

# PROCHEM

*Your Source for Local Supply and Support*

REFERENCE MANUAL

PIPING PRODUCTS

PART 2



PIPING PRODUCTS



INSTRUMENTATION & CONTROL



SPECIALTY VALVES



MANUFACTURING



INDENT SERVICE



HYDRAULIC



# The World of Prochem



PIPING PRODUCTS



INSTRUMENTATION & CONTROL



SPECIALTY VALVES



MANUFACTURING



INDENT SERVICE



HYDRAULIC



# Piping Products

## PART 2

### PART 1

BSP Fittings	<b>2</b>
NPT Fittings	<b>6</b>
Socketweld Fittings	<b>8</b>
Buttweld Pipe Fittings	<b>10</b>
Swage Nipples	<b>22</b>
Pipe Nipples	<b>23</b>
Branch Outlet Fittings	<b>24</b>
Pipe and Tube	<b>25</b>
Flanges	<b>38</b>
Stainless Steel Shim	<b>59</b>
Duplex	<b>60</b>
Welded Duplex Tube	<b>63</b>

### PART 2

Hygienic	<b>66</b>
Stainless Steel Ball Valves	<b>93</b>
Flanged Ball Valves	<b>97</b>
Actuated Ball Valves	<b>98</b>
Swing and Spring Check Valves / Y-Type Strainer	<b>99</b>
Saflok	<b>100</b>
Tube-Mac®	<b>102</b>
The Tube-Mac® PYPLOK® System	<b>103</b>
Stainless Water Solutions Package	<b>104</b>
Conversion Tables	<b>109</b>

WARNING: Improper selection or use of products described herein can cause personal injury or property damage. Whilst every care has been taken in preparation of the data contained in this handbook, Prochem Pipeline Products accepts no liability for the accuracy of information supplied. It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings, and application details should be considered in the selection.

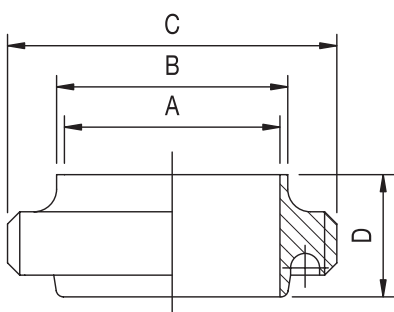
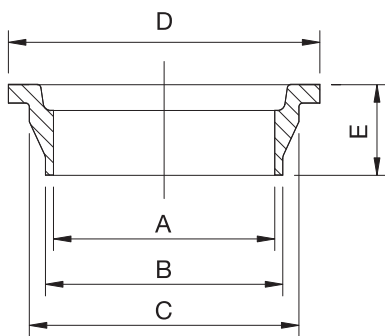
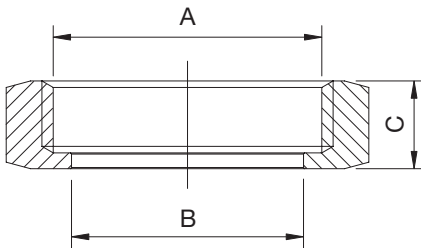
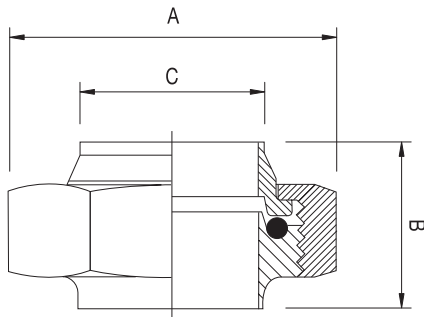


# BSM



## BSM RJT Standard

CF8 = 304 STAINLESS STEEL,  
CF8M = 316 STAINLESS STEEL  
ALL DIMENSIONS ARE IN MILLIMETRES



### BSM RJT COMPLETE UNION

Part Number	Size	A	B*	C	A/F
BSMBUWE025AI	25.4	59	41	25.4	50.8
BSMBUWE038AI	38.1	75	41	38.1	65.0
BSMBUWE051AI	50.8	92	41	50.8	79.4
BSMBUWE063AI	63.5	107	41	63.5	92.1
BSMBUWE076AI	76.2	121	41	76.2	104.8
BSMBUWE102AI	101.6	151	41	101.6	130.2
BSMBUWE152AI	152.4	213	49	152.4	184.0

\* Compressed condition

### BSM RJT HEX NUT CF8

Part Number	Size	A	B	C
BSMNH025CI	25.4	42.3 x 8TPI WHIT	33.3	22
BSMNH038CI	38.1	55.0 x 8TPI WHIT	46.0	22
BSMNH051CI	50.8	67.8 x 6TPI WHIT	58.7	22
BSMNH063CI	63.5	80.5 x 6TPI WHIT	71.4	22
BSMNH076CI	76.2	93.2 x 6TPI WHIT	84.1	22
BSMNH102CI	101.6	118.6 x 6TPI WHIT	109.5	22
BSMNH152CI	152.4	169.4 x 6TPI WHIT	160.3	24

### BSM RJT LINER CF8M

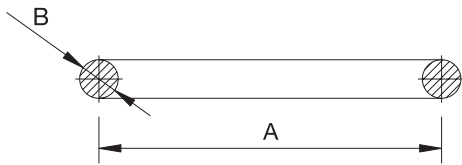
Part Number	Size	A	B	C	D	E
BSMWL025AI	25.4	22.2	25.4	32.4	41.3	19
BSMWL038AI	38.1	34.9	38.1	45.1	54.0	19
BSMWL051AI	50.8	47.6	50.8	57.8	66.7	19
BSMWL063AI	63.5	60.3	63.5	70.5	79.4	19
BSMWL076AI	76.2	73.0	76.2	83.1	92.1	19
BSMWL102AI	101.6	98.4	101.6	108.6	117.5	19
BSMWL152AI	152.4	149.2	152.4	159.4	168.3	27

### BSM RJT MALE PART CF8M

Part Number	Size	A	B	C	D
BSMBM025AI	25.4	22.2	25.4	45.7 x 8TPI WHIT	26.8
BSMBM038AI	38.1	34.9	38.1	58.4 x 8TPI WHIT	26.8
BSMBM051AI	50.8	47.6	50.8	72.7 x 6TPI WHIT	26.8
BSMBM063AI	63.5	60.3	63.5	85.4 x 6TPI WHIT	26.8
BSMBM076AI	76.2	73.0	76.2	98.1 x 6TPI WHIT	26.8
BSMBM102AI	101.6	98.4	101.6	123.5 x 6TPI WHIT	26.8
BSMBM152AI	152.4	149.2	152.4	174.3 x 6TPI WHIT	26.8

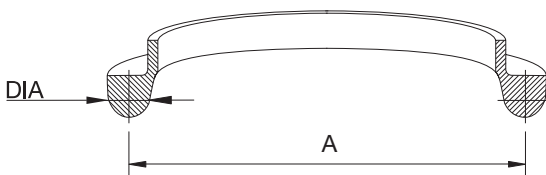


**BSM RJT SEAL (O-RING) EPDM**



Part Number	Size	A	B
BSMOR025E	25.4	33.3	6.5
BSMOR038E	38.1	46.0	6.5
BSMOR051E	50.8	58.7	6.5
BSMOR063E	63.5	71.4	6.5
BSMOR076E	76.2	84.1	6.5
BSMOR102E	101.6	109.5	6.5
BSMOR152E	152.4	160.3	6.5

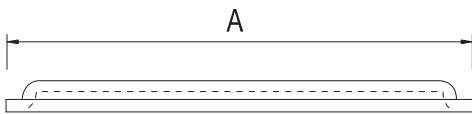
**BSM RJT CIP SEAL (O-RING) EPDM**



Part Number	Size	A	B
BSMORC025E	25.4	33.3	6.5
BSMORC038E	38.1	46.0	6.5
BSMORC051E	50.8	58.7	6.5
BSMORC063E	63.5	71.4	6.5
BSMORC076E	76.2	84.1	6.5
BSMORC102E	101.6	109.5	6.5
BSMORC152E	152.4	160.3	6.5

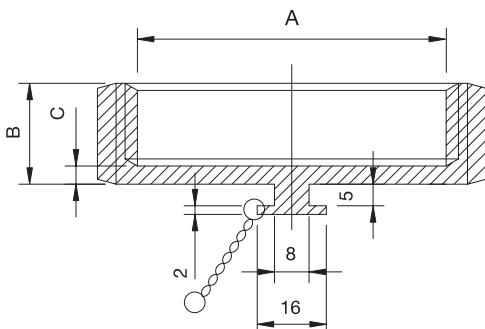
Seals also available in Teflon®, Viton® and Buna N

**BSM RJT BLANK CAPS 316**



Part Number	Size	A
BSMCB025A	25.4	41.3
BSMCB038A	38.1	54.0
BSMCB051A	50.8	66.7
BSMCB063A	63.5	79.4
BSMCB076A	76.2	92.1
BSMCB102A	101.6	117.5
BSMCB152A	152.4	168.3

**BSM RJT BLANK HEX NUT CF8 C/W CHAIN**

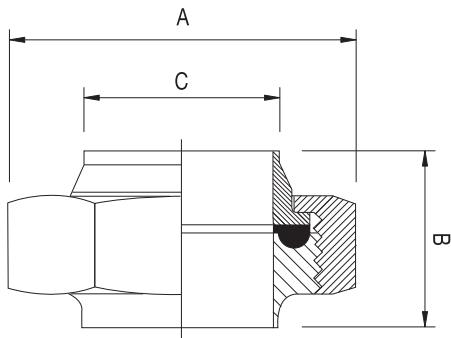


Part Number	Size	A	B	C
BSMNB025CI	25.4	42.3 x 8TPI WHIT	22	4
BSMNB038CI	38.1	55.0 x 8TPI WHIT	22	4
BSMNB051CI	50.8	67.8 x 6TPI WHIT	22	4
BSMNB063CI	63.5	80.5 x 6TPI WHIT	22	4
BSMNB076CI	76.2	93.2 x 6TPI WHIT	22	4
BSMNB102CI	101.6	118.6 x 6TPI WHIT	22	4



# BSM Flat-Faced

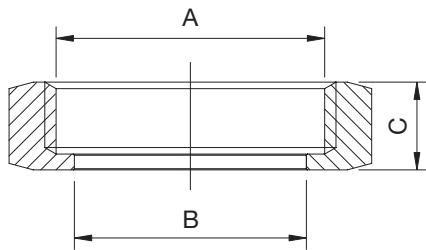
CF8 = 304 STAINLESS STEEL,  
CF8M = 316 STAINLESS STEEL  
ALL DIMENSIONS ARE IN MILLIMETRES



## BSM FLAT-FACED COMPLETE UNION

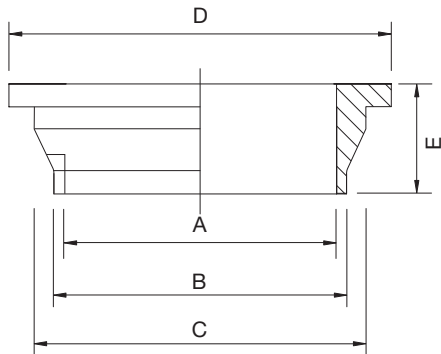
Part Number	Size	A	B*	C	A/F
BSMFFBUWE025AI	25.4	59	43.2	25.4	50.8
BSMFFBUWE038AI	38.1	75	43.2	38.1	65.0
BSMFFBUWE051AI	50.8	92	43.2	51.8	79.4
BSMFFBUWE063AI	63.5	107	43.2	63.5	92.1
BSMFFBUWE076AI	76.2	121	43.2	76.8	104.8
BSMFFBUWE102AI	101.6	151	43.2	101.6	130.2
BSMFFBUWE152AI	152.4	213	51.2	152.4	184.0

\* Uncompressed condition



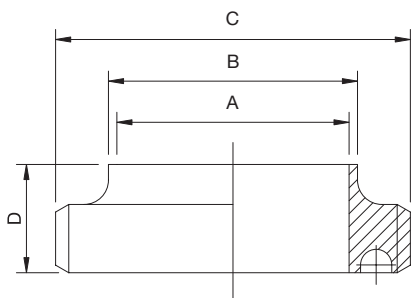
## BSM FLAT-FACED HEX NUT CF8

Part Number	Size	A	B	C
BSMNH025CI	25.4	42.3 x 8TPI WHIT	33.3	22
BSMNH038CI	38.1	55.0 x 8TPI WHIT	46.0	22
BSMNH051CI	50.8	67.8 x 6TPI WHIT	58.7	22
BSMNH063CI	63.5	80.5 x 6TPI WHIT	71.4	22
BSMNH076CI	76.2	93.2 x 6TPI WHIT	84.1	22
BSMNH102CI	101.6	118.6 x 6TPI WHIT	109.5	22
BSMNH152CI	152.4	169.4 x 6TPI WHIT	160.3	24



## BSM FLAT-FACED LINER CF8M

Part Number	Size	A	B	C	D	E
BSMFFWL025AI	25.4	22.2	25.4	32.6	41.3	19
BSMFFWL038AI	38.1	34.9	38.1	45.3	54.0	19
BSMFFWL051AI	50.8	47.6	50.8	58.0	66.7	19
BSMFFWL063AI	63.5	60.3	63.5	70.7	79.4	19
BSMFFWL076AI	76.2	73.0	76.2	83.4	92.1	19
BSMFFWL102AI	101.6	98.4	101.6	108.8	117.5	19
BSMFFWL152AI	152.4	149.2	152.4	159.6	168.3	27

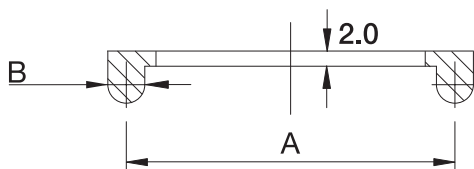


## BSM FLAT-FACED MALE PART CF8M

Part Number	Size	A	B	C	D
BSMFFBM025AI	25.4	22.2	25.4	45.7 x 8TPI WHIT	22
BSMFFBM038AI	38.1	34.9	38.1	58.4 x 8TPI WHIT	22
BSMFFBM051AI	50.8	47.6	50.8	72.7 x 6TPI WHIT	22
BSMFFBM063AI	63.5	60.3	63.5	85.4 x 6TPI WHIT	22
BSMFFBM076AI	76.2	73.0	76.2	98.1 x 6TPI WHIT	22
BSMFFBM102AI	101.6	98.4	101.6	123.5 x 6TPI WHIT	22
BSMFFBM152AI	152.4	149.2	152.4	174.3 x 6TPI WHIT	22

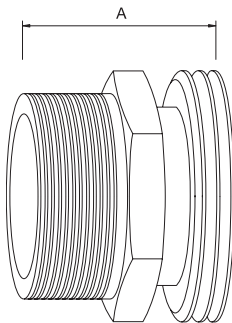
## BSM FLAT-FACED SEAL (O-RING) EPDM

Part Number	Size	A	B
BSMFFOR025E	25.4	33.3	6.5
BSMFFOR038E	38.1	46.0	6.5
BSMFFOR051E	50.8	58.7	6.5
BSMFFOR063E	63.5	71.4	6.5
BSMFFOR076E	76.2	84.1	6.5
BSMFFOR102E	101.6	109.5	6.5
BSMFFOR152E	152.4	160.3	6.5



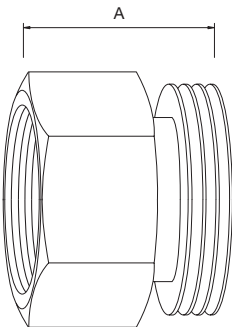
# BSM Adaptors

CF8M = 316 STAINLESS STEEL  
ALL DIMENSIONS ARE IN MILLIMETRES



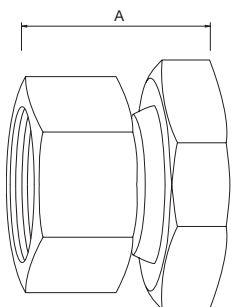
## BSM MALE TO BSP MALE ADAPTOR CF8M

Part Number	Size	A
BSMMA025X025EA	25.4	57
BSMMA038X040EA	38.1	53
BSMMA051X050EA	50.8	57
BSMMA063X065EA	63.5	57
BSMMA076X080EA	76.2	57
BSMMA102X100EA	101.6	65
BSMMA152X150EA	152.4	70



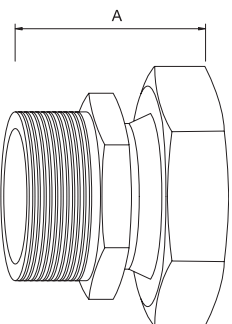
## BSM MALE TO BSP FEMALE ADAPTOR CF8M

Part Number	Size	A
BSMFA025X025EA	25.4	Note: 'A' dimension is available at time of order
BSMFA038X040EA	38.1	
BSMFA051X050EA	50.8	
BSMFA063X065EA	63.5	
BSMFA076X080EA	76.2	
BSMFA102X100EA	101.6	
BSMFA152X150EA	152.4	



## BSM FEMALE TO BSP FEMALE ADAPTOR CF8M

Part Number	Size	A
BSMFA025X025A	25.4	Note: 'A' dimension is available at time of order
BSMFA038X040A	38.1	
BSMFA051X050A	50.8	
BSMFA063X065A	63.5	
BSMFA076X080A	76.2	
BSMFA102X100A	101.6	
BSMFA152X150A	152.4	

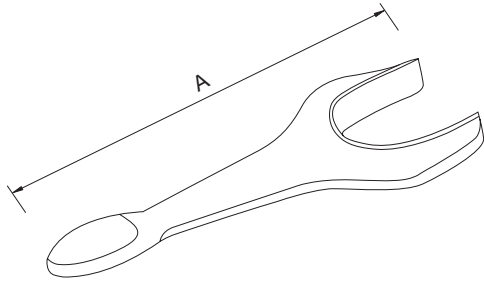


## BSM FEMALE TO BSP MALE ADAPTOR CF8M

Part Number	Size	A
BSMFA025X025EA	25.4	Note: 'A' dimension is available at time of order
BSMFA038X040EA	38.1	
BSMFA051X050EA	50.8	
BSMFA063X065EA	63.5	
BSMFA076X080EA	76.2	
BSMFA102X100EA	101.6	
BSMFA152X150EA	152.4	

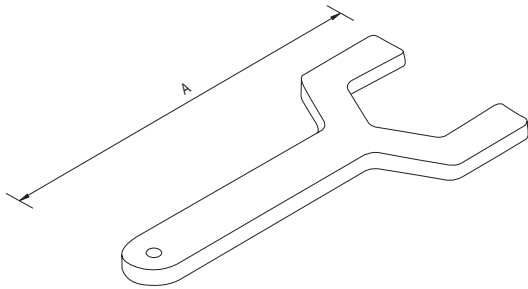


# BSM Spanners



## ALUMINIUM SPANNER

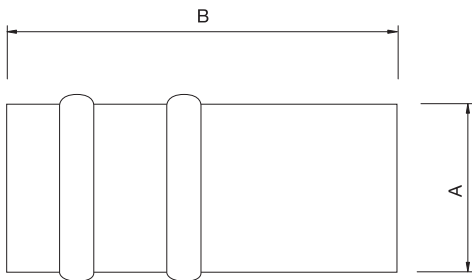
Part Number	Size	A
BSMAS025	25.4	250
BSMAS038	38.1	285
BSMAS051	50.8	310
BSMAS063	63.5	335
BSMAS076	76.2	365
BSMAS102	101.6	420
BSMAS152	152.4	475



## STAINLESS STEEL SPANNER

Part Number	Size	A
BSMSS025	25.4	250
BSMSS038	38.1	285
BSMSS051	50.8	310
BSMSS063	63.5	335
BSMSS076	76.2	365
BSMSS102	101.6	420
BSMSS152	152.4	475

# BSM Hosetails



## BSM DOUBLE HOSETAIL PLAIN 316

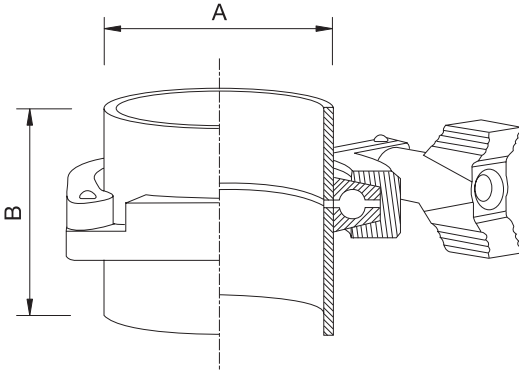
Part Number	Size	A	B
BSMDHT025A	25.4	25.4	110
BSMDHT032A	31.8	31.8	110
BSMDHT038A	38.1	38.1	120
BSMDHT051A	50.8	50.8	120
BSMDHT063A	63.5	63.5	135
BSMDHT076A	76.2	76.2	140
BSMDHT102A	101.6	101.6	145
BSMDHT152A	152.4	152.4	220

# Tri-Fittings

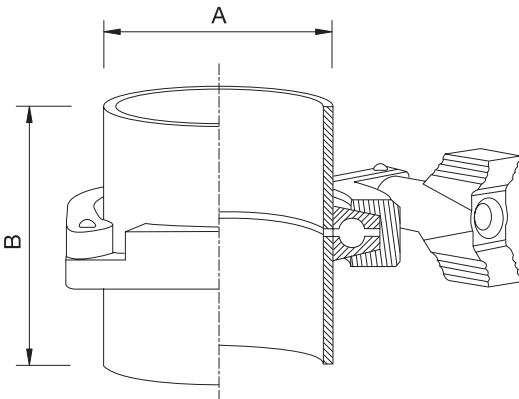
CF8 = 304 STAINLESS STEEL, CF8M = 316 STAINLESS STEEL  
ALL DIMENSIONS ARE IN MILLIMETRES



## TRI-UNION COMPLETE SHORT

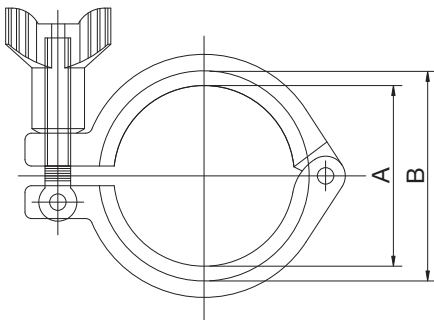


Part Number	Size	A	B
TRIBUSE013AI	12.7	12.7	27.3
TRIBUSE019AI	19.1	19.1	27.3
TRIBUSE025AI	25.4	25.4	27.3
TRIBUSE038AI	38.1	38.1	27.3
TRIBUSE051AI	50.8	50.8	27.3
TRIBUSE063AI	63.5	63.5	27.3
TRIBUSE076AI	76.2	76.2	27.3
TRIBUSE102AI	101.6	101.6	33.6
TRIBUSE152AI	152.4	152.4	45.0
TRIBUSE203AI	203.2	203.2	45.0



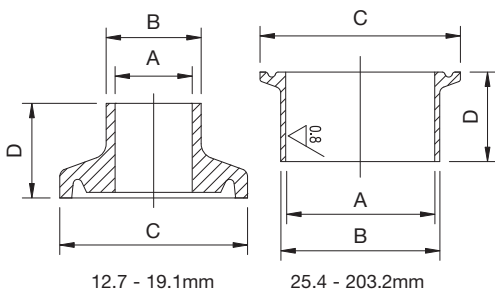
## TRI-UNION COMPLETE LONG

Part Number	Size	A	B
TRIBULE013AI	12.7	12.7	59.3
TRIBULE019AI	19.1	19.1	59.3
TRIBULE025AI	25.4	25.4	59.3
TRIBULE038AI	38.1	38.1	59.3
TRIBULE051AI	50.8	50.8	59.3
TRIBULE063AI	63.5	63.5	59.3
TRIBULE076AI	76.2	76.2	59.3
TRIBULE102AI	101.6	101.6	59.3
TRIBULE152AI	152.4	152.4	59.3
TRIBULE203AI	203.2	203.2	59.3



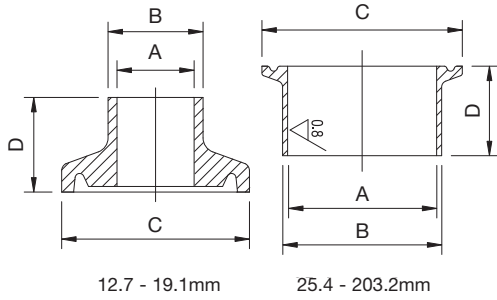
## TRI-CLAMP CF8

Part Number	Size	A	B
TRICL013CI	12.7	27.8	37.0
TRICL019CI	19.1	27.8	37.0
TRICL025CI	25.4	44.4	53.6
TRICL038CI	38.1	44.4	53.6
TRICL051CI	50.8	57.8	67.0
TRICL063CI	63.5	71.4	80.6
TRICL076CI	76.2	84.0	94.2
TRICL102CI	101.6	110.0	122.2
TRICL152CI	152.4	155.4	170.4
TRICL203CI	203.2	205.0	220.0



## TRI-FERRULE SHORT CF8M

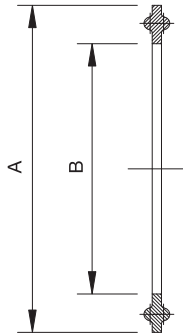
Part Number	Size	A	B	C	D
TRIFS013AI	12.7	9.5	12.7	25.2	12.7
TRIFS019AI	19.1	15.9	19.1	25.2	12.7
TRIFS025AI	25.4	22.2	25.4	50.5	12.7
TRIFS038AI	38.1	34.9	38.1	50.5	12.7
TRIFS051AI	50.8	47.6	50.8	64.0	12.7
TRIFS063AI	63.5	60.3	63.5	77.5	12.7
TRIFS076AI	76.2	73.0	76.2	91.0	12.7
TRIFS102AI	101.6	98.4	101.6	119.0	15.8
TRIFS152AI	152.4	149.2	152.4	166.8	21.5
TRIFS203AI	203.2	199.2	203.2	217.6	21.5



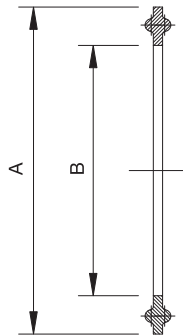
**TRI-FERRULE LONG CF8M**

Part Number	Size	A	B	C	D
TRIFL013AI	12.7	9.5	12.7	25.2	28.6
TRIFL019AI	19.1	15.9	19.1	25.2	28.6
TRIFL025AI	25.4	22.2	25.4	50.5	28.6
TRIFL038AI	38.1	34.9	38.1	50.5	28.6
TRIFL051AI	50.8	47.6	50.8	64.0	28.6
TRIFL063AI	63.5	60.3	63.5	77.5	28.6
TRIFL076AI	76.2	73.0	76.2	91.0	28.6
TRIFL102AI	101.6	98.4	101.6	119.0	28.6
TRIFL152AI	152.4	149.2	152.4	166.8	28.6
TRIFL203AI	203.2	199.2	203.2	217.6	28.6

**TRI-SEAL (EPDM)**



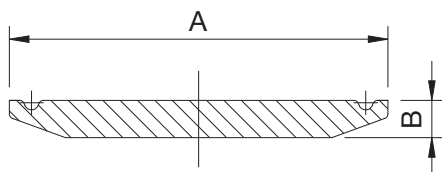
Part Number	Size	A	B
TRIS013EI	12.7	21.8	9.9
TRIS019EI	19.1	21.8	16.3
TRIS025EI	25.4	50.0	22.7
TRIS038EI	38.1	50.0	35.9
TRIS051EI	50.8	63.5	48.6
TRIS063EI	63.5	76.2	61.3
TRIS076EI	76.2	88.9	74.0
TRIS102EI	101.6	118.0	98.6
TRIS152EI	152.4	165.0	147.8
TRIS203EI	203.2	216.0	196.6



**TRI-SEAL (TEFLON®)**

Part Number	Size	A	B
TRIS013TI	12.7	21.8	9.9
TRIS019TI	19.1	21.8	16.3
TRIS025TI	25.4	50.0	22.7
TRIS038TI	38.1	50.0	35.9
TRIS051TI	50.8	63.5	48.6
TRIS063TI	63.5	76.2	61.3
TRIS076TI	76.2	88.9	74.0
TRIS102TI	101.6	118.0	98.6
TRIS152TI	152.4	165.0	147.8

**TRI-CAP CF8M**



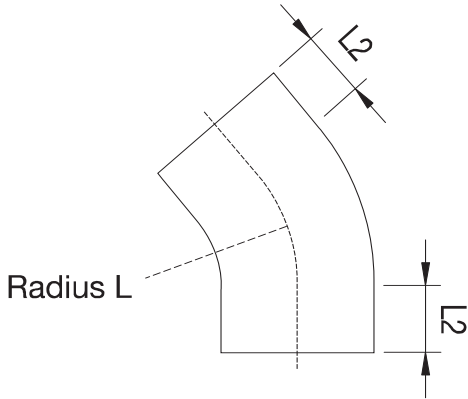
Part Number	Size	A	B
TRICAP013AI	12.7	25.2	5.0
TRICAP019AI	19.1	25.2	5.0
TRICAP025AI	25.4	50.5	6.3
TRICAP038AI	38.1	50.5	6.3
TRICAP051AI	50.8	64.0	6.3
TRICAP063AI	63.5	77.5	6.3
TRICAP076AI	76.2	91.0	6.3
TRICAP102AI	101.6	119.0	7.9
TRICAP152AI	152.4	166.7	11.1

# Tube Fittings



Prochem offers a complete range of tube fittings in accordance with Australian Food Standard AS 1528.

## 45° BEND POLISHED 304 & 316



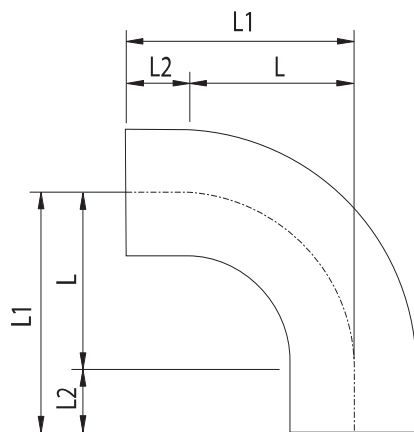
A INDICATES 316  
C INDICATES 304

NOTE 1: "L2" REFERS TO THE STRAIGHT END EXTENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES

Part Number	Size	L	L2	WT Nominal
TEL045D012.7AP	12.7	19.1	30.0	1.6
TEL045D012.7CP	12.7	19.1	30.0	1.6
TEL045D019.1AP	19.1	28.6	30.0	1.6
TEL045D019.1CP	19.1	28.6	30.0	1.6
TEL045D025.4AP	25.4	38.1	30.0	1.6
TEL045D025.4CP	25.4	38.1	30.0	1.6
TEL045D031.8AP	31.8	47.7	30.0	1.6
TEL045D031.8CP	31.8	47.7	30.0	1.6
TEL045D038.1AP	38.1	57.0	30.0	1.6
TEL045D038.1CP	38.1	57.0	30.0	1.6
TEL045D050.8AP	50.8	76.2	30.0	1.6
TEL045D050.8CP	50.8	76.2	30.0	1.6
TEL045D063.5AP	63.5	95.0	30.0	1.6
TEL045D063.5CP	63.5	95.0	30.0	1.6
TEL045D076.2AP	76.2	114.2	30.0	1.6
TEL045D076.2CP	76.2	114.2	30.0	1.6
TEL045D101.6AP	101.6	152.4	30.0	1.6
TEL045D101.6CP	101.6	152.4	30.0	1.6
TEL045D127.0AP	127.0	190.5	40.0	1.6
TEL045D127.0CP	127.0	190.5	40.0	1.6
TEL045E152.4AP	152.4	228.5	40.0	2.0
TEL045E152.4CP	152.4	228.5	40.0	2.0

## 90° BEND POLISHED 304 & 316



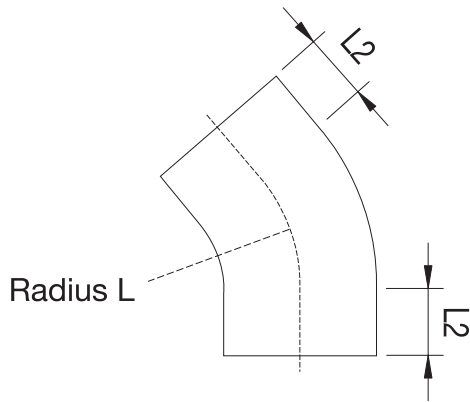
A INDICATES 316  
C INDICATES 304

NOTE 1: PROCHEM STANDARD 90° BEND STOCK IS "L1" DIMENSION CONFIGURATION

NOTE 2: "L2" REFERS TO THE STRAIGHT END EXTENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES

Part Number	Size	L	L1	L2	WT Nominal
TEL090D012.7AP	12.7	19.1	49.1	30.0	1.6
TEL090D012.7CP	12.7	19.1	49.1	30.0	1.6
TEL090D019.1AP	19.1	28.6	58.6	30.0	1.6
TEL090D019.1CP	19.1	28.6	58.6	30.0	1.6
TEL090D025.4AP	25.4	38.1	68.1	30.0	1.6
TEL090D025.4CP	25.4	38.1	68.1	30.0	1.6
TEL090D031.8AP	31.8	47.7	77.7	30.0	1.6
TEL090D031.8CP	31.8	47.7	77.7	30.0	1.6
TEL090D038.1AP	38.1	57.0	87.0	30.0	1.6
TEL090D038.1CP	38.1	57.0	87.0	30.0	1.6
TEL090D050.8AP	50.8	76.2	106.2	30.0	1.6
TEL090D050.8CP	50.8	76.2	106.2	30.0	1.6
TEL090D063.5AP	63.5	95.0	125.0	30.0	1.6
TEL090D063.5CP	63.5	95.0	125.0	30.0	1.6
TEL090D076.2AP	76.2	114.2	144.2	30.0	1.6
TEL090D076.2CP	76.2	114.2	144.2	30.0	1.6
TEL090D101.6AP	101.6	152.4	182.4	30.0	1.6
TEL090D101.6CP	101.6	152.4	182.4	30.0	1.6
TEL090D127.0AP	127.0	190.5	230.5	40.0	1.6
TEL090D127.0CP	127.0	190.5	230.5	40.0	1.6
TEL090E152.4AP	152.4	228.5	268.5	40.0	2.0
TEL090E152.4CP	152.4	228.5	268.5	40.0	2.0



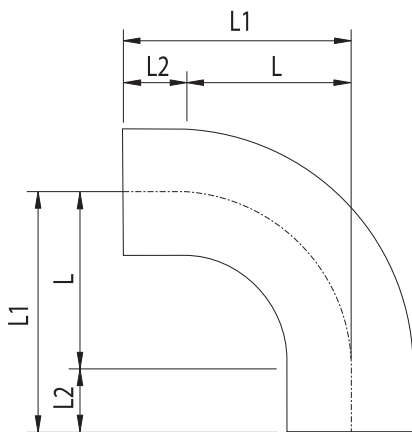
**A INDICATES 316**  
**B INDICATED 316L**  
**C INDICATES 304**  
**D INDICATES 304L**

NOTE 1: “L2” REFERS TO THE STRAIGHT END EXTENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES



\* Elbows are manufactured to EN 10253-3 or EN 10253-4. If EN 10253-4 is required, please check with your local Prochem office for availability of stock.



**A INDICATES 316**  
**C INDICATES 304**

NOTE 1: PROCHEM STANDARD 90° BEND STOCK IS “L1” DIMENSION CONFIGURATION

NOTE 2: “L2” REFERS TO THE STRAIGHT END EXTENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES

**45° BEND UNPOLISHED 304 & 316**

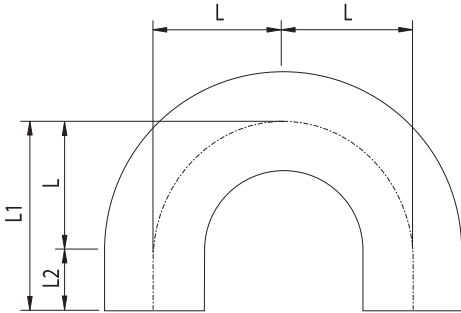
Part Number	Size	L	L2	WT Nominal
TEL045D012.7A	12.7	19.1	30.0	1.6
TEL045D012.7C	12.7	19.1	30.0	1.6
TEL045D019.1A	19.1	28.6	30.0	1.6
TEL045D019.1C	19.1	28.6	30.0	1.6
TEL045D025.4A	25.4	38.1	30.0	1.6
TEL045D025.4C	25.4	38.1	30.0	1.6
TEL045D031.8A	31.8	47.7	30.0	1.6
TEL045D031.8C	31.8	47.7	30.0	1.6
TEL045D038.1A	38.1	57.0	30.0	1.6
TEL045D038.1C	38.1	57.0	30.0	1.6
TEL045D050.8A	50.8	76.2	30.0	1.6
TEL045D050.8C	50.8	76.2	30.0	1.6
TEL045D063.5A	63.5	95.0	30.0	1.6
TEL045D063.5C	63.5	95.0	30.0	1.6
TEL045D076.2A	76.2	114.2	30.0	1.6
TEL045D076.2C	76.2	114.2	30.0	1.6
TEL045D101.6A	101.6	152.4	30.0	1.6
TEL045D101.6C	101.6	152.4	30.0	1.6
TEL045D127.0A	127.0	190.5	40.0	1.6
TEL045D127.0C	127.0	190.5	40.0	1.6
TEL045E152.4A	152.4	228.5	40.0	2.0
TEL045E152.4C	152.4	228.5	40.0	2.0
TEL045E204.0B*	204.0	300.0	-	2.0
TEL045E204.0D*	204.0	300.0	-	2.0
TEL045E254.0B*	254.0	375.0	-	2.0
TEL045E254.0D*	254.0	375.0	-	2.0
TEL045F304.8B*	304.8	450.0	-	2.5
TEL045F304.8D*	304.8	450.0	-	2.5

**90° BEND UNPOLISHED 304 & 316**

Part Number	Size	L	L1	L2	WT Nominal
TEL090D012.7A	12.7	19.1	49.1	30.0	1.6
TEL090D012.7C	12.7	19.1	49.1	30.0	1.6
TEL090D019.1A	19.1	28.6	58.6	30.0	1.6
TEL090D019.1C	19.1	28.6	58.6	30.0	1.6
TEL090D025.4A	25.4	38.1	68.1	30.0	1.6
TEL090D025.4C	25.4	38.1	68.1	30.0	1.6
TEL090D031.8A	31.8	47.7	77.7	30.0	1.6
TEL090D031.8C	31.8	47.7	77.7	30.0	1.6
TEL090D038.1A	38.1	57.0	87.0	30.0	1.6
TEL090D038.1C	38.1	57.0	87.0	30.0	1.6
TEL090D050.8A	50.8	76.2	106.2	30.0	1.6
TEL090D050.8C	50.8	76.2	106.2	30.0	1.6
TEL090D063.5A	63.5	95.0	125.0	30.0	1.6
TEL090D063.5C	63.5	95.0	125.0	30.0	1.6
TEL090D076.2A	76.2	114.2	144.2	30.0	1.6
TEL090D076.2C	76.2	114.2	144.2	30.0	1.6
TEL090D101.6A	101.6	152.4	182.4	30.0	1.6
TEL090D101.6C	101.6	152.4	182.4	30.0	1.6
TEL090D127.0A	127.0	190.5	230.5	40.0	1.6
TEL090D127.0C	127.0	190.5	230.5	40.0	1.6
TEL090E152.4A	152.4	228.5	268.5	40.0	2.0
TEL090E152.4C	152.4	228.5	268.5	40.0	2.0
TEL090E204.0B*	204.0	300.0	300.0	-	2.0
TEL090E204.0D*	204.0	300.0	300.0	-	2.0
TEL090E254.0B*	254.0	375.0	375.0	-	2.0
TEL090E254.0D*	254.0	375.0	375.0	-	2.0
TEL090F304.8B*	304.8	450.0	450.0	-	2.5
TEL090F304.8D*	304.8	450.0	450.0	-	2.5
TEL090H355.6B*	355.6	525.0	525.0	-	3.0



**180° BEND POLISHED 304 & 316**

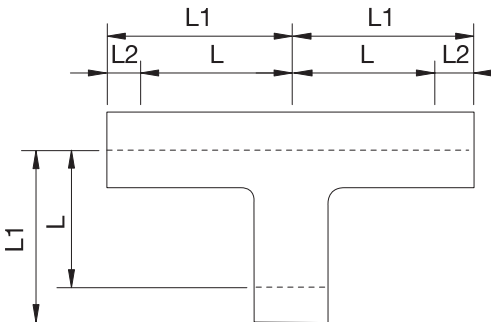


Centre measurement subject to change due to differing feed tube tempers

**A INDICATES 316**  
**C INDICATES 304**

NOTE 1: "L2" REFERS TO THE STRAIGHT END EXTENSIONS  
ALL DIMENSIONS ARE IN MILLIMETRES

Part Number	Size	L	L1	L2	WT Nominal
TEL180D012.7AP	12.7	19.1	49.1	30.0	1.6
TEL180D012.7CP	12.7	19.1	49.1	30.0	1.6
TEL180D019.1AP	19.1	28.6	58.6	30.0	1.6
TEL180D019.1CP	19.1	28.6	58.6	30.0	1.6
TEL180D025.4AP	25.4	38.1	68.1	30.0	1.6
TEL180D025.4CP	25.4	38.1	68.1	30.0	1.6
TEL180D031.8AP	31.8	47.7	77.7	30.0	1.6
TEL180D031.8CP	31.8	47.7	77.7	30.0	1.6
TEL180D038.1AP	38.1	57.0	87.0	30.0	1.6
TEL180D038.1CP	38.1	57.0	87.0	30.0	1.6
TEL180D050.8AP	50.8	76.2	106.2	30.0	1.6
TEL180D050.8CP	50.8	76.2	106.2	30.0	1.6
TEL180D063.5AP	63.5	95.0	125.0	30.0	1.6
TEL180D063.5CP	63.5	95.0	125.0	30.0	1.6
TEL180D076.2AP	76.2	114.2	144.2	30.0	1.6
TEL180D076.2CP	76.2	114.2	144.2	30.0	1.6
TEL180D101.6AP	101.6	152.4	182.4	30.0	1.6
TEL180D101.6CP	101.6	152.4	182.4	30.0	1.6



**A INDICATES 316**  
**C INDICATES 304**

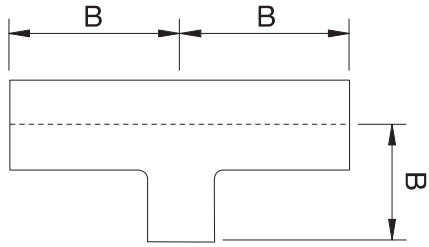
NOTE 1: PROCHEM STANDARD EQUAL TEE STOCK IS "L" DIMENSION CONFIGURATION  
NOTE 2: "L2" REFERS TO THE STRAIGHT END EXTENSIONS  
ALL DIMENSIONS ARE IN MILLIMETRES

**EQUAL TEE POLISHED 304 & 316**

Part Number	Size	L	L1	L2	WT Nominal
TETD012.7AP	12.7	19.1	49.1	30.0	1.6
TETD012.7CP	12.7	19.1	49.1	30.0	1.6
TETD019.1AP	19.1	28.6	58.6	30.0	1.6
TETD019.1CP	19.1	28.6	58.6	30.0	1.6
TETD025.4AP	25.4	38.1	68.1	30.0	1.6
TETD025.4CP	25.4	38.1	68.1	30.0	1.6
TETD031.8AP	31.8	47.7	77.7	30.0	1.6
TETD031.8CP	31.8	47.7	77.7	30.0	1.6
TETD038.1AP	38.1	57.0	87.0	30.0	1.6
TETD038.1CP	38.1	57.0	87.0	30.0	1.6
TETD050.8AP	50.8	76.2	106.2	30.0	1.6
TETD050.8CP	50.8	76.2	106.2	30.0	1.6
TETD063.5AP	63.5	95.0	125.0	30.0	1.6
TETD063.5CP	63.5	95.0	125.0	30.0	1.6
TETD076.2AP	76.2	114.2	144.2	30.0	1.6
TETD076.2CP	76.2	114.2	144.2	30.0	1.6
TETD101.6AP	101.6	152.4	182.4	30.0	1.6
TETD101.6CP	101.6	152.4	182.4	30.0	1.6
TETD127.0AP	127.0	190.5	230.5	40.0	1.6
TETD127.0CP	127.0	190.5	230.5	40.0	1.6
TETD152.4AP	152.4	228.5	268.5	40.0	1.6
TETD152.4CP	152.4	228.5	268.5	40.0	1.6





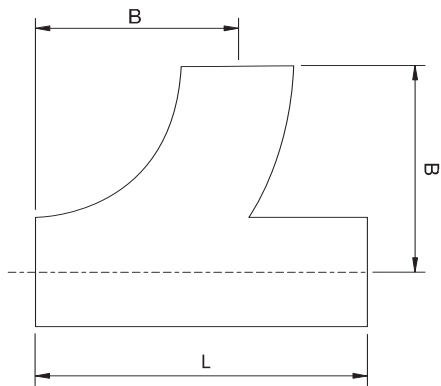


**A INDICATES 316**  
ALL DIMENSIONS ARE IN MILLIMETRES

**REDUCING TEE POLISHED 316**

Part Number	Run Size	B	WT Nominal
TRTD019.1 x ____ . _ A	19.1	B = 1.5 branch diameter or 80mm minimum	1.6
TRTD025.4 x ____ . _ A	25.4		1.6
TRTD031.8 x ____ . _ A	31.8		1.6
TRTD038.1 x ____ . _ A	38.1		1.6
TRTD050.8 x ____ . _ A	50.8		1.6
TRTD063.5 x ____ . _ A	63.5		1.6
TRTD076.2 x ____ . _ A	76.2		1.6
TRTD101.6 x ____ . _ A	101.6		1.6
TRTD127.0 x ____ . _ A	127.0		1.6
TRTD152.4 x ____ . _ A	152.4		1.6

*Note: Insert reduction size to complete part number*

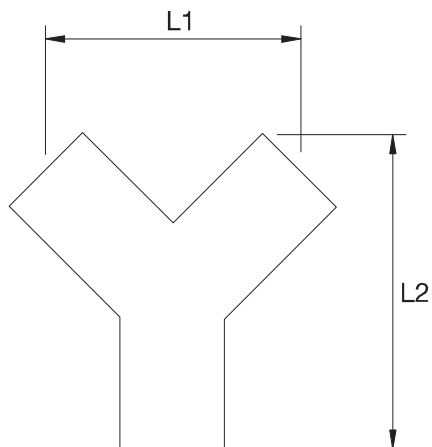


**A INDICATES 316**  
ALL DIMENSIONS ARE IN MILLIMETRES

**SWEEP TEE\* POLISHED 316**

Part Number	Size	B	L	WT Nominal
TSTD025.4A	25.4	51	90	1.6
TSTD031.8A	31.8	60	105	1.6
TSTD038.1A	38.1	70	120	1.6
TSTD050.8A	50.8	88	150	1.6
TSTD063.5A	63.5	122	210	1.6
TSTD076.2A	76.2	140	240	1.6
TSTD101.6A	101.6	179	310	1.6
TSTD127.0A	127.0	230	400	1.6
TSTE152.4A	152.4	270	460	2.0

*\*Double sweep tees available on request*

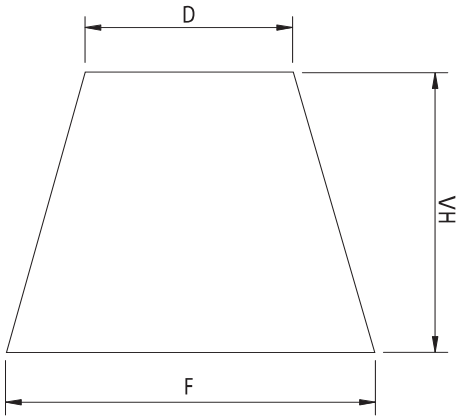


**A INDICATES 316**  
ALL DIMENSIONS ARE IN MILLIMETRES

**Y-PIECE POLISHED 316**

Part Number	Size	L1	L2	WT Nominal
TYPD025.4A	25.4	88	72	1.6
TYPD031.8A	31.8	110	90	1.6
TYPD038.1A	38.1	132	108	1.6
TYPD050.8A	50.8	176	143	1.6
TYPD063.5A	63.5	220	179	1.6
TYPD076.2A	76.2	264	215	1.6
TYPD101.6A	101.6	352	287	1.6
TYPD127.0A	127.0	359	440	1.6
TYPD152.4A	152.4	430	529	1.6

**CONCENTRIC REDUCER POLISHED 316**



**A INDICATES 316**

ALL DIMENSIONS ARE IN MILLIMETRES

Part Number	Size	F	D	WT Nominal
TCR019.1X012.7DA	19.1X12.7	19.1	12.7	1.6
TCR025.4X012.7DA	25.4X12.7	25.4	12.7	1.6
TCR025.4X019.1DA	25.4X19.1	25.4	19.1	1.6
TCR031.8X019.1DA	31.8X19.1	31.8	19.1	1.6
TCR031.8X025.4DA	31.8X25.4	31.8	25.4	1.6
TCR038.1X019.1DA	38.1X19.1	38.1	19.1	1.6
TCR038.1X025.4DA	38.1X25.4	38.1	25.4	1.6
TCR038.1X031.8DA	38.1X31.8	38.1	31.8	1.6
TCR050.8X019.1DA	50.8X19.1	50.8	19.1	1.6
TCR050.8X025.4DA	50.8X25.4	50.8	25.4	1.6
TCR050.8X031.8DA	50.8X31.8	50.8	31.8	1.6
TCR050.8X038.1DA	50.8X38.1	50.8	38.1	1.6
TCR063.5X025.4DA	63.5X25.4	63.5	25.4	1.6
TCR063.5X031.8DA	63.5X31.8	63.5	31.8	1.6
TCR063.5X038.1DA	63.5X38.1	63.5	38.1	1.6
TCR063.5X050.8DA	63.5X50.8	63.5	50.8	1.6
TCR076.2X025.4DA	76.2X25.4	76.2	25.4	1.6
TCR076.2X038.1DA	76.2X38.1	76.2	38.1	1.6
TCR076.2X050.8DA	76.2X50.8	76.2	50.8	1.6
TCR076.2X063.5DA	76.2X63.5	76.2	63.5	1.6
TCR101.6X025.4DA	101.6X25.4	101.6	25.4	1.6
TCR101.6X038.1DA	101.6X38.1	101.6	38.1	1.6
TCR101.6X050.8DA	101.6X50.8	101.6	50.8	1.6
TCR101.6X063.5DA	101.6X63.5	101.6	63.5	1.6
TCR101.6X076.2DA	101.6X76.2	101.6	76.2	1.6
TCR127.0X050.8DA	127.0X50.8	127.0	50.8	1.6
TCR127.0X063.5DA	127.0X63.5	127.0	63.5	1.6
TCR127.0X076.2DA	127.0X76.2	127.0	76.2	1.6
TCR127.0X101.6DA	127.0X101.6	127.0	101.6	1.6
TCR152.4X050.8DA	152.4X50.8	152.4	50.8	1.6
TCR152.4X063.5DA	152.4X63.5	152.4	63.5	1.6
TCR152.4X076.2DA	152.4X76.2	152.4	76.2	1.6
TCR152.4X101.6DA	152.4X101.6	152.4	101.6	1.6
TCR152.4X127.0DA	152.4X127.0	152.4	127.0	1.6

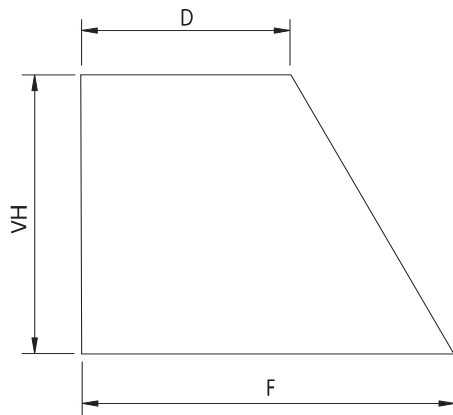
**LEGEND**

- D = Smaller Diameter of Reducer
- F = Larger Diameter of Reducer
- VH = Height of Reducer
- IN MOST CASES VH = F

Full Flow Tube Reducer VH = 4 (F-D)

Standard Tube Reducer VH = F





**A INDICATES 316**  
 ALL DIMENSIONS ARE IN MILLIMETRES

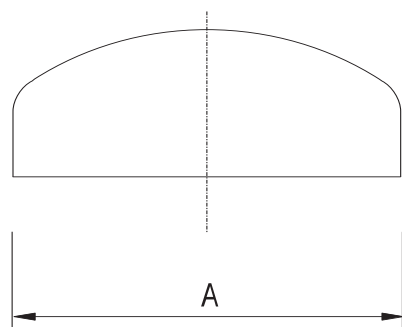
**ECCENTRIC REDUCER POLISHED 316**

Part Number	Size	F	D	WT Nominal
TER019.1X012.7DA	19.1X12.7	19.1	12.7	1.6
TER025.4X012.7DA	25.4X12.7	25.4	12.7	1.6
TER025.4X019.1DA	25.4X19.1	25.4	19.1	1.6
TER031.8X019.1DA	31.8X19.1	31.8	19.1	1.6
TER031.8X025.4DA	31.8X25.4	31.8	25.4	1.6
TER038.1X019.1DA	38.1X19.1	38.1	19.1	1.6
TER038.1X025.4DA	38.1X25.4	38.1	25.4	1.6
TER038.1X031.8DA	38.1X31.8	38.1	31.8	1.6
TER050.8X019.1DA	50.8X19.1	50.8	19.1	1.6
TER050.8X025.4DA	50.8X25.4	50.8	25.4	1.6
TER050.8X031.8DA	50.8X31.8	50.8	31.8	1.6
TER050.8X038.1DA	50.8X38.1	50.8	38.1	1.6
TER063.5X025.4DA	63.5X25.4	63.5	25.4	1.6
TER063.5X031.8DA	63.5X31.8	63.5	31.8	1.6
TER063.5X038.1DA	63.5X38.1	63.5	38.1	1.6
TER063.5X050.8DA	63.5X50.8	63.5	50.8	1.6
TER076.2X025.4DA	76.2X25.4	76.2	25.4	1.6
TER076.2X038.1DA	76.2X38.1	76.2	38.1	1.6
TER076.2X050.8DA	76.2X50.8	76.2	50.8	1.6
TER076.2X063.5DA	76.2X63.5	76.2	63.5	1.6
TER101.6X025.4DA	101.6X25.4	101.6	25.4	1.6
TER101.6X038.1DA	101.6X38.1	101.6	38.1	1.6
TER101.6X050.8DA	101.6X50.8	101.6	50.8	1.6
TER101.6X063.5DA	101.6X63.5	101.6	63.5	1.6
TER101.6X076.2DA	101.6X76.2	101.6	76.2	1.6
TER127.0X050.8DA	127.0X50.8	127.0	50.8	1.6
TER127.0X063.5DA	127.0X63.5	127.0	63.5	1.6
TER127.0X076.2DA	127.0X76.2	127.0	76.2	1.6
TER127.0X101.6DA	127.0X101.6	127.0	101.6	1.6
TER152.4X050.8DA	152.4X050.8	152.4	50.8	1.6
TER152.4X063.5DA	152.4X063.5	152.4	63.5	1.6
TER152.4X076.2DA	152.4X076.2	152.4	76.2	1.6
TER152.4X101.6DA	152.4X101.6	152.4	101.6	1.6
TER152.4X127.0DA	152.4X127.0	152.4	127.0	1.6

**LEGEND**

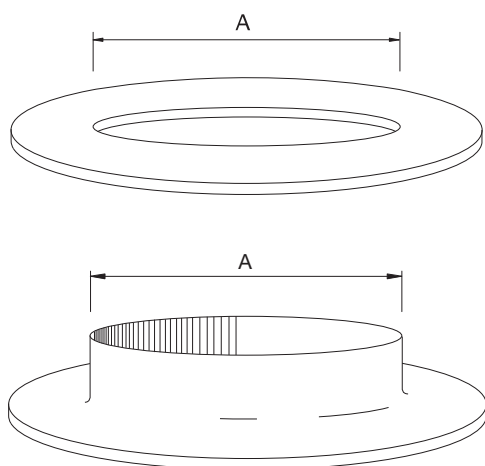
- D = Smaller Diameter of Reducer
- F = Larger Diameter of Reducer
- VH = Height of Reducer
- IN MOST CASES VH = F
- Full Flow Tube Reducer VH = 4 (F-D)
- Standard Tube Reducer VH = F

**DISHED CAPS POLISHED 316**



Part Number	Size	A	WT Nominal
TCAPD025.4DA	25.4	25.4	1.6
TCAPD031.8DA	31.8	31.8	1.6
TCAPD038.1DA	38.1	38.1	1.6
TCAPD050.8DA	50.8	50.8	1.6
TCAPD063.5DA	63.5	63.5	1.6
TCAPD076.2DA	76.2	76.2	1.6
TCAPD101.6DA	101.6	101.6	1.6
TCAPD127.0DA	127.0	127.0	1.6
TCAPD152.4DA	152.4	152.4	1.6

ALL DIMENSIONS ARE IN MILLIMETRES



**FACE/ANGLE RINGS 316**

Part Number	Size	A	WT Nominal
TFR025.4A	25.4	25.4	1.6
TFR031.8A	31.8	31.8	1.6
TFR038.1A	38.1	38.1	1.6
TFR050.8A	50.8	50.8	1.6
TAR063.5A	63.5	63.5	1.6
TAR076.2A	76.2	76.2	1.6
TAR101.6A	101.6	101.6	1.6
TAR127.0A	127.0	127.0	1.6
TAR152.4A	152.4	152.4	1.6

Note: Face ring up to 50.8 mm and angle ring for sizes 63.5 mm and above

ALL DIMENSIONS ARE IN MILLIMETRES

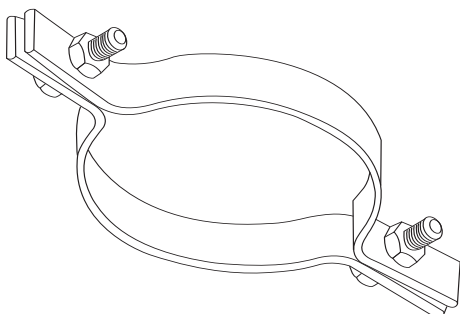
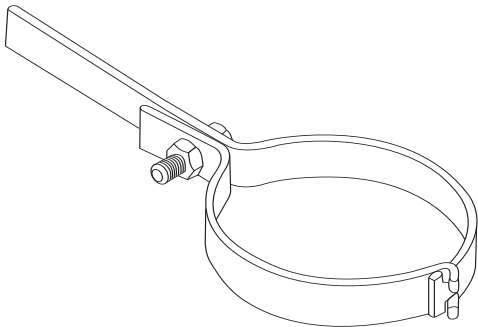
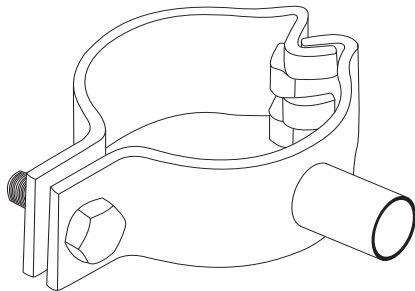
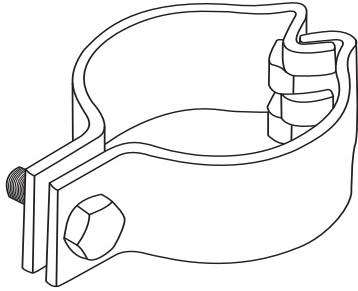
**TAPER NIPPLES**

Prochem manufactured BSP taper nipples are machined from heavy wall pipe allowing the ID of the fitting to be machined to suit OD sizes allowing the tube to be fully inserted.



Part Number	Thread Size	Suit Tube OD
BSPATN006A	R6 (1/8")	3.2 mm (1/8")
BSPATN008A	R8 (1/4")	6.35 mm (1/4")
BSPATN010A	R10 (3/8")	9.53 mm (3/8")
BSPATN015A	R15 (1/2")	12.7 mm (1/2")
BSPATN020A	R20 (3/4")	19.05 mm (3/4")
BSPATN025A	R25 (1")	25.4 mm (1")
BSPATN032A	R32 (1-1/4")	31.8 mm (1-1/4")
BSPATN040A	R40 (1-1/2")	38.1 mm (1-1/2")
BSPATN050A	R50 (2")	50.8 mm (2")
BSPATN065A	R65 (2-1/2")	63.5 mm (2-1/2")
BSPATN080A	R80 (3")	70.2 mm (3")
BSPATN100A	R100 (4")	101.6 mm (4")

# Clamps and Hangers



ALL DIMENSIONS ARE IN MILLIMETRES

## PLAIN CLAMPS (INTERLOCKING) 304

Part Number	Size
TCIHCP013C	12.7
TCIHCP019C	19.1
TCIHCP025C	25.4
TCIHCP032C	31.8
TCIHCP038C	38.1
TCIHCP051C	50.8
TCIHCP063C	63.5
TCIHCP076C	76.2
TCIHCP102C	101.6
TCIHCP127C	127.0
TCIHCP152C	152.4

## BOSSED CLAMPS 304

Part Number	Size
TCIHCB013C	12.7
TCIHCB019C	19.1
TCIHCB025C	25.4
TCIHCB032C	31.8
TCIHCB038C	38.1
TCIHCB051C	50.8
TCIHCB063C	63.5
TCIHCB076C	76.2
TCIHCB102C	101.6
TCIHCB127C	127.0
TCIHCB152C	152.4

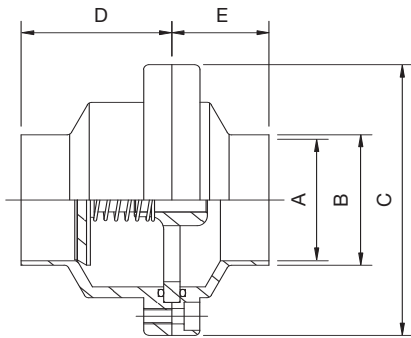
## TANG CLAMPS 304

Part Number	Size
TCITST013C	12.7
TCITST019C	19.1
TCITST025C	25.4
TCITST032C	31.8
TCITST038C	38.1
TCITST051C	50.8
TCITST063C	63.5
TCITST076C	76.2
TCITST102C	101.6
TCITST127C	127.0
TCITST152C	152.4

## DOUBLE BOLTED CLAMPS 304

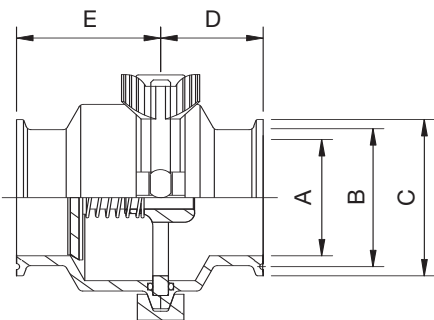
Part Number	Size
TCDBCP013C	12.7
TCDBCP019C	19.1
TCDBCP025C	25.4
TCDBCP032C	31.8
TCDBCP038C	38.1
TCDBCP051C	50.8
TCDBCP063C	63.5
TCDBCP076C	76.2
TCDBCP102C	101.6
TCDBCP127C	127.0
TCDBCP152C	152.4

# Non Return Valves



## FLANGE WELD END 316

Part Number	Size	A	B	C	D	E
VNRF025.4WEA	25.4	22.2	25.4	80	59	38
VNRF038.1WEA	38.1	34.9	38.1	93	59	38
VNRF050.8WEA	50.8	47.6	50.8	106	59	38
VNRF063.5WEA	63.5	60.3	63.5	123	59	38
VNRF076.2WEA	76.2	73.0	76.2	136	59	44



## CLAMP CLAMP END 316

Part Number	Size	A	B	C	D	E
VNRC025.4TEA	25.4	22.2	43.5	50.5	42	59
VNRC038.1TEA	38.1	34.9	43.5	50.5	42	59
VNRC050.8TEA	50.8	47.6	56.5	64.0	42	59
VNRC063.5TEA	63.5	60.3	70.5	77.5	42	59
VNRC076.2TEA	76.2	73.0	83.5	91.0	42	59

Maximum Working Pressure 10 bar

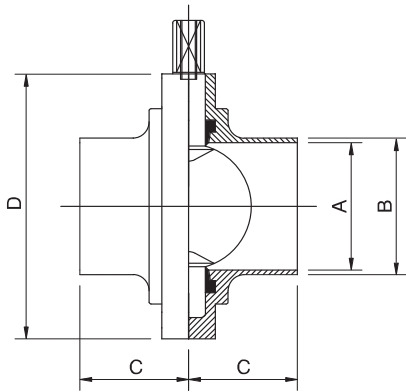
ALL DIMENSIONS ARE IN MILLIMETRES

Size	Cracking Pressure kPa (psi)
25.4 mm (1")	20 (3)
38.1 mm (1-1/2")	11 (1.6)
50.8 mm (2")	4.1 (0.6)
63.4 mm (2-1/2")	9 (1.3)
76.2 mm (3")	5.5 (0.8)
101.6 mm (4")	6.2 (0.9)





# Butterfly Valves



## WELD/WELD BUTTERFLY VALVE 316 C/W NYLON HANDLE

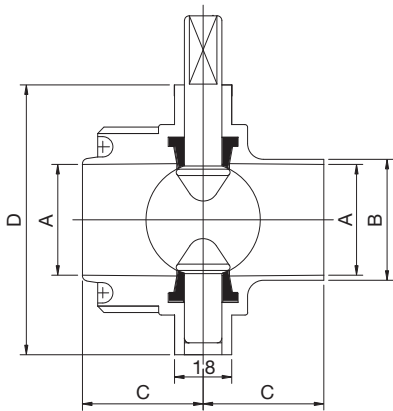
Part Number	Size	A	B	C	D
VBF025.4WEA	25.4	22.1	25.4	34	79
VBF038.1WEA	38.1	34.8	38.1	38	85
VBF050.8WEA	50.8	47.5	50.8	40	105
VBF063.5WEA	63.5	60.2	63.5	40	112
VBF076.2WEA	76.2	72.2	76.2	41	125
VBF101.6WEA	101.6	97.6	101.6	44	157

Note: All valves come standard with EPDM seat

## WELD/WELD BUTTERFLY VALVE 316 C/W STAINLESS STEEL LOCKABLE HANDLE

Part Number	Size	A	B	C	D
VBF025.4WEAL	25.4	22.1	25.4	34	79
VBF038.1WEAL	38.1	34.8	38.1	38	85
VBF050.8WEAL	50.8	47.5	50.8	40	105
VBF063.5WEAL	63.5	60.2	63.5	40	112
VBF076.2WEAL	76.2	72.2	76.2	41	125
VBF101.6WEAL	101.6	97.6	101.6	44	157

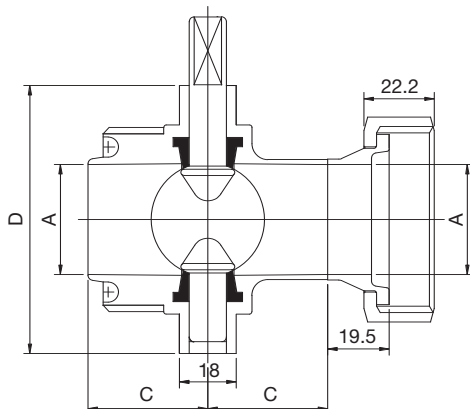
Note: All valves come standard with EPDM seat



## BSM MALE/WELD BUTTERFLY VALVE 316 C/W STAINLESS STEEL LOCKABLE HANDLE

Part Number	Size	A	B	C	D
VBF025.4BMWEALA	25.4	22.1	25.4	34	79
VBF038.1BMWEALA	38.1	34.8	38.1	38	85
VBF050.8BMWEALA	50.8	47.5	50.8	40	105
VBF076.2BMWEALA	76.2	72.2	76.2	41	125
VBF101.6BMWEALA	101.6	97.6	101.6	50/44	157

Note: All valves come standard with EPDM seat



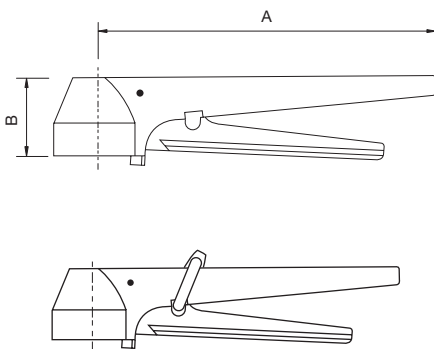
## BSM MALE/FEMALE BUTTERFLY VALVE 316 C/W STAINLESS STEEL LOCKABLE HANDLE

Part Number	Size	A	B	C	D
VBF025.4BMFEALA	25.4	22.1	34	79	79
VBF038.1BMFEALA	38.1	34.8	38	85	85
VBF050.8BMFEALA	50.8	47.5	40	105	105
VBF076.2BMFEALA	76.2	72.2	41	125	112
VBF101.6BMFEALA	101.6	97.6	50/44	157	125

Note: All valves come standard with EPDM seat



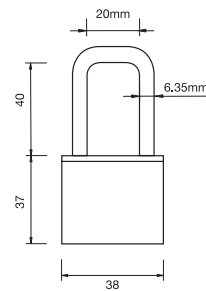
**Prochem’s hygienic butterfly valves come complete with 12 position lock-in plate to allow fine adjustment of flow.**



ALL DIMENSIONS ARE IN MILLIMETRES

**LOCKABLE STAINLESS STEEL HANDLE OPTION**

Part Number	Size	A	B
VBFHANDLEA	25.4 - 101.6	167	38



**PADLOCK DETAILS**

Dimensions for suitable padlocks are provided. Padlock can be mounted on lockable multi position handle as shown.

**TECHNICAL DATA**

WARNING: Improper selection or use of products described herein can cause personal injury or property damage. Whilst every care has been taken in preparation of the data contained in this handbook, Prochem accepts no liability for the accuracy of information supplied. It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings, and application details should be considered in the selection.

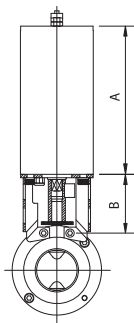
**BUTTERFLY VALVE TORQUE FOR FULL OPEN/CLOSE**

SIZE	TORQUE
25.4	<9.80 N/m
38.1	<9.80 N/m
50.8	12.74 N/m
63.5	14.70 N/m
76.2	19.60 N/m
101.6	30.30 N/m

**WORKING PRESSURES**

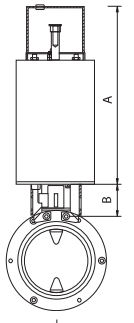
Minus 0.9 bar to 10 bar maximum, ambient temperature water. Standard range of Prochem Butterfly Valves are supplied with EPDM seat.

# Precision Actuators



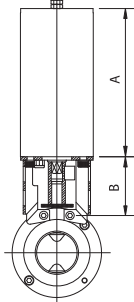
## DOUBLE ACTING PNEUMATIC 25-76 mm SIZE RANGE

Part Number	Size	A	B
VPABF076DA	25-76 mm	174	69



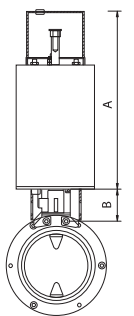
## DOUBLE ACTING PNEUMATIC 101.6 mm SIZE

Part Number	Size	A	B
VPABF102DA	101.6 mm	272	89



## SPRING RETURN PNEUMATIC 25-76 mm SIZE RANGE

Part Number	Size	A	B
VPABF076SR	25-76 mm	174	69



## SPRING RETURN PNEUMATIC 101.6 mm SIZE

Part Number	Size	A	B
VPABF102SR	101.6 mm	272	89



## PROCHEM K1 ACTUATOR DATA VALVE SIZE RANGE 25-76 mm

for both double acting and spring return

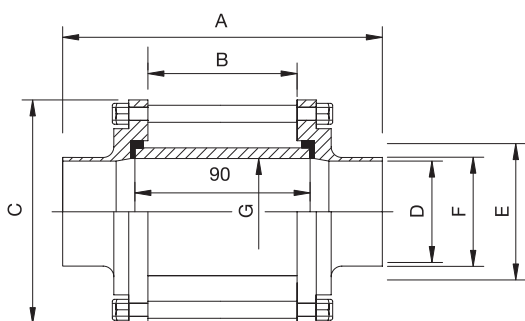
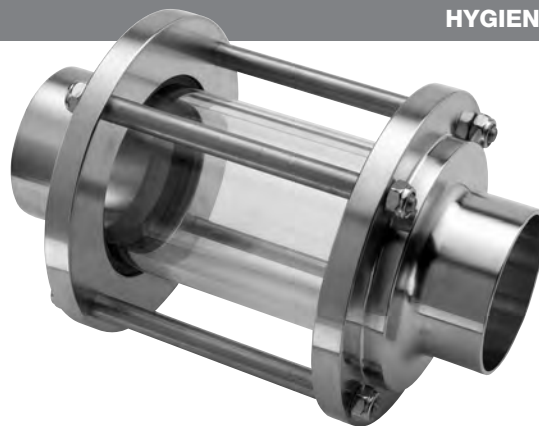
BODY MATERIAL	304 Stainless Steel
OUTPUT TORQUE	Max. 20 N/m
SHUT OFF TIME	1.5 seconds
WEIGHT	3.85 kg
OPERATING AIR PRESSURE	4 m/kg; min. 5 bar; max. 9 bar compressed air
AIR CONSUMPTION	0.266 litre at 5 bar

## PROCHEM K4 ACTUATOR DATA VALVE SIZE 101.6 mm

for both double acting and spring return

BODY MATERIAL	304 Stainless Steel
OUTPUT TORQUE	Max. 30 N/m
SHUT OFF TIME	1.7 seconds
WEIGHT	4.7 kg
OPERATING AIR PRESSURE	4 m/kg; min. 5 bar; max. 9 bar compressed air
AIR CONSUMPTION	0.550 litre at 5 bar

# Sight Glass



## SIGHT GLASS (LANTERN) WELD END 316

Part Number	Size	A	B	C	D	E	F	G
BSMSGL025.4WEA	25.4	150	82	79	22.1	32	25.4	26.0
BSMSGL038.1WEA	38.1	158	82	85	34.7	40	38.1	34.0
BSMSGL050.8WEA	50.8	162	82	105	47.6	60	50.8	50.0
BSMSGL063.5WEA	63.5	162	82	112	60.2	75	63.5	65.0
BSMSGL076.2WEA	76.2	164	82	125	72.0	85	76.2	75.4
BSMSGL101.6WEA	101.6	170	82	157	97.6	110	101.6	100.0
BSMSGL152.4WEA	152.4	196	82	214	146.8	160	152.4	150.0

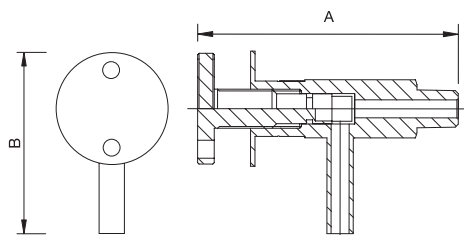
Maximum working pressure 10 bar

Replacement Glass Lens	Size
SGLG025.4	25.4
SGLG038.1	38.1
SGLG050.8	50.8
SGLG063.5	63.5
SGLG076.2	76.2
SGLG101.6	101.6
SGLG154.4	152.4

Replacement Polycarbonate Lens	Size
SGLP025.4	25.4
SGLP038.1	38.1
SGLP050.8	50.8
SGLP063.5	63.5
SGLP076.2	76.2
SGLP101.6	101.6
SGLP152.4	152.4

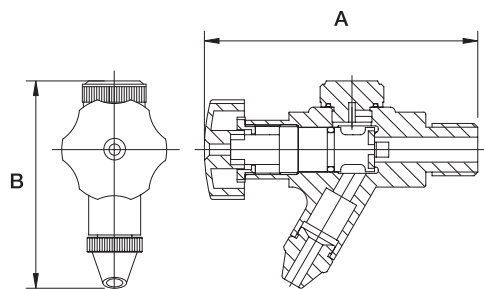
Replacement E.P.D.M. Seals	Size
SGSE025.4	25.4
SGSE038.1	38.1
SGSE050.8	50.8
SGSE063.5	63.5
SGSE076.2	76.2
SGSE101.6	101.6
SGSE152.4	152.4

# Sample Valves



## LOCKABLE SAMPLE VALVE 316

Part Number	Size	A	B
VSCL015EA	R15	75	67



## TEST VALVE 316

Part Number	Size	A	B
VWT015EA	G15	109	83

ALL DIMENSIONS ARE IN MILLIMETRES

# Stainless Steel Welded Tubing



**WELDED TUBE  
PHYSICAL DIMENSIONS AND TEST PRESSURE,  
IN ACCORDANCE WITH AS 1528.1 STANDARD**

Outside Diameter Nominal mm	Outside Diameter Tolerance mm	Wall Thickness Nominal mm	Wall Thickness Tolerance mm	Cut Length Tolerance mm	Test Pressure MPa
12.7	± 0.13	1.6	+nil, -0.10	-0, +3	26.9
19.1	± 0.13	1.6	+nil, -0.10	-0, +3	18.0
25.4	± 0.13	1.6	+nil, -0.10	-0, +3	13.5
31.8	± 0.13	1.6	+nil, -0.10	-0, +3	10.8
38.1	± 0.25	1.6	+nil, -0.10	-0, +5	9.0
50.8	± 0.25	1.6	+nil, -0.10	-0, +5	6.7
63.5	± 0.25	1.6	+nil, -0.10	-0, +5	5.4
76.2	± 0.25	1.6	+nil, -0.10	-0, +5	4.5
101.6	± 0.38	1.6	+nil, -0.10	-0, +5	3.4
127.0	± 0.38	1.6	+nil, -0.10	-0, +5	2.7
152.4	± 0.76	1.6	+nil, -0.10	-0, +5	2.2
203.2	± 0.76	2.0	+nil, -0.10	-0, +5	2.2
204.0*	± 2.04	2.0	± 0.20	-0, +10	7.0
254.0*	± 2.54	2.0	± 0.20	-0, +10	7.0
304.8*	± 3.05	2.5	± 0.25	-0, +10	7.0
355.6*	± 3.56	3.0	± 0.30	-0, +10	7.0

\* Tubes are manufactured to EN10217-7 - Welded steel tubes for pressure purposes.

**Welded Tube** – Prochem stock welded tube in a variety of finishes to suit market needs. These include “as welded”, “as welded polished”, “welded bright annealed”, “welded annealed polished”, and others on request. Materials in stock include 304 and 316 stainless steel to ASTM A269, ASTM A554 and AS1528.1, with other grades, standards or sizes available on request.



**STAINLESS STEEL ROUND WELDED TUBE 6 METRE LENGTHS**

Size, OD		Wall Thickness		Weight kg/m	T304						T316						
mm	inch	mm	Guage		AW	AWP	AWP3	AWA	AWAP	CW	AW	AWP	AWP3	AWM	AWA	AWAP	CWP
12.70	1/2	1.20	18	0.34		•	•					•	•				
12.70	1/2	1.60	16	0.45	•	•	•					•	•				
15.88	5/8	1.60	16	0.60	•	•	•					•	•				
19.10	3/4	1.60	16	0.71	•	•	•					•	•	•			•
22.23	7/8	1.60	16	0.84	•							•	•	•			
25.40	1	1.60	16	0.97	•	•	•					•	•	•			•
31.75	1-1/4	1.60	16	1.23	•	•	•					•	•	•			•
38.10	1-1/2	1.60	16	1.49	•	•	•				•	•	•	•			•
50.80	2	1.60	16	2.09		•	•					•	•	•			•
63.50	2-1/2	1.60	16	2.52	•	•	•					•	•				•
76.20	3	1.60	16	3.04		•	•					•	•				•
101.60	4	1.60	16	4.08	•	•	•					•	•				•
101.60	4	2.03	14	5.23	•	•	•										
127.00	5	1.60	16	5.12	•												
152.40	6	1.60	16	6.15	•	•	•				•	•	•				
152.40	6	2.03	14	7.91	•												
203.20	8	2.03	14	10.44	•						•						
204.00	-	2.0	-		*						*						
254.00	-	2.0	-		*						*						
254.00	10	2.03	14	13.07	•						•						
304.80	-	2.50	-		*						*						
355.6	-	3.00	-								*						

\* Tubes are manufactured to EN10217-7 - Welded steel tubes for pressure purposes. Materials 304L and 316L

• STANDARD STOCK

SPIRAL WOUND TUBE AVAILABLE IN CERTAIN SIZES. 152.4 X 1.6 MM & 203.2 X 2.03MM ALSO AVAILABLE IN T316L

**STAINLESS STEEL SQUARE TUBE ASTM A554**

Size mm	Wall Thickness mm	Weight kg/m	T304 Polished	T316 Polished
12.70 x 12.70	1.2	0.44	•	
19.10 x 19.10	1.2	0.67	•	
19.10 x 19.10	1.6	0.88	•	
25.40 x 25.40	1.2	0.92	•	
25.40 x 25.40	1.6	1.21	•	•
31.75 x 31.75	1.2	1.17	•	
31.75 x 31.75	1.6	1.55	•	
38.10 x 38.10	1.2	1.40	•	
38.10 x 38.10	1.6	1.85	•	•
38.10 x 38.10	3.0	3.30	•	
50.80 x 50.80	1.6	2.49	•	
50.80 x 50.80	3.0	4.48	•	
76.20 x 76.20	3.0	7.30	•	
101.60 x 101.60	3.0	9.73	•	

• STANDARD STOCK

**DEFINITIONS**

**LEGEND**

<b>AW</b>	AS WELDED
<b>AWM</b>	AS WELDED POLISHED Mirror
<b>AWP3</b>	AS WELDED POLISHED 320 Grit
<b>AWP</b>	AS WELDED POLISHED 600 Grit
<b>AWA</b>	AS WELDED ANNEALED
<b>AWAP</b>	AS WELDED ANNEALED-POLISHED
<b>CW</b>	COLD WORKED
<b>CWP</b>	COLD WORKED POLISHED

“AW” & “AWP” ARE MANUFACTURED TO ASTM A554

“CW” & “CWP” ARE MANUFACTURED TO AS1528  
Tubes of this quality are suitable for use in the food industry.  
Available in Grades T304 and T316

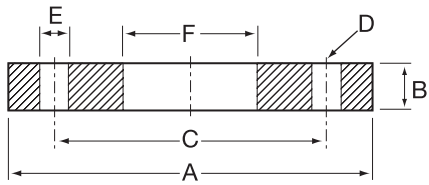
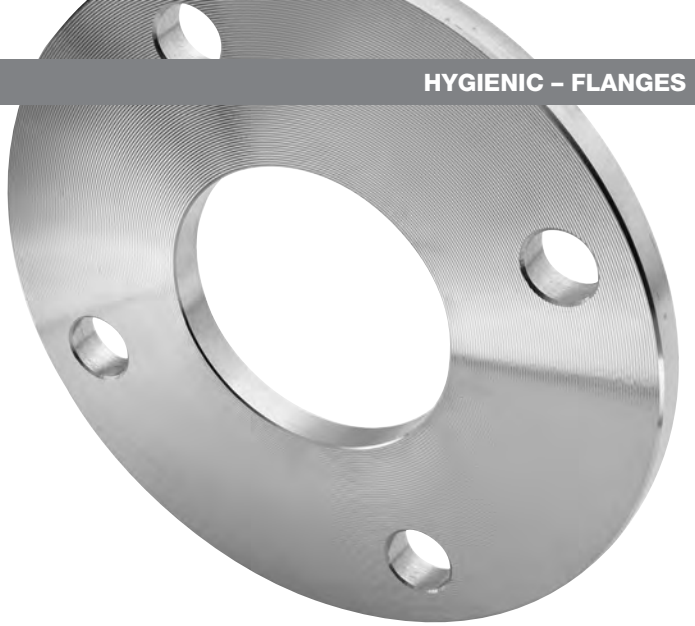
“AWA” & “AWAP” ARE MANUFACTURED TO ASTM A269  
annealed condition

**POLISHED TUBE** (all supplied in plastic sleeves)

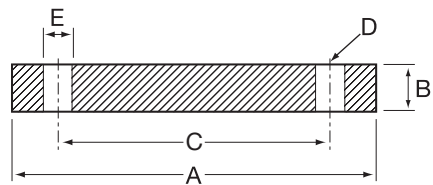
Our Standard polish is: **Round Tube:** 320 Grit, 600 Grit and Mirror finish  
**Square Tube:** 180 Grit



# Flanges



SLIP-ON WELDING



BLIND

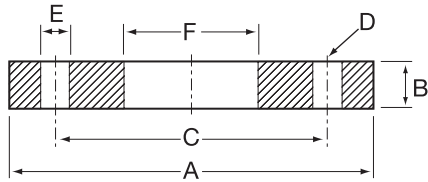
TABLE D FLANGES 316L

Part Number for Blind Flange	Part Number for Pipe Bore Slip-On	Part Number for Tube Bore Slip-On	Pipe Size DN	Tube Size OD	Outside Diam. of Flange A	Forged or Plate; Thickness of Flange Min. B	Pitch Circle Diam. C	Number of Holes D	Diam. of Holes E	Diam. of Bolts Metric	Slip-On F
BSD015BLB	BSD015PBSOB	BSD015TBSOB	15	12.70	95	5*	67	4	14	M12	BORE OF FLANGES TO SUIT EITHER PIPE OR TUBE OD - REFER PIPE & TUBE DIMENSIONS ON PAGES 36 & 37
BSD020BLB	BSD020PBSOB	BSD020TBSOB	20	19.10	100	5*	73	4	14	M12	
BSD025BLB	BSD025PBSOB	BSD025TBSOB	25	25.40	115	5*	83	4	14	M12	
BSD032BLB	BSD032PBSOB	BSD032TBSOB	32	31.80	120	6*	87	4	14	M12	
BSD040BLB	BSD040PBSOB	BSD040TBSOB	40	38.10	135	6*	98	4	14	M12	
BSD050BLB	BSD050PBSOB	BSD050TBSOB	50	50.80	150	8*	114	4	18	M16	
BSD065BLB	BSD065PBSOB	BSD065TBSOB	65	63.50	165	8*	127	4	18	M16	
BSD080BLB	BSD080PBSOB	BSD080TBSOB	80	76.20	185	10*	146	4	18	M16	
BSD100BLB	BSD100PBSOB	BSD100TBSOB	100	101.60	215	10*	178	4	18	M16	
BSD125BLB	BSD125PBSOB	BSD125TBSOB	125	127.00	255	13	210	8	18	M16	
BSD150BLB	BSD150PBSOB	BSD150TBSOB	150	152.40	280	13	235	8	18	M16	
BSD200BLB	BSD200PBSOB	BSD200TBSOB	200	203.20	335	13	292	8	18	M16	
BSD250BLB	BSD250PBSOB	BSD250TBSOB	250	254.00	405	16	356	8	22	M20	
BSD300BLB	BSD300PBSOB	BSD300TBSOB	300	304.80	455	19	406	12	22	M20	
BSD350BLB	BSD350PBSOB	BSD350TBSOB	350	355.60	525	22	470	12	26	M24	
BSD400BLB	BSD400PBSOB	BSD400TBSOB	400	406.40	580	22	521	12	26	M24	
BSD450BLB	BSD450PBSOB	BSD450TBSOB	450	457.20	640	25	584	12	26	M24	
BSD500BLB	BSD500PBSOB	BSD500TBSOB	500	508.00	705	29	641	16	26	M24	
BSD600BLB	BSD600PBSOB	BSD600TBSOB	600	609.60	825	32	756	16	30	M27	

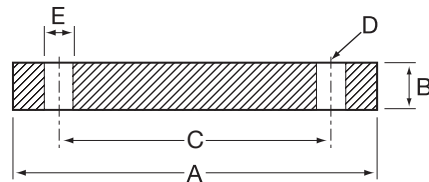
\* Flanges less than 12 mm thickness may suffer unacceptable distortion after welding to pipe.

304L FLANGES ARE ALSO AVAILABLE. REPLACE THE FINAL "B" IN THE PART NUMBER WITH "D"

NB - 15 NB TO 32 NB ONLY STOCKED IN TABLE 'E' FLANGE  
ALL SIZES ARE IN MILLIMETRES



SLIP-ON WELDING



BLIND

TABLE E FLANGES 316L

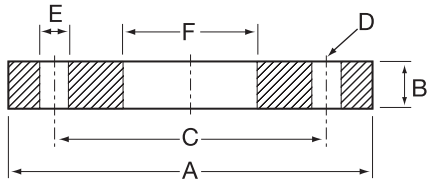
Part Number for Blind Flange	Part Number for Pipe Bore Slip-On	Part Number for Tube Bore Slip-On	Pipe Size DN	Tube Size OD	Outside Diam. of Flange A	Forged or Plate; Thickness of Flange Min. B	Pitch Circle Diam. C	Number of Holes D	Diam. of Holes E	Diam. of Bolts Metric	Slip-On F
BSE015BLB	BSE015PBSOB	BSE015TBSOB	15	12.70	95	6*	67	4	14	M12	BORE OF FLANGES TO SUIT EITHER PIPE OR TUBE OD - REFER PIPE & TUBE DIMENSIONS ON PAGES 36 & 37
BSE020BLB	BSE020PBSOB	BSE020TBSOB	20	19.10	100	6*	73	4	14	M12	
BSE025BLB	BSE025PBSOB	BSE025TBSOB	25	25.40	115	7*	83	4	14	M12	
BSE032BLB	BSE032PBSOB	BSE032TBSOB	32	31.80	120	8*	87	4	14	M12	
BSE040BLB	BSE040PBSOB	BSE040TBSOB	40	38.10	135	9*	98	4	14	M12	
BSE050BLB	BSE050PBSOB	BSE050TBSOB	50	50.80	150	10*	114	4	18	M16	
BSE065BLB	BSE065PBSOB	BSE065TBSOB	65	63.50	165	10*	127	4	18	M16	
BSE080BLB	BSE080PBSOB	BSE080TBSOB	80	76.20	185	11*	146	4	18	M16	
BSE100BLB	BSE100PBSOB	BSE100TBSOB	100	101.60	215	13	178	8	18	M16	
BSE125BLB	BSE125PBSOB	BSE125TBSOB	125	127.00	255	14	210	8	18	M16	
BSE150BLB	BSE150PBSOB	BSE150TBSOB	150	152.40	280	17	235	8	22	M20	
BSE200BLB	BSE200PBSOB	BSE200TBSOB	200	203.20	335	19	292	8	22	M20	
BSE250BLB	BSE250PBSOB	BSE250TBSOB	250	254.00	405	22	356	12	22	M20	
BSE300BLB	BSE300PBSOB	BSE300TBSOB	300	304.80	455	25	406	12	26	M24	
BSE350BLB	BSE350PBSOB	BSE350TBSOB	350	355.60	525	29	470	12	26	M24	
BSE400BLB	BSE400PBSOB	BSE400TBSOB	400	406.40	580	32	521	12	26	M24	
BSE450BLB	BSE450PBSOB	BSE450TBSOB	450	457.20	640	35	584	16	26	M24	
BSE500BLB	BSE500PBSOB	BSE500TBSOB	500	508.00	705	38	641	16	26	M24	
BSE600BLB	BSE600PBSOB	BSE600TBSOB	600	609.60	825	48	756	16	33	M30	

\* Flanges less than 12 mm thickness may suffer unacceptable distortion after welding to pipe.

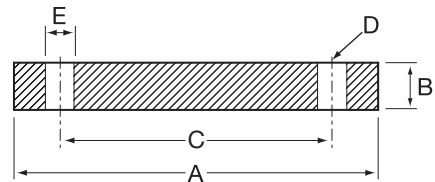
304L FLANGES ARE ALSO AVAILABLE. REPLACE THE FINAL “B” IN THE PART NUMBER WITH “D”

NB - 15 NB TO 32 NB ONLY STOCKED IN TABLE ‘E’ FLANGE

ALL SIZES ARE IN MILLIMETRES



SLIP-ON WELDING



BLIND

TABLE F FLANGES 316L

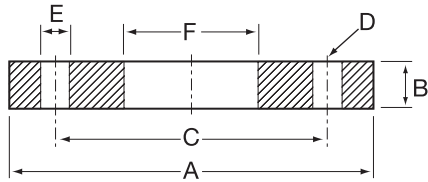
Part Number for Blind Flange	Part Number for Pipe Bore Slip-On	Part Number for Tube Bore Slip-On	Pipe Size DN	Tube Size OD	Outside Diam. of Flange A	Forged or Plate; Thickness of Flange Min. B	Pitch Circle Diam. C	Number of Holes D	Diam. of Holes E	Diam. of Bolts Metric	Slip-On F
BSF015BLB	BSF015PBSOB	BSF015TBSOB	15	12.70	95	10*	67	4	14	M12	BORE OF FLANGES TO SUIT EITHER PIPE OR TUBE OD - REFER PIPE & TUBE DIMENSIONS ON PAGES 36 & 37
BSF020BLB	BSF020PBSOB	BSF020TBSOB	20	19.10	100	10*	73	4	14	M12	
BSF025BLB	BSF025PBSOB	BSF025TBSOB	25	25.40	120	10*	87	4	18	M16	
BSF032BLB	BSF032PBSOB	BSF032TBSOB	32	31.80	135	13	98	4	18	M16	
BSF040BLB	BSF040PBSOB	BSF040TBSOB	40	38.10	140	13	105	4	18	M16	
BSF050BLB	BSF050PBSOB	BSF050TBSOB	50	50.80	165	16	127	4	18	M16	
BSF065BLB	BSF065PBSOB	BSF065TBSOB	65	63.50	185	16	146	8	18	M16	
BSF080BLB	BSF080PBSOB	BSF080TBSOB	80	76.20	205	16	165	8	18	M16	
BSF100BLB	BSF100PBSOB	BSF100TBSOB	100	101.60	230	19	191	8	18	M16	
BSF125BLB	BSF125PBSOB	BSF125TBSOB	125	127.00	280	22	235	8	22	M20	
BSF150BLB	BSF150PBSOB	BSF150TBSOB	150	152.40	305	22	260	12	22	M20	
BSF200BLB	BSF200PBSOB	BSF200TBSOB	200	203.20	370	25	324	12	22	M20	
BSF250BLB	BSF250PBSOB	BSF250TBSOB	250	254.00	430	29	381	12	26	M24	
BSF300BLB	BSF300PBSOB	BSF300TBSOB	300	304.80	490	32	438	16	26	M24	
BSF350BLB	BSF350PBSOB	BSF350TBSOB	350	355.60	550	35	495	16	30	M27	
BSF400BLB	BSF400PBSOB	BSF400TBSOB	400	406.40	610	41	552	20	30	M27	
BSF450BLB	BSF450PBSOB	BSF450TBSOB	450	457.20	675	44	610	20	33	M30	
BSF500BLB	BSF500PBSOB	BSF500TBSOB	500	508.00	735	51	673	24	33	M30	
BSF600BLB	BSF600PBSOB	BSF600TBSOB	600	609.60	850	57	781	24	36	M33	

\* Flanges less than 12 mm thickness may suffer unacceptable distortion after welding to pipe.

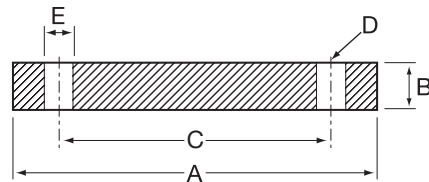
304L FLANGES ARE ALSO AVAILABLE. REPLACE THE FINAL “B” IN THE PART NUMBER WITH “D”

NB - 15 NB TO 32 NB ONLY STOCKED IN TABLE ‘E’ FLANGE

ALL SIZES ARE IN MILLIMETRES



SLIP-ON WELDING



BLIND

TABLE H FLANGES 316L

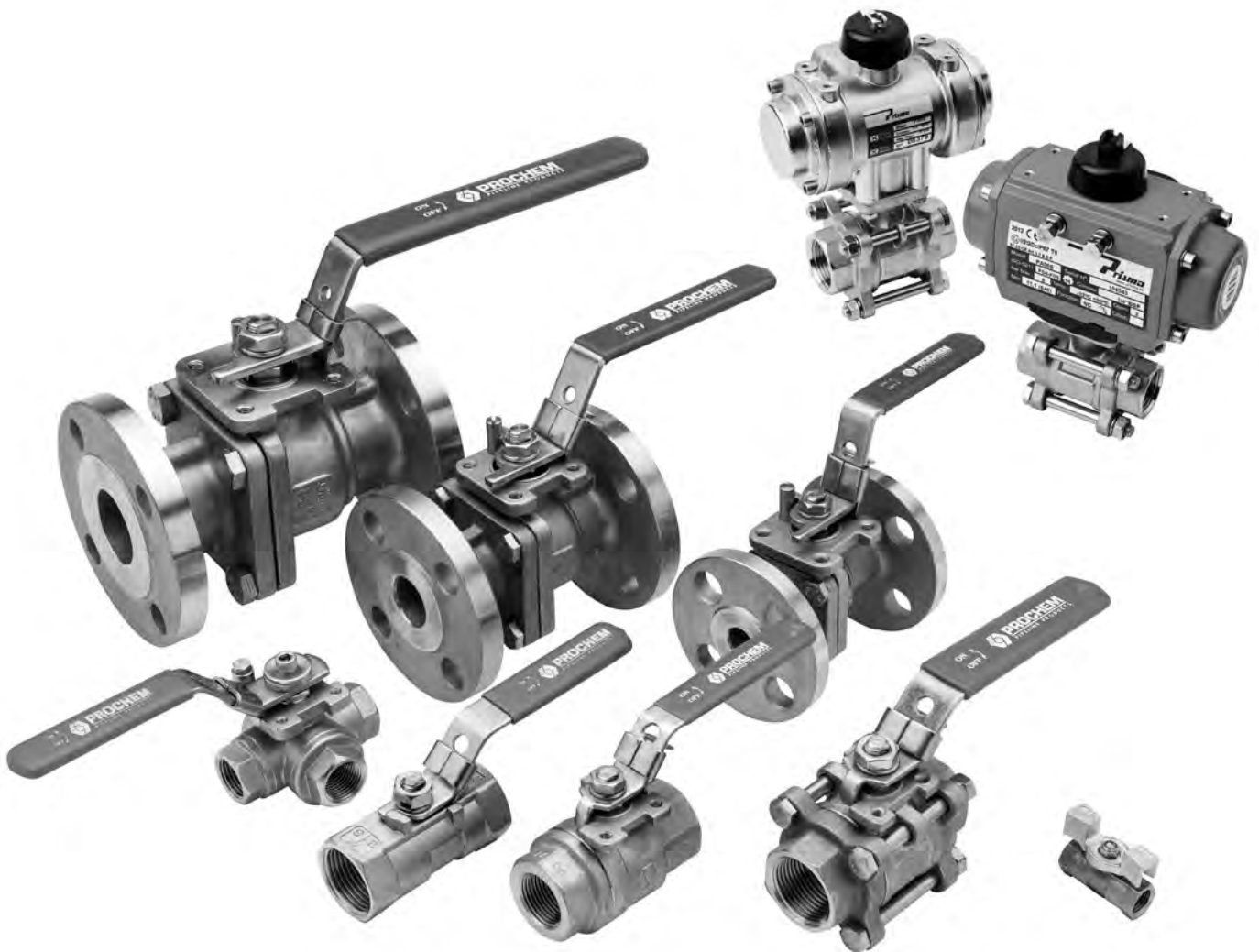
Part Number for Blind Flange	Part Number for Pipe Bore Slip-On	Part Number for Tube Bore Slip-On	Pipe Size DN	Tube Size OD	Outside Diam. of Flange A	Forged or Plate; Thickness of Flange Min. B	Pitch Circle Diam. C	Number of Holes D	Diam. of Holes E	Diam. of Bolts Metric	Slip-On F
BSH015BLB	BSH015PBSOB	BSH015TBSOB	15	12.70	115	13	83	4	18	M16	BORE OF FLANGES TO SUIT EITHER PIPE OR TUBE OD - REFER PIPE & TUBE DIMENSIONS ON PAGES 36 & 37
BSH020BLB	BSH020PBSOB	BSH020TBSOB	20	19.10	115	13	83	4	18	M16	
BSH025BLB	BSH025PBSOB	BSH025TBSOB	25	25.40	120	14	87	4	18	M16	
BSH032BLB	BSH032PBSOB	BSH032TBSOB	32	31.80	135	17	98	4	18	M16	
BSH040BLB	BSH040PBSOB	BSH040TBSOB	40	38.10	140	17	105	4	18	M16	
BSH050BLB	BSH050PBSOB	BSH050TBSOB	50	50.80	165	19	127	4	18	M16	
BSH065BLB	BSH065PBSOB	BSH065TBSOB	65	63.50	185	19	146	8	18	M16	
BSH080BLB	BSH080PBSOB	BSH080TBSOB	80	76.20	205	22	165	8	18	M16	
BSH100BLB	BSH100PBSOB	BSH100TBSOB	100	101.60	230	25	191	8	18	M16	
BSH125BLB	BSH125PBSOB	BSH125TBSOB	125	127.00	280	29	235	8	22	M20	
BSH150BLB	BSH150PBSOB	BSH150TBSOB	150	152.40	305	29	260	12	22	M20	
BSH200BLB	BSH200PBSOB	BSH200TBSOB	200	203.20	370	32	324	12	22	M20	
BSH250BLB	BSH250PBSOB	BSH250TBSOB	250	254.00	430	35	381	12	26	M24	
BSH300BLB	BSH300PBSOB	BSH300TBSOB	300	304.80	490	41	438	16	26	M24	
BSH350BLB	BSH350PBSOB	BSH350TBSOB	350	355.60	550	48	495	16	30	M27	
BSH400BLB	BSH400PBSOB	BSH400TBSOB	400	406.40	610	54	552	20	30	M27	
BSH450BLB	BSH450PBSOB	BSH450TBSOB	450	457.20	675	60	610	20	33	M30	
BSH500BLB	BSH500PBSOB	BSH500TBSOB	500	508.00	735	67	673	24	33	M30	
BSH600BLB	BSH600PBSOB	BSH600TBSOB	600	609.60	850	76	781	24	36	M33	

304L FLANGES ARE ALSO AVAILABLE. REPLACE THE FINAL “B” IN THE PART NUMBER WITH “D”  
 NB - 15 NB TO 32 NB ONLY STOCKED IN TABLE ‘E’ FLANGE  
 ALL SIZES ARE IN MILLIMETRES

STAINLESS STEEL

# Ball Valves

**Prochem offers a full range of high quality ball valves for a variety of general and specialty applications. Stocks are maintained at our branches Australia-wide, ensuring that our customers can rely on quick access to the most suitable style of ball valve for their needs.**





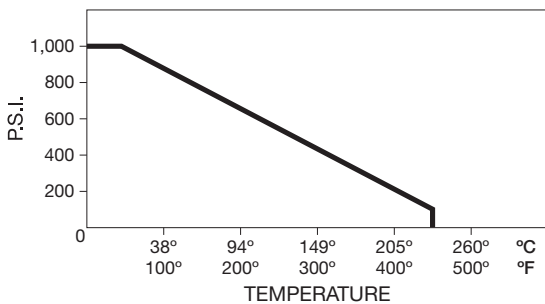
**2-WAY REDUCED BORE 1-PIECE STAINLESS BSP 1000 W.O.G.**

These simple, practical, 1-piece “bar-stock” type valves provide the most economic solution for manual control of air, water, and other clean and corrosive fluids in many environments.

Available in sizes 8 (1/4”) to 50 mm (2”).

- Reduced port
- 1-piece economy design
- Investment cast CF8M
- Anti-blowout stem
- Seat material Virgin PTFE

**Pressure/Temperature Rating**



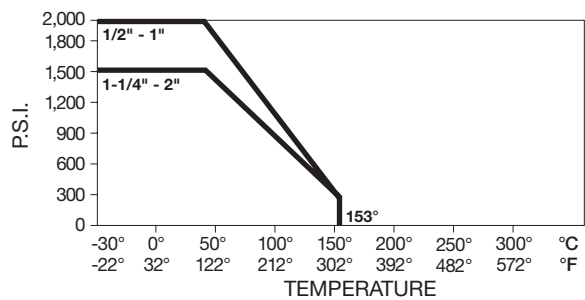
**2-WAY REDUCED BORE 1-PIECE HIGH PRESSURE STAINLESS BSP 1500/2000 W.O.G.**

This valve provides the user with a higher working pressure compared to the 800 W.O.G. 1-piece “bar-stock” valves.

Available in sizes 8 (1/4”) to 50 mm (2”).

- Reduced port
- 1-piece economy design
- Investment cast CF8M
- Anti-blowout stem
- Seat material Virgin PTFE

**Pressure/Temperature Rating**





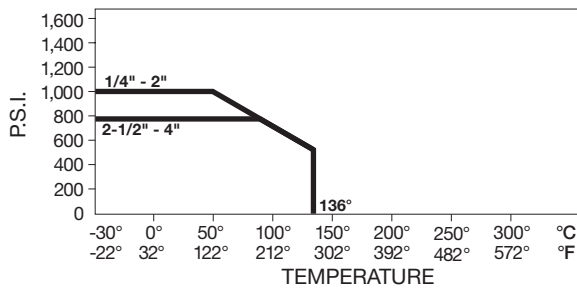
**2-WAY FULL BORE 2-PIECE STAINLESS BSP 800/1000 W.O.G.**

Full bore 2-piece threaded valves allowing straight-through flow. Virtually no head loss and a superior performer with mildly abrasive as well as corrosive fluids. Ideal for in-line control of process fluids.

Available in sizes 8 (1/4") to 80 mm (3").

- Full port
- 2-piece body
- Investment cast CF8M
- Anti-blowout stem
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Virgin PTFE

**Pressure/Temperature Rating**



Size		Torque		Weight kgs
mm	in	Nm	in/lbs	
8	1/4	5.8	50	.23
10	3/8	5.8	50	.23
15	1/2	8.5	75	.31
20	3/4	11.3	100	.57
25	1	20.5	180	.91
32	1-1/4	27	235	1.5
40	1-1/2	34	300	2.0
50	2	37.3	330	3.5



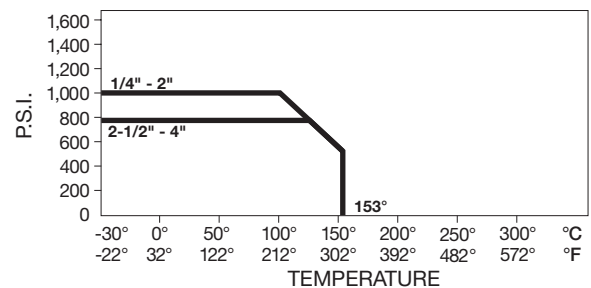
**2-WAY FULL BORE 3-PIECE STAINLESS BSP AND NPT 800/1000 W.O.G.**

3-piece construction allows end connections to be permanently fitted to the pipe, so the valve body can be removed enabling replacement of seals without disturbing pipework.

Available in sizes 8 (1/4") to 100 mm (4").

- Full port
- 3-piece swing out body
- Investment cast CF8M
- In-line repairable
- Anti-blowout stem
- Locking SS handle
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Reinforced PTFE

**Pressure/Temperature Rating**



Size		Torque		Weight kgs
mm	in	Nm	in/lbs	
8	1/4	5.8	50	.45
10	3/8	5.8	50	.45
15	1/2	7.5	65	.45
20	3/4	10	80	.91
25	1	17	150	1.4
32	1-1/4	23	200	2.0
40	1-1/2	25.5	225	2.4
50	2	28.5	250	3.6
65	2-1/2	96	850	9.1
80	3	113	1000	12.7
100	4	272	2400	20.4





**3-WAY REDUCED BORE  
STAINLESS BSP 800 W.O.G.**

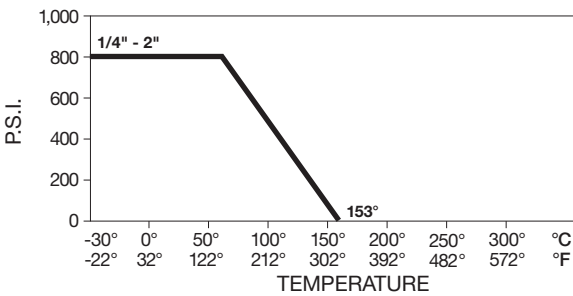
L-ported valves available to replace two normal valves, saving space, cost and weight.

Available in sizes 8 (1/4") to 50 mm (2").

"T" Ported valves available on request.

- Reduced port
- Investment cast CF8M
- Anti-blowout stem
- Actuator mounting pad
- Seat material Virgin PTFE

**Pressure/Temperature Rating**



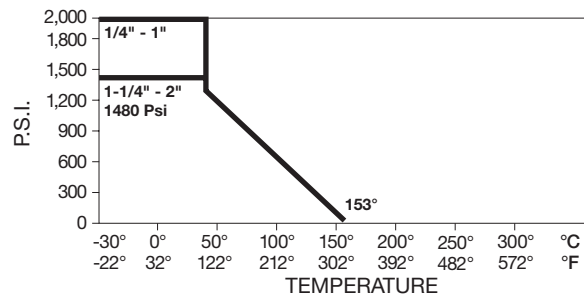
**2-WAY FULL BORE 2-PIECE  
STAINLESS NPT 1500/2000 W.O.G.**

Full Bore 2-piece threaded valves allowing straight-through flow. Virtually no head loss and a superior performer with mildly abrasive as well as corrosive fluids. Ideal for in-line control of process fluids.

Available in sizes 8 (1/4") to 50 mm (2").

- **All 316 wetted and non wetted components**
- Full Port
- 2-piece body
- Investment cast CF8M
- Anti-blowout stem
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Virgin PTFE

**Pressure/Temperature Rating**



# Flanged Ball Valves

## Split Body ANSI-ISO stainless steel flanged ball valves

- Full bore for minimum pressure drop
- In-line repairable split body design
- Investment cast through 100 mm (4") – CF8M
- Anti-blowout stem
- Adjustable stem packing
- Locking handle
- Static grounding device
- Flange dimensions to ANSI B16.5 and AS 2129
- Face to face dimension to ANSI B16.10
- Design in accordance ANSI B16.34 and API60 Testing to API 598
- Actuator mounting pad to ISO 5211
- Vacuum service down to 20 microns
- Stocked in ANSI Class 150, Table D and E

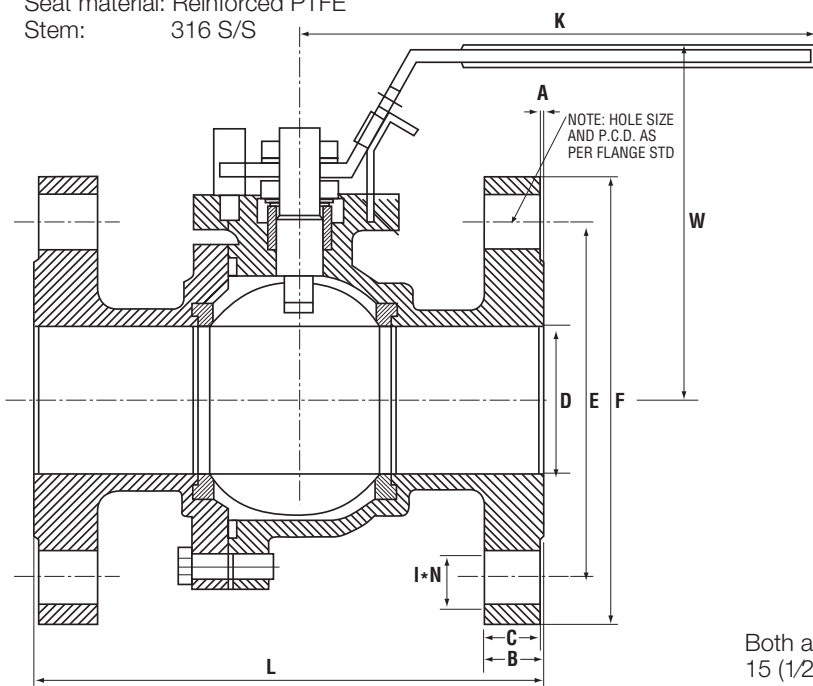


CLASS 150* (all dimensions are in millimetres)														
Size		A	B	C	D	E	F	L	I	N	K	W	U	J
mm	inch													
15	1/2"	1.6	11.2	9.6	15	60.5	88.9	108	16	4	120	91.0	50	M6
20	3/4"	1.6	12.7	11.1	20	69.9	98.6	117	16	4	120	94.5	50	M6
25	1"	1.6	14.3	12.7	25	79.3	108.0	127	16	4	158	96.5	50	M6
40	1-1/2"	1.6	17.6	16.0	38	98.6	127.0	165	16	4	228	113.0	70	M8
50	2"	1.6	19.1	17.5	50	120.7	152.4	178	19	4	228	122.5	70	M8
65	2-1/2"	1.6	22.4	20.8	65	139.8	178.0	190	19	4	349	-	102	M10
80	3"	1.6	23.9	22.3	80	152.5	190.0	203	19	4	349	-	102	M10
100	4"	1.6	23.9	22.3	100	190.5	229.0	228	19	8	349	-	102	M10

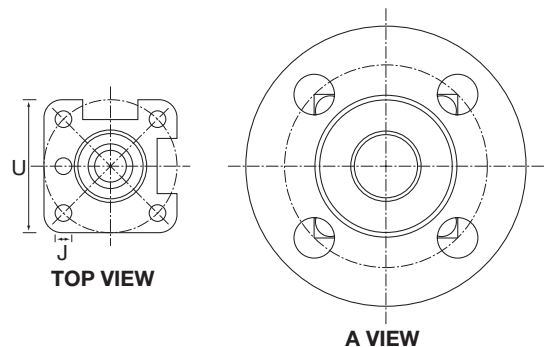
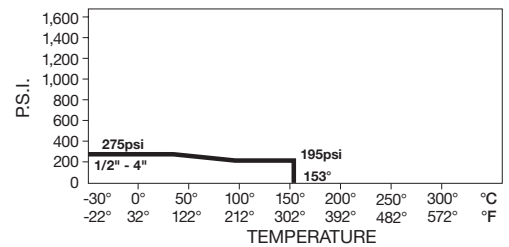
Valve Size		Breakaway Torque Nm	Weight kg
mm	inch		
15	1/2"	7-8	2.3
20	3/4"	10-11	2.7
25	1"	25-27	3.6
40	1-1/2"	42-44	6.8
50	2"	47-49	10.4
65	2-1/2"	49-52	15.9
80	3"	128-147	19.1
100	4"	156-168	29.9

\* Refer to AS 2129 for table flange dimensions

Body: ASTM-A351-CF8M  
 Ball material: 316 S/S  
 Seat material: Reinforced PTFE  
 Stem: 316 S/S



CLASS 150



Both above views are for sizes 15 (1/2"), 20 (3/4"), 25 (1"), 40 (1-1/2") and 50 (2") valves.

# Actuated Ball Valves

Prochem offers a close-fitted range of Pneumatic Double Acting and Spring Return Actuators. Anodised/ epoxy coated Aluminium alloy compact double piston and rack design, and featuring NAMUR standard ports for flush mounting of solenoid valves. Also available on request – Stainless Steel Actuators.

Standard compact mounting kits are generally common for either double acting or spring return actuators on the same valve.

Suitable for the Prochem range of 2-piece full bore threaded valves – 3-piece full bore threaded valves – 2-piece full bore flanged valves.

Refer to the Matching Chart below to select the actuator to suit your valves.

## GENERAL FEATURES

- Air supply: filtered, dry or lubricated, pressure minimum 1 bar (14 psi), pressure maximum 10 bar (142 psi).
- Lubrication: factory lubricated, guaranteed for 500,000 strokes minimum.
- Internal sliding surface lapped and anodized (Ra 0.8 – 1-2 µm on cut off 12.5 mm), for minimum friction and very long life to actuator.
- Guide bearings made by low friction material, to avoid metal to metal contact, easily replaceable for maintenance.
- Double bottom drilling, for actuator to valve assembling and centering as ISO 5211/DIN 3337 standard.
- Bottom shaft female key, as ISO 5211/DIN 3337 standard, double square hole for assembling on valves with square key stem in line or turned 45°.
- Air supply ports drilling as NAMUR standard or with interface plate as NAMUR standard.
- Top drilling for accessories assembling and shaft top end as NAMUR standard.
- Position indicator on request.

- Standard temperature range: -20 to 90°C (-4 to 194°F). Special (on request) range: -40 to 160°C (-40 to 320°F).
- External protection: corrosion as ASTM B 117-73.
- Each actuator is branded with a progressive serial number for easy identification and traceability.
- All actuators are cycle and pressure tested.

## MANUFACTURING MATERIALS

Body: Extruded Aluminium alloy ASTM 6063, anodised UNI 4522 (Epoxy coated).

Caps: Die-cast Aluminium alloy UNI 5076, powder epoxy coated.

Pistons: Die-cast Aluminium alloy UNI 5076

Shaft: Steel AISI SAE 11L37, Electroless nickel plated ASTM B 656.

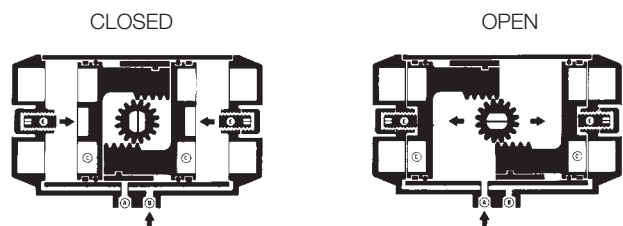
Guides: Low friction acetalic resin.

Bolts: Stainless steel AISI 304.

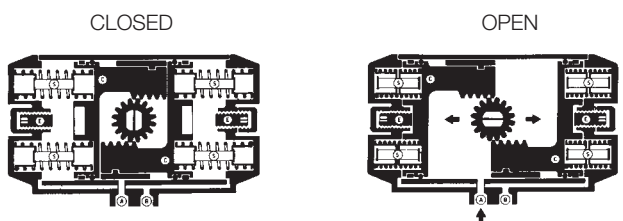
Springs: Preloaded spring cartridges, patented all around the world since 1986, powder epoxy coated.

Sealing: Nitrilic rubber BUNA N (on request VITON or EPDM).

## DOUBLE ACTING ACTUATORS (TOP VIEW)



## SPRING RETURN ACTUATORS (TOP VIEW)



## MATCHING CHART: ACTUATOR TO VALVE SIZE AND TYPE (spring return actuators available on request)

Prochem Two Piece Full Bore Stainless Ball Valve		Double Acting Actuator	Prochem Three Piece Full Bore Stainless Ball Valve		Double Acting Actuator	Prochem Two Piece Flanged Full Bore Stainless Ball Valve		Double Acting Actuator
metric	inches		metric	inches		metric	inches	
8	1/4	X 52	8	1/4	X 52	15	1/2	X 52
10	3/8	X 52	10	3/8	X 52	20	3/4	X 52
15	1/2	X 52	15	1/2	X 52	25	1	X 52
20	3/4	X 52	20	3/4	X 63	40	1-1/2	X 63
25	1	X 63	25	1	X 63	50	2	X 75
32	1-1/4	X 75	32	1-1/4	X 63	65	2-1/2	X 75
40	1-1/2	X 75	40	1-1/2	X 75	80	3	X 83
50	2	X 75	50	2	X 110	100	4	X 110
			65	2-1/2	X 110	150	6	
			80	3	X 160	200	8	
			100	4				

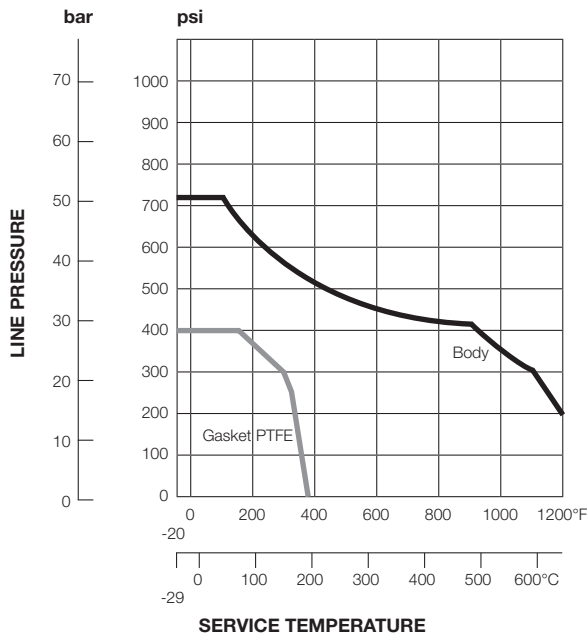
# Swing Check Valve



## Swing Check Valves – BSP, Class 200 W.O.G.

- Horizontal and Vertical Swing type
- Investment cast CF8M
- Screwed Cover
- Sizes 8 (1/4") to 50 mm (2")

**PRESSURE TEMPERATURE RATING  
SWING CHECK CLASS 200**



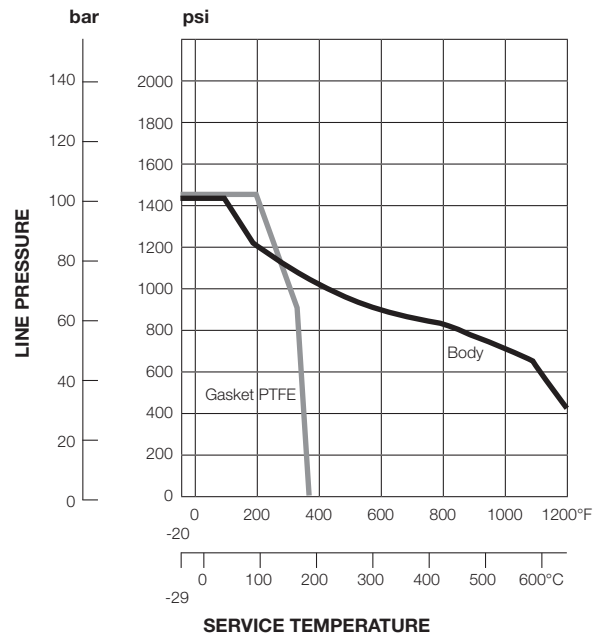
# Y-Type Strainer



## Y-Type Strainers – BSP, Class 600 W.O.G.

- Investment cast CF8M
- Screwed Cover and Plug
- Removable Filter
- Perforations 1 mm x 2 mm centres
- Sizes 15 (1/2") to 50 mm (2")

**PRESSURE TEMPERATURE RATING  
Y STRAINER**



# Spring Check Valve

## Spring Check Valves – BSP, 1000 W.O.G.

- 3 Piece
- Investment cast CF8M Body and End Cap
- T-316 Disc
- Sizes 8 to 100 mm (4")



# Saflok

## Self-Locking Quick Coupler Range



### Saflok Quick Coupler prevents accidental disconnection

Manufactured as per DIN 2828 and A-A-59326D specification with our patented safety locking cam arm, Saflok provides the best protection for the user and environment.

### SPECIAL CHARACTERISTICS

#### Safety is automatically provided

Saflok improves coupling safety in the transportation of high value and high-risk liquid chemicals. It prevents accidental disconnection or disaster that might occur due to the negligence of human operation or the accidental opening due to natural abrasion of the metal locking cam face.

#### Locks automatically when you close the arms

Close the Saflok quick coupler with one smooth motion – just like a regular quick coupling. It locks itself automatically and stays locked until you open it.

#### Virtually effortless

The Saflok coupler's patented arms are closed and they lock themselves. You release the lock with an easy tug of the finger rings. Every time an operator opens or closes a Saflok coupler, time, effort, and safety concerns are reduced.

### Less risk, less hassle

Operators will appreciate the Saflok coupler because its self-locking action reduces risk automatically. Operators will like it because it works just like a regular quick coupler – without possible hassles or problems.

### Compatible with other quick couplings: A-A-59326D

Now available in all sizes from DN 15 (1/2") to DN 100 (4").

### SAFLOK WORKING PRESSURES

Size	MPa	psi
SAFLOK DN 15 mm (1/2") Coupler	10	1,500
SAFLOK DN 20 mm (3/4") Coupler	10	1,500
SAFLOK DN 25 mm (1") Coupler	10	1,500
SAFLOK DN 32 mm (1-1/4") Coupler	10	1,500
SAFLOK DN 40 mm (1-1/2") Coupler	8	1,200
SAFLOK DN 50 mm (2") Coupler	8	1,200
SAFLOK DN 65 mm (2-1/2") Coupler	5.5	800
SAFLOK DN 80 mm (3") Coupler	4	600
SAFLOK DN 100 mm (4") Coupler	2.5	360





Type A Adaptor



Type B Coupler



Type C Coupler



Type D Coupler



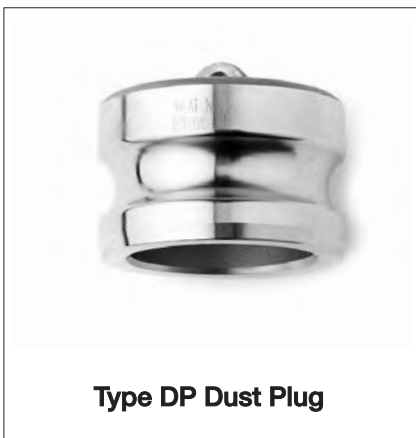
Type E Adaptor



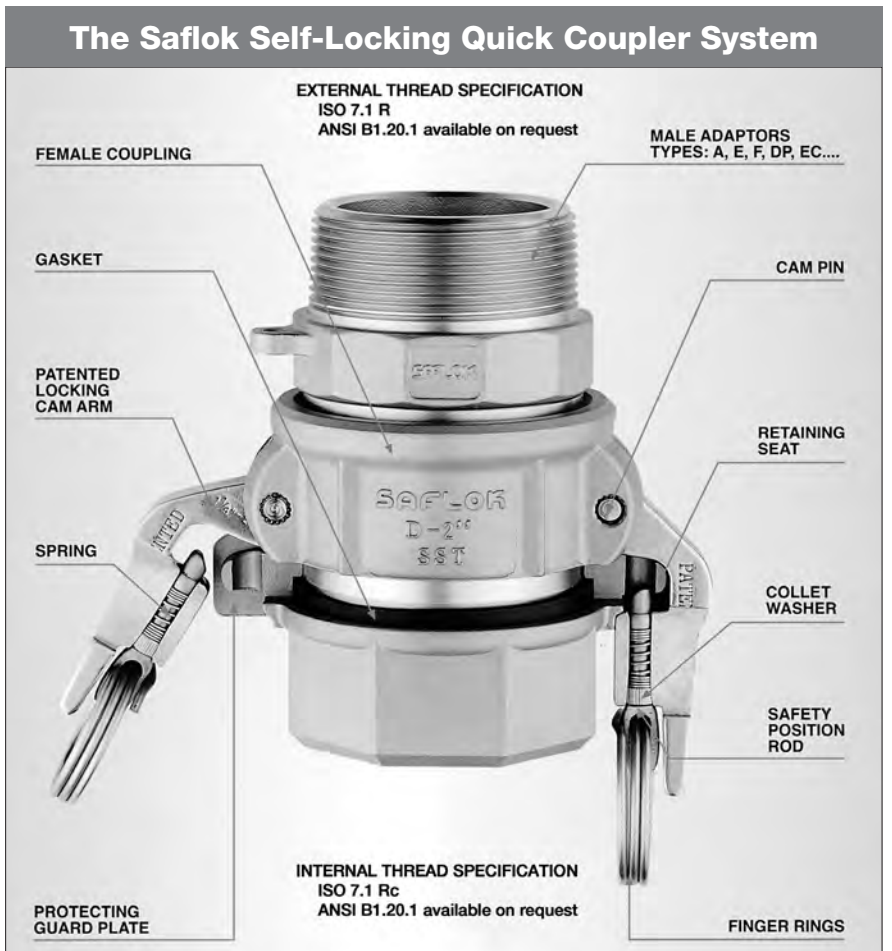
Type F Adaptor



Type DC Dust Cap



Type DP Dust Plug



# Tube-Mac®



Tube-Mac® was founded 30 years ago as a piping systems repair and installation business. It has since grown into a progressive worldwide company with offices in Canada, USA, UK, Spain and Austria.

Tube-Mac® utilises technologically advanced non-welded flanged and coupling systems as a more cost effective alternative to welded piping systems. In today's world, skilled high pressure welders are becoming more difficult to find, especially in remote parts of the world. Cleanliness and environmental issues are becoming a major concern in the industry.

## PYPLOK® 37° FLARE RETAIN RING

### BENEFITS:

- Overall installed cost savings**
- Proven leak-free system**
- Improved flow characteristics**
- Ease of installation**
- No welding**
- No acid cleaning**



### TYPICAL APPLICATIONS INCLUDE:

- |                      |  |
|----------------------|--|
| Steel mill equipment | Log handling                           |
| Transfer lines       | Apron and screw feeders                |
| Simulation equipment | Deck machinery                         |
| Aluminium mills      | Winches, thrusters, jack up cylinders  |
| Crushers, compactors | Barge and tower cranes                 |
| Shredders            | Chemical, agitators and reactor drives |
| Presses              | Sugar mill equipment                   |
| Digesters            | Steam, steam traced lines              |





# The Tube-Mac® Pyplok™ System

**It's the weldless, threadless way to join pipe/tube**



## **LEAKFREE PERFORMANCE, REDUCED INSTALLED COST AND MINIMISED DOWNTIME**

The Tube-Mac® PYPLOK® connecting system is sparkless and has a successful history of pipe and tube fabrication in the most demanding environments and systems, where fire safety is essential.

Using a portable, hand-held installation tool, fittings are cold worked and permanently compressed onto piping. This process deforms the pipe diameter a controlled amount, thus forming a permanent leaktight seal.

## **USE IT ANYWHERE YOU'D WELD... BUT WOULDN'T WANT TO**

Now you can have the benefits of a welded joint, but without the hazards of hot work, using the Tube-Mac® PYPLOK® coupling. It's not only a permanent system, it's also sparkless. It goes on cold. Which means all of the risks and requirements associated with "hot work" are avoided.

And the permanent characteristics of the Tube-Mac® PYPLOK® system make it ideal in place of welded flanges and threaded fittings which are prone to leaks due to flexure or vibration.

No hot work permits, no x-rays, no gas freeing, no system flushing or purging, no attached slag or contaminants enter the piping system. And with easy installation method, there is a substantial reduction of system downtime for repairs.

## **THE ADVANTAGES OF PYPLOK'S SEALING CHARACTERISTICS**

Tube-Mac® PYPLOK® Fittings incorporates unique sealing capabilities. It utilises four non-metallic o-rings, which make PYPLOK® Fittings adaptable to normal pipe and tube tolerances and surface conditions.

The outer o-ring seals prevent outside contaminants from entering the system.

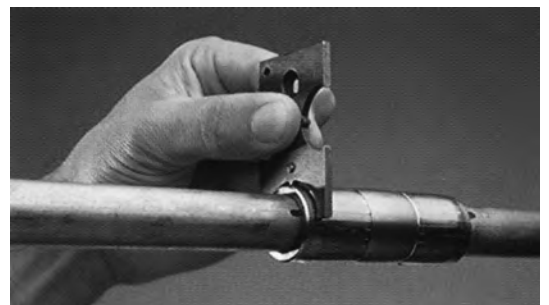
The Tube-Mac® PYPLOK® system is extremely versatile: Ideal for gaseous systems as well as fluids. Also available in various shapes: tees, elbows, 45° and 90°, reducers and custom ends.

## **HOW PYPLOK® IS INSTALLED**

The unique characteristics of the Tube-Mac® PYPLOK® Fitting system allows for installation on piping/tubing with normal tolerances and surface conditions.

Tooling is positioned around the fitting assembly and is pressurised using a manual or electric pump. The tool converts linear force into radial force, compressing, or swaging, the fitting and piping material together.

The connection results in joint tensile strength greater than the minimum pipe yield. A simple inspection gauge verifies proper diameter reduction.



# Stainless Water Solutions Package



PROVIDING A COMPREHENSIVE  
VALUE ADDED SERVICE



## WHERE STAINLESS STEEL IS THE PREFERRED MATERIAL

### PROCESS WATER


This covers a wide scope of applications including building services, industrial, mining and irrigation. Generally, these water applications cover air-conditioning systems – condenser water lines, factory feed water lines, wash down lines and many other non-drinking water applications.

Stainless pipes, valves and fitting products which are used for this market sector, do not require the material to be certified in accordance with the plumbing industry drinking water criteria, but may specify ASTM, grade and/or wall thickness relevant to the specific service applications.

### DRINKING WATER (Potable)


This is an application where pipes, valves and fittings are used for the purpose of supplying water to buildings where water is mainly used for consumption.

Water supply systems and materials of this type are installed by hydraulic services, “plumbers”, in accordance with the Plumbing Code of Australia (PCA). This plumbing code specifies that all material used for drinking water applications shall be tested and certified against relevant product standard to ensure they meet the minimum requirements of the Australian Standard for Plumbing AS 3500 Parts 1, 4 & 5. The code also requires stainless materials used for drinking water requirements to have a minimum pitting resistance equivalent number (PREN) of 22.

316/316L stainless steel meets the minimum PREN requirements thus is the “material of choice” for this market. The approved products are known as WaterMark and bare the WaterMark logo. 

Under the plumbing standard for water piping installation, Parts 1, 4 & 5, the plumbing system must be installed with products that clearly show this certification mark.

The added advantages of using stainless piping systems is that they can be used for ablution and/or supply to fire fighting services through one (1) single pipeline.

The Prochem stainless pipe range, includes both schedules 5S & 10S in 316/316L dual grade, and are certified to the Australian Standard. The pipes are marked identifying the material grade, specification number, manufacturer’s name, licence number, heat trace number and carry the WaterMark logo. 

Plumbers working in this market should always ask for stainless products which carry the WaterMark stamp of approval.

### RECYCLED AND RE-USED WATER SYSTEMS

Stainless pipes and fittings are the “material of choice” for these applications. Grade 316/316L with roll grooved pipe fittings meet the industry requirements, thus providing strength, long-life, cost benefits and corrosion resistance. Recycled water piping shall also meet the requirements of the Plumbing Code of Australia (PCA).

### FIRE SERVICE SYSTEMS

The use of stainless piping offers the ideal solution where the systems are regularly tested and new water is introduced.

Stainless pipes and fittings are in accordance with AS 2419 and AS 2118, approved for fire hydrants and fire sprinkler system applications.

### MARINE APPLICATIONS

Stainless grade 316/316L is most commonly used today in the construction of buildings and water supply services where marine and aggressive environments are encountered. Stainless steel is recognised as the premium material for marine applications offering excellent corrosion resistance, strength and hardness. 316/316L grade stainless has an excellent oxidation resistance for the long term protection of the pipe and fitting structures.

316/316L stainless resists rusting in most architectural applications and is often chosen for more aggressive environments such as industrial and sea-front buildings, wharves and piers.

# Vic-Press®

## for Schedule 5S and 10S



Revolutionary Vic-Press technology is now available for use on ASTM A312 Schedule 5S and 10S stainless steel pipe.

**The Vic-Press for Schedule 5S and 10S system is a flame-free press system that installs in seconds.**

**FEATURES**

- Designed to join Types 304(L) and 316(L) off-the shelf schedule 5S and 10S pipe, from 15 NB (½") to 50 NB (2").
- Once pressed, Vic-Press couplings, valves and fittings create a positive mechanical interlock, engaging the pipe to create a permanent joint rated for 3450 kPa (500 psi) for schedule 10S pipe and 2065 kPa (300 psi) for schedule 5S pipe.
- Patent-pending press detection technology provides for easy identification of unpressed joints as a system is being pressurised.
- Vic-Press seals are pre-lubricated, no additional lubrication is required for installation.
- Standard HNBR seal suitable for a variety of process and utility applications including air with oil vapor up to 98°C and water providing temperature ranges between -29°C to 98°C. Potable water up to 95°C.
- Alternative EPDM and Fluoroelastomer seals available, providing temperature ranges between -34°C to 121°C and 6°C to 149°C, respectively.
- Meets ASME B31.1, B31.3 and B31.9 support requirements as well as ANSI Class 150 ratings.

[www.victaulic.com/vicpress](http://www.victaulic.com/vicpress)



**APPLICATIONS INCLUDE**

**Water**

- Potable
- Utility
- Demineralized
- Cooling
- Heating
- Raw
- Recirculated
- Eye Wash Stations
- Shower Stations

**Process Chemicals**

- Mild Acids
- Mild Caustics
- Hydrocarbons
- Paints, Inks & Dyes
- Alcohol
- Salt Solutions
- Lube Oil
- Cutting Oil

**Air & Gases**

- Compressed Air
- Instrument Air
- Industrial Gases
- Inert Gases
- Air with Oil Vapor
- Vacuum
- Pneumatic Conveyance



**1 - MARK IT!**



**2 - FIT IT!**



**3 - PRESS IT!**



## Benefits of Stainless Steel in Water Applications

Stainless has a higher strength and ductility when compared to general steel, copper, plastic, cast iron pipes and fittings. The higher strength results in a reduction of wall thickness required for the service pipe.

Coatings or cathodic protection is not required for stainless in most locations. A thin adherent chromium-oxide layer provides the corrosion protection. This chromium-oxide layer is self healing, therefore, no extra corrosion protection is required.

Stainless is much more resistant to erosion corrosion caused by high flow rates and particulate matter than that of steel and copper. Grade 316/316L stainless pipes can handle high velocity and turbulence with minimal affect on the wall thickness.

Stainless retains low hydraulic friction properties as compared to other metallic piping systems. This results in lower water pressure losses and pump energy savings.

Having excellent ductility and the ability to be formed and welded into lightweight shapes, assists in the ease of pipeline installation. Stainless piping systems are interchangeable and easily coupled together with other materials used in general fluid applications.

**Note:** *It is recommended to refer to a galvanic series table when combining different materials*

## Environmental and Cost Benefits of Stainless Pipe and Fittings

Stainless lasts longer and costs less over its desired lifetime. It achieves these two (2) aims primarily because it is corrosion resistant and durable. Stainless is very strong, defending against wear and tear that typically increase maintenance costs.

The heat and corrosion resistance properties of stainless also significantly add to its life-cycle advantages by decreasing down-time and maintenance.

Stainless meets the challenge of environmentally friendly product, being completely recyclable and causing minimal negative impact on the environment.

Stainless requires less post fabrication processes and therefore is less harmful to the environment.

Stainless lasts longer, lowering the strain on valuable resources.

# Stainless Pipe and Fittings

Stainless pipe and fitting products are the “material of choice” for carrying process and drinking water, industrial water, sanitary fluids, slurries and gasses particularly when elevated pressures or temperatures are involved. Generally, pipe is supplied in either welded or seamless, and for water applications welded pipe is supplied with a wall thickness from schedule 5S through to schedule 40S.

The American Society of Mechanical Engineers (ASME) specifies pipe dimensions. Dimensions are defined by Nominal Pipe Size (NPS), the outside diameter (OD) which is fixed and the pipe schedule which determines the wall thickness (WT). These schedules and dimensions are given in ASME B36.19M. *(Refer: Table 1)*

**TABLE 1 - PIPE DIMENSIONS**  
**AMERICAN NATIONAL STANDARD STAINLESS STEEL PIPE B36.19M**

Nominal Pipe Size	Outside Diameter	Wall Thickness mm/in Weights: kgs Per Metre/lbs Per Foot					
		5S		10S		40S	
DN/in	mm/in	mm/in	kgs/lbs	mm/in	kgs/lbs	mm/in	kgs/lbs
<b>25</b>	<b>33.4</b>	<b>1.65</b>	<b>1.32</b>	<b>2.77</b>	<b>2.14</b>	<b>3.38</b>	<b>2.56</b>
1	1.315	0.065	0.88	0.109	1.41	0.133	1.68
<b>32</b>	<b>42.2</b>	<b>1.65</b>	<b>1.69</b>	<b>2.77</b>	<b>2.75</b>	<b>3.56</b>	<b>3.46</b>
1 ¼	1.660	0.065	1.14	0.109	1.81	0.140	2.27
<b>40</b>	<b>48.3</b>	<b>1.65</b>	<b>1.94</b>	<b>2.77</b>	<b>3.18</b>	<b>3.68</b>	<b>4.13</b>
1 ½	1.900	0.065	1.28	0.109	2.09	0.145	2.72
<b>50</b>	<b>60.3</b>	<b>1.65</b>	<b>2.44</b>	<b>2.77</b>	<b>4.01</b>	<b>3.91</b>	<b>5.55</b>
2	2.375	0.065	1.61	0.109	2.64	0.154	3.66
<b>65</b>	<b>73.0</b>	<b>2.11</b>	<b>3.77</b>	<b>3.05</b>	<b>5.37</b>	<b>5.16</b>	<b>8.81</b>
2 ½	2.875	0.083	2.48	0.120	3.53	0.203	5.80
<b>80</b>	<b>88.9</b>	<b>2.11</b>	<b>4.61</b>	<b>3.05</b>	<b>6.59</b>	<b>5.49</b>	<b>11.52</b>
3	3.500	0.083	3.03	0.120	4.34	0.216	7.58
<b>100</b>	<b>114.3</b>	<b>2.11</b>	<b>5.96</b>	<b>3.05</b>	<b>8.54</b>	<b>6.02</b>	<b>16.39</b>
4	4.500	0.083	3.92	0.120	5.62	0.237	10.80
<b>125</b>	<b>141.3</b>	<b>2.77</b>	<b>9.65</b>	<b>3.40</b>	<b>11.79</b>	<b>6.55</b>	<b>22.19</b>
5	5.563	0.109	6.36	0.134	7.78	0.258	14.63
<b>150</b>	<b>168.3</b>	<b>2.77</b>	<b>11.53</b>	<b>3.40</b>	<b>14.10</b>	<b>7.11</b>	<b>28.82</b>
6	6.625	0.109	7.59	0.134	9.30	0.280	18.99
<b>200</b>	<b>219.1</b>	<b>2.77</b>	<b>15.07</b>	<b>3.76</b>	<b>20.36</b>	<b>8.18</b>	<b>43.38</b>
8	8.625	0.109	9.92	0.148	13.41	0.322	28.58
<b>250</b>	<b>273.1</b>	<b>3.40</b>	<b>23.06</b>	<b>4.19</b>	<b>28.33</b>	<b>9.27</b>	<b>61.49</b>
10	10.750	0.134	15.21	0.165	18.67	0.365	40.52
<b>300</b>	<b>323.9</b>	<b>3.96</b>	<b>31.86</b>	<b>4.57</b>	<b>36.99</b>	<b>9.53</b>	<b>75.88</b>
12	12.750	0.155	21.00	0.180	24.19	0.375	49.61

Stainless pipes and fittings are generally supplied in the annealed condition to facilitate fabrication. The pipe system can be readily joined by welding, the use of flanges, roll grooving and in heavier schedules, by threaded end connections or welding.

While there are a number of grades of stainless pipes and fittings, it is the 300 series (austenitic) which are commonly used in water applications. The 300 series includes 316/316L and 304/304L, these are

non-magnetic and have improved corrosion resistance due to varying amounts of chromium (Cr), nickel (Ni) and molybdenum (Mo).

**Note:** Mo in 316 and 316/316L dual grade only.

For water applications grade 316, 316L or dual grade 316/316L, 304, 304L or dual grade 304/304L are commonly used. However, for drinking water applications dual grade 316/316L is used due to its improved corrosion resistance.

# CONVERSION TABLES

## VOLUME

Convert	into...	multiply by:
cc	ft <sup>3</sup>	0.00003531
	in <sup>3</sup>	0.06102
	litre	0.001
	m <sup>3</sup>	0.000001
	US quart	0.0010567
	US gallon	0.0002642
ft <sup>3</sup>	cc	28,317
	in <sup>3</sup>	1728
	litre	28.317
	m <sup>3</sup>	0.028317
	US quart	29.92
in <sup>3</sup>	cc	16.387
	ft <sup>3</sup>	0.0005787
	litre	0.016387
	m <sup>3</sup>	0.0000163
	US quart	0.01732
litre	cc	1,000
	ft <sup>3</sup>	0.03531
	in <sup>3</sup>	61.023
	m <sup>3</sup>	0.001
	US quart	1.057
m <sup>3</sup>	cc	1,000,000
	ft <sup>3</sup>	35.31
	in <sup>3</sup>	61,023
	litre	1,000
	US quart	1056.8
US quart	cc	946.25
	ft <sup>3</sup>	0.03342
	in <sup>3</sup>	57.75
	litre	0.9463
	m <sup>3</sup>	0.0009463
US gallon	cc	3,785
	ft <sup>3</sup>	0.1337
	in <sup>3</sup>	231
	litre	3.785
	m <sup>3</sup>	0.003785
US quart	4	

## TEMPERATURE

$$\text{degree F} = (\text{degree C} \times 1.8) + 32$$

$$\text{degree C} = (\text{degree F} - 32) / 1.8$$

## AREA

Convert	into...	multiply by:
cm <sup>2</sup>	ft <sup>2</sup>	0.0010764
	in <sup>2</sup>	0.155
	m <sup>2</sup>	0.0001
	mm <sup>2</sup>	100
ft <sup>2</sup>	cm <sup>2</sup>	929.0304
	in <sup>2</sup>	144
	m <sup>2</sup>	0.092903
in <sup>2</sup>	cm <sup>2</sup>	6.4516
	ft <sup>2</sup>	0.006944
	m <sup>2</sup>	0.0006451
m <sup>2</sup>	cm <sup>2</sup>	10,000
	ft <sup>2</sup>	10.76391
	in <sup>2</sup>	1,550
mm <sup>2</sup>	cm <sup>2</sup>	0.01
	ft <sup>2</sup>	0.000010764
	in <sup>2</sup>	0.00155
	m <sup>2</sup>	0.000001

## PRESSURE

Convert	into...	multiply by:
atm	bar	1.01325
	kg/cm <sup>2</sup>	1.0332
	PSI	14.696
	MPa	0.101325
	KPa	101.325
bar	atm	0.98692
	kg/cm <sup>2</sup>	1.01971
	PSI	14.504
	MPa	0.1
	KPa	100
kg/cm <sup>2</sup>	atm	0.96784
	bar	0.98067
	PSI	14.223
	MPa	0.098067
	KPa	98.0665
MPa	atm	9.869232
	bar	10
	kg/cm <sup>2</sup>	10.1971
	PSI	145.04
	KPa	1,000
KPa	atm	0.009869
	bar	0.01
	kg/cm <sup>2</sup>	0.010197
	PSI	0.145037
	MPa	0.001
PSI	atm	0.068046
	bar	0.068947
	kg/cm <sup>2</sup>	0.070307
	MPa	0.0068948
	KPa	6.89475

## FLOW

Convert	into...	multiply by:
cc/min	ft <sup>3</sup> /min	0.0000353145
	gal/min US	0.0002642
	in <sup>3</sup> /min	0.061
	L/min	0.001
ft <sup>3</sup> /min	cc/min	28,320
	gal/min US	7.48
	in <sup>3</sup> /min	1728
	L/min	28.32
gal/min US	cc/min	3785.4
	ft <sup>3</sup> /min	0.1337
	in <sup>3</sup> /min	231
	L/min	3.7854
in <sup>3</sup> /min	cc/min	16.39
	ft <sup>3</sup> /min	0.00057
	L/min	0.016
L/min	gal/min US	0.004
	cc/min	1,000
	ft <sup>3</sup> /min	0.03531
	in <sup>3</sup> /min	61.02
gal/min US	0.26417	

## LINEAR

Convert	into...	multiply by:
cm	ft	0.032808
	in	0.3937
	metres	0.01
	microns	10,000
	mm	10
ft	cm	30.48
	in	12
	metres	0.3048
	microns	304,800
	mm	304.8
in	cm	2.54
	ft	0.08333
	metres	0.0254
	microns	25,400
	mm	25.4
metres	cm	100
	ft	3.28083
	in	39.37
	microns	1,000,000
	mm	1,000
microns	cm	0.0001
	ft	0.000003281
	in	0.00003937
	metres	0.000001
	mm	0.001
mm	cm	0.1
	ft	0.003281
	in	0.03937
	metres	0.001
	microns	1000



**Certified Quality**  
Management System  
(Australia & Singapore)





**FOR FURTHER DETAILS PLEASE CONTACT YOUR LOCAL PROCHEM OFFICE**

**ADELAIDE**

3A CB Fisher Drive, CAVAN  
South Australia  
Australia 5094  
**Telephone 61-8-8241 7633**  
Facsimile 61-8-8241 7644  
Email sales@prochem.com.au

**HOBART**

96-98 Central Avenue  
Derwent Park, Tasmania  
Australia 7009  
**Telephone 61-3-6272 8828**  
Facsimile 61-3-6272 8688  
Email sales@prochem.com.au

**PERTH**

6 Forge Street  
Welshpool, Western Australia  
Australia 6106  
**Telephone 61-8-9458 7777**  
Facsimile 61-8-9351 8170  
Email sales@prochem.com.au

**BRISBANE**

1-5 Kingsbury Street  
Brendale, Queensland  
Australia 4500  
**Telephone 61-7-3265 2711**  
Facsimile 61-7-3265 7430  
Email sales@prochem.com.au

**MELBOURNE**

5-15 Ventura Place  
Dandenong South, Victoria  
Australia 3175  
**Telephone 61-3-9799 2244**  
Facsimile 61-3-9799 2255  
Email sales@prochem.com.au

**SYDNEY**

30 Enterprise Circuit  
Prestons, New South Wales  
Australia 2170  
**Telephone 61-2-9727 0044**  
Facsimile 61-2-9728 6766  
Email sales@prochem.com.au

**[www.prochem.com.au](http://www.prochem.com.au) | [1300 287 777](tel:1300287777) | [sales@prochem.com.au](mailto:sales@prochem.com.au)**