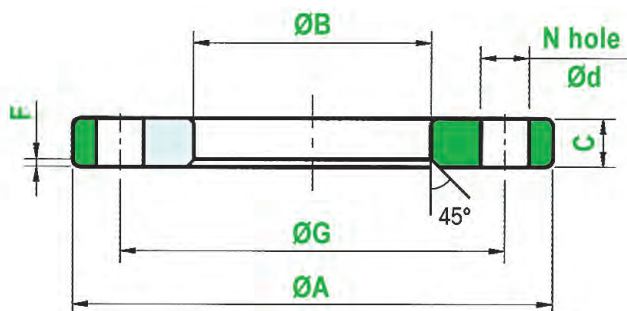


(Backing) Outer Flanges

PN 10

150 Lbs



Material : Carbon Steel A37 or A105

Outside Diameter of Pipe - ØD		DIN 86037								EEMUA 145 (A105 only)							
		PN 10								150 Lbs							
Nominal (Inch)	Actual (mm)	ØA (mm)	C (mm)	ØB (mm)	F (mm)	Drilling			kg /pc	ØA (mm)	C (mm)	ØB (mm)	F (mm)	Drilling			kg /pc
						ØG (mm)	N (mm)	Ød (mm)						ØG (mm)	N (mm)	Ød (mm)	
1/2	16	-	-	-	-	-	-	-	-	89	14	17.5	2	60.3	4	15.9	0.60
1/2	20	95	14	22	3	65	4	14	0.69	-	-	-	-	-	-	-	-
3/4	25	105	14	26.7	3	75	4	14	0.80	98	14	26.7	3	69.8	4	15.9	0.80
1	30	115	16	33.4	4	85	4	14	1.10	108	14	33.4	3	79.4	4	15.9	0.90
1¼	38	140	16	42.16	4	100	4	18	1.65	117	14	42.16	3	88.9	4	15.9	1.10
1½	44.5	150	16	48.3	4	110	4	18	1.85	127	14	48.3	3	98.4	4	15.9	1.20
2	57	165	16	60.3	5	125	4	18	2.20	152	18	60.3	3	120.6	4	19.0	2.10
2½	76.1	185	16	79.5	5	145	4	18	2.65	178	18	79.5	3	139.7	4	19.0	2.60
3	88.9	200	18	92	5	160	8	18	3.30	190	19	92	3	152.4	4	19.0	2.90
4	108	220	18	114.3	5	180	8	18	3.65	229	24	114.3	3	190.4	8	19.0	5.90
5	133	250	18	139.7	5	210	8	18	4.55	-	-	-	-	-	-	-	-
6	159	285	18	163	5	240	8	22	5.60	279	27	163	4	241.3	8	22.2	8.40
7	193.7	315	22	200	5	270	8	22	7.50	-	-	-	-	-	-	-	-
8	219.1	340	20	222	5	295	8	22	7.45	343	31	222	5	298.4	8	22.2	12.35
10	267	395	22	273	5	350	12	22	10.30	406	38	273	5	362.0	12	25.4	19.70
12	323.9	445	24	327	7	400	12	22	12.00	483	41	327	7	431.8	12	25.4	32.20
14	368	505	24	371	7	460	16	22	16.00	533	45	371	7	476.2	12	28.6	38.20
16	419.1	565	26	422	7	515	16	26	20.00	597	51	422	7	539.8	16	28.6	52.15
18	457.2	615	28	461.5	7	565	20	26	25.00	635	52	461.5	7	577.8	16	31.8	54.05
20	508	670	30	512	7	620	20	26	31.00	698	58	512	7	635.0	20	31.8	73.20
24	610	780	32	616	9	725	20	30	40.00	813	71	616	9	749.3	20	34.9	114.25
28	711	-	-	-	-	-	-	-	-	927	81	718	9	864.0	28	34.9	151.80
32	813	-	-	-	-	-	-	-	-	1060	95	820	9	978.0	28	41.1	233.50
36	914	-	-	-	-	-	-	-	-	1168	105	919	9	1086.0	32	41.1	294.10

* All the above backing flanges are hot dipped galvanized.

* Epoxy coating or chlorinated rubber coating on request.



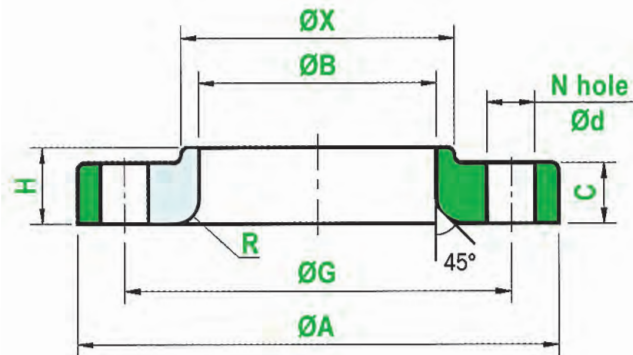
Athical Engineering Pte Ltd

Tel: +65 6863 3378 Fax: +65 6863 3398 Email: enquiry@athical.com Website: www.athical.com



(Backing) Outer Flanges

150 Lbs



Material : Carbon Steel A105

Outside Diameter of Pipe - ØD		ANSI B16.5									
		150 Lbs									
Nominal (Inch)	Actual (mm)	ØA (mm)	H (mm)	C (mm)	ØX (mm)	ØB (mm)	R (mm)	Drilling			kg /pc
								ØG (mm)	N (mm)	Ød (mm)	
1/2	16	88.9	15.9	11.1	30.2	17.5	3.2	60.3	4	15.9	0.80
■ 1/2	20	88.9	15.9	11.1	30.2	22	3.2	60.3	4	15.9	0.80
3/4	25	98.4	15.9	12.7	38.1	26.7	3.2	69.8	4	15.9	0.90
1	30	107.9	17.5	14.3	49.2	33.4	3.2	79.4	4	15.9	1.00
1¼	38	117.5	20.6	15.9	58.8	42.16	4.8	88.9	4	15.9	1.30
1½	44.5	127.0	22.2	17.5	65.1	48.3	6.4	98.4	4	15.9	1.40
2	57	152.4	25.4	19.0	77.8	60.3	7.9	120.6	4	19.0	2.30
2½	76.1	177.8	28.6	22.2	90.5	79.5	7.9	139.7	4	19.0	3.20
3	88.9	190.5	30.2	23.8	107.9	92	9.5	152.4	4	19.0	3.60
4	108	228.6	33.3	23.8	134.9	114.3	11.1	190.5	8	19.0	5.90
5	133	254.0	36.5	23.8	163.5	139.7	11.1	215.9	8	22.2	6.80
6	159	279.4	39.7	25.4	192.1	163	12.70	241.3	8	22.2	8.60
8	219.1	342.9	44.4	28.6	246.1	222	12.70	298.4	8	22.2	13.60
10	267	406.4	49.2	30.2	304.8	273	12.70	361.9	12	25.4	19.50
12	323.9	482.6	55.6	31.7	365.1	327	12.70	431.8	12	25.4	29.00
14	368	533.4	79.4	34.9	400.0	371	12.70	476.2	12	28.6	45.00
16	419.1	596.9	87.3	36.5	457.2	422	12.70	539.7	16	28.6	58.00
18	457.2	635.0	96.8	39.7	504.8	461.5	12.70	577.8	16	31.7	66.00
20	508	698.5	103.2	42.9	558.8	512	12.70	635.0	20	31.7	84.00
24	610	812.8	111.1	47.6	663.6	616	12.70	749.3	20	34.9	118.00

* All the above backing flanges are hot dipped galvanized.

* Epoxy coating or chlorinated rubber coating on request.

■ Not to EEMUA 145 Flanges Dimensions.



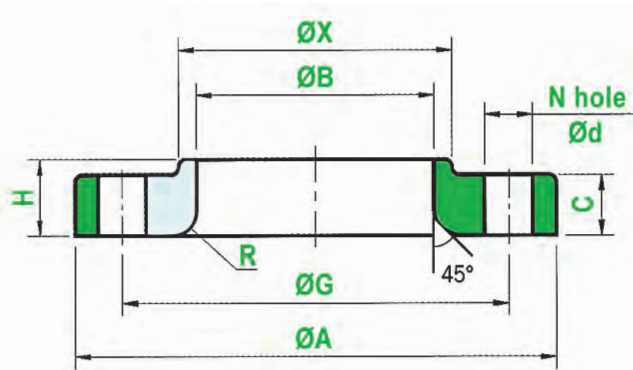
Athical Engineering Pte Ltd

Tel: +65 6863 3378 Fax: +65 6863 3398 Email: enquiry@athical.com Website: www.athical.com



(Backing) Outer Flanges

300 Lbs



Material : Carbon Steel A105

Outside Diameter of Pipe - ØD		ANSI B16.5									
		300 Lbs									
Nominal (Inch)	Actual (mm)	ØA (mm)	H (mm)	C (mm)	ØX (mm)	ØB (mm)	R (mm)	Drilling			kg /pc
								ØG (mm)	N (mm)	Ød (mm)	
1/2	16	95.2	22.2	14.3	38.1	17.5	3.2	66.7	4	15.9	1.20
■ 1/2	20	95.2	22.2	14.3	38.1	22	3.2	66.7	4	15.9	1.20
3/4	25	117.5	25.4	15.9	47.6	26.7	3.2	82.5	4	19.0	1.30
1	30	123.8	27.0	17.5	54.0	33.4	3.2	88.9	4	19.0	1.40
1¼	38	133.3	27.0	19.0	63.5	42.16	4.8	98.4	4	19.0	1.80
1½	44.5	155.6	30.2	20.6	69.8	48.3	6.4	114.3	4	22.2	2.70
2	57	165.1	33.3	22.2	84.1	60.3	7.9	127.0	8	19.0	3.20
2½	76.1	190.5	38.1	25.4	100.0	79.5	7.9	149.2	8	22.2	4.50
3	88.9	209.5	42.9	28.6	117.5	92	9.5	168.3	8	22.2	5.90
4	108	254.0	47.6	31.7	146.0	114.3	11.1	200.0	8	22.2	10.00
5	133	279.4	50.8	34.9	177.8	139.7	11.1	234.9	8	22.2	12.70
6	159	317.5	52.4	36.5	206.4	163	12.7	269.9	12	22.2	17.70
8	219.1	381.0	61.9	41.3	260.3	222	12.7	330.2	12	25.4	26.30
10	267	444.5	95.2	47.6	320.7	273	12.7	387.3	16	28.6	41.00
12	323.9	520.7	101.6	50.8	374.6	327	12.7	450.8	16	31.7	63.00
14	368	584.2	111.1	54.0	425.4	371	12.7	514.3	20	31.7	86.00
16	419.1	647.7	120.6	57.1	482.6	422	12.7	571.5	20	34.9	109.00
18	457.2	711.2	130.2	60.3	533.4	461.5	12.7	628.6	24	34.9	138.00
20	508	774.7	139.7	63.5	587.4	512	12.7	685.8	24	34.9	170.00
24	610	914.4	152.4	69.8	701.7	616	12.7	812.8	24	41.3	241.00

* All the above backing flanges are hot dipped galvanized.

* Epoxy coating or chlorinated rubber coating on request.

■ Not to EEMUA 145 Flanges Dimensions.

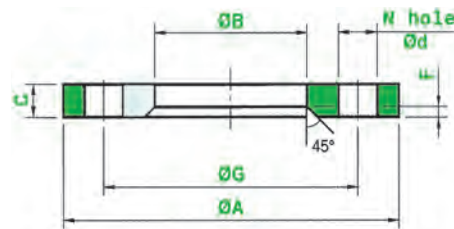
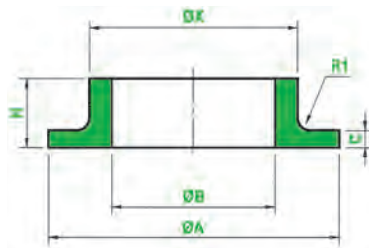


Athical Engineering Pte Ltd

Tel: +65 6863 3378 Fax: +65 6863 3398 Email: enquiry@athical.com Website: www.athical.com



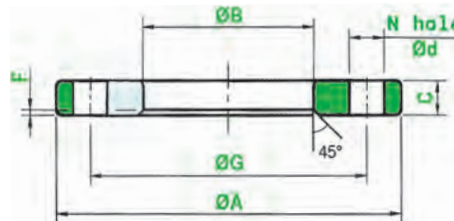
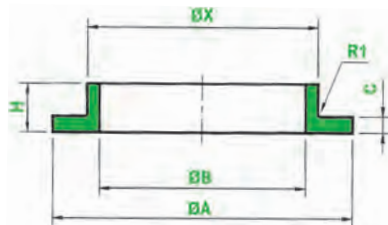
Composite Slip On Flanges



Material : CuNi 90/10 | CuNi 70/30

Outside Diameter of Pipe - ØD		DIN 86036							PN 10							
		10 Bar							10 Bar							
		Inner Flanges							Outer Flanges							
Nominal (Inch)	Actual (mm)	ØA (mm)	H (mm)	C (mm)	ØX (mm)	ØB (mm)	R1 (mm)	kg /pc	ØA (mm)	C (mm)	ØB (mm)	F (mm)	Drilling			kg /pc
													ØG (mm)	N Bolt Holes	Ød (mm)	
1/2	20	45	22	6	31	20.20	2	0.13	95	14	32	2	65	4	14	0.65
3/4	25	58	22	6	37	25.20	2	0.19	105	14	38	2	75	4	14	0.75
1	30	68	24	6	44	30.20	2	0.28	115	16	45	2	85	4	14	1.01
1¼	38	78	24	6	54	38.25	2	0.37	140	16	55	2	100	4	18	1.50
1½	44.5	88	24	6	60	44.75	2	0.43	150	16	62	2	110	4	18	1.71
2	57	102	24	6	73	57.30	2	0.54	165	16	75	2	125	4	18	2.00
2½	76.1	122	24	6	90	76.30	2	0.65	185	16	92	2	145	4	18	2.41
3	88.9	138	26	6	106	89.40	2	0.89	200	18	108	2	160	4	18	3.00
4	108	158	26	6	126	108.40	2	1.10	220	18	128	2	180	8	18	3.26

* All the above backing flanges are hot dipped galvanized. * Epoxy coating or chlorinated rubber coating on request.



Material : CuNi 90/10 | CuNi 70/30

Outside Diameter of Pipe - ØD		EEMUA 145							EEMUA 145 - Class 150 Lbs							
		16 Bar & 20 Bar							Outer Flanges							
		Inner Flanges														
Nominal (Inch)	Actual (mm)	ØA (mm)	H (mm)	C (mm)	ØX (mm)	ØB (mm)	R1 (mm)	kg /pc	ØA (mm)	C (mm)	ØB (mm)	F (mm)	Drilling		kg /pc	
													ØG (mm)	N Bolt Holes		Ød (mm)
1/2	16	40	16	5	21	16.07	1	0.06	89	14	23	3	60.3	4	15.9	0.75
3/4	25	53	16	5	31	25.08	1	0.10	98	14	33	3	69.8	4	15.9	0.80
1	30	60	18	5	36	30.08	1	0.14	108	14	38	3	79.4	4	15.9	0.95
1¼	38	70	18	5	45	38.10	1	0.20	117	14	47	3	88.9	4	15.9	1.10
1½	44.5	80	19	5	51	44.60	1	0.30	127	14	53	3	98.4	4	15.9	1.15
2	57	99	19	6	67	57.23	1	0.40	152	18	69	3	120.6	4	19	2.10
2½	76.1	120	19	6	87	76.33	1	0.50	178	18	89	3	139.7	4	19	2.60
3	88.9	130	21	7	100	89.18	1	0.70	190	19	103	3	152.4	4	19	2.90
4	108	158	23	7	120	108.38	1	0.90	229	24	123	3	190.5	4	19	5.90

* All the above backing flanges are hot dipped galvanized. * Epoxy coating or chlorinated rubber coating on request.



Athical Engineering Pte Ltd

Tel: +65 6863 3378 Fax: +65 6863 3398 Email: enquiry@athical.com Website: www.athical.com

