

# Malleable Iron Pipe Fittings

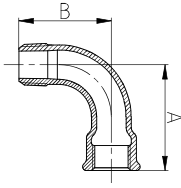
## DIN Standard

Material: ASTM A-197,ASTM A47,DIN EN 1562  
 Dimensions: DIN EN10242  
 Threads: ISO7-1  
 Size Available: 1/8" - 6"



### 1#

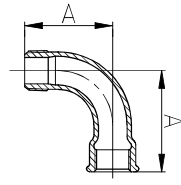
Bend 90°, M&F



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	35	40	48	55	69	85
	B	32	36	42	48	60	75
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	105	116	140	176	205	260
	B	95	105	130	165	190	245

### 1A

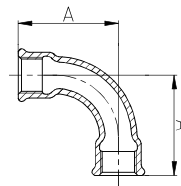
Short Bend 90°, M&F



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

### 2#

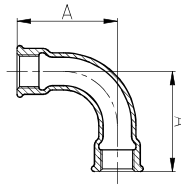
Bend 90°, female



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

### 2A

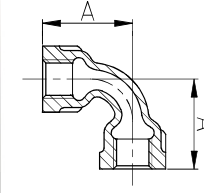
Short Bend 90°, female



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	2 1/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	115	138	167			

### 2AF

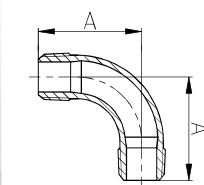
Short Bend 90°, female, banded



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

### 3#

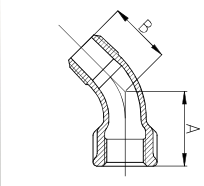
Bend 90°, male



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

### 40

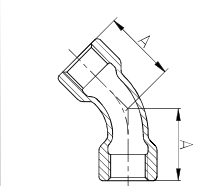
Bend 45°, M&F



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	26	30	36	43	51	64
	B	21	24	30	36	42	54
Size	Inch	1 1/2	2	2 1/2	3	4	6
	mm	40	50	65	80	100	150
Dim. (mm)	A	68	81	99	113	142	197
	B	58	70	86	100	126	176

### 41

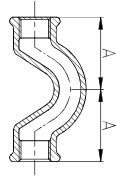
Bend 45°, female



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	26	30	36	43	51	64
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	68	81	99	113	142	

### 85

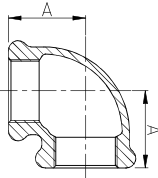
Crossover



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
	B						
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

### 90

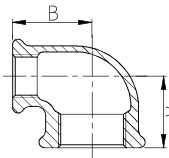
Elbow, 90°, equal



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
	B							
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							

### 90R

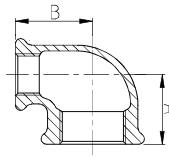
Reducing Elbow, 90°



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	1x1/2	1x3/4	1 1/4x1/2	1 1/4x3/4	1 1/4x1
	mm	25x15	25x20	32x15	32x20	32x25
Dim. (mm)	A	32	35	34	36	40
	B	34	36	38	41	42

### 90R

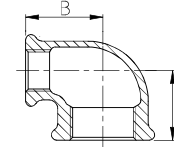
Reducing Elbow, 90°



Size	Inch	1 1/2x1/2	1 1/2x3/4	1 1/2x1	1 1/2x1 1/4	2x1 1/2
	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

### 90R

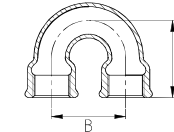
Reducing Elbow, 90°



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

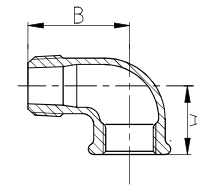
Return Bend



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					

### 92

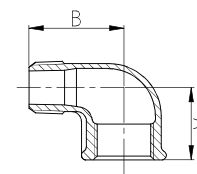
Street Elbow, 90°, equal



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

### 92R

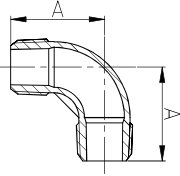
Reducing Street Elbow, 90°



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	1x3/4	1 1/4x1	1 1/2x1	1 1/2x1 1/4	
	mm	25x20	32x25	40x25	40x32	
Dim. (mm)	A	35	40	41	49	
	B	46	56	59	61	

94

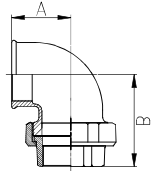
Elbow, 90° male



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					

95

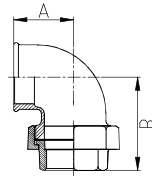
Union Elbow, F&F, flat seat without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	21	25	28	33	38	45
	B	48	52	58	62	72	82
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		

95D

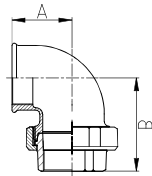
Union Elbow, F&F, flat seat with gasket



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
	B	61	65	75	85	93	103
Size	Inch	2 1/2	3				
	mm	65	80				
Dim. (mm)	A	78	83				
	B	115	134				

96

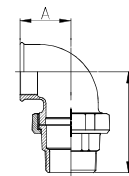
Union Elbow, F&F, conical joint iron to iron



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
	B	48	52	58	62	72	82
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		

97

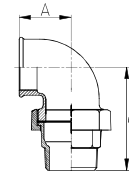
Union Elbow, M&F, flat seat without gasket



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	21	25	28	33	38	45
	B	61	65	76	82	94	107
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		

97D

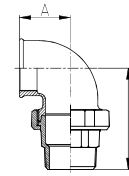
Union Elbow, M&F, flat seat with gasket



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
	B	79	85	97	110	118	131
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

98

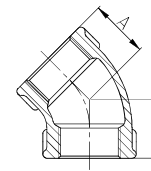
Union Elbow, M&F, conical joint iron to iron



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
	B	61	65	76	82	94	107
Size	Inch	2 1/2	3				
	mm	65	80				
Dim. (mm)	A	78	83				
	B	115	128	145	161		

120

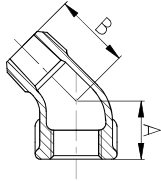
Elbow, 45°



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	43	49	55	66	

### 121

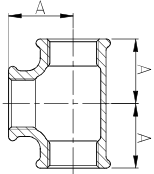
Street Elbow, 45°



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

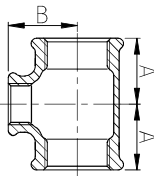
Tee



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
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

### 130R

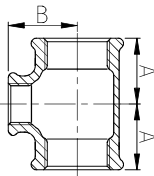
Reducing Tee



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

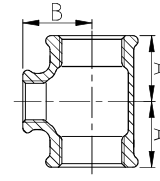
Reducing Tee



Size	Inch	1 1/4X3/8	1 1/4X1/2	1 1/2X3/4	1 1/2X1	1 1/2X1 1/2
	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	1 1/2X1	1 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

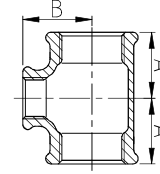
Reducing Tee



Size	Inch	2X1	2X1 1/4	2X1 1/2	2 1/2X1 1/2	2 1/2X3/4
	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 1/2
	mm	65X25	65X32	65X40	65X50	80X15
Dim. (mm)	A	47	52	55	61	50
	B	60	62	63	66	63

### 130R

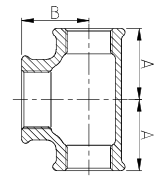
Reducing Tee



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

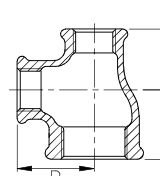
Reducing Tee



Size	Inch	3/8X1/2X3/8	1/2X3/4X1/2	1/2X1X1/2	3/4X1X3/4	1X1 1/4X1
	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 1/2X1 1/4	1 1/4X2X1 1/4	1 1/2X2X1 1/2	
	mm	25X40X25	32X40X32	32X50X32	40X50X40	
Dim. (mm)	A	46	48	54	55	
	B	42	46	48	52	

### 130R

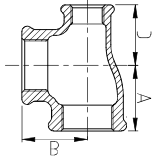
Reducing Tee



Size	Inch	1 1/2X3/8X3/8	3/4X1 1/2X1 1/2	1X1 1/2X1 1/2	1X3/4X3/4	1 1/4X3/4X3/4	1 1/4X1X1
	mm	15X10X10	20X15X15	25X15X15	25X20X20	32X20X20	32X25X25
Dim. (mm)	A	26	30	32	35	36	40
	B	26	31	34	36	41	42
	C	25	28	28	33	33	38
Size	Inch	1 1/2X1	1 1/2X1 1/4X1 1/4	2X1 1/4X1 1/4	2X1 1/2X1 1/2	2 1/2X2X2	3X2X2
	mm	40X25X25	40X32X32	50X32X32	50X40X40	65X50X50	80X60X60
Dim. (mm)	A	42	46	48	52	62	64
	B	46	48	54	55	68	73
	C	38	45	45	50	62	60

### 130R

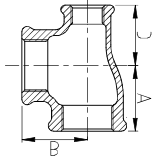
Reducing Tee



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	1 1/4X1 1/4X1/2	1 1/4X1 1/4X3/4	1 1/4X1 1/4X1	1 1/2X1 1/2X1/2
	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

### 130R

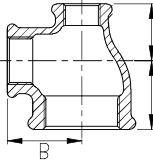
Reducing Tee



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

### 130R

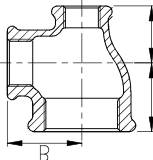
Reducing Tee



Size	Inch	3/4X1X1/2	1X1/2X3/4	1X3/4X1/2	1 1/4X1/2X3/4	1 1/4X1/2X1
	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 1/4X1 1/2X1	1 1/2X1/2X1	1 1/2X1/2X1 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

### 130R

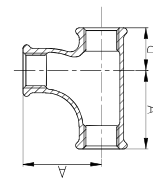
Reducing Tee



Size	Inch	1 1/2X3/4X1	1 1/2X3/4X1 1/4	1 1/2X1X1 1/4	1 1/2X1 1/4X1	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	2X1/2X1 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

### 131

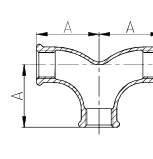
Pitcher Tee, 90°, equal



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						

### 132

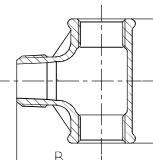
Twin Elbow, equal



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
	B						
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

### 133

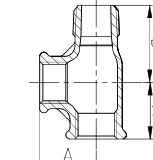
Tee, equal



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						

### 134

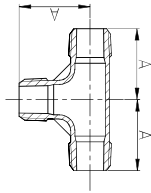
Tee, equal



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	27	33	37	45	50	59
	B	37	43	50	58	65	69
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

135

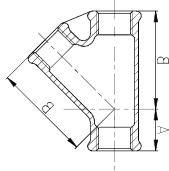
Tee, equal



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

165

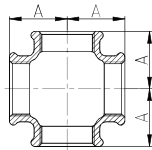
Lateral Y Branch, 45°



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

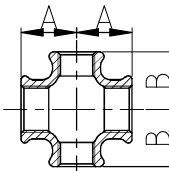
Cross



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
	B						
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						

180R

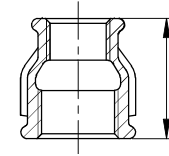
Reducing Cross



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

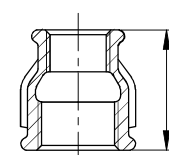
Reducing Socket



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
	B					
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
	B					

240

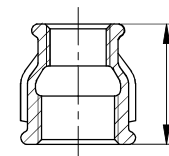
Reducing Socket



Size	Inch	1 1/4X3/8	1 1/4X1/2	1 1/4X3/4	1 1/4X1	1 1/2X1/2
	mm	32X10	32X15	32X20	32X25	40X15
Dim. (mm)	A	50	50	50	50	55
	B					
Size	Inch	1 1/2X3/4	1 1/2X1	1 1/2X1 1/4	2X1/2	2X3/4
	mm	40X20	40X25	40X32	50X15	50X20
Dim. (mm)	A	55	55	55	65	65
	B					

240

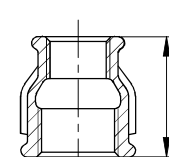
Reducing Socket



Size	Inch	2X1	2X1 1/4	2X1 1/2	2 1/2X1 1/2	2 1/2X3/4
	mm	50X25	50X32	50X40	65X15	65X20
Dim. (mm)	A	65	65	65	74	74
	B					
Size	Inch	2 1/2X1	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2	3X1
	mm	65X25	65X32	65X40	65X50	80X25
Dim. (mm)	A	74	74	74	74	80
	B					

240

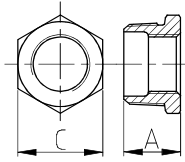
Reducing Socket



Size	Inch	3X1 1/4	3X1 1/2	3X2	3X2 1/2	4X1 1/2
	mm	80X32	80X40	80X50	80X65	100X40
Dim. (mm)	A	80	80	80	80	94
	B					
Size	Inch	4X2	4X2 1/2	4X3		
	mm	100X50	100X65	100X80		
Dim. (mm)	A	94	94	94		
	B					

241

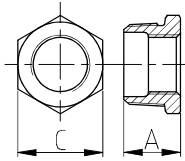
Bushing



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
	B					
	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
	B					
	C	22	30	30	30	36

241

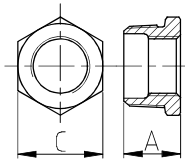
Bushing



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

241

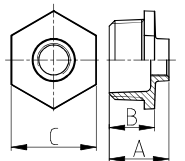
Bushing



Size	Inch	1 1/2X1 1/4	2X1	2X1 1/4	2X1 1/2	2 1/2X1 1/2
	mm	40X32	50X25	50X32	50X40	65X40
Dim. (mm)	A	31	35	35	35	40
	B					
	C	50	65	65	65	80
Size	Inch	2 1/2X2	3X2	3X2 1/2	4X3	
	mm	65X50	80X50	80X65	100X80	
Dim. (mm)	A	40	44	44	51	
	B					
	C	80	95	95	120	

241D

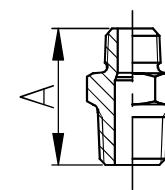
Bushing



Size	Inch	2X1/2	2X3/4	2 1/2X1	2 1/2X1 1/4	3X1
	mm	50X15	50X20	65X25	65X32	80X25
	A	48	48	54	54	59
	B	35	35	40	40	44
Dim. (mm)	C	65	65	80	80	95
	Size	Inch	3X1 1/4	3X1 1/2	4X2	4X2 1/2
	mm	80X32	80X40	100X50	100X65	
	A	59	59	69	69	
Dim. (mm)	B	44	44	51	51	
	C	95	95	120	120	

245

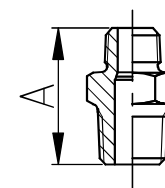
Reducing Nipple



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
	B					
	C					
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
	B					
	C					

245

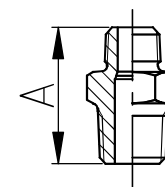
Reducing Nipple



Size	Inch	1 1/4X1/2	1 1/4X3/4	1 1/4X1	1 1/2X1/2	1 1/2X3/4
	mm	32X15	32X20	32X25	40X15	40X20
Dim. (mm)	A	57	57	57	59	59
	B					
	C					
Size	Inch	1 1/2X1	1 1/2X1 1/4	2X1/2	2X3/4	2X1
	mm	40X25	40X32	50X15	50X20	50X25
Dim. (mm)	A	59	59	68	68	68
	B					
	C					

245

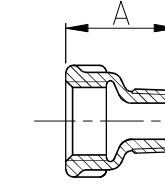
Reducing Nipple



Size	Inch	2X1 1/4	2X1 1/2	2 1/2X1	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2
	mm	50X32	50X40	65X25	65X32	65X40	65X50
Dim. (mm)	A	68	68	75	75	75	75
	B						
	C						
Size	Inch	3X1 1/2	3X2	3X2 1/2	4X2	4X2 1/2	4X3
	mm	80X40	80X50	80X65	100X50	100X65	100X80
Dim. (mm)	A	83	83	83	87	87	87
	B						
	C						

246

Reducing Extension piece, sockets M&F

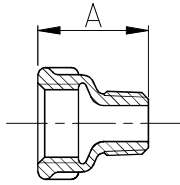


Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X3/8	3/4X1/2	1X1/2
	mm	10X8	15X8	15X10	20X10	20X15	25X15
Dim. (mm)	A	35	43	43	48	48	55
	B						
	C						
Size	Inch	1X3/4	1 1/4X1/2	1 1/4X3/4	1 1/4X1	1 1/2X3/4	1 1/2X1
	mm	25X20	32X15	32X20	32X25	40X20	40X25
Dim. (mm)	A	55	60	60	60	63	63
	B						
	C						



### 246

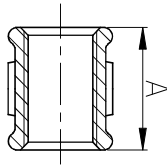
Reducing Extension piece, sockets M&F



Size	Inch	1 1/2X1 1/4	2X1 1/2	2X3/4	2X1	2X1 1/4
	mm	40X32	50X15	50X20	50X25	50X32
Dim. (mm)	A	63	70	70	70	70
Size	Inch	2X1 1/2	2 1/2X1 1/2	2 1/2X2	3X2	3X2 1/2
	mm	50X40	65X40	65X50	80X50	80X65
Dim. (mm)	A	70	74	74	80	81

### 270

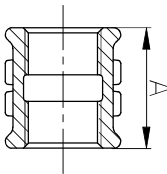
Socket, parallel threads, equal



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

### 271

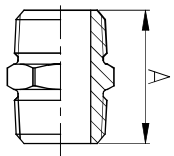
Socket, right&left hand thread



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					

### 280

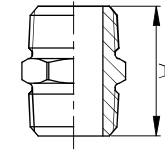
Hexagon Nipple, equal



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

### 281

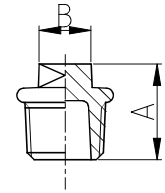
Hexagon Nipple, right&left hand thread



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					

### 290

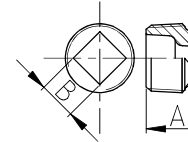
Plug, beaded



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
Dim. (mm)	A	39	41	48	54	60	70
	B	22	22	27	32	36	41

### 291

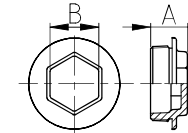
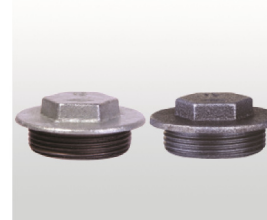
Plug, plain



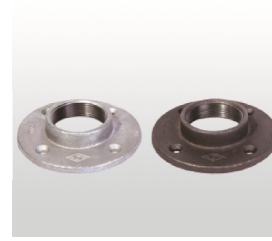
Size	Inch	1	2 1/2	3			
	mm	25	65	80			
Dim. (mm)	A	23	39	44			
	B	19	32	36			
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

### 292

Special Plug



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



```
ERROR: undefined
OFFENDING COMMAND: F'~
STACK:
```