



Section 10

Roll Groove Fittings

ROLL GROOVE FITTINGS

About Roll Groove

Grooved piping system is reliable and faster to install than welding, threading or flanging. This results in the lowest possible installed cost. It can be adopted to suit standard pipe with cut grooves or standard and light wall pipe with rolled grooves.

MATERIAL SPECIFICATIONS

FITTINGS	Ductile Iron conforming to ASTM A-536 Grade 65-45-12	
COATINGS	Hot Dipped Zinc galvanization	
BOLTS AND NUTS	Black or Zinc Plated at ASTM A-183 with a maximum tensile strength of 110,00PSI	Oval Neck bolts and heavy hexagon nuts
GASKETS	Elastomers with properties as designated by ASTM D-2000	

STANDARD ROLL GROOVE SPECIFICATIONS FOR STEEL PIPE

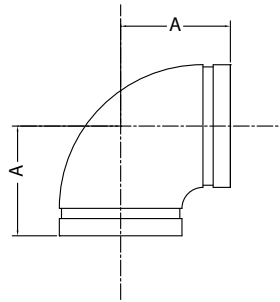
NOMINAL PIPE SIZE	PIPE OUTSIDE DIAMETRE (MM) 'F'			GASKET SEAT ±0.30 ±.770 (MM) 'A'	GROOVE WIDTH ± 0.30 ±.770 (MM) 'B'	GROOVE DIAMETRE 'C'		GROOVE DEPTH 'D'	MIN ALLOW WALL THICKNESS (MM) 'T'	MAX FLARE DIAMETRE (MM)
	ACTUAL	TOLERANCE (+)	TOLERANCE (-)			MM	MM			
25	33.700	+0.381	-0.381	15.875	7.137	30.226	-0.381			
32	42.400	+0.381	-0.381	15.875	7.137	38.989	-0.381	1.600	1.651	43.3
40	48.300	+0.381	-0.381	15.875	7.137	45.085	-0.381	1.600	1.651	49.4
50	60.300	+0.610	-0.610	15.875	8.738	57.150	-0.381	1.600	1.651	62.2
65	73.000	+0.737	-0.737	15.875	8.738	69.088	-0.457	1.981	2.108	75.2
80	88.900	+0.889	-0.737	15.875	8.738	84.938	-0.457	1.981	2.108	90.6
100	114.300	+1.143	-0.737	15.875	8.738	110.084	-0.508	2.108	2.108	116.2
125	141.300	+1.422	-0.737	15.875	8.738	137.033	-0.559	2.134	2.769	143.5
150	168.300	+1.600	-0.737	15.875	8.738	163.957	-0.559	2.159	2.769	170.7
200	219.100	+1.600	-0.737	19.050	11.913	214.401	-0.635	2.337	2.769	221.5

SPECIFICATIONS OF ROLL GROOVE PRODUCTS

PRODUCT	WORKING PRESSURE		MAXIMUM TEMPERATURE
RIGID COUPLING	2.5MPa (300PSI)		100°C
90° ELBOW			
45° ELBOW			
EQUAL TEE			
REDUCING TEE			
CONCENTRIC REDUCER			
CAP			
MECHANICAL TEE			

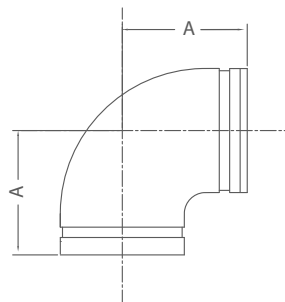
Roll Groove 90 Deg Elbow Short Radius

ROLL GROOVE 90 DEG ELBOW SHORT RADIUS				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGE050	RGEG050	50	70	.578
RGE065	RGEG065	65	76	.912
RGE080	RGEG080	80	85.5	1.327
RGE100	RGEG100	100	101	1.832
RGE150	RGEG150	150	140	4.463
RGE200	RGEG200	200	165	8.466



Roll Groove 90 Deg Elbow Long Radius

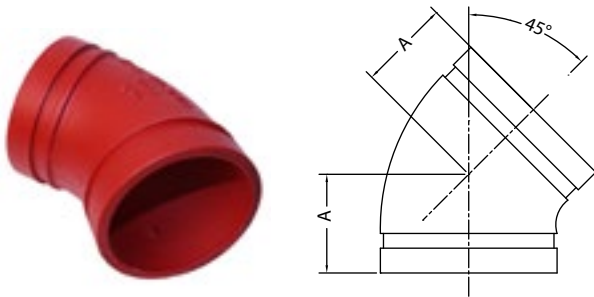
ROLL GROOVE 90 DEG ELBOW LONG RADIUS				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGEL025	RGELG025	25	57	.237
RGEL032	RGELG032	32	70	.414
RGEL040	RGELG040	40	70	.483
RGEL050	RGELG050	50	82.5	.652
RGEL065	RGELG065	65	95	1.153
RGEL080	RGELG080	80	108	1.607
RGEL100	RGELG100	100	127	2.661
RGEL125	RGELG125	125	140	4.091
RGEL150	RGELG150	150	165	5.992
RGEL200	RGELG200	200	197	11.118
RGEL250	RGELG250	250	229	24.580
RGEL300	RGELG300	300	254	35.523



ROLL GROOVE FITTINGS

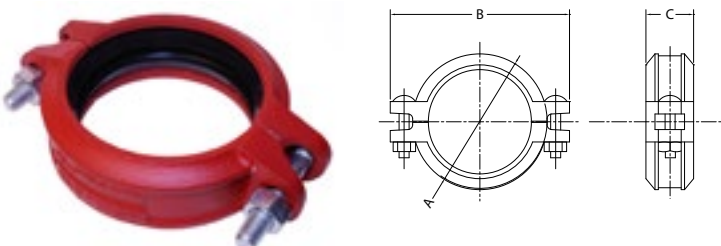
Roll Groove 45 Deg Elbow

ROLL GROOVE 45 DEG ELBOW				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGE45040	RGE45G040	40	44.5	
RGE45050	RGE45G050	50	51	0.7
RGE45065	RGE45G065	65	57	2.0
RGE45080	RGE45G080	80	63.5	1.3
RGE45100	RGE45G100	100	76	2.0
RGE45125	RGE45G125	125	83.5	3.5
RGE45150	RGE45G150	150	89	4.4
RGE45200	RGE45G200	200	108	9.0
RGE45250	RGE45G250	250	120.5	15.5
RGE45300	RGE45G300	300	113	22.5



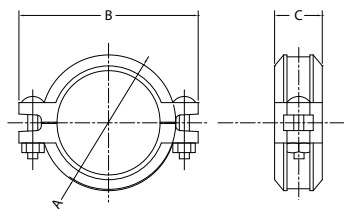
Roll Groove Rigid Coupling

ROLL GROOVE RIGID COUPLING							
CODE		METRIC SIZE	A	B	C	BOLT SIZE	APPROX KG/PC
PAINTED	GALVANISED						
RGCZ025	RGCZG025	25	59	100	44	M10 X 55	0.5
RGCZ032	RGCZG032	32	66	105	45		0.6
RGCZ040	RGCZG040	40	72	112	45		0.7
RGCZ050	RGCZG050	50	85	130	45	M10 X70	0.8
RGCZ065	RGCZG065	65	101	145	45		0.9
RGCZ080	RGCZG080	80	115	168	46		1.2
RGCZ100	RGCZG100	100	146	200	52	M12 X 75	1.6
RGCZ125	RGCZG125	125	170	235	52		2.3
RGCZ150	RGCZG150	150	198	262	52		2.8
RGCZ200	RGCZG200	200	260	342	62		6.1
RGCZ250	RGCZG250	250	327	420	63		
RGCZ300	RGCZG300	300	370	465	63		
RGCZ350	RGCZG350	350	415	510	72		



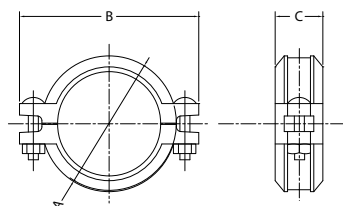
Roll Groove Flexible Coupling

ROLL GROOVE FLEXIBLE COUPLING									
CODE		METRIC SIZE	ANGULAR MOVEMENT		DIMENSIONS			BOLT SIZE	APPROX KG/PC
PAINTED	GALVANISED		PER COUPLING DEGREE	PER PIPE	A	B	C		
RGCF025	RGCFG025	25	5°	96	55	92	42	M10 X 45	0.6
RGCF032	RGCFG032	32	4°	76	65	104	44	M10 X 55	0.7
RGCF040	RGCFG040	40	3°	66	70	110	44		0.7
RGCF050	RGCFG050	50	3°	53	83	124	44		0.8
RGCF065	RGCFG065	65	2°	44	100	145	45		0.9
RGCF080	RGCFG080	80	2°	36	115	160	45	M12 X 75	1.3
RGCF100	RGCFG100	100	3°	59	145	198	50		1.9
RGCF125	RGCFG125	125	2°	48	169	230	52	M16 X 90	2.3
RGCF150	RGCFG150	150	2°	40	196	260	52		3.0
RGCF200	RGCFG200	200	1°	29	258	350	60		5.8
RGCF250	RGCFG250	250	1°	23	337	406	65	M20 X 120	8.2
RGCF300	RGCFG300	300	1°	20	372	460	64		12.0
RGCF350	RGCFG350	350	1°	9	428	520	72		15.7



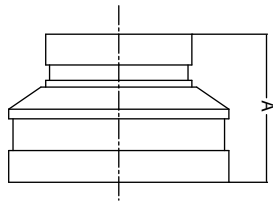
Roll Groove Reducing Flexible Coupling

ROLL GROOVE REDUCING FLEXIBLE COUPLING									
CODE		METRIC SIZE	ANGULAR MOVEMENT		DIMENSIONS			BOLT SIZE	APPROX KG/PC
PAINTED	GALVANISED		PER COUPLING DEGREE	PER PIPE	A	B	C		
RGCR065050	RGCRG065050	65 X 50	2°	22	102	140	45	M10 X 55	1.2
RGCR080050	RGCRG080050	80 X 50	2°	18	115	168	46	M12 X 75	1.5
RGCR080065	RGCRG080065	80 X 65	2°	18	115	168	46		1.7
RGCR100050	RGCRG100050	100 X 50	2°	21	144	198	50		2.4
RGCR100065	RGCRG100065	100 X 65	2°	21	144	198	50		2.6
RGCR100080	RGCRG100080	100 X 80	2°	21	148	198	50	M16 X 90	2.4
RGCR150100	RGCRG150100	150 X 100	2°	20	197	260	51		4.5
RGCR168165		168 X 165	2°	19	200	270	53		4.5
RGCR200150		200 X 150	1°	15	257	335	60	M20 X 120	7.6



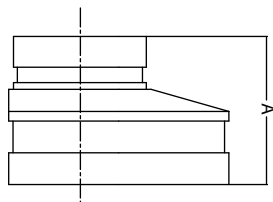
Roll Groove Concentric Reducer

ROLL GROOVE CONCENTRIC REDUCER				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGRC065050	RGRCG065050	65 X 50	64	0.5
RGRC080050	RGRCG080050	80 X 50	64	0.5
RGRC080065	RGRCG080065	80 X 65	64	0.6
RGRC100050	RGRCG100050	100 X 50	76	1.1
RGRC100065	RGRCG100065	100 X 65	76	1.0
RGRC100080	RGRCG100080	100 X 80	76	1.0
RGRC150050	RGRCG150050	150 X 50	102	1.9
RGRC150080	RGRCG150080	150 X 80	102	2.0
RGRC150100	RGRCG150100	150 X 100	102	2.1
RGRC200150	RGRCG200150	200 X 150	127	5.2



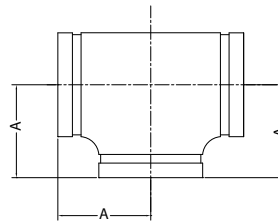
Roll Groove Eccentric Reducer

ROLL GROOVE ECCENTRIC REDUCER				
CODE	METRIC SIZE	A	APPROX KG/PC	
PAINTED				
RGRE065050	65 X 50	89	0.7	
RGRE080050	80 X 50	89	1.0	
RGRE080065	80 X 65	89	1.0	
RGRE100050	100 X 50	102	1.4	
RGRE100065	100 X 65	102	1.5	
RGRE100080	100 X 80	102	1.6	
RGRE150080	150 X 80	102	3.5	
RGRE150100	150 X 100	102	3.8	



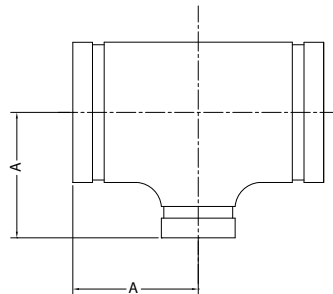
Roll Groove Equal Tee STD

ROLL GROOVE EQUAL TEE STD				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGT040	RGTG040	40	70	0.9
RGT050	RGTG050	50	82.5	1.3
RGT065	RGTG065	65	95	2.2
RGT080	RGTG080	80	108	3.1
RGT100	RGTG100	100	127	4.6
RGT125	RGTG125	125	140	6.5
RGT150	RGTG150	150	165	10.0
RGT200	RGTG200	200	197	20.0
RGT250	RGTG250	250	229	31.0
RGT300	RGTG300	300	254	45.0



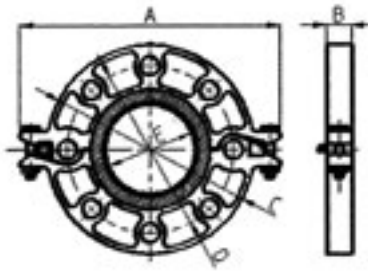
Roll Groove Reducing Tee

ROLL GROOVE REDUCING TEE				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGTR100050	RGTRG100050	100 X 50	101	4.2
RGTR100065	RGTRG100065	100 X 65	101	4.3
RGTR100080	RGTRG100080	100 X 80	101	4.5
	RGTRG250100	250 X 100	229	28.5
	RGTRG300200	300 X 200	254	38.0



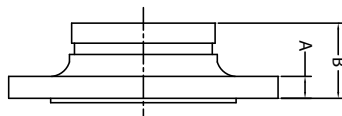
Roll Groove Flange

ROLL GROOVE FLANGE										
CODE		METRIC SIZE	DIMENSIONS			DIMENSIONS		BOLT		APPROX KG/PC
PAINTED	GALVANISED		A	B	C	D	E	SIZE	No.	
RGF065		65	185	145	22	76	105	M16	4	2.8
RGF080		80	200	160	24	89	116		8	3.4
RGF100	RGFG100	100	220	180	24	114	141		8	3.6
RGF150	RGFG150	150	285	240	24	165	195	M20	8	4.6
RGF200	RGFG200	200	340	295	24	219	254		12	8.4



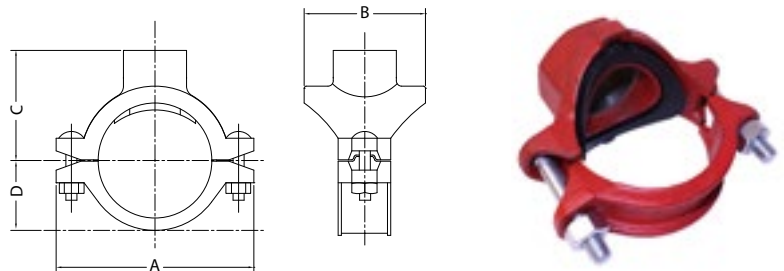
Roll Groove Flange Adaptor

ROLL GROOVE FLANGE ADAPTOR									
CODE	NOMINAL SIZE	METRIC SIZE	DIMENSIONS				BOLT		APPROX KG/PC
PAINTED			A	B	C	D	SIZE	No.	
RGFA065	65 76.1	76.1	70 2.756	165 6.50	127 5.00	16 0.63	M16	4	2.9
RGFA080	80 3	88.9	70 2.756	184 7.24	146 5.75	16 0.63		4	3.4
RGFA100	100 4	114.3	70 2.756	216 8.50	178 7.00	16 0.63		8	4.8
RGFA150	150 165.1	165.1	70 2.756	280 11.02	235 9.25	21 0.71	M20	8	6.3
RGFA200	200 8	219.1	102 4.02	337 13.27	292 11.50	19 0.75		12	13.6



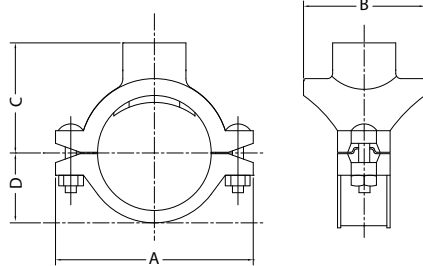
Roll Groove Mechanical Tee Female Threaded Outlet

ROLL GROOVE MECHANICAL TEE FEMALE THREADED OUTLET									
CODE		METRIC SIZE	HOLE DIA.	DIMENSIONS				BOLT SIZE	APPROX KG/PC
PAINTED	GALVANISED			A	B	C	D		
RGTM050015		50 X 15	38	116	68	60	39	M10 X 55	0.99
RGTM050025	RGTMG050025	50 X 25	38	116	68	60	39		1.09
RGTM050032	RGTMG050032	50 X 32	45	116	76	65	39		1.26
RGTM050040	RGTMG050040	50 X 40	45	116	76	65	39		1.37
RGTM065025	RGTMG065025	65 X 25	38	144	70	69	49	M12 X 60	1.30
RGTM065032	RGTMG065032	65 X 32	51	144	84.5	73	49		1.46
RGTM065040	RGTMG065040	65 X 40	51	144	84.4	73	49		1.56
RGTM080025	RGTMG080025	80 X 25	38	152	72.5	80	56.5	M12 X 75	1.53
RGTM080032	RGTMG080032	80 X 32	51	152	85.5	80	56.5		1.81
RGTM080040	RGTMG080040	80 X 40	51	152	85.5	80	56.5		1.88
RGTM080050	RGTMG080050	80 X 50	64	152	98	80	56.5		2.07
RGTM100025	RGTMG100025	100 X 25	38	188	78.5	93	70		1.70
RGTM100032	RGTMG100032	100 X 32	51	188	89	95	70		1.90
RGTM100040	RGTMG100040	100 X 40	51	188	89	97	70		2.04
RGTM100050	RGTMG100050	100 X 50	64	188	104.5	102	70		2.27
RGTM100065	RGTMG100065	100 X 65	70	188	104.5	102	70	2.47	
RGTM100080	RGTMG100080	100 X 80	89	188	124	102	70	2.91	
RGTM150040		150 X 40	51	244	93	118	97.5	M16 X 90	2.99
RGTM150050	RGTMG150050	150 X 50	64	244	112.5	128.5	97.5		3.18
RGTM150065	RGTMG150065	150 X 65	70	244	112.5	128.5	97.5		3.58
RGTM150080	RGTMG150080	150 X 80	89	244	132	128.5	97.5		4.10
RGTM150100		150 X 100	114	244	154	135	97.5		4.76
RGTM200050		200 X 50	64	322	117	160	125	M20 X 120	6.20
RGTM200065		200 X 65	70	322	118	158.5	125		6.20



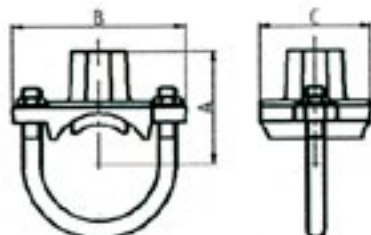
Roll Groove Mechanical Tee Grooved End Outlet

ROLL GROOVE MECHANICAL TEE GROOVED END OUTLET								
CODE PAINTED	METRIC SIZE	HOLE DIA.	DIMENSION				BOLT SIZE	APPROX KG/PC
			A	B	C	D		
RGTMGR050040	50 X 40	45	116	76	69.5	39	M10 X 55	1.18
RGTMGR080050	80 X 50	64	152	98	84.5	56.5	M12 X 75	1.83
RGTMGR100032	100 X 32	51	188	89	102	70		1.80
RGTMGR100040	100 X 40	51	188	89	102	70		1.81
RGTMGR100050	100 X 50	64	188	104.5	102	70		1.93
RGTMGR100065	100 X 65	70	188	104.5	102	70		2.66
RGTMGR100080	100 X 80	89	188	124	102	70		2.41
RGTMGR150050	150 X 50	64	244	112.5	127	97.5		M16 X 90
RGTMGR150065	150 X 65	70	244	112.5	127	97.5	3.38	
RGTMGR150100	150 X 100	114	244	154	135	97.5	4.05	



Roll Groove U-Bolt Mechanical Tee

ROLL GROOVE U-BOLT								
CODE		METRIC SIZE	HOLE DIA.	DIMENSIONS			BOLT SIZE U-BOLT	APPROX KG/PC
GALVANISED	PAINTED			A	B	C		
RGTMS032015		32 X 15	30	54.5	88.9	57.2	10	0.40
RGTMS032025	RGTMSP032025	32 X 25	30	57.7	88.9	57.2		0.40
RGTMS040015		40 X 15	30	57.4	88.9	57.2		0.40
RGTMS040020		40 X 20	30	57.4	88.9	57.2		0.40
RGTMS040025		40 X 25	30	60.8	88.9	57.2		0.40
RGTMS050015	RGTMSP050015	50 X 15	30	63.3	95.3	57.2		0.40
RGTMS050020		50 X 20	30	63.3	95.3	57.2		0.40
RGTMS050025		50 X 25	30	66.6	95.3	57.2		0.40
RGTMS065015		65 X 15	30	69.9	108.0	57.2		0.40
RGTMS065020		65 X 20	30	69.9	108.0	57.2		0.40
RGTMS065025		65 X 25	30	73.2	108.0	57.2		0.50



Roll Groove Lubricant

SUNDRY PRODUCTS	
AAP CODE	DESCRIPTION
RGLUBE	Roll Groove Lubricant

Shurjoint lubricant is recommended for proper gasket installation to prevent the gasket from being pinched. Apply a thin coat to the gasket exterior, gasket lips and/or housing interiors. Lubricant is available in 450g and 900g containers. Certified to ANSI/NSF 61.



Roll Groove Cap

ROLL GROOVE CAP				
CODE		METRIC SIZE	A	APPROX KG/PC
PAINTED	GALVANISED			
RGCA040	RGCAG040	40	25	0.2
RGCA050	RGCAG050	50	25	0.3
RGCA065	RGCAG065	65	25	0.4
RGCA080	RGCAG080	80	25	0.7
RGCA100	RGCAG100	100	25	1.0
RGCA125		125	25	1.7
RGCA150	RGCAG150	150	25	3.0
RGCA200	RGCAG200	200	30	5.5
RGCA250	RGCAG250	250	32	7.0
RGCA300		300	32	10.0

