

The logo for ALMA, featuring the word "ALMA" in a bold, teal, sans-serif font. The letters are contained within a teal rectangular border that has a slight 3D effect, with the top and bottom lines being thicker than the sides.

# ENGINEERING

## HVAC PROCESS PIPELINE VALVES

*Supplying valves and ancillary products  
to the Irish engineering industry since 1975.*

**PRODUCT GUIDE 2023**

**DAILY DELIVERIES TO DUBLIN AREA**





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*no minimum order sizes or values*

**IF YOU DON'T SEE WHAT YOU ARE LOOKING FOR  
PLEASE ASK!**

## **TERMS & CONDITIONS**

**ORDERS ARE ONLY ACCEPTED ON THE BASIS OF OUR STANDARD  
TERMS AND CONDITIONS WHICH CAN BE FOUND AT THE BACK OF THIS CATALOGUE**

**SPECIFIC TERMS ARE AS FOLLOWS:**

- PRICES** : As ruling at date of despatch and subject to change without notice and all prices subject to VAT
- ORDER SIZE** : No minimum order value
- CARRIAGE** : Deliveries to Dublin & North Wicklow, free of charge. Nationwide deliveries may be subject to carriage charges.
- DELIVERY** : Non delivery or shortages must be notified within 7 days  
Damages or defects must be notified in writing within 3 days
- RETURNS:** : Accepted only by prior agreement in writing and subject to re-handling charges
- DISCLAIMER** : Pressures, temperatures and other technical information stated in this price list are guides only, please contact us with specific application details
- AVAILABILITY** : Although most of the products in this price book are stocked in Rathnew, we cannot hope to cover all options. Please contact us for confirmation of availability

**E & OE**

**Please note:**

The information provided is only to be used as a guide, no responsibility will be accepted for any errors or changes in dimensions from our suppliers.

**Disclaimer:**

Although every effort is made to ensure the information in this Price List is correct at the time of printing, no responsibility can be accepted for any errors or omissions, nor for any loss or damage which may arise from the errors or omissions.

**UNIT 13 VILLAGE MILL ENTERPRISE PARK  
RATHNEW, CO. WICKLOW, A67HX57  
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Tel: 0404 64353**

**CREDIT CARDS ACCEPTED**





## Albion Art.40PB Brass Ball Valve WRAS

Blue Lever  
 Full Bore, PTFE Seats & Seals  
 PN40 Rated, Screwed BSPP Female  
 Temp: -20°C to 130°C  
 \*\*Sizes 2½", 3" & 4" are Art..54 (25 bar rated)



**WRAS Approved for Potable Water**

½"	¾"	1"	1¼"	1½"	2"	**2½"	**3"	**4"
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## Albion Art.40PR Brass Ball Valve WRAS

Red Lever  
 Full Bore, PTFE Seats & Seals,  
 PN40 Rated, Screwed BSPP Female  
 Temp: -20°C to 130°C



**WRAS Approved for Potable Water**

½"	¾"	1"	1¼"	1½"	2"			
----	----	----	-----	-----	----	--	--	--



## Albion Art.40PYL Brass Ball Valve WRAS - Lockable

Locking Lever  
 Full Bore, PTFE Seats & Seals  
 PN40 Rated, Screwed BSPP Female  
 Temp: -20°C to 130°C



**WRAS Approved for Potable Water**

½"	¾"	1"	1¼"	1½"	2"			
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## Albion Art.40B Brass Ball Valve WRAS - Extension

Spindle Extension  
 Full Bore, PTFE Seats & Seals  
 PN40 Rated, Screwed BSPP Female  
 Temp: -20°C to 130°C



**WRAS Approved for Potable Water**

½"	¾"	1"	1¼"	1½"	2"			
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## Albion Art.40PY Brass Ball Valve For Gas

Max pressure rating for gas: 5 bar  
 Full Bore, PTFE Seats & Seals  
 Screwed BSPP Female  
 Temp: -20°C to 60°C  
**EN331 Certified for Gas**

¼"	⅜"
----	----

½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"
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## Albion Art.41 Brass Ball Valve WRAS

Lever, Blue, Red or Yellow  
 Full Bore, PTFE Seats & Seals  
 PN40 Rated, Screwed BSPP Male x Female  
 Temp: -20°C to 140°C



**WRAS Approved for Potable Water**

½"	¾"	1"	1¼"	1½"	2"			
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### Albion Art.89 Brass Ball Valve

Full Bore, PTFE Seats  
 PN25 Rated, Temp: -10°C to 110°C  
 Compression Ends for Metric Copper  
 EN331:1995 Certified for Gas



#### Metric Copper

15mm	22mm	28mm	35mm	42mm	54mm			
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### Instantor Brass Ball Valve

Full Bore, PTFE Seats  
 PN16 Rated, Temp: 85°C  
 Compression Ends for Irish Copper  
 Lever Operated  
 Available with Red or Blue Levers up to 1"



#### Irish Copper

1/2"	3/4"	1"			Non WRAS	1 1/4"	1 1/2"	2"
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### Albion Art.50 DZR Brass Ball Valve

Full Bore, PTFE Seats & Seals  
 PN40 Rated  
 Temp: -20C to 130C  
 Screwed BSP Taper threads



1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### Albion Art.59 DZR Brass Ball Valve

Full Bore, PTFE Seats & Seals  
 PN40 Rated  
 Temp: -20C to 130C  
 Metric Compression Ends



15mm	22mm	28mm	35mm	42mm	54mm			
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### Albion Art 160 Brass Ball Valve - ISO Top

Full Bore, PTFE Seats & Seals  
 1/4" to 1" 40 bar, 1 1/4" 32 bar, 1 1/2" to 2 1/2" 30 bar, 3" 25 bar  
 Temp: -20°C to 120°C, Screwed BSP Female



#### ISO Direct Mount for Actuation

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
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Far Temperature Gauge Holder Ball Valves



## Albion Art.18 Compression Isolation Valve

Full Bore, NBR O-Rings  
10 bar Rated, Temp: -20°C to 110°C  
Compression Ends for Metric Copper

**Metric Copper**

15mm	22mm								
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## Reliance BVAL Brass Ball Valve

Full Bore PTFE Seats  
10 bar Rated, Temp: Max 85°C  
Compression Ends for Metric Copper  
Available with and without nickel plating



15mm	22mm								
------	------	--	--	--	--	--	--	--	--



## GE 3272E Brass 3-Way Ball Valve-L-Port

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -10°C to 90°C  
Screwed BSP Female  
Lever Operated

1/2"	3/4"	1"							
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## GE 3282E Brass 3-Way Ball Valve - T - Port

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -10°C to 90°C  
Screwed BSP Female  
Lever Operated

1/2"	3/4"	1"							
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## Albion Art 87 Brass 3-Way T-Port Ball Valve

PTFE Seals  
Lever available  
Screwed BSPP  
PN30 up to 3/4", PN20 to 1 1/2", PN16 up to 2"

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## Albion Art 88 Brass 3-Way L-Port Ball Valves

PTFE Seals  
Lever Available  
Screwed BSPP  
PN30 up to 3/4", PN20 to 1 1/2", PN16 up to 2"

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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### GE 3029 Brass Ball Valve

Full Bore, PTFE Seats & Seals  
Temp: -20°C to 90°C  
PN25 Rated  
Screwed BSP Female, Lever Operated

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 3032 Brass Ball Valve

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -20°C to 90°C  
Screwed BSP Female, Lever Operated  
Two side 1/4" inlet, one open/ one with plug

1/2"	3/4"	1"							
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### GE 3033 Brass Ball Valve Male x Male

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -20°C to 90°C  
Screwed BSP Male x Male  
Lever Operated

**Male x Male Threads**

1/2"	3/4"	1"							
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### GE 3034 Brass Ball Valve Male x Female

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -20°C to 90°C  
Screwed BSP Male x Female  
Lever Operated

**Male x Female Threads**

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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### GE 3035 Brass Ball Valves (3037 Red Handle)

Full Bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -20°C to 90°C  
Screwed BSP Female  
Aluminium Butterfly Handle

1/4"	3/8"	1/2"	3/4"	1"					
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### GE 3036 Brass Ball Valves Male x Female (3038 Red Handle)

Full bore, PTFE Seats & Seals  
PN25 Rated, Temp Range: -20°C to 90°C  
Screwed BSP Male x Female  
Aluminium Butterfly Handle

1/4"	3/8"	1/2"	3/4"	1"					
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### GE 3044 Boiler Discharge Ball Valve

Full Bore PTFE Seats  
 PN25 Rated, Temp Range: -20°C to 90°C  
 Male BSP x Hose Connection with safety cap

1/2" X 15mm								
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### GE 3046 Brass Ball Valve

Full Bore, PTFE Seats & Seals  
 PN25 Rated, Temp Range: -20°C to 90°C  
 Male Union End x Female BSP  
 Lever Operated

1/2"	3/4"	1"	1 1/4"					
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### GE 3048 Brass Ball Valve

Full Bore, PTFE Seats & Seals  
 PN25 Rated, Temp Range: -20°C to 90°C  
 Male Union End x Female BSP  
 Lever Operated

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### Effebi Hipress Brass Ball Valve

Reduced Bore, High Resistance Virgin PTFE  
 PN210 Rated, Temp Range: -10°C to 80°C  
 Anti Blow Out Stem  
 Screwed BSP, T Handle

3/8"	1/2"	3/4"	1"					
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### GE 3081 Brass Ball Valve - Copperweld

Full Bore  
 PTFE Seats  
 PN16 Rated, Temp Range: -20° to 110°C  
 T-Handle available

15mm	18mm	22mm	28mm	35mm	42mm	54mm		
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### RuB S84 Brass Spring Return Ball Valve

Screwed BSP Ends  
 Full Bore, Spring Return Lever  
 Brass Body & Ball  
 PTFE Seats & Seals

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### GE 2014 316SS 2-Piece Ball Valves - Screwed BSPP

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals, Locking System  
PN63 Rated, Temp: -25°C to 180°C  
Art. 2015 with ISO5211 direct mounting  
Available with NPT threads

									1/4"
3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	



### GE 2025 316SS 3-Piece Ball Valves - Screwed BSPP

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
ISO 5211 with locking System  
Available with NPT threads

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 2026 316SS 3-Piece Ball Valves - Butt Weld

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
ISO 5211 with locking System

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 2027 316SS 3-Piece Ball Valves - Socket Weld

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
ISO 5211 with locking System

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 2034 Carbon Steel 3-Piece Ball Valves - Screwed BSP

WCB Carbon Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
With locking System  
Available with NPT threads

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 2034S Carbon Steel 3-Piece Ball Valves - Socket Weld

WCB Carbon Steel Body, AISI 316SS Ball, Full Bore  
PTFE + 15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
With locking System

								1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### GE 2040 316SS 3 Way L-Port Ball Valves

A351 CF8M SS Body & 316 Ball, ISO 5211 with Locking System  
 PTFE +15% GF Seats & Seals  
 Reduced Bore, L-Port  
 PN63 Rated, Temp: -25°C to 180°C  
 Available with NPT Threads

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
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### GE 2041 316SS 3 Way T-Port Ball Valves

A351 CF8M SS Body & 316 Ball, ISO 5211 with Locking System  
 PTFE +15% GF Seats & Seals  
 Reduced Bore, T-Port  
 PN63 Rated, Temp: -25°C to 180°C  
 Available with NPT Threads

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
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### GE 2528 Stainless Steel Ball Valves PN16

A351 CF8M Stainless Steel Body  
 PTFE +15% GF Seats & Seals  
 Flanged PN16, Temp: -30°C to 180°C  
 ISO 5211 with Locking System

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



### GE 2528A Stainless Steel Ball Valves - ANSI 150

A351 CF8M Stainless Steel Body  
 PTFE +15% GF Seats & Seals  
 Flanged ANSI 150, Temp: -30°C to 180°C  
 ISO 5211 with Locking System

						1/2"	3/4"	1"
1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"



### GE 2525 Ductile Iron Ball Valve - PN16

GGG40 Body, 304SS Ball  
 PTFE +15% GF Seats & Seals  
 Flanged PN16, Temp: -30°C to 180°C  
 ISO 5211 with Locking System

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



### GE 2118 316SS Water Pattern Ball Valve

316 Stainless Steel Body & Ball  
 PTFE +15% GF Seats, Full Bore  
 16 bar Rated, Temp: -20°C to 180°C  
 Flanged PN16, Direct Mount ISO 5211  
 Lockable Lever

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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### GE 2007 Carbon Steel High Pressure Ball Valve

A105 Carbon Steel Body  
AISI 304SS Ball & Stem, Full Bore  
PEEK Seats & Seals  
PN255 Rated, Temp: -30°C to 250°C  
Available with NPT Threads

1/4"	3/8"	1/2"	3/4"	1"				
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### GE 2008 316SS 2-Piece High Pressure Ball Valves

A351 CF8M Stainless Steel Body, Locking System  
AISI 316 SS Ball, Full Bore  
PTFE +15% GF Seats & Seals  
PN140 Rated, Temp: -25% to 180°C

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
------	------	------	------	----	--------	--------	----	--



### GE2009 316SS 2 Piece Ball Valve

A351 CF8M Stainless Steel Body, T-Handle  
AISI 316SS Ball, Full Bore  
PTFE +15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C

1/4"	3/8"	1/2"	3/4"	1"				
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### GE 2010 316SS 2-Piece Ball Valve (Male x Female)

A351 CF8M Stainless Steel Body, T-Handle  
AISI 316SS Ball, Full Bore  
PTFE +15% GF Seats & Seals  
PN63 Rated, Temp: -25°C to 180°C  
Available with Lever

1/4"	3/8"	1/2"	3/4"	1"				
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### Oliver 316SS 10,000 PSI Rated Ball Valves

316SS Stainless Steel Body  
AISI 316SS Ball, Full Bore  
PTFE Seats & Seals  
-40°C to 120°C

1/4"	3/8"	1/2"	3/4"	1"				
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### EA HF3110 Spring Return Ball Valve

Screwed BSP Ends  
Full Bore, Spring Return Lever  
A351 CF8M Body & Ball  
PTFE Seats & Seals

1/4"	3/8"	1/2"	3/4"	1"				
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### GE 2015 316SS 2-Piece Ball Valve - ISO Top

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
 PTFE +15% GF Seats, Locking System  
 PN63 Rated, Temp: -25°C to 180°C  
 Sizes ¼" to 2"  
 Available with NPT Threads

¼"	¾"	½"	¾"	1"	1¼"	1½"	2"	
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### GE2933 St Steel Hygenic Ball Valve - Clamp Ends

316 Stainless Steel Body Construction  
 Clamp End Connections  
 Cavity Filled PTFE Seats  
 25 bar pressure rated  
 Temp rating -25°C to +180°C

½"	¾"	1"	1¼"	1½"	2"	2½"	3"	
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### GE 2013 316SS 2-Piece Ball Valve MxF BSP

A351 CF8M Stainless Steel Body, T-Handle  
 AISI 316SS Ball, Full Bore  
 PTFE +15% GF Seats & Seals  
 PN63 Rated, Temp: -25°C to 180°C

¼"	¾"	½"	¾"	1"				
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### GE2016 316SS Ball Valve - BSP x Camlock

A351 CF8M SS Body & 316 Ball, ISO 5211 with Locking System  
 PTFE +15% GF Seats & Seals  
 PN63 Rated, Temp: -25°C to 180°C  
 Full Bore

½"	¾"	1"	1¼"	1½"	2"	2½"	3"	
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### GE2048 316SS Union Ball Valve - BSP

A351 CF8M Stainless Steel Body, AISI 316SS Ball, Full Bore  
 PTFE +15% GF Seats & Seals  
 PN63 Rated, Temp: -25°C to 180°C  
 ISO 5211 with Locking System

1"	1¼"	1½"						
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### Valpres 710063 3 Piece Ball Valve - For Steam

ASTM WCB Carbon Steel Body, SS Ball & Stem  
 Full Bore, Screwed BSP Female  
 PTFE +25% Carbo-graphite Seats & Seals  
 From -20°C to 198°C

**Available in butt weld & socket weld**

							1/4"	3/8"	
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### Valpres 710060 3 Piece Ball Valve For Steam

CF8M 316 Stainless Steel  
 Full Bore, Screwed BSP Female  
 PTFE +25% Carbo-graphite Seats & Seals  
 From -20°C to 198°C

**Available in butt weld & socket weld**

							1/4"	3/8"	
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	



### Valpres 760020 Carbon Steel Ball Valve For Steam

A216-WCB CS Body, 316SS Ball, Carbo-graphite Seats  
 Full Bore, Temp. From -20°C to 180°C  
 Flanged PN40 up to 50mm, PN16 above  
 Available for ANSI 150 Flanging

**Anti-static & Firesafe**

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



### Valpres 760011 Stainless Steel Ball Valve for Steam

316SS Body, 316SS Ball, Carbo-graphite Seats  
 Full Bore, Temp. From -20°C to 180°C  
 Flanged PN40 up to 50mm, PN16 above  
 Available for ANSI 150 Flanging

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



### Valpres 722000 Carbon Steel Wafer Ball Valve

A105-WCB CS Body, 316SS Ball, PTFE Seats  
 Full Bore, Temp. From -10°C to 160°C, Flanged PN16  
 Available for PN40/PN63/ANSI 150/300 Flanging  
 Special executions available

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



### Valpres 721000 Stainless Steel Wafer Ball Valve

A351 CF8M Body, 316SS Ball, PTFE Seats  
 Full Bore, Temp. From -20°C to 160°C  
 Flanged PN16  
 Available for PN40/PN63/ANSI 150/300 Flanging  
 Special Executions available

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



## Valpres 68 Series Split Body Ball Valve

LF2, 316, F55, LCC, WCB, Supler Duplex Constructions  
 PTFE, GF PTFE, Metal Core, TFM, PEEK, Carbographe Seats  
 PN16, PN40, ANSI 150, ANSI 300  
 Firesafe EN ISO, API 607, SIL 3  
 For PN16 or ANSI 150 Flangng

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## Valpres 76 Series Split Body Ball Valves

Stainless Steel, Carbon Steel Construction  
 PTFE, GF PTFE, Metal Core or Carbographe Seats  
 PN6, PN16, PN40 PN63, ANSI 150, 300, 600  
 V-Ball Options available  
 Jacketed

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## Valpres 77 Series Wafer L-Port Ball Valve

316 Stainless Steel Body & Ball, PTFE Seats  
 Reduced Port  
 Temp: -20°C to 160°C  
 Flanged PN16

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Tuning 0944 Carbon Steel Ball Valve

A216 WCB Body, CF8M Ball, RTFE Seats  
 Full Bore, Anti Blowout Stem, Antistatic Devices  
 Firesafe API607, ISO Pad, Locking Device  
 Temp: -29°C to 200°C  
 Available BSP/Butt Weld/Socket Weld/NPT

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
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## Tuning 0934 Stainless Steel Ball Valve

CF8M 316 Stainless Steel Body & Ball, RTFE Seats  
 Full Bore, Anti Blowout Stem, Antistatic Device  
 Fire safe API 607, ISO Pad, Locking Device  
 Temp: - 29°C to 200°C  
 Available BSP/Butt Weld/Socket Weld/NPT

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
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## Tuning Stainless & Carbon Steel 3-Way Ball Valve

L-Port or T-Port, Flanged PN16 or ANSI 150  
 Full Bore, RTFE Seats & Seals  
 PN16 Rated, Temp: -20°C to 200°C

25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm
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### Uniwat VF701PGGE Wafer Butterfly Valve

Ductile Iron Epoxy Coated Body, Nickel Plated Ductile Iron Disc  
 EPDM Seat, Other disc & liner materials on request  
 Lever Operated \*Lever not recommended for DN300  
 For PN10/16/ANSI 150 Flanging

						25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



### Uniwat VF701RGGE Wafer Butterfly Valve

Ductile Iron Epoxy Coated Body, Nickel Plated Ductile Iron Disc  
 EPDM Seat, Other disc & liner materials on request  
 Gearbox Operated  
 For PN10/16/ANSI 150 Flanging

				50mm	65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm



### Uniwat VF701PGIE Wafer Butterfly Valve

Ductile Iron Epoxy Coated Body, AISI 316SS Disc  
 EPDM Seat, Other disc & liner materials on request  
 Lever Operated, \* Lever not recommended for DN300  
 For PN10/16/ANSI 150 Flanging



						25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



### Uniwat VF70RGIE Wafer Butterfly Valve

Ductile Iron Epoxy Coated Body, 316SS Disc  
 EPDM Seat, Other disc & liner materials on request  
 Gearbox Operated  
 For PN10/16/ANSI 150 Flanging



				50mm	65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm



### Uniwat VF700PGIT Wafer Butterfly Valve

Ductile Iron Epoxy Coated Body, 316SS Disc  
 PTFE Seat  
 Lever Operated up to 200mm  
 Rated 10 bar, For PN10/16 Flanging  
 Available up to DN600

							50mm	65mm
80mm	100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm



### Uniwat VF700PIIT Wafer Butterfly Valve

Stainless Steel Body, 316SS Disc  
 PTFE Liner  
 Lever Operated up to 100mm  
 Rated 10 bar, For PN 10/16 Flanging  
 Available up to DN600

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniwat VF750PGE Fully Lugged Butterfly Valve

Cast Iron Epoxy Body, Nickel Plated Ductile Iron Disc  
EPDM Seat, Other disc & liner materials on request  
Lever Operated \*Lever not recommended for DN300  
For PN16 Flanging

**Ductile Iron Bodies also available up to 1000mm**

						25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## Uniwat VF750RGE Fully Lugged Butterfly Valve

Cast Iron Epoxy Coated Body, Nickel Plated Ductile Iron Disc  
EPDM Seat, Other disc & liner materials on request  
Gearbox Operated  
F or PN16 Flanging

**Ductile Iron Bodies avail. up to 1000mm**

						50mm-65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm	



## Uniwat VF750PIE Fully Lugged Butterfly Valve

Cast Iron Epoxy Coated Body, AISI 316SS Disc  
EPDM Seat, Other disc & liner materials on request  
Lever Operated \*Lever not recommended for DN300  
For PN16 Flanging

**Carbon & St Steel Bodies available**



						25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## Uniwat VF750RIE Fully Lugged Butterfly Valve

Cast Iron Epoxy Coated Body, 316SS Disc  
EPDM Seat, Other disc & liner materials on request  
Gearbox Operated  
For PN16 Flanging

**Carbon & St Steel Bodies available**



						50mm-65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm	



## Uniwat VF7UOPGIE U-Section Butterfly Valve

Ductile Iron Epoxy Coated Body, 316SS Disc  
EPDM Seat, Other disc & liner materials on request  
Lever Operated up to DN250, Gear op from DN150 to DN120  
Rated 16 bar, For PN16 Flanging

**Available up to DN1200**



						150mm	200mm	250mm	300mm
350mm	400mm	450mm	500mm	600mm	700mm	800mm	900mm	1000mm	



## Uniwat VF790P/RGE Double Concentric Butterfly Valve

Ductile Iron Epoxy Coated Body, Ductile Iron Disc  
EPDM Seat, Other materials on request  
Gearbox Operated  
For PN16 Flanging

**Available up to DN1200**



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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# Uniwat Butterfly Valves



## Uniwat VF791RGE Double Eccentric Butterfly Valve

Ductile Iron Epoxy Coated Body, Ductile Iron Disc  
EPDM Seat, Other materials on request  
Gearbox Operated  
For PN16 Flanging



**Available up to DN1200**

150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm	100mm
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## Uniwat VF700/750 PIIE St Steel Wafer Butterfly Valve

Wafer Pattern & Fully Lugged\* (Max DN600)  
Stainless Steel Body & Disc, (Cast Steel available)  
EPDM Seat, Other disc & liner materials on request  
Lever Operated up to DN250  
Various flanging available



**Available up to DN1200\***

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Valsar VF733B Lugged Butterfly Valve for Gas

Ductile Iron Rilsan Coated Body, Nitrile Seats  
316 Stainless Steel Disc  
Lever Operated, 10 position Notchplate, 200mm + with Gearboxes  
PN16 Flanging, ATEX certified EX II 2 G/D  
Max 5 bar for gas isolation

40mm
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50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Albion Art.145 Lugged Butterfly Valve for Gas

Ductile Iron Rilsan Coated Body, Nitrile Seats  
Nickel Plated Ductile Iron Disc  
Lever Operated, 10 position Notchplate, 200mm + with Gearboxes  
PN16 Flanging, Lockable  
Max 5 bar for gas isolation

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Albion Art.135 PN25 Lugged Butterfly Valve

Ductile Iron Rilsan Coated Body, EPDM Seats  
316 Stainless Steel Disc  
Lever Operated, 10 Position Notchplate  
PN25 Flanging, Lockable

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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Valsar Butterfly Valves

High Performance - High Temperature (EFT) - CS - SS - DI - PN16 - PN40 - ANSI 150



## InterApp Desponia D1 Butterfly Valve

Rilsan Coated Ductile Iron Body & Disc  
 EPDM Seat, Suitable for PN6/10/16, ANSI 150  
 Lever Operated up to 200mm Gearbox from 250mm and above  
 Various material options available for body, discs and seats

					25-32mm	40-50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## InterApp Desponia D3 Fully Lugged Butterfly Valve

Rilsan Coated Ductile Iron Body & Disc Gearbox from 250mm and above  
 EPDM Seat, Other materials on request For PN16 Flanging  
 Lever Operated up to 200mm Also available for ANSI 150 Flanging

			25-32mm	40-50mm	65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm



## InterApp Desponia D1 Wafer Butterfly Valve - SS Disc

Rilsan coated Ductile Iron Body & 316SS Disc  
 EPDM Seat, Suitable for PN6/10/16, ANSI 150  
 Lever Operated up to 200mm, Gearbox from 250mm and above  
 Various material options available for body discs and seats

					25-32mm	40-50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## InterApp Desponia D3 Fully Lugged Butterfly Valve - SS Disc

Rilsan Coated Ductile Iron Body & 316 SS Disc  
 EPDM Seat, Other materials on request Gearbox from 250mm and above, For PN16 Flanging  
 Lever Operated up to 200mm Also available for ANSI 150 Flanging

			25-32mm	40-50mm	65mm	80mm	100mm	125mm
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm



## InterApp Bianca Hi Purity Butterfly Valves

Epoxy Coated Ductile Iron Body, SS Disc, PTFE Liner  
 Lever Operated, 10 position Notchplate  
 Various material options available for body, discs and seats  
 Full range from DN32 to DN900

**Also available in B3 Lugged and B4 U-Section versions**

32-50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### InterApp - Ball Valves - Check Valves

PTFE Lined Valves





**Cimberio 70BS Brass Gate Valve**

Screwed Female BSP  
BS 5154-B/B Type PN20  
9 bar @ 180°C  
20 bar @ 100°C

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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**Cimberio 70BSL Brass Lockshield Valve**

Screwed Female BSP  
BS5154-B/B Type PN20  
9 bar @ 180°C  
20 bar @ 100°C

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	
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**Albion 960 Stainless Steel Gate Valve - Screwed BSP**

CF8M Stainless Steel  
PTFE Seal  
Screwed BSP Female  
Max pressure 16 bar  
Temp range: -25°C to +180°C

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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**Uniflow S99 Forged Steel Gate Valve - Class 800**

A105N Body 13% Cr. HFS (No. 8) Trim  
Bolted Bonnet, OS&Y  
Temp: -29°C ~ 425°C  
Available with BSP, NPT and Socket Weld Ends  
Other trims available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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**CIM 72 Bronze Gate Valve**

Flanged PN6/10/16  
Bronze Body  
Max Temp 170°C

							15mm	20mm
25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm



Albion Bronze, DZR Brass, WRAS Gate Valves & Lockshield Valves



## Uniwat 504C Ductile Iron Gate Valve - DIN

Ductile Iron Body & Bonnet, Handwheel Operated  
Resilient Seat, SS Stem, EPDM Encapsulated Wedge  
Flanged PN16, Max Pressure: 16 bar  
DIN/BS5150



**Available up to DN1000**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	40mm
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## Uniwat 504C Ductile Iron Gate Valve - BS5163

Ductile Iron Body & Bonnet, Handwheel Operated  
Resilient Seat, SS Stem, EPDM Encapsulated Wedge  
Flanged PN16, Max Pressure: 16 bar  
To BS5163



**Available up to DN1000**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniflow 90AO Cast Steel Gate Valve - PN16

Flanged PN16  
Body & Bonnet: Cast Steel 1.0619+N  
Trim 8: Wedge: 1.0619+N+Cr13, Seat Integral+HF  
Stem: A182 F6a

**Available up to DN600**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniflow 90AO Cast Steel Gate Valve - PN25

Flanged PN25  
Body & Bonnet: Cast Steel 1.0619+N  
Trim 8: Wedge: 1.0619+N+Cr13, Seat Integral+HF  
Stem: A182 F6a

**Available up to DN600**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniflow 90AO Cast Steel Gate Valve - PN40

Flanged PN40  
Body & Bonnet: Cast Steel 1.0619+N  
Trim 8: Wedge: 1.0619+N+Cr13, Seat Integral+HF  
Stem: A182 F6a

**Available up to DN600**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniwat 507E Ductile Iron Gate Valve

Ductile Iron Body & Bonnet,  
Wedge, EPDM Coated (NBR available)  
Stem in Stainless Steel 420, Flanged PN16  
Rated 16 bar, Max Temp 90°C

**Available up to DN450**

100mm	125mm	150mm	200mm	250mm	300mm	50mm	65mm	80mm
						350mm	400mm	450mm

# Flanged Gate Valves



## Albion 210 Cast Iron Gate Valve - Flanged Table E

Cast Iron Body  
Bronze Trim, SS Stem  
conforms to BS3463  
Flanged BS10 Table E  
Temp: -10°C to 150°C

2"	2½"	3"	4"	5"	6"	8"	10"	12"
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## SF156 Cast Iron Gate Valve - Flanged PN16

Ductile Iron Body, Wedge & Bonnet  
Rising Stainless Steel Stem & Brass Seat  
Flanged PN16  
Rated 16 bar & 120°C  
Max Temp 120°C

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	40mm
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## TT Flow BS5163 Ductile Iron Gate Valve - Handwheel

To BS5163:2004 & EN1171:2002  
Epoxy Coated Ductile Iron Body  
Metal Seat, Clockwise Closing or AC closing  
Flanged PN16: Handwheel Operated  
WRAS listed components

**Available in larger sizes**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## TT Flow BS5163 Ductile Iron Gate Valve - Iso Top

To BS5163:2004 & EN1171:2002  
Epoxy Coated Ductile Iron Body  
Metal Seat, Clockwise Closing or AC closing  
Flanged PN16  
WRAS listed components

**Available in larger sizes**

80mm	100mm	125mm	150mm	200mm	250mm	300mm		
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## Genebre Forged Steel Gate Valve - Class 150

A105N Body 13% Cr, HFS (No. 5) Trim  
Bolted Bonnet, OS&Y  
Flanged ANSI 150RF  
Temp: -29°C ~ 425°C

½"	¾"	1"	1¼"	1½"	2"			
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## Uniflow S90 Cast Steel Gate Valves - ANSI 150

Design & manufacture to: API 6d-0398 10434:2004  
Body & Bonnet ASTM A216 WCB  
Seat A105 + 13% Cr, Trim #8  
Temp: -29°C ~ 425°C  
Available up to 20", in ANSI 300 & ANSI 600 and in stainless steel

2"	2½"	3"	4"	5"	6"	8"	10"	12"
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### Cimberio 81 Bronze Globe Valve

PTFE Disc  
Screwed BSP  
7 bar @ 180°C  
20 bar @ 100°C

**Suitable for Steam**

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### Albion 961 Stainless Steel Globe Valve

CF8M Stainless Steel Construction  
PTFE Seal  
Screwed BSP Female  
Max pressure 16 bar  
Temp range: -25°C to +180°C

**Suitable for Steam**

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### VYC 248 Bellow Sealed Globe Valve - NI

Nodular Iron Body, SS Internals  
304SS Bellow, Graphite Packing  
Rated 10 bar @ 300°C, 16 bar @ 120°C, Min Temp -10°C  
Flanged PN16

**Suitable for Steam**

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



### VYC 248 Bellow Sealed Globe Valve - CS

Cast Steel Body, SS Internals  
304SS Bellow, Graphite Packing  
Rated 23 bar @ 400°C, 40 bar @ 50°C, Min temp -20°C  
Flanged PN40

**Suitable for Steam**

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



### VYC 248 Bellow Sealed Globe Valve - SS

316SS Body & Internals  
316LSS Bellow, Graphite packing  
Rated 27.40 bar @ 400°C, 40 bar @ 50°C, Min temp -40°C  
Flanged PN40

**Suitable for Steam**

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



### Cimberio 82 Bronze Globe Valve

PTFE Disc  
Flanged PN6/10/16  
7 bar @ 170°C  
16 bar @ 100°C

**Suitable for Steam**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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# Globe Valves



## FB 01-401 Right Angle Globe Valves

Cast Iron Body  
 Flanged PN16  
 Available with cast iron, cast steel, bronze bodies  
 Available flanged PN10, PN16, JIS 5K, 10K, 16K etc

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## FB 01-396 Screw Down Non Return Valve

Cast Iron Body  
 Flanged PN16  
 Available with cast iron, cast steel, bronze bodies  
 Available flanged PN10, PN16, JIS 5K, 10K, 16K etc

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## FB 01-404 Right Angle Screw Down Non Return Valves

Cast Iron Body  
 Flanged PN16  
 Available with cast iron, cast steel, bronze bodies  
 Available flanged PN10, PN16, JIS 5K, 10K, 16K etc

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## Fire Valves

Available with bronze, gunmetal bodies  
 Available flanged PN10, PN16, JIS 5K, 10K, 16K etc

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## Storm Valves

Available with bronze, gunmetal bodies  
 Available flanged PN10, PN16, JIS 5K, 10K, 16K etc

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



MARINE VALVES - BRONZE VALVES - JIS VALVES - QUICK CLOSING VALVES

# Brass/Bronze Check Valves



## Albion 384 Bronze Swing Check Valve

Screwed BSPT  
 Max. 20 bar  
 Temp: -10°C to +232°C  
 To BS5154 (BS EN12288)



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Albion 84M Brass Swing Check Valves

Screwed Female BSPP  
 Metal Seat  
 Temp: -10°C to +150°C  
 Rated PN20

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	
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## Europa Brass Spring Non Return Valve

Screwed Female BSP  
 Stainless Steel Plate & Spring  
 Nitrile/Brass Seal  
 Temp: -20°C to +100°C

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3/8"
								4"



## Altecnic Single Check Valves

Screwed BSP  
 Max pressure: 10 bar  
 Max temp 85°C



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Altecnic/ Reliance Double Check Valves

Screwed BSP & Metric Compression  
 Max pressure: 10 bar  
 Max. temp: 85°C  
 Sizes 1 1/4", 1 1/2" & 2" Reliance Brand



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	15mm	22mm	28mm
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## Utam V1550 Bronze Horizontal Lift Check Valves

Bronze Body & Bonnet, Teflon disc  
 Max temp: 198°C @ 14 bar  
 Max pressure 32 bar @ 100°C  
 Screwed BSP Female

**Suitable for Steam**

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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# Check/Non-Return Valves



## Uni-Check 3141N Cast Iron Ball Check Valve

Cast Iron Epoxy Coated Body & Cover  
 Aluminium Nitrile Coated Ball  
 NBR Bonnet Joint  
 Screwed BSP, Design Pressure 10 bar  
 Also available in stainless steel

1 1/4"	1 1/2"	2"	2 1/2"	3"				
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## CIM 32 Brass Spring Loaded Check Valve MXF

Screwed BSP Male x Female  
 Temp: -10°C to +95°C  
 Rated PN16

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Albion 965 St Steel Swing Check Valve

Screwed BSP Female  
 Max Temp: 200°C  
 Max. pressure: 16 bar

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## GE 2413 Stainless Steel Spring Check Valve

316SS Body, Disc & Spring, PTFE Seal  
 Rated PN63, Screwed BSP Female  
 Temp: -20°C to +200°C

1/2"	3/4"	1"						
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## GE 2416 Stainless Steel Spring Check Valve

316SS Body, Disc & Spring, Metal Seat  
 Rated PN63, Screwed BSP Female  
 Temp: -20°C to +240°C

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	1/4"	3/8"
							3"	4"



## Stainless Steel Check Valves

Threaded BSP, NPT, Butt Weld, Socket Weld  
 3-Piece Design  
 Temp: -20°C to 200°C  
 Metal Seats, PTFE Gasket

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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# Check/Non Return Valves



## SF 360 Cast Iron Swing Check Valves

Cast Iron Body & Disc  
Metal Seat, Available with EPDM Seat  
Flanged & Drilled PN16  
Max Temp: 120°C

40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
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## BS5153 Ductile Iron Swing Check Valve

To BS5153:1974 (BS EN 12334:2001)  
Epoxy Coated Ductile Iron Body  
Metal Seat, Flanged PN16



50mm	80mm	100mm	150mm	200mm	250mm	300mm	
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## BS5153 Ductile Iron Swing Check Valve with Lever & Weight

To BS5153:1974 (BS EN 12334:2001)  
Epoxy Coated Ductile Iron Body  
Metal Seat, Flanged PN16  
Available up to DN1000



50-65mm	80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm
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## GE 2450 Disc Check Valve

GG25 Epoxy Coated Cast Iron Body  
NBR Seal, Silent Closing  
Temp: -10°C to 100°C  
Flanged PN16

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm
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## Weflo Cast Iron Disc Check Valve

Cast Iron Epoxy Coated Body  
Cast Iron Disc  
EPDM Seal  
Temp: -10°C to 120°C  
Flanged PN16



2"	2½"	3"	4"	5"	6"	8"	10"	12"
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## Uni-Check 3240N Cast Iron Ball Check Valve

Cast Iron Epoxy Coated Body & Cover  
Aluminium Nitrile Coated Ball  
Design Pressure 10 bar, Flanged PN16 up to 150mm  
PN10 200mm and above (PN16 available in other brands)  
Available in stainless steel

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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# Flanged/Wafer Check/Non Return Valves



## Uniwat 5107 Flex Swing Check Valve

Epoxy Coated Ductile Iron Body  
EPDM Lined Steel Disc  
Max 130°C, Rated PN16  
WRAS Approved sizes: DN200 to Dn600



**Available up to DN600**

					50-65mm	80mm	100mm	125mm	
150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm	

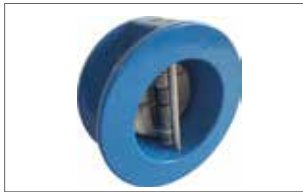


## Uniwat CH2263 Dual Plate Check Valve

Cast Iron Body 316SS Plates  
AISI 304SS Springs & Stem  
EPDM Seat, Max 130°C  
PN10/16/ANSI 150 Flanging  
Fully stainless steel version available

**Available up to DN600**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	
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## Albion Art. 136 Dual Plate Check Valve

Cast Iron Body, 316SS Plates  
AISI 304 SS Springs & Stem  
EPDM Seat, Max 120°C  
PN10/16/ANSI 150 Flanging  
Available in larger sizes



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	
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## GE2406 Stainless Steel Wafer Swing Check Valve

AISI 316 Stainless Steel Body & Disc  
Viton Seals  
Suitable for PN10-16-25 Flanging  
Rated 16 bar, Max Temp. 180°C

**Available up to DN900**

									40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	



## GE2415 Wafer Disc Check Valve

316SS Body, Disc & Spring  
Suitable for PN10/16 & ANSI 150 Flanging  
Rated 40 bar, Max Temp. 240°C

**GE Art.2402 316SS Dual Plate Check Valve also available**

						15mm	20mm	25mm	
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	

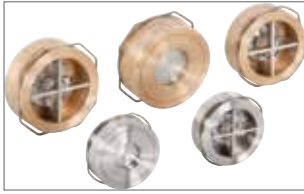


## Albion Art.236 Double Check Valve

Ductile Iron Body, Epoxy Coated  
Flanged PN16  
Nitrile 70 Shore Seals & Gaskets  
Rated 16 bar, Working Temp. 0°C to 23°C  
WRAS Approved as non return valve



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm		
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## VYC 170/172 Disc Check Valve

Bronze Construction, Cast Iron available DN125 to DN250  
 Max Temp: 250°C, Max pressure: 16 bar  
 Also available in Carbon Steel & Stainless Steel  
 For installing between flanges DIN, BS or ANSI

*Suitable for Steam*

				15mm	20mm	25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## VYC 179 Brass Piston Check Valve

Brass Construction  
 Max temp: 200°C  
 Max pressure: 200 bar  
 Screwed BSP, NPT or Socket Weld

*Suitable for Steam/Gases/Liquids*

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## Uniflow S35 Forged Steel Piston Check Valve - Class 800

A105N Body 13% Cr, HFS (No. 8) Trim  
 Bolted Bonnet, OS&Y  
 Temp: -29°C ~ 425°C  
 Available with BSP, NPT and Socket Weld Ends  
 Other trims available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Uniflow S39 Forged Steel Swing Check Valve - Class 800

A105N body 13% Cr, HFS (No 8) Trim  
 Bolted Bonnet, OS&Y  
 Temp: -29°C ~ 425°C  
 Available with BSP, NPT and Socket Weld Ends  
 Other trims available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Uniflow 3S Cast Steel Swing Check Valve - ANSI 150RF

Body & Bonnet ASTM A216 WCB  
 Seat A105 +13% Cr. Trim #1  
 Temp: -29°C ~ 425°C  
 Available up to 20" in ANSI 300 & ANSI 600

2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
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## Uniflow 3P Cast Steel Lift Disc Check Valve - ANSI 150RF

Body & Bonnet ASTM A216 WCB  
 Seat A105 +13% Cr. Trim #1  
 Temp: -29°C ~ 425°C  
 Available up to 20" in ANSI 300 & ANSI 600

2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
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# Threaded Strainers



## CIM 74ACR DZR Brass Y-Strainer

HNBR Gasket, Screwed BSP  
Stainless Steel Filter (0.65mm)  
Temp: -20°C to +180°C  
Max 20 bar

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Altecnic Brass-Y Strainer

Stainless Steel Filter, Screwed BSP  
0.4mm 1/2" to 1", 0.47mm 1 1/4" & 1 1/2", 0.53mm 2"  
PN10 rating  
Max Temp: 120°C



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Altecnic Brass Y-Strainer - Compression Ends

Metric Compression Ends  
Stainless Steel Filter 0.10mm for 15mm, 0.40mm for 22 & 28mm  
PN16 rating up to 30°C  
PN6 rating up to 110°C



15mm	22mm	28mm						
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## SF231 Carbon Steel Y-Strainer

A105 Carbon Steel Body, 316SS Screen  
Screwed BSP (also available in NPT and Socket Weld)  
Mesh 0.8mm with draining cap,  
Max pressure: 138 bar, Temp: -29°C to +425°C

**Suitable for Steam**

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## YYC 191 Stainless Steel Y-Strainer - Screwed BSP

316 Stainless Steel Body & Cover  
AISI 316SS Screen, PTFE Gasket  
Rated 40 bar, Temp: -20°C to 180°C  
Screwed BSP, 1mm perforations

**Suitable for Steam**

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## GE2460 Stainless Steel Y-Strainer

Screwed BSP Female  
PTFE Seat  
Max Temp: 240°C  
Max pressure: 40 bar

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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# Y Strainers



## Uniwat 630WEG Ductile Iron Y-Strainers - Flanged PN16

Ductile Iron Body & Cover Epoxy Coated  
 AISI 304SS Screen, EPDM Gasket  
 Rated 16 bar, Max Temp 120°C  
 Flanged PN16



									40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	



## Uniwat 630WOG Ductile Iron Y-Strainers - Flanged PN16

Ductile Iron Body & Cover Epoxy Coated  
 AISI 304SS Screen, NBR Gasket  
 Rated 16 bar, Max Temp 80°C  
 Flanged PN16

									40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	



## YYC 090 Nodular Iron Y-Strainers - Flanged PN16

Nodular Cast Iron Body & Cover RAL5002 Painted  
 AISI 304SS Screen, Graphite + SS Gasket  
 Rated 16 bar, Max Temp 350°C  
 Flanged PN16

*Suitable for Steam*

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



## YYC 090 Carbon Steel Y-Strainers - Flanged PN40

Carbon Steel Body & Cover  
 AISI 304SS Screen, Graphite + SS Gasket  
 Rated 40 bar, Max Temp 400°C  
 Flanged PN40

*Suitable for Steam*

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



## GE 2461 St. Steel Y-Strainer - Flanged PN16

316 Stainless Steel Body & Cover, 304SS Screen  
 Max temp 240°C  
 Std mesh 1.0mm (DN15-50)  
 Std mesh 2.0mm (DN65 - 200)  
 ANSI 150 also available

							15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	



## GE 2461A St. Steel Y-Strainer - Flanged ANSI 150

316 Stainless Steel Body & Cover, 304SS Screen  
 Max temp 240°C  
 Std mesh 1.0mm (DN15-50)  
 Std mesh 2.0mm (DN65 - 200)  
 ANSI 150 also available

50mm	65mm	80mm	100mm	150mm	200mm				
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# Y Strainers



## Uniflow FOA Cast Steel Y-Strainer - PN40

Body ASTM A216 WCB  
F304 SS Screen  
Mesh DN50 1mm, DN65-80 1.25mm, DN100-300 1.6mm

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Uniflow FOA Cast Steel Y-Strainer - ANSI 150RF

Body ASTM A216 WCB  
F304 SS Screen  
Mesh DN50 1mm, DN65-80 1.25mm, DN100-300 1.6mm  
Available up to 24" and in ANSI 300

2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
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## Uniwat ST101F Basket Strainer - Flanged PN16

Ductile Iron Body & Cover Epoxy Coated  
F304 SS Screen, EPDM Gasket  
Rated 16 bar, Max temp 120°C  
Flanged PN16

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Simplex Basket Strainer

Cast Iron, Bronze, Carbon and Stainless Steel  
Threaded BSP or NPT  
Flanged PN16 and ANSI 150  
316SS Screens, Various mesh sizes available  
Various seal materials available

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	20mm	25mm
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## Duplex Basket Strainer

Cast Iron, Bronze, Carbon and Stainless Steel  
Threaded BSP or NPT  
Flanged PN16 and ANSI 150  
316SS Screens, Various mesh sizes available  
Various seal materials available

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm	20mm	25mm
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Self Cleaning Strainers - Temporary Strainers



## CIM746 Fixed Orifice Commissioning Valve

Corrosion Resistant Brass Body & Internals, Brass Test Points  
Screwed Female BSP  
Nominal Pressure PN25  
From -10°C to 120°C  
Approved for use with Potable Water



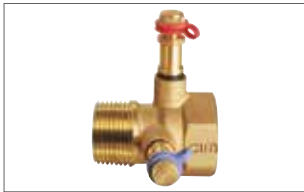
1/2" L	1/2" ML	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## CIM727 Double Regulating Valve

Corrosion Resistant Brass Body & Internals  
Screwed Female BSP  
Nominal Pressure PN20  
From -10°C to 120°C  
CIM 727L coupled with a CIM721 UL, L or ML for FODRV low flows

1/2" L	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## CIM721 Metering Station

Brass Flow Measuring Device  
Male x Female BSP  
Nominal Pressure PN20  
From -10°C to 120°C  
CIM 727L coupled with a CIM721 UL, L or ML for FODRV low flows

1/2" UL	1/2" L	1/2" ML	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2" UUL
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## CIM3739B Variable Orifice Double Regulating Valve

Cast Iron Body, Flanged PN16  
Nominal Pressure PN16  
From -10°C to 120°C  
Supplied with 2 test points  
*Also supplied under brand name Duyar*

65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	
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## Stainless Steel Orifice Plate

For PN16 Flanging  
Nominal Pressure PN16  
From -10°C to 120°C  
Supplied with 2 test points & Extension Tubes

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## CIM 778 Thermal Balancing Valve

With pressure gauge & insulation  
CR Brass Body & Internals  
Screwed Female BSP  
From -10°C to 90°C  
Rated PN25



Valve	1/2"	3/4"	1"		Insulation	1/2"	3/4"	1"
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## CIM 717 Pressure Independent Control Balancing Valve - Low & High Flow Options

CR Brass Body & Internals  
Screwed Female BSP  
From -10°C to 120°C

1/2" DN10 LF	3/4" DN15 LF	1/2" DN10 HF	3/4" DN 15 HF	1" DN20 HF	1 1/4" DN25 HF			
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## CIM 717 PICV with EMV311/ Pro Thermo-Electric

EMV 311 On/Off Thermo-Electric Actuator  
EMV 311/PRO Thermo-electric 0-10V Proportional  
EMV 212/144 0-10V Proportional Actuator  
EMV 212/147 3-Point Actuator

EMV311		EMV311PRO		EMV212/144		EMV212/147		
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## CIM 776 Pressure Independent Control Balancing Valve

CR Brass Body & Internals  
Screwed Female BSP  
EMV 212/148 0-10V Proportional Actuator  
EMV 212/150 3-Point Actuator

1 1/2" HF	2" HF		EVM211/148		EMV212/150			
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## CIM3776B Pressure Independent Control Balancing Valve - 24V 0-10V Actuator

Cast Iron Body & Bonnet  
From -20°C to 120°C  
Max pressure: 16 bar  
Operating range 30/50 kPa to 400 kPa

65mm	80mm	100mm	125mm	150mm		Gearbox		
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## CIM 718 & 767 Differential Pressure Control Valves

CR Brass Construction, Screwed BSP Female  
From -10°C to 120°C  
To be used in conjunction with CIM 787DP  
with Capillary Tube - Price shown for full kit  
CIM718 UP TO 1", CIM 767 ABOVE 1"

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## CIM 3767 Differential Pressure Control Valve

CR Brass Construction, Screwed BSP Female  
From -10°C to 120°C  
To be used in conjunction with CIM 3787  
with Capillary Tube - Price shown for full kit

65mm	80mm	100mm	125mm	150mm				
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## CIM 731 Monolink Terminal Units Connection System

Brass Construction  
 Threaded Connections  
 Pressure Class PN25  
 From -10°C to 120°C  
 Bespoke models available, extra ball valves, strainers etc

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## CIM 733/746 Monolink with Fixed Orifice Balancing Valve

Brass Construction, Threaded Connections  
 Pressure Class PN25  
 From -10°C to 120°  
 With Ball valve & Strainer

1/2" LF	1/2" MF	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## CIM 733/747 Monolink with Fixed Orifice Balancing Valve

Brass Construction, Threaded Connections  
 Pressure Class PN25  
 From -10°C to 120°C  
 With Ball valve & Strainer  
 Also available with CIM746

1/2" LF	1/2" MF	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## CIM 733/717 Pressure Independent Control Balancing Valve

Brass Construction, Threaded Connection  
 Pressure Class PN25  
 From -10°C to 120°C  
 Prices shown with modulating 0-10V electric actuator  
 Also available on/off, 3 point...

1/2" DN10	3/4" DN15	1" DN20	1 1/4" DN25					
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## CIM 733/717 Pressure Independent Control Balancing Valve

Brass Construction, Threaded Connections  
 Pressure Class PN25  
 From -10°C to 120°C  
 Prices shown with thermo electric actuator 0-10V Pro  
 Also available on/off, 3 point...

1/2" DN10	3/4" DN15	1" DN20	1 1/4" DN25					
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## CIM 790/3790 Automatic Flow Balancing Valve

CR Brass Body & Internals -Screwed BSP  
 GGG40 Ductile Iron Body Wafer Pattern for PN16 Flanging  
 Nominal Pressures CIM 790 PN25, CIM 3790 PN16  
 From -10°C to 120°C

			1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## Malgorani 143B Pressure Reducing Valves

DZR Brass Body & Internals, Stainless Steel Seat  
NBR 'O' Rings, Screwed BSP Female, Max Temp 80°C  
Max Inlet Pressure 25 bar, Adjustable Outlet Range 0.5-6 bar  
3/8" to 2" WRAS Approved, 2 1/2" to 4" ACS Approved



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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## Malgorani 143V Pressure Reducing Valves

Brass Body & Internals, Stainless Steel Seat  
Viton 'O' Rings, Screwed BSP Female  
Max Inlet Pressure 25 bar, Adjustable Outlet Range 0.5-6 bar  
Max. Temp. 130°C

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## CSA VRCD Pressure Reducing Valve

Max. Inlet pressure: 16 bar; Flanged PN16 (PN25 & PN40 available)  
Adjustable outlet pressure: 1.5-6 bar (5-12 bar available)  
Body & Cap in GS-400 Epoxy Coated  
[See page 39 for more CSA PRV's](#)



50mm	65mm	80mm	100mm	125mm	150mm		Gauge Kit	
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## FT 2440 316SS Pressure Reducing Valve

316 Stainless Steel Construction  
Available with EPDM or Viton Seals  
Screwed BSP, Flanged version available  
Max Inlet pressure : 16 bar  
Outlet Ranges, 1-6 bar, 4-10 bar, 8-13 bar



1/2"	3/4"	1"	1 1/2"	2"				
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## Reliance 315i Pressure Reducing Valves

DZR Brass Body, EPDM Seals & Diaphragm  
Stainless Steel Strainer  
Max Inlet Pressure 25 bar, Adjustable Outlet range 1-6 bar



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Goetze Series 481/482/681/682 Pressure Reducing Valves

Gunmetal or Stainless Steel Construction  
BSP Female, BSP Union Male Flanged PN16 or PN40 Connections  
Max Temp: -10°C to 95°C depending on version (SS not steam)  
Inlet pressure: Up to 40 bar, Outlet pressure range: 0.5 to 15 bar



### Liquids /Air/Vapours

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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# Pressure Reducing & Overflow Valves



## VYC 513 Pressure Reducing Valve

Body: Nodular Iron, Carbon Steel or Stainless Steel  
 Stainless Steel Internals, Screwed BSP Female  
 Max Inlet pressure: 17 bar, Max temp. 230°C  
 Outlet range 0.14 to 8.6 bar (3 springs)

**Suitable for Steam/Gases/Liquids**

1/2" - N.Iron	3/4" - N.Iron	1" - N.Iron	1/2" - CS	3/4" - CS	1" - CS	1/2" - SS	3/4" - SS	1" - SS
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## VYC 514 Pressure Reducing Valve

Body: Nodular Iron, Carbon Steel or Stainless Steel  
 Stainless Steel Internals, Flanged PN25  
 Max Inlet pressure: 17 bar, Max temp. 230°C  
 Outlet range 0.14 to 8.6 bar (3 springs)

**Suitable for Steam/Gases/Liquids**

15mm - N. Iron	20mm - N. Iron	25mm - N. Iron	15mm - CS	20mm - CS	25mm - CS	15mm -SS	20mm - SS	25mm - SS
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## VYC 614 Pressure Reducing Valve

Body: Carbon Steel  
 Stainless Steel Internals, Flanged PN16  
 Max pressure: 16 bar  
 Outlet range 0.14 to 8.6 bar (3 springs)

**Suitable for Steam/Gases**

25mm	32mm	40mm	50mm					
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## GE2274/2275 Pressure Reducing Valve

Body: Carbon Steel  
 Pilot Operated  
 Max pressure: 25 bar, (17 bar for steam)  
 Outlet range 0.50 to 12 bar  
 Max Temp: 260°C

**Suitable for Steam/Gases**

1 1/4"	1 1/2"	2"	15mm	20mm	25mm	1/2"	3/4"	1"
						32mm	40mm	50mm



## GE 2281 SS Pressure Reducing Valve

CF8 Stainless Steel  
 BSP Female BSP  
 Max Temp: 200°C  
 Set pressure ranges: 2 to 8 bar, 1 to 3 bar

1/2"	3/4"	1"						
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## Goetze Series 630/617 Overflow/Pressure Control Valve

Gunmetal Construction  
 BSP Female or BSP Union Male Connections (Flanged 631)  
 Max Temp: -10° to 95°C depending on version (SS Steam)  
 Set pressure range: 0.5 to 10 bar



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### VYC Model 095-ES Bronze/Brass Safety Valve

Proportional Lift, Closed Cap  
 BSP Male Inlet/Female Outlet  
 Max Temp: 260°C, Max. Set pressure: 25 bar (mixed construction over 16 bar)  
 Prices include certificates

**Suitable for Gases/Liquids**

							1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"



### VYC Model 095-AP Bronze/Brass Safety Valve

Proportional Lift, Closed Cap with lever  
 BSP Male Inlet/Female Outlet  
 Max Temp: 260°C, Max. Set pressure: 25 bar (Mixed Construction over 16 bar)  
 Prices include certificates

**Suitable for Steam/Gases/Liquids**

							1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"



### VYC Model 095-ES 316SS Safety Valve

Proportional Lift, BSP Male inlet/Female Outlet  
 Closed Cap with or without lever  
 Max Temp: 260°C, Max. Set pressure: 25 bar  
 Prices include certificates

**Suitable for Gases/Liquids**

							1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"



### VYC Model 095-AP 316SS Safety Valve

Proportional Lift, Closed Cap with lever  
 BSP Male inlet/Female Outlet  
 Max Temp: 260°C, Max. Set pressure: 25 bar  
 Prices include certificates

**Suitable for Steam/Gases/Liquids**

							1/4"	3/8"
1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"



### VYC Model 096 Safety Valve

Available in bronze/brass, stainless steel or mixed  
 Proportional Lift, Closed Cap with or without lever  
 Flanged PN16 Inlet/Female Outlet  
 Max. Set pressure: 25 bar - Max Temp: 260°C, Prices include certificates

**Suitable for Steam/Gases/Liquids**

							8 x 1/4"	10 x 3/8"
15 x 1/2"	20 x 3/4"	25 x 1"	32 x 1 1/4"	40 x 1 1/2"	50 x 2"	65 x 2 1/2"	80 x 3"	100 x 4"



### VYC 795 Vacuum Breaker Safety Valve

Brass Body, Stainless Steel Internals Screwed BSP male  
 Max Temp: 150°C  
 Max pressure: 16 bar  
 Available in Stainless Steel

**Suitable for Gases**

3/8"	1/2"	3/4"	1"					
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## VYC Model 295-ES/AP/EP Bronze Safety Valve

Normal Lift, Closed Cap or with Lever  
 BSP Male Inlet/Female Outlet  
 Max Temp: 260°C, Max Set Pressure: 25 bar  
 Available in Cast Steel

**Suitable for Steam/Gases/Liquids**

1/2 x 1"	3/4 x 1 1/4"	1 x 1 1/2"	1 1/4 x 2"				
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## VYC Model 295-ES/AP/EP Bronze Safety Valve

Normal Lift, Closed Cap or with Lever  
 Inlet Flange PN25/40, Outlet Flange PN10/16  
 Max Temp: 260°C, Max Set Pressure: 25 bar  
 Available in Cast Steel

**Suitable for Steam/Gases/Liquids**

15 x 25	20 x 32	25 x 40	32 x 50				
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## VYC Model 295-ES/AP/EP 316SS Safety Valve

Normal Lift, Closed Cap or with Lever  
 BSP Male Inlet/Female Outlet  
 Max Temp: 260°C, Max. Set Pressure: 25 bar  
 Available in Cast Steel

**Suitable for Steam/Gases/Liquids**

1/2 x 1"	3/4 x 1 1/4"	1 x 1 1/2"	1 1/4 x 2"				
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## VYC Model 295-ES/AP/EP 316SS Safety Valve

Normal Lift, Closed Cap or with lever  
 Inlet Flange PN25/40, Outlet Flange PN10/16  
 Max Temp: 260°C, Max. Set Pressure: 25 bar  
 Available in Cast Steel

**Suitable for Steam/Gases/Liquids**

15 x 25	20 x 32	25 x 40	32 x 50				
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## VYC Model 695 Bronze Safety Valve

Full Lift, Open with Lever (Closed Cap available)  
 BSP or NPT Male inlet/Female Outlet  
 Max. Temp: 200°C  
 Max. Set Pressure: 36 bar

**Suitable for Steam/Gases/Liquids**

3/8" x 1/2"	1/2"	1/2" x 3/4"	3/4"	3/4" x 1"	1"		
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## VYC Model 695 316SS Safety Valve

Full Lift, Open with Lever (Closed Cap available)  
 BSP or NPT Male inlet/Female Outlet  
 Max. Temp: 200°C  
 Max. Set Pressure: 36 bar

**Suitable for Steam/Gases/Liquids**

3/8" x 1/2"	1/2"	1/2" x 3/4"	3/4"	3/4" x 1"	1"		
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### VYC Model 496 Safety Valve EN

Full Lift Cast Iron Construction  
 Also available in Nodular Iron/Cast & Stainless Steel  
 Flanged & Rated PN16 & PN40, Max Temp: from -60°C to 450°C

*Suitable for Steam/Gases/Liquids*

32 x 50	40 x 65	50 x 80	65 x 100	80 x 125	100 x 150	125 x 200	150 x 250	200 x 300
							20 x 32	25 x 40



### VYC Model 486 Safety Valve ASME

Full Lift Carbon Steel Construction  
 Also available in Stainless Steel, Flanged & Rated ANSI 150 & 300lb  
 Max Temp: From -20°F to 842°F - Max set pressure: 580 psi

*Suitable for Steam/Gases/Liquids*

1" x 2"	1½ x 2"	1½ x 2½"	1½ x 3"	2" x 3"	3" x 4"	4" x 6"	6" x 8"	8" x 10"
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### VYC Model 495 Safety Valve EN

Full Lift Cast Iron Construction  
 Also available in Nodular Iron/Cast & Stainless Steel  
 Female Thread BSP (495) or NPT (485), Max set pressure: 40 bar/580 psi  
 Max Temp: from -60°C to 450°C / -20°F to 842°F

*Suitable for Steam/Gases/ Liquids*

¾" x 1¼"	1" x 1½"							
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### VYC Model 494 Safety Valve

Full Lift Cast Iron Construction  
 Also available in Nodular Iron/Cast & Stainless Steel  
 Max Temp: from -60°C to 450°C,  
 Std mesh 2.0mm (DN40-200)

*Suitable for Steam/Gases/Liquids*

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
								25mm



### VYC Model 596 Safety Valve - Max 62 Bar

Full Lift Carbon Steel Construction  
 Also available in Stainless Steel  
 Max Temp: from -60°C to 450°C,

*Suitable for Steam/Gases/Liquids*

50 x 80	65 x 100	80 x 125	100 x 150	125 x 200	150 x 250	200 x 300	250 x 350	300 x 400
							25 x 32	25 x 40
								32 x 50
								40 x 65



### VYC Model 696 Safety Valve - Max 95 Bar

Full Lift Carbon Steel Construction  
 Also available in Stainless Steel  
 Max Temp: from -60°C to 450°C

*Suitable for Steam/Gases/Liquids*

50 x 80	65 x 100	80 x 125	100 x 150	125 x 200	150 x 250	200 x 300	250 x 350	300 x 400
							25 x 40	32 x 50
								40 x 65

We have the facilities to set VYC Safety Valves at specific set pressures



Price Dependent on Valve Size, Type and Spring Range



### Goetze Series 645 Safety Valve

Gunmetal Construction  
 Female BSP Connections  
 Max Temp: -50° to 205°C depending on version  
 Set pressure range: 0.5 to 16 bar  
 Various Seat Seals/diaphragm materials available



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### Goetze Series 645 Safety Valve

Stainless Steel Inlet Gunmetal Outlet  
 Female BSP Connections  
 Max Temp: -50° to 205°C depending on version  
 Set pressure range: 0.5 to 16 bar  
 Various Seat Seals/diaphragm materials available



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### Goetze Series 810/410 Atmospheric Safety Valve

Gunmetal or Stainless Steel Construction  
 Male BSP Connections  
 Max Temp: -60°C to 225°C depending on version  
 Set pressure range: 0.2 to 50 bar  
 Various Seat Seals/Diaphragm materials available

1/4"	3/8"	1/2"	3/4"	1"				
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### Goetze Series 812/412 Atmospheric Safety Valve

Gunmetal or Stainless Steel Construction  
 Male BSP Connections  
 Max Temp: -60°C to 225°C depending on version  
 Set pressure range: 0,2 to 50 bar  
 Various Seat Seals/Diaphragm materials available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### Goetze Hygenic Series Valves

Stainless Steel Construction  
 Clamp Connections  
 Max Temp: -40°C to 200°C depending on version  
 Set pressure range: 0,4 to 106 bar  
 FKM or EPDM Seals

DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	
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Other Goetze Valve Series



## CSA VRCD Pressure Reducing Valve

Max. Inlet pressure: 16 bar, Flanged PN16 (PN25 & PN40 Available)  
 Adjustable outlet pressure: 1.5 - 6 bar (5-12 bar available)  
 Body & Cap in GS-400 Epoxy Coated  
 Model VRCD-M with Diaphragm  
 Model VRCD-XN - Maintenance Free



50mm	65mm	80mm	100mm	125mm	150mm		Gauge Kit	
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## CSA VSM Pressure Relief/Sustaining Valve

Max. Inlet pressure: 40 bar, Flanged PN16  
 Body & Cap in GS-400 Epoxy Coated  
 SS Trim, NBR Gaskets, Spring 55iCr6 Coated



50mm	65mm	80mm	100mm	125mm	150mm		Gauge Kit	
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## CSA XLC410 Pressure Reducing Valve

Body & Cover in GS 400-15 Epoxy Coated  
 Flanged PN16, Stainless steel internal parts & pipes  
 Also options for stabilizing, two set points, pressure management  
 solenoid controlled, flow rate & reducing

**WRAS Approved Epoxy Coating**

								50mm
65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	400mm



## CSA XLC420 Pressure Relief/Sustaining Valve

Body & Cover in GS 400-15 Epoxy Coated  
 Flanged PN16, Stainless steel internal parts & pipes  
 Also options for upstream relief, upstream sustaining  
 surge anticipating, differential sustaining

**WRAS Approved Epoxy Coating**

								50mm
65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	400mm



## CSA XLC430 Flow Control Valves

Body & Cover in GS 400-15 Epoxy Coated  
 Flanged PN16, Stainless steel internal parts & pipes  
 Also options for flow rate & reducing, min/max level control  
 solenoid controlled, excess flow control

**WRAS Approved Epoxy Coating**

								50mm
65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	400mm



Flow Control Valves	Level Control Valves	Altitude Control Valves	Solenoid Control Valves	
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## CSA Air Valves



### CSA Fox 3F Combination Air Valve

Body, Cap & Mobile flanges in GJS 450-10, Epoxy Coated  
 Solid Polypropylene float, SS Seat  
 Pressure range: 10-16-25-40 bar, Minimum working: 0.2 bar  
 Treated water maximum 60°C, higher on request  
 Available in AS & RFP versions



1"	2"	50mm	80mm	100mm	150mm	200mm	250mm	
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### CSA Fox 3F-HP Combination Air Valve

Body in GJS 450-15 Epoxy Coated  
 Solid Polypropylene Float, SS Seat  
 Pressure range: 10-16-25-40 bar  
 Minimum working pressure: 0.2 bar  
 Treated water maximum 60°C, higher on request



2"	50mm	65mm	80mm	100mm	150mm	200mm		
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### CSA SCA Three Function Air Valve For Sewage

**Double Function for sewage**  
 Body in GS 400-15 Epoxy Coated  
 Float, Rod & Nozzle in SS, NBR Gaskets  
 Available in AS & RFP options

2"	50mm	65mm	80mm	100mm	150mm	200mm		
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### CSA SCF Waste Water Combination Air Valve

Body & Cap in GS 400-15 Epoxy Coated  
 Float, Rod & Anti Hammer unit in SS  
 NBR Gaskets

2"	50mm	65mm	80mm	100mm	150mm	200mm		
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### CSA SCS Raw Water Combination Air Valve

Body & Cap in 316 Stainless Steel  
 Stainless Steel Trim, Flanged PN16/25/40  
 Maximum 60°C, higher on request  
 Available with Anti Surge feature  
 Available up to DN400

SCS	2"	SCS-AS	2"					
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### CSA Argo Combination Air Valve

Body & Cap in Glass Reinforced Polypropylene (GRPP)  
 BSP or NPT Threads  
 Treated water maximum 60°C  
 Max pressure 40 bar  
 Min pressure 0.3 bar



1"	2"							
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### CSA Fox 3F-AS-HR Surge Arrestors

Anti-shock air valve for high rise buildings and pumping stations  
 Max temperature: Treated Water 60°C  
 Max Pressure: 40 bar  
 Min Pressure: 0.2 bar

1"		PN10	PN16	PN25	PN40				
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### CSA Ventolo Air Release Valve

Body & Cap in GJS 450-10 Epoxy Coated  
 Float & internals stainless steel  
 Pressure range: 10-16-25-40 bar  
 Minimum working pressure: 0.2 bar  
 Treated water maximum 60°C

1"		PN16	PN25	PN40					
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### CSA Lynx 3F Combination Air Valve

Body, Cap & Mobile flanges in GJS 450-10, Epoxy Coated  
 solid Polypropylene Float, SS Seat  
 flanged PN16-also in PN25 & PN40  
 Minimum, working pressure: 0.2 bar  
 Treated water maximum 60°C



								2"	
50mm	80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm	



### CSA Lynx 3F-AS Combination Air Valve

Anti-Water Hammer Version  
 Body, Cap & Mobile flanges in GJS 450-10, Epoxy Coated  
 Solid Polypropylene Float, SS Seat  
 Flanged PN16 - also in PN25 & PN40  
 Minimum working pressure: 0.2 bar



								2"	
50mm	80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm	



### CSA Lynx 3F-RFP Combination Air Valve

Anti Surge Version  
 Body, Cap & Mobile flanges in GJS 450-10, Epoxy Coated  
 Solid Polypropylene Float, SS Seat  
 Flanged PN16 - Also in PN25 & PN40  
 Minimum working pressure: 0.2 bar



								2"	
50mm	80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm	



### CSA Golia 3F Combination Air Valve

Body & Cap in 316 Stainless Steel, Float in solid PP  
 Stainless Steel Trim, Flanged PN16 - Also in PN25 & PN40  
 Treated water maximum 60°C  
 Available in AS & RFP versions  
 Available up to DN400

1"	2"	50mm	80mm	100mm	150mm	200mm			
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# Thermostatic Mixing Valves



## Albion Art.33 Thermostatic Mixing Valve

DZR Brass Body & Internals  
 Metric Compression Ends  
 Art. 33 - 2 in 1 without isolating valves  
 Art. 33SV 4 in 1 with isolating valves  
 Threaded Version Art. 33MBSP - 2 in 1 without isolating valves



2 in 1	15mm	22mm	4 in 1	15mm	22mm	BSP	1/2"	3/4"
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## Reliance Ausimix Thermostatic Mixing Valve

DZR Brass Body & Internals  
 Metric Compression Ends  
 Dual TMV2-3  
 2 om 1 without isolating valves  
 4 in 1 with isolating valves



2 in 1	15mm	22mm	4 in 1	15mm	22mm			
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## Reliance Heatguard Dual Thermostatic Mixing Valve

DZR Brass Body & Internals  
 Metric Compression Ends  
 Dual TMV2-3  
 2 in 1 without isolating valves  
 4 in 1 with isolating valves



2 in 1	15mm	22mm	4 in 1	15mm	22mm			
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## Altecnic 5213/5219 Thermostatic Mixing Valve

DZR Brass Body & Internals  
 Metric Compression Ends  
 Dual TMV2-3  
 2 in 1 prices shown  
 Art 5219 - TMV2



No valves	15mm	22mm	With valves	15mm	22mm	No Valves	28mm	
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## Altecnic 5231 Thermostatic Mixing Valve

Chrome Plated Brass Body & Internals  
 Screwed BSP  
 TMV2  
 2 in 1 prices shown



1"	1 1/4"	1 1/2"	2"					
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Group Mixers - Tempering Valves



# Float Valves



## CSA Athena Equilibrium Ball Float Valve

Balanced Single Seat  
 Body & Cap in GS-400 Epoxy Coated  
 Internal Parts in Stainless Steel & Bronze  
 NBR Gaskets, 304SS Float  
 Available with Anti-freezing kit at extra cost



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	40mm
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## PSV 501 Equilibrium Ball Float Valve

Body, Cover: Cast Iron  
 Valve Disc: EPDM bonded to steel plate  
 Flanged PN16, Rated for 10 bar  
 including Float in Rilsan coated steel



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## VYC Model 151 Stainless Steel Float Valve

316SS Stainless Steel  
 Max Temp: 200°C  
 Max. Set pressure: 16 bar  
 Screwed BSP Male  
 Price does not include float/buoy

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
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## VYC Model 152 Stainless Steel Buoy

316SS Stainless Steel  
 Temperature and pressure ratings depend on size and shape of buoy

60mm	90mm	110mm	150mm	200mm	300mm		
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## BR Series 15.1 Brass Noiseless Float Valve

Max Temp: 60°C  
 Max Working Pressure: 5 bar for Series 9 (1/2" & 3/4")  
 Max Working Pressure: 12 bar for Series 15  
 Screwed BSP Male

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## BR Series 20.2 Copper Float

Rubber Floats available

120 - 1/2"	120 - 3/4"	180 - 1"	200 - 1 1/4"	220 - 1 1/2"	250 - 2"		
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### GE 2452 Foot Valve with Strainer

GG25 Cast Iron Body  
NBR seals, Flanged PN16  
Temperature rating -10°C to 100°C

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	
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### GE 2448 Foot Valve with Strainer

316SS Construction  
Viton Seat, PTFE Gasket  
Flanged PN16  
Manual Emptying System

50mm	65mm	80mm	100mm	125mm	150mm	200mm		
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### Weflo Cast Iron Foot Valve

Cast Iron Epoxy Coated Body  
Cast Iron Disc, 304 SS Basket  
EPDM Seal  
Temp: -10°C to +120°C  
Flanged PN16



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### GE 2447 Stainless Steel Filters

Screwed Male BSP  
All parts 316SS  
Sieve: 1/2" to 2" 1mm  
Sieve: 2 1/2" to 4" 1.9mm

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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### GE 3160 Stainless Steel Filters

Screwed Male BSP  
Nylon Thread, SS Strainer  
Available with SS threads

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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### GE 2451 Strainer

Zinc Plated Steel  
Available with PN10 & PN16 Drilling  
Stainless steel available

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	
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### GE 2221 3000 LBS Needle Valve

A105 Carbon Steel Body  
Screwed Female  
Working Temp. -20°C to 250°C

*Available to order with NPT Thread*

1/4"	3/8"	1/2"	3/4"	1"				
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### GE 2223 3000 LBS Needle Valve

316 Stainless Steel Body  
Screwed Female  
Working Temp. -20°C to 250°C

*Available to order with NPT Thread*

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### GE 2225 6000 LBS Needle Valve

316 Stainless Steel Body  
Screwed BSP Female  
Working Temp. -54°C to 250°C  
Max Working pressure: 410 bar  
GE2226 with male x female threads

*Available to order with NPT Thread*



1/4"	3/8"	1/2"	3/4"	1"		GE2226	1/4"	1/2"
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### VYC 147 Needle Valves

Brass Construction  
Rated 200 bar  
Max Temp: 200°C  
Screwed BSP, NPT or Socket Weld

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### VYC 147 Needle Valves

Carbon Steel Construction  
Rated 250 bar,  
Max Temp: 400°C  
Screwed BSP, NPT or Socket Weld

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### VYC 147 Needle Valves

Stainless Steel Construction  
Rated 250 bar  
Max Temp: 400°C  
Screwed BSP, NPT or Socket Weld

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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### Weir Type Diaphragm Valve

GGG40 Ductile Iron Body & Bonnet  
Screwed BSP Female  
EPDM Diaphragm, Others on request  
Handwheel Operated

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
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### Weir Type Diaphragm Valve

GGG40 Ductile Iron Body & Bonnet, Lined Bodies available  
Flanged PN16, ANSI 150 available  
Natural Rubber Diaphragm, Others on request  
Handwheel Operated

				15mm	20mm	25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



### Straight Through Type Diaphragm Valve

GGG40 Ductile Iron Body & Bonnet  
Screwed BSP Female  
Natural Rubber Diaphragm, Others on request  
Handwheel Operated

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"		
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### Straight Through Type Diaphragm Valve

GGG40 Ductile Iron Body & Bonnet, Lined Bodies available  
Flanged PN16, ANSI 150 available  
Natural Rubber Diaphragm, Others on request  
Handwheel Operated

				15mm	20mm	25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



### Spare Diaphragms

Weir type, straight through type

Compatible with SAUNDERS DIAPHRAGM VALVES



Natural Rubber, White Rubber, EPDM, Butyl, Nitrile, Neoprene, Hypalon
Viton, PTFE/EPDM, PTFE/Butyl, PTFE/Viton



Normally Open Pneumatic, Normally Closed Pneumatic, Handwheel
Coatings - Hard Rubber - Soft Rubber, Butyl, ECTFE-HALAR, ETFE, PVDF, FEF, PP, Hypalon

# Solenoid Valves



## Albion SLP NC Brass Pilot OP Solenoid Valves

2/2 Way, Normally Closed  
 Brass Body, EPDM Seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-120°C max  
 Pressure: 0.5 max. dependent on voltage and medium



3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## Albion SLP NO Brass Pilot OP Solenoid Valves

2/2 Way, Normally Open  
 Brass Body, EPDM Seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-120°C max  
 Pressure: 0.5 max. dependent on voltage and medium



3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## Albion ZS NC Brass Servo-Activated Solenoid Valves

2/2 Way, Normally Closed  
 Brass Body, NBR Seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-80°C max  
 Pressure: 0 to 10 bar depending on voltage and medium

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## Albion ZS NO Brass Servo-Activated Solenoid Valves

2/2 Way, Normally Open  
 Brass Body NBR Seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-80°C max  
 Pressure: 0 to 10 bar depending on voltage and medium

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## PU220 & AD Brass Assisted Lift Solenoid Valves

2/2 Way, Normally Closed, NBR Seals, (EPDM & FKM Seals available)  
 Pressure: 0 to 16 bar max dependent on voltage  
 Media Temperature: 80°C max, Ambient Temperature: -20 to 60°C max  
 IP 65 Coil, (Atex, EEx coils available)

**Normally closed**

PU220	3/8"	1/2"	3/4"	1"	AD	1 1/4"	1 1/2"	2"
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## PU220AR Brass Direct Acting Solenoid Valves

2/2 Way, Normally Closed, NBR Seals, (EPDM & FKM Seals available)  
 Pressure: 0 to 16 bar max dependent on voltage etc  
 Media Temperature: 80°C max, Ambient Temperature: -20 to 60°C max  
 IP 65 Coil, (Atex, EEx coils available)

**Normally closed**

1/8"	1/4"	3/8"						
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# Solenoid Valves



## Albion ZS NC St Steel Servo-Activated Solenoid Valves

2/2 Way, Normally Closed  
 302SS Body NBR Seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-80°C max  
 Pressure: 0 to 10 bar depending on voltage and medium

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## Albion ZS NO St Steel Servo-Activated Solenoid Valves

2/2 Way, Normally Open  
 302SS Body, NBR seals  
 24V ac/dc, 110V, 220V, 12V dc  
 Media Temperature: 0-80° max  
 Pressure: 0 to 10 bar depending on voltage and medium

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## MD316 Stainless Steel Assisted Solenoid Valves

2/2 Way, Normally Closed, NBR Seals, (EPDM & FKM Seals available)  
 Pressure: 0 to 10 bar max. Normally Open available  
 Media Temperature: 100°C max., Ambient Temperature: -20 to 60°C max  
 IP65 coil

**Available Normally Open**

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## NOAD 612 Brass Direct Acting Solenoid Valves

2/2 Way, Normally Open NBR Seals, (EPDM & FKM Seals available)  
 Pressure: 0 to 10 bar max. dependent on voltage etc  
 Media Temperature: 80°C max., Ambient Temperature: -20 to 60°C max  
 IP65 Coil

**Normally Open**

1/8"	1/4"	3/8"	1/2"					
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## UWNO Brass Assisted Lift Solenoid Valves

2/2 Way, Normally Open NBR Seals, (EPDM & FKM Seals available)  
 Pressure: 0 to 10 bar max. dependent on voltage  
 Media Temperature: 80°C max., Ambient Temperature: -20 to 60°C max  
 IP65 coil

**Normally Open**

3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
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## MKS Bronze Steam Direct Acting Solenoid Valves

2/2 Way, Normally Closed, PTFE & Graphite Seals  
 Pressure: 0 to 10 bar max.  
 Media Temperature: 180°C max., Ambient Temperature: -20 to 50°C max  
 IP65 coil, (Atex, EEx coils available)

**Suitable for steam**

1/2"	3/4"	1"						
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# HP Pneumatic Actuators



## HP Double Acting Pneumatic Actuator

Available in 90° spring return/double acting, 180° double acting & 180° spring return 3-position fail to mid (RPC)  
ATEX certified and CE marked  
All components have high corrosion resistance

					HP50D	HP63D	HP66D	HP75D
HP88D	HP100D	HP115D	HP125D	HP145D	HP160D	HP180D	HP200D	HP212D



## HP Spring Return Pneumatic Actuator

Available in 90° spring return/double acting, 180° double acting & 180° spring return 3-position fail to mid (RPC)  
ATEX certified and CE marked  
All components have high corrosion resistance

					HP50S	HP63S	HP66S	HP75S
HP88S	HP100S	HP115S	HP125S	HP145S	HP160S	HP180S	HP200S	HP212S



## Asco 551 Solenoid Valve

3-5/2 Namur Mounted Solenoid Valves  
Temp: -25°C to +60°C  
IP65 rated, WP:2 to 10 bar  
Manifold valves also available  
LED coils available

	220V		110V		24V AC		24V DC	
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## APL Mechanical Switchbox

Please contact us for any special switchbox requirements  
Also available: ATEX, STAINLESS STEEL, EX RATED  
PROXIMITY, WATERPROOF



APL210 IP67 2 X 3v Switches	APL230 IP67 24Vdc Switches	APL510IP67 Atex Eexd 2 x V3
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## Electro-Pneumatic Positioner

Position Transmitter 4-20mA Output Signal  
Stainless steel pressure gauges  
Aluminium Die Cast material



Power Genex EPR 4-20mA In/Out	Power Genex 4-20mA In/Out ATEX	Power Genex SSR 4-20 mA In/Out
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## Square Reducers - Adaptors Shim/Star Reducers - Adaptors

11 x 8	11 x 9	14 x 11	17 x 11	17 x 14	22 x 17	27 x 17	27 x 22	36 x 27
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# HQ & Auma Electric Actuators



## HQ004/HQ006 Electric Actuator - On/Off

220V, 24V & 110V. IP67 rated  
Manual Override, Position Indicator, Limit Switches  
Heater, all standard features, ISO 5211 Connections  
ISO 5211 Connections

**Available Ex & IP68 rated**

HQ004	24V	110V	220V		HQ006	24V	110V	220V
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## HQ005 Electric Actuator

Multi Voltage, 24V C, 110V, 220V  
IP67 rated, Neutral Switching  
Manual Override, Position Indicator, Heater, All Standard features  
Also available with PCU Modulating Control  
Also available with RPB = Battery-Back-Up

**Neutral Switching**

On/Off	24V AC/DC	110-230V	PCU	24V AC/DC	110-230V	RBP	24V AC/DC	110-230V
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## HQ Electric Actuator - On/Off

220V, 24V, 110V & 380V  
IP67 rated, 75% duty rating  
Manual Override, Position Indicator, Limit Switches  
Heater, all standard features, ISO 5211 Connections

**Available Ex & IP68 rated**

HQ015	HQ020	HQ030	HQ050	HQ060	HQ080	HQ120	HQ200	HQ300	HQ008
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## HQ Electric Actuator -4-20MA PCU Modulating Control

220V, 24V & 110V  
IP67 rated, 4-20mA Positioner Card  
Manual Override, Position Indicator  
Heater, all standard features, ISO 5211 Connections

HQ006	HQ008	HQ015	HQ020	HQ030	HQ050	HQ060	HQ080	HQ120	HQ005
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## HQ Electric Actuator - with Battery Back-Up HQ Electric Actuator - with Local Control Unit

220V, 24V & 10V, IP67 rated  
Manual Override, Position Indicator  
Heater, all standard features, ISO 5211 Connections

HQ008	HQ015	HQ020	HQ030					
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TCR Electric Actuators	AUMA Electric Actuators
On/Off - Quick Acting - Fail Safe	SA Multi Turn - SG Quarter Turn



# Electric Actuated Valves



## Brass Ball Valve - Albion Art.160 c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Full Bore Screwed BSP  
 PTFE Seats & Seals  
 Also available with HQ003

½" HQ005	¾" HQ005	1" HQ005	1¼" HQ005	1½" HQ005	2" HQ005	2½" HQ005	3" HQ005
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## 3-Piece 316SS Ball Valve - GE 2025 c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Full Bore Screwed BSP  
 PTFE Seats & Seals  
 Also available with HQ003 up to 1½"

½" HQ005	¾" HQ005	1" HQ005	1¼" HQ005	1½" HQ005	2" HQ005	2½" HQ005	3" HQ008	4" HQ015
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## Wafer Butterfly Valve - Uniwat VF701PGGE c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Wafer Pattern - Nickel Plated Ductile Iron Disc  
 EPDM Liner - other materials available

*Available in larger sizes*

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Wafer Butterfly Valve - Uniwat VF701PGIE c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Wafer Pattern - 316SS Disc  
 EPDM Liner - other materials available

*Available in larger sizes*

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Fully Lugged Butterfly Valve - Uniwat VF750PGE c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Fully Lugged Pattern - Nickel Plated Ductile Iron Disc  
 EPDM Liner - other materials available

*Available in larger sizes*

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Fully Lugged Butterfly Valve - Uniwat VF750PIE c/w HQ Electric Actuator

Available in 220V, 110V. 24V AC or DC  
 Fully Lugged Pattern - 316SS Disc  
 EPDM Liner - other materials available

*Available in larger sizes*

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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# Electric - Actuated Valves



## Ductile Iron Ball Valve - GE 2525 c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 316SS Ball, PTFE Seats & Seals  
 Flanged PN16, Full Bore  
 From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## 316 Stainless Steel Ball Valves - GE 2528 c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 316SS Ball, PTFE Seats & Seals  
 Full Bore, Flanged PN16  
 From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## 316 Stainless Steel Ball Valves - GE 2528A c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 316SS Ball, PTFE Seats & Seals  
 Full Bore, Flanged PN16 (ANSI 150 available)  
 From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Carbon Steel 2-Way Ball Valve - GE 2526A c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 316SS Ball, PTFE Seats & Seals  
 Full Bore, Flanged ANSI 150  
 From -30°C to 150°C

25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm
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## Praher M1 PVC-U Double Union Ball Valves c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 EPDM/PTFE Seats & Seals  
 Metric ends from stock - Imperial to order

20mm	25mm	32mm	40mm	50mm	63mm			
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## Comer ABS Double Union Ball Valves c/w HQ Electric Actuator

Available in 220V, 110V, 24V AC or DC  
 EPDM/PTFE Seats & Seals  
 Full Bore, Imperial Solvent Socket Ends - threaded available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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# Pneumatic - Actuated Valves



## Brass Ball Valve - Albion Art.160 c/w Double Acting Pneumatic Actuator

Screwed BSP  
Full Bore  
PTFE Seats & Seals

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	
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## Brass Ball Valve - Albion Art.160 c/w Spring Return Pneumatic Actuator

Screwed BSP  
Full Bore  
PTFE Seats & Seals

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	
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## 3-Piece 316SS Ball Valve - GE2025 c/w Double Acting Pneumatic Actuator

Screwed BSP, Butt Weld or Socket Weld  
PTFE Seats & Seals  
Full Bore

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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## 3-Piece 316SS Ball Valve - GE2025 c/w Spring Return Pneumatic Actuator

Screwed BSP, Butt Weld or Socket Weld  
PTFE Seats & Seals  
Full Bore

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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## 3-Way 316SS Ball Valves - GE2040/2041 c/w Double Acting Pneumatic Actuator

A351 CF8M SS Body & 316 Ball  
PTFE Seats & Seals  
Reduced Bore, L-Port or T-Port

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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## 3-Way 316SS Ball Valves - GE2040/2041 c/w Spring Return Pneumatic Actuator

A351 CF8M SS Body & 316 Ball  
PTFE Seats & Seals  
Reduced Bore, L-Port or T-Port

1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
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# Pneumatic - Actuated Valves



## Praher M1 PVC-U Double Union Ball Valve c/w Double Acting Pneumatic Actuator

Available in 220V, 110V 24V AC or DC  
EPDM/PTFE Seats & Seals  
Full Bore Socket Ends - threaded available  
Metric ends from stock - Imperial to order

20mm	25mm	32mm	40mm	50mm	63mm			
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## Praher M1 PVC-U Double Union Ball Valve c/w Spring Return Pneumatic Actuator

Available in 220V, 110V 24V AV or DC  
EPDM/PTFE Seats & Seals  
Full Bore Socket Ends - threaded available  
Metric ends from stock - Imperial to order

20mm	25mm	32mm	40mm	50mm	63mm			
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## Praher 3-Way PVC-U Double Union Ball Valve c/w Double Acting Pneumatic Actuator

Available in 220V, 110V, 24V AC or DC  
EPDM/PTFE Seats & Seals  
Full Bore, Imperial Solvent Socket Ends - threaded available

20mm	25mm	32mm	40mm	50mm	63mm			
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## Praher 3-Way PVC-U Double Union Ball Valve c/w Spring Return Pneumatic Actuator

Available in 220V, 110V, 24V AC or DC  
EPDM/PTFE Seats & Seals  
Full Bore, Imperial Solvent Socket Ends - threaded available

20mm	25mm	32mm	40mm	50mm	63mm			
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## Comer ABS Double Union Ball Valves c/w Double Acting Pneumatic Actuator

Available in 220V, 110V, 24V AC or DC  
EPDM/PTFE Seats & Seals  
Full Bore, Imperial Solvent Socket Ends - threaded available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Comer ABS Double Union Ball Valves c/w Spring Return Pneumatic Actuator

Available in 220V, 110V, 24V AC or DC  
EPDM/PTFE Seats & Seals  
Full Bore, Imperial Solvent Socket Ends - threaded available

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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# Pneumatic - Actuated Valves



## Wafer Butterfly Valve - Uniwat VF701PGGE c/w Double Acting Pneumatic Actuator

Ductile Iron Body, PN10/16/ANSI 150 Flanging  
Nickel Plated Ductile Iron Disc, EPDM Liner, other materials available

**Available up to 1000mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Wafer Butterfly Valve - Uniwat VF701PGGE c/w Spring Return Pneumatic Actuator

Ductile Iron Body, PN10/16/ANSI 150 Flanging  
Nickel Plated Ductile Iron Disc, EPDM Liner, other materials available

**Available up to 1000mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Wafer Butterfly Valve - Uniwat VF701PGIE c/w Double Acting Pneumatic Actuator

Ductile Iron Body, PN10/16/ANSI 150 Flanging  
316 Stainless Steel Disc, EPDM Liner, other materials available

**Available up to 1000mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Wafer Butterfly Valve - Uniwat VF701PGIE c/w Spring Return Pneumatic Actuator

Ductile Iron Body, PN10/16/ANSI 150 Flanging  
316 Stainless Steel Disc, EPDM Liner, other materials available

**Available up to 1000mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Fully Lugged Butterfly Valve - Uniwat VF750PGE c/w Double Acting Pneumatic Actuator

Cast Iron Body, PN10/16/ANSI 150 Flanging  
Nickel Plated Ductile Iron Disc, EPDM Liner, other materials available

**Available up to 600mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Fully Lugged Butterfly Valve - Uniwat VF750PGE c/w Spring Return Pneumatic Actuator

Cast Iron Body, PN10/16/ANSI 150 Flanging  
Nickel Plated Ductile Iron Disc, EPDM Liner, other materials available

**Available up to 600mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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# Pneumatic - Actuated Valves



## Fully Lugged Butterfly Valve - Uniwat VF750PIE c/w Double Acting Pneumatic Actuator

Cast Iron Body, PN10/16/ANSI 150 Flanging  
316 Stainless Steel Disc, EPDM Liner, other materials available

**Available up to 600mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Fully Lugged Butterfly Valve - Uniwat VF750PIE c/w Spring Return Pneumatic Actuator

Cast Iron Body, PN10/16/ANSI 150 Flanging  
316 Stainless Steel Disc, EPDM Liner, other materials available

**Available up to 600mm**

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Ductile Iron Ball Valve - GE2525 c/w Double Acting Pneumatic Actuator

316 SS Ball, PTFE Seats & Seals  
Flanged PN16, Full Bore, From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Ductile Iron Ball Valve - GE2525 c/w Spring Return Pneumatic Actuator

316 SS Ball, PTFE Seats & Seals  
Flanged PN16, Full Bore, From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## 316 Stainless Steel Ball Valve - GE2528 c/w Double Acting Pneumatic Actuator

316 SS Ball, PTFE Seats & Seals  
Flanged PN16, Full Bore, (ANSI 150 available) From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## 316 Stainless Steel Ball Valve - GE2528 c/w Spring Return Pneumatic Actuator

316 SS Ball, PTFE Seats & Seals  
Flanged PN16, Full Bore, (ANSI 150 available) From -30°C to 180°C

**Available up to 200mm**

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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### FAR 2-Way Zone Control Valve

Brass Body & Ball, PTFE Seats, EPDM O-Rings  
 Available in 230V & 24V AC  
 With manual release lever  
 Protection Level IP54  
 Available with Male/Male, Male/Female, Female/Female connections

1/2"	3/4"	1"	1 1/4"				
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### FAR 3-Way Diverter Zone Control Valve

Brass Body & Ball, PTFE Seats, EPDM O-Rings  
 Available in 230V & 24V AC  
 With manual release lever  
 Protection Level IP54  
 Available with Male/Male, Male/Female, Female/Female connections

1/2"	3/4"	1"	1 1/4"				
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### FAR 2-Way Zone Control Valve

Brass Body & Ball, PTFE Seats, EPDM O-Rings  
 Available in 230V & 24V AC  
 With manual release lever and automatic reset  
 Protection Level IP65  
 Available with Male/Male, Male/Female, Female/Female connections

1 1/2"	2"						
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### FAR 3-Way Diverter Zone Control Valve

Brass Body & Ball, PTFE Seats, EPDM O-Rings  
 Available in 230V & 24V AC  
 With manual release lever and automatic reset  
 Protection Level IP65  
 Available with Male/Male, Male/Female, Female/Female connections

1 1/2"	2"						
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### FAR 3005-3006 3-Point Actuator

230V or 24V 3 Point actuator with manual release  
 With Auxilliary Microswitch  
 Cable length 1m  
 Rotation time 40 seconds (8 sec available)  
 IP54 Protection Level

230V		24V					
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### FAR 3039-3040 3 Point Actuator

230V or 24V 3 point actuator with manual release  
 ISO 5211 Connection  
 Double Cable Gland PG11  
 Opening/Closing time 30-80 seconds  
 IP65 Protection Level

230V		24V					
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### FAR 3 Way Mixing Zone Control Ball Valve

Brass body & Ball, PTFE Seats, EPDM O-Rings  
 0-10V Electronic Modulating Actuator 24V  
 With Auxilliary Microswitch  
 Protection Level IP54  
 Available with Male/Male, Male/Female, Female/Female connections

1/2"	3/4"	1"	1 1/4"					
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### FAR 3-Way Mixing Zone Control Ball Valve

Brass body & Ball, PTFE Seats, EPDM O-Rings  
 230V or 24V 3 point actuator with manual release  
 With Auxilliary Microswitch  
 Protection Level IP54  
 Male/Male connections

1/2"	3/4"	1"	1 1/4"					
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### FAR 3010-3011-3012 FAR Actuator

230V or 24V 3 point actuator with manual release  
 With Auxilliary Microswitch  
 Cable length 1m, IP54  
 Rotation time 180 seconds  
 3012 = 24V Modulating

3010	230V	24V	3011	230V	24V	3012	24V	
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### Rotary 3-Way & 4-Way Shoe Valve

Brass body  
 Female BSP connections



3/4"	1"	1 1/4"	1 1/2"	2"				
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### Rotary 3-Way & 4-Way Shoe Valve

Cast Iron Body  
 PN6 Flanged Connections



50mm	65mm	80mm	100mm	125mm	150mm			
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Other Brands Available - Sauter - Siemens - Danfoss



## Hora BR216RA Two Way Valve

Bronze Construction, Screwed BSP External Thread with Unions  
 Power supply 24 V AC or 230 V AC, 50-60 Hz  
 Input and Output signal Y 0....10V DC, Alternatively Y 2....10V DC/4-20mA or 3 Point  
 Temp: -15°C to 150°C, PN16 Rated, Max 90°C for drinking water

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Hora BR316RA Three Way Valve

Bronze Construction, Screwed BSP External Thread with Unions  
 Power supply 24 V AC or 230 V AC, 50-60 Hz  
 Input and Output signal Y 0....10V DC, Alternatively Y 2....10V DC/4-20mA or 3 Point  
 Temp: -15°C to 150°C, PN16 Rated, Max 90°C for drinking water

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Hora Two Way Control Valve - Electric

Cast Iron, SG Iron, Cast Steel, Stainless Steel  
 Flanges PN16/25/40, up to 250 mm  
 Power supply 24 V AC or 230 V AC, 50-60 Hz  
 Input and Output signal Y 0....10V DC, Alternatively Y 2....10V DC/4-20mA or 3 Point

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Hora Three Way Control Valve - Electric

Cast Iron, SG Iron, Cast Steel, Stainless Steel  
 Flanged PN16/25/40, up to 250mm  
 Power supply 24 V AC or 230 V AC, 50-60 Hz  
 Input and Output signal Y 0....10V DC, Alternatively Y 2....10V DC/4-20mA or 3 Point

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Hora Two Way Control Valve - Pneumatic

Cast Iron, SG Iron, Cast Steel, Stainless Steel  
 Flanged PN16/25/40, up to 250mm  
 With Pneumatic Actuator, All usual accessories available

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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## Hora Three Way Control Valve - Pneumatic

Cast Iron, SG Iron, Cast Steel, Stainless Steel  
 Flanged PN16/25/40, up to 250mm  
 With Pneumatic Actuator, All usual accessories available

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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# Zubi Knife Gate Valves Unidirectional



## T200EV Cast Iron Knife Gate Valve - Manual

Unidirectional, AISI 304 SS Gate, EPDM Seat  
 PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Handwheel Operated  
 Available up to DN1200

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## T200EA Cast Iron Actuated Knife Gate Valve - DA Pneumatic

Unidirectional, AISI 304 SS Gate, EPDM Seat  
 PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Double Acting Pneumatic Cylinder  
 Available up to DN1200

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## T200E Cast Iron Knife Gate Valve - ISO Top

Unidirectional, AISI 304 SS Gate, EPDM Seat  
 PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Available up to DN1200  
 Non Rising Stem B3

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## T200EV Stainless Steel Knife Gate Valve - Manual

AISI 316 SS Body & Gate, EPDM Seat  
 PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Handwheel Operated  
 Available up to DN600

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## T200EA Stainless Steel Knife Gate Valve - DA Pneumatic

AISI 316 SS Body & Gate, EPDM Seat  
 PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Double Acting Pneumatic Cylinder  
 Available up to DN600

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



## T200LUG Cast Iron Knife Gate Valve - Fully Lugged

Unidirectional, AISI 304 SS Gate, EPDM Seat  
 Fully Lugged PN10 Flanging - Please add 10% for PN16, ANSI 150  
 Handwheel Operated  
 Available up to DN1200

						50mm	65mm	80mm
100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm



### T700EV Cast Iron Knife Gate Valve - Manual

Bidirectional, AISI 304 SS Gate, NBR Seats  
PN10 Flanging - Please add 10% for PN16  
Handwheel Operated  
Larger sizes available in Model 200-Bi

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### T700EA Cast Iron Knife Gate Valve - DA Pneumatic

Bidirectional, AISI 304 SS Gate, NBR Seats  
PN10 Flanging - Please add 10% for PN16,  
Double Acting Pneumatic Cylinder  
Larger sizes available in Model 200-Bi

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### T700E Cast Iron Knife Gate Valve - ISO Top

Bidirectional, AISI 304 SS Gate, NBR Seat  
PN10 Flanging - Please add 10% for PN16,  
Non-Rising Stem  
Larger sizes available in Model 200-Bi

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### T200EA St Steel Knife Gate Valve - Manual

Bidirectional, AISI 316 SS Body & Gate, NBR Seat  
PN10 Flanging - Please add 10% for PN16, ANSI 150  
Handwheel Operated  
Larger sizes available in Model 200-Bi

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### T200EA St. Steel Knife Gate Valve - Various

Bidirectional, Various Body, gate and seal materials available.  
PN10 Flanging - Please add 10% for PN16  
Rising stem or Non Rising Stem  
Manual, Pneumatic, ISO Hydraulic

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Knife Gate Valve Options



Bonnetted - Through Conduit - Square Design, Hopper Shaped - Rubber Sleeve

Levers - Gearboxes - Chainwheels - Limit Switches - Solenoid Valves - Positioners - Extensions



### GSD8-I Cold Water Meter c/w Unions

Single Jet Super Dry Dial 8 Rolls  
Max temp 50 deg C  
360 deg rotating dial MID R100  
Available to order prepared for remote reading  
Available to order with pulse transmitters and modules



1/2"	3/4"	With pulse transmitter			1/2"	3/4"	IMP001
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### GSD8-I Hot Water Meter c/w Unions

Single jet Super Dry Dial 8 Rolls  
Max temp 90 deg C  
360 deg rotating dial MID R100  
Available to order prepared for remote reading  
Available to order with pulse transmitters and modules



1/2"	3/4"	With Pulse transmitter			1/2"	3/4"	IMP001
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### GMDM-I Cold Water Meter c/w Unions

Multijet super dry Dial  
Max temp 50 deg C, 360 deg rotating lid up to DN32  
IWM-PL3 module preset at 1 Pulse per 10 litres (Adjustable)  
Add cost of IWM-PL3 for Pulse Output  
Mbus modules also available



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	50mm	Pulse	IWM-PL3
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### GMDM-I Hot Water Meter c/w Unions

Multijet super dry dial  
Max temp 90 deg C, 360 deg rotating lid up to DN32  
IWM-PL3 module preset at 1 Pulse per 10 litres (Adjustable)  
Add cost of IWM-PL3 for Pulse Output  
Mbus modules also available



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	50mm	Pulse	IWM-PL3
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### WDE-K50 Woltmann Cold Water Meter

Max temp 50 deg C, 360 deg rotating dial  
Add cost of IWM-PL4 for Pulse Output  
Conform to ISO4064, Class B as standard  
Flanged PN16  
Mbus modules also available



50mm	65mm	80mm	100mm	125mm	150mm	200mm	Pulse	IWM-PL4
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### WDE-K50 Woltmann Hot Water Meter

Max temp 90 deg C, 360 deg rotating dial  
Add cost of IWM-PL4 for Pulse Output  
Conform to ISO4064, Class B as standard  
Flanged PN16  
Mbus modules also available



50mm	65mm	80mm	100mm	125mm	150mm	200mm	Pulse	IWM-PL4
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## Hydrocal M4 Thermal Energy Meter

Compact Type, Single Jet  
 Max temp 105 deg C, Screwed BSP Male  
 Also available additional integrated and external modules for remote reading (MBUS, Wireless MBUS & Pulse output)  
 Qp - Nominal flow rate shown beside sizes

1/2" - 0.6	1/2" - 1.5	3/4" - 2.5						
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## Hydrosonis ULC Ultrasonic Thermal Energy Meters

Compact Type ULC  
 Max temp 105 deg C  
 PT 500 (1.5m)  
 QP - Nominal flow rate shown beside sizes

Radio WM Bus	1/2" - 0.6	1/2" - 1.5	3/4" - 2.5	Wired M-Bus	1/2" - 0.6	1/2" - 1.5	3/4" - 2.5	
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## Hydrosonis UP Ultrasonic Thermal Energy Meter

Compact Type ULC in DN15 & DN20, Max temp 130 deg C  
 Sizes DN25 to DN100 Type UP with Hydrosplit M3  
 Temp sensors extra for Type UP  
 Qp - Nominal flow rate shown beside sizes

1" - 3.5	1" - 6	1 1/2" - 10						
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## UH50 Ultrasonic Thermal Energy Meter

Class 2 or 3 (EN1434)  
 Qp - Nominal flow rate shown beside sizes

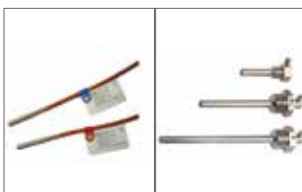
15mm - 1.5	20mm - 2.5	25mm - 3.5	25mm - 6	40mm - 10	50mm - 15	65mm - 25	80mm - 40	100mm - 60
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## Hydrosplit - M3 Thermal Energy Calculator

Can be connected to any water meter with pulsed output  
 Also available additional integrated and external modules for remote reading. (MBUS, Wireless MBUS & Pulse output)  
 Sockets and temperature sensors extra

Wired	Wireless							
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## Socket For Temperature Sensor Pair of Temperature Sensors

PT1000  
 MID Approved

1/4" x 45mm	1/2" x 45mm	1/2" x 85mm	1/2" x 120mm		S-U-3m	S-U-10m		
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### Hydrodigit Digital Cold Water Smart Meter

Single Jet, Digital Display with 8 digits  
Temp range: 0.1-50 deg C  
360 deg rotating dial, MID R250  
Wireless M-Bus, IP68 Protection



80mm long	½" - 2.5	110mm long	½" - 2.5	130mm long	¾ - 4				
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### Hydrodigit Digital Hot Water Smart Meter

Single Jet, Digital Display with 8 digits  
Temp range: 30-90 deg C  
360 deg rotating dial, MID R250  
Wireless M-Bus, IP68 Protection



80mm long	½" - 2.5	110mm long	½" - 2.5	130mm long	¾ - 4				
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### CMC-R Hot Water Meter

Multijet, Dry Dial, Direct Reading, Pulse Output  
Up to 120 deg C, To EN 1434  
Can be combined with Hydrosplit thermal energy calculator  
Antimagnetic fraud protection, Anti-condensation dial  
Qp - Nominal Flow rate shown beside sizes

1" - 3.5	1¼" - 6	1½" - 10							
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### WDC-R Hot Water Meter

Multijet Dry Dial, Direct Reading, Pulsed Output  
Flanged PN16, Up to 130 deg C, To EN 1434  
Can be combined with Hydrosplit thermal energy calculator  
Qp - Nominal flow rate shown beside sizes

50mm - 15	65mm - 25	80mm - 40	100mm - 60	125mm - 100	150mm - 150	200mm - 250	250mm - 400	300mm - 600
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### GSD8-RFM Cold Water Meter C/W Unions

Single Jet Super Dry Dial 8 Rolls  
Max temp 50 deg C  
360 deg rotating dial, MID R100  
Prepared for remote reading



½"	¾"							
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### GSD8-RFM Hot Water Meter C/W Unions

Single Jet Super Dry Dial 8 Rolls  
Max temp 90 deg C  
360 deg rotating dial, MID R100  
Prepared for remote reading



½"	¾"							
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## Tan-X5 Irrigation Cold Water Meter

Tangential Water Meter  
 Dry Dial  
 Conform to ISO4064, Class A  
 Cold Water 0°C -50°C Flanged PN16  
 With Pulsed Output on request

50mm	65mm	80mm	100mm	125mm	150mm	200mm	Pulse Adder
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## WDE Water Meter

Horizontal Woltman Water Meters  
 Dry Dial, Rotating ring 360°  
 Conform to ISO4064, Class A  
 Cold water 0°-50°C, Flanged PN16  
 With Pulsed Output



250mm	300mm	400mm	500mm				Pulse Adder
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## MAG-C Electromagnetic Flow Meter

IP68 Protection  
 Stainless Steel Body, Carbon Steel Flanges  
 Available with Ebanite or PTFE Lining  
 Flanged PN16 (available PN10/25/40, ANSI, BS)  
 Available up to DN2000

						15mm	20mm	25mm
32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm



## K-Sonic Ultrasonic Bulk Water Meter

IP68 Protection- r500 measuring range  
 Flanged PN16  
 Low pressure drop  
 Cold water 0.1°C -50°C only  
 With Pulsed Output on request



50mm	65mm	80mm	100mm	125mm	150mm	200mm	Pulse Adder
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## Pulse Emitters/Inductive Module Devices

IWM -PL3- Inductive pulse emitter device for GMB-1/GMDM-1  
 IWM - PL4 - Inductive pulse emitter device for WDE-K50  
 RFM-MB1 - M-Bus wired module for RFM single jet water meters  
 IWM-MB3 - Inductive M-Bus wired module for multi jet water meters  
 MB-Pulse - Signal Converter from impulse to M-Bus (4 meters with pulse output)

IWM-PL3	IWM-PL4	RFM-MB1	IWM-MB3	MB-Pulse
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## Pulse Leads

IMP001 - For GSD, GMDX, GMDM - IMP002 with Anti Fraud Signal  
 IMP004 - for GMB-RP, CPR-RP - IMP003 with Anti Fraud Signal  
 IMP005 - WDE-K30, TAN-X5, WDE-K40 (DN200) - IMP006 - with Anti Fraud Signal  
 IMP007 - WDE  
 IMP008 - WDE-K40, (DN50 - DN150 only)

IMP001	IMP002	IMP003	IMP004	IMP005	IMP006	IMP007	IMP008	IMP009
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# Gas Meters



## Metrix Gas Meter - Diaphragm Type

Flow: 0.04 to 40 m3/hr  
 BSP Unions  
 Complete with Pulse Output  
 Please contact us with flow rates for correct sizing  
 Other sizes/ranges available to order

¾" UG G4	1" 2UG G6	1¼" UG G10	1¼" UG G16	2" UG G25				
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## IGDM Sigma Gas Meter - Diaphragm Type

Flow: 0.04 to 40 m3/hr  
 BSP Unions  
 Complete with Pulse Output  
 Please contact us with flow rates for correct sizing

20mm G4P	25mm G6P	30mm G10P	50mm G16P	50mm G25P				
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## QA & TBX Gas Turbine Meter

Screwed BSP Connections  
 c/w Pulse Output  
 Flow: 1.6 to 100 m3/hr  
 Max Flow rate in m3/hr shown beside sizes  
 Please contact us with flow rates for correct sizing

QA	1" - 16	1" - 25	1" - 40	1½" - 65	TBX	1¼" - 30	1½" - 30	2" - 100
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## CPT Quantometer Gas Turbine Meter

Screwed BSP Connections  
 c/w Pulse Output  
 Flow: 1.6 to 100m3/hr  
 Max Flow rate in m3/hr shown beside sizes  
 Please contact us with flow rates for correct sizing

1" G16/25	1" G25/40	1¼" G16/25	1¼" G25/40	1½" G40/65	1½" G65/100	2" G40/65	2" G65/100	
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## IGTM Vemm Gas Turbine Meter - Wafer Pattern

Aluminium Casing (DN200 - Steel)  
 Flow: 2,5 to 1600 m3/hr  
 Rating: PN16, PN20, ANSI 150  
 Max Flow rate in m3/hr shown beside sizes  
 Please contact us with flow rates for correct sizing

50mm - 100	65mm - 160	80mm - 250	80mm - 400	100mm - 400	100mm - 650	150mm - 1000		Pulse
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## CPT Quantometer Gas Turbine Meter

Wafer Pattern PN16  
 Aluminium Casing (DN200-Steel)  
 Flow: 6 to 1000 m3/hr  
 Please contact us with flow rates for correct sizing

50mm	65mm	80mm	100mm	150mm	200mm			Pulse Plug
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## GECA Type AV Automatic Gas Solenoid Valves

Auto Reset, pmax 360 mbar, IP65 (available pmax 6 bar)  
 Aluminium Body, Screwed BSP/Flanged PN10  
 Temp range: -20°C – 60°C, Approval EN161, Operating time: 1 second  
 Supply Voltage: 230V, 110V 24V DC  
 Available slow opening and normally open



1"	1 1/4"	1 1/2"	2"	65mm	80mm	100mm	125mm	150mm
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## GECA Type VR Automatic Gas Solenoid Valves

Manual Reset, pmax 550 bar, IP65 (available pmax 6 bar)  
 Brass Body, Screwed BSP/Flanged PN10, Temp range: -15°C – 70°C  
 Approval EN161, Closing time: < 1 second  
 Supply Voltage: 230V, 24V, 12V, 110V



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	65mm	80mm	100mm
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## Geca Gas Filters

Aluminium Body, NBR Seals  
 Max pressure: 6 bar/ 10 bar on request  
 Temp: -20°C to 60°C, Screwed BSP, Filtration: 50 Micron  
*Available with Test Points/Manometer*

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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## Geca Gas Filters

Aluminium Body, NBR Seals  
 Max Pressure: 6 bar/ 10 bar on request up to 100mm  
 Temp: -20°C to 60°C, Flanged PN16, Filtration: 50 Micron  
*Available with Test Points/Manometer*

25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm
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## Albion Art.40PY Brass Ball Valve For Gas

Max pressure rating for gas: 5 bar  
 Full Bore, PTFE Seats & Seals  
 Screwed BSPP Female  
 Temp: -20°C to 60°C  
**EN331 Certified for Gas**

1/4"	3/8"
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1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
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## Albion Art.145 Lugged Butterfly Valve for Gas

Ductile Iron Rilsan Coated Body, Nitrile Seats  
 Zinc Plated Ductile Iron Disc  
 Lever Operated, 10 position Notchplate, 200mm + with Gearboxes  
 PN16 Flanging, Lockable

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### Geca Gas Governors - Screwed BSP

Die-Cast Aluminium Body, NBR Seals

**Inlet: Max. 500 mbar**

Setting Outlet: 10-130mbar

Std Spring 10 -27 mbar others on request, Temp : -20°C to 60°C

*Available with filter, test point*

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"				
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### Geca Gas Governors - Flanged PN16

Die-Cast Aluminium Body, NBR Seals

**Inlet: Max. 500 mbar**

Setting Outlet: 10 - 130mbar

Std spring 10 - 27 mbar other on request, Temp: -20°C to 60°C

*Available with filter, test point*

65mm	80mm	100mm							
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### Geca Gas Governors - Screwed BSP

Die-Cast Aluminium Body, NBR Seals

**Inlet: Max 1 bar**

Setting Outlet: 10 - 130mbar

Std spring 10 - 27 mbar others on request, Temp: -20°C to 60°C

*Available with filter, test point*

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"				
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### Geca Gas Governors - Flanged PN16

Die-Cast Aluminium Body, NBR Seals

**Inlet: Max 1bar**

Setting Outlet: 10 - 130mbar

Std spring 10 - 27 mbar others on request, Temp: -20°C to 60°C

*Available with filter, test point*

65mm	80mm	100mm							
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### Geca Gas Governors - Screwed BSP

Die-Cast Aluminium Body, NBR Seals

**Inlet: Max 2 bar**

Setting Outlet: 10 - 130mbar

Std spring 10 - 27mbar others on request, Temp: -20°C to 60°C

*Available with filter, test point*

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"				
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### Geca Gas Governors - Flanged PN16

Die Cast Aluminium Body, NBR Seals

**Inlet: Max 2 bar**

Setting Outlet: 10 - 130mbar

Std spring 10 - 27mbar others on request, Temp: - 20°C to 60°C

*Available with filter, test point*

65mm	80mm	100mm							
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### GECA CTM21/SE128K Central Unit for One Remote Sensor

IP65, Power Supply: 230V AC 50-60Hz, 12-24Vcc  
 Wall Installation, Test & Reset Function  
 Alarm Level 10% LEL - 20% LEL, Measuring Range 0÷20% LEL  
 Sensors Methane LPG, Output No. 3 relays: Capacity 230V 3A SPDT

SE128K								
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### GECA CTP26 Central Unit For Four Remote Sensors

IP65, Power Supply: 110÷240Vac (-15/+10%) 50÷60Hz, 10VA  
 Auxiliary power supply: 24VDC (-10/+15%) /12W  
 Standard Range 0÷20% LIE/LEL, -0÷100% LIE/LEL +300 ppm CO  
 Sensors Methane LPG CO2  
 Output No. 3 relays: Capacity 230V 3A SPDT

SE194K								
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### GECA ST441/SE192 Gas Detector

IP44 Rated  
 Powered by Control Unit  
 Range: 0-20% LEL

*Sensor for Methane & LPG*

SE192KM	SE192KG							
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### Geca TS282 Toxic Gas Detector

IP65, Power Supply: 12-24Vcc/Vdc (-10/+15%)  
 Available for Ammonia, CO2, Chlorine  
 Hydrogen Sulphide/Chloride/Cyanide  
 Nitric Oxide, Dioxide D'azote, Sulfur Dioxide  
*See catalogue for full details*

TS282EA	TS282EC-S	TS282ECL	TS282EH	TS282EHCL	TS282EHCN	TS282EN	TS282EN2	TS282ES
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### Emergency Stop Buttons

IP65 Rated  
 KOB - Emergency Stop Button  
 KR-KOB - Emergency Stop Button - c/w Key Reset  
 SH-KOB - Shrouded Knock Off Button

KOB	KR-KOB	SH-KOB					
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ATEX Sensor



Siren



Auxilliary Power Supply Unit



# Toraflex Rubber Bellows



## Toraflex S30-E EPDM Rubber Bellows

Twin Sphere, Galv. Unions, Screwed BSP  
 Max pressure: 16 bar, Max temp: 110°C  
 See O&M for installation guidelines

*Also available in Nitrile Buna Rubber (NBR)*

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	
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## Toraflex S15 EPDM Rubber Bellows

Single Sphere, Mild Steel Flanges, Flanged PN16 (ANSI150 on request)  
 Max Temp 110°C, Max Pressure 16 bar @ 20°C  
 Length: 130mm, Larger sizes available  
 See O&M for installation guidelines

50mm	65mm	80mm	100mm	125mm	150mm	200mm	25mm	32mm	40mm



## Toraflex S15 Nitrile Rubber Bellows

Single Sphere, Mild Steel Flanges, Flanged PN16 (ANSI150 on request)  
 Max Temp 90°C, Max Pressure 16 bar @ 20°C  
 Length: 130mm, Larger sizes available  
 See data sheet for movements  
 See O&M for installation guidelines

50mm	65mm	80mm	100mm	125mm	150mm	200mm	25mm	32mm	40mm



## Tie Rods Sets For S15 Bellows

Limiting Tie Rods  
 Also available for S10 & S20

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	40mm



## Toraflex S10 EPDM Rubber Bellows

Single Sphere Mild Steel Flanges, Flanged PN16 (ANSI 150 on request)  
 Max Temp 110°C, Max Pressure 16 bar @ 20°C  
 See O&M for installation guidelines

*Also available in Nitrile Buna rubber (NBR)*

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
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## Albion Art.427 EPDM Rubber Bellows - PN6

Single Sphere Mild Steel Flange  
 Max Pressure 6 bar  
 Temp:-20°C to 100°C  
 Flanged PN6

32mm	40mm	50mm	65mm	80mm	100mm			
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# Metallic Expansion Joints



## Toraflex S250 Metal Compensators

AISI 321SS Bellows & Inner Sleeve  
Butt Weld Ends in Carbon Steel  
See data sheet for movements  
See O&M for installation guidelines

					20mm	25mm	32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## Toraflex S500 Metal Compensators

AISI 321SS Bellows & Inner Sleeve  
PN16 Flanged Ends in Carbon Steel  
See data sheet for movements  
See O&M for installation guidelines

							32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## ABS Screwed Axial Expansion Joints

Membrane: 316 stainless steel  
Inner: 316 stainless steel flow sleeves  
Ends: 316 stainless steel BSPT male ends  
See data sheet for movements  
See O&M for installation guidelines



1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"		
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## AB Flanged Axial Expansion Joints

Membrane: 316 stainless steel  
Inner: 316 stainless steel flow sleeves  
Ends: Mild Steel Flanged PN16, Stainless Steel available  
See data sheet for movements  
See O&M for installation guidelines



							32mm	40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm



## MRCA Copper Ended Expansion Joints

Membrane: 316 stainless steel  
Copper Ends: BS2871 Table X  
Design pressure: 6 bar, Design temperature: 70°C  
See data sheet for movements  
See O&M for installation guidelines



15mm	22mm	28mm	35mm	42mm	54mm			
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## AU6 Screwed Axial Expansion Joints

Membrane: 316 stainless steel  
Ends: Malleable Iron BSP Female Union Ends  
See data sheet for movements  
See O&M for installation guidelines

3/4"	1"	1 1/4"	1 1/2"	2"				
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# Elaflex, Anchors & Guides



## Elaflex ERP Red Spot EPDM Bellows - WRAS

Single Sphere, Mild Steel Flanges, Flanged PN16 (ANSI 150 on request)  
 Max Temp 90°C, Temporarily up to 120°C  
 Max Pressure 16 bar @ 20°C



*Available in other materials for special applications*

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
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## Elaflex ERV-G Yellow Band Nitrile Bellows

Single Sphere, Mild Steel Flanges, Flanged PN16 (ANSI 150 on request)  
 Max Temp 90°C, Max Pressure 16 bar @20°C

*Available in other materials for special applications*

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
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## Elaflex ERV-R Red Band EPDM Bellows - WRAS

Single Sphere, Mild Steel Flanges, Flanged PN16 (ANSI 150 on request)  
 Max Temp 100°C, Temporarily up to 120°C  
 Max Pressure 16 bar @ 20°C



*Available in other materials for special applications*

32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
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## Type SS/SSN Double Sliding Guide Set

For steel, copper or stainless steel pipework  
 SSM for DN80-100  
**Pipe Clips not included**

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## Type CAB Cleated Anchor Bracket

For steel or stainless steel pipework

20mm	25mm	32mm	40mm	50mm				
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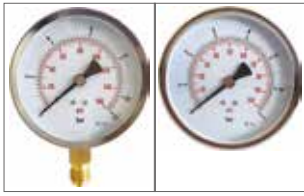


## Type CABN Cleated Anchor Bracket

Rubber lined  
 For steel, copper or stainless steel pipework

15mm	22mm	28mm	35mm	42mm	54mm	67mm		
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# Pressure Gauges



## B401 HVAC Industry 100mm Pressure Gauges

Bottom & Entry, Black Steel Case, 304SS Bezel  
 Thread Standard 3/8" BSP or optional 1/2" BSP  
 Accuracy: Class 1.6± 1.6% to EN 837-1  
 Other pressure ranges available

Bottom	0-1 bar	0-4 bar	0-7 bar	0-11 bar	Back	0-7 bar	0-11 bar
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## B422 Calibrated and B462 Steam -100mm Pressure Gauges

Bottom Entry, Stock ranges listed, Back Entry also available  
 Thread Standard 1/2" BSP or 3/8" BSP to order  
 Accuracy: Class 1.6± 1.6% to EN 837-1  
 Other pressure ranges available

Calibrated	0-11 bar	0-16 bar	0-20 bar	0-28 bar	Steam	0-7 bar	0-11 bar	0-16 bar
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## GE 3822 63mm SS Case Pressure Gauges

Stainless Steel AISI 304 Case, Brass Bourdon Pipe & Connector  
 1/4" BSP Thread, Glycerine Filled  
 Accuracy: Class 1.6± 1.6% to EN 837-1  
 Bottom Entry  
 Other pressure ranges available

0-2.5 bar	0-6 bar	0-10 bar	0-16 bar	0-25 bar	0-40 bar	0-60 bar	0-100 bar
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## GE 3829 63mm SS Case Pressure Gauges

Stainless Steel AISI 304 Case, Brass Bourdon Pipe & Connector  
 1/4" BSP Thread, Glycerine Filled  
 Accuracy: Class 1.6± 1.6% to EN 837-1  
 Back Entry  
 Other pressure ranges available

0-2.5 bar	0-6 bar	0-10 bar	0-16 bar	0-25 bar	0-40 bar	0-60 bar	0-100 bar
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## GE 3814 63mm Stainless Steel Pressure Gauges

Stainless Steel AISI 304 Case, Bourdon Pipe & Connector  
 1/4" BSP Thread, Glycerine Filled  
 Accuracy: Class 1.6± 1.6% to EN 837-1  
 Other pressure ranges available

0-2.5 bar	0-6 bar	0-10 bar	0-16 bar	0-25 bar	0-40 bar	0-60 bar	0-100 bar
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## GE 3824 100mm Stainless Steel Pressure Gauges

Stainless Steel AISI 304 Case, Bourdon Pipe & Connector  
 1/2" BSP Thread, Bottom Connection  
 Glycerine Filled  
 Accuracy: Class 1.6 ± 1.6% to EN 837-1  
 Other pressure ranges available

0-2.5 bar	0-4 bar	0-6 bar	0-10 bar	0-16 bar	0-25 bar	0-40 bar	0-60 bar	0-100 bar
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# Pressure Gauges



## SF 1625 100mm Stainless Steel Pressure Gauges

Stainless Steel AISI 304 Case, Brass Bourdon Pipe & Connector  
 ½" BSP Thread, Back Connection  
 Glycerine Filled  
 Accuracy: Class 1.6 ± 16 % to EN 837-1  
 Other pressure ranges available

-1/+1	0-1.6 bar	0-2.5 bar	0-4 bar	0-6 bar	0-10 bar	0-16 bar		
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## SF 1635 Capsule Pressure Gauges

100mm Dial, Low Pressure  
 Stainless Steel AISI 304 Case  
 ½" BSP Thread, Bottom Connection  
 Accuracy: Acc to EN837-3-IP31

0-6 mbar	0-100 mbar	0-250 mbar	0-400 mbar	0-600mbar				
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## GECA GAS Pressure Gauges

Bottom Entry, Grey Steel Case, Brass Connection  
 63mm dial with ¼" connection  
 80mm Dial with ⅜" connection  
 100mm Dial with ½" connection  
 0 to 40/60/100/160/250/400/600 mbar

63mm		80mm		100mm				
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## Combined Pressure & Temperature Gauges

Temperature range: 0-120°C  
 Pressure range: 0-4 & 10 bar in Back Entry  
 Pressure range: 0-6 bar in Bottom Entry  
 80mm Dial  
 ½" Connection

Back Entry		Bottom Entry						
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## GE 3821 53mm Pressure Gauge

ABS case, ¼" Back or Bottom Entry Connection  
 Precision class 2.5  
 Other pressure ranges available

0-6 bar Back		0-10 bar Back		0-6 bar Bottom				
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## VYC Model 011 Pigtail Siphons

Available in Carbon & Stainless Steel  
**See needle valve section for isolating**

⅜"CS	½"CS	⅜"SS	½"SS					
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# Thermometers



## Thermometers - HVAC Industry Bimetallic

Black Steel Case, 304SS Bezel  
 100mm Dial: Dual Scale °C (outer) & °F (inner)  
 Vertical Bottom Entry, 1/2" BSP, Accuracy: ± 1.6% FSD  
 Standard ranges: -30/+60°, 0/120°  
 Also stocked in 0/160°C & 0/250°

100mm Dial - 30/+60°, 50mm pocket	100mm dial 0/+120°, 50mm pocket	100mm Dial 0/+120°, 100mm pocket
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## Thermometers - HVAC Industry Bimetallic

Black Steel Case, 304SS Bezel  
 100mm Dial: Dual Scale °C (outer) & °F (inner)  
 Back Entry, 1/2" BSP, Accuracy: ± 1.6% FSD  
 Standard ranges: -30/+60°, 0/120°  
 Also stocked in 0/160° & 0/250°

100mm Dial - 30/+60°, 50mm pocket	100mm dial 0/+120°, 50mm pocket	100mm Dial 0/+120°, 100mm pocket
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## GE 8032 - GE 8034 Thermometers

Zinc Steel Case, Brass Probe & Pocket  
 63mm Dial: dual scale °C (outer) & °F (inner)  
 Back, 1/2" BSP, Accuracy: ± 2.5% FSD  
 8032 - 50mm Pocket Length  
 8034 - 100mm Pocket Length

50mm	BK -30/+60°	BK 0/+60°	BK 0/+120°	100mm	BM -30/+60°	BM 0/+60°	BM 0/+120°
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## GE 8033 - GE 8035 Thermometers

Zinc Steel Case, Brass Probe & Pocket  
 63mm Dial: dual scale °C (outer) & °F (inner)  
 Bottom Entry, 1/2" BSP, Accuracy: ± 2.5% FSD  
 8033 - 50mm Pocket Length  
 8035 - 100mm Pocket Length

50mm	BK -30/+60°	BK 0/+60°	BK 0/+120°	100mm	BM -30/+60°	BM 0/+60°	BM 0/+120°
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## Spring Mounted Temperature Gauges

63mm Dial  
 BS EN13190 - Class 2  
 IP 40 as per EN 60529  
 Magnet Mounted also available

S 0-120°C	S 0-160°C	S 0-250°C	S 0-400°C				
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High Temp/Pressure - Hydrometer - Electrical Contacts - Industrial Meters

# Thermometers



## SF 1680 Thermometers

All Stainless Steel, 304SS Bezel  
 100mm Dial, Class 2, IP31  
 Bottom Entry, 1/2" BSP  
 77mm Probe  
**Add thermowell Price**

M -30/+50°	0/+120°	0/+160°	0/+200°		Thermowell	Brass	St. Steel	
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## SF 1681 Thermometers

All Stainless Steel, 304SS Bezel  
 100mm Dial, Class 2, IP31  
 Bottom Entry, 1/2" BSP  
 100mm Probe  
**Add thermowell price**

M -30/+50°	0/+120°	0/+160°	0/+200°		Thermowell	Brass	St. Steel	
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## SF1685 Thermometers

All Stainless Steel, 304SS Bezel  
 100mm dial, Class 2, IP31  
 Back Entry, 1/2" BSP  
 77mm probe  
**Add thermowell price**

M -30/+50°	0/+120°	0/+160°	0/+200°		Thermowell	Brass	St. Steel	
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## SF 1686 Thermometers

All Stainless Steel, 304SS Bezel  
 100mm Dial, Class 2, IP31  
 Back Entry, 1/2" BSP  
 100mm Probe  
**Add thermowell price**

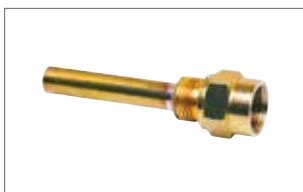
M -30/+50°	0/+120°	0/+160°	0/+200°		Thermowell	Brass	St. Steel	
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## Stainless Steel Thermowells for SF Thermometers

1/2" BSP for 10mm probes  
 For 77mm probe - 65mm insertion  
 For 100mm probe - 86mm insertion

77mm	100mm							
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## Brass Thermowells For SF Thermometers

1/2" BSP for 10mm probes  
 For 63mm probe - 65mm insertion  
 For 100mm probe - 86mm insertion

63mm	100mm							
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# Air & Dirt Separators



## Vira SC-F Air & Dirt Separator

Carbon Steel Body & Internals  
 Max. Pressure: 10 bar, Max Temp: 110°C  
 Flanged PN16, also Weld or Grooved available to order  
 Available up to 600mm

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Vira SC-M-F Magnetic Air & Dirt Separator

Stainless Steel Body & Internals  
 Max. Pressure: 10 bar, Max Temp: 110°C  
 Flanged PN16, also Weld or Grooved available to order  
 Available up to 600mm

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## Vira SCX-M-F Magnetic Hydraulic Separator

Carbon Steel Body & Internals  
 Max. Pressure: 10 bar, Max temp: 110°C  
 Flanged PN16, also Weld or Grooved available to order  
 Available up to 600mm

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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## FAR 2164 Hydraulic Separator

Painted Steel Body  
 Max. Pressure: 10 bar  
 Max Temp: 100°C  
 With anti-condensation insulation  
 Including auto air vent with shut-off valve and drain cock

1"	1 1/4"	1 1/2"	2"	50mm	65mm	80mm	100mm
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## Cleanvent CVAD Air & Dirt Separator

Stainless Steel Body & Internals  
 Max Pressure: 10 bar, Max Temp: 110°C  
 Flanged PN16  
 Available in CVA & CVD versions  
 Available up to 600mm

80mm	100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm
							50mm	65mm



## Cleanvent Magcvad Hydronic Header

Stainless Steel Body & Internals  
 Max. Pressure: 10 bar  
 Max Temp: 110°C  
 Available in CVD CVD-R versions

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
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### FAR 2220 Air & Dirt Separator

Brass Construction, Female BSP  
Swiveling Air Vent Valve, Drain Cock for Dirt Removal  
Max pressure: 10 bar  
Max temperature: 110 deg C

**Available with Magnet, Insulation**

3/4"	1"							
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### FAR 2225 Air & Dirt Separator with Magnet

Brass Construction, Female BSP  
Swiveling Air Vent Valve, Drain Cock for Dirt Removal  
Max pressure: 10 bar  
Max temperature: 110 deg C

**Available with Insulation**

3/4"	1"							
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### FAR 2200 Dirt Separator for Heating Systems

Brass Construction, Female BSP  
Drain Cock for Dirt Removal  
Max pressure: 10 bar  
Max temperature: 110 deg C

**Available with Magnet, Insulation**

3/4"	1"	1 1/4"	1 1/2"	2"				
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### FAR 2205 Dirt Separator with Magnet

Brass Construction, Female BSP  
Drain Cock for Dirt Removal  
Max pressure: 10 bar  
Max temperature: 110 deg C

**Available with Insulation**

3/4"	1"	1 1/4"	1 1/2"	2"				
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### FAR 2250 Deaerator for Heating Systems

Brass Construction, Female BSP  
Swiveling Air Vent valve  
Max pressure: 10 bar  
Max temperature: 110 deg C

**Available with Insulation**

3/4"	1"	1 1/4"	1"	2"				
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Swivelling Connections



Insulation



Magnetic



Chrome Plated



# Automatic Air Vents



## Brownall Automatic Air Eliminator

Bronze Body & Dome  
 1/2" Male BSP Inlet  
 Max Temperature: 93 deg C (Higher on request)  
 Max Pressure: 10 bar (Higher on request)  
 Min pressure: 0.15 bar

AE-A	AE-B	AE-C	AE-D	AE-MPHW-015	AE-MPHW-F	AE-MPHW-H	AE-MPHW-016	AE-MPHW-150
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## FAR 2045 Automatic Air Vents

Brass Housing, Max Pressure: 10 bar  
 Max Temperature: 110°C

## FAR 2068 Automatic Air Vent - High Temperature

Chrome Plated Brass, Max Pressure: 10 bar  
 Max Pressure: 160 deg C



2045	3/8"	1/2"	3/4"	Non Return	1/2" x 1/2"		2068	1/2"
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## FAR 2055 Automatic Air Vents - Angle Pattern

Brass Housing  
 Max Temperature: 110°C  
 Max Pressure: 10 bar

1/2"	3/4"							
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## Microvent Stainless Steel Automatic Air Vent

Stainless Steel Body  
 EPDM Seal, PE Rubber Float  
 Max Temperature: 110°C  
 Max pressure: 10 bar

1/2"								
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## CSA Ventolo Air Release Valve

Body & Cap in GS 400-15 Epoxy Coated  
 Float in stainless steel, NBR Gasket

## CSA Argo Combination Air Valve

Body & Cap in Glass Reinforced Polypropelene (GRPP)  
 Max pressure 16 bar, Min pressure 0.3 bar



Ventolo	1"	PN16	PN25	PN40		Argo	1"	2"
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## Flamco Flexvent

Minimum/Maximum operating temperature: -10°C/90°C (peak load:120°C)  
 Minimum/Maximum operating pressure: 0.2/6.0 bar (peak load: 10.0 bar)  
 Brass housing material

1/2"								
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## Expansion Vessels for Heating

Carbon Steel  
10 bar Rated Temp: Max 70°C  
Synthetic Rubber Diaphragm

8 litre	12 litre	18 litre	25 litre	35 litre	50 litre	80 litre	100 litre	140 litre
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## Expansion Vessels for Heating

Carbon Steel  
10 bar Rated, Temp: Max 70°C  
Synthetic Rubber Diaphragm

200 litre	300 litre	400 litre	500 litre	600 litre	800 litre	1000 litre	1500 litre	3000 litre
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## Expansion Vessels For Potable Water

Some sizes available with legs  
Carbon Steel  
10 bar Rated, Temp: Max 70°C  
Synthetic Rubber Diaphragm



8 litre	12 litre	18 litre	25 litre	33 litre	50 litre	80 litre	100 litre	140 litre
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## Expansion Vessels For Potable Water

Some sizes available with legs  
Carbon Steel  
10 bar rated, Temp: Max 70°C  
Synthetic Rubber Diaphragm  
Horizontal available



200 litre	300 litre	400 litre	500 litre	600 litre	800 litre	1000 litre	1500 litre
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## Flow Through Expansion Vessels

Carbon Steel  
10 bar Rated Temp: Max 70°C  
Synthetic Rubber Diaphragm

8 litre	12 litre	18 litre	25 litre	35 litre	60 litre	80 litre	100 litre	200 Litre
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## Flow Through Expansion Vessels

Carbon Steel  
10 bar Rated Temp: Max 70°C  
Synthetic Rubber Diaphragm



300 litre	400 litre	500 litre	600 litre		Flow jet	¾"		
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## Reliance Tenant Valve Plus

A one piece WRAS approved control manifold incorporating an extended lever isolating ball valve WRAS approved as a stop cock a cartridge type pressure reducing valve, a pressure gauge, a water meter connection point and double check valve



3/4"	1"								
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## Combined Thermal Balancing Valve & Pressure Reducing Valve

This all in one design reduces leak potential and saves installation time & cost



3/4"	1"								
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## Reliance 100/104 Safety Valves

High Capacity, Potable Water (100 series for heating)  
 Max temperature, 110°C  
 Female BSP  
 104 Series Set Pressures: 3.5 bar, 5 bar, 6 bar & 8 bar  
 100 Series Set Pressures: 3.5 bar, 3 bar, 4 bar & 5 bar



1/2" x 3/4"	3/4" x 1"	1" x 1 1/4"	1 1/4" x 1 1/2"	1 1/2" x 2"	2" x 2 1/2"				
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## Reliance Thermal Balancing Valve

DZR Brass Body, Female BSP  
 Temperature range: 35°C - 60°C  
 Max Temperature: 100°C, pressure rating: PN10  
 Incl disinfection module and gauge  
 Pre-insulated



1/2"	3/4"								
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## Reliance BVAL Brass Ball Valve

Full Bore, PTFE Seats  
 10 bar Rated, Temp: Max 85°C  
 Compression Ends for Metric Copper



15mm	22mm								
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Other Reliance Products

# Fixaflex Braided Hoses



## SS Braided EPDM Flexible Hose - Male X Female

Superflex Inox 25, Braided Stainless Steel AISI 304  
Swivel Female X Male BSPT  
Temperature Range - 20°C to +95°C  
Selection of stock hoses priced  
Made to order - any length - any fitting combination

**All Assemblies come with a 10 Year Guarantee**

1/2" x 300	3/4" x 300	1" x 300	1/2" x 450	3/4" x 450	1" x 450	1/2" x 600	3/4" x 600	1" x 600
------------	------------	----------	------------	------------	----------	------------	------------	----------



## Insulated SS Braided EPDM Flexible Hose - Male X Male

Insulated Superflex Inox 25, Braided Stainless Steel AISI 304  
Male BSPT x Male BSPT  
Temperature Range -20°C to 95°C  
Selection of stock hoses priced  
Made to order - any length - any fitting combination

**All Assemblies come with a 10 Year Guarantee**

1/2" x 300	3/4" x 300	1" x 300	1/2" x 450	3/4" x 450	1" x 450	1 1/4" x 450	1 1/2" x 450	
------------	------------	----------	------------	------------	----------	--------------	--------------	--



## SS Braided EPDM Flexible Hose - Male X Comp.

Superflex Inox 25, Braided Stainless Steel AISI 304  
Male BSPT x Metric Compression Ends  
Temperature Range - 20°C to +95°C  
Selection of stock hoses priced  
Made to order - any length - any fitting combination

**All Assemblies come with a 10 Year Guarantee**

1/2" x 300	3/4" x 300	1" x 300	1/2" x 450	3/4" x 450	1" x 450	1/2" x 600	3/4" x 600	1" x 600
------------	------------	----------	------------	------------	----------	------------	------------	----------



## Insulated SS Braided EPDM Flexible Hose - Male X Female

Insulated Superflex Inox 25, Braided Stainless Steel AISI 304  
Connections as required  
Temperature Range - 20°C to +95°C  
Made to order - any length - any fitting combination

**All Assemblies come with a 10 Year Guarantee**

1/2" x 300	3/4" x 300	1" x 300	1/2" x 450	3/4" x 450	1" x 450	1/2" x 600	3/4" x 600	1" x 600
------------	------------	----------	------------	------------	----------	------------	------------	----------



## Superflex Inox Flexible Hose - WRAS

Braided Stainless Steel AISI 304  
Swivel Female, Male BSPT Metric Compression Ends  
Available with insulation for chilled water applications  
Temperature Range - 20°C to +95°C

**Made to Order at Any Length**



10mm	12mm	19mm	25mm	32mm				
------	------	------	------	------	--	--	--	--



Quality Hoses For Drinking Water - HVAC - Cooling - Industry - Gas								
EPDM	SILICONE	OXYTIGHT	NITRILE	GAS	ST STEEL	POLYAMIDE	GALV STEEL	WRAS



## VYC 041 Thermodynamic Steam Trap

Stainless Steel Body & Cover  
 Stainless Steel Disc & Seat  
 PMA, 63 bar, PMS. 42 bar, PmS. 0.25 bar, TMA. 400°C  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam**

1/2"	3/4"	1"							
------	------	----	--	--	--	--	--	--	--



## VYC 042 Thermodynamic Steam Trap

Stainless Steel Body & Cover  
 Stainless Steel Disc & Seat  
 PMA. 63 bar, PMS. 42 bar PmS. 0,25 bar, TMA. 400°C  
 Flanged PN40

**Suitable for Steam**

15mm	20mm	25mm							
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## VYC 043 Thermodynamic Steam Trap

Stainless Steel Body & Cover  
 Stainless Steel Strainer, Disc & Seat  
 PMA. 63 bar, PMS 42 bar, PmS. 0.25 bar, TMA. 400°C  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam**

1/2"	3/4"	1"							
------	------	----	--	--	--	--	--	--	--



## VYC 044 Thermodynamic Steam Trap

Stainless Steel Body & Cover  
 Stainless Steel Strainer, Disc & Seat  
 PMA. 63 bar, PMS. 42 bar, PmS. 0,25 bar, TMA. 400°C  
 Flanged PN40

**Suitable for Steam**

15mm	20mm	25mm							
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## VYC 143 Bimetallic Steam Trap

Cast Steel Construction  
 Metal Seal  
 Max Temp: 450°C, Max pressure: 17/23/80 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam**

17 bar	1/2"	3/4"	23 bar	1/2"	3/4"	80 bar	1/2"	3/4 - 1"
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## VYC 144 Bimetallic Steam Trap

Cast Steel Construction  
 Metal Seal  
 Max Temp: 450°C  
 Max. pressure: 80 bar, Flanged PN40

**Suitable for Steam**

17 bar	15mm	20mm -25mm	23 bar	15mm	20mm -25mm	80 bar	15mm	20mm - 25mm
--------	------	------------	--------	------	------------	--------	------	-------------

# VYC Steam Traps



## VYC 241 Float & Thermostatic Steam Trap

Cast Iron Body & Cap  
 Max Temp: 220°C  
 Max. pressure: PMS 14 bar  
 Screwed BSP or NPT

**Suitable for Steam**

1/2"	3/4"	1"						
------	------	----	--	--	--	--	--	--



## VYC 243 Float & Thermostatic Steam Trap

Cast Steel Body & Cap  
 Max Temp: 220°C  
 Max. pressure: PMS 14 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam**

1/2"	3/4"	1"	1 1/2"	2"				
------	------	----	--------	----	--	--	--	--



## VYC 244 Float & Thermostatic Steam Trap

Cast Steel Body & Cap  
 Max Temp: 220°C  
 Max. pressure: PMS 14 bar  
 Flanged PN16, ANSI 150 or ANSI 300

**Suitable for Steam**

15mm	20mm	25mm	40mm	50mm				
------	------	------	------	------	--	--	--	--



## VYC 443 Thermostatic Steam Trap

Stainless Steel Construction, Max Temp: 250°C  
 Max pressure: PMS 22 bar  
 Screwed BSP, NPT or Socket Weld  
 Angular version also available

**Suitable for Steam**

1/4"	3/8"	1/2"	3/4"	1"				
------	------	------	------	----	--	--	--	--



## VYC 444 Thermostatic Steam Trap

Stainless Steel Construction  
 Max Temp: 250°C  
 Max. pressure: PMS 22 bar  
 For placing between flanges

**Suitable for Steam**

15mm	20mm	25mm						
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## VYC 343 Inverted Bucket Steam Trap

Cast Iron Body & Cap  
 Max Temp: 220°C  
 Max. pressure: 16 bar  
 Screwed BSP or NPT

**Suitable for Steam**

1/2"	3/4"	1"						
------	------	----	--	--	--	--	--	--





## Sight Glasses



### FP Fig.161 Brass Sight Glasses - with Ball

Body & Cover Brass  
 Tempered Glass  
 Double Window  
 Screwed BSP  
 Max 80°C with standard ball

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
------	------	----	--------	--------	----	--	--	--



### FP Fig.162 Brass Sight Glasses - with Rotors

Body & Cover Brass  
 Tempered Glass  
 Double Window  
 Screwed BSP

3/4"	1"	1 1/4"	1 1/2"	2"				
------	----	--------	--------	----	--	--	--	--



### GE2240 Stainless Steel Sight Glasses

AISI 316 SS Body  
 200°C at 10 bar, 50°C at 16 bar  
 Screwed BSP

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
------	------	----	--------	--------	----	--	--	--



### GE2250 Stainless Steel Sight Glasses

AISI 316SS Body  
 200°C at 10 bar, 50°C at 16 bar  
 Flanged PN16

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
------	------	------	------	------	------	------	------	-------



### FP FIG.158 Brass Sight Glasses

Single Window, Screwed BSP  
 Tempered Glass  
 Moplen Floating Ball  
 Max temp 80°C  
 Max pressure 16 bar  
**Suitable for Steam/Gases/Liquids**

3/8"	1/2"	3/4"	1"					
------	------	------	----	--	--	--	--	--



### FP FIG. 163 Bronze Sight Glasses

Double Window  
 Flanged PN16  
 Integral Flappers

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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### VYC 265 Sight Glasses - Single Window

Cast Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam/Gases/Liquids**

1/2"	3/4"	1"						
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### VYC 265 Sight Glasses - Single Window

Stainless Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam/Gases/Liquids**

1/2"	3/4"	1"						
------	------	----	--	--	--	--	--	--



### VYC 365 Sight Glasses - Double Window

Cast Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam/Gases/Liquids**

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
------	------	----	--------	--------	----	--	--	--



### VYC 365 Sight Glasses - Double Window

Stainless Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Screwed BSP, NPT or Socket Weld

**Suitable for Steam/Gases/Liquids**

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
------	------	----	--------	--------	----	--	--	--



### VYC 366 Sight Glasses - Double Window

Cast Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Flanged PN16, PN40 or ANSI

**Suitable for Steam/Gases/Liquids**

32mm	40mm	50mm	65mm	80mm	100mm	15mm	20mm	25mm
						125mm	150mm	200mm



### VYC 366 Sight Glasses - Double Window

Stainless Steel Construction  
 Max temp: 280°C  
 Max pressure: 40 bar  
 Flanged PN16, PN40 or ANSI

**Suitable for Steam/Gases/Liquids**

25mm	32mm	40mm	50mm	65mm	80mm	100mm	15mm	20mm
							125mm	150mm



## TT Ductile Iron Eccentric Plug Valve

Ductile Iron Body, Cover & Gland  
 Ductile Iron & NBR Fully Encapsulated Plug  
 ISO 5211 Mounting  
 Flanged PN16



80mm	100mm	150mm	200mm	250mm	300mm			
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## TT Fig. 5000 Flap Valve

Ductile Iron Door & Frame  
 Copper Alloy Door Seat  
 Max working pressure : 6 bar static on-seat head  
 PN16 Flanging, Epoxy Coated

80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm
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## Zubi Square Knife Gate Valve

Body Options 13:07 304L or 316L Stainless steel  
 Seat options: EPDM, NBR, Silicone, Viton  
 Knife Options: 304LSS, 316LSS, 316TiSS, Hardox  
 Manual, Pneumatic, Hydraulic, Electric and more  
 Various Packing Option

200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm	
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## Dosing Pots

All dosing pots that are designed to PD 5500:2000 category 3 (CE marked) have the following Max. 1" Connections

				3.5 L	5L	6L	10L	11L
13.5L	15L	16L	18L	20L	25L	30L	40L	50L



## RPZ Backflow Preventors

Various brands available  
 Flanged Threaded  
 Pressure rating PN10  
 Max. temperature: 100°C



Reliance - Caleffi - Socla - Honeywell								
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## SPR40 Steam Separator

Carbon Steel Body  
 Flanged PN40  
 For Steam & Compressed Air

15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
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# Miscellaneous



## Albion Drain Cocks

Art.10 - Brass BSPP BS 28798/2 Type A (Max Temp: 90°C)  
 Art.310 - Bronze BSPT BS 28798/2 Type A  
 Art. 311 - Bronze BSPT BS 28798/2 Type A Lockshield  
 Rated 16 bar, Temp range: -20°C to 120°C

ART.10	1/2"	3/4"	Art.310	1/2"	3/4"	Art.311	1/2"	3/4"
--------	------	------	---------	------	------	---------	------	------



## Watts Water Hammer Arrestor

Copper Body, EPDM O-Ring  
 Temp Range: 0.5°C to 82°C  
 Max Pressure 10.60 bar

1/2"	3/4"	1"						
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## FAR 2008 Pressure/Temp. Relief Valve

DZR Brass Body, Stainless Steel Spring  
 Set Temperature: 92°C  
 Valve opens between 89°C & 95°C  
 Set Pressures from 2 to 10 bar

1/2"	3/4"							
------	------	--	--	--	--	--	--	--



## NABIC 500T Pressure & Temp Relief Valve

Gunmetal body, Viton Seat  
 Max set pressure: 12.5 bar  
 Max temp. 95°C  
 Max working temp. 75°C

*Suitable for Steam*

DN15-3/4"	DN20-1"	DN25-1 1/4"	DN32-1 1/2"	DN40-2"	DN50-2 1/2"			
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## Nabic 568 Anti-Vacuum Valve

Bronze/Brass Construction - also available in stainless steel  
 PTFE to Metal Seating, Viton available  
 Max Temp. - 20°C to 195°C  
 Max pressure: 13.5 bar  
 Nabic available up to 2"



1/2"	3/4"	1"	RWC	1/2"/15mm	3/4"/22mm	Watts N36	1/2"	
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## Test Points

CIM 723 (Sold in packs of two)  
 Standard Binder Points  
 Extended Binder Points



CIM 723	1/4"	BINDER	1/4"	1/2"	1/4" EX	1/2" EX	GAUGE	PROBE
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## Miscellaneous



### Geca Oil Filters

with Water Drain Valve  
Screwed BSP  
Temperature range: -20°C to 60°C  
Max Pressure 2 bar

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
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### VZO Oil Meters

Flow: 1 l/hr to 30,000 l/hr  
Pulsed & Non Pulsed  
Please contact us with flow for correct sizing

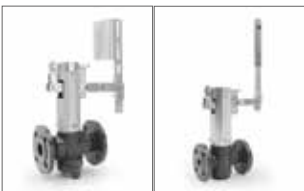
						VZ04	VZ08	VZ015
VZ020	VZ025	VZ040	VZ04P	VZ08P	VZ015P	VZ020P	VZ025P	VZ040P



### YYC Model 460 EN Blowdown Valve

Cast Steel Construction  
Flanged and Rated PN40  
Max Temp 250°C

	25mm	32mm	40mm	50mm				
--	------	------	------	------	--	--	--	--



### YYC Model 660 EN Blowdown Valve

Cast Steel Construction  
Flanged and Rated PN40  
Max Temp 250°C

25mm	32mm	40mm	50mm					
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### YYC Model 660-A EN Automation Blowdown Valve

Cast Steel Construction  
Flanged and Rated PN40  
Max Temp 250°C

20mm	25mm	32mm	40mm	50mm		MP2		
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### YYC Model 560 DRM-1 Samples Water Cooler

Stainless Steel Construction  
Max Pressure 140 bar  
Max Temp 250°C

1/2"								
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# Miscellaneous



## GE-SAFE 73070 Magnetic Filter for Boilers

PA66 Construction  
800 micron 304SS Filter  
EPDM Perox Hydraulic Seal  
Max 3 bar pressure  
Max Temp: 90°C

3/4"									
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## GE-SAFE 73219 Multifunction Magnetic Filter

PA66 Construction  
800 micron 304SS Filter  
EPDM Perox Hydraulic Seal  
Max 4 bar pressure  
Max Temp: 90°C

1"	1 1/4"								
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## GE Self Cleaning Filter with Magnetic Separator

Steel Construction  
100 micron 304SS Filter  
EPDM Perox Hydraulic Seal  
Max 10 bar pressure  
Max Temp: 95°C

50mm	65mm	80mm	100mm	125mm	150mm				
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## HOMATIC Series 10/20 40 Pinch Valves

POM or Aluminium Powder Coated Body  
POM Plastic Threaded Cover  
NBR Nitrile O-Rings  
Various Sleeve Materials available  
FDA & ATEX Sleeves available

1/2"	3/4"	1"	1"	1 1/2"	2"	2 1/2"	3"		
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## HOMATIC Series 40 Pinch Valves

Aluminium Powder Coated Body  
Flanged PN16  
NBR Nitrile O-Rings  
Various Sleeve Materials available  
FDA & ATEX Sleeves available

50mm	65mm	80mm	100mm	125mm	150mm				
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## CP961 Wondervalue

Isolating, Regulating, Filter Options  
Lever or Screwdriver Operated  
Threaded or Metric Compression Connections



1/2"	3/4"		15mm	20mm					
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## Accessories



M16 HT Zinc Plated Bolts  
M20 HT Zinc Plated Bolts  
HT Zinc Plated Set Screws

M16 x 60	M16 x 65	M16 x 70	M16 x 90	M16 x 120	M16 x 40	M16 x 50	M20 x 40	M20 x 50
					M20 x 70	M20 x 80	M20 x 90	M20 x 120



Hex Nuts - Zinc Plated  
Hex Washers - Zinc Plated

Other Sizes available on request

Nuts	M12	M16	M20		Washers	M12	M16	M20
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EPDM PN16 Ring Gaskets

EPDM x 3mm  
For water service up to 90°C  
BS2494  
Full range from 15mm to 300mm



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
					20mm	25mm	32mm	40mm



Novus Supra PN16 Ring Gaskets

Novus Supra x 1.5mm  
BS7531 WRC  
For steam, oil and gas services  
Full range from 15mm to 300mm  
Recommended max temperature 400°C



50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
						25mm	32mm	40mm



EPDM PN16 Full Face Gaskets

EPDM x 3mm  
For water services up to 90°C  
BS2494  
Full range from 15mm to 300mm



32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm	200mm
								25mm



PN16 Slip on Plate Flanges  
PN16 Screwed Flanges  
PN6 Screwed Flanges



40mm	50mm	65mm	80mm	100mm	125mm	150mm		
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# ABS Plastic Valves



## ABS Diaphragm Valve

Solvent Spigot Ends  
EPDM Diaphragm  
Available with PTFE/EPDM Diaphragm

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



## Comer ABS Industrial Ball Valve

Double Union, Solvent Socket Ends  
PTFE Seats, EPDM Seals  
Lever Operated  
Suitable for electric or pneumatic actuation

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



## Comer ABS Standard Ball Valve

Double Union, Solvent Socket Ends  
PTFE Seats, EPDM Seals  
Lever Operated

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



## Comer ABS Standard Ball Valve

Single Union, Solvent Socket Ends  
PTFE Seats, EPDM Seals  
Lever Operated

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



## Comer ABS Standard Non Return Valve

Double Union, EPDM Seals  
Solvent Socket Ends

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



## PP Industrial Butterfly Valve

ABS Disc  
EPDM or FPM Seal  
Lever or Gear Operated for PN10/16 Flanging

50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm
Please Request Copy of Alma/Epc/Comer Price List for ABS Valve Prices								



### Praher M1 PVC Lockable Ball Valve

Double Union Solvent Socket Ends  
PTFE Seats, EPDM Seals  
Lockable Lever Operated  
Suitable for electric or pneumatic actuation  
Available in CPVC, PP & PVDF

									16mm
20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	



### Praher T4 PVC-U Diaphragm Valve

Solvent Socket Union Ends  
EPDM Diaphragm  
Lockable Handwheel  
Available in CPVC, PP & PVDF

20mm	25mm	32mm	40mm	50mm	63mm	75mm			
------	------	------	------	------	------	------	--	--	--



### Praher S4 PVC-U 3-Way Ball Valve

Double Union, Lockable Lever  
PTFE Seats, EPDM Seals  
Solvent Socket Ends or other on request  
Suitable for electric or pneumatic actuation  
Available in PP & PVDF

16mm	20mm	25mm	32mm	40mm	50mm	63mm			
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### Praher PVC Foot-Aerating Valve

Double Union, PP Strainer  
EPDM Seals  
Solvent Sockets Ends or other on request  
Available in PP

									16mm
20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	



### Praher PVC K6 Wafer Check Valve

EPDM Seals  
PN10 Rated

									40mm
50mm	65mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	



Praher Butterfly Valve



Praher PVC K4 Check Valve



Praher PVC Line Strainer



# ABS Pipe, Valves & Fittings



Class C Pipe - class E Pipe - Sockets - 90 Elbows - 45 Elbows - Red Bushes

Full ABS Price List on Request



45 Elbows - Unions - Caps - Crosses Tees - Y - Tees

Full ABS Price List on Request



LR90 Bends - Plain Hoesetails - P/T Sockets - P/T Barrel Nipples - Threaded Hoesetails

Full ABS Price List on Request



FP/MT Adaptors - MP/FT Adaptors - P/T Tees - Reinforced Adaptors Sockets

Full ABS Price List on Request



Tank Connectors - Backnuts - Threaded Plugs - Threaded Caps - Threaded Sockets

Full ABS Price List on Request



Full Face Flanges - Blank Flanges - Stub Flanges - Backing Rings - Gaskets

Full ABS Price List on Request



Economy & Industrial Ball Valves - Non Return Valves - Diaphragm Valves

Full ABS Price List on Request



Cement - Cleaner - Pipe Clips - Composite Unions

Full ABS Price List on Request

## Chemical resistance of common metals used in valves.

The information in these tables is offered as a general guide only to the chemical resistance of commonly used materials in the construction of METAL valves.

These tables are *not* to be used as an absolute recommendation as there are too many factors that can influence the corrosion resistance, such as temperature, temperature fluctuations, concentrations and solutions, velocity and abrasion. J+J therefore accept no responsibility for any problems arising from use of these tables.

We recommend that if any doubt exists as to the resistance of a material to a specific chemical, that tests be carried out to verify the compatibility.

### What the ratings mean:

Ratings are based on media at ambient/ room temperature unless otherwise stated.

A = EXCELLENT RESISTANCE

B = GOOD OR ACCEPTABLE RESISTANCE

C = POOR RESISTANCE

D = DO NOT USE, NO RESISTANCE

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Acetaldehyde	B	C	C	C	A		A	A	A	D	A	B	C		A
Acetamine	B	B	B	B	B					A					A
Acetate Solvents	A	B	A	B	A			A	A	D	D		D		A
Acetic Acid, Aerated	B	F	D	D	A			A	A	C	D		C	A	A
Acetic Acid, Air Free	B	B	D	D	A	A	A	A	A	C	D		D	A	A
Acetic Acid, crude	C	C	C	C	A	A	A	B	A	D	D		D	A	A
Acetic Acid Glacial					A	A	A		A	D	D	B	C	A	A
Acetic Acid, pure	C	C	D	D	A	A	A	D	A	D	D		D	A	A
Acetic Acid 10%	C	C	C	C	A	A	A	B	A	D	B	B	D	A	A
Acetic Acid 80%	C	C	C	C	A	A	A	B	A	D	D	C	D	A	A
Acetic Acid Vapors	B	D			D	D	B	C	A	D				A	A
Acetic Anhydride	B	D	D	D	B	B	B	B	A	D	C	C	D	A	A
Acetone	A	A	A	A	A	A	A	A	A	D	A	A	D	A	A
Other Ketones	A	A	A	A	A	A	A	A	A	D	A	D	D	A	A
Acetyl Chloride	D	A		C	C			B	A	D	D	D	D		A
Acetylene	A	B	A	A	A	A	A	A	A	B	A	A	A		A
Acid Fumes	B	D	D	D	B		B			C	D				A
Acrylonitrile	B	A	A	C	A		B	A	A	D	D	D	C		A
Air	A	A	A	A	A		A	A	A	A	A	A	A		A
Alcohol, Amyl	B	B	B	C	A		B	B	B	C	A	A	B	A	A
Alcohol, Butyl	B	B	B	C	A		A	A	A	B	A	C	A	A	A
Alcohol, Diacetone	A	A	A	A	A		A	B	A	D	A	B	D	A	A
Alcohol, Ethyl	B	B	B	B	B		A	B	A	A	A	A	A	A	A
Alcohol, Fatty	B	B	B	B	A		A		A	B	A			A	A
Alcohol, Isopropyl	B	B	B	B	B		A	B	B	C	A	A	A	A	A
Alcohol, Methyl	B	B	B	B	A		A	A	A	B	A	A	C	A	A
Alcohol, Propyl	A	A	B	B	A		A	A	A	B	A	A	A	A	A
Alumunia	A	A						A	A	A	A	A			A
Aluminum Acetate	C	D		D	A	B	B	C	B	D	D	A	D		A
Aluminum Chloride Dry	B	B	C	D	C		D	B	B	B	A	A	A	A	A
Aluminum Chloride Solution	C				D	C	B	B	B	B	D		A	A	A
Aluminum Fluoride	C		D	D	C			B	A	A	C	A	A		A
Aluminum Hydroxide	A	A	D	D	A	B	B	B	A	A	C	A	A		A
Aluminum Nitrate	D	D		D	C		B	C	B	B	D	B	D		A
Aluminum Oxalate	B						A	B							A
Aluminum (Aluminum Potassium Sulfate)	D	D		D	B	C	B	C	A	B	D		B	A	A
Alum (Aluminum Sulfate)	C	C	D	D	B	A	B	C	A	A	D	A	A	A	A
Amines	B	B	B	C	A	A	A	B	B	D	C	C	D		A
Ammonia Alum	C				A		A	A	A	B	C	C		A	A
Ammonia, Anhydrous Liquid	A	D	A	B	A	A	A	B	A	B	D	B	D	A	A
Ammonia, Aqueous	B	C	C	C	A		A	A	A	D	A	B	C		A
Ammonia, Gas, hot	B	B	B	B	B					A	A				A
Ammonia Liquor	A	B	A	B	A			A	A	D	D		D		A
Ammonia Solutions	B	F	D	D	A			A	A	C	D		C	A	A
Ammonium Acetate	B	B	D	D	A	A	A	A	A	C	D		D	A	A
Ammonium Bicarbonate	B	B	C	B	B		B	B		B	A	A	A		A
Ammonium Bromide 5%	D				B		B	B			A				A
Ammonium Carbonate	B	B	B	B	B		B	B		C	D	A	B		A
Ammonium Chloride	D	D	D	D	C	C	B	B	B	B	C	A	A		A
Ammonium Hydroxide 28%	C	D	C	C	B	A	A	F	B	B	D	B	A	A	A

Ratings: A=Excellent B=Good C=Poor <sup>116</sup>D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

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## Chemicals

	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Ammonium Hydroxide Concentrated	C	D	C	C	A	A	A	C	B	C	D	A	A	A	A
Ammonium Monosulfate	D				B			B	B		D				A
Ammonium Nitrate	B	D	D	D	A	A	B	D	B	A	D	A	A		A
Ammonium Oxalate 5%	A				A		A	B			A				A
Ammonium Persulfate	C	C			A		A	D		D	D	B	B		A
Ammonium Phosphate	C	D	D	D	B		B	C	A	C	C	A	A		A
Ammonium Phosphate Di-basic	B	C	D	D	B		B	C	A	A	A		A		A
Ammonium Phosphate Tri-basic	C	C	D	D	B		B	C	A	A	A		A		A
Ammonium Sulfate	C	C	C	D	B	B	B	B	A	B	B	A	B	A	A
Ammonium Sulfide	C	D	D	D	B		B	B	A	A	A	A	D		A
Ammonium Sulfite	C	C	C	C	A		B	D		B	A	B	A		A
Amyl Acetate	B	B	C	C	B	A	A	B	A	D	A	B	D		A
Amyl Chloride	D	B		B	A		A	B	B	D	A	D	D		A
Aniline	C	D	C	C	B		A	B	B	D	D	C	C	A	A
Aniline Dyes	C	C	C	C	A		A	A		C	A	C	B		A
Apple Juice	B	C	D	D	B		A	A		A	A	B	A		A
Aqua Regia (Strong Acid)	D	D	D	D	B		B	B		D	D	D	D	D	A
Aromatic Solvents	A	A	C	B	A		A	B		D	A	D			A
Arsenic Acid	D	D	D	D	B		B	D	B	A	D	B	A	A	A
Asphalt Emulsion	C	A	B	B	A		A	A	A	D	A	D	A		A
Asphalt Liquid	C	A	B	B	A		A	A	A	C	A	D	A		A
Barium Carbonate	C	B	B	B	B		B	B	A	B	A	A	A		A
Barium Chloride	D	B	C	C	B	B	C	B		A	A	A	A		A
Barium Cyanide	D	C		C	B		B	D		B	A	B	B		A
Barium Hydrate	D	D			A		A	B		A		A			A
Barium Hydroxide	D	C	C	B	B	A	A	B		A	A	B	A		A
Barium Nitrate	B				A		A			A	A				A
Barium Sulfate	D	C	C	C	A		A	B		A	A	B	A		A
Barium Sulfide	D	D	C	D	B		B	C		A	A	A	A		A
Beer	A	B	D	D	A	A	A	A		B	A	B	A		A
Beet Sugar Liquors	A	A	B	B	A		A	A		A	A	B	A		A
Benzaldehyde	A	A	A	C	A		A	B	B	D	A	A	D		A
Benzene (Benzol)	B	B	B	B	B	B	A	A	B	D	C	D	B	A	A
Benzoic Acid	B	B	D	D	B	A	B	B	A	C	A	D	B		A
Beryllium Sulfate	B	B		B	B		A	B		B	A	B	B		A
Bleaching Powder Wet		B			C		B	A	D	D	B	B	B		A
Blood (meat juices)	B	B		D	A	A	A		B	B	A	B	B		A
Borax (Sodium Borate)	C	D	C	C	A			A	B	A	A	A	A		A
Bordeaux Mixture					A		A			A	A	A			A
Borax Liquors	C	A	C	C	B		A	B		A	A	A	A		A
Boric Acid	B	C	D	D	B		B	B	A	B	A	B	A	A	A
Brake Fluid	B	B		B	B	A		B		D	B	B	D		A
Brines, Saturated	C	B	D	C	B		B	B	A	A	A	A	A		A
Bromine, Dry	C	B	D	D	D		B	A	A	D	D	D	B	B	A
Bunker Oils (Fuel)	A	B	B	B	A		A	A		B	A		A		A
Butadiene	B	C	B	B	A		A	C	B	C	A	C	B		D
Butane	A	A	B	B	A		A	B	A	B	A	D	A		A
Butter					A		A			B	A				A
Buttermilk	A	D	D	D	A		A	D		A	A	B	A		A
Butyl Acetate	B	B		B	B		A	B	B	D	B	D	D		A

Ratings: A=Excellent B=Good C=Poor 117 D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Butylene	A	A	A	A	A		A	A		D	A	D	D		A
Butyric Acid	B	C	D	D	B		B	B	A	C	A	C	C		A
Calcium Bisulfite	C	C	D	D	B		B	D	B	A	D	D	A		A
Calcium Carbonate	C	C	D	D	B		B	B	B	A	A	B	A		A
Calcium Chlorate	B	D		C	B		B	B		B	D	B	B	B	A
Calcium Chloride	C	B	C	C	B	B	B	B	A	A	A	B	A		A
Calcium Hydroxide	D	C	C	C	B		B	A	A	A	A	A	A		A
Calcium Nitrate	B				B		B			B	C	B			A
Calcium Phosphate	D	C		C	B		B			B	B	B	B		A
Calcium Silicate	D	C		C	B		B			B	A	B	B		A
Calcium Sulfate	B	C	C	C	B	B	B	B	B	A	A	B	A		A
Caliche Liquor			B		A		A			B	A				A
Camphor	C	C		C	B		C	C		B	A	B	B		A
Cane Sugar Liquors	A	B		B	A		A	B		B	A	B	B		A
Carbonated Beverages	B	B	D	B	B	B	B	C		B	A	B	B	A	A
Carbonated Water	A	B	B	A	A	B	A	B		A	A	A	A	A	A
Carbon Bisulfide	A	C	B	B	B		B	B		D	A	D	A		A
Carbon Dioxide, Dry	A	A	A	B	A	A	A	A		C	A	B	B	A	A
Carbonic Acid	A	D	D	D	B	B	A	B		B	A	B	A	A	A
Carbon Monoxide	A	A		B	A	A	A	A	A	B	A	B	B		A
Carbon Tetrachloride, dry	B	C	B	C	A	A	A	A	A	D	A	D	B	A	A
Carbon Tetrachloride, wet		D	D	D	B		B	B	B	D	B	D	B	A	A
Casein	C	C		C	B		B	C		B	A	B	B		A
Caster Oil	A	A	B	B	A		A	A	A	A	A	B	A		A
Caustic Potash					A		A	B		B	D				A
Caustic Soda	D		B	B	A		A	A		C	D	B	B		A
Cellulose Acetate	B	B		B	B		B	B	B	D	C	B	D		A
China Wood Oil (Tung)	A	C	C	C	A		A	A	A	A	A	D	A		A
Chlorinated Solvents	D	C	C	C	A		A	B		D	A	D	C		A
Chlorinated Water	C				C	D	A	D	D	B	D		A	B	A
Chlorine Gas, Dry	B	C	B	B	B	C	A	A	A	C	D	D	B	A	A
Chlorobenzene, dry	B	B	B	B	A		A	B	B	D	B	D	A		A
Chloroform, dry	D	B	B	C	A	B	A	A	B	D	A	D	B		A
Chlorophyll, dry	B	B		B	B		A	B		B		B	B		A
Chlorosulfonic Acid, dry	B	C	B	B	B		B	B	A	D	D	D	D		A
Chrome Alum	C	C	B	C	A		A	B		B	B	B	B		A
Chronic Acid<50%	C	D	D	D	C	C	B	C	B	D	D	C	C		A
Chronic Acid>50%	D	D	D	C	C	D	B	D	B	D	D	C	C		A
Chromium Sulfate	B	C		D	B		C	B		B	C	B	B		A
Cider	B				A		B	A			A				A
Citric Acid	B	C	D	D	B	C	A	B	A	B	A	B	A	A	A
Citrus Juices	C	B	D	D	B		A	A		A	A		A		A
Coca Cola Syrup					A		A			B	A		B		A
Coconut Oil	B	B	C	C	B		A	B		A	A	A	A		A
Coffee	A	A		D	A		A	B		A	A	A	A		B
Coffee Extracts, hot	A	B	C	C	A		A	A		A					A
Coke Oven Gas	A	C	B	B	A		A	B		C	D	D	B		A
Cooking Oil	B	B	B	B	A		A	A		A	A	D	A		A
Copper Acetate	D	D	D	D	A		A	C	B	C	D	B	D		A
Copper Carbonate	D				A		A			A					A

Ratings: A=Excellent B=Good C=Poor 118 D=Do not use Blank =No Information



# Chemical compatibility



Doc: ChemComp/01

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## Chemicals

	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPBR	Viton	Flexible Graphite	Teflon-Reinforced
Copper Cyanide	D	D		D	A		A	C		A	A	B	B		A
Copper Nitrate	D	D	D	D	B		B	D		A	A	B	A		A
Copper Sulfate	D	D	D	D	B	B	B	C	A	A	A	A	A	A	A
Corn Oil	B	B	C	C	B		B	B		A	A	C	A		A
Cottonseed Oil	B	B	C	C	B		B	B		A	A	C	B		A
Cresol					B		B			D	D	D	D		A
Creosote Oil	B	B	B	B	B	B	A	B	B	C	D	D	A		A
Cresylic Acid	C	C	C	D	B		B	B		D	D	D	B		A
Crude Oil, sour	B	C	B	C	A		A	B		A	A	D	A		A
Crude Oil, sweet	A	B	B	B	A		A	A		A	A		A		A
Cupric Nitrate	D				A		A	D			D				A
Cutting Oils, Water Emulsions	A	A	B	B	A		A			A	A		A		A
Cyanide Plating Solution	D	D		D	B		B	D		B	D	B	B		A
Cyclohexane	A	A	A	A	A		A	B	B	C	A	D	A		A
Cyclohexanone	B	B			A		A	B	B	D	A				A
Detergents, Synthetic	B	B		B	B		A	B		B	A	B	A		A
Dextrin	B	B		B	B		B	B		B	A	B	B		A
Dichloroethane				C	C		B	B		D	D	D			A
Dichloroethyl Ether	B	B		B	B		B	B		D	D	D	D		A
Diesel Oil Fuels	A	A		A	A		A	A		A	A	D	A		A
Diethylamine	B	B	A	B	A		A	B		B	A	C	D		A
Diethyl Benzene					B		B			D	C	D			A
Diethylene Glycol	B	B	A	A	A		A	B		A	A	A	B		A
Diethyl Sulfate	B	B		B	B		B	B		C	A	C	B		A
Dimethyl Formamide	B	B		B	A		A	B		B	A	D	D		A
Dimethyl Phthalate										B	C		D		A
Dioxane	B	B		B	B		B	B		D	C	C	D	A	A
Dipentane (Pinene)	A	A		A	A		A			B	A	D	B		A
Disodium phosphate	B			B	B		B	C		B	A		B		A
Dowtherm	A	A	B	B	A		A	A		D	A	D	A	A	A
Drilling Mud	B	B	B	B	A		A	A		B	A	A	A		A
Dry Cleaning Fluids	A	C	B	B	A		A	A		B	D	A	B		A
Drying Oil	C	C	C	B	B		B	B		B	A	A			A
Enamel		A									B	A			A
Epsom Salts (MgSo4)	A	B	C	C	B		B	B		B	A	A	A		A
Ethane	A	B	C	C	B		B	B		A	A	D	A		A
Ethers	A	B	A	B	A	B	A	B		D	C	C	C		A
Ethyl Acetate	A	C	B	C	B	A	B	B	B	D	C	C	D		A
Ethyl Acrylate	C	B	C	C	A		A	B		A	D	B	C	D	A
Ethyl Benzene							A		A	C	A	D			A
Ethyl Bromide	B	A		B	B		C	B		B	A	B	B		A
Ethyl Chloride, dry	B	B	B	B	A	A	A	B	B	C	A	C	B		B
Ethyl Chloride, wet	D	C	C	D	B		B	B	B	C	A	B	B		A
Ethylene Chloride	C				A		A	B	B	D	A		D		A
Ethylene Dichloride					B		A	B		D	C	D	D	A	A
Ethylene Glycol	A	B	B	B	B	A	A	B	A	A	A	A	A		A
Ethylene Oxide	C	C	B	B	B		B	B	A	D	A	D	D		A
Ethyl Ether		B		C	A		A	A	B	D	A	D	D		A
Ethyl Silicate	B	B		B	B		B	B		B	A	B	B		A
Ethyl Sulfate	A				B		B			B	A	C	A		A

Ratings: A=Excellent B=Good C=Poor 119 D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

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## Chemicals

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Fatty Acids	B	C	D	D	A		A	B	A	B	A	D	A	A	A
Ferric Hydroxide					A		A	A		B	A	A			A
Ferric Nitrate	D	D	D	D	C	B	A	D	B	A	A	A	A		A
Ferric Sulfate	D	D	D	D	B	B	A	D		A	A	A	A		A
Ferrous Ammonium Citrate	B				B		B			A	A				A
Ferrous Chloride	D	B	D	D	D		D	D	D	A	A	A	A	A	A
Ferrous Sulfate	C	B	D	D	B		B	B	B	A	A	A	A	A	A
Ferrous Sulfate, Saturated	C	C	C	C	A		A	B	B	C	A	B	B	A	A
Fertilizer Solutions	B	C	B	B	B		B	B		B	A	D	A		A
Fish Oils	C	B	B	B	A		A	A		A	A	D	A		A
Flue Gases	C	B		B	A		A	B		C	C	D	C		A
Fluoboric Acid	B				B		A			A	D				A
Fluorosilicic Acid	D	B	D	D	B		B	A	B	C	C	C	C		A
Formaldehyde, cold	A	A	A	B	A	A	A	A	B	B	A	B	D		A
Formaldehyde, hot	B	B	D	D	C		B	B	B	B	A				A
Formic Acid, cold	D	B	D	D	B	B	A	B	A	D	D		B	A	A
Formic Acid, hot	D	B	D	D	B	D	B	B	B	D	D		A	A	A
Freon Gas, dry	B	B	B	B	A	A	A	A	B	C	A	C	C	A	A
Freon 11, MF,112, BF	B	B	C	A	A		A	B	B	C	A	C	D	A	A
Freon 12, 12, 32, 114, 115	A	A	B	A	A		A	B	B	B	A	A	D	A	
Freon 21, 31	B	B		C	A		A	B	B	D	A	D	D	A	
Freon 22	A	A		B			A		B	D	A	D	D	A	
Freon 113, TF	B	B		C	A		A	B	B	B	A	C	C	A	
Freon, wet	D	D		D	C	B	B	B	B	B	A	B	D	A	A
Fruit Juices	B	B	D	D	A		A	B		A	A	A	A		A
Fuel Oil	A	B	B	B	A		A	B		A	A	D	A		A
Fumaric Acid										B	A				A
Furfural	A	A	A	B	A	B	A	B	B	D	A	C	D		A
Gallic Acid 5%	A	C	D	D	B		B	B	B	B	A	C	A		A
Gas, Manufactured	B	B	B	B	B		B	A		A	A		A		A
Gas, Natural	B	B	B	B	A		B	A		A	A	D	A		A
Gas, Odorizers	A	A	B	B	B		A	B		B	A		A		A
Gasoline, Aviation	A	A	A	B	A		A	A	A	C	A		A	A	A
Gasoline, Leaded	A	A	A	A	A		A	B	A	C	A		A	A	A
Gasoline, Motor	A	A	A	B		A	A	A	A	C	A	D	A	A	A
Gasoline, Refined	A	B	B	B	A		A	B	A	C	A	D	A	A	A
Gasoline, sour	A	B	B	B	A		A	C	A	C	A	D	A	A	A
Gasoline, Unleaded	A	A	A	B	A		A	A	A	C	A		A	A	A
Gelatine	A	A	D	D	A		A	B		A	A	A	A		A
Glucose	A	A	B	B	A		A	A	A	A	A	A	A		A
Glue	A	B	A	B	B		A	B	A	A	A	B	A		A
Glycerine (Glycerol)	A	B	C	B	A	A	A	A	A	C	A	A	B	A	A
Glycol Amine	C	D		B	B	A			D	A	C	D	D	A	
Glycol	A	B	C	B	B		A	B		B	C	A	A		A
Graphite	B	B		C	B		A	B		B	A	B	B		A
Grease	B	C	A	A	A		A	B		A	A	D	A		A
Helium Gas	B	B		B	A		A	B	A	B	A	B	B		A
Heptane	A	A	B	B	A		A	B	A	A	A	D	A		A
Hexane	A	B	B	B	A		A	B	A	A	A	D	A		A
Hexanol, Tertiary	A	A	A	A	A		A	A	A	A	A	D	B		A

Ratings: A=Excellent B=Good C=Poor 120 D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Hydraulic Oilm Petroleum Base	A	B	A	B	A		A	A		A	A	D	A		A
Hydrazine	C	D		D	B		B	D		C	D	D	D		A
Hydrocyanic Acid	A	D	D	C	A		A	C	B	B	D	B	B	A	A
Hydrofluosilicic Acid	D	A	D	D	C		C	B		B	A	B	A	A	A
Hydrogen Gas, cold	A	B	B	B	A		A	A		B	A	B	A		A
Hydrogen Gas, hot	C		B		B		A		A	B	A	B			A
Hydrogen Peroxide, Concentrated	A	D	D	D	B		B	D	D	D	D	B	B		A
Hydrogen Peroxide, Dilute	A	C	D	D	B		B	D	D	A	D	B	A		A
Hydrogen Sulfide, Dry	A	C	B	B	A	B	B	B	B	C	C	A	A	A	A
Hydrogen Sulfide, Wet	B	D	C	D	B		B	C	D	C	C	B	A	A	A
Hypo (Sodium Thiosulfate)	B	C	D	D	B		B	B		C	A	A	A		A
Illuminating Gas	A	A	A	A	A		A	A		A	A	D	A		A
Ink-Newsprint	C	C	D	D	A		A	B		A	A	B	A		A
Iodoform	C	C	B	C	A		A	C		A	A		A		A
Iso-Butane					B		B			B	A	D			A
Iso-Octane	A	A	A	B	A		B		A	A	A	D	A		A
Isopropyl Acetate					B				D	D	A	D		A	A
Isopropyl Ether	B	A	A	B	A		B	A	C	C	A	D	D	A	A
JP-4 Fuel	A	A	A	B	A		A	A	A	A	A		A		A
JP-5 Fuel	A	A	A	A	A		B	A	B	B	A		A		A
JP-6 Fuel	A	A	A	A	A		A	A	A	A	A		A		A
Kerosene	A	A	B	B	A		A	A	A	A	A	D	A	A	A
Ketchup	D	D	D	D	A		A	B		A	A		A		A
Ketones	A	A	A	A	A		A	A		D	A	D	D		A
Laquer (and Solvent)	A	A	C	C	A		A	A		D	A	D	D		A
Lactic Acid Concentrated cold	C	D	D	D	A	D	A	D	A	B	D	B	A	A	A
Lactic Acid Concentrated hot	C	D	D	D	B	D	A	D	B	C	D	B	B	A	A
Lactic Acid Dilute cold	A	D	D	D	A	B	A	C	A	B	D	B	A	A	A
Lactic Acid Dilute hot	B	D	D	D	A	D	A	D	B	C	D		D	A	A
Lactose	B	B		C	B		B	B		B	A	B	B		A
Lard	A	B		A	A		A			B	A	C			A
Lard Oil	B	B	C	C	B		A	B		A	A	B	A		A
Lead Acetate	D	C	D	D	B		B	B		A	A	B	B		A
Lead Sulfate	D	C		D	B		B	B		B	A	B	B		A
Lecithin	C	C		C	B		B	B		D	A	D	B		A
Linoleic Acid	A	B	B	B	A		A	B		B	A	D	B		A
Linseed Oil	A	B	A	A	A		A	B		A	A	D	A		A
Lithium Chloride	D	B		B	B		A	B		B	A	B	B		A
LPG	A	A	B	B	B		B	B		A	A	D	A		A
Lubricating Oil Petroleum Base	A	B	A	A	A		A	B		A	A	D	A		A
Ludox	D	D		B	B		B	B		B	B	B	B		A
Magnesium Bisulfate	B	B	B	B	A		A	B		B	A	B	B		A
Magnesium Bisulfate	C	D		D	B		B	B		B	A	B	B		A
Magnesium Carbonate	B	A		B	A		A	B		B	A	B	B		A
Magnesium Chloride	C	B	C	D	B	C	B	B	A	A	A	A	A		A
Magnesium Hydroxide	D	B	B	B	A	A	A	B	B	A	A	A	A		A
Magnesium Hydroxide Hot	D	D	B	B	A	A	A	A	B	B	A		A		A
Magnesium Nitrate	B				A		A	B		B	A		B		A
Magnesium Sulfate	B	B	B	B	A	A	A	B	A	A	A	A	A		A
Maleic Acid	B	B	B	C	B		B	B	A	B	A	D	A		A

Ratings: A=Excellent B=Good C=Poor D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Maleic Anhydride	B	B		B	B		B	B	B	D	C	D	B		A
Malic Acid	B	B	D	D	B		B	B		A	A		A		A
Malt Beverages					A		B	A		A	A	B	A		A
Manganese Carbonate	B				B		A			B	A				A
Manganese Sulfate	B	B		D	A		A	B		B	A	B	B	A	A
Mayonnaise	D	D	D	D	A		A	B		A	A		A		A
Meat Juices	B	D			A		A			B	A				A
Melamine Resins				D	C		C			B	A				A
Methanol	B	B		B	A		A	B		B	C	D	B		A
Mercuric Chloride	D	D	D	D	B		B	D	B	A	A	A	A		A
Mercuric Cyanide	D	D	D	D	A		A	C	B	A	A	A	A		A
Mercurous Nitrate	D	D			A		A	D		A	A		B		A
Mercury	D	D	A	A	A		A	B	B	A	A	A	A		A
Methane	A	A	B	B	A		A	B	A	A	A		A		A
Methyl Acetate	A	A	B	B	A		A	B	A	D	B	B	D		A
Methyl Acetone	A	A	A	A	A		A	A		D	B	A	D		A
Methylamine	A	D	B	B	A		A	C	B	D	A	B	D		A
Methyl Bromide 100%	C	C		D	B		A	B		B	A	D	B		
Methyl Cellosolve	A	A	B	B	A		A	B	B	C	A	B	D		A
Methyl Cellulose					A		A		B	D	A				A
Methyl Chloride	D	B	B	B	A		A	B		D	A	D	B		A
Methyl Ethyl Ketone	A	A	A	A	A		A	A	B	D	A	B	D	A	A
Methylene Chloride	C	A	B	B	A		A	B	B	D	A	D	C		A
Methyl Formate	C	A	C	C	B		A	B	B	D	A	B	D		A
Methyl Isobutyle ketone					A		A			D	A			A	A
Milk & Milk Products	A	B	D	D	A		A	B		A	A	A	A		A
Mineral Oils	A	B	B	B	A		A	A		A	A	D	A		A
Mineral Spirits	A	B	B	B	B		B	B		A	A		A		A
Mixed Acids (cold)	D	D	C	C	B		B	C		D	D	D	B		A
Molasses, crude	B	A	A	A	A		A	A		A	A		A		A
Molasses, Edible	A	A	C	C	A		A	A		A	A		A		A
Molybdic Acid					A		A			A	A				A
Monochloro Benzene Dry					B		B	B		D	C			A	A
Morphine	B	B		B	A		A	B		D	A	B	D		A
Mustard	B	A	B	B	A		A	A		A	A		A		A
Naptha	A	B	B	B	B		B	B	A	B	A	D	A		A
Napthalene	B	B	B	B	B		B	B	B	D	A	D	A		A
Natural Gas, Sour	B	B	B	B	A		A	D	A	A	A	D	A		A
Nickel Ammonium Sulfate	D	D	D	D	A		A	C		A	C	B	D		A
Nickel Chloride	D	D	D	D	B		A	B	A	A	D	B	A	A	A
Nickel Nitrate	C	D	D	D	B		A	B		A	C	A	A		A
Nickel Sulfate	D	D	D	D	B		A	B	B	A	C	B	A	A	A
Nicotinic Acid	A	A	B	C	A		A	A		D	C	D	B		A
Nitric Acid 10%	D	D	D	D	A	A	A	D		C	D		A	A	A
Nitric Acid 30%	D	D	D	D	A	D	A	D		C	D	B	A	B	A
Nitric Acid 80%	B	D	D	D	C	D	B	D		D	D	B	B	B	A
Nitric Acid 100%	B	D	D	D	A	D	A	D		D	D	D	B	B	A
Nitric Acid Anhydrous	B	D	D	C	A	D	A	D		D	D	D	A	B	A
Nitrobenzene	C	D	B	B	A		A	B	B	D	B	C	C		A
Nitrogen	A	A	A	A	A		A	A		A	A	B	A		A

Ratings: A=Excellent B=Good C=Poor 122 D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy 20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Nitrus Acid 10%	D	D	D	D	B		B	D		C	B		A		A
Nitrous Gases	B	D	B	C	A		A	D			B				A
Nitrous Oxide	C	B	B	C	B		B	D	B	B	A		A		A
Oils & Fats	B				A		A			A	A	D			A
Oils, Animal	A	A	A	A	A		A	B	A	B	A	B	B		A
Oils, Petroleum	A	B	A	A	A		A	A	A	A	A	A	D		A
Oils, Petroleum Sour	A	C	B	C	A		A	A	A	A	B	A	D		A
Oils, Water Mixture	A	A	B	B	A		A		A	A	A	A			A
Olaic Acid	B				B		B	A	A		D	C			A
Oleic Acid	B	B	C	C	B		A	B	B	B	B	C	D	A	A
Oleum	B	C	B	D	B		B	C	B	D	D	D	C		A
Oleum Spirits	D	D		D	B		B	D		C	D	D	A		A
Olive Oil	B	C	B	B	A		A	A		A	A	B	A		A
Oxalic Acid	C	B	D	D	B		IB	B		C	C	B	A	A	A
Oxygen	A	A	B	B	A		NA	A	A	B	D	A	A		A
Ozone, Dry	A	A	A	A	A		A	A	A	D	C	A	B		A
Ozone, Wet	B	B	C	C	A		A	A	A	D	C	B	B		A
Paints & Solvents	A	A	A	A	A		A	A		D	A	D	B		A
Palmitic Acid	B	B	C	C	B		B	B		B	A	B	A		A
Palm Oil	A	B	C	C	B		A	A		B	A	D	A		A
Paper Pulp	D	B		B	A		A	B		B	A	B	B		
Paraffin	A	A	B	B	A		A	A	A	A	A	D	A		A
Paraformaldehyde	B	B	B	B	B		B	B		B	A	D			A
Paraldehyde					B		B			B	A	D		A	A
Pentane	A	A	B	B	A		A	B		A	A	D	A		A
Perchlorethylene, Dry	B	C	B	B	A		A	B	B	D	B	D	A		A
Petrolatum (Vaseline Petroleum Jelly)	B	B	C	C	B		A	A		A	A	A	A		A
Phenol	A	B	D	D	A		BA	A		D	C	D	B		A
Phosphate Ester 10%	D	D	A	A	A		A	A	A	D	A	A	A		A
Phosphate Acid 10%	D	D	D	D	D		IB	D		B	D	B	A	A	A
Phosphoric Acid 50% Cold	D	D	D	D	B		IB	C		B	D	B	A	A	A
Phosphoric Acid 50% Hot	D	D	D	D	D		IB	C		B	D	B	A	A	A
Phosphoric Acid 85% Cold	D	D	B	B	A		CB	A		C	D		B	A	A
Phosphoric Acid 85% Hot	D	D	C	C	B		IB			C	D			A	A
Phosphoric Anhydride	A				A		A			D	B		B	A	A
Phosphorous Trichloride	D		B	C	A		A			D	D	B	B	A	A
Phthalic Acid	B	B	C	C	B		B	A	B	C	B		A		A
Phthalic Anhydride	B	B	C	C	B		B	A	A	C	A		A		A
Picric Acid	C	C	D	D	B		CB	D	B	C	C	D	B		A
Pineapple Juice	A	C	C	C	A		A	A		A	A		A		A
Pine Oil	B	B	B	B	A		A	B		A	A	D	A		A
Pitch (Bitumen)					A		A			C	A	D			A
Polysulfide	D	D		B	B		A	B		B	D	B	B		A
Polyvinyl Acetate	B	B		B	B		B	B			A	B			A
Polyvinyl Chloride	B	B		B	B		B	B			A	B			A
Potassium Bicarbonate	A				A		A	B		B	A				A
Potassium Bichromate	A				A		A	A		B	B		B		A
Potassium Bisulfate	B				A		A	B		B	A	B	A		A
Potassium Bisulfate	C	C	D	D	B		B	D		A	A	B	A		A
Potassium Bromide	C	C	D	D	A		CB	B		A	A		A		A

Ratings: A=Excellent B=Good C=Poor 123 D=Do not use Blank =No Information

# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

Chemicals	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Potassium Carbonate	D	B	B	B	B	A	B	B		A	A	B	A		A
Potassium Chlorate	C	B	B	B	B	B	B	C		A	A	B	A		A
Potassium Chloride	D	C	C	B	B	B	A	B	B	A	A	A	A		A
Potassium Chromate	B	B	B	B	B		B	B		B	A	B	B		A
Potassium Cyanide	D	D	B	B	B		B	B	B	A	A	A	A		A
Potassium Dichromate	A	D	C	C	B		A	B		A	A	B	A		A
Potassium Ferricyanide	B	D	C	C	A	B	B	B		A	A	B	A		A
Potassium Ferrocyanide	B	B	C	C	B		B	A		A	A		A		A
Potassium Hydroxide Dilute Cold	D	D	A	A	B	B	B	A		A	D		D		A*
Potassium Hydroxide to 70%, Cold	D	D	B	B	B	C	B	A		B	D	B	D		A*
Potassium Hydroxide Dilute Hot	D	D	B	B	B	C	B	A		B	D	A			A*
Potassium Hydroxide to 70%, Hot	D	D	A	B	B	D	B	A		C	D				A*
Potassium Iodide	D	D	C	C	B	B	B	C		A	A	B	A		A
Potassium Nitrate	A	B	B	B	B	B	B	B	B	A	A	B	A		A
Potassium Oxalate	C				A		A				A				A
Potassium Permanganate	B	B	B	B	B	B	B	B	B	A	A	B	A		A
Potassium Phosphate	D	C		C	B		B	B	B	A	A	A	A		A
Potassium Phosphate Di-basic	B	B	A	A	A		A	B	B	A	A	B	A		A
Potassium Phosphate Tri-basic	D		A	A	B		B	B		B		B			A
Potassium Sulfate	A	B	B	C	A	A	A	B		A	A	A	A		A
Potassium Sulfide	B	B	B	B	A		A	C	A	A	A	B	B		
Potassium Sulfite	B	B	B	B	A		A	C	B	B	A	A	B		A
Producer Gas	B	B	B	B	B	A	B	A		A	A	D	A		A
Propane Gas	A	A	B	B	B	A	A	B	A	A	A	D	A		A
Propyl Bromide	B	B		B	B		A	B		B	A	B	B		A
Propylene Glycol	A	B	B	B	B		B	B		A	C	B	A		A
Pyridine	B			B	B		A			D	D		D		A
Pyrogallic Acid	B	B	B	B	B	B	A	B		A	A		A		A
Quench Oil	A	B	B	B	A		A			A	A		A		A
Quinine, sulfate, dry					A	B	A	B			A				A
Resins & Rosins	A	A	C	C	A	B	A	A		C	A		A		A
Resorcinol					B		B								A
Road Tar	A	A	A	A	A		A	A		B	A	D	A		A
Roof Pitch	A	A	A	A	A		A	A		B	A		A		A
Rosin Emulsion	A	B	C	C	A		A	A		D	A		B		A
R P-1 Fuel	A	A	A	A	A		A	A		B	A		A		A
Rubber Latex Emulsions	A	A	B	B	A		A			A	C		A		A
Rubber solvents	A	A	A	A	A		A	A		D	C		D		A
Salad Oil	B	B	C	C	B		A	B		A	A	B	A		A
Salicylic Acid	C	C	D	D	A		B	B		A	A	B	A		A
Salt (NaCl)	B	B	C	C	B		A	A		A	A		A		A
Salt Brine	B	B		D	B		B	B		A	A	B	B		A
Sauerkraut Brine					B		B				C				A
Sea Water	C	C	D	D	B		B	A		A	A	A	A		A
Sewage	C	C	C	D	B	A	B	B		A	B	B	B		A
Shellac	A	A	A	B	A		A	A		A	A				A
Silicone Fluids	B	B		B	B		B			B	A		B		A
Silver Bromide	D				A	C	A	B			D				A
Silver Cyanide	D	D		D	A		A	B		B	D		B		A
Silver Nitrate	D	D	D	D	A		A	D		C	A	A	A		A

Ratings: A=Excellent B=Good C=Poor 124D=Do not use Blank =No Information

\* Not with reinforced or polyfill



# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Silver Plating sol.	B				A		A				D				A
Soap Solutions (Stearates)	C	A	A	B	A		A	A		A	A	A	A		A
Sodium Acetate	B	B	C	C	B		B	B	B	B	A	B	A		A
Sodium Aluminate	D	B	C	C	A		B	B	B	A	A	B	A		A
Sodium Benzoate	B				B		B	B	B		B				A
Sodium Bicarbonate	B	B	C	C	B		A	B		A	B	A	A		A
Sodium Bichromate	A				B		B	B		D	A				A
Sodium Bisulfate 10%	D	B	D	D	A		A	B		A	D	B	A		A
Sodium Bisulfite 10%	D	B	D	D	A		B	B	B	A	D	B	A		A
Sodium Borate	B	B	C	C	B		B	B		A	A	B	A		A
Sodium Bromide 10%	B	B	C	D	B		B	B		A	A	B	A		A
Sodium Carbonate (Soda Ash)	D	B	B	B	A		A	B	B	A	A	B	A		A
Sodium Chlorate	C	B	C	C	B		B	C		B	A	A	A	B	A
Sodium Chloride	B	B	C	C	B		A	A	B	A	A	B	A	A	A
Sodium Chromate	D	C	B	B	A		B	B		A	A	B	A		A
Sodium Citrate	D				B		B				A				A
Sodium cyanide	D	D	B	B	A	B	A	B		A	A	B	A		A
Sodium Ferricyanide	A				A		A	B			A				A
Sodium Fluoride	C	C	D	D	B	B	A	B		A	A	B	A		A
Sodium Hydroxide 20% Cold	D	A	A	A	A	A	B	A		A	D	B	B	A	A*
Sodium Hydroxide 20% Hot	D	A	B	B	A	C	A	A		B	D	B	C	A	A*
Sodium Hydroxide 50% Cold	D	A	A	B	A	B	A	A		A	D	B	C	A	A*
Sodium Hydroxide 50% Hot	D	A	B	B	A	C	A	B		B	D		C	A	A*
Sodium Hydroxide 70% Cold	D	A	A	A	A	B	B	A		B	D	B	C	A	A*
Sodium Hydroxide 70% Hot	D	B	B	B	A	C	B	B		D	D	B	C	A	A*
Sodium Hypochlorite (Bleach)	D	D	D	D	D	D	C	D	A		D		A		A
Sodium Hyposulfite	B				B		B	B			A				A
Sodium Lactate	D				A		A	B			A				A
Sodium Metaphosphate	A	C	B	C	B	B	B		A	A	B	B		A	A
Sodium Metasilicate Cold	B	B	C	C	A		A	A		B	A		B		A
Sodium Metasilicate Hot	B	B	D	D	A		A	A	A		A				A
Sodium Nitrate	A	B	B	B	A	B	A	B	B	C	A	B	A		A
Sodium Nitrite	A				B		B	C	B	C	B	A	B		A
Sodium Perborate	B	B	B	B	B	B	B	B	B	C	A	A	A		A
Sodium Peroxide	C	D	C	C	B	B	B	B	B	C	A	A	A		A
Sodium Phosphate	D	C	C	C	B	B	B	B	B	B	B	A	A		A
Sodium Phosphate Di-basic	D	C	C	C	B		B	B	B	A	A	A	A		A
Sodium Phosphate Tri-basic	D	C	C	C	B		B	B	B	B	A	A	A		A
Sodium Polyphosphate					B		B	B	B	B		A			A
Sodium Salicylate					A		A				A	A			A
Sodium Silicate	B	B	B	B	B		B	B		A	A	B	A		A
Sodium Silicate, Hot	C	C	C	C	B		B	B			A	B			A
Sodium Sulfate	B	B	B	B	A	B	A	A		A	A	A	A		A
Sodium Sulfide	C	D	B	B	A	A	B	B		A	A	B	A		A
Sodium Sulfite	B	C		A	A	A	A	B	B	A	A	B	B		A
Sodium Tetraborate				A	A		A			A	A	B			A
Sodium Thosulfate	B	B	B	C	B	A	B	B		A	A	A	A		A
Soybean Oil	B	B	C	C	A		A	A		A	B	B	A		A
Starch	B	B	C	C	B		A	A		A	A	C	A		A
Steam (212°F)	A	A	A	A	A	A	A	B		D	D	B	C	A	A

Ratings: A=Excellent B=Good C=Poor 125 D=Do not use Blank =No Information

\* Not with reinforced or polyfill



# Chemical compatibility



Doc: ChemComp/01

Jun 2007

## Chemicals

	Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316 Stainless Steel	17-4PH	Alloy20	Monel	Hastelloy C	Buna N (Nitrile)	Delrin	EPDM/EPR	Viton	Flexible Graphite	Teflon-Reinforced
Stearic Acid	A	C	C	C	B		B	B	A	A	A	B	A	A	A
Styrene	A	A	A	B	A		A	B	A	D	A	D	B		A
Sugar Liquids	A	A	B	B	A		A	A		A	A	B	A		A
Sugar, Syrups & Jam	B	B		C		A	A			A	A				A
Sulfate, Black Liquor	C	C	C	C	B	A	B	B		C	C	B	C		A
Sulfate, Green Liquor	B	C	C	C	B	A	B	B		C	A		C		A
Sulfate, White Liquor	B	C	C	C	B	B	D	C		C	D		C		A
Sulfur	A	D	C	C	B		A	B		D	A	B	B		A
Sulfur Chlorides	D	B	D	D	D		A	B		D	A	C	A	A	A
Sulfur Dioxide, dry	A	B	B	B	A	A	B	B	A	D	A	A	A	A	A
Sulfur Dioxide, wet	C	D			A	C	B	A	B	D	D	B		A	A
Sulfur Hexafluoride	A	B			A		A			A	A				A
Sulfur, Molten	A	D	C	B	B		A	D	B	D	D	B	B		A
Sulfur Trioxide		B	B	B	B	B	B		B	D	D		B	D	A
Sulfur Trioxide, dry	A	B	B	B	B	B	B	B	B	D	A	B	A	D	A
Sulfuric Acid 0 to 77%	C	C	D	D	C		B	B		B	D		A	A	A
Sulfuric Acid 100%	D	C	C	B	A	B	A	D		D	D	C	B	D	A
Sulfurous Acid	C	D	D	D	B		B	D	B	C	C	C	A	A	A
Tall Oil	C	B	B	B	B		B	B	A	B	A	D	A		A
Tannic Acid (Tannin)	C	B	C	C	B	B	B	B	B	B	A	B	A		A*
Tanning Liquors	A				B		B			B	D				A*
Tar & Tar Oils	A	A	A	A	A	A	A	A		C	A	D	A		A*
Tartaric Acid	B	B	D	D	A	A	A	B	B	C	A	B	A		A*
Tetraethyl Lead	B	B	C	C	B		B	A		A	A				A*
Toluol (Toluene)	A	A	A	A	A		A	A	A	D	C	D	B		A*
Tomato Juice	A	C	C	C	A		A	B		A	A		A		A
Transformer Oil	A	B	A	B	A		A	A		A	A		A		A
Tributyl Phosphate	A	A	A	A	A		A	A		D	A	B	D		A
Trichlorethylene	A	B	B	C	B	A	B	B	A	D	A	D	B	A	A
Trichloroacetic Acid	D	B		D	D		B	B	A	C	D		D		A
Triethanolamine	B				B		B	B	A	C	A	B			A
Triethylamine		B			B		B		A	B	C				A
Trisodium Phosphate	D				B		B		A	A	A	B	B		A
Tung Oil	B	B	B	B	A		A	C	A	A	A	D	A		A
Turpentine	B	B	B	B	B	A	B	D	A	B	A	D	A		A
Urea	B	B	C	C	B		B	B	A	C	A	B	D		A
Uric Acid	D				A		A		A		B				A
Varnish	A	A	C	C	A		A	A	A	C	A	D	B		A
Vegetable Oils	A	B	B	B	A		A	B	A	A	A	D	A		A
Vinegar	C	B	D	D	A		A	B	A	D	B	A	D		A
Vinyl Acetate	B	B		B	B		B	B	A		D	A		A	A
Water, Distilled	A	A	D	D	A	A	A	A	A	C	A	B	A	A	A
Water, Fresh	A	A	C	C	A	A	A	A	A	C	A	B	A		A
Water, Acid Mine	D	D	D	D	B	B		D	C	B	A	A	D	A	A
Waxes	A	A	A	A	A		A	A	A	A	A	C	A		A
Whiskey & Wines	D	B	D	D	A		A	A	A	B	A	A	A		A
Xylene (Xylol), Dry	A	A	B	B	A		A	A	A	D	A	D	B		A
Zinc Bromide	D	B		D	B		B	B	A	B	A	B	B	A	A
Zinc Hydrosulfite	D	C	A	B	A		A	B	A	A	A	A	A		A
Zinc Sulfate	D	B	D	D	B		A	B	A	A	A	A	A	A	A

Ratings: A=Excellent B=Good C=Poor <sup>126</sup> D=Do not use Blank =No Information

\* Not with reinforced or halffill

## FLANGE TABLES

1/2"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	80	55	4	M10	11	40	2
PN10	95	65	4	M12	14	45	2
PN16	95	65	4	M12	14	45	2
PN25	95	65	4	M12	14	45	2
PN40	95	65	4	M12	14	45	2
PN64	105	75	4	M12	14	45	2
ANSI 150	89	60	4	1/2 (13)	16	35	1.6
ANSI 300	95	67	4	1/2 (13)	16	35	1.6
Table D	95	67	4	1/2 (13)	14	-	-
Table E	95	67	4	1/2 (13)	14	-	-
Table F	95	67	4	1/2 (13)	14	-	-
Table G	114	83	4	3/8 (16)	17	57	2

3/4"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	90	65	4	M10	11	50	2
PN10	105	75	4	M12	14	58	2
PN16	105	75	4	M12	14	58	2
PN25	105	75	4	M12	14	58	2
PN40	105	75	4	M12	14	58	2
PN64	130	90	4	M16	18	58	2
ANSI 150	98	70	4	1/2 (13)	16	43	1.6
ANSI 300	117	83	4	5/8 (16)	19	43	1.6
Table D	102	73	4	1/2 (13)	14	-	-
Table E	102	73	4	1/2 (13)	14	-	-
Table F	102	73	4	1/2 (13)	14	-	-
Table G	114	83	4	5/8 (16)	17	57	2

1"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	100	75	4	M10	11	60	2
PN10	115	85	4	M12	14	68	2
PN16	115	85	4	M12	14	68	2
PN25	115	85	4	M12	14	68	2
PN40	115	85	4	M12	14	68	2
PN64	140	100	4	M16	18	68	2
ANSI 150	114	79	4	1/2 (13)	16	51	1.6
ANSI 300	124	89	4	1/2 (16)	19	51	1.6
Table D	114	83	4	1/2 (13)	14	-	-
Table E	114	83	4	1/2 (13)	14	-	-
Table F	121	87	4	5/8 (16)	17	-	-
Table G	121	87	4	5/8 (16)	17	64	2

1 1/4"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	120	90	4	M12	14	70	2
PN10	140	100	4	M16	18	78	2
PN16	140	100	4	M16	18	78	2
PN25	140	100	4	M16	18	78	2
PN40	140	100	4	M16	18	78	2
PN64	155	110	4	M20	22	78	2
ANSI 150	117	89	4	1/2 (13)	16	64	1.6
ANSI 300	133	98	4	5/8 (16)	19	64	1.6
Table D	121	87	4	1/2 (13)	14	-	-
Table E	121	87	4	1/2 (13)	14	-	-
Table F	133	98	4	5/8 (16)	17	-	-
Table G	133	98	4	5/8 (16)	17	76	2

1 1/2"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	130	100	4	M12	14	80	3
PN10	150	110	4	M16	18	88	3
PN16	150	110	4	M16	18	88	3
PN25	150	110	4	M16	18	88	3
PN40	150	110	4	M16	18	88	3
PN64	170	125	4	M20	22	1.6	3
ANSI 150	127	98	4	1/2 (13)	16	1.6	1.6
ANSI 300	156	114	4	3/4 (19)	22	73	1.6
Table D	133	98	4	1/2 (13)	14	-	-
Table E	133	98	4	1/2 (13)	14	-	-
Table F	140	105	4	5/8 (16)	17	-	-
Table G	140	105	4	5/8 (16)	17	83	2

2"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	140	110	4	M12	14	90	3
PN10	165	125	4	M16	18	102	3
PN16	165	125	4	M16	18	102	3
PN25	165	125	4	M16	18	102	3
PN40	165	125	4	M16	18	102	3
PN64	180	135	4	M20	22	102	3
ANSI 150	152	121	4	5/8 (16)	19	92	1.6
ANSI 300	165	127	8	5/8 (16)	19	92	1.6
Table D	152	114	4	5/8 (16)	17	-	-
Table E	152	114	4	5/8 (16)	17	-	-
Table F	165	127	4	5/8 (16)	17	-	-
Table G	165	127	4	5/8 (16)	17	102	2

2 1/2"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	160	130	4	M12	14	110	3
PN10	185	145	4	M16	18	122	3
PN16	185	145	4	M16	18	122	3
PN25	185	145	8	M16	18	122	3
PN40	185	145	8	M16	18	122	3
PN64	205	160	8	M20	22	122	3
ANSI 150	178	140	4	5/8 (16)	19	105	1.6
ANSI 300	191	149	8	3/4 (19)	22	105	1.6
Table D	165	127	4	5/8 (16)	17	-	-
Table E	165	127	4	5/8 (16)	17	-	-
Table F	184	146	8	5/8 (16)	17	-	-
Table G	184	146	8	5/8 (16)	17	114	2

3"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	190	150	4	M16	18	128	3
PN10	200	160	8	M16	18	138	3
PN16	200	160	8	M16	18	138	3
PN25	200	160	8	M16	18	138	3
PN40	200	160	8	M16	18	138	3
PN64	215	170	8	M20	22	138	3
ANSI 150	191	152	4	5/8 (16)	19	127	1.6
ANSI 300	210	168	8	3/4 (19)	22	127	1.6
Table D	184	146	4	5/8 (16)	17	-	-
Table E	184	146	4	5/8 (16)	17	-	-
Table F	203	165	8	5/8 (16)	17	-	-
Table G	203	165	8	5/8 (16)	17	127	2

4"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	210	170	4	M16	18	148	3
PN10	220	180	8	M16	18	158	3
PN16	220	180	8	M16	18	158	3
PN25	235	190	8	M20	22	162	3
PN40	235	190	8	M20	22	162	3
PN64	250	200	8	M24	26	162	3
ANSI 150	229	191	8	¾ (16)	19	157	1.6
ANSI 300	254	200	8	¾ (19)	22	157	1.6
Table D	216	178	4	¾ (16)	17	-	-
Table E	216	178	8	¾ (16)	17	-	-
Table F	229	191	8	¾ (16)	17	-	-
Table G	229	191	8	¾ (16)	17	152	2

5"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	240	200	8	M16	18	178	3
PN10	250	210	8	M16	18	188	3
PN16	250	210	8	M16	18	188	3
PN25	270	220	8	M24	26	188	3
PN40	270	220	8	M24	26	188	3
PN64	295	240	8	M27	30	188	3
ANSI 150	254	216	8	¾ (19)	22	186	1.6
ANSI 300	279	235	8	¾ (19)	22	186	1.6
Table D	254	210	8	¾ (16)	17	-	-
Table E	254	210	8	¾ (16)	17	-	-
Table F	279	235	8	¾ (19)	22	-	-
Table G	279	235	8	¾ (19)	22	178	2

6"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	265	225	8	M16	18	202	3
PN10	285	240	8	M20	22	212	3
PN16	285	240	8	M20	22	212	3
PN25	300	250	8	M24	26	218	3
PN40	300	250	8	M24	26	218	3
PN64	345	280	8	M30	33	218	3
ANSI 150	279	241	8	¾ (19)	22	216	1.6
ANSI 300	318	270	12	¾ (19)	22	216	1.6
Table D	279	235	8	¾ (16)	17	-	-
Table E	279	235	8	¾ (19)	22	-	-
Table F	305	260	12	¾ (19)	22	-	-
Table G	305	260	12	¾ (19)	22	210	2

8"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	320	280	8	M16	18	258	3
PN10	340	295	8	M20	22	268	3
PN16	340	295	12	M20	22	268	3
PN25	360	310	12	M24	26	278	3
PN40	375	320	12	M27	30	285	3
PN64	415	345	12	M33	36	285	3
ANSI 150	343	298	8	¾ (19)	22	270	1.6
ANSI 300	381	330	12	¾ (22)	25	270	1.6
Table D	337	292	8	¾ (16)	17	-	-
Table E	337	292	8	¾ (19)	22	-	-
Table F	368	324	12	¾ (19)	22	-	-
Table G	368	324	12	¾ (19)	22	260	2

10"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	375	335	12	M16	18	312	3
PN10	395	350	12	M20	22	320	3
PN16	405	355	12	M24	26	320	3
PN25	425	370	12	M27	30	335	3
PN40	450	385	12	M30	33	345	3
PN64	470	400	12	M33	36	345	3
ANSI 150	406	362	12	¾ (22)	25	324	1.6
ANSI 300	445	387	16	1 (25)	29	324	1.6
Table D	406	356	8	¾ (19)	22	-	-
Table E	406	356	12	¾ (19)	22	-	-
Table F	432	381	12	¾ (22)	25	-	-
Table G	432	381	12	¾ (22)	25	311	2

12"	Dia. of flange	PCD	Number of bolts	Dia. of Bolts	Dia of holes	Dia. of RF	Height of RF
PN6	440	395	12	M20	22	365	4
PN10	445	400	12	M20	22	370	4
PN16	460	410	12	M24	26	378	4
PN25	485	430	16	M27	30	395	4
PN40	515	450	16	M30	33	410	4
PN64	530	460	16	M33	36	375	4
ANSI 150	483	432	12	¾ (22)	25	381	1.6
ANSI 300	521	451	16	1½ (28)	32	381	1.6
Table D	457	406	12	¾ (19)	22	-	-
Table E	457	406	12	¾ (19)	22	-	-
Table F	489	438	16	¾ (22)	25	-	-
Table G	489	438	16	¾ (22)	25	311	2





Equipamientos/Assembling Set/Ensemble d'installation  
Válvulas de mariposa/Butterfly valves/Vannes à papillon  
UNI VF700 (wafer) PN10

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Espárrago con Tuercas Stay bolts with nuts Tige filetée avec écrous		Bridas Flanges Brides PN10*
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Dimensión Size Dimension	
40	4	M16x85	-	-	2
50	4	M16x100	-	-	2
65	4	M16x110	-	-	2
80	8	M16x110	-	-	2
100	8	M16x110	-	-	2
125	8	M16x120	-	-	2
150	8	M20x125	-	-	2
200	8	M20x140	-	-	2
250	12	M20x150	-	-	2
300	12	M20x160	-	-	2
350	16	M20x160	-	-	2
400	16	M24x200	-	-	2
450	20	M24x220	-	-	2
500	20	M24x230	-	-	2
600	20	M27x270	-	-	2
700	8	M27x70	20/40	M27x310	2
800	8	M30x80	20/40	M30x340	2
900	8	M30x80	24/48	M30x360	2
1000	8	M33x80	24/48	M33x380	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette  
EN1092-1 11 PN10 (DIN2632)

Equipamientos/Assembling Set/Ensemble d'installation  
Válvulas de mariposa/Butterfly valves/Vannes à papillon  
UNI VF700 (wafer) PN16

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Espárrago con Tuercas Stay bolts with nuts Tige filetée avec écrous		Bridas Flanges Brides PN16*
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Dimensión Size Dimension	
40	4	M16x90	-	-	2
50	4	M16x100	-	-	2
65	4	M16x110	-	-	2
80	8	M16x110	-	-	2
100	8	M16x120	-	-	2
125	8	M16x130	-	-	2
150	8	M20x140	-	-	2
200	12	M20x140	-	-	2
250	12	M24x160	-	-	2
300	12	M24x180	-	-	2
350	16	M24x180	-	-	2
400	16	M27x220	-	-	2
450	20	M27x230	-	-	2
500	20	M30x250	-	-	2
600	20	M33x300	-	-	2
700	8	M33x90	20/40	M33x340	2
800	8	M36x90	20/40	M36x370	2
900	8	M36x90	24/48	M36x390	2
1000	8	M39x100	24/48	M39x420	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette  
EN1092-1 11 PN16 (DIN2633)



Equipamientos/Assembling Set/Ensemble d'installation  
Válvulas de mariposa/Butterfly valves/Vannes à papillon  
UNI VF750 (lug) PN10

DN	Tornillos Bolts Boulons		Bridas Flanges/Brides PN10*
	Número Quantity Número	Dimensión Size Dimension	
25	8	M12x30	2
32	8	M16x30	2
40	8	M16x30	2
50	8	M16x35	2
65	8	M16x40	2
80	16	M16x40	2
100	16	M16x40	2
125	16	M16x45	2
150	16	M20x45	2
200	16	M20x50	2
250	24	M20x55	2
300	24	M20x60	2
350	32	M20x60	2
400	32	M24x70	2
450	40	M24x70	2
500	40	M24x80	2
600	40	M27x80	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette  
EN1092-1 11 PN10 (DIN2632)

Equipamientos/Assembling Set/Ensemble d'installation  
Válvulas de mariposa/Butterfly valves/Vannes à papillon  
UNI VF750 (lug) PN16

DN	Tornillos Bolts Boulons		Bridas Flanges/Brides PN16*
	Número Quantity Número	Dimensión Size Dimension	
25	8	M12x30	2
32	8	M16x30	2
40	8	M16x30	2
50	8	M16x35	2
65	16	M16x40	2
80	16	M16x40	2
100	16	M16x40	2
125	16	M16x45	2
150	16	M20x45	2
200	24	M20x50	2
250	24	M24x55	2
300	24	M24x60	2
350	32	M24x60	2
400	32	M27x75	2
450	40	M27x80	2
500	40	M30x90	2
600	40	M33x90	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette  
EN1092-1 11 PN16 (DIN2633)



**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas y filtros bridados PN10**  
**Flanged Valves and Strainers PN10**  
**Vannes et filtres à brides PN10**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN10*	Juntas Gaskets Joints
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Número Quantity Número
15	8	M12x45	2	2
20	8	M12x50	2	2
25	8	M12x50	2	2
32	8	M16x55	2	2
40	8	M16x55	2	2
50	8	M16x60	2	2
65	8	M16x60	2	2
80	16	M16x65	2	2
100	16	M16x65	2	2
125	16	M16x70	2	2
150	16	M20x75	2	2
200	16	M20x80	2	2
250	24	M20x80	2	2
300	24	M20x80	2	2
350	32	M20x90	2	2
400	32	M24x90	2	2
450	40	M24x100	2	2
500	40	M24x100	2	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette EN1092-1 11 PN10 (DIN2632)

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas y filtros bridados PN16**  
**Flanged Valves and Strainers PN16**  
**Vannes et filtres à brides PN16**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN16*	Juntas Gaskets Joints
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Número Quantity Número
15	8	M12x45	2	2
20	8	M12x50	2	2
25	8	M12x50	2	2
32	8	M16x55	2	2
40	8	M16x55	2	2
50	8	M16x60	2	2
65	8	M16x60	2	2
80	16	M16x65	2	2
100	16	M16x65	2	2
125	16	M16x70	2	2
150	16	M20x80	2	2
200	24	M20x80	2	2
250	24	M24x90	2	2
300	24	M24x90	2	2
350	32	M24x100	2	2
400	32	M27x100	2	2
450	40	M27x100	2	2
500	40	M30x110	2	2
600	40	M33x140	2	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette EN1092-1 11 PN16(DIN2633)

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas y filtros bridados PN25**  
**Flanged Valves and Strainers PN25**  
**Vannes et filtres à brides PN25**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN25*	Juntas Gaskets Joints
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Número Quantity Número
15	8	M12x50	2	2
20	8	M12x55	2	2
25	8	M12x55	2	2
32	8	M16x55	2	2
40	8	M16x55	2	2
50	8	M16x60	2	2
65	16	M16x65	2	2
80	16	M16x70	2	2
100	16	M20x70	2	2
125	16	M24x80	2	2
150	16	M24x90	2	2
200	24	M24x90	2	2
250	24	M27x100	2	2
300	32	M27x100	2	2
350	32	M30x110	2	2
400	32	M33x120	2	2
450	40	M33x130	2	2
500	40	M33x130	2	2
600	40	M36x150	2	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette EN1092-1 11 PN25

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas y filtros bridados PN40**  
**Flanged Valves and Strainers PN40**  
**Vannes et filtres à brides PN40**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN40*	Juntas Gaskets Joints
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número	Número Quantity Número
15	8	M12x50	2	2
20	8	M12x55	2	2
25	8	M12x55	2	2
32	8	M16x55	2	2
40	8	M16x55	2	2
50	8	M16x60	2	2
65	16	M16x65	2	2
80	16	M16x70	2	2
100	16	M20x70	2	2
125	16	M24x80	2	2
150	16	M24x90	2	2
200	24	M27x100	2	2
250	24	M30x110	2	2
300	32	M30x120	2	2
350	32	M33x130	2	2
400	32	M36x140	2	2
450	40	M36x150	2	2
500	40	M39x150	2	2
600	40	M45x190	2	2

\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à collerette EN1092-1 11 PN40 (DIN2635)

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Manguitos/Rubber Joints/Manchons PN10**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges Brides PN10*
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número
25	8	M12x50	2
32	8	M16x50	2
40	8	M16x50	2
50	8	M16x60	2
65	8	M16x60	2
80	16	M16x65	2
100	16	M16x70	2
125	16	M16x70	2
150	16	M20x80	2
200	16	M20x80	2
250	24	M20x80	2
300	24	M20x80	2
350	32	M20x90	2
400	32	M24x100	2
450	40	M24x100	2
500	40	M24x100	2
600	40	M27x110	2

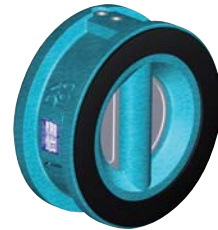


\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à colerette EN1092-1 11 PN10 (DIN2632)

Si se utilizan tirantes tener en cuenta el espesor de la placa  
 If limits rods are used consider additional thickness  
 Considérez l'épaisseur des plaques de tiroirs en cas d'utilisation

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas retención doble clapeta/Dual plate Check Valves**  
**Clapets de non retour à double battants**  
**UNICHECK CH2222 (wafer)**

DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN10*
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número
50	4	M16x100	2
65	4	M16x110	2
80	8	M16x130	2
100	8	M16x130	2
125	8	M16x140	2
150	8	M20x160	2
200	8	M20x180	2
250	12	M20x200	2
300	12	M20x200	2



\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à colerette EN1092-1 11 PN10 (DIN2632)

**Equipamientos/Assembling Set/Ensemble d'installation**  
**Válvulas de Clapeta Oscilante/Swing Check Valves**  
**Clapets Simple Battant**  
**UNICHECK CV (wafer)**

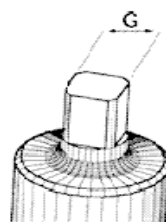
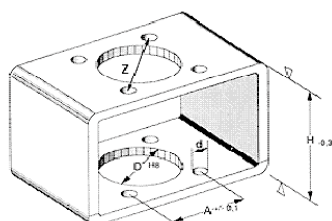
DN	Tornillos con Tuercas Bolts with nuts Boulons avec écrous		Bridas Flanges/Brides PN16*
	Número Quantity Número	Dimensión Size Dimension	Número Quantity Número
32	4	M16x75	2
40	4	M16x75	2
50	4	M16x80	2
65	4	M16x80	2
80	8	M16x80	2
100	8	M16x85	2
125	8	M16x85	2
150	8	M20x90	2
200	12	M20x100	2
250	12	M24x110	2
300	12	M24x120	2



\*Bridas con cuello para soldar/Welding neck flanges/Brides à souder à colerette EN1092-1 11 PN16 (DIN2633)

## Extract from ISO:5211 & DIN:3337

ISO:5211 defines the actuator mounting dimensions and drive square size  
 DIN:3337 defines a 45 deg orientation of the actuators' square drive shaft



	ØD	A (±0.1)	Ød (±0.1)	ØZ (±0.1)	No. of bolts	Bolt Ø	H (±0.5)	G
F03	25	25.5	5.5	36	4	M5	50	9
F04	30	29.7	5.5	42	4	M5	50	11
F05	35	35.4	6.5	50	4	M6	60	14
F07	55	49.5	8.5	70	4	M8	60	17
F10	70	72.1	10.5	102	4	M10	80	22
F12	85	88.4	12.5	125	4	M12	80	27
F14	100	99	17	140	4	M16	90	36
F16	130	116.7	21	165	4	M20	120	46
F25	200	254	17	254	8	M16	180	55

## Extract from IEC:60529 (IP Code)

IEC:60529 describes a system for classifying the degrees of protection provided by the enclosures of electrical equipment. The system uses a 2 number code, the combination of which indicates the degree of protection

1st code Number	Level of protection against the ingress of solid foreign bodies	2nd code Number	Level of protection against water
0	No protection	0	No protection
1	≥ 50mm diameter	1	Vertical dripping
2	≥ 12.5mm diameter	2	Angled (15deg) dripping
3	≥ 2.5mm diameter	3	Spraying (light water splashes)
4	≥ 1mm diameter	4	Spraying (water splashes)
5	Dust protected	5	Jetting (water squirts)
6	Dust tight	6	Powerful jetting
		7	Temporary immersion
		8	Continuous immersion

Further details for most common codes

2nd code Number	Test means	Water flow Litres/min	Duration of test
5	Water jet hose nozzle. Nozzle 6.3mmØ Distance 2.5 to 3m	12.5 ±5%	1 minute per m2 for at least 3 minutes
6	Water jet hose nozzle. Nozzle 12.5mmØ Distance 2.5 to 3m	100 ±5%	2 minute per m2 for at least 3 minutes
7	Immersion tank. Water level on enclosure 0.15m above the top, 1m above the bottom	N/A	30 minutes
8	Immersion Tank. Water level on agreement	N/A	By agreement





## Terms And Conditions Of Sale And Delivery

Alma Engineering Supplies Ltd

Unit 13, Village Mill Enterprise Park

Rathnew, Co. Wicklow

Tel: 0404 64353

E-mail: info@alma-valves.ie

1. Introduction;

"Contract" means the contract between ALMA and You the Buyer for the supply of Goods in accordance with these Terms;

"Goods" means the goods supplied by ALMA to You, the Buyer as set out in the Order;

"ALMA" or "Company" means Alma Engineering Supplies Limited;

"Order" means the method by which You communicate Your order for the Goods You require from ALMA from time to time;

"You"; "Your" or "the Buyer" means the person or firm who purchases Goods from ALMA.

These Terms apply to the Contract to the exclusion of any other terms that You seek to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.

No variation, and no additional terms and conditions to this Order, will be valid unless accepted in writing and signed by ALMA .

2. Delivery;

- (a) All obligations to supply materials are entered into by ALMA. upon the express condition that the Company has the right to suspend deliveries without involving any responsibility upon the Company during any period of prevention or delay attributed to the following causes: War, fire, strikes, lockouts, combinations of workmen, fog, weather conditions, shipping delays, road transport delays, unavailability of materials, or any accident or other cause beyond the Company and/or its suppliers.

(b) ALMA will use all reasonable endeavours to meet any delivery dates specified by You, but any date for delivery named by the Company is an estimate only and in no circumstances shall the failure of the Company to deliver on or before the named date either entitle the Buyer to rescind or terminate the contract or make the Company liable in any way for the consequences of any delay. Material from stock is offered subject to being unsold upon receipt of order.

(c) PLEASE NOTE: Any claim relating to goods delivered under this contract shall be notified to the Company in writing within 3 working days from the date on which the said goods are received by the Buyer or his agent. The Buyer shall afford the Company reasonable facilities for examining the goods before they have been disposed of, or treated, or in any way altered. All goods damaged in transit and accepted in that condition by the Buyer shall not be subject of any claim hereunder.

(d) The signature of any employee or agent or ostensible agent of the Buyer acknowledging receipt of the goods shall be conclusive evidence of receipt of the goods specified on the relevant Delivery Docket.

3. Your obligations. You will;

Ensure the details of the Order and any information provided regarding a specification are complete and accurate.

Ensure that any specification requested by You or proposed by ALMA is sufficient to ensure that the end product of the Goods is fit for the purpose required by You.

Provide ALMA with such information as it may reasonably require in order to supply the Goods.

Notify ALMA within 3 days of delivery where a defect is discovered in the Goods upon delivery.

4. Specification and performance;

ALMA will provide the Goods to You, the Buyer, in accordance in all material respects with any specification You have supplied and that has been referenced in the Order Acceptance.

Where You have supplied a specification to ALMA, You shall indemnify ALMA against all liabilities, costs, expenses, damages and losses (including any direct, indirect or consequential losses, loss of profit, loss of reputation and all interest, penalties and legal and other reasonable professional costs and expenses) suffered or incurred by ALMA in connection with any claim made against ALMA for actual or alleged infringement of a third party's intellectual property rights arising out of or in connection with ALMA's use of the specification. This shall survive termination of the Contract.

Where the Goods are manufactured in accordance with information or drawings supplied by You or to Your design or specification or where standard Goods are altered in accordance with Your instructions, no guarantee or warranty is given by ALMA as to the practicability, efficiency, safety or otherwise of the Goods (this being without prejudice to any of the other Terms).

Where no specification has been supplied by You: ALMA will provide the Goods based on the information You have supplied and use all reasonable endeavours to ensure the Goods meet the purpose for which they are required.

ALMA will not be liable if the Goods do not meet the particular level of performance that they are required for. Where ALMA provides advice on specification, You remain responsible for ensuring that the specification is adequate for the purposes You require. No variation in the specification or design of any Goods, which in the reasonable opinion of ALMA does not affect the suitability of the Goods for the purpose for which they are supplied, will constitute a breach of Contract or impose upon ALMA any liability whatsoever.

5. Order / Quotations and Payment;

All quotations are subject to prices ruling at date of despatch (notwithstanding prices quoted).

The prices quoted are exclusive of VAT which will be added to the invoice at the rate then current and appropriate to the transaction.

Accounts must be settled within SIXTY days from date of invoice / E.O.M as per terms agreed. Otherwise overdue accounts will be put on hold until payment. Interest shall be charged by the Company at the current rate of interest on all amounts remaining due and owing after the credit period referred to in the Application for Credit Facilities form has expired and such interest shall accrue on a daily basis. If no Credit Application Form has been completed and signed then payments must be made in THIRTY days (EU Directive 2000/35/EC). Alma is currently covered by Credit Insurance therefore failure to pay within the terms agreed may result in debts being passed on for collection by the Insurance Company.

The company reserves the right to cancel or refuse to accept any order for goods quoted, without any reason therefore. Cancellation or refusal shall be communicated in writing to the buyer's last known address. Any cancellation of order received by the company must be in writing, otherwise the order stands.

Orders are accepted only on the strict understanding that the Company's responsibility for any claim connected with materials supplied by the Company shall be limited to the replacement of such materials and shall exclude all consequential claims.

Any recommendation made by the Company relating to the use of the goods is given in good faith, but it is for the Buyer to satisfy himself as to the suitability of the goods for his own particular purpose and the Company gives no warranty as to the fitness of goods for any particular purpose.

6. Warranty;

ALMA warrants that the Goods will be free from any defects in material or workmanship for a period of one year after the date of delivery to You, the buyer.

As ALMA is not the manufacturer of the Goods ALMA will use reasonable endeavours to transfer to You the benefit of any warranty or guarantee given by the manufacturer.

7. Title and Risk;

The risk in the Goods shall pass to You on completion of delivery.

Title to the Goods shall not pass to You until ALMA has received payment in full (in cash or cleared funds) for the Goods.

Ownership of goods shall be governed by the 'Reservation of Title' as agreed and signed by your company. Until title to the Goods has passed to You, You shall:

(a) hold the Goods on a fiduciary basis as ALMA's bailee;

(b) store the Goods separately from all other Goods and any other stock held by You so that they remain readily identifiable as ALMA's property;

(c) not remove, deface or obscure any identifying mark or packaging on or relating to the Goods;

(d) maintain the Goods in satisfactory condition and keep them insured against all risks for their full price from the date of delivery; and

(e) notify ALMA immediately if You become subject to any of the events listed in Clause 9 but You may resell or use the Goods in the ordinary course of Your business.

If, before title to the Goods passes to You, You become subject to any of the events listed in clause 9, or ALMA reasonably believes that any such event is about to happen and notifies You accordingly, then, provided that the Goods have not been resold, or irrevocably incorporated into another product, and without limiting any other right or remedy



## Alma Engineering Supplies Terms and Conditions of Sale and Delivery - Continued

ALMA may have, ALMA may at any time require You to deliver up the Goods and, if You fail to do so promptly, enter Your premises or those of any third party where the Goods are stored in order to recover them.

### LIEN on Goods;

ALMA shall have a lien on all of the goods of the Buyer from time to time in the possession of the Company whether pursuant to this Contract of sale or Otherwise for all amounts due to the Company hereunder or otherwise. If the Buyer does not discharge the lien within thirty days of it being imposed, by payment of all amounts due, the Company shall have the rights to sell the goods, the subject of the lien and to deduct from the net proceeds of sale all amounts due to the Company.

If the Buyer, being an individual, or where the buyer is a firm, any partner in it, shall at any time become bankrupt or shall have a receiving order or administration order made against him or shall make any composition or arrangement with or for the benefit of his creditors or if the Buyer being a company shall pass a resolution or a court shall make an order that it be wound up (not being a Members of Voluntary winding up for the purpose of reconstruction or amalgamation) or if a receiver or manager on behalf of a creditor shall be appointed or if circumstances arise which entitle the court to make a winding-up order or if the Buyer becomes insolvent then the company shall be entitled forthwith on notice to the Buyer to terminate the contact without compensation to the buyer but without prejudice to any rights of the company hereunder.

### 8. Liability

Except as set out in these Terms, all warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

Nothing in these Terms excludes or limits ALMA's liability for death or personal injury caused by negligence, or for fraud or fraudulent misrepresentation.

ALMA will not be liable to You, whether in Contract, tort (including negligence), breach of statutory duty, or otherwise for any loss of profit, or an indirect or consequential loss arising under or in connection with the Contract.

ALMA shall have no liability for defective Goods unless the relevant Goods are returned to ALMA for inspection within 28 days of the discovery of any defect. ALMA shall use all reasonable endeavours to rectify defects in the Goods, provided that the defective Goods are made available to ALMA in the same condition as they were supplied i.e. are not damaged or altered.

This Clause shall survive termination of the Contract.

### 9. General;

All notices, etc, to be served hereunder shall be deemed duly served or delivered within two days of posting or within twenty-four hours of faxing same to the receiving party.

(i) This contract is governed by Irish Law

(ii) Any dispute under the contract shall be referred to an Arbitrator or Arbitrators to be appointed by the parties, or in default of agreement, by the President of the Law Society of Ireland for the time being and his discretion shall be binding on both parties, and this shall be a submission to Arbitration within the Arbitration Act, 1954 or any statutory amendment thereof for the time being in force.

(iii) In this clause 'dispute' does not include a claim for the price of goods sold by the Company to be Buyer.

The above terms are accepted as overriding any terms or conditions that may be included in any request document or subsequent order from the Buyer.

No variation of these terms shall be entertained unless in writing and signed on behalf of the Company.

### 10. DATA PROTECTION

**ALMA ENGINEERING SUPPLIES LTD are legally obliged to inform you that we currently hold the following details on our secure accounting software / server. This information is purely for maintaining our trading relationship and general communication purposes. Your information is backup for security purposes by a trusted 3rd party.**

**We do not share the information with any 3rd parties, other than limited courier companies for delivery purposes and our approved and compliant Merchant Service supplier if you avail of our Credit Card facility. If you visit our Website we only gather anonymous 3rd. party data.**

**Terms and Conditions are subject to change and up to date T&C will always be available to view on our website.**



The information retained is all or part of the following;

1. Company name
2. Contact name / Trading name for buyers, sales, accounts and management
3. Trade References (if given at time of account setup).
4. Head office / Invoicing address including various possible 3rd party site location delivery addresses.
5. Contact numbers and fax numbers as supplied by yourselves
6. Email addresses as supplied by yourselves
7. Invoice and Product Acquisition/Quoting Activity.
8. Vat No. / Company Registered No.
9. Bank account details
10. Euler Hermes Credit Rating (if applicable)

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# NOTES

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