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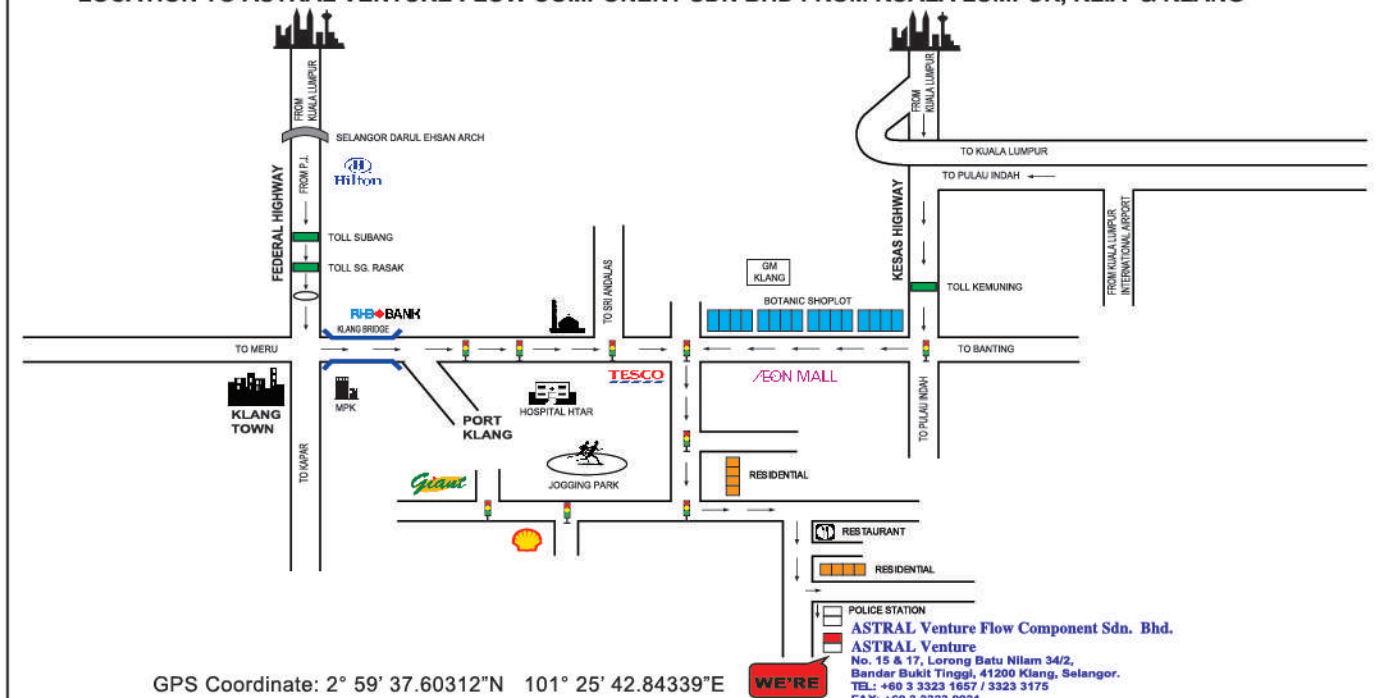
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LOCATION TO ASTRAL VENTURE FLOW COMPONENT SDN BHD FROM KUALA LUMPUR, KLIA & KLANG





PARTNER INSTEAD OF SUPPLIER

Started with **ASTRAL** Venture then transformed to **ASTRAL Venture Flow Component Sdn. Bhd.** incorporated in 2000 in Malaysia. Our office, showroom and stores are located in Klang, Selangor, 45 minutes from Kuala Lumpur Town and Kuala Lumpur International Airport (KLIA).

Independent family owned company. With long experienced in sanitary fluid handling tools, component & equipment has given us confident in assisting customer needs.

Preferred to be ***PARTNER INSTEAD OF SUPPLIER*** this is one of the flexibility we offered.

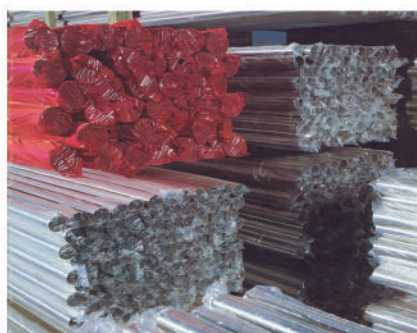
‘**ASTRAL®**’ the registered brand name carried by **ASTRAL Venture Flow Component Sdn. Bhd.** We work very closely with partners who specialized in products development, design, production management and quality control. All products distributes are tested, approved and comes with certificates comply to FDA, 3A, ASME BPE, USP Class VI, FEIBP, HALAL and etc.

With dedicated and hardworking team 24/7 days, we are always on standby! We also have associates office in Singapore & Indonesia to assists you.

Products are widely used in industries like dairies, sauces, food chemical, sugar &, flour mills, oleo chemical, food ingredients, bakeries, candies, convenient food, cosmetics, toiletries, pharmaceutical, biotech, laboratories, hospitals, edible oil refineries and many more.

Send Your Inquiries Anytime **Call** : + 6 013 388 4202
Email : astral.nizza@astralventure.com

Sanitary Tube/Pipe For Food, Pharmaceutical & others....



ASTRAL™ supply sanitary welded or seamless tubes/pipes.

* Standard : ASTM A269, A270

* Material : ASTM 304, 304L, 316 & 316L

* Surface & Roughness :

1) OD/ID Pickle ($Ra \leq 1. \mu m$)

2) Mechanical Polished :-

i. ID Polished to 180 Grit ($Ra \leq 0.8 \mu m$)

ii. ID Polished to 240 Grit ($Ra \leq 0.6 \mu m$)

iii. ID Polished to 320 Grit ($Ra \leq 0.5 \mu m$)

iv. ID Polished to 420 Grit ($Ra \leq 0.4 \mu m$)

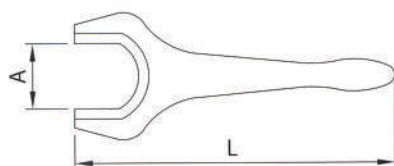
Electropolished :-

i. ID Electro Polished to 180 Grit ($Ra \leq 0.5 \mu m$)

ii. ID Electro Polished to 180 Grit ($Ra \leq .38 \mu m$)

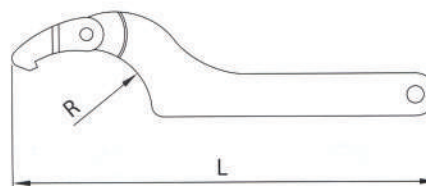


BPE standard			SMS standard			IDF standard			3A sanitary standard			DIN 11850		
SIZE	O.D	T	SIZE	O.D	T	SIZE	O.D	T	SIZE	O.D	T	SIZE	O.D	T
1/2"	12.7	1.65												
1.0"	25.4	1.65	25	25	1.25	20"	25.4	1.2		25.4	1.65	25	28	1
														1.5
			32	32	1.25	1.25"	31.8	1.2				32	34	1
														1.5
1.5"	38.1	1.65	38	38	1.25	1.5"	38.1	1.2		38.1	1.65	40	40	1
														1.5
2.0"	50.8	1.65	51	51	1.25	2.0"	50.8	1.5		50.8	1.65	50	52	1
														1.5
2.5"	63.5	1.65	63.5	63.5	1.5	2.5"	63.5	2		63.5	1.65	65	70	2
3.0"	76.2	1.65	76	76.1	1.6	3.0"	76.3	2		76.2	1.65	80	85	2
4.0"	101.6	2.11	104	104	2	4.0"	101.6	2		101.6	1.65	100	104	2
											2.11			



RJT Spanner

SIZE	ØA	L
1.0"	51.8	240
1.5"	66	288
2.0"	80.4	300
2.5"	93.2	326
3.0"	106.3	440
4.0"	121.5	448



DIN Spanner

SIZE	ØA	L
DN36 ~ DN60	2266	175
DN60 ~ DN90	31	247
DN90 ~ DN155	49	290
DN155 ~ DN230	82.5	515



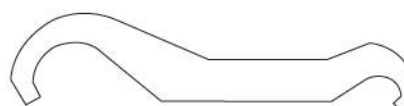
Spanner for SMS and DS Round Nuts

SIZE	DIMENSION (mm) For Nut Diam.	
	FROM	TO
25"	58.0	62.0
38"	68.0	75.0
51"	80.0	90.0
63.5"	95.0	100.0
76.1"	110.0	115.0
101.6"	155.0	165.0



Spanner for IDE Round Nuts

SIZE	DIMENSION (mm) For Nut Diam.	
	FROM	TO
25" - 76.1"		

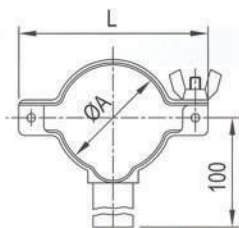


Universal Spanner for Inch / DIN

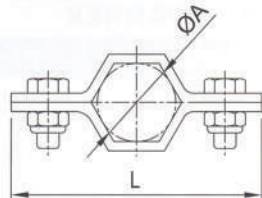
SIZE	DIMENSION (mm) For Nut Diam.	
	FROM	TO
25" - 76" DIN 20-65		

Tubing Hanger (mm)

TH-1



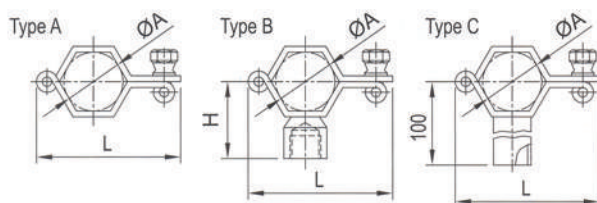
TH-2



TH-1.TH-4.TH-5 (Type A.Type C).TH6

SIZE	ØA	ØA1	ØC	H	H1	H2	L	L1	L2	L3
1/2"	12.7							79	83	
3/4"	19.05							79	83	
1.0"	25.4	25.5	10	84	90	46.8	66	79	83	55
1.25"		31.75	10	87	90	49.9				60
1.5"	38.1	38.1	10	90	90	53	76	95	97.7	80
2.0"	50.8	50.8	10	76	90	59.4	90	117.9	111.7	90
2.5"	63.5	63.5	10	85	90	66.3	105	120	124	120
3.0"	76.2	76.1	10	92.5	90	72.6	120	135.1	104.5	138
4.0"	101.6/104	101.6	10	102	90	85.3	146	168.4	162	180
5.0"		129	12	114.5		99				207
6.0"	152.4	154	12	127	145	112		225	217	232
8.0"		204	12	152		137				285

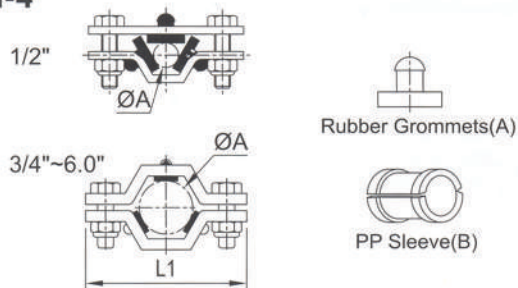
TH-3



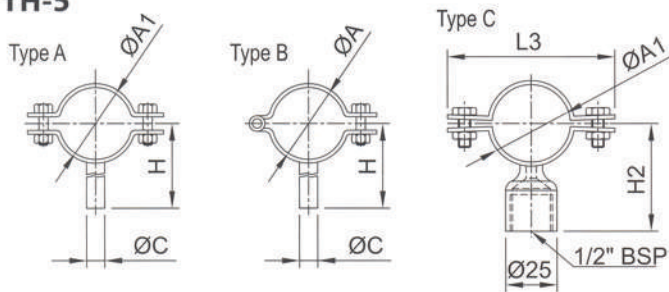
TH-3.TH-5.(Type A .Type B .Type C) (Type A)

SIZE	ØA	H	L	SIZE	ØA	ØA1	ØC	H	H1	L
				DIN10		12/13	6		67.5	
				DIN15		18/19	8		70.5	
				DIN20		22/23	8		72.5	
SMS25	25	45	61	DIN25	28	28/29	8	46.5	75.5	64
				DIN32	34	34/35	10	49.5	78.5/79.5	64
SMS38	38	51.5	76	DIN40	40	40/41	10	52.5	81.5/82.5	78
SMS51	51	58	90	DIN50	52	52/53	12	58.5	88/89	90
SMS63.5	63.5	64	106	DIN65	70	70	12	67.5	98	111
SMS76	76.1	70.5	120	DIN80	85	85	15	75	105.5	125
SMS104	104	84.5	152	DIN100	101.6	104	15	83	116	146
				DIN125		129	18		127	
				DIN150		154	18		140	
				DIN200		204				
				DIN250		254				

TH-4



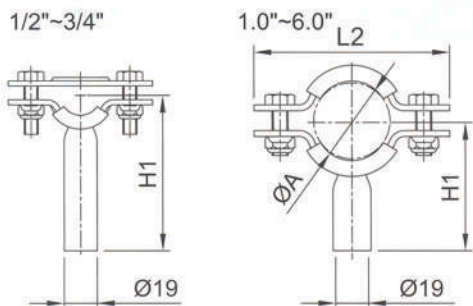
TH-5



TH-2

SIZE	ØA	L
ISO-21.3	21.3	68
ISO-26.9	26.9	74
ISO-33.7	33.7	82
ISO-42.4	42.4	93
ISO-48.3	48.3	101
ISO-60.3	60.3	114
ISO-88.9	88.9	149
ISO-114.3	114.3	177

TH-6

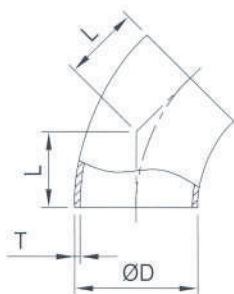


TH-5 (Type B)

SIZE	ØA	ØC	H
NW20	22	10	61
NW25	28	10	64
NW32	34	10	67
NW40	40	10	70
NW50	52	10	76
NW65	70	10	85
NW80	85	10	92.5
NW100	104	10	102
NW125	129	12	114.5
NW150	154	12	127
NW200	204	12	152

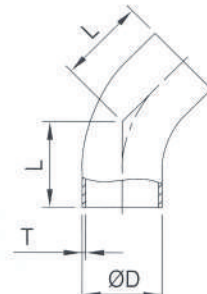
3A Pipe Line (mm)

45° Short Elbow C.2WK-45° Elbow



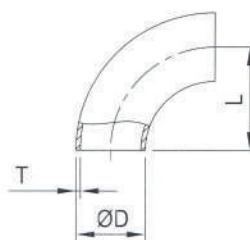
SIZE	ØD	L	T
1/2"	12.7	13.16	1.65
3/4"	19.05	23.8	1.65
1.0"	25.4	15.8	1.65
1.5"	38.1	23.8	1.65
2.0"	50.8	31.75	1.65
2.5"	63.5	39.6	1.65
3.0"	76.2	47.6	1.65
4.0"	101.6	63.5	2.10
6.0"	152.4	95.25	2.77

45° Long Elbow C.L2KS-45° Elbow



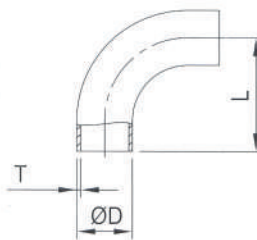
SIZE	ØD	L	T
1/2"	12.7	30.2	1.65
3/4"	19.05	30.2	1.65
1.0"	25.4	30.2	1.65
1.5"	38.1	41.3	1.65
2.0"	50.8	58.7	1.65
2.5"	63.5	76.2	1.65
3.0"	76.2	93.7	1.65
4.0"	101.6	122.2	2.10
6.0"	152.4	158.2	2.80

90° Short Bend C.2WCL-90° Bend



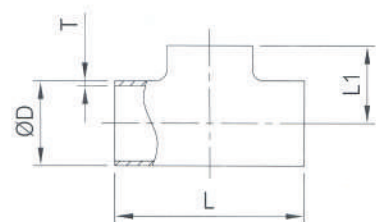
SIZE	ØD	L	T
1/2"	12.7	19.05	1.65
3/4"	19.05	28.58	1.65
1.0"	25.4	38.1	1.65
1.5"	38.1	57.2	1.65
2.0"	50.8	76.2	1.65
2.5"	63.5	95.25	1.65
3.0"	76.2	114.3	1.65
4.0"	101.6	152.4	2.10
6.0"	152.4	228.6	2.77

90° Long Bend C.L2S-90° Bend



SIZE	ØD	L	T
1/2"	12.7	33.4	1.65
3/4"	19.05	42.9	1.65
1.0"	25.4	52.4	1.65
1.5"	38.1	74.6	1.65
2.0"	50.8	103.2	1.65
2.5"	63.5	131.8	1.65
3.0"	76.2	160.3	1.65
4.0"	101.6	211.1	2.10
6.0"	152.4	292.1	2.80

Welding Tee



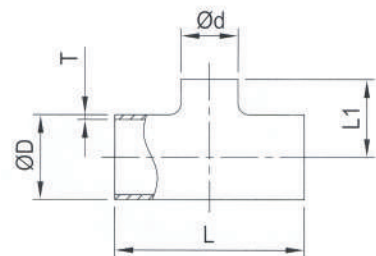
C.L7WWW-Short Tee

SIZE	ØD	L	L1	T
1/2"	12.7	38.1	19.05	1.65
3/4"	19.05	57.2	28.6	1.65
1.0"	25.4	57.2	28.6	1.65
1.5"	38.1	84.2	42.1	1.65
2.0"	50.8	104.8	52.4	1.65
2.5"	63.5	119.0	59.5	1.65
3.0"	76.2	131.8	65.9	1.65
4.0"	101.6	174.6	87.3	2.10

C.7W-Long Tee

SIZE	ØD	L	L1	T
1/2"	12.7	95.2	54	1.65
3/4"	19.05	95.2	54	1.65
1.0"	25.4	95.2	47.6	1.65
1.5"	38.1	114.4	57.2	1.65
2.0"	50.8	152.4	76.2	1.65
2.5"	63.5	152.4	76.2	1.65
3.0"	76.2	165.2	82.6	1.65
4.0"	101.6	196.8	98.4	2.10
6.0"	152.4	285.8	142.9	2.77

Long Reducing Tee



C.L7RW-Long Reducing Tee

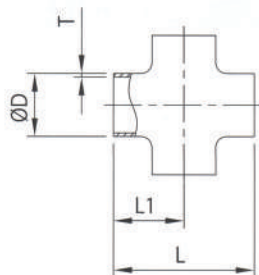
SIZE	ØD	Ød	L	L1	T
1.5"x1.0"	38.1	25.4	114.3	54	1.65
2.0"x1.0"	50.8	25.4	152.4	60.30	1.65
2.0"x1.5"	50.8	38.1	152.4	63.50	1.65
2.5"x1.5"	63.5	38.1	152.4	69.85	1.65
2.5"x2.0"	63.5	50.8	152.4	82.55	1.65
3.0"x1.5"	76.2	38.1	165.1	76.20	1.65
3.0"x2.0"	76.2	50.8	165.1	88.90	1.65
3.0"x2.5"	76.2	63.5	165.1	82.55	1.65
4.0"x2.0"	101.6	50.8	196.8	101.6	2.10
4.0"x2.5"	101.6	63.5	196.8	95.25	2.10
4.0"x3.0"	101.6	76.2	196.8	95.25	2.10

C.L7RW-Short Reducing Tee

SIZE	ØD	Ød	L	L1	T
1.5"x1.0"	38.1	25.4	84.2	34.9	1.65
2.0"x1.0"	50.8	25.4	104.8	41.3	1.65
2.0"x1.5"	50.8	38.1	104.8	48.4	1.65
2.5"x1.0"	63.5	25.4	119	47.63	1.65
2.5"x1.5"	63.5	38.1	119	54.75	1.65
2.5"x2.0"	63.5	50.8	119	58.7	1.65
3.0"x1.0"	76.2	25.4	131.8	54.0	1.65
3.0"x1.5"	76.2	38.1	131.8	65.1	1.65
3.0"x2.0"	76.2	50.8	131.8	65.1	1.65
3.0"x2.5"	76.2	63.5	131.8	65.9	1.65
4.0"x1.0"	76.2	25.4	174.6	66.7	2.10
4.0"x1.5"	101.6	38.1	174.6	108.0	2.10
4.0"x2.0"	101.6	50.8	174.6	108.0	2.10
4.0"x2.5"	101.6	63.5	174.6	108.0	2.10
4.0"x3.0"	101.6	76.2	174.6	108.0	2.10

3A Pipe Line (mm)

Cross



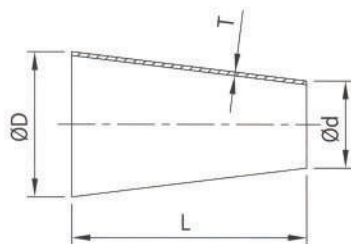
C.L9WWW-Short Cross

SIZE	ØD	L	L1	T
1.0"	25.4	57.2	28.6	1.65
1.5"	38.1	84.2	42.1	1.65
2.0"	50.8	104.8	52.4	1.65
2.5"	63.5	119.0	59.5	1.65
3.0"	76.2	131.8	65.9	1.65
4.0"	101.6	174.6	87.3	2.10

C.L9W-Long Cross

SIZE	ØD	L	L1	T
1.0"	25.4	95.2	47.6	1.65
1.5"	38.1	114.4	57.2	1.65
2.0"	50.8	152.4	76.2	1.65
2.5"	63.5	152.4	76.2	1.65
3.0"	76.2	165.2	82.6	1.65
4.0"	101.6	196.8	98.4	2.10

Concentric Reducer

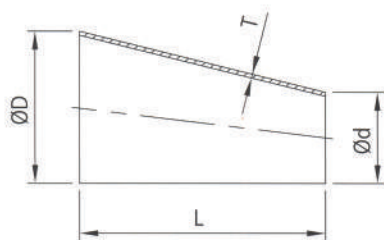


C.L31-Concentric Reducer

SIZE	ØD	Ød	L	T
3/4"x1/2"	19.05	12.7	50.8	1.65
1.0"x1/2"	25.4	12.7	50.8	1.65
1.5"x1/2"	38.1	12.7	101.6	1.65
2.0"x1/2"	50.8	12.7	50.8	1.65
1.0"x3/4"	25.4	19.05	152.4	1.65
1.5"x3/4"	38.1	19.05	101.6	1.65
1.5"x1.0"	38.1	25.4	50.8	1.65
2.0"x1.0"	50.8	25.4	101.6	1.65
2.0"x1.5"	50.8	38.1	50.8	1.65
2.5"x1.0"	63.5	25.4	152.4	1.65
2.5"x1.5"	63.5	38.1	101.6	1.65
2.5"x2.0"	63.5	50.8	50.8	1.65

SIZE	ØD	Ød	L	T
3.0"x1.0"	76.2	25.4	203.2	1.65
3.0"x1.5"	76.2	38.1	152.4	1.65
3.0"x2.0"	76.2	50.8	101.6	1.65
3.0"x2.5"	76.2	63.5	50.8	1.65
4.0"x1.5"	101.6	38.1	25.4	2.10
4.0"x2.0"	101.6	50.8	203.2	2.10
4.0"x2.5"	101.6	63.5	152.4	2.10
4.0"x3.0"	101.6	76.2	101.6	2.10
6.0"x2.0"	152.4	50.8	254	2.77
6.0"x3.0"	152.4	76.2	152.4	2.77
6.0"x4.0"	152.4	101.6	101.6	2.77

Eccentric Reducer

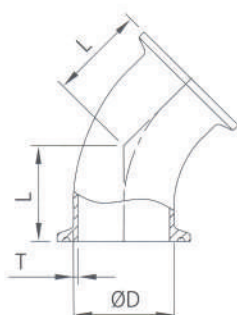


C.L32-Eccentric Reducer

SIZE	ØD	Ød	L	T
3/4"x1/2"	19.05	12.7	25.4	1.65
1.0"x1/2"	25.4	12.7	50.8	1.65
1.5"x1/2"	38.1	12.7	101.6	1.65
2.0"x1/2"	50.8	12.7	152.4	1.65
1.0"x3/4"	25.4	19.05	25.4	1.65
1.5"x3/4"	38.1	19.05	76.2	1.65
2.0"x3/4"	50.8	19.05	127	1.65
1.5"x1.0"	38.1	25.4	50.8	1.65
2.0"x1.0"	50.8	25.4	101.6	1.65
2.0"x1.5"	50.8	38.1	50.8	1.65
2.5"x1.0"	63.5	25.4	152.4	1.65
2.5"x1.5"	63.5	38.1	101.6	1.65

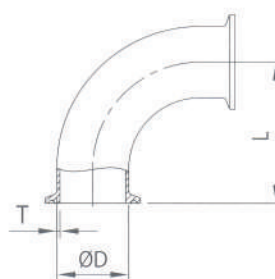
SIZE	ØD	Ød	L	T
2.5"x2.0"	63.5	50.8	50.8	1.65
3.0"x1.0"	76.2	25.4	203.2	1.65
3.0"x1.5"	76.2	38.1	152.4	1.65
3.0"x2.0"	76.2	50.8	101.6	1.65
3.0"x2.5"	76.2	63.5	50.8	1.65
4.0"x1.5"	101.6	38.1	254	2.10
4.0"x2.0"	101.6	50.8	203.2	2.10
4.0"x2.5"	101.6	63.5	152.4	2.10
4.0"x3.0"	101.6	76.2	101.6	2.10
6.0"x2.0"	152.4	50.8	254	2.77
6.0"x3.0"	152.4	76.2	152.4	2.77
6.0"x4.0"	152.4	101.6	101.6	2.77

45° Clamp Elbow C.2KMP-45° Elbow



SIZE	ØD	L	T
1.0"	25.4	28.5	1.65
1.5"	38.1	36.5	1.65
2.0"	50.8	44.45	1.65
2.5"	63.5	52.3	1.65
3.0"	76.2	60.3	1.65
4.0"	101.6	76.2	2.10

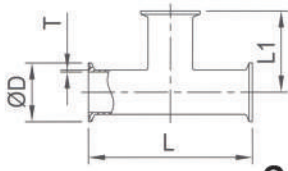
90° Clamp Bend C.2KMP-90° Bend



SIZE	ØD	L	T
1/2"	12.7	41.3	1.65
3/4"	19.05	41.3	1.65
1.0"	25.4	50.8	1.65
1.5"	38.1	69.9	1.65
2.0"	50.8	88.9	1.65
2.5"	63.5	107.95	1.65
3.0"	76.2	127	1.65
4.0"	101.6	168.2	2.10

3A Pipe Line (mm)

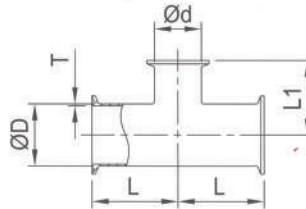
Clamp Tee



C.7MP-Clamp Long Tee

SIZE	ØD	L	L1	T
1/2"	12.7	63.5	31.75	1.65
3/4"	19.05	120.6	60.3	1.65
1.0"	25.4	120.6	60.3	1.65
1.5"	38.1	139.8	69.9	1.65
2.0"	50.8	177.8	88.9	1.65
2.5"	63.5	177.8	88.9	1.65
3.0"	76.2	190.6	95.3	1.65
4.0"	101.6	228.4	114.2	2.10

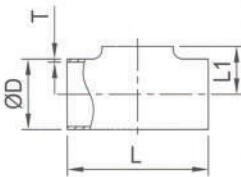
Reducing Tee



C.L7RMP-Reducing Long Tee Clamp End

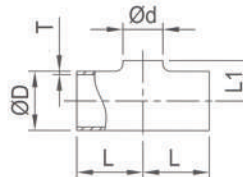
SIZE	ØD	L	L1	T
1.5"x1.0"	38.1	25.4	69.85	66.68
2.0"x1.0"	50.8	25.4	88.9	73.0
2.0"x1.5"	50.8	38.1	88.9	76.2
2.5"x1.5"	63.5	38.1	88.9	82.55
2.5"x2.0"	63.5	50.8	88.9	95.25
3.0"x1.5"	76.2	38.1	95.25	88.9
3.0"x2.0"	76.2	50.8	95.25	101.6
3.0"x2.5"	76.2	63.5	95.25	95.25
4.0"x2.0"	101.6	50.8	114.2	114.3
4.0"x2.5"	101.6	63.5	114.2	107.95
4.0"x3.0"	101.6	76.2	114.2	107.95

Equal Tee



C.7WW Equal Tee W/O Straight End

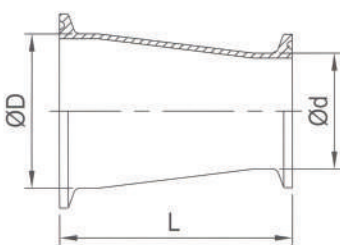
SIZE	ØD	L	L1	T
1.0"	25.4	57.2	16	1.65
1.5"	38.1	84.2	22	1.65
2.0"	50.8	104.8	29	1.65
2.5"	63.5	119.0	35	1.65
3.0"	76.2	131.8	41	1.65
4.0"	101.6	174.6	54	2.10



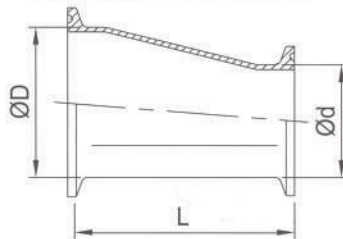
C.7RWW W/O Straight end Reducing Tee

SIZE	ØD	d	L	L1
1.5"x1.0"	38.1	25.4	42.1	22
2.0"x1.5"	50.8	38.1	52.4	29
2.5"x2.0"	63.5	50.8	59.5	35
3.0"x2.0"	76.2	50.8	65.9	41
3.0"x2.5"	76.2	63.5	65.9	41
4.0"x2.0"	101.6	50.8	117.5	54
4.0"x2.5"	101.6	63.5	117.5	54
4.0"x3.0"	101.6	76.2	117.5	54

Concentric Reducer



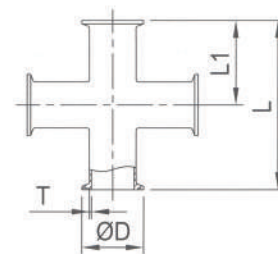
Eccentric Reducer



C.32-14MP Eccentric Reducer Clamp End C.31-14MP Concentric Reducer Clamp End

SIZE	ØD	Ød	L
1.5"x1.0"	38.1	25.4	76.2
2.0"x1.5"	50.8	38.1	76.2
2.5"x1.5"	63.5	38.1	127
2.5"x2.0"	63.5	50.8	76.2
3.0"x1.5"	76.2	38.1	177.8
3.0"x2.0"	76.2	50.8	127
3.0"x2.5"	76.2	63.5	76.2
4.0"x1.5"	101.6	38.1	282.5
4.0"x2.0"	101.6	50.8	231.7
4.0"x2.5"	101.6	63.5	180.9
4.0"x3.0"	101.6	76.2	130.1

Clamp Cross

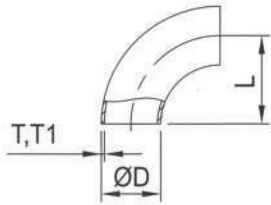


C.9MP-Clamp Long Cross

SIZE	ØD	L	L1	T
1.0"	25.4	120.6	60.3	1.65
1.5"	38.1	139.8	69.9	1.65
2.0"	50.8	177.8	88.9	1.65
2.5"	63.5	177.8	88.9	1.65
3.0"	76.2	190.6	95.3	1.65
4.0"	101.6	228.4	114.2	2.10

SMS Pipe Line (mm)

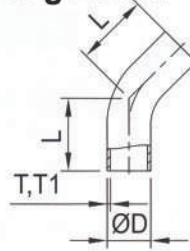
90° Short Elbow



SMS 90 B 90° Short Elbow

DN	ØD	L	T	T1
25	125.0	37.5	1.25	1.5
38	38.0	57.0	1.25	1.5
51	51.0	76.5	1.25	1.5
63.5	63.5	95.25	1.5	1.5
76	76.1	114.15	1.6	2.0
104	104	152.1	2.0	2.0

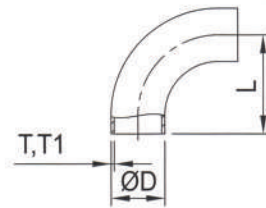
45° Long Elbow



SMS 45 LB 45° Long Elbow

DN	ØD	L	T	T1
25	25.0	42.33	1.25	1.5
38	38.0	48.72	1.25	1.5
51	51.0	58.15	1.25	1.5
63.5	63.5	75.3	1.5	1.5
76	76.1	79.37	1.6	2.0
104	104	85.54	2.0	2.0

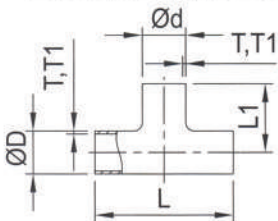
90° Long Elbow



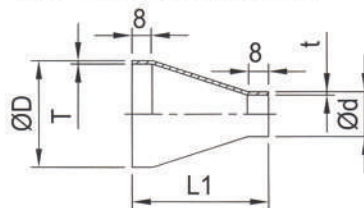
SMS 90 LB 90° Long Elbow

DN	ØD	L	T	T1
25	25.0	55	1.25	1.5
38	38.0	70	1.25	1.5
51	51.0	82	1.25	1.5
63.5	63.5	105	1.5	1.5
76	76.0	110	1.6	2.0
101.6	101.6	150	2.0	2.0
104	104	150	2.0	2.0

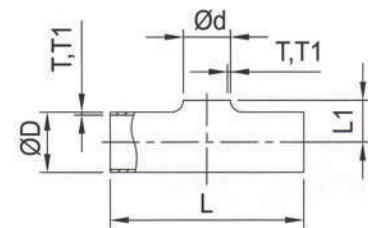
SMS Tee With Straight-End



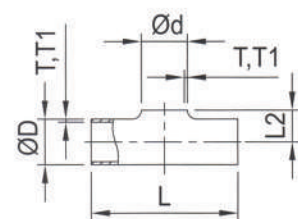
SMS Concentric Reducer



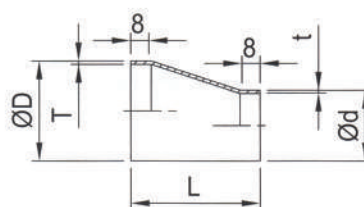
SMS Welding Reducing Tee Without Straight-End



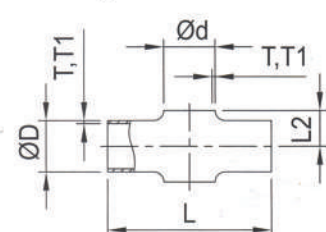
SMS Tee Without Straight-End



SMS Eccentric Reducer



SMS Welding Cross Without Straight-End



SIZE	ØD	Ød	T	t	L1	L
38x25	38.0	25.0	1.25	1.25	46	39
51x25	51.0	25.0	1.25	1.25	68	57
51x38	51.0	38.0	1.25	1.25	47	39
63.5x25	63.5	25.0	1.5	1.25	92	74
63.5x38	63.5	38.0	1.5	1.25	70	57
63.5x51	63.5	51.0	1.5	1.25	44	39
76x25	76.1	25.0	1.6	1.25	-	92
76x38	76.1	38.0	1.6	1.25	92	74
76x51	76.1	51.0	1.6	1.25	68	57
76x63.5	76.1	63.5	1.6	1.50	47	39
104x51	104	51.0	2.0	1.25	117	95
104x63.5	104	63.5	2.0	1.50	94	78
104x76	104	76.1	2.0	1.60	74	60

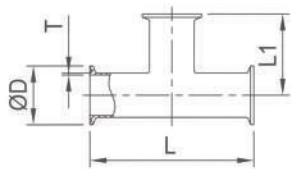
DN	ØD	Ød	T	T1	L	L1
38x25	38.0	25.0	1.25	1.5	140	21.0
51x25	51.0	25.0	1.25	1.5	164	29.0
51x38	51.0	38.0	1.25	1.5	164	29.0
63.5x25	63.5	25.0	1.5	1.5	210	34.5
63.5x38	63.5	38.0	1.5	1.5	210	35.0
63.5x51	63.5	51.0	1.5	1.5	210	36.0
76.1x25	76.1	25.0	1.6	2.0	220	41.0
76.1x38	76.1	38.0	1.6	2.0	220	42.0
76.1x51	76.1	51.0	1.6	2.0	220	43.0
76.1x63.5	76.1	63.5	1.6	2.0	220	43.0
104x25	104	25.0	2.0	2.0	300	56.0
104x38	104	38.0	2.0	2.0	300	56.0
104x51	104	51.0	2.0	2.0	300	57.0
104x63.5	104	63.5	2.0	2.0	300	58.0
104x76.1	104	76.1	2.0	2.0	300	58.0

DN	ØD	Ød	T	T1	L	L1	T1
25	25.0	25.0	1.25	1.5	110	55	14.0
38	38.0	38.0	1.25	1.5	140	70	21.0
51	51.0	51.0	1.25	1.5	164	82	28.5
63.5	63.5	63.5	1.5	1.5	210	105	36.0
76.1	76.1	76.1	1.6	2.0	220	110	43.0
104	104	104	2.0	2.0	300	150	58.0

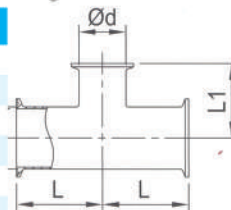


DIN Pipe Line (mm)

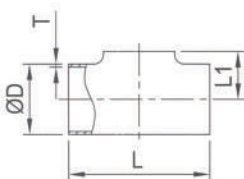
DIN 45° Long Elbow



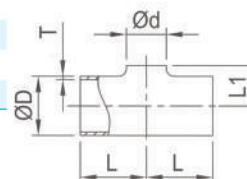
SIZE	ØD	L	T
DN25	28	20	1.5
DN32	34	23	1.5
DN40	40	20	1.5
DN50	52	27	1.5
DN65	70	30	2.0
DN80	85	33	2.0
DN100	104	40	2.0



DIN 90° Short Bend



SIZE	ØD	L	T
DN20	22	40	1.5
DN25	28	50	1.5
DN32	34	55	1.5
DN40	40	60	1.5
DN50	52	70	1.5
DN65	70	80	2.0
DN80	85	90	2.0
DN100	101.6	133	2.0

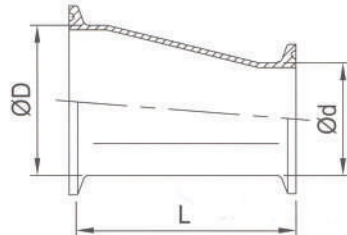
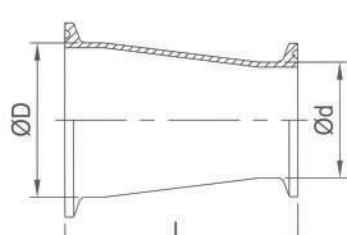


DIN 90° Long Bend

SIZE	ØD	L	T
DN25	28	65	1.5
DN32	34	73	1.5
DN40	40	80	1.5
DN50	52	92	1.5
DN65	70	105	2.0
DN80	85	119	2.0
DN100	101.6	175	2.0

DIN Tee & Pull Tee

SIZE	ØD	L	L1	L2	T
DN20	22	94	47	13	1.5
DN25	28	100	50	15.5	1.5
DN32	34	110	55	19	1.5
DN40	40	120	60	22	1.5
DN50	52	140	70	28.5	1.5
DN65	70	160	80	39.5	2.0
DN80	85	180	90	46.5	2.0
DN100	101.6	300	150	56	2.0

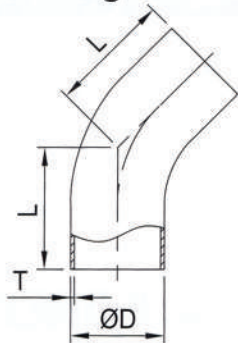


DIN Concentric Reducer

SIZE	ØD	Ød	T	L	L1	L
32x25	34	28	1.5	25	16.5	1.5
40x25	40	28	1.5	23	33	1.5
40x32	40	34	1.5	23	16.5	1.5
50x25	52	28	1.5	27	66	1.5
50x32	52	34	1.5	28	49.5	1.5
50x40	52	40	1.5	27	33	1.5
65x25	70	28	1.5	35	75	1.5
65x40	70	40	2.0	39	77	1.5
65x50	70	52	2.0	29	44	1.5
80x50	85	52	2.0	45	85	1.5
80x65	85	70	2.0	33	41.2	2.0
100x50	104	52	2.0	50	137.5	1.5
100x65	104	70	2.0	44	93.5	2.0
100x80	104	85	2.0	60	52.5	2.0

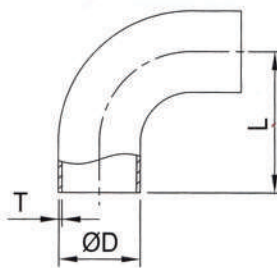
AS Pipe Line (mm)

45° Long Elbow



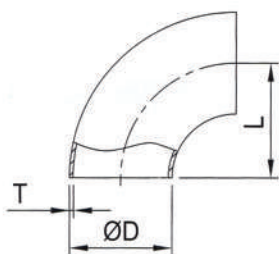
SIZE	ØD	L	T
1/2"	12.7	30	1.6
3/4"	19.1	30	1.6
1.0"	25.4	30	1.6
1 1/4"	31.8	30	1.6
1.5"	38.1	30	1.6
2.0"	50.8	30	1.6
2.5"	63.5	30	1.6
3.0"	76.2	30	1.6
4.0"	101.6	30	2.0

90° Long Bend



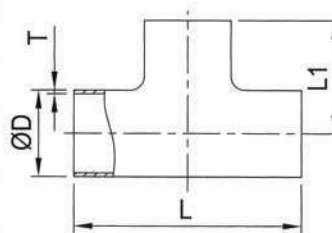
SIZE	ØD	L	T
1/2"	12.7	49.1	1.6
3/4"	19.1	58.6	1.6
1.0"	25.4	68.1	1.6
1 1/4"	31.8	77.7	1.6
1.5"	38.1	87.0	1.6
2.0"	50.8	106.2	1.6
2.5"	63.5	125.0	1.6
3.0"	76.2	144.2	1.6
4.0"	101.6	182.4	2.0

90° Short Bend



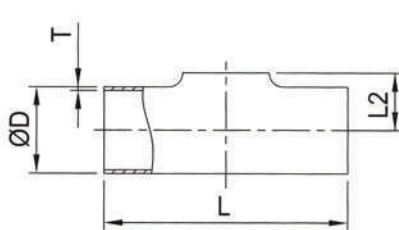
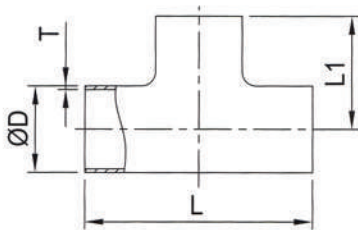
SIZE	ØD	L	T
1/2"	12.7	19.1	1.6
3/4"	19.1	28.6	1.6
1.0"	25.4	38.1	1.6
1 1/4"	31.8	47.7	1.6
1.5"	38.1	57.0	1.6
2.0"	50.8	76.2	1.6
2.5"	63.5	95.0	1.6
3.0"	76.2	114.2	1.6
4.0"	101.6	152.4	2.0

Long Tee



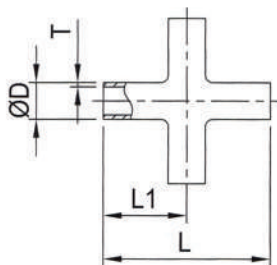
SIZE	ØD	L	L1	T
1/2"	12.7	98.2	49.1	1.6
3/4"	19.1	117.2	58.6	1.6
1.0"	25.4	136.2	68.1	1.6
1 1/4"	31.8	155.4	77.7	1.6
1.5"	38.1	174.0	87.0	1.6
2.0"	50.8	212.4	106.2	1.6
2.5"	63.5	250.0	125.0	1.6
3.0"	76.2	288.4	144.2	1.6
4.0"	101.6	364.8	182.4	2.0

Short Tee/Equal Tee



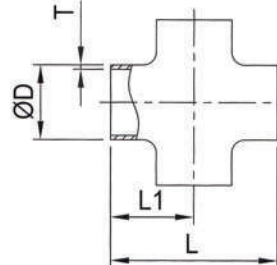
SIZE	ØD	L	L1	L2	T
1/2"	12.7	38.7	19.1	9.35	1.6
3/4"	19.1	57.2	28.6	12.55	1.6
1.0"	25.4	76.2	38.1	15.7	1.6
1 1/4"	31.8	95.4	47.7	18.9	1.6
1.5"	38.1	114.0	57.0	22.05	1.6
2.0"	50.8	152.4	76.2	28.4	1.6
2.5"	63.5	190.0	95.0	34.75	1.6
3.0"	76.2	228.4	144.2	41.1	1.6
4.0"	101.6	304.8	152.4	53.8	2.0

EC Long Cross



SIZE	ØD	L	L1	T
1/2"	12.7	98.2	49.1	1.6
3/4"	19.1	117.2	58.6	1.6
1.0"	25.4	136.2	68.1	1.6
1 1/4"	31.8	155.4	77.7	1.6
1.5"	38.1	174.0	87.0	1.6
2.0"	50.8	212.4	106.2	1.6
2.5"	63.5	250.0	125.0	1.6
3.0"	76.2	288.4	144.2	1.6
4.0"	101.6	364.8	182.4	2.0

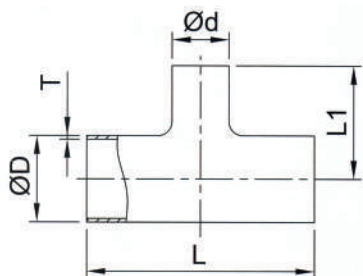
Short Cross



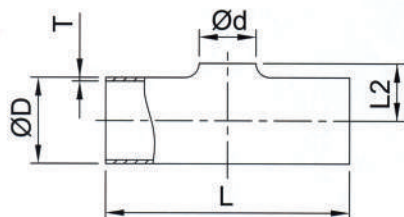
SIZE	ØD	L	L1	T
1/2"	12.7	38.2	19.1	1.6
3/4"	19.1	57.2	28.6	1.6
1.0"	25.4	76.2	38.1	1.6
1 1/4"	31.8	95.4	47.7	1.6
1.5"	38.1	114.0	57.0	1.6
2.0"	50.8	152.4	76.2	1.6
2.5"	63.5	190.0	95.0	1.6
3.0"	76.2	288.4	144.2	1.6
4.0"	101.6	304.8	152.4	2.0

AS Pipe Line (mm)

Equal Reducing Tee

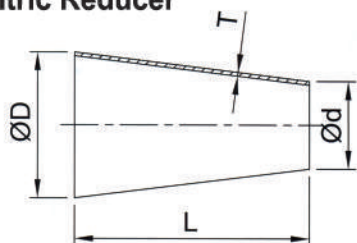


Reducing Tee

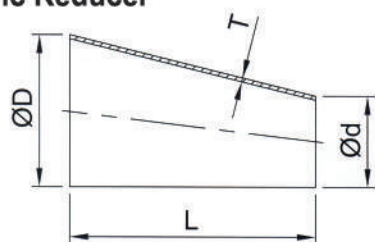


SIZE	ØD	Ød	L1	L2	T	T
1.5"x1.0"	38.1	25.4	160	80	22.05	1.6
2.0"x1.0"	50.8	25.4	160	80	28.4	1.6
2.0"x1.5"	50.8	38.1	160	80	28.4	1.6
2.5"x1.5"	63.5	38.1	160	80	34.75	1.6
2.5"x2.0"	63.5	50.8	160	80	34.75	1.6
3.0"x1.5"	76.2	38.1	160	80	41.1	1.6
3.0"x2.0"	76.2	50.8	160	80	41.1	1.6
3.0"x2.5"	76.2	63.5	190.5	95.3	41.1	1.6
4.0"x2.0"	101.6	50.8	160	80	53.8	2.0
4.0"x2.5"	101.6	63.5	190.5	95.3	53.8	2.0
4.0"x3.0"	101.6	76.2	228.6	114.3	53.8	2.0

Concentric Reducer



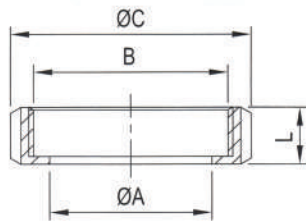
Eccentric Reducer



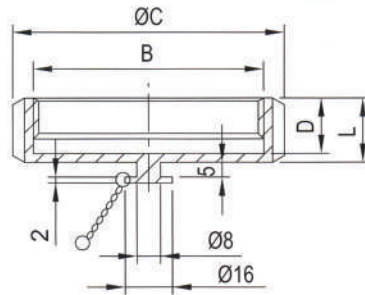
SIZE	ØD	Ød	L	T	SIZE	ØD	Ød	L	T
3/4"x1/2"	19.1	12.7	19.1	1.6	3.0"x1 1/4"	76.2	31.8	76.2	1.6
1.0"x1/2"	25.4	12.7	25.4	1.6	3.0"x1.5"	76.2	38.1	76.2	1.6
1.0"x3/4"	25.4	19.1	25.4	1.6	3.0"x2.0"	76.2	50.8	76.2	1.6
1 1/4"x3/4"	31.8	19.1	31.8	1.6	3.0"x2.5"	76.2	63.5	76.2	1.6
1 1/4"x1.0"	31.8	25.4	31.8	1.6	4.0"x1.0"	101.6	25.4	101.6	1.6
1.5"x3/4"	38.1	19.1	38.1	1.6	4.0"x1 1/4"	101.6	31.8	101.6	1.6
1.5"x1.0"	38.1	25.4	38.1	1.6	4.0"x1.5"	101.6	38.1	101.6	1.6
1.5"x1 1/4"	38.1	31.8	38.1	1.6	4.0"x2.0"	101.6	50.8	101.6	1.6
2.0"x1/2"	50.8	12.7	50.8	1.6	4.0"x2.5"	101.6	63.5	101.6	1.6
2.0"x3/4"	50.8	19.1	50.8	1.6	4.0"x3.0"	101.6	76.2	101.6	1.6
2.0"x1.0"	50.8	25.4	50.8	1.6	5.0"x2.0"	127.0	50.8	127.0	1.6
2.0"x1 1/4"	50.8	31.8	50.8	1.6	5.0"x3.0"	127.0	76.2	127.0	1.6
2.0"x1.5"	50.8	38.1	50.8	1.6	5.0"x4.0"	127.0	101.6	127.0	1.6
2.5"x1.0"	63.5	25.4	63.5	1.6	6.0"x2.0"	152.4	50.8	152.4	1.6
2.5"x1 1/4"	63.5	31.8	63.5	1.6	6.0"x2.5"	152.4	63.5	152.4	1.6
2.5"x1.5"	63.5	38.1	63.5	1.6	6.0"x3.0"	152.4	76.2	152.4	1.6
2.5"x2.0"	63.5	50.8	63.5	1.6	6.0"x4.0"	152.4	101.6	152.4	1.6
3.0"x1.0"	76.2	25.4	76.2	1.6	6.0"x5.0"	152.4	127.0	152.4	1.6

DIN 11851 Union (mm)

DIN-13R

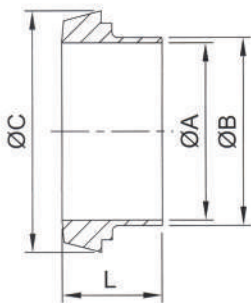


DIN-13RBN



DIN-14DA Welding Liner DIN-14DB Welding Liner

DIN	ØA	ØB	ØC	L	DIN	ØA	ØB	ØC	L
10	10	13	22.2	17	10	9	12	22.2	17
15	16	19	28.2	17	15	15	18	28.2	17
20	20	23	36.3	18	20	19	22	36.3	18
25	26	29	44	22	25	25	28	44	22
32	32	35	50	25	32	31	34	50	25
40	38	41	56	26	40	37	40	56	26
50	50	53	68	28	50	49	52	68	28
60	57	61	76	30	60	57	61	76	30
65	66	70	86	32	65	66	70	86	32
80	81	85	100	37	80	81	85	100	37
100	100	104	121	44	100	100	104	121	44
125	125	129	150	34	125	125	129	150	34
150	150	154	176	37	150	150	154	176	37

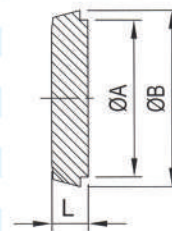


DIN-13 Round Nut

DIN	ØA	B	ØC	D	L	Slots
10	19	RD 28*1/8	38	15	18	4
15	25	RD 34*1/8	44	15	18	4
20	31	RD 44*1/6	54	17	20	4
25	36	RD 52*1/6	63	18	21	4
32	42	RD 58*1/6	70	18	21	4
40	49	RD 65*1/6	78	18	21	4
50	62	RD 78*1/6	92	19	22	4
65	80	RD 95*1/6	112	21	25	6
80	94	RD 110*1/4	127	25	29	6
90	104	RD 120*1/4	138	26	30	6
100	114	RD 130*1/4	148	26	31	6
125	137	RD 160*1/4	178	30	35	6
150	163	RD 190*1/4	210	34	40	6

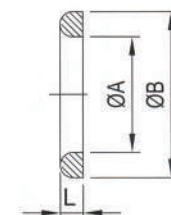
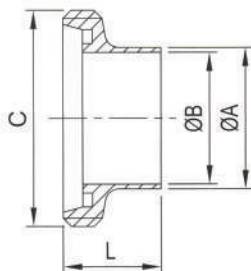
DIN-14B Blanks

SIZE	ØA	ØB	L
10	18	22.5	9
15	24	28.5	9
20	30	36.5	11
25	35	44	13
32	41	50	13
40	48	56	13
50	61	68.5	14
65	79	86	16
80	93	100	16
100	114	121	20
125	137	150	22
150	163	176	24



DIN-15DA Welding Male DIN-15DB Welding Male

SIZE	ØA	ØB	C	L	SIZE	ØA	ØB	C	L
10	10	13	RD 28x1/8	21	10	9	12	RD 28x1/8	21
15	16	19	RD 34x1/8	21	15	15	18	RD 34x1/8	21
20	20	23	RD 44x1/6	24	20	19	22	RD 44x1/6	24
25	26	29	RD 52x1/6	29	25	25	28	RD 52x1/6	29
32	32	35	RD 58x1/6	32	32	31	34	RD 58x1/6	32
40	38	41	RD 65x1/6	33	40	37	40	RD 65x1/6	33
50	50	53	RD 78x1/6	35	50	49	52	RD 78x1/6	35
60	57	61	RD 85x1/6	36	60	57	61	RD 85x1/6	36
65	66	70	RD 95x1/6	40	65	66	70	RD 95x1/6	40
80	81	85	RD 110x1/4	45	80	81	85	RD 110x1/4	45
90	89	93	RD 120x1/4	54	90	89	93	RD 120x1/4	54
100	100	104	RD 130x1/4	54	100	100	104	RD 130x1/4	54
125	125	129	RD 160x1/4	46	125	125	129	RD 160x1/4	46
150	150	154	RD 190x1/4	50	150	150	154	RD 190x1/4	50

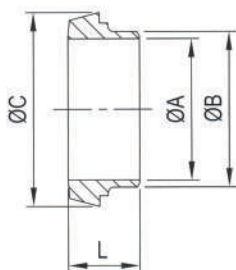


DIN Seal Ring (EPDM, Silicon, Viton)

SIZE	ØA	ØB	L
10	12	20	4.5
15	18	26	4.5
20	23	33	4.5
25	30	40	5
32	36	46	5
40	42	52	5
50	54	64	5
65	71	81	5
80	85	95	5
100	104	114	6
125	130	142	7
150	155	167	7

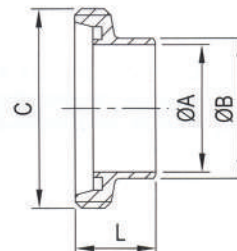
DIN-14S Welding Liner

SIZE	ØA	ØB	ØC	L
10	10	15	22	17
15	16	21	28	17
20	20	25	36	18
25	26	31	44	22
32	32	37	50	25
40	38	43	56	26
50	50	55	68	28
60	57	63	76	30
65	66	72	86	32
80	81	87	100	37
101.6	99	104	121	44
104	100	106	121	44
125	125	132	150	34
150	150	157	176	37



DIN-15S Welding Male

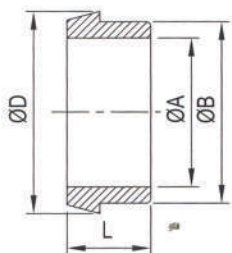
SIZE	ØA	ØB	C	L
10	10	15	RD 28x1/8	21
15	16	21	RD 34x1/8	21
20	20	25	RD 44x1/6	24
25	26	31	RD 52x1/6	29
32	32	37	RD 58x1/6	32
40	38	43	RD 65x1/6	33
50	50	55	RD 78x1/6	35
60	57	63	RD 85x1/6	36
65	66	72	RD 95x1/6	40
80	81	87	RD 110x1/4	45
101.6	99	104	RD 120x1/4	54
104	100	106	RD 130x1/4	54
125	125	132	RD 160x1/4	46
150	150	157	RD 190x1/4	50



DIN 11851 Union (mm) (Expanding / Imperial)

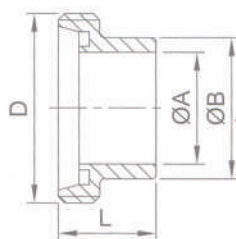
DIN Welding Liner DIN 14-T

SIZE	ØA	ØB	ØD	L
DN10	10	18	22	17
DN15	16	24	28	17
DN20	20	30	36	18
DN25	26	35	44	22
DN32	32	41	50	25
DN40	38	48	56	26
DN50	50	61	68	28
DN65	66	79	86	32
DN80	81	93	100	37
101.6	99	112	121	44
DN104	100	114	121	44



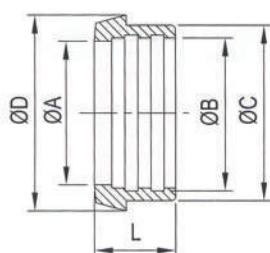
DIN Welding Liner DIN 15-T

SIZE	ØA	ØB	D	L
DN10	10	18	RD 28x1/8	21
DN15	16	24	RD 34x1/8	21
DN20	20	30	RD 44x1/6	24
DN25	26	35	RD 52x1/6	29
DN32	32	41	RD 58x1/6	32
DN40	38	48	RD 65x1/6	33
DN50	50	61	RD 78x1/6	35
DN65	66	79	RD 95x1/6	40
DN80	81	93	RD 110x1/4	45
101.6	99	112	RD 130x1/4	54
DN104	100	114	RD 130x1/4	54



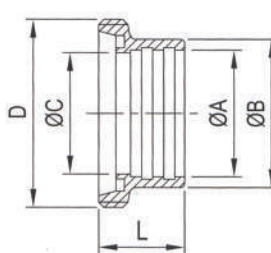
DIN Expanding Liner DIN 14R

SIZE	ØA	ØB	ØC	ØD	L
DN10	10	12.2	18	22	17
DN15	16	18.2	24	28	17
DN20	20	22.2	30	36	18
DN25	26	28.2	35	44	22
DN32	32	34.2	41	50	25
DN40	38	40.2	48	56	26
DN50	50	52.2	61	68	28
DN65	66	70.3	79	86	32
DN80	81	85.3	93	100	37
DN100	100	104.3	114	121	44
DN125	125	129.3	137	150	34
DN150	150	154.3	163	176	37



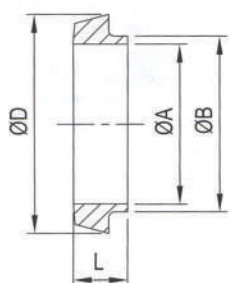
DIN Expanding Male DIN-15R

SIZE	ØA	ØB	ØC	D	L
DN10	12.2	18	10	RD 28x1/8	21
DN15	18.2	24	16	RD 34x1/8	21
DN20	22.2	30	20	RD 44x1/6	24
DN25	28.2	35	26	RD 52x1/6	29
DN32	34.2	41	32	RD 58x1/6	32
DN40	40.2	48	38	RD 65x1/6	33
DN50	52.2	61	50	RD 78x1/6	35
DN65	70.3	79	66	RD 95x1/6	40
DN80	85.3	93	81	RD 110x1/4	45
DN100	104.3	114	100	RD 130x1/4	54
DN125	129.3	137	125	RD 160x1/4	46
DN150	154.3	163	150	RD 190x1/4	50



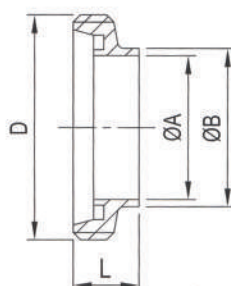
DIN Short Welding Liner DIN-14E

SIZE	ØA	ØB	ØD	L
DN10	9	12	22	13
DN15	15	18	28	13
DN20	19	22	36	13
DN25	25	28	44	15
DN32	31	34	50	15
DN40	37	40	56	15
DN50	49	52	68	16
DN65	66	70	86	17
DN80	81	85	100	17
DN100	100	104	121	20
DN125	125	129	150	23.5
DN150	150	154	176	27



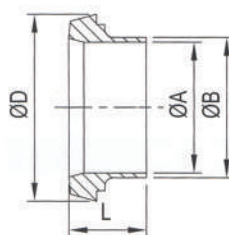
DIN Short Welding Male DIN-15E

SIZE	ØA	ØB	D	L
DN10	9	12	RD 28x1/8	17
DN15	15	18	RD 34x1/8	17
DN20	19	22	RD 44x1/6	19
DN25	25	28	RD 52x1/6	22
DN32	31	34	RD 58x1/6	22
DN40	37	40	RD 65x1/6	22
DN50	49	52	RD 78x1/6	23
DN65	66	70	RD 95x1/6	25
DN80	81	85	RD 110x1/4	25
DN100	100	104	RD 130x1/4	30
DN125	125	129	RD 160x1/4	35.5
DN150	150	154	RD 190x1/4	40



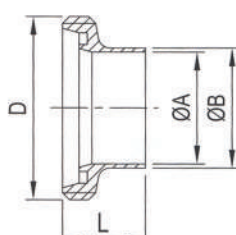
DIN Imperial Welding Liner DIN-14I

SIZE	ØA	ØB	ØD	L
1.0"	22.1	25.4	44	22
1.5"	34.8	38.1	56	26
2.0"	47.5	50.8	68	28
2.5"	60.2	63.5	86	32
3.0"	72.9	76.2	100	37
4.0"	97.6	101.6	121	44



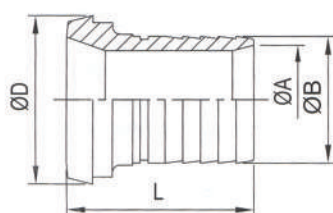
DIN Imperial Welding Male DIN15I

SIZE	ØA	ØB	D	L
1.0"	22.1	25.4	RD 52x1/6	29
1.5"	34.8	38.1	RD 65x1/6	33
2.0"	47.5	50.8	RD 78x1/6	35
2.5"	60.2	63.5	RD 95x1/6	40
3.0"	72.9	76.2	RD 110x1/6	45
4.0"	97.6	101.6	RD 130x1/6	54



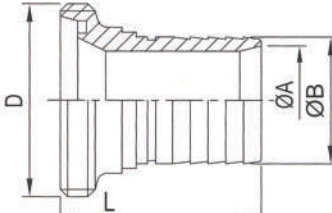
DIN-14AHR Hose Adapter

SIZE	ØA	ØB	ØD	L
DN25	22.2	25	44	67
DN32	28.7	32.2	50	71
DN40	34	38	56	78
DN50	47	50.5	68	89
DN65	59	63.2	86	100
DN80	71.5	75.5	100	108
DN100	95	100.8	121	120

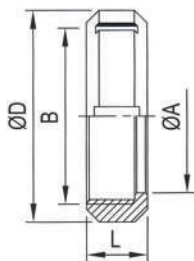


DIN-15AHR Hose Adapter

SIZE	ØA	ØB	D	L
DN25	22.1	25	RD 52x1/6	69
DN32	28.7	32.2	RD 58x1/6	73
DN40	34	38	RD 65x1/6	80
DN50	47	50.5	RD 78x1/6	90
DN65	59	63.2	RD 95x1/6	108
DN80	71.5	75.5	RD 110x1/4	116
DN100	95	100.8	RD 130x1/4	128

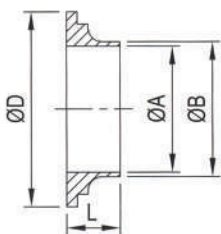


SMS Union



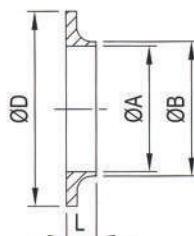
SMS Nut 6 Slots SMS-13R

SIZE	ØA	B	ØD	L
DN25	32	RD40*1/6	51	20
DN32	40	RD48*1/6	60	22
DN38	48	RD60*1/6	74	25
DN51	60.5	RD70*1/6	84	26
DN63.5	74	RD85*1/6	100	30
DN76	87	RD98*1/6	114	32
DN101.6	113	RD125*1/4	138	31
DN104	113	RD125*1/4	138	31
DN104-B	117	RD132*1/6	150	31



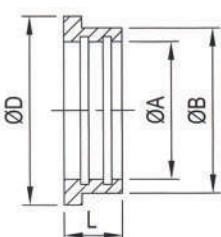
Long Welding Liner SMS-14GL

SIZE	ØA	ØB	ØD	L
DN25	22.5	25	35.5	15
DN38	35.5	38	55	20
DN51	48.5	51	65	20
DN63.5	60.5	63.5	80	24
DN76	72.9	76.1	93	24
DN101.6	97.6	101.6	118	30
DN104	100	104	118	30
DN104-B	98.5	102.5	127	19



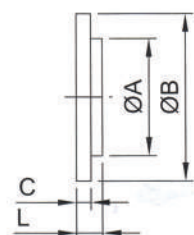
Short Welding Liner SMS-14S

SIZE	ØA	ØB	ØD	L
DN25	22.5	25	35.5	8
DN38	35.5	38	55	9
DN51	48.5	51	65	9
DN63.5	60.5	63.5	80	9
DN76	72	76	93	10
DN101.6	97.6	101.6	118	12
DN104	100	104	118	12
DN104-B	98.5	102.5	127	12



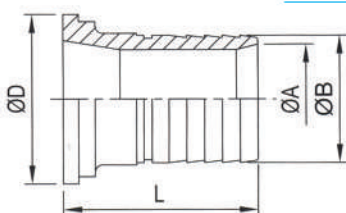
SMS Expanding Male 14R

SIZE	ØA	ØB	ØD	L
DN25	25	32	35.5	17
DN32	32	40	43.5	17
DN38	38	48	55	20
DN40	40	48	55	20
DN51	51	60	65	20
DN63.5	63.5	73.5	80	25
DN76	76	86	93	30
DN101.6	101.8	112.5	118	27
DN104	104.2	112.5	118	27



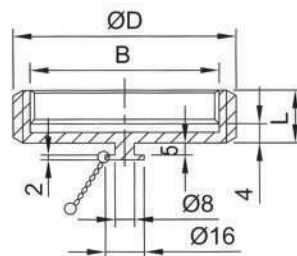
SMS-14B Blanks

SIZE	ØA	ØB	C	L
DN25	32	35.5	3.5	7.5
DN38	48	55	5	9
DN51	60	65	5	10
DN63.5	73.5	80	5	10
DN76	86	93	5	11
DN101.6B	116	128	6	11
DN104	112	118	6	11



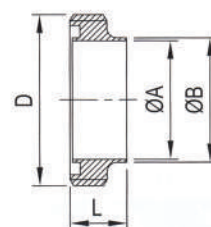
SMS-14AHR Hose Adapter

SIZE	ØA	ØB	ØD	L
DN25	22.2	2.5	35.5	60.5
DN38	34	38	55	72
DN51	47	50.5	65	82
DN63.5	59	63.2	80	95
DN76	71.5	75.5	93	97
DN104	95	100.8	118	109



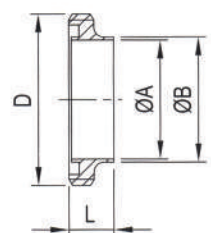
SMS Blank Nut 13RBN

SIZE	B	ØD	L
DN25	RD40*1/6	51	20
DN32	RD48*1/6	60	22
DN38	RD60*1/6	74	25
DN51	RD70*1/6	84	26
DN63.5	RD85*1/6	100	30
DN76	RD98*1/6	114	32
DN104	RD125*1/4	138	31



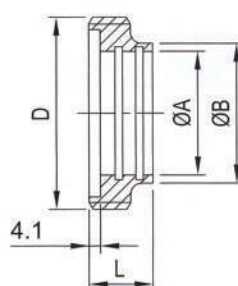
Long Welding Male SMS-15GL

SIZE	ØA	ØB	D	L
DN25	22.5	25	RD40*1/6	19
DN38	35.5	38	RD60*1/6	23
DN51	48.5	51	RD70*1/6	23
DN63.5	60.5	63.5	RD85*1/6	27
DN76	72.9	76.1	RD98*1/6	27
DN101.6	97.6	101.6	RD125*1/4	30
DN104	100	104	RD125*1/4	30
DN104-B	98.5	102.5	RD132*1/6	35



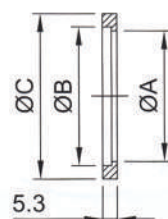
Short Welding Male SMS-15S

SIZE	ØA	ØB	D	L
DN25	22.5	25	RD40*1/6	15
DN38	35.5	38	RD60*1/6	20
DN51	48.5	51	RD70*1/6	20
DN63.5	60.5	63.5	RD85*1/6	24
DN76	72	76	RD98*1/6	24
DN101.6	97.6	101.6	RD125*1/4	26
DN104	100	104	RD125*1/4	26
DN104-B	98.5	102.5	RD132*1/6	26



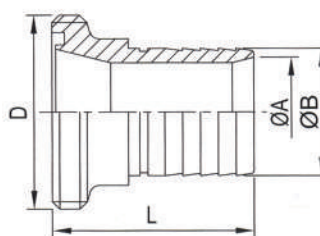
SMS Expanding Male 15R

SIZE	ØA	ØB	D	L
DN25	25.2	32	RD40*1/6	20
DN32	32.2	40	RD48*1/6	20
DN38	38.2	47.9	RD60*1/6	23
DN40	40.2	48	RD60*1/6	23
DN51	51.2	60.4	RD70*1/6	25
DN63.5	63.7	73.5	RD85*1/6	30
DN76	76.2	86.5	RD98*1/6	35
DN101.6	101.8	112.5	RD125*1/4	30
DN104	104.2	112.5	RD125*1/4	30



**Seal Ring LType
(EPDM, SILICON, VITON)**

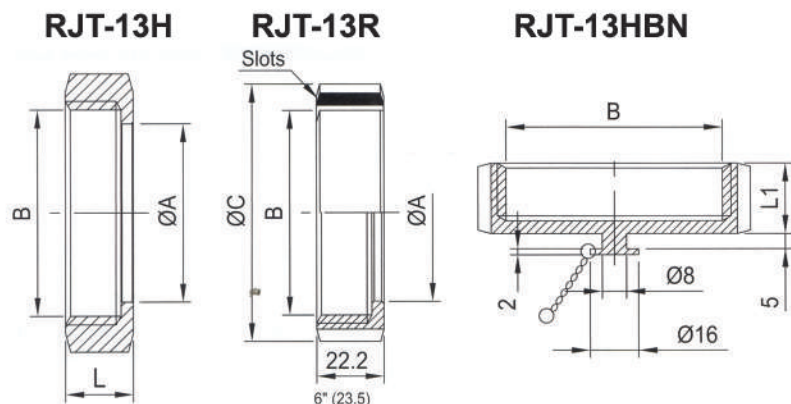
SIZE	ØA	ØB	L
DN25	22.8	25.1	38.1
DN38	35.8	38.1	47.8
DN51	48.8	51.1	60.8
DN63.5	61	63.6	73.3
DN76	73.4	76.1	85.8
DN104	100.5	104	115.7



SMS-15AHR Hose Adapter

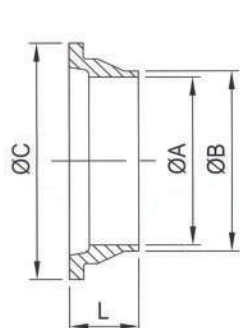
SIZE	ØA	ØB	D	L
DN25	22.2	25	RD40*1/6	64
DN38	34	38	RD60*1/6	79
DN51	47	50.5	RD70*1/6	89
DN63.5	59	63.2	RD85*1/6	102
DN76	71.5	75.5	RD98*1/6	105
DN104	95	100.8	RD125*1/4	120

BS/RJT Union (mm)



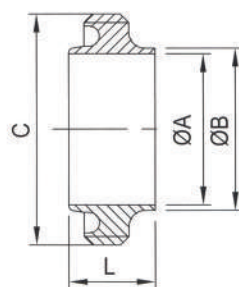
IDF-13 NUT

SIZE	ØA	B	ØC	L	L1	Slots
1/2"	14.5	19.6x10TPI WHIT		16		
3/4"	21	26.2x10TPI WHIT		16		
1.0"	33.3	42.26x8TPI WHIT	58.5	22.2	23.5	4
1.5"	46	54.96x10TPI WHIT	74	22.2	23.5	4
2.0"	58.7	67.92x6TPI WHIT	85.5	22.2	23.5	6
2.5"	71.4	80.62x6TPI WHIT	98.5	22.2	23.5	6
3.0"	84.1	93.32x6TPI WHIT	111.6	22.2	23.5	8
4.0"	109.5	118.72x6TPI WHIT	138	22.2	23.5	8
6.0"	163	169.52x6TPI WHIT	197	24		10



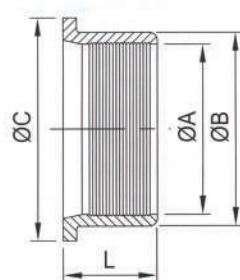
RJT Welding Liner RJT-14

SIZE	ØA	ØB	ØC	L
1/2"	9.6	14	18	11.4
3/4"	16	20	23.1	11.4
1.0"	22.2	25.65	41.3	10/12.7
1.5"	34.9	38.35	54	10/12.7
2.0"	47.6	51.05	66.7	10/12.7
2.5"	60.3	63.75	79.4	10/12.7
3.0"	73	76.45	92.1	10/12.7
4.0"	97.6	101.85	117.5	12.7/25.4
6.0"	148	152.4	169.1	23.5



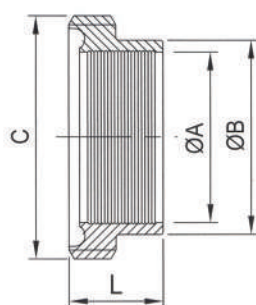
RJT Welding Male RJT-15

SIZE	ØA	ØB	C	L
1/2"	9.6	13.7	21.2x10T WHIT	16.5
3/4"	16	20	27.6x10T WHIT	16.5
1.0"	22.2	25.4	45.72x8T WHIT	21.5
1.5"	34.9	38.1	58.42x8T WHIT	21.5
2.0"	47.6	50.8	72.72x6T WHIT	21.5
2.5"	60.3	63.5	85.42x6T WHIT	21.5
3.0"	73	76.2	98.12x6T WHIT	21.5
4.0"	97.6	101.6	123.52x6T WHIT	21.5
104	100	104	123.52x6T WHIT	27
6.0"	148	152.4	174.32x6T WHIT	24



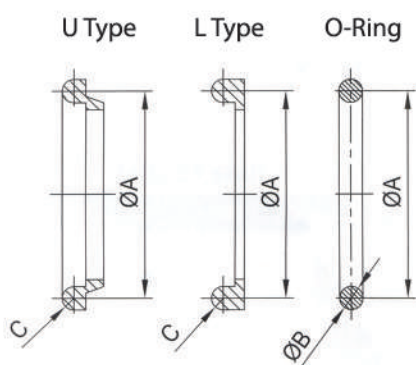
RJT Expanding Liner RJT-14R

SIZE	ØA	ØB	ØC	L
1.0"	25.4	32.5	41.3	20
1.5"	38.1	45.2	54	24
2.0"	50.8	57.9	66.7	28
2.5"	63.5	70.6	79.4	32
3.0"	76.2	83.3	92.1	32
4.0"	101.7	108.7	117.5	32



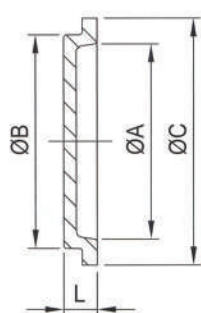
RJT Expanding Male RJT-15R

SIZE	ØA	ØB	C	L
1.0"	25.4	32.5	45.72x8T WHIT	20
1.5"	38.1	45.2	58.42x8T WHIT	24
2.0"	50.8	57.9	72.72x6T WHIT	28
2.5"	63.5	70.6	85.42x6T WHIT	32
3.0"	76.2	83.3	98.12x6T WHIT	32
4.0"	101.7	108.7	123.52x6T WHIT	32



RJT Seal Ring (EPDM, Silicon, Viton)

SIZE	ØA	ØB	C
1.0"	33.3	6.6	3.2
1.5"	46	6.6	3.2
2.0"	58.7	6.6	3.2
2.5"	71.4	6.6	3.2
3.0"	84.1	6.6	3.2
4.0"	109.5	6.6	3.2
6.0"	162.6	6.6	3.2

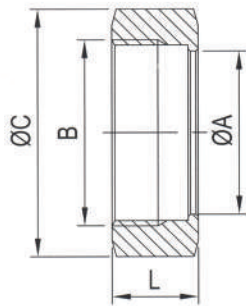


RJT-14B Blanks

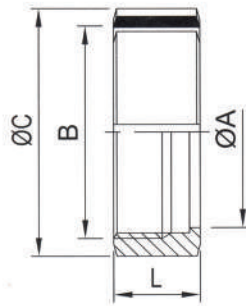
SIZE	ØA	ØB	ØC	L
1.0"	26.2	32.5	41.3	9
1.5"	38.9	45.2	54	9
2.0"	51.6	57.9	66.7	9
2.5"	64.3	70.6	79.4	9
3.0"	77	83.3	92.1	9
4.0"	102.4	108.7	117.5	9
104	102.8	108.7	117.5	9

IDF/ISO UNION (mm)

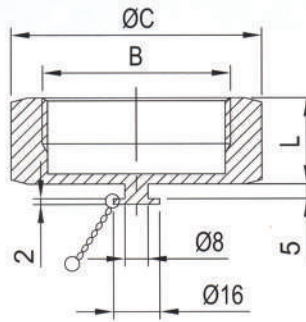
IDF-13H



IDF-13R



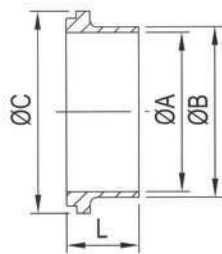
IDF-13HBN



IDF-13 NUT

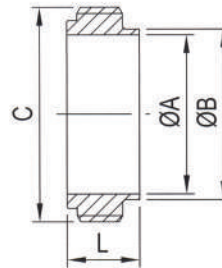
SIZE	ØA	B	ØC	L
1.0"	30.5	34.34x8T ACME	46	30
1.5"	43.5	47.86x8T ACME	60	30
2.0"	57	61.37x8T ACME	75	30
2.5"	70.7	74.88x8T ACME	90	30
R 3.0"	83.3	88.4x8T ACME	106	30
H 3.0"	83.3	88.4x8T ACME	105	30
R 4.0"	110	115.41x8T ACME	135	34.9
H 4.0"	110	122.05x6T ACME	133	34.9

Welding Liner 14



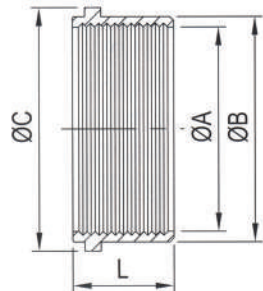
SIZE	IDF		JIS		ØC	L
	ØA	ØB	ØA	ØB		
1.0"	22.6	25.6	23	25.4	33.8	21.5
1.5"	35.6	38.6	35.7	38.1	47	21.5
2.0"	48.6	51.6	47.8	50.8	60.5	21.5
2.5"	60.3	64.1	59.5	63.5	74	21.5
3.0"	72.9	76.7	72.3	76.3	87.5	21.5
4.0"	97.6	102.5	97.6	101.6	114.1	21.5

Welding Male 15



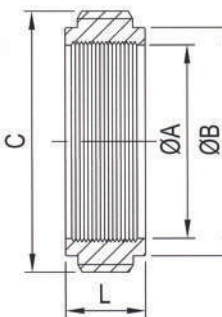
SIZE	IDF		JIS		C	L
	ØA	ØB	ØA	ØB		
1.0"	22.6	25.6	23	25.4	37.13x8T ACME	21.5
1.5"	35.6	38.6	35.7	38.1	50.65x8T ACME	21.5
2.0"	48.6	51.6	47.8	50.8	64.16x8T ACME	21.5
2.5"	60.3	64.1	59.5	63.5	37.13x8T ACME	21.5
3.0"	72.9	76.7	72.3	76.3	91.19x8T ACME	21.5
H 4.0"	97.6	102.5	97.6	101.6	125.9x6T ACME	21.5

IDF Expanding Liner IDF-14R



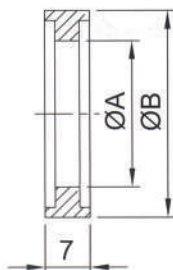
SIZE	ØA	ØB	ØC	L
1.0"	25	29	33.8	20
1.5"	38	42.5	47	20
2.0"	51	56	60.5	25
2.5"	63.5	69.7	74	30
3.0"	76.1	82.3	87.5	30
R 4.0"	101.6	108.4	114.1	30
H 4.0"	101.7	111.1	120.6	30

IDF Expanding Male IDF-15R



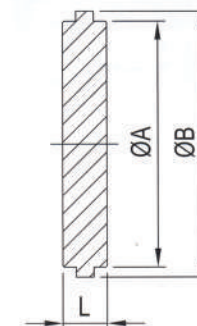
SIZE	ØA	ØB	B	L
1.0"	25	29	37.13x8T ACME	17
1.5"	38	42.5	50.65x8T ACME	20
2.0"	51	56	64.16x8T ACME	20
2.5"	63.5	69.7	77.76x8T ACME	25
3.0"	76.1	82.3	91.19x8T ACME	30
R 4.0"	101.6	108.4	118.2x8T ACME	35
H 4.0"	101.7	111.1	125.9x6T ACME	35

IDF Seal Ring



SIZE	ØA	ØB
1.0"	23	32.5
1.5"	36	46
2.0"	49	59.5
2.5"	60.7	73.2
3.0"	73.2	86.5
R 4.0"	98	113
H 4.0"	98	119.6

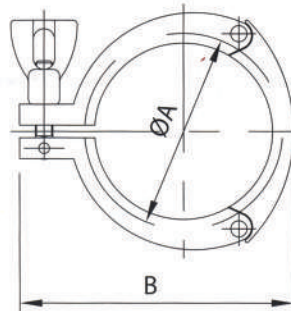
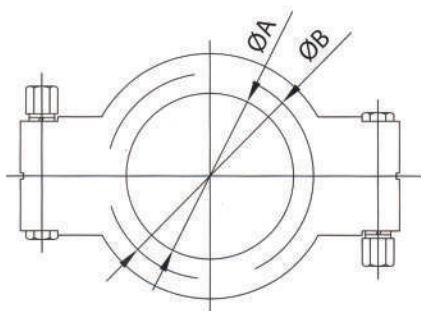
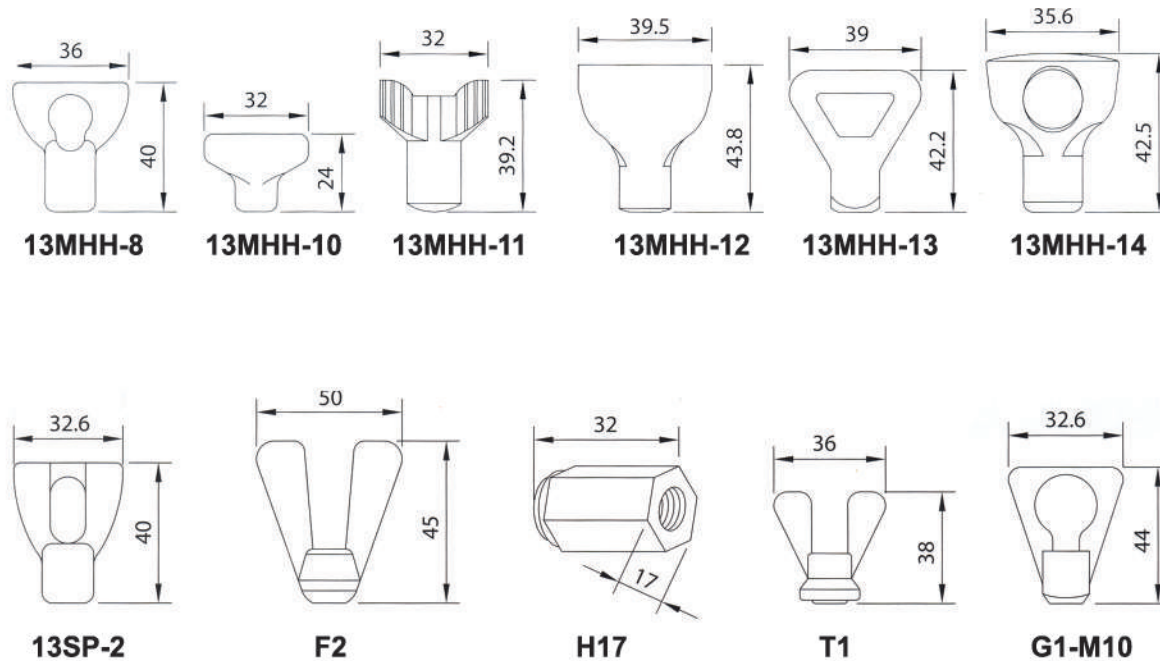
IDF-14B Blanks



SIZE	ØA	ØB	L
1.0"	29.2	33.8	10.5
1.5"	42.7	47	10.5
2.0"	56.2	60.5	10.5
2.5"	69.9	74	10.5
3.0"	82.6	87.5	10.5
R 4.0"	108.8	114.1	12.6
H 4.0"	111.1	120.6	12.6

Clamp Union (mm)

WING-NUT FOR CLAMP



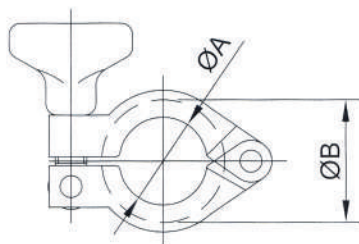
13MHP HIGH PRESSURE CLAMP WITH SCREW BOLT BRASS NUT

SIZE	$\varnothing A$	$\varnothing B$
3/4"	20	28
1.5"	43.32	52
2.0"	56.44	65.5
2.5"	69.54	79
3.0"	77.56	92.5
4.0"	108.86	120.5
6.0"	158	170
6.5"	173	186.2
10"	258.2	272.8
12"	309	327.6

13MHHS 3 PIECES CLAMP

SIZE	$\varnothing A$	$\varnothing B$
1.5"	54	80
2.0"	67.5	94
2.5"	80.9	109
3.0"	84.4	126
4.0"	122.4	154

Clamp Union (mm)

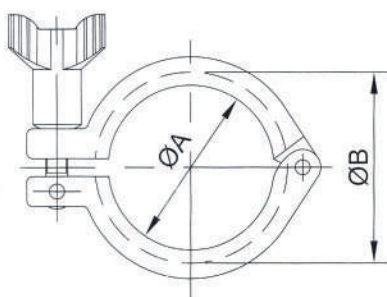


(13MHH & 13MHH & 13SF)

SIZE: 1/2"~3/4"

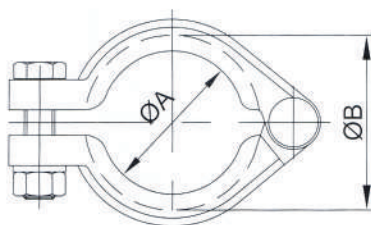
13MHH Heavy Duty Single Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28.2
A37	27.8	37
1.5"	44.4	53.6
2.0"	57.8	67
2.5"	71.4	80.6
3.0"	84	94.2
3.5"	99	109.2
4.0"	110	122.2
4.5"	123	133.2
6.0"	155.4	170.4
8.0"	205	220



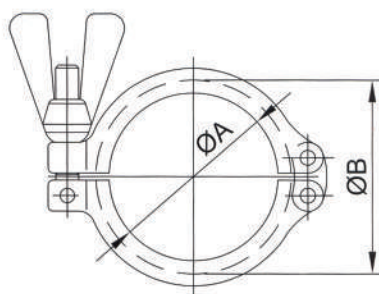
13MHH Heavy Duty Double Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28
1.5"	43.6	53.6
2.0"	57	67
2.5"	70.6	80.6
3.0"	84	94
4.0"	112	122
6.0"	155	170
8.0"	205	220.8



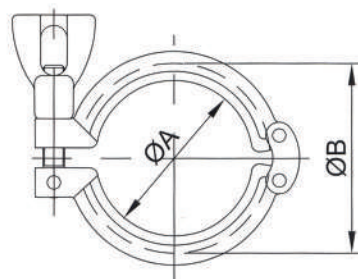
13IU Bolted Clamp

SIZE	ØA	ØB
1.5"	45	55
2.0"	63	73
2.5"	74	89
3.0"	88	102
4.0"	111	128



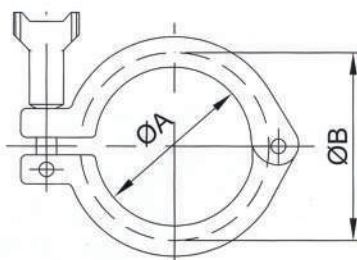
13CS Double Pin Clamp

SIZE	ØA	ØB
3/4"	20.58	28.34
DN10-20	27.2	37
1.5"	41.02	53.52
DN25-40	44.5	54.5
2.0"	54.54	67.04
DN50	57	68
2.5"	68.02	80.52
3.0"	81.52	94.02
DN65	84	95
DN80	99	110
4.0"	109.54	122.04
DN100	112	123
DN115	123	134
DN125	144	159
6.0"	157.6	175.1
DN150	172	187
8.0"	207.4	225.9
DN200	222.5	237.5
DN250	257	272
DN300	309	323



13SF Heavy Duty Double Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28
A37	27.5	42.9
1.5"	45	58.6
2.0"	59	72
2.5"	67	84
3.0"	85	98
4.0"	114	127

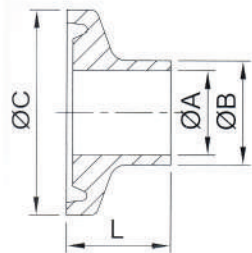


13IS I-line Clamp

SIZE	ØA	ØB
1.0"~1.5"	53.4	83.8
2.0"	72.2	111
2.5"	88.1	121.4
3.0"	102.4	136.1
4.0"	127.8	162
6.0"	195.3	242.1

Clamp Union (mm)

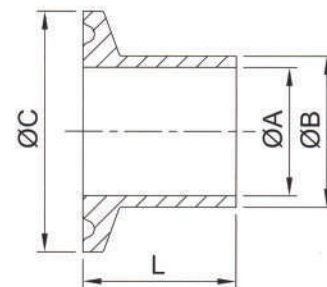
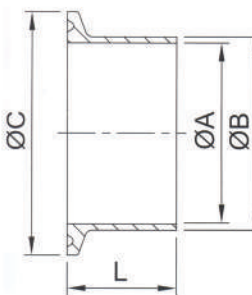
1/2"~3/4"



Welding Ferrule

	3A/SMS			14WMP 14MMP 14AMP		
SIZE	ØA	ØB	ØC	L	L	L
1/4"	3.9	6.35	25	12.7	21.5	28.6
1/2"	9.4	12.7	25	12.7	21.5	28.6
DN15	9.7	12.7	25.4	12.7	21.5	28.6
3/4"	15.75	19.05	25	12.7	21.5	28.6
DN20	15.95	19.05	25.4	12.7	21.5	28.6
1"	22.1	25.4	50.5	12.7	21.5	28.6
DN25	22.5	25	50.5	-	21.5	28.6
1.25"	28.45	31.75	50.5	12.7	21.5	28.6
1.5"	34.8	38.1	50.5	12.7	21.5	28.6
DN38	35.5	38.1	50.5	-	21.5	28.6
2.0"	47.5	50.8	64	12.7	21.5	28.6
DN51	48.5	51	64	-	21.5	28.6
2.5"	60.2	63.5	77.5	12.7	21.5	28.6
DN63.5	60.5	63.5	77.5	-	21.5	28.6
DN76	72.9	76.1	91	-	21.5	28.6
3.0"	72.9	76.2	91	12.7	21.5	28.6
DN104	100	104	119	-	21.5	28.6
4.0"	97.4	101.6	119	15.8	21.5	28.6
6.0"	145.86	152.4	166.87	-	21.5	28.6 or 38.1
8.0"	197.66	203.2	217.67	-	21.5	28.6 or 38.1
10"	247.2	254	268.47	-	21.5	28.6 or 38.1
12"	298	304.8	319.27	-	21.5	28.6 or 38.1

1.0"~12"

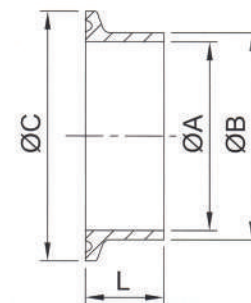


ISO Ferrule

SIZE	ØA	ØB	ØC	L	L
DN8	10.3	13.5	34	21.5	28.6
DN12	14	17.5	34	21.5	28.6
DN15	18.1	21.6	34	21.5	28.6
DN20	23.7	26.9	50.5	21.5	28.6
DN25	30.5	33.7	50.5	21.5	28.6
DN32	39.2	42.4	50.5	21.5	28.6
DN40	45.1	48.3	64	21.5	28.6
DN50	56.3	60.3	77.5	21.5	28.6
DN65	72.1	76.1	91	21.5	28.6
DN80	84.9	88.9	106	21.5	28.6
DN100	109.1	114.3	130	21.5	28.6
DN125	133.7	139.7	155	-	28.6
DN150	162.3	168.3	183	-	28.6
DN200	211.1	219.1	233.5	-	28.6

DIN Ferrule

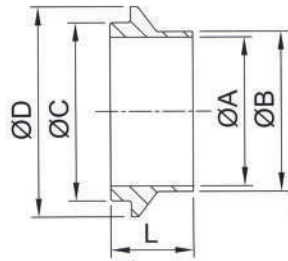
SIZE	ØA	ØB	ØC	L	L
DN10	10	12	34	21.5	28.6
DN15	16	18	34	21.5	28.6
DN20	20	22	34	21.5	28.6
DN28	26	28	50.5	21.5	28.6
DN34	32	34	50.5	21.5	28.6
DN40	38	40	50.5	21.5	28.6
DN52	50	52	64	21.5	28.6
DN70	66	70	91	21.5	28.6
DN85	81	85	106	21.5	28.6
DN101.6	97.6	101.6	119	21.5	28.6
DN100	100	104	119	21.5	28.6
DN125	125	129	155	21.5	28.6
DN150	150	154	183	21.5	28.6
DN200	200	204	233.5	-	28.6
DN250	250	254	268.47	-	28.6
DN300	300	304	319.27	-	28.6



14MPW Ferrule For Tank

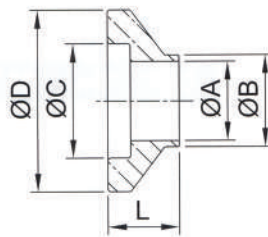
SIZE	ØA	ØB	ØC	L
1/2"	8.15	12.75	25.2	54
3/4"	14.6	19.05	25.2	54
1.0"	22.1	29.5	50.5	41.3
1.5"	34.8	42.6	50.5	41.3
2.0"	47.5	55.7	64	44.5
2.5"	60.2	68.8	77.5	44.5
3.0"	72.9	81.9	91	46.1
4.0"	97.4	108.1	119	54
6.0"	146.25	157.3	166.87	63.5
8.0"	197.05	208.1	217.67	63.5

Clamp Union (mm)



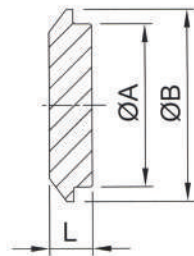
14WI- Ferrule Male

SIZE	ØA	ØB	ØC	ØD	L
1.0"	22.1	25.65	31.5	50.67	19.84
1.5"	34.8	38.35	44.2	50.67	23.8
2.0"	47.5	51.05	56.9	67.05	26.19
2.5"	60.2	63.75	69.6	84	29.36
3.0"	72.89	76.45	83.82	98.3	30.94
4.0"	97.38	101.85	109.14	123.7	34.11



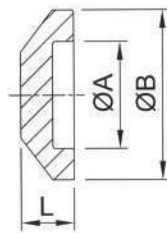
15WI- Ferrule Female

SIZE	ØA	ØB	ØC	ØD	L
1.0"	22.1	25.65	31.88	50.67	19.84
1.5"	34.8	38.35	44.58	50.67	23.8
2.0"	47.5	51.05	57.28	67.05	26.19
2.5"	60.2	63.75	69.98	84	29.36
3.0"	72.89	76.45	84.2	98.3	30.94
4.0"	97.38	101.85	109.6	123.7	34.11



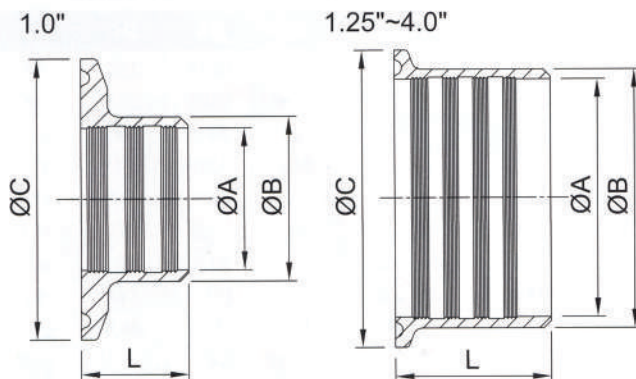
14WI- CAP Male

SIZE	ØA	ØB	L
1.0"	31.5	50.67	12.37
1.5"	44.2	50.67	12.37
2.0"	56.9	67.05	14.11
2.5"	69.6	84	18.72
3.0"	83.82	98.3	19.32
4.0"	109.14	123.7	19.32



15WI- CAP Female

SIZE	ØA	ØB	L
1.0"	31.88	50.67	12.75
1.5"	44.58	50.67	12.75
2.0"	57.28	67.05	17.66
2.5"	69.98	84	18.77
3.0"	84.2	98.3	19.37
4.0"	109.6	123.7	19.37



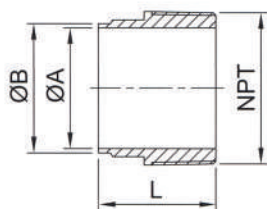
14RMP Expanding Ferrule

SIZE	ØA	ØB	ØC	L
1.0"	25.5	29.5	50.5	19.1
1.25"	31.9	36.3	50.5	21.5
1.5"	38.2	42.6	50.5	28.6
2.0"	50.9	55.7	64	33.3
2.5"	63.6	68.8	77.5	34.9
3.0"	76.3	81.9	91	36.5
4.0"	101.7	108.1	119	38.1

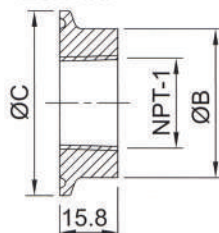
Clamp Union (mm)



B19W



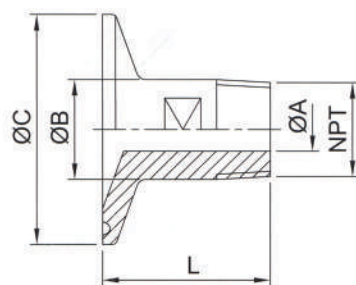
23BMP



B19W . 23BMP

SIZE	ØA	ØB	ØC	L	NPT	NPT-1
1.0"	22.1	25.4	50.5	44.5	1.0"-11.5T	1/2"-14T
1.5"	34.8	38.1	50.5	44.5	1.5"-11.5T	3/4"-14T
2.0"	47.5	50.8	64	46	2.0"-11.5T	3/4"-14T
2.5"	60.2	63.5	77.5	58.7	2.5"-8T	3/4"-14T
3.0"	72.9	76.2	91	63.5	3.0"-8T	3/4"-14T
4.0"	97.4	101.6	119	65.1	4.0"-8T	3/4"-14T
6.0"	146.9	152.4	166.8	76.2	6.0"-8T	3/4"-14T

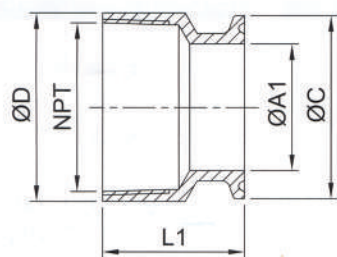
21MP



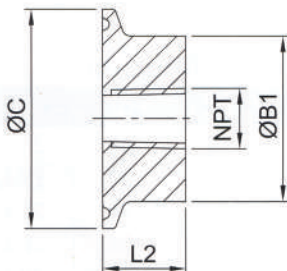
BLANK 16AMP (Ferrule Nipple)

SIZE	ØA1		ØB	ØB1	ØC	ØD	L	L1	L2	NPT
	1.0"	1.5"								
1/2"x1/2"	9.4	9.4	12.7		25	30	45	33		1/2"-18T
3/4"x1/2"	15.75		19.05		25		45			1/2"-18T
3/4"x3/4"	15.75	15.75	19.05		25	30	45	33		3/4"-18T
1.0"x1.5"x1/4"	3.18		14	38.1	50.5		40		19	1/4"-18T
1.0"x1.5"x3/8"	6.35		18	38.1	50.5		40		19	3/8"-18T
1.0"x1.5"x1/2"	9.7		22	38.1	50.5		40		19	1/2"-14T
1.0"x1.5"x3/4"	15.75		27	38.1	50.5		45		19	3/4"-14T
1.0"x1.5"x1.0"	22.1		34	38.1	50.5		50		19	1.0"-11.5T
1.0"x1.5"x1.2"	28.6	22.1	34.8	38.1	50.5	46	50	39		1.2"-11.5T
1.0"x1.5"x1.5"	34.8	22.1	34.8	38.1	50.5	52	50	39		1.5"-11.5T
1.0"x1.5"x2.0"	47.5	22.1	34.8	38.1	50.5	65	55	39		2.0"-11.5T
2.0"x1/4"	3.18		50.8	50.8	64		40		19	1/4"-18T
2.0"x3/8"	6.35		50.8	50.8	64		40		19	3/8"-18T
2.0"x1/2"	9.4		50.8		64		40			1/2"-14T
2.0"x3/4"	15.75		50.8		64		50		19	3/4"-14T
2.0"x1.0"	22.1		50.8	50.8	64		50		19	1.0"-11.5T
2.0"x1.5"	34.8		50.8	50.8	64	65	50	39		1.5"-11.5T
2.0"x2.0"	47.5		50.8		64		55			2.0"-11.5T
2.0"x2.5"	60.2		50.8		64		60			2.5"-8T
2.0"x3.0"	72.9		50.8		64		70			3.0"-8T
2.0"x4.0"	97.6		50.8		64		75			4.0"-8T
2.5"x1.0"	22.1		63.5	63.5	77.5		50		35	1.0"-11.5T
2.5"x1.5"	34.8		63.5	63.5	77.5		50		35	1.5"-11.5T
2.5"x2.0"	47.5		63.5	63.5	77.5		55		35	2.0"-11.5T
2.5"x2.5"	60.2	60.2	63.5		77.5	80	60	50		2.5"-8T
2.5"x3.0"	72.9		63.5		77.5		70			3.0"-8T
2.5"x4.0"	97.6		63.5		77.5		75			4.0"-8T
3.0"x1.0"	22.1		76.2	76.2	91		55		35	1.0"-11.5T
3.0"x1.5"	34.8		76.2	76.2	91		55		35	1.5"-11.5T
3.0"x2.0"	47.5		76.2	76.2	91		55		35	2.0"-11.5T
3.0"x2.5"	60.2	72.9	76.2		91	95	60	50		2.5"-8T
3.0"x3.0"	72.9		76.2		91		70			3.0"-8T
3.0"x4.0"	97.6		76.2		91		75			4.0"-8T
4.0"x1.0"	22.1		101.6	101.6	119		55		35	1.0"-11.5T
4.0"x1.5"	34.8		101.6	101.6	119		55		35	1.5"-11.5T
4.0"x2.0"	47.5		101.6	101.6	119		55		35	2.0"-11.5T
4.0"x2.5"	60.2		101.6	101.6	119		60		35	2.5"-8T
4.0"x3.0"	72.9	72.9	101.6	101.6	119	95	70	52	35	3.0"-8T
4.0"x4.0"	97.6		101.6		119		75			4.0"-8T
6.0"x4.0"		97.6	101.6		119	120	75	54		4.0"-8T

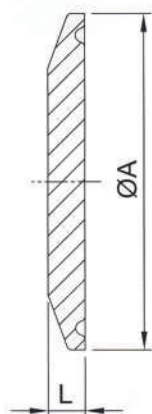
22MP



22MP



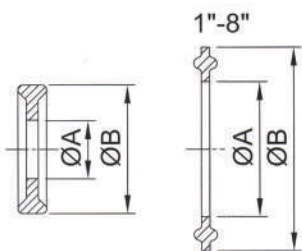
Clamp Union (mm)



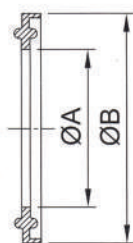
BLANK 16AMP

3A	DIN	ISO	ØA	L
1/2"~3/4"			25	6
A37			34	6.3
	DN10	DN8	34	6.3
	DN15	DN12	34	6.3
	DN20	DN15	34	6.3
1.0"	DN28	DN20	50.5	6.3
1.5"	DN34	DN25	50.5	6.3
	DN40	DN32	50.5	6.3
2.0"	DN52	DN40	64	6.3
2.5"	DN70	DN50	77.5	6.3
3.0"	DN80	DN65	91	6.3
	DN100	DN80	106	6.3
4.0"	DN100		119	7.9
		DN100	130	7.9
	DN125	DN125	155	7.9
6.0"			166.87	11.1
	DN150	DN150	183	11.1
8.0"			217.7	11.1
	DN200	DN200	233.5	11.1
10"			268.5	11.1
12"			319.3	11.1

1/2"~3/4"



13PG



13FG

Ferrule Gasket (EPDM,SILICON,VITON,PTFE)

PLAIN TYPE 13PG

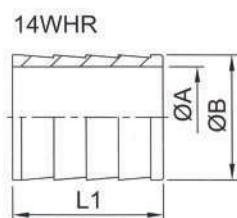
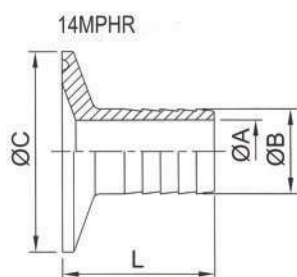
SIZE	ØA	ØB
1/2"	9.9	21.8
3/4"	16.3	21.8
A37	15.5	33
1.0"	22.7	50
1.2"	29.5	50.5
1.5"	35.9	50
2.0"	48.6	63.5
2.5"	61.3	76.2
3.0"	74	88.9
4.0"	98.6	118
6.0"	147.8	165
8.0"	198.6	216

Flange Type 13FG

SIZE	ØA	ØB
1.0"	22.8	52.7
1.5"	35.8	52.7
2.0"	48.8	66.2
2.5"	60.5	79.7
3.0"	73.1	93.2
4.0"	97.8	121.2
6.0"	148	169.1
10"	249	270.7
12"	300	321.5

14MPHR . 14WHR Hose Adapter

SIZE	ØA	ØB	ØC	L	L
1/2"x1/2"	9.5	13.7	25	38	25.3
3/4"x3/4"	15.8	21.4	25	38	25.3
1.0"x1/2"	9.5	13.7	50.5	38	25.3
1.0"x3/4"	15.8	21.4	50.5	38	25.3
1.0"x1.0"	20.6	25.4	50.5	43	25.3
1.5"x1/2"	9.5	13.7	50.5	38	25.3
1.5"x3/4"	15.8	21.4	50.5	38	25.3
1.5"x1.0"	20.6	25.4	50.5	43	25.3
1.5"x1.5"	33.2	38.1	50.5	43	30.3
2.0"x1.5"	33.2	38.1	64	43	30.3
2.0"x2.0"	46	50.8	64	58.7	46
2.5"x2.5"	58.7	63.5	77.5	59.5	46.8
3.0"x3.0"	72	76.2	91	78.6	65.9
4.0"x4.0"	97.6	101.6	119	85.5	72.8



Sight Glass

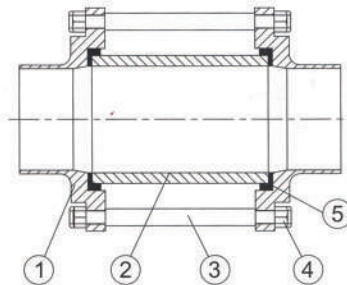
Glass: Clean, High Press Glass. Max Work 10 Bar. Can Be Changeable.

Body: SUS304, 316, 316L Precision Machined Body. With Wide Range Connection

End. 3A DIN, SMS, RJT, IDF, Male/Male. Weld And Female End.

Screw Blot: Full Stainless Steel.

Seal: EPDM, Silicon And Viton.



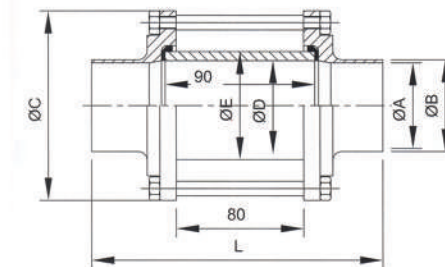
NO.	Name
1	Body
2	High Press Clean Glass
3	Screw Blot
4	Nylon Lock Nut
5	Seal

PYREX Borosilicate Glass Composition

CONTENT	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	B ₂ O ₃	Na ₂ O	K ₂ O
%	80.9	2.3	0.03	12.7	4.0	0.04

Physical Properties

Young's Module	6.4*10 ⁵ kg/cm ³
Poisson's Ratio	0.20
Shear Modules	2.7*10 ⁵ kg/cm ²
Knoop Hardness (100g)	418KHN
Bending Strength	4~7*10 ⁵ kg/cm ²
Design Stress (Safety Factor)	67 kg/cm ²

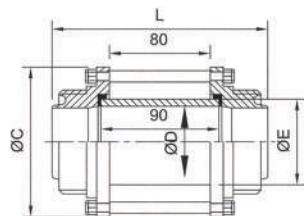


3A/BS Weld End Sight-Glass

SIZE	ØA	ØB	ØC	ØD	ØE	L
1/2"	9.4	12.7	47	10.2	15	106
3/4"	15.75	19.05	47	17	22	106
1.0"	22.1	25.4	79	26	32	148
1.5"	34.8	38.1	85	34	40	156
2.0"	47.5	50.8	105	50	60	160
2.5"	60.2	63.5	112	65	75	160
3.0"	72.9	76.2	125	75.4	85	162
4.0"	97.6	101.6	157	100	110	167

SMS Weld End Sight-Glass

SIZE	ØA	ØB	ØC	ØD	ØE	L
DN25	22.5	25	79	26	32	148
DN38	35.4	38	85	34	40	156
DN51	48	51	105	50	60	160
DN63.5	60.2	63.5	112	65	75	160
DN76	72	76	125	75.4	85	162
DN104	100	104	157	100	110	168

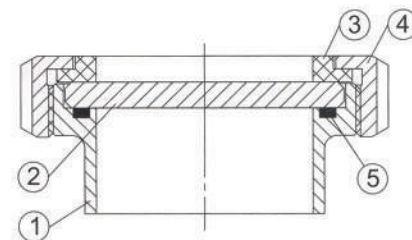
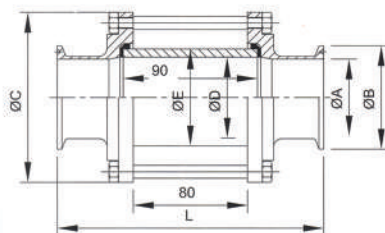


RJT, SMS, DIN, IDF-Male End Sight Class

SIZE	L	ØC	ØD	ØE
25	148	79	26	32
38	156	85	34	40
51	160	105	50	60
63.5	160	112	65	75
76	162	125	75.4	85
104	168	157	100	110

3A/BS Clamp End Sight-Glass

SIZE	ØA	ØB	ØC	ØD	ØE	L
1.0"	22.1	50.5	79	26	32	143
1.5"	34.8	50.5	85	34	40	146
2.0"	47.5	64	105	50	60	150
2.5"	60.2	77.5	112	65	75	150
3.0"	72.9	91	125	75.4	85	156
4.0"	97.6	119	157	100	110	156

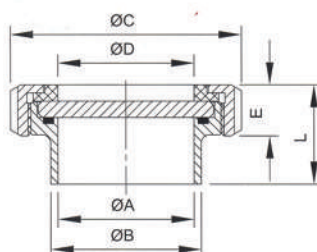


NO.	Name
1	Body
2	High Press Clean Glass
3	Teflon Gasket
4	NUT
5	Seal

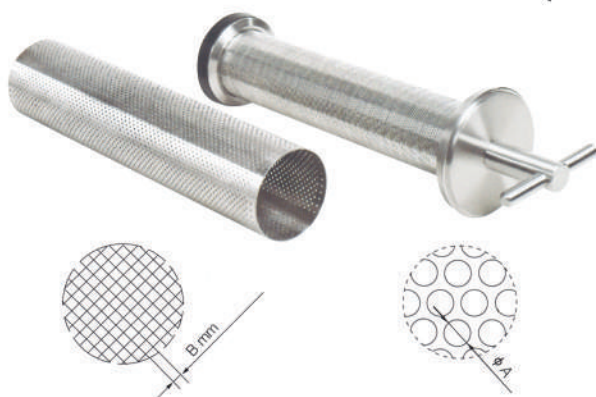
With Weld End Only

Weld End Sight-Glass

SIZE	ØA	ØB	ØC	ØD	ØE	L
DN65	66	73	112	66	25	48.5
DN80	80	93	127	82	29	52.5
DN100	98	113	148	100	31	60.5



Strainer Filter (Straight, Angle, Y & Duplex Type)

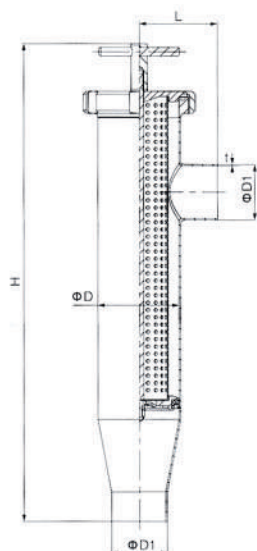


Screen: Metal Mesh

Mesh	B (mm)	Useful Surface (%)
30	0.55	48
40	0.40	46
60	0.30	52.6
80	0.20	42
100	0.15	36.2
165	0.10	45.4

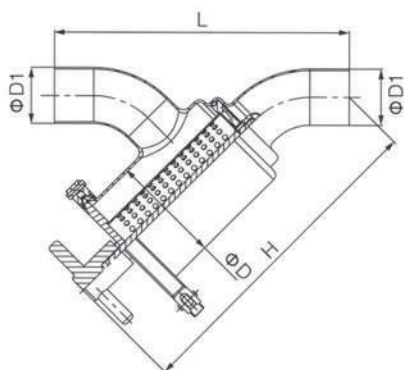
Screen: Perforated Plate

A (mm)	Useful Surface (%)
0.5	15
1	28
1.5	33
2	30
3	33
5	46



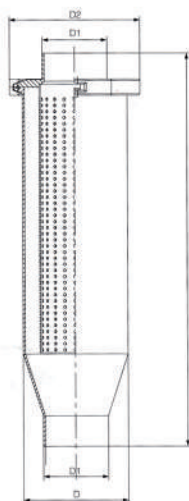
Angle Type Strainer (3A, SMS, ISO, DS)

SIZE	H	L	D1	D
1"	425	77.5	25.4	85
1 1/4"	425	77.5	31.8	85
1 1/2"	425	77.5	38	85
2"	425	77.5	50.8	85
2 1/2"	565	104	63.5	102
3"	585	107	76.2	114
3 1/2"	585	107	89	114
4"	700	127	101.6	154



Y Type Strainer (3A, SMS, ISO, DS)

SIZE	H	L	D1	D
1"	257	204	25.4	85
1 1/4"	288	226	31.8	102
1 1/2"	282	242	38	102
2"	312	280	50.8	102
2 1/2"	390	362	63.5	114
3"	405	406	76.2	114
3 1/2"	405	406	89	114
4"	565	460	101.6	154



Straight Type Strainer (3A, SMS, ISO, DS)

SIZE	H	D2	D1	D
1"	425	106	25.4	85
1 1/4"	425	106	31.8	85
1 1/2"	425	106	38	85
2"	425	106	50.8	85
2 1/2"	500	119	63.5	102
3"	580	130	76.2	114
3 1/2"	580	130	89	114
4"	640	167	101.6	154



Duplex Filter

Applications

- This duplex filters is applied to eliminate the invisible solids from dairy, beverage and pulps, etc. So as to purify the liquids.
- The two filters can run alternatively and continually. Because they can be replaced or cleaned without powering off.

Operating Principles

- Cartridge: AISI304/ AISI316L
- Gasket: EPDM according to FDA 177.2600
- Inner surface polish: Ra<0.8um
- External surface polish: mirror polish
- Screen hole: 0.5mm - 2.0mm
- Screen: 30 - 300 meshes
- Size: DN 25 - DN 150/ 1" - 6"
- Working temperature: -10°C to 120°C (EPDM) 14° F to 248° F
+140°C (SIP, max. 30 min) 284° F
- Max. working pressure: 10 bar 145 PSI



Micro-Filter

Applications

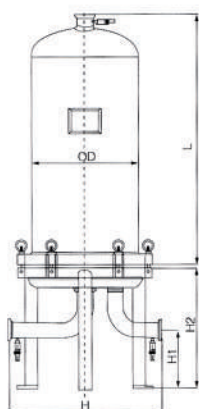
- Filters are widely used in the auxiliary service for food processing, cosmetic, chemicals and pharmacy industries

Technical Specifications

- Users should configure different material and type of filter for different purpose and medium. For example, for GMP pharment industry, before inputting air, this filter can annihilat the bacteria; in addition, it can dispose the exhaust till the gas reaches HIM standard.
- Materials for filter: PP/PTFECN-CA
- Presicion : 0.1-60um
- Length: 10", 20", 30", 40" (250, 500, 750, 1000mm)
- Pressure resistance: plugged (222, 226) / flat nib style

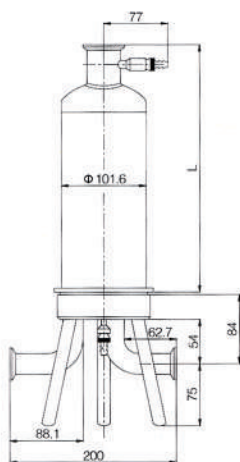
Seven Cores Filter

HEIGHT SIZE	L	OD	H	H1	H2	CONNECTION OF FILTER CORE
10"	380	273	390	150	310	226 (222)
20"	630	273	390	150	310	226 (222)
30"	880	273	390	150	310	226 (222)
40"	1130	273	390	150	310	226 (222)



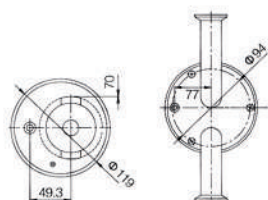
Five Cores Filter

HEIGHT SIZE	L	OD	H	H1	H2	CONNECTION OF FILTER CORE
10"	380	219	335	150	310	226 (222)
20"	630	219	335	150	310	226 (222)
30"	880	219	335	150	310	226 (222)
40"	1130	219	335	150	310	226 (222)



Three Cores Filter

HEIGHT SIZE	L	OD	H	H1	H2	CONNECTION OF FILTER CORE
10"	380	200	300	150	290	226 (222)
20"	630	200	300	150	290	226 (222)
30"	880	200	300	150	290	226 (222)
40"	1130	200	300	150	290	226 (222)



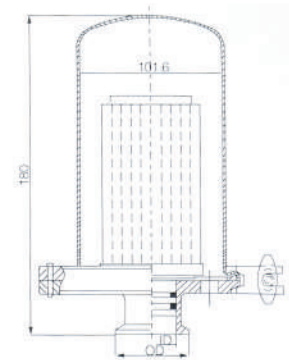
Single Cores Filter

HEIGHT SIZE	L	CONNECTION OF FILTER CORE
5"	233 (185)	226 (7#)
10"	360	226 (7#)
20"	614	226 (7#)
30"	868	226 (7#)

Rebreather

Applications

- The principle is same as micro-filter's. It can prevent the outside partivulates coming into the storage tannk due to the liquid level descends. It ensures the air purity in the tank.
- Housing material: 316L/ 304.
- Inner surface polish: Ra < 0.2um
- Capacity: 0.75m³ / min, 1.5m³ / min, 3m³ / min
- Connection ends: Clamped. Flanged



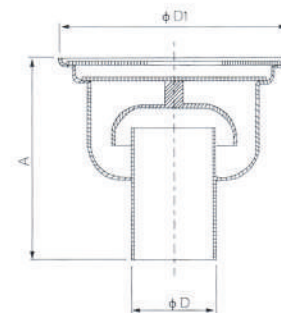
SIZE	ID	OD
1"	22	50.5
1 1/4"	29	50.5
1.5"	35	50.5
2"	48	64



Drainer

Applications

- The drainer is used in the hygienic workshops of food Processing, pharmacy industries.
- Material: AISI304/ 316L
- Size: 1" - 4", DN25 - DN100
- Metal meshes and hopper can keep dirty particulates from blocking pipeline.
- Cover and hopper can be cleaned to prevent bacteria from propagating.



SIZE	A	D	D1
1"	80	25	130
1.5"	80	38	130
2"	100	51	195
2.5"	100	63	195
3"	130	76	230
4"	130	100	230

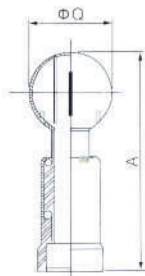
Cleaning Ball

- Cleaner series products are mainly used to spray strongly an clean inside of tank, generally, in field of food - processing beverage, beer, pharmaceutical industries.

Cleaning ball is divided into three kinds of products:

- Fixed cleaning ball: 360 degree spray completely, 180 degree spray, aperture of spray is 2.5mm
- Rotary cleaning ball: ball is spherical and elliptical. Jet orifice looks flat slot shape
- Potary cleaner: multi - position spray. When working the spray outlets rotate

Rotary Spray Ball

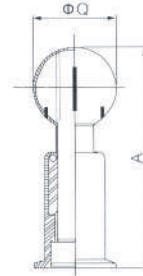


Threaded

SIZE	A	Q
1"	140.0	53.0
1 1/4"	160.0	53.0
1 1/2"	170.0	63.0
2"	192.0	76.0
2 1/2"	220.0	910.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"~1.5"	2	1.25	12
2"	2	1.5	38
2.5"	2	2.0	38

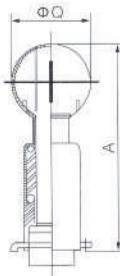


Clamped

SIZE	A	Q
1"	138.0	53.0
1 1/4"	138.0	53.0
1 1/2"	138.0	53.0
2"	168.0	63.0
2 1/2"	190.0	76.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"~1.5"	2	1.25	12
2"	2	1.5	38
2.5"	2	2.0	38

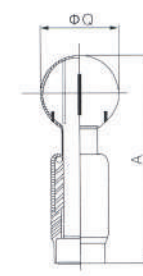


Bolted

SIZE	A	Q
1"	135.0	53.0
1 1/4"	137.0	53.0
1 1/2"	137.0	53.0
2"	168.0	63.0
2 1/2"	190.0	76.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"~1.5"	2	1.25	12
2"	2	1.5	38
2.5"	2	2.0	38



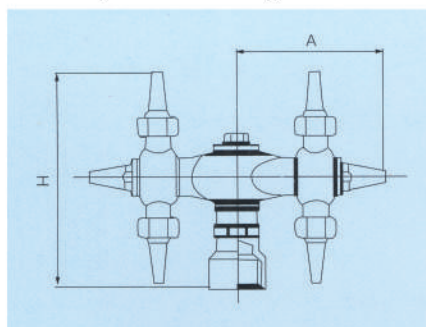
Welded

SIZE	A	Q
1"	143.0	53.0
1 1/4"	145.0	53.0
1 1/2"	145.0	53.0
2"	180.0	63.0
2 1/2"	200.0	76.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"~1.5"	2	1.25	12
2"	2	1.5	38
2.5"	2	2.0	38

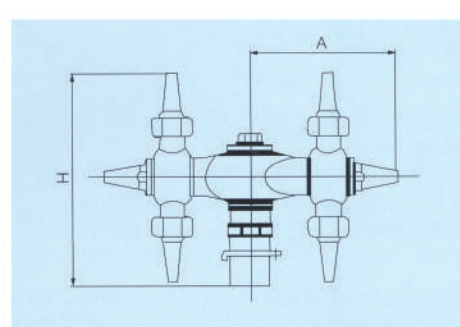
Rotary Cleaning



Threaded

Technical parameter

SIZE	A	H	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"	118.0	165.0	1.5~2.0	2.0~3.0	23
1 1/4"~1 1/2"	142.0	189.0	1.8~2.5	2.5~3.0	38
2"	145.0	191.0	2.5~3.0	3.5~4.0	60

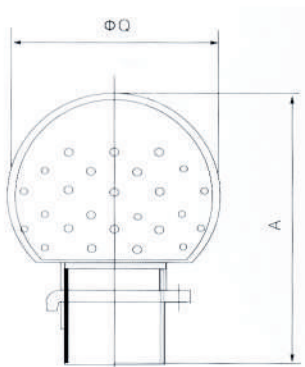
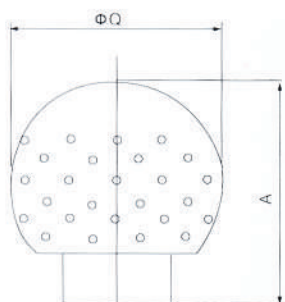
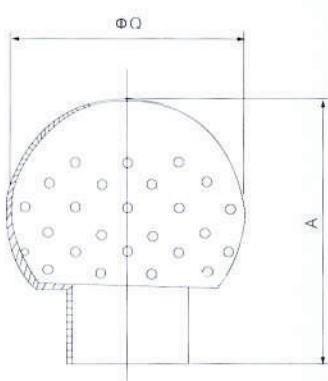
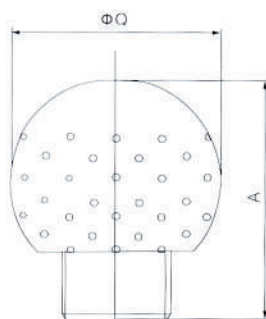


Bolted

Technical parameter

SIZE	A	H	Pressure (bar)	Cleaning radius (m)	Fluxation m³/h
1"	118.0	175.0	1.5~2.0	2.0~3.0	
1 1/4"~1 1/2"	142.0	200.0	1.8~2.5	2.5~3.0	
2"	145.0	205.0	2.5~3.0	3.5~4.0	

Static Spray Ball



Threaded

SIZE	A	Q
1"	72.0	63.0
1 1/2"	85.0	76.0
2"	87.0	76.0
2 1/2"	102.0	91.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	360° / 180° Fluxation m ³ / h
1"	2.5	1.0~1.25	17/10
1 1/4"~1 1/2"	2.5	1.25~1.75	23/17
2"	3.5	2.0~3.0	55/38
2 1/2"	3.5	3.0~3.5	58/41

Welded

SIZE	A	Q
1"	72.0	53.0
1 1/2"	85.0	63.0
2"	87.0	91.0
2 1/2"	102.0	100.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	360° / 180° Fluxation m ³ / h
1"	2.5	1.0~1.25	17/10
1 1/4"~1 1/2"	2.5	1.25~1.75	23/17
2"	3.5	2.0~3.0	55/38
2 1/2"	3.5	3.0~3.5	58/41

Clamped

SIZE	A	Q
1"	80.0	63.0
1 1/4"	93.0	76.0
1 1/2"	93.0	76.0
12"	108.0	91.0
2 1/2"	115.0	100.0

Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	360° / 180° Fluxation m ³ / h
1"	2.5	1.0~1.25	17/10
1 1/4"~1 1/2"	2.5	1.25~1.75	23/17
2"	3.5	2.0~3.0	55/38
2 1/2"	3.5	3.0~3.5	58/41

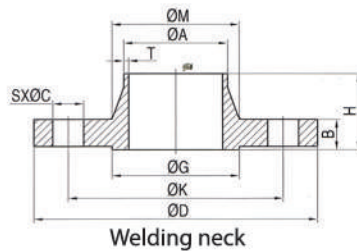
Bolted

SIZE	A	Q
1"	85.0	63.0
1 1/2"	110.0	76.0
2"	125.0	91.0
2 1/2"	135.0	100.0

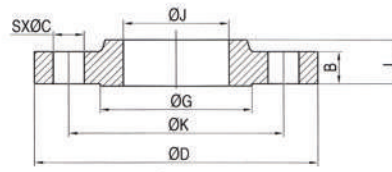
Technical parameter

SIZE	Pressure (bar)	Cleaning radius (m)	360° / 180° Fluxation m ³ / h
1"	2.5	1.0~1.25	17/10
1 1/4"~1 1/2"	2.5	1.25~1.75	23/17
2"	3.5	2.0~3.0	55/38
2 1/2"	3.5	3.0~3.5	58/41

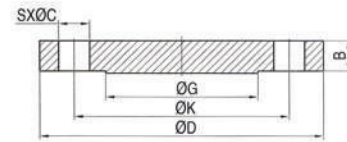
Stainless Steel Flanges



Welding neck



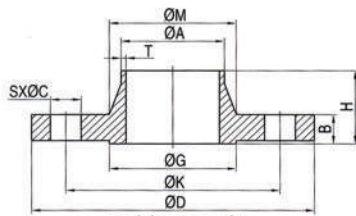
Slip-on



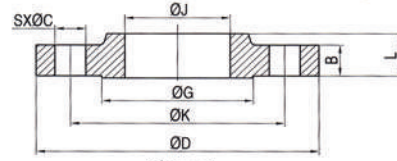
Blank

B16.5 150LBS

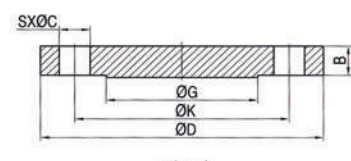
SIZE	D	K	G	B	H	N	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
1/2"	88.9	60.3	34.9	11.1	47.6	15.7	21.3	30.2	22.3	15.9	4x15.9	0.5	0.4	0.4
3/4"	98.4	69.8	42.9	12.7	52.4	20.8	26.7	38.1	27.7	15.9	4x15.9	0.7	0.7	0.7
1"	107.9	79.4	50.8	14.3	55.6	26.7	33.5	49.2	34.5	17.5	4x15.9	1.1	0.8	0.9
1-1/4"	117.5	88.9	63.5	15.9	57.1	35.1	42.2	58.8	43.2	20.6	4x15.9	1.5	1.1	1.3
1-1/2"	127.0	98.4	73.0	17.5	61.9	40.9	48.3	65.1	49.5	22.2	4x15.9	1.8	1.4	1.6
2"	152.4	120.6	92.1	19.0	63.5	52.6	60.3	77.8	62.0	25.4	4x19.0	2.7	2.2	2.6
2-1/2"	177.8	139.7	104.8	22.0	69.8	62.7	73.1	90.5	74.7	28.6	4x19.0	4.4	3.6	4.1
3"	190.5	152.4	127.0	23.8	69.8	78.0	88.9	107.9	90.7	30.2	4x19.0	5.2	4.1	5.0
3-1/2"	215.9	177.8	139.7	23.8	71.4	90.2	101.6	122.2	103.4	31.7	8x19.0	6.4	5.2	6.4
4"	228.6	190.5	157.2	23.8	76.2	102.4	114.3	134.9	116.1	33.3	8x19.0	7.5	5.6	7.1
5"	254.0	215.9	185.7	23.8	88.9	128.3	141.2	163.5	143.8	36.5	8x22.2	9.2	6.3	9.0
6"	297.4	241.3	215.9	25.4	88.9	154.2	168.4	192.1	170.7	39.7	8x22.2	11	7.5	11.8
8"	342.9	298.4	269.9	28.6	101.6	202.7	219.1	246.1	221.5	44.4	8x22.2	18.3	12.6	21.0
10"	406.4	361.9	323.8	30.2	101.6	254.5	273	304.8	276.3	49.2	12x25.4	25.0	18.5	30.0
12"	482.6	431.8	381.0	31.7	114.3	304.8	323.8	365.1	327.1	55.6	12x25.4	39.0	28.0	45.0
14"	533.4	476.2	412.7	34.9	127.0	336.5	355.6	400.0	359.1	57.1	12x28.6	51.0	36.0	59.0
16"	596.9	539.7	469.9	36.5	127.0	387.3	406.4	457.2	410.5	63.5	12x28.6	60.0	46.0	79.0
18"	635.0	577.8	533.4	39.7	139.7	438.1	457.2	504.8	461.8	68.3	16x31.7	71.0	50.0	97.0
20"	698.5	635.0	584.2	42.9	144.5	488.9	508.0	558.8	513.1	73.0	20x31.7	88.0	64.0	124.0
22"	749.3	692.1	641.2	46.0	149.2	539.7	558.8	609.6	564.4	79.4	20x34.9	102	72.0	151
24"	812.8	749.3	692.1	47.6	152.4	590.5	609.6	663.6	615.9	82.5	20x34.9	119	89.0	188



Welding neck



Slip-on

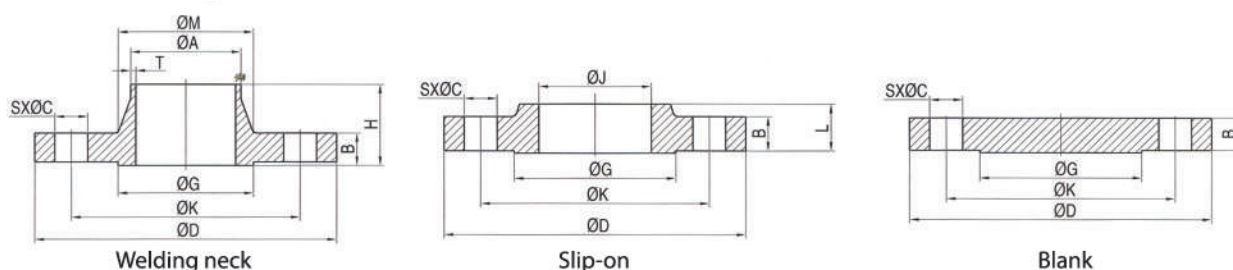


Blank

B16.5 300LBS

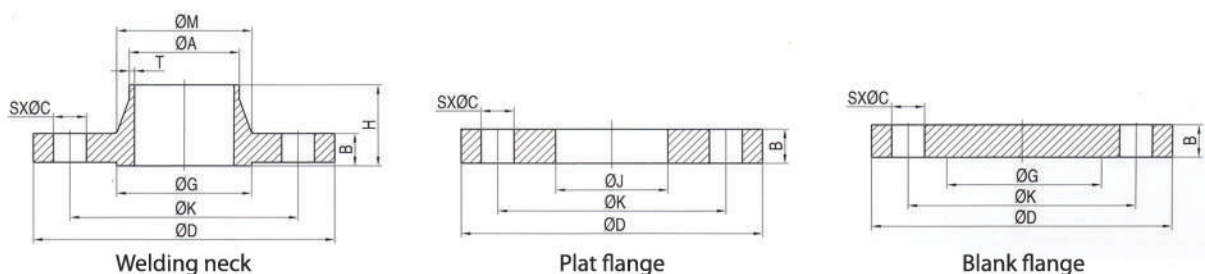
SIZE	D	K	G	B	H	N	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
1/2"	95.2	66.7	34.9	14.3	52.4	15.7	21.3	38.1	22.3	22.2	4x15.9	0.9	0.7	0.7
3/4"	117.5	82.5	42.9	15.9	57.1	20.8	26.7	47.6	27.7	25.4	4x19.0	1.5	1.1	1.2
1"	123.8	88.9	50.8	17.5	61.9	26.7	33.5	54.0	34.5	27.0	4x19.0	1.9	1.4	1.5
1-1/4"	133.8	98.4	63.5	19.0	65.1	35.1	42.2	63.5	43.2	27.0	4x19.0	2.6	1.8	2.0
1-1/2"	155.6	114.3	73.0	20.6	68.3	40.9	48.3	69.8	49.5	30.2	4x22.2	3.3	2.6	2.9
2"	165.1	127.0	92.1	22.2	69.8	52.6	60.3	84.1	62.0	33.3	8x19.0	3.6	3.4	3.4
2-1/2"	190.5	149.2	104.8	25.4	76.2	62.7	73.1	100.0	74.7	38.1	8x22.2	5.4	4.4	5.1
3"	209.5	168.3	127.0	28.6	79.4	78.0	88.9	117.5	90.7	42.9	8x22.2	7.4	6.1	7.0
3-1/2"	228.6	184.1	139.7	30.2	81.0	90.2	101.6	133.3	103.4	44.4	8x22.2	8.9	7.5	8.9
3"	209.5	168.3	127.0	28.6	79.4	78.0	88.9	117.5	90.7	42.9	8x22.2	7.4	6.1	7.0
3-1/2"	228.6	184.1	139.7	30.2	81.0	90.2	101.6	133.3	103.4	44.4	8x22.2	8.9	7.5	8.9
4"	254.0	200.0	157.2	31.7	85.7	102.4	114.3	146.0	116.1	47.6	8x22.2	11.9	10.1	11.8
5"	279.4	234.9	185.7	34.9	98.4	128.3	141.2	177.8	143.8	50.8	8x22.2	16.0	12.5	15.5
6"	317.5	269.9	215.9	36.5	98.4	154.2	168.4	206.4	170.7	52.4	12x22.2	20.2	14.1	21.3
8"	381.0	330.2	269.9	41.3	111.1	202.7	219.1	260.3	221.5	61.9	12x25.4	31.0	24.8	35.2
10"	444.5	387.3	323.4	47.6	117.5	254.5	273	320.7	276.3	66.7	16x28.6	44.3	37.1	57.0
12"	520.7	450.8	381.0	50.8	130.2	304.8	323.8	374.6	327.1	73.0	16x31.7	64.0	50.0	82.0
14"	584.2	514.3	412.7	54.0	142.9	336.5	355.6	425.4	359.1	76.2	20x31.7	88.0	70.0	106
16"	647.7	571.5	469.9	57.1	146.0	387.3	406.4	482.6	410.5	82.5	20x34.9	113	90.0	140
18"	711.2	628.6	533.4	60.3	158.7	438.1	457.2	533.4	461.8	88.9	24x34.9	134	112	178
20"	774.7	685.8	584.2	63.5	161.9	488.9	508.0	587.4	513.1	95.2	24x34.9	171	133	223
22"	838.2	742.9	641.2	66.7	165.1	539.7	558.8	641.2	564.4	101.6	24x41.3	195	197	270
24"	914.4	812.8	692.1	69.8	168.3	590.5	609.6	701.7	615.9	106.4	24x41.3	238	208	345

Flange



B16.5 600LBS

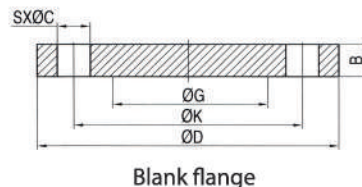
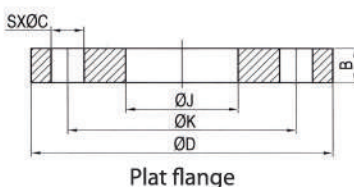
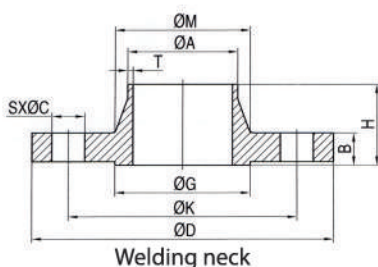
SIZE	D	K	G	B	H	N	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
1/2"	95.2	66.7	34.9	14.3	52.4	15.7	21.3	38.1	22.3	22.2	4x15.9	0.9	0.8	0.7
3/4"	117.5	82.5	42.9	15.9	57.1	20.8	26.7	47.6	27.7	25.4	4x19.0	1.5	1.4	1.2
1"	123.8	88.9	50.8	17.5	61.9	26.7	33.5	54.0	34.5	27.0	4x19.0	1.9	1.6	1.5
1-1/4"	133.8	98.4	63.5	20.6	66.7	35.1	42.2	63.5	43.2	28.6	4x19.0	2.6	2.1	2.0
1-1/2"	155.6	114.3	73.0	22.2	69.8	40.9	48.3	69.8	49.5	31.7	4x22.2	3.3	3.1	3.2
2"	165.1	127.0	92.1	25.4	73.0	52.6	60.3	84.1	62.0	36.5	8x19.0	4.7	3.7	4.3
2-1/2"	190.5	149.2	104.8	28.6	79.4	62.7	73.1	100.0	74.7	41.3	8x22.2	6.5	5.4	6.0
3"	209.5	168.3	127.0	31.7	82.5	78.0	88.9	117.5	90.7	46.0	8x22.2	8.7	7.3	8.0
3-1/2"	228.6	184.1	139.7	34.9	85.7	90.2	101.6	133.3	103.4	49.2	8x25.4	11.2	8.9	10.5
4"	273.0	215.9	157.2	38.1	101.6	102.4	114.3	152.4	116.1	54.0	8x25.4	18.1	11.8	18.0
5"	330.2	266.7	185.7	44.4	114.3	128.3	141.2	188.9	143.8	60.3	8x28.6	30.5	24.5	28.5
6"	355.6	292.1	215.9	47.6	117.5	154.2	168.4	222.2	170.7	66.7	12x28.6	36.2	29.5	35.5
8"	419.1	349.2	269.9	55.6	133.3	202.7	219.1	273.0	221.5	76.2	12x31.7	56.5	43.0	58.0
10"	508.0	431.8	323.4	63.5	152.4	254.5	273	342.9	276.3	85.7	16x34.9	91.0	70.0	98.0
12"	558.8	488.9	381.0	66.7	155.6	304.8	323.8	400.0	327.1	92.1	20x34.9	105	86.0	125
14"	603.2	527.0	412.7	69.8	165.1	336.5	355.6	431.8	359.1	93.7	20x38.1	125	100	151
16"	685.8	603.2	469.9	76.2	177.8	387.3	406.4	459.3	410.5	106.4	20x41.3	178	142	210
18"	742.9	654.0	533.4	82.5	184.1	438.1	457.2	533.4	461.8	117.5	20x44.4	261	175	287
20"	812.8	723.9	584.2	88.9	190.5	488.9	508.0	587.4	513.1	127.0	24x44.4	268	232	366
22"	869.9	777.9	641.2	95.2	196.8	539.7	558.8	641.2	564.4	133.3	24x47.6	328	292	437
24"	939.8	838.2	692.1	101.6	203.2	590.5	609.6	701.7	615.9	139.7	24x50.8	380	330	532



EN1092-1 PN6

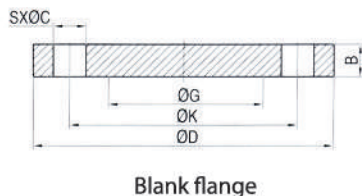
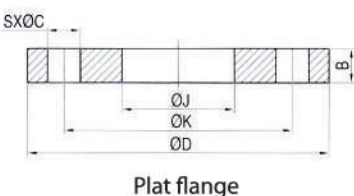
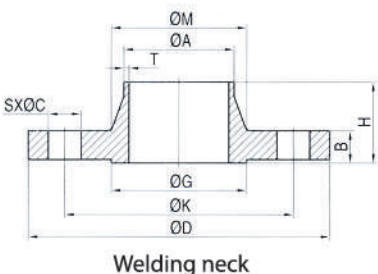
DN	D	K	G	B	H	T	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
15	80	55	40	12	30	2	21.3	30	21.3	12	4x11	0.39	0.41	0.72
20	90	65	50	14	32	2.3	26.9	38	26.9	14	4x11	0.59	0.6	1.01
25	100	75	60	14	35	2.6	33.7	42	33.7	14	4x11	0.75	0.74	1.23
32	120	90	70	14	35	2.6	42.4	55	42.4	16	4x14	1.05	1.19	1.8
40	130	100	80	14	38	2.6	48.3	62	48.3	16	4x14	1.18	1.39	2.09
50	140	110	90	14	38	2.9	60.3	74	60.3	16	4x14	1.34	1.53	2.88
65	160	130	110	14	38	2.9	76.1	88	76.1	16	4x14	1.67	1.89	3.66
80	190	150	128	16	42	3.2	88.9	102	88.9	18	4x18	2.71	2.98	4.77
100	210	170	148	16	45	3.6	114.3	130	114.3	18	4x14	3.24	3.46	5.65
125	240	200	178	18	48	4	139.7	155	139.7	20	8x18	4.49	4.6	8.42
150	265	225	202	18	48	4.5	168.3	184	168.3	20	8x18	5.15	5.22	10.4
200	320	280	258	20	55	5.9	219.1	236	219.1	22	8x18	7.78	7.15	46.5
250	375	335	312	22	60	6.3	273	290	273	24	12x18	10.8	9.61	24
300	440	395	365	22	62	7.1	323.9	342	323.9	24	12x22	14	12.6	30.9
350	490	445	415	22	62	7.1	355.6	385	355.6	26	16x22	18.5	15.6	40.6
400	540	495	465	22	65	7.1	406.4	438	406.4	28	20x22	21.2	18.4	49.4
500	645	600	570	24	68	7.1	508	538	508	30	20x22	28.6	24.6	75
600	755	705	670	24	70	7.1	610	640	610	30	24x26	31.5	32.4	91.4

Flange



EN1092-1 PN10

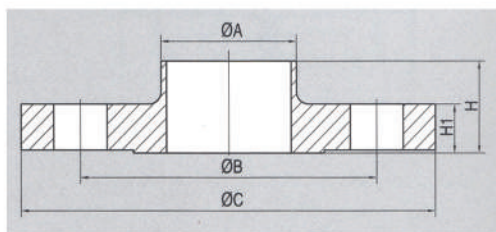
DN	D	K	G	B	H	T	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
15	95	65	45	14	35	2	21.3	32	21.3	14	4x14	0.65	0.68	0.72
20	105	75	58	16	38	2.3	26.9	40	26.9	16	4x14	0.95	0.94	1.01
25	115	85	68	16	38	2.6	33.7	45	33.7	16	4x14	1.14	1.14	1.23
32	140	100	78	16	40	2.6	42.4	56	42.4	16	4x18	1.69	1.66	1.8
40	150	110	88	16	42	2.6	48.3	64	48.3	16	4x18	1.86	1.89	2.09
50	165	125	102	18	45	2.9	60.3	75	60.3	18	4x18	2.53	2.51	2.88
65	185	145	122	18	45	2.9	76.1	90	76.1	18	4x18	3.06	3.0	3.66
80	200	160	138	20	50	3.2	88.9	105	88.9	20	8x18	3.7	3.75	4.77
100	220	180	158	20	52	3.6	114.3	131	114.3	20	8x18	4.62	4.2	5.65
125	250	210	188	22	55	4	139.7	156	139.7	22	8x18	6.3	5.71	8.42
150	285	240	212	22	55	4.5	168.3	184	168.3	22	8x22	7.75	6.72	10.4
200	340	295	268	24	62	5.9	219.1	235	219.1	24	8x22	11.3	9.31	46.5
250	395	350	320	26	68	6.3	273	292	273	26	12x22	14.7	12.5	24
300	445	400	370	26	68	7.1	323.9	344	323.9	26	12x22	17.4	13.8	30.9
350	505	460	430	26	68	7.1	355.6	385	355.6	26	16x22	23.6	20.6	40.6
400	565	515	482	26	72	7.1	406.4	440	406.4	26	16x26	28.6	27.9	49.4
500	670	620	585	28	75	7.1	508	542	508	28	20x26	38.1	41.1	75
600	780	725	685	28	80	7.1	610	642	610	28	20x30	44.6	45.2	91.4



EN1092-1 PN16

DN	D	K	G	B	H	T	A	M	J	L	SXC	WEIGHT (kg)		
												WN	SO	BL
15	95	65	45	14	35	2	21.3	32	21.3	14	4x14	0.65	0.68	0.72
20	105	75	58	16	38	2.3	26.9	40	26.9	16	4x14	0.95	0.94	1.01
25	115	85	68	16	38	2.6	33.7	45	33.7	16	4x14	1.14	1.14	1.23
32	140	100	78	16	40	2.6	42.4	56	42.4	16	4x18	1.69	1.66	1.8
40	150	110	88	16	42	2.6	48.3	64	48.3	16	4x18	1.86	1.89	2.09
50	165	125	102	18	45	2.9	60.3	75	60.3	18	4x18	2.53	2.51	2.88
65	185	145	122	18	45	2.9	76.1	90	76.1	18	4x18	3.06	3.0	3.66
80	200	160	138	20	50	3.2	88.9	105	88.9	20	8x18	3.7	3.75	4.77
100	220	180	158	20	52	3.6	114.3	131	114.3	20	8x18	4.62	4.2	5.65
125	250	210	188	22	55	4	139.7	156	139.7	22	8x18	6.3	5.71	8.42
150	285	240	212	22	55	4.5	168.3	184	168.3	22	8x22	7.75	6.72	10.4
200	340	295	268	24	62	5.9	219.1	235	219.1	24	12x22	11.3	9.31	16.1
250	405	355	320	26	70	6.3	273	292	273	26	12x26	15.6	11.7	24.9
300	460	410	378	28	78	7.1	323.9	344	323.9	28	12x26	22	15.1	35.1
350	520	470	438	30	82	8	355.6	390	355.6	30	16x26	31.2	22	47.8
400	580	525	490	32	85	8	406.4	445	406.4	32	16x30	39.3	27.4	63.5
500	715	650	610	34	90	8	508	548	508	34	20x33	61	42.2	102
600	840	770	725	36	95	8.8	610	652	610	36	20x36	75.4	73.2	174

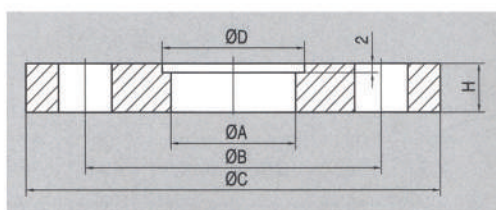
Flange



Welding flange

DIN 2576-DIN 11850

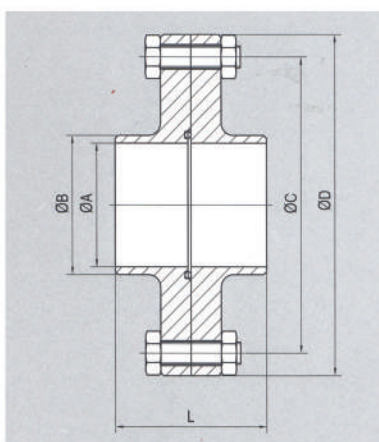
DN	A	B	C	H1	H
10	13 x 1.5	60	90	14	35
15	19 x 1.5	65	95	14	35
20	23 x 1.5	75	105	14	38
25	29 x 1.5	85	115	16	38
32	35 x 1.5	100	140	16	40
40	41 x 1.5	110	150	16	42
50	53 x 1.5	125	165	16	45
65	70 x 2	145	185	16	45
80	85 x 2	160	200	18	50
100	104 x 2	180	220	18	52
125	129 x 2	210	250	18	55
150	154 x 2	240	285	18	55



Flat flange

DIN 2576-DIN 11850

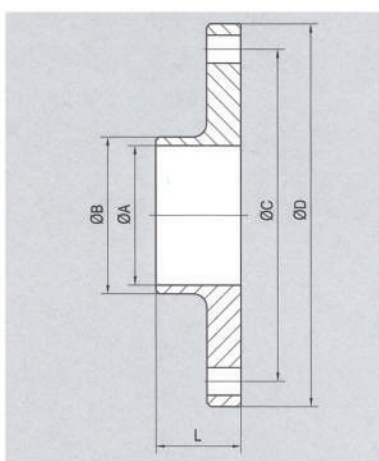
DN	A	B	C	D	H
10	10	60	90	13.2	14
15	16	65	95	19.2	14
20	20	75	105	23.2	14
25	26	85	115	29.2	16
32	32	100	140	35.2	16
40	38	110	150	41.2	16
50	50	125	165	53.2	16
65	66	145	185	70.5	16
80	81	160	200	85.2	18
100	100	180	220	104.5	18
125	125	210	250	129.5	18
150	150	240	285	154.5	18
200	200	295	340	204.5	20



Flange fittings

DIN 11850

DN	A	B	C	D	L
10	10	15	44	62	40
15	16	21	50	68	40
20	20	25	59	75	40
25	26	32	73	87	40
32	32	37	78	92	40
40	38	43	82.5	97	50
50	50	55	95.5	110	50
65	66	72	112.5	127	50
80	81	87	127.5	142	60
100	100	106	147.5	162	60
125	125	132	180	200	80
150	150	157	210	230	90

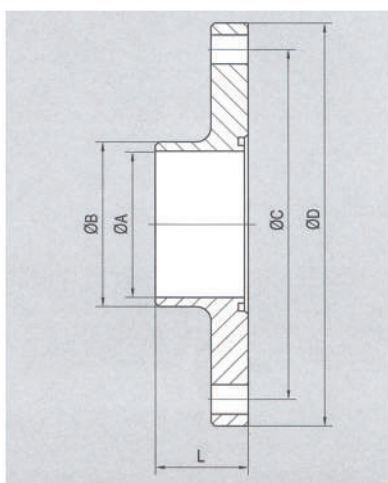
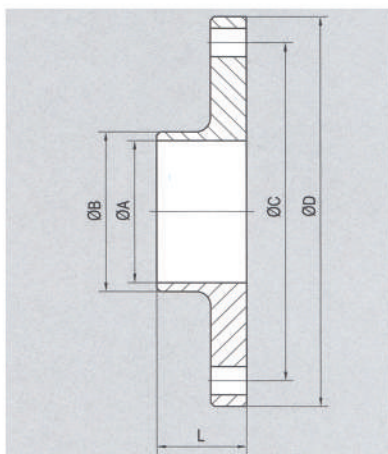
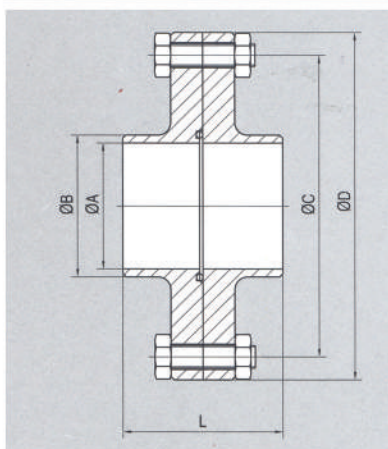
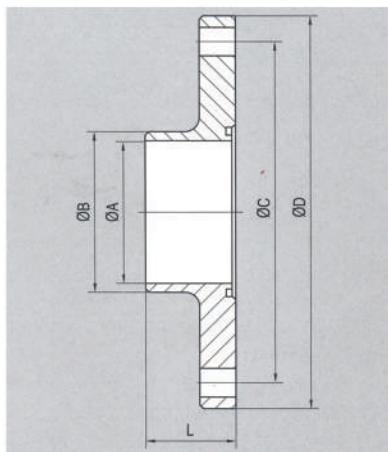


Welding flange with flat

DIN 11850

DN	A	B	C	D	L
10	10	15	44	62	20
15	16	21	50	68	20
20	20	25	59	75	20
25	26	32	73	87	20
32	32	37	78	92	20
40	38	43	82.5	97	25
50	50	55	95.5	110	25
65	66	72	112.5	127	25
80	81	87	127.5	142	30
100	100	106	147.5	162	30
125	125	132	180	200	40
150	150	157	210	230	45

Flange



Welding flange with concave

DIN 11850

DN	A	B	C	D	L
10	10	15	44	62	20
15	16	21	50	68	20
20	20	25	59	75	20
25	26	32	73	87	20
32	32	37	78	92	20
40	38	43	82.5	97	25
50	50	55	95.5	110	25
65	66	72	112.5	127	25
80	81	87	127.5	142	30
100	100	106	147.5	162	30
125	125	132	180	200	40
150	150	157	210	230	45

Flange fittings

Inch

DN	A	B	C	D	L
1.0"	22.1	25.4	73	87	40
1.5"	34.8	38.1	82.5	97	50
2.0"	47.5	50.8	95.5	110	50
2.5"	60.2	63.5	112.5	127	50
3"	72.9	76.2	127.5	142	60
4"	97.38	101.6	147.5	162	60

Welding flange with plat

Inch

DN	A	B	C	D	L
1.0"	22.1	25.4	73	87	20
1.5"	34.8	38.1	82.5	97	25
2.0"	47.5	50.8	95.5	110	25
2.5"	60.2	63.5	112.5	127	25
3"	72.9	76.2	127.5	142	30
4"	97.38	101.6	147.5	162	30

Welding flange with concave

Inch

DN	A	B	C	D	L
1.0"	22.1	25.4	73	87	20
1.5"	34.8	38.1	82.5	97	25
2.0"	47.5	50.8	95.5	110	25
2.5"	60.2	63.5	112.5	127	25
3"	72.9	76.2	127.5	142	25
4"	97.38	101.6	147.5	162	25

BPE Pipe Line (mm) (Pharmaceutical & Biotech Industries)



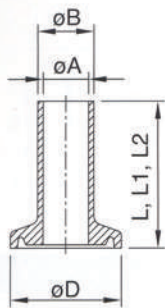
Ra Reading for Tubing					
As Drawing and / or Mechanically Polished			Mechanically Polished and Electropolished or Electropolished		
Surface Designation	Ra Average		Surface Designation	Ra Average	
	μ-in	μ-m		μ-in	μ-m
SF1	20	0.5	SF4	15	0.38
SF2	25	0.63	SF5	20	0.5
SF3	30	0.76	SF6	25	0.63

Ra Reading for Fitting					
Mechanically Polished			Mechanically Polished and Electropolished		
Surface Designation	Ra Average		Surface Designation	Ra Average	
	μ-in	μ-m		μ-in	μ-m
SF1	20	0.5	SF4	15	0.38
SF2	25	0.63	SF5	20	0.5
SF3	30	0.76	SF6	25	0.63

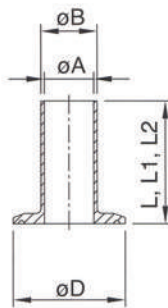
Outer Surface: Tubes and fittings Ra ≤ 32 μin (0.8 μm)

BPE-14AMP-AWF Weld Ferrule

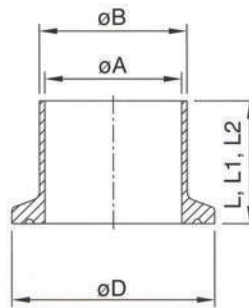
1/2" & 3/4"



1.0"



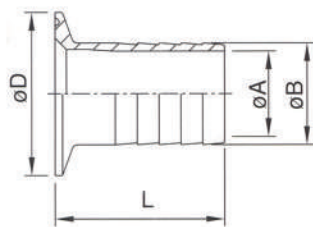
1.5" - 4.0"



DT-22

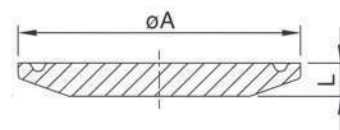
SIZE	ØA	ØB	ØD	L	L1	L2
1/2"	9.4	12.7	25	12.7	28.7	44.5
3/4"	15.7	19.13	25	12.7	28.7	44.5
1.0"	22.1	25.4	50.5	12.7	28.7	44.5
1.5"	34.8	38.1	50.5	12.7	28.7	44.5
2.0"	47.5	50.8	64	12.7	28.7	57.2
2.5"	60.2	63.5	77.5	12.7	28.7	57.2
3.0"	72.9	76.2	91	12.7	28.7	57.2
4.0"	97.4	101.6	119	15.9	28.7	57.2

BPE-14MPHR Rubber Hose Adapter



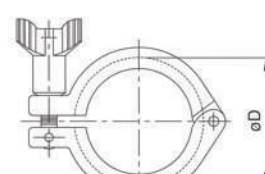
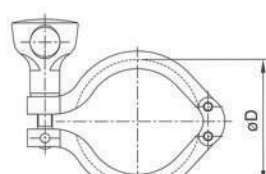
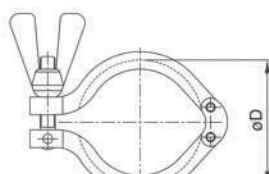
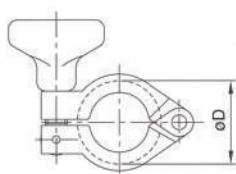
SIZE	ØA	ØB	ØD	L
1/2"	9.5	13.7	50.5	38.1
3/4"	15.8	21.4	50.5	38.1
1.0"	20.6	25.4	50.5	42.86
1.5"	33.2	38.1	50.5	42.86
2.0"	46.0	50.8	64.0	58.7
2.5"	58.7	63.5	77.5	59.8
3.0"	72.0	76.2	91.0	78.5
4.0"	97.6	101.6	119	85.5

BPE-16AMP Solid End Cap



SIZE	ØA	L
1/2"	25.4	6
3/4"	25.4	6
1.0"	50.5	6.35
1.5"	50.5	6.35
2.0"	64	6.35
2.5"	77.5	6.35
3.0"	91	6.35
4.0"	119.0	8.9

13MHH & 13MHHM



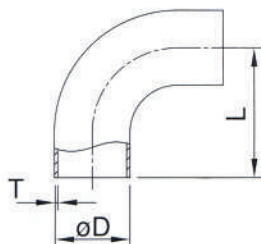
Size: 1/2" ~ 3/4"
(13MHHM & 13MHH & 13SF)

SIZE	ØD
1/2"	28.2
3/4"	28.2
1.5"	53.6
2.0"	67
2.5"	80.6
3.0"	94.2
4.0"	122.2
6.0"	170
8.0"	220

BPE Pipe Line (mm)

BPE-2S 90° Elbow

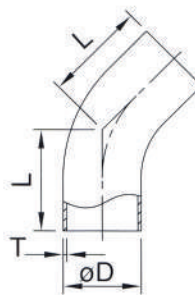
DT-7



SIZE	ØD	L	T
1/2"	12.7	76.2	1.65
3/4"	19.05	76.2	1.65
1.0"	25.4	76.2	1.65
1.5"	38.1	95.25	1.65
2.0"	50.8	120.65	1.65
2.5"	63.5	139.7	1.65
3.0"	76.2	158.75	1.65
4.0"	101.6	203.2	2.1

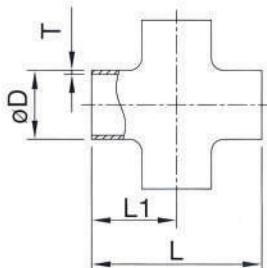
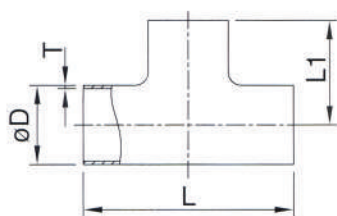
BPE-2KS 45° Elbow

DT-8



SIZE	ØD	L	T
1/2"	12.7	57.15	1.65
3/4"	19.05	57.15	1.65
1.0"	25.4	57.15	1.65
1.5"	38.1	63.5	1.65
2.0"	50.8	76.2	1.65
2.5"	63.5	85.6	1.65
3.0"	76.2	91.95	1.65
4.0"	101.6	114.3	2.1

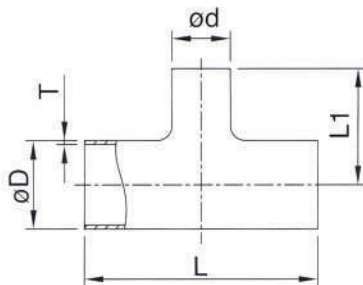
BPE-7W Tee & 9W Cross



DT-9

SIZE	ØD	L	L1	T
1/2"	12.7	95.2	47.5	1.65
3/4"	19.05	101.6	50.8	1.65
1.0"	25.4	108	53.85	1.65
1.5"	38.1	120.6	60.2	1.65
2.0"	50.8	146	73	1.65
2.5"	63.5	158.8	79.25	1.65
3.0"	76.2	171.4	85.6	1.65
4.0"	101.6	209.6	104.65	2.1

BPE-7RW Reducing Tee

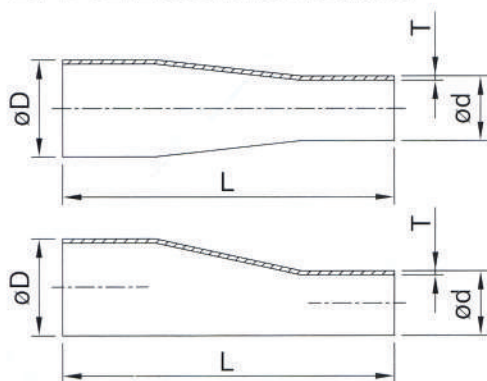


DT-10

SIZE	ØD	Ød	L	L1	T
3/4"x1/2"	19.05	12.7	101.6	50.8	1.65
1.0"x1/2"	25.4	12.7	108	53.85	1.65
1.0"x3/4"	25.4	19.05	108	53.85	1.65
1.5"x1/2"	38.1	12.7	120.6	60.2	1.65
1.5"x3/4"	38.1	19.05	120.6	60.2	1.65
1.5"x1.0"	38.1	25.4	120.6	60.2	1.65
2.0"x1/2"	50.8	12.7	145.8	66.55	1.65
2.0"x3/4"	50.8	19.05	145.8	66.55	1.65
2.0"x1.0"	50.8	25.4	145.8	66.55	1.65
2.0"x1.5"	50.8	38.1	145.8	66.55	1.65
2.5"x1/2"	63.5	12.7	158.5	72.9	1.65
2.5"x3/4"	63.5	19.05	158.5	72.9	1.65
2.5"x1.0"	63.5	25.4	158.5	72.9	1.65

SIZE	ØD	Ød	L	L1	T
2.5"x1.5"	63.5	38.1	158.8	73	1.65
2.5"x2.0"	63.5	50.8	158.8	73	1.65
3.0"x1/2"	76.2	12.7	171.2	79.25	1.65
3.0"x3/4"	76.2	19.05	171.2	79.25	1.65
3.0"x1.0"	76.2	25.4	171.2	79.25	1.65
3.0"x1.5"	76.2	38.1	171.2	79.25	1.65
3.0"x2.0"	76.2	50.8	171.2	79.25	1.65
3.0"x2.5"	76.2	63.5	171.2	79.25	1.65
4.0"x1.0"	101.6	25.4	209.3	91.95	2.1
4.0"x1.5"	101.6	38.1	209.3	91.95	2.1
4.0"x2.0"	101.6	50.8	209.3	98.3	2.1
4.0"x2.5"	101.6	63.5	209.3	98.3	2.1
4.0"x3.0"	101.6	76.2	209.3	98.3	2.1

BPE-31 Concentric & BPE-32 Eccentric Reducer



DT-11

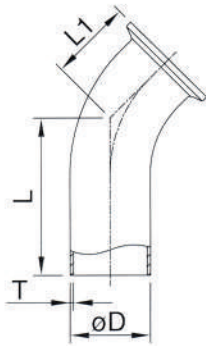
SIZE	ØD	Ød	L	T
3/4"x1/2"	19.05	12.7	101.6	1.65
1.0"x1/2"	25.4	12.7	114.3	1.65
1.0"x3/4"	25.4	19.05	101.6	1.65
1.5"x1/2"	38.1	12.7	139.7	1.65
1.5"x3/4"	38.1	19.05	127	1.65
1.5"x1.0"	38.1	25.4	127	1.65
2.0"x1/2"	50.8	12.7	196.85	1.65
2.0"x3/4"	50.8	19.05	184.25	1.65
2.0"x1.0"	50.8	25.4	184.25	1.65
2.0"x1.5"	50.8	38.1	33.35	1.65

DT-11

SIZE	ØD	Ød	L	T
2.5"x1/2"	63.5	38.1	184.25	1.65
2.5"x1/2"	63.5	50.8	139.7	1.65
3.0"x3/4"	76.2	38.1	235	1.65
3.0"x1/2"	76.2	50.8	190.5	1.65
3.0"x3/4"	76.2	63.5	139.7	1.65
4.0"x1.0"	101.6	38.1	342.9	2.1
4.0"x1/2"	101.6	50.8	299.7	2.1
4.0"x3/4"	101.6	63.5	247.7	2.1
4.0"x1.0"	101.6	76.2	196.85	2.1

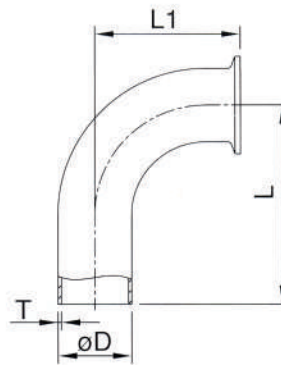
BPE Pipe Line (mm)

BPE-45° Weld / DT-13
Clamp Elbow



SIZE	ØD	L	L1	T
1/2"	12.7	57.15	25.4	1.65
3/4"	19.05	57.15	25.4	1.65
1.0"	25.4	57.15	28.45	1.65
1.5"	38.1	63.5	36.8	1.65
2.0"	50.8	76.2	44.45	1.65
2.5"	63.5	85.6	52.32	1.65
3.0"	76.2	91.95	60.45	1.65
4.0"	101.6	114.3	79.25	2.1

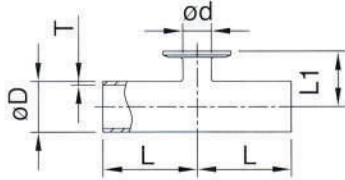
BPE-90° Weld /
Clamp Elbow



DT-12

SIZE	ØD	L	L1	T
1/2"	12.7	76.2	41.15	1.65
3/4"	19.05	76.2	41.15	1.65
1.0"	25.4	76.2	50.8	1.65
1.5"	38.1	95.25	69.85	1.65
2.0"	50.8	120.65	88.9	1.65
2.5"	63.5	139.7	107.95	1.65
3.0"	76.2	158.75	127	1.65
4.0"	101.6	203.2	168.15	2.1

BPE-Short Outlet Weld /
Clamp Reducing Tee

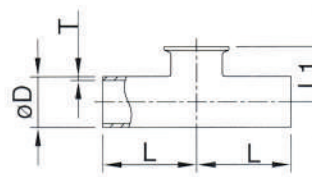


DT-14

SIZE	ØD	Ød	L	L1	T
3/4"x1/2"	19.05	12.7	50.8	25.4	1.65
1.0"x1/2"	25.4	12.7	53.84	28.6	1.65
1.0"x3/4"	25.4	19.05	53.84	28.6	1.65
1.5"x1/2"	38.1	12.7	60.2	34.9	1.65
1.5"x3/4"	38.1	19.05	62.2	34.9	1.65
1.5"x1.0"	38.1	25.4	60.2	34.9	1.65
2.0"x1/2"	50.8	12.7	72.9	41.3	1.65
2.0"x3/4"	50.8	19.05	72.9	41.3	1.65
2.0"x1.0"	50.8	25.4	72.9	41.3	1.65
2.0"x1.5"	50.8	38.1	72.9	41.3	1.65
2.5"x1/2"	63.5	12.7	79.25	47.6	1.65
2.5"x3/4"	63.5	19.05	79.25	47.6	1.65
2.5"x1.0"	63.5	25.4	79.25	47.6	1.65

SIZE	ØD	Ød	L	L1	T
2.5"x1.5"	63.5	38.1	79.4	47.6	1.65
2.5"x2.0"	63.5	50.8	79.4	47.6	1.65
3.0"x1/2"	76.2	12.7	85.7	54	1.65
3.0"x3/4"	76.2	19.05	85.7	54	1.65
3.0"x1.0"	76.2	25.4	85.7	54	1.65
3.0"x1.5"	76.2	38.1	85.7	54	1.65
3.0"x2.0"	76.2	50.8	85.7	54	1.65
3.0"x2.5"	76.2	63.5	85.7	54	1.65
4.0"x1.0"	101.6	25.4	104.8	66.7	2.1
4.0"x1.5"	101.6	38.1	104.8	66.7	2.1
4.0"x2.0"	101.6	50.8	104.8	66.7	2.1
4.0"x2.5"	101.6	63.5	104.8	66.7	2.1
4.0"x3.0"	101.6	76.2	104.8	66.7	2.1

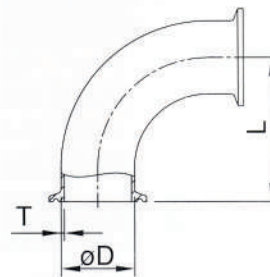
BPE-Equal Outlet
Weld / Clamp Tee



DT-15

SIZE	ØD	L	L1	T
1/2"	12.7	47.6	25.4	1.65
3/4"	19.05	50.8	28.6	1.65
1.0"	25.4	54	28.6	1.65
1.5"	38.1	60.3	34.9	1.65
2.0"	50.8	73	41.3	1.65
2.5"	63.5	79.4	47.6	1.65
3.0"	76.2	85.7	54	1.65
4.0"	101.6	104.8	69.9	2.1

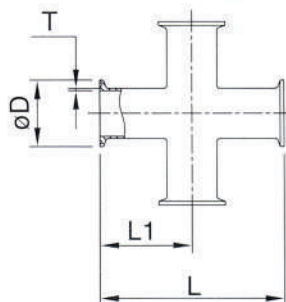
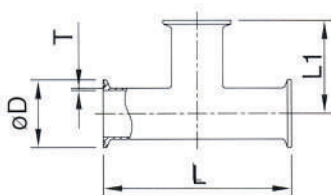
BPE-2CMP 90°
Clamp Elbow



DT-16

SIZE	ØD	L	T
1/2"	12.7	41.15	1.65
3/4"	19.05	41.15	1.65
1.0"	25.4	50.8	1.65
1.5"	38.1	69.85	1.65
2.0"	50.8	88.9	1.65
2.5"	63.5	107.95	1.65
3.0"	76.2	127	1.65
4.0"	101.6	168.3	2.1

BPE-7MP Clamp Tee & BPE-9MP Cross

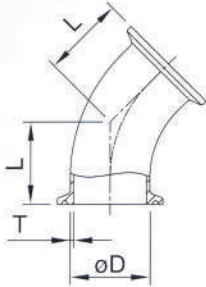


DT-18

SIZE	ØD	L	L1	T
1/2"	12.7	114.4	57.2	1.65
3/4"	19.05	120.6	60.2	1.65
1.0"	25.4	133.4	66.55	1.65
1.5"	38.1	146	72.9	1.65
2.0"	50.8	171.4	85.6	1.65
2.5"	63.5	182.2	91.95	1.65
3.0"	76.2	196.8	8.3	1.65
4.0"	101.6	241.4	120.65	2.1

BPE Pipe Line (mm)

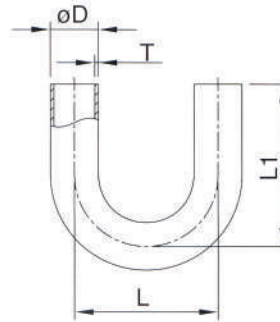
**BPE-2KMP 45°
Clamp Elbow**



DT-17

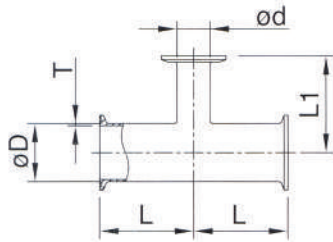
SIZE	ØD	L	T
1/2"	12.7	25.4	1.65
3/4"	19.05	25.4	1.65
1.0"	25.4	28.4	1.65
1.5"	38.1	36.58	1.65
2.0"	50.8	44.45	1.65
2.5"	63.5	52.32	1.65
3.0"	76.2	60.45	1.65
4.0"	101.6	79.25	2.1

BPE-180° U-Joint Weld DT-23



SIZE	ØD	L	L1	T
1/2"	12.7	114.3	76.2	1.65
3/4"	19.05	114.3	76.2	1.65
1.0"	25.4	114.3	76.2	1.65
1.5"	38.1	152.4	114.3	1.65
2.0"	50.8	152.4	127	1.65
2.5"	63.5	190.5	146.1	1.65
3.0"	76.2	228.6	165.1	1.65
4.0"	101.6	304.8	215.9	2.1

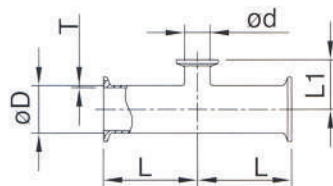
BPE-Reducing Tee Clamp End DT-19



SIZE	ØD	Ød	L	L1	T
3/4"x1/2"	19.05	12.7	63.5	63.5	1.65
1.0"x1/2"	25.4	12.7	66.7	66.7	1.65
1.0"x3/4"	25.4	19.05	66.7	66.7	1.65
1.5"x1/2"	38.1	12.7	73	73	1.65
1.5"x3/4"	38.1	19.05	73	73	1.65
1.5"x1.0"	38.1	25.4	73	73	1.65
2.0"x1.0"	50.8	25.4	85.7	79.4	1.65
2.0"x1.5"	50.8	38.1	85.7	79.4	1.65
2.5"x1.0"	63.5	25.4	92.1	85.7	1.65
2.5"x1.5"	63.5	38.1	92.1	85.7	1.65

SIZE	ØD	Ød	L	L1	T
2.5"x2.0"	63.5	50.8	92.1	85.7	1.65
3.0"x1.0"	76.2	25.4	98.4	92.1	1.65
3.0"x1.5"	76.2	38.1	98.4	92.1	1.65
3.0"x2.0"	76.2	50.8	98.4	98.4	1.65
3.0"x2.5"	76.2	63.5	98.4	98.4	1.65
4.0"x1.0"	101.6	25.4	120.7	104.8	2.1
4.0"x1.5"	101.6	38.1	120.7	104.8	2.1
4.0"x2.0"	101.6	50.8	120.7	111.1	2.1
4.0"x2.5"	101.6	63.5	120.7	111.1	2.1
4.0"x3.0"	101.6	76.2	120.7	111.1	2.1

BPE-7RMP Clamp Reducing Tee

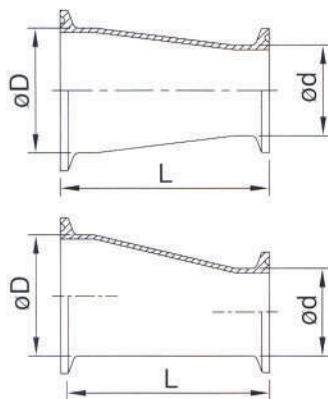


DT-20

SIZE	ØD	Ød	L	L1	T
3/4"x1/2"	19.05	12.7	63.5	25.4	1.65
1.0"x1/2"	25.4	12.7	66.7	28.6	1.65
1.0"x3/4"	25.4	19.05	66.7	28.6	1.65
1.5"x1/2"	38.1	12.7	73	34.9	1.65
1.5"x3/4"	38.1	19.05	73	34.9	1.65
1.5"x1.0"	38.1	25.4	73	34.9	1.65
2.0"x1.0"	50.8	25.4	85.7	47.6	1.65
2.0"x1.5"	50.8	38.1	92.1	47.6	1.65
2.5"x1.0"	63.5	25.4	92.1	47.6	1.65
2.5"x1.5"	63.5	38.1	92.1	47.6	1.65

SIZE	ØD	Ød	L	L1	T
2.5"x2.0"	63.5	50.8	92.1	47.6	1.65
3.0"x1.0"	76.2	25.4	98.4	54	1.65
3.0"x1.5"	76.2	38.1	98.4	54	1.65
3.0"x2.0"	76.2	50.8	98.4	54	1.65
3.0"x2.5"	76.2	63.5	98.4	54	1.65
4.0"x1.0"	101.6	25.4	120.7	66.7	2.1
4.0"x1.5"	101.6	38.1	120.7	66.7	2.1
4.0"x2.0"	101.6	50.8	120.7	66.7	2.1
4.0"x2.5"	101.6	63.5	120.7	66.7	2.1
4.0"x3.0"	101.6	76.2	120.7	66.7	2.1

BPE-31-14MP Concentric & BPE-32-14MP Eccentric Reducer



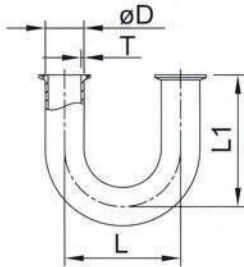
DT-21

SIZE	ØD	Ød	L	T
3/4"x1/2"	19.05	12.7	50.8	1.65
1.0"x1/2"	25.4	12.7	63.5	1.65
1.0"x3/4"	25.4	19.05	50.8	1.65
1.5"x1/2"	38.1	12.7	88.9	1.65
1.5"x3/4"	38.1	19.05	76.2	1.65
1.5"x1.0"	38.1	25.4	76.2	1.65
2.0"x1/2"	50.8	12.7	139.7	1.65
2.0"x3/4"	50.8	19.05	127.0	1.65
2.0"x1.0"	50.8	25.4	127.0	1.65
2.0"x1.5"	50.8	38.1	76.2	1.65

SIZE	ØD	Ød	L	T
2.5"x1/2"	63.5	38.1	127	1.65
2.5"x1/2"	63.5	50.8	76.2	1.65
3.0"x3/4"	76.2	38.1	177.8	1.65
3.0"x1/2"	76.2	50.8	127.0	1.65
3.0"x3/4"	76.2	63.5	76.2	1.65
4.0"x1.0"	101.6	38.1	282.6	2.1
4.0"x1/2"	101.6	50.8	231.8	2.1
4.0"x3/4"	101.6	63.5	181.0	2.1
4.0"x1.0"	101.6	76.2	130.2	2.1

BPE Pipe Line (mm)

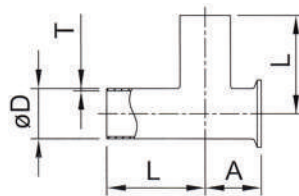
BPE-180° Clamp Elbow



DT-24

SIZE	ØD	L	L1	T
1/2"	12.7	114.3	88.9	1.65
3/4"	19.05	114.3	88.9	1.65
1.0"	25.4	76.2	88.9	1.65
1.5"	38.1	114.3	127.0	1.65
2.0"	50.8	152.4	139.7	1.65
2.5"	63.5	190.5	158.8	1.65
3.0"	76.2	228.6	177.8	1.65
4.0"	101.6	304.8	231.8	2.1

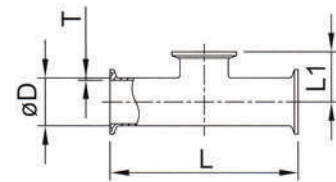
BPE-Short Outlet Run Tee



DT-25

SIZE	ØD	A	L	T
1/2"	12.7	22.2	47.6	1.65
3/4"	19.05	25.4	50.8	1.65
1.0"	25.4	28.6	54.0	1.65
1.5"	38.1	34.9	60.3	1.65
2.0"	50.8	41.3	73.0	1.65
2.5"	63.5	47.6	79.4	1.65
3.0"	76.2	54.0	85.7	1.65
4.0"	101.6	69.9	104.8	2.1

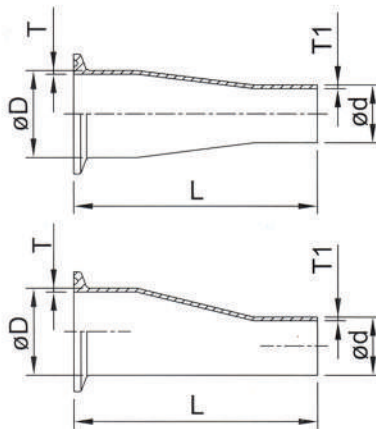
BPE-Short Outlet Tee Clamp End



DT-27

SIZE	ØD	L	L1	T
1/2"	12.7	114.4	25.4	1.65
3/4"	19.05	120.6	28.6	1.65
1.0"	25.4	133.4	28.6	1.65
1.5"	38.1	146.0	34.9	1.65
2.0"	50.8	171.4	41.3	1.65
2.5"	63.5	184.2	47.6	1.65
3.0"	76.2	196.8	54.0	1.65
4.0"	101.6	241.4	69.9	2.1

BPE-Concentric & Eccentric Reducer Clamp / Weld End

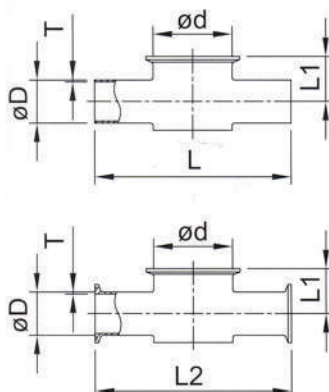


DT-26

SIZE	ØD	Ød	L	T	T1
3/4"x1/2"	19.05	12.7	76.2	1.65	1.65
1.0"x1/2"	25.4	12.7	88.9	1.65	1.65
1.0"x3/4"	25.4	19.05	76.2	1.65	1.65
1.5"x1/2"	38.1	12.7	114.3	1.65	1.65
1.5"x3/4"	38.1	19.05	101.6	1.65	1.65
1.5"x1.0"	38.1	25.4	101.6	1.65	1.65
2.0"x1/2"	50.8	12.7	165.1	1.65	1.65
2.0"x3/4"	50.8	19.05	152.4	1.65	1.65
2.0"x1.0"	50.8	25.4	152.4	1.65	1.65
2.0"x1.5"	50.8	38.1	101.6	1.65	1.65

SIZE	ØD	Ød	L	L1	T
2.5"x2.0"	63.5	38.1	152.4	1.65	1.65
2.5"x1.0"	63.5	50.8	108	1.65	1.65
3.0"x1.5"	76.2	38.1	203.2	1.65	1.65
3.0"x2.0"	76.2	50.8	158.8	1.65	1.65
3.0"x2.5"	76.2	63.5	108.0	1.65	1.65
4.0"x1.0"	101.6	38.1	308.0	2.1	1.65
4.0"x1.5"	101.6	50.8	263.5	2.1	1.65
4.0"x2.0"	101.6	63.5	212.7	2.1	1.65
4.0"x2.5"	101.6	76.2	161.9	2.1	1.65

BPE-Instrument Tee Weld / Clamp End



DT-28/DT-29

SIZE	ØD	Ød	L	L1	L2	T
1.0"x1/2"	12.7	25.4	127	22.2	154	1.65
1.0"x3/4"	19.05	25.4	127	25.4	154	1.65
1.5"x3/4"	12.7	38.1	127	22.2	152.4	1.65
1.5"x1/2"	19.05	38.1	127	25.4	152.4	1.65
1.5"x3/4"	25.4	38.1	127	28.6	152.4	1.65
2.0"x1.0"	12.7	50.8	139.8	25.4	165.2	1.65
2.0"x1/2"	19.05	50.8	139.8	28.6	165.2	1.65
2.0"x3/4"	25.4	50.8	139.8	31.8	165.2	1.65
2.0"x1.0"	38.1	50.8	139.8	38.1	165.2	1.65
2.5"x1.5"	12.7	63.5	170	35	194	1.65
2.5"x1.5"	19.05	63.5	170	38.1	194	1.65
2.5"x1.5"	25.4	63.5	170	41.3	194	1.65
2.5"x1.5"	38.1	63.5	170	44.5	194	1.65
2.5"x1.5"	50.8	63.5	170	48.0	194	1.65

DT-28/DT-29

SIZE	ØD	Ød	L	L1	L2	T
3.0"x1/2"	12.7	76.2	180	38.1	204	1.65
3.0"x3/4"	19.05	76.2	180	41.3	204	1.65
3.0"x1.0"	25.4	76.2	180	44.5	204	1.65
3.0"x1.5"	38.1	76.2	180	48	204	1.65
3.0"x2.0"	50.8	76.2	180	50.8	204	1.65
3.0"x2.5"	63.5	76.2	180	54	204	1.65
4.0"x1/2"	12.7	101.6	220	79.4	244	1.65
4.0"x3/4"	19.05	101.6	220	82.6	244	1.65
4.0"x1.0"	25.4	101.6	220	85.7	244	1.65
4.0"x1.5"	38.1	101.6	220	88.9	244	1.65
4.0"x2.0"	50.8	101.6	220	95.2	244	1.65
4.0"x2.5"	63.5	101.6	220	98.4	244	1.65
4.0"x3.0"	76.2	101.6	220	101.6	244	1.65

Sanitary Butterfly Valve



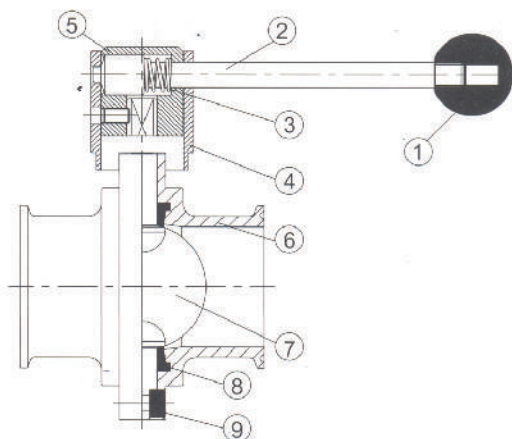
Butterfly Valve

- Wetted Parts : SS304 & SS316L
- Manual Handle : Nylon Reinforced Gripper Handle (12 Position) & SS Pull Handle (4 Position)
- Handle Colour : Blue or Black
- Gasket : Silicone, NBR, EPDM, Viton
- Connection : Weld Ends, SMS, DIN, RJT, Ferrule Clamp

OPTION

Pneumatic Actuator : Single (Air/Spring) & Double Effect (Air/Air) NC NO

- Material : SS304
- Shut-Off Time : AV1 & AV2 - 1.5 Sec, AV3 - 1.7 Sec
- Operating Air Pressure : 6kg/cm² min 5 bar max. 9 bar compress air
- Air Consumption : AV1, AV2 – 0.266 litre at 5 bar, AV3 Air Consumption 0.550 litre at 5 bar
- Option Signal Control : Proximity Switch - 10-30 VDC (PNP or NPN) / Microswitch - 3A 125VAC 30VDC



3A Clamp End With St.St Pull Handle, 4 Position

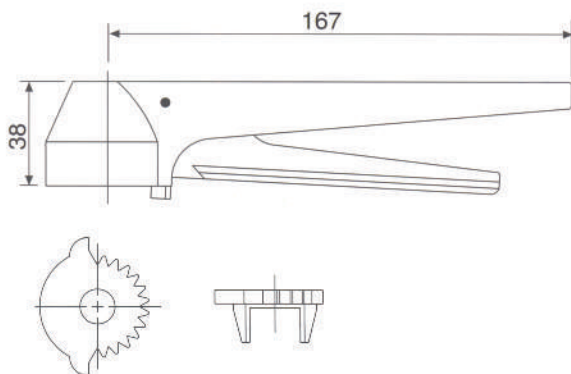
SIZE	Name
1	KNOW
2	STEEL-BAR
3	SPRING
4	ST.T
5	HOLDER
6	BODY
7	DISC
8	EPDM RUBBER SEAT
9	SCREW BOLT

Torque for Full Open/ Close

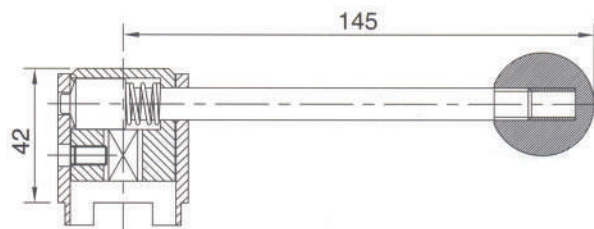
1.0"	<1 kgf-m
1.5"	<1 kgf-m
2.0"	1.3 kgf-m
2.5"	1.5kgf-m
3.0"	2.0 kgf-m
4.0"	3.1 kgf-m

*1kgf-m = 9.8 N.m = 86.8 lbf-in = 7.23 lbf-ft

Gripper Handle 12 Position - G12



Pull Handle 4 Position - P4



AV2, AV3 Actuator Instruction

1. AV1, AV2: Shut-Off time: 1.5second ; Weight : 3.85KGS
 AV3: Shut-Off time: 1.7second ; Weight : 4.7KGS
2. Operating air pressure : 6kg/cm² ; Min.5 bar ; Max.9bar compress air
3. AV1, AV2 Air consumption : 0.266 Liter at 5 bar : AV3 Air consumption : 0.550 Liter at 5 bar.
4. Material : stainless steel AISI 304
5. Can be equiped with normal close or open.

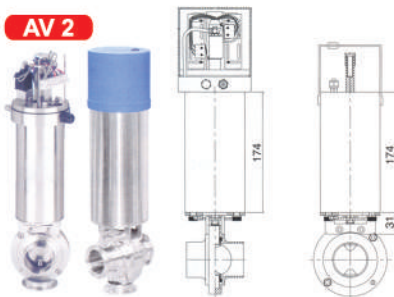
AV 1



Operation instruction

1. AV1 Actuator apply to butterfly valve in size 1"-3" of the disc head DIA. 12mm x 8mm. (other size can be required)
2. Signal transfer : can be connect with M18 or M12 screw proximity switch (PNP or NPN)
3. Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
4. Accessories : 1pc ; M6 X 35 screw : 2pcs ; washer : 4pcs ; M6 nut : 2pcs ; 1/8PT quick coupler : 1pc

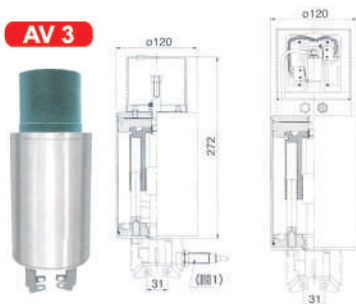
AV 2



Operation instruction

1. AV2 Actuator apply to butterfly valve in size 1"-3" of the disc head DIA. 12mm X 8mm. (other size can be required)
2. Control ways :
 - 2-1. Signal transfer :
 - a. With 10-30VDC proximity switch contact : 1 or 2 pcs. (PNP or NPN)
 - b. Or 3A 125VAC. 30VDC microswitch : 2pcs
 - 2-2. Individual control : Choice (a) or (b) + DC24 3.0W electric valve : 1pc & Air manifold (for complete control box).
3. Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
4. Accessories : adapter : 1pcs ; M6 X 35 screw : 2pcs ; washer : 4pcs ; M6 nut : 2pcs ; 1/8PT quick coupler : 1pcs

AV 3



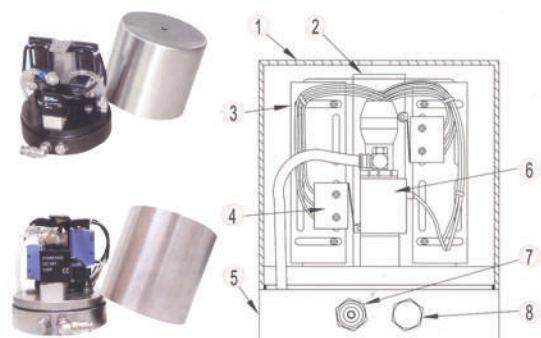
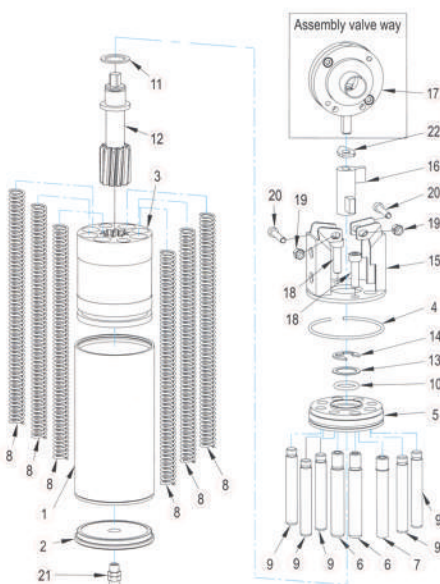
Operation instruction

1. AV3 Actuator apply to butterfly valve in size 4"-6" of the disc head DIA. 12mm X 12mm.
2. Control ways :
 - 2-1. Signal transfer :
 - a. Can be connect with M18 or M12 screw proximity switch (PNP or NPN) as (1)
 - b. With 10-30 VDC proximity switch contact : 1 or 2pcs (PNP OR NPN)
 - c. Or 3A 125VAC. 30VDC microswitch : 2pcs
 - 2-2. Individual control : Choice (a) or (b) or (c) + DC24 3.0W electric valve : 1pcs & air manifold (for complete control box).
3. Air/Air (double effect) actuator or air/spring (simple effect) actuator are available.
4. Accessories : adapter : 1pcs ; M6 X 40 screw : 2pcs ; washer : 4pcs ; M6 nut : 2pcs ; 1/8PT quick coupler : 1pcs

AV1, AV2, AV3

AV2 Assembly Drawing & Parts List
 Max. output torque 20N/M on AV1 & AV2
 Max. output torque 30N/M on AV3

Parts List			
Item	Parts Name	Qty	Material
1	St.St Cylinder	1	St.St 304
2	St.St Cylinder Cap	1	St.St 304
3	Piston	1	Tenac 4010/SH410
4	Lock wire clip	1	St.St 304
5	Lower cylinder end	1	St.St 304
6	Piston guide part	2	St.St 304
7	Piston guide part	1	St.St 304
8	Compress spring	6	St.St 304
9	Piston guide part	5	St.St 304
10	Piston axle O-ring	1	Teflon
11	Teflon gasket	1	Teflon
12	Coupling axle piece	1	St.St 304
13	Conact seal	1	St.St 304
14	Circlip	1	St.St 304
15	Mounting bracket	1	St.St 304
16	Connection piece	1	St.St 304
17	Assembly valve way	1	St.St 304/316(L)
18	M8x12 ST.ST screw	2	St.St 304
19	M6 Nut	2	St.St 304
20	M6x35 ST.ST screw	2	St.St 304
21	Air connection	1	Cupper
22	Positioning index	1	St.St 304

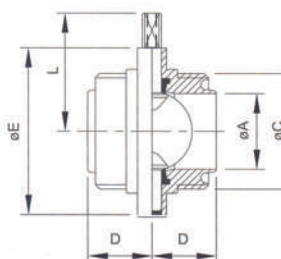
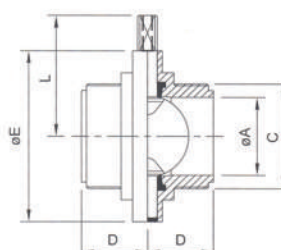
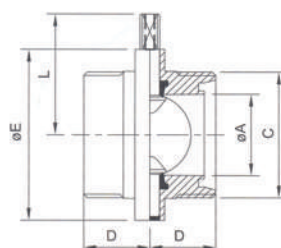
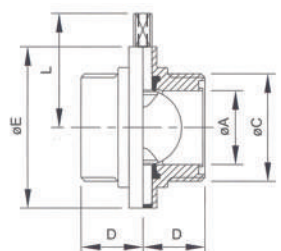
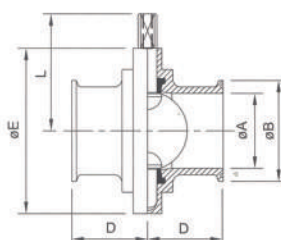
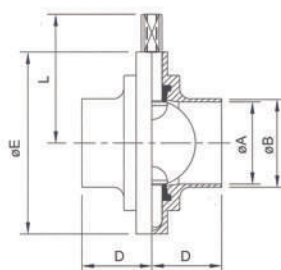


Control Box Actuator

Control box construction assembly drawing & items list

Parts List			
Item	Parts Name	Qty	Material
1	Cover	1	PC or St.St 304
2	Swith plate	1	St.St 304
3	Plastic hanger	2	St.St 304
4	Micro switch	2	3A 125VAC. 30VDC
5	Air manifold	1	P.O.M. (Plastic) or St.St 304
6	Electrovalve	1	DC24 3.0W
7	Air connection	1	Cu
8	E/N connect piece	1	St.St 304

Type AV



3A/ BS/ SMS Weld/ Weld Butterfly Valves

SIZE	ØA	ØB	SIZE	ØA	ØB	D	ØE	L
1/2"	9.5	12.7	-	1.65	1.65	1.65	1.65	1.65
3/4"	15.8	19.05	-	1.65	1.65	1.65	1.65	1.65
1.0"	22.1	25.4	DN25	1.65	1.65	1.65	1.65	1.65
1.5"	34.8	38.1	DN38	1.65	1.65	1.65	1.65	1.65
2.0"	47.5	50.8	DN51	1.65	1.65	1.65	1.65	1.65
2.5"	60.2	63.5	DN63	1.65	1.65	1.65	1.65	1.65
3.0"	72.2	76.2	DN76	1.65	1.65	1.65	1.65	1.65
4.0"	97.6	101.6	DN104	2.10	2.10	2.10	2.10	2.10
6.0"	146.8	152.4	-	2.80	2.80	2.80	2.80	2.80

DIN Weld/ Weld Butterfly Valves

SIZE	ØA	ØB	D	ØE	L
DN28	25	28	34	79	61
DN34	31	34	38	85	64.3
DN40	37	40	38	90	74.3
DN50	49	52	40	105	77.6
DN65	66	70	41	125	84.8
DN85	81	85	42	137	91.6
DN104	100	104	44	157	101.7

3A Clamp/ Clamp Butterfly Valves

SIZE	ØA	ØB	D	ØE	L
DN28	25	28	34	79	61
DN34	31	34	38	85	64.3
DN40	37	40	38	90	74.3
DN50	49	52	40	105	77.6
DN65	66	70	41	125	84.8
DN85	81	85	42	137	91.6
DN104	100	104	44	157	101.7

SMS Male/ Male Butterfly Valves

SIZE	ØA	C	D	ØE	L
DN25	22.5	RX40x1/6	34	79	61
DN38	35.4	RD60x1/6	38	85	64.3
DN51	48	RD70x1/6	40	105	74.3
DN63	60.2	RD85x1/6	40	112	77.6
DN76	72.1	RD98x1/6	41	125	84.8
DN104	100	RD125x1/4	50	157	101.7

DIN Male/ Male Butterfly Valves

SIZE	ØA	C	D	ØE	L
DN28	26	51.3 RD52x1/6	34	79	61
DN34	32	57.3 RD58x1/6	38	85	64.3
DN40	38	64.3 RD65x1/6	38	90	74.3
DN50	50	77.3 RD78x1/6	40	105	77.6
DN65	66	94.3 RD95x1/6	41	125	84.8
DN85	81	109 RD110x1/4	42	137	91.6
DN101.6	97.6	129 RD130x1/4	50	157	101.7
DN104	100	129 RD130x1/4	50	157	101.7

IDF Male/ Male Butterfly Valves

SIZE	ØA	C	D	ØE	L
1.0"	22.4	37.13x8T ACME	34	79	61
1.5"	35.1	50.65x8T ACME	38	85	64.3
2.0"	47.8	64.16x8T ACME	40	105	74.3
2.5"	60.5	77.76x8T ACME	40	112	77.6
3.0"	72	91.19x8T ACME	41	125	84.8
4.0"	97.6	125.9x6T ACME	44	157	101.7

IDF Male/ Male Butterfly Valves

SIZE	ØA	C	D	ØE	L
1.0"	22.1	45.72x8T WHIT	34	79	61
1.5"	34.9	58.42x8T WHIT	38	85	64.3
2.0"	47.6	72.72x6T WHIT	40	105	74.3
2.5"	60.3	85.42x6T WHIT	40	112	77.6
3.0"	73	98.12x6T WHIT	41	125	84.8
4.0"	97.6	123.52x6T WHIT	50	157	101.7

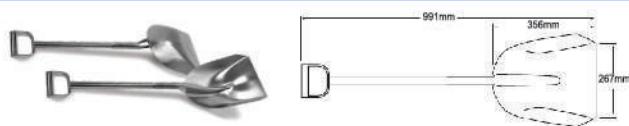
Industrial Heavy Duty Seamless Stainless Scoop

Material : SS304 & SS316L

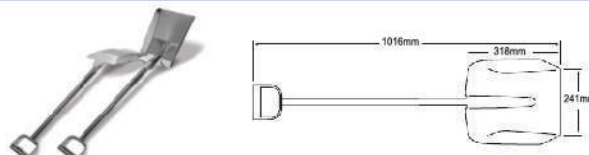
Industrial Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV3997</td><td>8oz / 226gm</td><td>69.85mmW x 101.6mmL Handle x 203.20mm AOL</td></tr><tr><td>AV4002</td><td>16oz / 453gm</td><td>85.72mmW x 101.6mmL Handle x 231.77mm AOL</td></tr><tr><td>AV4003</td><td>32oz / 907gm</td><td>107.95mmW x 101.6mmL Handle x 269.87mm AOL</td></tr><tr><td>AV4004</td><td>64oz / 1.81 Kgs</td><td>127mmW x 101.6mmL Handle x 311.15mm AOL</td></tr><tr><td>AV4005</td><td>96oz / 2.7 Kgs</td><td>133.35mmW x 114.3mmL Handle x 355.6mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV3997	8oz / 226gm	69.85mmW x 101.6mmL Handle x 203.20mm AOL	AV4002	16oz / 453gm	85.72mmW x 101.6mmL Handle x 231.77mm AOL	AV4003	32oz / 907gm	107.95mmW x 101.6mmL Handle x 269.87mm AOL	AV4004	64oz / 1.81 Kgs	127mmW x 101.6mmL Handle x 311.15mm AOL	AV4005	96oz / 2.7 Kgs	133.35mmW x 114.3mmL Handle x 355.6mm AOL
Part Nr.	Capacity	Dimension																	
AV3997	8oz / 226gm	69.85mmW x 101.6mmL Handle x 203.20mm AOL																	
AV4002	16oz / 453gm	85.72mmW x 101.6mmL Handle x 231.77mm AOL																	
AV4003	32oz / 907gm	107.95mmW x 101.6mmL Handle x 269.87mm AOL																	
AV4004	64oz / 1.81 Kgs	127mmW x 101.6mmL Handle x 311.15mm AOL																	
AV4005	96oz / 2.7 Kgs	133.35mmW x 114.3mmL Handle x 355.6mm AOL																	
Industrial Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV3998</td><td>128oz / 3.6 Kgs</td><td>158.75mmW x 114.3mmL Handle x 330.2mm AOL</td></tr><tr><td>AV3999</td><td>160oz / 4.8 Kgs</td><td>203.2mmW x 127mmL Handle x 381mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV3998	128oz / 3.6 Kgs	158.75mmW x 114.3mmL Handle x 330.2mm AOL	AV3999	160oz / 4.8 Kgs	203.2mmW x 127mmL Handle x 381mm AOL									
Part Nr.	Capacity	Dimension																	
AV3998	128oz / 3.6 Kgs	158.75mmW x 114.3mmL Handle x 330.2mm AOL																	
AV3999	160oz / 4.8 Kgs	203.2mmW x 127mmL Handle x 381mm AOL																	
Pharma Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV43RD</td><td>8oz / 226gm</td><td>50.8mmW x 127mmL Handle x 279.4mm AOL</td></tr><tr><td>AV44RD</td><td>16oz / 453gm</td><td>57.15mmW x 127mmL Handle x 323.85mm AOL</td></tr><tr><td>AV40RD</td><td>32oz / 907gm</td><td>57.15mmW x 127mmL Handle x 355.6mm AOL</td></tr><tr><td>AV41RD</td><td>50oz / 1.4Kg</td><td>139.7mmW x 127mmL Handle x 355.6mm AOL</td></tr><tr><td>AV45RD</td><td>64oz / 1.81Kg</td><td>139.7mmW x 127mmL Handle x 355.6mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV43RD	8oz / 226gm	50.8mmW x 127mmL Handle x 279.4mm AOL	AV44RD	16oz / 453gm	57.15mmW x 127mmL Handle x 323.85mm AOL	AV40RD	32oz / 907gm	57.15mmW x 127mmL Handle x 355.6mm AOL	AV41RD	50oz / 1.4Kg	139.7mmW x 127mmL Handle x 355.6mm AOL	AV45RD	64oz / 1.81Kg	139.7mmW x 127mmL Handle x 355.6mm AOL
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AV43RD	8oz / 226gm	50.8mmW x 127mmL Handle x 279.4mm AOL																	
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AV45RD	64oz / 1.81Kg	139.7mmW x 127mmL Handle x 355.6mm AOL																	
Pharma Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV40RB</td><td>32oz / 907gm</td><td>123.8mmW x 228.6mm Bowl Length</td></tr><tr><td>AV41RB</td><td>50oz / 1.4Kg</td><td>139.7mmW x 228.6mm Bowl Length</td></tr><tr><td>AV45RB</td><td>64oz / 1.81Kg</td><td>152.4mmW x 304.8mm Bowl Length</td></tr></table>	Part Nr.	Capacity	Dimension	AV40RB	32oz / 907gm	123.8mmW x 228.6mm Bowl Length	AV41RB	50oz / 1.4Kg	139.7mmW x 228.6mm Bowl Length	AV45RB	64oz / 1.81Kg	152.4mmW x 304.8mm Bowl Length						
Part Nr.	Capacity	Dimension																	
AV40RB	32oz / 907gm	123.8mmW x 228.6mm Bowl Length																	
AV41RB	50oz / 1.4Kg	139.7mmW x 228.6mm Bowl Length																	
AV45RB	64oz / 1.81Kg	152.4mmW x 304.8mm Bowl Length																	
Square Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV45RD</td><td>64oz / 1.81Kg</td><td>139.7mmW x 127mmL Handle x 355.6mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV45RD	64oz / 1.81Kg	139.7mmW x 127mmL Handle x 355.6mm AOL												
Part Nr.	Capacity	Dimension																	
AV45RD	64oz / 1.81Kg	139.7mmW x 127mmL Handle x 355.6mm AOL																	
Long Handle Industrial Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV400324</td><td>32oz / 907gm</td><td>114.3mmW x 609.6mmL Handle x 777.9mm AOL</td></tr><tr><td>AV400424</td><td>64oz / 1.81Kg</td><td>127mmW x 609.6mmL Handle x 838.2mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV400324	32oz / 907gm	114.3mmW x 609.6mmL Handle x 777.9mm AOL	AV400424	64oz / 1.81Kg	127mmW x 609.6mmL Handle x 838.2mm AOL									
Part Nr.	Capacity	Dimension																	
AV400324	32oz / 907gm	114.3mmW x 609.6mmL Handle x 777.9mm AOL																	
AV400424	64oz / 1.81Kg	127mmW x 609.6mmL Handle x 838.2mm AOL																	
Long Handle Pharma Scoop 	<table><tr><th>Part Nr.</th><th>Capacity</th><th>Dimension</th></tr><tr><td>AV40RD24</td><td>32oz / 907mm</td><td>127mmW x 609.6mmL Handle x 838.2mm AOL</td></tr><tr><td>AV44RD24</td><td>16oz / 453gm</td><td>127mmW x 609.6mmL Handle x 806.45mm AOL</td></tr></table>	Part Nr.	Capacity	Dimension	AV40RD24	32oz / 907mm	127mmW x 609.6mmL Handle x 838.2mm AOL	AV44RD24	16oz / 453gm	127mmW x 609.6mmL Handle x 806.45mm AOL									
Part Nr.	Capacity	Dimension																	
AV40RD24	32oz / 907mm	127mmW x 609.6mmL Handle x 838.2mm AOL																	
AV44RD24	16oz / 453gm	127mmW x 609.6mmL Handle x 806.45mm AOL																	

Sanitary Seamless Stainless Steel Shovel

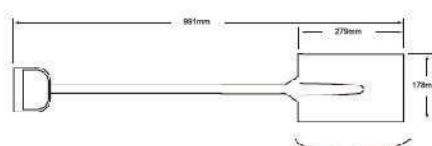
Standard Shovels



Model : 207 Size : 267mm W x 991mm AOL
 Model : 227 Size : 292mm W x 1016mm AOL
 Model : 237 Size : 349mm W x 1116mm AOL



Model : 217 Size : 241mm W x 1016mm AOL



Model : 267 Size : 178mm W x 991mm AOL



Model : 267T Size : 177mm W x 990mm AOL

Reinforced Shovels



Model : 207R Size : 266mm W x 990mm AOL
 Model : 227R Size : 292mm W x 1016mm AOL
 Model : 237R Size : 349mm W x 1117mm AOL



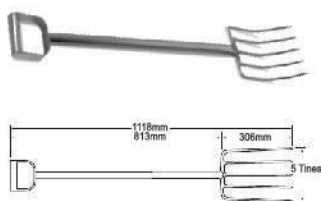
Model : 217R Size : 241mm W x 1016mm AOL



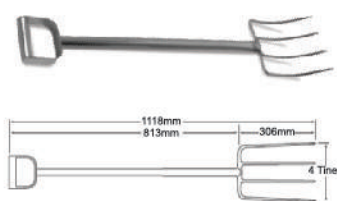
Model : 267R Size : 177mm W x 990mm AOL

Sanitary Seamless Stainless Steel Forks

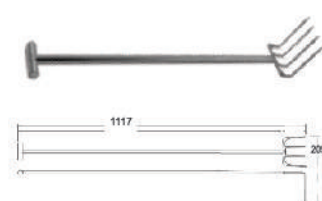
Standard Forks



Model : 2071 Size : 216mm W x 1117mm AOL
 Model : 2072 Size : 209mm W x 1117mm AOL



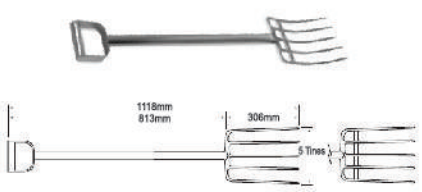
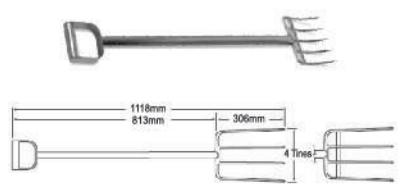
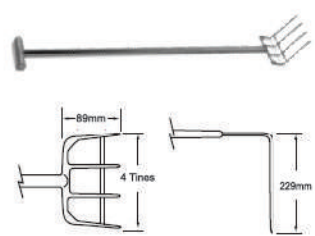
Model : 2073 Size : 216mm W x 1117mm AOL
 Model : 2074 Size : 216mm W x 1117mm AOL



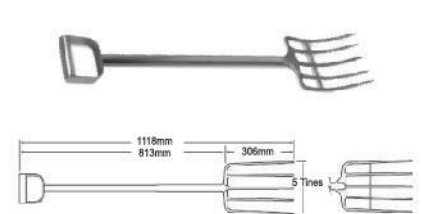
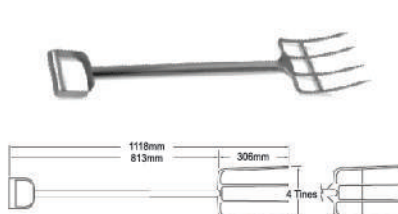
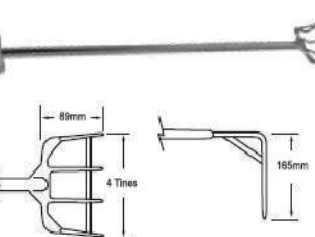
Model : 2075
 Size : 209mm W x 1117mm AOL

Sanitary Seamless Stainless Steel Forks

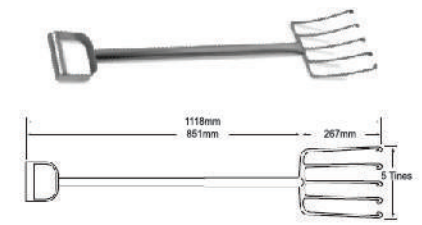
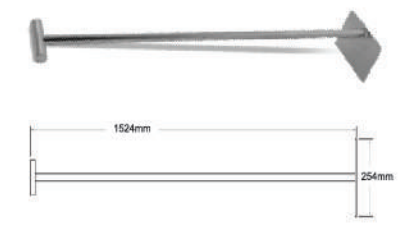
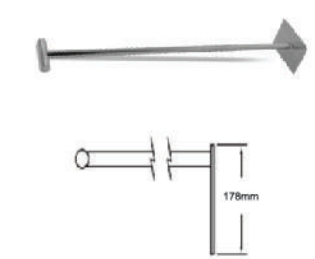
Reinforced Forks

 Model : 2071R Size : 216mm W x 1117mm AOL Model : 2072R Size : 216mm W x 1117mm AOL	 Model : 2073R Size : 216mm W x 1117mm AOL Model : 2074R Size : 216mm W x 1117mm AOL	 Model : 2075R Size : 209mm W x 1524mm AOL
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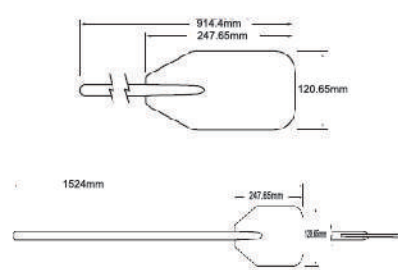
Super Reinforced Forks

 Model : 2071SR Size : 216mm W x 1117mm AOL Model : 2072SR Size : 209mm W x 1117mm AOL	 Model : 2073SR Size : 216mm W x 1117mm AOL Model : 2074SR Size : 216mm W x 1117mm AOL	 Model : 2075SR Size : 216mm W x 1524mm AOL
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Specialty Items

 Model : 2076 Size : 216mm W x 1117mm AOL Fork Type : Curled Tine Ends	 Model : 2077 Size : 178mm W x 1524mm AOL	 Model : 2082 Size : 178mm W x 1524mm AOL
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Paddle Scraper

 Model : 2078 Size : 120.65mm W x 914mm AOL Model : 2079 Size : 120.65mm W x 1067mm AOL Model : 2080 Size : 120.65mm W x 1219mm AOL Model : 2081 Size : 120.65mm W x 1524mm AOL	 Model : 2078P Size : 120.65mm W x 914mm AOL Model : 2079P Size : 120.65mm W x 1067mm AOL Model : 2080P Size : 120.65mm W x 1219mm AOL Model : 2081P Size : 120.65mm W x 1524mm AOL	
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Heavy Duty Industrial Ware



Industrial Heavy Duty Stainless Steel Seamless Measuring Jug

- Material : SS304 & SS316L FDA
 - Complete with Handle, Sprout & Duo Internal Graduation (Ounce / Litre)
 - Custom Marking : Option Engrave & Sandblasting
- Capacity : 0.5 Litre / Size : 423 x 347 x 245mm
 Capacity : 1.0 Litre / Size : 523 x 446 x 301mm
 Capacity : 1.5 Litre / Size : 640 x 482 x 335mm
 Capacity : 2.0 Litre / Size : 643 x 497 x 375mm



Industrial Heavy Duty Stainless Steel Seamless Pail

- Material : SS304 & SS316L FDA
 - Complete with Handle, Lid & Internal Graduation (Litre)
 - Custom Marking : Option Engrave & Sandblasting
- Capacity : 10 Litre / Size : 32cmTopØ x 21.5cm BottomØ x 27cm Height x 1.0mmT
 Capacity : 15 Litre / Size : 32cm TopØ x 24cm BottomØ x 25cm Height x 1.0mmT
 Capacity : 20 Litre / Size : 34cm TopØ x 26cm BottomØ x 29cm Height x 1.0mmT



INDUSTRIAL HEAVY DUTY STAINLESS STEEL SEAMLESS STRAIGHT SIDED STORAGE CONTAINER / DRUM

- Wetted Parts : SS304 & SS316L FDA
 - Gasket : Silicone FDA
 - Complete with Handle, Lid & Internal Graduation (Litre)
 - Custom Marking : Option Engrave & Sandblasting
- Capacity : 10 Litre /Size : 25cmØ x 25cm Height x 1.0mmT
 Capacity : 20 Litre / Size : 35cmØ x 35cmHeight x 1.0mmT
 Capacity : 30 Litre / Size : 34cmØ x 26cmHeight x 1.0mmT
 Capacity : 50 Litre / Size : 40cmØ x 40cmHeight x 1.0mmT

Detectable Products



Jumbo Marker



Fully Metal Detectable ID Badge Holder



Metal Detectable Self Adhesive Tape



Stainless Steel Lanyard Chain



Detectable Cable Tie



Detectable Cable Tidy



Metal Detectable Mallet



Detectable Mop Cap



Detectable Earplugs



Pastry Brush

Halal Compliance Food Grade Cleaning Tools



The Halal Certification Process

The Halal Authority Board audited our production facilities, when both approval and certification were given in December 2014. The development from initial concept has taken 14 months to complete, proving our commitment to food safety innovation. Hill Brush sourced Halal approved materials for use in production, which then involved modifications to the manufacturing process of our polypropylene supplier. Co-operation was crucial in certifying the range as Halal due to stringent supply chain requirements. Changes were also made to cleaning routines, equipment and staff conduct. The resulting range is compliant in every detail, from raw materials to the packaged product.



Banister Brush

B861H

Crimped fill.

Ideal for: Light particles.

Size: 317 x 36mm



Short Handled Brush

D4H

Ideal for: Production lines; catering, manufacturing use.

Size: 254 x 72mm



Long Handled Brush

D9H

Ideal for: Production lines; hard to reach areas; catering, manufacturing.

Size: 406 x 50mm



Grippy Scrub

ST8H

Ideal for: Medium particles; cleaning around corners; conveyor belts.

Size: 152 x 60mm



Plastic Scraper

PSC2H

Ideal for: Removing stubborn food debris; worktops, production lines.

Size: 255 x 110mm



Seamless Hand Scoop

SCOOP4H

Ideal for: Moving ingredients; food preparation areas.

Size: 90 x 170 x 260mm (Overall 375mm)



Open Plastic Dustpan

DP13H

Ideal for: Removing debris; catering, manufacturing.

Size: 325 x 315mm



Stainless Steel Hanger

SSHANG1H

Ideal for: Storing cleaning tools hygienically.

Size: 75 x 310mm



Sanitary Hygienic Cleaning Tools

RESIN-SET
DRS® BRUSHWARE



TOTAL MDX
HYGIENIC TOOLS®



ANTI-MICROBIAL
HYGIENIC TOOLS™



Shadow Board



Metal Detectable Tools



Malaysia (Office, Showroom & Stores)

ASTRAL Venture Flow Component Sdn. Bhd. (Co. No. 679466-W) (GST ID No. 000 6581 125 12)

ASTRAL Venture (Co. Reg. Nr. 001290377-D)

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Email : astral.nizza@astralventure.com / astral.sales1@astralventure.com / astral.jamal@astralventure.com

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