栓		认证标识
50 2	60.3 2.375	300 2.07	206 8.11	22 0.86	152 5.98	121 4.76	57.5 2.26	M10X50-2	4-5/8	UL FM
65 2½	73.0 2.875	300 2.07	230 9.05	22 0.86	178 7.00	140 5.51	69.8 2.74	M10X50-2	4-5/8	UL FM
80 3	88.9 3.500	300 2.07	242 9.53	24 0.95	191 7.52	152 5.98	85.5 3.37	M10X50-2	4-5/8	UL FM
100 4	114.3 4.500	300 2.07	280 11.02	24 0.95	229 9.00	191 7.52	110.5 4.35	M12X55-2	8-5/8	UL FM
125 5	141.3 5.563	300 2.07	325 12.79	24.5 0.96	254 10.00	216 8.50	137.4 5.41	M12X65-2	8-3/4	UL FM
150 6	168.3 6.625	300 2.07	346 13.62	25.5 1.00	280 11.00	241.3 9.50	164.3 6.47	M12X65-2	8-3/4	UL FM
200 8	219.1 8.625	300 2.07	414.3 16.31	30 1.18	341.4 13.44	298.5 11.75	214.9 8.46	3/8X70-2	8-3/4	UL FM
250 10	273.0 10.750	300 2.07	481.2 18.94	30.3 1.19	405.6 15.97	361.95 14.25	268.9 10.59	3/8X70-2	12-7/8	UL FM
300 12	323.9 12.750	300 2.07	553.3 21.78	30.4 1.20	482.6 19.00	431.8 17.00	318.9 12.56	3/8X70-2	12-7/8	UL FM



321H-PN25

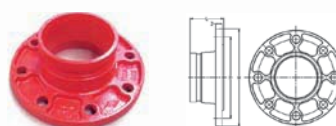
沟槽法兰
GROOVED FLANGE



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions					Bolt/Nut		Certificate
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-SIZE mm		
规格	管子基本尺寸	工作压力	尺寸					螺栓		认证标识
100 108.0	108.0 4.250	362 2.5	280 11.02	25.5 1.00	220 8.66	180 7.09	104.5 4.11	2-M12X55	8-M16	UL FM
150 165.1	165.1 6.500	362 2.5	346 13.62	25.5 1.00	280 11.00	240 9.45	160.8 6.33	2-M12X65	8-M20	UL FM

321GL-PN10

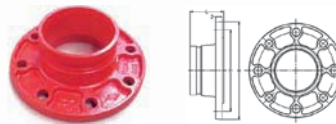
10公斤级高颈法兰
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	Certificate
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	认证标识
200 8	219.1 8.625	145 1.0	80 3.150	340 13.39	295 11.61	19 0.75	8-M20	UL FM
250 10	273.0 10.750	145 1.0	85 3.346	405 15.94	350 13.78	21 0.83	12-M20	UL FM
300 12	323.9 12.750	145 1.0	90 3.543	460 18.11	400 15.75	24 0.94	12-M20	UL FM

321G-PN16

16公斤级高颈法兰
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	Certificate
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	认证标识
25 1	33.7 1.327	225 1.6	60.5 2.382	115 4.53	80 3.15	16 0.63	4-M12	UL FM VdS
32 1¼	42.4 1.669	225 1.6	60.5 2.382	140 5.51	100 3.94	16 0.63	4-M16	UL FM VdS
40 1½	48.3 1.902	225 1.6	60.5 2.382	150 6.91	110 4.33	16 0.63	4-M16	UL FM VdS
50 2	60.3 2.375	225 1.6	65 2.559	165 6.50	125 4.92	16 0.63	4-M16	UL FM VdS
65 2½	76.1 3.000	225 1.6	65 2.559	185 7.28	145 5.70	16 0.63	4-M16	UL FM VdS
80 3	88.9 3.500	225 1.6	65 2.559	200 7.87	160 6.30	16 0.63	8-M16	UL FM VdS
100 4	108.0 4.250	225 1.6	70 2.756	220 8.66	180 7.09	16 0.63	8-M16	UL FM
100 4	114.3 4.500	225 1.6	70 2.756	220 8.66	180 7.09	16 0.63	8-M16	UL FM VdS
125 5	133 5.250	225 1.6	70 2.756	250 9.84	210 8.27	18 0.71	8-M16	UL FM
125 5	139.7 5.500	225 1.6	70 2.756	250 9.84	210 8.27	18 0.71	8-M16	UL FM VdS
150 6	159.0 6.250	225 1.6	70 2.756	285 11.22	240 9.45	18 0.71	8-M20	UL FM
150 6	165.1 6.500	225 1.6	70 2.756	285 11.22	240 9.45	18 0.71	8-M20	UL FM
150 6	168.3 6.625	225 1.6	70 2.756	285 11.22	240 9.45	18 0.71	8-M20	UL FM VdS
200 8	219.1 8.625	225 1.6	80 3.150	340 13.39	295 11.61	19 0.75	12-M20	UL FM VdS
250 10	273.0 10.750	225 1.6	85 3.346	405 15.94	355 13.98	21 0.83	12-M24	UL FM VdS
300 12	323.9 12.750	225 1.6	90 3.543	460 18.11	410 16.14	24 0.94	12-M24	UL FM VdS
350 14	377.0 14.843	225 1.6	100 3.937	520 20.47	470 18.50	25 1.00	16-M24	UL FM
400 16	426.0 16.772	225 1.6	110 4.331	580 22.83	525 20.67	27 1.06	16-M27	UL FM

321GH-PN25

25公斤高颈法兰
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	Certificate
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	认证标识
100 108.0	108.0 4.250	362 2.5	70 2.756	230 9.05	190 7.48	18 0.71	8-M20	UL FM
100 4	114.3 4.500	362 2.5	70 2.756	235 9.25	190 7.48	16 0.63	8-M20	UL FM
150 159.0	159.0 6.250	362 2.5	70 2.756	300 11.80	250 9.85	20 0.79	8-M24	UL FM
150 165.1	165.1 6.500	362 2.5	70 2.756	300 11.80	250 9.84	18 0.71	8-M24	UL FM
200 8	219.1 8.625	362 2.5	80 3.150	360 14.17	310 12.20	19 0.75	12-M24	UL FM

321GA-ANSI 125/150

Class 125/150高颈法兰
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	Certificate
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	认证标识
50 2	60.3 2.375	300 2.07	65 2.559	165 6.50	120.7 4.75	16 0.63	4-5/8	UL FM
65 2½	73.0 2.875	300 2.07	65 2.559	185 7.28	139.7 5.50	16 0.63	4-5/8	UL FM
80 3	88.9 3.500	300 2.07	65 2.559	200 7.87	152.4 6.00	16 0.63	8-5/8	UL FM
100 4	114.3 4.500	300 2.07	70 2.756	229 9.01	190.5 7.50	16 0.63	8-5/8	UL FM
150 6	168.3 6.625	300 2.07	70 2.756	282 11.10	241.3 9.50	18 0.71	8-3/4	UL FM
200 8	219.1 8.625	300 2.07	80 3.150	340 13.39	298.5 11.75	19 0.75	8-3/4	UL FM

321GJ

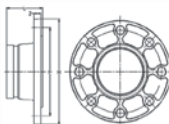
JIS 10K级高颈法兰
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	
65 2 1/2	76.3 3.00	10	65 2.559	175 6.89	140 5.51	18 0.71	4-M16	
80 3	89.1 3.50	10	65 2.559	185 7.28	150 5.91	18 0.71	8-M16	
100 4	114.3 4.50	10	70 2.756	210 8.27	175 6.89	18 0.71	8-M16	
125 5	139.8 5.50	10	70 2.756	250 9.84	210 8.27	20 0.79	8-M20	
150 6	165.2 6.50	10	70 2.756	280 11.02	240 9.45	20 0.79	8-M20	

321G-BS. TABLE 'E'

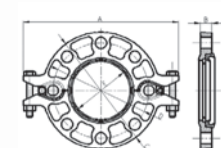
Adaptor Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions				Bolt/Nut	
			L mm/in	X mm	Y mm	Z mm	No.-Size mm	
规格	管子基本尺寸	工作压力	尺寸				螺栓	
65 2 1/2	76.1 3.000	225 1.6	70 2.756	165 6.50	127 5.00	16 0.63	4-M16	
80 3	88.9 3.500	225 1.6	70 2.756	184 7.24	146 5.75	16 0.63	4-M16	
100 4	114.3 4.500	225 1.6	70 2.756	216 8.50	178 7.00	16 0.63	8-M16	
150 6	165.1 6.500	225 1.6	70 2.756	280 11.02	235 9.25	21 0.71	8-M20	
200 8	219.1 8.625	225 1.6	102 4.02	337 13.27	292 11.50	19 0.75	12-M20	

321S-PN16

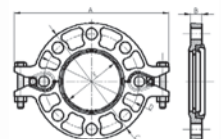
沟槽法兰
Grooved Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions					Bolt/Nut		Certificate
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-SIZE mm		
规格	管子基本尺寸	工作压力	尺寸					螺栓		认证标识
40 1 1/2	48.3 1.900	225 1.6	195 7.68	19 0.75	150 5.91	110 4.33	45.4 1.78	2-M10X50	4-M16	UL FM VdS
50 2	60.3 2.375	225 1.6	220 8.66	19 0.75	166 6.54	125 4.92	57.5 2.26	2-M10X50	4-M16	UL FM VdS
65 2 1/2	76.1 3.000	225 1.6	235 9.25	19 0.75	185 7.28	145 5.71	72.7 2.86	2-M10X50	4-M16	UL FM VdS
80 3	88.9 3.500	225 1.6	252 9.72	19 0.75	192 7.56	160 6.30	85.5 3.37	2-M10X50	8-M16	UL FM VdS
100 4	108.0 4.250	225 1.6	277 10.91	19 0.75	220 8.66	180 7.09	104.5 4.11	2-M12X55	8-M16	UL FM
100 4	114.3 4.500	225 1.6	277 10.91	19 0.75	224 8.83	180 7.09	110.5 4.35	2-M12X55	8-M16	UL FM VdS
125 5	133.0 5.250	225 1.6	312 12.28	22 0.87	246 9.68	210 8.27	129.2 5.08	2-M12X65	8-M16	UL FM
125 5	139.7 5.500	225 1.6	318 12.52	23 0.87	242 9.84	210 8.27	135.5 5.33	2-M12X65	8-M16	UL FM VdS
150 6	159.0 6.250	225 1.6	346 13.62	22 0.87	280 11.00	240 9.45	160.8 6.33	2-M12X65	8-M20	UL FM
150 6	165.1 6.500	225 1.6	346 13.62	23 0.91	280 11.00	240 9.45	160.8 6.33	2-M12X65	8-M20	UL FM
165 6 1/2	168.3 6.625	225 1.6	346 13.62	23 0.87	285 11.22	240 9.45	164.3 6.47	2-M12X65	8-M20	UL FM VdS

321AS-ANSI 125/150

沟槽法兰
Grooved Flange



Nominal Size mm/in	Pipe O.D mm/in	Working Pressure PSI/MPa	Dimensions					Bolt/Nut		Certificate
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-SIZE mm		
规格	管子基本尺寸	工作压力	尺寸					螺栓		认证标识
50 2	60.3 2.375	300 2.07	209 8.23	19 0.75	153 6.02	121 4.76	57.5 2.26	2-M10X50	4-5/8	UL FM
65 2 1/2	73.0 2.875	300 2.07	232 9.13	19 0.75	178 7.00	140 5.51	69.8 2.74	2-M10X50	4-5/8	UL FM
80 3	88.9 3.500	300 2.07	246 9.72	19 0.75	192 7.56	152 5.98	85.5 3.37	2-M10X50	4-5/8	UL FM
100 4	114.3 4.500	300 2.07	280 11.02	19 0.75	229 9.00	191 7.52	110.5 4.35	2-M12X55	8-5/8	UL FM
125 5	141.3 5.563	300 2.07	321 12.64	22 0.87	250 9.84	216 8.50	137.4 5.41	2-M12X65	8-3/4	UL FM
150 6	168.3 6.625	300 2.07	346 13.62	22 0.87	285 11.22	241.3 9.50	164.3 6.47	2-M12X65	8-3/4	UL FM

橡胶密封圈（GASKET DATA）

根据不同的环境和介质，选择不同的橡胶密封圈



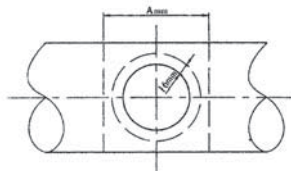
牌号标记 Gasket	名称 Name	适用温度 Temperature Range	使用介质 General Service Recommendations	颜色标记 Color Mark
E	三元乙丙橡胶	-34~+110℃ (-30~+230° F)	水、气体、稀释的酸（碱）、以及其他化学品（不包括碳氢化合物。） 注：严禁与油、碳氢化合物同用。 Recommended for hot water service within the specified temperature range plus a variety of dilute acids,oil-free air and many chemical services.UL classified in accordance with ANSI/ NSF 61or cold+86° F(+30°)and hot +180° F(+82℃) potable water service.Not recommended for petroleum service.	黑色加绿色标记 Green Strip
D	丁晴橡胶	-29~+82℃ (-20~+180° F)	石油产品、植物油、矿物油 注：严禁与高温物质同用。 (Recommended for petroleum products, air with oil vapors,vegetable and mineral oils within the specified temperature range.Not recommended for hot water services.)	黑色加橙色标记 Orange Strip
S	硅橡胶	-40~+177℃ (-40~+350° F)	高温干燥的空气和一些高温的化学物，饮用水等。 (Recommended for high temperature dry air and some high temperature chemical products.)	白色 White



机械三通开孔尺寸表
Hole Diameter of pipe



管道钻孔机
Hole-cutting Machine



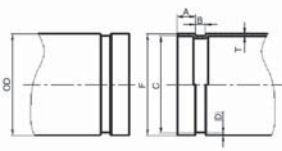
Run Nominal Sine mm/in	Outlet Nominal Size mm/in	Hole Dia. +3.2,0+0.13,0 mm/in	Run Nominal Size mm/in	Outlet Nominal Size mm/in	Hole Dia. +3.2,0+0.13,0 mm/in	Run Nominal Size mm/in	Outlet Nominal Size mm/in	Hole Dia. +3.2,0+0.13,0 mm/in			
主管公称尺寸	支管公称尺寸	开孔直径	主管公称尺寸	支管公称尺寸	开孔直径	主管公称尺寸	支管公称尺寸	开孔直径			
50 2"/60.3	15 1/2	38 1.50 A89	100 108.0 4"/114.3	15 1/2	38 1.50 A89	150 159.0 165.1 6"/168.3	15 1/2	38 1.50 A89			
	20 3/4			20 3/4			20 3/4				
	25 1			25 1			25 1				
	32 1¼	45 1.75 A102		32 1¼	51 2.00 A102		32 1¼	51 2.00 A102			
	40 1½			40 1½			40 1½				
65 2½" /73.0 76.1	15 1/2	38 1.50 A89	125 133.0 139.7 5"/141.3	50 2	64 2.50 A114	200 8"/219.1 250 10"/273.0	50 2	64 2.50 A114			
	20 3/4			65 2½/76.1			70 2.75 A120		65 2½/76.1	70 2.75 A120	
	25 1			80 3			89 3.50 A140		80 3	89 3.50 A140	
	32 1¼	51 2.00 A102		15 1/2	38 1.50 A89		100 108.0/4	114 4.50 A165			
	40 1½			20 3/4			25 1		25 1	38 1.50 A89	
80 3"/88.9	15 1/2	38 1.50 A89	125 133.0 139.7 5"/141.3	32 1¼	51 2.00 A102	200 8"/219.1 250 10"/273.0	32 1¼	51 2.00 A102			
	20 3/4			40 1½			40 1½		40 1½	50 2	64 2.50 A114
	25 1			50 2			64 2.50 A114		65 2½/76.1	70 2.75 A120	
	32 1¼	51 2.00 A102		80 3	89 3.50 A140		70 2.75 A120	70 2.75 A120			
	40 1½						80 3		89 3.50 A140	80 3	89 3.50 A140
	50 2	64 2.50 A114					100 108.0/4	114 4.50 A165			

在开孔周边16mm范围内管件外表必须保持光滑无毛刺，A尺寸范围内管子无损伤
The outside surface of the pie within 16mm from the hole must be clean and smooth.

钢管轧槽尺寸表
Roll Groove Dimensions



滚槽机
Roll Grooving Machine

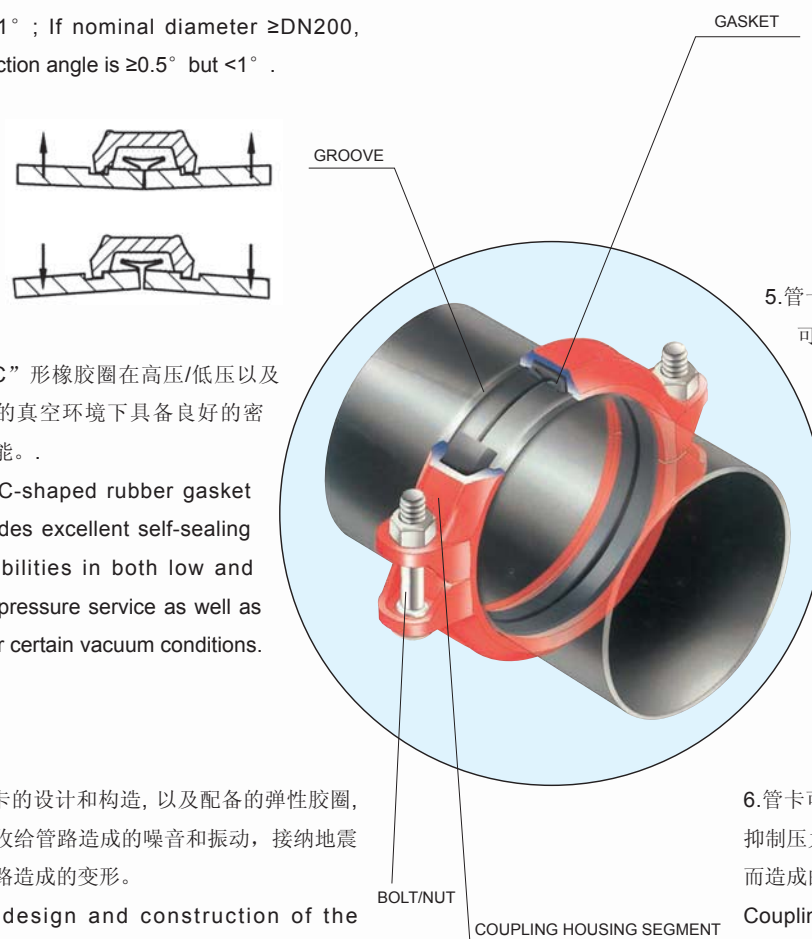


规格 Nominal Size mm/in	管外径 Pipe OD		密封面宽度A Gasket seat A ±0.76/±0.03 mm/in	槽宽B Groove Width B ±0.76/±0.03 mm/in	槽底直径 C Groove Dia C C ±0.76/±0.03 mm/in		槽深D(参考) Groove Depth D(ref) mm/in	最大伸展面F MaxAllow Flare Dia F mm/in	管壁最小壁厚T Min. Allow wall thickness T mm/in
	标准 Basic mm/in	公差 Tolerance mm/in			标准 Basic mm/in	公差 Tolerance mm/in			
25 1	33.7 1.327	+0.41 -0.026	15.88 0.625	7.14 0.281	30.23 1.190	-0.38 -0.015	1.60 0.063	34.5 1.358	1.8 0.071
32 1 1/4	42.4 1.669	+0.50 -0.023	15.88 0.625	7.14 0.281	38.99 1.535	-0.38 -0.015	1.60 0.063	43.3 1.705	1.8 0.071
40 1 1/2	48.3 1.900	+0.44 -0.020	15.88 0.625	7.14 0.281	45.09 1.779	-0.38 -0.015	1.60 0.063	49.4 1.945	1.8 0.071
50 2	60.3 2.375	+0.61 -0.024	15.88 0.625	8.74 0.344	57.15 2.250	-0.38 -0.015	1.60 0.063	62.2 2.449	1.8 0.071
65 2 1/2	73.0 2.875	+0.74 -0.029	15.88 0.625	8.74 0.344	69.09 2.720	-0.46 -0.018	1.98 0.078	75.2 2.961	2.3 0.091
65 2 1/2	76.1 3.000	+0.76 -0.030	15.88 0.625	8.74 0.344	72.26 2.845	-0.46 -0.018	1.99 0.078	77.7 3.059	2.3 0.091
80 3	88.9 3.500	+0.89 -0.031	15.88 0.625	8.74 0.344	84.94 3.344	-0.46 -0.018	1.98 0.078	90.6 3.567	2.3 0.091
100 4	108.0 4.250	+1.07 -0.031	15.88 0.625	8.74 0.344	103.73 4.084	-0.51 -0.020	2.11 0.083	109.7 4.319	2.3 0.091
100 4	114.3 4.500	+1.14 -0.031	15.88 0.625	8.74 0.344	110.08 4.334	-0.51 -0.020	2.11 0.083	116.2 4.575	2.3 0.091
125 5	133.0 5.250	+1.32 -0.031	15.88 0.625	8.74 0.344	129.13 5.084	-0.51 -0.020	2.11 0.083	134.9 5.311	2.9 0.114
125 5	139.7 5.500	+1.40 -0.031	15.88 0.625	8.74 0.344	135.48 5.334	-0.51 -0.020	2.11 0.083	141.7 5.579	2.9 0.114
125 5	141.3 5.563	+1.42 -0.031	15.88 0.625	8.74 0.344	137.03 5.395	-0.56 -0.022	2.13 0.084	143.5 5.650	2.9 0.114
150 6	159.0 6.250	+1.60 -0.031	15.88 0.625	8.74 0.344	154.50 6.083	-0.56 -0.022	2.16 0.085	161.0 6.339	2.9 0.114
150 6	165.1 6.500	+1.60 -0.031	15.88 0.625	8.74 0.344	160.8 6.330	-0.56 -0.022	2.16 0.085	167.1 6.579	2.9 0.114
150 6	168.3 6.625	+1.60 -0.031	15.88 0.625	8.74 0.344	163.96 6.455	-0.56 -0.022	2.16 0.085	170.7 6.720	2.9 0.114
200A 8	216.3 8.516	+1.60 -0.031	19.05 0.750	11.91 0.469	211.60 8.331	-0.64 -0.025	2.35 0.093	219.8 8.653	2.9 0.114
200 8	219.1 8.625	+1.60 -0.031	19.05 0.750	11.91 0.469	214.40 8.441	-0.64 -0.025	2.34 0.092	221.5 8.720	2.9 0.114
250A 10	267.4 10.528	+1.60 -0.031	19.05 0.750	11.91 0.469	262.60 10.339	-0.69 -0.027	2.40 0.095	270.9 10.665	3.6 0.142
250 10	273.0 10.750	+1.60 -0.031	19.05 0.750	11.91 0.469	268.28 10.562	-0.69 -0.027	2.39 0.094	275.4 10.842	3.6 0.142
300A 12	318.5 12.539	+1.60 -0.031	19.05 0.750	11.91 0.469	312.90 12.319	-0.76 -0.030	2.77 0.109	322.0 12.677	4.0 0.158
300 12	323.9 12.750	+1.60 -0.031	19.05 0.750	11.91 0.469	318.29 12.531	-0.76 -0.030	2.77 0.109	326.2 12.842	4.0 0.158
350 14	377.0 14.842	+1.60 -0.031	23.83 0.938	11.91 0.469	371.44 14.623	-0.76 -0.030	2.77 0.109	379.5 14.941	4.5 0.177
400 16	426.0 16.772	+1.60 -0.031	23.83 0.938	11.91 0.469	420.46 16.553	-0.76 -0.030	2.77 0.109	428.5 16.870	4.5 0.177
500 20	529.0 20.827	+1.60 -0.031	25.40 1.000	11.91 0.469	523.46 20.608	-0.76 -0.030	2.77 0.109	533.0 20.984	5.0 0.197

挠性管卡/ Flexible Coupling :

1. 挠性管卡可沿轴向偏转。在管道公称直径 $< DN200$ 时, 提供 $\geq 1^\circ$ 的偏转角, $\geq DN200$ 时, 提供 $\geq 0.5^\circ$ 而 $< 1^\circ$ 的偏转角。

A flexible coupling accommodates pipe deflection and or non-alignment as below: If nominal diameter $< DN200$, deflection angle is $\geq 1^\circ$; If nominal diameter $\geq DN200$, deflection angle is $\geq 0.5^\circ$ but $< 1^\circ$.

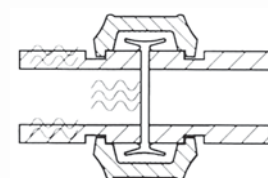


2. “C”形橡胶圈在高压/低压以及特定的真空环境下具备良好的密封性能。

The C-shaped rubber gasket provides excellent self-sealing capabilities in both low and high pressure service as well as under certain vacuum conditions.

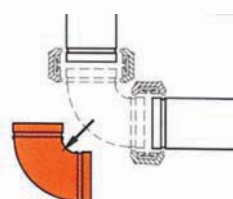
3. 管卡的设计和构造, 以及配备的弹性胶圈, 能吸收给管路造成的噪音和振动, 接纳地震给管路造成的变形。

The design and construction of the coupling with elastomeric gaskets can provide significant noise and vibration absorption as well as seismic stress.



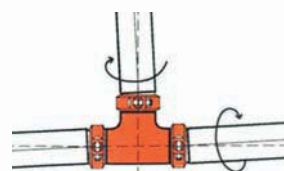
4. 仅需卸掉几个螺栓, 就可以轻松的实施系统的清洁, 维护, 更换或系统延伸。

With the removal of just a few bolts you can easily access the system for cleaning, maintenance, changes or system expansion.



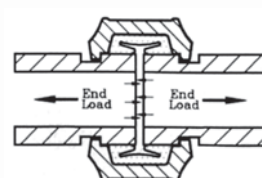
5. 管卡不限制管子的转向, 管子在安装过程中可以 360° 转动。

Coupling are non-directive and pipe can be rotated 360° during installation.



6. 管卡可以与压槽的圆周紧密衔接, 可以有效的抑制压力和末端载荷, 从而防止管子因内力/外力而造成的移动。

Coupling keys engage the full circumference of the grooves and provide significant pressure and end load restraint against pipe movement from internal and external forces.



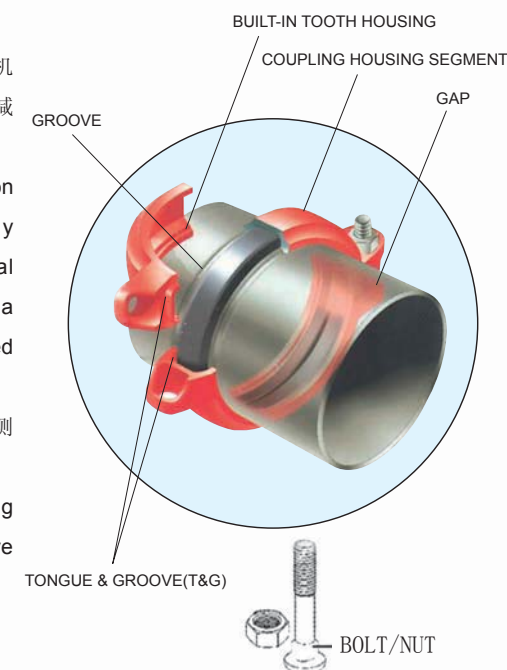
刚性管卡/ Rigid Coupling :

1. 舌状&凹槽(T&G)结构, 可以提供机械的/有摩擦的互锁. 达到刚性连接, 减少管路偏转。

The T&G mechanism in combination with a slightly shortened key diameter provides a mechanical and frictional interlock resulting in a rigid joint which reduces undesired angular movement.

2. 管卡的内置牙槽紧卡住沟槽的侧翼, 减少管子转动。

The built-in teeth on the coupling grip the groove shoulder and serve to reduce linear movement.



3. 舌状&凹槽(T&G)机械装置以半个管卡底部的轻微垂距为特色, 保护垫圈不外露。

The T&G mechanism features a slight offset at the foot of the coupling halves which serve to protect the gasket from exposure.

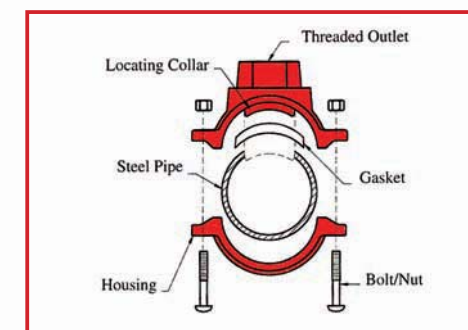
4. T&G管卡没有对螺栓垫有金属对金属对接的要求. 在安装后, 两片卡箍之间留有 1.6mm 至 3.2mm 的间隙。

With the T&G style coupling no metal-to-metal contact of the bolt pads is required. You will normally see a $1/16''$ - $1/8''$ (1.6mm to 3.2mm) gap between the bolt pads when installed.

机械三通式连接

沟槽式机械三通(3J, 3G, 3L)的设计, 提供了简易、快速的分支管安装施工方式, 消除了传统的需要焊接或使用异径三通和管卡的设计弊端。只需在合适的位置按指定的尺寸开孔, 即可将三通安装。当将螺栓及螺母拧紧时, 橡胶圈会因受压力而与钢管密封。

The Mechanical Tee (3J, 3G, 3L) provide for a fast and easy grooved or threaded branch outlet and eliminate the need for welding or the use of a reducing tee and couplings. Simply cut a hole to the specified size at the expected location and fasten the mechanical tee to the pipe with the nuts and bolts provided. As the housing bolts are tightened, the pressure responsive gasket forms a leak-tight seal.





产品最大压力等级和最大终端载荷

Pressure Ratings and End Loads for Mech Couplings on Steel Pipe



1G Rigid



1GS L/Duty Rigid



1NR Reducing

公称尺寸 Nom. Size	管子外径 Pipe O.D	管子壁厚 等级 Pipe Sched	管子壁厚 Wall Thick.	1G		1GS		1NR	
				滚槽Roll Grooved		滚槽Roll Grooved		滚槽Roll Grooved	
				最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load	最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load	最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load
DN/in	mm	(Sch)	mm	Bar/Psi	kN/Lbs	Bar/Psi	kN/Lbs	Bar/Psi	kN/Lbs
25	33.7	40	3.38	35/500	3.0/680			20/300	1.8/410
		10	2.77	35/500	3.0/680			20/300	1.8/410
32	42.4	40	3.56	35/500	4.8/1080			20/300	2.9/650
		10	2.77	35/500	4.8/1080			20/300	2.9/650
40	48.3	40	3.68	35/500	6.3/1420			20/300	3.8/850
		10	2.77	35/500	6.3/1420			20/300	3.8/850
50	60.3	40	3.91	35/500	9.8/2210			20/300	5.9/1330
		10	2.77	35/500	9.8/2210			20/300	5.9/1330
65	73	40	5.16	35/500	14.4/3240			20/300	8.7/1950
		10	3.05	35/500	14.4/3240			20/300	8.7/1950
65	76.1	--	6.35						
		--	5.08	35/500	15.7/3530	20/300	9.4/2120	20/300	9.4/2120
		--	3.81	35/500	15.7/3530	20/300	9.4/2120	20/300	9.4/2120
80	88.9	40	5.49	35/500	21.4/4800	20/300	12.8/2885	20/300	12.8/2885
		10	3.05	35/500	21.4/4800	20/300	12.8/2885	20/300	12.8/2885
100	114.3	40	6.02	35/500	35.4/7950	20/300	21.2/4770	20/300	21.2/4770
		10	3.05	35/500	35.4/7950	20/300	21.2/4770	20/300	21.2/4770
125	141.3	40	6.55	31/450	48.6/10930	20/300	32.4/7290	20/300	32.4/7290
		10	3.4	31/450	48.6/10930	20/300	32.4/7290	20/300	32.4/7290
150	165.1	--	6.35	31/450	66.4/14930	20/300	44.3/9960	20/300	44.3/9960
		--	5.08	31/450	66.4/14930	20/300	44.3/9960	20/300	44.3/9960
150	168.3	40	7.11	31/450	68.9/15500	20/300	46.0/10340	20/300	46.0/10340
		10	3.4	31/450	68.9/15500	20/300	46.0/10340	20/300	46.0/10340
200	219.1	40	8.18	31/450	116.9/26280	20/300	77.8/17500		
		30	7.04	31/450	116.9/26280	20/300	77.8/17500		
		10	4.77	20/300	77.8/17500	20/300	77.8/17500		
250	273	40	9.27	20/300	121.0/27210				
		30	7.8	20/300	121.0/27210				
		10	4.77	20/300	121.0/27210				
300	323.9	40	10.31	20/300	170.3/38280				
		STD	9.53	20/300	170.3/38280				
		30	6.35	20/300	170.3/38280				
		10	4.77	20/300	170.3/38280				



1N Flexible



1NH Heavy Duty Flexible



321 Flange Adaptor

公称尺寸 Nom. Size	管子外径 Pipe O.D	管子壁厚 等级 Pipe Sched	管子壁厚 Wall Thick.	1N		1NH		321	
				滚槽Roll Grooved		滚槽Roll Grooved		滚槽Roll Grooved	
				最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load	最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load	最大工作压力 Max.Work Press.	最大终端载荷 Max.End Load
DN/in	mm	(Sch)	mm	Bar/Psi	kN/Lbs	Bar/Psi	kN/Lbs	Bar/Psi	kN/Lbs
25	33.7	40	3.38	35/500	3.0/680				
		10	2.77	35/500	3.0/680				
32	42.4	40	3.56	35/500	4.8/1080				
		10	2.77	35/500	4.8/1080				
40	48.3	40	3.56	35/500	6.3/1420			16/225	3.2/710
		10	2.77	35/500	6.3/1420			16/225	3.2/710
50	60.3	40	3.91	35/500	9.8/2210	52/750	14.8/3320	16/225	4.4/1000
		10	2.77	35/500	9.8/2210	52/750	14.8/3320	16/225	4.4/1000
65	73	40	5.16	35/500	14.4/3240	52/750	21.7/4870	20/300	5.9/1330
		10	3.05	35/500	14.4/3240	41/600	17.3/3900	20/300	5.9/1330
65	76.1	--	6.35						
		--	5.08	35/500	15.7/3530	52/750	23.6/5300	16/225	7.1/1590
		--	3.81	35/500	15.7/3530	41/600	18.9/4240	16/225	7.1/1590
80	88.9	40	5.49	35/500	21.4/4800	52/750	32.1/7210	16/225	9.6/2165
		10	3.05	35/500	21.4/4800	41/600	25.6/5760	16/225	9.6/2165
100	114.3	40	6.02	35/500	35.4/7950	52/750	53.0/11920	16/225	15.9/3580
		10	3.05	35/500	35.4/7950	41/600	42.4/9540	16/225	15.9/3580
125	141.3	40	6.55	31/450	48.6/10930	48/700	75.7/17010	20/300	31.3/7035
		10	3.4	31/450	48.6/10930	31/450	48.6/10930	20/300	31.3/7035
150	165.1	--	6.35	31/450	66.4/14930	48/700	102.7/23090	16/225	33.2/7460
		--	5.08	31/450	66.4/14930	31/450	66.4/14930	16/225	33.2/7460
150	168.3	40	7.11	31/450	68.9/15500	48/700	107.3/24120	16/225	34.5/7750
		10	3.4	31/450	68.9/15500	31/450	68.9/15500	16/225	34.5/7750
200	219.1	40	8.18	31/450	116.9/26280	41/600	155.7/35000	16/225	58.4/13140
		30	7.04	31/450	116.9/26280	41/600	155.7/35000	16/225	58.4/13140
		10	3.76	20/300	77.8/17500	20/300	77.8/17500	16/225	58.4/13140
250	273	40	9.27	20/300	121.0/27210			16/225	90.8/20410
		30	6.35	20/300	121.0/27210			16/225	90.8/20410
		10	4.19	20/300	121.0/27210			16/225	90.8/20410
300	323.9	40	10.31	20/300	170.3/38280			16/225	127.7/28710
		STD	9.53	20/300	170.3/38280			16/225	127.7/28710
		20	6.35	20/300	170.3/38280			16/225	127.7/28710
		10	4.57	20/300	170.3/38280			16/225	127.7/28710

挠性&刚性卡箍安装指南

Installation InstructionFor Rigid & Flexible Coupling



1. 管端检查 Pipe preparation

管端至沟槽的管道外表面必须清洁光滑，无毛刺，无凹陷、凸起（包括焊缝），无脱落油漆和滚制压痕等。安装前必须检查，确保无上述影响橡胶圈密封的缺陷。
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. 检查并润滑橡胶圈 Lubricate gasket

检验橡胶圈，确保其适用于所用工况。在橡胶圈密封唇及外表面涂一层合适的（润滑油），防止安装时挤橡胶圈。Check gasket to be sure it's compatible for the intended service. Apply thin lubricant to the outside and sealing lips of the gasket.



3. 安装橡胶圈 Gasket installation

将橡胶圈套入并定位到管端上，确保橡胶圈没有悬垂于管端。Slip the gasket over one pipe, making sure the gasket lip does not over-hang the pipe end.



4. 连接管端 Alignment

两个管端对中并接合到一起。让橡胶圈滑入就位，确保其定位于两管端沟槽之间的中间位置。同时确保橡胶圈无任何部位伸入任一管端的沟槽内。
After aligning two pipe ends together, pull the pull thegasket into position, centering between the grooves on each pipe.The gasket should not extend into the groove on either pipe.



5.安装管卡 Housing installation

卸下管卡一端的螺栓螺母并松动另一侧的螺母。把一片管卡扣在橡胶圈上，确保管卡两侧卡入两管端沟槽内，然后将另一片管卡扣在橡胶圈上，管卡两侧要卡入两管端沟槽内，然后用手把二片管卡对在一起。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. Re-insert the bolt and connect two housings.



6. 紧固螺母 Tighten nuts

先手动拧紧螺母，然后用扭力扳手轮流并均匀地拧紧管卡两端的螺母，以达到（额定螺栓扭矩）且确保两螺栓的椭圆颈部完全落入螺栓孔内。Firstly hand tighten nuts and make sure oval neck bolt completely fits into bolt hole. Then securely tighten nuts alternatively and equally to the specified bolt torque by using spanner.



7 a. 刚性管卡安装完成 Assembly completed- Rigid Coupling

检验管道连接处，确保管卡两侧完全卡入管子沟槽中，两管卡对接处两侧的间隙（相等），且（看不到）橡胶圈。
For Rigid Coupling, keep the gaps at bolt pads evenly spaced. Gaskets can't be seen visually.

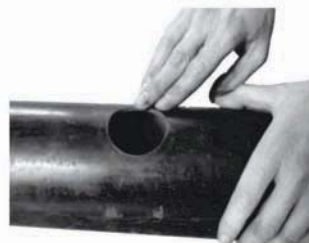


7 b. 挠性管卡安装完成 Assembly completed- Flexible Coupling

检验管道连接处，确保管卡两侧完全卡入管子沟槽中，两管卡对接处两侧均无（间隙）且看不到（挤橡胶圈）现象。
For Flexible Coupling, two housings should be iron to iron connected. Gaskets can't be seen visually.

螺纹式&沟槽式机械三通安装指南

Installation Instruction For Threaded & Grooved Mechanical Tee



1.钢管检查 Pipe preparation

开孔周边16mm范围内的管道必须清洁光滑，无毛刺，无凹陷、凸起，无脱落油漆，孔不得开在焊缝上。安装前必须检查，确保无上述影响橡胶圈密封的缺陷。
Clean the gasket sealing surface within 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 weld line.



2. 去除尖角或毛刺 Remove burrs

如管子开孔处表面存在尖角或毛刺，安装前必须去除，防止安装过程中尖角或毛刺损伤橡胶圈，影响密封性能，导致漏水。
If any burrs or slug exists at the pipe hole, please remove them before assembly, to protect the gasket and avoid leakage.



3. 橡胶圈安装 Gasket installation

将橡胶垫的外圆弧表面放入机械三通橡胶槽区域内，对准孔慢慢地居中放入，保证定位环嵌入管子开孔中间位置，且使橡胶垫均匀的贴在孔的周边部位。
Insert the gasket into outlet 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. 组装 Alignment

将下盖卡住管子，用手将主体与下盖对紧，先插入一侧螺栓并手动拧紧螺母后，再插入另一侧螺栓并手动拧紧螺母，仔细观察主体并把主体调至居中位置。
Align the strap around the pipe, insert the bolts and tighten the nuts finger tight.



5. 紧固螺母 Tighten nuts

一只手扶住钢管，另一只手用扭力扳手拧紧螺母，根据规定的螺栓扭矩，轮流并均匀地拧紧螺母。
Alternatively and evenly tighten the nuts to the specified bolt torque.



6. 安装完成 Assembly completed

检验管道连接处，下盖与主体之间应有间隙，且两侧间隙均匀。
There should be even gaps on two sides between upper and lower housings.

注意/Caution

要达到额定性能，需要恰当的螺栓扭矩。螺栓扭矩过大会损坏铸件及螺栓（导致螺栓断裂），并致使连接脱落。螺栓扭矩过低会降低保压性能，减弱弯曲负荷能力，出现渗漏或导致连接脱落。一旦管子连接脱落，会造成重大的财产损失和严重的人身伤害！
Proper torquing of bolts is required to obtain specified performance.
- Over torquing the bolts may result in damage to the bolt and / or casting which could result in pipe joint separation.
- Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

额定螺栓扭矩/Specified Bolt Torque

美制螺栓/ANSI BOLTS

螺栓尺寸/Bolt Size	额定螺栓扭矩/Specified Bolt Torque	
英寸/Inch	Lbs-Ft.	牛*米/N·m
3/8	30-45	40-60
1/2	80-100	110-135
5/8	100-130	135-175
3/4	130-180	175-245
7/8	180-240	245-325

注意/Caution

要达到额定性能，需要恰当的螺栓扭矩。螺栓扭矩过大会损坏铸件、螺栓（导致螺栓断裂），并致使连接脱落。螺栓扭矩过低会降低保压性能、减弱弯曲负荷能力，出现渗漏或导致联接脱落。一旦管子连接脱落，会造成重大的财产损失和严重伤害！
Proper torquing of bolts is required to obtain specified performance.
- Over torquing the bolts may result in damage to the bolt and / or casting which could result in pipe joint separation.
- Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

额定螺栓扭矩/Specified Bolt Torque

美制螺栓/ANSI BOLTS

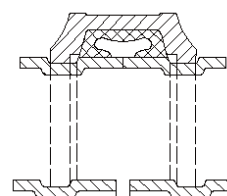
螺栓尺寸/Bolt Size	额定螺栓扭矩/Specified Bolt Torque	
英寸/Inch	Lbs-Ft.	牛*米/N·m
3/8	30-45	40-60
1/2	80-100	110-135
5/8	100-130	135-175
3/4	-	-
7/8	-	-

管路移动

Movement

沟槽式挠性接头在设计概念中已预留移动允许量，不同的接头或尺寸将会有不同的容许量。一般来说移动可分为平行移动和角度移动，而影响移动容许量的主要两个因素为：一、挠性接头卡口宽度与沟槽宽度之间的设计间隙；二、挠性接头接合管端之间的间隙。

Each flexible design coupling can provide for pipe system movement up to the design maximum for the specific size and type coupling being utilized. Movement is possible in the coupling due to two factors: (1) designed-in clearance between the key of the coupling and the groove diameter and groove width, and (2) the gap between pipe ends joined by the coupling.



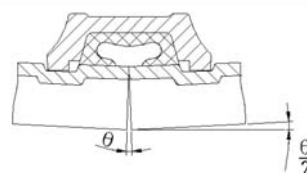
1.平行移动/ Linear Movement

管路的平行移动通常源于温差或管路内压，弹性接头可容许有限度的平行移动。管路平行移动可分为平行移动与反方向平行移动。一般来说在同方向的情形中，管路的总长度将不会改变，而反方向的情形中，管路总长度将会增长或者缩短。见下表

Linear movement is accommodated within the coupling by allowing the pipe ends to move together or apart in response to pressure thrusts and temperature changes. The available linear movement provided by couplings is shown below:

平行移动范围

尺寸/size	1-1¼英寸 (25-32MM)	1½-12英寸 (40-300MM)
范围/movement	0-4.0MM	0-6.4MM



2.角度移动 /Angular Movement

挠性接头在设计上，允许两端管道在接头内作同或反方向的移动，此项设计所预留的平行移动空间，让挠性接头也能够容许微量的角度移动。这个特性使设计更有弹性，例如管路在设计上或架设时可以允许一些偏斜，而不会造成接头的过度负载。

Designed-in clearances allow limited deflection of the pipe joint within the coupling, without introducing eccentric loads into the coupling joint.

每种济南玫德的最大容许角度移动范围可在挠性接头功能表中查得。不同尺寸、种类的接头其角度移动容许范围也会有所不同。在设计时因为每个水管、沟槽及接头的实际尺寸，会在公差范围内有所变化，所以应将角度移动容许量范围适当的缩减。见下表

The maximum available angular movement of coupling joints is shown in the performance data for each coupling type. The amount of angular flexibility varies for each coupling size and type. For design purposes the published figures should be reduced by the below listed factors to account for pipe, groove and coupling tolerances.

尺寸/size	1-3英寸 (IN)	4-12英寸 (IN)
幅度/Design factor	角度移动最大降至50% Reduce to 50%	角度移动最大降至75% Reduce to 75%

垂直管路设计

一般来说，安装在垂直管路的接头应细分为两种情况。最普遍的方法是安装时保持最小的管末间距，也就是封闭式安装法，安装垂直管路时，水管是呈一上一下的，而密封环通常是先套上下面的水管，然后在把密封环推至上下水管的中间。在固定垂直管路方面，垂直管路方面，可以在管路加压之前完成，也可以在加压之后固定，当然这两个不同的固定方法，差别在于加压后固定的管路，其接头是呈开放式的。

另外一个安装方法是利用金属间隔片保持一定的管末间距，当然间隔片的厚度必须保持一定，而金属片的厚度即是设计中所预先计算的管末间距。架设管路时，将金属间隔片放置在两水管之间，然后将金属片上面的水管固定，此时将间隔片抽出，并同时接头安装好。此安装方法可保持适当的管末间距，特别适用于有热移动的管路系统。另外在较无弹性的管路系统如有焊接、牙接、法兰接的分支管路，因其分支管路易受压力或温度而造成的剪力伤害，所以需要预先计算所需的管间距，来吸收应平行或角度移动所引起的管路长度变化。下述是常见的管路设计的安装范例。

无支管的垂直管路系统

安装此类管路时应保持最小管末间距。

在垂直管路A之下，加装固定架以承受水管、接头及流通的重量，此外每个水管都应加装导向架来导引移动方向，并防止管路歪斜。除此以外此管路应不需其他固定。管路加压后，管路将应压力而有伸长的现象，并保持最大的管末间距。最大的管路伸长率可事先求出（详见）。图中管路L处的接头必须有足够容许量来吸收管路的长度变化，或者L处的接头必须要有足够的弹性来提供管路的角度移动（如图1）

有支管的管路系统

用间隔片的方法来架设管路，在A点或附近加装抗压固定架，以承受管路的重量，并同时抵抗整个管路受压伸长的压力，与B点也应加装相同的抗压固定架，以承受整个管路的重量与伸长压力。于A点与B点之间也应加装固定架，如图2中C点所示。另外每两个水管最少要加装一个管路夹。此管路系统在加压后所产生的伸长压力应是被局限住的，支管连接部分应不可有承受剪力的现象。

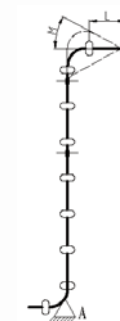


图1

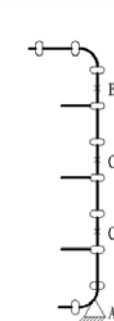
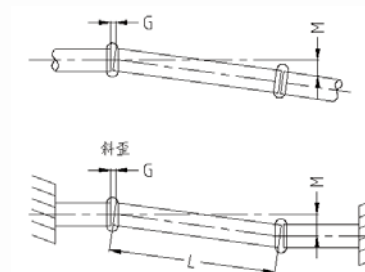


图2

歪斜与偏心管路

弹性接头因为具有平行、角度移动的容许量，所以可轻松应付管路中轻微的歪斜、偏心。歪斜管路可由一个或一个以上的接头来连成所需的角度，而偏心管路则需要两个接头以上，由挠性接头功能表可查得详细的数据。

歪斜、偏心管路的接头，其吸收管路变化的能力将受不同的管路支撑、固定方法影响。在没有任何的固定架、支撑架系统中。管路内的压力常使管路有伸长、拉直的现象，另言之，管路系统的加压、受压将导致些许的平行移动，这些平行移动将减弱接头角度移动的能力。在设计蓝图中有歪斜管路情况下，可用固定架来维持所有的角度，并防止不必要的管路偏心现象。



管路歪斜的程度可由下列方程式求知：

$$M=L \sin \theta$$

$$\theta =\sin^{-1} (G \div D)$$

$$M= (G \div D) \times L$$

$$M=\text{偏心长度}$$

$$G=\text{最大管末间距(可由功能表查得,并乘以安全系数)}$$

$$\theta =\text{歪斜角(由中心线测量起,此数据可由功能表查得,并乘以安全系数)}$$

$$D=\text{钢管外径}$$

$$L=\text{钢管长度}$$

弧形管路系统

当一管路系统设计蓝图中有弧形管路的需求时，设计师必须选择最适合的方法来连成此设计的要求。其中一个方法即是利用接头的角度弹性与适当长度的管道相互配合来连成弧形设计的要求。

弧形半径、管道长度及接头数量可由下列方程式求得：

$$R = L \div [2 \sin (\theta \div 2)]$$

$$L = 2R \sin (\theta \div 2)$$

$$N = T \div \theta$$

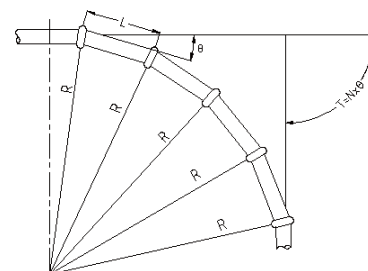
N=接头数量

R=弧形半径

L=管道长度

θ = 歪斜角 (由中心线测量起，此数据可由功能表查得，并乘以安全系数)

T=总歪斜角



Riser Design:

Risers assembled with Flexible couplings are generally installed in either of two ways. In the most common method, the pipe ends are butted together within the coupling joint. Note that when installing risers, the gasket is first placed onto the lower pipe and rolled back away from the pipe end prior to positioning the upper pipe. Anchoring of the riser may be done prior to pressurization with the pipe ends butted or while pressurized, when, due to pressure thrust, the pipe ends will be fully separated.

An alternative method of riser installation is to place a metal spacer of a predetermined thickness, between the pipe ends when an additional length of pipe is added to the riser stack. The upper pipe length is anchored, the spacer removed and the coupling is then installed. This method creates a predetermined gap at each pipe joint which can be utilized in pipe systems where thermal movement is anticipated and in systems with rigid (threaded, welded, flanged) branch connections where shear forces due to pressure thrust could damage the rigid connections.

The following examples illustrate methods of installing commonly encountered riser designs.

Risers without Branch Connections

Install the riser with the pipe ends butted.

Locate an anchor at the base of the riser (A) to support

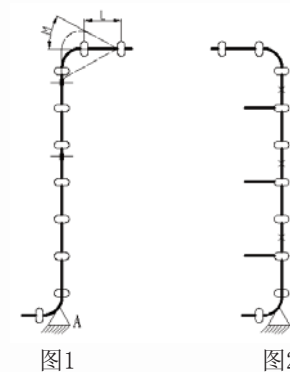
the total weight of the pipe, couplings and fluid. Provide pipe guides on every other pipe length, as a minimum, to pre-vent possible deflection of the pipe line at the coupling joints as the riser expands due to pressure thrust or thermal growth. Note that no intermediate anchors are required.

When the system is pressurized the pipe stack will “grow” due to pressure thrust which causes maximum separation of pipe ends within the couplings. The maximum amount of stack growth can be predetermined (see Linear Movement). In this example the pipe length “L” at the top of the riser must be long enough to permit sufficient deflection (see Angular Movement) to accommodate the total movement “M” from both pressure thrust and thermal gradients.

Risers with Branch Connections

Install the riser with the predetermined gap method. Anchor the pipe at or near the base with a pressure thrust anchor “A” capable of supporting the full pressure thrust, weight of pipe and the fluid column. Anchor at “B” with an anchor capable of withstanding full pressure thrust at the top of the riser plus weight of pipe column. Place intermediate anchors “C” as shown, between anchors “A” and “B”. Also place intermediate clamps at every other pipe length as a minimum.

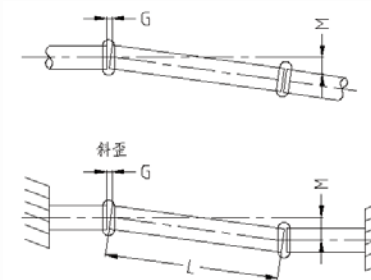
When this system is pressurized, the pipe movement due to pressure thrust will be strained and there will be no shear forces acting at the branch connections.



Misalignment & Deflections:

The angular movement capability of the flexible coupling permits the assembly of pipe joints where the piping is not properly aligned. At least two couplings are required to provide for lateral pipe misalignment. Deflection (longitudinal misalignment) may be accommodated within a single coupling as long as the angle of deflection does not exceed the value shown in the coupling performance data for the particular size and coupling type.

A pipe joint that utilizes the angular deflection capability of the coupling will react to pressure and thermal forces dependent upon the manner in which it is restrained. An unrestrained joint will react to these forces by straightening, thus reducing, if not eliminating, the deflection at the joint. If joint deflection has been designed into the pipe layout and must be maintained, then sufficient anchors must be provided to resist the lateral forces and hold the joint in the deflected condition.



The amount of deflection from pipe run centerline can

be calculated utilizing the following equations:

$$M = L \sin \theta$$

$$\theta = \sin^{-1} (G \div D)$$

$$M = (G \div D) \times L$$

Where:

M = Misalignment (inches)

G = Maximum Allowable Pipe End Movement (Inches) as shown under “Performance Data” (Value to be reduced by Design Factor)

θ = Maximum Deflection (Degrees) from centerline as shown under “Performance Data” (Value to be reduced by Design Factor)

D = Pipe Outside Diameter (Inches)

L = Pipe Length (Inches)

Curve Layout:

Utilizing the angular deflection at each coupling joint curves may be laid out using straight pipe lengths and Couplings.

This example shows how to calculate the curve radius, required pipe lengths, and number of required couplings.

$$R = L / (2 \times \sin (\theta / 2))$$

$$L = 2 \times R \times \sin (\theta / 2)$$

$$N = T / \theta$$

WHERE:

N = Number of Couplings

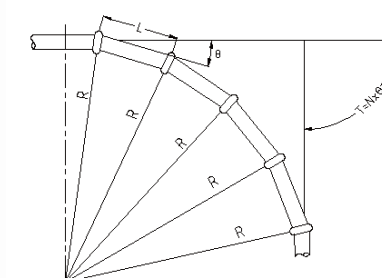
R = Radius of Curve (feet)

L = Pipe Length (feet)

θ = Deflection from centerline (Degrees) of each Coupling

(See coupling performance data, value to be reduced by Design Factor)

T = Total Angular Deflection of all Couplings.



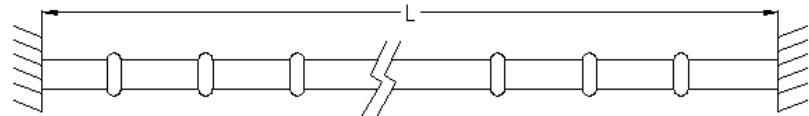


平行、角度移动的应用

管路系统的热膨胀

管路系统的热移动意指因温度变化造成的管路伸长、收缩，所以在考虑管路系统应使用多少接头时，热移动的量将会是一个重要的因素。

范例：



一个管径114.3mm，30米长的水管（碳钢管）

水管与两端固定

最低温度（安装时）=5度

最高工作温度=55度

从热膨胀表可得知管路总长在此范例中将增加18mm，我们想知道应使用多少接头？

一个弹性接头的允许移动范围

移动范围X设计安全系数=允许移动范围

4.3mmX75%=3.2mm

适当的接头数量

热膨胀量/允许移动范围=接头数量

18mm/3.2mm=5.6个

结论：适当的接头数量为6个

在此特别强调。18mm是6个弹性接头所能吸收的最大量，为此最大吸收量，6个接头与安装时必须保持最大的管末间隙，也就是国外一般所谓的开放式安装法。但若此改为热收缩，即安装温度比工作温度高50℃，则管路总长度将与系统正式运转时收缩18mm，依此方法求的接头数量将是这些接头的最大吸收量，唯一不同的是，因为此时这6个接头与安装时需保持最小管末间距，也就是所谓的封闭式安装法或吻合安装法。

无论是热膨胀、热收缩或者两者的混合，每个管路系统都需要合适的固定架（移动方向）、导引架和支撑架。

碳钢管热膨胀表

温差（度）	碳钢管长度(米)					
	1	5	10	20	30	40
	热膨胀量（mm）					
1	0.012	0.06	0.12	0.24	0.36	0.48
5	0.06	0.3	0.6	1.2	1.8	2.4
10	0.12	0.6	1.2	2.4	3.6	4.8
20	0.24	1.2	2.4	4.8	7.2	9.6
30	0.36	1.8	3.6	7.2	11	15
40	0.48	2.4	4.8	9.6	14	20
50	0.6	3	6	12	18	24
60	0.72	3.6	7.2	14	22	29
70	0.84	4.2	8.4	17	25	34
80	0.96	4.8	9.6	19	29	39

热膨胀公式1

$$\lambda = \alpha \times L \times T$$

λ ：热膨胀量

α ：钢管平行伸展系数

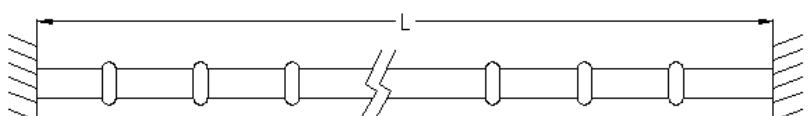
L：钢管长度

T：温差

Movement -Application

Thermal stress

Thermal stress is caused by changes in temperature, resulting in either expansion or contraction. When designing a system you must allow for this thermal movement. To determine the appropriate number of flexible couplings to allow for this thermal movement please refer to the following.



Example:

- 4” straight steel pipe, 30m long

- Anchored on both ends

- Minimum temperature (during installation) = 5℃

- Maximum working temperature = 55℃

From the thermal expansion table, we know the overall pipeline length will increase by 18mm (0.71”). You can also use Formula 1 or Table 3 to find the amount of thermal expansion. We want to know the number of couplings that are required to address this thermal movement problem.

The allowed movement of a 4” flexible coupling is :

Movement range x Adjustment = Allowed movement

4.3mm x 75% = 3.2mm

The appropriate number of coupling is:

Thermal expansion / Allowed movement = Number of couplings

18mm / 3.2mm = 5.6

Conclusion:

The appropriate number of coupling is 6.

Thermal Expansion

Temperature difference (°C)	Pipe length (m)					
	1	5	10	20	30	40
	Thermal Expansion (mm)					
1	0.012	0.06	0.12	0.24	0.36	0.48
5	0.06	0.3	0.6	1.2	1.8	2.4
10	0.12	0.6	1.2	2.4	3.6	4.8
20	0.24	1.2	2.4	4.8	7.2	9.6
30	0.36	1.8	3.6	7.2	11	15
40	0.48	2.4	4.8	9.6	14	20
50	0.6	3	6	12	18	24
60	0.72	3.6	7.2	14	22	29
70	0.84	4.2	8.4	17	25	34
80	0.96	4.8	9.6	19	29	39

Thermal Expansion Formula 1

$$\lambda = \alpha \times L \times T$$

λ ：Thermal Expansion

α ：Linear Expansion

coefficient for steel

L：Pipe length

T：Temperature difference

管路的固定与支撑

Anchoring and Supports

管路系统设计在考虑如何使用吊架、支撑架及固定架来固定管路时，除了考虑吊架、支撑架及固定架的设计通则外，也应考虑每种接头的特殊性质。设计良好的管路固定、支撑系统将可顺利地负载流体、管道、接头及其他管件的重量，减少接头的负载，让管路系统在受压时能调整移动。管道水平安装的吊架、支撑架及固定架最大间距应符合下表。

When designing the hangers, supports and anchors for a grooved end pipe system, the piping designer must consider certain unique characteristics of the grooved type coupling in additional to many universal pipe hanger and support design factors. As with any pipe system, the hanger or support system must provide for

- 1)the weight of the pipe, couplings, fluid and pipe system components;
- 2)reduce stresses at pipe joints; and
- 3)permit required pipe system movement to relieve stress.

The following chart shows the maximum span between pipe hangers, supports and anchors.

钢管管道支架的最大间距/Max. Span between Supports (steel pipe)

公称直径/Nominal Size (mm)		15	20	25	32	40	50	70	80	100	125	150	200	250	300
支架的最大间距 Max. Span Between Supports (mm)	保温管 Insulating Pipe	2	2.5	2.5	2.5	3	3	4	4	4.5	6	7	7	8	8.5
	不保温管 Non-insulating Pipe	2.5	3	3.5	4	4.5	5	6	6	6.5	7	8	9.5	11	12

挠性卡箍平行位移及角度位移表

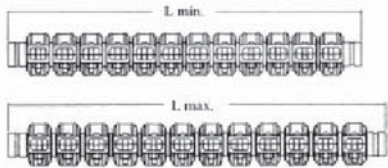
Flexible Couplings: Linear Movement and Angular Movement

尺寸Dimensions		平行位移 Linear Movemen	角度位移 Angular Movement	
公称直径 Nominal Size	管外径 Pipe O.D.			
毫米/英寸 mm/in	毫米/英寸 mm/in	毫米/英寸 mm/in	(°)	毫米/米 mm/in 英寸/英尺 in/ft
25 1	33.7 1.315	2.0 0.0787	2° -45'	48 0.58
32 1¼	42.4 1.660	2.0 0.0787	2° -10'	38 0.45
40 1½	48.3 1.900	3.2 0.125	1° -54'	33 0.40
50 2	60.3 2.375	3.2 0.125	1° -31'	26 0.32
65 2½	73.0 2.875	3.2 0.125	1° -27'	25 0.30
65 2½	76.1 3.000	3.2 0.125	1° -12'	21 0.25
80 3	88.9 3.500	3.2 0.125	1° -02'	18 0.22
100 4	108.0 4.250	3.2 0.125	1° -51'	32 0.39
100 4	114.3 4.500	3.2 0.125	1° -36'	28 0.34

尺寸Dimensions		平行位移 Linear Movemen	角度位移 Angular Movement	
公称直径 Nominal Size	管外径 Pipe O.D.			
毫米/英寸 mm/in	毫米/英寸 mm/in	毫米/英寸 mm/in	(°)	毫米/米 mm/in 英寸/英尺 in/ft
125 5	133.0 5.250	3.2 0.125	1° -41'	30 0.36
125 5	139.7 5.500	3.2 0.125	1° -19'	23 0.28
125 5	141.3 5.563	3.2 0.125	1° -03'	18 0.22
150 6	159.0 6.250	3.2 0.125	1° -18'	23 0.27
150 6	165.1 6.500	3.2 0.125	1° -05'	20 0.24
150 6	168.3 6.625	3.2 0.125	1° -05'	19 0.23
200 8	219.1 8.625	3.2 0.125	0° -50'	15 0.17
250 10	273 10.750	3.2 0.125	0° -40'	12 0.14
300 12	323.9 12.750	3.2 0.125	0° -34'	10 0.12

串联的伸缩组件的移动尺寸

Movement capability of couplings-expansion and contraction joints



规格 Nominal Size	管子外径 Pipe O.D. (mm)	最大移动尺寸 Maximum Allowable Movement (mm)	L最小 L min. (mm)	L最大 L max. (mm)	管卡数量 Number of Couplings	冲入水压压力 (psi) Filled With Water Pressure
1	33.7	45	617	662	10	300
1¼	42.4	45	617	662	10	300
1½	48.3	45	617	662	10	300
2	60.3	45	617	662	10	300
2½	73.0	45	617	662	10	300
76.1	76.1	45	617	662	10	300
3	88.9	45	617	662	10	300
4	114.3	47	503	550	7	300
139.7	139.7	47	503	550	7	300
5	141.3	47	503	550	7	300
165.1	165.1	52	503	550	7	300
6	168.3	52	591	643	7	300
8	219.1	52	591	643	7	300
10	273.0	52	591	643	7	300
12	323.9	52	591	643	7	300

工艺试验

Engineering Test

序号	试验项目	标准要求
1	真空试验 Vacuum Test	沟槽管卡、沟槽异径管卡、沟槽单片法兰、机械三通、平口管卡应该能够承受自动喷水灭火系统被排干时所出现的真空状况。每一尺寸、每一类型的带橡胶圈的管卡和管件的样品应该能够经受25 inHG (85 KPA) 的内部真空长达五分钟。进行真空测试，被浸没在水中时，施加给测试装配组件的压力要从0增加到50 psi(345 kpa)。测试结果不应出现渗漏或永久变形。 Grooved couplings, grooved reducing couplings, grooved split flanges, mechanical tees, and plain end couplings shall be able to withstand the effects of vacuum conditions encountered when sprinkler systems are drained. Samples of each nominal size and style of gasketed coupling and fitting shall be subjected to an internal vacuum of 25 inHg (85 kPa) for a duration of 5 minutes. Following the vacuum test, the test assembly shall be pneumatically pressurized from zero to 50 psi (345 kPa) while submerged in a water bath. There shall be no leakage or permanent deformation as a result of this test.
2	静水压试验 Hydrostatic Strength Test	施加3-5倍的工作压力的静水压，保压1分钟，管件不出现破裂。（规格≤6”，5倍；8”-10”，4倍；≥12”，3倍） All items shall be able to withstand an internal hydrostatic pressure equal to three-five times the rated working pressure without cracking, rupture, or permanent distortion. . The test shall be conducted for a duration of 1 minute. (Test Size ≤6” , Five time; 8” -10” , 4time; ≥12” , 3times)

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3	气压 Air Leakage Test	管卡装配系统须增压至气压3巴+0.5/-0巴。然后整个系统被浸入水中，不能有任何可以看到的渗漏。 The coupling assembly shall be pressurised with air to 3 bar +0.5/-0 bar. The assembly shall be immersed in water to establish that there is no visible leakage
4	弯矩试验 Moment Test	系统在1倍工作压力的情况下，施加一定的力矩，管件不出现渗漏和破裂 The moment resistance shall be demonstrated while the test assembly is internally pressurized to the rated working pressure. Then a force was applied to the test assembly. There shall be no leakage, cracking, or fitting or coupling pull-off as a result of this test.
5	高温试验 Hot Gasket Test	标准的橡胶圈被组装在一定长度的管子上，能够承受275° F（135° C）达45天。被曝光后，测试装配组件要浸没在水中中进行漏水测试，承受0到50 psi(345 kpa)的空气压力，无渗漏现象。在水下空气测试完成后，测试装配组件要被拆分开，当直径上相反的两点一起挤压或者弯折成一个“8”字形时，橡胶圈不会断裂。然后观察橡胶圈有无明显的破裂、严重不合格的迹象。 Standard gaskets shall be assembled to short lengths of pipe, and subjected to 275° F (135° C) for a duration of 45 days. After exposure, the test assembly shall be submerged in a water bath and subjected to an air under water leakage test from zero to 50 psi (0 to 345 kPa) in order to evaluate for leakage. After the air under water testing is completed, the test assembly shall be disassembled and the gasket shall not crack when squeezed together from any two diametrically opposite points, or twisted into a figure-eight shape. The gasket shall then be visually inspected for signs of cracking, tearing, or excessive degradation as a result of this test.
6	低温试验 Cold Gasket Test	暴露在低温-40F°（-40° C）的空气中4天。在暴露后浸入-40F°（-40° C）的防冻剂，装配组件的空气压力要从0增加到50 psi(0到345 kpa)。不应有渗漏现象发生。然后装配组件被加热到周围温度，然后拆开。从装配组件拿掉后，当直径上相反的两点挤压或者弯折成一个“8”字形时，橡胶圈不应有裂缝。 The low temperature exposure shall consist of -40 ° F (-40 ° C) air exposure for 4 days. After exposure, the assembly while submerged in -40 ° F (-40 ° C) antifreeze, shall be pneumatically pressurized from 0 to 50 psi (0 - 345 kPa). No leakage shall occur. The assembly shall then be allowed to warm to ambient temperature and then be disassembled. The gasket, after removal from the assembly, shall not crack when squeezed together from any two diametrically opposite points, or twisted into a figure eight shape.
7	火烧试验 Flame test	在空气不流通的房间中，将装配好的检测系统U型弯曲并充满水。弯曲角度达到标准要求的角度，然后将水排出。将燃料盘放在管卡的正下面，加入燃料并点燃，点燃时间，<DN100的为5分钟，≥DN100的为8分钟。达到燃烧时间时，火焰需要被立即熄灭，检测系统需立即采用喷水的方式冷却，直到看不见水蒸气，但至少要3分钟。然后，检测系统需充满水，并加压至最大允许压强。肉眼检测是否渗漏。水分可以允许滴落，但不允许流淌或喷射。然后释压。 The test shall be conducted in a room free from air draught., The test joint is mounted, U-bent on the test apparatus and filled with water. The angle corresponds to the angle documented as a result of the test Subsequently the test joint is drained. The fuel pan is placed centrally below the pipe joint Fuel is filled into the pan and the fuel is ignited. Burning time 5 min for nominal diameters < DN 100; 8 min for nominal diameters ≥ DN 100 For reducer couplings the dimension of the smaller nominal diameter shall apply for the determination of the burning time. The flame shall be extinguished immediately once the burning time has expired (5 min or 8 min) and the test joint shall be cooled down. For cooling the test joint is immediately sprayed with water until steam formation is no longer visible, but at least for 3 min. The test joint is then filled completely with water and exposed to a test pressure which corresponds to the maximum permissible pressure and is checked visibly for leaks. Water may leak in form of drops, however, not in form of flowing water or a water spray. The test joint is then pressure relieved (force and internal pressure).
8	压力循环（水锤） Cycling Pressure Resistance （Water Hammer Test）	在循环之前，组装的管件要经受流体静力强度测试到额定的工作压力，最小为175psi(1205kpa)，并且要持续5分钟，不允许有渗漏和裂缝。从0压力到额定工作压力，最小为175psi(1205kpa)，组装管件要能够进行20，000次循环。在循环之后，测试装配组件要进行静水压试验不应出现渗漏和裂缝，测试持续5分钟。 Prior to the cycling, assemblies shall be subjected to a hydrostatic strength test to the rated working pressure, 175 psi (1205 kPa) minimum, for a duration of 5 minutes. Without leakage or cracking. Assemblies shall then be subjected to 20,000 cycles from zero pressure to the rated working pressure, 175 psi (1205 kPa) minimum. After cycling, the test assembly shall be tested Hydrostatic Strength and maintain 5minutes without leakage and cracking.
9	喷淋流量 Friction Loss Determination	管卡和管件的构造和安装应该保证经过管卡和管件的水道的障碍物保持在最小限度。在同管卡和管件直径相等的40级的钢管内，以 20ft/s(6.1 m/s)的速度产生的水流通过管卡和管件的损失不应超过5.0 psi(35 kpa)。 The construction and installation of the coupling or fitting shall be such that obstruction to the passage of water through the coupling or fitting body is minimal. The loss in pressure through the coupling or fitting shall not exceed 5.0 psi (35 kPa) at a flow producing a velocity of 20 ft/s (6.1 m/s) in Schedule 40 steel pipe of the same nominal diameter as the coupling or fitting.

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10	渗漏试验 Leakage Test - Assembly without Gasket	没有橡胶圈的管卡或管件的装配组件的渗漏不应超过洒水装置莲蓬头的流量系数（K系数），应在5.3到5.8个单位 [gal/min(psi) 1/2] {76-84 L/Min(bar)1/2}。这个试验是针对对于高架管道上的名义尺寸小于或等于12”的(300MM). Leakage from a gasket-less coupling assembly or fitting shall not exceed that of an operating sprinkler head whose discharge coefficient (K-factor) is 5.3 to 5.8 gal/min(psi)1/2 [76 - 84 L/min/(bar)1/2].This test is for nominal pipe sizes normally associated with over-head piping, less than or equal to 12 in. NPS (300 mm).
11	扭曲试验 Torsion test	此试验仅针对≤DN40的管卡。检测系统中充满水并加压至最大允许压强，然后释压。随后检测系统一端的钢管被固定，而另一端钢管被施加一个增加的扭矩。管卡必须有能力将最大80Nm的扭矩从一端的管子转移到另一端，此过程中两端管子不能有任何的相对扭转。 This test relates to pipe joints ≤ DN 40 only. The test joint is filled with water and exposed once to the maximum permissible pressure and is then pressure relieved again. Subsequently the test joint is fixed on one pipe end and an increasing torque is applied to the other pipe end. At the pressure-less test joint the pipe joint shall be able to transmit a torque of up to 80 Nm from one pipe end to the other pipe end without any torsion of the pipe ends against each other.
12	挠角试验 Flexibility Test for Flexible Fittings	把管子加压到额定工作压力，对连接部位施加弯矩，直到弯曲到生产商指定的最大挠度，规格小于8英寸的不小于1度，8英寸和8英寸以上的不小于0.5度，不应出现渗漏和管子损坏。 With the assembly pressurized to its rated pressure, a bending moment is to be applied to deflect the joint to the maximum angle specified by the manufacturer, while not less than 1 degree for nominal pipe diameters less than 8 inches (203.2 mm) or 0.5 degrees for 8 inches (203.2 mm) and larger. Observations are to be made for leakage or pipe damage.
13	抗震动试验 Seismic Evaluation	为了估测在易于发生地震活动的区域50-500年沟槽管卡的使用情况，测试装配组件要采用挠性管卡和长度较短的钢管，尺寸相同，要能够经受住循环测试。测试将前后方向偏转装配组件到生产者被推荐的最大角度15个来回，内部压力同额定工作压力相同。测试结果不应有渗漏、裂缝现象。 In order to evaluate the use of grooved couplings in Earthquake zones 50 through 500 years, test assemblies utilizing flexible couplings and short lengths of steel pipe, in the same nominal size, will be subjected to cyclic testing. The test will deflect the assembly to the manufacturer’ s maximum recommended angle in the forward and reverse direction for a total 15 cycles with the internal pressure equal to the rated working pressure. There shall be no leakage, cracking, or rupture as a result of this test.
14	测向位移 Lateral Displacement	在任何测试阶段管卡都不能渗漏，并且要保持在生产商标定的管道系统的角偏移或测向位移范围内。 The coupling shall not leak during any of the tests, within the manufacturer’ s stated limitations for angular deflection or lateral displacement of associated pipework.
15	静水压波动测试 Hydrostatic fluctuation pressure test	管卡装配系统须增压至水压10巴±1巴，持续2分钟+30秒/-0秒，至此建立一组数据。然后将水排出，内部抽成真空，达到最大值600mm a/水银柱或者-0.8巴+0巴/-0.1巴，持续2分钟+30秒/-0秒。然后内部在不少于5秒钟内返至大气压。然后再增压至水压10巴±1巴，持续2分钟+30秒/-0秒。测试过程中须检查整个装配系统是否有渗漏现象。每根管子的相对移动在真空阶段及每个压力阶段都要被记录下来。不能有任何渗漏。 The coupling assembly shall be pressurised with water to a gauge pressure of 10 bar ± 1 bar for 2min, +30s/-0s to establish a datum. The assembly shall then be drained before being subjected to the greatest vacuum attainable to a maximum of 600mm a/mercury or -0.8bar +0bar/-0.1 bar for 2min +30s/-0s, and allowed to return to atmospheric pressure in not less than 5s. The assembly shall then be pressurised with water to 10 bar ± 1bar for 2 min +30s/-0s. The assembly shall be examined for leakage throughout the test. The relative movement of each pipe shall be recorded at the greatest vacuum and at each pressure. There shall be no leakage.
16	防火测试 Fire Test	如果带橡胶圈的管件使用黑色金属的材质作为坚实的组成结构，或者依FM认证判断，设计在防火方面受到怀疑，就需要执行防火测试。没有橡胶圈的代表性尺寸的组装接缝应该被暴露在1000° F（538° C）的环境中5分钟。在这段持续时间内，装配组件应该很干燥。暴露完毕后，立即引入水流到接缝处并持续到装配组件冷却至可以用手触摸。不应有裂缝，任何管卡和管件的组成部分也不能有变形。然后管卡和管件要被拆开并装上橡胶圈。重新组装后，要对接缝进行静水压测试。 If a gasketed pipe coupling or fitting employs non-ferrous materials for its substantial structural components, or if in the judgment of FM Approvals, the design is otherwise suspect with respect to fire resistance, a fire test shall be conducted. A representative size assembled joint without a gasket shall be exposed to a 1000 ° F (538 ° C) fire environment for 5 minutes. The assembly shall be dry for the duration of this exposure. Immediately after the exposure, a water flow shall be introduced through the joint and sustained until the assembly is cool to the touch. No cracking or distortion of any component of the coupling or fitting shall occur. The coupling or fitting shall then be disassembled and the gasket installed. After reassembly, the joint shall be hydrostatically tested, as described in to the hydrostatic test.