

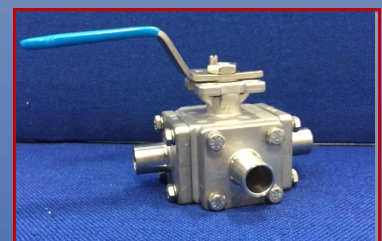
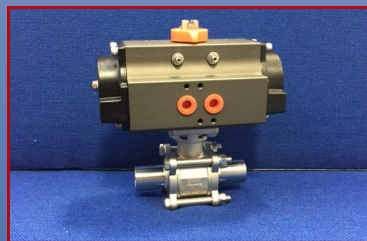
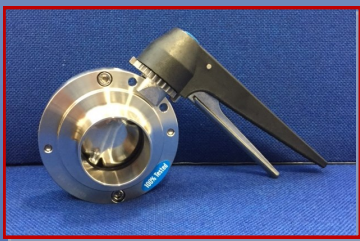


BDE (NORTHAMPTON) LTD

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*Hygienic stainless steel valves,  
tube, tube fittings, systems  
& accessories*

*Hygienic Fabrications*



Tel: 01604 750380  
Fax: 01604 750377  
sales@bdeltd.co.uk

[www.bdeltd.co.uk](http://www.bdeltd.co.uk)



## BDE (NORTHAMPTON) LTD

### About Us

BDE was formed in 1979 with the aim of providing the highest quality Brewing & Dairy Equipment (Hence the name BDE!). Since then we have developed into a specialist company supplying hygienic stainless steel tubular products to a wide range of industries. We endeavour to provide very high standards of service to our clients, and only provide products which are renowned for their reliability and quality.

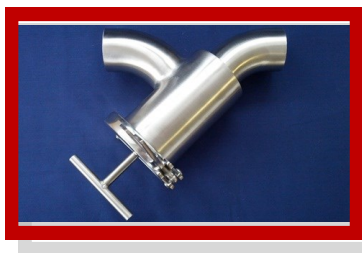
**STOCK.** During recent years, we have invested in a much larger range of manual and actuated valves and pipeline accessories, and we are undertaking a planned expansion of these products. This coupled with access to large central stocks, and the knowledge that our experienced sales team will always be prepared to SOURCE that awkward item, allows us to offer the complete package.

**FABRICATION** is a large part of our business. We undertake to manufacture bespoke union adaptors, manifolds & pre-fabricated hygienic pipework assemblies etc. to suit your requirements. We can also offer valves and pipe fittings with union ends. All hygienic welds are purged, and are crack and crevice free. We are proud to say we received regular compliments on our quality and finishing of our fabrications.

**STRAINERS.** We manufacture hygienic strainers in house, and can offer bespoke units to customer requirements, examples are jacketed and duplex units, special length and ported units.

**MANIFOLDS & TEE PULLING.** We have access to a tee pulling machine, which allows us to offer tubular manifolds to your specifications.

**CUSTOMER OWN VALVES.** Although we prefer to offer our own valves, we offer a confidential service to other stockist when you need your valve adapting. We can fit RJT, IDF, Clamp, DIN, SMS, BSP & flanged ends to suit. Where appropriate, we can also jacket some types of valves.





## BDE (NORTHAMPTON) LTD

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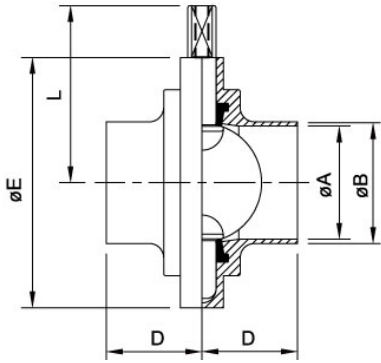
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**BDE (NORTHAMPTON) LTD**

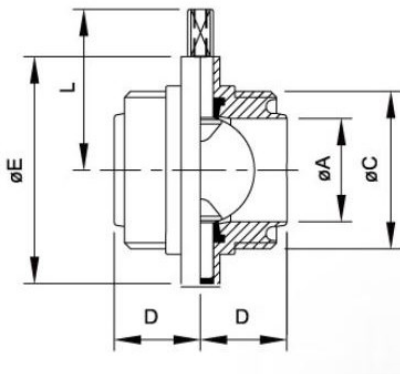
## HYGIENIC BUTTERFLY VALVE



• **PLAIN WELD ENDED BUTTERFLY VALVE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"	6"
ØA	22.1	34.8	47.5	60.2	72.2	97.6	146.8
ØB	25.4	38.1	50.8	63.5	76.2	101.6	152.4
D	34.0	38.0	40.0	40.0	41.0	44.0	57.0
ØE	79.0	85.0	105.0	112.0	125.0	157.0	214.0
L	61.0	64.3	74.3	77.6	84.8	101.7	139.0

ALTERNATIVE ENDS CAN BE WELDED - CLAMP/RJT/DIN/IDF OR SMS



• **RJT MALE x MALE BUTTERFLY VALVE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
ØA	22.1	34.9	47.6	60.3	73.0	97.6
ØB	45.72 x 8T WHIT	58.42 x 8T WHIT	72.72 x 6T WHIT	85.42 x 6T WHIT	98.12 x 6T WHIT	123.52 x 6T WHIT
D	34.0	38.0	40.0	40.0	41.0	50.0
ØE	79.0	85.0	105.0	112.0	125.0	157.0
L	61.0	64.3	74.3	77.6	84.8	101.7

- Stocked from 1" OD - 6" OD
- Weld Ends & RJT Male x Male available ex stock - Alternative ends of your choice can be supplied.
- EPDM seal as standard - Viton & Silicone seals also kept.
- 12 position plastic handle - C/W 304 stainless steel gripper bar as standard
- Other handles are available - See Butterfly Valve Spares

### Valve Information:

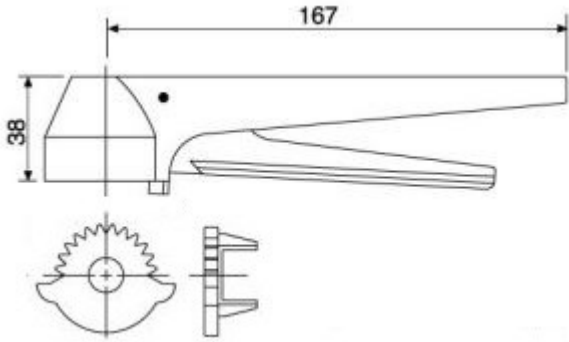
- **BODY:** Fully machined from 316 forging.
- **DISC:** Fully machined, highly polished - Ra less than 0.6 µm
- **DISC DRIVE HEAD:** 8mm x 12mm
- **MAX PRESSURE:** For use up to 150psi / 10bar.





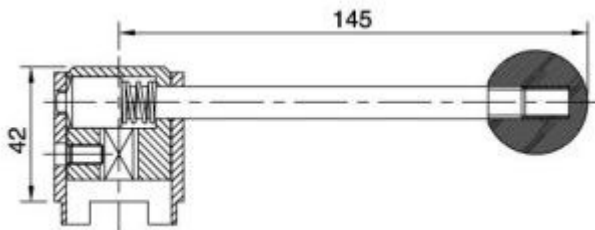
**BDE (NORTHAMPTON) LTD**

## BUTTERFLY VALVE SPARES



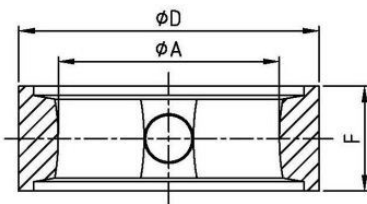
### **STANDARD BUTTERFLY VALVE HANDLE**

- Plastic - Nylon Reinforced Handle
- 304 Stainless Steel gripper bar
- 12 Position notch plate
- ALSO AVAILABLE IN FULL STAINLESS STEEL - GRADE 304



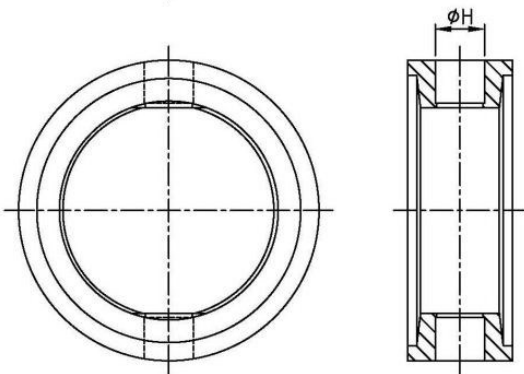
### **ALTERNATIVE BUTTERFLY VALVE HANDLE**

- 4 Position "PULL" type handle
- **12 POSITION LOCKABLE HANDLE IN 304 STAINLESS STEEL ALSO AVAILABLE.**



### **BUTTERFLY VALVE SEALS**

- EPDM as standard
- VITON & SILICONE replacement seals are also available

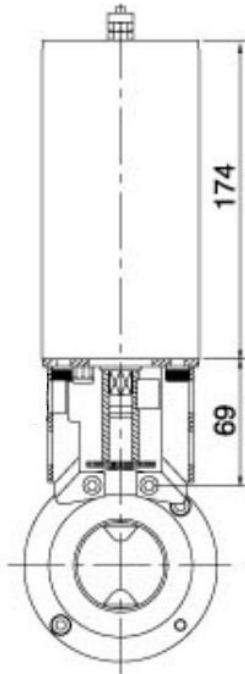


SIZE	1"	1.5"	2"	2.5"	3"	4"
$\phi A$	21.0	34.0	48.5	60.3	69.5	99.0
$\phi D$	38.1	51.8	65.9	75.9	88.4	121.0
F	23.0	23.0	23.0	23.0	25.0	29.0
$\phi E$	10.8	10.8	10.8	10.8	10.8	14.7



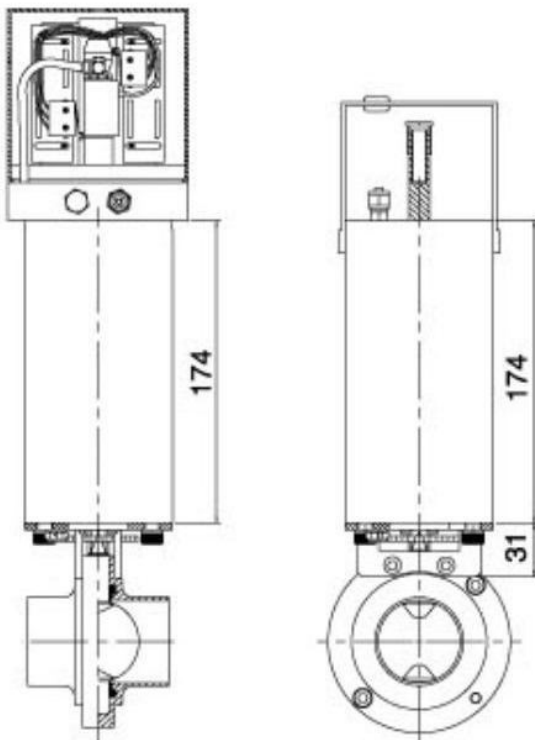
**BDE (NORTHAMPTON) LTD**

## 1" - 3" C1 & C2 ACTUATORS



### *C1 ACTUATOR 304 - AIR/SPRING*

- 304 Stainless Steel.
- Air / Spring operation.
- **FOR USE WITH:** 1" - 3" Butterfly Valves.
- **C1 SHUT OFF TIME:** 1.5 Seconds.
- **C1 OPERATING PRESSURE:** 6M/KG2 - Min: 5 bar  
Max: 9 bar compressed air
- **C1 AIR CONSUMPTION:** 0.266 Litre @ 5 bar
- **C1 WEIGHT:** 3.85kg
- **MAX OUTPUT TORQUE:** 20N/M
- **ACTUATOR DRIVE HEAD:** 12mm x 12mm Square
- Individually wrapped C/W mounting Kit



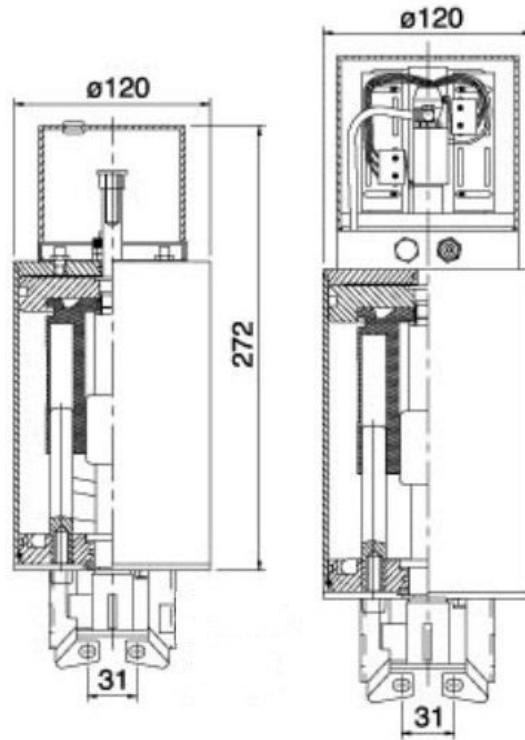
### *C2 ACTUATOR 304 - AIR/SPRING*

- 304 Stainless Steel.
- Air / Spring operation.
- Can be used with / without a control box
- **FOR USE WITH:** 1" - 3" Butterfly Valves.
- **C2 SHUT OFF TIME:** 1.5 Seconds.
- **C2 OPERATING PRESSURE:** 6M/KG2 - Min: 5 bar -  
Max: 9 bar compressed air
- **C2 AIR CONSUMPTION:** 0.266 Litre @ 5 bar
- **C2 WEIGHT:** 3.85kg
- **MAX OUTPUT TORQUE:** 20N/M
- **ACTUATOR DRIVE HEAD:** 12mm x 12mm Square
- Individually wrapped - C/W mounting kit.



**BDE (NORTHAMPTON) LTD**

## 4" C101 ACTUATOR



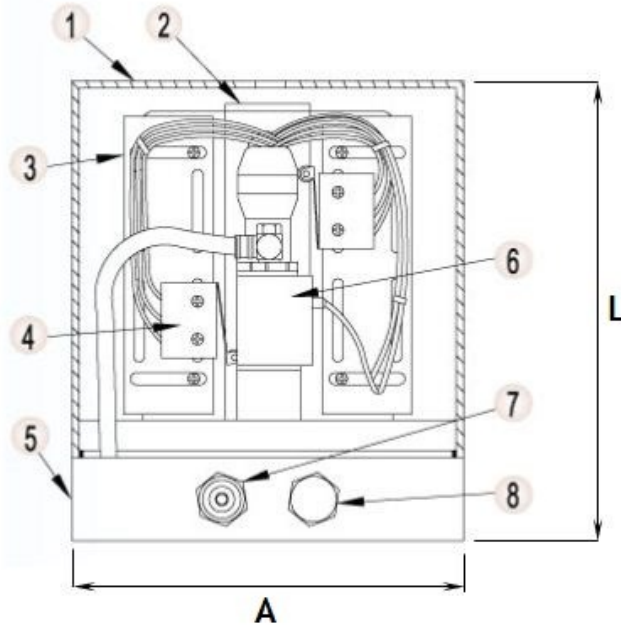
### *C101 ACTUATOR 304 - AIR/SPRING*

- 304 Stainless Steel.
- Air / Spring operation.
- Can be used with / without a control box
- **FOR USE WITH:** 4" Butterfly Valves.
- **C101 SHUT OFF TIME:** 1.7 Seconds.
- **C101 OPERATING PRESSURE:** 6M/KG2 - Min: 5 bar - Max: 9 bar compressed air
- **C101 AIR CONSUMPTION:** 0.550 Litre @ 5 bar
- **C101 WEIGHT:** 4.7kg
- **MAX OUTPUT TORQUE:** 30N/M
- **ACTUATOR DRIVE HEAD:** 12mm x 12mm Square
- Individually wrapped - C/W mounting kit.



**BDE (NORTHAMPTON) LTD**

## CONTROL BOX - FOR USE WITH C2 & C101 ACTUATOR



***DIMENSION:***

**L = 108mm**

**A = 105mm**

***CONTROL BOX:***

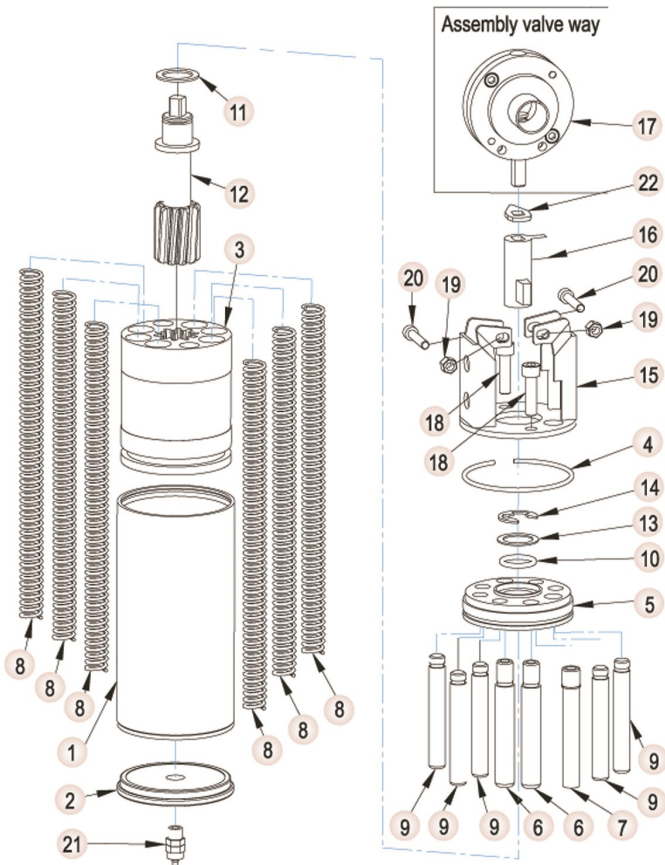
- Grade 304 Stainless Steel
- For use with C2 & C101 actuator
- 3A 125V, 30VDC MICRO-SWITCHES 2PCE
- 24V DC 3.0 SOLENOID VALVE

ITEM	PART NAME	QTY	MATERIAL
1	COVER	1	304 ST/ST
2	SWITCH PLATE	1	304 ST/ST
3	PLASTIC HANGER	2	304 ST/ST
4	MICRO SWITCH	2	3A 125VAC; 30VDC
5	AIR MANIFOLD	1	304 ST/ST
6	ELECTRO-VALVE	1	DC24 3.0W
7	AIR CONNECTION	1	COPPER
8	E/N CONNECT PIECE	1	304 ST/ST



# BDE (NORTHAMPTON) LTD

## C2 ACTUATOR CONSTRUCTION



**C1 & C2 MAX OUTPUT TORQUE - 20N/m**

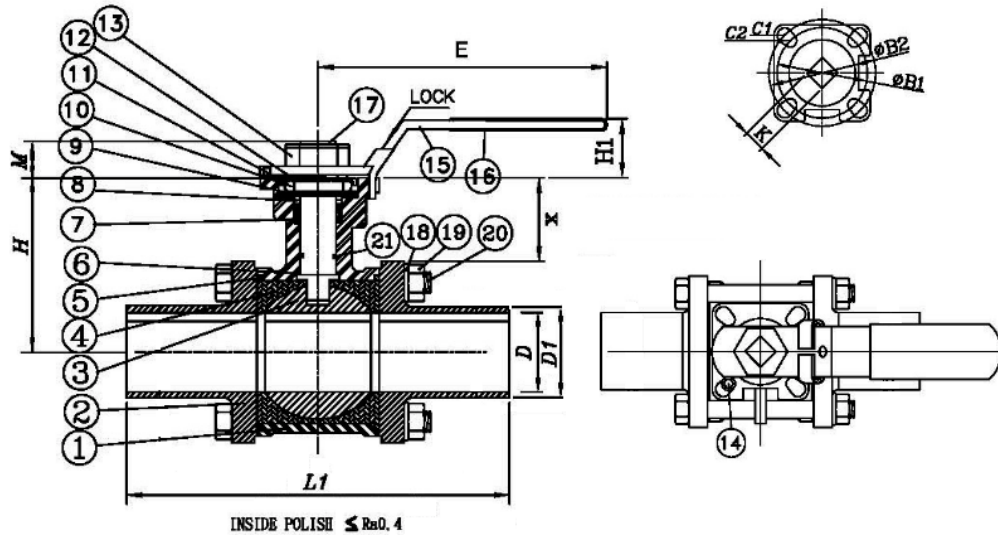
**C101 MAX OUTPUT TORQUE - 30N/m**

ITEM	PART NAME	QTY	MATERIAL
1	ST/ST CYLINDER	1	304 ST/ST
2	ST/ST CYLINDER CAP	1	304 ST/ST
3	PISTON	1	TENAC 4010/ H410
4	LOCK WIRE CLIP	1	304 ST/ST
5	LOWER CYLINDER END	1	304 ST/ST
6	PISTON GUIDE PART	2	304 ST/ST
7	PISTON GUIDE PART	1	304 ST/ST
8	COMPRESS SPRING	6	304 ST/ST
9	PISTON GUIDE PART	5	304 ST/ST
10	PISTON AXLE O-RING	1	TEFLON
11	TEFLON GASKET	1	TEFLON
12	COUPLING AXLE PIECE	1	304 ST/ST
13	CONTACT SEAL	1	304 ST/ST
14	CIRCLIP	1	304 ST/ST
15	MOUNTING BRACKET	1	304 ST/ST
16	CONNECTION PIECE	1	304 ST/ST
17	ASSEMBLY VALVE WAY	1	304/316
18	M8 x 12 ST/ST SCREW	2	304 ST/ST
19	M6 NUT	2	304 ST/ST
20	M6 x 35 ST/ST SCREW	2	304 ST/ST
21	AIR CONNECTION	1	COPPER
22	POSITIONING INDEX	1	304 ST/ST



# BDE (NORTHAMPTON) LTD

## SANITARY BALL VALVE 316



SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"
ISO 5211	F03-04	F03-04	F04-05	F05-07	F05-07	F07-10	F07-10	F10-12
ØD	9.5	15.9	22.2	35.0	47.6	60.3	73.0	97.4
ØD1	12.7	19.05	25.4	38.1	50.8	63.5	76.2	101.6
L1	89.0	101.00	114.0	140.0	156.0	197.0	229.0	241.0
H	37.0	47.0	57.2	78.2	86.2	109.2	116.2	133.5
M	9	9	11	14	14	17	17	22
E	143.0	143.0	160.0	187.0	187.0	310.0	310.0	400.0
B1	36	36	42	50	50	70	70	102
B2	42	42	50	70	70	102	102	125
E	143	143	160	187	187	310	310	400
K	9	9	11	14	14	17	17	22
H1	26.0	26.0	34.0	43.0	43.0	53.0	53.0	56.0
C1	6	6	6	8	8	10	10	12
C2	6	6	8	10	10	12	12	14
X	15.5	20.6	29.0	39.0	42.0	48.0	48.7	34.0
TORQUE IN/LBS	90	100	140	240	480	650	1150	1400

ITEM	PART NAME	MATERIAL
1	BODY	ASTM-A351-CF8M (316)
2	CAP	ASTM-A351-CF8M (316)
3	BALL	A351-CF8M (316)
4	SEAT	PTFE
5	GASKET	PTFE
6	THRUST PACKING	PTFE
7	STEM PACKING	PTFE
8	RING	304
9	BELLEVILLE WASHER	304
10	STEM NUT	304
11	LOCK WASHER	304
12	RING	304
13	HANDLE NUT	304
14	STOP PIN	304
15	HANDLE	304
16	HANDLE SLEEVE	PLASTIC
17	STEM	316
18	SPRING WASHER	304
19	BOLT NUT	304
20	BOLT	304
21	O-RING	VITON

### HYGIENIC BALL VALVE INFORMATION:

#### HYGIENIC STANDARD

PTFE CAVITY SEAL - CREVICE FREE

MAX WORKING PRESSURE UP TO 10 BAR

LOCKABLE HANDLE & ISO MOUNTING PAD AS STANDARD

FULL ACTUATION PACKAGE AVAILABLE FROM STOCK.

TORQUE DOES NOT INCLUDE SAFETY AND IS BASED ON WATER

ALTERNATIVE ENDS CAN BE WELDED

CLAMP, RJT, DIN, SMS, IDF

Tel: 01604 750380  
Email: sales@bdeltd.co.uk

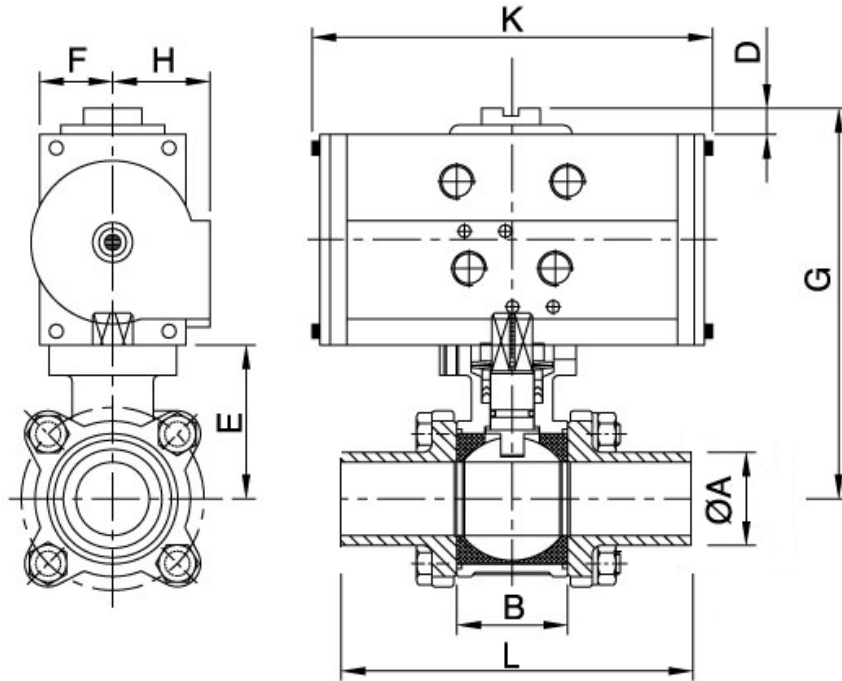
Fax: 01604 750377  
www.bdeltd.co.uk





**BDE (NORTHAMPTON) LTD**

## ACTUATED SANITARY BALL VALVE 316



• **ACTUATED HYGIENIC SANITARY BALL VALVE 316**

SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"
ØA	12.7	19.05	25.4	38.1	50.8	63.5	76.2	101.6
B	37.0	37.0	42.0	50.0	50.0	72.0	72.0	95.0
G	121.0	131.0	156.2	196.2	227.2	250.2	278.7	302.2
L	89.0	101.0	114.0	140.0	156.0	197.0	229.0	241.0
TORQUE LBS/INCH	90	100	140	240	480	650	1150	1400

DN	15	20	25	40	50	65	80	100
VDA/VSR	C-125	C-125	C-250	C-450	C-1000	C-1000	C-2250	C-2250
D	20	20	20	20	20	20	20	30
F	28.5	28.5	33.6	43.6	54.6	54.5	65.0	65.0
H	33.7	33.7	47.5	51.5	64.5	64.5	75.5	75.5
K	120.0	120.00	144.3	149.2	183.0	183.0	259.6	259.6

**ACTUATOR INFORMATION:**

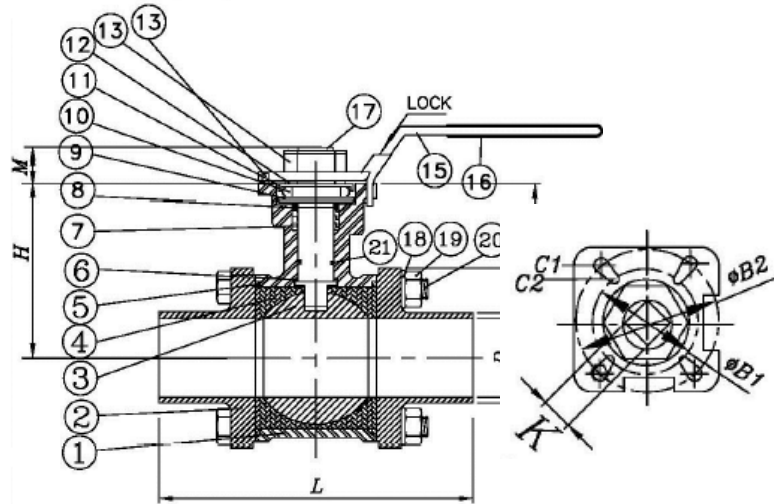
- **EXTRUDED ALUMINIUM ALLOY BODY**
- **OPERATING PRESSURE RANGE: 40 - 120PSI**

**OPTIONAL SWITCH BOX: C/W 2 MICRO-SWITCHES**  
**OPTIONAL SOLENOID VALVE: 24V DC / 5-PORT**



# BDE (NORTHAMPTON) LTD

## DIN SERIES 2 - DIRECT MOUNT SANITARY BALL VALVE



SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
ISO 5211	F03-04	F03-04	F04-05	F04-05	F05-07	F05-07	F07-10	F07-10	F10-12
D	15	20	25	32	38	50	65	80	100
L	70	85	95	110	120	142	164	188	228
H	37	47	57.2	62.5	78.2	86.2	109.2	117.7	141.2
M	9	9	11	11	14	14	17	17	22
ØB1	36	36	42	42	50	50	70	70	102
ØB2	42	42	50	50	70	70	102	102	125
K	9	9	11	11	14	14	17	17	22
D1	18.2	23.2	28.2	35.2	41.2	53.2	69	84	104
C1	Ø6	Ø6	Ø6	Ø6	Ø8	Ø8	Ø10	Ø10	Ø12
C2	Ø6	Ø6	Ø8	Ø8	Ø10	Ø10	Ø12	Ø12	Ø14
INCH / LBS	90	100	140	200	240	480	650	1150	1400
X	15.5	20.6	29		39	42	48	48.7	34

ITEM	PART NAME	MATERIAL
1	BODY	CF8M (316)
2	CAP	CF8M (316)
3	BALL	CF8M (316)
4	SEAT	PTFE (RTFE)
5	GASKET	PTFE
6	THRUST PACKING	PTFE
7	STEM PACKING	PTFE
8	RING	AISI 304
9	BELLEVILLE WASHER	AISI 304
10	STEM NUT	AISI 304
11	LOCK WASHER	AISI 304
12	RING	AISI 304
13	HANDLE NUT	AISI 304
14	STOP PIN	AISI 304
15	HANDLE	AISI 304
16	HANDLE SLEEVE	PLASTIC
17	STEM	AISI 316
18	SPRING WASHER	AISI 304
19	BOLT NUT	AISI 304
20	BOLT	AISI 304
21	O-RING	VITON

### HYGIENIC BALL VALVE INFORMATION:

#### HYGIENIC STANDARD

PTFE CAVITY SEAL - CREVICE FREE

MAX WORKING PRESSURE UP TO 10 BAR.

LOCKABLE HANDLE & ISO MOUNTING PAD AS STANDARD

FULL ACTUATION PACKAGE AVAILABLE FROM STOCK.

TORQUE DOES NOT INCLUDE SAFETY AND IS BASED ON WATER

DN25, DN40, DN50 & DN65 CURRENTLY AVAILABLE FROM STOCK.

REMAINING SIZES AVAILABLE TO ORDER ON A SHORT LEAD TIME.

ALTERNATIVE ENDS CAN BE WELDED

CLAMP, RJT, DIN, SMS, IDF

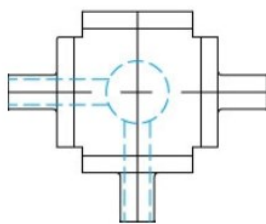
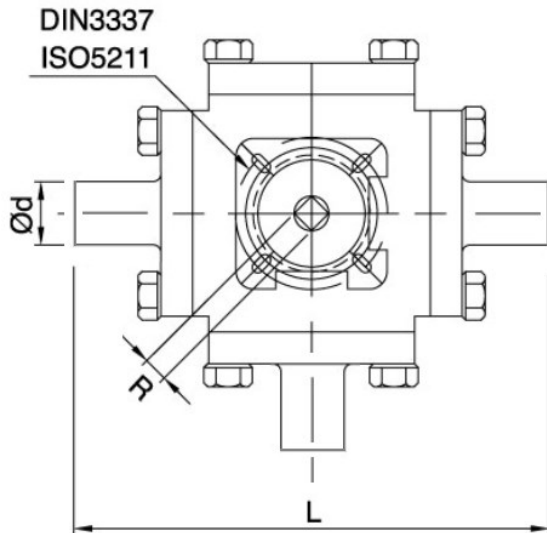
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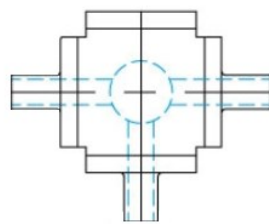


**BDE (NORTHAMPTON) LTD**

## 3 WAY L / T PORT BALL VALVE



L PORT



T PORT

### 3 WAY VALVE INFORMATION:

- Body & Wetted parts grade 316 stainless steel.
- Stocked from 1/2" OD - 3" OD.
- 'L' & 'T' configuration
- Weld ends available ex-stock - Alternative ends can be supplied on request.
- Hygienic standard.
- Full bore design.
- PTFE Cavity seat - Crevice free.
- Max working pressure up to 10 Bar.
- Standard ISO Mounting pad  
Full Actuation package available from stock
- Spares kit available

### • SANITARY BALL VALVE - 3 WAY "L" & "T" PORT 316

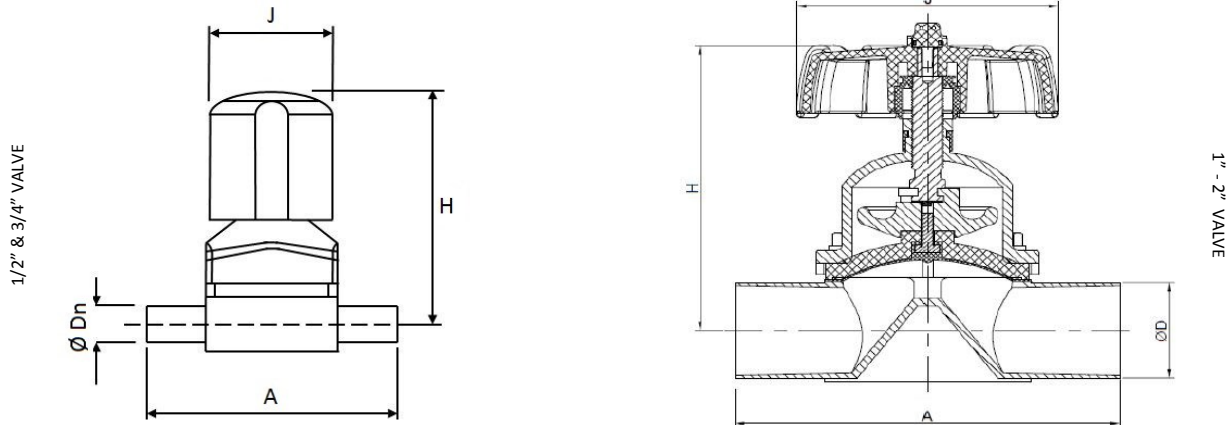
SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"	3"
ISO 5211	F03	F03	F04	F05	F05	F07	F10
Ød	12.7	19.05	25.4	38.1	50.8	63.5	76.2
Torque LB/IN*	90	100	140	240	480	650	1150
R	9.0	9.0	11.0	14.0	14.0	17.0	22.0
L	118.0	127.0	152.0	175.0	190.0	228.0	260.0

\*TORQUE DOES NOT INCLUDE SAFETY & IS BASED ON WATER.



**BDE (NORTHAMPTON) LTD**

## HYGIENIC DIAPHRAGM VALVE 316



• **HYGIENIC DIAPHRAGM VALVE 316**

SIZE	1/2"	3/4"	1"	1.5"	2"
ØD	12.7	19.1	25.4	38.1	50.8
A	69.0	85.0	145.4	178.4	198.4
H	70.0	70.0	128.4	142.2	184.7
J	37.5	37.5	87.2	114.0	138.0

### DIAPHRAGM VALVE INFORMATION

- 1/2" - 2" OD weld ends ex-stock
- AISI 316L contact (wetted) parts - Other parts 304L
- EPDM Diaphragm as standard
- Optional PTFE/EPDM composite diaphragm
- Max Pressure: 10 BAR
- Internal Finish: 0.5µm
- External Finish: MATT
- Temperature EPDM -10°C TO +120°C
- ALTERNATIVE ENDS CAN BE WELDED -  
**CLAMP,RJT,IDF,DIN,SMS**

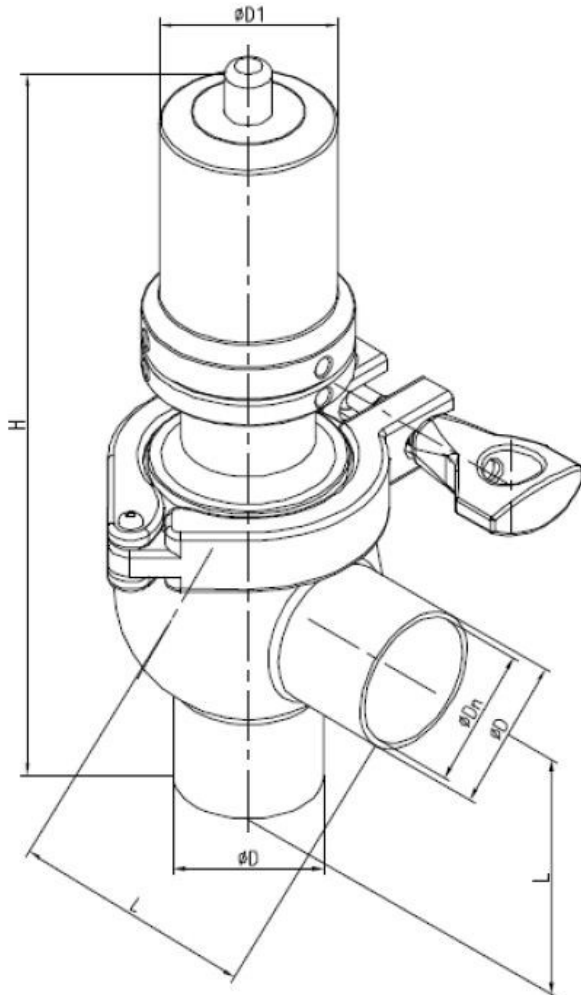
**IMPORTANT NOTE:**

**IT IS THE CUSTOMER'S  
RESPONSIBILITY TO ENSURE  
THE VALVE IS SUITABLE FOR  
THE APPLICATION.**



**BDE (NORTHAMPTON) LTD**

## PRESSURE RELIEF VALVE



### **PRESSURE RELIEF VALVE INFORMATION:**

- **AISI 316L Contact (Wetted) Parts**
- **1" , 1.5" & 2" OD Weld Ends**
- **Max Inlet Pressure: 10 bar**
- **Standard Spring: 0 - 6 bar**
- 0 - 10 bar relieving pressure
- Manual adjustable setting
- **ALTERNATIVE ENDS CAN BE WELDED - CLAMP,RJT,IDF,DIN,SMS**

**NOTE: THIS VALVE IS NOT PRE-SET PRIOR TO DISPATCH**

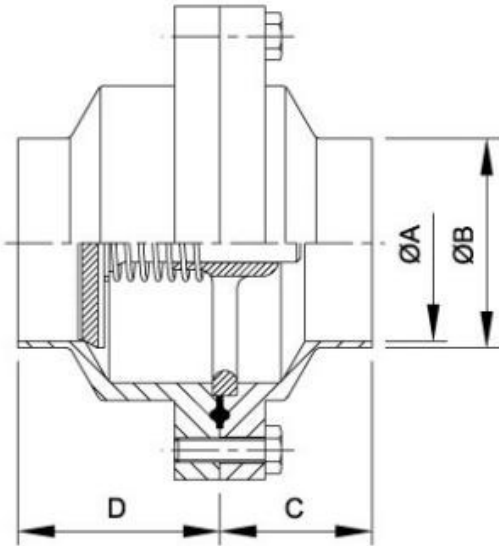
### • **HYGIENIC PRESSURE RELIEF VALVE 316**

SIZE	1"	1.5"	2"
D	25.40	38.10	50.80
Dn	22.1	34.8	47.5
D1	45.0	45.0	51.0
H	222.5	240.0	260.0
L	50.0	60.0	70.0



**BDE (NORTHAMPTON) LTD**

## NON RETURN VALVE



### NON RETURN INFORMATION:

- Grade 316 Body, Piston & Spring
- Body & Piston Seal: EPDM
- Max Pressure: 10 BAR
- ALTERNATIVE ENDS CAN BE WELDED - CLAMP, RJT, IDF, DIN, SMS

### • HYGIENIC NON RETURN VALVE 316

SIZE	1"	1.5"	2"	2.5"	3"	4"
ØA	22.1	34.8	47.6	60.2	72.9	97.6
ØB	25.4	38.1	50.8	63.5	76.2	101.6
C	59.00	59.00	59.00	59.00	59.00	50.00
D	38.00	38.00	38.00	38.00	38.00	44.00

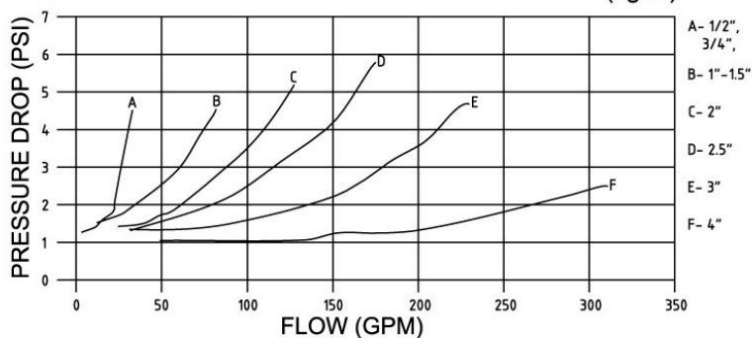
SPARE SEAL KITS AVAILABLE EX-STOCK - C/W REPLACEMENT SPRING

### OPEN PRESSURE (PSI)

1"	1.5"	2"	2.5"	3"	4"
3.0	1.6	0.6	1.3	0.8	0.9

### Spring Check Valve Pressure Drop

(fig. 3)



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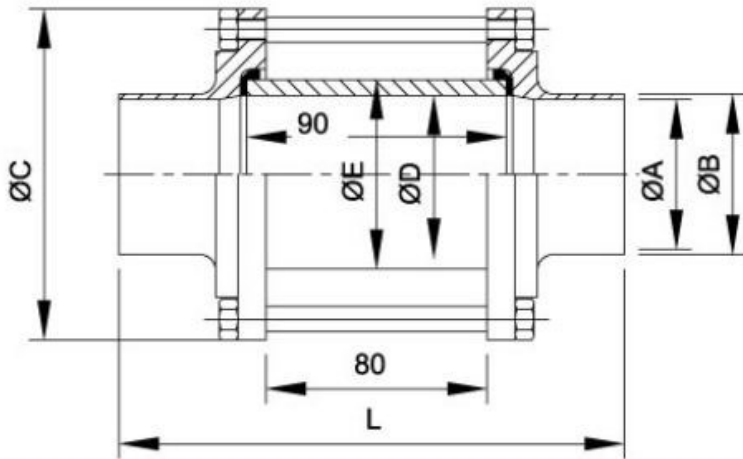
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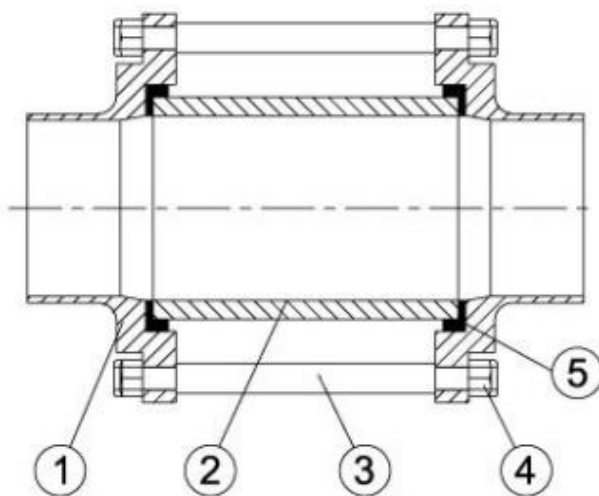
## HYGIENIC SIGHT GLASS



### HYGIENIC SIGHT GLASS INFORMATION

- **GRADE 316 Stainless Steel Body**
- **GLASS:** Clean, High press glass (*PYREX Borosilicate*)
- **MAX WORKING PRESSURE** - See below table
- **GLASS SEAL:** EPDM
- **ALTERNATIVE ENDS CAN BE WELDED - CLAMP,RJT,IDF,DIN,SMS**

SIZE	1"	1.5"	2"	2.5"	3"	4"
ØA	22.1	34.8	47.5	60.2	72.9	97.6
ØB	25.4	38.1	50.8	63.5	76.2	101.6
ØC	79.0	85.0	105.0	112.0	125.0	157.0
ØD	26.0	34.0	50.0	65.0	75.4	100.0
ØE	32.0	40.0	60.0	75.0	85.0	110.0
L	148.0	156.0	160.0	160.0	162.0	167.0
Max Pressure	10 bar	10 bar	10 bar	9 bar	7 bar	7 bar



ITEM	MATERIAL
1	BODY
2	HIGH PRESS CLEAN GLASS
3	SCREW BOLT
4	NYLON LOCK NUT
5	SEAL

### GLASS COMPOSITION

	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	B <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O	K <sub>2</sub> O
%	80.9	2.3	0.03	12.7	4	0.04

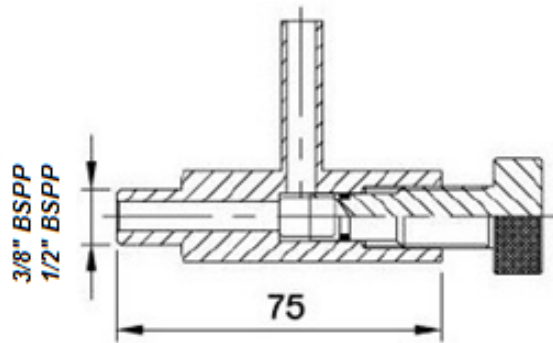
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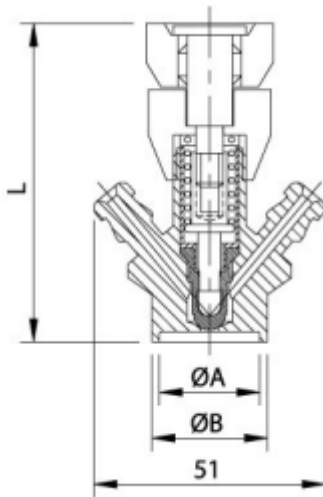
**BDE (NORTHAMPTON) LTD**

## SAMPLE COCK VALVES



### **SAMPLE COCK VALVE INFORMATION**

- 3/8" & 1/2" BSP parallel male threaded inlet
- Weld ended outlet
- EPDM Seal ring
- Grade 316 stainless steel
- Alternative outlets can be welded



### **ASEPTIC SAMPLE VALVE INFORMATION**

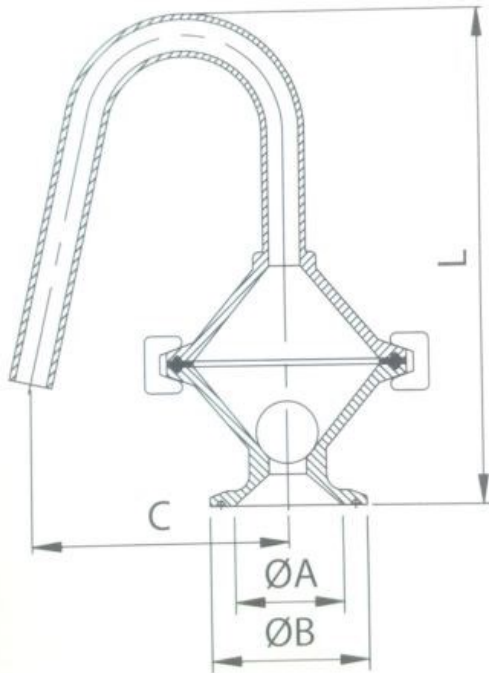
- For BPE use
- Grade 316 Stainless Steel
- EPDM Seal ring
- Temperature Range: -10° c to + 140° c
- 1" OD as standard

<b>SIZE</b>	<b>1"</b>
<b>ØA</b>	22.1
<b>ØB</b>	25.4
<b>L</b>	71.5



**BDE (NORTHAMPTON) LTD**

## AIR VENT VALVE



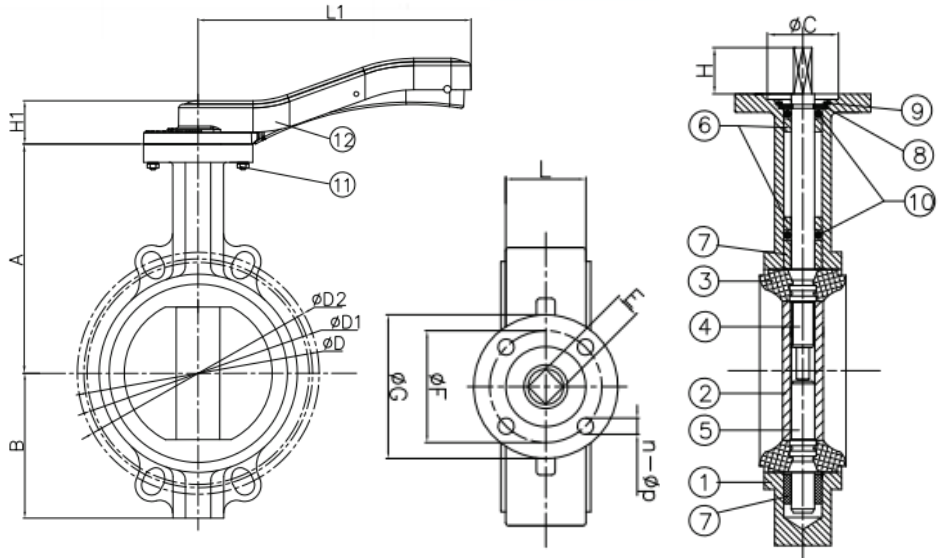
SIZE	1"
ØA	22.20
ØB	50.50
C	82.00
L	158.00

### *AIR VENT VALVE INFORMATION*

- 1" - 1.5" Clamp connection - 1/2" Bore
- Grade 316 stainless steel

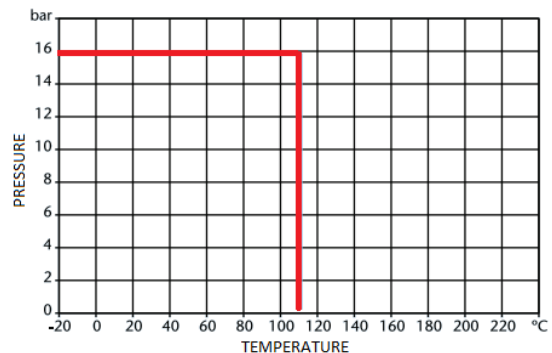

**BDE (NORTHAMPTON) LTD**

## DUCTILE IRON BUTTERFLY VALVE - WAFER TYPE



### FEATURES

- Universal Flange Mounting - PN10, PN16, ASA150
- BS5155 (BS EN 593)
- 316 Stainless Steel Disc
- ISO 5211 Direct Mount
- Lockable Handle
- Epoxy Coat Finish
- WRAS Approved



DN	50	65	80	100	125	150	200	250	300
A	142	154	161	179	193	204	250	282	326
B	60	78	87	105	120	138	174	209	242
C	56	56	56	56	56	56	71	71	71
D	125	145	160	180	210	240	295	355	410
E	11	11	11	11	14	14	17	22	22
F	70	70	70	70	70	70	102	102	102
G	90	90	90	90	90	90	125	125	125
H	19	19	19	19	19	19	25	30	30
H1	31	31	31	36	36	36	42	42	42
L	41.4	44	44.6	51.4	53.8	55.1	59.5	65	75.9
L1	176	176	176	225	225	225	300	359	359
Holes	4 x 19	4 x 19	8 x 19	8 x 19	8 x 19	8 x 23	12 x 23	12 x 28	12 x 28
n-∅p	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 12	4 x 12	4 x 12
Torque	19	21	28	43	60	91	194	295	412
Kgs	2.35	2.75	3.05	4.7	5.5	6.75	11.6	20.4	29.1

ITEM	PART NAME	MATERIAL
1	Body	Ductile Iron GGG40
2	Disc	316 Stainless Steel
3	Seat	WRAS EPDM
4	Upper Shaft	410 Stainless Steel
5	Lower Shaft	411 Stainless Steel
6	Short Bush	PTFE
7	Long Bush	PTFE
8	Split Pin	Spring Steel
9	Circlip	Spring Steel
10	O-Ring	WRAS EPDM
11	Bolt	Carbon Steel
12	Lever	DN50-150 Aluminium DN200-300 DI

### TECHNICAL DATA

- Maximum Pressure: 16 Bar
- Working Temperature: -20°C to +110°C

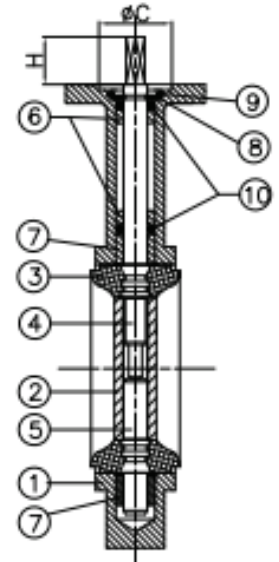
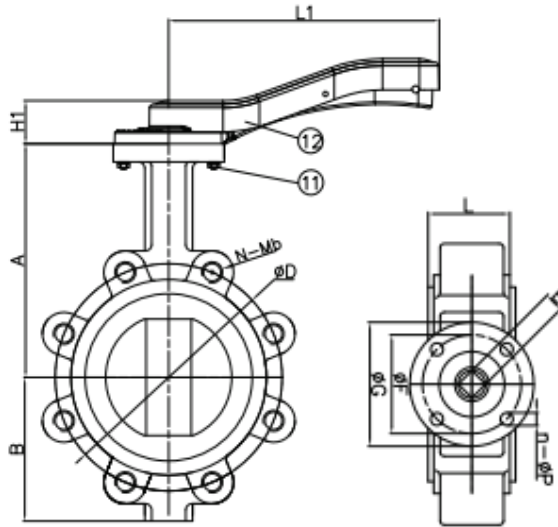
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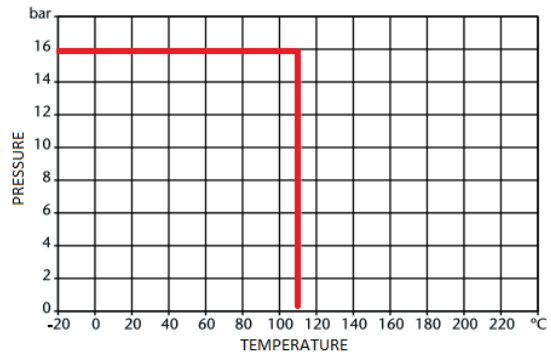
**BDE (NORTHAMPTON) LTD**

## DUCTILE IRON BUTTERFLY VALVE - LUGGED & TAPPED TYPE



### FEATURES

- Flange mounting PN16 Only
- BS5155 (BS EN 593)
- 316 Stainless Steel Disc
- ISO 5211 Direct Mount
- Lockable Handle
- Epoxy Coat Finish
- WRAS Approved



DN	50	65	80	100	125	150	200	250	300
A	142	154	161	179	193	204	250	282	326
B	75	80	91	110	125	137	178	208	241
C	56	56	56	56	56	56	71	71	71
D	125	145	160	180	210	240	295	355	410
E	11	11	11	11	14	14	17	22	22
F	70	70	70	70	70	70	102	102	102
G	90	90	90	90	90	90	125	125	125
H	19	19	19	19	19	19	25	30	30
H1	31	31	31	36	36	36	42	42	42
L	41.4	44	44.6	51.4	53.8	55.1	59.5	65	75.9
L1	176	176	176	225	225	225	300	359	359
Holes	4 x M16	4 x M16	8 x M16	8 x M16	8 x M16	8 x M20	12 x M20	12 x M24	12 x M24
n-Øp	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 12	4 x 12	4 x 12
Torque Kgs	19	21	28	43	60	91	194	295	412
	3.55	3.95	5.25	7	8.65	10.1	18.2	26.8	35.5

ITEM	PART NAME	MATERIAL
1	Body	Ductile Iron GGG40
2	Disc	316 Stainless Steel
3	Seat	WRAS EPDM
4	Upper Shaft	410 Stainless Steel
5	Lower Shaft	411 Stainless Steel
6	Short Bush	PTFE
7	Long Bush	PTFE
8	Split Pin	Spring Steel
9	Circlip	Spring Steel
10	O-Ring	WRAS EPDM
11	Bolt	Carbon Steel
12	Lever	DN50-150 Aluminium DN200-300 DI

### TECHNICAL DATA

- Maximum Pressure: 16 Bar
- Working Temperature: -20°C to +110°C

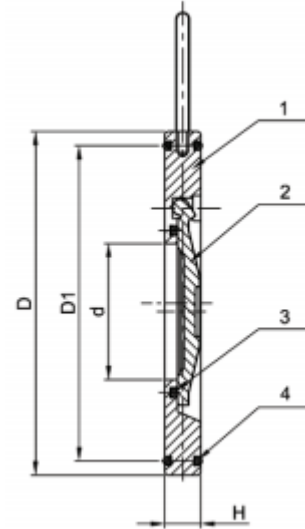
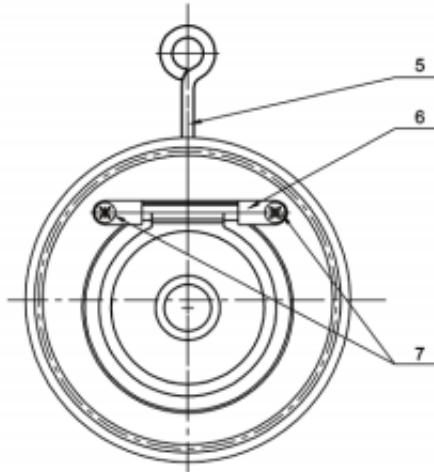
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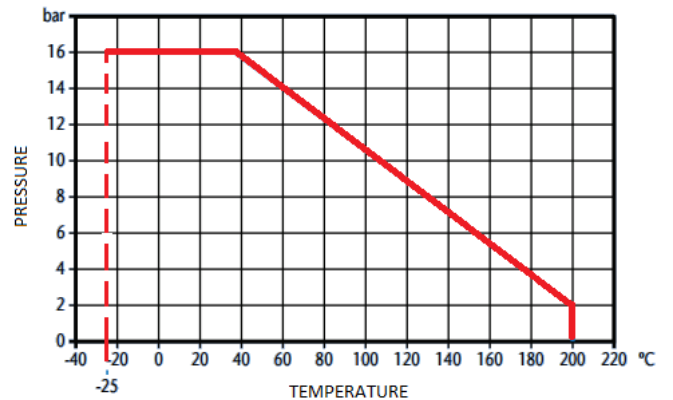
**BDE (NORTHAMPTON) LTD**

## PN16 STAINLESS STEEL WAFER CHECK VALVE



### FEATURES

- Wafer Pattern to suit PN16 & ASA 150 Flanges
- Viton seats & seals
- Suitable for upwards or horizontal flow
- PN16 Rated



DN	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
d	32	40	54	70	92	114	154	200	230
D	105	124	136	164	194	220	275	330	384
D1	84	96	117.5	148	166	197	249	310	358
H	14	14	14	18	18	20	22	26	30
Kgs	0.85	1.15	1.34	2.30	3.10	4.40	7.10	12.0	20.5

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Disc	CF8M
3	Disc O'ring	Viton
4	External O'ring	Viton
5	Hook	Steel
6	Stem Stopper	316 Stainless Steel
7	Axis Screw	316 Stainless Steel

### TECHNICAL DATA

- Maximum Pressure: 16 Bar
- Working Temperature: -25°C to +200°C

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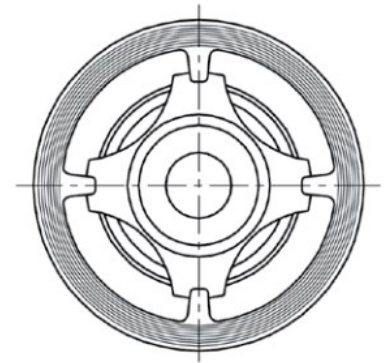
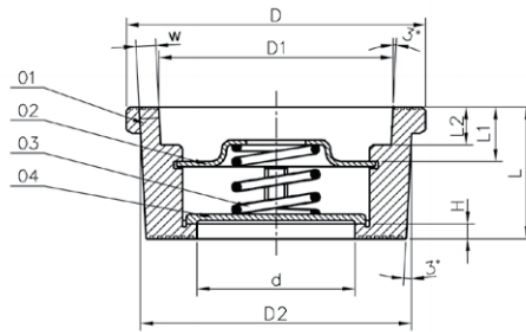
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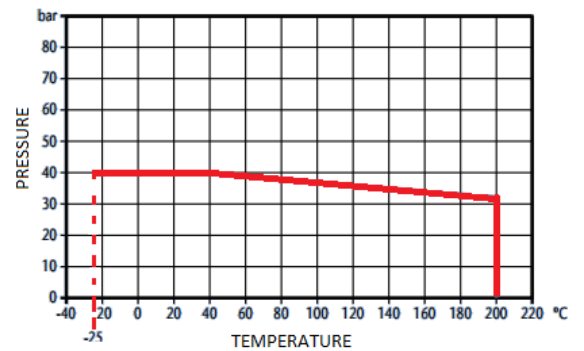
**BDE (NORTHAMPTON) LTD**

## PN40 STAINLESS STEEL WAFER SPRING CHECK VALVE



### FEATURES

- Wafer Pattern to suit PN10, 16, 40 & ANSI 150, 300 Flanges
- Metal Seat
- PN16 Rated



DN	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	15	20	25	32	40	48	62	75	95
D	39	46	54	70	81	94	113	132	150
D1	28.3	35.7	40	52.4	61	75.4	90	109	125.3
D2	34	41	49	62	71	85	102	123	140
W	3.1	3.3	4.5	4.8	5	5.3	6	7	7.5
L	16	19	22	28	32	40	46	50	60
L1	4	5	5.5	8	10	15	17.5	18	23
L2	2	2	3	4	4	4	5	5	6
H	3.5	4	4	5	5.5	6	6.5	7.5	8.5
Kgs	0.10	0.14	0.22	0.39	0.54	0.77	1.25	1.90	2.80

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Spring Cover	316 Stainless Steel
3	Spring	316 Stainless Steel
4	Disc	CF8M

### TECHNICAL DATA

- Maximum Pressure: 40 Bar
- Working Temperature: -25°C to +200°C

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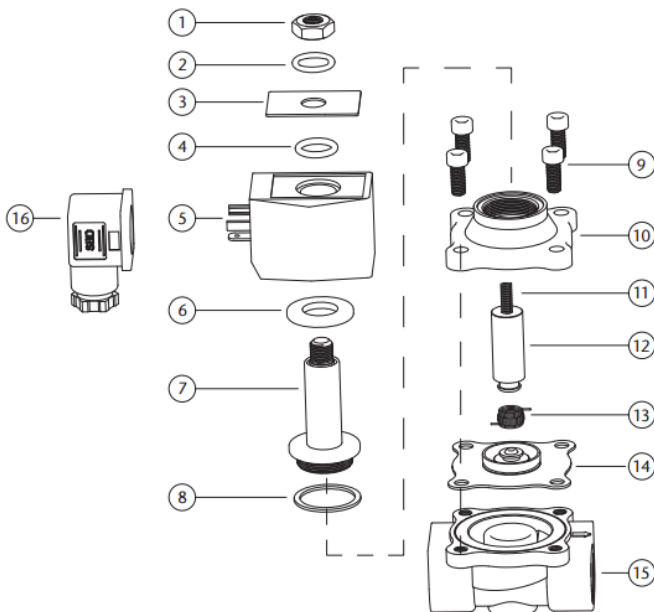
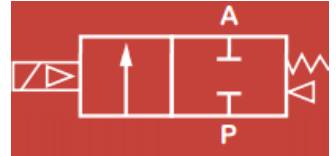
# BDE (NORTHAMPTON) LTD

## SOLENOID VALVE - NORMALLY CLOSED



### AVAILABLE IN:

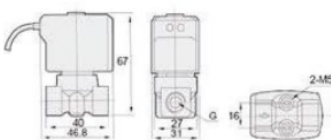
- 240VAC
- 110VAC
- 12VDC
- 24VDC
- 24VAC



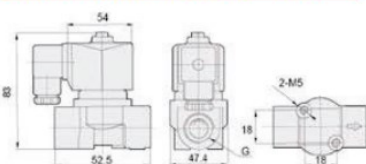
ITEM	PART NAME	MATERIAL
1	Lock Nut	302 Stainless Steel
2	Washer	302 Stainless Steel
3	Plate	Aluminium
4	O Ring	NBR / EPDM / Viton
5	Coil	Enamelled Wire
6	Base Plate	Plated Steel
7	Plunger Tube Unit	304 Stainless Steel + 1J117
8	Plunger Tube Seal	PTFE
9	Bolt	302 Stainless Steel
10	Valve Cover	Brass / 316 Stainless Steel
11	Plunger Spring	304 Stainless Steel
12	Pilot Unit	304 Stainless Steel + 1J117
13	Coil Spring	304 Stainless Steel
14	Diaphragm Unit	NBR / EPDM / Viton
15	Valve Body	Brass / 316 Stainless Steel
16	Plug	Nylon

### Main Dimensions

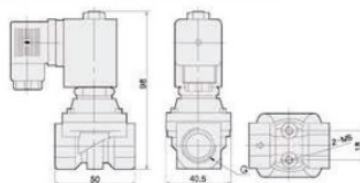
Orifice: 2.5mm - Port: 1/8" & 1/4"



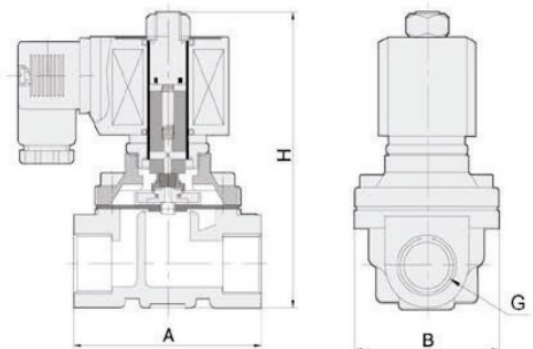
Orifice: 2.5mm - Port: 1/8" & 1/4"



Orifice: 10mm - Port: 1/4", 3/8, 1/2"



Large Orifice - See Table Opposite



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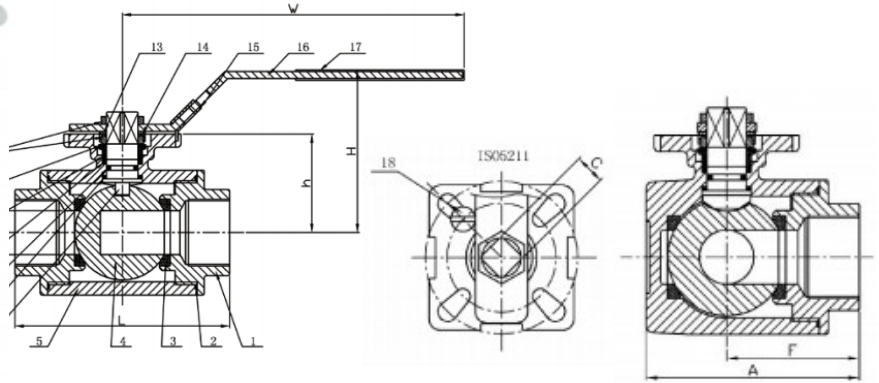
## SOLENOID VALVE - NORMALLY CLOSED

Port Size (C)	Orifice	CV Value	Pressure Difference (Bar)						Max. Temp. (°C)	VA AC 220V	W DC 24V	220VAC 50/60Hz		Main Dimension AxBxH		
			Min.	Max. Working Pressure								Brass	316 Stainless Steel			
				Air / Gas		Water / Hot Liquid		Light Oil ≤20CST							316 Stainless Steel	
				AC	DC	AC	DC	AC								DC
1/8"	2.5	0.23	0	7	5	7	5	7	5	80	13	8.5	ZS06EE2-2.5L	ZS06EE2-2.5LS2	50x40.5x98	
	2.5	0.23	0	7	5	7	5	-	-	120	13	8.5	ZS06VE2-2.5L	ZS06VE2-2.5LS2	50x40.5x98	
	2.5	0.23	0	7	5	7	5	7	5	120	13	8.5	ZS06VE2-2.5L	ZS06VE2-2.5LS2	50x40.5x98	
1/4"	2.5	0.23	0	7	5	7	5	7	5	80	13	8.5	ZS08EE2-2.5L	ZS08EE2-2.5LS2	50x40.5x98	
	2.5	0.23	0	7	5	7	5	-	-	120	13	8.5	ZS08VE2-2.5L	ZS08VE2-2.5LS2	50x40.5x98	
	2.5	0.23	0	7	5	7	5	7	5	120	13	8.5	ZS08VE2-2.5L	ZS08VE2-2.5LS2	50x40.5x98	
	10	1	0	20	16	20	16	20	16	80	22	13	ZS08E2-10L	-	50x40.5x98	
	10	1	0	20	16	20	16	-	-	120	22	13	ZS08EE2-10L	-	50x40.5x98	
	10	1	0	20	16	20	16	20	16	120	22	13	ZS08VE2-10L	-	50x40.5x98	
3/8"	4	0.6		8	5	8	5	5	5	80	33	20	ZS10E2-4L	ZS10E2-4LS2	50x40.5x98	
	4	0.6	0	8	5	8	5	-	-	120	33	20	ZS10EE2-4L	ZS10EE2-4LS2	50x40.5x98	
	4	0.6	0	8	5	8	5	5	5	120	33	20	ZS10VE2-4L	ZS10VE2-4LS2	50x40.5x98	
	10	1.8	0	20	16	20	16	20	16	80	22	13	ZS10E2-10L	-	69x57x106	
	10	1.8	0	20	16	20	16	-	-	120	22	13	ZS10EE2-10L	-	69x57x106	
	10	1.8	0	20	16	20	16	20	16	120	22	13	ZS10VE2-10L	-	69x57x106	
	16	4.8	0	10	6	10	6	7	4	80	33	20	ZS10E2-16L	ZS10E2-16LS2	69x57x106	
	16	4.8	0	10	6	10	6	-	-	120	33	20	ZS10EE2-16L	ZS10EE2-16LS2	69x57x106	
	16	4.8	0	10	6	10	6	7	4	120	33	20	ZS10VE2-16L	ZS10VE2-16LS2	69x57x106	
1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	ZS15E2-10L	-	69x57x106	
	10	1.9	0	20	16	20	16	-	-	120	22	13	ZS15EE2-10L	-	69x57x106	
	10	1.9	0	20	16	20	16	20	16	120	22	13	ZS15VE2-10L	-	69x57x106	
	16	4.8	0	10	6	10	6	7	4	80	33	20	ZS15E2-16L	ZS15E2-16LS2	69x57x106	
	16	4.8	0	10	6	10	6	-	-	120	33	20	ZS15EE2-16L	ZS15EE2-16LS2	69x57x106	
	16	4.8	0	10	6	10	6	7	4	120	33	20	ZS15VE2-16L	ZS15VE2-16LS2	69x57x106	
3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	ZS-20E2	ZS-20E2S2	73x57x114	
	20	7.6	0	10	6	10	6	-	-	120	33	20	ZS-20EE2	ZS-20EE2S2	73x57x114	
	20	7.6	0	10	6	10	6	7	4	120	33	20	ZS-20VE2	ZS-20VE2S2	73x57x114	
1"	25	12	0	10	6	10	6	7	4	80	33	20	ZS-25E2	ZS-25E2S2	99x77x121	
	25	12	0	10	6	10	6	-	-	120	33	20	ZS-25EE2	ZS-25EE2S2	99x77x121	
	25	12	0	10	6	10	6	7	4	120	33	20	ZS-25VE2	ZS-25VE2S2	99x77x121	
	25	12	0	10	6	3	3	-	-	120	33	20	ZS-25GE2	ZS-25GE2S2	99x77x121	
1.1/4"	35	24	0	10	6	10	6	7	4	80	70	40	ZS-35E2	ZS-35E2S2	112x86.5x150	
	35	24	0	10	6	10	-	-	-	120	70	40	ZS-35EE2	ZS-35EE2S2	112x86.5x150	
	35	24	0	10	6	10	6	7	4	120	70	40	ZS-35VE2	ZS-35VE2S2	112x86.5x150	
1.1/2"	40	29	0	10	6	10	6	7	4	80	70	40	ZS-40E2	ZS-40E2S2	123x94x160	
	40	29	0	10	6	10	-	-	-	120	70	40	ZS-40EE2	ZS-40EE2S2	123x94x160	
	40	29	0	10	6	10	6	7	7	120	70	40	ZS-40VE2	ZS-40VE2S2	123x94x160	
2"	50	48	0	10	6	10	6	7	4	80	70	40	ZS-50E2	ZS-50E2S2	168x123x183	
	50	48	0	10	6	10	-	-	-	120	70	40	ZS-50EE2	ZS-50EE2S2	168x123x183	
	50	48	0	10	6	10	6	7	4	120	70	40	ZS-50VE2	ZS-50VE2S2	168x123x183	
1" Flange Connection	25	12	0	10	6	10	6	7	4	80	70	40	-	ZSFE2-25LS2	140x115x160	
	25	12	0	10	6	10	6	7	4	120	70	40	-	ZSFE2-25LS2	140x115x160	
1 1/4" Flange Connection	32	24	0	10	6	10	6	7	4	80	70	40	-	ZSFE2-32LS2	152x135x215	
	32	24	0	10	6	10	-	-	-	120	70	40	-	ZSFE2-32LS2	152x135x215	
1 1/2" Flange Connection	40	29	0	10	6	10	6	7	4	80	70	40	-	ZSFE2-40LS2	152x135x215	
	40	29	0	10	6	10	-	-	-	120	70	40	-	ZSFE2-40LS2	152x135x215	
2" Flange Connection	50	48	0	10	6	10	6	7	4	80	70	40	-	ZSFE2-50LS2	195x160x220	
	50	48	0	10	6	10	6	-	-	120	70	40	-	ZSFE2-50LS2	195x160x220	
	50	48	0	10	6	10	6	7	4	120	70	40	-	ZSFE2-50LS2	195x160x220	
2 1/2" Flange Connection	65	75	0	6	5	6	5	3	2	80	55	64	-	ZSFE2-65LS2	250x185x308	
	65	75	0	6	5	6	5	-	-	120	55	64	-	ZSFE2-65LS2	250x185x308	
	65	75	0	6	5	6	5	3	2	120	55	64	-	ZSFE2-65LS2	250x185x308	
3" Flange Connection	80	90	0	6	5	6	5	3	2	80	55	64	-	ZSFE2-80LS2	270x202x320	
	80	90	0	6	5	6	5	-	-	120	55	64	-	ZSFE2-80LS2	270x202x320	
	80	90	0	6	5	6	5	3	2	120	55	64	-	ZSFE2-80LS2	270x202x320	
4" Flange Connection	100	160	0	6	5	6	5	3	2	80	55	64	-	ZSFE2-100LS2	342x222x345	
	100	160	0	6	5	6	5	-	-	120	55	64	-	ZSFE2-100LS2	342x222x345	
	100	160	0	6	5	6	5	3	2	120	55	64	-	ZSFE2-100LS2	342x222x345	



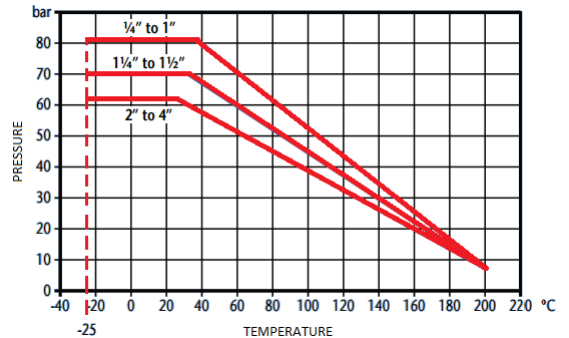
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL 'L' PORT BALL VALVE



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE/Viton seals
- Reduced Bore
- PN82 Rated
- Locking Device
- ISO 5211 Direct Mount



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	9.5	11	12	15	20	25	32	40	49	60	75
L	75	75	75	85	100	122	131	158	178	202	246
H	66	66	66	72	77	92	96	107	135	147	160
W	130	130	130	161	161	203	203	203	254	254	310
h	36.8	36.8	36.8	41.2	46.5	56	60	70.5	95.5	106	119
F	37.5	37.5	37.5	42.5	50	61	65.5	79	89	101	123
A	57.5	57.5	57.5	65.5	79	97	106.5	129	145	167	203
C	9	9	9	11	11	14	14	14	17	17	17
ISO 5211	F03/04	F03/04	F03/04	F04/05	F04/05	F05/07	F05/07	F05/07	F07/010	F07/010	F07/010
Torque	8	8	8	9	15	20	30	45	60	90	120
Kgs	0.70	0.67	0.63	0.94	1.39	2.91	3.66	6.31	8.95	13.11	22.10

ITEM	PART NAME	MATERIAL
1	Cap	CF8M
2	Gasket	PTFE
3	Ball	R-PTFE (15%)
4	Ball Seat	316 Stainless Steel
5	Body	CF8M
6	Stem	316 Stainless Steel
7	Thrust Washer	PTFE
8	O-Ring	Viton
9	Stem Packing	PTFE
10	Stem Ring	316 Stainless Steel
11	Belleville Washer	304 (301) Stainless Steel
12	Nut	304 Stainless Steel
13	Plate Washer	304 Stainless Steel
14	Nut Stopper	304 Stainless Steel
15	Lock Device	304 Stainless Steel
16	Handle	304 Stainless Steel
17	Handle Sleeve	Plastic
18	Stop Pin	304 Stainless Steel

### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 4" = 62 Bar
- Working Temperature: -25°C to +200°C

\* Raw torque with no safety added

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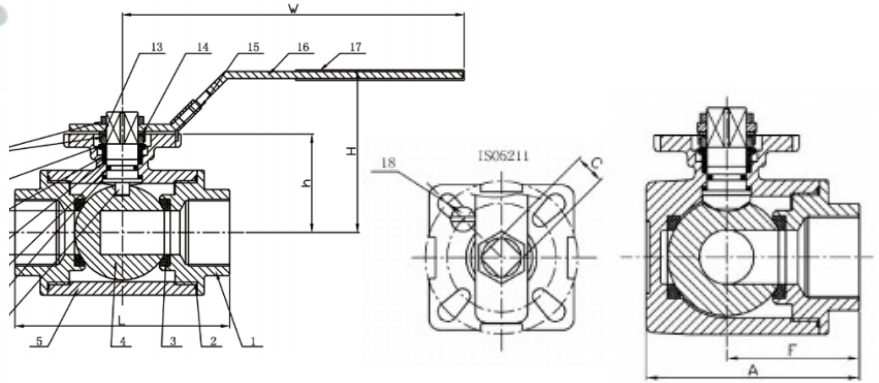
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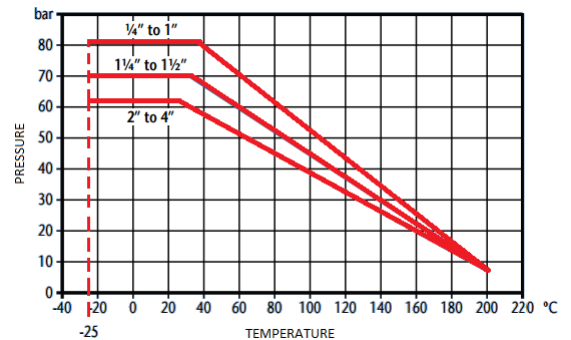
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL 'T' PORT BALL VALVE



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE/Viton seals
- Reduced Bore
- PN82 Rated
- Locking Device
- ISO 5211 Direct Mount



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	9.5	11	12	15	20	25	32	40	49	60	75
L	75	75	75	85	100	122	131	158	178	202	246
H	66	66	66	72	77	92	96	107	135	147	160
W	130	130	130	161	161	203	203	203	254	254	310
h	36.8	36.8	36.8	41.2	46.5	56	60	70.5	95.5	106	119
F	37.5	37.5	37.5	42.5	50	61	65.5	79	89	101	123
A	57.5	57.5	57.5	65.5	79	97	106.5	129	145	167	203
C	9	9	9	11	11	14	14	14	17	17	17
ISO 5211	F03/04	F03/04	F03/04	F04/05	F04/05	F05/07	F05/07	F05/07	F07/010	F07/010	F07/010
Torque	8	8	8	9	15	20	30	45	60	90	120
Kgs	0.70	0.67	0.63	0.94	1.39	2.91	3.66	6.31	8.95	13.11	22.10

ITEM	PART NAME	MATERIAL
1	Cap	CF8M
2	Gasket	PTFE
3	Ball	R-PTFE (15%)
4	Ball Seat	316 Stainless Steel
5	Body	CF8M
6	Stem	316 Stainless Steel
7	Thrust Washer	PTFE
8	O-Ring	Viton
9	Stem Packing	PTFE
10	Stem Ring	316 Stainless Steel
11	Belleville Washer	304 (301) Stainless Steel
12	Nut	304 Stainless Steel
13	Plate Washer	304 Stainless Steel
14	Nut Stopper	304 Stainless Steel
15	Lock Device	304 Stainless Steel
16	Handle	304 Stainless Steel
17	Handle Sleeve	Plastic
18	Stop Pin	304 Stainless Steel

### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 4" = 62 Bar
- Working Temperature: -25°C to +200°C

\* Raw torque with no safety added

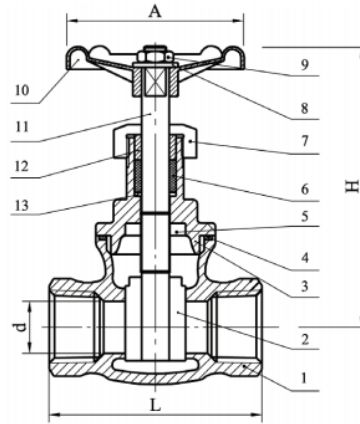
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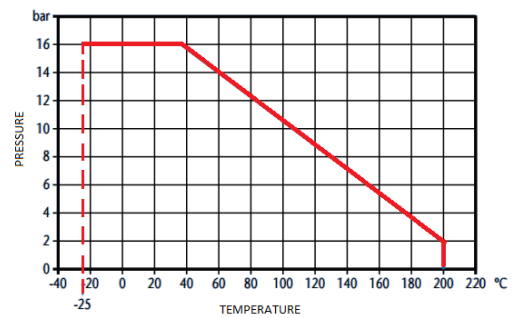
**BDE (NORTHAMPTON) LTD**

## PN16 STAINLESS STEEL GATE VALVE



### FEATURES

- Screwed BSP Parallel
- PTFE Seats
- Full Bore
- PN16 Rated



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
D	10	12	15	20	25	32	40	50
L	55	55	55	60	65	73	76	85
H	98	98	98	104	115	125	137	160
A	66	66	66	72	72	97	97	108
Kgs	0.42	0.42	0.41	0.53	0.69	0.99	1.31	1.85

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Disc	CF8M
3	Bonnet	CF8M
4	Gasket	PTFE
5	Snap Washer	316 Stainless Steel
6	Packing	PTFE
7	Packing Nut	316 Stainless Steel
8	Washer	304 Stainless Steel
9	Wheel Nut	304 Stainless Steel
10	Hand Wheel	Aluminium Alloy
11	Stem	316 Stainless Steel
12	Gland	304 Stainless Steel
13	Snap Washer	304 Stainless Steel

### TECHNICAL DATA

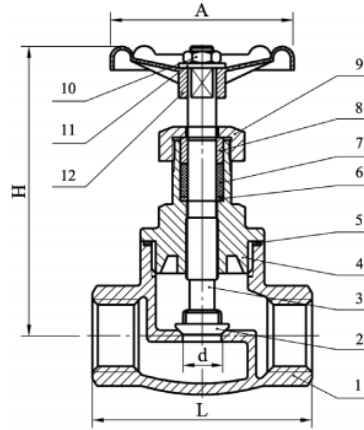
- Maximum Pressure: 16 Bar
- Working Temperature: -25°C to +200°C





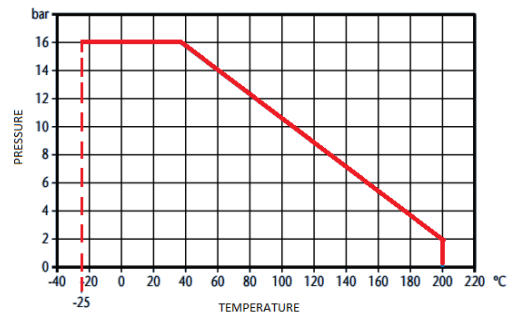
**BDE (NORTHAMPTON) LTD**

## PN16 STAINLESS STEEL GLOBE VALVE



### FEATURES

- Screwed BSP Parallel
- PTFE Seats
- Metal Seat
- PN16 Rated



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
D	10	12	15	20	25	32	40	50
L	67	67	67	80	89	100	118	134
H	79	79	79	91	106	125	136	146
A	66	66	66	71	77	90	105	105
Kgs	0.42	0.42	0.40	0.57	0.80	1.30	1.84	2.40

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Petal	316 Stainless Steel
3	Stem	316 Stainless Steel
4	Cap	CF8M
5	Gasket	PTFE
6	Washer	304 Stainless Steel
7	Stem Packing	PTFE
8	Ring	304 Stainless Steel
9	Gland Ring	304 Stainless Steel
10	Wheel Nut	304 Stainless Steel
11	Plate	304 Stainless Steel
12	Hand Wheel	Aluminium Alloy

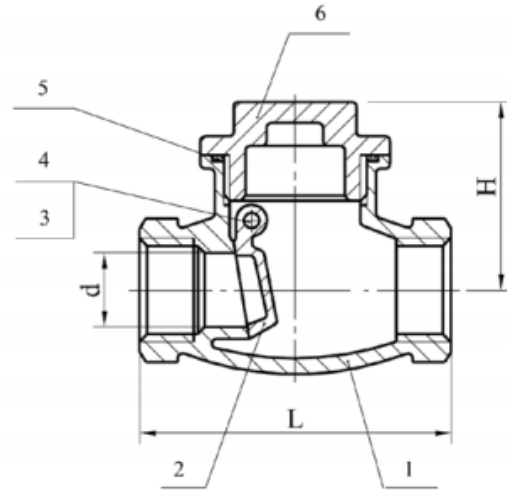
### TECHNICAL DATA

- Maximum Pressure: 16 Bar
- Working Temperature: -25°C to +200°C



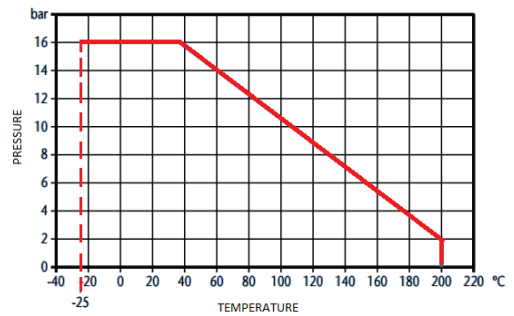
**BDE (NORTHAMPTON) LTD**

## PN16 STAINLESS STEEL SWING CHECK VALVE



### FEATURES

- Screwed BSP Parallel
- Metal Seat
- PTFE Joint Gasket



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
D	10	12	15	20	25	32	40	50
L	63	63	63	74	85	101	115	135
H	42	42	42	46	50	54	64	71
Kgs	0.27	0.26	0.25	0.34	0.47	0.76	1.03	1.45

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Disc	CF8M
3	Pipe Plug	316 Stainless Steel
4	Plug Gasket	PTFE
5	Body Gasket	PTFE
6	Cap	CF8M

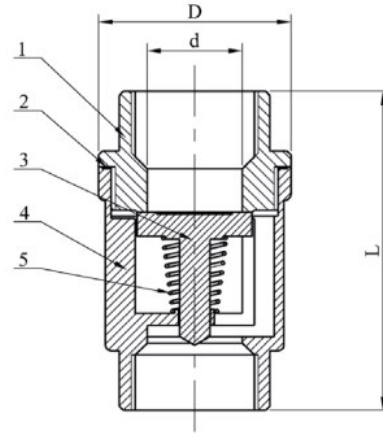
### TECHNICAL DATA

- Maximum Pressure: 16 Bar
- Working Temperature: -25°C to +200°C



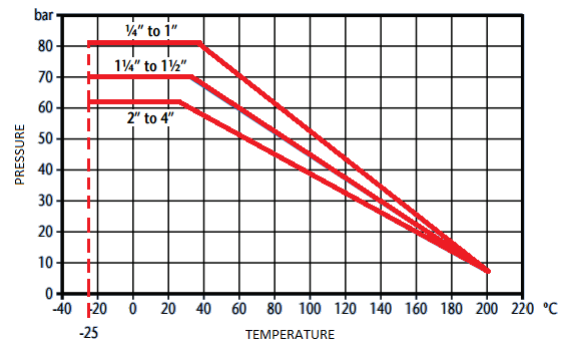
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL SPRING CHECK VALVE



### FEATURES

- Screwed BSP Parallel
- Metal Seat
- PTFE Joint Gasket



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	8	10	15	20	25	30	38	47	61	75	94
D	30.5	30.5	37	42	48	58	70	82	102.5	120	150
L	53	53	56	63	74	81	91	97	118	138	158
Kgs	0.18	0.17	0.21	0.29	0.40	0.65	0.98	1.40	2.44	3.80	6.60

ITEM	PART NAME	MATERIAL
1	Cap	CF8M
2	Body Gasket	PTFE
3	Disc	CF8M
4	Body	CF8M
5	Spring	316 Stainless Steel

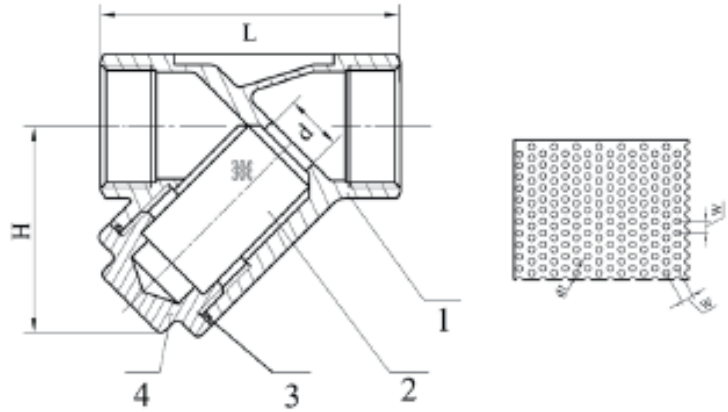
### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 4" = 62 Bar
- Working Temperature: -25°C to +200°C



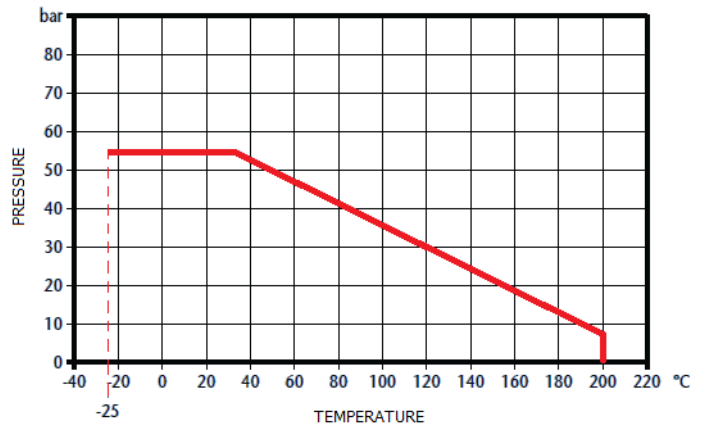
**BDE (NORTHAMPTON) LTD**

## PN55 STAINLESS STEEL SCREWED Y TYPE STRAINER



### FEATURES

- Screwed BSP Parallel
- 1mm/1000 micron mesh
- PTFE Joint Gasket
- Body CF8M



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	10	12	15	20	25	32	38	50	61	75	94
L	64	64	64	80	90	106	119	140	167	198	238
H	43	43	45	52	68	70	80	98	117	137	163
W	2	2	2	2	2	2	2	2	2	2	2
d1	1	1	1	1	1	1	1	1	1	1	1
Kgs	0.20	0.20	0.21	0.34	0.59	0.80	1.06	1.61	2.99	4.74	7.88

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Screen	316 Stainless Steel
3	Joint Gasket	PTFE
4	Bonnet	CF8M

### TECHNICAL DATA

- Maximum Pressure: 55 Bar
- Working Temperature: -25°C to +200°C

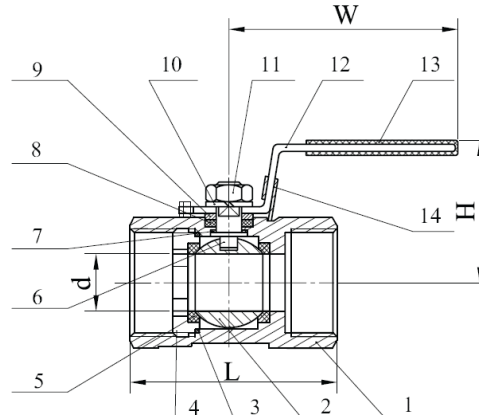
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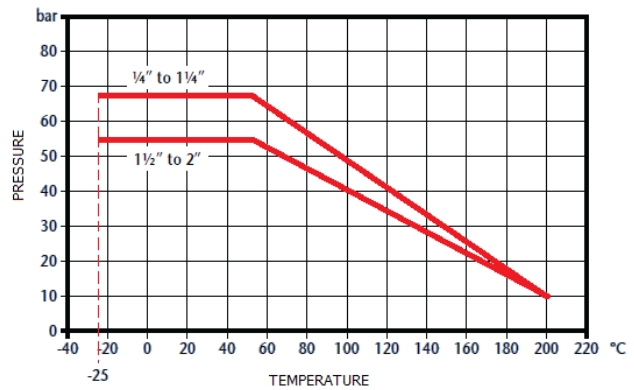
## BDE (NORTHAMPTON) LTD

# PN69 STAINLESS STEEL 1 PIECE BALL VALVE



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE Seals
- Reduced Bore
- PN69 Rated
- Locking Device



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
D	5	6.8	9.5	12.7	16	20	25	32
L	40	45	56	59	71	76	85	99
H	32	33	43	45	48	58.3	67	74
W	67	67	93	93	93	106	128	128
Torque	4	4	6	6	8	10	14	15
Kgs	00.9	0.12	0.19	0.28	0.39	0.58	0.85	1.35

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Ball	316 Stainless Steel
3	Ball Gasket	PTFE
4	Cap	CF8M
5	Ball Seat	R-PTFE (15%)
6	Stem	316 Stainless Steel
7	Thrust Washer	PTFE
8	Stem Packing	PTFE
9	Washer	304 Stainless Steel
10	Spring Washer	304 Stainless Steel
11	Nut	304 Stainless Steel
12	Handle	304 Stainless Steel
13	Handle Cover	Plastic
14	Lock Device	304 Stainless Steel

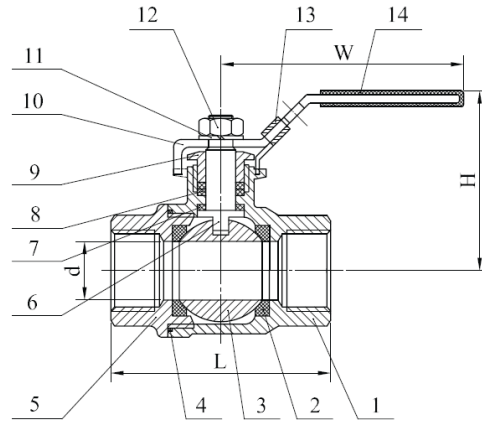
### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1.25" = 69 Bar  
1.5" - 2" = 55 Bar
- Working Temperature: -25°C to +200°C



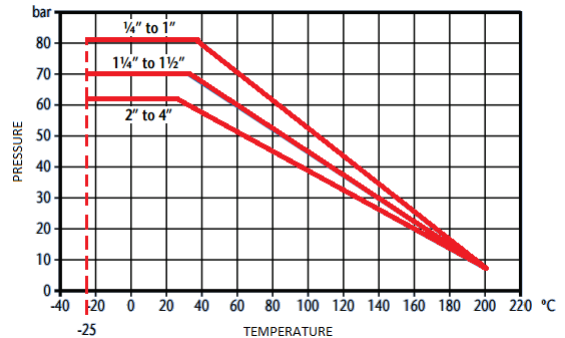
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL 2 PIECE BALL VALVE



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE Seals
- Full Bore
- PN82 Rated
- Locking Device



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"
d	11.5	12.5	15	20	25	32	40	50	65	76
L	49	49	57	64	77	90	105	125	153	172
H	54	54	56	65	70	75	93	99	123	140
W	4	4	5	8	10	14	18	25	48	75
Kgs	0.23	0.23	0.24	0.45	0.65	1.05	1.70	2.41	5.01	7.61

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Ball Seat	R-PTFE (15%)
3	Ball	316 Stainless Steel
4	Body Gasket	PTFE
5	Cap	CF8M
6	Stem	316 Stainless Steel
7	Thrust Washer	PTFE
8	Stem Packing	PTFE
9	Gland Nut	304 Stainless Steel
10	Washer	304 Stainless Steel
11	Spring Washer	304 Stainless Steel
12	Nut	304 Stainless Steel
13	Handle	304 Stainless Steel
14	Handle Cover	Plastic

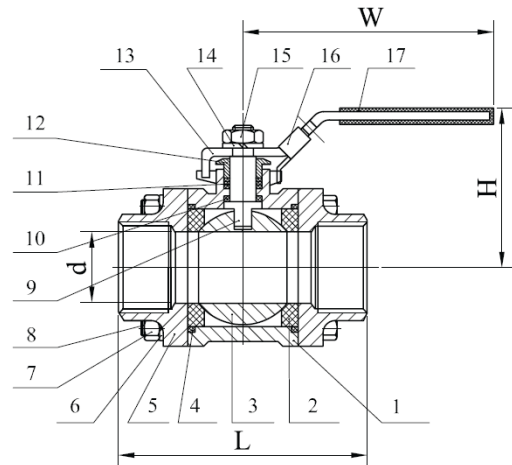
### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 3" = 62 Bar
- Working Temperature: -25°C to +200°C



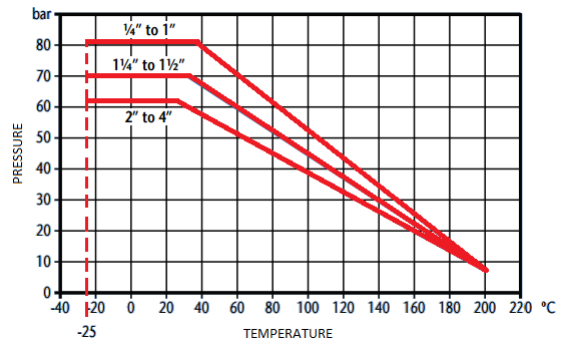
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL 3 PIECE BALL VALVE



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE Seals
- Full Bore
- PN82 Rated
- Locking Device



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"
d	11	12.5	15	20	25	32	40	50	65	80
L	50	60	75	80	90	110	120	140	185	205
H	51	51	53	60	75	80	88	95	121	135
W	105	105	118	118	150	150	182	182	254	254
Torque	4	4	5	8	10	14	18	25	48	75
Kgs	0.40	0.42	0.45	0.73	1.04	1.65	2.43	3.52	7.14	11.85

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Ball Seat	R-PTFE (15%)
3	Ball	316 Stainless Steel
4	Body Gasket	PTFE
5	Cap	CF8M
6	Spring Washer	304 Stainless Steel
7	Nut	304 Stainless Steel
8	Bolt	304 Stainless Steel
9	Stem	316 Stainless Steel
10	Thrust Washer	PTFE
11	Stem Packing	PTFE
12	Gland Nut	304 Stainless Steel
13	Handle	304 Stainless Steel
14	Spring Washer	304 Stainless Steel
15	Nut	304 Stainless Steel
16	Lock Device	304 Stainless Steel
17	Handle Cover	Plastic

### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5 = 69 Bar  
2" - 3" = 62 Bar
- Working Temperature: -25°C to +200°C

Tel: 01604 750380  
Email: sales@bdeld.co.uk

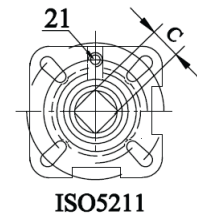
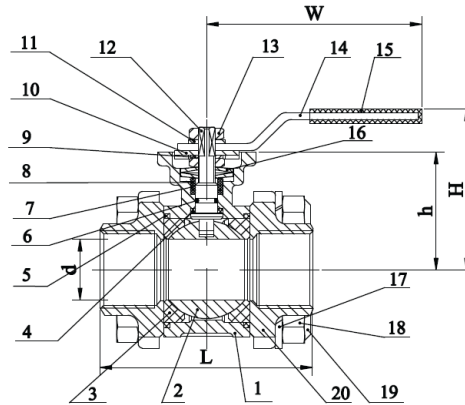
Fax: 01604 750377  
www.bdeld.co.uk





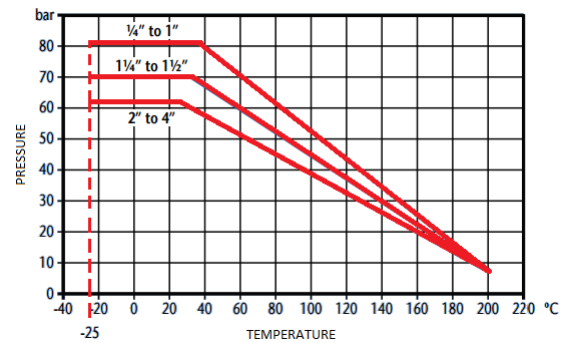
**BDE (NORTHAMPTON) LTD**

## PN82 STAINLESS STEEL 3 PIECE BALL VALVE - ISO5211



### FEATURES

- Screwed BSP Taper
- RPTFE (15%) Seats
- PTFE Seals
- Full Bore
- PN82 Rated
- Locking Device
- ISO5211 Direct Mount



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
d	11	12.5	15	20	25	32	40	50	65	80	100
L	50	60	75	80	90	110	120	140	185	205	240
H	59	59	70	78	87	98	104	112	140	153	166
h	32.5	32.5	42.0	50.0	58.0	64.0	69.5	78.0	100	112.5	112.5
W	115	115	117	134	134	203	203	203	255	255	302
C	9	9	9	11	11	14	14	14	17	17	17
ISO5211	F03	F03	F03/F04	F03/F04	F03/F04	F05/F07	F05/F07	F05/F07	F07/F010	F07/F010	F07/F010
Torque	4	4	5	8	10	14	18	25	48	75	110
Kgs	0.46	0.48	0.51	0.89	1.27	2.04	3.00	3.80	7.80	12.4	20.8

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Ball	316 Stainless Steel
3	Ball Seat	R-PTFE (15%)
4	Thrust Washer	PTFE
5	Body Gasket	PTFE
6	O-Ring	Viton
7	Stem Packing	PTFE
8	Gland	304 Stainless Steel
9	Tab Washer	304 Stainless Steel
10	Stopper	304 Stainless Steel
11	Spring Washer	304 Stainless Steel
12	Stem	316 Stainless Steel
13	Nut	304 Stainless Steel
14	Handle	304 Stainless Steel
15	Handle Cover	Plastic
16	Belleville Washer	301 Stainless Steel
17	Spring Washer	304 Stainless Steel
18	Nut	304 Stainless Steel
19	Bolt	304 Stainless Steel
20	Cap	CF8M
21	Stop Pin	304 Stainless Steel

### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 4" = 62 Bar
- Working Temperature: -25°C to +200°C

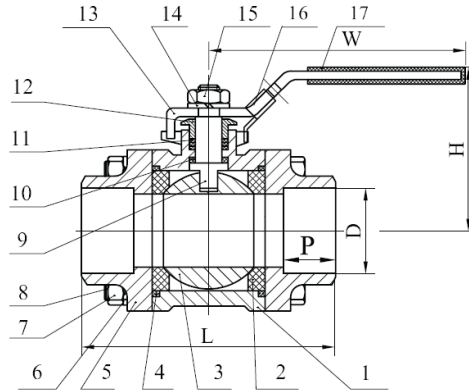
Tel: 01604 750380  
Email: sales@bdeltd.co.uk

Fax: 01604 750377  
www.bdeltd.co.uk



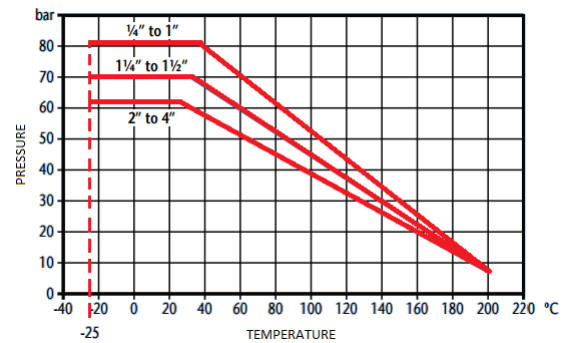
## BDE (NORTHAMPTON) LTD

### PN82 STAINLESS STEEL 3 PIECE BALL VALVE



#### FEATURES

- Socket Weld Ends
- RPTFE (15%) Seats
- PTFE Seals
- Full Bore
- PN82 Rated
- Locking Device



DN	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"
D	14	17.6	21.7	27.3	34.1	42.8	48.7	61	77	90
P	10	10	10	13	13	13	13	16	16	16
L	50	60	75	80	90	110	120	140	185	205
H	51	51	53	60	75	80	88	95	121	135
W	105	105	118	118	150	150	182	182	254	254
Torque	4	4	5	8	10	14	18	25	48	75
Kgs	0.38	0.40	0.41	0.71	0.95	1.64	2.36	3.42	6.88	11.50

ITEM	PART NAME	MATERIAL
1	Body	CF8M
2	Ball Seat	R-PTFE (15%)
3	Ball	316 Stainless Steel
4	Body Gasket	PTFE
5	Cap	CF8M
6	Spring Washer	304 Stainless Steel
7	Nut	304 Stainless Steel
8	Bolt	304 Stainless Steel
9	Stem	316 Stainless Steel
10	Thrust Washer	PTFE
11	Stem Packing	PTFE
12	Gland Nut	304 Stainless Steel
13	Handle	304 Stainless Steel
14	Spring Washer	304 Stainless Steel
15	Nut	304 Stainless Steel
16	Locking Device	304 Stainless Steel
17	Handle Cover	Plastic

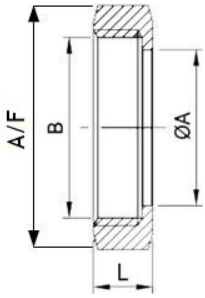
#### TECHNICAL DATA

- Maximum Pressure: 1/4" - 1" = 82 Bar  
1.25" - 1.5" = 69 Bar  
2" - 3" = 62 Bar
- Working Temperature: -25°C to +200°C



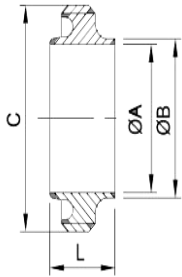
# BDE (NORTHAMPTON) LTD

## RJT UNION (BS4825 PT5)



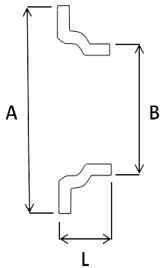
- RJT HEX NUT 304**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	33.45	46.00	58.67	71.40	84.10	109.70
B	42.40	55.00	68.00	80.00	92.00	118.00
A/F	51.00	65.00	79.00	92.00	105.00	129.00
L	22.00	22.00	22.00	22.00	22.00	22.00



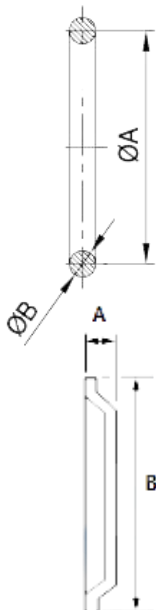
- RJT WELD MALE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	21.10	34.80	47.50	60.20	72.90	97.60
B	25.40	38.10	50.80	63.50	76.20	101.60
C	45.72	58.42	72.72	85.42	98.12	123.52
L	27.00	27.00	27.00	27.00	27.00	27.00



- RJT PRESSED WELD LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	41.40	54.00	66.70	79.40	92.10	117.50
B	25.40	38.10	50.80	63.5	76.20	101.60
L	12.70	12.70	12.70	12.70	12.70	12.70



- RJT JOINT RING - NITRILE**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	33.30	46.00	58.70	71.40	84.10	109.50
B	6.60	6.60	6.60	6.60	6.60	6.60

VITON & EPDM ALSO EX STOCK.  
PTFE SOLID CAN ALSO BE SUPPLIED.

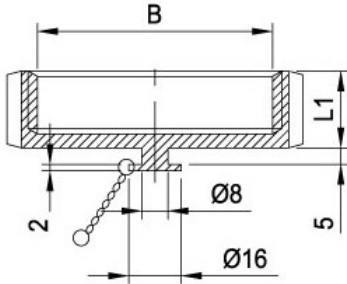
- RJT PRESSED BLANK LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	8.70	8.70	8.70	8.70	8.70	8.70
B	41.30	54.00	66.70	79.40	92.10	117.50



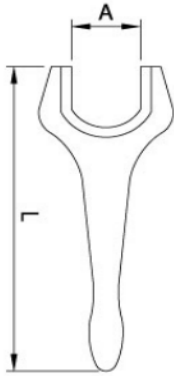
**BDE (NORTHAMPTON) LTD**

## RJT UNION (BS4825 PT5)



• **RJT BLANK NUT & CHAIN 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
<b>B</b>	42.66 x 8	54.96 x 8	67.92 x 6	80.62 x 6	93.32 x 6	118.72 x 6
	TPI WHIT	TPI WHIT	TPI WHIT	TPI WHIT	TPI WHIT	TPI WHIT
<b>L1</b>	23.50	23.50	23.50	23.50	23.50	23.50



• **RJT CAST ALUMINIUM SPANNER**

SIZE	1"	1.5"	2"	2.5"	3"	4"
<b>A</b>	51.80	66.00	80.40	93.20	106.30	121.50
<b>B</b>	240.00	288.00	300.00	326.00	440.00	448.00

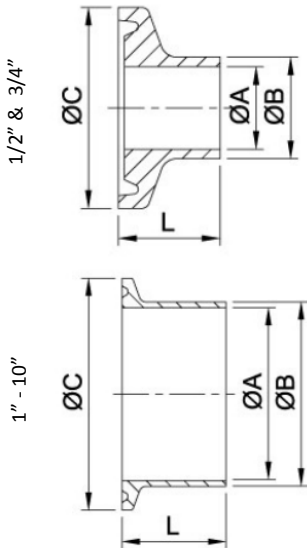
**ALSO AVAILABLE:**

- RJT REDUCING LINERS
- RJT/BSP ADAPTORS 316
- RJT MALE/FEMALE ELBOWS 316
- RJT HOSE LINERS
- RJT MALE HOSETAIL
- MACHINED LINERS



**BDE (NORTHAMPTON) LTD**

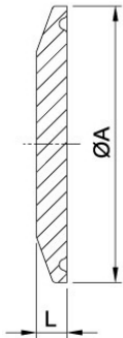
## CLAMP UNION (BS4825 PT3)



• **CLAMP FERRULE 316**

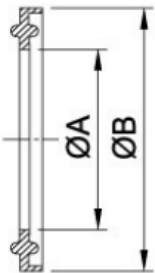
SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"
A	9.40	15.75	22.10	34.80	47.50	60.20
B	12.70	19.05	25.40	38.10	50.80	63.50
C	25.00	25.00	50.50	50.50	64.00	77.50
L	12.7	12.7	21.50*	21.50*	21.50*	21.50*
SIZE	3"	4"	5"	6"	8"	10"
A	72.90	97.40	125.00	150.00	200.00	247.20
B	76.20	101.60	129.00	154.00	204.00	254.00
C	91.00	119.00	144.50	166.87	217.67	268.47
L	21.50*	21.50*	28.00	21.50*	21.50*	21.50*

\*Also stocked in 28mm long.



• **CLAMP BLANK 316**

SIZE	1/2" - 3/4"	1" - 1.5"	2"	2.5"	3"
A	25.00	50.50	64.00	77.50	91.00
L	6.00	6.30	6.30	6.30	6.30
SIZE	4"	5"	6"	8"	10"
A	119.00	144.5	166.87	217.70	268.50
L	7.90	10.00	11.10	11.10	11.10



• **LIPPED CLAMP JOINT RING - BLUE EPDM**

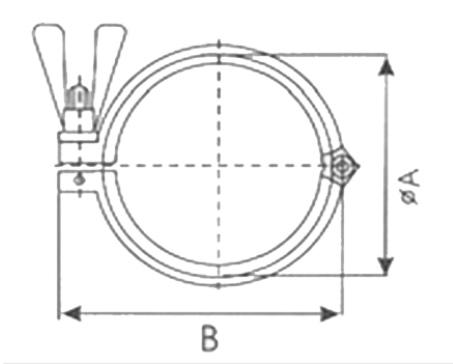
SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"
A	9.90	16.30	22.80	35.80	48.80	60.50
L	21.80	21.80	52.70	52.70	66.20	79.70
SIZE	3"	4"	5"	6"	8"	10"
A	73.10	97.80	123.00	148.00	198.60	249.00
L	93.20	121.20	144.40	169.10	229.00	270.70

Clamp joint rings are available in the following materials:  
 Viton (Green - Lipped & Unlipped) , PTFE solid (White - Unlipped),  
 Silicone (Opaque - unlipped) , PTFE Envelope (Unlipped)



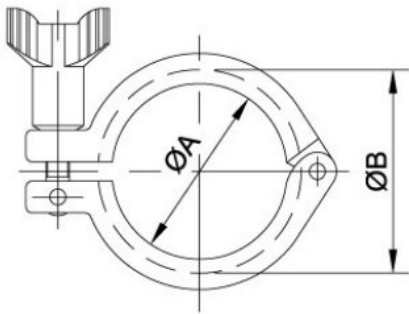
**BDE (NORTHAMPTON) LTD**

## CLAMP UNION (BS4825 PT3)



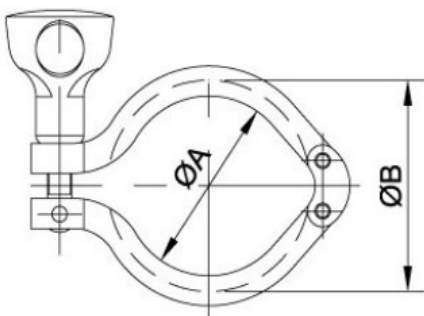
- BSF TYPE CLAMP 304 (SINGLE HINGED)**

SIZE	1/2" - 3/4"	1" - 1.5"	2"	2.5"	3"	4"
A	28.00	53.00	67.40	80.90	94.40	122.00
B	47.00	85.50	99.00	112.00	128.50	157.50



- SINGLE HINGED CLAMP 304**

SIZE	1/2" - 3/4"	1" - 1.5"	2"	2.5"	3"
A	20.00	44.40	57.80	71.40	84.00
B	28.20	53.60	67.00	80.60	94.20
SIZE	4"	5"	6"	8"	
A	110.00	133.60	155.40	205.00	
B	19.20	144.50	170.40	220.00	

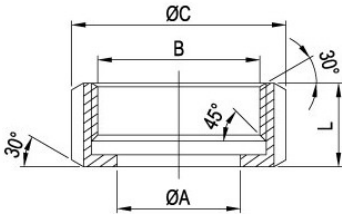


- DOUBLE HINGED CLAMP 304 (13MHM)**

SIZE	1" - 1.5"	2"	2.5"	3"	4"
A	43.60	57.00	70.60	84.00	112.00
B	53.60	67.00	80.60	94.00	122.00

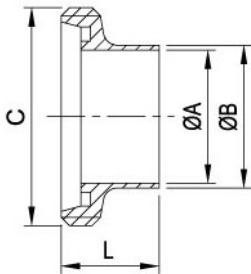

**BDE (NORTHAMPTON) LTD**

## IMPERIAL DIN UNION (DIN11851)



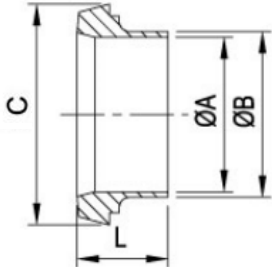
- DIN ROUND SLOTTED NUT 304**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	36.00	49.00	62.00	80.00	94.00	114.00
B	RD52*1/6	RD65*1/6	RD78*1/6	RD95*1/6	RD110*1/4	RD130*1/4
C	63.00	78.00	92.00	112.00	127.00	148.00
L	21.00	21.00	22.00	25.00	29.00	31.00
SLOTS	4	4	4	4	6	6



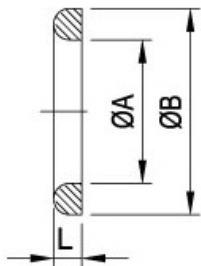
- DIN WELD MALE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.10	34.80	47.50	60.20	72.90	97.60
B	25.40	38.10	50.80	63.50	76.20	101.60
C	RD52*1/6	RD65*1/6	RD78*1/6	RD95*1/6	RD110*1/4	RD130*1/4
L	29.00	33.00	35.00	40.00	45.00	54.00



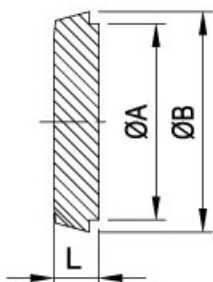
- DIN WELD LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.10	34.80	47.50	60.20	72.90	97.60
B	25.40	38.10	50.80	63.50	76.20	101.60
C	44.00	56.00	68.00	86.00	100.00	121.00
L	22.00	26.00	28.00	32.00	37.00	44.00



- DIN JOINT RING - EPDM**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	30.00	42.00	54.00	71.00	85.00	104.00
B	40.00	52.00	64.00	81.00	95.00	114.00
L	5.00	5.00	5.00	5.00	5.00	6.00



- DIN BLANK LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	35.00	48.00	61.00	79.00	93.00	114.00
B	48.00	56.00	68.50	86.00	100.00	121.00
L	13.00	13.00	14.00	116.00	16.00	20.00

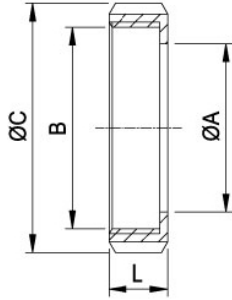




# BDE (NORTHAMPTON) LTD

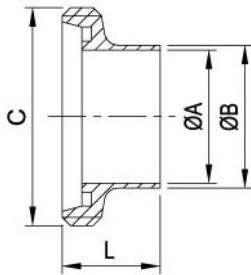
## METRIC DIN UNION (DIN11851)

### METRIC DIN ROUND SLOTTED NUT 304



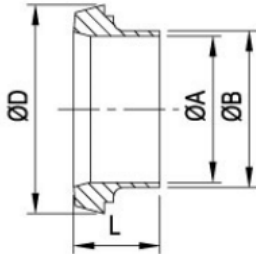
DIN	10	15	20	25	32	40	50	65	80	100	125	150
ØA	19.00	25.00	31.00	36.00	42.00	49.00	62.00	80.00	94.00	114.00	137.00	163.00
B	RD28* 1/8	RD34 *1/8	RD44* 1/6	RD52 *1/6	RD58* 1/6	RD65* 1/6	RD78* 1/6	RD95* 1/6	RD110* 1/4	RD130 *1/4	RD160 *1/4	RD190 *1/4
ØC	38.00	44.00	54.00	63.00	70.00	78.00	92.00	112.0	127.00	148.00	178.00	210.00
L	18.00	18.00	20.00	21.00	21.00	21.00	22.00	25.00	29.00	31.00	35.00	40.00
SLOTS	4.00	4.00	4.00	4.00	4.00	4.00	4.00	6.00	6.00	6.00	6.00	6.00

### METRIC DIN WELD MALE 316



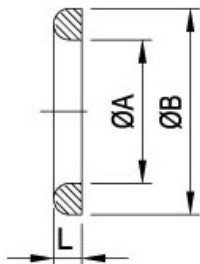
DIN	10	15	20	25	32	40	50	65	80	100	125	150
ØA	10.0	16.0	20.0	26.0	32.0	38.0	50.0	66.0	81.0	100.0	125.0	150.0
ØB	13.0	19.0	23.0	29.0	35.0	41.0	53.0	70.0	85.0	104.0	129.0	154.0
C	RD28*	RD34*	RD44*	RD52*	RD58*	RD65*	RD78*	RD95*	RD110	RD130	RD160	RD190
L	21.0	21.0	24.0	29.0	32.0	33.0	35.0	40.0	45.0	54.0	46.0	50.0

### METRIC DIN WELD LINER 316



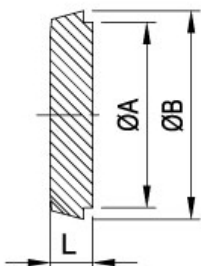
DIN	10	15	20	25	32	40	50	65	80	100	125	150
ØA	10.0	16.0	20.0	26.0	32.0	38.0	50.0	66.0	81.0	100.0	125.0	150.0
ØB	13.0	19.0	23.0	29.0	35.0	41.0	53.0	70.0	85.0	104.0	129.0	154.0
ØD	21.9	27.9	35.9	42.9	48.9	54.9	66.9	84.9	98.9	118.9	150.0	176.0
L	17.0	17.0	18.0	22.0	25.0	26.0	30.0	34.0	38.0	45.0	34.0	27.0

### METRIC DIN JOINT RING - EPDM



DIN	10	15	20	25	32	40	50	65	80	100	125	150
ØA	12.0	18.0	23.0	30.0	36.0	42.0	54.0	71.0	85.0	104.0	130.0	155.0
ØB	20.0	26.0	33.0	40.0	46.0	52.0	64.0	81.0	95.0	114.0	142.0	167.0
L	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0	6.0	7.0	7.0

### METRIC DIN BLANK LINER 316

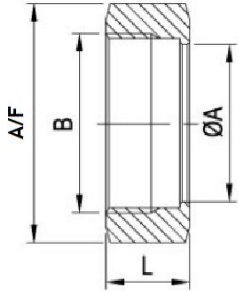


DIN	10	15	20	25	32	40	50	65	80	100
ØA	18.0	24.0	30.0	35.0	41.0	48.0	61.0	79.0	93.0	114.0
ØB	22.5	28.5	36.5	44.0	50.0	56.0	68.5	86.0	100.0	121.0
L	9.0	9.0	11.0	13.0	13.0	13.0	14.0	16.0	16.0	20.0



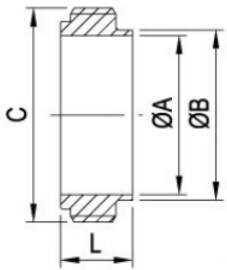
# BDE (NORTHAMPTON) LTD

## IDF UNION (BS4825 PT4)



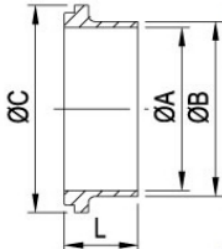
- IDF HEX NUT 304**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	30.50	43.50	57.00	70.70	83.30	110.00
B	34.34	47.86	61.37	74.88	84.40	122.05
A/F	46.00	60.00	75.00	90.00	105.00	133.00
L	30.00	30.00	30.00	30.00	30.00	34.90



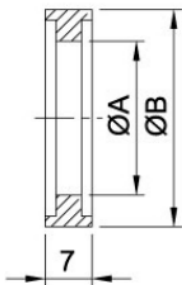
- IDF WELD MALE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.20	34.90	47.60	60.30	73.00	97.60
B	25.40	38.10	50.80	63.50	76.20	101.60
C	37.13	50.65	64.16	77.76	91.19	125.90
L	21.50	21.50	21.50	21.50	21.50	30.00



- IDF WELD LINER 316**

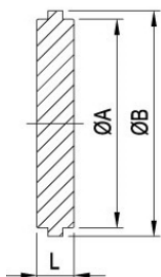
SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.20	34.90	47.60	60.30	73.00	97.60
B	25.40	38.10	50.80	63.50	76.20	101.60
C	33.80	47.00	60.50	74.00	87.50	114.10
L	21.50	21.50	21.50	21.50	21.50	30.00



- IDF JOINT RING - NITRILE**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	23.00	36.00	49.00	60.70	73.20	98.00
B	32.50	46.00	59.40	73.20	86.50	119.00

EPDM - ex stock



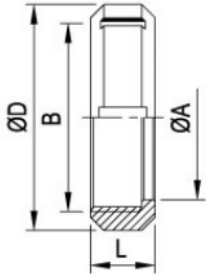
- IDF BLANK LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	29.20	42.70	56.20	69.90	82.60	111.10
B	33.80	47.00	60.50	74.00	87.50	120.60
L	10.50	10.50	10.50	10.50	10.50	12.60



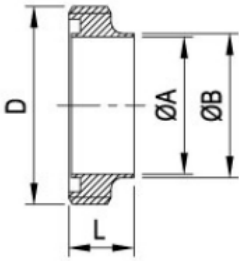
# BDE (NORTHAMPTON) LTD

## SMS UNION



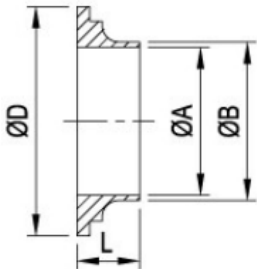
- SMS ROUND SLOTTED NUT 304**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	32.00	48.00	60.50	74.00	87.00	113.00
B	RD40*1/6	RD60*1/6	RD70*1/6	RD85*1/6	RD98*1/4	RD125*1/4
D	51.00	74.00	84.00	100.00	114.00	138.00
L	20.00	25.00	26.00	30.00	32.00	31.00
SLOTS	6	6	6	6	6	6



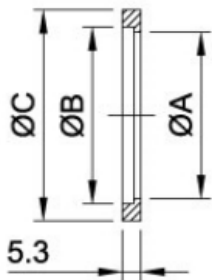
- SMS WELD MALE 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.50	25.50	48.50	60.50	72.90	97.60
B	25.00	38.00	51.00	63.50	76.10	101.60
D	RD40*1/6	RD60*1/6	RD70*1/6	RD85*1/6	RD98*1/6	RD125*1/4
L	19.00	23.00	23.00	27.00	27.00	30.00



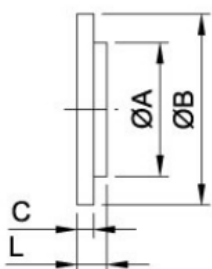
- SMS WELD LINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.50	25.50	48.50	60.50	72.90	97.60
B	25.00	38.00	51.00	63.50	76.10	101.60
D	35.50	55.00	65.00	80.00	93.00	118.00
L	15.00	20.00	20.00	24.00	24.00	30.00



- SMS JOINT RING - EPDM**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	22.80	25.80	48.80	61.00	73.40	100.50
B	25.10	38.10	51.10	63.60	76.10	104.00
C	38.10	47.80	60.80	73.30	85.80	115.70



- SMS BLANK LINER 316**

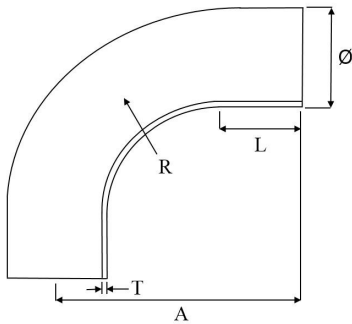
SIZE	1"	1.5"	2"	2.5"	3"	4"
A	32.00	48.00	60.00	73.50	86.00	116.00
B	35.50	55.00	65.00	80.00	93.00	128.00
C	3.50	5.00	5.00	5.00	5.00	6.00
L	7.50	9.00	10.00	10.00	11.00	11.00



**BDE (NORTHAMPTON) LTD**

## 90 DEGREE & 45 DEGREE ELBOWS

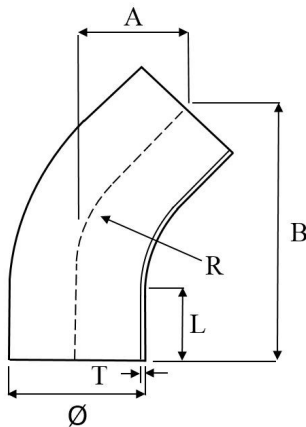
### • 90 DEGREE ISO BEND - (BS4825 PT2 LONG)



SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
Ø	12.7	19.0	25.4	31.8	38.1	50.8	63.5	76.1	101.6
T	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.0
R	26.0	29.0	37.5	48.0	57.0	76.5	95.3	114.0	153.0
A	40.0	50.0	65.0	80.0	85.0	110.0	135.0	155.0	195.0
L	12.5	20.0	27.5	33.5	28.0	33.5	39.7	40.8	42.5

Finishes Available: Dull Polished & Descaled  
Grades: 304L & 316L  
1.5D Radius

NOTE: 1/2", 3/4" & 1.25 NOT ISO STANDARD

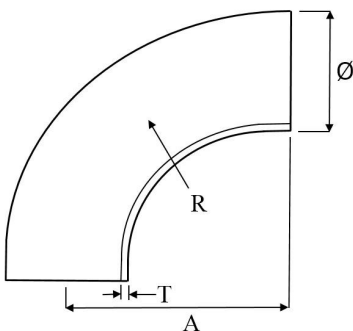


### • 45 DEGREE BEND

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
Ø	12.7	19.05	25.4	31.8	38.1	50.8	63.5	76.1	101.6
T	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	2.0
R	19.0	28.0	38.0	48.0	57.0	76.5	95.3	114.0	153.0
A	18.0	21.8	21.4	30.8	29.2	41.5	53.8	63.8	86.4
B	45.0	55.0	51.50	77.0	70.5	100.0	130.0	154.0	209.0
L	15.0	20.0	14.6	22.0	17.7	27.0	36.7	42.9	59.2

Finishes Available: Dull Polished & Descaled in 316L  
1.5D Radius

NOTE: LENGTHS MAY VARY



### • 90 DEGREE BS BEND - (BS4825 PT2 SHORT)

SIZE	1"	1.5"	2"	2.5"	3"	4"
Ø	25.4	38.1	50.8	63.5	76.1	101.6
T	1.6	1.6	1.6	1.6	1.6	2.0
R	37.5	57.0	76.5	95.3	114.0	153.0
A	44.0	64.0	89.0	114.0	134.0	174.0

Finishes Available: Dull Polished & Descaled in 316L  
1.5D Radius

NOTE: LENGTHS MAY VARY

ALTERNATIVE ENDS CAN BE WELDED - CLAMP/RJT/DIN/IDF OR SMS

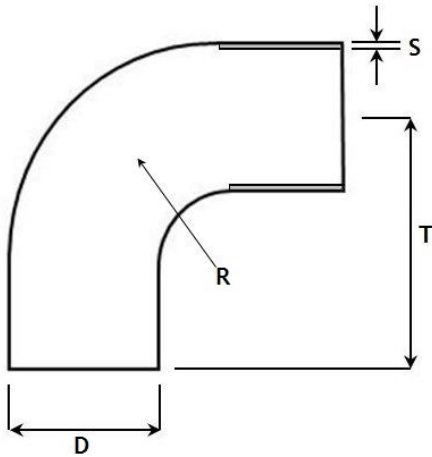
Tel: 01604 750380  
Email: sales@bdeld.co.uk

Fax: 01604 750377  
www.bdeld.co.uk



**BDE (NORTHAMPTON) LTD**

## SHORT & LONG RADIUS ELBOWS

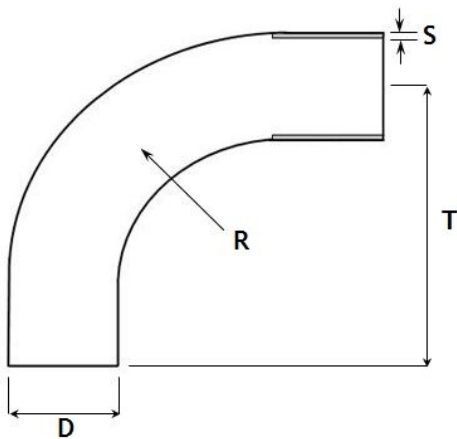


• ***R = 1 x D 90 DEGREE BEND***

SIZE	1"	1.25"	1.5"	2"	2.5"	3"	4"
D	25.40	31.80	38.10	50.80	63.50	76.10	101.60
S	1.50	1.50	1.50	1.50	1.50	1.60	2.00
R	25.00	32.00	38.00	51.00	63.00	76.00	110.00
T	55.00	66.00	70.00	82.00	105.00	110.00	150.00

Finishes: Polished & Descaled

Grades: 304L & 316L

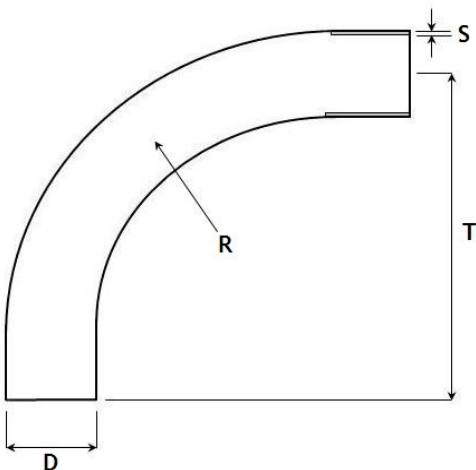


• ***R = 2 x D 90 DEGREE BEND***

SIZE	1"	1.5"	2"	2.5"	3"	4"
D	25.40	38.10	50.80	63.50	76.10	101.60
S	1.60	1.60	1.60	1.60	1.60	2.00
R	51.00	76.00	101.00	127.00	152.00	203.00
T	102.00	105.00	130.00	160.00	200.00	203.00

Finishes: Polished & Descaled

Grades: 316L



• ***R = 3 x D 90 DEGREE BEND***

SIZE	1"	1.5"	2"	2.5"	3"	4"
D	25.40	38.10	50.80	63.50	76.10	101.60
S	1.50	1.50	1.50	1.50	1.60	2.00
R	75.00	115.00	150.00	185.00	215.00	200.00
T	115.00	140.00	225.00	230.00	250.00	235.00

Finishes: Polished & Descaled

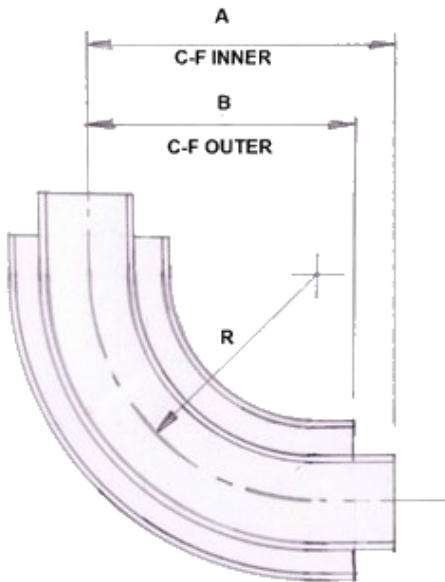
Grades: 316L

ALTERNATIVE ENDS CAN BE WELDED - CLAMP/RJT/DIN/IDF OR SMS



**BDE (NORTHAMPTON) LTD**

## JACKETED BENDS



### Information:

The below table shows the common jacketing sizes along with lengths and radii.

Commonly internal bends are grade 316 descaled & external bends are grade 304 dull polished

Closure rings are stocked to suit the sizes below.

We can manufacture and supply compete bends with end connections and water connections.

We are able to supply jacketed tees, valves and strainers for the complete package.

Inner / Outer	Rad 'R'	Inner	A	Outer	B
1" x 1.5"	75mm	1" 3 x D Bend	110mm **	1.5" 2 x D Bend	105mm **
1" x 2"	51mm	1" 2 x D Bend	102mm	2" 1 x D Bend	82mm
1" x 2"	75mm	1" 3 x D Bend	110mm	2" BS Bend	89mm
1.5" x 2"	76mm	1.5" 2 x D Bend	105mm	2" BS Bend	89mm
1.5" x 2.5	115mm	1.5" 3 x D Bend	140mm **	2.5" 2 x D Bend	160mm **
1.5" x 3"	115mm	1.5" 2 x D Bend	105mm **	3" BS Bend	134mm **
2" x 2.5"	101mm	2" 2 x D Bend	135mm	2.5" BS Bend	114mm
2" x 3"	76mm	2" ISO Bend	110mm **	3" 1 x D Bend	110mm **
2" x 3"	150mm	2" 3 x D Bend	225mm	3" 2 x D Bend	216mm **
2" x 4"	150mm	2" 3 x D Bend	225mm	4" BS Bend	174mm
2.5" x 3"	127mm	2.5" 2 x D Bend	160mm	3" BS Bend	134mm
2.5" x 4"	180mm	2.5" 2 x D Bend	230mm	4" BS Bend	174mm
3" x 4"	152mm	3" 2 x D Bend	216mm	4" BS Bend	174mm
4" x 5"	203mm	4" 2 x D Bend	235mm	125mm x 1.5D Bend	188mm
4" x 6"	203mm	4" 2 x D Bend	235mm	150mm x 1.5D Bend	225mm

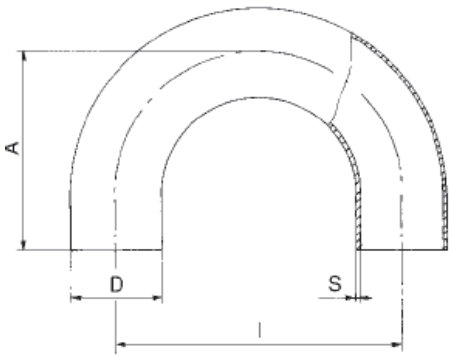
\*\* Due to standard lengths these bends will need the outer bend cut back, or the inner bend extending





**BDE (NORTHAMPTON) LTD**

## 180 DEGREE ELBOWS



- 180 DEGREE "RETURN" BEND**

SIZE	1"	1.5"	2"	2.5"	3"
D	25.4	38.1	50.8	63.5	76.2
S	1.5	1.5	1.5	1.5	2.0
A	75	90	100	115	130
I	96	106	146	172	174

Available in Polished - Grade 316

ALTERNATIVE ENDS CAN BE WELDED - **CLAMP/RJT/DIN/IDF OR SMS**

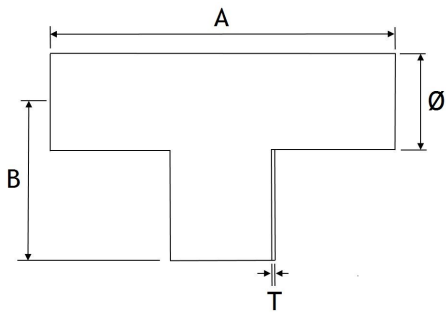
Tel: 01604 750380  
Email: [sales@bdeltd.co.uk](mailto:sales@bdeltd.co.uk)

Fax: 01604 750377  
[www.bdeltd.co.uk](http://www.bdeltd.co.uk)



**BDE (NORTHAMPTON) LTD**

## EQUAL/PULLED TEES & CROSSES

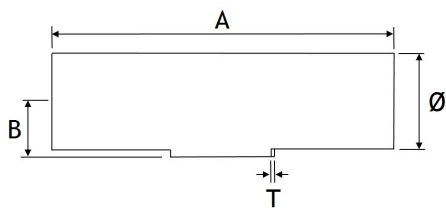


• **FULL EQUAL TEE**

SIZE	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"
Ø	12.70	19.05	25.40	38.10	50.80	63.50	76.10	101.60
T	1.60	1.60	1.60	1.60	1.60	1.60	1.60	2.00
A	58.00	76.00	88.00	128.00	178.00	228.00	268.00	348.00
B	29.00	38.00	44.00	64.00	89.00	114.00	134.00	174.00

Finishes: Polished & Descaled

Grades: 304L & 316L

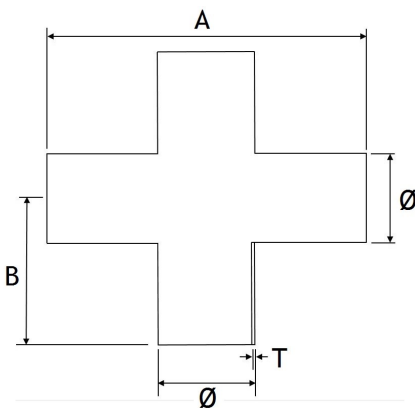


• **PULLED TEE - AS PULLED**

SIZE	1"	1.5"	2"	2.5"	3"	4"
Ø	25.40	38.10	50.80	63.50	76.10	101.60
T	1.60	1.60	1.60	1.60	1.60	2.00
A	88.00	128.00	178.00	228.00	268.00	348.00
B	13.80	19.90	27.60	34.00	40.90	54.70

Finishes: Polished & Descaled

Grades: 304L & 316L

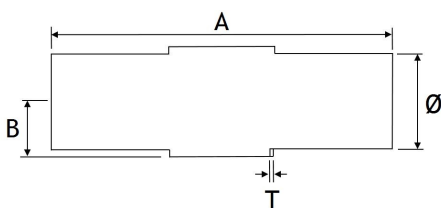


• **FULL EQUAL CROSS**

SIZE	1"	1.5"	2"	2.5"	3"	4"
Ø	25.40	38.10	50.80	63.50	76.10	101.60
T	1.60	1.60	1.60	1.60	1.60	2.00
A	88.00	128.00	178.00	228.00	268.00	348.00
B	44.00	64.00	89.00	114.00	134.00	174.00

Finishes: Polished & Descaled

Grades: 304L & 316L



• **PULLED CROSS - AS PULLED**

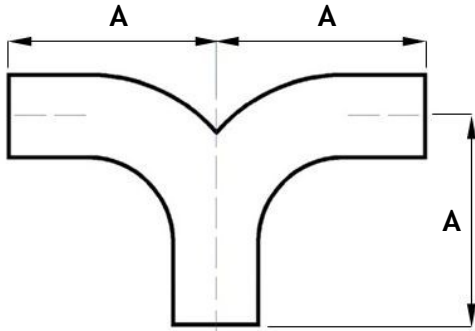
SIZE	1"	1.5"	2"	2.5"	3"	4"
Ø	25.40	38.10	50.80	63.50	76.10	101.60
T	1.60	1.60	1.60	1.60	1.60	2.00
A	88.00	128.00	178.00	228.00	268.00	348.00
B	13.80	19.90	27.60	34.00	40.90	54.70

Finishes: Polished & Descaled



**BDE (NORTHAMPTON) LTD**

## SEAGULL TEE, SWEPT TEE & Y-PIECE



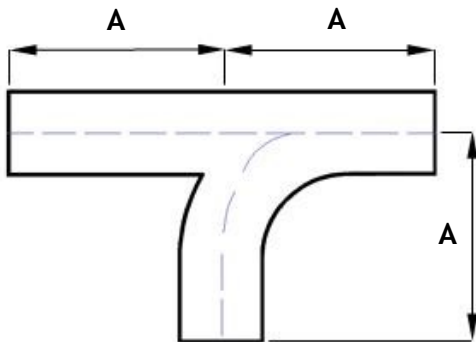
- SEAGULL TEE 316L**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	65.00	85.00	110.00	135.00	155.00	195.00
THICKNESS	1.60	1.60	1.60	1.60	1.60	2.00

Finish: Polished

Grade: 316

Grade 304 & larger sizes available on request.



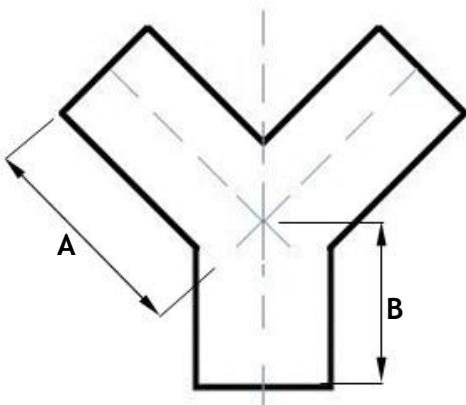
- SWEPT TEE 316L**

SIZE	1"	1.5"	2"	2.5"	3"	4"
A	65.00	85.00	110.00	135.00	155.00	195.00
THICKNESS	1.60	1.60	1.60	1.60	1.60	2.00

Finish: Polished

Grade: 316

Grade 304 & larger sizes available on request.



- Y-PIECE 316L**

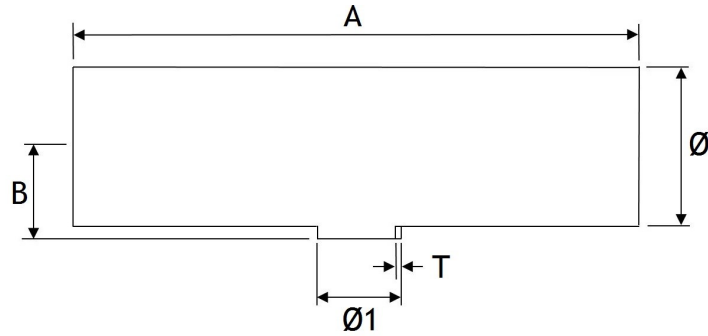
SIZE	1"	1.5"	2"	2.5"	3"	4"
A	44.00	64.00	89.00	114.00	134.00	174.00
B	22.00	31.00	44.00	58.00	67.00	85.00
THICKNESS	1.60	1.60	1.60	1.60	1.60	2.00

Finish: Polished

Grade: 316



# BDE (NORTHAMPTON) LTD



• **REDUCING TEE 316L - AS PULLED**

SIZE	Ø	Ø1	T	A	B
1" x 1/2"	25.40	12.70	1.5mm	88.00	13.80
1" x 3/4"	25.40	19.05	1.5mm	88.00	13.80
1.5" x 1/2"	38.10	12.70	1.5mm	128.00	19.90
1.5" x 3/4"	38.10	19.05	1.5mm	128.00	19.90
1.5" x 1"	38.10	25.40	1.5mm	128.00	19.90
2" x 1/2"	50.80	12.70	1.5mm	178.00	27.60
2" x 3/4"	50.80	19.05	1.5mm	178.00	27.60
2" x 1"	50.80	25.40	1.5mm	178.00	27.60
2" x 1.5"	50.80	38.10	1.5mm	178.00	27.60
2.5" x 3/4"	63.50	19.05	1.5mm	228.00	34.00
2.5" x 1"	63.50	25.40	1.5mm	228.00	34.00
2.5" x 1.5"	63.50	38.10	1.5mm	228.00	34.00
2.5" x 2"	63.50	50.80	1.5mm	228.00	34.00
3" x 1"	76.20	25.40	1.5mm	268.00	40.90
3" x 1.5"	76.20	38.10	1.5mm	268.00	40.90
3" x 2"	76.20	50.80	1.5mm	268.00	40.90
3" x 2.5"	76.20	63.50	1.5mm	268.00	40.90
4" x 1"	101.60	25.40	2mm	348.00	54.70
4" x 1.5"	101.60	38.10	2mm	348.00	54.70
4" x 2"	101.60	50.80	2mm	348.00	54.70
4" x 2.5"	101.60	63.50	2mm	348.00	54.70
4" x 3"	101.60	76.20	2mm	348.00	54.70

Available in 316 in both polished & descaled ex-stock | 304 available to order on a short lead time

\*DIMENSION "B" MAY VARY AS THEY ARE MADE "AS PULLED"

**SPECIAL MANIFOLDS TO THE CUSTOMERS SPECIFICATIONS CAN BE PRODUCED BY BDE**

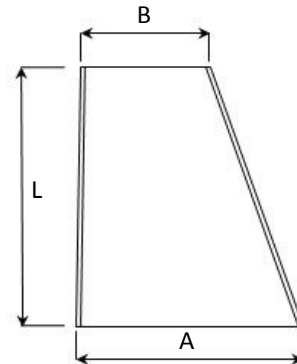
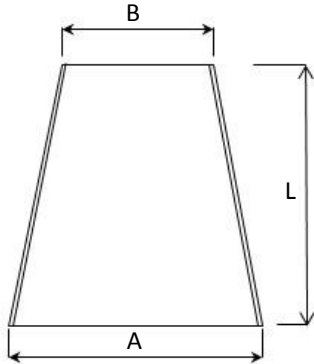
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**BDE (NORTHAMPTON) LTD**

## CONCENTRIC & ECCENTRIC REDUCING CONES



• **CONCENTRIC REDUCING CONES**

SIZE	A	B	L
3/4" x 1/2"	19.05	12.70	14.00
1" x 1/2"	25.40	12.70	20.00
1" x 3/4"	25.40	19.05	13.00
1.25" x 1/2"	31.75	12.70	32.00
1.25" x 3/4"	31.75	19.05	30.00
1.25" x 1"	31.75	25.40	19.00
1.5" x 1/2"	38.10	12.70	44.00
1.5" x 3/4"	38.10	19.05	44.00
1.5" x 1"	38.10	25.40	28.00
1.5" x 1.25"	38.10	31.75	19.00
2" x 1/2"	50.80	12.70	61.00
2" x 3/4"	50.80	19.05	66.00
2" x 1"	50.80	25.40	53.00
2" x 1.5"	50.80	38.10	38.00
2.5" x 1"	63.50	25.40	80.00
2.5" x 1.5"	63.50	38.10	60.00
2.5" x 2"	63.50	50.80	39.00
3" x 1"	76.20	25.40	106.00
3" x 1.5"	76.20	38.10	81.00
3" x 2"	76.20	50.80	54.00
3" x 2.5"	76.20	63.50	40.00
4" x 1"	101.60	25.40	160.00
4" x 1.5"	101.60	38.10	133.00
4" x 2"	101.60	50.80	107.00
4" x 2.5"	101.60	63.50	78.00
4" x 3"	101.60	76.20	53.00

• **ECCENTRIC REDUCING CONES**

SIZE	A	B	L
3/4" x 1/2"	19.05	12.70	15.00
1" x 1/2"	25.40	12.70	25.00
1" x 3/4"	25.40	19.05	15.00
1.25" x 3/4"	31.75	19.05	28.00
1.25" x 1"	31.75	25.40	17.00
1.5" x 1/2"	38.10	12.70	42.00
1.5" x 3/4"	38.10	19.05	44.00
1.5" x 1"	38.10	25.40	36.00
1.5" x 1.25"	38.10	31.75	19.00
2" x 1/2"	50.80	12.70	79.00
2" x 3/4"	50.80	19.05	68.00
2" x 1"	50.80	25.40	55.00
2" x 1.5"	50.80	38.10	34.00
2.5" x 1"	63.50	25.40	76.00
2.5" x 1.5"	63.50	38.10	65.00
2.5" x 2"	63.50	50.80	34.00
3" x 1"	76.20	25.40	101.00
3" x 1.5"	76.20	38.10	76.00
3" x 2"	76.20	50.80	66.00
3" x 2.5"	76.20	63.50	42.00
4" x 1"	101.60	25.40	156.00
4" x 1.5"	101.60	38.10	130.00
4" x 2"	101.60	50.80	100.00
4" x 2.5"	101.60	63.50	73.00
4" x 3"	101.60	76.20	72.00

Concentric reducers available in both dull polished & descaled finishes.

Eccentric only available in dull polish.

**GRADE 316**

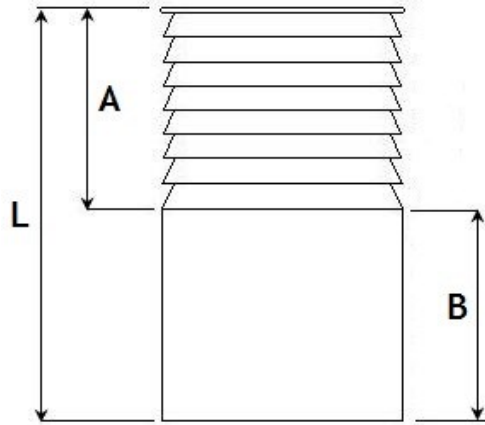
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**BDE (NORTHAMPTON) LTD**

## HOSETAILS & END CAPS



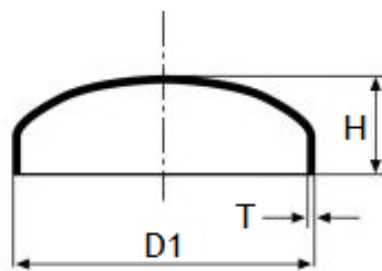
- PLAIN ENDED HOSETAILS 316**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"	5"	6"
<b>A</b>	25.00	25.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	85.00	85.00
<b>B</b>	25.00	25.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	65.00	65.00
<b>L</b>	50.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	150.00
<b>THICKNESS</b>	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.00	2.00	2.00

Made from 316 stainless steel tube

Special lengths & sizes can be produced upon request

Alternative ends can be welded - **Clamp/RJT/DIN/IDF or SMS**



- OD END CAP 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
<b>D1</b>	25.00	38.00	51.00	63.50	76.10	101.60
<b>H</b>	12.00	15.00	19.00	19.00	27.00	24.50
<b>T</b>	1.60	1.60	1.60	1.60	1.60	2.00

OD End caps are a descaled finish as standard in grade 316

End caps can be polished on a short lead time

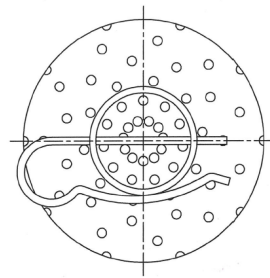
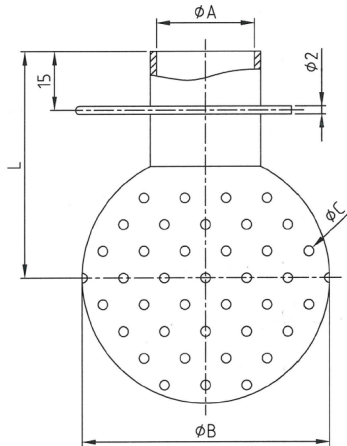
Metric caps also stocked





**BDE (NORTHAMPTON) LTD**

## SPRAYBALLS



SIZE	A	B	C	L	HEIGHT	FIXING	ANGLE	SPRAYING CIRCLE DIA (mtrs)	FLOW RATE Cu mtr/hr @ 1 bar
<b>3/4"</b>	19.05	40	1.6	40	45	Clip	360	0.8 - 1.5	2.8
								1.0 - 2.0	5.1
<b>1"</b>	25.4	64	2.5	58	85	Clip	360	1.5 - 2.5	3.0
								1.8 - 2.5	7.0
								2.0 - 3.0	9.8
								2.5 - 3.5	12.8
								3.0 - 4.0	15.3
<b>1.5"</b>	38.1	64	2.5	58	85	Clip	360	2.6	18.8

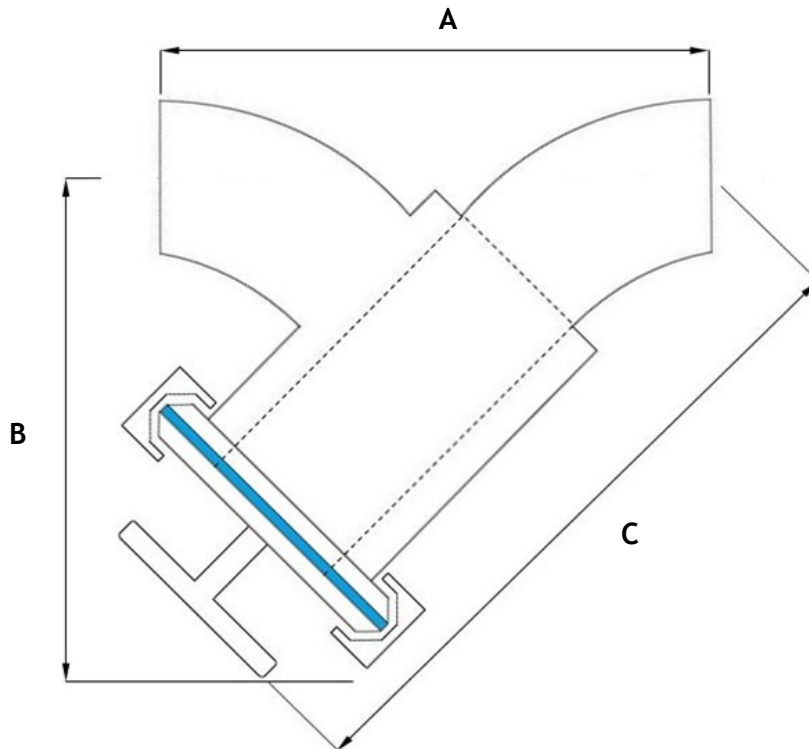
### SPRAYBALL INFORMATION

- Grade 316 Stainless Steel
- 3/4", 1" & 1.5" Inlet available
- 360° Spray Pattern



**BDE (NORTHAMPTON) LTD**

## HYGIENIC Y PATTERN STRAINER 316



- PUMP PROTECTION Y TYPE STRAINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"	6"
A	307.0	277.0	201.0	370.0	290.0	540.0	473.0
B	200.0	200.0	200.0	250.0	250.0	360.0	400.0
C	263.0	263.0	263.0	367.0	367.0	510.0	550.0

The Y pattern strainer is designed specifically to remove potentially damaging debris before it passes through the pump, However it is now widely used as a strainer for coarse particles entering product lines, It is designed to fit into confined spaces, as well as for ease of cleaning and the changing of elements.

**PUMP PROTECTION "Y" STRAINER INFORMATION:**

- Designed & Manufactured by BDE - from 316 Stainless Steel
- Pump Protection Assembly consists of: **1 x Element, 1 x Body, 1 x Single Hinged Clamp & 1 x Lipped EDPM Joint Ring.**
- To make either 1", 1.5" or 2.5" - A concentric cone will be used on a standard body.
- Shut off valves can be welded to the unit.
- Standard finish - 240 Grit ID & OD - Other finishes available on request
- Elements - We stock a wide range of perforated & wedge wire elements - See elements page (40-43)
- We strongly recommend ordering a replacement element to ease cleaning and to minimize line down time.
- ALTERNATIVE ENDS CAN BE WELDED TO CUSTOMER'S SPECIFICATIONS - **CLAMP/RJT/DIN/IDF OR SMS**

**DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE**

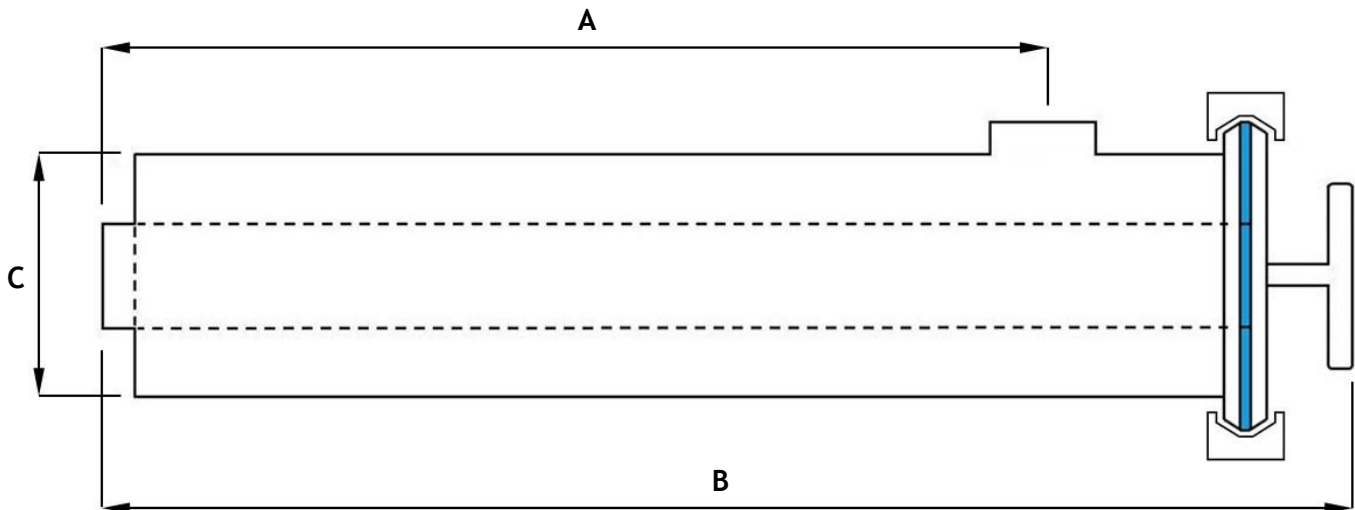
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**BDE (NORTHAMPTON) LTD**

## HYGIENIC 90 DEGREE PRODUCT STRAINER



• **90DEG PRODUCT STRAINER 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"	6"
<b>A</b>	302.0	302.0	302.0	402.0	402.0	410.0	470.0
<b>B</b>	522.0	507.0	469.0	609.0	569.0	590.0	670.0
<b>C</b>	101.6	101.6	101.6	101.6	101.6	154.0	204.0

The 90° product strainer is designed specifically for filtration of product, and to remove potentially unwanted items in the product. The product strainer has improved flow characteristics over the Y Pattern strainer, due to its extra length.

**90d PRODUCT STRAINER INFORMATION:**

- Designed & Manufactured by BDE - from 316 Stainless Steel
- Pump Protection Assembly consists of: **1 x Element, 1 x Body, 1 x Single Hinged Clamp & 1 x Lipped EDPM Joint Ring.**
- To make either 1", 1.5" or 2.5" - A concentric cone will be used on a standard body.
- Standard finish - 240 Grit ID & OD - Other finishes available on request
- Can be adapted into a Y type strainer
- Shut off valves can be welded to the unit.
- Elements - We stock a wide range of perforated & wedge wire elements - See elements page (35-38)
- We strongly recommend ordering a replacement element to ease cleaning and to minimize line down time.
- ALTERNATIVE ENDS CAN BE WELDED TO CUSTOMERS SPECIFICATIONS - **CLAMP/RJT/DIN/IDF OR SMS**

**Jacketed & Duplex strainers can be supplied to the customer's specification**

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

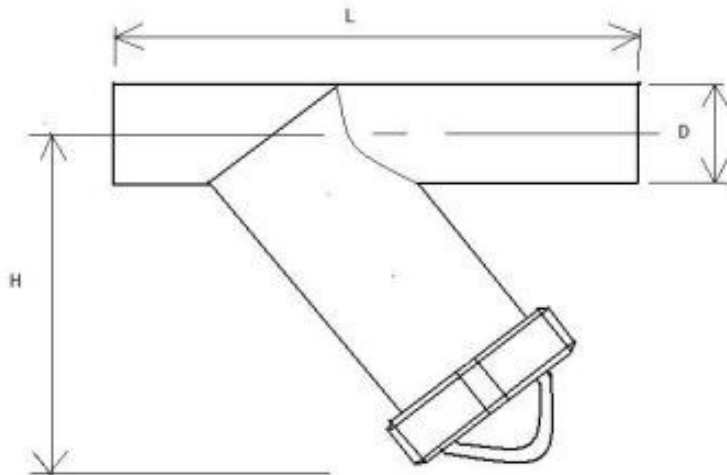
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**BDE (NORTHAMPTON) LTD**

## MINI STRAINER



• **MINI STRAINER 316**

SIZE	D	L	H
1"	25.4mm x 1.65	120	115
1.5"	38.1mm x 1.65	177	120

### BDE "MINI STRAINER"

- Material - Grade 316 Stainless Steel
- FPM seal
- ELEMENT: 1mm as standard
- OPTIONAL ELEMENTS - 0.5mm, 2mm & 3mm (For 1" strainer only)
- 1" & 1.5" OD WELD ENDS AS STANDARD - CAN BE FITTED WITH UNION ENDS IN HOUSE
- COMPACT DESIGN

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

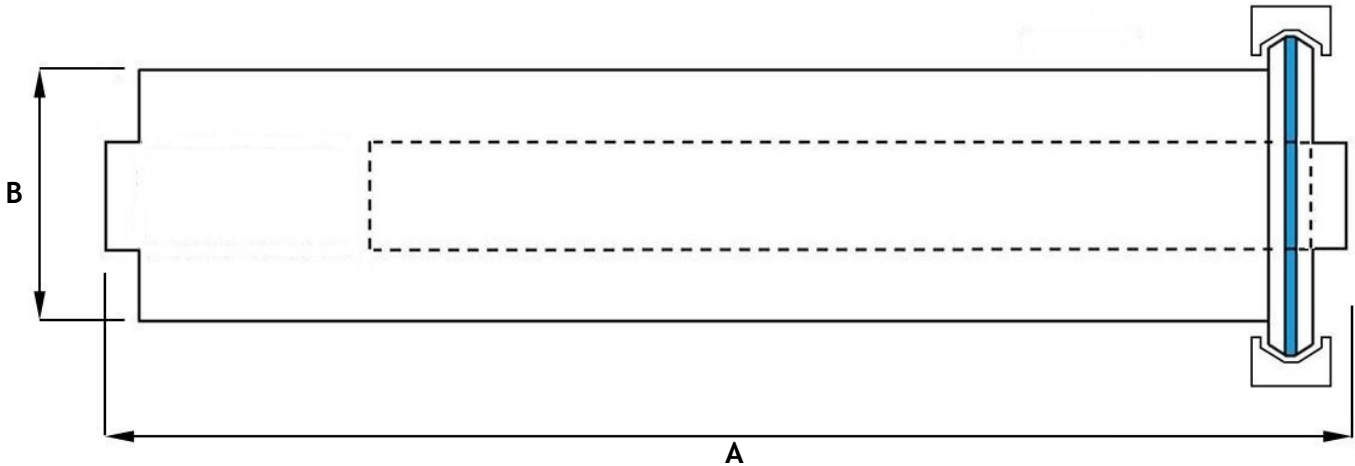
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**BDE (NORTHAMPTON) LTD**

## STRAIGHT THROUGH / INLINE PRODUCT STRAINER



• **STRAIGHT THROUGH PRODUCT STRAINER 316**

SIZE	1"	1.5"	2"	2.5"	3"
A	617	587	511	688	608
B	101.6	101.6	101.6	101.6	101.6

The straight through / in-line product strainer has the same features as the 90° product strainer, but allows the line to remain on the same plane

**STRAIGHT THROUGH PRODUCT STRAINER INFORMATION:**

- Designed & Manufactured by BDE - from 316 Stainless Steel
- Straight Through Product Strainer Assembly consists of: **1 x Element, 1 x Body, 1 x Single Hinged Clamp & 1 x Lipped EDPM Joint Ring.**
- To make either 1", 1.5" or 2.5" - A concentric cone will be used on a standard body.
- Shut off valves can be welded to the unit.
- Standard finish - 240 Grit ID & OD - Other finishes available on request
- Elements - We stock a wide range of perforated & wedge wire elements - See elements page (35-38)
- We strongly recommend ordering a replacement element to ease cleaning and to minimize line down time.
- ALTERNATIVE ENDS CAN BE WELDED TO CUSTOMERS SPECIFICATIONS - **CLAMP/RJT/DIN/IDF OR SMS**

**Jacketed & Duplex strainers can be supplied to the customers specification**

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

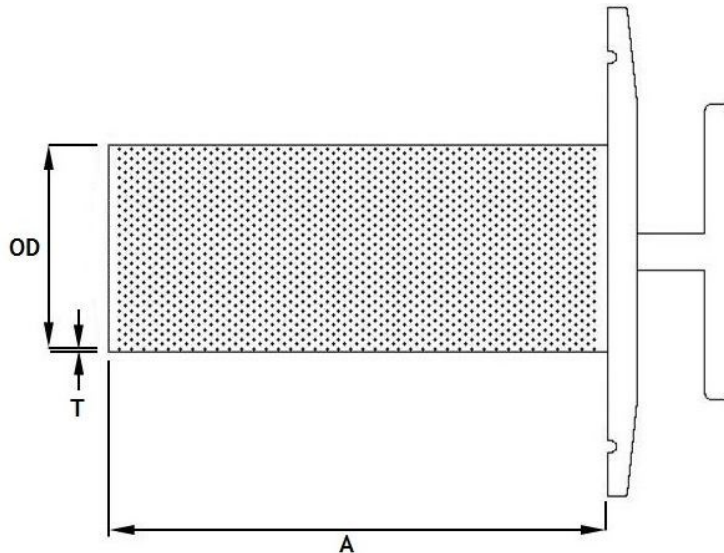
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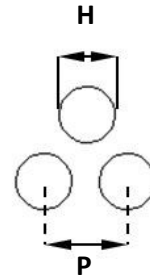


**BDE (NORTHAMPTON) LTD**

## Y PATTERN - PERFORATED ELEMENT



*Perforations:*



### • PUMP PROTECTION ELEMENTS - PERFORATED

ITEM	OD	A	T	H	P	OPEN AREA %
2" PUMP ELEMENT - 1mm HOLE	46.5	130.0	0.8	1.0	2.0	22.7%
2" PUMP ELEMENT - 1.5mm HOLE	46.5	130.0	1.0	1.5	3.0	22.7%
2" PUMP ELEMENT - 2mm HOLE	46.5	130.0	1.0	2.0	4.0	22.7%
2" PUMP ELEMENT - 3mm HOLE	46.5	130.0	1.0	3.0	5.0	32.6%
2" PUMP ELEMENT - 4mm HOLE	46.5	130.0	1.0	4.0	6.0	40.3%
2" PUMP ELEMENT - 5mm HOLE	46.5	130.0	1.0	5.0	8.0	35.4%
3" PUMP ELEMENT - 1mm HOLE	72.0	205.0	0.8	1.0	2.00	22.7%
3" PUMP ELEMENT - 1.5mm HOLE	72.0	205.0	1.0	1.5	3.00	22.7%
3" PUMP ELEMENT - 2mm HOLE	72.0	205.0	1.0	2.0	4.00	22.7%
3" PUMP ELEMENT - 3mm HOLE	72.0	205.0	1.0	3.0	5.00	32.6%
3" PUMP ELEMENT - 5mm HOLE	72.0	205.0	1.0	5.0	8.00	40.3%
3" PUMP ELEMENT - 10mm HOLE	72.0	205.0	1.5	10.0	15.00	35.4%
4" PUMP ELEMENT - 1mm HOLE	97.0	238.0	1.0	1.0	2.00	22.7%
4" PUMP ELEMENT - 1.5mm HOLE	97.0	238.0	1.0	1.5	3.00	22.7%
4" PUMP ELEMENT - 2mm HOLE	97.0	238.0	1.0	2.0	4.00	22.7%
4" PUMP ELEMENT - 3mm HOLE	97.0	238.0	1.0	3.0	5.00	32.6%
4" PUMP ELEMENT - 10mm HOLE	97.0	238.0	1.0	10.0	15.00	35.4%
6" PUMP ELEMENT - 1mm HOLE	149.0	323.0	1.0	1.0	2.00	22.7%
6" PUMP ELEMENT - 1.5mm HOLE	149.0	323.0	1.0	1.5	3.00	22.7%
6" PUMP ELEMENT - 3mm HOLE	149.0	323.0	1.0	3.0	5.00	32.6%

- Manufactured by BDE - from 316 Stainless Steel
- **Element Assembly Consists of:**  
1 x Perf Element, 1 x Clamp Blank
- **Round Perforation:**  
Staggered Pitch @ 60 Degrees
- All Elements complete with 5mm boarder.
- Suitable for CIP & SIP systems.
- Rigid elements suitable for reverse flushing.
- Inner & outer fine mesh wrap can be supplied on request.
- **Flow:** In to Out (FITO)
- Other perforation sizes & patterns available on request.

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

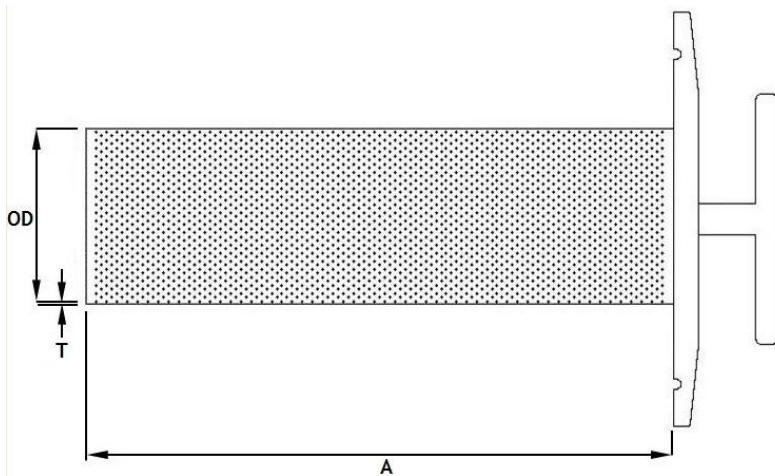
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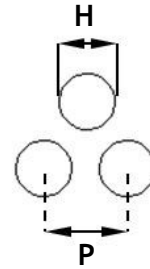


**BDE (NORTHAMPTON) LTD**

## PRODUCT - PERFORATED ELEMENT



*Perforations:*



### • **PRODUCT ELEMENTS - PERFORATED**

ITEM	OD	A	T	H	P	OPEN
2" PRODUCT ELEMENT - 1mm HOLE	47	400	0.80	1.0	2.0	22.7%
2" PRODUCT ELEMENT - 1.5mm HOLE	47	400	1.00	1.5	3.0	22.7%
2" PRODUCT ELEMENT - 2mm HOLE	47	400	1.00	2.0	4.0	22.7%
2" PRODUCT ELEMENT - 3mm HOLE	47	400	1.00	3.0	5.0	32.6%
2" PRODUCT ELEMENT - 4mm HOLE	47	400	1.00	4.0	6.0	40.3%
2" PRODUCT ELEMENT - 5mm HOLE	47	400	1.00	5.0	8.0	35.4%
3" PRODUCT ELEMENT - 1mm HOLE	72	502	0.80	1.0	2.00	22.7%
3" PRODUCT ELEMENT - 1.5mm HOLE	72	502	1.00	1.5	3.00	22.7%
3" PRODUCT ELEMENT - 2mm HOLE	72	502	1.00	2.0	4.00	22.7%
3" PRODUCT ELEMENT - 3mm HOLE	72	502	1.00	3.0	5.00	32.6%
3" PRODUCT ELEMENT - 5mm HOLE	72	502	1.00	5.0	8.00	40.3%
3" PRODUCT ELEMENT - 10mm HOLE	72	502	1.50	10.0	15.00	35.4%
4" PRODUCT ELEMENT - 1mm HOLE	97	525	1.00	1.0	2.00	22.7%
4" PRODUCT ELEMENT - 1.5mm HOLE	97	525	1.00	1.5	3.00	22.7%
4" PRODUCT ELEMENT - 2mm HOLE	97	525	1.00	2.0	4.00	22.7%
4" PRODUCT ELEMENT - 3mm HOLE	97	525	1.00	3.0	5.00	32.6%
4" PRODUCT ELEMENT - 10mm HOLE	97	525	1.00	10.0	15.00	35.4%
6" PRODUCT ELEMENT - 1mm HOLE	149	600	1.00	1.0	2.00	22.7%
6" PRODUCT ELEMENT - 1.5mm HOLE	149	600	1.00	1.5	3.00	22.7%
6" PRODUCT ELEMENT - 3mm HOLE	149	600	1.00	3.0	5.00	32.6%

- Manufactured by BDE - from 316 Stainless Steel
- **Element Assembly Consists of:**  
1 x Perf Element, 1 x Clamp Blank
- **Round Perforation:**  
Staggered Pitch @ 60 Degrees
- All Elements complete with 5mm boarder.
- Suitable for CIP & SIP systems.
- Rigid elements suitable for reverse flushing.
- Inner & outer fine mesh wrap can be supplied on request.
- **Flow:** In to Out (FITO)
- Other perforation sizes & patterns available on request.

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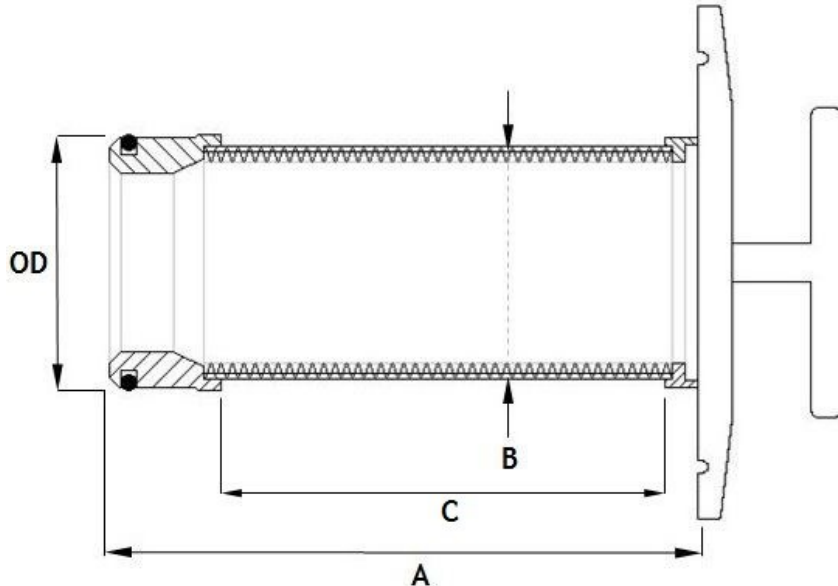
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**BDE (NORTHAMPTON) LTD**

## Y PATTERN - WEDGE WIRE ELEMENT



### • PUMP PROTECTION ELEMENTS - WEDGE WIRE

ITEM	OD	A	B	Micron	mm	OPEN AREA %
2" PUMP PROTECTION - 50 MICRON	48	133	45	50	0.050	5%
2" PUMP PROTECTION - 100 MICRON	48	133	45	100	0.100	9%
2" PUMP PROTECTION - 150 MICRON	48	133	45	150	0.150	13%
2" PUMP PROTECTION - 250 MICRON	48	133	45	250	0.250	20%
2" PUMP PROTECTION - 400 MICRON	48	133	45	400	0.400	20%
2" PUMP PROTECTION - 500 MICRON	48	133	45	500	0.500	33%
2" PUMP PROTECTION - 750 MICRON	48	133	45	750	0.750	43%
2" PUMP PROTECTION - 1000 MICRON	48	133	45	1000	1.00	50%
2" PUMP PROTECTION - 1500 MICRON	48	133	45	1500	1.50	60%
2" PUMP PROTECTION - 3000 MICRON	48	133	45	3000	3.00	75%
3" PUMP PROTECTION - 50 MICRON	72	208	70	50	0.050	5%
3" PUMP PROTECTION - 100 MICRON	72	208	70	100	0.100	9%
3" PUMP PROTECTION - 150 MICRON	72	208	70	150	0.150	13%
3" PUMP PROTECTION - 250 MICRON	72	208	70	250	0.250	20%
3" PUMP PROTECTION - 400 MICRON	72	208	70	400	0.400	20%
3" PUMP PROTECTION - 500 MICRON	72	208	70	500	0.500	33%
3" PUMP PROTECTION - 750 MICRON	72	208	70	750	0.750	43%
3" PUMP PROTECTION - 1000 MICRON	72	208	70	1000	1.00	50%
3" PUMP PROTECTION - 1500 MICRON	72	208	70	1500	1.50	60%
3" PUMP PROTECTION - 3000 MICRON	72	208	70	3000	3.00	75%

- Manufactured by BDE - Entirely from 316 Stainless Steel
- **Element Assembly Consists of:**  
1 x W/W Element, 1 x Clamp Blank, 1 x Element Seal (Nitrile)
- **Flow:** In to Out (FITO)
- Suitable for CIP & SIP systems.
- Rigid elements suitable for reverse flushing.
- EPDM Element seal can be supplied as an alternative.
- Other wedge wire sizes available on request.

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

Tel: 01604 750380  
Email: sales@bdeltd.co.uk

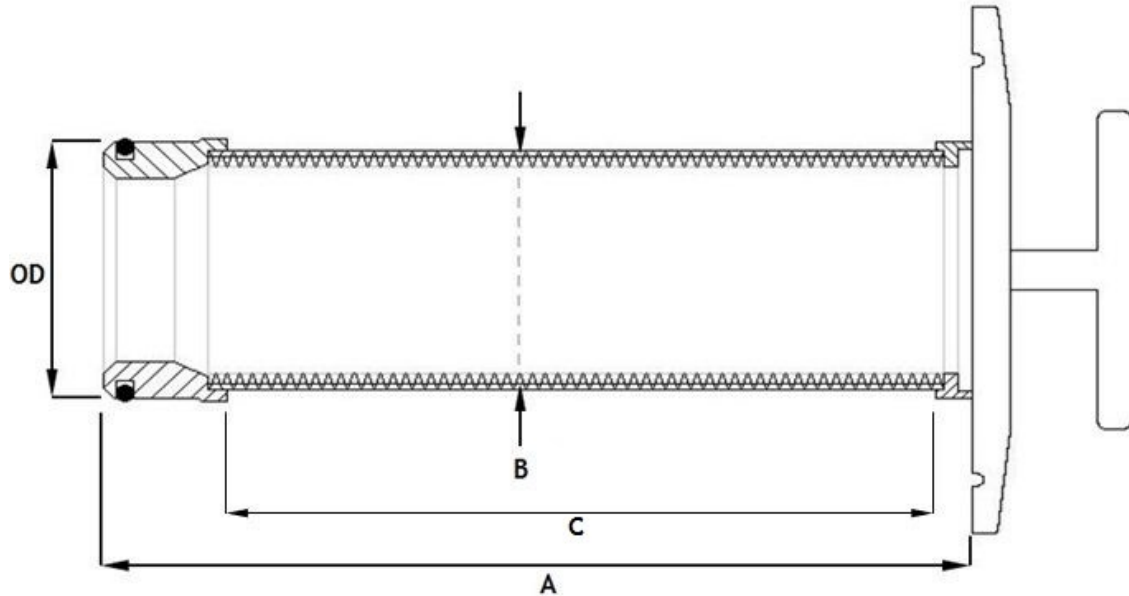
Fax: 01604 750377  
www.bdeltd.co.uk





**BDE (NORTHAMPTON) LTD**

## PRODUCT - WEDGE WIRE ELEMENT



### • **PRODUCT ELEMENTS - WEDGE WIRE**

ITEM	OD	A	B	C	Micron	mm	OPEN AREA %
2" PRODUCT ELEMET - 50 MICRON	48	403	45	377	50	0.050	5%
2" PRODUCT ELEMENT - 100 MICRON	48	403	45	377	100	0.100	9%
2" PRODUCT ELEMENT - 150 MICRON	48	403	45	377	150	0.150	13%
2" PRODUCT ELEMENT - 250 MICRON	48	403	45	377	250	0.250	20%
2" PRODUCT ELEMENT - 400 MICRON	48	403	45	377	400	0.400	20%
2" PRODUCT ELEMENT - 500 MICRON	48	403	45	377	500	0.500	33%
2" PRODUCT ELEMENT - 750 MICRON	48	403	45	377	750	0.750	43%
2" PRODUCT ELEMENT - 1000 MICRON	48	403	45	377	1000	1.00	50%
2" PRODUCT ELEMENT - 1500 MICRON	48	403	45	377	1500	1.50	60%
2" PRODUCT ELEMENT - 3000 MICRON	48	403	45	377	3000	3.00	75%
3" PRODUCT ELEMENT - 50 MICRON	72	503	70	477	50	0.050	5%
3" PRODUCT ELEMENT - 100 MICRON	72	503	70	477	100	0.100	9%
3" PRODUCT ELEMENT - 150 MICRON	72	503	70	477	150	0.150	13%
3" PRODUCT ELEMENT - 250 MICRON	72	503	70	477	250	0.250	20%
3" PRODUCT ELEMENT - 400 MICRON	72	503	70	477	400	0.400	20%
3" PRODUCT ELEMENT - 500 MICRON	72	503	70	477	500	0.500	33%
3" PRODUCT ELEMENT - 750 MICRON	72	503	70	477	750	0.750	43%
3" PRODUCT ELEMENT - 1000 MICRON	72	503	70	477	1000	1.00	50%
3" PRODUCT ELEMENT - 1500 MICRON	72	503	70	477	1500	1.50	60%
3" PRODUCT ELEMENT - 3000 MICRON	72	503	70	477	3000	3.00	75%

- Manufactured by BDE - Entirely from 316 Stainless Steel
- **Element Assembly Consists of:**  
1 x W/W Element, 1 x Clamp Blank, 1 x Element Seal (Nitrile)
- **Flow:** In to Out (FITO)
- Suitable for CIP & SIP systems.
- Rigid elements suitable for reverse flushing.
- EPDM Element seal can be supplied as an alternative.
- Other wedge wire sizes available on request.

DUE TO CONTINUOUS DEVELOPMENT & INNOVATION, WE RESERVE THE RIGHT TO CHANGE THE DESIGN/DIMENSIONS WITHOUT PRIOR NOTICE

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**BDE (NORTHAMPTON) LTD**

## HYGIENIC TUBE



Sold In 6 Mtr Lengths

304L & 316L Grades available ex stock.

Weld bead removed internally for crevice free I.D

SIZE Ø	mm	KG p/mtr	316L Brushed	316L Descaled	304L Brushed	304L Descaled
1/2" x 1.5	12.7 x 1.5	0.42	•			
3/4" x 1.5	19.05 x 1.5	0.66	•			
1" x 1.5	25.4 x 1.5	0.99	•	•	•	•
1.25" x 1.5	32.0 x 1.5	1.25	•			
1.5" x 1.5	38.1 x 1.5	1.51	•	•	•	•
2" x 1.5	50.8 x 1.5	1.88	•	•	•	•
2.5" x 1.5	63.5 x 1.5	2.49	•	•	•	•
3" x 1.5	76.2 x 1.5	3.01	•	•	•	•
4" x 1.5	101.6 x 1.5	4.03	•	•	•	•
4" x 2.0	101.6 x 2.0	4.98	•		•	•
(5") 129 x 2	129 x 2.0	6.36	•		•	
(6") 154 x 2	154 x 2.0	7.61	•		•	
(8") 204 x 2	204 x 2.0	10.11	•		•	

- Available Ex-Stock

**Standard:**

1/2" - 1" MANUFACTURED TO EN 10217-7  
1.5" - 8" MANUFACTURED TO DIN 11850 / EN10357

**NON ANNEALED**

PLASTIC INSERTS AVAILABLE EX-STOCK

STAINLESS STEEL ROUND END CAPS ALSO AVAILABLE EX STOCK

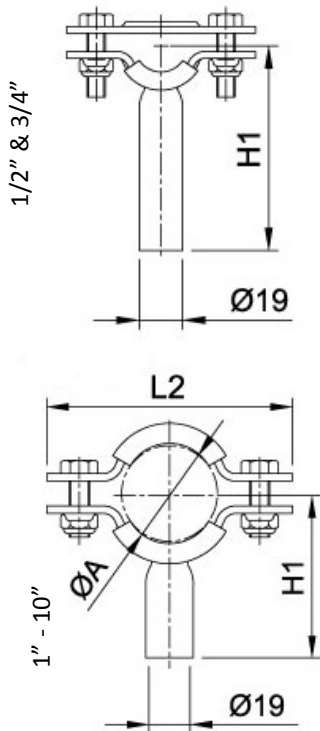
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Email: sales@bdeldtd.co.uk

Fax: 01604 750377  
www.bdeldtd.co.uk



**BDE (NORTHAMPTON) LTD**

## TUBE SUPPORTS

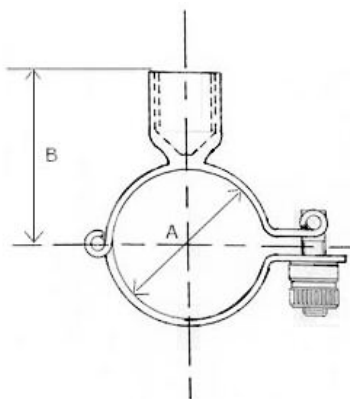


- ANTI-VIBRATION CLIP 304**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"
A	12.70	19.05	25.40	32.00	38.10	50.80	63.50
H1	90.00	90.00	90.00	90.00	90.00	90.00	90.00
L2	83.00	83.00	83.00	90.00	97.70	111.70	124.00
WIDTH	25.00	25.00	25.00	25.00	25.00	25.00	25.00
SIZE	3"	4"	5"	6"	8"	10"	
A	76.20	101.60	129.00	154.00	204.00	254.00	
H1	90.00	90.00	130.00	140.00	160.00	180.00	
L2	144.50	162.00	196.00	217.00	281.00	330.00	
WIDTH	25.00	25.00	25.00	25.00	25.00	25.00	

Complete with blue inserts & Nylok nuts.

Also stocked with M10 boss (1"-3") & M12 Boss (4")



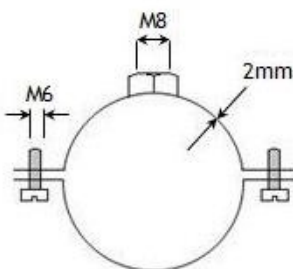
- HINGED PIPE CLIP 304**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
A	12.70	19.00	25.40	33.40	38.10	50.80	63.50	76.20	101.60
B	40.00	40.00	45.00	50.00	50.00	60.00	65.00	70.00	80.00
WIDTH	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00

Complete with 1/2" BSP Boss

Alternative thread sizes available on request

Also stocked with M10/M12 Boss



- MUNSEN RING**

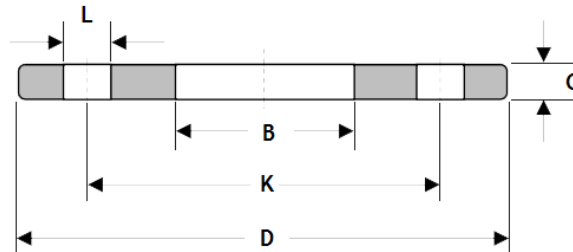
SIZE	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
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Extended stem also available on a short lead time.



**BDE (NORTHAMPTON) LTD**

## (BS10) TABLE E FLANGE 316



• **BS10 TABLE E FLANGE - BORED FOR OD TUBE**

SIZE	1"	1.5"	2"	2.5"	3"	4"
B	26.20	39.00	51.70	64.30	77.00	102.40
K	82.60	98.40	114.30	127.00	146.00	177.60
D	114.30	133.40	152.40	165.10	184.10	215.00
L	14.29	14.29	17.46	17.46	17.46	17.46
C	7.14	8.73	9.52	10.31	11.11	12.70
HOLES	4	4	4	4	4	8

• **BS10 TABLE E FLANGE - BORED FOR NB PIPE**

SIZE	1"	1.5"	2"	2.5"	3"	4"
B	34.50	49.50	61.50	74.70	90.50	116.00
K	82.60	98.40	114.30	127.00	146.00	177.60
D	114.30	133.40	152.40	165.10	184.10	215.00
L	14.29	14.29	17.46	17.46	17.46	17.46
C	7.14	8.73	9.52	10.31	11.11	12.70
HOLES	4	4	4	4	4	8

• **BS10 TABLE E FLANGE - BSPP THREADED**

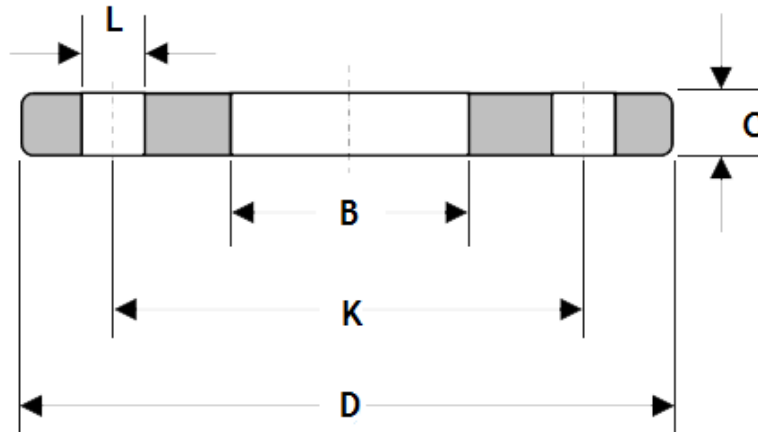
SIZE	1"	1.5"	2"	2.5"	3"	4"
K	82.60	98.40	114.30	127.00	146.00	177.60
D	114.30	133.40	152.40	165.10	184.10	215.00
L	14.29	14.29	17.46	17.46	17.46	17.46
C	7.14	8.73	9.52	10.31	11.11	12.70
HOLES	4	4	4	4	4	8

*Parallel thread to suit BSP male*



**BDE (NORTHAMPTON) LTD**

## PN16 F/F FLANGE E THICK - BORED FOR OD TUBE



• **PN16 F/F FLANGE TABLE E THICK - BORED FOR OD TUBE**

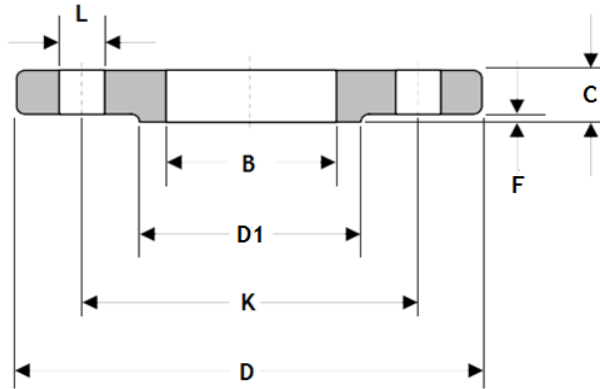
SIZE	1"	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"
<b>B</b>	26.20	39.00	51.70	64.30	77.00	102.40	130.50	156.00	206.00	256.00
<b>K</b>	85.00	110.00	125.00	145.00	160.00	180.00	210.00	240.00	295.00	355.00
<b>D</b>	115.00	150.00	165.00	185.00	200.00	220.00	250.00	285.00	340.00	405.00
<b>L</b>	14.00	18.00	18.00	18.00	18.00	18.00	18.00	22.00	22.00	26.00
<b>C</b>	7.14	8.73	9.52	10.31	11.11	12.70	14.28	17.46	19.05	22.22
<b>HOLES</b>	4	4	4	8	8	8	8	8	12	12

- **Stocked in both grade 304 & 316.**
- **Larger sizes available on request.**



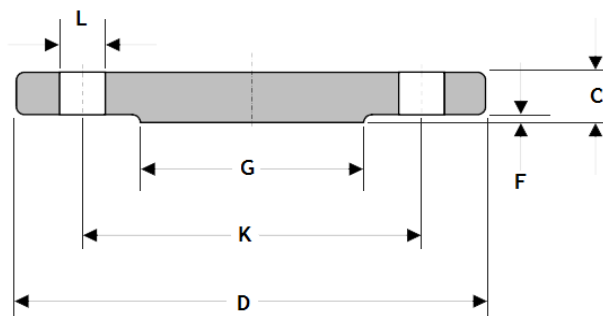
**BDE (NORTHAMPTON) LTD**

## (EN1092-1) PN16 R/F SOW & BLANK FLANGE



• **PN16/101 R/F SOW FLANGE - BORED FOR NB PIPE GRADE 304 & 316**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"	5"	6"
B	22.00	27.50	34.50	43.50	49.50	61.50	74.70	90.50	116.00	141.50	170.50
D1	45.00	58.00	68.00	78.00	88.00	102.00	122.00	138.00	158.00	188.00	212.00
K	65.00	75.00	85.00	100.00	110.00	125.00	145.00	160.00	180.00	210.00	240.00
D	95.00	105.00	115.00	140.00	150.00	165.00	185.00	200.00	220.00	250.00	285.00
C	14.00	16.00	16.00	16.00	16.00	18.00	18.00	20.00	20.00	22.00	22.00
F	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
L	14.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	22.00
HOLES	4	4	4	4	4	4	8	8	8	8	8



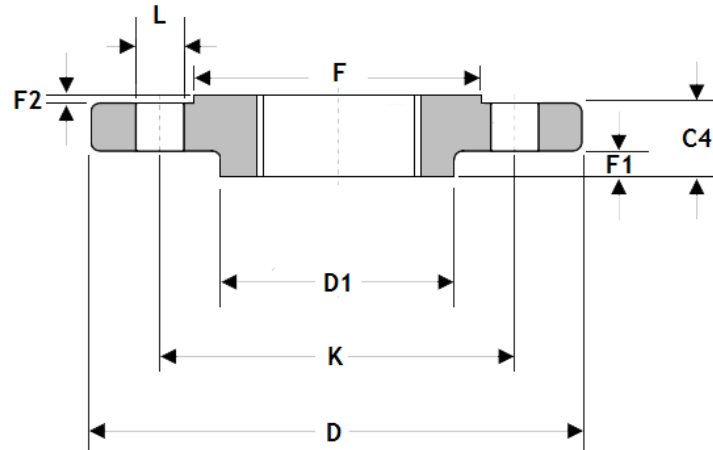
• **PN16/105 R/F BLANK FLANGE - GRADE 316**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"	5"	6"
G	45.00	58.00	68.00	78.00	88.00	102.00	122.00	138.00	158.00	188.00	212.00
K	65.00	75.00	85.00	100.00	110.00	125.00	145.00	160.00	180.00	210.00	240.00
D	95.00	105.00	115.00	140.00	150.00	165.00	185.00	200.00	220.00	250.00	285.00
C	14.00	16.00	16.00	16.00	16.00	18.00	18.00	20.00	20.00	22.00	22.00
F	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
L	14.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	22.00
HOLES	4	4	4	4	4	4	8	8	8	8	8



**BDE (NORTHAMPTON) LTD**

## (EN1092-1) PN16/113 - BSPP THREADED BOSSED FLANGE



• **PN16/113 BSPP THREADED R/F BOSSED FLANGE - GRADE 316**

SIZE	1"	1.25"	1.5"	2"	2.5"	3"	4"
<b>D</b>	115.00	140.00	150.00	165.00	185.00	200.00	220.00
<b>K</b>	85.00	100.00	110.00	125.00	145.00	160.00	180.00
<b>D1</b>	50.00	60.00	70.00	84.00	32.00	34.00	40.00
<b>F</b>	60.00	70.00	80.00	102.00	110.00	128.00	148.00
<b>F2</b>	4.00	5.00	5.00	5.00	6.00	6.00	6.00
<b>L</b>	14.00	18.00	18.00	18.00	18.00	18.00	18.00
<b>C4</b>	24.00	26.00	26.00	28.00	32.00	34.00	40.00
<b>F1</b>	8.00	8.00	8.00	10.00	14.00	14.00	20.00
<b>HOLES</b>	4	4	4	4	4	8	8

*Parallel thread to suit BSP male*

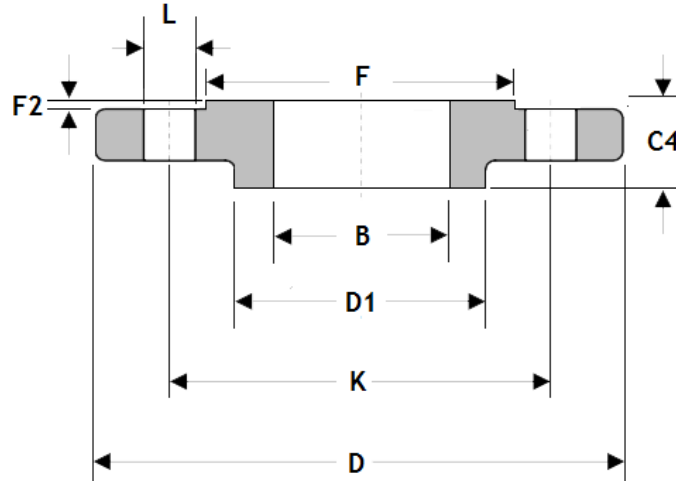
Previously manufactured to BS4504 - PN16/4

**PN10, 25, 40 FLANGES AVAILABLE TO ORDER**



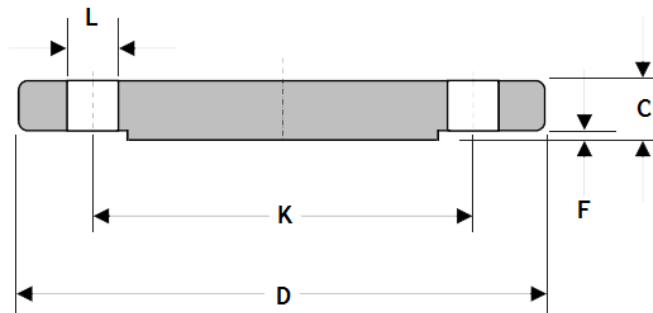
**BDE (NORTHAMPTON) LTD**

## (BS1560) ANSI B16.5 / ASA 150LB



• **ANSI B16.5 / ASA 150LB RF S/O FLANGE 316**

SIZE	1"	1.25"	1.5"	2"	2.5"	3"	4"
D	108.00	117.00	127.00	152.00	178.00	190.00	229.00
K	79.40	88.90	98.40	120.60	139.70	152.40	190.50
D1	49.00	59.00	65.00	78.00	90.00	108.00	135.00
B	34.50	43.20	49.50	62.00	74.70	90.70	116.10
F	50.80	63.50	73.00	92.10	104.80	127.00	157.20
F2	1.60	1.60	1.60	1.60	1.60	1.60	1.60
L	15.90	15.90	15.90	19.00	19.00	19.00	19.00
C4	17.50	20.60	22.20	25.40	28.60	30.20	33.30
HOLES	4	4	4	4	4	4	8



• **ANSI B16.5 / ASA 150LB RF BLANK FLANGE 316**

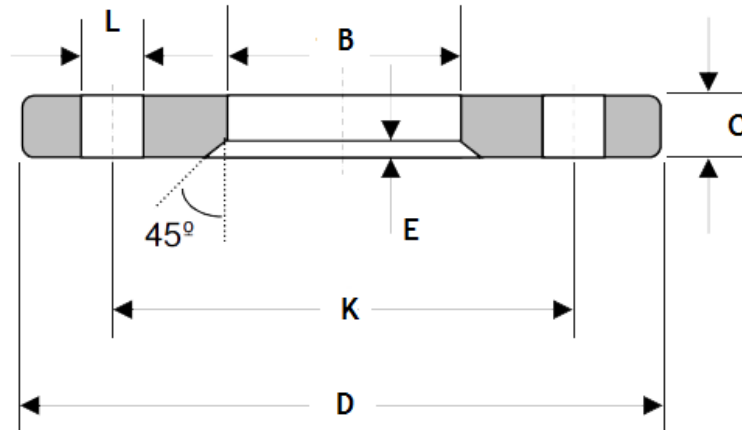
SIZE	1"	1.25"	1.5"	2"	2.5"	3"	4"
D	108.00	117.00	127.00	152.00	178.00	190.00	229.00
K	79.40	88.90	98.40	120.60	139.70	152.40	190.50
F	1.60	1.60	1.60	1.60	1.60	1.60	1.60
L	15.90	15.90	15.90	19.00	19.00	19.00	19.00
C	15.90	17.50	19.10	20.60	23.80	25.40	25.40
HOLES	4	4	4	4	4	4	8





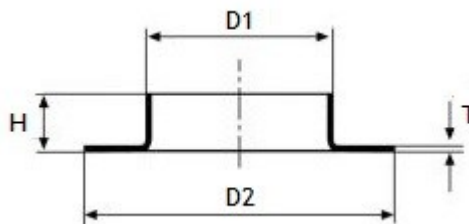
**BDE (NORTHAMPTON) LTD**

## PN10/16 ZINC PLATED BACKING FLANGE & COLLAR



• **PN16 ZINC PLATED BACKING FLANGES - TABLE D THICK**

SIZE	1"	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"
<b>B</b>	35.00	50.00	60.00	75.00	90.00	110.00	136.00	161.00	212.00	262.00
<b>K</b>	85.00	110.00	125.00	145.00	160.00	180.00	210.00	240.00	295.00	355.00
<b>D</b>	115.00	150.00	165.00	185.00	200.00	220.00	250.00	285.00	340.00	405.00
<b>C</b>	10.00	10.00	10.00	10.00	10.00	10.00	12.00	12.00	12.00	16.00
<b>E</b>	3.00	3.00	3.00	3.00	3.00	4.00	4.00	5.00	6.00	6.00
<b>L</b>	14	18.00	18.00	18.00	18.00	18.00	18.00	22.00	22.00	22.00
<b>HOLES</b>	4	4	4	8	8	8	8	8	12	12



• **OD PRESSED COLLARS 304 & 316**

SIZE	1"	1.5"	2"	2.5"	3"	4"
<b>D1</b>	25.00	38.00	51.00	63.50	76.10	101.60
<b>D2</b>	58.00	78.00	88.00	115.00	122.00	158.00
<b>H</b>	8.00	10.00	12.00	12.00	12.00	14.00
<b>T</b>	1.60	1.60	1.60	1.60	1.60	2.00

For larger sizes -  
Please see our metric  
range on page 56



**BDE (NORTHAMPTON) LTD**

## SQUARE BOX SECTION



Sold In 6 Mtr Lengths

304 grades ex stock - 316 is available

Dull polished finish

Smaller/Larger sizes can also be supplied

SIZE	Wall Thickness	KG per MTR
20 x 20	1.5mm	0.88
25 x 25	1.5mm	1.14
30 x 30	1.5mm	1.37
40 x 40	1.5mm	1.85
50 x 50	1.5mm	2.32
25 x 25	2mm	1.49
30 x 30	2mm	1.84
40 x 40	2mm	2.45
50 x 50	2mm	3.08
25 x 25	3mm	2.20
30 x 30	3mm	2.72
40 x 40	3mm	3.75
50 x 50	3mm	4.65
70 x 70	3mm	6.53
80 x 80	3mm	7.53
100 x 100	3mm	9.54

**ALSO AVAILABLE:**

PLASTIC INSERTS, STAINLESS STEEL SQUARE END PLATES  
& ADJUSTABLE FEET

Tel: 01604 750380  
Email: sales@bdeltd.co.uk

Fax: 01604 750377  
www.bdeltd.co.uk



# BDE (NORTHAMPTON) LTD

## FLAT BAR, ANGLE & ROUND BAR



- **FLAT BAR 304 - ROLLED EDGE**

SIZE	KG per MTR
12 x 3mm	0.28
20 x 3mm	0.47
25 x 3mm	0.59
30 x 3mm	0.71
40 x 3mm	0.95
50 x 3mm	1.19
60 x 3mm	1.42
100 x 3mm	2.37
15 x 5mm	0.59
20 x 5mm	0.79
25 x 5mm	0.99
30 x 5mm	1.19
40 x 5mm	1.58
50 x 5mm	1.98
60 x 5mm	2.37
25 x 6mm	1.19
30 x 6mm	1.42
40 x 6mm	1.90
50 x 6mm	2.37
60 x 6mm	2.84
75 x 6mm	3.56
100 x 6mm	4.74
40 x 10mm	3.16
50 x 10mm	3.95
100 x 10mm	7.90

- Sold in 4mtr Lengths as standard
- Grade 304 Ex Stock
- Mill Finish

- **EQUAL ANGLE 304**

SIZE	KG per MTR
20 x 20 x 3mm	0.90
25 x 25 x 3mm	1.20
30 x 30 x 3mm	1.40
40 x 40 x 3mm	1.83
50 x 50 x 3mm	2.30
25 x 25 x 5mm	1.77
40 x 40 x 5mm	3.00
50 x 50 x 5mm	3.80
30 x 30 x 6mm	2.56
40 x 40 x 6mm	3.51
50 x 50 x 6mm	4.47
60 x 60 x 6mm	5.84
100 x 100 x 6mm	9.93

- Sold in 6mtr Lengths as standard
- Mill Finish

- **ROUND BAR 303**

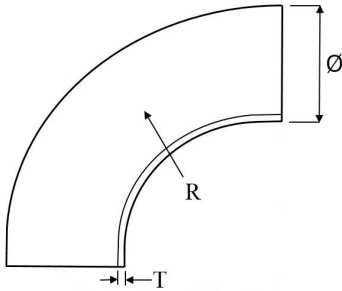
SIZE	KG per MTR
3mm	0.06
4mm	0.10
5mm	0.16
6mm	0.22
8mm	0.40
10mm	0.62
12mm	0.89
16mm	1.59
20mm	2.48
25mm	3.88

- Sold in 3mtr Lengths as standard
- Grade 303 Ex Stock
- Bright Finish
- Alternative sizes and grades can also be supplied.



**BDE (NORTHAMPTON) LTD**

## METRIC FITTINGS

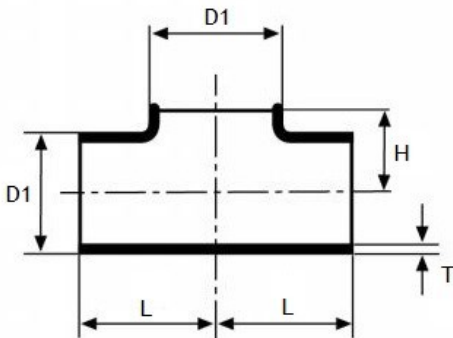


• **90 deg METRIC ELBOW**

SIZE	84 x 2	104 x 2	129 x 2	154 x 2	204 x 2	254 x 2
Ø	84.00	104.00	129.00	154.00	204.00	254.00
R	120.00	150.00	187.00	225.00	300.00	350.00
T	2.00	2.00	2.00	2.00	2.00	2.00

Available in both grade 304 & 316

**45 DEGREE ELBOWS ALSO STOCKED IN 316**



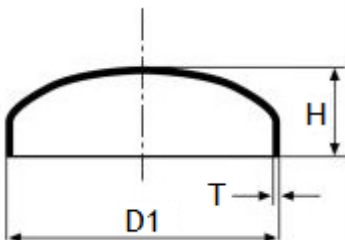
• **AS PULLED METRIC TEE**

SIZE	5" (129mm)	6" (154mm)	8" (204mm)	10" (254mm)
D1	129.00	154.00	204.00	254.00
H	70.00	84.00	110.00	140.00
L	124.00	143.00	178.00	250.00
T	2.00	2.00	2.00	2.00

Available in both grade 304 & 316

Smaller & Larger sizes available on request.

*Please note: Dimension "H" can vary, due to being produced as pulled*



• **METRIC DOMED END CAP 316**

SIZE	5" (129 x 2)	6" (154 x 2)	8" (204 x 2)
D1	129.00	154.00	204.00
H	34.00	41.00	50.00
T	2.00	2.00	2.00

Smaller & Larger sizes available on request.

OD End caps also available

METRIC TUBE AVAILABLE EX-STOCK - SEE OUR HYGIENIC TUBE PAGE

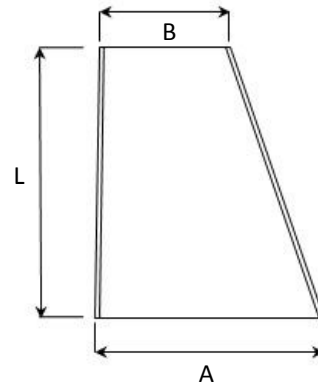
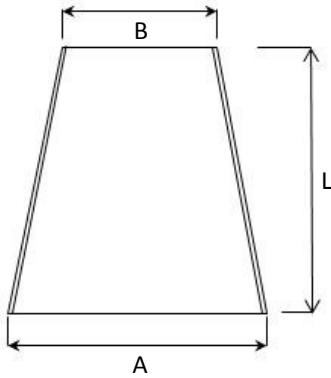
Tel: 01604 750380  
Email: sales@bdeltd.co.uk

Fax: 01604 750377  
www.bdeltd.co.uk



**BDE (NORTHAMPTON) LTD**

## METRIC CONCENTRIC & ECCENTRIC REDUCING CONES



• **METRIC CONCENTRIC REDUCING CONE 316**

SIZE	A	B	L	THICKNESS
84mm x 54mm	84mm	54mm	80.00	2.00
104mm x 84mm	104mm	84mm	100.00	2.00
129mm x 84mm	129mm	84mm	125.00	2.00
129mm x 104mm	129mm	104mm	125.00	2.00
154mm x 84mm	154mm	84mm	150.00	2.00
154mm x 104mm	154mm	104mm	150.00	2.00
154mm x 129mm	154mm	129mm	150.00	2.00
204mm x 104mm	204mm	104mm	200.00	2.00
204mm x 129mm	204mm	129mm	200.00	2.00
204mm x 154mm	204mm	154mm	200.00	2.00
254mm x 154mm	254mm	154mm	250.00	2.00
254mm x 204mm	254mm	204mm	250.00	2.00
304mm x 204mm	304mm	204mm	300.00	2.00

• **METRIC x IMPERIAL REDUCING CONES 316**

SIZE	A	B	L	THICKNESS
84mm x 3" OD	84.00	76.20	26.50	2.00
129mm x 3" OD	129.00	76.20	158.70	2.00
129mm x 4" OD	129.00	101.60	82.20	2.00
154mm x 3" OD	154.00	76.20	233.70	2.00
154mm x 4" OD	154.00	101.60	157.20	2.00

CONCENTRIC & ECCENTRIC ARE AVAILABLE IN 316

ECCENTRIC ALSO AVAILABLE ON REQUEST.

OTHER SIZES/GRADES AVAILABLE ON REQUEST.

**ALL LENGTHS MAY VARY  
MANUFACTURER DEPENDENT**

METRIC TUBE AVAILABLE EX-STOCK - SEE OUR HYGIENIC TUBE PAGE

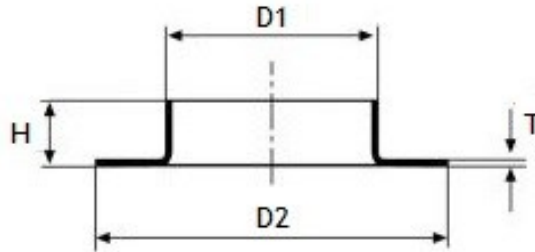
Tel: 01604 750380  
Email: sales@bdeltd.co.uk

Fax: 01604 750377  
www.bdeldtd.co.uk



**BDE (NORTHAMPTON) LTD**

## METRIC COLLARS



- METRIC PRESSED COLLARS 316**

<b>SIZE</b>	<b>38mm</b>	<b>46mm</b>	<b>54mm</b>	<b>71mm</b>	<b>79mm</b>	<b>81mm</b>	<b>84mm</b>	<b>104mm</b>	<b>106mm</b>
<b>D1</b>	38mm	46mm	54mm	71mm	79mm	81mm	84mm	104mm	106mm
<b>D2</b>	78.00	88.00	102.00	122.00	122.00	138.00	138.00	158.00	158.00
<b>H</b>	10.00	12.00	12.00	12.00	12.00	13.00	13.00	16.00	16.00
<b>T</b>	2mm	3mm	2mm	3mm	2mm	3mm	2mm	2mm	3mm
	<b>114mm</b>	<b>129mm</b>	<b>131mm</b>	<b>154mm</b>	<b>156mm</b>	<b>204mm</b>	<b>206mm</b>	<b>254mm</b>	<b>256mm</b>
<b>D1</b>	114mm	129mm	131mm	154mm	156mm	204mm	206mm	254mm	256mm
<b>D2</b>	158.00	188.00	188.00	212.00	212.00	268.00	269.00	320.00	320.00
<b>H</b>	16.00	15.00	20.00	19.00	20.00	21.00	21.00	24.00	25.00
<b>T</b>	3.00	2mm	3mm	2mm	3mm	2mm	3mm	2mm	3mm

Smaller & Larger sizes are also available, in both 304 & 316

METRIC TUBE AVAILABLE EX-STOCK - SEE OUR HYGIENIC TUBE PAGE

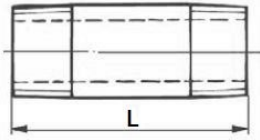
Tel: 01604 750380  
Email: sales@bdeltd.co.uk

Fax: 01604 750377  
www.bdeldtd.co.uk



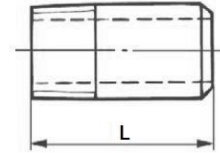
# BDE (NORTHAMPTON) LTD

## BSP FITTINGS 316 - 150LB PRESSURE RATING



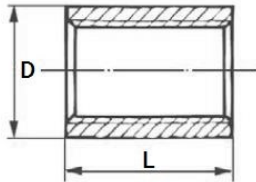
### • BSP BARREL NIPPLE 316

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
L	30.00	30.00	50.00	60.00	60.00	60.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
L	75.00	80.00	100.00	100.00	120.00	120.00



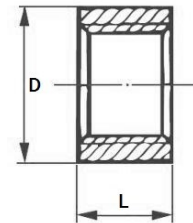
### • BSP WELD NIPPLE 316

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
L	30.00	30.00	30.00	35.00	40.00	40.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
L	50.00	50.00	50.00	60.00	70.00	80.00



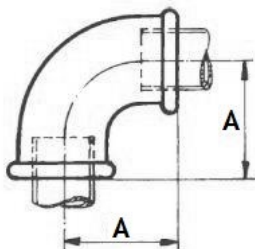
### • BSP FULL SOCKET 316

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
D	14.0	18.5	21.5	26.5	32.0	39.5
L	20.0	25.0	26.0	34.0	36.0	43.0
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
D	48.5	54.5	66.5	82.0	95.0	122.0
L	48.0	48.0	56.0	65.0	70.7	83.0



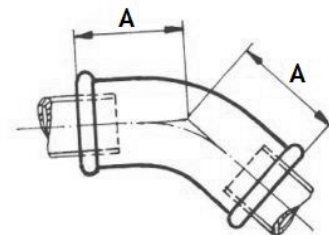
### • BSP HALF SOCKET 316

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
D	14.0	18.5	21.5	26.5	32.0	39.5
L	11.00	13.00	12.00	15.00	17.00	20.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
D	48.5	54.5	66.5	82.0	95.0	122.0
L	22.00	22.00	26.00	30.00	33.00	40.00



### • BSP F/F 90d ELBOW 316

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	14.00	18.50	20.80	25.00	27.50	33.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	39.50	43.00	52.00	61.00	70.50	89.00



### • BSP F/F 45d ELBOW 316

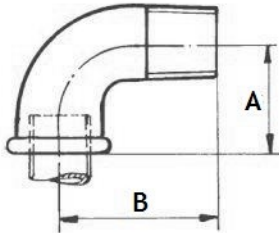
SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	17.70	18.60	20.50	22.50	25.00	28.20
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	28.20	36.40	43.00	47.00	52.00	63.00

DIMENSIONS ARE A GUIDE  
ONLY AND MAY VARY



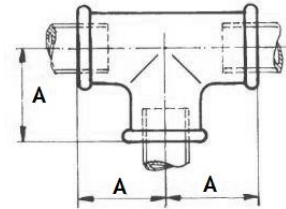
**BDE (NORTHAMPTON) LTD**

## BSP FITTINGS 316 - 150LB PRESSURE RATING



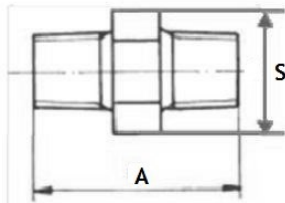
• **BSP M/F 90<sup>d</sup> STREET ELBOW 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	15.40	17.60	20.50	20.50	24.00	30.00
B	23.00	27.00	30.00	30.00	34.50	39.50
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	35.50	38.50	48.00	62.50	79.30	100.50
B	46.50	49.50	60.50	87.00	106.50	126.30



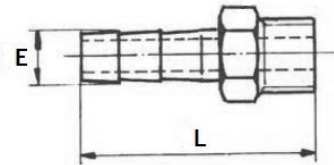
• **BSP F/F/F EQUAL TEE 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	14.00	18.50	20.80	25.00	27.50	33.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	40.00	43.00	52.00	61.00	70.50	89.00



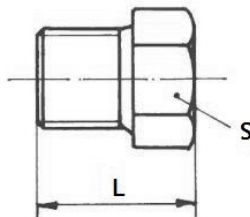
• **BSP HEX NIPPLE 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	29.50	28.00	31.00	33.50	38.00	41.50
S	10.00	14.60	18.10	22.40	28.00	35.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	48.50	48.50	57.00	67.00	75.00	81.00
S	44.00	50.00	62.00	78.00	91.00	116.00



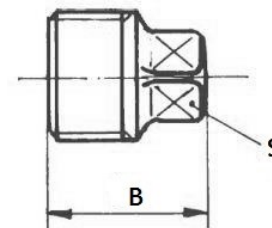
• **BSP HOSE NIPPLE 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
L	29.00	40.00	40.00	47.50	50.50	61.00
E	7.00	9.00	11.00	13.00	20.00	25.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
L	63.50	75.00	79.00	89.00	102.50	109.00
E	33.00	39.00	51.00	65.00	77.50	103.00



• **BSP HEX PLUG 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
L	17.70	17.70	18.50	19.50	22.00	24.80
S	16.80	16.80	18.00	22.00	28.00	35.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
L	28.80	28.80	33.50	34.00	37.50	44.00
S	44.00	50.00	62.00	78.00	91.00	116.00



• **BSP SQUARE PLUG 316**

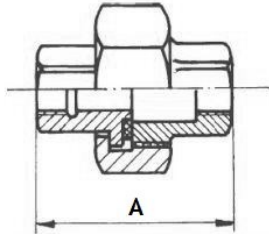
SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
B	15.50	19.00	18.00	18.50	21.00	24.00
S	7.00	8.00	9.00	10.00	14.00	17.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
B	28.00	28.00	34.00	38.50	41.50	51.50
S	20.00	23.00	28.00	36.00	40.00	52.00





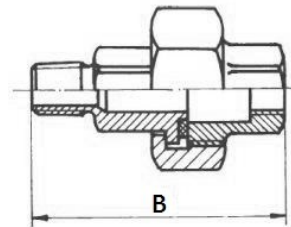
# BDE (NORTHAMPTON) LTD

## BSP FITTINGS 316 - 150LB PRESSURE RATING



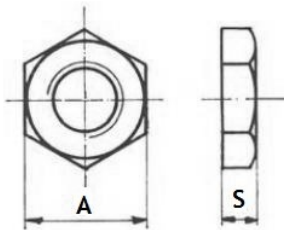
- BSP F/F UNION 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	35.00	35.00	35.10	38.10	40.50	49.30
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	50.50	57.60	63.40	66.50	75.50	89.10



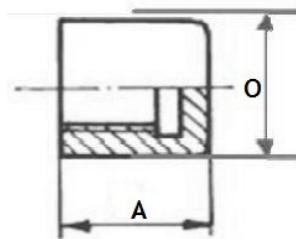
- BSP M/F UNION 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
B	-	-	-	52.30	59.60	70.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
B	75.80	80.70	87.50	-	-	-



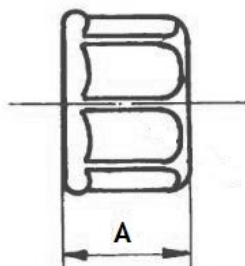
- BSP LOCKNUT 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	/	6	7	8	9	10
S	/	22.00	27.00	32.00	36.00	46.00
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	11	12	13	/	/	/
S	55.00	60.00	75.00	/	/	/



- BSP ROUND CAP 316**

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	11.5	13.4	16.9	18.6	20.0	23.0
O	16.5	19.8	21.4	25.6	31.8	39.0
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	26.2	26.2	31.0	31.7	35.1	41.6
O	48.4	54.4	67.0	84.0	98.0	124.0



- BSP HEX CAP 316**

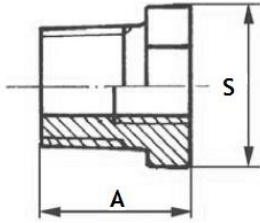
SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	11.8	15	15.4	17.1	18.5	21
SIZE	1.25"	1.5"	2"	2.5"	3"	4"
A	23.7	23.7	27.5	31.7	35.1	41.6

**DIMENSIONS ARE A GUIDE  
ONLY AND MAY VARY**



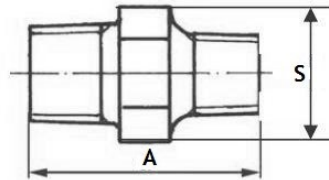
**BDE (NORTHAMPTON) LTD**

## BSP FITTINGS 316 - 150LB PRESSURE RATING



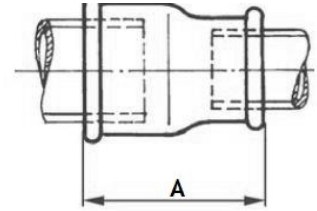
• **BSP REDUCING BUSH 316**

SIZE	A	S
1/4" x 1/8"	14.5	18.0
3/8" x 1/8"	16.0	21.4
3/8" x 1/4"	16.0	27.0
1/2" x 1/8"	19.5	27.0
1/2" x 1/4"	19.5	27.0
1/2" x 3/8"	19.5	27.0
3/4" x 1/4"	21.0	27.0
3/4" x 3/8"	21.0	27.0
3/4" x 1/2"	21.0	27.0
1" x 1/4"	24.0	27.0
1" x 3/8"	24.0	27.0
1" x 1/2"	24.0	27.0
1" x 3/4"	24.0	27.0
1.25" x 3/8"	27.0	42.7
1.25" x 1/2"	27.0	42.7
1.25" x 3/4"	27.0	42.7
1.25" x 1"	27.0	42.7
1.5" x 3/8"	27.0	48.6
1.5" x 1/2"	27.0	48.6
1.5" x 3/4"	27.0	48.6
1.5" x 1"	27.0	48.6
1.5" x 1.25"	27.0	48.6
2" x 1/2"	31.0	31.0
2" x 3/4"	31.0	60.5
2" x 1"	31.0	60.5
2" x 1.25"	31.0	60.5
2" x 1.5"	31.0	60.5
2.5" x 1"	34.0	60.5
2.5" x 1.25"	34.0	60.5
2.5" x 1.5"	34.0	60.5
2.5" x 2"	34.0	60.5
3" x 1"	37.5	91.0
3" x 1.25"	37.5	91.0
3" x 1.5"	37.5	91.0
3" x 2"	37.5	91.0
3" x 2.5"	37.5	91.0
4" x 2"	44.0	116.0
4" x 2.5"	44.0	116.0
4" x 3"	44.0	116.0



• **BSP REDUCING NIPPLE 316**

SIZE	A	S
3/8" x 1/8"	25.5	18.0
1/2" x 1/4"	30.0	21.4
1/2" x 3/8"	30.0	21.4
3/4" x 3/8"	32.0	27.0
3/4" x 1/2"	35.5	27.0
1" x 1/2"	38.5	34.0
1" x 3/4"	39.5	34.0
1.25" x 1/2"	41.5	42.7
1.25" x 3/4"	42.5	42.7
1.25" x 1"	45.0	42.7
1.5" x 3/4"	42.5	48.6
1.5" x 1"	45.0	48.6
1.5" x 1.25"	47.5	48.6
2" x 1"	49.0	60.5
2" x 1.25"	51.5	60.5
2" x 1.5"	51.5	60.5
2.5" x 2"	59.0	78.0
3" x 2"	62.5	91.0
3" x 2.5"	64.5	91.0
4" x 3"	74.0	116.0



• **BSP REDUCING SOCKET 316**

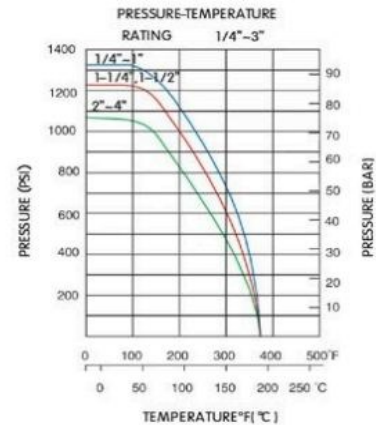
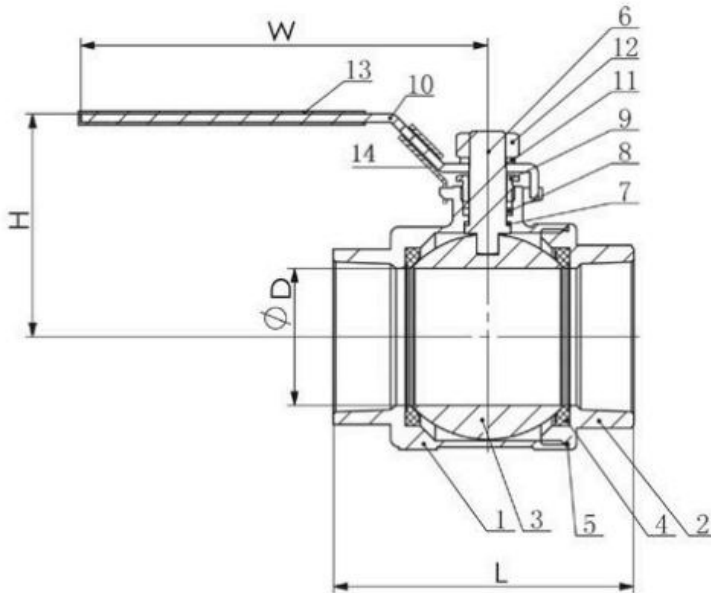
SIZE	A
1/4" x 1/8"	22.8
3/8" x 1/8"	24.3
3/8" x 1/4"	27.5
1/2" x 1/8"	21.0
1/2" x 1/4"	25.0
1/2" x 3/8"	28.0
3/4" x 1/8"	22.0
3/4" x 1/4"	24.0
3/4" x 3/8"	24.0
3/4" x 1/2"	32.5
1" x 1/4"	26.5
1" x 3/8"	27.0
1" x 1/2"	29.5
1" x 3/4"	36.4
1.25" x 3/8"	29.5
1.25" x 1/2"	32.0
1.25" x 3/4"	33.0
1.25" x 1"	42.0
1.5" x 1/2"	32.0
1.5" x 3/4"	33.0
1.5" x 1"	34.5
1.5" x 1.25"	44.3
2" x 1/2"	35.5
2" x 3/4"	36.5
2" x 1"	38.0
2" x 1.25"	40.0
2" x 1.5"	47.8
2.5" x 1"	42.0
2.5" x 1.25"	44.0
2.5" x 1.5"	45.0
2.5" x 2"	47.0
3" x 1.25"	47.0
3" x 1.5"	48.0
3" x 2"	50.0
3" x 2.5"	51.0
4" x 1.5"	54.0
4" x 2"	56.0
4" x 2.5"	57.0
4" x 3"	60.0

**DIMENSIONS ARE A GUIDE  
ONLY AND MAY VARY**



## BDE (NORTHAMPTON) LTD

### BSP 2 PIECE BALL VALVE 316 - FULL BORE



• **BSP 2 PIECE BALL VALVE 316 - FULL BORE**

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"
L	49.00	49.00	57.00	65.00	78.00	90.50	105.00	127.00	160.00	180.00
D	12.80	12.80	15.00	20.00	25.00	32.00	38.00	50.00	65.00	80.00
H	51.00	51.00	55.00	59.00	73.00	78.00	91.00	99.00	130.00	142.00
W	95.00	95.00	95.00	110.00	135.00	135.00	165.00	165.00	215.00	215.00

ITEM	PARTS	MATERIALS	QUANTITY
1	BODY	316	1
2	CAP	316	1
3	BALL	316	1
4	BALL SEAT	PTFE	2
5	JOINT GASKET	PTFE	1
6	STEM	316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	2
9	GLAND NUT	304	1
10	HANDLE	304	1
11	STEM WASHER	304	1
12	STEM NUT	304	1
13	PLASTIC COVER	PLASTIC	1
14	LOCK DEVICE	304	1

**Ball Valve Information:**

- PIPE THREAD IN ACCORDANCE WITH EN 10226-1, ISO 7-1
- BLOW-OUT PROOF STEM / FULL PORT
- 1000PSI (69 BAR) W.O.G
- COMPLETE WITH LOCKING DEVICE HANDLE

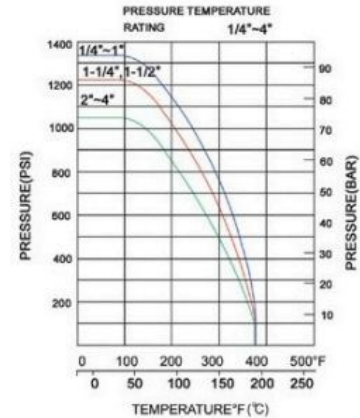
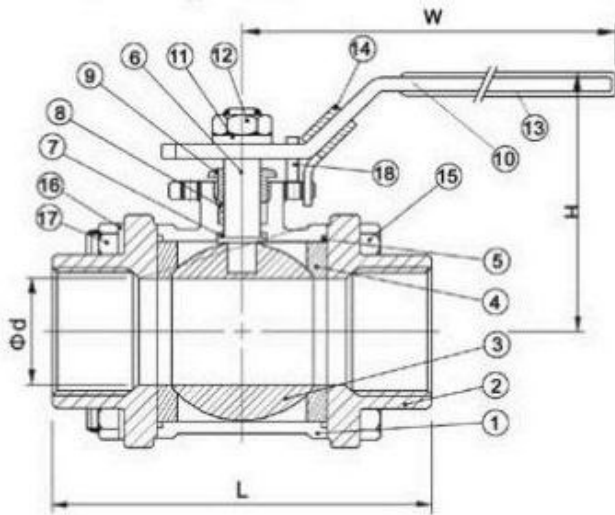
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**BDE (NORTHAMPTON) LTD**

## BSP 3 PIECE BALL VALVE 316 - FULL BORE



• **BSPT 3 PIECE BALL VALVE 316 - FULL BORE**

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1.25"	1.5"	2"
D	12.80	12.80	15.00	20.00	25.00	32.00	38.00	50.00
L	59.00	59.00	64.00	75.00	85.00	97.00	110.00	132.00
H	51.00	51.00	55.00	63.00	74.00	80.00	92.00	107.00
W	95.00	95.00	95.00	110.00	135.00	135.00	175.00	180.00
Cv FACTOR	6.6	7.9	11.2	21	35	57	80	150
TORQUE KGF-CM	40	40	54	78	106	150	200	280

ITEM	PARTS	MATERIALS	QUANTITY
1	BODY	316	1
2	CAP	316	1
3	BALL	316	1
4	BALL SEAT	PTFE	2
5	JOINT GASKET	PTFE	1
6	STEM	316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	2
9	GLAND NUT	304	1
10	HANDLE	304	1
11	STEM WASHER	304	1
12	STEM NUT	304	1
13	PLASTIC COVER	PLASTIC	1
14	LOCK DEVICE	304	1
15	BOLT	304	4
16	SPRING WASHER	304	4
17	HEX NUT	304	4
18	STOP PIN	304	1

**Ball Valve Information:**

- PIPE THREAD IN ACCORDANCE WITH EN 10226-1, ISO 7-1
- BLOW-OUT PROOF STEM / FULL PORT
- 1000PSI (69 BAR) W.O.G
- MOUNTING PAD FOR ISO 5211
- SCREWED END
- COMPLETE WITH LOCKING DEVICE HANDLE

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## BDE (NORTHAMPTON) LTD

# NOMINAL BORE SCHEDULE PIPE

### • NB SCH 10 PIPE 304L / 316

NB PIPE SIZE	OD	WALL THICKNESS	KG/MTR
1/4"	13.7	1.65	0.49
3/8"	17.1	1.65	0.63
1/2"	21.3	2.11	1.00
3/4"	26.7	2.11	1.28
1"	33.4	2.77	2.09
1.25"	42.1	2.77	2.70
1.5"	48.3	2.77	3.11
2"	60.3	2.77	3.93
2.5"	73.0	3.05	5.26
3"	88.9	3.05	6.45
4"	114.3	3.05	8.36
5"	141.3	3.40	11.57
6"	168.3	3.40	13.84
8"	219.1	3.76	19.96

### • NB SCH 40 PIPE 304L / 316L

NB PIPE SIZE	OD	WALL THICKNESS	KG/MTR
1/4"	13.7	2.24	0.63
3/8"	17.1	2.31	0.84
1/2"	21.3	2.77	1.27
3/4"	26.7	2.87	1.69
1"	33.4	3.38	2.50
1.25"	42.1	3.56	3.39
1.5"	48.3	3.86	4.05
2"	60.3	3.91	5.44
2.5"	73.0	5.16	8.63
3"	88.9	5.49	11.29
4"	114.3	6.02	16.07
5"	141.3	6.55	21.77
6"	168.3	7.11	28.26
8"	219.1	8.18	42.55



### SCHEDULE PIPE INFORMATION

- MANUFACTURED TO ASTM A312
- STOCKED IN 304L & 316L
- WELDED EX-STOCK
- SEAMLESS AVAILABLE ON REQUEST
- SOLD IN 6MTR RANDOM LENGTHS

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**

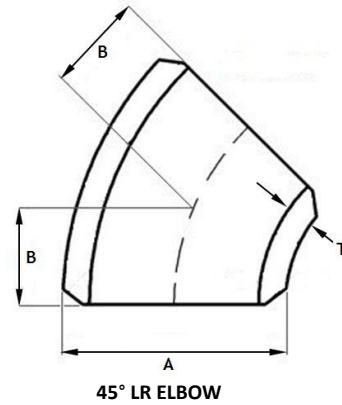
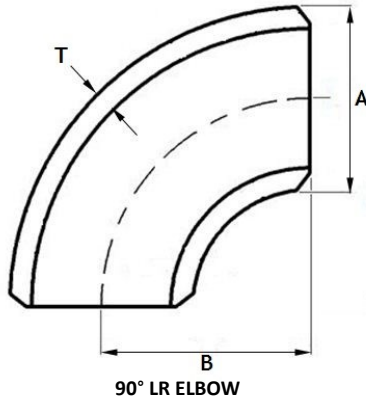
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**BDE (NORTHAMPTON) LTD**

## SCHEDULE 10 & 40 - LR ELBOW'S



• **NB SCH 10 - 90D LR ELBOW 304L / 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"	5"	6"
A	21.30	26.60	33.40	42.10	48.10	60.30	73.00	88.90	114.30	141.30	168.30
B	38.10	28.60	38.10	47.60	57.20	76.20	95.20	114.00	152.00	191.00	228.00
T	2.11	2.11	2.77	2.77	2.77	2.77	3.05	3.05	3.05	3.40	3.40

• **NB SCH 40 - 90D LR ELBOW 304L / 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"	5"	6"
A	21.3	26.6	33.4	42.1	48.1	60.3	73.0	88.9	114.3	141.3	168.3
B	38.1	28.6	38.1	47.6	57.2	76.2	95.2	114.0	152.0	191.0	228.0
T	2.77	2.87	3.38	3.56	3.68	3.91	5.16	5.49	6.02	6.55	7.11

• **NB SCH 10 - 45D LR ELBOW 304L / 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
A	21.3	26.6	33.4	42.1	48.1	60.3	73.0	88.9	114.3
B	15.88	11.13	22.23	25.40	28.45	35.05	44.45	50.80	63.50
T	2.11	2.11	2.77	2.77	2.77	2.77	3.05	3.05	3.05

• **NB SCH 40 - 45D LR ELBOW 304L / 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
A	21.3	26.6	33.4	42.1	48.1	60.3	73.0	88.9	114.3
B	15.88	11.13	22.23	25.40	28.45	35.05	44.45	50.80	63.50
T	2.77	2.87	3.38	3.56	3.68	3.91	5.16	5.49	6.02

### BUTT WELD ELBOW INFORMATION

- MANUFACTURED TO ASTM-A403/ANSI B16.9
- STOCKED IN 304L & 316L
- WELDED EX-STOCK - SEAMLESS AVAILABLE ON REQUEST
- SHORT RADIUS AVAILABLE ON REQUEST
- LARGER SIZES AVAILABLE ON REQUEST
- SEAMLESS AVAILABLE ON REQUEST

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**

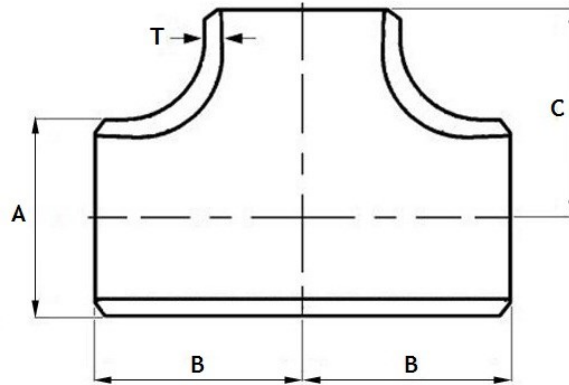
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**BDE (NORTHAMPTON) LTD**

## SCHEDULE 10 & 40 - EQUAL TEES



• **NB SCH 10 - EQUAL TEE 304L & 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
A	21.3	26.6	33.4	42.1	48.1	60.3	73.0	88.9	114.3
B	25.40	28.70	38.10	47.75	57.15	63.50	76.20	85.85	104.90
C	25.40	28.70	38.10	47.75	57.15	63.50	76.20	85.85	104.90
T	2.11	2.11	2.77	2.77	2.77	2.77	3.05	3.05	3.05

• **NB SCH 40 - EQUAL TEE 304L & 316L**

SIZE	1/2"	3/4"	1"	1.25"	1.5"	2"	2.5"	3"	4"
A	21.3	26.6	33.4	42.1	48.1	60.3	73.0	88.9	114.3
B	25.40	28.70	38.10	47.75	57.15	63.50	76.20	85.85	104.90
C	25.40	28.70	38.10	47.75	57.15	63.50	76.20	85.85	104.90
T	2.77	2.87	3.38	3.56	3.68	3.91	5.16	5.49	6.02

**BUTT WELD EQUAL TEE INFORMATION**

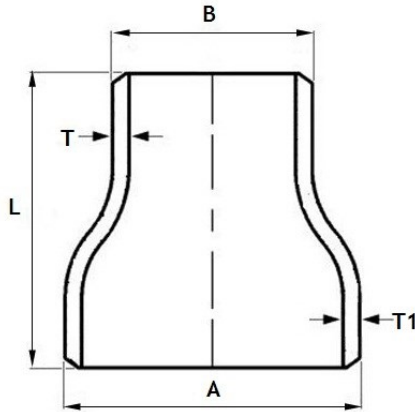
- MANUFACTURED TO ASTM-A403/ANSI B16.9
- STOCKED IN 304L & 316L
- WELDED EX-STOCK - SEAMLESS CAN BE SUPPLIED
- SEAMLESS & LARGER SIZES AVAILABLE ON REQUEST

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**



**BDE (NORTHAMPTON) LTD**

## SCHEDULE 10 & 40 - CONCENTRIC REDUCERS



### BUTT WELD CONCENTRIC REDUCER INFORMATION

- MANUFACTURED TO ASTM-A403/ANSI B16.9
- STOCKED IN 304L & 316L  
(ITEMS MARKED \*\* IN 316 ONLY)
- WELDED EX-STOCK - SEAMLESS AVAILABLE ON REQUEST

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**

### • NB SCH 10 - CONCENTRIC REDUCER

SIZE	A	B	L	T1	T
3/4" x 1/2"	26.6	21.3	38.0	2.11	2.11
1" x 1/2"	33.4	21.3	50.8	2.77	2.11
1" x 3/4"	33.4	26.6	50.8	2.77	2.11
1.25" x 1"	42.1	33.4	50.8	2.77	2.77
**1.5" x 1/2"	48.3	21.3	63.5	2.77	2.11
**1.5" x 3/4"	48.3	26.6	63.5	2.77	2.11
1.5" x 1"	48.3	33.4	63.5	2.77	2.77
**1.5" x 1.25"	48.3	42.1	63.5	2.77	2.77
2" x 3/4"	60.3	26.6	76.2	2.77	2.11
2" x 1"	60.3	33.4	76.2	2.77	2.77
**2" x 1.25"	60.3	42.1	76.2	2.77	2.77
2" x 1.5"	60.3	48.3	76.2	2.77	2.77
2.5" x 2"	73.0	60.3	88.9	3.05	2.77
3" x 1"	88.9	33.4	88.9	3.05	2.77
3" x 1.5"	88.9	60.3	88.9	3.05	2.77
3" x 2"	88.9	60.3	88.9	3.05	2.77
3" x 2.5"	88.9	73.0	88.9	3.05	3.05
4" x 2"	114.3	60.3	101.6	3.05	2.77
4" x 2.5"	114.3	73.0	101.6	3.05	3.05
4" x 3"	114.3	88.9	101.6	3.05	3.05
**6" x 3"	168.3	88.9	139.7	3.40	3.05
**6" x 4"	168.3	114.3	139.7	3.40	3.05
**6" x 5"	168.3	141.3	139.7	3.40	3.40

### • NB SCH 40 - CONCENTRIC REDUCER

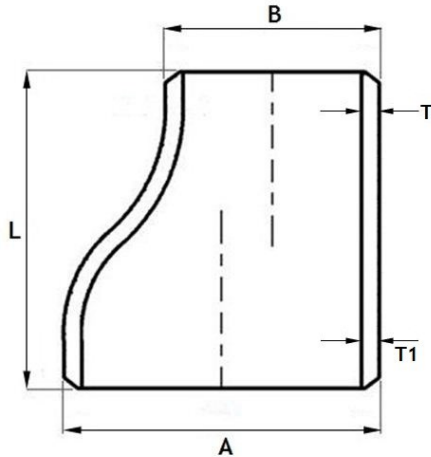
SIZE	A	B	L	T	T1
3/4" x 1/2"	26.6	21.3	38.0	2.77	2.87
1" x 1/2"	33.4	21.3	50.8	2.77	3.38
1" x 3/4"	33.4	26.6	50.8	2.87	3.38
1.25" x 1"	42.1	33.4	50.8	3.38	3.56
**1.5" x 1/2"	48.3	21.3	63.5	2.77	3.68
**1.5" x 3/4"	48.3	26.6	63.5	2.87	3.68
1.5" x 1"	48.3	33.4	63.5	3.56	3.68
**1.5" x 1.25"	48.3	42.1	63.5	3.56	3.68
2" x 1"	60.3	33.4	76.2	3.38	3.91
**2" x 1.25"	60.3	42.1	76.2	3.56	3.91
2" x 1.5"	60.3	48.3	76.2	3.68	3.91
2.5" x 2"	73.0	60.3	88.9	3.91	5.16
3" x 1.5"	88.9	60.3	88.9	3.68	5.49
3" x 2"	88.9	60.3	88.9	3.91	5.49
3" x 2.5"	88.9	73.0	88.9	5.16	5.49
4" x 2"	114.3	60.3	101.6	3.91	6.02
4" x 2.5"	114.3	73.0	101.6	5.16	6.02
4" x 3"	114.3	88.9	101.6	5.49	6.02
**6" x 3"	168.3	88.9	139.7	5.49	7.11
**6" x 4"	168.3	114.3	139.7	6.02	7.11





**BDE (NORTHAMPTON) LTD**

## SCHEDULE 10 & 40 - ECCENTRIC REDUCERS



### BUTT WELD ECCENTRIC REDUCER INFORMATION

- MANUFACTURED TO ASTM-A403/ANSI B16.9
- STOCKED IN 304L & 316L  
(ITEMS MARKED \*\* IN 316 ONLY)
- WELDED EX-STOCK - SEAMLESS AVAILABLE ON REQUEST
- SMALLER/LARGER SIZES AVAILABLE ON REQUEST

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**

### • NB SCH 10 - ECCENTRIC REDUCER

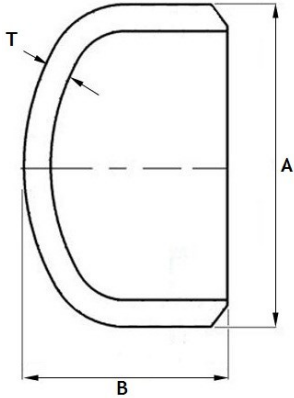
SIZE	A	B	L	T1	T
1" x 1/2"	33.4	21.3	50.8	2.77	2.11
1" x 3/4"	33.4	26.6	50.8	2.77	2.11
1.25" x 1"	42.1	33.4	50.8	2.77	2.77
**1.5" x 1/2"	48.3	21.3	63.5	2.77	2.11
1.5" x 1"	48.3	33.4	63.5	2.77	2.77
1.5" x 1.25"	48.3	42.1	63.5	3.68	3.56
2" x 1/2"	60.3	21.3	76.2	2.77	2.11
2" x 1"	60.3	33.4	76.2	2.77	2.77
2" x 1.5"	60.3	48.3	76.2	2.77	2.77
2.5" x 2"	73.0	60.3	88.9	3.05	2.77
3" x 1"	88.9	33.4	88.9	3.05	2.77
3" x 1.5"	88.9	60.3	88.9	3.05	2.77
3" x 2"	88.9	60.3	88.9	3.05	2.77
3" x 2.5"	88.9	73.0	88.9	3.05	3.05
4" x 2"	114.3	60.3	101.6	3.05	2.77
4" x 2.5"	114.3	73.0	101.6	3.05	3.05
4" x 3"	114.3	88.9	101.6	3.05	3.05

### • NB SCH 40 - ECCENTRIC REDUCER

SIZE	A	B	L	T1	T
1" x 1/2"	33.4	21.3	50.8	3.38	2.77
1" x 3/4"	33.4	26.6	50.8	3.38	2.87
1.5" x 1"	48.3	33.4	63.5	3.68	3.56
2" x 1"	60.3	33.4	76.2	3.91	3.38
2" x 1.5"	60.3	48.3	76.2	3.91	3.68
3" x 2"	88.9	60.3	88.9	5.49	3.91
4" x 2"	114.3	60.3	101.6	6.02	3.91
4" x 3"	114.3	88.9	101.6	6.02	5.49



## BDE (NORTHAMPTON) LTD



### *BUTT WELD END CAPS*

- MANUFACTURED TO ASTM-A403/ANSI B16.9
- STOCKED IN 316L
- SMALLER/LARGER SIZES AVAILABLE ON REQUEST

**FLANGES & FITTINGS  
AVAILABLE TO SUIT EX-STOCK**

#### • *NB SCH 10 - END CAP*

SIZE	2"	2.5"	3"	4"	6"
A	60.3	73.0	88.9	114.3	168.3
B	38.1	50.4	63.5	76.2	101.6
T	2.77	3.05	3.05	3.05	3.40

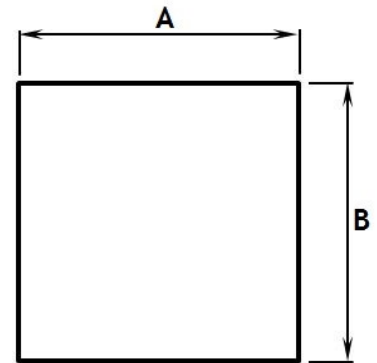
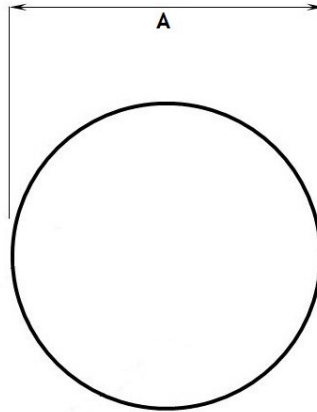
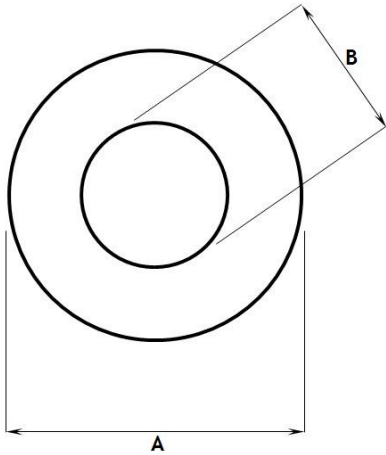
#### • *NB SCH 40 - END CAP*

SIZE	2"	2.5"	3"	4"	6"
A	60.3	73.0	88.9	114.3	168.3
B	38.1	50.4	63.5	76.2	101.6
T	3.91	5.16	5.49	6.02	7.11



**BDE (NORTHAMPTON) LTD**

## LASER CUT PRODUCTS



- CLOSURE RINGS 304**

SIZE	A	B
2" x 1"	50.4	26.2
2" x 1.5"	50.4	38.9
2.5" x 1.5"	63.1	38.9
2.5" x 2"	63.1	51.6
3" x 1"	75.8	26.2
3" x 1.5"	75.8	38.9
3" x 2"	75.8	51.6
4" x 2"	101.2	51.6
4" x 2.5"	101.2	64.3
4" x 3"	101.2	77.0
5" x 3"	128.6	77.0
5" x 4"	128.6	102.4
6" x 3"	153.6	77.0
6" x 4"	153.6	102.4
6" x 5"	153.6	129.8
8" x 4"	203.6	102.4
8" x 5"	203.6	129.8

- FLAT DISCS 316**

SIZE	A
1"	25.1
1.25"	31.3
1.5"	37.7
2"	50.4
2.5"	63.1
3"	75.8
4"	101.2
5"	128.6
6"	153.6

- SQUARES 304**

A	B
24.5	24.5
29.5	29.5
39.5	39.5
49	49.0
59	59.0
79	79.0
99	99.0

24.5 x 24.5 T/S 25 X 25 BOX  
 29.5 x 29.5 T/S 30 x 30 BOX  
 39.5 x 39.5 T/S 40 x 40 BOX  
 59 x 59 T/S 60 x 60 BOX  
 79 x 79 T/S 80 x 80 BOX  
 99 x 99 T/S 100 x 100 BOX

**ALL PRODUCTS LASER CUT  
 FROM 2mm THICK  
 STAINLESS STEEL 2B SHEETS**

**BDE (NORTHAMPTON) LTD**

## FABRICATION FACILITIES

### AS STANDARD

**HYGIENIC WELDING** – TIG welding fully purged, full penetration crack and crevice free. Rotary welded or free hand.

**POLISHING** – weld bead removed to leave a dull polish 180/240 grit finish.

**CUTTING** – GF type cutting (squarer end) up to 4" Band saw cutting up to 6",

Note: Weld bead can only be removed where accessible.

### TO CUSTOMER REQUIREMENTS

Non Hygienic welding to stainless steel.

Polishing to mirror finish dependent on size.

Bulk cutting service

Bespoke pipework fabrications

Flow plate

Manifold assemblies / Tee Pulling

Trolley and skid units



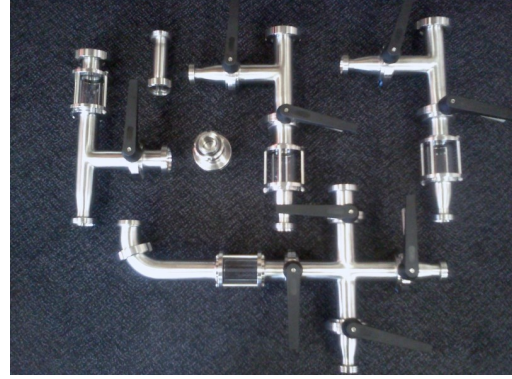


**BDE (NORTHAMPTON) LTD**

## FABRICATION



Skid unit and pipework assembly for client's filters



Valves & Sight Glass pipework assemblies



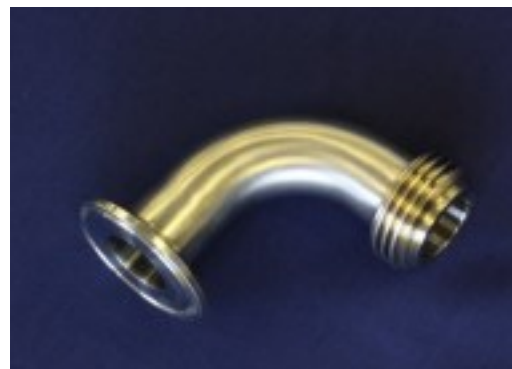
Fabricated Components



Filter & Pump assembly on Trolley



Jacketed bends & Jacketed Tee



IDF male union x Ferrule 90 degree bend

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Email: [sales@bdeltd.co.uk](mailto:sales@bdeltd.co.uk)

Fax: 01604 750377  
[www.bdeltd.co.uk](http://www.bdeltd.co.uk)



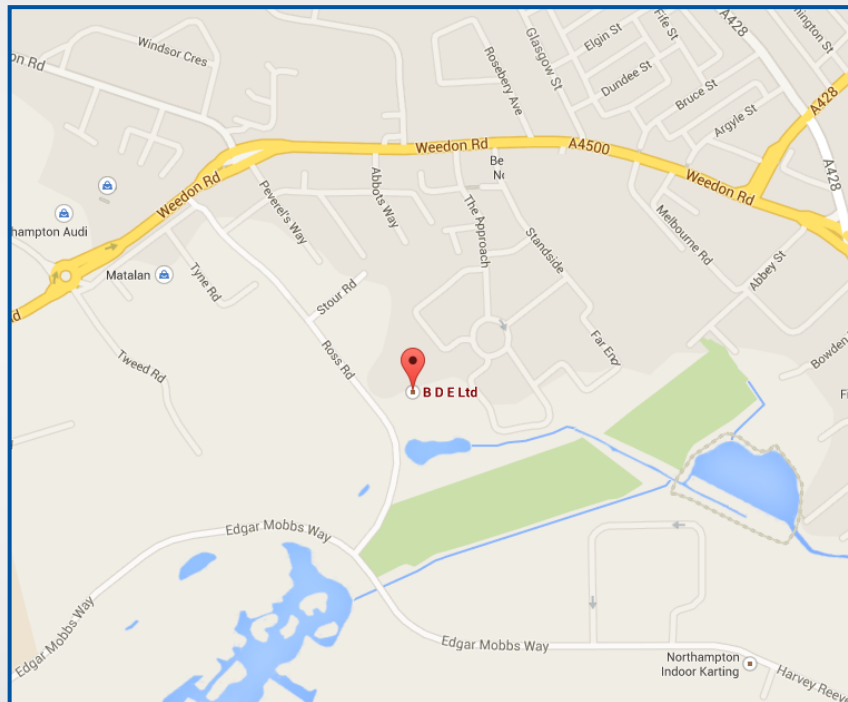


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### DISCLAIMER

Whereas we have faithfully tried to be accurate on the information contained in this brochure, BDE (Northampton) Ltd cannot accept any responsibility for any errors, variances, or changes in design that may have occurred.

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