

PRODUCT CATALOGUE



Engineering

Excellence | Innovation | Service



Engineering

ABOUT US

Established in 1963, A&G Engineering boasts five decades of experience in pioneering and producing high quality stainless steel vessels and equipment. Today, it's the preferred tank manufacturer for many industries across Australia.

Over the years A&G has developed many of the standard engineering concepts and fermentation equipment used in the wine industry and this commitment to innovation has led our foray into the supply of more specialised vessels.

The A&G team designs, manufactures and installs an extensive range of stainless steel vessels for the major hygienic industries such as dairy, brewing and processed foods. Our reputation spans the globe and we have successfully undertaken international projects in France, Vietnam, Argentina and the USA.

Growing demand for A&G products led to the expansion of the retail division with outlets in Griffith NSW and Irymple in Victoria's Sunraysia region. The A&G product catalogue provides a summary of the diversified merchandise that can be readily supplied.

The quality and integrity of A&G's products and services has been recognised at the highest levels as a previous winner of the WTIA Company of the Year Award and the Australian Museum's Eureka Prize for Industry.



PAGE

1	Tube Products
2	Square and Rectangle Welded Tube
3 - 4	Hygienic Fittings
5	Tube Fittings
6	Reducing Tube Fittings
7	Sight Glasses
8	Compression Fittings
9	Wine Fittings
10	Seamless and Welded Pipe
11	Buttweld Pipe
12	Reducing Buttweld Pipe Fittings
13	Technical Data
14	Technical Data Buttweld Pipe Fitting Dimensions
15 - 17	BSP Fittings
18	NPT Fittings
19 - 20	Tube Flanges
21	ANSI / DIN Flanges
22	Tube / Pipe Angle Rings
23	Butterfly Valves
24	Ball Valves
25	Knife Gate Valves



CONTENTS

PAGE

26	Non Return Valves
27	Sample Valves
28	Pressure Relief Valves
29 - 30	Flat Bar
31	Angle Bar
32 - 33	Round Bar - Improved Machining
34	Square Bar
35	Channel
36	Hollow Bar
37	Sheet
38	Plate
39	A&G Slotted Screen
40	Perf Mesh
41	Welded Mesh
42	Woven Wire
43	Fasteners and Hardware
44	Insulated Tube
45	Tank Manufacturing
46	Tank Equipment
47	Pipe Chart and Weight Table
48 - 54	Flange Table





TUBE PRODUCTS

All Tube to ASTM 1528 below 152.40
 316 and 304 , both as welded and buff polish.

SIZE	WT
OD	WT
9.53	1.60
12.70	1.60
15.90	1.60
19.05	1.60
25.40	1.60
31.80	1.60
38.10	1.60
50.80	1.60
63.50	1.60
76.20	1.60
88.90	1.60
101.60	1.60
127.00	1.60
152.40	1.60
203.20	2.00
254.00	2.00
305.00	2.00



SQUARE & RECTANGLE WELDED TUBE

SPECIFICATIONS:

ASTM A554

LENGTHS:

6 METRES

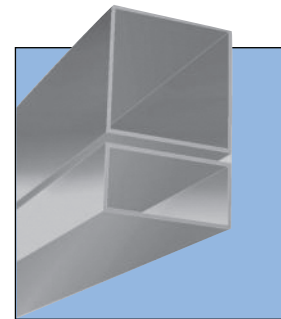
FINISH:

POLISHED 180 HAIRLINE SBP
POLISHED 400 GRIT 400

SQUARE TUBE

SIZE mm	T304	T316	
	SBP	SBP	400
12.7 x 12.7 x 9	○		
12.7 x 12.7 x 1.2	●	○	
19 x 19 x 1.2	●	○	○
19 x 19 x 1.6	●	●	
22.2 x 22.2 x 1.2	○	○	
22.2 x 22.2 x 1.6	●	○	
25.4 x 25.4 x 1.2	●	○	
25.4 x 25.4 x 1.6	●	●	●
31.8 x 31.8 x 1.2	●	○	
31.8 x 31.8 x 1.6	●	●	●
38.1 x 38.1 x 1.2	●	○	
38.1 x 38.1 x 1.6	●	●	●
50.8 x 50.8 x 1.2	●	○	
50.8 x 50.8 x 1.6	●	●	●

● regularly stocked

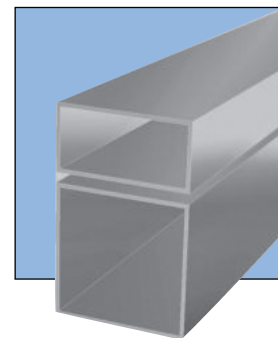


SIZE mm	T304	T316	
	SBP	SBP	400
25 x 25 x 2	●	○	○
25 x 25 x 3	●	○	○
32 x 32 x 2	●	○	○
32 x 32 x 3	●	○	○
38 x 38 x 2	●	○	
38 x 38 x 3	●	●	○
50 x 50 x 2	●	○	
50 x 50 x 3	●	●	○
80 x 80 x 2	●	○	
80 x 80 x 3	●	●	○
100 x 100 x 3	●	●	○
100 x 100 x 5	●	○	○
150 x 150 x 5	●	○	○

RECTANGLE TUBE

SIZE mm	T304	T316	
	SBP	SBP	400
38.1 x 25.4 x 1.6	○	○	
50.8 x 25.4 x 1.2	●	○	
50.8 x 25.4 x 1.6	●	●	○
80 x 40 x 1.6	●	○	○

SIZE mm	T304	T316	
	SBP	SBP	400
50 x 25 x 3	●	●	
60 x 40 x 3	●	●	
80 x 40 x 3	●	●	○
100 x 50 x 2	●	○	
100 x 50 x 3	●	●	○
150 x 75 x 5	●	○	○
150 x 100 x 5	●	○	○

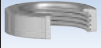
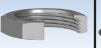







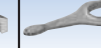



HYGIENIC FITTINGS

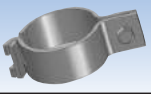
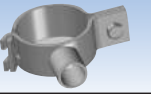
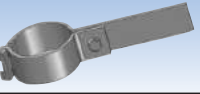
SPECIFICATIONS:

BSM/RJT Fittings to AS1528 Part 4 - 1976

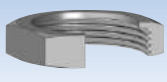
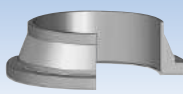
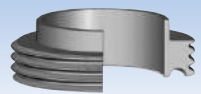


BSM FITTINGS

SIZE mm	ROUND Slotted Nut	HEX. Nut	PLAIN Liner	MALE Part	O-RING EPDM	O-RING Teflon	O-RING Viton	CIP Seal	BLANK Cap	BLANK Nut	ALUMN. Spanner
25											
	●	●	●	●	○	●	●	●	●	○	●
50	●	●	●	●	○	●	●	●	●	○	●
76	●	●	●	●	○	●	●	●	●	○	●
125	○	●	●	●	○	●	●	●	●	○	●
	○	●	●	●	○	●	●	●	●	○	●

TUBE CLAMPS

SIZE mm	PLAIN	BOSSED	LONTANG
19			
	●	●	
25	●	●	●
32	●	●	●
38	●	●	●
50	●	●	●
63	●	●	●
76	●	●	●
100	●	●	●
125	○	○	○
150	●	●	●

HYGIENIC FLAT FACE FITTINGS

SIZE mm	HEX NUT	FLAT FACE LINER	MALE PART LIP REMOVED	SEAL EPDM	SEAL TEFLON
					
12	●	●	●	●	○
19	●	●	●	●	○
25	●	●	●	●	○
38	●	●	●	●	○
50	●	●	●	●	○
63	●	●	●	●	○
76	●	●	●	●	○
100	●	●	●	●	○
125	○	○	○	○	○
150	●	●	●	●	○



HYGIENIC FITTINGS

SPECIFICATIONS:

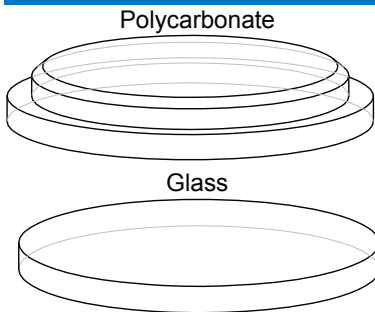
TRICLOVER AS1528, part 2 - 1976

● regularly stocked

SIZE mm	CLAMP BODY	FERRULE LONG	BLANK CAP	SEAL EPDM	SEAL BUNA	SEAL TEFLON	SEAL VITON
20	●	●	●	●	○	○	○
25	●	●	●	●	○	○	○
38	●	●	●	●	○	○	○
50	●	●	●	●	○	○	○
63	●	●	●	●	○	○	○
76	●	●	●	●	○	○	○
100	●	●	●	●	○	○	○
125	○	○	○	○	○	○	○
150	●	●	●	●	●	●	●



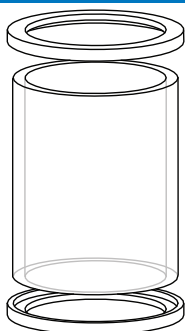
BULLSEYE / PORTHOLE SPARE LENS



SIZE			
25mm			
38mm			
50mm			
63mm	POLY-CARBONATE	STD ARMOUR PLATE GLASS	H/DTY ARMOUR PLATE GLASS
76mm			
100mm			
125mm			
150mm			
	(SG1)	(SG2)	(SG3)

* std Armour Plate Lens: 6mm Thick H/Duty: 12mm Thick

UNION/LANTERN SPARE PARTS



SIZE				
25mm				
38mm				
50mm				
63mm	GLASS	POLY-CARBONATE	EPDM SET	TEFLON SET
76mm				
100mm				
150mm				
	(SG4)	(SG5)	(SG6)	(SG7)

TUBE FITTINGS

SPECIFICATIONS

AUSTRALIAN STANDARD 1528











PART 3 - 1975

BENDS: CLR 1.50

FINISH:

BENDS: UNPOLISHED AND POLISHED

OTHERS: POLISHED




SIZE		THICK	90° BEND		45° BEND		180° BEND	EQUAL TEE		Y PEICE	CAP	CROSS
												
INCH	mm	mm	304	316	304	316	316	304	316	316	316	316
1/2	12.7	1.6		●					●			
5/8	15.88	1.6		●								
3/4	19.05	1.6	●	●		●	●		●			
1	25.4	1.6	●	●		●	●		●	○	●	●
1 1/4	31.8	1.6	●	●		●	●		●	○	●	○
1 1/2	38.1	1.6	●	●		●	●	●	●	○	●	●
1 3/4	44.45	1.6		●								
2	50.8	1.6	●	●		●	●	●	●	○	●	●
2 1/2	63.5	1.6	●	●	○	●	●	●	●	○	●	○
3	76.2	1.6	●	●	○	●	●	●	●	○	●	●
3 1/2	88.9	1.6		●								
4	101.6	1.6	●	●	○	●	●	●	●	○	●	○
5	127	1.6	●	●	○	●	●	●	●	○	○	○
6	152.4	1.6	●	●	○	●	●	●	●	○	●	○
8	203.2	1.6	●	●	○	○	○	●	●			
10	254	1.6	○	○	○	○	○		○			
12	305	1.6	○	○	○	○	○		○			
1	25.4	2		○					○			
1 1/4	31.8	2		○					○			
1 1/2	38.1	2		○					○			
2	50.8	2		○					○			
2 1/2	63.5	2		○					○			
3	76.2	2		○					○			
4	101.6	2		○					○			
5	127	2		○					○			
6	152.4	2	●	●					○			
8	203.2	2	●	●					○			
10	254	2	●	●					○			
12	305	2	●	●					○			



REDUCING TUBE FITTINGS

SPECIFICATIONS:
AUSTRALIAN STANDARD 1528

● regularly stocked

OD		TK MM	CONCENTRIC REDUCER 	ECCENTRIC REDUCER 	REDUCING TEE 
Mm	INCHES				
19.1 x 12.7	¾ x ½	1.6	●	○	●
25.4 x 12.7	1 x ½	1.6	●	○	●
25.4 x 19.1	1 x ¾	1.6	●	●	●
31.8 x 19.1	1 ¼ x ¾	1.6		○	●
31.8 x 25.4	1 ¼ x 1	1.6	●	○	○
38.1 x 12.7	1 ¾ x ½	1.6	○	○	○
38.1 x 19.1	1 ½ x ¾	1.6	●	○	○
38.1 x 25.4	1 ½ x 1	1.6	●	●	○
38.1 x 31.8	1 ½ x 1 ¼	1.6	●	●	○
50.8 x 12.7	2 x ½	1.6	●	○	○
50.8 x 19.1	2 x ¾	1.6	●	●	●
50.8 x 25.4	2.1 x 1	1.6	●	●	●
50.8 x 31.8	2 x 1 ¼	1.6	●	●	○
50.8 x 38.1	2 x 1 ½	1.6	●	●	●
63.5 x 19.1	2 ½ x ¾	1.6	○	○	○
63.5 x 25.4	2 ½ x 1	1.6	●	○	○
63.5 x 31.8	2 ½ x 1 ¼	1.6	○	○	○
63.5 x 38.1	2 ½ x 1 ½	1.6	●	●	○
63.5 x 50.8	2 ½ x 2	1.6	●	●	●
76.2 x 19.1	3 x ¾	1.6	○	○	○
76.2 x 25.4	3 x 1	1.6	●	●	●
76.2 x 31.8	3 x 1 ¼	1.6	●	○	○
76.2 x 38.1	3 x 1 ½	1.6	●	●	○
76.2 x 50.8	3 x 2	1.6	●	●	●
76.2 x 63.5	3 x 2 ½	1.6	●	●	●
101.6 x 25.4	4 x 1	1.6	●	○	○
101.6 x 38.1	4 x 1 ½	1.6	●	○	○
101.6 x 50.8	4 x 2	1.6	●	●	●
101.6 x 63.5	4 x 2 ½	1.6	●	●	○
101.6 x 76.2	4 x 3	1.6	●	●	●
127 x 50.8	5 x 2	1.6	○	○	○
127 x 63.5	5 x 2 ½	1.6	○	○	○
127 x 76.2	5 x 3	1.6	●	○	○
127 x 101.6	5 x 4	1.6	●	●	○
152.4 x 25.4	6 x 1	1.6	○	○	○
152.4 x 50.8	6 x 2	1.6	●	●	○
152.4 x 63.5	6 x 2 ½	1.6	●	○	○
152.4 x 76.2	6 x 3	1.6	●	●	○
152.4 x 101.6	6 x 4	1.6	●	●	●
152.4 x 127	6 x 5	1.6	●	○	○
203.2 x 101.6	8 x 4	1.6	●	●	○
203.2 x 127	8 x 5	1.6	○	○	○
203.2 x 152.4	8 x 6	1.6	●	○	○



SIGHT GLASSES

**BULLSEYE SIGHT GLASS
C/W POLYCARBONATE LENS**



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

**PORTHOLE SIGHT GLASS
C/W POLYCARBONATE LENS**



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

**BULLSEYE SIGHT GLASS
C/W ARMOUR PLATE LENS**



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

**PORTHOLE SIGHT GLASS
C/W ARMOUR PLATE LENS**



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

UNION TYPE SIGHT GLASS



SIZE
25mm
38mm
50mm
76mm
100mm

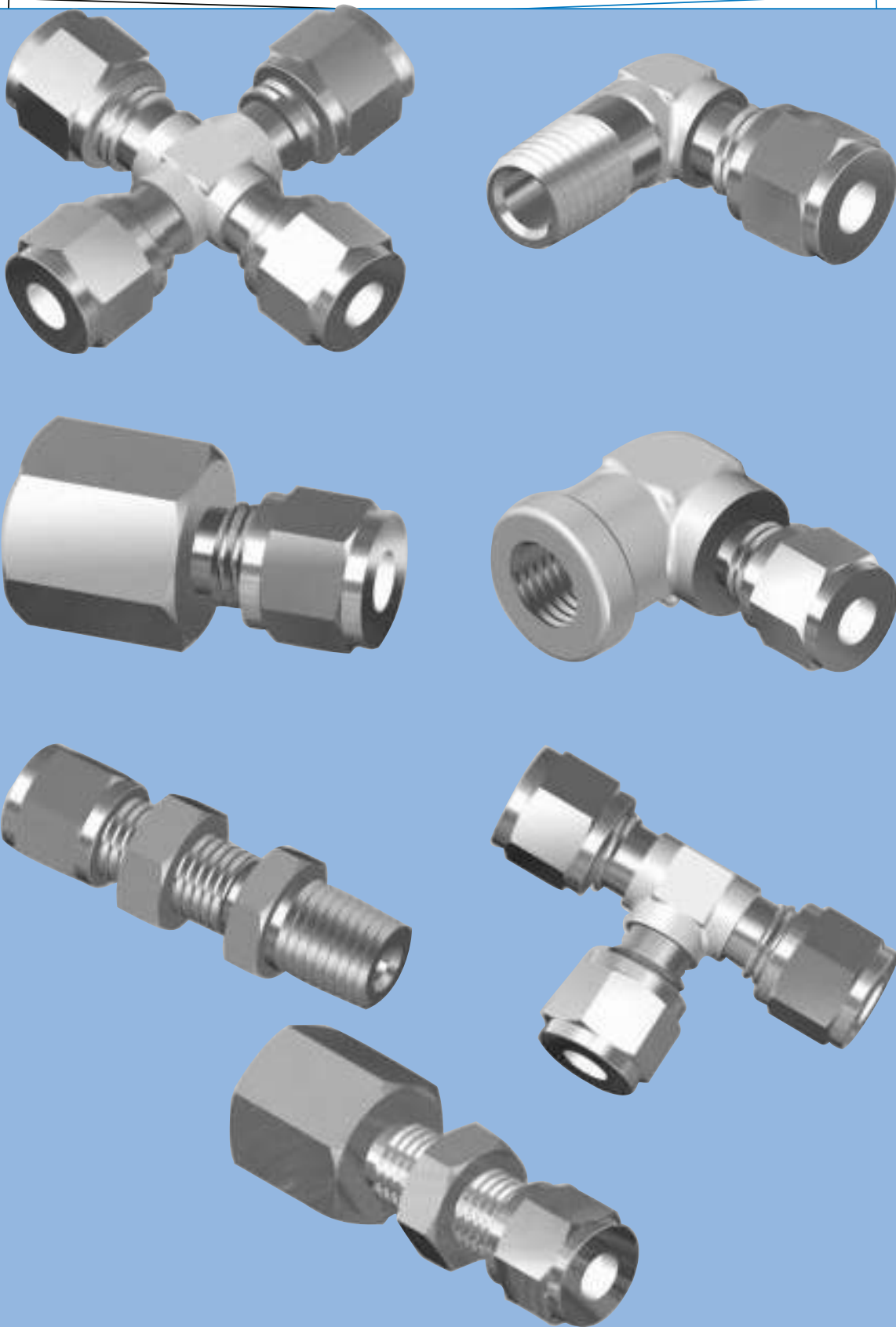
**LANTERN TYPE SIGHT
GLASS**



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
150mm



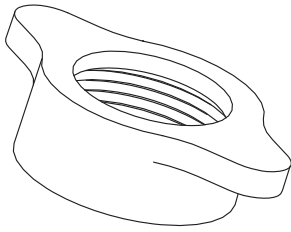
COMPRESSION FITTINGS



WINE FITTINGS

WINE BRASS NUT

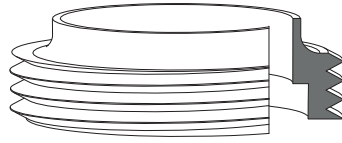
(WBN)



- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

WINE MALE PART

(WM)

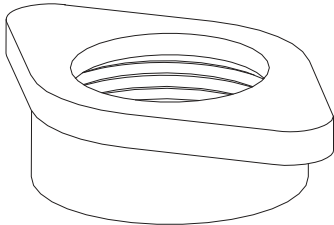


Material Grade: 316

- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

WINE S/S WING NUT

(WN)



Material Grade: 304

- SIZE**
 50mm
 76mm
 100mm

WINE LINER SLIP ON

(WLS)



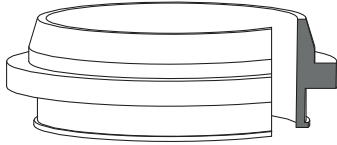
Material Grade: 316

- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm



WINE LINER B/W

(WLBW)

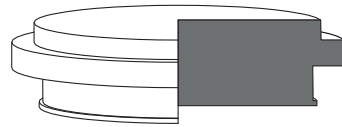


Material Grade: 316

- SIZE**
 38mm
 50mm
 76mm
 100mm

WINE BLANK CAP

(WBC)

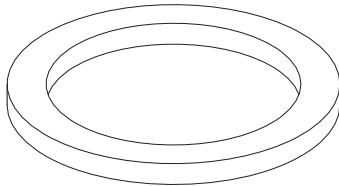


Material Grade: 316

- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

WINE EPDM SEAL

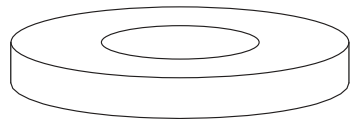
(WS)



- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

WINE MALE PROTECTOR

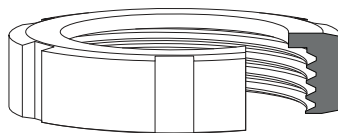
(WMP)



- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

WINE S/S SLOTTED NUT

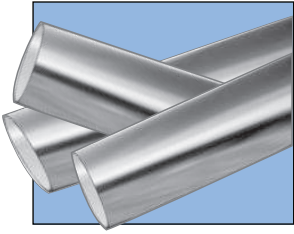
(WSN)



Material Grade: 304

- SIZE**
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

SEAMLESS AND WELDED PIPE



SPECIFICATIONS: ASTM A312/94B

LENGTHS: 6.1 METRE RANDOMS

FINISH: WELDED ANNEALED & PICKLED
SEAMLESS COLD FINISH/HOT FINISH

● regularly stocked

NB PIPE SIZE		SIZE		WELDED			SEAMLESS			APPROX.WGT
INCH	mm	O.D.	WT	304/L	316/L	2205	304/L	316/L	2205	KG/MTR
SCHEDULE 10										
1/8	6	10.287	1.244			○	○	○		0.2772
1/4	8	13.716	1.651	●	●	○	○	○		0.4905
3/8	10	17.145	1.651	●	●	○	○	○	○	0.6301
1/2	20	26.67	2.108	●	●	○	○	○	○	1.275
1	25	33.401	2.768	●	●	○	○	○	○	2.089
1 1/4	32	42.164	2.768	●	●	○	○	○	○	2.687
1 1/2	40	48.26	2.768	●	●	○	○	○	○	3.102
2	50	60.325	2.768	●	●	○	○	○	○	3.925
2 1/2	65	73.025	3.048	●	●	○	○	○	○	5.254
3	75	88.9	3.048	●	●	○	○	○	○	6.45
3 1/2	90	101.6	3.048	●	●	○	○	○	○	7.399
4	100	114.3	3.048	●	●	○	○	○	○	8.352
5	125	141.3	3.403	●	●	○	○	○	○	11.56
6	150	168.275	3.403	●	●	○	○	○	○	13.82
8	200	219.075	3.759	●	●	○	○	○	○	19.93
10	250	273.05	4.191	●	●	○			○	27.82
12	300	323.85	4.572	●	●	○				35.95
14	350	355.6	6.35	●	●	○				41.3
16	400	406.4	6.35	○	○	○				47.29
18	450	457.2	6.35	○	○	○				70.51
20	500	508	6.35	○	○					78.56
24	600	609.6	6.35	○	○					94.35
				○	○					
SCHEDULE 40										
1/8	6	10.287	1.727							0.3641
1/4	8	13.716	2.235	●	●		○	○		0.6321
3/8	10	17.145	2.311	●	●	○	○	○		0.8445
1/2	15	21.336	2.768	●	●	○	○	●		1.266
3/4	20	26.67	2.87	●	●	○	○	●		1.682
1	25	33.401	3.378	●	●	○	○	●	○	2.498
1 1/4	32	42.164	3.556	●	●	○	○	●	○	3.382
1 1/2	40	48.26	3.683	●	●	○	○	●	○	4.044
2	50	60.325	3.911	●	●	○	○	●	○	5.435
2 1/2	65	73.025	5.156	●	●	○	○	●	○	8.619
3	80	88.9	5.486	●	●	○	○	●	○	11.27
3 1/2	90	101.6	5.74	●	●	○	○	●	○	13.55
4	100	114.3	6.019	●	●	○	○	○	○	16.05
5	125	141.3	6.553	●	●	○	○	●	○	21.75
6	150	168.275	7.112	●	●	○	○	●	○	28.22
8	200	219.075	8.178	●	●	○	○		○	42.48
10	250	273.05	9.271	●	●	○				60.23
12	300	323.85	9.53	●	●	○				73.88
14	350	355.6	11.12	○	○	○				94.28
16	400	406.4	12.7	○	○					123.1
18	450	457.2	14.27	○	○					155.9
20	500	508	15.06	○	○					182.8
24	600	609.6	17.44	○	○					54.7



BUTTWELD PIPE FITTINGS

SCH 10 / SCH 40







SPECIFICATIONS:

ASTM A403
ANSI B16.9

MATERIAL:

WELDED / SEAMLESS

● regularly stocked

SIZE		90d ELBOW				45 ELBOW		EQUAL TEE		STUB END		CAPS
		LONG RADIUS 		SHORT RADIUS 		LONG RADIUS 				TYPE B 		
INCH	mm	304L	316L	304L	316L	304L	316L	304L	316L	304L	316L	316L
SCHEDULE 40												
1/2	15	●	●	○	○	●	●	●	●	○	○	○
3/4	20	●	●	○	○	●	●	●	●	○	○	○
1	25	●	●	○	○	●	●	●	●	○	●	●
1 1/4	32	●	●	○	○	●	●	●	●	○	●	●
1 1/2	40	●	●	○	○	●	●	●	●	○	●	●
2	50	●	●	○	○	●	●	●	●	○	●	●
2 1/2	65	●	●	○	○	●	●	●	●	○	●	●
3	80	●	●	○	○	●	●	●	●	○	●	●
3 1/2	90	●	●	○	○	●	●	●	●	○	●	○
4	100	●	●	○	○	●	●	●	●	○	●	●
5	125	○	●	○	○	○	●	●	●	○	○	○
6	150	●	●	○	○	●	●	●	●	○	●	●
8	200	●	●	○	○	●	●	●	●	○	●	●
10	250	●	●	○	○	○	●	○	●	○	○	○
12	300	●	●	○	○	○	●	○	●	○	○	○
SCHEDULE 40												
1/2	15	●	●	○	○	●	●	●	●	○	○	○
3/4	20	●	●	○	○	●	●	●	●	○	○	●
1	25	●	●	○	○	●	●	●	●	○	●	●
1 1/4	32	●	●	○	○	●	●	●	●	○	●	●
1 1/2	40	●	●	○	○	●	●	●	●	○	●	●
2	50	●	●	○	○	●	●	●	●	○	●	●
2 1/2	65	●	●	○	○	●	●	●	●	○	●	●
3	80	●	●	○	○	●	●	●	●	○	●	●
3 1/2	90	●	●	○	○	●	●	●	●	○	●	○
4	100	●	●	○	○	●	●	●	●	○	●	●
5	125	○	●	○	○	○	●	○	●	○	○	○
6	150	●	●	○	○	●	●	●	●	○	●	●
8	200	●	●	○	○	●	●	●	●	○	●	●
10	250	●	●	○	○	○	●	○	●	○	○	○
12	300	●	●	○	○	○	●	○	●	○	○	○



BUTTWELD PIPE FITTINGS



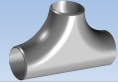
SPECIFICATIONS:

ASTM A403
ANSI B16.9

MATERIAL:

WELDED / SEAMLESS

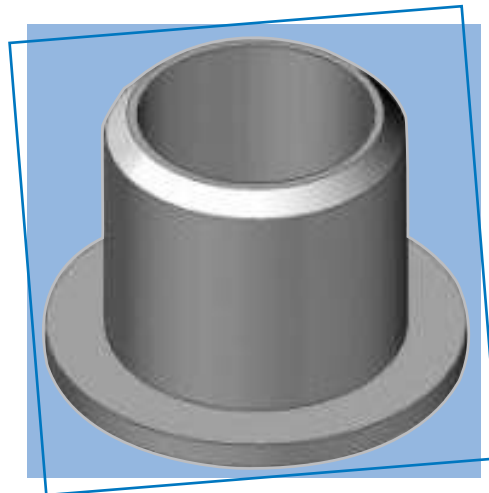
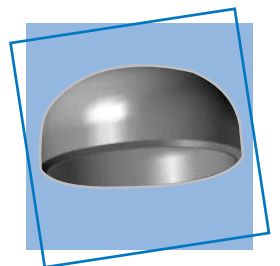
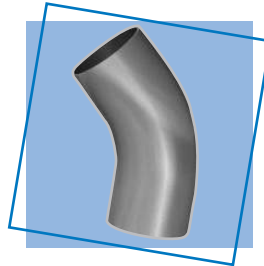
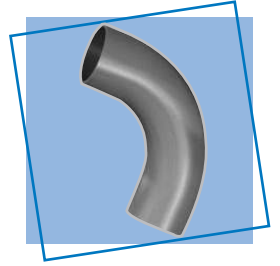
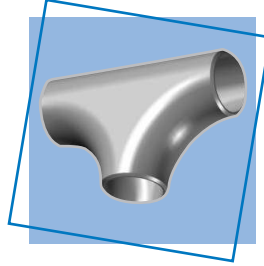
● regularly stocked

SIZE		CONCENTRIC REDUCER				ECCENTRIC REDUCER		REDUCING TEE	
									
		SCH 10		SCH 40		SCH 10	SCH 40	SCH10	SCH40
INCH	mm	304L	316L	304L	316L	316L	316L	316L	316L
3/4 x 1/2	20 x 15	○	●	○	●	●	●	○	○
1 x 1/2	25 x 15	○	●	○	●	●	●	○	○
1 x 3/4	25 x 20	○	●	○	●	●	●	○	○
1 1/4 x 1/2	32 x 15	○	●	○	●	●	●	○	○
1 1/4 x 3/4	32 x 20	○	●	○	●	●	●	○	○
1 1/4 x 1	32 x 25	○	●	○	●	●	●	○	○
1 1/2 x 1/2	40 x 15	○	●	○	●	●	●	○	○
1 1/2 x 3/4	40 x 20	○	●	○	●	●	●	○	○
1 1/2 x 1	40 x 25	○	●	○	●	●	●	○	○
1 1/2 x 1 1/4	40 x 32	○	●	○	●	●	●	○	○
2 x 3/4	50 x 20	○	○	○	○	○	○	○	○
2 x 1	50 x 25	○	●	○	●	●	●	○	○
2 x 1 1/4	50 x 32	○	●	○	●	●	●	○	○
2 x 1 1/2	50 x 40	○	●	○	●	●	●	○	○
2 1/2 x 1	65 x 25	○	●	○	●	●	●	○	○
2 1/2 x 1 1/4	65 x 32	○	○	○	○	○	○	○	○
2 1/2 x 1 1/2	65 x 40	○	●	○	●	●	●	○	○
2 1/2 x 2	65 x 50	○	●	○	●	●	●	○	○
3 x 1	80 x 25	○	●	○	●	●	●	○	○
3 x 1 1/4	80 x 32	○	○	○	○	○	○	○	○
3 x 1 1/2	80 x 40	○	●	○	●	●	●	○	○
3 x 2	80 x 50	○	●	○	●	●	●	○	○
3 x 2 1/2	80 x 65	○	●	○	●	●	●	○	○
3 1/2 x 1 1/2	90 x 40	○	○	○	○	○	○	○	○
3 1/2 x 2	90 x 50	○	○	○	○	○	○	○	○
3 1/2 x 2 1/2	90 x 65	○	○	○	○	○	○	○	○
3 1/2 x 3	90 x 80	○	○	○	○	○	○	○	○
4 x 1 1/2	100 x 40	○	●	○	●	●	●	○	○
4 x 2	100 x 50	○	●	○	●	●	●	○	○
4 x 2 1/2	100 x 65	○	●	○	●	●	●	○	○
4 x 3	100 x 80	○	●	○	●	●	●	○	○
4 x 3 1/2	100 x 80	○	○	○	○	○	○	○	○
5 x 2	125 x 50	○	○	○	○	○	○	○	○
5 x 2 1/2	125 x 65	○	○	○	○	○	○	○	○
5 x 3	125 x 80	○	○	○	○	○	○	○	○
5 x 3 1/2	125 x 90	○	○	○	○	○	○	○	○
5 x 4	125 x 100	○	○	○	○	○	○	○	○
6 x 2	150 x 50	○	○	○	○	○	○	○	○
6 x 2 1/2	150 x 65	○	○	○	○	○	○	○	○
6 x 3	150 x 80	○	●	○	●	●	●	○	○
6 x 3 1/2	150 x 90	○	○	○	○	○	○	○	○
6 x 4	150 x 100	○	●	○	●	●	●	○	○
6 x 5	150 x 125	○	○	○	○	○	○	○	○
8 x 3	200 x 80	○	○	○	○	○	○	○	○
8 x 3 1/2	200 x 90	○	○	○	○	○	○	○	○
8 x 4	200 x 100	○	●	○	●	●	●	○	○
8 x 5	200 x 125	○	○	○	○	○	○	○	○
8 x 6	200 x 150	○	●	○	●	●	●	○	○
10 x 4	250 x 100	○	○	○	○	○	○	○	○
10 x 5	250 x 125	○	○	○	○	○	○	○	○
10 x 6	250 x 150	○	●	○	●	○	○	○	○
10 x 8	250 x 200	○	●	○	●	●	●	○	○
12 x 5	300 x 125	○	○	○	○	○	○	○	○
12 x 6	300 x 150	○	○	○	○	○	○	○	○
12 x 8	300 x 200	○	●	○	●	●	●	○	○
12 x 10	300 x 250	○	●	○	●	●	●	○	○



TECHNICAL DATA

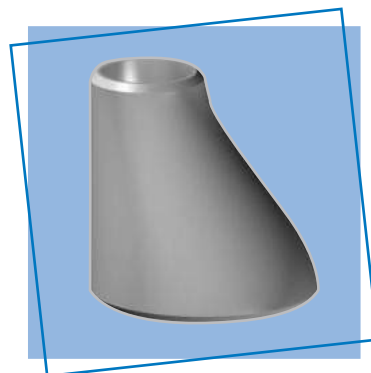
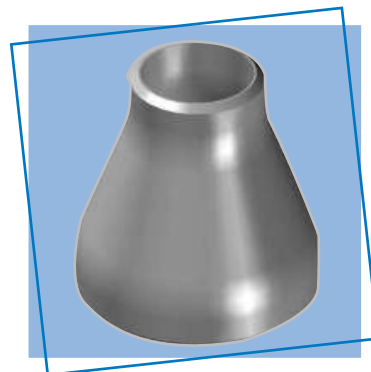
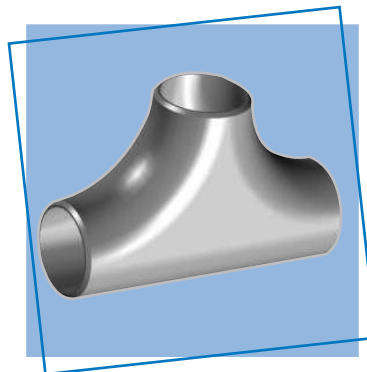
NOMINAL PIPE SIZE		WALL THICKNESS SCHEDULE	
INCH	MM	10S	40S
½	15	2.11	2.77
¾	20	2.11	2.87
1	25	2.77	3.38
1 ¼	32	2.77	3.56
1 ½	40	2.77	3.68
2	50	2.77	3.91
2 ½	65	3.05	5.16
3	80	3.05	5.49
1 ½	90	3.05	5.74
4	100	3.05	6.02
5	125	3.4	6.55
6	150	3.4	7.11
8	200	3.76	8.18
10	250	4.19	9.27
12	300	4.57	9.52



NOMINAL PIPE SIZE	
INCH	MM
½	15
¾	20
1	25
1 ¼	32
1 ½	40
2	50
2 ½	65
3	80
3 ½	90
4	100
5	125
6	150
8	200
10	250
12	300

TECHNICAL DATA BUTTWELD PIPE FITTING DIMENSIONS

NOMINAL PIPE SIZE	
INCH	INCH
3/4	x 1/2
1	x 1/2
	x 3/4
1 1/4	x 1/2
	x 3/4
	x 1
1 1/2	x 1/2
	x 3/4
	x 1
	x 1 1/4
2	x 3/4
	x 1
	x 1 1/4
	x 1 1/2
2 1/2	x 1
	x 1 1/4
	x 1 1/2
	x 2
3	x 1
	x 1 1/4
	x 1 1/2
	x 2
	x 2 1/2
3 1/2	x 1 1/2
	x 2
	x 2 1/2
	x 3
4	x 1 1/2
	x 2
	x 2 1/2
	x 3
	x 3 1/2
5	x 2
	x 2 1/2
	x 3
	x 3 1/2
	x 4
6	x 2
	x 2 1/2
	x 3
	x 3 1/2
	x 4
	x 5
8	x 3
	x 3 1/2
	x 4
	x 5
	x 6
10	x 4
	x 5
	x 6
	x 8
12	x 5
	x 6
	x 8
	x 10

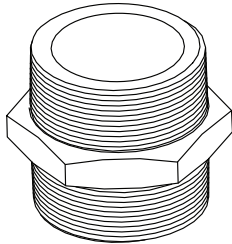


BSP FITTINGS



BSP HEX NIPPLE

(BPNH)



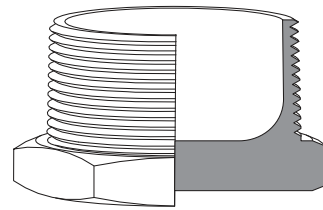
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP PLUG

(BPP)



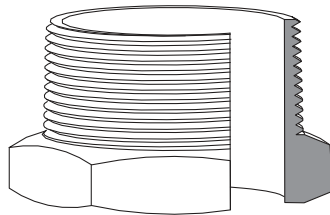
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP HALF HEX NIPPLE

(BPHHN)



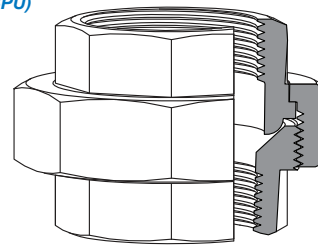
Material Grade: 316

SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP UNION

(BPU)



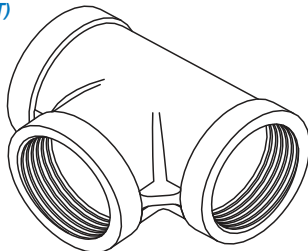
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

BSP FEMALE TEE

(BPT)



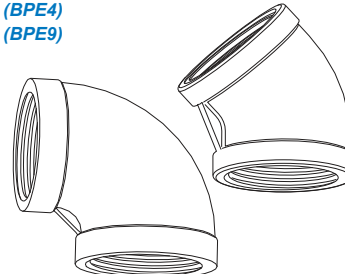
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP ELBOW FEMALE

(BPE4)
(BPE9)



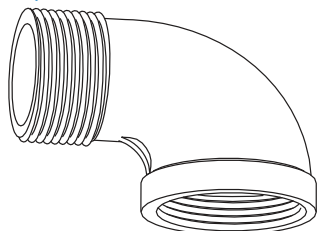
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP 90° M/F ELBOWS

(BPEMF)



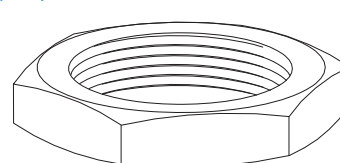
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

BSP LOCK NUT

(BPN)



Material Grade: 316

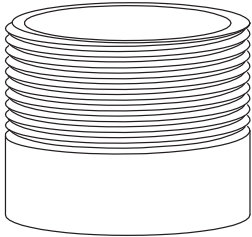
SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP FITTINGS

BSP TOE NIPPLE

(BPTN)



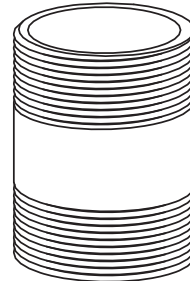
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm

BSP BARREL NIPPLE

(BPNB)



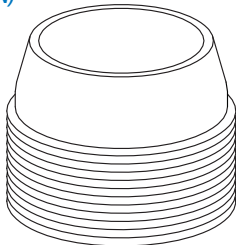
Material Grade: 316

SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm

BSP TOE NIPPLE TUBE/REDUCING

(BPTTN)



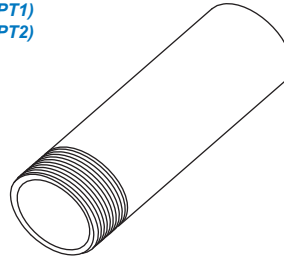
Material Grade: 316

SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

BSP EXTENDED TOE NIPPLE

(BPT1)
(BPT2)



Material Grade: 316

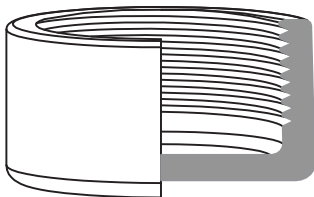
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Available in 100mm & 150mm lengths.

BSP ROUND CAP

(BPCR)



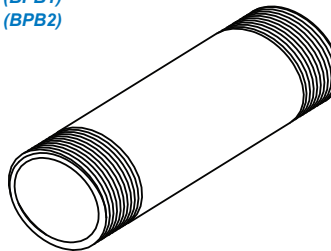
Material Grade: 316

SIZE

- 63mm
- 76mm
- 100mm

BSP EXTENDED BARREL NIPPLE

(BPB1)
(BPB2)



Material Grade: 316

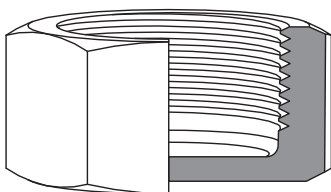
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Available in 100mm & 150mm lengths.

BSP HEX CAP

(BPCH)



Material Grade: 316

SIZE

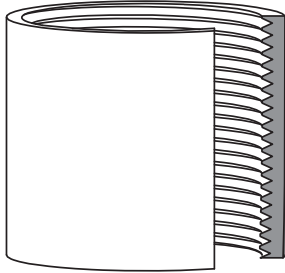
- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm



BSP FITTINGS

BSP SOCKET

(BPS)

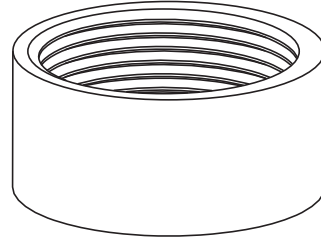


Material Grade: 316

SIZE
3mm
6mm
9mm
12mm
18mm
25mm
31mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

BSP HALF SOCKET

(BPHS)

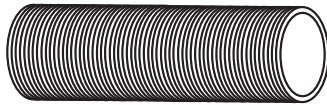


Material Grade: 316

SIZE
6mm
9mm
12mm
18mm
25mm
31mm
38mm
50mm
63mm
76mm
100mm
125mm
150mm

BSP PARALLEL THREAD 150mm LONG

(BP150)

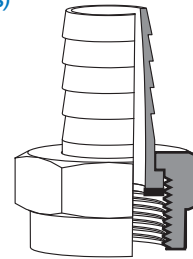


Material Grade: 316

SIZE
3mm
6mm
9mm
12mm
18mm
25mm
31mm
38mm
50mm
63mm
76mm
100mm

BSP FEMALE (swivel) HOSETAIL

(BPHFS)

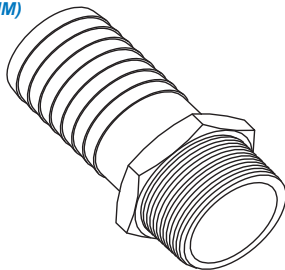


Material Grade: 316

SIZE
6mm
9mm
12mm
18mm
25mm
31mm
38mm
50mm

BSP HOSETAIL MALE

(BPHM)



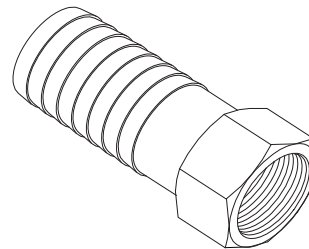
Material Grade: 316

SIZE
3mm
6mm
9mm
12mm
18mm
25mm
31mm
38mm
50mm
63mm
76mm
100mm

Reduc'n sizes available

BSP FEMALE (FIXED) HOSETAIL

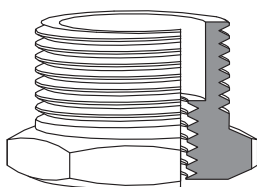
(BPHFF)



Material Grade: 316

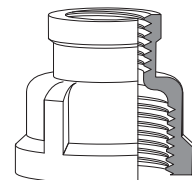
SIZE
38mm
50mm
63mm
76mm
100mm

BSP REDUCING FITTINGS

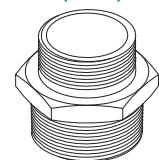


(BPRB)

SIZE		
6>3		
9>6,3		
12>9,6,3		
18>12,9,6		
25>18,12	Red	Red
31>25	Bush	Nipple
38>31,25		
50>38>31>25		
63>50		
76>63,50		
100>76,63,50		



(BPRS)

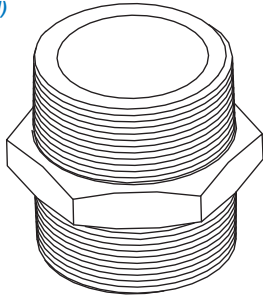


Material Grade: 316
(BPRN)

NPT FITTINGS

NPT HEX NIPPLE

(NPHN)



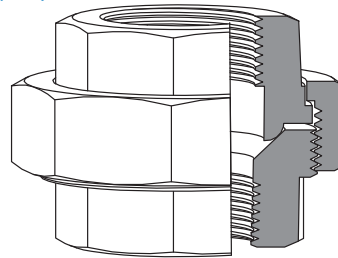
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316

NPT UNION

(NPU)



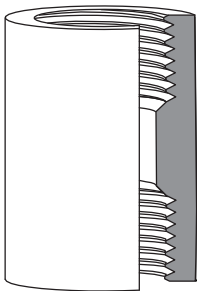
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316

NPT FULL/HALF COUPLING

(NPFC)
(NPHC)



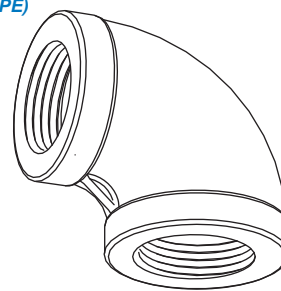
SIZE

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316

NPT 90° F/F ELBOW

(NPE)



SIZE

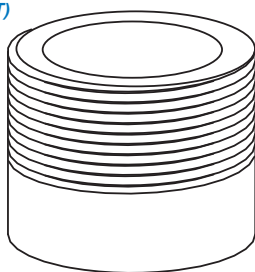
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316



NPT TOE NIPPLE

(NPNT)



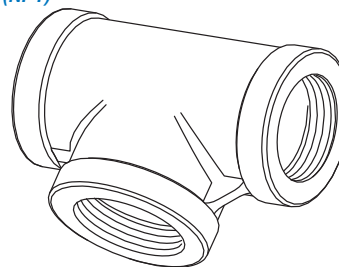
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 150mm

Material Grade: 316

NPT FEMALE TEE

(NPT)



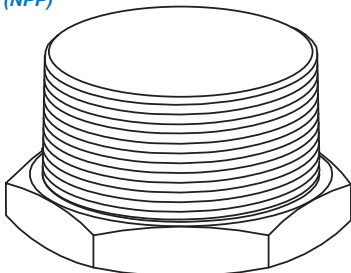
SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316

NPT HEX PLUG

(NPP)



SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Material Grade: 316

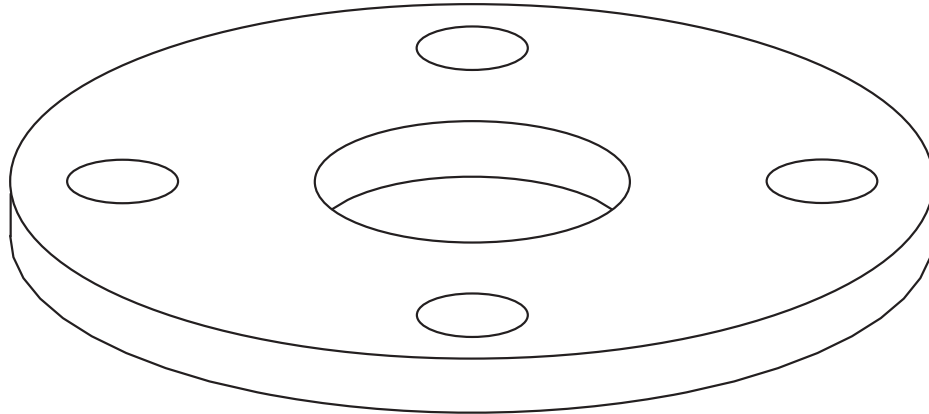
SOCKET WELD FITTINGS

Available on Request

TUBE FLANGES

T/D & T/E

S/S TABLE FLANGES TO SUIT TUBE OR PIPE



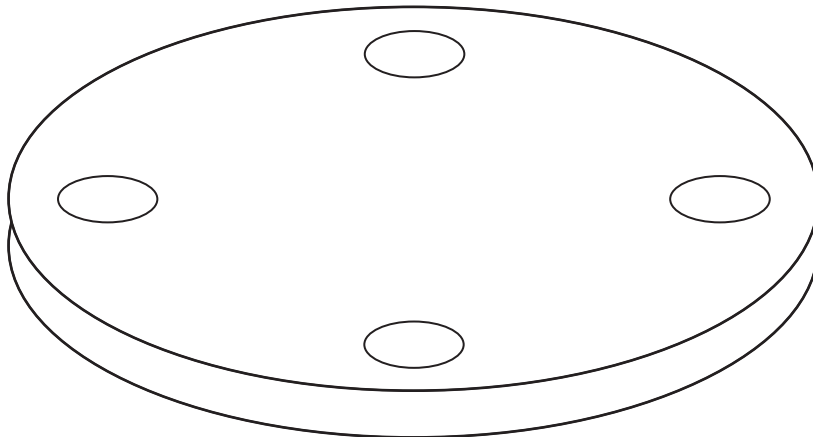
- SIZE**
- 12mm
 - 18mm
 - 25mm
 - 31mm
 - 38mm
 - 50mm
 - 63mm
 - 76mm
 - 100mm
 - 125mm
 - 150mm
 - 200mm
 - 250mm
 - 300mm
 - 350mm
 - 400mm
 - 450mm
 - 500mm
 - 600mm

(FLD4) (FLD6) (FLE4) (FLE6) (FLH6)

OTHER SIZES AVAILABLE ON REQUEST



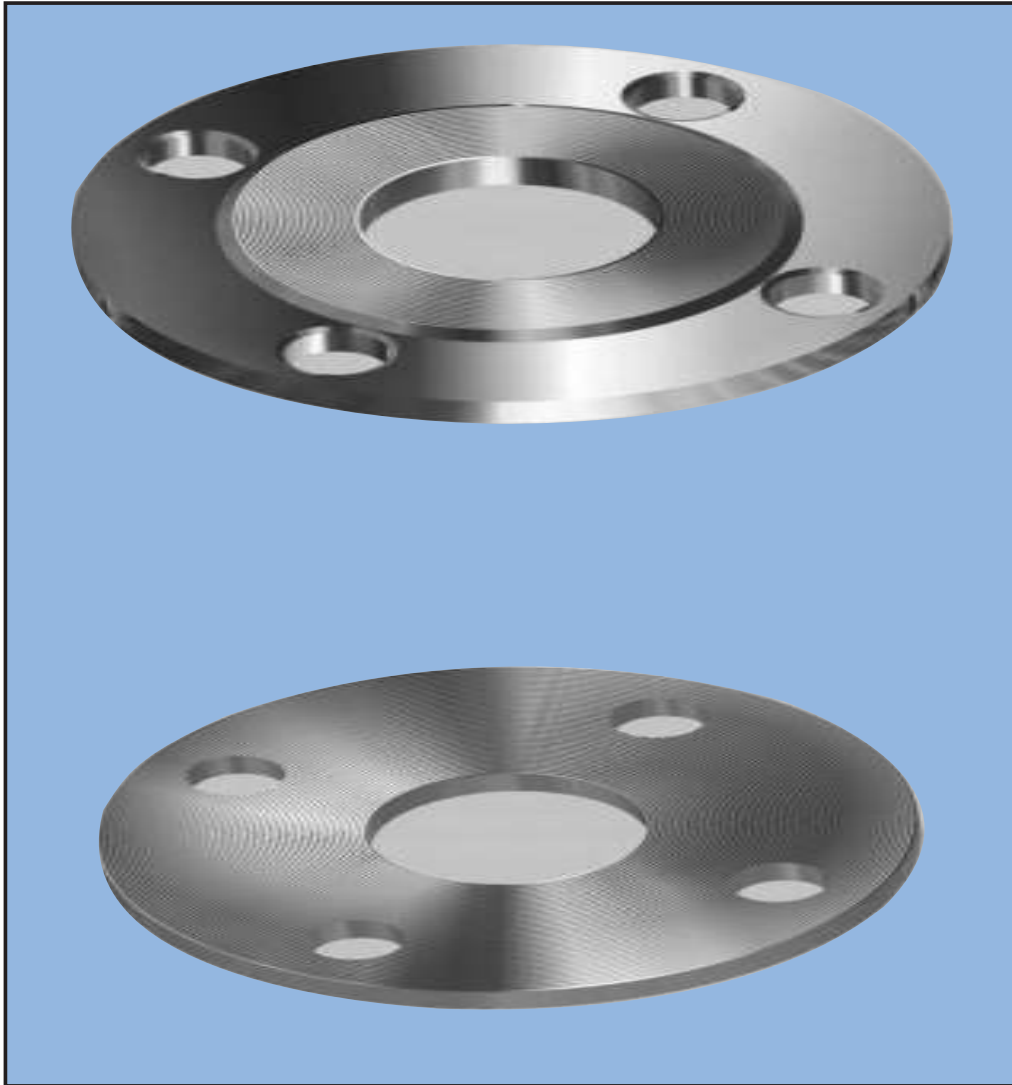
S/S BLIND TABLE FLANGES



- SIZE**
- 12mm
 - 18mm
 - 25mm
 - 31mm
 - 38mm
 - 50mm
 - 63mm
 - 76mm
 - 100mm
 - 125mm
 - 150mm
 - 200mm
 - 250mm
 - 300mm

(FLBD4) (FLBD6) (FLBE4) (FLBE6)

TUBE FLANGES

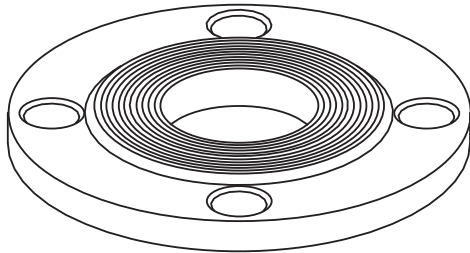


BOTH AVAILABLE IN 304 AND 316

**OTHER SPECIALITY FLANGES
AVAILABLE UPON REQUEST**

ANSI / DIN FLANGES

S/S DIN & ANSI FLANGES 316

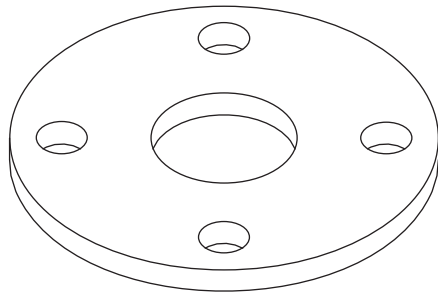


SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm
- 450mm
- 500mm
- 600mm



GALV. BACKING FLANGES

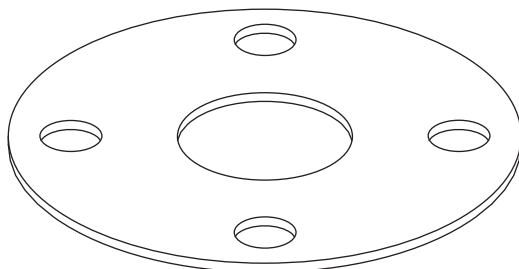


SIZE

- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm
- 450mm
- 500mm
- 600mm

FLANGE GASKETS (suit tube)

*TD/TE - INSERTION RUBBER
 * DIN / ANSI - EPDM



SIZE

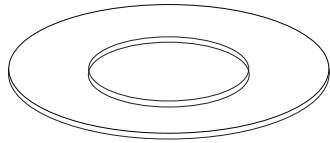
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm

TUBE / PIPE ANGLE RINGS



CEILING PLATE - PLAIN

(CP)



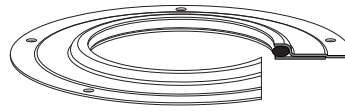
Material Grade: 316

SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm

CEILING PLATE C/W ORING

(CPOR)

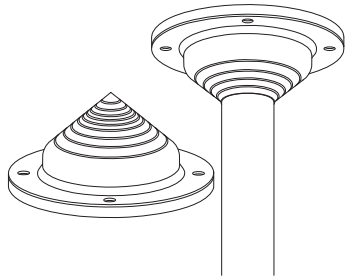


Material Grade: 316

SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm

PIPETITES



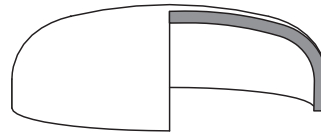
SIZE RANGE

- 0 - 25mm
- 0 - 65mm
- 0 - 95mm
- 70 - 135mm
- 100 - 180mm

Made from food grade high temperature silicone.

TUBE END CAP

(TEC)

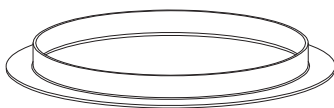


Material Grade: 316

SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm

TUBE ANGLE RING



SIZE

- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm
- 450mm
- 500mm
- 600mm

TUBE STUB END

(TSE)

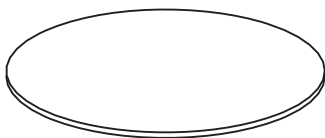


SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm

TUBE END DISC

(TED1, TED2)



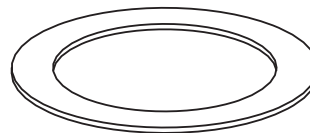
Material Grade: 316

SIZE

- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm
- 125mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm
- 450mm
- 500mm

JACKET END DISC

(JED)

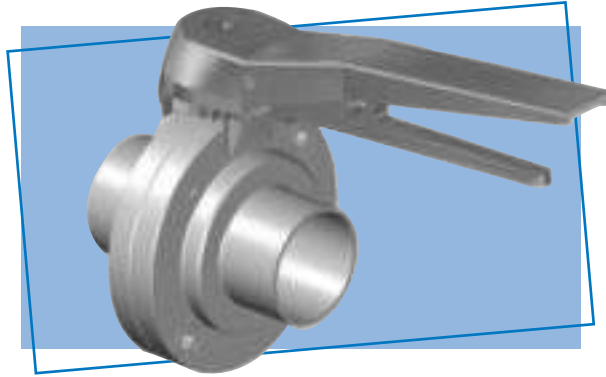


Material Grade: 316

SIZE

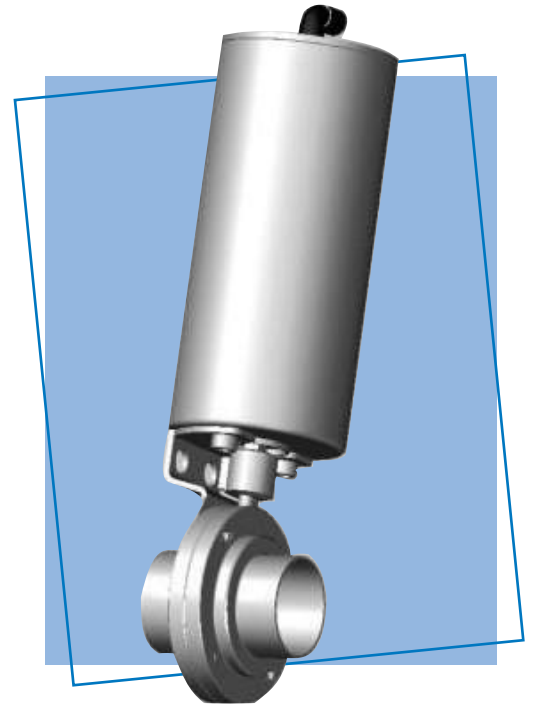
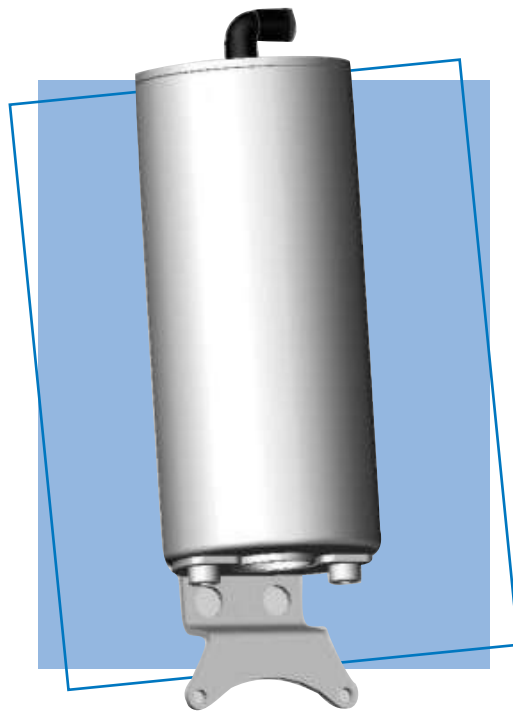
- 38x25mm
- 50x38mm
- 50x25mm
- 63x50mm
- 63x38mm
- 76x63mm
- 76x50mm
- 76x38mm
- 100x76mm
- 100x63mm
- 100x50mm
- 127x100mm
- 150x127mm
- 150x100mm
- 200x150mm

BUTTERFLY VALVES

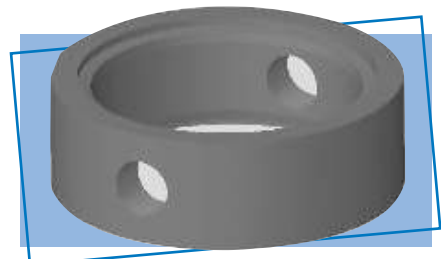


- Size
- 12mm
 - 18mm
 - 25mm
 - 38mm
 - 50mm
 - 63mm
 - 76mm
 - 100mm
 - 150mm
 - 200mm

Actuators



Available in Air - Air or Air - Spring configuration



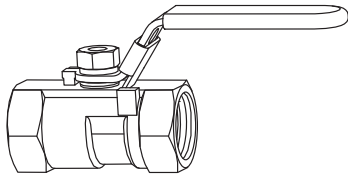
Seals available to suit valves



BALL VALVES

BSP 1pce RED BORE BALL VALVE

(BV1)

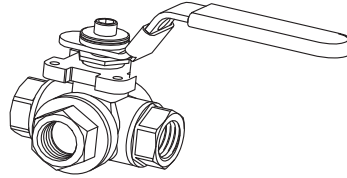


SIZE

- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

BSP 3 WAY BALL VALVE

(BV3W)



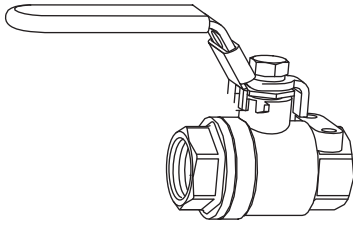
SIZE

- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm

Available in 'L' port & 'T' port.

BSP 2pce FULL BORE BALL VALVE

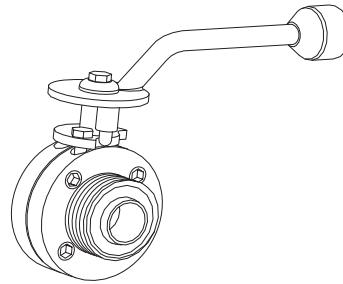
(BV2)



SIZE

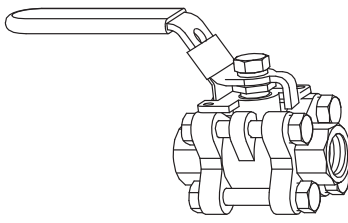
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm

2" HYGENIC BALL VALVE



BSP 3pce FULL BORE BALL VALVE

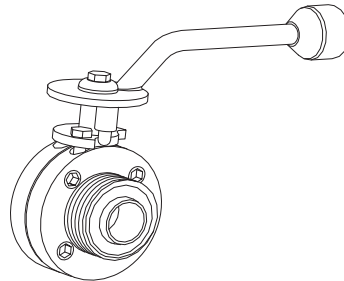
(BV3)



SIZE

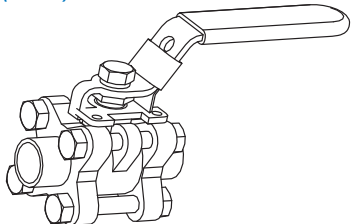
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm
- 31mm
- 38mm
- 50mm
- 63mm
- 76mm
- 100mm

3" HYGENIC BALL VALVE



B/W 3pce FULL BORE BALL VALVE

(BVBW)



SIZE

- 12mm
- 18mm
- 25mm
- 38mm
- 50mm

KNIFE GATE VALVES

FOR FOOD & INDUSTRIAL APPLICATIONS

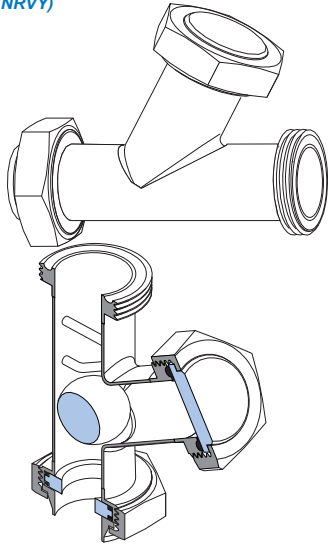
**ALL SIZES AVAILABLE,
SPECIALIZING IN LARGE DIAMETER**



NON RETURN VALVES

Y BALL NON RETURN VALVE

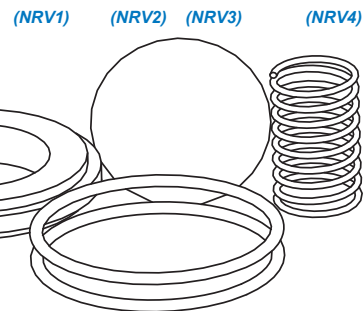
(NRVY)



SIZE
25mm
38mm
50mm
63mm
76mm
100mm

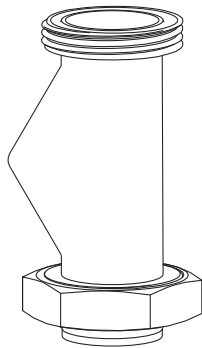
NON RETURN VALVE SPARES

SIZE
12mm
18mm
25mm
38mm
50mm
63mm
76mm
100mm
150mm



INLINE BALL NON RETURN VALVE

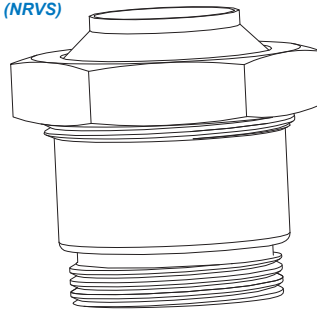
(NRVi)



SIZE
25mm
38mm
50mm
63mm
76mm
100mm

SPRING PLATE NON RETURN VALVE

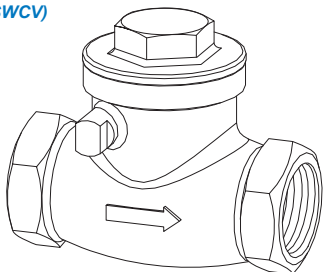
(NRVS)



SIZE
25mm
38mm
50mm
63mm
76mm
100mm
150mm

BSP SWING CHECK VALVE

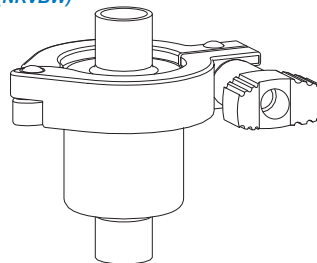
(SWCV)



SIZE
12mm
18mm
25mm
31mm
38mm
50mm
75mm

B/W SPRING NON RETURN VALVE

(NRVBW)

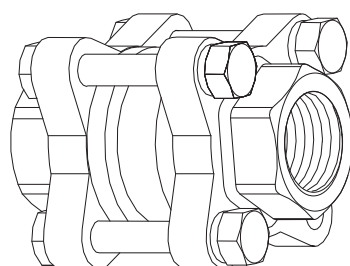


SIZE
12mm
18mm

*Ferrule ends available

BSP SPRING CHECK VALVE

(SPCV)



SIZE
12mm
18mm
25mm
31mm
38mm
50mm

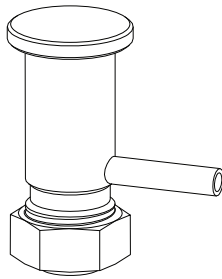


SAMPLE VALVES



MALE SAMPLE VALVE

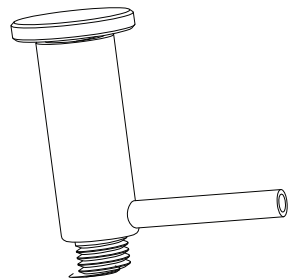
(SV2)



SIZE
18mm

BSP MALE SAMPLE VALVE

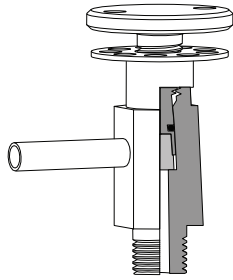
(SV1)



SIZE
9mm

BSP LOCKABLE SAMPLE VALVE

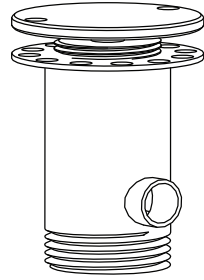
(SV3)



SIZE
12mm

F/FACE LOCKABLE SAMPLE VALVE

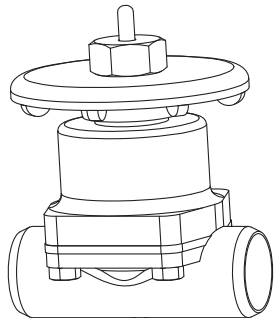
(SV6)



SIZE
25mm

FULL FLOW DIAPHRAGM VALVE P/PLAIN

(DVP) (DVPP) (DVD)



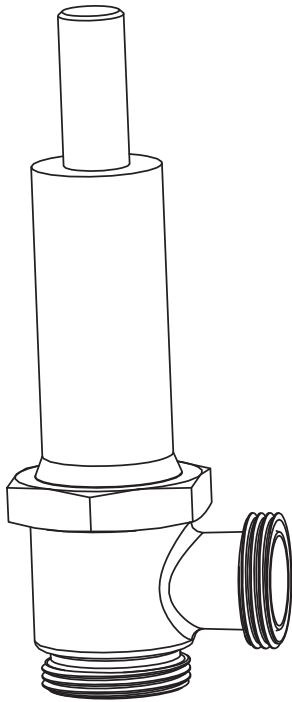
- SIZE**
- 25mm
 - 38mm
 - 50mm
 - 63mm
 - 76mm
 - 100mm
 - 150mm

- ACTUATED VALVES A/AIR**
- 76mm
 - 100mm

PRESSURE RELIEF VALVES

PRESSURE RELIEF VALVE

(PRV)

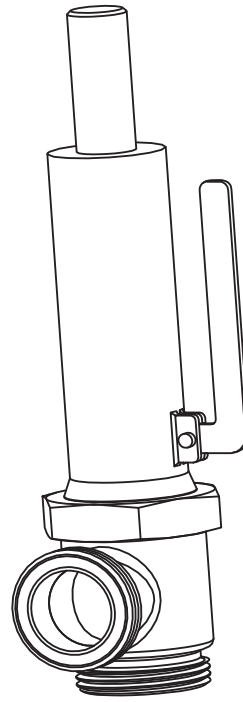


SIZE
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

NOTE: Standard Valves designed to work between 25-150Psi. All other spring settings POA.

PRV C/W MANUAL OVERRIDE

(PRVM)

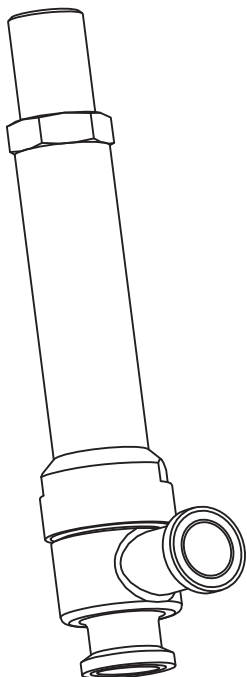


SIZE
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm



FERRULE PRV

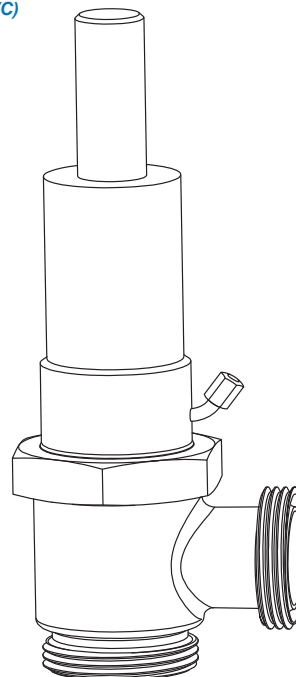
(PRVF)



SIZE
 12mm
 18mm

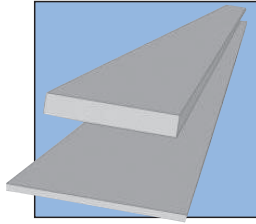
CIP PRV

(PRVC)



SIZE
 25mm
 38mm
 50mm
 63mm
 76mm
 100mm

FLAT BAR



SPECIFICATION:
ASTM A276/A484M

LENGTHS:
4 & 6 METRE

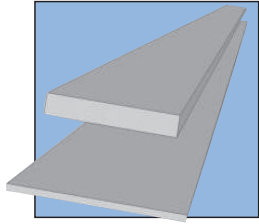
FINISH:
SLIT ROLLED EDGE (SRE)
HOT ROLLED ANNEALED
AND PICKLED (HRAP)

● regularly stocked



Mm	304		316		APPROX. WEIGHT kg/metre
	SRE	HRAP	SRE	HRAP	
3 x 12	●	○	●	○	0.317
3 x 20	●	●	●	○	0.48
3 x 25	●	●	●	●	0.63
3 x 30	●	●	●	●	0.79
3 x 40	●	●	●	●	0.948
3 x 50	●	●	●	●	1.3
3 x 75	○	○	●	○	1.98
5 x 20	●	●	●	○	0.79
5 x 25	●	●	●	●	0.987
5 x 30	●	●	●	●	1.19
5 x 40	●	●	●	●	1.58
5 x 50	●	●	●	●	1.97
5 x 65	●	●	●	●	2.56
5 x 75	●	●	●	○	2.96
6 x 12		●		●	0.648
6 x 20	●	●	●	●	0.97
6 x 25	●	●	●	●	1.93
6 x 30	●	●	●	●	1.62
6 x 40	●	●	●	●	1.93
6 x 50	●	●	●	●	2.59
6 x 65	●	●	●	●	34.25
6 x 75	●	●	●	●	3.89
6 x 90	○		●		4.52
6 x 100	●	●	●	●	5.10
6 x 150	●	○	●	○	7.38
8 x 50	●		●		3.28
8 x 65	●		●		4.26
8 x 75	●		●		4.92
8 x 100	●		●		6.56

FLAT BAR



SPECIFICATION:
ASTM A276/A484M

LENGTHS:
4 & 6 METRE

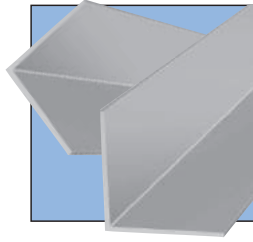
FINISH:
SLIT ROLLED EDGE (SRE)
HOT ROLLED ANNEALED
AND PICKLED (HRAP)

● regularly stocked

Mm	304		316		APPROX. WEIGHT kg/metre
	SRE	HRAP	SRE	HRAP	
10 x 20		●		●	1.58
10 x 25		●		●	1.97
10 x 30	●	●	●	●	2.43
10 x 40	●	●	●	●	3.16
10 x 50	●	●	●	●	3.96
10 x 65	●	●	●	●	5.13
10 x 75	●	●	●	●	5.93
10 x 100	●	●	●	●	7.9
10 x 125	○	○	○	○	10.16
10 x 150	○	○	○	○	11.83
12 x 25	●	●		●	2.59
12 x 30	○	○	○	○	3.25
12 x 40	●	●	●	●	3.89
12 x 50	●	●	●	●	5.18
12 x 65	●	●	●	●	6.48
12 x 75	●	●	●	●	7.77
12 x 100	●	●	●	○	10.36
16 x 40		●		○	5.05
16 x 50		●		●	6.48
16 x 65		●		○	8.21
20 x 50		●		○	7.9
20 x 75		●		●	11.9
20 x 100		●		●	15.8
25 x 50		●		○	10.36
25 x 75		●		○	15.48
25 X 100		●		○	20.69



ANGLE BAR



SPECIFICATION:
ASTM A276/A484M

LENGTHS:
6 METRE FIXED AND
RANDOMS

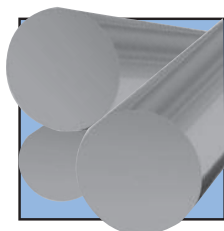
FINISH:
HOT ROLLED ANNEALED
AND PICKLED

● regularly stocked

SIZE mm	304	316	APPROX. WEIGHT kg/metre
3 x 20 x 20			0.9
3 x 25 x 25	●	●	1.21
3 x 30 x 30	●	●	1.53
3 x 40 x 40	●	●	1.86
3 x 50 x 50	●	●	2.5
4 x 30 x 30	●	●	1.95
4 x 40 x 40	●	○	2.6
5 x 25 x 25	●	○	1.77
5 x 30 x 30	●	●	2.25
5 x 40 x 40	●	●	2.98
5 x 50 x 50	●	●	3.79
6 x 25 x 25	●	●	2.26
6 x 30 x 30	●	●	2.92
6 x 40 x 40	●	●	3.56
6 x 50 x 50	●	●	4.95
6 x 65 x 65	●	●	6.16
6 x 75 x 75	●	●	7.46
6 x 100 x 100	●	●	10.05
10 x 50 x 50	●	●	7.06
10 x 65 x 65	●	●	9.48
10 x 75 x 75	●	●	11.1
10 x 100 x 100	●	●	15
10 x 127 x 127	○	○	20.1
10 x 150 x 150	○	○	23.7
12 x 100 x 100	○	○	19.6



ROUND BAR - IMPROVED MACHINING



SPECIFICATION:
ASTM A276

LENGTHS:
4 METRE FIXED AND
RANDOMS

FINISH:
COLD DRAWN AND POLISHED
PEELED AND REELED
CENTRELESS/
PRECISION GROUND

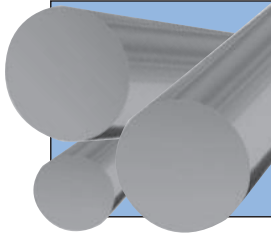
TOLERANCE:
H9/ H10 /
H11/ K12

● regularly stocked

mm	303	304	316	431	2205	253MA	APPROX. WEIGHT kg / metre
3.18		●	●				0.062
3.96		●	●				0.1
4.76		●	●				0.14
5		○	●				0.155
6	●	●	●			●	0.23
6.35	●	●	●				0.25
7.94		●	●				0.39
8		●	●			●	0.4
9.53	●	●	●	○			0.56
10		●	●	○		●	0.62
11.11		●	●				0.76
12	●	●	●	○		●	0.89
12.7		●	●				0.99
14.28		●	●				1.26
15.88		●	●	○			1.552
16		●	●			●	1.58
17.46		○	○				1.88
19.05	●	●	●	●	●		2.235
20	●	●	●	○		●	2.47
22.23		●	●				3.042
24		●	●				3.551
25	●	●	●	○		●	3.853
25.4	●	●	●	●	●		3.973
28.58		●	●				5.03
30		●	●				5.55
31.75		●	●	●	●		6.21
33		○	○				6.72
34.93		●	●			●	7.512
35		○	○			●	7.553
36		○	○				8



ROUND BAR - IMPROVED MACHINING



SPECIFICATION:
ASTM A276

LENGTHS:
4 METRE FIXED AND
RANDOMS

FINISH:
COLD DRAWN AND POLISHED
PEELED AND REELED
CENTRELESS/
PRECISION GROUND

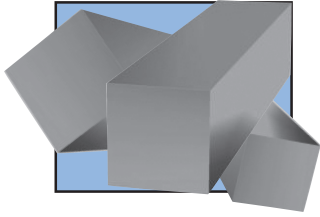
TOLERANCE:
H9/ H10 /
H11/ K12

● regularly stocked

mm	303	304	316	431	2205	253MA	APPROX.WEIGHT kg / metres
38.1		●	●	●	●		8.94
40		●	●			●	9.87
41.28		○	●				10.5
44.45		●	●		●		12.17
50		●	●			●	15.413
50.8		●	●	●	●		15.9
53.97		○	○				17.95
57.15		●	●				20.12
60		○	○				22.2
63.5		●	●	○			24.84
69.85		●	●				30.05
70						●	30.2
76.2		●	●				35.76
80						●	39.46
82.55		●	●				41.98
88.9		●	●				48.68
95.25			●				55.88
101.6		●	●				63.59
110						●	74.6
114.3		●	●				81.9
127		○	●			○	100.9
139.7		●	●				122.5
152.4		○	●			●	144.9
177.8		●	●				196.9
203.2		○	●				256.8
228.6			●				324.7
254			●				403
304.8			●				575.9



SQUARE BAR



SPECIFICATIONS:
ASTM A276 / A484M

LENGTHS:
RANDOMS

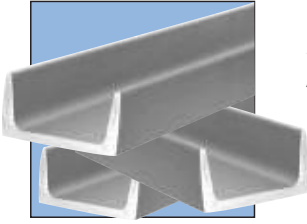
FINISH:
COLD DRAWN (CD)
HOT ROLLED
ANNEALED AND PICKLED
(HRAP0)

● regularly stocked

SIZE mm	304	316	AVG. WEIGHT kg/m
4	○	○	0.13
6	○	●	0.33
6.35	○	●	0.34
8	○	●	0.53
9.52	○	●	0.75
10	○	●	0.8
12	○	●	1.27
12.7	○	●	1.32
15.88	○	○	2.03
16	○	●	2.05
19.05	○	○	2.98
20	○	●	3.21
25	○	●	5.18
25.4	○	○	5.29
32	○	●	8.21
38.1	○	○	11.9
40	○	●	12.83
45	○	○	16.24
50	○	●	20.05
50.8	○	○	21.2



CHANNEL



SPECIFICATION:
ASTM A276
/A484M

LENGTHS:
6 METRE FIXED

FINISH:
HOT ROLLED ANNEALED
AND PICKLED (HRAP)

● regularly stocked

SIZE mm H x B	THICKNESS T MM							
	3	4	5	6	7	8	9	10
40 x 20	○							
50 x 25	○							
60 x 30		○	○	○				
70 x 35		○	○	○				
80 x 40		○	●	○				
90 x 45		○	○	○				
100 x 50		○	○	●	○	○	○	○
120 x 60			○	○	○	○		
130 x 65			○	○	○	○	○	○
140 x 70				○	○	○	○	○
150 x 75				●	○	○	○	○
160 x 80				○	○	○	○	○
180 x 90				○	○	○	○	○
200 x 100				○	○	○	○	○



HOLLOW BAR

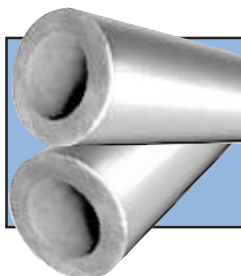
SPECIFICATIONS:
ASTM A511

GRADE:
316
(FREE MACHINIG)

LENGTHS:
2 TO 6
METRES

TOLERANCE:
OUTSIDE DIAMETER
+2/ - 0%
INSIDE DIAMETER
+0/ - 2%

SIZE	
O.D.	I.D.
mm	mm
32	20
	16
36	25
	20
	16
40	28
	25
	20
45	32
	28
	20
50	36
	32
	25
56	40
	36
	28
63	50
	40
	36
	32
71	56
	45
	40
	36
75	40
80	63
	50
	45
	40
85	45
90	71
	63
	56
	50
95	50
100	80
	71
	63
	56
106	80
	71
	63
	56



SIZE	
O.D.	I.D.
mm	mm
112	90
	80
	71
	63
118	90
	80
	71
	63
125	100
	90
	80
	71
132	106
	90
	80
	71
140	112
	100
	90
	80
150	125
	106
	95
	80
160	132
	122
	112
170	140
	130
	118
180	150
	140
	125
190	160
	150
	132
200	160
	150
	140
212	170
	130
224	180
	140
236	190
	150
250	200



SHEET

SPECIFICATIONS:

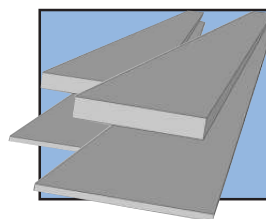
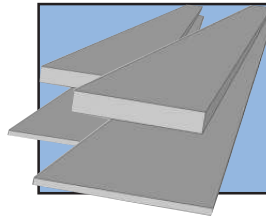
ASTM A240/480

FINISH:

2B, 2BPE, N4 PE, BAPE



SIZE	
0.45mm	915 x 1819
	1219 x 2438
0.55mm	915 x 1819
	915 x 2438
	1219 x 2438
0.7mm	915 x 1819
	915 x 2438
	1219 x 2438
0.9mm	915 x 1819
	915 x 2438
	1219 x 2438
1mm	1219 x 2438
	1250 x 2500
1.2mm	915 x 1819
	915 x 2438
	1219 x 2438
	3000 x 1219
	3000 x 1500
1.5mm	915 x 1819
	915 x 2438
	1219 x 1800
	1219 x 2438
	1219 x 3000
	1250 x 2400
	1250 x 2500
	1500 x 3000

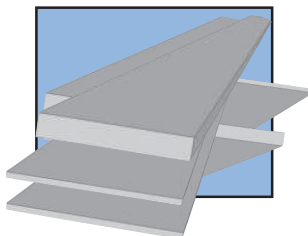
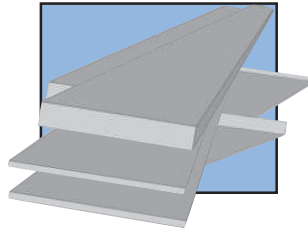


SIZE	
2mm	915 x 1819
	915 x 2438
	1219 x 1800
	1219 x 2438
	1219 x 3000
	1250 x 2400
	1250 x 2500
	1500 x 3000
2.5mm	915 x 1819
	915 x 2438
	1219 x 2438
	1219 x 3000
	1500 x 3000
3mm	915 x 1819
	915 x 2438
	1219 x 1800
	1219 x 2438
	1219 x 3000
	1250 x 2400
	1250 x 2500
	1250 x 3000
	1500 x 3000

PLATE

SPECIFICATIONS:
ASTM A240/ 480

FINISH:
2B, 2BPE, CPP, NO.1 HRAP

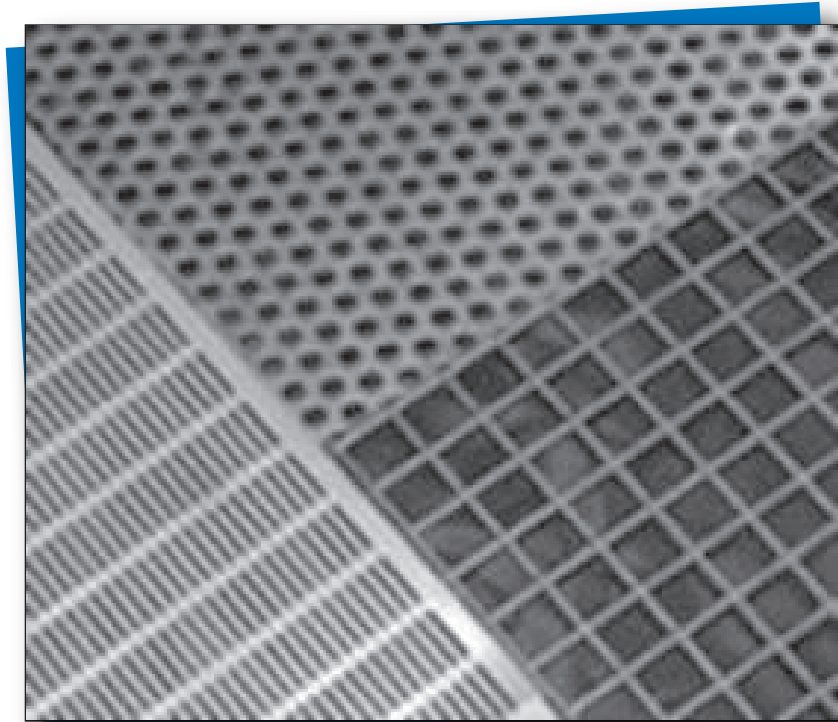


SIZE	
3	1500 x 3000
	1219 x 6000
	1500 x 6000
	2000 x 6000
4	1219 x 2438
	1500 x 3000
	1500 x 6000
	2000 x 6000
5	1219 x 2438
	1250 x 2500
	1500 x 3000
	1500 x 6000
	2000 x 6000
	2500 x 6000
6	1219 x 2438
	1250 x 2400
	1500 x 3000
	1500 x 6000
	2000 x 6000
	2500 x 6000
	2500 x 7500
8	1500 x 3000
	1500 x 6000
	2000 x 6000
	2500 x 6000
	2500 x 7500
10	1250 x 2500
	1500 x 3000
	1500 x 6000
	2000 x 6000
	2500 x 6000
	2500 x 7500

SIZE	
12	1500 x 6000
	2000 x 6000
	2500 x 6000
	2500 x 7000
	2500 x 7500
	3000 x 1500
16	1500 x 6000
	2000 x 6000
	2599 x 6000
20	1500 x 6000
	2000 x 6000
	2500 x 6000
25	1500 x 6000
	2000 x 6000
	2500 x 6000
32	1500 x 6000
	2000 x 6000
	2500 x 6000
40	1500 x 6000
	2000 x 6000
	2500 x 6000
50	1500 x 6000
	2000 x 6000
65	2000 x 4000
80	2000 x 4000



A&G SLOTTED SCREEN



ASSORTED SHEET SIZES AVAILABLE

PERFORATED MESH

STAINLESS STEEL TYPE 304 – ROUND 'O' HOLES

DESCRIPTION	HOLE SIZE (mm)	PITCH (mm)	OPEN AREA %	0.30mm thick	0.50mm thick	0.75mm thick	1.00mm thick	1.50mm thick	2.00mm thick	3.00mm thick
PR0.5 T1	0.50	1.00	23	▲						
PR0.8 T1.5	0.80	1.50	25		●					
PR1 T2	1.00	2.00	23		●	●	●			
PR1.5 T2.75	1.50	2.75	26				●			
PR2 T3	2.00	3.00	40				●			
PR2 T3.5	2.00	3.50	30		●		●	●		
PR3 T4	3.00	4.00	50				●			
PR3 T5	3.00	5.00	32		●		●■	●■	●	
PR4 T5	4.00	5.00	58				●			
PR4 T6	4.00	6.00	40				●			
PR4 T7	4.00	7.00	29					●	●	
PR5 T6	5.00	6.00	63				●	●		
PR5 T7	5.00	7.00	45		●		●			
PR5 T8	5.00	8.00	35				■	■	●	
PR5 T10	5.00	10.00	23							●
PR6 T8.5	6.00	8.50	45		●		●			
PR6 T9	6.00	9.00	40				●	●	●	
PR6 T12	6.00	12.00	23							●
PR8 T11	8.00	11.00	47				●			
PR8 T12	8.00	12.00	40					●	●	●
PR10 T13	10.00	13.00	53				●■			
PR10 T15	10.00	15.00	40					●■	●	●
PR12 T17	12.00	17.00	45					●		
PR15 T20	15.00	20.00	50				●			
PR15 T21	15.00	21.00	46					●		●



STAINLESS STEEL TYPE 316L – ROUND 'O' HOLES

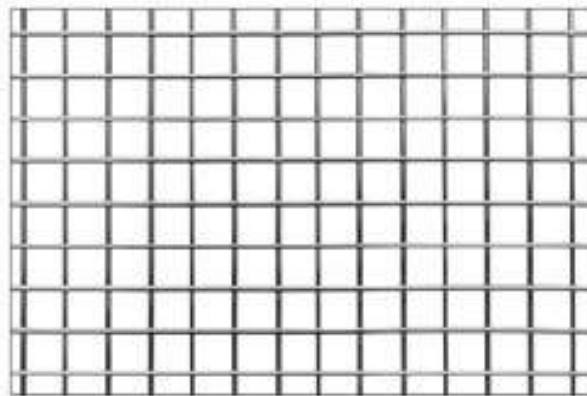
DESCRIPTION	HOLE SIZE (mm)	PITCH (mm)	OPEN AREA %	0.30mm thick	0.50mm thick	0.75mm thick	1.00mm thick	1.50mm thick	2.00mm thick	3.00mm thick
PR0.8 T1.5	0.8	1.50	25		●					
PR1.1 T2	1.1	2.00	23			●				
PR1.5 T2.75	1.50	2.75	26				●			
PR2 T3.5	2.00	3.50	30				●			
PR3 T4	3.00	4.00	50				●			
PR3 T5	3.00	5.00	32				●	●	●	
PR4 T7	4.00	7.00	29					●	●	
PR5 T7	5.00	7.00	45				●			
PR5 T8	5.00	8.00	35					●		
PR8 T11	8.00	11.00	47				●	●		
PR10 T15	10.00	15.00	40					●		

● = SHEET SIZE 2000mm x 1000mm ▲ = SHEET SIZE 3000mm x 670mm ■ = SHEET SIZE 2500mm x 1250mm

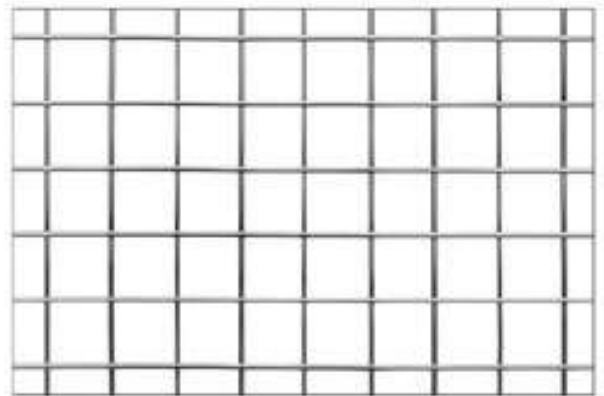
1/2 SIZE SHEETS ARE AVAILABLE FOR STAINLESS STEEL TYPES 304 & 316L ROUND 'O' HOLES

It is suggested that if stainless steel is to be used in an aggressive environment that it is pickled and passivated, and/or electropolished.

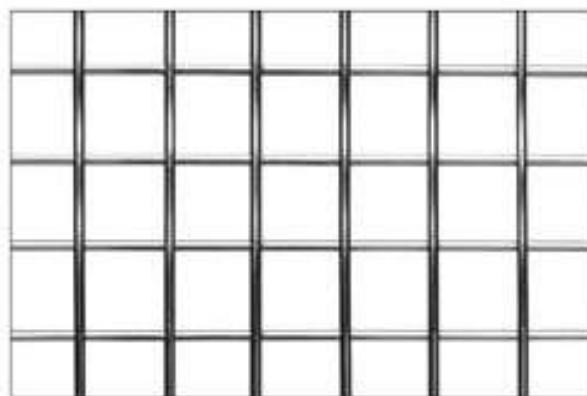
WELDED MESH



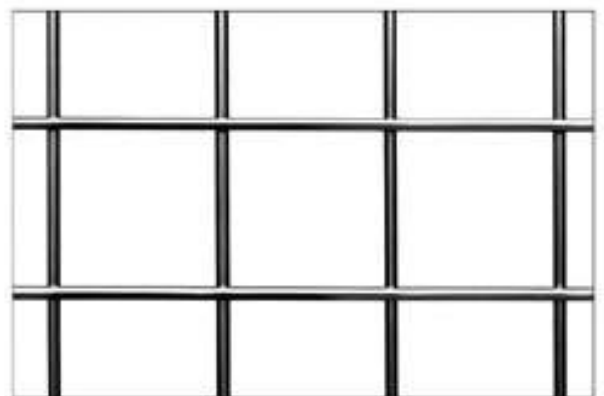
WELD-6.35



WELD-10



WELD-12.7



WELD-25.2

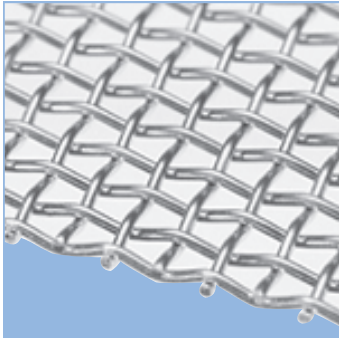


STAINLESS STEEL WELDED WIRE MESH

CODE	APERTURE mm	WIRE DIAMETER Ø mm	PITCH mm	GRADE	WIDTH mm
WLD-6.35-0.8	5.55	0.8	6.35	304	1220
WLD-10-1	9	1	10	304	1530
WLD-10-0.8	9.2	0.8	10	304	1220
WLD-12.7-1.6	11.1	1.6	12.7	304 & 316	1220
WLD-12.7-1.6A	11.1	1.6	12.7	304	915
WLD-12.7-1.2	11.5	1.2	12.7	304	1220
WLD-18-2	16	2	18	304	1220
WLD-25-2	23.4	2	25.4	304 & 316	1220
WLD-25-1.6	23.8	1.6	25.4	304	1220
WLD-25-1.6	24.4	1	25.4	316	1220
WLD-40-2	38	2	40	304	1220
WLD-50-2	48	2	50	304 & 316	1220
THE ABOVE ARE AVAILABLE IN ROLLS					
WLD-25-3A	21.85	3.15	25	304	2400 X 1200
WLD-25-3	21.85	3.15	25	304	2000 X 1000
WLD-25-3-6	21.85	3.15	25	316	2500 X 1200
WLD-50-4A	46	4	50	304	2400 X 1200
WLD-50-4	46	4	50	304	2000 X 1000
WLD-50-4-6	46	4	50	316	2500 X 1200
WLD-50-3	47	3	50	304	2500 X 1200
WLD-100-6	94	6	100	304	2500 X 1200
WLD-100-3	97	3.15	100	304	2500 X 1200

THE ABOVE ARE AVAILABLE IN PANELS

WOVEN WIRE



STAINLESS STEEL BOLTING CLOTH

TYPE 316

Bolting Cloth is commonly used for high capacity sifting where increased through-put per screen is important.

APPROXIMATE APERTURE mm & microns	WIRE DIAMETER Ø mm	OPEN AREA %	IMPERIAL MESH
1.6 mm	0.22	77	14
1.4	0.22	75	16
1.18	0.22	71	18
1.04	0.22	68	20
950 microns	0.22	66	22
850	0.22	63	24
780	0.2	63	26
710	0.2	61	28
680	0.165	65	30
630	0.165	63	32
580	0.165	61	34
540	0.165	59	36
500	0.165	57	38
475	0.16	56	40
460	0.14	59	42
440	0.14	57	44
410	0.14	56	46
390	0.14	54	48
375	0.14	53	50
350	0.14	51	52
320	0.114	55	58
310	0.114	53	60
300	0.114	52	62
280	0.10	54	66
260	0.09	54	72
250	0.09	53	74
240	0.09	52	76
220	0.09	50	80
210	0.09	50	84
200	0.09	48	88
180	0.09	45	94
150	0.065	47	120
130	0.06	47	135
105	0.05	47	165
90	0.04	46	200
75	0.04	43	220

AVAILABLE IN 1530mm WIDTHS
OTHER APERTURES AVAILABLE UPON REQUEST

MARKET GRADE STAINLESS STEEL WOVEN WIRE MESH

PLAIN SQUARE WEAVE

APPROXIMATE APERTURE mm	WIRE DIAMETER Ø mm	OPEN AREA %	IMPERIAL MESH	EQUIVALENT APPROXIMATE SWG
35	4	77	-	8
THE ABOVE IS AVAILABLE IN PANELS 2500 x 1220mm				
22.4	3.15	77	1 I/C	10
16	2.5	75	3/4 I/C	12
12.7	3	65	1.6 I/C	10
11.2	1.6	77	2 I/C	16
10.6	2	70	2 I/C	14
10	2.5	63	2 I/C	12
6.8	1.6	67	3	16
6.3	2	57	3	14
6.1	1.2	69	3.5	18
5.3	1	71	4	19
5.1	1.2	65	4	18
4.7	1.6	55	4	16
3.9	1.2	58	5	18
3.5	1.6	46	5	16
3.3	0.91	61	6	20
3	1.2	51	6	18
2.7	1.6	38	6	16
2.5	0.7	60	8	22
2.3	0.91	51	8	20
2.1	0.45	67	10	26
2	1.2	38	8	18
2	0.56	61	10	24
1.9	0.61	58	10	23
1.82	0.71	52	10	22
1.9	0.91	46	9	20
1.74	0.8	46	10	21
1.6	0.91	41	10	20
1.6	0.5	58	12	25
1.4	0.71	44	12	22
1.3	0.5	52	14	25
1.25	0.56	48	14	24
1.2	0.9	32	12	20
1.2	0.37	58	16	28
1.1	0.45	51	16	26
1	0.56	42	16	24
0.9	0.71	31	16	22
0.9	0.37	50	20	28
0.81	0.45	41	20	26
0.745	0.31	49	24	30
0.71	0.56	31	20	24
0.6	0.45	32	24	26
0.57	0.27	46	30	32
0.53	0.31	39	30	30
0.415	0.22	40	40	34
0.31	0.2	38	50	36
0.26	0.16	35	60	37
0.21	0.15	34	70	38
0.19	0.125	34	80	39
0.15	0.1	36	100	42
0.13	0.08	37	120	44
0.11	0.071	37	140	45
0.10	0.063	37	150	45
0.09	0.05	42	180	47
0.08	0.05	38	200	47
0.063	0.04	38	250 TW & PL	48
0.056	0.032	40	300 PL	49
0.053	0.04	32	270 TW (300)	48
0.045	0.036	31	325 TW	49
0.045	0.032	32	325 PL	49
0.04	0.032	31	350 TW	49.5
0.034	0.03	27	400 TW	49
0.025	0.025	25	500 TW	50

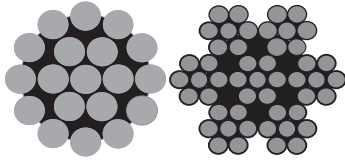
MOST GRADES AVAILABLE IN 1245mm WIDTHS
SOME GRADES AVAILABLE IN 1550mm WIDTHS
TYPE 316 & 304 GRADE SS
I/C – Intercrimp Mesh TW – TWILL WEAVE

Note: If the product is to be used in a harsh environment, we suggest that the finished product is pickled, passivated and / or electropolished



FASTENERS & HARDWARE

Wire Rope 316 (Marine Grade)

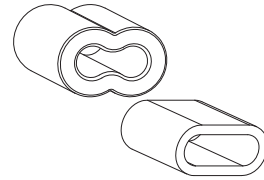


Available in different sizes

Available in 1x19 configuration or 7x7 for more flexibility.

Marine Grade 316

Copper Ferrule



Hand Swage

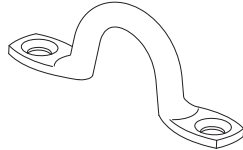
Price POA

Machine Swage

Price POA

To suit 3.2mm Wire

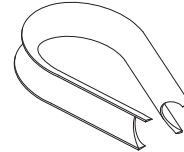
S/S 316 Saddle



Available in different sizes

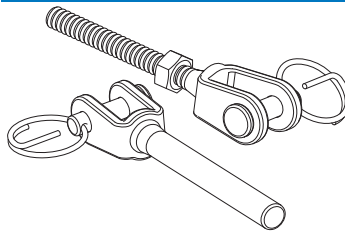
Marine Grade 316

S/S 304 Thimble



Available in different sizes

Fork Terminal Swage 316

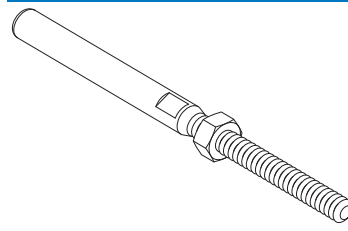


Available Options

- Fork Term Swage
- Fork Terminal Screw W/Lock Nut

Must be swaged using a Mechanical / Hydraulic Press

Threaded Terminal 316

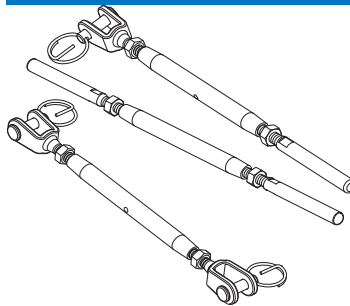


Available in different sizes

Marine Grade 316

Must be swaged using a Mechanical / Hydraulic Press

Rigging Screws 316



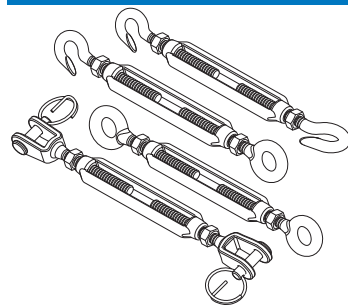
Config Options

- Swg+Swg W/Lock Nuts
- Jaw+Swg W/Lock Nuts
- Jaw+Jaw W/Lock Nuts

Marine Grade 316

Must be swaged using a Mechanical / Hydraulic Press

Turn Buckle Open Body W/Lock Nut



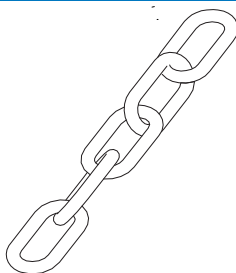
Config Options

- Eye + Eye
- Hook + Eye
- Hook + Hook
- Jaw + Jaw

Marine Grade 316

Available in Different sizes

STAINLESS STEEL CHAIN



Under Packed

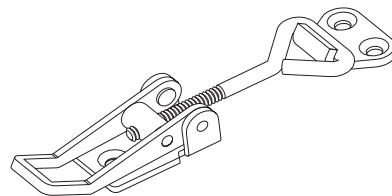
SIZE	30M	30M
2mm	10.00	8.00
2.5mm	11.00	9.00
3mm	11.00	9.00
4mm	15.00	13.00
5mm	17.00	14.00
6mm	28.00	24.00
8mm	60.00	52.00

(SSC1) (SSC3)

TOGGLE CLAMPS

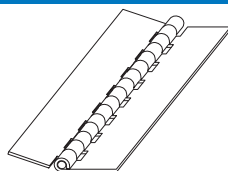
(TC)
(TCHD)

SIZE
STANDARD
H/DUTY



STAINLESS STEEL CHAIN

(PH)



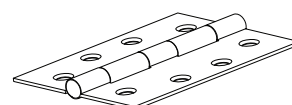
SIZE

25mm	(open)
38mm	(open)
50mm	(open)

Available in 1800mm Lengths

TOGGLE CLAMPS

(BH)



Width / Length

40x50
70x50
60x85
75x100

HEAVY DUTY

75x100
100x100

(BHHD)



INSULATED TUBE

SIZES STOCKED FROM:
12.7mm TUBING TO 609.6mm PIPE

AVAILABLE IN GALVINIZED OUTER
 STAINLESS STEEL OUTER
 COLOUR BOND OUTER

VARIOUS THICKNESSES OF INSULATION

JOINER KITS
BEND KITS
END CAP KITS

TO SUIT ALL INSULATED TUBE SIZES AND FINISHES



TANK MANUFACTURING



A&G Engineering are far more than Australia's leading designers and fabricators of stainless steel tanks and vessels. For more than 40 years we have been at the forefront of stainless steel tank manufacture and design, providing complete vessel engineering solutions.

Our extensive experience as steel fabricators shows we're dedicated to offering you the most effective solutions to your steel fabrication needs



FROM 500 LITRE TO 5 MILLION LITRE VESSELS

SMALL FERMENTER INSTALLATIONS TO LARGE TURNKEY PROJECTS

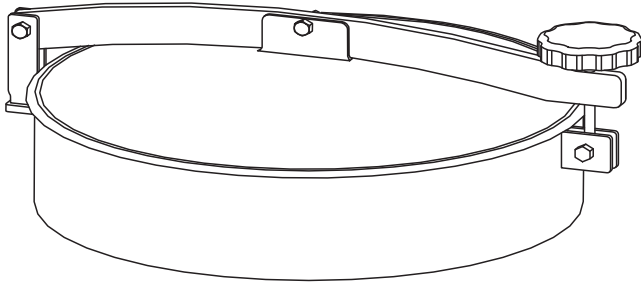


A & G ENGINEERING
EXCELLENCE BUILT ON INNOVATION & SERVICE

TANK EQUIPMENT

STAINLESS STEEL MANHOLES

(MH)

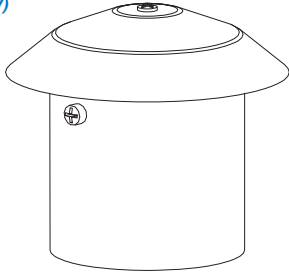


Check with A&G for pricing, numerous sizes available

- Material Grade (304 or 316)
- Size
- Shape (Round/Rectangle/Oval)
- Pressure Rating
- Seal Material
- Top or Side entry
- Outward or Inward opening

SAFETY VALVE

(SV)

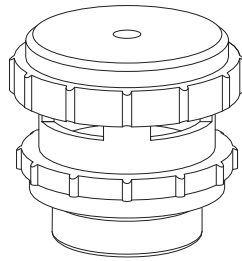


SIZE
50mm Pipe
75mm Pipe

FOR BLOW-OFF AND VACUUM RELIEF

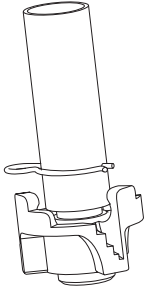
PRESSURE VACUUM VENT

(PVV)



ROTATING TANK CLEANER

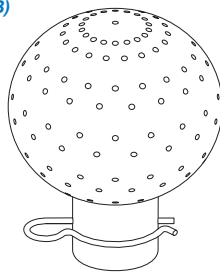
(RTC)



SIZE
12mm BSP
25mm Tube
38mm Tube

SPRAY BALL

(SB)



SIZE	BALL	HOLES
18mm	38mm	1.6mm
25mm	63mm	1.6mm
38mm	63mm	2.5mm
50mm	95mm	2.5mm

PIPE CHART & WEIGHT TABLE



Nominal Pipe size mm	OD mm	5 S	10 S	10	20	30	STD	40 S	40	60	XS	80 S	80	100	120	140	160	XXS
6	10.3		1,24 0,28				1,73 0,37	1,73 0,36	1,73 0,37		2,41 0,47	2,41 0,48	2,41 0,47					
8	13.7		1,65 0,51				2,24 0,63	2,24 0,64	2,24 0,63		3,02 0,80	3,02 0,82	3,02 0,80					
10	17.1		1,65 0,64				2,31 0,84	2,31 0,84	2,31 0,84		3,20 0,91	3,20 1,12	3,20 1,10					
15	21.3	1,65 0,82	2,11 1,01				2,77 1,27	2,77 1,30	2,77 1,27		3,73 1,62	3,73 1,65	3,73 1,62				4,78 1,95	7,47 2,55
20	26.7	1,65 1,04	2,11 1,31				2,87 1,69	2,87 1,71	2,87 1,69		3,91 2,20	3,91 2,24	3,91 2,20				5,56 2,90	7,82 3,64
25	33.4	1,65 1,33	2,77 2,13				3,38 2,50	3,38 2,55	3,38 2,50		4,55 3,24	4,55 3,29	4,55 3,24				6,35 4,24	9,09 5,45
32	42.2	1,65 1,68	2,77 2,76				3,56 3,39	3,56 3,46	3,56 3,39		4,85 4,47	4,85 4,56	4,85 4,47				6,35 5,61	9,70 7,77
40	48.3	1,65 1,95	2,77 3,17				3,68 4,05	3,68 4,13	3,68 4,05		5,08 5,41	5,08 5,51	5,08 5,41				7,14 7,25	10,15 9,56
50	60.3	1,65 2,44	2,77 4,01				3,91 5,44	3,91 5,54	3,91 5,44		5,54 7,48	5,54 7,63	5,54 7,48				8,74 11,11	11,07 13,44
65	73.0	2,11 3,77	3,05 5,36				5,16 8,63	5,16 8,81	5,16 8,63		7,01 11,41	7,01 11,64	7,01 11,41				9,53 14,92	14,02 20,39
80	88.9	2,11 4,60	3,05 6,59				5,49 11,28	5,49 11,52	5,49 11,29		7,62 15,27	7,62 15,59	7,62 15,27				11,13 21,35	15,24 27,68
90	101.6	2,11 5,29	3,05 7,55				5,74 13,57	5,74 13,84	5,74 13,57		8,08 18,63	8,08 19,01	8,08 18,63				-	-
100	114.3	2,11 5,96	3,05 8,52				6,02 16,07	6,02 16,40	6,02 16,07		8,56 22,32	8,56 22,77	8,56 22,32		11,13 28,32		13,49 33,54	17,12 41,03
125	141.3	2,77 9,67	3,40 11,82				6,55 21,77	6,55 22,20	6,55 21,77		9,53 30,97	9,53 31,59	9,53 30,97		12,70 40,28		15,88 49,11	19,05 57,43
150	168.3	2,77 11,55	3,40 14,13				7,11 28,26	7,11 28,83	7,11 28,26		10,97 42,56	10,97 43,42	10,97 42,56		14,27 54,20		18,26 67,56	21,95 79,22
200	219.	2,77 15,09	3,76 20,37		6,35 33,31	7,04 36,81	8,18 42,55	8,18 43,39	8,18 42,55	10,31 53,08	12,70 64,64	12,70 65,95	12,70 64,64	15,09 75,92	18,26 90,44	20,62 100,92	23,01 111,27	22,23 107,92
250	273,1	3,40 23,08	4,19 28,34		6,35 41,77	7,80 51,03	9,27 60,31	9,27 61,52	9,27 60,31	12,70 81,55	12,70 81,55	12,70 83,19	15,09 96,01	18,26 114,75	21,44 133,06	25,40 155,15	28,58 172,33	25,40 155,15
300	323,9	3,96 31,89	4,57 36,73		6,35 49,73	8,38 65,20	9,53 73,88	9,52 75,32	10,31 79,73	14,27 108,96	12,70 97,46	12,70 99,43	17,48 132,08	21,44 159,91	25,40 186,97	28,58 208,14	33,32 238,76	25,40 186,97
350	355.6	3,96 35,06	4,76 42,14	6,35 54,69	7,92 67,90	9,53 81,33	9,53 81,33		11,13 94,55	15,09 126,71	12,70 107,39		19,05 158,10	23,83 194,96	27,79 224,65	31,75 253,56	35,71 281,70	
400	406,4	4,19 42,41	4,78 48,46	6,35 62,64	7,92 77,83	9,53 93,27	9,53 93,27		12,70 123,30	16,66 160,12	12,70 123,30		21,44 203,53	26,19 245,56	30,96 286,64	36,53 333,19	40,49 365,35	
450	457,2	4,19 47,77	4,78 54,36	6,35 70,57	7,92 87,71	11,13 122,38	9,53 105,16		14,27 155,80	19,05 205,74	12,70 139,15		23,88 254,55	29,36 309,62	34,93 363,56	39,67 408,62	45,24 459,37	
500	508,0	4,78 60,46	5,54 70,00	6,35 78,55	9,53 117,15	12,70 155,12	9,53 117,15		15,09 183,42	20,62 247,83	12,70 155,12		26,19 311,17	32,54 381,53	38,10 441,49	44,45 508,11	50,01 564,81	
550	558,8	4,78 66,57	5,54 77,06	6,35 86,54	9,53 129,13	12,70 171,09	9,53 129,13		- 294,25	22,23 271,09	12,70 171,09		28,58 373,83	34,93 451,42	41,28 527,02	47,63 600,63	53,98 672,26	
600	609,06	5,54 84,16	6,35 96,37	6,35 94,53	9,53 141,12	14,27 209,64	9,53 141,12		17,48 255,41	24,61 356,26	12,70 187,06		30,96 442,08	38,89 547,71	46,02 640,03	52,37 720,15	59,54 808,22	
650	660,4			7,92 127,23	12,70 202,72	-	9,53 152,87		-		12,70 202,72							
700	711,2			7,92 137,32	12,70 218,69	15,88 271,21	9,53 164,85		-		12,70 218,69							
750	762,0	6,35 120,72	7,29 150,36	7,29 147,28	12,70 234,67	15,88 292,18	9,53 176,84		-		12,70 234,67							
800	812,8			7,92 157,24	12,70 250,64	15,88 312,15	9,53 188,82		17,48 342,91		12,70 250,64							
850	863,6			1,92 167,20	12,70 266,61	15,88 332,12	9,53 200,31		17,48 364,90		12,70 266,61							
900	914,4			7,92 176,96	12,70 282,27	15,88 351,70	9,53 212,56		19,05 420,42		12,70 282,27							
950	965,2						9,53 224,54				12,70 298,24							
1000	1016,0						9,53 236,53				12,70 314,22							
1050	1066,8						9,53 248,52				12,70 330,19							
1100	1117,6						9,53 260,50				12,70 346,16							
1150	1168,4						9,53 272,25				12,70 351,82							
1200	1219,2						9,53 284,24				12,70 377,79							

Wall Thickness = mm
Weight = kg/m (plain end mass)
5 S, 10 S, 40 S, 80 S - ANSI B36.19

FLANGE TABLE

Nominal Pipe Size	Flange Standards		O/D	PCD	Flange Dimensions		Thickness			
	Name	Rating			Bolt Details		Cast Iron	Steel		
					No. Off	Diameter				
TABLE A-H	ANSI	125	108	79	4	M16	11	14		
		150	108	79	4	M16	11	14		
		300	124	89	4	M16		17		
	AS2129	A	115	83	83	4	M12	13	12	
		D	115	83	83	4	M12	13	12	
		E	115	83	83	4	M12	13	12	
		F	120	87	87	4	M16	13	12	
		H	120	87	87	4	M16	19	14	
		DIN	6	100	75	75	4	M10	14	14
			10	115	85	85	4	M12	16	16
			16	115	85	85	4	M12	16	16
			25	115	85	85	4	M12		
			40	115	85	85	4	M12		
		TABLE A-H	ANSI	125	118	89	4	M16	13	16
				150	118	89	4	M16	13	16
300	133			98	4	M16		20		
AS2129	A		120	87	87	4	M12	16	12	
	D		120	87	87	4	M12	16	12	
	E		120	87	87	4	M12	16	12	
	F		135	98	98	4	M16	16	13	
	H		135	98	98	4	M16	22	17	
	DIN		6	120	90	90	4	M12	16	16
10			140	100	100	4	M16	18	16	
16			140	100	100	4	M16	18	16	
25			140	100	100	4	M16			
40			140	100	100	4	M16			
TABLE A-H	ANSI		125	127	98	4	M16	14	18	
			150	127	98	4	M16	14	18	
		300	156	114	4	M20		21		
	AS2129	A	135	98	98	4	M12	16	12	
		D	135	98	98	4	M12	16	12	
		E	135	98	98	4	M12	16	12	
		F	140	105	105	4	M16	16	13	
		H	140	105	105	4	M16	22	17	
		DIN	6	130	100	100	4	M12	16	16
	10		150	110	110	4	M16	18	16	
	16		150	110	110	4	M16	18	16	
	25		150	110	110	4	M16			
	40		150	110	110	4	M16			



FLANGE TABLE

Nominal Pipe Size	Flange Standards		O/D	PCD	Flange Dimensions		Thickness		
	Name	Rating			Bolt Details		Cast Iron	Steel	
					No. Off	Diameter			
50 mm (2 inch)	ANSI	125	152	121	4	M16	18	19	
		150	152	121	4	M16	18	19	
		300	165	127	4	M16		22	
	AS2129	A	150	114	114	4	M16	16	12
		D	150	114	114	4	M16	17	12
		E	150	114	114	4	M16	19	12
		F	165	127	127	4	M16	19	16
		H	165	127	127	4	M16	25	19
		DIN	6	140	110	110	4	M12	16
	DIN	10	165	125	125	4	M16	20	18
		16	165	125	125	4	M16	20	18
		25	165	125	125	4	M16		
		40	165	125	125	4	M16		
		65 mm (2½ inch)	ANSI	125	178	140	4	M16	18
150				178	140	4	M16	18	22
300				191	149	8	M20		25
AS2129			A	165	127	127	4	M16	17
	D		165	127	127	4	M16	17	12
	E		165	127	127	4	M16	19	12
	F	185	146	146	8	M16	19	16	
	H	185	146	146	8	M16	25	19	
DIN	6	160	130	130	4	M12	16	16	
	10	185	145	145	4	M16	20	18	
	16	185	145	145	4	M16	20	18	
	25	185	145	145	8	M16			
	40	185	145	145	8	M16			
80 mm (3 inch)	ANSI	125	191	152	4	M16	19	24	
		150	191	152	4	M16	19	24	
		300	210	168	8	M20		29	
	AS2129	A	185	146	146	4	M16	17	12
		D	185	146	146	4	M16	19	12
		E	185	146	146	4	M16	19	12
		F	205	165	165	8	M16	19	16
		H	205	165	165	8	M16	29	22
	DIN	6	190	150	150	4	M16	18	18
		10	200	160	160	8	M16	22	20
		16	200	160	160	8	M16	22	20
		25	200	160	160	8	M16		
40		200	160	160	8	M16			
90 mm (3½ inch)	ANSI	125	216	178	8	M16		24	
		150	216	178	8	M16		24	
		300	229	184	8	M20		30	



FLANGE TABLE

Nominal Pipe Size	Flange Standards		Flange Dimensions					Thickness	
	Name	Rating	O/D	PCD	Bolt Details		Cast Iron	Steel	
					No. Off	Diameter			
	AS2129	A	205	165	4	M16		12	
		D	205	165	4	M16		12	
		E	205	165	8	M16		12	
		F	215	178	8	M16		19	
		H	215	178	8	M16		22	
	100 mm (4 inch)	ANSI	125	229	191	8	M16	24	24
			150	229	191	8	M16	24	24
			300	254	200	8	M20		16
		AS2129	A	215	178	4	M16	19	12
			D	215	178	4	M16	19	12
E			215	178	8	M16	22	13	
F			230	191	8	M16	22	19	
H			230	191	8	M16	32	25	
DIN		6	210	170	4	M16	18	18	
		10	220	180	8	M16	24	20	
	16	220	180	8	M16	24	20		
	25	235	190	8	M20				
	40	235	190	8	M20				
125 mm (5 inch)	ANSI	125	254	216	8	M20	24	24	
		150	254	216	8	M20	24	24	
		300	279	235	8	M20		35	
	AS2129	A	255	210	4	M16	19	13	
		D	255	210	8	M16	21	13	
		E	255	210	8	M16	22	14	
		F	280	235	8	M20	25	22	
		H	280	235	8	M20	35	29	
	DIN	6	240	200	8	M16	20	20	
		10	250	210	8	M16	26	22	
16		250	210	8	M16	26	22		
25		270	220	8	M24				
40		270	220	8	M24				
150 mm (6 inch)	ANSI	125	279	241	8	M20	25	25	
		150	279	241	8	M20	25	25	
		300	318	270	12	M20		37	
	AS2129	A	280	235	4	M16	21	13	
		D	280	235	8	M16	21	13	
		E	280	235	8	M20	22	17	
		F	305	260	12	M20	25	22	
		H	305	260	12	M20	35	29	
	DIN	6	265	225	8	M16	20	20	
		10	285	240	8	M20	26	22	
16		285	240	8	M20	26	22		
25		300	250	8	M24				
40		300	250	8	M24				



FLANGE TABLE

Nominal Pipe Size	Flange Standards		Flange Dimensions					
	Name	Rating	O/D	PCD	Bolt Details		Thickness	
					No. Off	Diameter	Cast Iron	Steel
200 mm (8 inch)	ANSI	125	343	299	8	M20	29	29
		150	343	299	8	M20	29	29
		300	381	330	12	M22		41
	AS2129	A	335	292	8	M16	22	13
		D	335	292	8	M16	22	13
		E	335	292	8	M20	25	19
		F	370	324	12	M20	29	25
		H	370	324	12	M20	38	32
	DIN	6	320	280	8	M16	22	22
		10	340	295	8	M20	26	24
		16	340	295	12	M20	30	24
		25	360	310	12	M24		
		40	375	320	12	M27		
	250 mm (10 inch)	ANSI	125	406	362	12	M22	30
150			406	362	12	M22	30	30
300			445	387	16	M27		48
AS2129		A	405	356	8	M20	24	16
		D	405	356	8	M20	25	16
		E	405	356	12	M20	25	22
		F	430	381	12	M24	29	29
		H	430	381	12	M24	41	35
DIN		6	375	335	12	M16	24	24
		10	395	350	12	M20	28	26
		16	405	355	12	M24	32	26
		25	425	370	12	M27		
		40	450	385	12	M30		
300 mm (12 inch)		ANSI	125	483	432	12	M22	32
	150		483	432	12	M22	32	32
	300		521	451	16	M27		51
	AS2129	A	455	406	8	M20	24	19
		D	455	406	12	M20	25	19
		E	455	406	12	M24	29	25
		F	490	438	16	M24	32	32
		H	490	438	16	M24	44	41
	DIN	6	440	395	12	M20	24	24
		10	445	400	12	M20	28	26
		16	460	410	12	M24	32	28



FLANGE TABLE

Nominal Pipe Size	Flange Standards		O/D	PCD	Flange Dimensions		Thickness	
	Name	Rating			Bolt Details		Cast Iron	Steel
					No. Off	Diameter		
350 mm (14 inch)	ANSI	125	533	476	12	M27	35	35
		150	533	476	12	M27	35	35
		300	584	514	20	M27		54
	AS2129	A	525	470	8	M24	25	22
		D	525	470	12	M24	29	22
		E	525	470	12	M24	32	29
		F	550	495	16	M27	35	35
		H	550	495	16	M27	48	48
		DIN	6	490	445	12	M20	26
			10	505	460	16	M20	30
		16	520	470	16	M24	36	32
400 mm (16 inch)	ANSI	125	597	540	16	M27	37	37
		150	597	540	16	M27	37	37
		300	648	572	20	M33		57
	AS2129	A	580	521	12	M24	27	22
		D	580	521	12	M24	29	22
		E	580	521	12	M24	32	32
		F	610	552	20	M27	35	41
		H	610	552	20	M27	51	54
		DIN	6	540	495	16	M20	28
			10	565	515	16	M24	32
		16	580	525	16	M27	38	36
450 mm (18 inch)	ANSI	125	635	578	16	M27	40	40
		150	635	578	16	M27	40	40
		300	711	629	24	M33		60
	AS2129	A	640	584	12	M24	27	22
		D	640	584	12	M24	32	25
		E	640	584	16	M24	35	35
		F	675	610	20	M30	38	44
		H	675	610	20	M30	54	60
		DIN	6	595	550	16	M20	
			10	615	565	20	M24	32
		16	640	585	20	M27		
500 mm (20 inch)	ANSI	125	699	635	20	M27	43	43
		150	699	635	20	M27	43	43
		300	775	686	24	M33		64



FLANGE TABLE

Nominal Pipe Size	Flange Standards		O/D	PCD	Flange Dimensions		Thickness	
	Name	Rating			No. Off	Diameter	Cast Iron	Steel
	AS2129	A	705	641	12	M24	29	25
		D	705	641	16	M24	32	29
		E	705	641	16	M24	38	38
		F	735	673	24	M30	41	51
		H	735	673	24	M30	57	67
	DIN	6	645	600	20	M20	30	30
		10	670	620	20	M24	34	38
		16	715	650	20	M30	42	44
	550 mm (22 inch)	AS2129	A	760	699	12	M27	30
D			760	699	16	M27	35	29
E			760	699	16	M27	38	44
F			785	724	24	M30	41	54
H			785	724	24	M30	60	70
600 mm (24 inch)	ANSI	125	813	749	20	M33	48	48
		150	813	749	20	M33	48	48
		300	914	813	24	M39		70
	AS2129	A	825	756	12	M27	30	25
		D	825	756	16	M27	35	32
		E	825	756	16	M30	41	48
		F	850	781	24	M33	44	57
		H	850	781	24	M33	64	76
	DIN	6	755	705	20	M24	60	32
10		780	725	20	M27	36	42	
16		840	770	20	M33	48	52	
650 mm (26 inch)	AS2129	A	845	781	16	M27	32	25
700 mm (28 inch)	AS2129	A	870	806	16	M27	32	25
		D	910	845	20	M27	38	35
		E	910	845	20	M30	44	51
	DIN	6	860	810	24	M24	32	34
		10	895	840	24	M27	40	46
		16	910	840	24	M33	54	58
750 mm (30 inch)	ANSI	125	984	915	28	M33		
		150	984	915	28	M33		
		300		997	28	M45		
	AS2129	A	945	883	20	M27	32	25
		D	995	927	20	M30	41	41
		E	995	927	20	M33	48	54



FLANGE TABLE

Nominal Pipe Size	Flange Standards		O/D	PCD	Flange Dimensions		Thickness	
	Name	Rating			Bolt Details		Cast Iron	Steel
					No. Off	Diameter		
800 mm (32 inch)	AS2129	A	1005	940	20	M27	32	25
		D	1060	984	20	M33	41	41
		E	1060	984	20	M33	48	54
	DIN	6	975	920	24	M27	34	38
		10	1015	950	24	M30	44	52
		16	1025	950	24	M36	58	64
850 mm (34 inch)	AS2129	A	1030	965	20	M27	32	29
		D	1090	1016	20	M33	41	44
		E	1090	1016	20	M33	51	57
900 mm (36 inch)	ANSI	125	1168	1086	32	M39		
		150	1168	1086	32	M39		
	AS2129	A	1105	1041	24	M27	35	29
		D	1175	1092	24	M33	44	48
		E	1175	1092	24	M33	51	64
	DIN	6	1075	1020	24	M27	36	42
10		1115	1050	28	M30	46	56	
16		1125	1050	28	M33	62	72	
1000 mm (40 inch)	AS2129	A	1180	1118	24	M27	35	29
		D	1255	1175	24	M33	44	51
		E	1255	1175	24	M36	54	67
	DIN	6	1175	1120	28	M27	35	46
		10	1230	1160	28	M33	50	62
		16	1255	1170	28	M39	66	78
1200 mm (48 inch)	ANSI	125	1511	1422	44	M39		
		150	1511	1422	44	M39		
	AS2129	A	1415	1353	28	M27	38	32
		D	1490	1410	32	M33	51	60
		E	1490	1410	32	M36	60	79
	DIN	2.5	1375	1320	32	M27	30	36
6		1405	1340	32	M30	40	56	
10		1455	1380	32	M36	56	74	



1.1 MILLION LITRE TANKS



NOTES



NOTES



NOTES



NOTES



NOTES



NOTES





Engineering

GRIFFITH

23 - 25 Lenehan Road
PO Box 1006
Griffith NSW 2680

Ph (02) 6964 3422
Fax (02) 6964 3497
www.agengineering.com.au

IRYMPLE

4 Industrial Court
PO Box 684
Irymple VIC 3498

Ph (03) 5024 5791
Fax (03) 5024 5891
www.agengineering.com.au