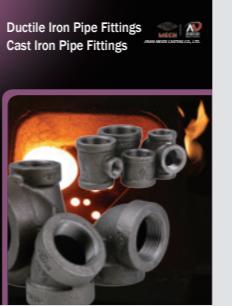
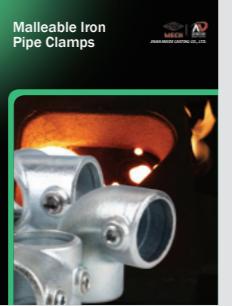
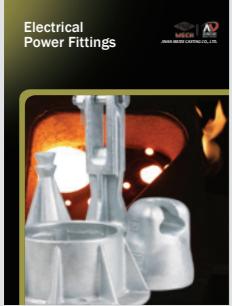
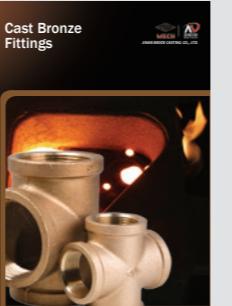
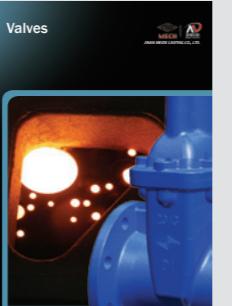
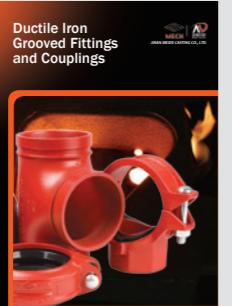
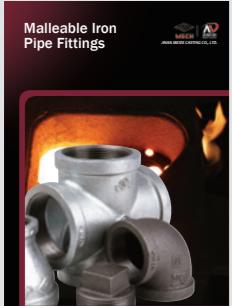


# Malleable Iron Pipe Fittings

DIN Standard

## MECH FLOW SUPPLIES



# More than 50 years of Foundry Experience

## Company Profile

Jinan Meide Casting Co. Ltd. was established in 1962. In the past decades, Jinan Meide has seized each opportunity to consolidate its strength, and has finally developed into what it is today, a large-scale enterprise group with advanced technology, equipment and strong comprehensive strength, known for its complete range of products, large producing capacity, high quality and strong R&D strength. The company owns altogether one main factory, three branch factories, two independent accounting steel pipe companies, and a science & technology park.

The company is the largest manufacturer in the fitting industry with the most complete range of products, supplying malleable iron fittings, grooved fittings, grooved couplings, valves, cast iron fittings, ductile iron fittings, steel pipe nipples and couplings, stainless steel nipples, brass pipe nipples, cast bronze fittings, steel pipes, pipe hangers and supports, electric fittings, etc.

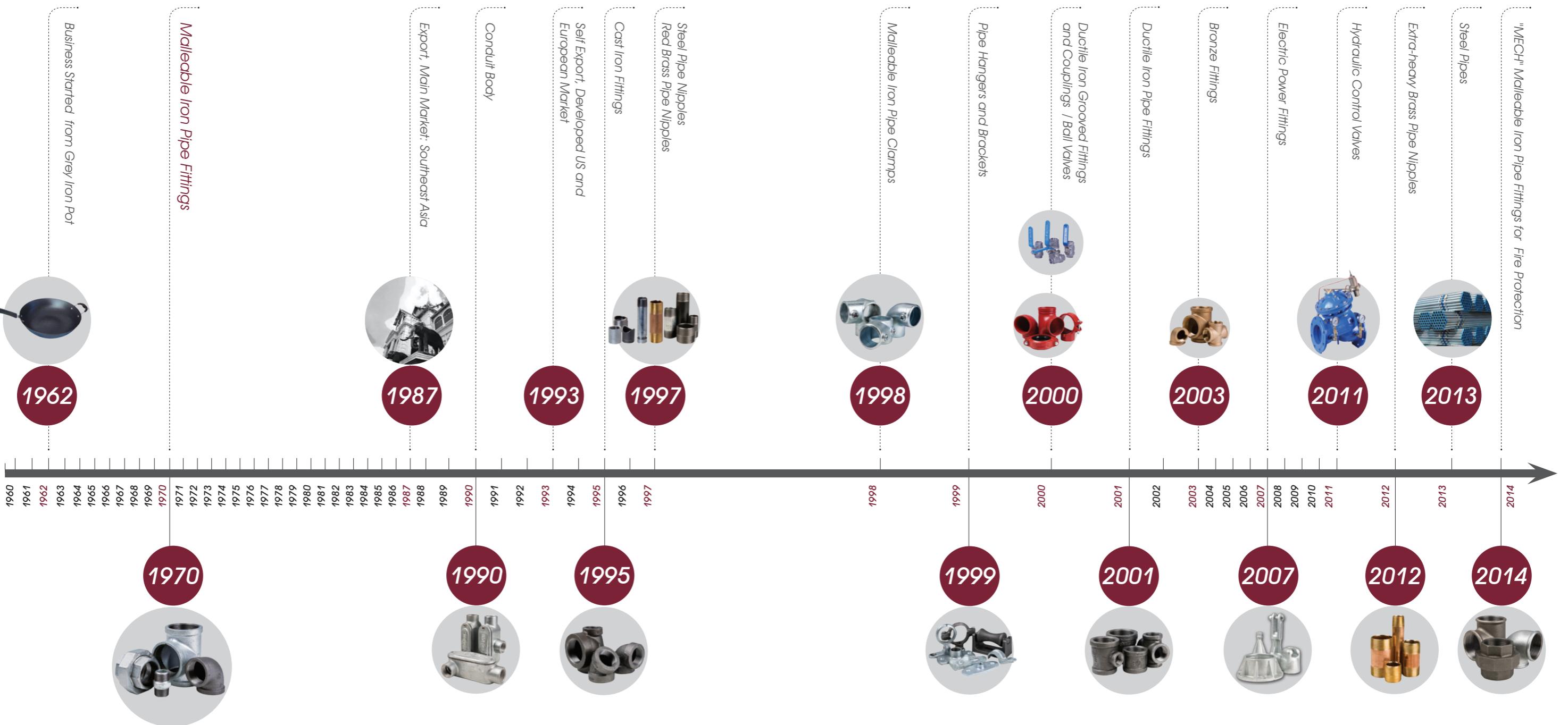
Over 50 years, Jinan Meide has been a trusted name in piping solutions by offering high-quality products, service and support to the PVF industry continuously. We provide expertise and product solutions for a wide range of applications, plumbing, mechanical, industrial, air-conditioning and refrigeration, mining, oil, gas, fire protection, equipment and power system. Many of the company's application technology are advanced in the world, with more than 20 patents registered each year, and the company has presided over and participated in the drafting of many important national standards of the industry.

We organize the whole production process in accordance with ISO 9001 and ISO 14001. It has also the most complete certificates in the PVF industry, including UL/FM/NSF of US, CRN/cUL of Canada, DVGW/TUV/CE/VdS of Germany, BSI/LPCB of UK, SII of Israel, JIS of Japan, ABNT of Brazil, GOST-R of Russia, CNBOP of Poland, KS of South Korea, TSE of Turkey, PSB of Singapore, SIRIM of Malaysia, SABS of South Africa etc. The products are well distributed in more than 130 countries and regions.

As an industry leader and key high-tech enterprise of the national torch plan, the company attaches great importance to environmental protection, energy-saving and emission-reduction. US-EEC recognizes MECH brand malleable iron pipe fittings as "the product to promote for the technology exchange of environmental protection". Protecting the environment is the duty of the company.

Customer satisfaction has always been the company's top objective, and we constantly stick to the principle: to provide customers with a value-added solution rather than simply delivering products.

# Company History



## State of the Art Equipment

High precision equipment is quality assurance. Jinan Meide's 7 factories are all equipped with the most advanced facilities and equipment in the industry. The main production facilities include Sinto automatic molding line, Tokyu automatic molding line, Chinese 416 automatic vertical molding line, automatic molding sand mixers, cupola furnaces, electric furnaces, water-cooled longeuous cupola furnaces, CNC vertical machining centers, CNC machines, NC vertical lathes, radial drills, Jinan Meide proprietary automatic machines, hot-dipped galvanization line, automatic box sealing line, stereoscopic warehouse and so on.



## Reliable Quality Assurance

Jinan Meide is honored as the National enterprise technical center and is capable and qualified to conduct full series of tests and inspections including chemical checking, etc.

Inspection facilities include: spectrometer, carbon sulfur analyzer, metallurgical microscope, tensile strength testing equipment, pressure testing equipment, adhesive force testing equipment, CMM, hardness tester, etc.

From incoming inspection to finished product, quality is checked and monitored in the whole process. Each step of the manufacturing process is carefully documented, regularly reviewed for revision control and updating standard. Quality procedures are constantly monitored and updated to assure that only the highest and most consistent quality products are supplied to our valued customers.



Metallurgical Microscope



Spectrometer





## Certificates



# Malleable Iron Pipe Fittings

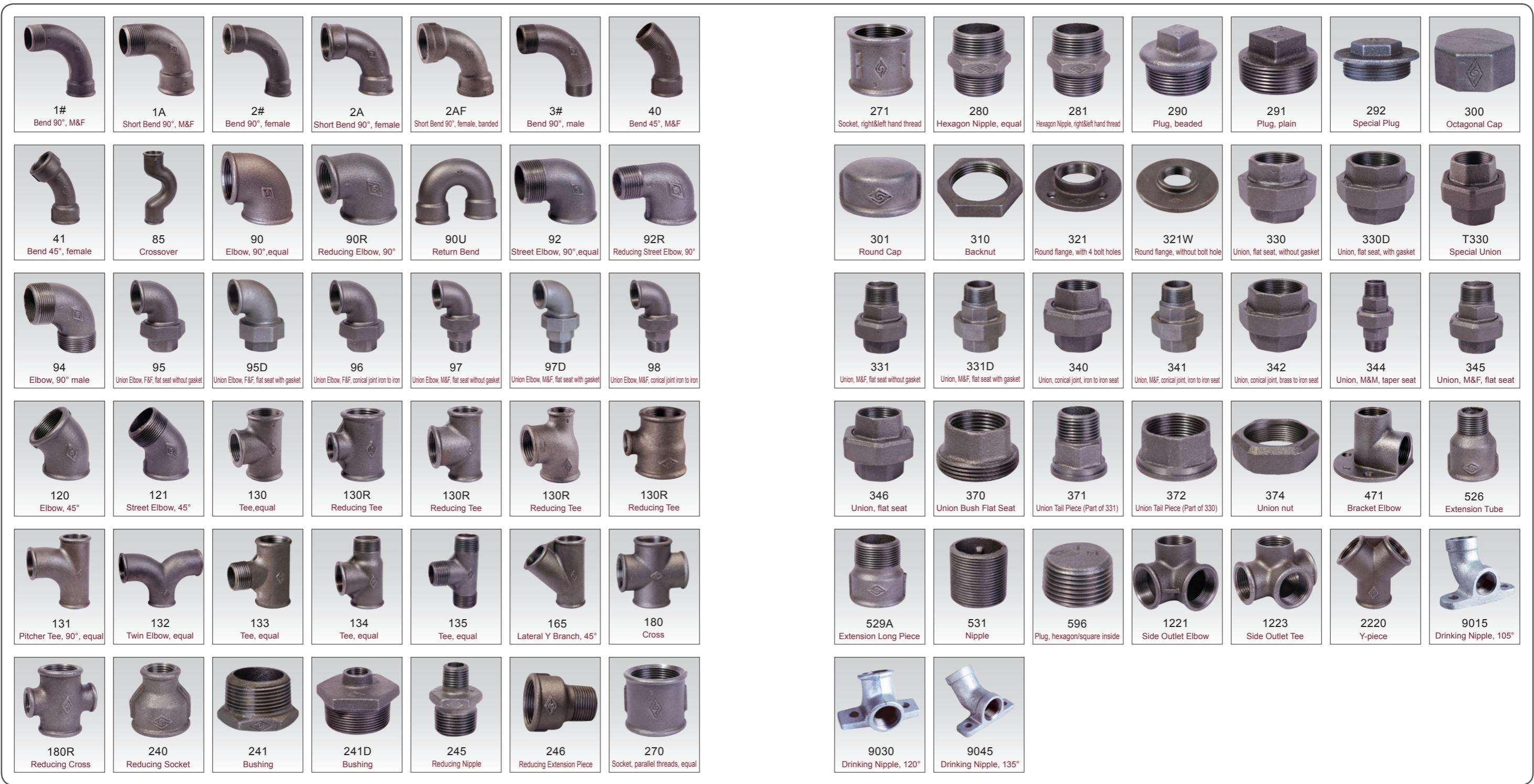
DIN Standard

Material: ASTM A-197,ASTM A47,DIN EN 1562

Dimensions: DIN EN10242

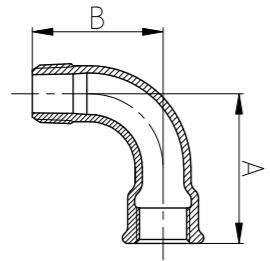
Threads: ISO7-1

Size Available: 1/8"- 6"



**1#**

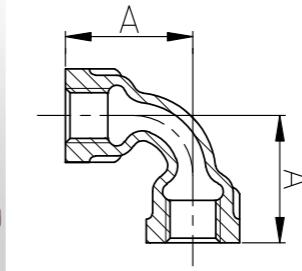
Bend 90°, M&amp;F



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
mm	6	8	10	15	20	25	32
Dim. (mm)	A	35	40	48	55	69	85
Size	Inch	11/4	11/2	2	21/2	3	4
mm	32	40	50	65	80	100	
Dim. (mm)	A	105	116	140	176	205	260
Size	Inch	95	105	130	165	190	245
mm							

**2AF**

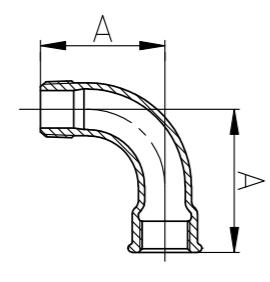
Short Bend 90°, female, banded



Size	Inch	1/4	1/2	3/4	1	11/4	11/2
mm	8	15	20	25	32	40	
Dim. (mm)	A	30	45	50	63	76	85
Size	Inch	2	21/2	3			
mm	50	65	80				
Dim. (mm)	A	102	115	138			

**1A**

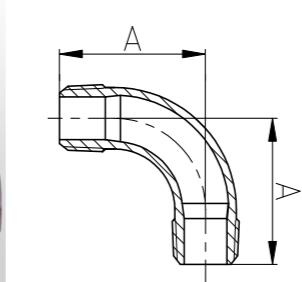
Short Bend 90°, M&amp;F



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	30	36	45	50	63	76
Size	Inch	11/2	2	21/2	3	4	
mm	40	50	65	80	100		
Dim. (mm)	A	85	102	115	138	167	

**3#**

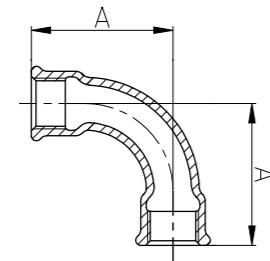
Bend 90°, male



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	36	42	48	60	75	95
Size	Inch	11/2	2	21/2	3	4	
mm	40	50	65	80	100		
Dim. (mm)	A	105	130	165	190	245	

**2#**

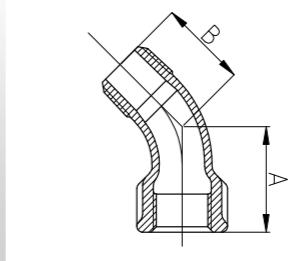
Bend 90°, female



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	40	48	55	69	85	105
Size	Inch	11/2	2	21/2	3	4	
mm	40	50	65	80	100		
Dim. (mm)	A	116	140	176	205	260	

**40**

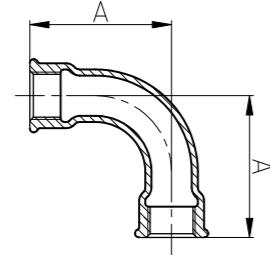
Bend 45°, M&amp;F



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	26	30	36	43	51	64
Size	Inch	11/2	2	21/2	3	4	6
mm	40	50	65	80	100	150	
Dim. (mm)	A	68	81	99	113	142	197
Size	Inch	58	70	86	100	126	176

**2A**

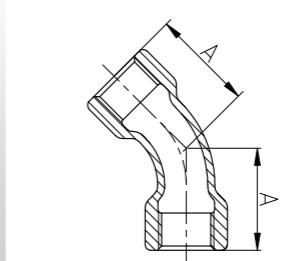
Short Bend 90°, female



Size	Inch	1/2	3/4	1	11/4	11/2	2
mm	15	20	25	32	40	50	
Dim. (mm)	A	45	50	63	76	85	102
Size	Inch	21/2	3	4			
mm	65	80	100				
Dim. (mm)	A	115	138	167			

**41**

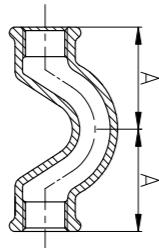
Bend 45°, female



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	26	30	36	43	51	64
Size	Inch	11/2	2	21/2	3	4	6
mm	40	50	65	80	100		
Dim. (mm)	A	68	81</				

**85**

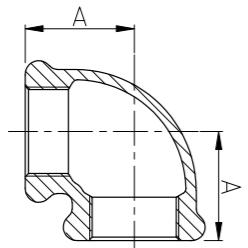
Crossover



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	45	54	70	91	100.5	115.5
Size	Inch						
	mm						
Dim. (mm)	A						

**90**

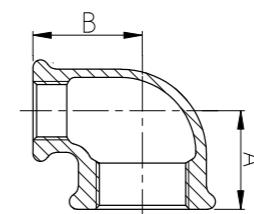
Elbow, 90°, equal



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	19	21	25	28	33	38	45
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	50	58	69	78	96	115	131

**90R**

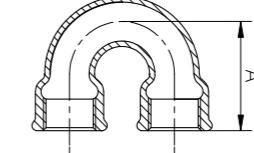
Reducing Elbow, 90°



Size	Inch	2 1/2X1 1/2	3X2 1/2	2 1/2X2	3X1 1/2	3X2
	mm	65X40	80X65	65X50	80X40	80X50
Dim. (mm)	A	64	82	61	58	73
B	69	85	66	72	78	
Size	Inch	4X2 1/2	4X3			
	mm	100X65	100X80			
Dim. (mm)	A	78	84			
B	90	92				

**90U**

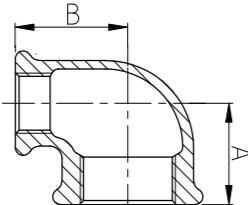
Return Bend



Size	Inch	3/4	1	1 1/2	2	
	mm	20	25	40	50	
Dim. (mm)	A	52	64	80	90	
B	50	64	89	102		
Size	Inch					
	mm					
Dim. (mm)	A					
B						

**90R**

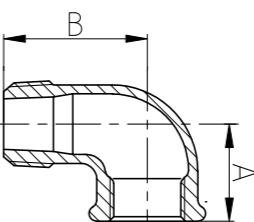
Reducing Elbow, 90°



Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X3/8	3/4X1/2
	mm	10X8	15X8	15X10	20X10	20X15
Dim. (mm)	A	23	26	26	28	30
B	23	26	26	28	31	
Size	Inch	1X 1/2	1X 3/4	1 1/4X 1/2	1 1/4X 3/4	1 1/4X 1
	mm	25X15	25X20	32X15	32X20	32X25
Dim. (mm)	A	32	35	34	36	40
B	34	36	38	41	42	

**92**

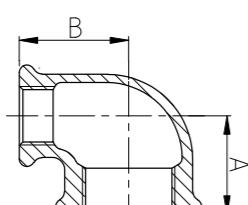
Street Elbow, 90°, equal



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	19	21	25	28	33	38
B	25	28	32	37	43	52	
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	45	50	58	69	78	96
B	60	65	74	88	98	118	

**90R**

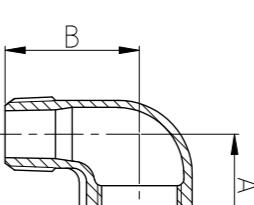
Reducing Elbow, 90°



Size	Inch	1 1/2X1/2	1 1/2X3/4	1 1/2X1	1 1/2X1 1/4	2X1/2
	mm	40X15	40X20	40X25	40X32	50X15
Dim. (mm)	A	36	39	42	46	38
B	42	44	46	48	48	
Size	Inch	2X3/4	2X1	2X1 1/4	2X1 1/2	2 1/2X1
	mm	50X20	50X25	50X32	50X40	65X25
Dim. (mm)	A	40	44	56	52	56
B	50	52	58	55	63	

**92R**

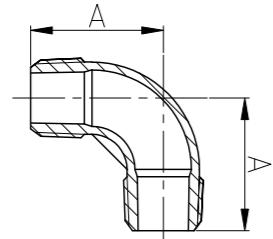
Reducing Street Elbow, 90°



Size	Inch	3/8X1/2	1/2X3/8	3/4X3/8	3/4X1/2	
	mm	10X15	15X10	20X10	20X15	
Dim. (mm)	A	28	26	28	30	
B	37	33	38	40		
Size	Inch	1X 3/4	1 1/4X 1	1 1/2X 1	1 1/2X 1 1/4	
	mm	25X20	32X25	40X25	40X32	
Dim. (mm)	A	35	40	41	49	

**94**

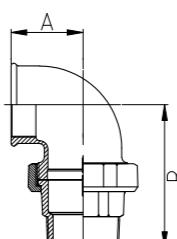
Elbow, 90° male



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
mm	10	15	20	25	32	40	
Dim. (mm)	A	29	37	40	48	56	59
Size	Inch	2					
mm	50						
Dim. (mm)	A	68					

**97**

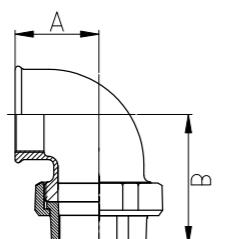
Union Elbow, M&amp;F, flat seat without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
mm	8	10	15	20	25	32	40
Dim. (mm)	A	21	25	28	33	38	45
Size	Inch	11/2	2	2 1/2	3		
mm	40	50	65	80			
Dim. (mm)	A	50	58	78	83		
B	115	128	145	161			

**95**

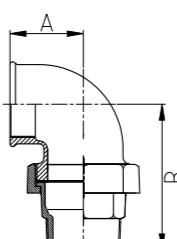
Union Elbow, F&amp;F, flat seat without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
mm	8	10	15	20	25	32	40
Dim. (mm)	A	21	25	28	33	38	45
Size	Inch	11/2	2	2 1/2	3		
mm	40	50	65	80			
Dim. (mm)	A	50	58	78	83		
B	90	100	112	131			

**97D**

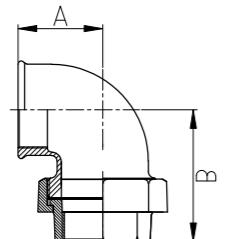
Union Elbow, M&amp;F, flat seat with gasket



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
mm	15	20	25	32	40	50	
Dim. (mm)	A	28	33	38	45	50	58
Size	Inch						
mm							
Dim. (mm)	A						
B							

**95D**

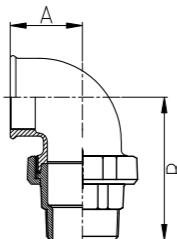
Union Elbow, F&amp;F, flat seat with gasket



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
mm	15	20	25	32	40	50	
Dim. (mm)	A	28	33	38	45	50	58
Size	Inch	2 1/2	3				
mm	65	80					
Dim. (mm)	A	78	83				
B	115	134					

**98**

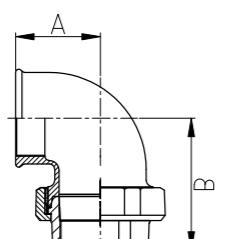
Union Elbow, M&amp;F, conical joint iron to iron



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	21	25	28	33	38	45
Size	Inch	1 1/2	2	2 1/2	3		
mm	40	50	65	80			
Dim. (mm)	A	50	58	78	83		
B	115	128	145	161			

**96**

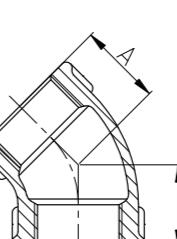
Union Elbow, F&amp;F, conical joint iron to iron



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	21	25	28	33	38	45
Size	Inch	1 1/2	2	2 1/2	3		
mm	40	50	65	80			
Dim. (mm)	A	50	58	78	83		
B	90	100	112	131			

**120**

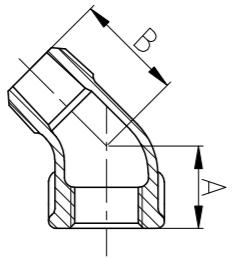
Elbow, 45°



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
mm	8	10	15	20	25	32	
Dim. (mm)	A	17	20	22	25	28	33
Size	Inch	1 1/2	2	2 1/2	3	4	
mm	40	50	65	80	100		
Dim. (mm)	A	36					

**121**

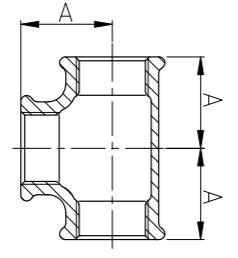
Street Elbow, 45°



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	20	22	25	28	33	36
	B	25	28	32	37	43	46
Size	Inch	2	2 1/2	3			
	mm	50	65	80			
Dim. (mm)	A	43	49	59			
	B	55	69	78			

**130**

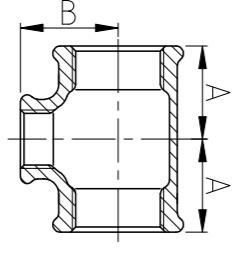
Tee



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	19	21	25	28	33	38	45
	B	19	21	25	28	33	38	45
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	50	58	69	78	96	115	131
	B	50	58	69	78	96	115	131

**130R**

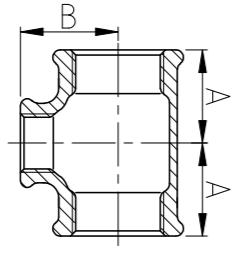
Reducing Tee



Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X1/4	3/4X3/8
	mm	10X8	15X8	15X10	20X8	20X10
Dim. (mm)	A	23	24	26	26	28
	B	23	24	26	27	28
Size	Inch	3/4X1/2	1X1/4	1X3/8	1X1/2	1X3/4
	mm	20X15	25X8	25X10	25X15	25X20
Dim. (mm)	A	30	28	30	32	35
	B	31	31	32	34	36

**130R**

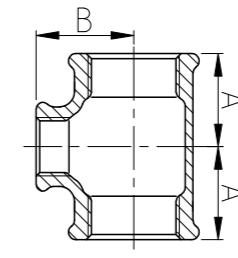
Reducing Tee



Size	Inch	11/4X3/8	11/4X1/2	11/4X3/4	11/4X1	11/2X1/2
	mm	32X10	32X15	32X20	32X25	40X15
Dim. (mm)	A	32	34	36	40	36
	B	36	38	41	42	42
Size	Inch	1 1/2X3/4	2 1/2X1	2 1/2X1 1/4	2X1/2	2X3/4
	mm	40X20	40X25	40X32	50X15	50X20
Dim. (mm)	A	38	42	46	38	40
	B	44	46	48	48	50

**130R**

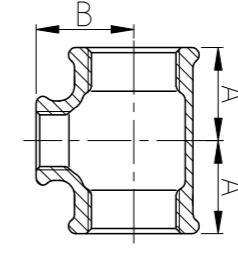
Reducing Tee



Size	Inch	2X1	2X1 1/4	2X1 1/2	2X1 1/2	2X1 3/4
	mm	50X25	50X32	50X40	65X15	65X20
Dim. (mm)	A	44	48	52	46	49
	B	52	54	55	55	58
Size	Inch	2 1/2X1	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2	3X1/2
	mm	65X25	65X32	65X40	65X50	80X15
Dim. (mm)	A	47	52	55	61	50
	B	60	62	63	66	63

**130R**

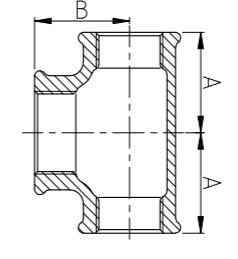
Reducing Tee



Size	Inch	3X3/4	3X1	3X1 1/4	3X1 1/2	3X2	3X2 1/2
	mm	80X20	80X25	80X32	80X40	80X50	80X65
Dim. (mm)	A	52	51	55	58	64	72
	B	64	67	70	71	73	76
Size	Inch	4X1	4X1 1/4	4X1 1/2	4X2	4X2 1/2	4X3
	mm	100X25	100X32	100X40	100X50	100X65	100X80
Dim. (mm)	A	56	60	61	70	78	84
	B	81	84	84	86	90	92

**130R**

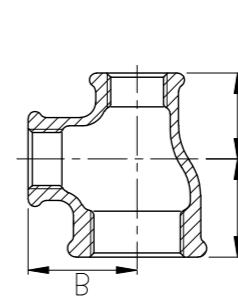
Reducing Tee



Size	Inch	3/8X1/2X3/8	1/2X3/4X1/2	1/2X1X1	3/4X1X3/4	1X1/4X1X1
	mm	10X15X10	15X20X15	15X25X15	20X25X20	25X32X25
Dim. (mm)	A	26	31	34	36	42
	B	26	30	32	35	40
Size	Inch	1X1 1/2X1	1 1/4X1 1/4X1 1/4	1 1/2X2X1 1/4	1 1/2X2X1 1/2	1 1/2X2X2
	mm	25X40X25	32X40X32	32X50X32	40X50X40	
Dim. (mm)	A	46	48	54	55	
	B	42	46	48	52	

**130R**

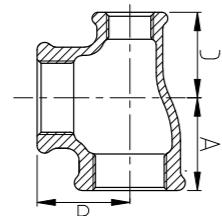
Reducing Tee



Size	Inch	1 1/2X3/8X3/8	3/4X1 1/2X1/2	1X1/2X1/2	1X3/4X3/4	1 1/4X3/4X3/4	1 1/4X1X1
	mm	15X10X10	20X15X15	25X15X15	25X20X20	32X20X20	32X25X2

**130R**

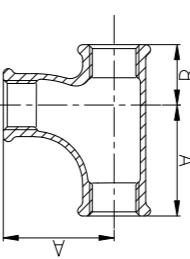
Reducing Tee



Size	Inch	1/2X1/2X3/8	3/4X3/4X3/8	3/4X3/4X1/2	1X1X3/8	1X1X1/2
	mm	15X15X10	20X20X10	20X20X15	25X25X10	25X25X15
Dim. (mm)	A	28	33	33	38	38
	B	28	33	33	38	38
	C	26	28	31	32	34
Size	Inch	1X1X3/4	11/4X11/4X1/2	11/4X11/4X3/4	11/4X11/4X1	11/2X11/2X1/2
	mm	25X25X20	32X32X15	32X32X20	32X32X25	40X40X15
Dim. (mm)	A	38	45	45	45	50
	B	38	45	45	45	50
	C	36	38	41	42	42

**131**

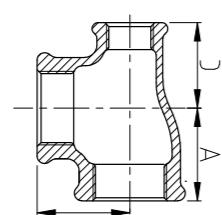
Pitcher Tee, 90°, equal



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	45	50	63	76	85	102
	B	24	28	33	40	43	53
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

**130R**

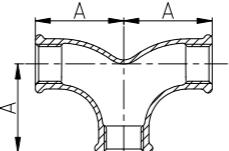
Reducing Tee



Size	Inch	1 1/2X1 1/2X3/4	1 1/2X1 1/2X1	1 1/2X1 1/2X1 1/4	2X2X1/2
	mm	40X40X20	40X40X25	40X40X32	50X50X15
Dim. (mm)	A	50	50	50	58
	B	50	50	50	58
	C	44	46	48	48
Size	Inch	2X2X3/4	2X2X1	2X2X1 1/4	2X2X1 1/2
	mm	50X50X20	50X50X25	50X50X32	50X50X40
Dim. (mm)	A	58	58	58	58
	B	58	58	58	58
	C	50	52	54	55

**132**

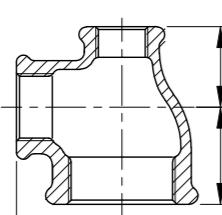
Twin Elbow, equal



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	45	50	63	76	85	102
Size	Inch						
	mm						
Dim. (mm)	A						

**130R**

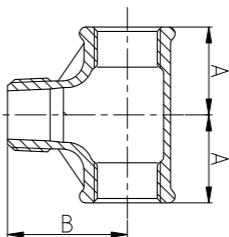
Reducing Tee



Size	Inch	3/4X1X1/2	1X1X2X3/4	1X3/4X1X1/2	1 1/4X1X2X3/4	1 1/4X1X1/2
	mm	20X25X15	25X15X20	25X20X15	32X15X20	32X15X25
Dim. (mm)	A	36	32	35	35	34
	B	35	34	36	38	38
	C	34	30	31	29	32
Size	Inch	1 1/4X3/4X1	1 1/4X1X3/4	1 1/4X1X2X1	1 1/2X1X2X1	1 1/2X1X2X1 1/4
	mm	32X20X25	32X25X20	32X40X25	40X15X25	40X15X32
Dim. (mm)	A	36	40	48	37	36
	B	41	42	46	41	42
	C	35	36	46	32	34

**133**

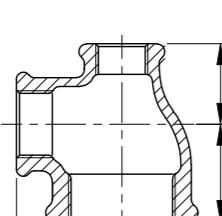
Tee, equal



Size	Inch	3/8	1/2	3/4	1		
	mm	10	15	20	25		
Dim. (mm)	A	22	25	33	39		
	B	31	38	45	53		
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

**130R**

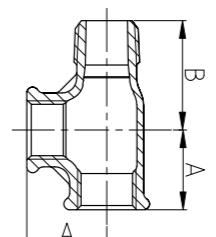
Reducing Tee



Size	Inch	1 1/2X3/4X1	1 1/2X3/4X1 1/4	1 1/2X1X1 1/4	1 1/2X1X4X1	1 1/2X2X1 1/4
	mm	40X20X25	40X20X32	40X25X32	40X32X25	40X50X32
Dim. (mm)	A	40	38	42	46	57
	B	43	44	46	48	56
	C	35	36	40	42	55
Size	Inch	2X1X2X1 1/2	2X3/4X1 1/2	2X1X1 1/2	2X1 1/4X1 1/2	2X1 1/2X1
	mm	50X15X40	50X20X40	50X25X40	50X32X40	50X40X25
Dim. (mm)	A	42	40	44	48	55
	B	47	50	52	54	57
	C	37	38	42	46	54

**134**

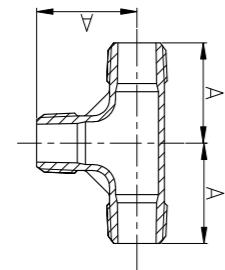
Tee, equal



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
<tbl\_info

**135**

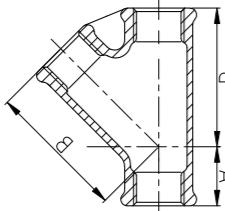
Tee, equal



Size	Inch	1/2	3/4	1			
mm	15	20	25				
Dim. (mm)	A	37	43	48			
Size	Inch						
mm							
Dim. (mm)	A						

**165**

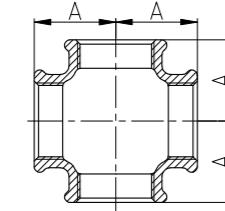
Lateral Y Branch, 45°



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
mm	15	20	25	32	40	50	
Dim. (mm)	A	21	24	28	34	34	40
B	56	64	77	91	98	106	
Size	Inch						
mm							
Dim. (mm)	A						
B							

**180**

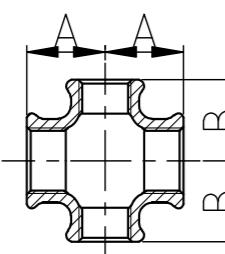
Cross



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
mm	6	8	10	15	20	25	
Dim. (mm)	A	19	21	25	28	33	38
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
mm	32	40	50	65	80	100	
Dim. (mm)	A	45	50	58	69	78	96

**180R**

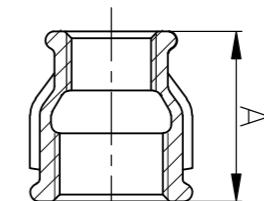
Reducing Cross



Size	Inch	3/4X1/2	1X1/2				
mm	20X15	25X15					
Dim. (mm)	A	30	32				
B	31	34					
Size	Inch						
mm							
Dim. (mm)	A						
B							

**240**

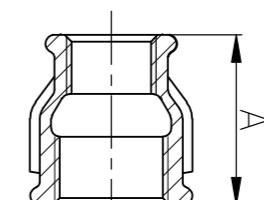
Reducing Socket



Size	Inch	3/8X1/8	3/8X1/4	1/2X1/4	1/2X3/8	3/4X1/4
mm	10X6	10X8	15X8	15X10	20X8	
Dim. (mm)	A	30	30	36	36	39
Size	Inch	3/4X3/8	3/4X1/2	1X3/8	1X1/2	1X3/4
mm	20X10	20X15	25X10	25X15	25X20	
Dim. (mm)	A	39	39	45	45	45

**240**

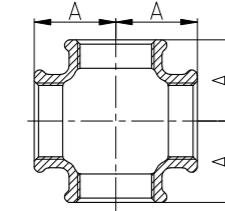
Reducing Socket



Size	Inch	11/4X3/8	11/4X1/2	11/4X3/4	11/4X1	11/2X1/2
mm	32X10	32X15	32X20	32X25	40X15	
Dim. (mm)	A	50	50	50	50	55
Size	Inch	11/2X3/4	11/2X1	11/2X11/4	2X1/2	2X3/4
mm	40X20	40X25	40X32	50X15	50X20	
Dim. (mm)	A	55	55	55	65	65

**180**

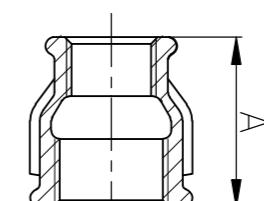
Cross



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
mm	6	8	10	15	20	25	
Dim. (mm)	A	19	21	25	28	33	38
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
mm	32	40	50	65	80	100	
Dim. (mm)	A	45	50	58	69	78	96

**240**

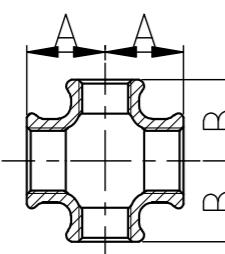
Reducing Socket



Size	Inch	2X1	2X11/4	2X11/2	21/2X1/2	21/2X3/4
mm	50X25	50X32	50X40	65X15	65X20	
Dim. (mm)	A	65	65	65	74	74
Size	Inch	21/2X1	21/2X11/4	21/2X11/2	21/2X2	3X1
mm	65X25	65X32	65X40	65X50	80X25	
Dim. (mm)	A	74	74	74	74	80

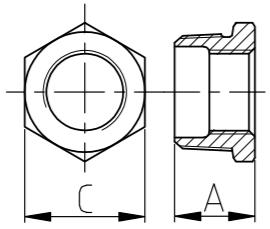
**180R**

Reducing Cross



**241**

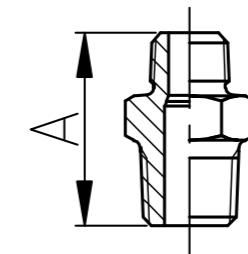
Bushing



Size	Inch	1/4X1/8	3/8X1/8	3/8X1/4	1/2X1/8	1/2X1/4
	mm	8X6	10X6	10X8	15X6	15X8
Dim. (mm)	A	20	20	20	24	24
	C	17	19	19	22	22
Size	Inch	1/2X3/8	3/4X1/4	3/4X3/8	3/4X1/2	1X1/4
	mm	15X10	20X8	20X10	20X15	25X8
Dim. (mm)	A	24	26	26	26	29
	C	22	30	30	30	36

**245**

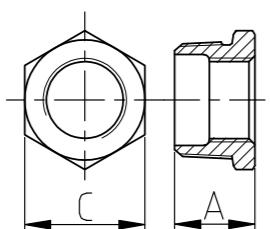
Reducing Nipple



Size	Inch	1/4X1/8	3/8X1/8	3/8X1/4	1/2X1/4	1/2X3/8
	mm	8X6	10X6	10X8	15X8	15X10
Dim. (mm)	A	31	34	38	44	44
Size	Inch	3/4X1/4	3/4X3/8	3/4X1/2	1X1/2	1X3/4
	mm	20X8	20X10	20X15	25X15	25X20
Dim. (mm)	A	36	47	47	53	53

**241**

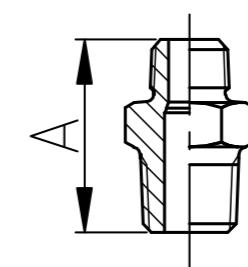
Bushing



Size	Inch	13X3/8	1X1/2	1X3/4	11/4X3/8	11/4X1/2
	mm	25X10	25X15	25X20	32X10	32X15
Dim. (mm)	A	29	29	29	31	31
	C	36	36	36	46	46
Size	Inch	11/4X3/4	11/4X1	11/2X1/2	11/2X3/4	11/2X1
	mm	32X20	32X25	40X15	40X20	40X25
Dim. (mm)	A	31	31	31	31	31
	C	46	46	50	50	50

**245**

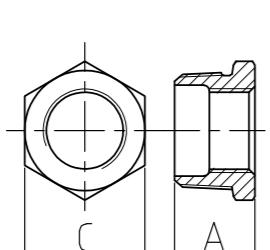
Reducing Nipple



Size	Inch	11/4X1/2	11/4X3/4	11/4X1	11/2X1/2	11/2X3/4
	mm	32X15	32X20	32X25	40X15	40X20
Dim. (mm)	A	57	57	57	59	59
Size	Inch	11/2X1	11/2X11/4	2X1/2	2X3/4	2X1
	mm	40X25	40X32	50X15	50X20	50X25
Dim. (mm)	A	59	59	68	68	68

**241**

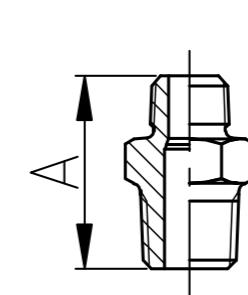
Bushing



Size	Inch	11/2X11/4	2X1	2X11/4	2X11/2	21/2X11/2
	mm	40X32	50X25	50X32	50X40	65X40
Dim. (mm)	A	31	35	35	35	40
	C	50	65	65	65	80
Size	Inch	21/2X2	3X2	3X21/2	4X3	
	mm	65X50	80X50	80X65	100X80	
Dim. (mm)	A	40	44	44	51	
	C	80	95	95	120	

**245**

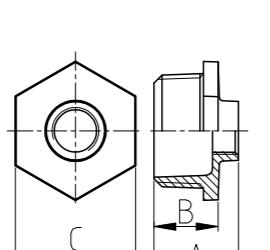
Reducing Nipple



Size	Inch	2X11/4	2X11/2	21/2X1	21/2X11/4	21/2X11/2	21/2X2
	mm	50X32	50X40	65X25	65X32	65X40	65X50
Dim. (mm)	A	68	68	75	75	75	75
Size	Inch	3X11/2	3X2	3X21/2	4X2	4X21/2	4X3
	mm	80X40	80X50	80X65	100X50	100X65	100X80
Dim. (mm)	A	83	83	83	87	87	87

**241D**

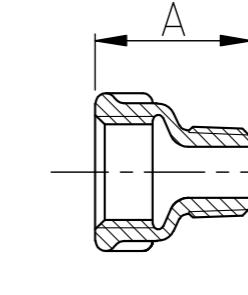
Bushing



Size	Inch	2X1/2	2X3/4	21/2X1	21/2X11/4	3X1
	mm	50X15	50X20	65X25	65X32	80X25
Dim. (mm)	A	48	48	54	54	59
	B	35	35	40	40	44
	C	65	65	80	80	95
Size	Inch	3X11/4	3X11/2	4X2	4X21/2	
	mm	80X32	80X40	100X50	100X65	
Dim. (mm)	A	59	59	69	69	
	B	44	44	51	51	
	C	95	95	120	120	

**246**

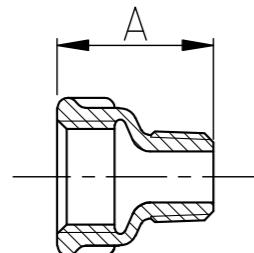
Reducing Extension piece, sockets M&amp;F



Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X3/8	3/4X1/2	1X1/2
	mm	10X8	15X8	15X10	20X10	20X15	25X15
Dim.							

**246**

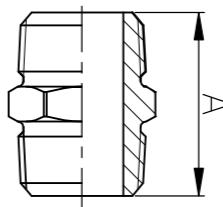
Reducing Extension piece, sockets M&amp;F



Size	Inch	1 1/2 X 1 1/4	2 X 1/2	2 X 3/4	2 X 1	2 X 1 1/4
	mm	40X32	50X15	50X20	50X25	50X32
Dim. (mm)	A	63	70	70	70	70
Size	Inch	2 X 1 1/2	2 1/2 X 1 1/2	2 1/2 X 2	3 X 2	3 X 2 1/2
	mm	50X40	65X40	65X50	80X50	80X65
Dim. (mm)	A	70	74	74	80	81

**281**

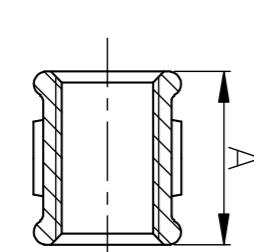
Hexagon Nipple, right&amp;left hand thread



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	38	44	47	53	57	59
Size	Inch	2					
	mm	50					
Dim. (mm)	A	68					

**270**

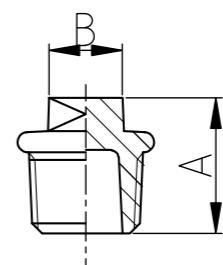
Socket, parallel threads, equal



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	25	27	30	36	39	45	50
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	55	65	74	80	94	102	110

**290**

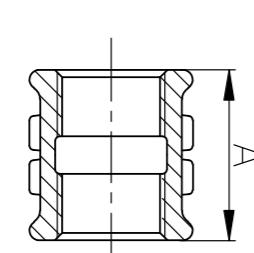
Plug, beaded



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	20	22	24	26	32	36
B	7	8	10	11	17	19	
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
A	39	41	48	54	60	70	
B	22	22	27	32	36	41	

**271**

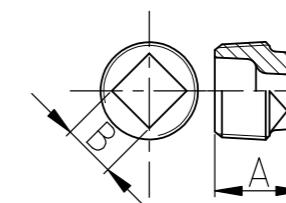
Socket, right&amp;left hand thread



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	30	36	39	45	50	55
Size	Inch	2					
	mm	50					
Dim. (mm)	A	65					

**291**

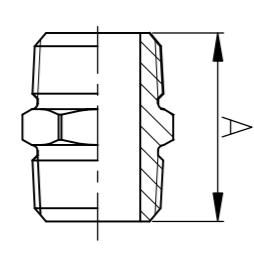
Plug, plain



Size	Inch	1	1 1/2	3			
	mm	25	65	80			
Dim. (mm)	A	23	39	44			
B	19	32	36				
Size	Inch						
	mm						
A							
B							

**280**

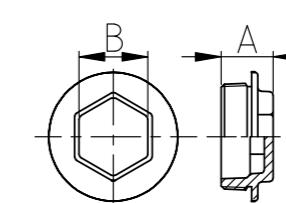
Hexagon Nipple, equal



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	29	36	38	44	47	53	57
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	59	68	75	83	95	103	115

**292**

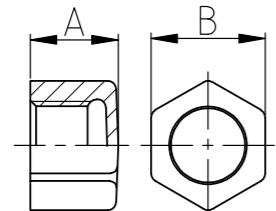
Special Plug



Size	Inch	1 1/2					
	mm	40					
Dim. (mm)	A	24					
B	32						
Size	Inch						
	mm						
A							
B							

**300**

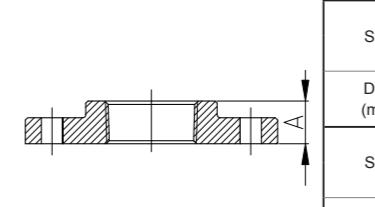
Octagonal Cap



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	13	15	17	19	22	24
	B	15	18	22	26	32	39
Size	Inch	11/4	11/2	2	21/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	27	27	32	35	38	45
	B	48	54	66	84	96	123

**321**

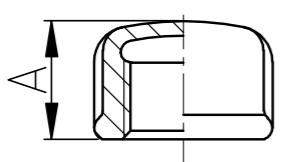
Round Flange, with 4 bolt holes



Size	Inch	1/2	3/4	1	11/4	11/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	12	13	14	15	16	18
	B	32	40	50	65	80	100
Size	Inch	21/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	20	22	24			

**301**

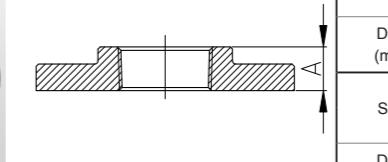
Round Cap



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	15	17	19	22	25	28
	B	40	50	65	80	100	
Size	Inch	11/2	2	21/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	31	35	38	40	50	

**321W**

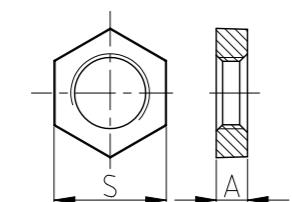
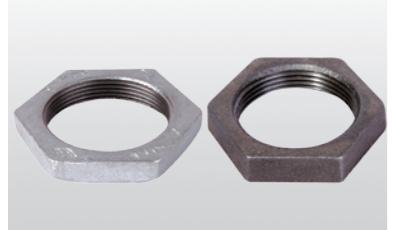
Round Flange, without bolt hole



Size	Inch	1/2	3/4	1	11/4	11/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	12	13	14	15	16	18
	B	32	40	50	65	80	100
Size	Inch	21/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	20	22	24			

**310**

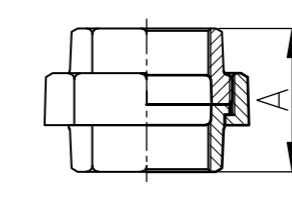
Backnut



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	6	7	8	9	10	11
	S	22	27	32	36	46	55
Size	Inch	11/2	2	21/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	12	13	16	19	23	
	S	60	75	95	105	135	

**330**

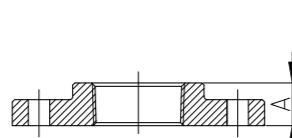
Union, flat seat, without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	42	45	48	52	58	65
	B	32	40	50	65	80	100
Size	Inch	11/2	2	21/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	70	78	85	95	110	

**321**

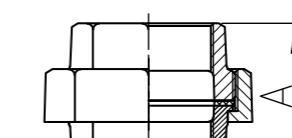
Round Flange, with 4 bolt holes



Size	Inch	1/2	3/4	1	11/4	11/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	12	13	14	15	16	18
	B	32	40	50	65	80	100
Size	Inch	21/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	20	22	24			

**330D**

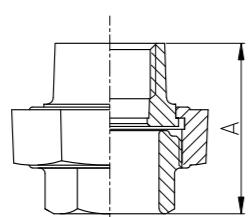
Union, flat seat, with gasket



Size	Inch	1/4	3/8	1/2	3/4	1	11/4
	mm	8	10	15	20	25	32

**T330**

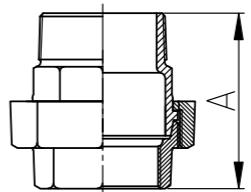
Special Union



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	45	54	60	65	66	66
Size	Inch	2 1/2	3				
	mm	65	80				
Dim. (mm)	A	71	74.5				

**341**

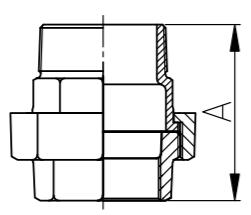
Union, M&amp;F, conical joint, iron to iron seat



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	55	58	66	72	80	90
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	95	106	118	130	133	

**331**

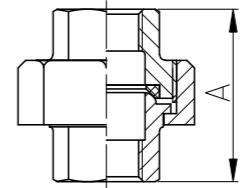
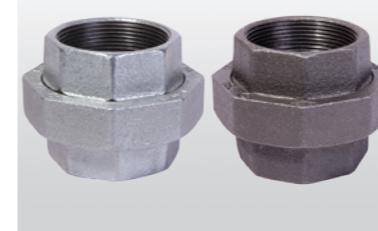
Union, M&amp;F, flat seat without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	55	58	66	72	80	90
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	95	106	118	130	133	

**342**

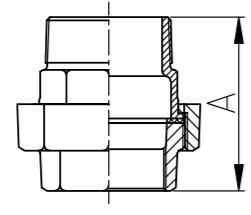
Union, conical joint, brass to iron seat



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	32	37	41	44	49.5	52.5	57.5
Size	Inch	1 1/2	2	2 1/2	3	4	6	
	mm	40	50	65	80	100	150	
Dim. (mm)	A	61.5	70	82	89	98	145	

**331D**

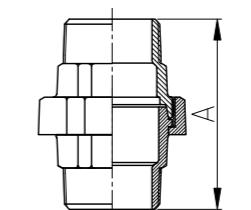
Union, M&amp;F, flat seat, with gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	58	61	69	75	83	93
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	98	109	121	133	136	

**344**

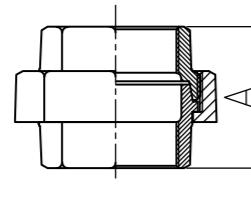
Union, M&amp;M, taper seat



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	69	75	85	93	103	114
Size	Inch						
	mm						
Dim. (mm)	A						

**340**

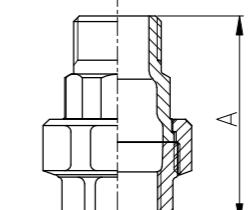
Union, conical joint iron to iron seat



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	42	45	48	52	58	65
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	70	78	85	95	110	

**345**

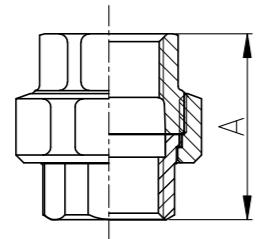
Union, M&amp;F, flat seat



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	63	70	78	88	93	104
Size	Inch	2 1/2	3				
	mm	65	80				
Dim. (mm)	A	116	128				

**346**

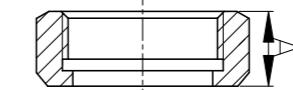
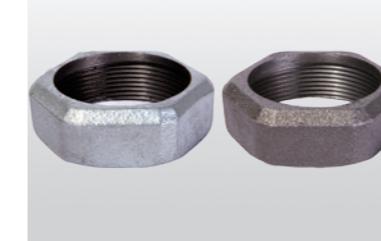
Union, flat seat



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	46	50	56	63	68	76
Size	Inch	2 1/2	3				
	mm	65	80				
Dim. (mm)	A	83	93				

**374**

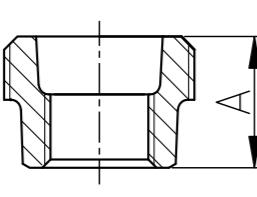
Union nut



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	16	17	18	20	22	24
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	25	27	30	31	36	

**370**

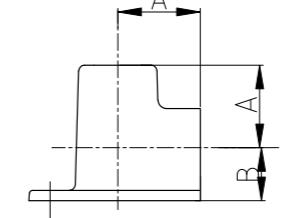
Union Bush Flat Seat



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	24	27	29.8	34	37	41
Size	Inch						
	mm						
Dim. (mm)	A						

**471**

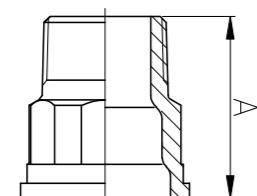
Bracket Elbow



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	28	33	38			
B	18	20	23				
Size	Inch						
	mm						
Dim. (mm)	A						
B							

**371**

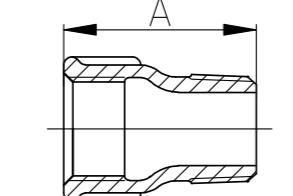
Union Tail Piece (Part of 331)



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	39	44	48	55	57	63
Size	Inch						
	mm						
Dim. (mm)	A						

**526**

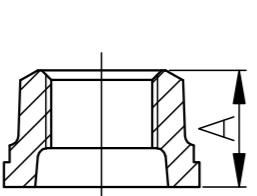
Extension Tube



Size	Inch	3/8x30	3/8x40	1/2x30	1/2x40	3/4x40	
	mm	10x30	10x40	15x30	15x40	20x40	
Dim. (mm)	A	30	40	30	40	40	
Size	Inch						
	mm						
Dim. (mm)	A						

**372**

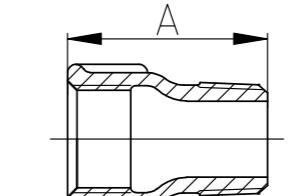
Union Tail Piece (Part of 330)



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	21	24	26	30	32	35
Size	Inch						
	mm						
Dim. (mm)	A						

**529A**

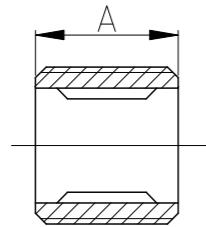
Extension Long Piece



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	35	43	48	55	60	63
Size	Inch						
	mm						
Dim. (mm)	A						

**531**

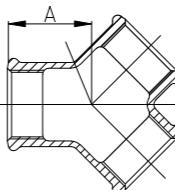
Nipple



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
mm	10	15	20	25	32	40	
Dim. (mm)	A	23	25	30	35	40	45
Size	Inch	2	2 1/2	3	4		
mm	50	65	80	100			
Dim. (mm)	A	50	56	69	82		

**2220**

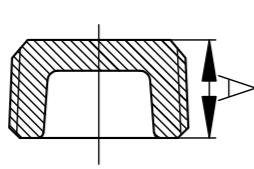
Y-piece



Size	Inch	3/8	1/2	3/4	1		
mm	10	15	20	25			
Dim. (mm)	A (Min)	24	27	33	40		
Size	Inch						
mm							
Dim. (mm)	A (Min)						

**596**

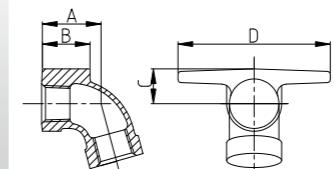
Plug, hexagon/square inside



Size	Inch	1	1 1/4	1 1/2			
mm	25	32	40				
Dim. (mm)	A	19	22	22			
Size	Inch						
mm							
Dim. (mm)	A						

**9015**

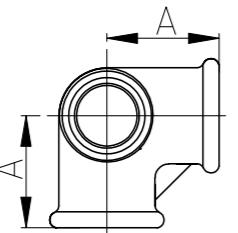
Drinking Nipple, 105°



Size	Inch	1/2					
mm	15						
Dim. (mm)	A (Min)	32					
B (Min)	22						
C (Min)	19						
D (Min)	77						

**1221**

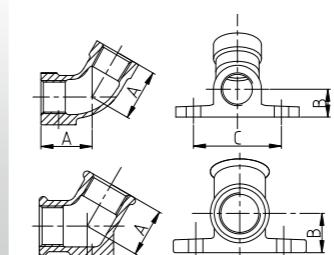
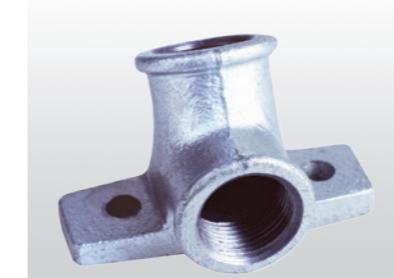
Side Outlet Elbow



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
mm	10	15	20	25	32	40	
Dim. (mm)	A	25	28	33	38	45	50
Size	Inch	2					
mm	50						
Dim. (mm)	A	58					

**9030**

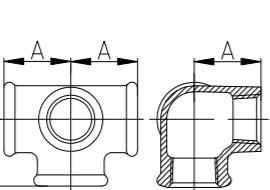
Drinking Nipple, 120°



Size	Inch	1/2	3/4				
mm	15	20					
Dim. (mm)	A	32	30				
B	19	25					
C	55	55					

**1223**

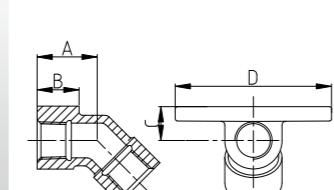
Side Outlet Tee



Size	Inch	1/2	3/4	1	1 1/4		
mm	15	20	25	32			
Dim. (mm)	A	28	33	38	46		
Size	Inch						
mm							
Dim. (mm)	A						

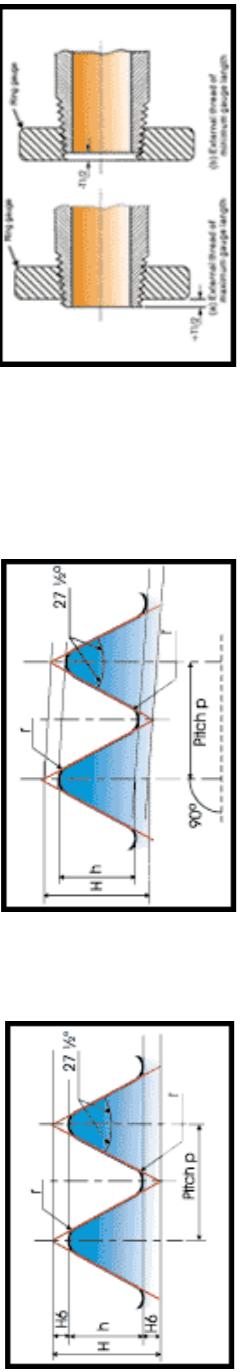
**9045**

Drinking Nipple, 135°



Size	Inch	1/2	3/4				
mm	15	20					
Dim. (mm)	A (Min)	32	36				
B (Min)	19	15					
C (Min)	18	22					
D (Min)	77	83					

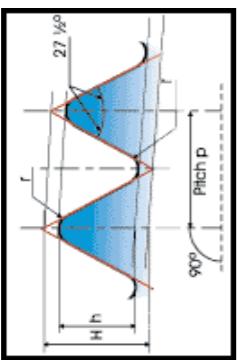
## Basic Dimension for British and DIN Standard Pipe Threads



(a) External thread of maximum gauge length

(b) External thread of minimum gauge length

(c) External thread of minimum gauge length



International Standard ISO7/1, Pipe Threads Dimensions

Designations of thread size	Number of threads in 25.4 mm	Pitch P	Height of thread h	Diameters at gauge plane			Gauge Length (external thread)						Tolerance on position of gauge			Dimensions in millimeters		
				Major gauge diameter d	Minor d1	Nominal	Tolerance $\pm 1/12$	Maximum	Minimum	Tolerance $\pm 1/22$	Turns of threads	Turns of threads	For Nominal gauge length	Length of useful external thread not less than	For maximum gauge length	For minimum gauge length		
1/8	28	0.907	0.581	9.728	9.147	8.566	4	6.9	4.9	3.1	1.1	1.1	1 1/4	6.5	7.4	5.6		
1/4	19	1.337	0.856	13.157	12.301	11.445	6	1.3	1	7.3	4.7	1.7	1 1/4	9.7	11	8.4		
3/8	19	1.337	0.856	16.662	15.806	14.95	6.4	1.3	1	7.7	5.1	1.7	1 1/4	10.1	11.4	8.8		
1/2	14	1.814	1.162	20.955	19.793	18.631	8.2	1.8	1	10	6.4	2.3	1 1/4	13.2	15	11.4		
3/4	14	1.814	1.162	26.441	25.279	24.117	9.5	1.8	1	10	7.7	2.3	1 1/4	14.5	16.3	12.7		
1	11	2.309	1.479	33.249	31.77	30.291	10.4	2.3	1	12.7	8.1	2.9	1 1/4	16.8	19.1	14.5		
1 1/4	11	2.309	1.479	40.431	38.952	37.979	12.7	2.3	1	15	10.4	2.9	1 1/4	21.4	24.1	16.8		
1 1/2	11	2.309	1.479	46.324	44.845	42.765	12.7	2.3	1	15	10.4	2.9	1 1/4	19.1	21.4	16.8		
2	11	2.309	1.479	52.803	47.803	46.324	15.9	2.3	1	18.2	13.6	2.9	1 1/4	23	25.7	21.1		
2 1/2	11	2.309	1.479	59.614	58.135	56.656	15.9	2.3	1	21	14	3.5	1 1/2	26.7	30.2	23.2		
3	11	2.309	1.479	75.184	73.705	72.226	17.5	3.5	1	1/2	24.1	17.1	3.5	1 1/2	29.8	33.3	26.3	
4	11	2.309	1.479	87.884	86.405	84.926	20.6	3.5	1	1/2	28.9	21.9	3.5	1 1/2	35.8	39.3	32.3	
5	11	2.309	1.479	113.03	111.551	110.072	25.4	3.5	1	32.1	25.1	3.5	1 1/2	40.1	43.6	36.6		
6	11	2.309	1.479	138.43	136.951	135.472	28.6	3.5	1	32.1	25.1	3.5	1 1/2	40.1	43.6	36.6		

Note: This information is selected from the International Standard ISO7/1:2000: Pipe threads where pressure - tight joints, Table Table 1