

jinton TAIWAN

JTPR®



# GROOVED FITTINGS



[www.jinton.com.tw](http://www.jinton.com.tw)

## Jinton

Jinton Grooved Fittings based in Taoyuan, Taiwan is a major subsidiary of Jinton Metal Product Co., Ltd. With an experience of more than ten years has earned itself the reputation of the most widely used products in internal piping facilities of offices and residential buildings. Jinton's core products include extensive line of ductile iron grooved pipe fittings and couplings, approved by many major agencies including **Underwriter Laboratories (UL) and Factory Mutual (FM)**.

Jinton Facility in Taoyuan, Taiwan is certified to ISO-9001, ISO-2000; Quality Management Standards. Our continuous endeavors are in place to provide the premium standard quality products for our global clients.

Jinton employs the latest manufacturing technology and automatic tooling line capable to produce 2000 sets of couplings per hour. Our manufacturing plant has the Production capacity of 100,000 tons of grooved fittings spread in an area of 70,000 square meters.

Our highly experienced and professional staff prides ourselves in our commitment to deliver highest quality products, expertise and after sales services to our valued customers. Also we have emerged to become one of the trusted companies in grooved fittings in Pan Asia, MENA region, USA and Europe.

**Vision:** To become globally one of the most trusted and innovative manufacturer of grooved fittings.

**Mission:** To work closely with the industry needs and raise the product standard and performance

# Contents

Quality Management .....	4
Products Range .....	5
Rigid Coupling .....	7
Flexible Coupling .....	8
Mechinal Tee Grooved outlet .....	9
Mechinal Tee Threaded outlet .....	12
U-Bolt Mechinal Tee .....	17
Grooved Flange ANSI Class 150 .....	18
Grooved Flange PN 16 .....	19
90° Elbow .....	20
45° Elbow .....	20
22.5° Elbow .....	21
11.25° Elbow .....	21
Tee .....	22
Grooved Reducing Tee .....	23
Threaded Reducing Tee .....	25
Cross .....	28
Grooved Reducing Cross .....	29
Threaded Reducing Cross .....	30
Cap .....	31
Grooved Concentric Reducer .....	32
Threaded Concentric Reducer .....	35
Grooved Eccentric Reducer .....	39
Adaptor Flange ANSI Class 150 .....	40
Adaptor Flange PN 16 .....	41
Gasket Data .....	42
Hole Diameter of Pipe .....	43
Roll Groove Dimension .....	44
Pressure Ratings and End Loads .....	46
Installation Instruction for Rigid & Flexible Coupling .....	48
Engineering Test .....	49

# Quality Management





# Products Range



Rigid Coupling



Flexible Coupling



Mechanical Tee Grooved outlet



Mechanical Tee Threaded outlet



U-Bolt Mechanical Tee



Grooved flange



90° Elbow



45° Elbow



22.5° Elbow



11.25° Elbow

# Products Range



Tee



Grooved Reducing Tee



Threaded Reducing Tee



Cross



Grooved Reducing Cross



Threaded Reducing Cross



Cap



Grooved Concentric Reducer



Threaded Concentric Reducer



Grooved Eccentric Reducer



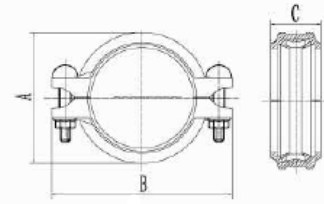
Adaptor Flange

# Rigid Coupling

## XGQT1

The JINTON Model XGQT1 rigid coupling for moderate pressure piping services including fire mains, long straight runs and valve connections.

of a long straight run. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13. With the removal of only one bolt you can make a fast and easy 'swing-over' installation.



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

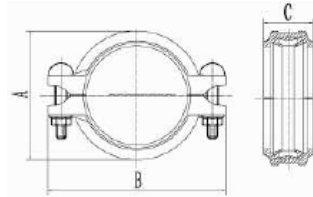
Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in			Bolt Size No.-Size mm
			A mm/in	B mm/in	C mm/in	
25 1	33.7 1.327	300 psi 2.07 Mpa	56 2.20	98 3.85	44 1.74	M10*45-2
32 1¼	42.4 1.669		65 2.55	108 4.25	44 1.74	M10*45-2
40 1½	48.3 1.9		72 2.84	114 4.48	44 1.74	M10*45-2
50 2	60.3 2.375		84 3.30	126 4.96	46 1.81	M10*60-2
65 2½	73 2.875		97 3.81	140 5.52	46 1.81	M10*60-2
65 2½	76.1 3		100 3.93	142 5.59	46 1.81	M10*60-2
80 3	88.9 3.5		114 4.48	154 6.06	46 1.81	M10*60-2
100 4	108 4.25		135 5.31	186 7.32	50 1.96	M12*70-2
100 4	114.3 4.5		138 5.43	192 7.55	50 1.96	M12*70-2
125 5	133 5.25		162 6.37	213 8.38	50 1.96	M12*75-2
125 5	139.7 5.5		170 6.73	220 8.66	50 1.96	M12*75-2
125 5	141.3 5.563		171 6.73	222 8.74	50 1.96	M12*75-2
150 6	159 6.25		190 7.48	241 9.48	50 1.96	M14*75-2
150 6	165.1 6.5		196 7.71	248 9.76	50 1.96	M14*75-2
150 6	168.3 6.625		200 7.87	252 9.92	50 1.96	M14*75-2
200 8	219.1 8.625		258 10.15	322 12.67	60 2.36	M16*95-2
250 10	273 10.75		318 12.51	400 15.74	62 2.44	M20*110-2
300 12	323.9 12.750		372 14.64	454 17.87	64 2.51	M20*120-2

# Flexible Coupling

## XGQT2

The JINTON Model XGQT2 Flexible Reducing Coupling allows a direct transition between two different pipe sizes, and replaces two couplings and a reducing fitting. It is capable of pressures up to 350 psig (24,1 bar) depending on pipe size and wall thickness.

This is a standard flexible coupling designed for use in a variety of moderate pressure general piping applications. This coupling features flexibility that can accommodate misalignment, distortion, thermal stress, vibration, noise and seismic tremors. The Model XGQT2 can even accommodate an arced or curved piping layout.



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in			Bolt Size No.-Size mm
			A mm/in	B mm/in	C mm/in	
25 1	33.7 1.327	300 psi 2.07 Mpa	56 2.20	98 3.85	44 1.74	M10*45-2
32 1¼	42.4 1.669		65 2.55	108 4.25	44 1.74	M10*45-2
40 1½	48.3 1.9		72 2.84	114 4.48	44 1.74	M10*45-2
50 2	60.3 2.375		84 3.30	126 4.96	46 1.81	M10*60-2
65 2½	73 2.875		97 3.81	140 5.52	46 1.81	M10*60-2
65 2½	76.1 3		100 3.93	142 5.59	46 1.81	M10*60-2
80 3	88.9 3.5		114 4.48	154 6.06	46 1.81	M10*60-2
100 4	108 4.25		135 5.31	186 7.32	50 1.96	M12*70-2
100 4	114.3 4.5		138 5.43	192 7.55	50 1.96	M12*70-2
125 5	133 5.25		162 6.37	213 8.38	50 1.96	M12*75-2
125 5	139.7 5.5		170 6.73	220 8.66	50 1.96	M12*75-2
125 5	141.3 5.563		171 6.73	222 8.74	50 1.96	M12*75-2
150 6	159 6.25		190 7.48	241 9.48	50 1.96	M14*75-2
150 6	165.1 6.5		196 7.71	248 9.76	50 1.96	M14*75-2
150 6	168.3 6.625		200 7.87	252 9.92	50 1.96	M14*75-2
200 8	219.1 8.625		258 10.15	322 12.67	60 2.36	M16*95-2
250 10	273 10.75		318 12.51	400 15.74	62 2.44	M20*110-2
300 12	323.9 12.750		372 14.64	454 17.87	64 2.51	M20*120-2

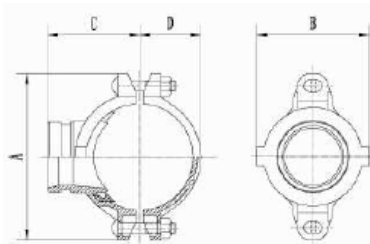


# Mechanical Tee Grooved outlet

XGQT3



The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:

Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
50×25 2×1	60.3×33.7 2.375×1.315	300 psi 2.07 Mpa	38 1.50	118 4.64	71 2.80	69 2.71	40 1.57	M10*60-2
50×32 2×1¼	60.3×42.4 2.375×1.660		46 1.81	118 4.64	75 2.95	69 2.71	40 1.57	M10*60-2
50×40 2×1½	60.3×48.3 2.375×1.900		46 1.81	118 4.64	75 2.95	69 2.71	40 1.57	M10*60-2
65×25 2½×1	73.0×33.7 2.875×1.315		38 1.50	133 5.23	72 2.83	77 3.03	47 1.85	M10*60-2
65×32 2½×1¼	73.0×42.4 2.875×1.660		46 1.81	133 5.23	81 3.18	77 3.03	47 1.85	M10*60-2
65×40 2½×1½	73.0×48.3 2.875×1.900		53 2.08	133 5.23	86 3.38	77 3.03	47 1.85	M10*60-2
65×25 2½×1	76.1×33.7 3.000×1.315		38 1.50	136 5.35	72 2.83	78 3.07	49 1.93	M10*60-2
65×32 2½×1¼	76.1×42.4 3.000×1.660		46 1.81	136 5.35	81 3.18	78 3.07	49 1.93	M10*60-2
65×40 2½×1½	76.1×48.3 3.000×1.900		53 2.08	136 5.35	86 3.38	78 3.07	49 1.93	M10*60-2
80×25 3×1	88.9×33.7 3.500×1.315		38 1.50	150 5.98	73 2.87	85 3.33	56 2.20	M10*60-2
80×32 3×1¼	88.9×42.4 3.500×1.660		46 1.81	150 5.98	82 3.22	85 3.33	56 2.20	M10*60-2
80×40 3×1½	88.9×48.3 3.500×1.900		53 2.08	150 5.90	87 3.42	85 3.33	56 2.20	M10*60-2
80×50 3×2	88.9×60.3 3.500×2.375		61 2.40	150 5.90	100 3.93	85 3.33	56 2.20	M10*60-2
80×65 3×2½	88.9×73.0 3.500×2.875		61 2.40	150 5.90	100 3.93	85 3.33	56 2.20	M10*60-2
80×65 3×2½	88.9×76.1 3.500×3.000		61 2.40	150 5.90	100 3.93	85 3.33	56 2.20	M10*60-2

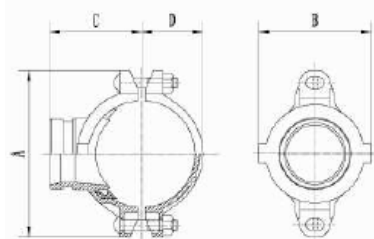


# Mechanical Tee Grooved outlet



## XGQT3

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

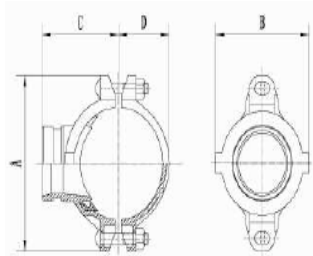
Nominal Size mm/in	Pipe OD mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				A	B	C	D	
100×50 4×2	108.0×60.3 4.250×2.375	300 psi 2.07 Mpa	61 2.40	172 6.77	106.5 4.19	92 3.78	64.5 2.54	M12*70-2
100×65 4×2½	108.0×76.1 4.250×3.000		81 3.18	172 6.77	106.5 4.19	92 3.78	64.5 2.54	M12*70-2
100×25 4×1	114.3×33.7 4.500×1.315		38 1.50	182 7.16	73 2.87	99 3.90	70 2.76	M12*70-2
100×32 4×1¼	114.3×42.4 4.500×1.660		46 1.81	182 7.16	82 3.22	99 3.90	70 2.76	M12*70-2
100×40 4×1½	114.3×48.3 4.500×1.900		53 2.08	182 7.16	87 3.42	99 3.90	70 2.76	M12*70-2
100×50 4×2	114.3×60.3 4.500×2.375		61 2.40	182 7.16	100 3.93	99 3.90	70 2.76	M12*70-2
100×65 4×2½	114.3×73.0 4.500×2.875		81 3.18	182 7.16	118 4.64	99 3.90	70 2.76	M12*70-2
100×65 4×2½	114.3×76.1 4.500×3.000		81 3.18	182 7.16	118 4.64	99 3.90	70 2.76	M12*70-2
100×80 4×3	114.3×88.9 4.500×3.500		86 3.38	182 7.16	124 4.88	99 3.90	70 2.76	M12*70-2
125×50 5×2	139.7×60.3 5.500×2.375		61 2.40	215 8.46	102 4.01	113 4.44	83 3.26	M12*75-2
125×65 5×2½	139.7×76.1 5.500×3.000		81 3.18	215 8.46	119 4.68	113 4.44	83 3.26	M12*75-2
125×80 5×3	139.7×88.9 5.500×3.500		86 3.38	215 8.46	134 5.27	113 4.44	83 3.26	M12*75-2
125×100 5×4	139.7×114.3 5.500×4.500		114 4.48	215 8.46	158 6.22	115 4.52	83 3.26	M12*75-2
125×50 5×2	141.3×60.3 5.563×2.375		61 2.40	215 8.46	102 4.01	114 4.48	83 3.26	M12*75-2
125×65 5×2½	141.3×76.1 5.563×3.000		81 3.18	215 8.46	119 4.64	114 4.48	83 3.26	M12*75-2
125×80 5×3	141.3×88.9 5.563×3.500		86 3.38	215 8.46	134 5.27	114 4.48	83 3.26	M12*75-2
125×100 5×4	141.3×114.3 5.563×4.500		114 4.48	215 8.46	158 6.22	115 4.52	83 3.26	M12*75-2



# Mechanical Tee Grooved outlet

## XGQT3

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

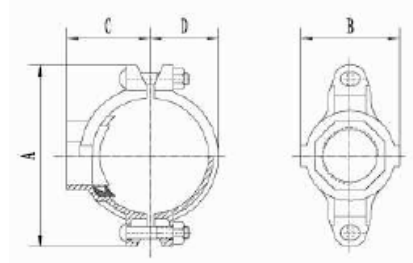
- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				C	D	B		
150×50 6×2	159.0×60.3 6.250×2.375	300 psi 2.07 Mpa	61 2.40	230 9.05	98 3.85	123 4.84	90 3.54	M14*75-2
150×65 6×2½	159.0×76.1 6.250×3.000		81 3.18	230 9.05	121 4.76	123 4.84	90 3.54	M14*75-2
150×80 6×3	159.0×88.9 6.250×3.500		86 3.38	230 9.05	134 5.27	123 4.84	90 3.54	M14*75-2
150×100 6×4	159.0×108.0 6.250×4.250		114 4.48	230 9.05	155 6.10	123 4.84	90 3.54	M14*75-2
150×100 6×4	159.0×114.3 6.250×4.500		114 4.48	230 9.05	155 6.10	123 4.84	90 3.54	M14*75-2
150×50 6×2	165.1×60.3 6.500×2.375		61 2.40	240 9.44	102 4.01	126 4.96	96 3.77	M14*75-2
150×65 6×2½	165.1×76.1 6.500×3.000		81 3.18	240 9.44	119 4.68	126 4.96	96 3.77	M14*75-2
150×80 6×3	165.1×88.9 6.500×3.500		86 3.38	240 9.44	134 5.27	126 4.96	96 3.77	M14*75-2
150×100 6×4	165.1×114.3 6.500×4.500		114 4.48	240 9.44	158 6.22	128 5.04	96 3.77	M14*75-2
150×50 6×2	168.3×60.3 6.625×2.375		61 2.40	244 9.60	102 4.01	128 5.04	97 3.81	M14*75-2
150×65 6×2½	168.3×73.0 6.625×2.875		81 3.18	244 9.60	119 4.68	128 5.04	97 3.81	M14*75-2
150×65 6×2½	168.3×76.1 6.625×3.000		81 3.18	244 9.60	119 4.68	128 5.04	97 3.81	M14*75-2
150×80 6×3	168.3×88.9 6.625×3.500		86 3.38	244 9.60	134 5.27	128 5.04	97 3.81	M14*75-2
150×100 6×4	168.3×114.3 6.625×4.500		114 4.48	244 9.60	158 6.22	130 5.11	97 3.81	M14*75-2
200×50 8×2	219.1×60.3 8.625×2.375		61 2.40	308 12.12	102 4.01	153 6.02	124 4.88	M16*95-2
200×65 8×2½	219.1×76.1 8.625×3.000		81 3.18	308 12.12	119 4.68	153 6.02	124 4.88	M16*95-2
200×80 8×3	219.1×88.9 8.625×3.500		86 3.38	308 12.12	134 5.27	153 6.02	124 4.88	M16*95-2
200×100 8×4	219.1×114.3 8.625×4.500		114 4.48	308 12.12	158 6.22	155 6.10	124 4.88	M16*95-2

# Mechanical Tee Threaded outlet

## XGQT3S

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

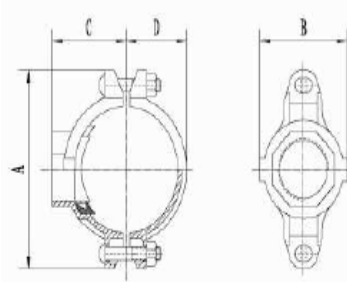
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				A	B	C	D	
50×15 2×½	60.3×21.3 2.375×0.825	300 psi 2.07 Mpa	30 1.18	116 4.57	68 2.68	58 2.28	40 1.57	M10*60-2
50×20 2×¾	60.3×26.9 2.375×1.050		30 1.18	116 4.57	68 2.68	58 2.28	39 1.53	M10*60-2
50×25 2×1	60.3×33.7 2.375×1.315		38 1.50	118 4.64	71 2.80	58 2.36	40 1.57	M10*60-2
50×32 2×1¼	60.3×42.4 2.375×1.660		46 1.81	118 4.64	75 2.95	60 2.56	40 1.57	M10*60-2
50×40 2×1½	60.3×48.3 2.375×1.900		46 1.81	118 4.64	75 2.95	63 2.56	40 1.57	M10*60-2
65×15 2½×½	73.0×21.3 2.875×0.825		30 1.18	144 5.66	71 2.80	66 2.72	49 1.93	M10*60-2
65×20 2½×¾	73.0×26.9 2.875×1.050		30 1.18	144 5.66	71 2.80	66 2.72	49 1.93	M10*60-2
65×25 2½×1	73.0×33.7 2.875×1.315		38 1.50	133 5.23	72 2.83	67 2.72	47 1.85	M10*60-2
65×32 2½×1¼	73.0×42.4 2.875×1.660		46 1.81	133 5.23	81 3.18	69 2.87	47 1.85	M10*60-2
65×40 2½×1½	73.0×48.3 2.875×1.900		53 2.08	133 5.23	86 3.38	69 2.87	47 1.85	M10*60-2
65×15 2½×½	76.1×21.3 3.000×0.825		30 1.18	137 5.39	71 2.80	68 2.72	49.5 1.95	M10*60-2
65×20 2½×¾	76.1×26.9 3.000×1.050		30 1.18	137 5.39	71 2.80	68 2.72	49.5 1.95	M10*60-2
65×25 2½×1	76.1×33.7 3.000×1.315		38 1.50	136 5.35	72 2.83	69 2.72	49 1.93	M10*60-2
65×32 2½×1¼	76.1×42.4 3.000×1.660		46 1.81	136 5.35	81 3.18	71 2.72	49 1.93	M10*60-2
65×40 2½×1½	76.1×48.3 3.000×1.900		53 2.08	136 5.35	86 3.38	71 2.72	49 1.93	M10*60-2
80×15 3×½	88.9×21.3 3.500×0.825		30 1.18	152 5.98	72.5 2.85	74 3.15	56.5 2.22	M10*60-2

# Mechanical Tee Threaded outlet

## XGQT3S

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:

Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

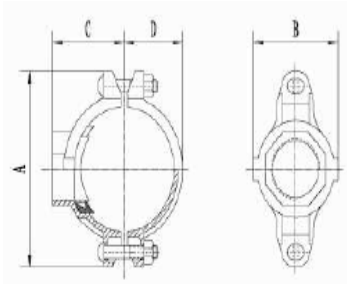
- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				A	B	C	D	
80×20 3×¾	88.9×26.9 3.500×1.050	300 psi 2.07 Mpa	30 1.18	152 5.98	72.5 2.85	74 3.15	56.5 2.22	M10*60-2
80×25 3×1	88.9×33.7 3.500×1.315		38 1.50	150 5.98	73 2.87	75 3.15	56 2.20	M10*60-2
80×32 3×1¼	88.9×42.4 3.500×1.660		46 1.81	150 5.98	82 3.22	77 3.15	56 2.20	M10*60-2
80×40 3×1½	88.9×48.3 3.500×1.900		53 2.08	150 5.90	87 3.42	77 3.15	56 2.20	M10*60-2
80×50 3×2	88.9×60.3 3.500×2.375		61 2.40	150 5.90	100 3.93	81 3.15	56 2.20	M10*60-2
100×25 4×1	108.0×33.7 4.250×1.315		38 1.50	172 6.77	78.5 3.09	87 3.43	64.5 2.54	M12*70-2
100×32 4×1¼	108.0×42.4 4.250×1.660		46 1.81	172 6.77	89 3.50	87 3.43	64.5 2.54	M12*70-2
100×40 4×1½	108.0×48.3 4.250×1.900		53 2.08	172 6.77	89 3.50	87 3.43	64.5 2.54	M12*70-2
100×50 4×2	108.0×60.3 4.250×2.375		61 2.40	172 6.77	106.5 4.19	92 3.62	64.5 2.54	M12*70-2
100×65 4×2½	108.0×76.1 4.250×3.000		81 3.18	172 6.77	106.5 4.19	96 3.78	64.5 2.54	M12*70-2
100×80 4×3	108.0×88.9 4.250×3.500		86 3.38	172 6.77	106.5 4.19	100 3.94	64.5 2.54	M12*70-2
100×25 4×1	114.3×33.7 4.500×1.315		38 1.50	182 7.16	73 2.87	89 3.66	70 2.76	M12*70-2
100×32 4×1¼	114.3×42.4 4.500×1.660		46 1.81	182 7.16	82 3.22	90 3.74	70 2.76	M12*70-2
100×40 4×1½	114.3×48.3 4.500×1.900		53 2.08	182 7.16	87 3.42	90 3.82	70 2.76	M12*70-2
100×50 4×2	114.3×60.3 4.500×2.375		61 2.40	182 7.16	100 3.93	95 3.62	70 2.76	M12*70-2
100×65 4×2½	114.3×73.0 4.500×2.875	81 3.18	182 7.16	118 4.64	94 4.02	70 2.76	M12*70-2	

# Mechanical Tee Threaded outlet

## XGQT3S

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI: Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric: Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

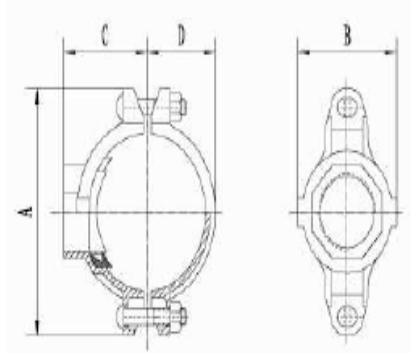
- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				A	B	C	D	
100×65 4×2½	114.3×76.1 4.500×3.000	300 psi 2.07 Mpa	81 3.18	182 7.16	118 4.64	94 4.02	70 2.76	M12*70-2
100×80 4×3	114.3×88.9 4.500×3.500		86 3.38	182 7.16	124 4.88	100 4.02	70 2.76	M12*70-2
125×25 5×1	133.0×33.7 5.250×1.315		38 1.50	208 8.18	74 2.91	100 4.13	79 3.11	M12*75-2
125×32 5×1¼	133.0×42.4 5.250×1.660		46 1.81	208 8.18	83 3.26	101 4.13	79 3.11	M12*75-2
125×40 5×1½	133.0×48.3 5.250×1.900		53 2.08	208 8.18	88 3.46	101 4.13	79 3.11	M12*75-2
125×50 5×2	133.0×60.3 5.250×2.375		61 2.40	208 8.18	102 4.01	105 4.33	79 3.11	M12*75-2
125×65 5×2½	133.0×76.1 5.250×3.000		81 3.18	208 8.18	119 4.68	103 4.53	79 3.11	M12*75-2
125×80 5×3	133.0×88.9 5.250×3.500		86 3.38	208 8.18	134 5.27	110 4.65	79 3.11	M12*75-2
125×25 5×1	139.7×33.7 5.500×1.315		38 1.50	215 8.46	74 2.91	103 4.33	83 3.26	M12*75-2
125×32 5×1¼	139.7×42.4 5.500×1.660		46 1.81	215 8.46	83 3.26	104 4.41	83 3.26	M12*75-2
125×40 5×1½	139.7×48.3 5.500×1.900		53 2.08	215 8.46	88 3.46	104 4.41	83 3.26	M12*75-2
125×50 5×2	139.7×60.3 5.500×2.375		61 2.40	215 8.46	102 4.01	108 4.53	83 3.26	M12*75-2
125×65 5×2½	139.7×76.1 5.500×3.000		81 3.18	215 8.46	119 4.68	108 4.53	83 3.26	M12*75-2
125×80 5×3	139.7×88.9 5.500×3.500		86 3.38	215 8.46	134 5.27	113 4.72	83 3.26	M12*75-2
125×25 5×1	141.3×33.7 5.563×1.315		38 1.50	215 8.46	74 2.91	103 4.33	84 3.31	M12*75-2
125×32 5×1¼	141.3×42.4 5.563×1.660		46 1.81	215 8.46	83 3.26	104 4.41	84 3.31	M12*75-2

# Mechanical Tee Threaded outlet

## XGQT3S

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

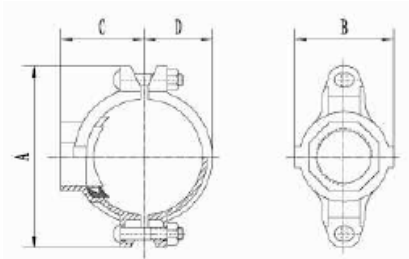
- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
				A	B	C	D	
125x40 5x1½	133.0x48.3 5.250x1.900	300 psi 2.07 Mpa	53 2.08	208 8.18	88 3.46	101 4.13	79 3.11	M12*75-2
125x50 5x2	133.0x60.3 5.250x2.375		61 2.40	208 8.18	102 4.01	105 4.33	79 3.11	M12*75-2
125x65 5x2½	133.0x76.1 5.250x3.000		81 3.18	208 8.18	119 4.68	103 4.53	79 3.11	M12*75-2
125x80 5x3	133.0x88.9 5.250x3.500		86 3.38	208 8.18	134 5.27	110 4.65	79 3.11	M12*75-2
125x25 5x1	139.7x33.7 5.500x1.315		38 1.50	215 8.46	74 2.91	103 4.33	83 3.26	M12*75-2
125x32 5x1¼	139.7x42.4 5.500x1.660		46 1.81	215 8.46	83 3.26	104 4.41	83 3.26	M12*75-2
125x40 5x1½	139.7x48.3 5.500x1.900		53 2.08	215 8.46	88 3.46	104 4.41	83 3.26	M12*75-2
125x50 5x2	139.7x60.3 5.500x2.375		61 2.40	215 8.46	102 4.01	108 4.53	83 3.26	M12*75-2
125x65 5x2½	139.7x76.1 5.500x3.000		81 3.18	215 8.46	119 4.68	108 4.53	83 3.26	M12*75-2
125x80 5x3	139.7x88.9 5.500x3.500		86 3.38	215 8.46	134 5.27	113 4.72	83 3.26	M12*75-2
125x25 5x1	141.3x33.7 5.563x1.315		38 1.50	215 8.46	74 2.91	103 4.33	84 3.31	M12*75-2
125x32 5x1¼	141.3x42.4 5.563x1.660		46 1.81	215 8.46	83 3.26	104 4.41	84 3.31	M12*75-2
125x40 5x1½	141.3x48.3 5.563x1.900		51 2.00	215 8.46	88 3.46	104 4.41	84 3.31	M12*75-2
125x50 5x2	141.3x60.3 5.563x2.375		61 2.40	215 8.46	102 4.01	108 4.53	83 3.26	M12*75-2
125x65 5x2½	141.3x76.1 5.563x3.000		81 3.18	215 8.46	119 4.64	108 4.53	83 3.26	M12*75-2
125x80 5x3	141.3x88.9 5.563x3.500		86 3.38	215 8.46	134 5.27	114 4.72	83 3.26	M12*75-2

# Mechanical Tee Threaded outlet

## XGQT3S

The JINTON XGQT3 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet, eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure rated to 300 psi (20 Bar).



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in				Bolt Size
150×25 6×1	168.3×33.7 6.625×1.315	300 psi 2.07 Mpa	38 1.50	244 9.60	74 2.91	119 5.12	97 3.81	M14*75-2
150×32 6×1¼	168.3×42.4 6.625×1.660		46 1.81	244 9.60	83 3.26	120 5.12	98.5 3.88	M14*75-2
150×40 6×1½	168.3×48.3 6.625×1.900		53 2.08	244 9.60	88 3.46	120 4.80	98.5 3.88	M14*75-2
150×50 6×2	168.3×60.3 6.625×2.375		61 2.40	244 9.60	102 4.01	122 5.20	97 3.81	M14*75-2
150×65 6×2½	168.3×73.0 6.625×2.875		81 3.18	244 9.60	119 4.68	123 5.20	97 3.81	M14*75-2
150×65 6×2½	168.3×76.1 6.625×3.000		81 3.18	244 9.60	119 4.68	123 5.20	97 3.81	M14*75-2
150×80 6×3	168.3×88.9 6.625×3.500		86 3.38	244 9.60	134 5.27	128 5.51	97 3.81	M14*75-2
150×100 6×4	168.3×114.3 6.625×4.500		114 4.48	244 9.60	158 6.22	134 5.51	97 3.81	M14*75-2
200×25 8×1	219.1×33.7 8.625×1.315		38 1.50	308 12.12	74 2.91	145 5.91	124 4.88	M16*95-2
200×32 8×1¼	219.1×42.4 8.625×1.660		46 1.81	308 12.12	83 3.26	146 5.91	124 4.88	M16*95-2
200×40 8×1½	219.1×48.3 8.625×1.900		53 2.08	308 12.12	88 3.46	146 5.91	124 4.88	M16*95-2
200×50 8×2	219.1×60.3 8.625×2.375		61 2.40	308 12.12	102 4.01	149 6.30	124 4.88	M16*95-2
200×65 8×2½	219.1×76.1 8.625×3.000		81 3.18	308 12.12	119 4.68	149 6.24	124 4.88	M16*95-2
200×80 8×3	219.1×88.9 8.625×3.500		86 3.38	308 12.12	134 5.27	154 6.30	124 4.88	M16*95-2
200×100 8×4	219.1×114.3 8.625×4.500	114 4.48	308 12.12	158 6.22	159 6.30	124 4.88	M16*95-2	

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

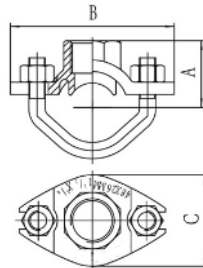
### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)



# U-Bolt Mechinal Tee

XGQT3US



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

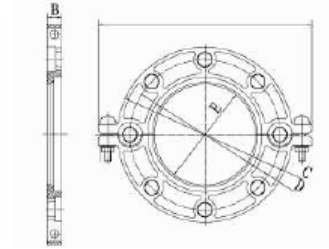
### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Hole Dia. Mm/in +1.6,0/+0.063,0	Dimensions mm/in			Bolt Size
32×15 1¼×½	42.4×21.3 1.660×0.825	300 psi 2.07 Mpa	30 1.18	43 1.693	90 3.543	56 2.205	M10*28.5
32×20 1¼×¾	42.4×26.9 1.660×1.050		30 1.18	45 1.772	90 3.543	56 2.205	M10*28.5
32×25 1¼×1	42.4×33.7 1.660×1.315		30 1.18	50 1.969	90 3.543	56 2.205	M10*28.5
40×15 1½×½	48.3×21.3 1.900×0.825		30 1.18	43 1.693	93 3.661	59 2.323	M10*28.5
40×20 1½×¾	48.3×26.9 1.900×1.050		30 1.18	54 2.126	93 3.661	59 2.323	M10*28.5
40×25 1½×1	48.3×33.7 1.900×1.315		30 1.18	58 2.283	93 3.661	59 2.323	M10*28.5
50×15 2×½	60.3×21.3 2.375×0.825		30 1.18	54 2.126	96 3.780	59 2.323	M10*30
50×20 2×¾	60.3×26.9 2.375×1.050		30 1.18	56 2.205	96 3.780	59 2.323	M10*30
50×25 2×1	60.3×33.7 2.375×1.315		30 1.18	66 2.598	96 3.780	59 2.323	M10*30
65×15 2½×½	73.0×21.3 2.875×0.825		30 1.18	60 2.362	110 4.331	59 2.323	M10*30
65×20 2½×¾	73.0×26.9 2.875×1.050		30 1.18	63 2.480	110 4.331	59 2.323	M10*30
65×25 2½×1	73.0×33.7 2.875×1.315		30 1.18	70 2.63	110 4.331	59 2.323	M10*30
65×15 2½×½	76.1×21.3 3.000×0.825		30 1.18	61 2.51	110 4.331	59 2.323	M10*30
65×20 2½×¾	76.1×26.9 3.000×1.050		30 1.18	67 2.59	110 4.331	59 2.323	M10*30
65×25 2½×1	76.1×33.7 3.000×1.315		30 1.18	74 2.67	110 4.331	59 2.323	M10*30

# Grooved Flange ANSI Class 150

XGQT09



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

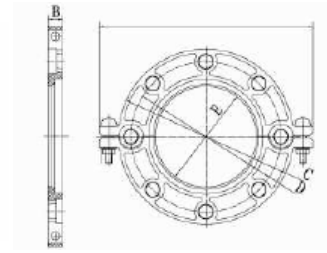
### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in					Bolt/Size	
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-Size mm	
50 2	60.3 2.375	300 psi 2.07 Mpa	206 8.11	19 0.74	152 5.98	121 4.76	57.5 2.26	M10*50-2	5/8-4
65 2½	73 2.875		230 9.05	19 0.74	178 7.00	140 5.51	69.0 2.71	M10*50-2	5/8-4
80 3	88.9 3.5		244 9.60	19 0.74	191 7.52	152 5.98	85.0 3.34	M10*50-2	5/8-4
100 4	114.3 4.5		280 11.02	19 0.74	229 9.00	191 7.52	110.5 4.35	M12*55-2	5/8-8
125 5	141.3 5.563		322 12.67	22 0.86	250 9.84	216 8.50	137.0 5.39	M12*65-2	3/4-8
150 6	168.3 6.625		346 13.62	22 0.86	285 11.22	241.5 9.50	164.0 6.45	M12*65-2	3/4-8
200 8	219.1 8.625		410 16.14	24 0.94	340.0 13.38	298.5 11.75	214.0 8.42	70-2*3/8	3/4-8
250 10	273 10.75		478.0 18.81	25 0.98	405.6 15.97	362.0 14.25	268.0 10.55	70-2*3/8	7/8-12

# Grooved Flange PN 16

XGQT09



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

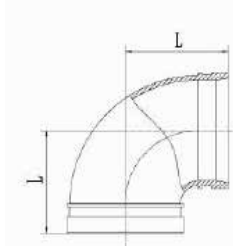
### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in					Bolt/Size	
			A mm/in	B mm/in	C mm/in	D mm/in	E mm/in	No.-Size mm	
50 2	60.3 2.375	232 psi 1.6 Mpa	215 8.46	24 0.95	160 6.29	125 4.92	57.5 2.26	M10*50-2	4-M16
65 2½	73 2.875		240 9.44	24 0.95	176 6.92	145 5.71	69.8 2.74	M10*50-2	4-M16
65 2½	76.1 3		240 9.44	24 0.95	176 6.92	145 5.71	72.7 2.86	M10*50-2	4-M16
80 3	88.9 3.5		250 9.84	24 0.95	184 7.24	160 6.30	85.5 3.37	M10*50-2	8-M16
100 4	108 4.25		266 10.47	24 0.95	218 8.58	180 7.09	104.5 4.11	M12*55-2	8-M16
100 4	114.3 4.5		266 10.47	24 0.95	218 8.58	180 7.09	110.5 4.35	M12*55-2	8-M16
125 5	133 5.25		300 11.81	24 0.95	247 9.72	210 8.27	129.2 5.08	M12*65-2	8-M16
125 5	139.7 5.5		300 11.81	24 0.95	247 9.72	210 8.27	135.5 5.33	M12*65-2	8-M16
125 5	141.3 5.563		300 11.81	24 0.95	247 9.72	210 8.27	137.4 5.41	M12*65-2	8-M16
150 6	159 6.25		336 13.22	24 0.95	282 11.10	240 9.45	154.5 6.08	M12*65-2	8-M20
150 6	165.1 6.5		336 13.22	24 0.95	282 11.10	240 9.45	163.5 6.43	M12*65-2	8-M20
150 6	168.3 6.625		336 13.22	24 0.95	282 11.10	240 9.45	163.5 6.43	M12*65-2	8-M20
200 8	219.1 8.625		395 15.55	27 1.06	335 13.18	295 11.61	214.5 8.44	70-2*3/8	12-M20
250 10	273 10.75		470 18.50	27 1.06	404 15.90	355 13.97	267 10.51	70-2*3/8	12-M24

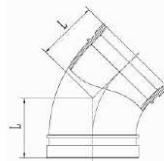
# 90° Elbow

XGQT01



# 45° Elbow

XGQT02



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
25 1	33.7 1.327	300 psi 2.07 Mpa	57 2.24
32 1¼	42.4 1.669		60 2.36
40 1½	48.3 1.9		60 2.36
50 2	60.3 2.375		70 2.75
65 2½	73 2.875		76 3.00
65 2½	76.1 3		76 3.00
80 3	88.9 3.5		86 3.38
100 4	108 4.25		101 3.98
100 4	114.3 4.5		101 3.98
125 5	133 5.25		121 4.76
125 5	139.7 5.5		121 4.76
125 5	141.3 5.563		121 4.76
150 6	159 6.25		140 5.51
150 6	165.1 6.5		140 5.51
150 6	168.3 6.625		140 5.51
200 8	219.1 8.625		175 6.88
250 10	273 10.75		118.5 7.42
300 12	323.9 12.750		222.5 8.76

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
25 1	33.7 1.327	300 psi 2.07 Mpa	45 1.77
32 1¼	42.4 1.669		45 1.77
40 1½	48.3 1.9		45 1.77
50 2	60.3 2.375		51 2.00
65 2½	73 2.875		57 2.24
65 2½	76.1 3		57 2.24
80 3	88.9 3.5		64 2.51
100 4	108 4.25		76 3.00
100 4	114.3 4.5		76 3.00
125 5	133 5.25		82.5 3.24
125 5	139.7 5.5		82.5 3.24
125 5	141.3 5.563		82.5 3.24
150 6	159 6.25		89 3.50
150 6	165.1 6.5		89 3.50
150 6	168.3 6.625		89 3.50
200 8	219.1 8.625		108 4.25
250 10	273 10.75		120.5 4.74
300 12	323.9 12.750		133 5.23

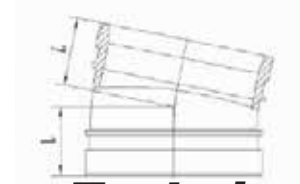
# 22.5° Elbow

XGQT021



# 11.25° Elbow

XGQT022



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in	Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
32 1¼	42.4 1.669	300 psi 2.07 Mpa	45 1.77	50 2	60.3 2.375	300 psi 2.07 Mpa	35 1.37
40 1½	48.3 1.9		45 1.77	65 2½	76.1 3		38 1.49
50 2	60.3 2.375		48 1.88	80 3	88.9 3.5		38 1.49
65 2½	73 2.875		51 2.00	100 4	108 4.25		44 1.73
65 2½	76.1 3		51 2.00	100 4	114.3 4.5		44 1.73
80 3	88.9 3.5		57 2.24	125 5	133 5.25		51 2.00
100 4	108 4.25		73 2.87	125 5	139.7 5.5		51 2.00
100 4	114.3 4.5		73 2.87	150 6	159 6.25		51 2.00
125 5	133 5.25		73 2.87	150 6	165.1 6.5		51 2.00
125 5	139.7 5.5		73 2.87	150 6	168.3 6.625		51 2.00
150 6	159 6.25		89 3.50	200 8	219.1 8.625		51 2.00
150 6	165.1 6.5		89 3.50				
150 6	168.3 6.625		89 3.50				
200 8	219.1 8.625		98 3.85				

# Tee

## XGQT03

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
25 1	33.7 1.327	300 psi 2.07 Mpa	57 2.24
32 1¼	42.4 1.669		60 2.36
40 1½	48.3 1.9		60 2.36
50 2	60.3 2.375		70 2.75
65 2½	73 2.875		76 3.00
65 2½	76.1 3		76 3.00
80 3	88.9 3.5		86 3.38
100 4	108 4.25		101 3.98
100 4	114.3 4.5		101 3.98
125 5	133 5.25		121 4.76
125 5	139.7 5.5		121 4.76
125 5	141.3 5.563		121 4.76
150 6	159 6.25		140 5.51
150 6	165.1 6.5		140 5.51
150 6	168.3 6.625		140 5.51
200 8	219.1 8.625		175 6.88
250 10	273 10.75	215 8.46	
300 12	323.9 12.750	245 9.64	



### Technical Data

#### Approvals

FM 1920  
UL 213

#### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

#### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

#### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

#### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

# Grooved Reducing Tee

XGQT04



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
50×25 2×1	33.7×60.3 1.315×2.375	300 psi 2.07 Mpa	70 2.75	70 2.75
50×32 2×1¼	42.4×60.3 1.660×2.375		70 2.75	70 2.75
50×40 2×1½	48.3×60.3 1.900×2.375		70 2.75	70 2.75
65×32 2½×1¼	42.4×73.0 1.660×2.875		76 3.00	76 3.00
65×40 2½×1½	48.3×73.0 1.900×2.875		76 3.00	76 3.00
65×50 2½×2	60.3×73.0 2.375×2.875		76 3.00	76 3.00
65×32 2½×1¼	42.4×76.1 1.660×3.000		76 3.00	76 3.00
65×40 2½×1½	48.3×76.1 1.900×3.000		76 3.00	76 3.00
65×50 2½×2	60.3×76.1 2.375×3.000		76 3.00	76 3.00
80×40 3×1½	48.3×88.9 1.900×3.500		86 3.38	86 3.38
80×50 3×2	60.3×88.9 2.375×3.500		86 3.38	86 3.38
80×65 3×2½	76.1×88.9 3.000×3.500		86 3.38	86 3.38
100×65 4×2½	76.1×108.0 3.000×4.250		101 3.98	101 3.98
100×80 4×3	88.9×108.0 3.500×4.250		101 3.98	101 3.98
100×50 4×2	60.3×114.3 2.375×4.500		101 3.98	101 3.98
100×65 4×2½	76.1×114.3 3.000×4.500		101 3.98	101 3.98
100×80 4×3	88.9×114.3 3.500×4.500		101 3.98	101 3.98
125×50 5×2	60.3×133.0 2.375×5.250		121 4.76	121 4.76
125×65 5×2½	76.1×133.0 3.000×5.250		121 4.76	121 4.76
125×100 5×4	108.0×133.0 4.250×5.250		121 4.76	121 4.76



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

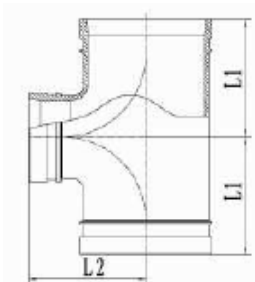
- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Grooved Reducing Tee

XGQT04



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
150×65 6×2½	159.0×76.1 6.250×3.000	300 psi 2.07 Mpa	140 5.50	140 5.50
150×80 6×3	159.0×88.9 6.250×3.500		140 5.50	140 5.50
150×100 6×4	159.0×108.0 6.250×4.250		140 5.50	140 5.50
150×100 6×4	159.0×114.3 6.250×4.500		140 5.50	140 5.50
150×50 6×2	165.1×60.3 6.500×2.375		140 5.50	140 5.50
150×65 6×2½	165.1×76.1 6.500×3.000		140 5.50	140 5.50
150×80 6×3	165.1×88.9 6.500×3.500		140 5.50	140 5.50
150×100 6×4	165.1×114.3 6.500×4.500		140 5.50	140 5.50
150×125 6×5	165.1×139.7 6.500×5.500		140 5.50	140 5.50
150×50 6×2	168.3×60.3 6.625×2.375		140 5.50	140 5.50
150×65 6×2½	168.3×76.1 6.625×3.000		140 5.50	140 5.50
150×80 6×3	168.3×88.9 6.625×3.500		140 5.50	140 5.50
200×65 8×2½	219.1×76.1 8.625×3.000		175 6.88	175 6.88
200×80 8×3	219.1×88.9 8.625×3.500		175 6.88	175 6.88
200×100 8×4	219.1×108.0 8.625×4.250		175 6.88	175 6.88
200×100 8×4	219.1×114.3 8.625×4.500		175 6.88	175 6.88
200×125 8×5	219.1×139.7 8.625×5.500		175 6.88	175 6.88
200×150 8×6	219.1×159.0 8.625×6.250		175 6.88	175 6.88
200×150 8×6	219.1×165.1 8.625×6.500		175 6.88	175 6.88
200×150 8×6	219.1×168.3 8.625×6.625		175 6.88	175 6.88
250×100 10×4	273.0×114.3 10.750×4.500	215 8.46	215 8.46	
250×125 10×5	273.0×139.7 10.750×5.500	215 8.46	215 8.46	
250×150 10×6	273.0×165.1 10.750×6.500	215 8.46	215 8.46	



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)



# Threaded Reducing Tee

XGQT04S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
40×25 1½×1	48.3×33.7 1.900×1.315	300 psi 2.07 Mpa	60 2.36	60 2.36
40×32 1½×1¼	48.3×42.4 1.900×1.660		60 2.36	60 2.36
50×25 2×1	60.3×33.7 2.375×1.315		70 2.75	70 2.75
50×32 2×1¼	60.3×42.4 2.375×1.660		70 2.75	70 2.75
50×40 2×1½	60.3×48.3 2.375×1.900		70 2.75	70 2.75
65×25 2½×1	73.0×33.7 2.875×1.315		76 3.00	76 3.00
65×32 2½×1¼	73.0×42.4 2.875×1.660		76 3.00	76 3.00
65×40 2½×1½	73.0×48.3 2.875×1.900		76 3.00	76 3.00
65×50 2½×2	73.0×60.3 2.875×2.375		76 3.00	76 3.00
65×25 2½×1	76.1×33.7 3.000×1.315		76 3.00	76 3.00
65×32 2½×1¼	76.1×42.4 3.000×1.660		76 3.00	76 3.00
65×40 2½×1½	76.1×48.3 3.000×1.900		76 3.00	76 3.00
65×50 2½×2	76.1×60.3 3.000×2.375		76 3.00	76 3.00
80×25 3×1	88.9×33.7 3.500×1.315		86 3.38	86 3.38
80×32 3×1¼	88.9×42.4 3.500×1.660		86 3.38	86 3.38
80×40 3×1½	88.9×48.3 3.500×1.900		86 3.38	86 3.38
80×50 3×2	88.9×60.3 3.500×2.375		86 3.38	86 3.38
80×65 3×2½	88.9×76.1 3.500×3.000		86 3.38	86 3.38
100×65 4×2½	108.0×76.1 4.250×3.000		101 3.98	101 3.98
100×80 4×3	108.0×88.9 4.250×3.500		101 3.98	101 3.98

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

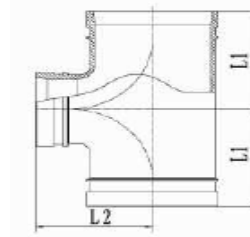
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

# Threaded Reducing Tee

XGQT04S



Nominal Size mm/in	Pipe OD mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
100×25 4×1	114.3×33.7 4.500×1.315	300 psi 2.07 Mpa	101 3.98	101 3.98
100×32 4×1¼	114.3×42.4 4.500×1.660		101 3.98	101 3.98
100×40 4×1½	114.3×48.3 4.500×1.900		101 3.98	101 3.98
100×50 4×2	114.3×60.3 4.500×2.375		101 3.98	101 3.98
100×65 4×2½	114.3×76.1 4.500×3.000		101 3.98	101 3.98
100×80 4×3	114.3×88.9 4.500×3.500		101 3.98	101 3.98
125×25 5×1	139.7×33.7 5.500×1.315		121 4.76	121 4.76
125×32 5×1¼	139.7×42.4 5.500×1.660		121 4.76	121 4.76
125×40 5×1½	139.7×48.3 5.500×1.900		121 4.76	121 4.76
125×50 5×2	139.7×60.3 5.500×2.375		121 4.76	121 4.76
125×65 5×2½	139.7×76.1 5.500×3.000		121 4.76	121 4.76
125×80 5×3	139.7×88.9 5.500×3.500		121 4.76	121 4.76
125×25 5×1	141.3×33.7 5.563×1.315		121 4.76	121 4.76
125×32 5×1¼	141.3×42.4 5.563×1.660		121 4.76	121 4.76
125×40 5×1½	141.3×48.3 5.563×1.900		121 4.76	121 4.76
125×50 5×2	141.3×60.3 5.563×2.375		121 4.76	121 4.76
125×65 5×2½	141.3×73.0 5.563×2.875		121 4.76	121 4.76
125×65 5×2½	141.3×76.1 5.563×3.000		121 4.76	121 4.76
150×65 6×2½	159.0×76.1 6.250×3.000		140 5.50	140 5.50
150×80 6×3	159.0×88.9 6.250×3.500		140 5.50	140 5.50

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

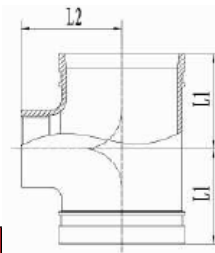
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Threaded Reducing Tee

XGQT04S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
150×25 6×1	165.1×33.7 6.500×1.315	300 psi 2.07 Mpa	140 5.50	140 5.50
150×32 6×1¼	165.1×42.4 6.500×1.660		140 5.50	140 5.50
150×40 6×1½	165.1×48.3 6.500×1.900		140 5.50	140 5.50
150×50 6×2	165.1×60.3 6.500×2.375		140 5.50	140 5.50
150×65 6×2½	165.1×76.1 6.500×3.000		140 5.50	140 5.50
150×80 6×3	165.1×88.9 6.500×3.500		140 5.50	140 5.50
150×100 6×4	165.1×114.3 6.500×4.500		140 5.50	140 5.50
150×25 6×1	168.3×33.7 6.625×1.315		140 5.50	140 5.50
150×32 6×1¼	168.3×42.4 6.625×1.660		140 5.50	140 5.50
150×40 6×1½	168.3×48.3 6.625×1.900		140 5.50	140 5.50
150×50 6×2	168.3×60.3 6.625×2.375		140 5.50	140 5.50
200×50 8×2	219.1×60.3 8.625×2.375		175 6.88	175 6.88
200×65 8×2½	219.1×76.1 8.625×3.000		175 6.88	175 6.88
200×80 8×3	219.1×88.9 8.625×3.500		175 6.88	175 6.88

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:

Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

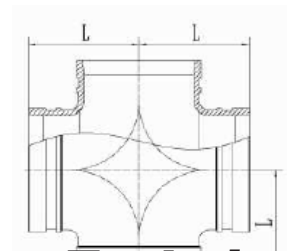
- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Cross

## XGQT05



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
32 1¼	42.4 1.669	300 psi 2.07 Mpa	60 2.36
40 1½	48.3 1.9		60 2.36
50 2	60.3 2.375		70 2.75
65 2½	73.0 2.875		76 3.00
65 2½	76.1 3		76 3.00
80 3	88.9 3.5		86 3.38
100 4	108 4.25		101 3.98
100 4	114.3 4.5		101 3.98
125 5	133.0 5.25		121 4.76
125 5	139.7 5.5		121 4.76
125 5	141.3 5.563		121 4.76
150 6	159.0 6.25		140 5.51
150 6	165.1 6.5		140 5.51
150 6	168.3 6.625		140 5.51
200 8	219.1 8.625		175 6.88
250 10	273.0 10.75		215 8.46
300 12	323.9 12.750	245 9.64	



### Technical Data

#### Approvals

FM 1920  
UL 213

#### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

#### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

#### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

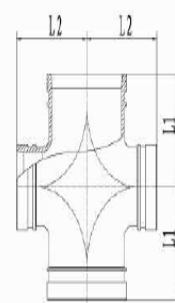
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

#### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Grooved Reducing Cross

XGQT051



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
50×100 2×4	60.3×114.3 2.375×4.500	300 psi 2.07 Mpa	101 3.98	101 3.98
65×100 ½2×4	76.1×114.3 3.000×4.500		101 3.98	101 3.98
80×100 3×4	88.9×114.3 3.500×5.563		101 3.98	101 3.98
100×125 4×5	114.3×139.7 4.500×5.500		121 4.76	121 4.76
100×150 4×6	114.3×165.1 4.500×6.500		140 5.50	140 5.50
50×150 2×6	60.3×168.3 2.375×6.625		140 5.50	140 5.50
65×150 ½2×6	76.1×168.3 3.000×6.625		140 5.50	140 5.50
80×150 3×6	88.9×168.3 3.500×6.625		140 5.50	140 5.50
100×150 4×6	114.3×168.3 4.500×6.625		140 5.50	140 5.50

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536,  
Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

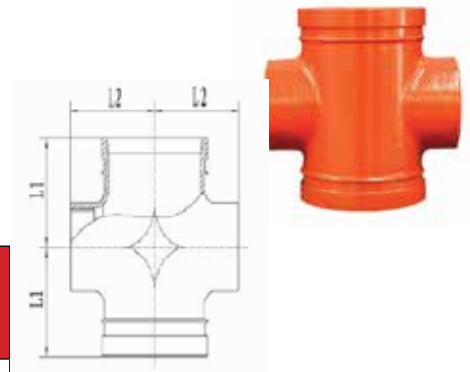
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Threaded Reducing Cross

XGQT05S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L1 mm/in	Dimensions L2 mm/in
100×25 4×1	114.3×33.7 4.500×1.315	300 psi 2.07 Mpa	101 3.98	101 3.98
100×32 4×1¼	114.3×42.4 4.500×1.660		101 3.98	101 3.98
100×40 4×1½	114.3×48.3 4.500×1.900		101 3.98	101 3.98
100×50 4×2	114.3×60.3 4.500×2.375		101 3.98	101 3.98
100×65 4×2½	114.3×76.1 4.500×3.000		101 3.98	101 3.98
100×80 4×3	114.3×88.9 4.500×3.500		101 3.98	101 3.98
125×32 5×1¼	139.7×42.4 5.500×1.660		121 4.76	121 4.76
125×40 5×1½	139.7×48.3 5.500×1.900		121 4.76	121 4.76
125×50 5×2	139.7×60.3 5.500×2.375		121 4.76	121 4.76
125×65 5×2½	139.7×76.1 5.500×3.000		121 4.76	121 4.76
125×80 5×3	139.7×88.9 5.500×3.500		121 4.76	121 4.76
150×25 6×1	165.1×33.7 6.500×1.315		140 5.50	140 5.50
150×32 6×1¼	165.1×42.4 6.500×1.660		140 5.50	140 5.50
150×40 6×1½	165.1×48.3 6.500×1.900		140 5.50	140 5.50
150×50 6×2	165.1×60.3 6.500×2.375		140 5.50	140 5.50
150×65 6×2½	165.1×76.1 6.500×3.000		140 5.50	140 5.50
150×80 6×3	165.1×88.9 6.500×3.500	140 5.50	140 5.50	

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

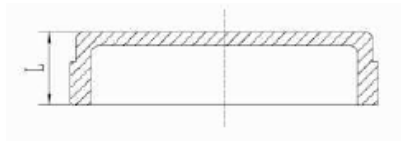
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Cap

XGQT06



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
25 1	33.7 1.327	300 psi 2.07 Mpa	25 0.98
32 1¼	42.4 1.669		25 0.98
40 1½	48.3 1.9		25 0.98
50 2	60.3 2.375		25 0.98
65 2½	73 2.875		25 0.98
65 2½	76.1 3		25 0.98
80 3	88.9 3.5		26 10.2
100 4	108 4.25		26 10.2
100 4	114.3 4.5		26 10.2
125 5	133 5.25		26 10.2
125 5	139.7 5.5		26 10.2
125 5	141.3 5.563		26 10.2
150 6	159 6.25		26 10.2
150 6	165.1 6.5		26 10.2
150 6	168.3 6.625		26 10.2
200 8	219.1 8.625		30 1.18
250 10	273 10.75		32 1.25
300 12	323.9 12.750		32 1.25

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

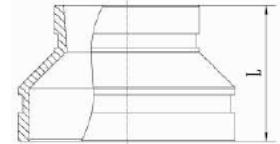
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Grooved Concentric Reducer

XGQT07



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
32×25 1¼×1	42.4×33.7 1.660×1.315	300 psi 2.07 Mpa	64 2.51
40×25 1½×1	48.3×33.7 1.900×1.315		64 2.51
40×32 1½×1¼	48.3×42.4 1.900×1.660		64 2.51
50×25 2×1	60.3×33.7 2.375×1.315		64 2.51
50×32 2×1¼	60.3×42.4 2.375×1.660		64 2.51
50×40 2×1½	60.3×48.3 2.375×1.900		64 2.51
65×25 2½×1	73.0×33.7 2.875×1.315		64 2.51
65×32 2½×1¼	73.0×42.4 2.875×1.660		64 2.51
65×40 2½×1½	73.0×48.3 2.875×1.900		64 2.51
65×50 2½×2	73.0×60.3 2.875×2.375		64 2.51
65×32 2½×1¼	76.1×42.4 3.000×1.660		64 2.51
65×40 2½×1½	76.1×48.3 3.000×1.900		64 2.51
65×50 2½×2	76.1×60.3 3.000×2.375		64 2.51
80×32 3×1¼	88.9×42.4 3.500×1.660		64 2.51
80×40 3×1½	88.9×48.3 3.500×1.900		64 2.51
80×50 3×2	88.9×60.3 3.500×2.375		64 2.51
80×65 3×2½	88.9×76.1 3.500×3.000		64 2.51
100×65 4×2½	108.0×76.1 4.250×3.000		76 2.99

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

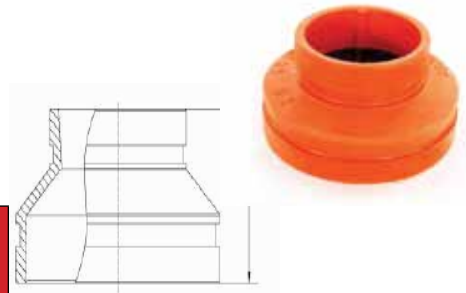
### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)



# Grooved Concentric Reducer

XGQT07



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
100×80 4×3	114.3×88.9 4.500×3.500	300 psi 2.07 Mpa	76 2.99
125×50 5×2	139.7×60.3 5.500×2.375		89 3.50
125×65 5×2½	139.7×76.1 5.500×3.000		89 3.50
125×80 5×3	139.7×88.9 5.500×3.500		89 3.50
125×100 5×4	139.7×114.3 5.500×4.500		89 3.50
125×50 5×2	141.3×60.3 5.563×2.375		89 3.50
125×65 5×2½	141.3×76.1 5.563×3.000		89 3.50
125×80 5×3	141.3×88.9 5.563×3.500		89 3.50
125×100 5×4	141.3×114.3 5.563×4.500		89 3.50
150×50 6×2	159.0×60.3 6.250×2.375		102 4.01
150×65 6×2½	159.0×76.1 6.250×3.000		102 4.01
150×80 6×3	159.0×88.9 6.250×3.500		102 4.01
150×100 6×4	159.0×108.0 6.250×4.250		102 4.01
150×100 6×4	159.0×114.3 6.250×4.500		102 4.01
150×125 6×5	159.0×133.0 6.250×5.250		102 4.01
150×125 6×5	159.0×139.7 6.250×5.500		102 4.01
150×50 6×2	165.1×60.3 6.500×2.375	102 4.01	

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

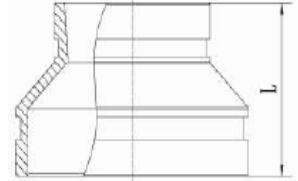
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade “E” EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Grooved Concentric Reducer

XGQT07



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
150×65 6×2½	159.0×76.1 6.250×3.000	300 psi 2.07 Mpa	102 4.01
150×80 6×3	159.0×88.9 6.250×3.500		102 4.01
150×100 6×4	159.0×108.0 6.250×4.250		102 4.01
150×100 6×4	159.0×114.3 6.250×4.500		102 4.01
150×125 6×5	159.0×133.0 6.250×5.250		102 4.01
150×125 6×5	159.0×139.7 6.250×5.500		102 4.01
150×50 6×2	165.1×60.3 6.500×2.375		102 4.01
150×65 6×2½	165.1×76.1 6.500×3.000		102 4.01
150×80 6×3	165.1×88.9 6.500×3.500		102 4.01
150×100 6×4	165.1×114.3 6.500×4.500		102 4.01
150×125 6×5	165.1×139.7 6.500×5.500		102 4.01
150×50 6×2	168.3×60.3 6.625×2.375		102 4.01
150×65 6×2½	168.3×76.1 6.625×3.000		102 4.01
150×80 6×3	168.3×88.9 6.625×3.500		102 4.01
150×100 6×4	168.3×114.3 6.625×4.500		102 4.01
150×80 6×5	168.3×139.7 6.625×5.500		102 4.01
200×50 8×2	219.1×60.3 8.625×2.375		127 5
200×65 8×2½	219.1×76.1 8.625×3.000		127 5
200×80 8×3	219.1×88.9 8.625×3.500		127 5
200×100 8×4	219.1×108.0 8.625×4.250		127 5
200×100 8×4	219.1×114.3 8.625×4.500		127 5
200×125 8×5	219.1×139.7 8.625×5.500	127 5	
200×150 8×6	219.1×159.0 8.625×6.250	127 5	
200×150 8×6	219.1×165.1 8.625×6.500	127 5	
200×150 8×6	219.1×168.3 8.625×6.625	127 5	

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

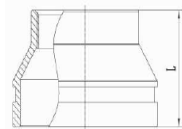
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

# Threaded Concentric Reducer

XGQT07S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
32×25 1¼×1	42.4×33.7 1.660×1.315	300 psi 2.07 Mpa	64 2.51
40×32 1½×1¼	48.3×42.4 1.900×1.660		64 2.51
50×25 2×1	60.3×33.7 2.375×1.315		64 2.51
50×32 2×1¼	60.3×42.4 2.375×1.660		64 2.51
50×40 2×1½	60.3×48.3 2.375×1.900		64 2.51
65×25 2½×1	73.0×33.7 2.875×1.315		64 2.51
65×32 2½×1¼	73.0×42.4 2.875×1.660		64 2.51
65×40 2½×1½	73.0×48.3 2.875×1.900		64 2.51
65×50 2½×2	73.0×60.3 2.875×2.375		64 2.51
65×25 2½×1	76.1×33.7 3.000×1.315		64 2.51
65×32 2½×1¼	76.1×42.4 3.000×1.660		64 2.51
65×40 2½×1½	76.1×48.3 3.000×1.900		64 2.51
65×50 2½×2	76.1×60.3 3.000×2.375		64 2.51
80×25 3×1	88.9×33.7 3.500×1.315		64 2.51
80×32 3×1¼	88.9×42.4 3.500×1.660		64 2.51
80×40 3×1½	88.9×48.3 3.500×1.900		64 2.51
80×50 3×2	88.9×60.3 3.500×2.375		64 2.51
80×65 3×2½	88.9×76.1 3.500×3.000		64 2.51

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

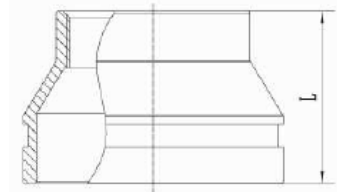
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Threaded Concentric Reducer

XGQT07S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
100×25 4×1	108.0×33.7 4.250×1.315	300 psi 2.07 Mpa	76 2.99
100×32 4×1¼	108.0×42.4 4.250×1.660		76 2.99
100×40 4×1½	108.0×48.3 4.250×1.900		76 2.99
100×50 4×2	108.0×60.3 4.250×2.375		76 2.99
100×65 4×2½	108.0×76.1 4.250×3.000		76 2.99
100×80 4×3	108.0×88.9 4.250×3.500		76 2.99
100×25 4×1	114.3×33.7 4.500×1.315		76 2.99
100×32 4×1¼	114.3×42.4 4.500×1.660		76 2.99
100×40 4×1½	114.3×48.3 4.500×1.900		76 2.99
100×50 4×2	114.3×60.3 4.500×2.375		76 2.99
100×65 4×2½	114.3×76.1 4.500×3.000		76 2.99
100×80 4×3	114.3×88.9 4.500×3.500		76 2.99
125×25 5×1	133.0×33.7 5.250×1.315		89 3.50
125×32 5×1¼	133.0×42.4 5.250×1.660		89 3.50
125×40 5×1½	133.0×48.3 5.250×1.900		89 3.50
125×50 5×2	133.0×60.3 5.250×2.375		89 3.50
125×25 5×1	139.7×33.7 5.500×1.315		89 3.50
125×32 5×1¼	139.7×42.4 5.500×1.660		89 3.50

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

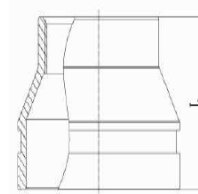
### Gaskets

- Grade "E" EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Threaded Concentric Reducer

XGQT07S

Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
125×40 5×1½	139.7×48.3 5.500×1.900	300 psi 2.07 Mpa	89 3.50
125×50 5×2	139.7×60.3 5.500×2.375		89 3.50
125×65 5×2½	139.7×76.1 5.500×3.000		89 3.50
125×80 5×3	139.7×88.9 5.500×3.500		89 3.50
125×100 5×4	139.7×114.3 5.500×4.500		89 3.50
125×25 5×1	141.3×33.7 5.563×1.315		89 3.50
125×32 5×1¼	141.3×42.4 5.563×1.660		89 3.50
125×40 5×1½	141.3×48.3 5.563×1.900		89 3.50
125×50 5×2	141.3×60.3 5.563×2.375		89 3.50
125×65 5×2½	141.3×76.1 5.563×3.000		89 3.50
125×80 5×3	141.3×88.9 5.563×3.500		89 3.50
150×25 6×1	159.0×33.7 6.250×1.315		102 4.01
150×32 6×1¼	159.0×42.4 6.250×1.660		102 4.01
150×40 6×1½	159.0×48.3 6.250×1.900		102 4.01
150×50 6×2	159.0×60.3 6.250×2.375		102 4.01
150×65 6×2½	159.0×76.1 6.250×3.000	102 4.01	
150×80 6×3	159.0×88.9 6.250×3.500	102 4.01	
150×25 6×1	165.1×33.7 6.500×1.315	102 4.01	



## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

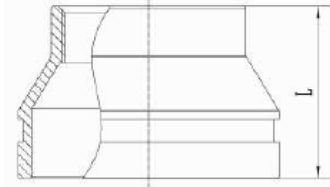
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade “E” EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Threaded Concentric Reducer

XGQT07S



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
150×32 6×1¼	165.1×42 6.500×1.660	300 psi 2.07 Mpa	102 4.01
150×40 6×1½	165.1×48.3 6.500×1.900		102 4.01
150×50 6×2	165.1×60.3 6.500×2.375		102 4.01
150×65 6×2½	165.1×76.1 6.500×3.000		102 4.01
150×80 6×3	165.1×88.9 6.500×3.500		102 4.01
150×100 6×4	165.1×114.3 6.500×4.500		102 4.01
150×25 6×1	168.3×33.7 6.625×1.315		102 4.01
150×32 6×1¼	168.3×42.4 6.625×1.660		102 4.01
150×40 6×1½	168.3×48.3 6.625×1.900		102 4.01
150×50 6×2	168.3×60.3 6.625×2.375		102 4.01
200×25 8×1	219.1×33.7 8.625×1.315		127 5
200×32 8×1¼	219.1×42.4 8.625×1.660		127 5
200×40 8×1½	219.1×48.3 8.625×1.900		127 5
200×50 8×2	219.1×60.3 8.625×2.375		127 5
200×65 8×2½	219.1×76.1 8.625×3.000		127 5
200×80 8×3	219.1×88.9 8.625×3.500		127 5
200×100 8×4	219.1×114.3 8.625×4.500		127 5

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

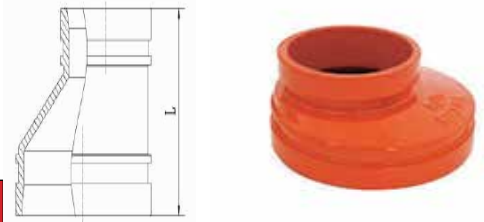
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade “E” EPDM, ASTM D 2000  
-30°F to 230°F (-34°C to 110°C)

# Grooved Eccentric Reducer

XGQT07P



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions L mm/in
80×50 3×2	88.9×60.3 3.500×2.375	300 psi 2.07 Mpa	89 3.50
100×65 4×2½	108.0×76.1 4.250×3.000		102 4.01
100×80 4×3	108.0×88.9 4.250×3.500		102 4.01
100×50 4×2	114.3×60.3 4.500×2.375		102 4.01
100×65 4×2½	114.3×76.1 4.500×3.000		102 4.01
100×80 4×3	114.3×88.9 4.500×3.500		102 4.01
125×80 5×3	139.7×88.9 5.500×3.500		102 4.01
125×100 5×4	139.7×114.3 5.500×4.500		102 4.01
150×80 6×3	159.0×88.9 6.250×3.500		102 4.01
150×100 6×4	159.0×108.0 6.250×4.250		102 4.01
150×100 6×4	159.0×114.3 6.250×4.500		102 4.01
150×65 6×2½	165.1×76.1 6.500×3.000		102 4.01
150×80 6×3	165.1×88.9 6.500×3.500		102 4.01
150×100 6×4	165.1×114.3 6.500×4.500		102 4.01
150×125 6×5	165.1×139.7 6.500×5.500		102 4.01
150×80 6×3	168.3×88.9 6.625×3.500		102 4.01
150×100 6×4	168.3×114.3 6.625×4.500		102 4.01
150×80 6×5	168.3×139.7 6.625×5.500		102 4.01
200×80 8×3	219.1×88.9 8.625×3.500		127 5
200×100 8×4	219.1×114.3 8.625×4.500		127 5
200×125 8×5	219.1×139.7 8.625×5.500		127 5
200×150 8×6	219.1×165.1 8.625×6.500	127 5	
200×150 8×6	219.1×168.3 8.625×6.625	127 5	

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

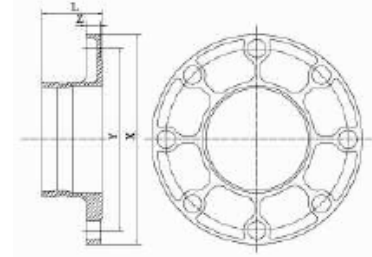
ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

# Adaptor Flange ANSI Class 150

XGQT08



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in				Bolt/Size No.-Size mm
			L mm/in	X mm/in	Y mm/in	Z mm/in	
50 2	60.3 2.375	300 psi 2.07 Mpa	60 2.362	160 6.30	120.7 4.75	15 0.59	4-5/8
65 2½	73 2.875		60 2.362	180 7.08	139.7 5.50	15 0.59	4-5/8
80 3	88.9 3.5		65 2.559	200 7.87	152.5 6.00	15 0.59	8-5/8
100 4	114.3 4.5		70 2.756	228 8.97	190.5 7.50	16 0.63	8-5/8
100 4	141 4.5		70 2.756	250 9.84	216 8.50	17 0.67	8-5/8
150 6	168.3 6.625		70 2.756	282 11.10	241.5 9.50	17 0.67	8-3/4
200 8	219.1 8.625		75 2.952	340 13.39	298.5 11.75	19 0.74	8-3/4
250 10	273 10.75		85 3.346	405 15.94	362 14.25	21 0.82	12-7/8
300 12	323.9 12.750	85 3.346	482 18.97	432 17.00	22 0.86	12-7/8	

## Technical Data

### Approvals

FM 1920  
 UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
 Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
 Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

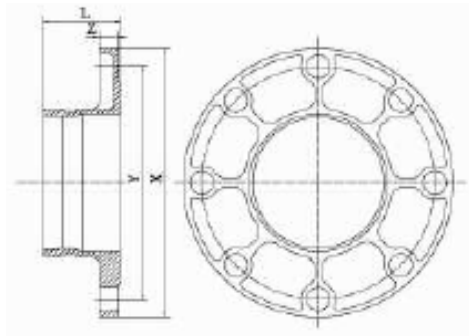
### Gaskets

- Grade "E" EPDM, ASTM D 2000  
 -30°F to 230°F (-34°C to 110°C)



# Adaptor Flange PN 16

XGQT07P



Nominal Size mm/in	Pipe OD. mm/in	Working Pressure psi/Mpa	Dimensions mm/in				Bolt/Size No.-Size mm
			L mm/in	X mm/in	Y mm/in	Z mm/in	
50 2	60.3 2.375	232 psi 1.6 Mpa	65 2.559	165 6.50	125 4.92	16 0.63	4-M 16
65 ½	76.1 3		65 2.559	185 7.28	145 5.70	16 0.63	4-M 16
80 3	88.9 3.5		65 2.559	200 7.87	160 6.29	16 0.63	8-M 16
100 4	108 4.25		70 2.756	220 8.66	180 7.08	16 0.63	8-M 16
100 4	114.3 4.5		70 2.756	220 8.66	180 7.08	16 0.63	8-M 16
125 5	133 5.25		70 2.756	250 9.84	210 8.26	18 0.71	8-M 16
125 5	139.7 5.5		70 2.756	250 9.84	210 8.26	18 0.71	8-M 16
150 6	159 6.25		70 2.756	282 11.10	240 9.44	18 0.71	8-M 20
150 6	165.1 6.5		70 2.756	282 11.10	240 9.44	18 0.71	8-M 20
150 6	168.3 6.625		70 2.756	282 11.10	240 9.44	18 0.71	8-M 20
200 8	219.1 8.625		80 3.150	340 13.39	295 11.61	19 0.74	12-M 20
250 10	273 10.75		85 3.346	405 15.94	355 13.97	21 0.82	12-M 24
300 12	323.9 12.750		90 3.543	460 18.11	410 16.14	24 0.94	12-M 24

## Technical Data

### Approvals

FM 1920  
UL 213

### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12

### Finish

- Orange non-lead paint
- Red non-lead paint RAL # 3000
- Hot-dipped, Galvanized conforming to ASTM A153

### Bolts/Nuts

- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

Stainless Steel bolts and nuts are available upon request.

- Metric:  
Carbon Steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F568M with a minimum tensile strength of 760 MPa.

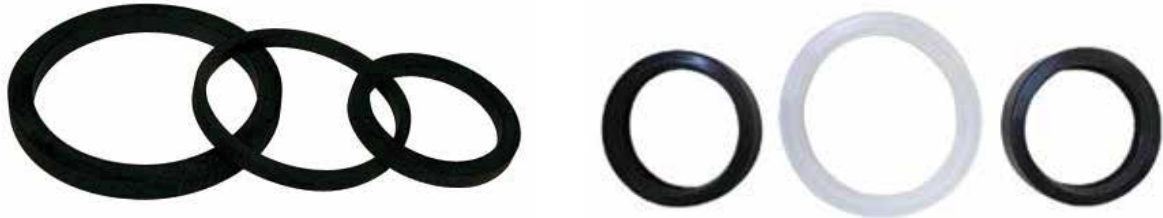
Carbon Steel heavy hex nuts conform to the physical properties of

ASTM A563M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B633.

### Gaskets

- Grade "E" EPDM, ASTM D 2000 -30°F to 230°F (-34°C to 110°C)

# Gasket Data



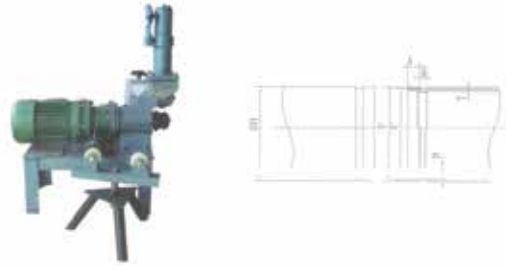
GASKET	NAME	TEMPERATURE RANGE	GENERAL SERVICE RECOMMENDATIONS	COLOR MASK
E	EPDM	-34 ~ +110°C (-30 ~ +230°F)	Recommendation for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 or cold +86° F(+30°) and hot +180° F(+82 C) potable water service. Not recommended for petroleum	Green Strip
D	NITRILE	-29 ~ +82°C (-20 ~ +180°F)	(Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water service.)	Orange Strip
S	SILICON	-40 ~ +177°C (-40 ~ +350°F)	(Recommended for high temperature dry air and some high temperature chemical products)	white

# Hole Diameter of Pipe



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	Run Nominal Size mm/in	Outlet Nominal Size mm/in	Hole Dia. +3.2,0+0.13, 0 mm/in				
25 1"/33.8	15 1/2	24 0.94	80 3"/88.9	25 1	38 1.5	150 159 165.1 6"/168.3	25 1	38 1.5				
	20 3/4			32 1 1/4	46 1.81		32 1 1/4	46 1.81				
32 1 1/4"/42.4	15 1/2	30 1.18		40 1 1/2	53 2.08		40 1 1/2	53 2.08				
	20 3/4			50 2"/60.3	61 2.40		50 2"/60.3	61 2.40				
	25 1			65 2 1/2	61 2.4		65 2 1/2	81 3.18				
40 1 1/2"/48.3	15 1/2	30 1.18		100 108 4"/114.3	25 1		38 1.5	200 8"/219.1	65 2 1/2	81 3.18		
	20 3/4				32 1 1/4		46 1.81		80 3	86 3.38		
	25 1				40 1 1/2		53 2.08		100 4	114 4.48		
50 2"/60.3	15 1/2	30 1.18			50 2"/60.3		61 2.4		61 2.4	200 8"/219.1	25 1	38 1.5
	20 3/4				65 2 1/2		81 3.18		32 1 1/4		46 1.81	
	25 1	38 1.5			80 3		86 3.38		40 1 1/2		53 2.08	
	32 1 1/4	46 1.81			25 1		38 1.50		50 2"/60.3		61 2.4	
65 2 1/2"/73.0 76.1	32 1 1/4	46 1.81	125 133 139.7 5"/174.3		32 1 1/4	46 1.81	200 8"/219.1		32 1 1/4		46 1.81	
	40 1 1/2				40 1 1/2	53 2.08			50 2"/60.3		61 2.4	
	25 1	38 1.5			40 1 1/2	53 2.08			65 2 1/2		81 3.18	
	32 1 1/4	46 1.81			50 2"/60.3	61 2.4			80 3		86 3.38	
	40 1 1/2	53 2.08			65 2 1/2	81 3.18			100 4		114 4.48	
50 2"/60.3	80 3			86 3.38	100 4	114 4.48						
	100 4			114 4.48								

# Roll Groove Dimension



Nominal size mm/in	Pipe OD			Gasket seat A ±0.76/±0.03 mm/in	Groove Width B ±0.76/±0.03 Mm/in	Groove Dia. C		Groove Depth D(ref) mm/in	Max Allow Flare Dia. F mm/in	Min. Allow wall thickness T mm/in
	Basic mm/in	Tolerance mm/ in				Basic mm/in	Tolerance mm/in			
25 1	33.7 1.327	+0.426 +0.016	-0.68 -0.026	15.88 0.625	7.14 0.281	30.23 1.19	-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 +0.020	-0.60 -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 +0.017	-0.52 -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	-0.61 -0.024	15.88 0.625	8.74 0.344	57.15 2.25	-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	-0.74 -0.029	15.88 0.625	8.74 0.344	69.09 2.72	-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	-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 +0.035	-0.79 -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 +0.042	-0.79 -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 +0.045	-0.79 -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 +0.052	-0.79 -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	+1.4 +0.055	-0.79 -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 +0.056	-0.79 -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

# Hole Diameter of Pipe

Nominal size mm/in	Pipe OD			Gasket seat A ±0.76/±0.03 mm/in	Groove Width B ±0.76/±0.03 Mm/in	Groove Dia. C		Groove Depth D(ref) mm/in	Max Allow Flare Dia. F mm/in	Min. Allow wall thickness T mm/in
	Basic mm/in	Tolerance mm/in				Basic mm/in	Tolerance mm/in			
150 6	159.0 6.250	1.60 0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	154.5 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 0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	160.8 6.33	-0.56 -0.022	2.16 0.085	167.1 6.579	2.9 0.114
150 6	168.3 6.625	1.6 0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	163.96 6.455	-0.56 -0.022	2.16 0.085	170.7 6.72	2.9 0.114
200A 8	216.3 8.516	1.6 0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	211.6 8.331	-0.64 -0.025	2.35 0.093	219.8 8.653	2.9 0.114
200 8	219.1 8.625	1.6 0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	214.4 8.441	-0.64 -0.025	2.34 0.092	221.5 8.72	2.9 0.114
250A 10	267.4 10.528	1.60 0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	262.6 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 0.063	-0.79 -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 0.063	-0.79 -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 12.75	1.60 0.063	-0.79 -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 0.063	-0.79 -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 0.063	-0.79 -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 0.063	-0.79 -0.031	25.4 1.000	11.91 0.469	523.46 20.608	-0.76 -0.030	2.77 0.109	533.0 20.984	4.5 0.177

# Pressure Ratings and End Loads FOR Mech Coupling on Steel pipe

Nom. Size	Pipe O.D	Pipe Sched	Wall Thick	Max. Work Press	Max. End Load
DN/in	mm	(Sch)	mm	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	2.56	35/500	4.8/1080
		10	2.77	35/500	4.8/1080
40	48.3	40	3.68	35/500	6.3/1420
		10	2.77	35/500	6.3/1420
50	60.3	40	3.91	35/500	9.8/2210
		10	2.77	35/500	9.8/2210
65	73	40	5.16	35/500	14.4/3240
		10	3.05	35/500	14.4/3240
65	76.1	--	6.35		
		--	5.08	35/500	15.7/3530
		--	3.81	35/500	15.7/3530
80	88.9	40	5.49	35/500	21.4/4800
		10	3.05	35/500	21.4/4800
100	114.3	40	6.02	35/500	35.4/7950
		10	3.05	35/500	35.4/7950
125	141.3	40	6.55	31/450	48.6/10930
		10	3.4	31/450	48.6/10930
150	165.1	--	6.35	31/450	66.4/14930
		--	5.08	31/450	66.4/14930
150	168.3	40	7.11	31/450	68.9/15500
		10	3.4	31/450	68.9/15500
200	219.1	40	8.18	31/450	116.9/26280
		30	7.04	31/450	116.9/26280
		10	4.77	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

# Flexible Coupling

Nom. Size	Pipe O.D	Pipe Sched	Wall Thick	Max. Work Press	Max. End Load
DN/in	mm	(Sch)	mm	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	2.56	35/500	4.8/1080
		10	2.77	35/500	4.8/1080
40	48.3	40	3.68	35/500	6.3/1420
		10	2.77	35/500	6.3/1420
50	60.3	40	3.91	35/500	9.8/2210
		10	2.77	35/500	9.8/2210
65	73	40	5.16	35/500	14.4/3240
		10	3.05	35/500	14.4/3240
65	76.1	--	6.35		
		--	5.08	35/500	15.7/3530
		--	3.81	35/500	15.7/3530
80	88.9	40	5.49	35/500	21.4/4800
		10	3.05	35/500	21.4/4800
100	114.3	40	6.02	35/500	35.4/7950
		10	3.05	35/500	35.4/7950
125	141.3	40	6.55	31/450	48.6/10930
		10	3.4	31/450	48.6/10930
150	165.1	--	6.35	31/450	66.4/14930
		--	5.08	31/450	66.4/14930
150	168.3	40	7.11	31/450	68.9/15500
		10	3.4	31/450	68.9/15500
200	219.1	40	8.18	31/450	116.9/26280
		30	7.04	31/450	116.9/26280
		10	4.77	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

# Installation Instruction for Rigid & Flexible Coupling

Flange adaptor (Flange adaptor. threaded flange. Flange) can be used for the transitional connection between the grooved pipe and the equipment & valves with flanges. The diameter, location and measurement of the bolt hole on Flange adaptor complies with bolts of international standards. (GB9114.9115.9116.9119.9123- 88)



Before installation, check groove standard matching with pipe, then wipe away the pickles, iron rust, greasy dirt on gasket ring and pipe.



Spread lubricant on the pipe end and gasket ring.



Cover the compacting gasket ring at the sealing of the pipe.



Secure 2nd grooved steel pipe to the 1st one and cover the gasket ring on the pipe end, ensuring that the gasket ring at the sealing position of both pipes are locked.



Make sure the coupling has fixed the pipe.



Gradually tighten nuts to torque.



# Engineering Test

No.	Test	Standard
1	Vacuum Test	Grooved couplings, grooved reducing couplings, grooved split flanges, mechanical tees, and plain end couplings shall be able to withstand the effects of vacuum condition encountered when sprinkler systems are drained. Samples of each nominal size and style of gasket 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 (345kPa) while submerged in a water bath. There shall be no leakage or permanent deformation as a result of this test.
2	Hydrostatic Strength Test	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 duration of 1 minute. (Test Size $\leq 6''$ , Five time; $8'' - 10''$ , 4time; $\geq 12''$ , 3times)
3	Air leakage Test	The coupling assembly shall be pressurized with air to 3 bars $+0.5/-0$ bar. The assembly shall be immersed in water to establish that there is no visible leakage.
4	Moment Test	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	Hot Gasket Test	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(0-345 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	Cold Gasket Test	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.

No.	Test	Standard
7	Flame test	The test shall be conducted in a room free from air draught. The test joint is mounted on U-belt 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 or nominal diameters <DN100 ; 8 min for nominal diameters ≥DN100 For reducer couplings the dimensions 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	Cycling Pressure Resistance (Water Hammer Test)	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 5 minutes without leakage and cracking.
9	Friction Loss Determination	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 20ft/s (6.1 m/s) in schedule 40 steel pipe of the same nominal diameter as the coupling or fitting.
10	Leakage Test-Assembly without Gasket	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 [76-84l/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	Torsion Test	This Test relates to pipes joints ≤ DN40 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 80Nm from one pipe end to the other pipe end without any torsion of the pipes ends against each other.
12	Flexibility Test for Flexible Fittings.	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 (203.3mm) or 0.5 degrees for 8 inches (203.2mm) and larger. Observations are to be made for leakage or pipe damage.

.No	Test	Standard
13	Seismic Evaluation	In order to evaluate the use of grooved couplings in earthquake zones 50-500 years, test assembly utilizes flexible couplings and short lengths steel pipe, 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 of 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	Lateral Displacement Test	The coupling shall not leak during any of the tests, within the manufacturer's stated limitations for angular deflection or lateral displacement of associated pipe work.
15	Hydrostatic fluctuation pressure Test	The coupling assembly shall be pressurized with water to a gauge pressure of 10 bar±1bar for 2 min, +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 -0.8 bar + bar/-0.1 bar for 2 min +30s/-0s, and allowed to return to atmospheric pressure in not less than 5s. The assembly shall then be pressurized with water to 10 bar±1 bar 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	Fire Test	If a gasket pipe coupling or fitting employs non-ferrous material for its substantial structural components, or if in the judgment of FM Approval, the design is otherwise faulty 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 the joint shall be hydrostatically tested, as described in to the hydrostatic test.
17	Specification	FM 1920, UL213, Compliance with ASTM A 536 EPDM E gasket compliance with ASTM D 2000



.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



JINTON GROOVED FITTINGS

E-Mail: [sales@jinton.com.tw](mailto:sales@jinton.com.tw)

51, Li-Hsin Rd. 9, Hsinchu Science Park,  
Hsinchu 300-096, Taiwan, R.O.

#### DISTRIBUTION CONTACTS

Elcen Metal Products FZ-LLC

FDRK3658 Compass Building,  
Al Shohada Road, Al Hamra  
Industrial Zone-FZ Ras Al Khaimah,  
United Arab Emirates.

Direct Sales: 00971 - 585925029  
[Sales@elcen-metal.com](mailto:Sales@elcen-metal.com)

Elcen Metal Products Company

9325 KING ST, FRANKLIN PARK,  
IL 60131  
United States

Direct Sales:001 (531) 237-6494  
[sales@elcenmetals.com](mailto:sales@elcenmetals.com)

JINTON USA

Sales office

Direct Sales Africa and Rest of the World  
[usasales@jinton.com.tw](mailto:usasales@jinton.com.tw)