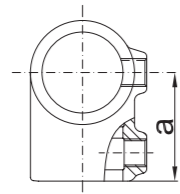
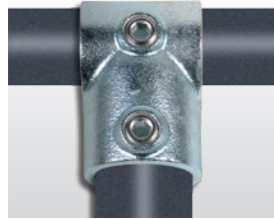


Malleable Iron Pipe Clamps



101

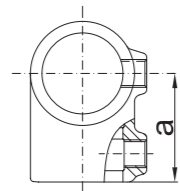
Short Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	41			
B	33.7	46			
C	42.4	60			
D	48.3	68			
E	60.3	84			
T	21.3	35			

101

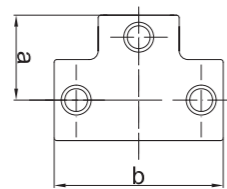
Reducing Short Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
CB	42.4/33.7	57			
CD	42.4/48.3	68			
DC	48.3/42.4	63			
ED	60.3/48.3	74			

104

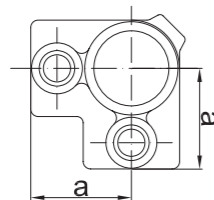
Long Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	41	82		
B	33.7	46	92		
C	42.4	60	120		
D	48.3	68	136		
E	60.3	84	168		

116

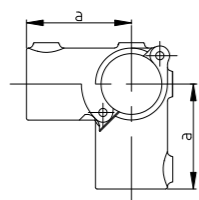
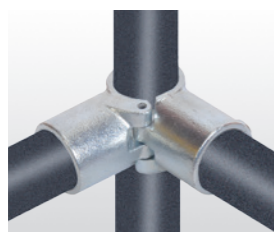
3 Way Through



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	40			
B	33.7	48			
C	42.4	60			
D	48.3	68			
E	60.3	86			
T	21.3	35			

116A-D

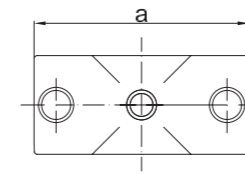
Add-on 3 Way Through



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	88			

119

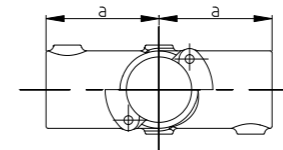
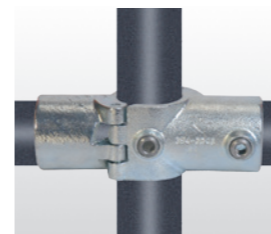
2 Socket Cross



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	80			
B	33.7	96			
C	42.4	120			
CD	42.4/48.3	122			
D	48.3	135			
E	60.3	168			
T	21.3	70			

119A-D

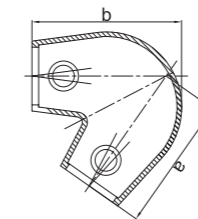
Add on 2 Socket Cross



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	88			

123

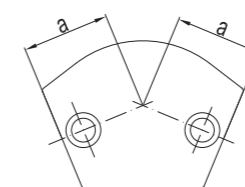
Variable Elbow 40° - 70°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	120	134		

124

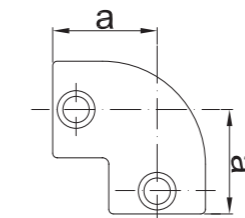
Variable Elbow 15° - 60°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	40			
C	42.4	47.5			
D	48.3	44			

125

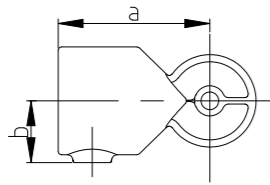
2 Way 90° Elbow



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	41			
B	33.7	46			
C	42.4	60			
D	48.3	68			
DC	48.3/42.4	68/60			
E	60.3	84			
T	21.3	35			

125H

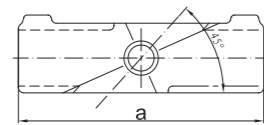
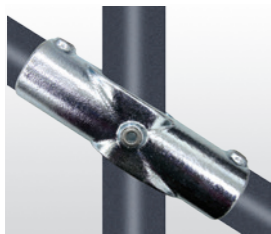
Variable Elbow



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	62	27.2		
C	42.4	75	31.7		
D	48.3	85	34.7		

126

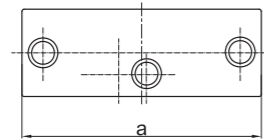
Angle Cross 30° - 45°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
C	42.4	190			
D	48.3	218			

127

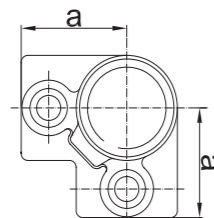
Angle Tee 30° - 45°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	119			
C	42.4	147			
D	48.3	164.5			

128

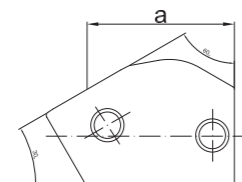
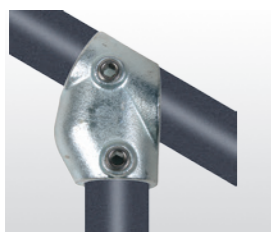
3 Way 90° Elbow



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	40			
B	33.7	48			
C	42.4	60			
D	48.3	68			
E	60.3	85			
T	21.3	35			

129

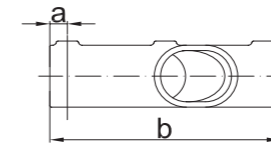
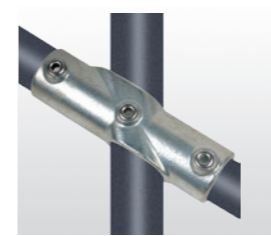
Adjustable Tee 30° - 60°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	75			
B	33.7	70			
C	42.4	85			
D	48.3	90			

130

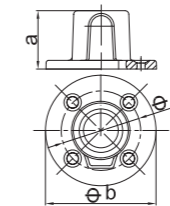
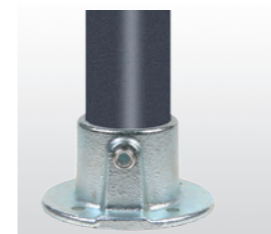
Adjustable Corss 30° - 45°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	14.5	147		
C	42.4	16.5	199		
D	48.3	16.5	217		

131

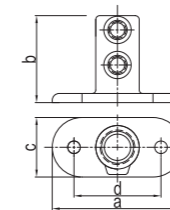
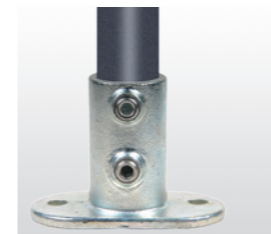
Base Flange



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	42	83	57	
B	33.7	48	89	65	
C	42.4	50	102	76	
D	48.3	59	114	88.5	
E	60.3	64	127	95	
T	21.3	32	74	55.5	

132

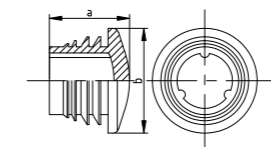
Railing Base Flange



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	105	60	52	76
B	33.7	127	71	62	89
C	42.4	139	84	72	101
D	48.3	152	89	86	114
E	60.3	165	104	96	127

133

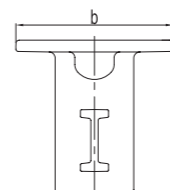
Plastic End Cap



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	26	34		
C	42.4	30	42.5		
D	48.3	31	48		
E	60.3	26	60		

134

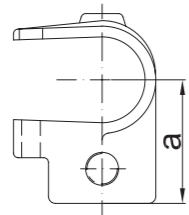
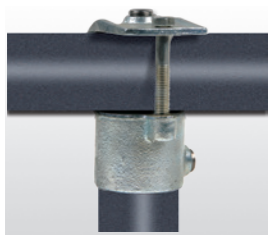
Ground Socket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	123	127		
C	42.4	136	140		
D	48.3	136	140		

135

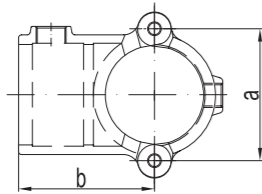
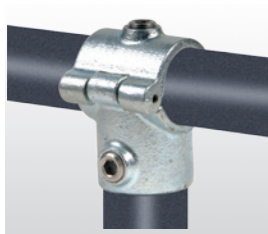
Clamp on Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	50			
B	33.7	53			
C	42.4	67			
D	48.3	77			
E	60.3	90.5			

136

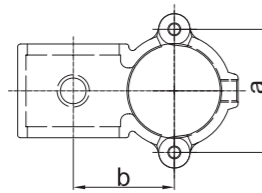
Add on Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	53.5	52		
C	42.4	61.4	60		
D	48.3	67	69		

137

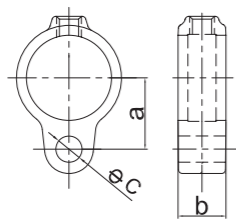
Crossover 90°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	53.5	41		
C	42.4	61.4	50		
D	48.3	67	55		

138

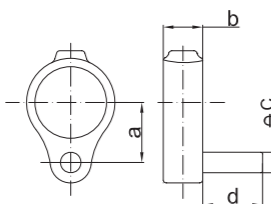
Gate Eye



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	30	25	14	
B	33.7	33	25	14	
C	42.4	38	25	14	
D	48.3	41	25	14	

140

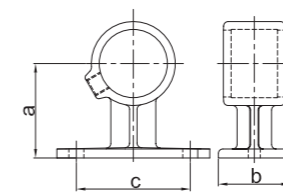
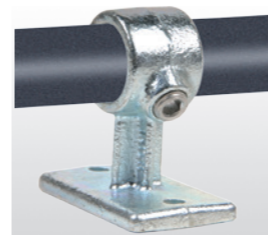
Gate Hinge



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	30	25	13	38
B	33.7	33	25	13	38
C	42.4	38	25	12	38
D	48.3	41	25	12	38

143

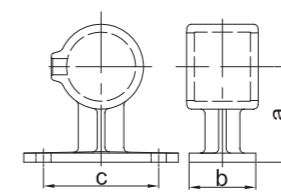
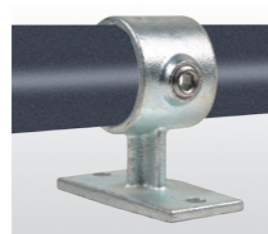
Handrail Bracket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	55	44	57	
B	33.7	57	44	62	
C	42.4	63	44	76	
D	48.3	67	50	82.5	

143W

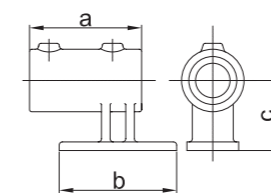
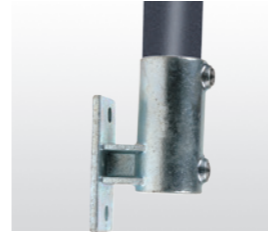
Handrail Bracket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	55	44	57.5	
B	33.7	57	44	63	
C	42.4	63	44	76	
D	48.3	67	48	82.5	

144

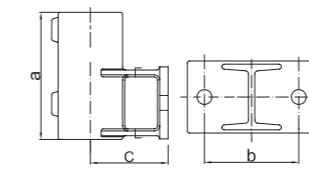
Railing Side Support (Vertical)



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	104	96	65	
C	42.4	112	110	64.5	
D	48.3	120	123	65	

145

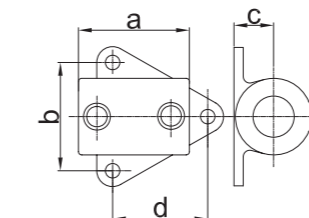
Railing Side Support (Horizontal)



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	102	67	57	
C	42.4	111	73	64	
D	48.3	119	89	73	

146

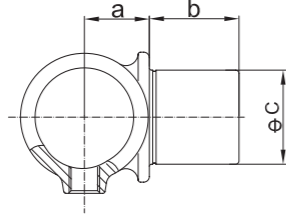
Side Palm Fixing



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	76	71	24	63
C	42.4	83	82	28	72
D	48.3	89	86	31	78

147

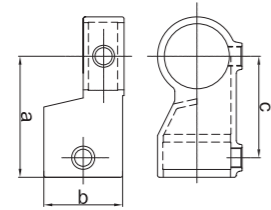
Internal Swivel Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	23	29	34	
C	42.4	26	37	42	
D	48.3	30	42	48	

148

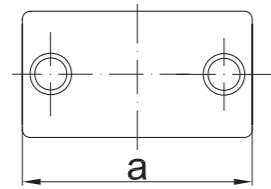
Short Swivel Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	53	37	42	
B	33.7	59	46	48	
C	42.4	73	55	58.5	
D	48.3	93	60.5	78	
E	60.3	110	73	93.5	

149

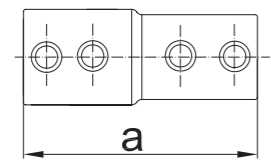
Sleeve Joint



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	76			
B	33.7	89			
C	42.4	102			
D	48.3	102			
E	60.3	120			

149BA

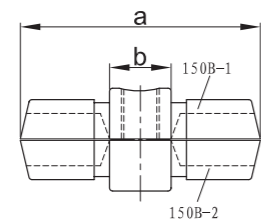
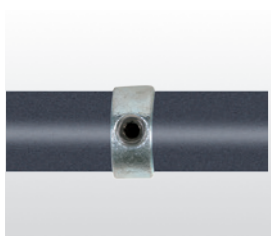
Reducing Sleeve Joint



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
BA	33.7/26.9	130			

150

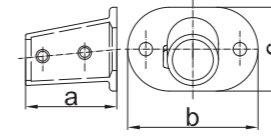
Internal Joint



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	76	22		
B	33.7	78	20		
C	42.4	78	20		
D	48.3	78	20		

152

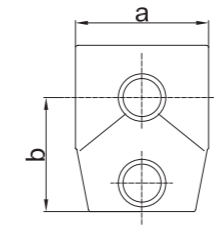
Base Flange 0° - 11°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	90	127	80	
C	42.4	98	140	90	
D	48.3	99	153	96	

153

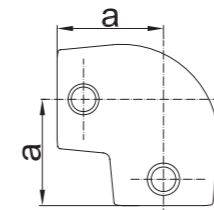
Short Tee 0° - 11°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	60	46		
C	42.4	70	60		
D	48.3	78	68		

154

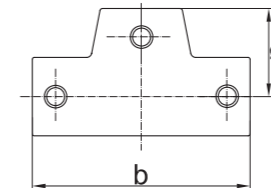
Elbow 0° - 11°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	46			
C	42.4	60			
D	48.3	68			

155

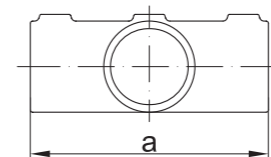
Long Tee 0° - 11°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	46	104		
C	42.4	60	145		
D	48.3	68	168		

156

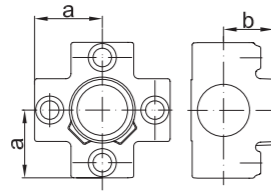
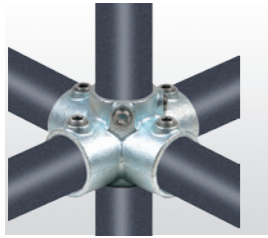
2 Socket Cross 0° - 11°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	110			
C	42.4	140			
D	48.3	158			

158

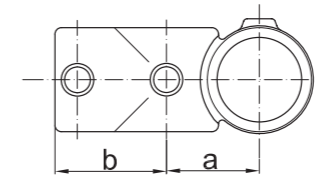
4 Way Cross



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	41	32		
B	33.7	46	35		
C	42.4	60	43.5		
D	48.3	68	49.5		
T	21.3	35	35		

165

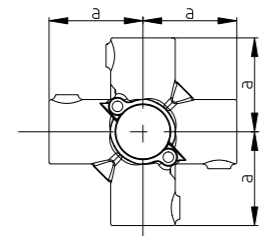
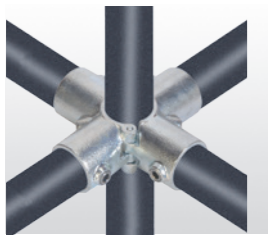
Combination Socket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	35	40		
B	33.7	40	48		
C	42.4	50	60		
D	48.3	56	67		

158A-D

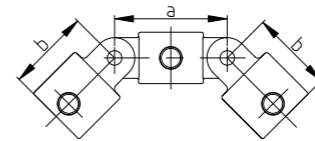
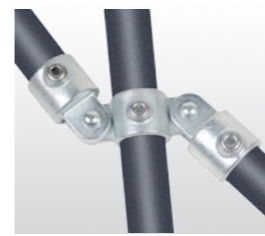
Add on 4Way Cross



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	88			

167

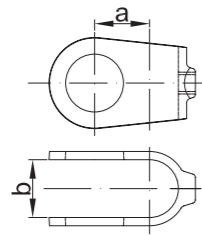
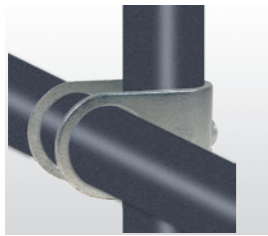
Double Swivel Combination



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	76	58.5		
B	33.7	86	61		
C	42.4	95	69		
D	48.3	100	77		

160

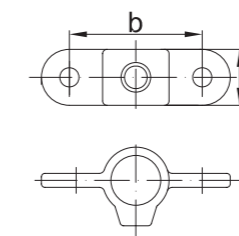
Clamp on Crossover



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	27	28		
B	33.7	34	35		
C	42.4	43	45.4		
D	48.3	49	51.6		
E	60.3	61	63		

167M

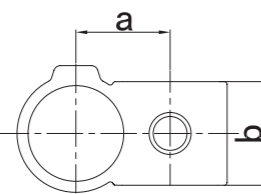
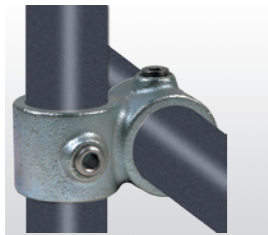
Double Male Section of Swivel



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	32	76		
B	33.7	40	86		
C	42.4	45	95		
D	48.3	48	105		
E	60.3	38	124		

161

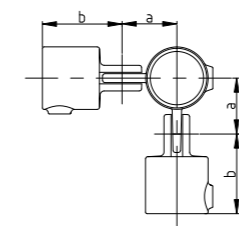
90° Crossover



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	38	31.5		
B	33.7	41	38.5		
C	42.4	50	45		
D	48.3	50	55		
E	60.3	64	61		

168

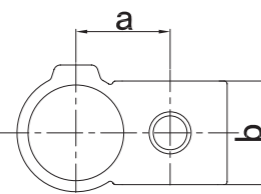
90° Corner Swivel Combination



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	38	58.5		
B	33.7	43.5	61		
C	42.4	47	69		
D	48.3	53	77		

161

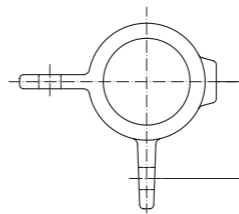
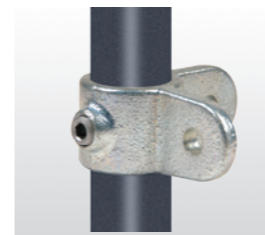
Reducing 90° Crossover



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
CB	42.4/33.7	45	46		
DB	48.3/33.7	45	38.5		
DC	48.3/42.4	49	45		
ED	60.3/48.3	58	55		

168M

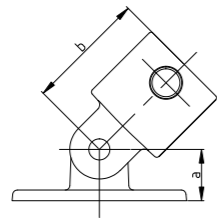
90° Corner Swivel Male Section



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	38			
B	33.7	43.5			
C	42.4	48			
D	48.3	53			
E	60.3	62			

169

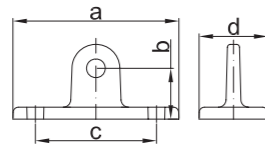
Swivel Base



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	32	58.5		
B	33.7	32	61		
C	42.4	32	69		
D	48.3	32	77		
E	60.3	32	95		

169M

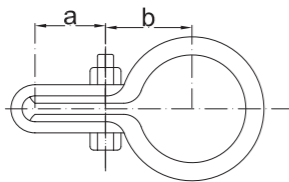
Male Swivel Locating Flange



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
M		112	32	85	51
A	26.9	111	40	81	46
B	33.7	112	32	85	52
C	42.4	112	32	85	52
D	48.3	112	32	85	52

170

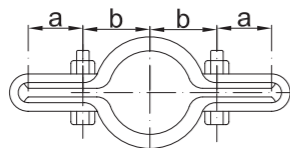
Single Sided Mesh Panel



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	22	25		
B	33.7	25	28		
C	42.4	25	33		
D	48.3	25	35		
E	60.3	25	40		

171

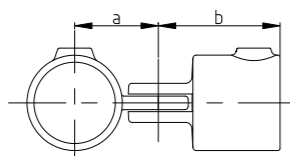
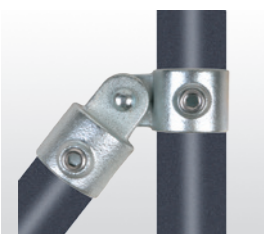
Double Sided Mesh Panel



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	22	25		
B	33.7	25	28		
C	42.4	25	33		
D	48.3	25	35		
E	60.3	25	40		

173

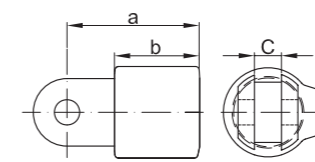
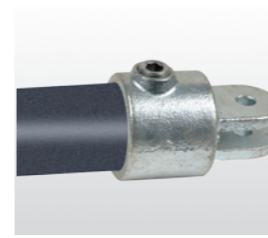
Single Swivel Combination



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	38	58.5		
B	33.7	43.5	61		
C	42.4	47	69		
D	48.3	53	77		
E	60.3	62	90.5		

173F

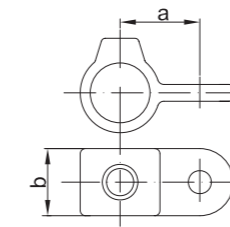
Female Section of Swivel



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	61	38	11.2	
B	33.7	61	38	11.2	
C	42.4	69	46	11.2	
D	48.3	77	55	11.2	
E	60.3	90.5	63	11.2	

173M

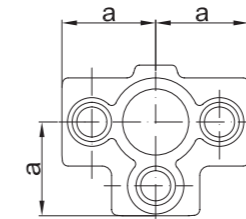
Single Male Section of Swivel



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	40	38		
B	33.7	43.5	38		
C	42.4	48	44.5		
D	48.3	53	44.5		
E	60.3	62	50.5		

176

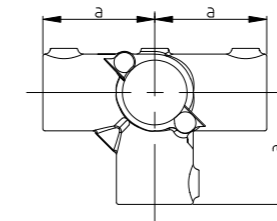
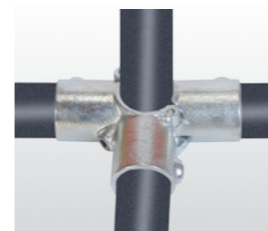
Side Outlet Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	40			
B	33.7	46			
C	42.4	60			
D	48.3	68			
E	60.3	84.5			
T	21.3	35			

176A-D

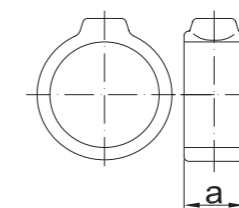
Add on Side Outlet Tee



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	88			

179

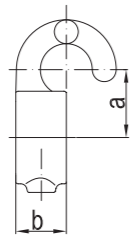
Locking Collar



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	22			
B	33.7	25			
C	42.4	25			
D	48.3	32			

182

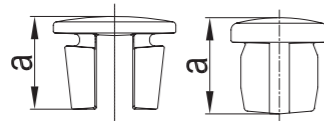
Hook



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	32	25		
B	33.7	34	25		
C	42.4	39	25		
D	48.3	41	25		

184

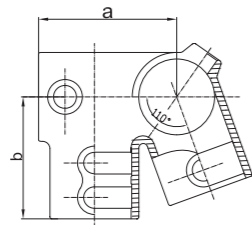
Plug



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	27.5			
B	33.7	26.5			
C	42.4	29.4			
D	48.3	28			
E	60.3	38			

185

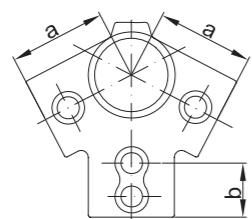
Eaves Fitting



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	94	83		

191

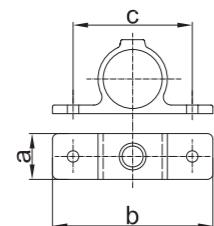
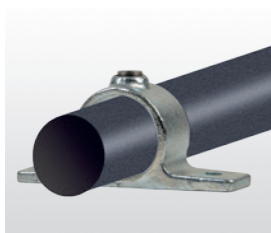
Ridge Fitting



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	70	39.5		

198

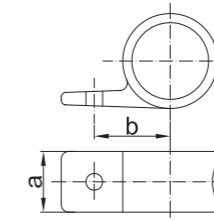
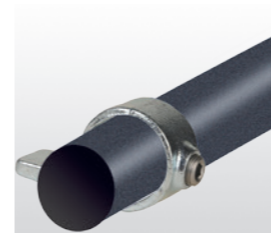
Double Sided Fixing Bracket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	35	128	94	
B	33.7	30	120	86	
C	42.4	33	130	95	
D	48.3	35	140	104	

199

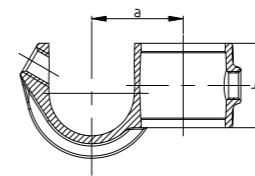
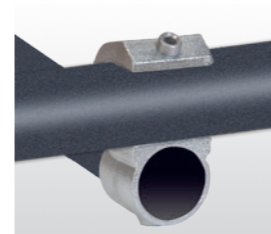
Adjustable Fixing Bracket



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
A	26.9	35	47		
B	33.7	30	43		
C	42.4	33	47.5		
D	48.3	35	52		

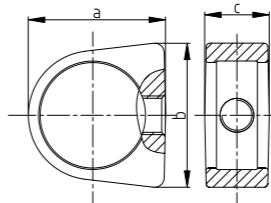
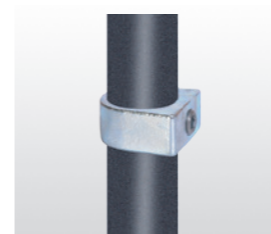
201

Guard Hook



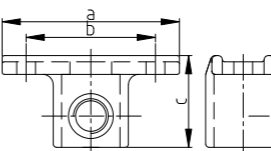
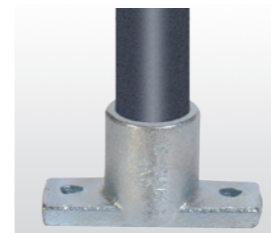
TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	55.3	51.5		

235



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
C	42.4	58.5	62.6	27.5	

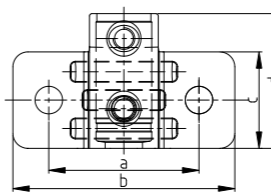
240



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
20X85	26.9	85	62	44	
20X110	26.9	110	85	44	
20X165	26.9	165	140	44	

246

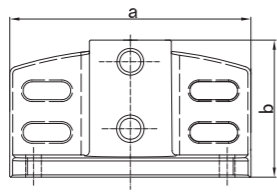
Heavt Duty Side Palm



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
B	33.7	100.5	148	64	90
C	42.4	100.5	148	64	90
D	48.3	102	145	75	90

247

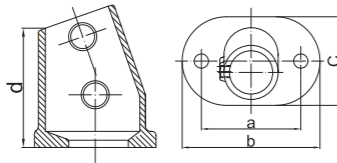
Flange With Toeboard Adaptor



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
C	42.4	162	90		
D	48.3	162	90		

252Z

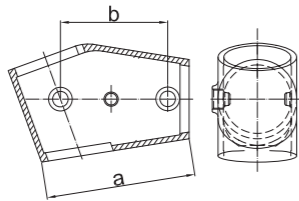
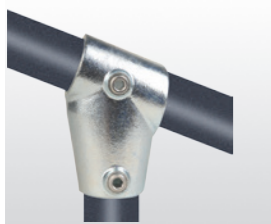
Slope Base Flange 11° - 29°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	127	165	92	88

253Z

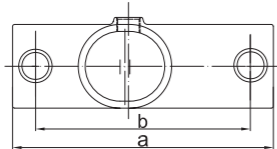
Slope Short Tee 11° - 29°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	115	86		

255Z

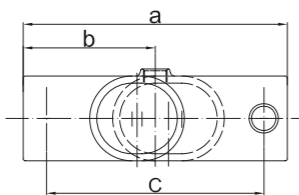
Slope Long Tee 11° - 29°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	187	154		

256Z

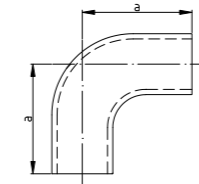
Slope Cross Middle Rail 11° - 29°



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
D	48.3	187	93.5	154	

DDA-1

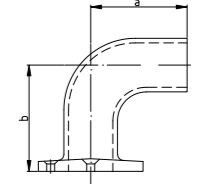
Elbow



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
1	33.7	78.2			

DDA-2

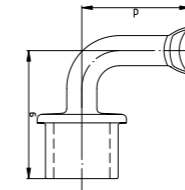
End Plate



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
2	33.7	78.2	86.2		

DDA-3

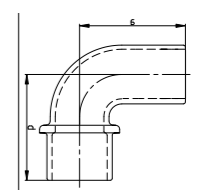
Post Connector



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
3		85	70		

DDA-4

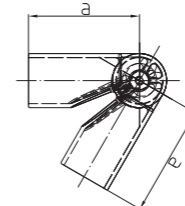
Post End Connector



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
4	33.7	78			

DDA-5

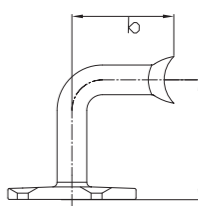
Variable Elbow



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
5	42.4	88			

DDA-6

Wall Plate



TYPE	TUBE SIZE (mm)	DIMENSIONS(mm.)			
		a	b	c	d
6		95	70		