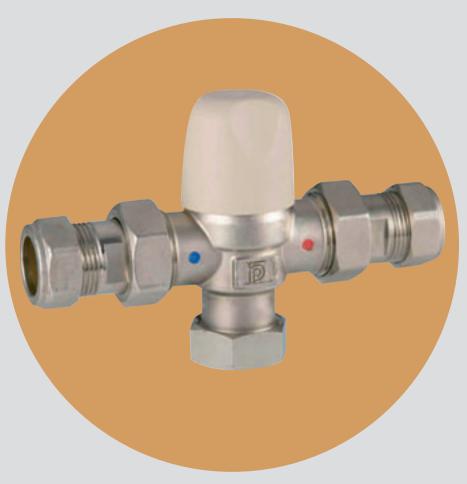
# PRESTEX

Valves and Fittings













# PEGLER QUALITY, SERVICE AI MORE THAN A CENTURY IN T

Established in 1899 and proud of its time-honoured principles of quality, innovation and customer service, Pegler is respected the world over as one of the leading manufacturers of 21st-century plumbing and heating products – products which continue to set the standards for today's global market. Out of this great tradition has come the comprehensive Prestex range of valves and fittings.

#### **Prestex quality and pedigree**

- Prestex valves and fittings have long been trusted and respected in the industry for quality, design, reliability and overall value for money.
- Robust construction under the most stringent quality control conditions assures a long working life.
- Pegler investment in advanced manufacturing techniques to complement the traditional skills of the workforce has achieved BS EN ISO 9001:2000 Quality Assurance accreditation.
- Where appropriate, Prestex products comply with kite mark British Standards or the European norm, and independent and certification ensure quality is maintained.
- Every Prestex product is made to perform better and to last longer
   by any standards, the one true measure of value for money.

#### **Prestex innovation**

 Every valve and fitting in the Prestex range is the result of Pegler's unceasing dedication to not only finding new and better solutions to customers' needs – but also to further improving

- quality and performance through new and better manufacturing techniques.
- Products such as Optiflush and Peglertherm are perfect examples of how Pegler's ongoing research and development continues to bring innovative new ideas to the marketplace.

#### **Prestex service**

As with all Pegler products, the Prestex range is supported by outstanding customer service.

- Friendly and helpful telephone response.
- Computerised sales ordering and distribution.
- All the technical support and advice you could need from Pegler's expert team and dedicated helpline.

#### **Market-leading Prestex fittings**

Prestex is the ideal solution for virtually all domestic and commercial applications. In fact, so comprehensive is the Prestex range that it forms the backbone of any builders merchant's plumbing stock and reputable plumber's fittings bag.

- With Prestex compression fittings you're safe and secure in the knowledge that the range is designed, manufactured and tested to meet appropriate UK and international standards, EN1254.
- Prestex fluid control solutions meet all the requirements of water regulations and include both single and double check valves for controlling the direction of water flow.
- For isolating pipes, Prestex gives you the option of compact balloperated isolating valves or, for heavier applications, gate valves. Where flow regulation as well as isolation is required, use stop valves for in-line control and bib taps for terminal control
- An extensive range of Prestex float valves gives water level control at high and low pressures.
- More specialist Prestex products include water-saving Optiflush, temperature-safe and easymaintenance Peglertherm, and a general range of wastes and draincocks.











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## **4 COMPRESSION FITTINGS TYPE A – EN1254**



STRAIGHT COUPLINGS	Brass	DZR* (Prefix DR)	Chromium Plated Brass (Suffix CP)
40 Straight Coupling Copper x copper	8mm       22mm         10mm       22 x 15mm         10 x 8mm       28mm         12mm       28 x 15mm         15mm       28 x 22mm         15 x 8mm       35mm         15 x 10mm       42mm         15 x 12mm       54mm         18mm       18 x 15mm	15mm 22mm 28mm 35mm 42mm 54mm	15mm 22mm 28mm
40CO Crossover Coupling Copper x copper	15mm 18mm 22mm 28mm		
Repair Coupling 100mm long (slip) copper x copper	15mm		
Straight Coupling Copper x female iron	8mm x <sup>1</sup> / <sub>4</sub> " 22mm x <sup>1</sup> / <sub>2</sub> " 10mm x <sup>1</sup> / <sub>4</sub> " 22mm x <sup>3</sup> / <sub>4</sub> " 10mm x <sup>3</sup> / <sub>8</sub> " 22mm x <sup>1</sup> " 10mm x <sup>1</sup> / <sub>2</sub> " 28mm x <sup>3</sup> / <sub>4</sub> " 15mm x <sup>1</sup> / <sub>4</sub> " 28mm x <sup>1</sup> " 15mm x <sup>3</sup> / <sub>8</sub> " 35mm x <sup>11</sup> / <sub>4</sub> " 15mm x <sup>1</sup> / <sub>2</sub> " 42mm x <sup>11</sup> / <sub>2</sub> " 15mm x <sup>3</sup> / <sub>4</sub> " 54mm x <sup>2</sup> "	15mm x 1/2" 15mm x 3/4" 22mm x 3/4" 22mm x 1" 28mm x 1" 35mm x 11/4" 42mm x 11/2" 54mm x 2"	15mm x 1/ <sub>2</sub> " 22mm x 3/ <sub>4</sub> " 28mm x 1"
42 Straight Coupling Copper x male iron	8mm x <sup>1</sup> / <sub>4</sub> " 22mm x <sup>1</sup> / <sub>2</sub> " 10mm x <sup>1</sup> / <sub>4</sub> " 22mm x <sup>3</sup> / <sub>4</sub> " 10mm x <sup>3</sup> / <sub>8</sub> " 22mm x 1" 10mm x <sup>1</sup> / <sub>2</sub> " 28mm x <sup>1</sup> / <sub>2</sub> " 12mm x <sup>1</sup> / <sub>2</sub> " 28mm x 1" 15mm x <sup>1</sup> / <sub>4</sub> " 28mm x 1" 15mm x <sup>1</sup> / <sub>8</sub> " 28mm x 1" 15mm x <sup>1</sup> / <sub>2</sub> " 35mm x 1" 15mm x <sup>3</sup> / <sub>4</sub> " 35mm x 1" 18mm x <sup>1</sup> / <sub>2</sub> " 42mm x 1 <sup>1</sup> / <sub>4</sub> " 18mm x <sup>1</sup> / <sub>2</sub> " 54mm x 2"	15mm x 1/2" 22mm x 3/4" 22mm x 1" 28mm x 1" 35mm x 11/4" 42mm x 11/2" 54mm x 2"	15mm x 1/2" 22mm x 3/4" 28mm x 1"
Straight Coupling Copper x male iron 38mm (11/2") screw with backnut	15mm x <sup>1</sup> /2" 22mm x <sup>3</sup> /4" 28mm x 1"		
Straight Coupling with Draincock* (Type B) Copper x copper	15mm		



ELBOWS		Brass	DZR* (Prefix DR)	Chromium Plated Brass (Suffix CP)
	44 Elbow Copper x copper	8mm 28mm 10mm 28 x 15mm 12mm 28 x 22mm 15mm 35mm 18mm 42mm 22mm 54mm 22 x 15mm	15mm 22mm 28mm 35mm 42mm 54mm	15mm 22mm 28mm 35mm
C	45 Elbow opper x male iron	10mm x 3/8" 22mm x 1" 12mm x 3/8" 28mm x 1" 12mm x 1/2" 35mm x 11/4" 15mm x 1/2" 42mm x 11/2" 22mm x 1/2" 54mm x 2" 22mm x 3/4"	15mm x ½" 15mm x ¾" 22mm x ¾" 22mm x 1" 28mm x 1"	15mm x ½"
	W Bend with Oraincock*	22mm x <sup>3</sup> / <sub>4</sub> " 28mm x 1" Type A draincock		
Ta Ta	Ibow with per Thread x male iron (ISO7-R)	15mm x 1/ <sub>2</sub> "		
	45W Elbow er x male iron 38mm ) screw with backnut	22mm x <sup>3</sup> / <sub>4</sub> "	28mm x 1"	
Co	46 Elbow pper x female iron	15mm x 3/8" 22mm x 1" 15mm x 1/2" 28mm x 3/4" 15mm x 3/4" 28mm x 1" 18mm x 1/2" 35mm x 11/4" 22mm x 1/2" 42mm x 11/2" 22mm x 3/4" 54mm x 2"	15mm x 1/ <sub>2</sub> " 22mm x 3/ <sub>4</sub> " 22mm x 1" 28mm x 1"	15mm x 1/ <sub>2</sub> "
TEES				
Al	<b>50</b> Equal Tee Il ends for copper	8mm 35mm 10mm 42mm 15mm 54mm 18mm 22mm 28mm	15mm 22mm 28mm 35mm 42mm 54mm	15mm 22mm 28mm
	50A e – Both Ends Reduced Il ends for copper	15 x 22mm	22 x 28mm	
	50B ee – One End Reduced Il ends for copper	18 x 15mm 22 x 15mm 28 x 15mm 28 x 22mm		22 x 15mm 28 x 15mm 28 x 22mm

## **6 COMPRESSION FITTINGS TYPE A – EN1254**



TEES	Brass	DZR* (Prefix DR)	Chromium Plated Brass (Suffix CP)
50C Tee – Branch Reduced All ends for copper	22 x 15mm 28 x 15mm 28 x 22mm	22 x 15mm	22 x 15mm 28 x 15mm
Tee – One End Reduced & Branch Reduced All ends for copper	18 x 15mm 22 x 15mm	22 x 15mm 28 x 22mm	22 x 15mm
51H Heater Tee Copper branch x female iron x male iron	15mm x 1/ <sub>2</sub> "		
52 Tee Copper x female iron end	15mm x 1/ <sub>2</sub> " 22mm x 1/ <sub>2</sub> " 22mm x <sup>3</sup> / <sub>4</sub> "		15mm x 1/ <sub>2</sub> "
54 Tee Copper x female iron branch	15mm x <sup>1</sup> / <sub>2</sub> " 28mm x <sup>1</sup> / <sub>2</sub> " 18mm x <sup>1</sup> / <sub>2</sub> " 28mm x <sup>3</sup> / <sub>4</sub> " 22mm x <sup>1</sup> / <sub>2</sub> " 28mm x 1" 22mm x <sup>3</sup> / <sub>4</sub> "		
TANK CONNECTORS			
Flanged Tank Connector Copper x flange and backnut	15mm 35mm 22mm 42mm 28mm 54mm	15mm 35mm 22mm 42mm 28mm 54mm	
STOP ENDS			
Stop End Copper x blank end	12mm 15mm 22mm 28mm	15mm 35mm 22mm 42mm 28mm 54mm	15mm
TAP CONNECTORS			
Straight Swivel Tap Connector Copper x union nut	15mm x 1/ <sub>2</sub> " 15mm x 3/ <sub>4</sub> " 22mm x 3/ <sub>4</sub> "	15mm x <sup>1</sup> / <sub>2</sub> " 22mm x <sup>3</sup> / <sub>4</sub> "	15mm x 1/ <sub>2</sub> " 22mm x 3/ <sub>4</sub> "
43B  Bent Swivel Tap  Connector  Copper x union nut	15mm x 1/ <sub>2</sub> " 22mm x <sup>3</sup> / <sub>4</sub> "	15mm x 1/ <sub>2</sub> "	15mm x 1/ <sub>2</sub> " 22mm x 3/ <sub>4</sub> "



WALL PLATE FITTINGS	Brass	DZR* (Prefix DR)	Chromium Plated Brass (Suffix CP)
54X Tee with Bracket Copper x female iron branch	15mm x 1/ <sub>2</sub> "		
57X  Bibtap Wall Flange (3 hole) Copper x female iron	15mm x 1/ <sub>2</sub> "		
58X  Bibtap Wall Flange (2 hole)  Copper x female iron	15mm x <sup>1</sup> / <sub>2</sub> " 22mm x <sup>3</sup> / <sub>4</sub> "	15mm x 1/ <sub>2</sub> "	15mm x 1/ <sub>2</sub> " 22mm x <sup>3</sup> / <sub>4</sub> "
REDUCERS			
102/3/4 Reducing Set* For reducing 'Type A' ends to accept smaller pipe	10 x 8mm 35 x 22mm 12 x 10mm 35 x 28mm 15 x 8mm 42 x 15mm 15 x 10mm 42 x 18mm 15 x 12mm 42 x 22mm 18 x 10mm 42 x 28mm 18 x 12mm 42 x 35mm 18 x 15mm 54 x 15mm 22 x 15mm 54 x 18mm 22 x 18mm 54 x 22mm 28 x 15mm 54 x 35mm 28 x 15mm 54 x 35mm 35 x 15mm 54 x 35mm 35 x 15mm 54 x 42mm	22 x 15mm 28 x 15mm 28 x 22mm	22 x 15mm
SUNDRIES			
37A Blanking Off Disc*	15mm 22mm 28mm		
103 Brass Cone* For Type A joints	6mm 22mm 8mm 28mm 10mm 35mm 12mm 42mm 15mm 54mm		
C103 Copper Cone* For Type A joints	8mm 35mm 10mm 42mm 12mm 54mm 15mm 3/ <sub>4</sub> " 22mm 28mm		
105 Type A Capnut For Type A joints	8mm 28mm 10mm 35mm 12mm 42mm 15mm 54mm 18mm 22mm	15mm 22mm 28mm 35mm 42mm 54mm	8mm 22mm 10mm 28mm 12mm 35mm 15mm
Spanner* For 15mm octagonal capnut	15mm		

#### PL COMPRESSION FITTINGS FOR POLYETHYLENE PIPE

#### **STOP ENDS**



8

Stop End

Polyethylene x blank end

20mm 25mm

#### STRAIGHT COUPLINGS



25mm

**Straight Coupling** Polyethylene x polyethylene 20mm



Straight Coupling Metric polyethylene x Imperial polyethylene

20mm x <sup>1</sup>/<sub>2</sub>" 25mm x <sup>3</sup>/<sub>4</sub>"

Straight Coupling Polyethylene x copper

20 x 15mm 25 x 15mm

25 x 22mm 32 x 28mm

<sup>3</sup>/<sub>8</sub>" x 15mm



#### **ELBOWS**



Polyethylene x polyethylene

20mm 25mm

#### **TEES**



Equal Tee All ends for polyethylene 20mm 25mm

#### **IMPERIAL STIFFENERS**



Stiffeners C Class (blue) For use with imperial pipe to BS 1972 3/8" 1/2" 3/4"

1"

#### **METRIC STIFFENERS**



Stiffener for MDPE

20mm 25mm 32mm 50mm

63mm

#### **CAPNUTS**



Capnuts For Prestex PL 20mm 25mm 32mm 50mm 63mm

**Straight Coupling** Polyethylene x female iron 20mm x <sup>1</sup>/<sub>2</sub>" 25mm x <sup>1</sup>/<sub>2</sub>" 25mm x 3/4"



**Straight Coupling** 

Polyethylene x male iron

20mm x <sup>1</sup>/<sub>2</sub>" 25mm x <sup>3</sup>/<sub>4</sub>"

#### **WALL PLATE FITTINGS**



Bibtap Wall Flange (2 hole) Polyethylene x female iron 20mm x 1/2" 25mm x 3/4"

#### **ADAPTORS**



Adaptor Polyethylene x plain tail for copper 25 x 15mm

#### **REDUCERS**



**Reducing Set** 

For reducing polyethylene ends to accept smaller polyethylene pipe 25 x 20mm

#### **SUNDRIES**



Cone For Prestex PL 20mm 3/8" 25mm 1/2" 3/4" 32mm 50mm 1" 63mm





RANG	RANGE			
		Sizes	(mm)	
Patt. No.	Description	15	22	
801	Single Check Valve	•	•	
802	Double Check Valve	•	•	
802CP	Chrome Plate Double Check Valve	•		
8028	Double Check Valve and Service valve	•		
FL1*	Filling Loop	•		
FL1 + Kit*	Filling Loop with Capping-Off Kit	•		
Kit	Capping-Off Kit for use with Pegler Filling Loops	•		

<sup>\*</sup>Comply with Water Supply (Water Fittings) Regulations 1999 R24.2

#### **STANDARDS**

Single check valves are manufactured to BS 6282 Part 1. Double check valves are manufactured to BS 6282 Part 1. All check valve products are WRAS approved.

#### **MATERIAL**

Single and double check valves are manufactured in dezincification resistant metal (DZR).

#### PRESSURE/TEMPERATURE RATING

10 bar at 80°C (max working) 0.03 bar (low test pressure) 16 bar (high test pressure)

FLOW RATE			
	Sizes	(mm)	
Patt. No.	15	22	
801	0.50	0.82	
802	0.47	0.90	
8028	0.065		

Note: Flow rate is measured in litres per second when experiencing a 0.15 bar pressure drop across the valve for single check valves, and a 0.30 bar pressure drop for double check valves.

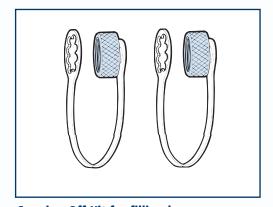
#### **THREADING**

Compression connections are to EN 1254; 15mm equates to  $^{1}/_{2}$ " BSP, 22mm are unique to Prestex.

FACE TO FACE DIMENSIONS (MM)			
Sizes (mm)			
Patt. No. 15 22			
801	57	69	
802	82	104	
8028	102		
FL1 ‡	508		

‡ Note: The stainless steel braided hose is 406mm long.

WEIGHTS (APPROX. KG)			
	Sizes (mm)		
Patt. No.	15	22	
801	0.11	0.24	
802	0.18	0.23	
8028	0.182		
FL1	0.45		
Kit	0.04		



**Capping-Off Kit for filling loops** 

#### 10 ISOLATING VALVES





RANG	E				
	SERVICING VALVES		Size	es	
Patt. No.	Description	15	15 x <sup>1</sup> / <sub>2</sub> "	22	22 x <sup>3</sup> / <sub>4</sub> "
806	Straight Pattern, copper x swivel union		•		•
807	Angle Pattern, copper x swivel union		•		
808	Straight Pattern, copper x copper	•		•	
WASHING MACHINE TAPS			Size		
Patt. No.	Description 15 x <sup>3</sup> / <sub>4</sub> "			( 3/4"	
809	Straight Pattern, copper x male iron (hot and cold)			•	
809B	Angle Pattern, copper x male iron (hot and cold)			•	•
809T	809T Tee Pattern, copper x male iron (hot and cold)			•	•
ANGLE VALVES			Siz	e	
Patt. No.	Description		1/	'2"	
79†	Angle Pattern (hot and cold)				•

#### **STANDARDS**

Pegler servicing valves and washing machine taps are manufactured to the performance standards of BS 6675, and 15mm 808, 15mm x  $^{1}/_{2}$ " 806 and 15mm x  $^{3}/_{4}$ " 809 carry WRAS approval.

The Angle valve complies with Pegler performance standards.

#### **MATERIAL**

All isolating valves are manufactured in Brass and Chrome plated.

#### PRESSURE/TEMPERATURE RATING

#### **Servicing Valves/Washing Machine Taps:**

16 bar at 30°C

10 bar at 65°C

6 bar at 110°C

5 bar at 120°C

20 bar

5 bar pneumatic test

#### Angle Valves:

10 bar at 95°C (max working)

15 bar pneumatic test

#### **FLOWRATE**

Flow rates for servicing valves and washing machine taps are in excess of those specified in BS 6675, notably 15mm 0.16 l/s, 22mm 0.32 l/s at 0.10 bar running pressure.

#### **THREADING**

Compression connections are to EN 1254. Female iron swivel union connections are to ISO 228 Parallel. Male connections are to ISO 228 Parallel.

#### **DIMENSION (MM)** STRAIGHT PRODUCTS Patt. No. Size Face to Face 15mm x <sup>1</sup>/<sub>2</sub>" 806 57 22mm x 3/4" 806 85 808 15mm 59 808 70 809 51 **ANGLE PRODUCTS Outlet Centre** Top of Outlet line to bottom Inlet Centre Patt. No. Size Centre Line of inlet line to outlet 15mm x <sup>1</sup>/<sub>2</sub>" 807 15mm x <sup>3</sup>/<sub>4</sub>" 809B 28 28 34 50 34 26 79 **TEE VALVES**

WEIGHTS (APPROX. KG)			
Patt. No.	Size	Weight	
806	15mm x <sup>1/</sup> 2"	0.12	
806	22mm x <sup>3/</sup> 4"	0.62	
807	15mm x <sup>1/</sup> 2"	0.14	
808	15mm	0.12	
808	22mm	0.21	
809	15mm x <sup>3</sup> / <sub>4</sub> "	0.13	
809B	15mm x <sup>3</sup> / <sub>4</sub> "	0.10	
809T	15mm x <sup>3</sup> / <sub>4</sub> "	0.13	
79	1/2"	0.22	

Face to Face

56

Centre Line

to end

39

Centre line to

top of lever

28

Patt. No.

809T

Size

15mm x <sup>3</sup>/<sub>4</sub>"

<sup>†</sup> Export Sales only.



RANG	E									
	Type A Range									
Patt. No.	Description			15	22	28	35	42	54	
59	Brass Stopvalve, copper x coppe	r		•	•	•				
59 FGK	Brass Stopvalve with ferrule gua and key, copper x copper	ırd		•	•	•				
59 ECCP	Chromium Plated Brass Stopvalowith crosstop ( hot or cold), cop		opper	•						
GM59	Stopvalve (Gunmetal body/ brass head), copper x copper			•	•	•	•	•	•	
GM59 FGK	Stopvalve with ferrule guard an (Gunmetal body/brass head), copper x copper	d key			•					
69	Brass Stopvalve with Draincock,	copper	х сорр	er •						
GM69	Stopvalve with Draincock (Gunmetal body/brass head), co	opper x	coppe	er •						
	Metric Polyethylene	Rar	ıge	9	Size	es (1	mn	1)		
Patt. No.	Description	20x15	25x15	25x22	32	x28	20	25	32	
PL59	Stopvalve (Gunmetal body/brass head), polyethylene x polyethylene				•	•	•			
PL59A	Stopvalve (Gunmetal body/brass head), polyethylene x copper	•	•	•		•				

Unless stated, all Compression Stopvalves are supplied with a crutch top.

#### **STANDARDS**

All Pegler compression end stopvalves are manufactured in accordance with BS 1010.

#### **MATERIAL**

Pegler compression end stopvalves are manufactured in Forged or Cast Brass or Gunmetal.

#### PRESSURE/TEMPERATURE RATING

All sizes are rated 16 bar at 30°C (cold working)

15/22mm or equivalent are rated 10 bar at 90°C (max working) 28mm or equivalent and larger sizes are rated 10 bar at 85°C (max working)

All sizes – 20 bar (test pressure)

#### **COMPRESSION ENDS**

Compression connections on all stopvalves are to EN 1254.

DIME	NSIC	ONS	(MI	VI)					
	FACE	TO F	ACE		9	Sizes	1)	mm)	
Patt. No.	15	22	2	8	3	5		42	54
59	84		9	0	1	15			
GM59	75	90	11	5	1.	25	1	140	165
69	97	119							
GM69	75								
	20x15	25x15	25x22	32	x28	20		25	32
PL59						89		105	127
DI 59Δ	21	86	96	1	31				

	20X13	23813	ZOXZZ	JZXZO	20	25	32		
PL59					89	105	127		
PL59A	81	86	96	131					
PL69						100			
HEIGHT OPEN Sizes (mm)									
Patt No.	att. No. 15or20 22or25				-	42			
1 4 11.	150120	ZZorz	5 280r	32 3	5	42	54		
59	90	100	12		35	155	180		

Note: Heights for FGK and ECCP versions will vary slightly.



WEIGHTS (APPROX. KG)													
Sizes (mm)													
Patt. No. 15 22 28 35 42 54													
59 0.39 0.57 1.21													
69	0.49												
	20x15	25x15	25×	(22	32:	x28	20	)	25		32		
PL59							0.4	8	0.80		1.37		
PL59A	0.40	0.48	0.6	56	1.	34							

**Note**: Weights are shown for the Gunmetal version. Brass versions are slightly lighter.

#### 12 STOP VALVES FOR IRON



RANG	iΕ							
Patt. No.	Description	1/2"	3/4"	1"	11/4"	11/2"	2"	3"‡
744F	Brass Stopvalve with crutch top, female iron x female iron	•	•	•	•	•	•	•
744F IW	Brass Stopvalve with Alloy Wheel, female iron x female iron	•	•	•	•	•	•	
744F ECCP	Chromium Plated Brass Stopvalve with crosstop (cold), female iron x female iron	•						
	Other stopvalves						Size	s
Patt. No.	Description					1/2"	3/4"	1"
709† Brass Stopvalve with crutch top, female iron x female iron								•
89†	•	•						

<sup>‡</sup> Note: Supplied with iron wheel as standard.

#### **STANDARDS**

All Pegler Stopvalves for Iron, with the exception of the 709 and 89, are manufactured in accordance with BS 1010.

The 709 and 89 comply with Pegler performance standards.

#### **MATERIAL**

Pegler compression end stopvalves are manufactured in Forged or Cast Brass.

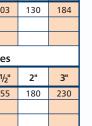
#### PRESSURE/TEMPERATURE RATING

 $\frac{1}{2}$ " or  $\frac{3}{4}$ " sizes are rated 16 bar at 90°C (max working) 1" plus sizes are rated 16 bar at 85°C (max working) All sizes – 20 bar

#### **THREADING**

Female connections on all stopvalves are to BS 21 Taper.

DIMENSIONS											
FACE TO FACE Sizes											
Patt. No. 1/2" 3/4" 1" 11/4" 11/2" 2" 3'											
744F	56.5	67	86	95	103	130	184				
709	54	63.5	77								
89	54	58.7									
	MAX	IMUN	/I HEI	GHT :	Sizes						
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"	3"				
744F	90	100	122	135	155	180	230				
709	66.5	71.5	100								
89	104	104									





Note: Dimensions for the MF version are identical to the standard 744F where as heights for IW, FGK and ECCP versions will vary slightly.

WEIGHTS (APPROX. KG)											
Sizes											
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"	3"				
744F	0.34	0.52	1.08	1.64	2.11	4.03	8.40				
709	0.21	0.33	0.70								
89	0.41	0.47									

Note: Weights shown are for crutch handle versions where options exist.

<sup>†</sup> Export sales only



RANG	E		
	HEAVY PATTERN BIBTAPS		
Patt. No.	Description	1/2"	3/4"
141	Brass Finish with crutch top	•	•
141EC	Chromium Plated with crosstop (hot or cold)	•	•
141HU	Hose Union Pattern, Brass Finish with crutch top (Suitable for use with $1/2$ " hose or $3/4$ " adaptors)	•	•
141HU FGK	Hose Union Pattern, Brass Finish with Ferrule Guard and Key (Suitable for use with 1/2" hose or 3/4" adaptors)	•	•
141HUEC	Chromium Plated Hose Union Pattern with crosstop (hot or cold) (Suitable for use with <sup>1</sup> / <sub>2</sub> " hose or <sup>3</sup> / <sub>4</sub> " adaptors)	•	
142HU	Bibplus, combined Bibtap with integral double check valve,hose union pattern with crutch top (Suitable for use with 1/2" hose or 3/4" adaptors)	•	
142HU FGK	Bibplus, combined Bibtap with integral double check valve, hose union pattern with Ferrule Guard and Key (Suitable for use with 1/2" hose or 3/4" adaptors)	•	
	LIGHT PATTERN BIBTAPS		
Patt. No.	Description	1/2"	3/4"
701 <sup>†</sup>	Brass Finish	•	•
723 <sup>†</sup>	Hose Union Pattern, Brass Finish	•	•
723AT <sup>†</sup>	Hose Union Pattern, Brass Finish, Screwed 3/4" American thread on nose	•	

Note: All light pattern bibtaps are supplied with crutch top. † Export Sales only.

#### **STANDARDS**

Heavy Pattern Bibtaps are manufactured in accordance with BS 1010.

Light Pattern Bibtaps are manufactured to Pegler performance standards.

Screwed 3/4" American thread on nose

#### **MATERIAL**

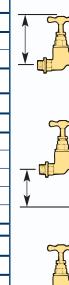
Pegler Bibtaps are manufactured in Forged or Cast Brass.

#### PRESSURE/TEMPERATURE RATING

10 bar at 90°C (max working)

5 bar pneumatic test

DIME	NSIONS (MN	1)								
	HEIGHT OPEN									
Patt. No.	1/2"	3/4"								
141/142	96	101								
701/723	70	80								
Centre line of inlet to top of crutch Note: Heights for FGK and EC versions will vary slightly.										
	DROP									
Patt. No. 1/2" 3/4"										
141	16	22								
141HU	61	77								
142HU	76									
701	12	12								
723	38	46								
	Centre line of inlet to outlet									
	WIDTH									
Patt. No.	1/2"	3/4"								
141/142	65	88								
701	65	71								
723	75	87								
	Inlet flange to centre of outlet									

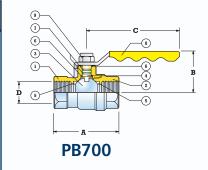


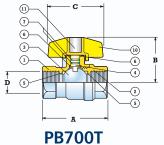
WEIGHTS	WEIGHTS (APPROX. KG)										
Patt. No.	1/2"	3/4"									
141	0.39	0.64									
141HU	0.48	0.78									
142HU	0.50										
701	0.21	0.33									
723	0.25	0.40									

## 14 PB700 FULL BORE QUARTER TURN BALL VALVES



- All sizes rated PN40.
- Full bore.
- Quarter turn operation.
- Blow-out and vandal-proof assembly.
- 1/4" to 4" sizes.
- P.T.F.E. (Teflon) ball seals.
- Double '0' ring Viton stem seals.
- BS 21 Taper Thread.





RANG	RANGE											
						Sizes						
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"	
PB700	•	•	•	•	•	•	•	•	•	•	•	
PB700T	•	•	•	•	•							

DIME	DIMENSIONS (MM)											
Patt. No.	Description	1/4"	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	2 <sup>1</sup> / <sub>2</sub> "	3"	4"
	A Face to Face	48	48.5	59	67.5	79.5	95	100	122	150	177	214
	B Centre Line to Lever	35	35	39	50	55	62	77.5	84	97	122	136
PB700	C Lever Length	91.5	91.5	91.5	105	105	105	165	165	180	255	255
	D Bore	10	10	15	20	25	32	40	50	65	80	100
	Weight kg	0.16	0.16	0.25	0.45	0.68	1.2	1.64	2.92	4.15	7.14	11.00
	A Face to Face	48	48.5	59	67.5	79.5						
	B Centre Line to Lever	36.5	36.5	40	50.5	55						
PB700T	C Lever Length	48.5	48.5	48.5	60	60						
	D Bore	10	10	15	20	25						
	Weight kg	0.14	0.26	0.27	0.49	0.72						

FLOW RATES*	FLOW RATES*											
					Sizes							
Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"	
Cv	6.9	11.0	19.9	48.0	81.9	141.6	234.0	341.6	626.0	994.5	1591.2	
Kv	5.9	9.4	17.0	41.0	70.0	121.0	200.0	292.0	535.0	850.0	1360.0	
Kv Gas	3.8	4.2	11.3	23.8	31.1	67.2	101.5	148.0				

<sup>\*</sup> Cv – flow rate in US GPM at a pressure drop of 1 psi. \* Kv – flow rate in m3 per hour at a pressure drop of 1 bar. \* Kv Gas – flow rate in m3 per hour at a pressure drop of 1 mbar.



MAXIM	MAXIMUM PRESSURE CONDITIONS											
Size	Maxir Pressure Co	num nditions (bar)										
	Temperatures up to 110°C	Temperatures up to 186°C	Shell	Seat								
1/4" to 2"	40.0	10.0	44.0									
2½" to 4"	40.0	10.0	60.0	44.0								
Size	Maxii Pressure Cor	mum nditions (psi)	Tes Pressure	-								
	Temperatures 212°F	Temperatures up to 389°F	Shell	Seat								
1/4" to 2"	580.2	145.0	870.2	638.2								
2 <sup>1</sup> / <sub>2</sub> " to 4"	580.2	145.0	870.2	638.2								

SUI	SUITABLE FOR												
Steam	Water	Oil	Air	Gases									
~	·	- V	<i></i>	Inert	Combustible <sup>†</sup>	Corrosive <sup>††</sup>	Oxygen						
Ĺ				~	V	V	X						
<u> </u>				V	~	V							

#### $\dagger$ The valves are suitable for British Gas Applications Family Gases 1, 2 and 3. $\dagger\dagger$ Suitable in applications where moisture is completely absent.

#### **GAS APPLICATIONS CONDITIONS**

-20°C to +60°C maximum 5 bar. British Gas (MOP 5). For LPG: maximum 10 bar.

## PRESSURE EQUIPMENT DIRECTIVE CATEGORY

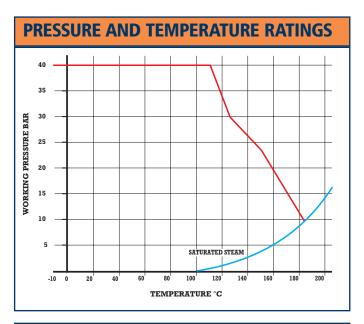
	Sizes										
1/4"	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	21/2"	3"	4"	
SEP	SEP	SEP	SEP	SEP	Cat I	Cat I	Cat I	Cat I	Cat I	Cat I	

Cat I carries the CE Mark.

Sizes  $\frac{1}{4}$ " to 2" suitable for group 1 liquids and gases.

Sizes  $2^{1}/_{2}$ " 3" and 4" suitable for group 1 gases (10 bar max) and group 2 liquids.

MAT	ERIAL SPEC	CIFICATION			
No.	Component	Material			
		Forged Brass, Chrome Plated ( $\frac{1}{4}$ " to 2")			
1	Body	Gravity Die Cast Brass, Chrome Plated (2 <sup>1</sup> / <sub>2</sub> " to 4")			
		Forged Brass, Chrome Plated (1/4" to 2")			
2	End Piece	Gravity Die Cast Brass, Chrome Plated (2 <sup>1</sup> / <sub>2</sub> " to 4")			
		Brass Bar, Chrome Plated (1/4" to 1/2")			
3	Ball	Forged Brass, Chrome Plated (3/4" to 2")			
		Gravity Die Cast Brass, Chrome Plated (2 <sup>1</sup> / <sub>2</sub> " to 4")			
4	Stem	Brass Bar			
5	Seats	PTFE (Teflon)			
6	Thrust Washer	PTFE (Teflon)			
7	Stem 'O' Ring	Viton			
8	Yellow Lever	High Temperature PVC Insulated Zinc Plated Steel			
9	Nut (Self Locking)	Zinc Plated Steel			
10	Yellow Tee Handle	Aluminium, Painted			
11	Security Screws	Nickel Plated Brass			



<b>ACCESSORIES</b>	ACCESSORIES								
LD LOCKING DEVICE									
Locking Device	Suitability								
LD 1	suits ½", ¾" and ½"								
LD 2	suits <sup>3</sup> ⁄ <sub>4</sub> ", 1" and 1 <sup>1</sup> ⁄ <sub>4</sub> "								
LD 3	suits 1½" and 2"								
LD 4	suits 2½"								
LD 5	suits 3" and 4"								

A range of matching long shank warded action padlocks is available to suit the locking devices as follows:

	PADLOCK						
Padlock	Suitability						
PDK 3	suits <sup>1</sup> / <sub>4</sub> ", <sup>3</sup> / <sub>8</sub> ", <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" and 1 <sup>1</sup> / <sub>4</sub> "						
PDK 4	suits 1 <sup>1</sup> / <sub>2</sub> " and 2"						
PDK 5	suits 2½", 3" and 4"						
STEM EXTENSION KITS							
Stem Extension	Suitability						
PBSEK 7	suits $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and 15mm						
PBSEK 8	suits <sup>3</sup> / <sub>4</sub> ", 1, 1 <sup>1</sup> / <sub>4</sub> ", 22mm, 28mm and 35mm						
PBSEK 9	suits 1 <sup>1/</sup> 2", 2", 42mm and 54mm						
PBSEK 10	suits 2½"						
DDCEK 11	:t Dil All						



The LD Locking Device can be utilised to prevent unauthorised operation of any standard lever handle product.

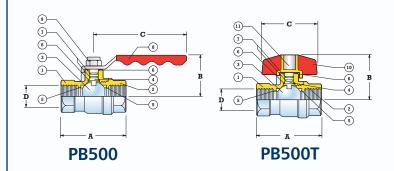
The locking device shown is type LD1 and LD2. To fit LD3, 4 and 5 the handle locking nut must be removed. The locking device is then fitted and the locking nut reattached.



#### 16 PB500 FULL BORE QUARTER TURN BALL VALVE **RANGE – RED**



- All sizes rated PN25.
- Full bore.
- Quarter turn operation.
- Blow-out and vandal-proof assembly.
- 1/4" to 4" sizes.
- P.T.F.E. (Teflon) ball seals.
- Viton '0' ring stem seals.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 Parallel Thread PT.



RANG	RANGE											
Sizes												
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	111/4"	11/2"	2"	21/2"	3"	4"	
PB500	•	•	•	•	•	•	•	•	•	•	•	
PB500 AT			•	•	•	•	•	•	•	•	•	
PB500 PT			•	•	•	•	•	•	•	•		
PB500T PT	•	•	•	•	•							

DIME	DIMENSIONS (MM)												
						Sizes							
Patt. No.	Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"	
	A Face to Face	48	48.5	59	67.5	79.5	95	100	122	150	177	214	
	B Centre Line to Lever	35	35	39	50	55	62	77.5	84	97	122	136	
PB500	C Lever Length	91.5	91.5	91.5	105	105	105	165	165	180	255	255	
	D Bore	10	10	15	20	25	32	40	50	65	80	100	
	Weight kg	0.15	0.15	0.24	0.44	0.63	1.15	1.61	2.79	3.80	6.79	10.85	
	A Face to Face	48	48.5	59	67.5	79.5							
	B Centre Line to Lever	36.5	36.5	40	50.5	55							
PB500T	C Lever Length	48.5	48.5	48.5	60	60							
	D Bore	10	10	15	20	25							
	Weight kg	0.25	0.27	0.31	0.60	0.80							

FLOW RATES*											
					Sizes						
Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
Cv	6.9	11.0	19.9	48.0	81.9	141.6	234.0	341.6	626.0	994.5	1591.2
Kv	5.9	9.4	17.0	41.0	70.0	121.0	200.0	292.0	535.0	850.0	1360.0

<sup>\*</sup> Cv – flow rate in US GPM at a pressure drop of 1 psi. \* Kv – flow rate in m3 per hour at a pressure drop of 1 bar.



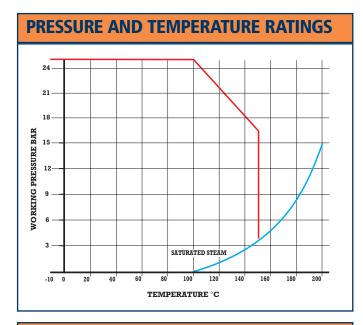
MAXIM	MAXIMUM PRESSURE CONDITIONS											
Size	Maxii Pressure Co	mum inditions (bar)	Test Pressures (bar)									
<sup>1</sup> / <sub>4</sub> " to 4"	Temperatures up to 100°C 25.0	Temperatures up to 150°C 16.5	Shell 37.5	Seat 27.5								
74 10 4		mum	37.3									
Size	Pressure Co	nditions (psi)	Pressur	es (psi)								
	Temperatures up to 212°F	Temperatures up to 302°F	Shell	Seat								
½" to 4"	362.6	52.6 293.3 543.9 398										

SUI	TAB	LE F	OR								
Steam	Water	Oil	Air	Gases							
~	~	1	1	Inert	Combustible	Corrosive	Oxygen				
	, , ,			X	×	×	X				

	PRESSURE EQUIPMENT DIRECTIVE CATEGORY									
					Sizes					
1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP

Suitable for group 2 liquids only.

MAT	MATERIAL SPECIFICATION								
No.	Component	Material							
		Forged Brass, Chrome Plated (1/4" to 2")							
1	Body	Gravity Die Cast Brass, Chrome Plated (2 <sup>1</sup> / <sub>2</sub> " to 4")							
		Forged Brass, Chrome Plated (1/4" to 2")							
2	End Piece	Gravity Die Cast Brass, Chrome Plated (2 <sup>1</sup> / <sub>2</sub> " to 4")							
		Brass Bar, Chrome Plated (1/4" to 1/2")							
3	Ball	Forged Brass, Chrome Plated (3/4" to 2")							
		Gravity Die Cast Brass, Chrome Plated (2 <sup>1/</sup> 2" to 4")							
4	Stem	Brass Bar							
5	Seats	PTFE (Teflon)							
6	Thrust Washer	PTFE (Teflon)							
7	Stem 'O' Ring	Viton							
8	Red Lever	High Temperature PVC Insulated Zinc Plated Steel							
9	Nut (Self Locking)	Zinc Plated Steel							
10	Red Tee Handle	Aluminium, Painted							
11	Security Screws	Nickel Plated Brass							



ACCESSORIES							
LD LOCKING DEVICE							
Locking Device	Suitability						
LD 1	suits $\frac{1}{4}$ ", $\frac{3}{8}$ " and $\frac{1}{2}$ "						
LD 2	suits <sup>3</sup> ⁄ <sub>4</sub> ", 1" and 1 <sup>1</sup> ⁄ <sub>4</sub> "						
LD 3	suits 1 <sup>1/</sup> 2" and 2"						
LD 4	suits 2 <sup>1/</sup> 2"						
LD 5	suits 3" and 4"						

A range of matching long shank warded action padlocks is available to suit the locking devices as follows:

PADLOCK							
Padlock	Suitability						
PDK 3	suits <sup>1</sup> / <sub>4</sub> ", <sup>3</sup> / <sub>8</sub> ", <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" and 1 <sup>1</sup> / <sub>4</sub> "						
PDK 4	suits 1 <sup>1</sup> / <sub>2</sub> " and 2"						
PDK 5	suits 2 <sup>1/</sup> 2", 3" and 4"						
STEM EXTENSION KITS							
Stem Extension	Suitability						
PBSEK 7	suits $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and 15mm						
PBSEK 8	suits <sup>3</sup> / <sub>4</sub> ", 1, 1 <sup>1</sup> / <sub>4</sub> ", 22mm, 28mm and 35mm						
PBSEK 8 PBSEK 9	suits $\frac{3}{4}$ ", 1, $\frac{1}{4}$ ", 22mm, 28mm and 35mm suits $\frac{1}{2}$ ", 2", 42mm and 54mm						



The LD Locking Device can be utilised to prevent unauthorised operation of any standard lever handle product.

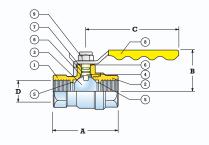
The locking device shown is type LD1 and LD2. To fit LD3, 4 and 5 the handle locking nut must be removed. The locking device is then fitted and the locking nut reattached.



#### 18 PB500 YELLOW FULL BORE QUARTER TURN BALL VALVE **RANGE**



- All sizes rated PN25.
- Full bore.
- Quarter turn operation.
- Blow-out and vandal-proof assembly.
- 1/4" to 4" sizes.
- P.T.F.E. (Teflon) ball seals.
- Viton '0' ring stem seals.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).



RANGE											
						Sizes					
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	21/2"	3"	4"
PB500 YELLOW	•	•	•	•	•	•	•	•	•	•	•
PB500 AT YELLOW			•	•	•	•	•	•			

DIME	DIMENSIONS (MM)											
	Sizes											
Patt. No.	Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
	A Face to Face	48	48.5	59	67.5	79.5	95	100	122	150	177	214
	B Centre Line to Lever	35	35	39	50	55	62	77.5	84	97	122	136
PB500	C Lever Length	91.5	91.5	91.5	105	105	105	165	165	180	255	255
	D Bore	10	10	15	20	25	32	40	50	65	80	100
	Weight kg	0.15	0.15	0.24	0.44	0.63	1.15	1.61	2.79	3.80	6.79	10.85

FLOW RATES*											
					Sizes						
Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
Cv	6.9	11.0	19.9	48.0	81.9	141.6	234.0	341.6	626.0	994.5	1591.2
Kv	5.9	9.4	17.0	41.0	70.0	121.0	200.0	292.0	535.0	850.0	1360.0

 $<sup>^{\</sup>ast}$  Cv – flow rate in US GPM at a pressure drop of 1 psi.  $^{\ast}$  Kv – flow rate in m3 per hour at a pressure drop of 1 bar.



TESTED TO EN 331 1/4" to 2"

(

MAXIMUM PRESSURE CONDITIONS								
Size	Maxi Pressure Co	mum inditions (bar)	Test Pressures (bar)					
	Temperatures up to 100°C	Temperatures up to 150°C	Shell	Seat				
<sup>1</sup> / <sub>4</sub> " to 4"	25.0	16.5	37.5	27.5				
Size		mum nditions (psi)	Test Pressures (psi)					
	Temperatures up to 212°F	Temperatures up to 302°F	Shell	Seat				
<sup>1</sup> / <sub>4</sub> " to 4"	362.6	293.3	543.9	398.9				

SUI	SUITABLE FOR									
Steam	Water	Oil	Air‡	Gases						
~	~	7		Inert	Combustible <sup>†</sup>	Corrosive <sup>††</sup>	Oxygen			
				~	<b>V</b>	<b>V</b>	Х			

 $<sup>\</sup>dagger$  The valves are suitable for British Gas Applications Family Gases 1, 2 and 3.  $\dagger\dagger$  Suitable in applications where moisture is completely absent.

#### **GAS APPLICATIONS CONDITIONS**

-20°C to +60°C maximum 5 bar. British Gas (MOP 5). for LGP maximum 10 bar.

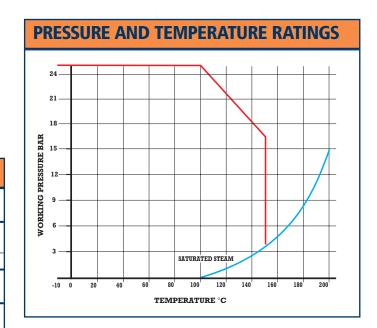
	PRESSURE EQUIPMENT DIRECTIVE CATEGORY									
	Sizes									
1/4"	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	21/2"	3"	4"
SEP	SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I	CAT I	CAT I	CAT I

Cat I carries the CE Mark.

Sizes  $1\!/_{\!4}{}^{\scriptscriptstyle \parallel}$  to 3" are suitable for group 1 liquids and gases.

Sizes 4" is suitable for group 1 gas (10 bar max) and group 2 liquids.

MAT	ERIAL SPEC	CIFICATION
No.	Component	Material
		Forged Brass, Chrome Plated (1/4" to 2")
1	Body	Gravity Die Cast Brass, Chrome Plated (2½" to 4")
		Forged Brass, Chrome Plated (1/4" to 2")
2	End Piece	Gravity Die Cast Brass, Chrome Plated (2 <sup>1/</sup> 2" to 4")
		Brass Bar, Chrome Plated $(\frac{1}{4}$ to $\frac{1}{2}$ )
3	Ball	Forged Brass, Chrome Plated (3/4" to 2")
		Gravity Die Cast Brass, Chrome Plated $(2^{1/2}$ " to 4")
4	Stem	Brass Bar
5	Seats	PTFE (Teflon)
6	Thrust Washer	PTFE (Teflon)
7	Stem 'O' Ring	Viton
8	Yellow Lever	High Temperature PVC Insulated Zinc Plated Steel
9	Nut (Self Locking)	Zinc Plated Steel



ACCESSORIES							
LD LOCKING DEVICE							
Locking Device	Suitability						
LD 1	suits 1/4", 3/8" and 1/2"						
LD 2	suits <sup>3</sup> ⁄ <sub>4</sub> ", 1" and 1 ¹/ <sub>4</sub> "						
LD 3	suits 1½" and 2"						
LD 4	suits 2½"						
LD 5	suits 3" and 4"						

A range of matching long shank warded action padlocks is available to suit the locking devices as follows:

	PADLOCK
Padlock	Suitability
PDK 3	suits <sup>1</sup> / <sub>4</sub> ", <sup>3</sup> / <sub>8</sub> ", <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" and 1 <sup>1</sup> / <sub>4</sub> "
PDK 4	suits 1 <sup>1</sup> / <sub>2</sub> " and 2"
PDK 5	suits 2½", 3" and 4"
S	TEM EXTENSION KITS
Stem Extension	Suitability
PBSEK 7	suits $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and 15mm
PBSEK 8	suits <sup>3</sup> / <sub>4</sub> ", 1, 1 <sup>1</sup> / <sub>4</sub> ", 22mm, 28mm and 35mm
PBSEK 9	suits 1 <sup>1/</sup> 2", 2", 42mm and 54mm
PBSEK 10	suits 2 <sup>1/</sup> 2"
PBSEK 11	suits 3" and 4"



The LD Locking Device can be utilised to prevent unauthorised operation of any standard lever handle product.

The locking device shown is type LD1 and LD2. To fit LD3, 4 and 5 the handle locking nut must be removed. The locking device is then fitted and the locking nut reattached.



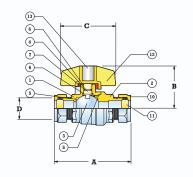
# 20 PB300 FULL BORE QUARTER TURN BALL VALVE RANGE



RANGE									
Sizes									
Patt. No.	15	22	28	35	42	54			
PB300	•	•	•	•	•	•			
PB300T	•	•	•						

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D S	
(5)—/ <b>A</b> ————————————————————————————————————	

DIMENSION (MM)									
				Sizes					
Patt. No.	Description	15	22	28	35	42	54		
	A Face to Face	77.5	88	96	119	132.5	161.5		
	B Centre Line to Lever	39	50	55	62	77.5	84		
PB300	C Lever Length	91.5	105	105	105	165	165		
	D Bore	15	20	25	32	40	50		
	Weight kg	0.28	0.48	0.73	1.32	1.92	3.24		
	A Face to Face	77.5	88	96					
	B Centre Line to Lever	40	50.5	55					
PB300T	C Lever Length	48.5	60	60					
	D Bore	15	20	25					
	Weight kg	0.30	0.52	0.77					



FLOW RATES*							
			Siz	es.			
Description	15	22	28	35	42	54	
Cv	19.9	48.0	81.9	141.6	234.0	341.6	
Kv	17.0	41.0	70.0	121.0	200.0	292.0	

<sup>\*</sup> Cv – flow rate in US GPM at a pressure drop of 1 psi. \* Kv – flow rate in m3 per hour at a pressure drop of 1 bar.

SUI	SUITABLE FOR								
Steam	Water	Oil	Air		Gases				
~	<i>y</i>	1	~	Inert	Combustible†	Corrosive††	Oxygen		
				~	V	V	Х		

<sup>†</sup> The valves are suitable for British Gas Applications Family Gases 1, 2 and 3. †† Suitable in applications where moisture is completely absent.

#### **GAS APPLICATIONS CONDITIONS**

-20°C to +60°C maximum 5 bar. British Gas (MOP 5).

For LPG: maximum 10 bar



**TESTED TO EN 331** 



#### **FEATURES**

- All sizes rated PN16.
- Full bore.
- Quarter turn operation.
- Blow-out and vandal-proof assembly.
- 15mm to 54mm sizes.
- P.T.F.E. (Teflon) ball seals.
- Viton '0' ring stem seals.
- Choice of red, yellow or blue sleeve.
- Prestex compression ends to EN 1254/2 (formerly BS 864/2).

#### **MAXIMUM PRESSURE CONDITIONS**

Size	Maxi Pressure Co	mum nditions (bar)	Te: Pressure					
	Temperatures up to 30°C	Temperatures up to 120°C	Shell	Seat				
15mm to 54mm	16.0	5.0	24.0	17.6				
Size	1010070	imum nditions (psi)	Te: Pressure					
	Temperatures up to 86°F	Temperatures up to 248°F	Shell	Seat				
15mm to 54mm	232.1	72.5	348.1	253.8				

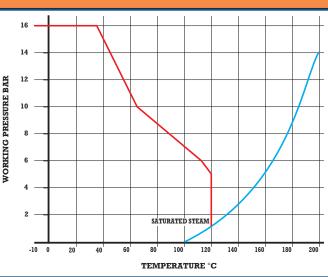
#### PRESSURE EQUIPMENT **DIRECTIVE CATEGORY**

		Siz	es		
15	22	28	35	42	54
SEP	SEP	SEP	SEP	SEP	SEP

#### **MATERIAL SPECIFICATION**

No.	Component	Material		
1	Body	Forged Brass, Chrome Plated (15 to 54mm)		
2	End Piece	Forged Brass, Chrome Plated (15 to 54mm)		
3	Ball	Brass Bar, Chrome Plated (15mm)		
3	Dali	Forged Brass, Chrome Plated (22 to 54mm)		
4	Stem	Brass Bar		
5	Seats	PTFE (Teflon)		
6	Thrust Washer	PTFE (Teflon)		
7	Stem 'O' Ring	Viton		
8	Lever (Red, Yellow or Blue)	High Temperature PVC Insulated Zinc Plated Steel Zinc Plated Steel		
9	Nut (Self Locking)			
10	Compression Nut	Forged Brass, Chrome Plated		
11	Compression Cone	Brass		
12	Tee Handle (Red, Blue or Yellow)	Aluminium, Painted		
13	Security Screw	Nickel Plated Brass		
14	Extended Stem	Brass Bar		
15	Extended Sleeve	Aluminium		
16	Nut (Self Locking)	Zinc Plated Steel		





#### **ACCESSORIES**

	LD LOCKING DEVICE				
	Locking Device	Suitability			
Γ	LD 1	suits 15mm			
	LD 2	suits 22mm, 28mm and 35mm			
Г	ID 3	suits 42mm and 54mm			

A range of matching long shank warded action padlocks is available to suit the locking devices as follows:

	PADLOCK			
Padlock	Suitability			
PDK 3	suits 22mm, 28mm and 35mm			
PDK 4	suits 42mm and 54mm			
ST	EM EXTENSION KITS			
Stem Extension	Suitability			
PBSEK 7	suits 15mm			
PBSEK 8	suits 22mm, 28mm and 35mm			
PBSEK 9	suits 42mm and 54mm			



The LD Locking Device can be utilised to prevent unauthorised operation of any standard lever handle product.

The locking device shown is type LD1 and LD2. To fit LD3, 4 and 5 the handle locking nut must be removed. The locking device is then fitted and the locking nut reattached.



#### **OPTIONAL HANDLES**

YELLOW TEE HANDLE - For visual identification of gas applications only on sizes 15mm-28mm. EN 331 TESTED.

YELLOW LEVER - For visual identification of gas applications. Standard lever only on sizes 15mm-28mm. EN 331 TESTED.

BLUE LEVER – For visual identification of cold water applications. Standard lever only on sizes 15mm-54mm.





BLUE TEE HANDLE – For visual identification of cold water applications only on sizes 15mm-28mm.



## **PB100 FULL BORE QUARTER TURN BALL VALVE RANGE**

#### **FEATURES**

- Brass body.
- Full bore.
- Quarter turn operation.
- Blow-out vandal-proof assembly.
- 1/2" to 2" sizes
- PTFE ball seals.
- Nitrile 'O' ring seals.
- BS 21 Taper Thread.
- ISO 228 (BS 2779) Parallel Thread.
- ANSI (NPT) American Thread.
- Chrome plated finish.
- PN25 rated.

RANGE								
	Sizes							
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"		
PB100	•	•	•	•	•	•		
PB100PT	•	•	•	•	•	•		
PB100AT	•	•	•	•	•	•		

DIMENSIONS (MM)							
	Sizes						
Description	1/2"	3/4"	1"	11/4"	11/2"	2"	
A Face to Face	50	58	69	81	88.5	110	
B Centre Line to Lever	46	50	52	70	76	83	
C Lever Length	100	100	110	135	135	165	
D Port Bore	14.5	19	25	30	38	47.5	
Weight kg	0.176	0.25	0.38	0.624	0.84	1.45	

FLOW RATES*							
			Siz	es			
	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	11/2"	2"	
Cv	19.9	48.0	81.9	141.6	234.0	341.6	
Kv	17.0	41.0	70.0	121.0	200.0	292.0	

<sup>\*</sup> Cv – flow rate in US GPM at a pressure drop of 1 psi. \* Kv – flow rate in m3 per hour at a pressure drop of 1 bar.

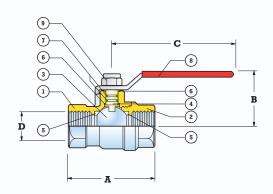
#### **MAXIMUM PRESSURE CONDITIONS**

Size	Maxi Pressure Co	mum Inditions (bar)	Te: Pressure	
	Temperatures up to 120°C	Temperatures up to 20°C	Shell	Seat
½" to 2"	4.0	25.0	37.5	27.5

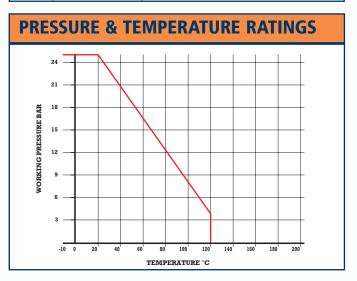
SUI	TAB	LE F	OR				
Steam	Water	Oil	Air		Gas	es	
×	~	~	~	Inert	Combustible	Corrosive	Oxygen
"				×	X	X	×

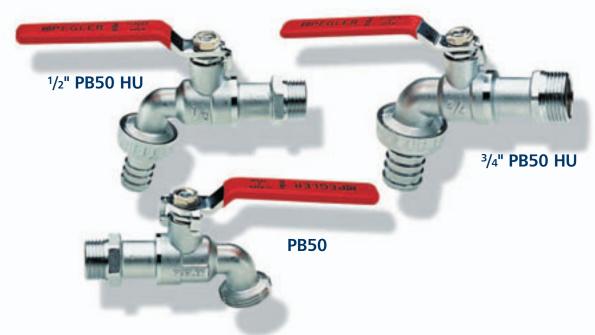
PRESSURE EQUIPMENT DIRECTIVE CATEGORY					
Sizes					
1/2"	3/4"	1"	11/4"	11/2"	2"
SEP	SEP	SEP	SEP	SEP	SEP





MATERIAL SPECIFICATION				
No.	Component	Material		
1	Body	Brass		
2	End Piece	Brass		
3	Ball	Chrome Plated Brass		
4	Stem	Brass		
5	Seats	PTFE		
6	Friction Washer	PTFE		
7	'O' Rings	Nitrile Rubber		
8	Lever	Dip-Coated on CP Steel		
9	Handle Nut	Steel		





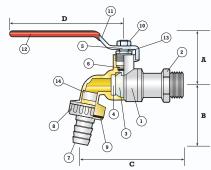
- Chrome plated Brass.
- Quarter turn operation.
- Inlet thread BS 2779 Parallel.
- Ball valve operation.
- $\frac{1}{2}$ " and  $\frac{3}{4}$ " with hose connection.
- 1/2" option with 3/4" AT hose thread (PB50).
- PN16 rated.

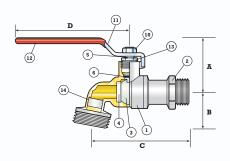
RANGE		
	Siz	es:
Patt. No.	1/2"	3/4"
PB50 HU	•	•
PB50	•	

DIMENSIONS (MM)						
		Siz	es			
Description		1/2"	3/4"			
A Centre Line to Top of Lev	er	45	45			
B Centre Line to End of Tail	B Centre Line to End of Tailpipe/Outlet		50			
C Inlet to Centre of Outlet	C Inlet to Centre of Outlet PB50 HU		94			
	PB50	86	-			
D Centre of Spindle to End of Lever		93	93			
Weight kg PB50 HU		0.257	0.315			
	PB50	0.220	-			

MAXIMUM PRESSURE CONDITIONS					
Size	Maximum Pressure	e Conditions (bar)			
	Temperatures up to 60°C	Temperatures up to 100°C			
1/2"	16	8			
3/4"	16	8			
1/2" x 3/4"	16	8			

SUITABLE FOR							
Steam	Water	Oil	Air	Gases			
×	~	~	×	Inert	Combustible	Corrosive	Oxygen
				X	×	X	X





MATI	ERIAL SPECIF	ICATION
No.	Component	Material
1	Body	MS58 Brass
2	Сар	MS58 Brass
3	Ball	MS58 Brass
4	Ball Seal	PTFE
5	Spindle	MS58 Brass
6	Spindle Seal	NBR
7	Hose Pipe	MS58 Brass
8	Hose Nut	MS58 Brass
9	Hose Union 'O' Ring	NBR
10	Lever Nut	Brass
11	Lever	A3 Steel
12	Lever Grip	PVC
13	Gland Nut	MS58 Brass
14	Flow Straightener	Polyethylene

#### **24 PB52 HU BRASS BALL VALVE BIB TAPS**



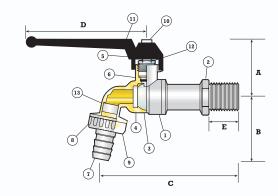
- Chrome plated Brass.
- Quarter turn operation.
- 20mm long inlet thread BS 2779 Parallel.
- Ball valve operation.
- 1/2" and 3/4" with hose connection.
- PN16 rated.
- Black cast lever.
- Lockable in a closed position.
- Suitable for drum and tank fitting.

RANGE			
	Sizes		
Patt. No.	1/2"	3/4"	
PB52 HU	•	•	

DIMENSIONS (MM)		
	Siz	es
Description	1/2"	3/4"
A Centre Line to Top of Lever	45	45
B Centre Line to End of Tailpipe/Outlet	45	50
C Inlet to Centre of Outlet	105	105
D Centre of Spindle to End of Lever	88	88
E Inlet Tail	20	20
Weight kg	0.28	0.36

MAXIMUM PRESSURE CONDITIONS									
Size	Size Maximum Pressure Conditions (bar)								
	Temperatures up to 60°C	Temperatures up to 100°C							
1/2"	16	8							
3/4"	16	8							

SUITABLE FOR								
Steam	Water	Oil	Air	Gases				
X	~	~	Y	Inert	Combustible	Corrosive	Oxygen	
		^	×	X	X	X		



MAT	MATERIAL SPECIFICATION							
No.	Component	Material						
1	Body	MS58 Brass						
2	Cap	MS58 Brass						
3	Ball	MS58 Brass, Chromium Plated						
4	Ball Seal	PTFE						
5	Spindle	MS58 Brass						
6	Spindle Seal	NBR						
7	Hose Pipe	MS58 Brass						
8	Hose Nut	MS58 Brass						
9	Hose Union 'O' Ring	NBR						
10	Lever Securing Screw	Brass, Chromium Plated						
11	Lever	Cast Aluminium, Painted Black						
12	Gland Nut	MS58 Brass						
13	Flow Straightener	Polyethylene						

- Non-rising stem.
- 'O' Ring gland packing seal.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).

RANGE								
Sizes								
Patt. No.	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"		
1065	•	•	•	•	•	•		
1065AT	•	•	•	•	•	•		

DIMENSIONS									
Sizes									
Description	1/2"	3/4"	1"	11/4"	1 <sup>1/</sup> 2"	2"			
A Face to Face	46	50	57	64	68	81			
B Height	70	80	95	115	125	155			
C H'wheel Diam	60	60	70	85	95	105			
Weight kg	0.27	0.37	0.58	0.94	1.19	2.09			

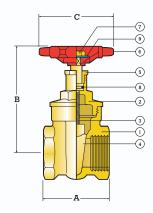
FLOW RATES*									
Sizes									
	1/2"	3/4"	1"	1 <sup>1</sup> /4"	1 <sup>1</sup> / <sub>2</sub> "	2"			
Cv	16.4	37.4	66.7	105.3	150.9	269.1			
Kv	14.0	32.0	57.0	90.0	129.0	230.0			

MAXIMUM PRESSURE CONDITIONS									
Size	Maxir Pressure Co	num nditions (bar)	Tes Pressure	-					
	Temperatures up to 25°C	Temperatures up to 93°C	Shell	Seat					
½" to 2"	17.5	17.5	26.3	19.3					
Size	Maxii Pressure Cor	mum nditions (psi)	Tes Pressure						
	Temperatures up to 77°F	Temperatures up to 200°F	Shell	Seat					
½" to 2"	253.8	253.8	381.5	279.5					

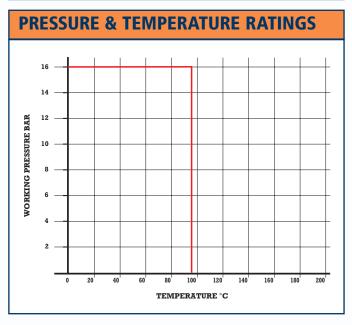
SUITABLE FOR								
Steam	Water	Oil	Air	Gases				
×	7	~	×	Inert	Combustible	Corrosive	Oxygen	
	<u> </u>		×	×	X	×		

PRESSURE EQUIPMENT DIRECTIVE CATEGORY									
	Sizes								
1/2"	3/4"	1"	11/4"	11/2"	2"				
SEP	SEP	SEP	SEP	SEP	SEP				





MATERIAL SPECIFICATION							
No.	Component	Material					
1	Body	Forged Brass					
2	Bonnet	Forged Brass					
3	Stem	Brass Bar					
4	Wedge	Forged Brass					
5	Gland Screw	Brass Bar					
6	Handwheel	Aluminium					
7	Handwheel Nut	Brass Bar					
8	'O' Rings	Nitrile Rubber					
9	Rating Disc	Aluminium					



#### **1068 FORGED BRASS FULL BORE GATE VALVE**



#### **FEATURES**

- BS 5154 PN20 Series B.
- Non-rising stem.
- Solid wedge.
- High quality PTFE packing.
- Can be re-packed under pressure.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT)
- ISO 228 Parallel Thread
- Lockshield option

RANGE									
Sizes									
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
1068	•	•	•	•	•	•	•	•	•
1068AT	•	•	•	•	•	•	•	•	•
1068PT	•	•	•	•	•	•	•	•	
1068LS	•	•	•	•	•	•			

DIMENSIONS									
Sizes									
Description	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
A Face to Face	52	56	65	73	76	90	102	114	134
B Height	85	95	110	125	145	170	205	240	290
C H'wheel Diam.	60	60	70	75	95	105	120	155	155
Weight kg	0.31	0.46	0.72	1.07	1.33	2.45	3.38	5.17	8.84

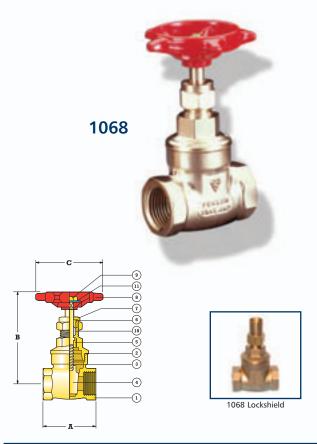
FLOW RATES*									
Sizes									
Description	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
Cv	16.4	37.4	66.7	105.3	150.9	269.1	500.8	795.6	1273.0
Kv	14.0	32.0	57.0	90.0	129.0	230.0	428.0	680.0	1088.0

MAXIMUM PRESSURE CONDITIONS										
Size	Maxir Pressure Co	num nditions (bar)	Test Pressures (bar)							
	Temperatures up to 100°C	Temperatures up to 180°C	Shell	Seat						
<sup>1/</sup> 2" to 4"	20.0	9.0	30.0	22.0						
Size	Maxii Pressure Cor	mum nditions (psi)	Test Pressures (psi)							
	Temperatures up to 212°F	Temperatures up to 356°F	Shell	Seat						
½" to 4"	290.1	130.5	435.1	319.1						

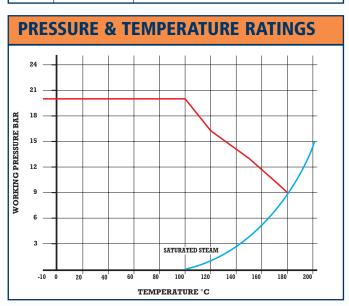
SUITABLE FOR										
Steam	Water	Oil	Air	Gases						
	~	~	×	Inert	Combustible	Corrosive	Oxygen			
			^	X	×	X	X			

Special test required for air or gas.

	PRESSURE EQUIPMENT DIRECTIVE CATEGORY									
	Sizes									
1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	11/2"	2"	21/2"	3"	4"		
SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP		



MAT	MATERIAL SPECIFICATION								
No.	Component	Material							
1	Body	Forged Brass (1/4" to 2")							
l '	Body	Gravity Die Cast Brass (2 <sup>1/</sup> 2" to 4")							
2	Bonnet	Forged Brass (1/4" to 3")							
	bonnet	Gravity Die Cast Brass (4")							
3	Stem	Brass Bar							
4	Madaa	Forged Brass (1/4" to 21/2")							
4	Wedge	Gravity Die Cast Brass (3 & 4")							
5	Stem Ring	Brass Bar							
6	Gland	Brass Bar							
7	Gland Nut	Brass Bar (1/4" to 1")							
'	Giana Nut	Forged Brass (11/4" to 4")							
8	Handwheel	Aluminium							
9	Handwheel Nut	Brass Bar							
10	Gland Packing	PTFE							
11	Rating Disc	Aluminium							
12	Lockshield	Brass Bar							



- BS 5154 PN32 Series B.
- Non-rising stem.
- Gunmetal wedge, head, stem and stem ring.
- High quality PTFE packing.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 Parallel Thread.

RANGE									
Sizes									
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"			
1072	•	•	•	•	•	•			
1072AT	•	•	•	•	•	•			
1072PT	•	•	•	•	•	•			

DIMENSIONS									
Sizes									
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"			
A Face to Face	64	65	75	90	97	105			
B Height	100	110	130	145	165	200			
C H'wheel Diam.	70	75	85	95	120	120			
Weight kg	0.47	0.69	1.02	1.57	2.44	3.43			

FLOW RATES*									
Sizes									
Patt. No.	1/2"	3/4"	1"	11/4"	1 <sup>1</sup> / <sub>2</sub> "	2"			
Cv	16.4	37.4	66.7	105.3	150.9	269.1			
Kv	14.0	32.0	57.0	90.0	129.0	230.0			
Kv GAS	9.3	18.6	25.3	50.0	65.5	116.6			

<sup>\*</sup>Cv – flow rate in US GPM at a pressure drop of 1 psi.
\*Kv – flow rate in m³ per hour at a pressure drop of 1 bar.
\*Kv Gas – flow rate in m³ per hour at a pressure drop of 1 mbar.

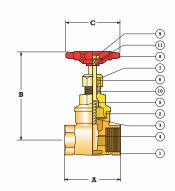
MAXIMUM PRESSURE CONDITIONS										
Size	Maxir Pressure Co	num nditions (bar)	Test Pressures (bar)							
	Temperatures up to 100°C	Temperatures up to 198°C	Shell	Seat						
<sup>1/</sup> 2" to 2"	32.0	14.5	48.0	35.2						
Size	Maxii Pressure Cor	mum nditions (psi)	Test Pressures (psi)							
	Temperatures up to 212°F	Temperatures up to 389°F	Shell	Seat						
<sup>1</sup> / <sub>2</sub> " to 2"	464.1	210.3	696.2	510.5						

SUITABLE FOR									
Steam	Water	Oil	Air	Gases					
	7	1	x	Inert	Combustible	Corrosive	Oxygen		
				×	×	X	×		

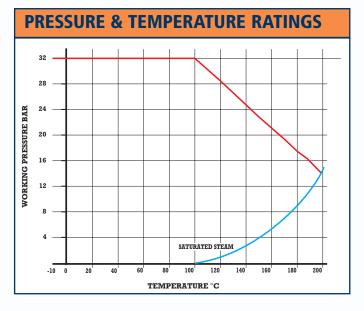
Special test required for air or gas.

	PRESSURE EQUIPMENT DIRECTIVE CATEGORY								
		Siz	es						
1/2"	3/4"	1"	11/4"	11/2"	2"				
SEP	SEP	SEP	SEP	SEP	SEP				





MAT	MATERIAL SPECIFICATION									
No.	Component	Material								
1	Body	Gunmetal								
2	Bonnet	Gunmetal								
3	Stem	Gunmetal								
4	Wedge	Gunmetal								
5	Stem Ring	Gunmetal								
6	Gland	Brass Bar								
7	Gland Nut	Brass Bar								
8	Handwheel	Aluminium								
9	Handwheel Nut	Brass Bar								
10	Gland Packing	PTFE								
11	Rating Disc	Aluminium								



## **1070/125 BRONZE FULL BORE GATE VALVE RANGE**

- BS 5154 PN20 Series B.
- Non-rising stem.
- Solid Gunmetal wedge.
- High quality PTFE packing.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 (BS 2779) Parallel Thread PT.



RANGE											
						Sizes					
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	<b>1</b> <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	<b>2</b> <sup>1</sup> / <sub>2</sub> "	3"	4"
1070/125	•	•	•	•	•	•	•	•	•	•	•
1070/125AT									•	•	•
1070/125PT			•	•	•	•	•	•	•	•	•

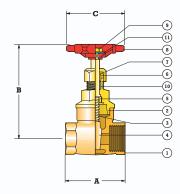
DIMENS	DIMENSION (MM)												
Sizes													
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	<b>1</b> <sup>1</sup> / <sub>4</sub> "	<b>1</b> <sup>1</sup> / <sub>2</sub> "	2"	<b>2</b> <sup>1</sup> / <sub>2</sub> "	3"	4"		
A Face to Face	43	43	52	56	65	73	76	90	102	114	134		
B Height	85	85	85	95	110	125	145	170	205	240	290		
C H'wheel Diam.	60	60	60	60	70	75	95	105	120	155	155		
Weight kg	0.24	0.25	0.32	0.46	0.69	1.03	1.40	2.28	3.68	5.42	10.59		

FLOW RA	FLOW RATES*												
						Sizes							
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	<b>1</b> <sup>1</sup> / <sub>4</sub> "	<b>1</b> <sup>1</sup> / <sub>2</sub> "	2"	<b>2</b> <sup>1</sup> / <sub>2</sub> "	3"	4"		
Cv	5.5	8.8	16.4	37.4	66.7	105.3	150.9	269.1	500.8	795.6	1273.0		
Kv	4.7	7.5	14.0	32.0	57.0	90.0	129.0	230.0	428.0	680.0	1088.0		

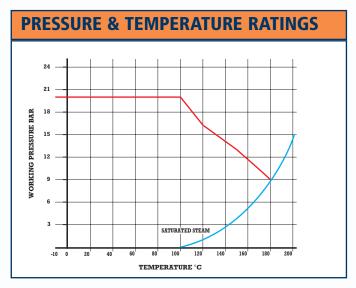
MAXIMUM PRESSURE CONDITIONS											
Size		Maximum Pressure Conditions (bar) Pre									
	Temperatures up to 100°C	Temperatures up to 180°C	Shell	Seat							
<sup>1</sup> / <sub>4</sub> " to 4"	20.0	9.0	30.0	22.0							
Size	Maxii Pressure Cor	mum nditions (psi)	Tes Pressure	-							
	Temperatures up to 212°F	Temperatures up to 356°F	Shell	Seat							
<sup>1</sup> / <sub>4</sub> " to 4"	290.1	130.5	435.1	319.1							

SUITABLE FOR											
Steam	Water	Oil	Air	Gases							
~	~	~	×	Inert 🗶	Oxygen <b>X</b>						

	PRESSURE EQUIPMENT DIRECTIVE CATEGORY										
	Sizes										
1/4"	1/4" 3/8" 1/2" 3/4" 1" 11/4" 11/2" 2" 2 <sup>1</sup> / <sub>2</sub> " 3" 4"										
SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	



MA	TERIAL SPE	CIFICATION
No.	Component	Material
1	Body	Gunmetal
2	Bonnet	Forged Brass (1/4 to 3")
2	Donnet	Gravity Die Cast Brass (4")
3	Stem	Brass Bar
4	Wedge	Gunmetal
5	Stem Ring	Brass Bar
6	Gland	Brass Bar
7	Gland Nut	Brass Bar (1/4 to 1")
,	Giana Nut	Forged Brass (11/4 to 4")
8	Handwheel	Aluminium
9	Handwheel Nut	Brass Bar
10	Gland Packing	PTFE
11	Rating Disc	Aluminium





- Available in a choice of Bronze or Brass.
- Non-rising stem.
- Solid wedge.
- Compression ends.
- High quality PTFE packing.
- All sizes available with Lockshield.
- Prestex compression ends to EN 1254/2 (formerly BS 864/2).

RANG	RANGE											
	Sizes											
Patt. No.		15	22	28	35	42	54					
63	Brass Gate Valve, copper x copper	•	•	•	•							
63LS	Brass Lockshield Gate Valve, copper x copper	•	•	•								
GM63	Gunmetal Gate Valve, copper x copper	•	•	•	•	•	•					
GM63 LS	Gunmetal Lockshield Gate Valve, copper x copper	•	•									

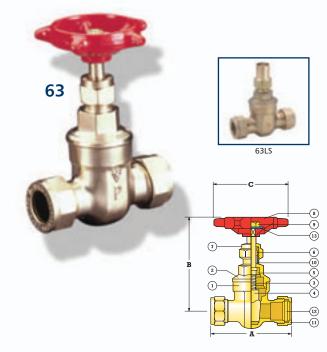
DIMENSIONS (MM)												
	Sizes											
Description	15 22 28 35 42 54											
A Face to Face	72	81	90	107	113	129						
B Height	83	93	111	124	146	174						
C 'H'wheel Diam.	60	60	70	75	95	105						
63 Weight kg	0.31	0.47	0.65	1.26	-	-						
GM63 Weight kg	0.32	0.48	1.18	1.16	1.60	2.70						

FLOW	FLOW RATES*											
			Siz	es								
	15	22	28	35	42	54						
Cv	16.4	37.4	66.7	105.3	150.9	269.1						
Kv	14.0	32.0	57.0	90.0	129.0	230.0						

<sup>\*</sup> Cv – flow rate in US GPM at a pressure drop of 1 psi. \* Kv – flow rate in  $m^3$  per hour at a pressure drop of 1 bar.

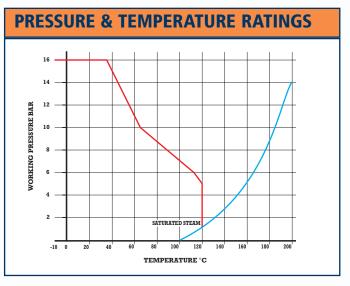
MAXIMUM PRESSURE CONDITIONS							
Size	Maxii Pressure Coi	mum nditions (bar)	Test Pressures (psi)				
	Temperatures up to 30°C	Temperatures up to 120°C	Shell	Seat			
15 to 54	16.0	5.0	24.0	17.5			
Size		mum nditions (psi)	Tes Pressure	-			
	Temperatures up to 77°F	Temperatures up to 200°F	Shell	Seat			
15 to 54	232.1	72.5	348.1	253.8			

SUI	SUITABLE FOR								
Steam	Water	Oil	Air	Gases					
×	7	~	×	Inert	Combustible	Corrosive	Oxygen		
^   ^		•	X	X	X	X			



MAT	MATERIAL SPECIFICATION				
No.	Component	Material			
1	Body	Brass			
	body	Gunmetal (GM)			
2	Bonnet	Forged Brass			
3	Stem	Brass Bar			
4	Wedge	Brass			
4	vveuge	Gunmetal (GM)			
5	Stem Ring	Brass Bar			
6	Gland	Brass Bar			
7	Gland Nut	Brass Bar (15 and 22mm)			
/		Forged Brass (28 to 54mm)			
8	Handwheel	Aluminium			
9	Handwheel Nut	Brass Bar			
10	Compression Nut	Forged Brass			
11	Compression Cone	Brass			
12	Rating Disc	Aluminium			
13	Lockshield	Brass Bar			

PRESSURE EQUIPMENT DIRECTIVE CATEGORY						
	Sizes					
15	22	28	35	42	54	
SEP	SEP	SEP	SEP	SEP	SEP	



#### **90 P81M BRASS FULL BORE GATE VALVE RANGE**

#### **FEATURES**

- Non-rising stem.
- Solid Brass wedge.
- High quality PTFE packing.
- Solder ends (end feed) dimensionally conforming to either EN 1254/1 (formerly BS 864/2).

RANGE					
	Sizes				
Patt. No.	15	22	28		
P81M	•	•	•		

DIMENSIONS (MM)							
		Sizes					
Description	15 22 28						
A Face to Face P81M	51	61	76				
B Height	83	93	111				
C 'H'wheel Diam.	60	60	75				
Weight kg	0.27	0.63	0.91				

FLOW RATES*					
		Sizes			
	15	22	28		
Cv	16.4	37.4	66.7		
Kv	14.0	32.0	57.0		

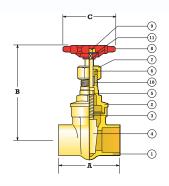
- $^{*}$  Cv flow rate in US GPM at a pressure drop of 1 psi.  $^{*}$  Kv flow rate in m³ per hour at a pressure drop of 1 bar.

MAXIMUM PRESSURE CONDITIONS								
Size	Maxi Pressure Co	mum Inditions (bar)	Test Pressures (bar)					
	Temperatures up to 100°C	Temperatures up to 180°C	Shell	Seat				
15 to 28	20.0	9.0	30.0	22.0				
Size		mum nditions (psi)	Tes Pressure	-				
	Temperatures 212°F	Temperatures up to 356°F	Shell	Seat				
15 to 28	290.1	130.5	435.1	319.1				

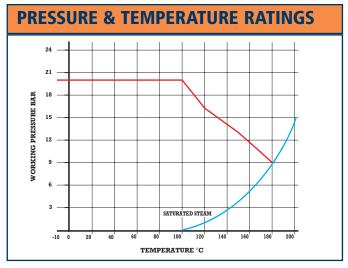
SUITABLE FOR								
Steam	Water	Oil	Air	Gases				
_	~	~	~	Inert Combustible Corrosive			Oxygen	
		•		×	×	×	×	

PRESSURE EQUIPMENT DIRECTIVE CATEGORY						
	Sizes					
15	22	28				
SEP	SEP	SEP				





MAT	MATERIAL SPECIFICATION				
No.	Component	Material			
1	Body	Forged Brass			
2	Bonnet	Forged Brass			
3	Stem	Brass Bar			
4	Wedge	Forged Brass			
5	Stem Ring	Brass Bar			
6	Gland	Brass Bar			
7	Gland Nut	Brass Bar (15 to 28)			
8	Handwheel	Aluminium			
9	Handwheel Nut	Brass Bar			
10	Gland Packing	PTFE			
11	Rating Disc	Aluminium			



Note: The performance of this valve may be limited by the inlet/outlet connections. We recommend that installation of this valve should be carried out with the aid of a heat resisting compound in order to maintain the integrity of the valve.

- BS 5154 PN32 Series B/NM.
- Rising stem.
- P.T.F.E. renewable disk.
- High quality PTFE packing.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 (BS 2779) Parallel Thread (PT).

RANGE								
	Sizes							
Patt. No.	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"
1029	•	•	•	•	•	•	•	•
1029AT			•	•	•	•	•	•
1029PT			•	•	•	•	•	•

DIMEN	DIMENSIONS									
Sizes										
Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	1 <sup>1</sup> / <sub>2</sub> "	2"		
A Face to Face	48	46	57	65	78	89	100	121		
B Height	76	76	95	98	114	138	159	170		
C H'wheel Diam.	60	60	75	75	85	95	105	120		
Weight kg	0.20	0.22	0.38	0.54	0.84	1.36	1.76	2.62		

FLOW I	FLOW RATES*									
Sizes										
Description	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"		
Cv	0.8	1.3	2.3	5.9	11.7	18.7	26.9	49.1		
Kv	0.7	1.1	2.0	5.0	10.0	16.0	23.0	42.0		
Kv Gas	0.5	0.5	1.3	2.9	4.4	8.9	11.7	21.3		

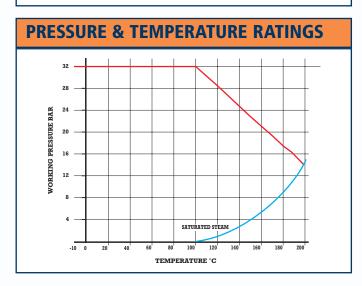
- \* Cv flow rate in US GPM at a pressure drop of 1 psi. \* Kv flow rate in m3 per hour at a pressure drop of 1 bar. \* Kv Gas flow rate in m3 per hour at a pressure drop of 1 mbar.

SUI	TAB	LE F	OR				
Steam	Water	Oil	Air	Gases			
~	~	~	~	Inert	Combustible†	Corrosive††	Oxygen
				~	V	<b>V</b>	X

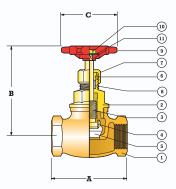
 $\dagger$  The valves are suitable for British Gas Applications Family Gases 1, 2 and 3.  $\dagger\dagger$  Suitable in applications where moisture is completely absent.

#### **VACUUM CONDITIONS**

Can be used in a vacuum at 10-3 torr.







MAT	MATERIAL SPECIFICATION							
No.	Component	Material						
1	Body	Gunmetal						
2	Bonnet	Forged Brass (1/4" to 2")						
3	Stem	Brass Bar						
4	Disk Holder	Brass Bar (1/4" to 2")						
5	Disk Ring	Brass Bar						
6	Disk	Glass Filled PTFE						
7	Disk Nut	Brass Bar (1/4" to 2")						
8	Gland	Brass Bar						
9	Gland Nut	Brass Bar (1/4" to 2")						
10	Packing	PTFE						
11	Handwheel	Aluminium (1/4" to 2")						
12	Handwheel Nut	Brass Bar						
13	Rating Disc	Aluminium						

MAXIMUM PRESSURE CONDITIONS								
Size	Maxi Pressure Co	mum Inditions (bar)	Test Pressures (bar)					
	Temperatures up to 100°C	Temperatures up to 198°C	Shell	Seat				
1/4" to 2"	32.0	14.0	48.0	35.2				
Size		mum nditions (psi)	Tes Pressure	-				
	Temperatures up to 86°F	Temperatures up to 248°F	Shell	Seat				
1/ <sub>4</sub> " to 2"	464.1	203.1	696.1	510.5				

	PRESSURE EQUIPMENT DIRECTIVE CATEGORY								
	Sizes								
1/4"	3/8"	1/2"	3/4"	1"	111/4"	1 <sup>1</sup> / <sub>2</sub> "	2"		
SEP	SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I		

Cat I products carry the CE Mark.

- BS5154 PN32 Series B.
- Rising stem.
- Integral seat and metal valve.
- High quality PTFE packing.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 (BS 2779) Parallel Thread (PT).

RANG	RANGE								
Sizes									
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"			
1031	•	•	•	•	•	•			
1031AT	•	•	•						

DIME	DIMENSIONS (MM)								
Sizes									
Description	1/2"	3/4"	1"	11/4"	11/2"	2"			
A Face to Face	57	65	78	89	100	121			
B Height Open	95	98	114	138	159	170			
C 'H'wheel Diam.	75	75	85	95	105	120			
Weight kg	0.39	0.55	0.87	1.45	1.83	2.61			

FLOW	FLOW RATES*									
			Siz	es						
	1/2"	3/4"	1"	11/4"	11/2"	2"				
Cv	2.3	5.9	11.7	18.7	26.9	49.1				
Kv	2.0	5.0	10.0	16.0	23.0	42.0				
Kv Gas	1.3	2.9	4.4	8.9	11.7	21.3				

- \* Cv flow rate in US GPM at a pressure drop of 1 psi. \* Kv flow rate in m3 per hour at a pressure drop of 1 bar. \* Kv Gas flow rate in m3 per hour at a pressure drop of 1 mbar.

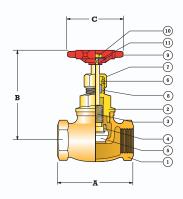
MAXIMUM PRESSURE CONDITIONS								
Size	Maxi Pressure Co	mum nditions (bar)	Te: Pressure					
	Temperatures up to 100°C	Temperatures up to 198°C	Shell	Seat				
<sup>1</sup> / <sub>2</sub> " to 2"	32.0	14.0	48.0	35.2				
Size		mum nditions (psi)	Tes Pressure	-				
	Temperatures 212°F	Temperatures up to 389°F	Shell	Seat				
<sup>1</sup> / <sub>2</sub> " to 2"	464.1	203.1	696.2	510.5				

SU	SUITABLE FOR							
Steam	Water	Oil	Air	Gases				
~	~	V	×	Inert Combustible Corrosive Oxygen				
				×	×	X	×	

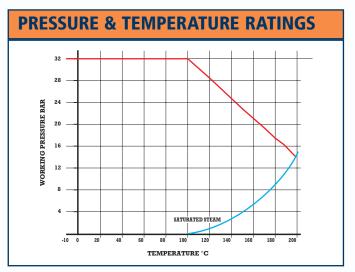
**VACUUM CONDITIONS** Can be used in a vacuum at 10-3 torr.

PRESSURE EQUIPMENT DIRECTIVE CATEGORY								
Sizes								
1/2"	1/2" 3/4" 1" 1 <sup>1</sup> /4" 1 <sup>1</sup> / <sub>2</sub> " 2"							
SEP SEP SEP SEP SEP								





MAT	MATERIAL SPECIFICATION						
No.	Component	Material					
1	Body	Gunmetal					
2	Bonnet	Forged Brass					
3	Stem	Brass Bar					
4	Disk Ring	Brass Bar					
5	Disk	Brass Bar					
6	Gland	Brass Bar					
7	Gland Nut	Brass Bar					
8	Packing	PTFE					
9	Handwheel	Aluminium					
10	Handwheel Nut	Brass Bar					
11	Rating Disc	Aluminium					



- BS 5154 PN32 SERIES B.
- Horizontal fixing.
- Metal seat.
- Body arrow indicates direction of flow.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 (BS 2779) Parallel Thread (PT).

RANGE							
			Siz	es			
Patt. No.	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1/</sup> 2"	2"	
1039	•	•	•	•	•	•	
1039AT	•	•	•				
1039PT	•	•	•				

DIMENSIONS (MM)							
Sizes							
Description	1/2"	3/4"	1"	1 1/4"	1 <sup>1</sup> / <sub>2</sub> "	2"	
A Face to Face	57	65	78	89	100	121	
B Height	30	40	45	55	60	65	
Weight kg	0.28	0.44	0.68	1.14	1.46	2.24	

FLOV	FLOW RATES*											
						Sizes						
		1/	2"			3/	4"			1	"	
Flow (l/s)	0.025	0.050	0.100	0.200	0.075	0.100	0.150	0.200	0.050	0.100	0.200	0.400
Cv	1.0	1.7	2.2	3.0	2.8	3.5	3.9	4.0	2.2	4.1	7.3	9.8
Kv	0.8	1.5	1.9	2.6	2.4	2.9	3.4	3.5	1.9	3.6	6.3	8.5
	11/4"					1 <sup>1</sup>	/2"			2	."	
Flow (l/s)	0.060	0.080	0.200	0.600	0.100	0.300	0.500	0.700	0.200	0.400	0.800	1.400
Cv	2.5	3.4	7.9	16.1	4.6	12.4	19.4	24.8	8.0	15.5	29.4	45.9
Kv	2.2	2.9	6.8	13.9	3.9	10.7	16.8	21.4	6.9	13.4	25.4	39.7



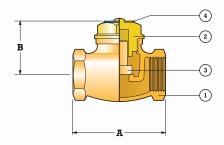
#### MINIMUM OPERATING CONDITIONS

Sizes  $^{1}/_{2}$ " to 1" require 0.5 bar (7.25 psi) minimum line pressure with a differential pressure of 1 to 1.5 psi to allow the valve to open and close.

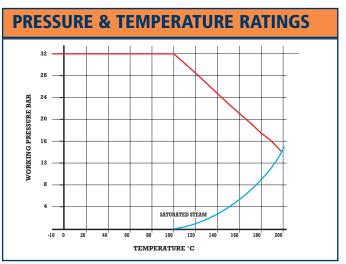
SUI	SUITABLE FOR							
Steam	Water	Oil	Air	Gases				
_	7	7	7	Inert	Combustible	Corrosive	Oxygen	
*		_ •	•	X	X	×	X	

MAXIMUM PRESSURE CONDITIONS								
Size	Maxi Pressure Co	mum nditions (bar)	Test Pressures (bar)					
	Temperatures up to 100°C	Temperatures up to 198°C	Shell	Seat				
<sup>1</sup> / <sub>2</sub> " to 2"	32.0	14.0	48.0	35.2				
Size		mum nditions (psi)	Test Pressures (psi)					
	Temperatures 212°F	Temperatures up to 389°F	Shell	Seat				
<sup>1</sup> / <sub>2</sub> " to 2"	464.1	203.1	696.2	510.5				





MATERIAL SPECIFICATION							
No.	Component	Material					
1	Body	Gunmetal					
2	Сар	Forged Brass ( $\frac{1}{2}$ " to $\frac{1}{4}$ ") Gravity Die Cast Brass ( $\frac{1}{2}$ " to $\frac{2}{1}$ ")					
3	Valve	Brass (½" to 2")					
4	Rating Disc	Aluminium					



		QUIPME ATEGO					
	Sizes						
1/2"	3/4"	1"	11/4"	11/2"	2"		
SEP	SEP	SEP	SEP	SEP	SEP		

#### **1060A BRONZE SWING CHECK VALVE RANGE**

#### **FEATURES**

- BS 5154 PN25 Series B.
- Horizontal or vertical fixing (upward flow only).
- · Metal seat and swing type metal disk.
- Body arrow indicates direction of flow.
- BS 21 Taper Thread.
- ANSI (NPT) American Taper Thread (AT).
- ISO 228 (BS 2779) Parallel Thread PT.

#### **RANGE** Sizes Patt. No. 3/4" 1" 11/4" 11/2" 21/2" 3" 4" 1060A • • • • • 1060AAT • 1060APT

DIMENSIONS									
					Sizes				
Description	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
A Face to Face	62	76	83	94	105	125	148	175	222
B Height	45	55	60	65	75	90	110	125	130
Weight kg	0.38	0.58	0.86	1.26	1.66	2.66	4.80	6.79	13.07

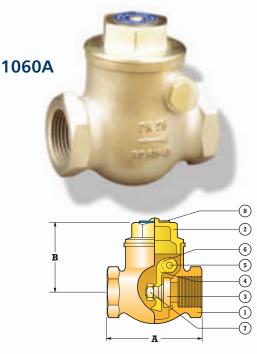
FLOW RATES*												
						Sizes						
		1/	2"			3/	<b>4</b> "			1	"	
Flow (I/s)	0.04	0.10	0.20	0.40	0.04	0.10	0.40	1.00	0.01	0.20	0.30	1.00
Cv	2.1	4.3	5.9	6.5	3.1	6.3	15.6	17.6	8.8	16.0	21.1	29.1
Kv	1.8	3.7	5.1	5.7	2.7	5.5	13.6	15.3	7.7	13.9	18.4	25.3
		1 <sup>1</sup>	/4"			1 <sup>1</sup>	/2"			2	."	
Flow (I/s)	0.20	0.30	0.10	1.00	0.40	0.60	0.80	3.00	0.60	0.80	1.50	4.00
Cv	17.2	23.7	29.1	37.5	34.8	46.2	55.7	62.5	48.3	62.0	99.0	112.6
Kv	15.0	20.6	25.3	32.6	30.3	40.2	48.5	54.4	42.0	54.0	86.2	98.0

- \* Cv flow rate in US GPM at a pressure drop of 1 psi.
- \* V = 100V rate in 0.3 Gram at a pressure group of 1 bar. \* V = 100V rate in V =

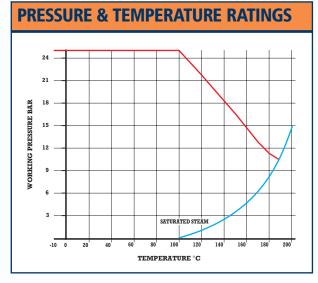
#### **MINIMUM OPERATING CONDITIONS**

Sizes  $^{1}\!/_{2}$ " to 1" require 0.5 bar (7.25 psi) minimum line pressure with a differential pressure of 1 to 1.5 psi to allow the valve to open and close. Sizes  $2^{1/2}$ " to 4" require 1 bar (14.5 psi) minimum line pressure with a differential pressure of 1.5 to 2 psi to allow the valve to open and close.

MAXIMUM PRESSURE CONDITIONS							
Size	Maxi Pressure Co	mum inditions (bar)	Test Pressures (bar)				
<sup>1</sup> / <sub>2</sub> " to 4"	Temperatures up to 100°C 25.0	Temperatures up to 186°C 10.5	Shell 37.5	Seat 27.5			
Size		mum nditions (psi)	Test Pressures (psi)				
<sup>1</sup> / <sub>2</sub> " to 4"	Temperatures up to 212°F 362.6	Temperatures up to 367°F 152.3	Shell 543.9	Seat 398.9			



MAT	MATERIAL SPECIFICATION						
No.	Component	Material					
1	Body	Gunmetal					
2	Com	Forged Brass (1/4 to 2")					
2	Сар	Gunmetal (2½ to 4")					
3	Valve	Gunmetal					
4	Codenan	Brass Bar (1/4 to 1")					
4	Swinger	Gunmetal (1 <sup>1</sup> / <sub>4</sub> to 4")					
5	Swinger Pin	Brass Bar					
6	Swinger Pin Cap (Sizes 21/2 to 4" only)	Brass Bar					
7	Nut	Brass Bar					
8	Rating Disc	Tinned Iron Sheet					



SUITABLE FOR										
Steam	Water	Oil	Air	Gases						
	~	<i>y</i>	V	Inert	Combustible	Corrosive	Oxygen			
_				X	X	X	X			

PRESSURE EQUIPMENT DIRECTIVE CATEGORY									
	Sizes								
1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"	
SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	

- BS 5154 PN25 Series B.
- Horizontal or vertical fixing (upward flow only).
- Metal seat and swing type metal disc.
- Body arrow indicates direction of flow.
- BS 21 Taper Thread.

RANGE										
		Sizes								
Patt. No.	1/2"	3/4"	1"							
1062	•	•	•							

DIMENSIONS (MM)									
	Sizes								
Description	1/2"	3/4"	1"						
A Face to Face	58	72	83						
B Height	34	40	51						
Weight kg	0.27	0.48	0.72						

FLOW	FLOW RATES*											
	Sizes											
	1/2"					3/4"			1"			
Flow (l/s)	0.04	0.10	0.20	0.40	0.04	0.10	0.40	1.00	0.01	0.20	0.30	1.00
Cv	2.1	4.3	5.9	6.5	3.1	6.3	15.6	17.6	8.8	16.0	21.1	29.1
Kv	1.8	3.7	5.1	5.7	2.7	5.5	13.6	15.3	7.7	13.9	18.4	25.3

- \* Cv flow rate in US GPM at a pressure drop of 1 psi. \* Kv flow rate in  $m^3$  per hour at a pressure drop of 1 bar.

#### **MINIMUM OPERATING CONDITIONS**

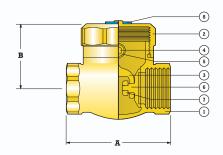
Sizes 1/2 to 1" require 0.5 bar (7.25 psi) minimum line pressure with a differential pressure of 1 to 1.5 psi to allow the valve to open and close.

MAXIMUM PRESSURE CONDITIONS									
Size	Maxi Pressure Co	mum nditions (bar)	Te: Pressure						
	Temperatures up to 100°C	Temperatures up to 186°C	Shell	Seat					
<sup>1</sup> / <sub>2</sub> " to 1"	25.0	10.5	37.5	27.5					
Size		mum nditions (psi)	Tes Pressure						
	Temperatures 212°F	Temperatures up to 389°F	Shell	Seat					
<sup>1</sup> / <sub>2</sub> " to 1"	362.6	152.3	543.9	398.9					

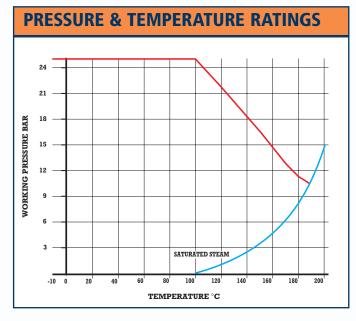
SUI	SUITABLE FOR											
Steam	Water	Oil	Air	Gases								
_	~	7	×	Inert	Combustible	Corrosive	Oxygen					
	•			×	×	×	×					

PRESSURE EQUIPMENT DIRECTIVE CATEGORY								
	Sizes							
1/2"	3/4"	1"						
SEP	SEP	SEP						





MATERIAL SPECIFICATION							
No.	Component	Material					
1	Body	Forged Brass (½" and ¾")					
	body	Gravity Die Cast Brass (1")					
2	Cap	Forged Brass					
3	Swinger	Brass Bar					
4	Swinger Pin	Brass Bar					
5	Bush	Brass Bar					
6	Valve	Brass Bar					
7	Nut	Brass Bar					
8	Rating Disc	Aluminium					



# **1063/1064 BRASS SPRING ACTION CHECK AND FOOT VALVES**

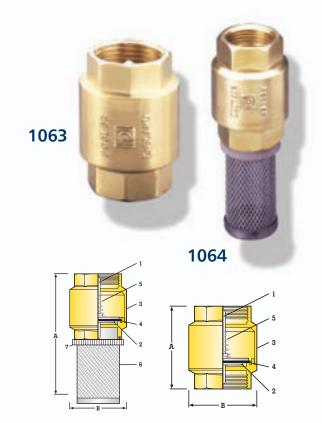
#### **FEATURES**

#### 1063

- Brass.
- · Horizontal, vertical or oblique fixing.
- Stainless steel spring.
- Flow directional arrow on body.
- ½" to 4" sizes.
- ISO 228 Parallel Thread (PT).
- BS 21 Taper Thread.
- ANSI (NPT) American Thread (AT).
- Maximum operating temperature, 90°C.

#### 1064

- Brass.
- Horizontal, vertical or oblique fixing.
- Stainless steel spring.
- Flow directional arrow on body.
- ½" to 4" sizes.
- ISO 228 Parallel Thread (PT).
- BS 21 Taper Thread.
- ANSI (NPT) American Thread (AT).
- Maximum operating temperature, 90°C.
- Stainless Steel filter.
- ABS body to filter connection.
- · Removable, screw in filter.



RANG	RANGE											
Sizes												
Patt. No.	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"			
1063PT	•	•	•	•	•	•	•	•	•			
1064PT	•	•	•	•	•	•	•	•	•			
1064AT	•	•	•	•	•	•						

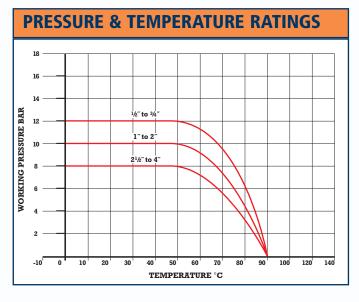
PRESSURE EQUIPMENT DIRECTIVE CATEGORY										
	Sizes									
1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	11/2"	2"	21/2"	3"	4"		
SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP	SEP		

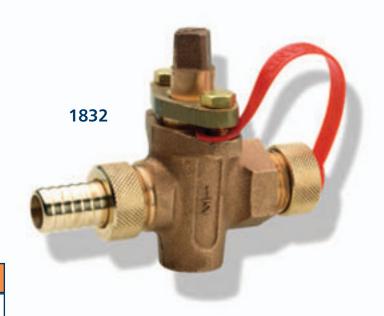
DIME	DIMENSIONS (MM)											
	Sizes											
Patt. No.	Description	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"		
	A Face to Face	49.5	57.5	61.5	66	76	87	100	110	114		
1063	B Diameter	34	41.5	47	58.5	69	84.5	103	112	145		
	Weight kg	0.124	0.232	0.251	0.389	0.581	0.852	1.380	1.966	2.830		
	A Face to Face	83	96	107	120	136	159	181	201	217		
1064	B Diameter	34	41.5	47	58.5	69	84	103	112	145		
	Weight kg	0.13	0.20	0.27	0.40	0.57	0.81	1.50	1.89	3.04		

MATERIAL SPECIFICATION						
No.	Component	Material				
1	Pin	ABS				
2	Pin Washer	ABS				
3	Body	Brass				
4	Sealing Washer	EPDM Rubber				
5	Spring	Stainless Steel 18/8				
6	Filter	Stainless Steel 18/8				
7	Filter/Body Connection	ABS				

#### **MAXIMUM PRESSURE CONDITIONS Maximum Pressure Conditions** (bar) (psi) Size $\frac{1}{2}$ " and $\frac{3}{4}$ " 12.0 174 10 21/2" to 4" These are maximum permissible working pressures **Maximum Pressure Conditions** Size (°C) (°F) 2<sup>1</sup>/<sub>2</sub>" to 4" 194

SUITABLE FOR										
	Stoom	Steam Water	Oil	Air	Gases					
	Steam				Inert	Combustible	Corrosive	Oxygen		
1063	X	~	X	~	X	X	X	X		
1064	×	~	X	~	X	×	×	×		





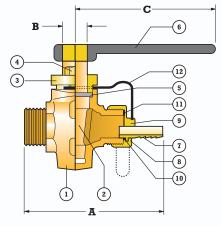
- Adjustable gland and accurately ground-in tapered plug to ensure water tightness.
- Rectangular port (area approximately equal to the nominal bore of the cock).
- Male Parallel Thread ISO 228 x Hose Union.
- Supplied with Iron lever.

RANGE					
Sizes					
Patt. No.	1/2"	3/4"	1"		
1832	•	•	•		

DIMENSIONS (MM)							
	Sizes						
Description	1/2" 3/4" 1"						
A Face to Face	93	117	145				
B Square Head	10.3	13.5	15.9				
C Lever Length	86	95	121				
Weight kg	0.44	0.76	1.32				

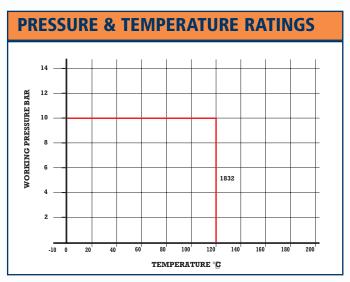
MAXIMUM PRESSURE CONDITIONS				
Size	Test Pressures Shell (psi)			
<sup>1/</sup> 2" to 1"	10.0 (up to 120°C)	20.0		
<sup>1/</sup> 2" to 1"	290.1			

MATERIAL SPECIFICATION			
No.	Component	Material	
1	Body	Gunmetal	
2	Plug	Gunmetal	
3	Gland	Brass Bar ( $\frac{1}{2}$ " and $\frac{3}{4}$ ")	
3	Giariu	Forged Brass (1")	
4	Bolt	Brass Bar	
5	Gland Packing	PTFE	
6	Lever	Cast Iron	
7	Pipe	Brass Bar	
8	8 Boss Brass Bar (1/2")		
•	DOSS	Forged Brass (3/4" and 1")	
9	Cap	Brass Bar	
10	'O' ring	WRc Approved Rubber	
11	11 'O' ring or 'O' Ring – WRc Approved Rubber (1/2		
washer Washer – Akulon (3/4" and 1")		Washer – Akulon (¾" and 1")	
12	Strap	Nylon 6	



SUI	TAB	LE F	OR					
Steam	Water	Oil	Air	Gases				
×	~	~	x	Inert	Combustible	Corrosive	Oxygen	
				×	×	X	×	

PRESSURE EQUIPMENT DIRECTIVE CATEGORY					
Sizes					
1/2"	3/4"	1"			
SEP SEP SEP					



# **PEGLERTHERM IN-LINE MIXING VALVES 402H/402U/402UA**





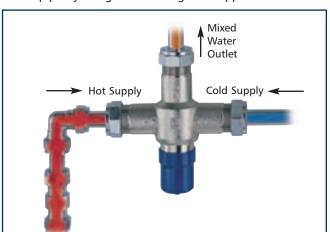
Peglertherm in-line mixing valves are designed to eliminate the risk of scalding and are suitable for use in a wide range of public, health care, social, commercial and domestic applications.

- Suitable for sinks, wash basins, bath, bidets, single point showers, hair wash sprays and domestic hot water systems.
- · Simple to install and service.
- Temperature pre-set to 43°C, but easily adjustable on site.
- WRAS approved for a wide variety of uses.
- Complies with NHS Model Engineering Specification DO8.
- Choice of standard connections 402H or easy to service 402U with union connections and 402UA with 90° angle side cocks.

## **INSTALLATION**

The 402 is fitted with internal strainers but where debris is a particular problem we recommend the fitting of serviceable external strainers. The 402 can be fitted in any orientation provided the hot and cold supplies are connected as marked on the valve body (C = cold supply H = hot supply).

The Peglertherm 402H and 402U are supplied with 22mm pipe connections as standard but can be adapted to accept 15mm pipe by using the reducing sets supplied.



Note: We would recommend the fitting of servicing valves on the inlet supplies to aid any future isolation requirements for 402H and 402U. To ensure proper performance of the 402 range the isolation valves should always be fully open during operation.



## **ADJUSTMENT**

The valve is supplied pre-set at approximately 43°C. The valve must be adjusted to suit conditions on site.

## IN SERVICE TESTING

The normal service frequency is one year but site conditions may mean that the service checks should be undertaken more frequently. It is recommended that the service procedure in the NHS Document DO8 is followed.

Maximum continuous temperatures during testing should not exceed the following values:

Bidet 40°C Shower 43°C Washbasin 43°C

Bath 44°C Bath 46°C

If it is found to be impossible to obtain the correct setting point a service is required. The Peglertherm 402 should not normally require part replacement. However a full range of spares is available on request.

## **APPROVALS**

The Peglertherm 402 has been approved by WRAS Certificate Number 0301049 for the following uses:

Code	Operating Range	Application
HP-B	High pressure	Bidet – maximum temperature – 38°C
HP-S	High pressure	Shower – maximum temperature – 41°C
HP-W	High Pressure	Washbasin – maximum temperature – 41°C
HP-T44	High pressure	Bath with fill temperature up to – 44°C
HP-T46	High pressure	Bath fill temperature up to – 46°C (assisted)
LP-B	Low pressure	Bidet – maximum temperature – 38°C
LP-S	Low pressure	Shower – maximum temperature – 41°C
LP-W	Low pressure	Washbasin – maximum temperature – 41°C

Under the terms of the TMV3 Scheme the valve must be installed under the following conditions:

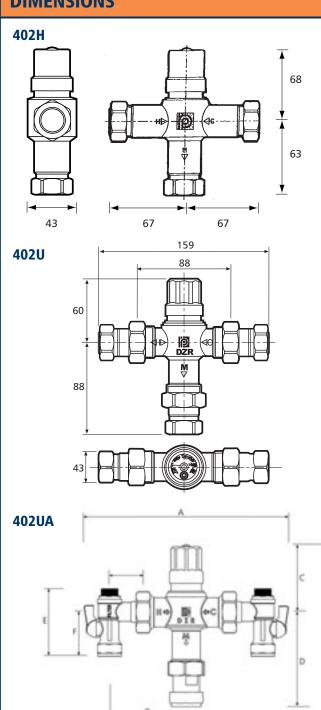
Operating Pressure Range	High Pressure	Low Pressure		
Maximum static pressure (bar)	10	10		
Flow pressure, hot and cold (bar)	1 - 5	0.2 - 1		
Hot supply temperature (°C)	52 - 65	52 - 65		
Cold supply temperature (°C)	5 - 20	5 - 20		

Note: Valves operating outside these conditions cannot be guaranteed to operate as type 3 Valves. The use of a Pressure Reducing Valve to achieve balanced supply conditions is recommended where necessary.





## **DIMENSIONS**



TECHNICAL SPECIFICATION					
	General operating parameters	TMV3 approved parameters			
Minimum mixed temperature	30°C	38°C			
Maximum mixed temperature	50°C	46°C			
Maximum temperature deviation	+/- 2°C	+/- 2°C			
Maximum hot inlet temperature	85°C	65°C			
Maximum hot/cold cold/hot inlet pressure ratio	5 to 1	N/A			
Maximum static pressure	12 bar	10 bar			
Minimum dynamic flow pressure	0.1 bar	0.2 bar			
Minimum hot inlet to mixed outlet temperature differential	10°C	10°C			
Flow with 0.2 bar differential pressure loss	9.0L/M	9.0L/M			
Flow 1.0 bar differential pressure loss	18L/M	18L/M			

## **GENERAL SPECIFICATION**

Materials: DZR Brass Surface Finish: Nickel

Water Connections:

402H 22mm compression with 15mm reducing

sets supplied

402U 22mm compression with 15mm reducing sets

and union connections supplied

402UA 22mm compression outlet with 15mm reducing

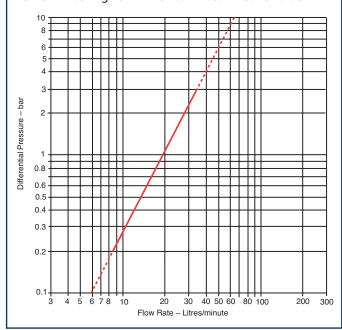
(15mm) set and 15mm side cocks supplied

402UA 22mm compression all ends

(22mm)

## **FLOW RATE**

The flow rate is given under balanced inlet conditions



## **40 PEGLERTHERM 404 IN-LINE MIXING VALVES**





## **FEATURES**

Peglertherm in-line mixing valves are designed to eliminate the risk of scalding and are suitable for use in a wide range of public, social housing, commercial and domestic applications.

- Suitable for sinks, wash basins, bath, bidets, single point showers, hair wash sprays and domestic hot water systems.
- Simple to install and service.
- Temperature pre-set to 43°C, but easily adjustable on site.
- WRAS approved for a wide variety of uses.

## INSTALLATION

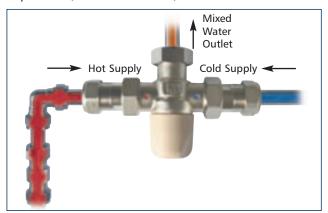
The 404 is supplied with internal strainers but where debris is a particular problem we recommend the fitting of serviceable external strainers. The 404 can be fitted in any orientation provided the hot and cold supplies are connected as marked on the valve body

(C = cold supply, H = hot supply. Blue indice = cold supply, Red indice = hot supply).

The Peglertherm 404 is supplied with compression connections for copper tube.

Designation of use HP & LP. ref 97083 97084 – compliance with EN1111, EN287 and BS1415 Pt2 (TMV2).

Thermostatic mixing valves are temperature sensitive devices and must not be subjected to extreme temperatures, either hot or cold, in use or installation.



Note: We would recommend the fitting of full bore servicing valves on the inlet supplies to aid any future isolation requirements. To ensure proper performance of the 404 isolation valves, they should always be fully open during operation. Isolation valves should be installed as close as practicable to the mixing valve inlets.

## **PRESSURES**

Pressure at the valve inlets must be within the 10-1 ratio under flow conditions. The size and layout of pipework and in-line fittings must take this into consideration.

Optimum performance is achieved with equal pressure.

Minimum Working Pressure 0,1 bar
Maximum Working Pressure 5 bar
Maximum Static Pressure 10 bar
Minimum Flow Rate 5 L/min

See Table 1 for conditions of normal use.

## **WATER REGULATIONS**

MIXING VALVES must be installed in accordance with local Water Authority Water Regulations (Water Supply (Water Fittings) Regulations 1999). Your attention is therefore drawn to any installation requirements which may be applicable.

This product is fitted with a WRAS approved listed single check valve cartridge for both the hot and cold supplies to the valve. If supplying a submerged outlet additional protection will be required.

**ISOLATING VALVES** Isolation valves must be installed on the hot and cold connectors.

**STRAINERS** Strainers must be installed on the hot and cold connectors.

# TEMPERATURE DIFFERENTIAL CHARACTERISTICS

Table 1 – conditions of normal use

Operating Pressure Range	High Pressure	Low Pressure		
Maximum static pressure - bar	10	10		
Flow pressure, hot and cold - bar	1 to 5	0.1 to 5		
Hot supply temperature - °C	55 to 65	55 to 65		
Cold supply temperature - °C	≤ 25	≤ 25		
The temperature differential for MIXING VALVE must be 10°C				

## IN SERVICE TESTING

The purpose of in-service tests is to regularly monitor and record the performance of the thermostatic mixing valve. Deterioration in performance can indicate the need for service work on the valve and/or the water supplies.







## **APPLICATIONS**

High Pressure (EN1111:1999)

Bidets

Showers

Wash hand basin

Bath fill

Low Pressure (EN1287:1999)

Bidets

Showers

Wash hand basins

## ADJUSTMENT AND COMMISSIONING

The thermostatic controller is supplied factory pre-set at 43°C. However, installation conditions will dictate that the product be adjusted on site. To adjust the temperature supply remove the plastic cap on top of the valve and adjust with the key provided.

- To increase the temperature turn anti-clockwise
- To decrease the temperature turn clockwise
- To set the valve to a maximum mixed water temperature (see table 2).

Table 2	
Application Mixed water temperature	
Shower	41°C
Washbasin	41°C
Bidet	38°C
Bath	44°C

The temperatures and pressures must be stabilised and checked before commissioning (allow mixed water to flow for 1 minute prior final setting). All parameters must be in accordance with TABLE 1 above.

Note: After adjustment replace the cap to prevent tampering. This valve must not be used to mix water above a temperature of 46 °C. Hot water can burn and it is strongly recommended that both comfort and safety levels are considered when selecting a set temperature.

## **MAINTENANCE**

PURPOSE: Since the installed supply conditions are likely to be different from those applied in the laboratory tests, it is appropriate, at commissioning, to carry out some simple checks and tests on each mixing valve to provide a performance reference point for future in-service tests. For further information on service tests and maintenance refer to the 404 installation instructions.

## **GENERAL SPECIFICATION**

Materials: DZR Brass
Surface Finish: Nickel
Water Connection: 404 15mm
22mm

Wafer Strainers

Single check valves on inlets

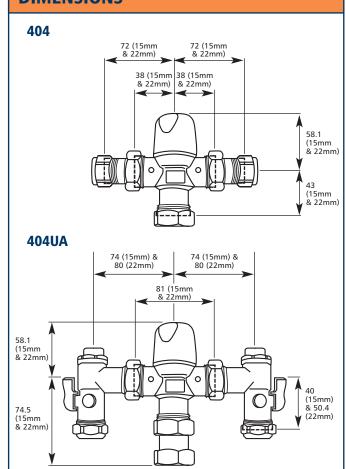
Water Connection: 404UA 15mm

22mm

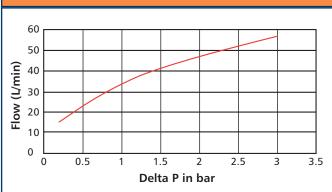
Single check valves on inlets Angle valves with strainers

Isolating valves Test points

## **DIMENSIONS**



## **FLOW RATE**



## 42 OP1/OP2 OPTIFLUSH URINAL FLUSH CONTROLLERS



## **FEATURES**

- Demand Activated Passive Infra-Red sensing technology.
- Complies with Water Regulation R25.12 and BS 6700.
- Suitable for all pressures from 0.05 bar to 12 bar.
- · Hygiene Flush feature (every 12 hours).
- Installer friendly test mode set up with audible location assistance.
- · Pre-wired for easy installation.
- · Battery or mains operated.
- Low battery indicator warning signal. (Battery version only).
- Recess mountable into any standard double patress box.
- · Reduces limescale build up through controlled flushing.

# STANDARDS & WATER REGULATION REQUIREMENTS

The Water Regulations are concerned with the amount of water utilised per hour in the flushing process. The table below summarises the maximum flow requirements per urinal bowl/slab.

These requirements combined with those of BS 6700 which state that no more than 3 flushes per hour are permissible clearly demand an accurate means of control.

The Optiflush is designed to give you the maximum amount of flexibility in set up to ensure that every installation is capable of complying with the water byelaws and BS 6700.

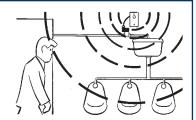
Number of Urinal Bowls/Slabs	1	2	3	4	5	6
Maximum Flow Requirement (litres per hour)	10	15	22.5	30	37.5	45

Note: Figures for two or more bowls/slabs are calculated based on using 7.5 litres per hour per bowl as a maximum.

## **HOW IT WORKS**

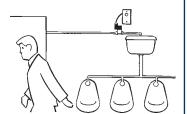
#### (1) PICK UP

The Optiflush's passive infra-red detector senses movement in the cloakroom.



## (2) DELAY

Knowledge that the cloakroom has been utilised is then stored by the Optiflush for a pre-set delay period (determined by the installer).



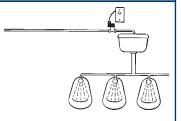
## (3) DELAY

During the delay period, subsequent users of the cloakroom are not detected by the Optiflush.



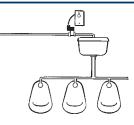
### (4) FLUSH

The Optiflush activates the solenoid latching valve and water is released for a measured length of time to fill the cistern and subsequently flush the urinals.



## (5) RE-SET

Once the flushing operation is complete, the Optiflush closes the valve, re-sets itself and awaits the next user to begin the cycle again.



## **LOCATION**

The Optiflush can be surface mounted on the wall or recess mounted into a standard double patress box.

Typically the product control box will be situated in close proximity to the valve and for this purpose the components are supplied pre wired to simplify installation. The control box can be sited in excess of 0.5m distance away from the valve but in this instance you will have to re-wire the product.

Choice of location should always enable the product to sense movement in the room. To ensure that the product is sited correctly it comes with an audible test mode setting allowing the installer to clearly hear if the product is sensing movement by approaching it from a number of different directions.

## **SET UP**

The Flexibility of the Optiflush stems from its setting controls. A simple set of control switches enables the installer to vary the delay time between flushes and the fill time of the cistern. Thus variations between installations such as pressure ratings or cistern sizes can be easily accommodated.

## **RECOMMENDED DELAY TIME**

Number of Urinals Bowls/slabs	A (20 minutes)	B (30 minutes)	C (40 minutes)
1	_	4.5 litre Cistern	_
2	4.5 litre Cistern	_	9 litre Cistern
3	_	9 litre Cistern	13.6 litre Cistern
4	9 litre Cistern	13.6 litre Cistern	18.2 litre Cistern
5	9 litre Cistern	18.2 litre Cistern	_
6	13.6 litre Cistern	18.2 litre Cistern	_

## **RECOMMENDED FILL TIME SETTINGS**

Static Pressure	Cistern Size			
(bar)	4.5 litre	9 litre	13.6 litre	18.2 litre
0.05				
0.1				
0.2				
0.5				
1.0				
2.0				
3.0				
4.0				
5.0				
6.0				
7.0				
8.0				
9.0				
10.0				
11.0				
12.0				

Key to	Period	1	2	3	4
settings	Time	1.5 minutes	3 minutes	7 minutes	20 minutes

## **GENERAL SPECIFICATION**

## **POWER**

**OP1 BATTERY operated version** 

Voltage: 9 Volts D.C. Current: Nominal 0.03mA

Battery Supply: 9 Volts PP3 (MN1604) Alkaline Batteries.

OP2 MAINS operated version Voltage: 230 Volts A.C. 50Hz Current: Nominal 0.0031 mA

Battery Supply: 230 Volts AC Fused 1 amp.

## **SOLENOID VALVE**

12 Volt 6 Watt D.C latching type.

#### **PRESSURE RANGE**

Suitable for all pressures from 0.05 bar to 12.0 bar.

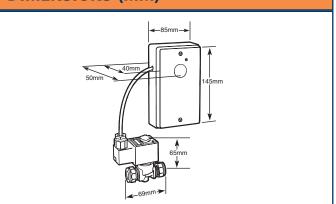
## **FLOW RATE**

CV Flow value 0.15 KV Flow value 0.17

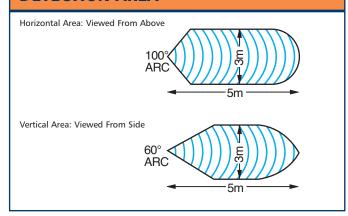
#### SERVICING/REGULATION

A Stopvalve should be positioned upstream of the Optiflush valve for the purposes of servicing and flow regulation. Under no circumstances should the flow be restricted downstream of the Optiflush (i.e. pet cocks should be fully open or removed).

## **DIMENSIONS (MM)**



## **DETECTION AREA**



# 44 PRESSURE REDUCING VALVES AND PRESSURE GAUGE





## **FEATURES**

## PRESSURE GAUGE

- Rear entry.
- Pressure range: 0-10 bar.
- Robust brass/high impact plastic body.
- Reference pointer on dial.

## PRV

- High performance 'yoke' construction.
- Drop tight seal.
- 1/2" and 3/4" sizes.
- DZR body.
- WRAS approved.

DIMENSIONS (MM)			
	Siz	es.	
Description	1/2" F	3/ <sub>4</sub> " F	
A	76	76	
В	30.5	30.5	
С	115	115	
D	72	72	
Weight kg	1.12	1.08	

MAXIMUM PRESSURE CONDITIONS – PRV			
Size	Max Inlet Pressure Min Outlet Pressure Conditions (bar) Conditions (bar)		
	Temperatures up to 80°C	Temperatures up to 80°C	
1/2"	16.0	5.5	
3/4"	16.0	5.5	

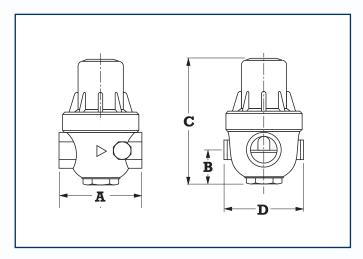
SUITABLE FOR							
Steam	Water	Oil	Air	Gases			
×	V	./	~	Inert	Combustible	Corrosive	Oxygen
<b>^</b>				×	×	X	~

# PERFORMANCE — GAUGE Max. working pressure: 10 bar Max. Temperature: 80°C Min. Operating Temperature: 1°C

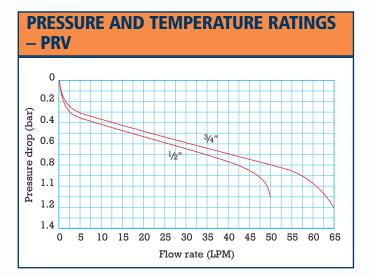
## **MATERIALS – GAUGE**

Body: Brass/high impact plastic





MATERIAL SPECIFICATION			
No.	Component	Material	
А	Body	DZR Brass	
В	Diaphragm	NBR	
С	Seals	NBR	
D	Bonnet	Alloy	







- 15 or 22mm compression connection.
- Drop tight seal.
- Compact easy set design.
- 0-25 bar inlet pressure range.
- Two gauge connection points.
- WRAS approved.
- DZR body.

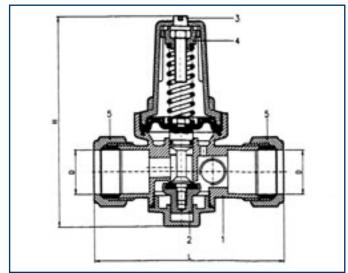
RANGE			
	Sizes		
Patt. No.	15mm	22mm	
15mm PRV-2	•		
22mm PRV-2		•	

<b>DIMENSIONS (MM)</b>		
	Siz	es
Description	15mm PRV-2	22mm PRV-2
D	15	22
L	86.5	92
Н	105	105
Weight Kg	0.421	0.453

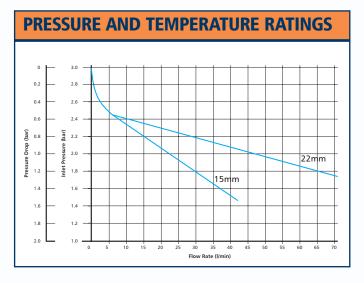
PERFORMANCE	
Max. Inlet Pressure	25 bar
Outlet Pressure	Adjustable between 1 bar to 6 bar
Max. Fluid Temperature	80°C
Installation	In any position

FLOW RATES		
	Sizes	
Description	15	22
PRV-2	50 l/min	100 l/min

SUITABLE FOR			
Water	Neutral Liquids	Compressed Air	
V	V	V	



MAI	MATERIAL SPECIFICATION								
No.	Component	Material							
1	Body	DZR Brass CW602N							
2	Shutter	DZR Brass CW602N							
3	Adjusting Screw	Galvanised Steel							
4	Spring Guide	Plastic							
5	Connections	Brass CW614N							



## **46 MOH PORTSMOUTH PATTERN FLOATVALVES**

855/856



## **FEATURES**

- Conventional design with integral tail and seat.
- Size range from <sup>3</sup>/<sub>8</sub>" to 2" available in Brass with 1½" and 2" sizes also available in Bronze (Gunmetal).
- Suitable for pressures up to 14 bar (200 psi).
- High and low pressure variations.
- Recommended for temperatures from 0-85°C.

# FLOW RATE & SIZE SELECTION CHART (GPM)

	Sta Pres					55 valve			Flo	856 atvalv	e
	PSI	Feet	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	11/2"	2"	3/8"	1/2"	3/4"
	0.5	1.15	0.25	0.82	1.85	2.50	5.90	11.70	0.61	061	1.85
	1.0	2.30	0.35	1.16	2.60	3.50	8.30	16.50	0.86	0.86	2.60
	2.0	4.60	0.50	1.65	3.70	4.90	11.80	23.50	1.20	1.20	3.70
	4.0	9.20	0.70	2.33	5.20	6.90	16.60	33.70	1.70	1.70	5.20
	7.0	16.10	0.93	3.10	6.90	9.20	21.90	43.10	2.30	2.30	6.90
LOW	10.0	23.10	1.10	3.70	8.20	11.00	26.30	52.50	2.70	2.70	8.20
PRESSURE	15.0	34.60	1.40	4.50	10.10	13.50	32.30	64.40	3.30	3.30	10.10
	20.0	46.20	1.60	5.20	11.70	15.60	37.30	74.40	3.90	3.90	11.70
	25.0	57.70	1.76	5.80	13.00	17.40	41.60	83.10	4.30	4.30	13.00
	30.0	69.30	1.93	6.40	14.30	19.10	45.60	91.00	4.70	4.70	14.30
	35.0	80.80	2.10	6.90	15.40	20.60	49.20	98.30	5.10	5.10	15.40
	40.0	92.40	2.20	7.40	16.50	22.00	52.60	105.00	5.50	5.50	16.50
	50.0	115.00	2.50	8.20	18.40	24.60	58.70	117.00			
	60.0	138.00	2.70	9.00	20.20	27.00	64.40	128.00			
	70.0	161.00	2.90	9.60	21.50	28.80	68.60	136.00			
	80.0	184.00	3.10	10.30	23.30	31.00	74.00	147.00	N	ATIUZ TC	BLE
HIGH	90.0	207.00	3.30	11.00	24.70	33.00	79.00	157.00	FO	R PRESSU	RES
PRESSURE	100.0	231.00	3.50	11.60	26.00	34.70	84.00	165.00	AB	OVE 40 F	.S.I.
	110.0	254.00	3.70	12.20	27.30	36.50	87.00	173.00		USE 855	
	125.0	289.00	3.90	13.00	29.20	39.00	93.00	186.00			
	150.0	346.00	4.30	14.20	31.80	42.50	101.00	202.00			
	175.0	404.00	4.60	15.30	34.40	46.00	109.00	218.00			
	200.0	462.00	5.00	16.50	37.00	49.40	118.00	235.00			

## WEIGHTS OF COPPER & PLASTIC BALL FLOATS TO SUIT ALL FLOATVALVES

Ball Float Size	Copper Ball Float Weight (kg)	Plastic Ball Float Weight (kg)
3"	-	0.04
41/2"	0.11	0.08
5"	0.14	0.09
5 <sup>1</sup> / <sub>2</sub> "	0.17	=
6"	0.20	0.17
8"	0.50	0.35
10"	0.71	0.59
12"	1.13	0.91
14"	2.36	-
15"	2.64	-
16"	3.04	-

Note: Ball floats are only supplied in export shipments, all copper ball floats are supplied in halves.

#### Flow Rate and Size Selection Chart General Notes:

The discharge through a floatvalve is governed by the running pressure maintained at its inlet. In practice this is difficult to measure and so the tables shown indicate the 'estimated' flow rate in G.P.M. that will occur at various static heads for each size of floatvalve or for each size of seat in floatvalves that accept a variety of seat sizes. The flow rates quoted will only occur when the floatvalve is fully open and will reduce as the water level in the tank rises. Excessive pipe runs to the floatvalve will result in lower running pressures and thus reduced flow rates.

## **RANGE**

	Patt. No.	Size	Piston Material	Backnut Material	Seat Bore	Tail Length	Lever Length		ed Float Size Plastic	Weight Approx KG
	Tutte 140.	3120	Widterial	iviateriai	Dorc	Length	Length	Copper	Plastic	дрыох ка
	855	1/2"	Nylon	Brass	1/8"	1 <sup>1</sup> / <sub>4</sub> "	10"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.24
	855-Z	1/2"	Brass	Brass	1/8"	11/4"	10"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.26
HIGH	855	3/4"	Brass	Brass	1/4"	11/2"	13"	51/2" x 5/16"W	5" x <sup>5</sup> / <sub>16</sub> "W	0.41
PRESSURE	855	1"	Brass	Brass	3/8"	11/2"	14"	6" x <sup>3</sup> / <sub>8</sub> "W	6" x <sup>3</sup> / <sub>8</sub> "W	0.69
	855	11/4"	Brass	Brass	7/16"	2"	16"	8" x <sup>3</sup> / <sub>8</sub> "W	8" x <sup>3</sup> / <sub>8</sub> "W	0.86
	855	11/2"	Brass	Brass	5/8"	2"	2121/32"	10" x <sup>1</sup> / <sub>2</sub> "W	10" x <sup>1</sup> / <sub>2</sub> "W	2.27
	855	2"	Brass	Brass	5/8"	2"	2121/32"	12" x <sup>1</sup> / <sub>2</sub> "W	12" x <sup>1</sup> / <sub>2</sub> "W	2.68
	855	11/2"	Bronze(GM)	Brass	5/8"	2"	2121/32"	10" x <sup>1</sup> / <sub>2</sub> "W	10" x <sup>1</sup> / <sub>2</sub> "W	1.55
	855	2"	Bronze(GM)	Brass	5/8"	2"	2121/32"	12" x <sup>1</sup> / <sub>2</sub> "W	12" x <sup>1</sup> / <sub>2</sub> "W	1.64
	856	3/8"	Brass	Brass	7/32"	1 <sup>1</sup> / <sub>4</sub> "	71/4"	-	3" x <sup>5</sup> / <sub>16</sub> "W	0.24
LOW	856	1/2"	Nylon	Brass	7/32"	1 <sup>1</sup> / <sub>4</sub> "	10"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.26
PRESSURE	856-Z	1/2"	Brass	Brass	7/32"	11/4"	10"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.26
	856	3/4"	Brass	Brass	3/8"	11/2"	13"	51/2" x 5/16"W	5" x <sup>5</sup> / <sub>16</sub> "W	0.40



## FLOW RATE & SIZE SELECTION CHART (GPM)

857/859

		itic sure					1212 eat Bor				
	P.S.I.	Feet	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	<sup>15</sup> / <sub>16</sub> "	1"	11/4"
	0.5	1.15	0.20	0.82	1.84	3.28	5.12	7.37	11.50	13.10	20.50
	1.0	2.30	0.29	1.16	2.61	4.65	7.25	10.40	16.30	18.60	29.00
	2.0	4.60	0.41	1.65	3.69	6.57	10.30	14.80	23.10	26.30	41.00
	4.0	9.20	0.58	2.33	5.22	9.29	14.50	20.90	32.60	37.10	58.00
LOW	7.0	16.10	0.77	3.08	6.90	12.30	19.20	27.60	43.20	49.10	77.00
PRESSURE	10.0	23.10	0.92	3.69	8.27	14.70	23.00	33.10	51.70	58.90	92.00
	15.0	34.60	1.13	4.52	10.10	18.00	28.20	40.50	63.40	72.00	113.00
	20.0	46.20	1.31	5.22	11.70	20.80	32.50	46.80	73.00	83.00	130.00
	25.0	57.70	1.46	5.82	13.00	23.20	36.30	52.30	82.00	93.00	145.00
	30.0	69.30	1.60	6.40	14.30	25.50	39.80	57.30	90.00	102.00	159.00
	35.0	80.80	1.73	6.90	15.50	27.50	43.00	62.00	97.00	110.00	172.00
	40.0	92.40	1.85	7.38	16.50	29.50	46.00	66.00	103.00	118.00	184.00
	50.0	115.00	2.06	8.24	18.50	32.80	51.00	74.00	115.00	131.00	205.00
	60.0	138.00	2.26	9.02	20.20	36.00	56.00	81.00	125.00	144.00	225.00
MEDIUM	70.0	161.00	2.44	9.74	21.80	38.80	61.00	87.00	136.00	155.00	243.00
PRESSURE	80.0	184.00	2.60	10.40	23.30	41.50	65.00	93.00	146.00	166.00	260.00
	90.0	207.00	2.76	11.00	24.70	44.00	69.00	99.00	155.00	176.00	275.00
	100.0	231.00	2.92	11.60	26.10	46.50	73.00	105.00	163.00	186.00	291.00
	110.0	254.00	3.06	12.20	27.40	48.80	76.00	109.00	172.00	195.00	305.00
	125.0	289.00	3.26	13.10	29.20	52.10	81.00	117.00	183.00	208.00	325.00
HIGH	150.0	346.00	3.58	14.30	32.00	57.10	89.00	128.00	200.00	228.00	356.00
PRESSURE	175.0	404.00	3.86	15.40	34.60	61.60	96.00	138.00	216.00	246.00	385.00
	200.0	462.00	4.13	16.50	37.00	65.90	103.00	148.00	231.00	267.00	412.00

## Flow Rate and Size Selection Chart general Notes:

The discharge through a floatvalve is governed by the running pressure maintained at its inlet. In practice this is difficult to measure and so the tables shown indicate the 'estimated' flow rate in G.P.M. that will occur at various static heads for each size of floatvalve or for each size of seat in floatvalves that accept a variety of seat sizes. The flow rates quoted will only occur when the floatvalve is fully open and will reduce as the water level in the tank rises. Excessive pipe runs to the floatvalve will result in lower running pressures and thus reduced flow rates.

## **FEATURES**

- · Designed with interchangeable parts to make replacement easy.
- Size range from <sup>1</sup>/<sub>2</sub>" to 2".
- 1/2" to 1" sizes are manufactured in Brass, larger sizes are in Bronze (Gunmetal).
- Removable seats in nylon  $(\frac{1}{2}$  and  $\frac{3}{4}$ ) or bronze.
- Choice of plastic or brass backnuts and plastic or brass piston on  $\frac{1}{2}$ " size.
- Suitable for pressures up to 14 bar (200 psi).
- · High and low pressure variations.
- Recommended for temperatures from 0-85°C.

RAN	GE										
		Patt. No.	Size	Piston Material	Backnut Material	Seat Bore	Tail Length	Lever Length	Recommend Copper	led Float Size Plastic	Weight Approx kg
		857 N	1/2"	Nylon	Brass	No. 3 (1/8")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.39
		857 N-Z	1/2"	Nylon	Nylon	No. 3 (1/ <sub>8</sub> ")	11/4"	83/4"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.34
		857 N-S	1/2"	Nylon	Brass	No. 5 (3/ <sub>16</sub> ")	11/4"	83/4"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.39
		857 N-Y	1/2"	Brass	Brass	No. 3 (1/ <sub>8</sub> ")	11/4"	83/4"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.42
	NYLON	857 N-X	1/2"	Nylon	Brass	No 3 (1/ <sub>8</sub> ")	11/4"	101/2"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.41
	SEAT	857 N-W	1/2"	Nylon	Brass	No. 3 (1/ <sub>8</sub> ")	17/8"	101/2"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.43
		857 N-V	1/2"	Brass	Brass	No. 3 (1/ <sub>8</sub> ")	17/8"	101/2"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.48
		857 N-U	1/2"	Nylon	Brass	No. 3 (1/ <sub>8</sub> ")	21/2"	101/2"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.45
		857 N	3/4"	Brass	Brass	No. 6 (1/4")	11/4"	13"	5 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	5" x <sup>5</sup> / <sub>16</sub> "W	0.90
HIGH		857 N	1"	Bronze	Brass	No. 9 ( <sup>3</sup> / <sub>8</sub> ")	11/2"	16"	6" x <sup>7</sup> / <sub>16</sub> "W	6" x <sup>7</sup> / <sub>16</sub> "W	1.67
PRESSURE		857 B-Y	1/2"	Brass	Brass	No. 3 (1/8")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.43
	BRONZE	857 B-V	1/2"	Brass	Brass	No. 3 (1/ <sub>8</sub> ")	17/8"	101/2"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.47
	SEAT	857 B	3/4"	Brass	Brass	No. 6(1/ <sub>4</sub> ")	11/4"	13"	51/2" x 5/16"W	5" x <sup>5</sup> / <sub>16</sub> "W	0.92
		857 B	1"	Bronze	Brass	No. 9 (3/ <sub>8</sub> ")	11/2"	16"	6" x <sup>7</sup> / <sub>16</sub> "W	6" x <sup>7</sup> / <sub>16</sub> "W	1.69
		857 B	11/4"	Bronze	Bronze	No. 19 (3/ <sub>4</sub> ")	17/8"	221/2"	8" x <sup>9</sup> / <sub>16</sub> "W	10" x <sup>9</sup> / <sub>16</sub> "W	3.78
		857 B	11/2"	Bronze	Bronze	No. 19 (3/ <sub>4</sub> ")	17/8"	221/2"	10" x <sup>9</sup> / <sub>16</sub> "W	10" x <sup>9</sup> / <sub>16</sub> "W	3.90
		857 B	2"	Bronze	Bronze	No. 25 (1")	21/8"	29"	12" x <sup>5</sup> / <sub>8</sub> "W	12" x <sup>5</sup> / <sub>8</sub> "W	6.76
		859 N	1/2"	Brass	Brass	No. 9 (3/8")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.50
LOW	NYLON	859 N-V	1/2"	Brass	Brass	No. 9 (3/8")	17/8"	101/2"	41/2" x 5/16"W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.53
PRESSURE	SEAT	859 N	3/4"	Brass	Brass	No. 13 ( <sup>1</sup> / <sub>2</sub> ")	1 <sup>1</sup> / <sub>4</sub> "	13"	5 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	5" x <sup>5</sup> / <sub>16</sub> "W	0.90
		859 N	1"	Bronze	Brass	No. 16 ( <sup>5</sup> / <sub>8</sub> ")	11/2"	16"	6" x <sup>7</sup> / <sub>16</sub> "W	6" x <sup>7</sup> / <sub>16</sub> "W	1.67
	BRONZE SEAT	859 B	1/2"	Brass	Brass	No. 9 ( <sup>3</sup> / <sub>8</sub> ")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.42

Note: It is normal practice to consider the 857 as a high pressure floatvalve and the 859 as a low pressure. It is, however, possible to use a low pressure valve at high pressures provided an appropriate float is used to ensure shut off at the higher pressure. Similarly, a high pressure valve can be used at low pressures provided the resulting lower flow rates are acceptable. Where two seat size options exist for different sizes of floatvalve, select the smaller size of floatvalve if the flow rate through the seat is more than 5% in excess of the flow required.

## 48 BS1212 PART II DIAPHRAGM PATTERN FLOATVALVES



## **FEATURES**

- Designed with a discharge arrangement to prevent back siphonage and thus comply with the Water Supply (Water Fittings) Regulations 1999. DETR Guidance G 16.2.
- Available in <sup>1/2</sup>" and <sup>3/4</sup>" sizes.
- Approval pending with WRc.
- Manufactured in Brass.
- Flow controlled by rubber diaphragm which isolates the plunger and helps to reduce the risk of sticking in waters with a high lime content.
- Suitable for pressures up to 14 bar (200 psi).
- · High and low pressure variations.
- Recommended for temperatures from 0-85°C.

# FLOW RATE & SIZE SELECTION CHART (GPM)

	Sta Press			BS 1212 Seat Bo	2 PART 1 re Size	
	PSI	Feet	1/8"	<sup>3</sup> / <sub>16</sub> "	1/4"	3/8"
	0.5	1.15	0.18	0.41	0.55	0.71
	1.0	2.30	0.25	0.58	0.78	1.00
	2.0	4.60	0.35	0.82	1.10	1.40
	4.0	9.20	0.50	1.16	1.56	2.00
	7.0	16.10	0.66	1.53	2.02	2.60
	10.0	23.10	0.79	1.83	2.46	3.20
LOW	15.0	34.60	0.97	2.25	3.00	3.87
PRESSURE	20.0	46.20	1.12	2.60	3.49	4.47
	25.0	57.70	1.25	2.90	3.90	5.00
	30.0	69.30	1.34	3.17	4.27	5.48
	35.0	80.80	1.48	3.43	4.61	5.90
	40.0	92.40	1.58	3.67	4.93	6.30
	50.0	115.00	1.77	4.10	5.50	7.10
	60.0	138.00	1.94	4.50	6.00	7.74
MEDIUM	70.0	161.00	2.10	4.85	6.50	8.30
PRESSURE	80.0	184.00	2.24	5.20	6.98	8.90
	90.0	207.00	2.37	5.50	7.40	9.50
	100.0	231.00	2.50	5.80	7.80	10.00
	110.0	254.00	2.62	6.08	8.20	10.50
111611	125.0	289.00	2.79	6.48	8.70	11.20
HIGH	150.0	346.00	3.06	7.10	9.50	12.20
PRESSURE	175.0	404.00	3.30	7.67	10.30	13.20
	200.0	462.00	3.53	8.20	11.00	14.10

#### Flow Rate and Size Selection Chart general Notes:

The discharge through a floatvalve is governed by the running pressure maintained at its inlet. In practice this is difficult to measure and so the tables shown indicate the 'estimated' flow rate in G.P.M. that will occur at various static heads for each size of floatvalve or for each size of seat in floatvalves that accept a variety of seat sizes. The flow rates quoted will only occur when the floatvalve is fully open and will reduce as the water level in the tank rises. Excessive pipe runs to the floatvalve will result in lower running pressures and thus reduced flow rates.

RAN	GE										
		Patt. No.	Size	Diaphragm Material	Backnut Material	Seat Bore	Tail Length	Lever Length	Recommend Copper	ed Float Size Plastic	Weight Approx kg
		858 N	1/2"	Rubber	Brass	No. 3 (1/ <sub>8</sub> ")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.45
	NYLON	858 N-Z	1/2"	Rubber	Nylon	No. 3 (1/8")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.40
HIGH	SEAT	858 N-V	1/2"	Rubber	Brass	No. 3 (1/8")	17/8"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.47
PRESSURE		858 N	3/4"	Rubber	Brass	No. 6 (1/4")	11/2"	83/4"	6" x <sup>5</sup> / <sub>16</sub> "W	6" x <sup>5</sup> / <sub>16</sub> "W	0.52
	BRONZE	858 B	1/2"	Rubber	Brass	No. 3 (1/8")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.47
	SEAT	858 B-V	1/2"	Rubber	Brass	No. 3 (1/ <sub>8</sub> ")	17/8"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.49
LOW PRESSURE	NYLON SEAT	860 N	1/2"	Rubber	Brass	No. 9 ( <sup>3</sup> / <sub>8</sub> ")	11/4"	83/4"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.54

Note: It is normal practice to consider the 858 as a high pressure floatvalve and the 860 as a low pressure. It is, however, possible to use a low pressure valve at high pressures provided an appropriate float is used to ensure shut off at the higher pressure. Similarly, a high pressure valve can be used at low pressures provided the resulting lower flow rates are acceptable. Where two seat size options exist for different sizes of floatvalve, select the smaller size of floatvalve if the flow rate through the seat is more than 5% in excess of the flow required.



- · Designed to minimise the effect of changing water pressures.
- Size range from ½" to 1" available in Brass with 1¼" to 6" available in Bronze (Gunmetal).
- Smoothly controlled closure ensures a fast quiet shut off.
- · Line pressure assists closing thus reducing the length of lever required.
- One size of seat and one size of ball float suits any working pressure up to 14 bar or the maximum recommended (detailed below).
- Recommended for temperatures from 0-85°C.

FLOW	FLOW RATE & SIZE SELECTION CHART (GPM)											
	atic ssure				901	– Floatvalve S	Size					
BAR	PSI	1/2"	3/4"	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"	21/2"	3"	4"	6"	
0.5	7.2	4.9	12.5	28.0	50.0	70.0	110.0	250.0	310.0	450.0	800.0	
1.0	14.5	6.9	17.7	38.0	71.0	100.0	150.0	350.0	440.0	630.0	1130.0	
1.5	21.7	8.4	21.7	48.0	87.0	120.0	190.0	430.0	540.0	770.0	1380.0	
2.0	29.0	9.7	25.0	55.0	100.0	140.0	220.0	500.0	620.0	890.0	1600.0	
2.5	36.2	10.9	28.0	62.0	112.0	150.0	250.0	560.0	690.0	1000.0	1780.0	
3.0	43.5	11.9	31.0	68.0	122.0	170.0	270.0	610.0	760.0	1100.0	1950.0	
4.0	58.0	13.8	35.0	80.0	142.0	190.0	320.0	710.0	880.0	1270.0	2250.0	
5.0	72.0	15.3	39.0	88.0	157.0	220.0	350.0	790.0	980.0	1400.0	2500.0	
6.0	87.0	16.8	43.0	96.0	173.0	240.0	380.0	870.0	1070.0	1550.0	2750.0	
7.0	101.0	18.2	46.0	104.0	186.0	260.0	420.0	940.0	1160.0	1670.0	2950.0	
8.0	116.0	19.5	50.0	110.0	200.0	280.0	440.0	1000.0	1250.0	1800.0	3200.0	
9.0	130.0	20.7	53.0	118.0	212.0	300.0	470.0	1060.0	1320.0	1900.0	3400.0	
10.0	145.0	21.7	56.0	125.0	223.0	315.0	500.0	1120.0	1390.0	2000.0	3550.0	
11.0	159.0	22.8	59.0	130.0								
12.0	174.0	23.8	61.0	136.0	NOT SUITABLE FOR PRESSURES							
13.0	188.0	24.9	64.0	142.0	ABOVE 10 BAR							
14.0	203.0	25.7	66.0	148.0								

Flow Rate and Size Selection Chart general Notes

The discharge through a floatvalve is governed by the running pressure maintained at its inlet. In practice this is difficult to measure and so the tables shown indicate the 'estimated' flow rate in G.P.M. that will occur at various static heads for each size of floatvalve or for each size of seat in floatvalves that accept a variety of seat sizes. The flow rates quoted will only occur when the floatvalve is fully open and will reduce as the water level in the tank rises. Excessive pipe runs to the floatvalve will result in lower running pressures and thus reduced flowrates.

RANGE											
		Patt. No.	Size	Piston Material	Backnut Material	Seat Bore	Tail Length	Lever Length	Recommen Copper	ded Float Size Plastic	Weight Approx kg
	BRASS	901	1/2"	brass	brass	<sup>5</sup> / <sub>16</sub> "	1 1/4"	11"	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	4 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "W	0.47
	CONSTRUCTION	901	3/4"	brass	brass	1/2"	11/4"	127/8"	5½" x ½16"W	5" x <sup>5</sup> / <sub>16</sub> "W	0.91
		901	1"	brass	brass	3/4"	11/2"	101/16"	6" x <sup>7</sup> / <sub>16</sub> "W	6" x <sup>7</sup> / <sub>16</sub> "W	1.56
		901	11/4"	bronze	bronze	11/64"	17/8"	1013/16"	8" x <sup>9</sup> / <sub>16</sub> "W	8" x <sup>9</sup> / <sub>16</sub> "W	3.40
REDUCED		901	11/2"	bronze	bronze	13/16"	17/8"	1013/16"	10" x <sup>9</sup> / <sub>16</sub> "W	10" x <sup>9</sup> / <sub>16</sub> "W	3.42
BORE		901	2"	bronze	bronze	11/2"	21/8"	111/8"	12" x <sup>5</sup> / <sub>8</sub> "W	12" x <sup>5</sup> / <sub>8</sub> "W	5.84
	BRONZE	901	21/2"	bronze	bronze	21/4"	3"	19"	12" x <sup>9</sup> / <sub>16</sub> "W	-	5.11
	CONSTRUCTION	901	3"	bronze	bronze	21/2"	31/2"	20"	14" x <sup>3</sup> / <sub>4</sub> "W	-	8.25
		901	4"	bronze	bronze	3"	4"	21"	15" x <sup>3</sup> / <sub>4</sub> "W	-	12.78
		901	6"	bronze	bronze	4"	5"	23"	16" x <sup>7</sup> / <sub>8</sub> "W	-	24.55

Note: Where two sizes or two patterns of floatvalve are capable of providing the required flow rate, select the smaller size if the indicated flow rate is more than 10% in excess of the flow rate required.

## **50 DRAINCOCKS & FITTINGS**



DRAINCOCKS RANGES											
	DRAINCOCKS HEAVY PATTERN Sizes										
Patt. No.	Description	1/2"	3/4"								
833	Brass Draincock, Type A to BS 2879/2, gland seal on spindle	•	•								
833LS	Brass Draincock, Type A to BS 2879/2, with Lockshield, gland seal on spindle	•									
833GM	Brass Draincock, Type A to BS 2879/2, gland seal on spindle	•									
833GMLS	Brass Draincock, Type A to BS 2879/2, with Lockshield, gland seal on spindle	•									
838	Brass Draincock, Type A to BS 2879/2, with plain inlet, gland seal on spindle	•									
	DRAINCOCKS LIGHT PATTERN										
Patt. No.	Description	1/2"	3/4"								
834	Brass Draincock, Type B	•	•								
836	Brass Draincock, Type B with plain inlet	•									

**STANDARDS** Heavy pattern draincocks are manufactured to BS 2879/2 Type A. Light pattern draincocks conform to Pegler performance standards.

**MATERIAL** Draincocks are manufactured in Forged Brass or Gunmetal. Pressure/Temperature Rating 20 bar at 120°C (max working).

THREADING Male connections are to BS 21 Taper.

## **SPRING SAFETY VALVES RANGE**

		Siz	zes
Patt. No.	Description	1/2" x 3/4" Outlet	3/4" x 1" Outlet
816 - SV	Spring safety valve	•	•

MATERIAL All are manufactured in Brass.

**THREADING** Female x Female, supplied with male nipple. **PRESSURE RATING** Factory set at 2.5 bar.

**SPRING** Stainless steel.

## **BACKNUTS RANGES**

	Sizes						
Patt. No.	Description	1/2"	3/4"	1"	11/4"	11/2"	2"
915	Heavy Pattern	•	•	•			
915L	Light Pattern	•	•	•	•	•	•

MATERIAL All are manufactured in Brass.

THREADING BS 2779 Parallel.

## **AIRCOCK KEYS**

		Size	es
Patt. No.	Description	1/8"	1/4"
1069	Radiator Air Cock	•	•
Key	Aircock Key	•	

**MATERIAL** All are manufactured in Brass to BS EN 12164. **THREADING** (1069) BS 21 Taper.

## PRESSURE EQUIPMENT DIRECTIVE

	Sizes					
Patt. No.	1/2"	3/4"				
833GM SEP		-				
816 - SV	Cat 4	Cat 4				

Category 4 is marked CE1115.

	SINK WASTES	
		Finish
		Chromium
Patt. No.	Description	Plate
11/2" 772	Sink waste, slotted, $3^3/8^{"}$ flange, $3^1/2^{"}$ tail, metal backnut	•
11/ <sub>2</sub> " 772 NS	Sink waste, no slot, 3 <sup>3</sup> / <sub>8</sub> " flange, 3 <sup>1</sup> / <sub>2</sub> " tail, metal backnut	•
1 <sup>1</sup> / <sub>2</sub> " 772 NS/1 <sup>3</sup> / <sub>8</sub> "	Sink waste, no slot, 3 <sup>3</sup> / <sub>8</sub> " flange, 1 <sup>3</sup> / <sub>8</sub> " tail, metal backnut	•
11/2" 779	Combined sink waste and overflow, plastic backnut	•
	BASIN WASTES	
		Finish
Patt. No.	Description	Chromium Plate
1 <sup>1</sup> / <sub>4</sub> " 772L/ PN	Basin waste, slotted, $2^{7}/_{16}$ " flange, $3^{1}/_{2}$ " tail, plastic backnut	•
1 <sup>1</sup> / <sub>4</sub> " 772L	Basin waste, slotted, $2^{7}/_{16}$ " flange, $3^{1}/_{2}$ " tail, metal backnut	•
1/ <sub>4</sub> " 772LNS	Basin waste, no slot, 2 <sup>7</sup> / <sub>16</sub> " flange, 3 <sup>1</sup> / <sub>2</sub> " tail, metal backnut	•
11/4" 778	Combined basin waste and overflow, plastic backnut	•
	BATH WASTES	
		Finish
Patt. No.	Description	Chromium Plate
111/2" 765	Bath waste, 27/8" flange, 11/8" tail, metal backnut	•
11/2" 765/2	Bath waste, 2 <sup>7</sup> / <sub>8</sub> " flange, 2" tail, metal backnut	•
11/2" 771	Combined bath waste with pop-up	•
11/2" 777	Combined bath waste and overflow, plastic backnut	•
	SHOWER WASTES	
		Finish
Patt. No.	Description	Chromium Plate
1 <sup>1</sup> / <sub>2</sub> " 762	Shower waste, flush grated, slotted, 33/8" flange, 31/2" tail, metal backnut	•
1 <sup>1</sup> / <sub>2</sub> " 762NS	Shower waste, flush grated, no slot, 33/8" flange, 31/2" tail, metal backnut	•
11/ <sub>2</sub> " 764NS	Shower waste, flush grated, no slot, 27/8" flange, 23/8" tail, metal backnut	•
	STOPPERS AND PLUGS	
		Finish
Patt. No.	Description	Chromium Plate
774	Taphole stopper	•
11/ <sub>4</sub> " Plug	Brass Basin Plug	•
11/2" Plug	Brass Bath Plug	

RANGE



## STANDARDS

Where a Mazak (metal) backnut is utilised all wastes comply with BS 3380:1982.

## MATERIAL

All wastes are manufactured in Brass to BS 2872 or BS 2874. The majority are supplied with backnuts in Mazak (metal) to BS 1004:1972 Alloy A.

## 52 INSTALLATION OF TYPE A COMPRESSION FITTINGS



## **FEATURES**

Manufactured to EN 1254 (formerly BS 864/2), and carrying the prestigious Kite mark, Prestex 'Type A' compression fittings are suitable for mechanically joining copper or stainless steel tube by means of compressing a cone onto the tube without the application of heat.

The range is designed for use with copper tube to BS EN 1057:1996 (formerly BS 2871:Part 1), BS 2871:Part 2, or stainless steel tube to BS 4127:1994.

Fittings are available in a choice of brass or DZR brass bodies, all with brass capnuts as standard.

Sizes range from 8mm up to 54mm, covering a wide range of product alternatives including straights, elbows, tees, crosses and reducers to cope with all installation requirements.

## **GENERAL SPECIFICATION**

Nominal Pipe Size	Guide to Tightening				
8mm	³⁄₄ to 1 Turn				
10mm	³⁄₄ to 1 Turn				
12mm	³⁄₄ to 1 Turn				
15mm	³⁄₄ to 1 Turn				
18mm	3∕ <sub>4</sub> to 1 Turn				
22mm	3∕ <sub>4</sub> to 1 Turn				
28mm	3∕ <sub>4</sub> to 1 Turn				
35mm	1 to 11/ <sub>4</sub> Turns				
42mm	1 to 11/4 Turns				
54mm	1 to 11/4 Turns				

#### Notes

- 1. Jointing compounds or sealants are not necessary with PRESTEX fittings; the use of these materials could impair the efficiency of the joint and may contravene local water regulations.
- 2.Over-tightening will not produce a better joint, and may lead to problems in service.
  Type A fittings as specified in EN 1254 are suitable for use at the following pressures and temperatures.

TECHNICAL S	ECHNICAL SPECIFICATION					
Medium	Service temp up to °C	Max worki bar	ng pressure psi			
Water OR Light Mineral Oils 8 to 54mm sizes	30 65 110 120	16 10 6 5	232 145 87 72			
Compressed Air Non-Shock 8 to 28mm sizes only	30	7	100			
Saturated Steam	120	3	43			
LPG 8 to 28mm sizes only	30	1	15			
Natural Gas 8 to 28mm sizes	60	5	73			

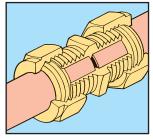
Note: Chromium plated Type A compression fittings comply with the same criteria as un-plated fittings.

## **HOW TO MAKE A TYPE A JOINT**

 Ensure that the fitting is the correct size for the pipe being used. Cut the pipe to length, making sure that the cut is square and the pipe is not deformed. Remove any burrs from the cut ends.

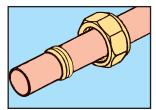
## **EITHER**

2a. Insert the pipe into the fitting without removing the capnut and cone, ensuring that the cone is in the correct position and that the pipe makes firm contact with the stop in the body of the fitting.

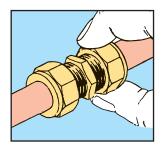


## OR

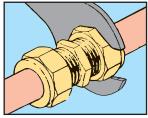
2b. Unscrew the capnut and cone from the fitting. Slide the capnut and cone onto the pipe, and insert the pipe into the fitting as far as the stop.



 In both cases, tighten the capnut onto the fitting until the pipe cannot be rotated by hand. A drop of light machine oil on the threads will facilitate tightening (particularly on larger sizes).



 Tighten the capnut with a good, well-fitting spanner, using the table below as a guideline taking into consideration any variations in installation conditions.





Manufactured to EN 1254-3 and EN 1254-4 and approved under the renowned WRc approval scheme, Prestex PL compression fittings are suitable for mechanically joining metric or imperial sized polyethylene by means of compressing a cone onto the tube which is internally supported by a stiffener.

The range is designed for use with metric sized MDPE polyethylene pipe to BS 6572:1985 and BS 6730:1986 or for use with imperial sized polyethylene pipe to BS 1972:1967 and BS 3284:1967. Fittings have bodies and capnuts in dezincification resistant (DZR) metal.

Sizes range from 20mm to 32mm. Fittings and stiffeners are available to join metric sizes to imperial and polyethylene pipe to copper or iron, making the range versatile and adaptable for all installation requirements.

#### **GENERAL SPECIFICATION** Maximum working pressure **Pipe** bar psi BS 6572 Blue or 12 175 Black Metric Size BS 1972 or BS 3284 BLACK Imperial Size: CLASS B 87 CLASS C 9 130 CLASS D 12 175

PRESTEX PL fittings are suitable for cold water applications up to 20°C to the pressure limit of the pipe.

Note: Blue pipe to BS 6572 is intended for underground use only. When used above ground it should be protected from sunlight by enclosure in ducts or buildings.

TECHNICAL SPECIFICATION						
Maximum working pressure						
Size	20mm 25mm		32mm			
TEST FORCE (KILO NEWTONS)	1.9	2.5	4.1			
TEST FORCE (LBS)	427	562	921			

Note: Chromium plated Type A compression fittings comply with the same criteria as

## **HOW TO MAKE A PL COMPRESSION JOINT**

- Ensure that the fitting is the correct size for the pipe used. Cut the pipe to length, making sure that the cut is square and the pipe is not deformed. Remove any burrs from the cut ends.
- 2. Insert the appropriate stiffener fully into the end of the pipe until the flange of the stiffener is in contact with the pipe end. If necessary use a sharp knife to produce a small chamfer on the leading edge of the pipe bore.

## **EITHER**

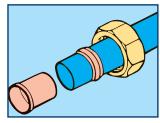
3a. Insert the pipe into the fitting without removing the capnut and cone, ensuring that the cone is in the correct position and that the pipe makes firm

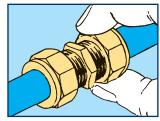
contact with the stop in the body of the fitting.

## OR

3a. Unscrew the capnut and cone from the fitting. Slide the capnut and cone onto the pipe, and insert the pipe into the fitting as far the as the stop.

- 4. In both cases, tighten the capnut onto the fitting by hand as far as possible. A drop of light machine oil on the threads will facilitate tightening (particularly on larger sizes).
- 5. Fully tighten the capnut with a good well-fitting spanner.





Note: Jointing compounds or sealants are not necessary with PRESTEX PL fittings: the use of these materials could impair the efficiency of the joint.

Note: Because metric Prestex PL cones are not symmetrical you should always check to see that the cone is the right way round i.e that the leading edge is the smaller.

## **DESIGN CONSIDERATIONS**

Stress corrosion cracking (SCC) is a phenomenon that occurs occasionally with brass compression fittings. It is almost always introduced during installation, either from over-tightening of fittings or contamination from a corrosive substance.

The usual corrosive substance involved in SCC is ammonia or ammoniacal compounds, which can be found in cleaning fluids, refrigeration gases, sewage waste products, building materials, insulating materials (especially foams) and flame and smoke retarding treatments. An essential ingredient in the SCC process is moisture. Moisture on the fitting or pipework allows the corrosive substance to collect and become more concentrated. This is a particular problem in chilled water installations, where insulating materials allow the condensed moisture to be retained and kept in close contact with the fitting surface.

Pegler does not recommend the use of brass components in chilled water applications.

Where all components upon which the integrity of the fitting is dependent, ones made from SCC resistant or immune materials, such as copper or gunmetal, are recommended. If compression fittings are used then they should be assembled exactly in accordance with our published instructions and securely bound by a moisture barrier such as Densotape® to prevent moisture build up on the fitting.

The following installation practices should be adhered to when installing compression fittings in order to avoid SCC:

- 1. Do not overtighten brass components.
- 2. Use correctly fitting spanners.
- 3. Use a drop or two of light oil on the threads of fittings of sizes 35mm and above.
- 4. Avoid contaminating the threads or nuts with jointing compounds.

Minimise the risk of contamination from a potential corrosive substance. Wrapping susceptible fittings in a vapour barrier or applying impermeable paints can be helpful in preventing contact with a corrosive substance.

## PRESSURE/TEMPERATURE RATING TABLES

	Maximum Permissible Working Pressure (Bar)							
	PN16	Class100	Class 150	PN20	PN25	PN32	Class 250	PN40
SERVICE TEMP °C	Flanged or Threaded	Flanged	Flanged	Threaded	Flanged or Threaded	Threaded	Threaded	Threaded
	Series B	Series B	Series B	Series B	Series B	Series B	Series A	Series A
-10 to 66	16.0	13.8	15.5	20.0	25.0	32.0	34.5	40.0
100	16.0	11.9	14.3	20.0	25.0	32.0	34.5	40.0
120	13.5	11.1	13.5	17.2	21.8	28.3	34.5	40.0
150	9.5	9.3	12.4	13.0	16.5	22.8	34.5	38.5
170	7.0	6.9	11.7	10.3	12.8	19.2	34.5	35.5
180			11.3	9.0	11.3	17.4	34.5	34.0
186			11.1		10.5	16.2	33.1	32.8
198						14.0	30.4	30.4
200							30.2	30.0
220							25.8	25.5
250							19.4	19.5
260							17.5	17.5

Note: Intermediate values may be interpolated. Full details should be obtained from the main catalogue pages.

	Ball Valves	Gate Valves	Globe Valves	Check Valves
PN40	PB700			
PN32		1072	1029 1031	1039
PN25	PB500 PB100			1060A 1062
PN20		1070/125 1068 1068LS		
PN16	PB300*	63* GM63*		
UNRATED		1065 P81M		1063 1064

\*Denotes Temperature/Pressure limited by end connection.

## **CONVERSION FORMULAS**

## 1. TEMPERATURE

Celcius to Fahrenheit

$$^{\circ}F = \left(\frac{9 \times ^{\circ}C}{5}\right) +32$$

## 2. PRESSURE

Bar to psi x 14.5038

#### 3. WEIGHT

Kg to lbs x 2.2046

## 4. MEASUREMENT

mm to inches ÷ 25.4

Fahrenheit to Celsius

$$^{\circ}C=5x\left(\frac{^{\circ}F-32}{9}\right)$$

psi to bar ÷ 14.5038

lbs to Kg ÷ 2.2046

inches to mm x 25.4

## **GAS APPLICATIONS**

Where indicated Pegler valves are suitable for use with water, steam, oil and certain gases. It is common practice for manufacturers to claim that their valves are suitable with gas. In fact, gases vary widely in their properties and the following explanation is offered for guidance.

Gases may be classified as follows:-

## Class 1. INERT

Air, argon, carbon dioxide, helium, nitrogen

## Class 2. COMBUSTIBLE

Hydrogen, methane, natural gas, town gas

## Class 3. CORROSIVE

Chlorine, sulphur dioxide

Class 4. OXYGEN

# THE SUITABILITY OF PEGLER VALVES FOR HANDLING DIFFERENT CLASSES OF GAS

## Class 1. INERT

Entirely suitable. We recommend the renewable disk valves for preference. When ordering please state the specific purpose for which the valve is required.

## Class 2. COMBUSTIBLE

There is no technical reason why our valves should not be used. However, in view of the hazards involved and the special requirements and approvals required by British Gas, we do not make any general recommendation for this class of gas unless specified, but will be pleased to discuss specific applications.

## Class 3. CORROSIVE

Copper alloy valves are only suitable for such application if moisture is completely absent.

## Class 4. OXYGEN

Oxygen can react dangerously with oils and greases, and normal lubricants cannot be used so brass/bronze valves are not recommended for this use.



## The perfect commercial partnership



Pegler is an expert in the Yorkshire is a specialist production of Taps, Mixers and Valve products. It boasts an unrivalled track record for integrity, quality, reliability



and innovation.





VALVES AND FITTINGS





in the production of metal plumbing and heating fittings. It has an established reputation for manufacturing quality products.



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THE PUSH-FIT JOINTING SYSTEM



THE PRESS-FIT JOINTING SYSTEM



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COMMERCIAL VALVES

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Southern team:

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Western team:

Telephone: 0870 1200283 Fax: 01302 560109

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Telephone: 0870 1200282 Fax: 01302 560458

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#### **EXPORT**

Telephone: +44 (0) 1302 855656 Fax: +44 (0) 1302 730513 Email: export@pegler.co.uk Technical helpline: 0870 1200285



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