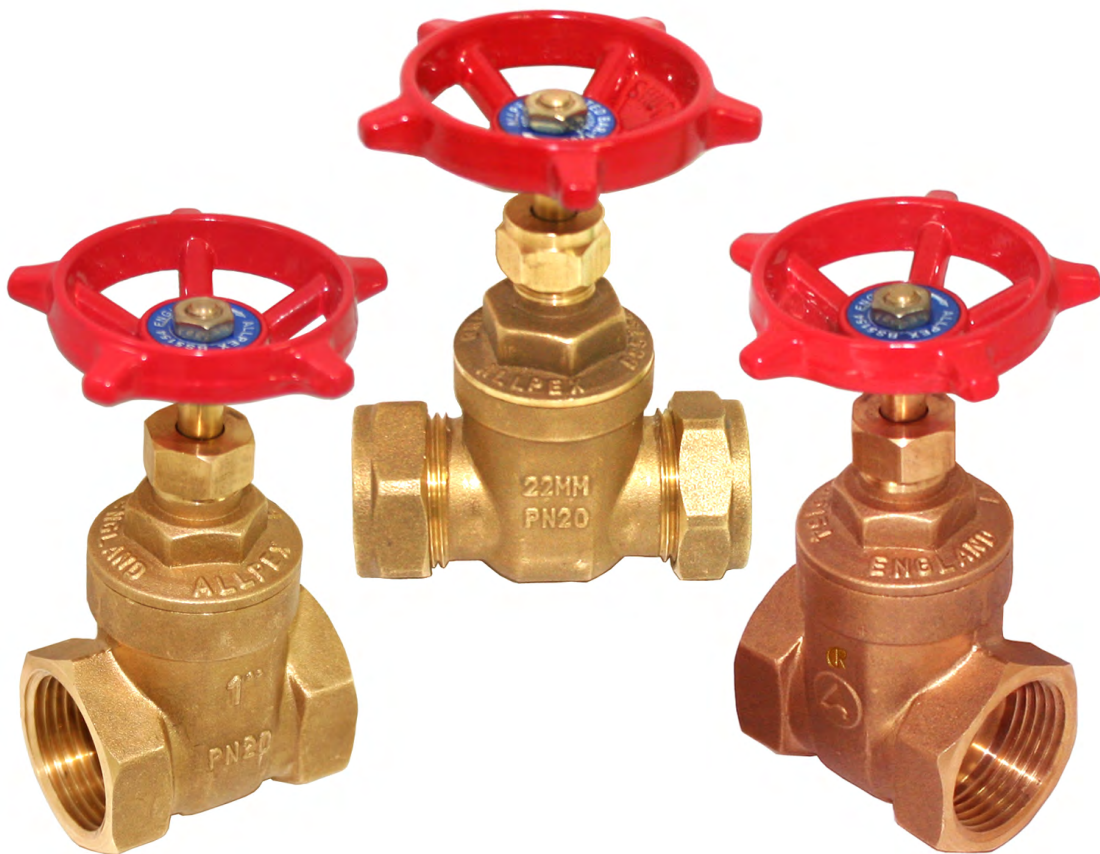




**Allpex®**

**Full Bore Gate Valves - PN 20  
(to BS EN 12288:2003 & BS 5154/B)  
Forged Brass & Cast Bronze (Gunmetal) with  
Compression ends to EN 1254 Part 2 &  
Female threaded ends to BS 21**



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# Allpex GateValves - Forged Brass/Cast Bronze, Full Bore Female Threaded & Compression Ends - Product Information.

## Scope & Application:

Allpex offers high quality forged brass/bronze full bore gate valves with female thread connections and full bore gate valves with compression ends suitable for applications involving steam, water and viscous liquids such as heavy oils, varnish, molasses and other non-flammable viscous liquids. Gate valves are advantageous in applications involving slurries, as their gates can cut right through the slurry. The main features of Allpex gate valves include high quality lubricated packing, can be re-packed under pressure, they have a non rising stem and a solid wedge.

**Note:** Suitable for steam, water & oil. Not recommended for air.

## Standards & Specifications:

Allpex Gate Valves are made to confirm to BS EN 12288:2003 & BS 5154 Part B with

- Female threaded end connections to BS 21 &
- Brass compression end connections to BS EN 1254.2 (previously BS 864.2)

## Materials and Specification:

**BS EN 12164:1998** (previously BS 2874:1986) - Specification for copper and copper alloys. Rod for free machining purposes. Alloy CW614N (CZ121), CW617N (CZ122) and CW602N (CZ132) for DZR use.

**BS EN 12165:1998** - Specification for copper and copper alloys. Wrought and unwrought forging stock. Alloy CW617N (CZ122) & CW602N (CZ132) for DZR use.

**BS EN 1982:1999** (previously BS 1400:1985) - Specification for copper and copper alloys. Ingots and castings (Bronze / Gunmetal RG5 / LG2C)

**BS EN 10226-1:2004/BS 21:1985** Specification for pipe threads for tubes and fittings where pressure-tight joints are made on the threads (metric dimensions)

## Marking:

**Body marking** - nominal size, nominal pressure rating (PN), body material designation, manufacturer's name or trade mark, CR for DZR applications.

**Body or identification plate marking** - British standard no (i.e. BS 5154), designation of the series (A or B).

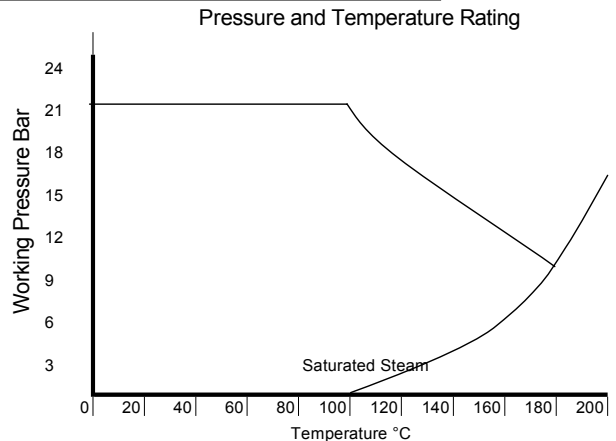
## Technical Service:

Our team of specialist engineers will be pleased to offer any help or advice for installations and applications.

### Forged Brass Full Bore Female Gate Valves (Female taper threads to BS 21)

#### Pressure and Temperature Rating:

MAXIMUM PRESSURE RATING				
Size	Maximum Pressure (in psi)		Test Pressures (in psi)	
	Temperatures up to 212°F	Temperatures up to 356°F	Shell	Seat
1/2" to 4"	290.0	130.0	435.0	319.0
Size	Maximum Pressure (in bar)		Test Pressures (in bar)	
	Temperature up to 100°C	Temperature up to 180°C	Shell	Seat
1/2" to 4"	20.0	9.0	30.0	22.0



#### Material Specification:

No.	Component	Material
2	Wedge	1/2" to 2 1/2" - Forged Brass CW617N (BS EN 12165:1998); 3" & 4" - Forged or Gravity Die Cast Brass CW617N (BS EN 12165:1998).
3	Bonnet	1/2" to 3" - Forged Brass CW617N (BS EN 12165:1998); 4" - Forged or Gravity Die Cast Brass CW617N (BS EN 12165:1998).
4	Stem	Brass Bar CW614N (BS EN 12164:1998).
5	Stem Ring	Brass Bar CW614N (BS EN 12164:1998).
6	Gland	Brass Bar CW614N (BS EN 12164:1998).
7	Gland Nut	1/2" to 1" - Brass Bar CW614N (BS EN 12164:1998); 1 1/4" to 4" - Forged Brass CW617N (BS EN 12165:1998).
8	Handle wheel Nut	Brass Bar CW614N (BS EN 12164:1998).
9	Gasket (Washer)	PTFE
10	Gland Packing	Graphited non Asbestos
11	Handle wheel	Aluminium Die cast
12	Disc	Aluminium sheet

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# Allpex Gate Valves - Forged Brass/Cast Bronze, Full Bore Female Threaded & Compression Ends - Product Information.

## Product Ordering and User Information for Brass Female Gate Valves (Female Taper Threads to BS 21)

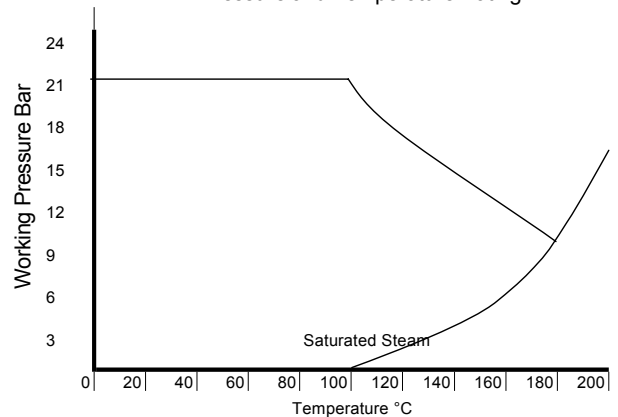
Product Code	Thread Size in inch (Female Taper)	Dimensions			Flow Rate		Packaging	
		Face To Face <b>A</b>	Height <b>B</b>	H'Wheel Diameter <b>C</b>	Cv	Kv	Bag Qty.	Box Qty.
VB14B20-D	1/2"	37	72.8	58	16.5	14.2	10	60
VB14B20-E	3/4"	40	79.3	58	38.0	33.0	10	60
VB14B20-F	1"	55	91.8	68	68.0	59.0	5	40
VB14B20-G	1 1/4"	57	123.5	75	106.0	90.0	5	20
VB14B20-H	1 1/2"	57	127.5	96	152.0	132.0	5	10
VB14B20-I	2"	70	144.5	104	271.0	233.0	5	10
VB14B20-J	2 1/2"	86	210	114	500.0	429.0	1	6
VB14B20-K	3"	90	210	114	797.0	682.0	1	4
VB14B20-L	4"	98	239.5	144	1275.0	1090.0	1	2

## DZR Brass / Bronze Full Bore Female Gate Valves (Female taper threads to BS 21)

### Pressure and Temperature Rating:

MAXIMUM PRESSURE RATING				
Size	Maximum Pressure (in psi)		Test Pressures (in psi)	
	Temperatures up to 212°F	Temperatures up to 356°F	Shell	Seat
1/2" to 4"	290.0	130.0	435.0	319.0
Size	Maximum Pressure (in bar)		Test Pressures (in bar)	
	Temperatures up to 100°C	Temperatures up to 180°C	Shell	Seat
1/2" to 4"	20.0	9.0	30.0	22.0

Pressure and Temperature Rating



### Material Specification:

Number	Component	Material
2	Wedge	1/2" to 4" - Gunmetal (BS EN 1982:1999/ BS 1400 LG 2).
3	Bonnet	DZR Brass [CW602N (EN 12165)] or Gunmetal (BS EN 1982:1999/ 1400 RG 5 / LG 2).
4	Stem	DZR Brass CW602N (BS EN 12165:1998).
5	Stem Ring	DZR Brass CW602N (BS EN 12165:1998).
6	Gland	DZR Brass CW602N (BS EN 12165:1998).
7	Gland Nut	1/2" to 1" - Brass Bar CW614N (BS EN 12164:1998); 1 1/4" to 4" - Forged Brass CW617N (BS EN 12165:1998).
8	Handle wheel Nut	Brass Bar CW614N (BS EN 12164:1998).
9	Gasket (Washer)	PTFE
10	Gland Packing	PTFE
11	Handle wheel	Aluminium Die cast
12	Disc	Aluminium sheet

## Product Ordering and User Information for DZR Brass / Bronze Female Gate Valves (Female Taper Threads to BS 21)

Product Code	Thread Size in inch (Female Taper)	Dimensions			Flow Rate		Packaging	
		Face To Face <b>A</b>	Height <b>B</b>	H'Wheel Diameter <b>C</b>	Cv	Kv	Bag Qty.	Box Qty.
VG14B20-D	1/2"	37	72.8	58	16.5	14.2	10	60
VG14B20-E	3/4"	40	79.3	58	38.0	33.0	10	60
VG14B20-F	1"	55	91.8	68	68.0	59.0	5	40
VG14B20-G	1 1/4"	57	123.5	75	106.0	90.0	5	20
VG14B20-H	1 1/2"	57	127.5	96	152.0	132.0	5	10
VG14B20-I	2"	70	144.5	104	271.0	233.0	5	10
VG14B20-J	2 1/2"	86	210	114	500.0	429.0	1	6
VG14B20-K	3"	90	210	114	797.0	682.0	1	4
VG14B20-L	4"	98	239.5	144	1275.0	1090.0	1	2



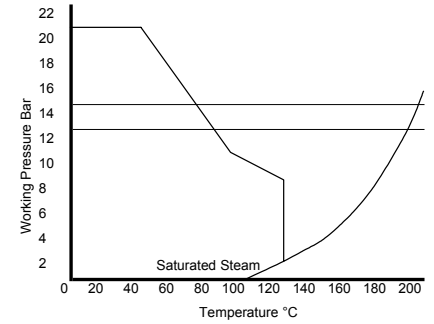
# Allpex Gate Valves - Forged Brass/Cast Bronze, Full Bore Female Threaded & Compression Ends - Product Information.

## Brass, DZR Brass & Bronze/Gunmetal Compression Full Bore Gate Valves (Compression Ends to BS 1254.2 & 3)

### Pressure and Temperature Rating:

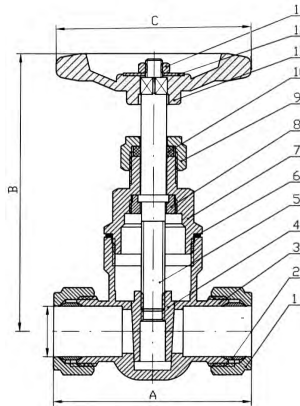
MAXIMUM PRESSURE RATING				
Size in mm	Maximum Pressure Conditions (in psi)		Test Pressures (in psi)	
	Temperatures up to 86°F	Temperatures up to 248°F	Shell	Seat
15 to 54	290.0	116.0	435	290
Size in mm	Maximum Pressure (in bar)		Test Pressures (in bar)	
	Temperatures up to 30°C	Temperatures up to 120°C	Shell	Seat
15 to 54	20.0	8.0	30	20

Pressure and Temperature Rating



### Material Specification:

No.	Component	Brass	DZR Brass	Bronze	
		Forged Brass CW617N (BS EN 12165:1998).			
1	Compression Nut	Forged Brass CW617N (BS EN 12165:1998).			
2	Compression Ring	Brass / Copper (Cu DHP CW024A)	DZR Brass CW602N (BS EN 12165:1998) / Copper (Cu DHP CW024A)		
3	Body	Forged Brass CW617N (BS EN 12165:1998).	DZR Brass CW602N (BS EN 12165:1998)	Gunmetal (BS EN 1982:1999/ BS 1400 LG 2 & LG 4)	
4	Wedge	Forged Brass CW617N (BS EN 12165:1998).	Forged DZR Brass CW602N (BS EN 12165:1998)	Gunmetal (BS EN 1982:1999/ BS 1400 LG 2 & LG 4)	
5	Stem	Brass Bar CW614N (BS EN 12164:1998).	DZR Brass CW602N (BS EN 12165:1998)	Gunmetal (BS EN 1982:1999/ BS 1400 LG 2 & LG 4)	
6	Gasket	PTFE			
7	Bonnet	Forged Brass CW617N (BS EN 12165:1998).	Forged Brass CW617N (BS EN 12165:1998) / DZR Brass CW602N (BS EN 12165:1998)	Gunmetal (BS EN 1982:1999/ BS 1400 LG 2 & LG 4)	
8	Stem Ring	Brass Bar CW614N (BS EN 12164:1998).	DZR Brass CW602N (BS EN 12165:1998)		
9	Gland Nut	Brass Bar [CW617N (BS EN 12164:1998) / Forged Brass CW617N (BS EN 12165:1998).			
10	Gland Packing	PTFE			
11	Handle wheel	Aluminium Die cast			
12	Name Plate	Aluminium sheet			
13	Handle wheel Nut	Brass Bar CW614N (BS EN 12164:1998).			



### Product Ordering and User Information: Brass, DZR Brass & Bronze Gate Valves (Compression Ends to BS EN 1254.2).

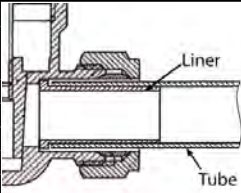
Product Codes			Tube OD Size (in mm)	Dimensions			Packaging	
Brass	DZR Brass	Bronze		Face To Face (in mm) A	Height (in mm) B	H'Wheel Diameter (in mm) C	Bag Qty.	Box Qty.
VB10B20-15	VBZ10B20-15	VG10B20-15	15	62.5	80.0	58	10	50
VB10B20-22	VBZ10B20-22	VG10B20-22	22	70.0	87.0	58	10	40
VB10B20-28	VBZ10B20-28	VG10B20-28	28	80.0	91.5	68	5	25
VB10B20-35	VBZ10B20-35	VG10B20-35	35	104.0	115.0	75	5	20
VB10B20-42	VBZ10B20-42	VG10B20-42	42	111.0	135.0	96	2	10
VB10B20-54	VBZ10B20-54	VG10B20-54	54	131.0	163.5	104	1	5

### Compression Gate Valves for Polyethylene, PPR and PEX Tubes (Compression Ends to BS EN 1254.3).

Product Codes			Tube OD Size (in mm)	Dimensions			Packaging	
Brass	DZR Brass			Face To Face (in mm) A	Height (in mm) B	H'Wheel Diameter (in mm) C	Bag Qty.	Box Qty.
VB10B20-16	VBZ10B20-16		16	70.0	80.0	58	10	50
VB10B20-20	VBZ10B20-20		20	80.0	87.0	58	10	40
VB10B20-25	VBZ10B20-25		25	90.0	91.5	68	5	25
VB10B20-32	VBZ10B20-32		32	110.0	115.0	75	5	20

### Copper Liners for Plastic Tubes when used with Compression Ends.

Tube Nominal OD	MDPE Tube (BS 6572 & BS 6730)			PEX Tube			PPR Tube SDR 7		
	W.T. min	W.T. max	MDPE Liner Product code	W.T. min	W.T. max	PEX Liner Product code	W.T. min	W.T. max	PPR Liner Product code
15				1.8	2.0	LC3-1518			
16				2.2	2.4	LC3-1622			
20	2.3	2.6	LC3-2023	2.5	2.7	LC3-2025	2.8	3.3	LC3-2028
25	2.3	2.6	LC3-2523				3.5	4.1	LC3-2535
32	3.0	3.4	LC3-3230				4.4	5.1	LC3-3244



Note: Liners available for other wall thicknesses (For full range of liners refer to our liner list).

**Allpex Ltd.**