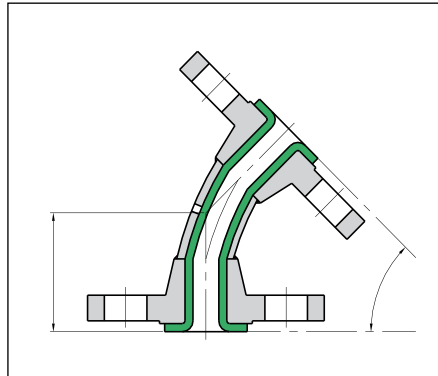
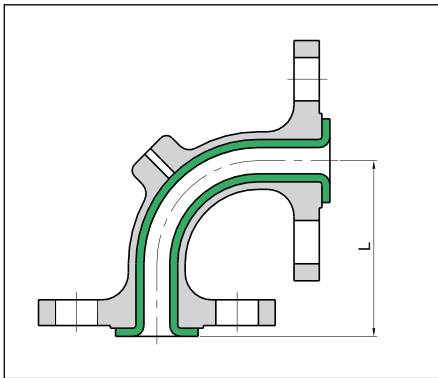


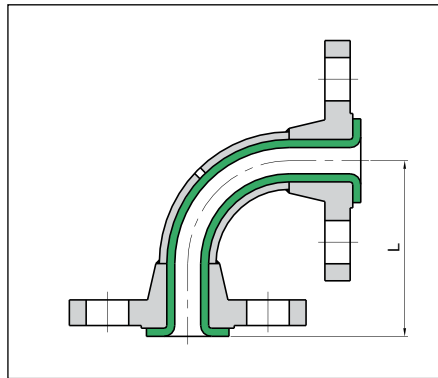
90° Stub-End Elbow



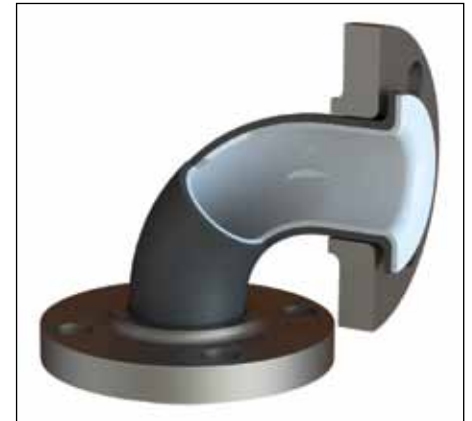
60°/45°/30° Steel Elbow



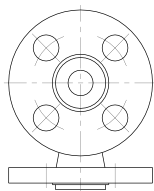
90° Cast Steel Elbow



90° Steel Elbow



Orientation of Fixed Flange  
for 1" to 3" Sizes



NB #150	L (mm)				Weight (kg)			
	$\alpha=90^\circ$	$\alpha=45^\circ$	$\alpha=60^\circ$	$\alpha=30^\circ$	$\alpha=90^\circ$	$\alpha=45^\circ$	$\alpha=60^\circ$	$\alpha=30^\circ$
1/2"	65	44	52	40	1.0	0.9	0.9	0.9
3/4"	75	44	72	59	1.4	1.3	1.3	1.3
1"	89	44	98	77	2.2	2.1	2.1	2.1
1 1/2"	102	57	92	78	3.8	3.4	3.5	3.2
2"	114	64	110	86	5.9	5.3	5.5	5.1
3"	140	76	110	75	11.5	10.0	10.5	9.5
4"	165	102	135	90	16.7	14.2	15.1	13.4
6"	203	127	180	110	26.6	21.2	22.9	19.4
8"	229	140	235	140	44.3	34.7	37.9	31.6
10"	279	165			62.4	48.4		
12"	305	190			86.3	70.7		

STEEL	SIZE	MATERIAL	STANDARDS	NOTE
ELBOWS & TEES	1" - 12"	Cast Steel	ASTM A216 Grade WCB	Fixed Flgs
	1" - 8"	Carbon Steel	A234 Gr WPB, B16.9 (Long Radius)	Fixed / Loose Flgs
	10" - 12"	Carbon Steel	A234 Gr WPB, B16.28 (Short Radius)	Fixed / Loose Flgs

Stainless steel / other material on request.