











Bronze Valves



PAGE

	BR 118 - BRONZE BALL VALVE - PN 25	2
	BR 120 - BRONZE BALL VALVE - 600 PSI	3
	BR 220 - BRONZE STRAINER.....	4
	BR 325 - BRONZE CHECK VALVE.....	5
	BR 432 - BRONZE GLOBE VALVE.....	6
	BR 516 - BRONZE GATE VALVE - PN 16	7
	BR 520 - BRONZE GATE VALVE - PN 20	8
	BR 525 - BRONZE GATE VALVE - PN 25	9
	BR 582 - BRONZE GATE VALVE - PN 32	10
	BR 825 - BRONZE FIXED ORIFICE DOUBLE REGULATING VALVE	11
	Valve Instalation Tips	12

BR 118

BRONZE BALL VALVE

WORKING PRESSURE PN 25

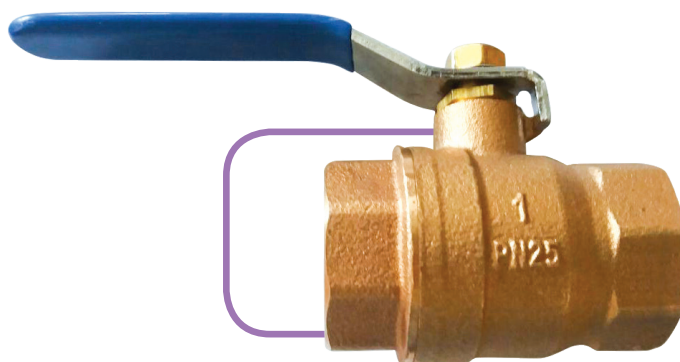
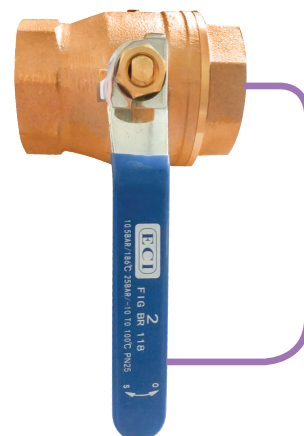
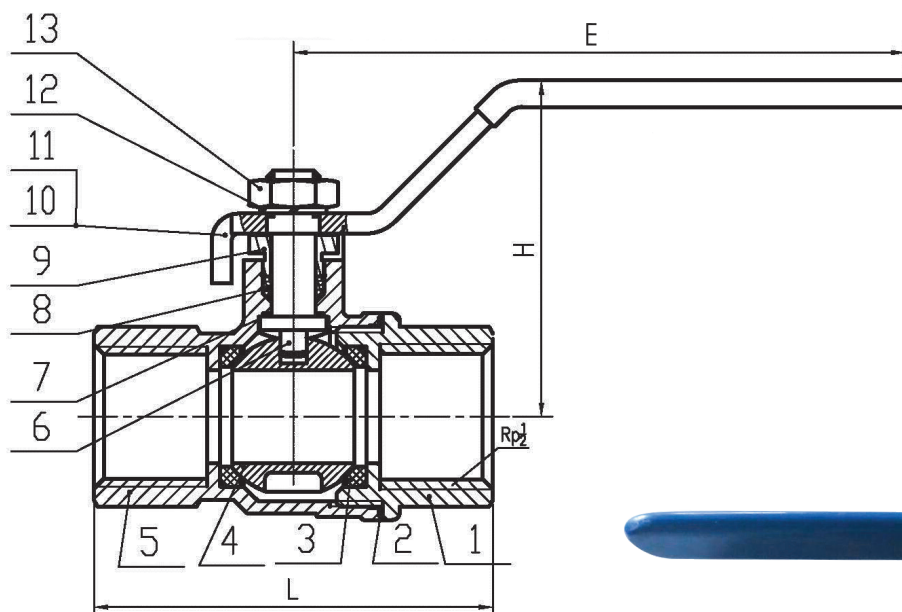
FULL BORE

TAPER PIPE THREADED TO ISO 7

DESIGN STANDARD GB/T8464



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Specifications:

- WORKING PRESSURE:
PN 25
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- PORT SIZE:
 $\frac{1}{2}$ " UP TO 2"
FULL PORT
- TESTING PRESSURE: 100 PSI AIR FOR SHELL & SEAT
- TAPER PIPE THREADED TO NPT AND ISO 7-1 (ex. BS-21)
- SUITABLE MEDIA: WATER, OIL, AIR, STEAM & GAS

Dimensions (mm)

DN	SIZE INCH	L	H	E	WEIGHT KGS
15	$\frac{1}{2}$ "	53	44	95	0.228
20	$\frac{3}{4}$ "	61	51	110	0.366
25	1"	71	55	110	0.539
32	1 $\frac{1}{4}$ "	85	65	140	0.838
40	1 $\frac{1}{2}$ "	92	70	140	1.133
50	2"	114	83	160	1.880

Material

No.	DESCRIPTION	MATERIAL
1	SEAT RETAINER	BRONZE CC491K
2	PACKING	PTFE
3	SEAT	PTFE
4	BALL	BRASS CW617N
5	BODY	BRONZE CC491K
6	STEM	DZR BRASS CW602N
7	STEM GASKET	PTFE
8	PACKING	PTFE
9	GLAND NUT	BRASS CW617N
10	LEVER	MILD STEEL CHROME PLATED
11	LEVER COVER	PVC
12	WASHER	STAINLESS STEEL
13	NUT	STAINLESS STEEL



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BR 120

BRONZE BALL VALVE

600 PSI / 41.4 BAR WOG

150 PSI / 10.3 BAR WSP

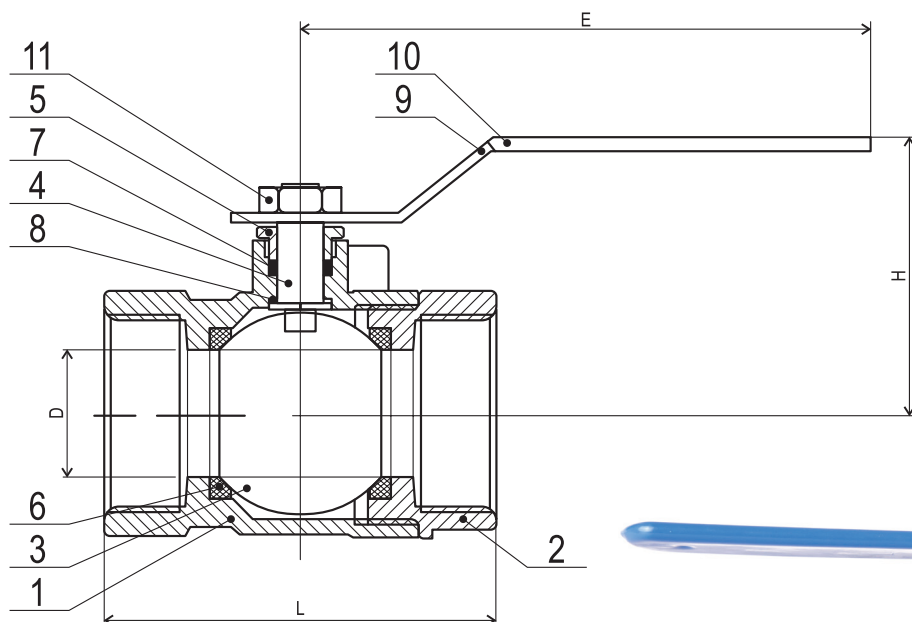
1/2"~1" FULL PORT

1 1/4"~4" CONVENTIONAL PORT

CONFORMS TO MSS SP-110

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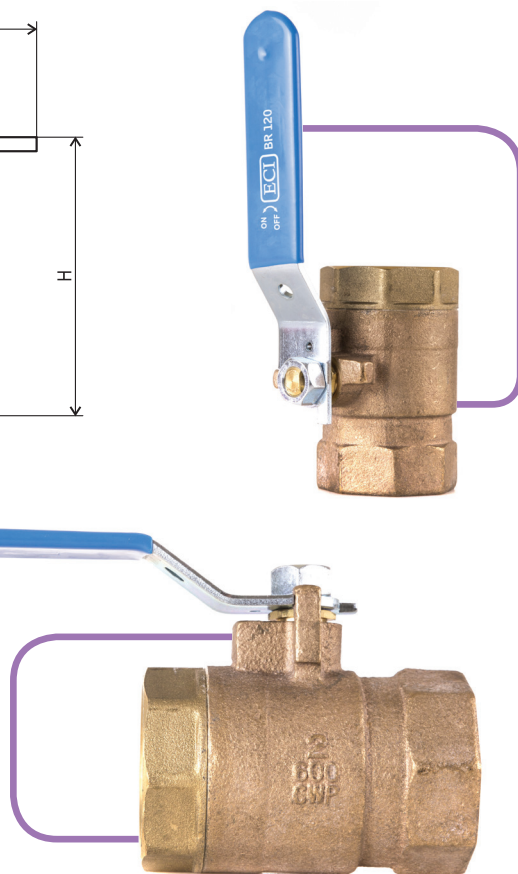


Specifications:

- WORKING PRESSURE:
600 PSI / 41.4 BAR WOG
150 PSI / 10.3 BAR WSP
- WORKING TEMPERATURE: $T \leq 140^{\circ}\text{C}$
- PORT SIZE:
1/2"~1" FULL PORT
1 1/4"~4" RED PORT (CONVENTIONAL)
- TESTING PRESSURE: 100 PSI AIR FOR SHELL & SEAT
- TAPER PIPE THREADED TO NPT AND ISO 7-1 (ex. BS-21)
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM

Dimensions (mm)

DN	SIZE INCH	L	H	E	WEIGHT KGS
15	1/2"	61	48	102	0.399
20	3/4"	74	56	122	0.581
25	1"	86	65	122	0.889
32	1 1/4"	102	69	122	1.406
40	1 1/2"	109	79	175	2.177
50	2"	117	84	175	3.039
65	2 1/2"	150	91	175	3.856
80	3"	180	114	201	6.713



Material

No.	DESCRIPTION	BRONZE	LEAD FREE
1	Body	ASTM B584 C84400	ASTM C87850 or C89844
2	Tailpiece	ASTM B584 C84400	ASTM C87850 or C89844
3	Ball	ASTM B16 C36000	Stainless Steel 316
4	Stem	ASTM B16 C36000	ASTM C69300 or CW510L
5	Packing Nut	ASTM B16 C36000	ASTM C69300 or CW510L
6	Ball Seat	15% Glass RPTFE	15% Glass RPTFE
7	Packing	15% Glass RPTFE	15% Glass RPTFE
8	Thrust Washer	15% Glass RPTFE	15% Glass RPTFE
9	Handle	Steel-Zn.P.	Steel-Zn.P.
10	Handle Sleeve	Vinyl	Vinyl
11	Handle Nut	Steel-Zn.P.	Steel-Zn.P.

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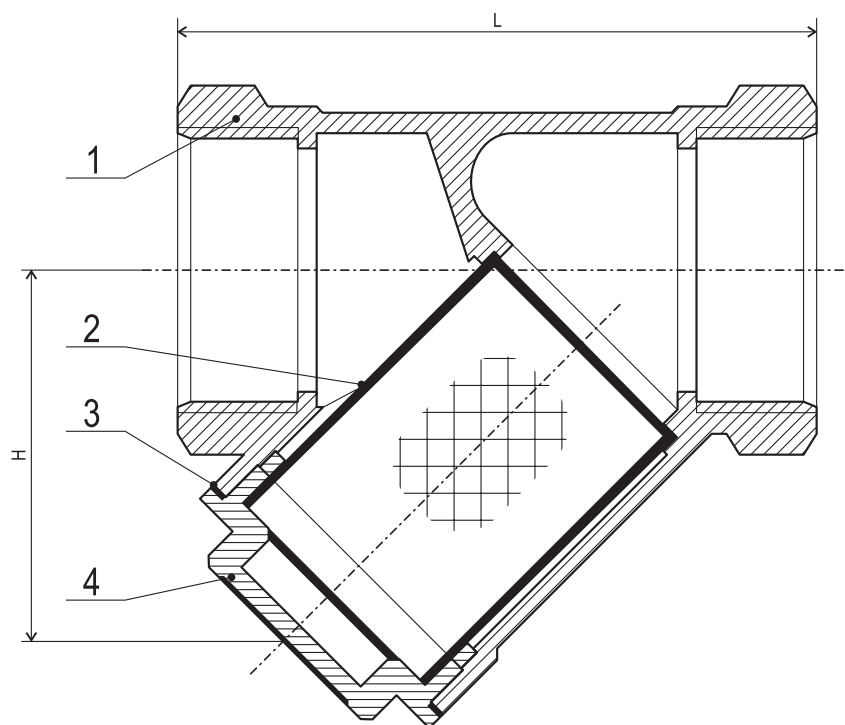
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BR 220

BRONZE STRAINER

PN 20 "Y" TYPE



Specifications:

- PRESSURE RATING: PN 20
- SUITABLE MEDIA: WATER, OIL, AIR & GAS
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 7-1 (EX. BS-21)

Dimensions (mm)

DN	SIZE INCH	L	H	WEIGHT KGS
15	1/2"	58	33	0.185
20	3/4"	70	41	0.298
25	1"	88	49	0.426
32	1 1/4"	96	56	0.720
40	1 1/2"	107	62	0.980
50	2"	126	80	1.500

Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Screen	Stainless Steel Type 304
3	Gasket	P.T.F.E
4	Cap	Bronze CC491K



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BR 325

BRONZE CHECK VALVE

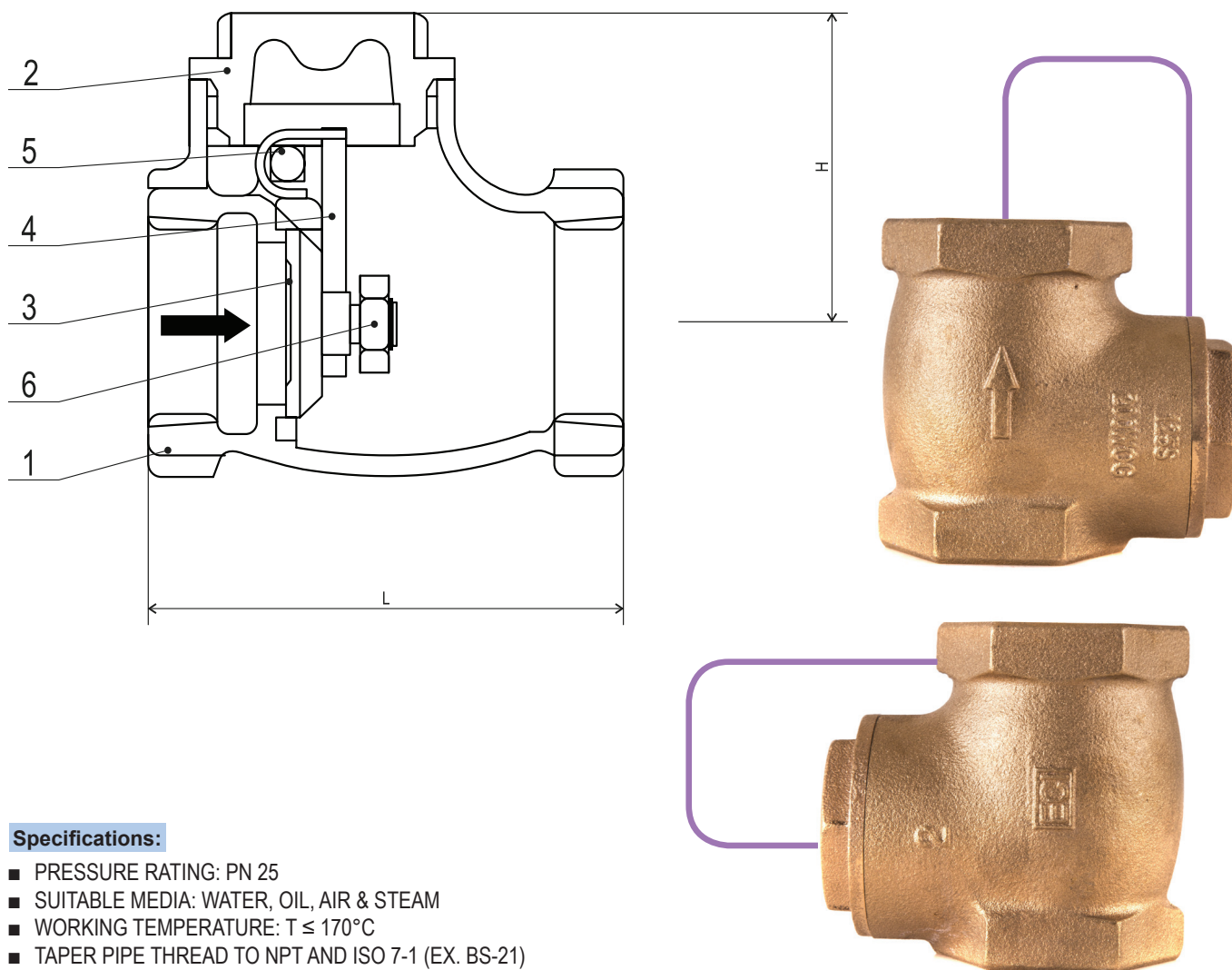
PN 25 SWING TYPE

CONFORMS TO MSS SP-80



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Specifications:

- PRESSURE RATING: PN 25
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 7-1 (EX. BS-21)

Dimensions (mm)

DN	SIZE INCH	L	H	WEIGHT KGS
10	3/8"	48	33	0.301
15	1/2"	58	38	0.332
20	3/4"	66	42	0.440
25	1"	80	49	0.687
32	1 1/4"	89	56	1.010
40	1 1/2"	95	65	1.423
50	2"	108	76	2.390

Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Cap	Bronze CC491K
3	Disc	Bronze CC491K (1 1/4" - 2")
3	Disc	Brass CW617N (3/8" - 1")
4	Hinge	Bronze CC491K
5	Hinge Pin	Stainless Steel
6	Hinge Nut	Brass CW617N



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BR 432

BRONZE GLOBE VALVE

PN 32

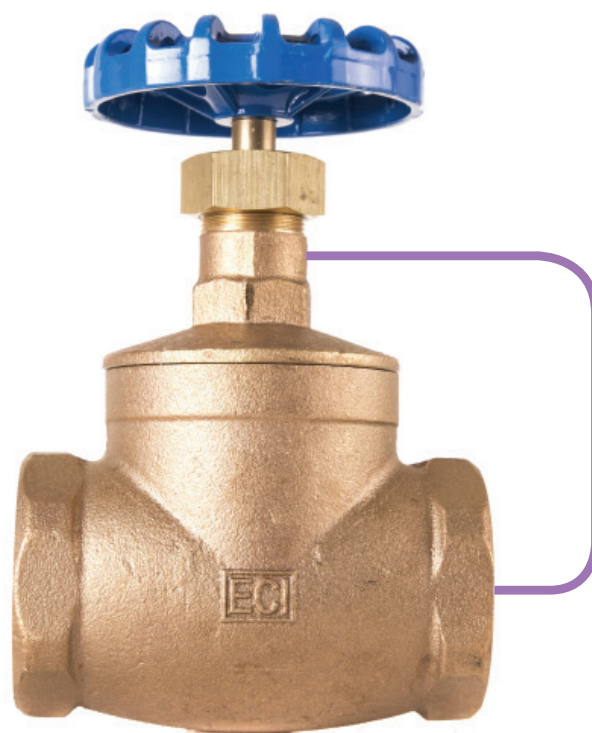
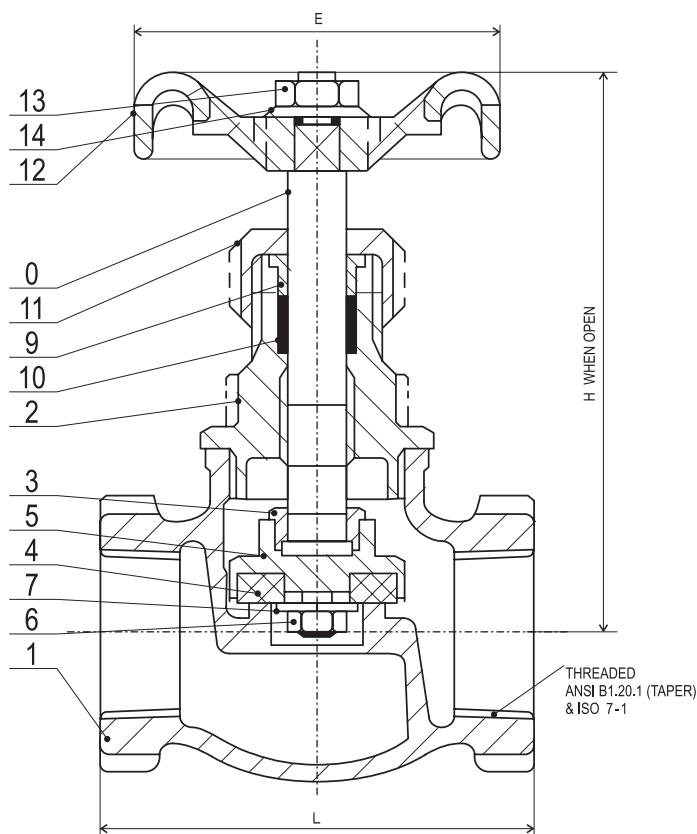
RIISING STEM

CONFORMS TO BS 5154/MSS SP-80



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Specifications:

- PRESSURE RATING: PN 32
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM
- WORKING TEMPERATURE: $T \leq 180^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 7-1 (EX. BS-21)

Dimensions (mm)

DN	SIZE INCH	L	H	E	WEIGHT KGS
15	1/2"	62	101	52	0.540
20	3/4"	74	115	52	0.650
25	1"	90	125	70	0.810
32	1 1/4"	100	150	70	1.550
40	1 1/2"	115	159	92	2.010
50	2"	136	191	103	3.080

Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Bonnet	Bronze CC491K
3	Disc Stem Ring	Brass CW602N
4	Disc	P.T.F.E
5	Disc Holder	Bronze CC491K
6	Disc Nut	Brass CW602N
7	Washer	Brass CW602N
8	Stem	Brass CW602N
9	Gland	Brass CW614N
10	Packing	Asbestos Free
11	Packing Nut	Brass CW614N
12	Handwheel	Aluminum
13	Handwheel Nut	Brass CW614N
14	I.D Plate	Aluminum



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BR 516

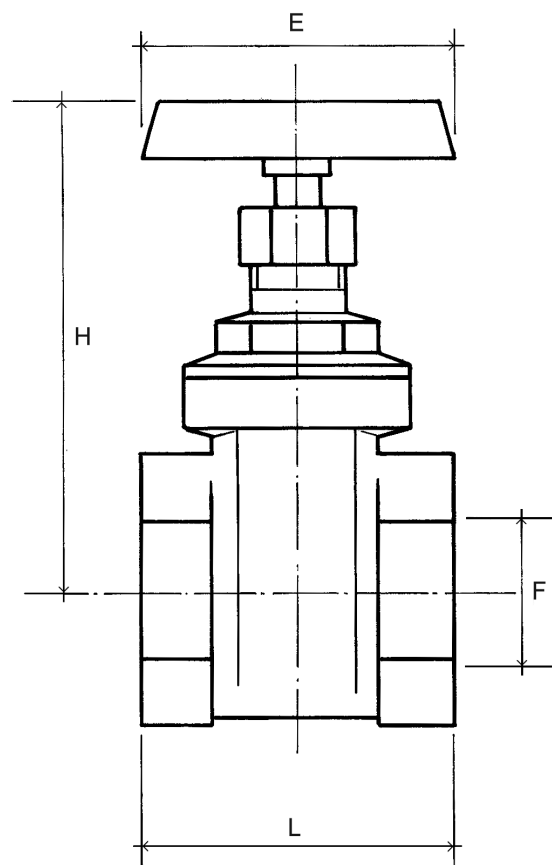
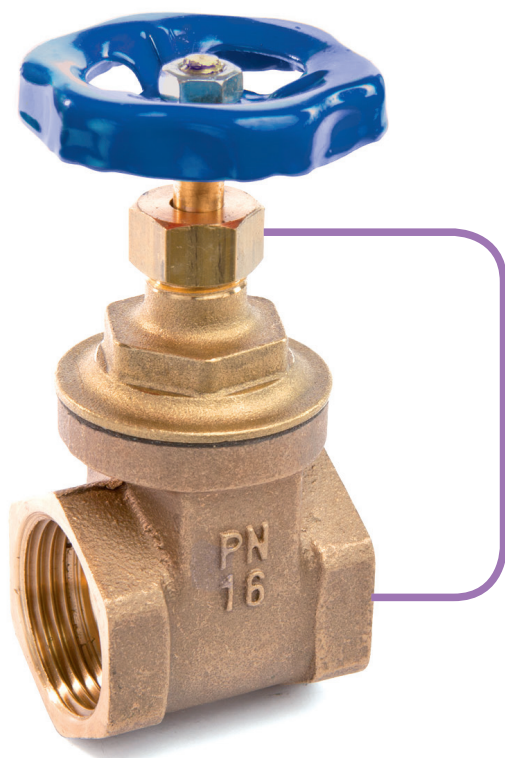
BRONZE GATE VALVE

PN 16

NON-RISEING STEM

CONFORMS TO PED 97/23/CE

& IT IS CE MARKING-FREE AS PER ART. 3 PAR.3



Specifications:

- PRESSURE RATING: PN 16
- SUITABLE MEDIA: WATER, OIL & AIR
- WORKING TEMPERATURE: $T \leq 80^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 228/1

Dimensions (mm)

DN	SIZE INCH	F	L	H	E	WEIGHT KGS
15	1/2"	15	38	68	45	0.195
20	3/4"	19	45	78	50	0.280
25	1"	24	48	92	55	0.380
32	1 1/4"	32	51	108	60	0.600
40	1 1/2"	37	58	125	70	0.830
50	2"	47	62	145	80	1.210

Material

DESCRIPTION	MATERIAL
Body	Bronze SN 5 UNI-EN1982 DIN50930/6
Bonnet	Brass CW 617 N-UNI-EN12165
Stem	Brass CW 614 N-UNI-EN12164
Packing	EPDM90 DUTRAL
Wedge	Brass DELTA CS UNI-EN1982 CB 7535
Handwheel	Steel with blue plastic coating
Handwheel Nut	Steel Zinc plated

TUV APPROVED ART.210-RASTELLI



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BR 520

BRONZE GATE VALVE

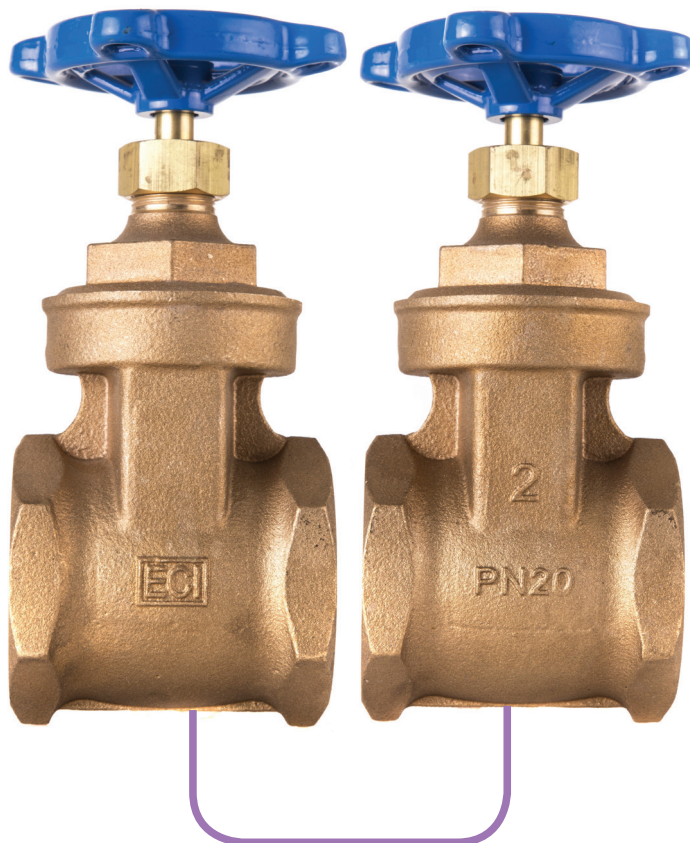
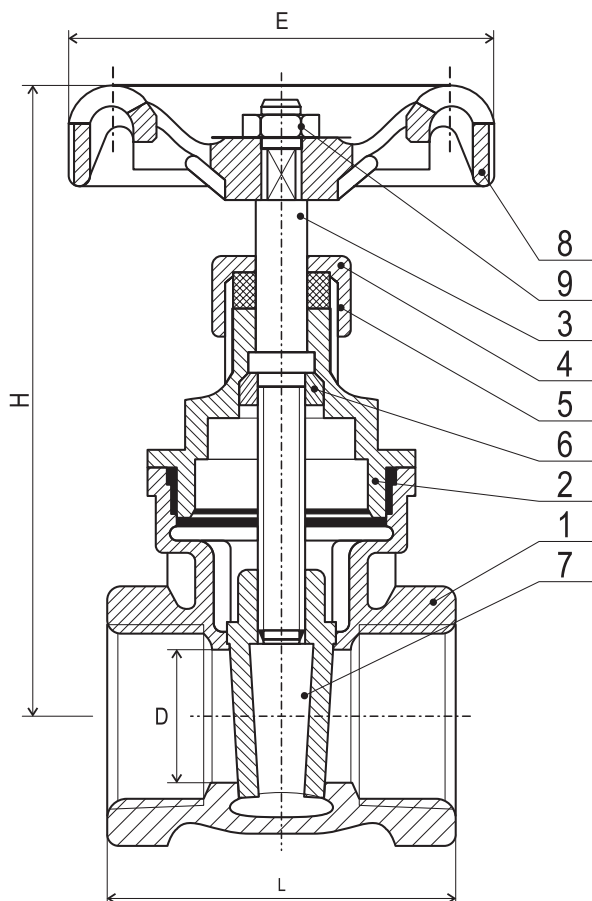
PN 20

NON-RISING STEM

CONFORMS TO BS 5154

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Specifications:

- PRESSURE RATING: PN 20
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 7-1 (EX. BS-21)

Dimensions (mm)

DN	SIZE INCH	D	L	H	E	WEIGHT KGS
15	1/2"	12.7	50	74	52	0.268
20	3/4"	19.1	54	85	52	0.395
25	1"	25.4	62	106	70	0.585
32	1 1/4"	31.8	70	113	70	0.857
40	1 1/2"	38.2	77	132	92	1.265
50	2"	50.9	87	155	92	1.900

Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Bonnet	Bronze CC491K
3	Stem	DZR Brass CW602N
4	Packing Nut	Brass CW617N
5	Packing	P.T.F.E
6	Stem Bush	DZR Brass CW602N
7	Disc	Bronze CC491K
8	Handwheel	Aluminum
9	Handwheel Nut	Brass CW614N

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BR 525

BRONZE GATE VALVE

PN 25

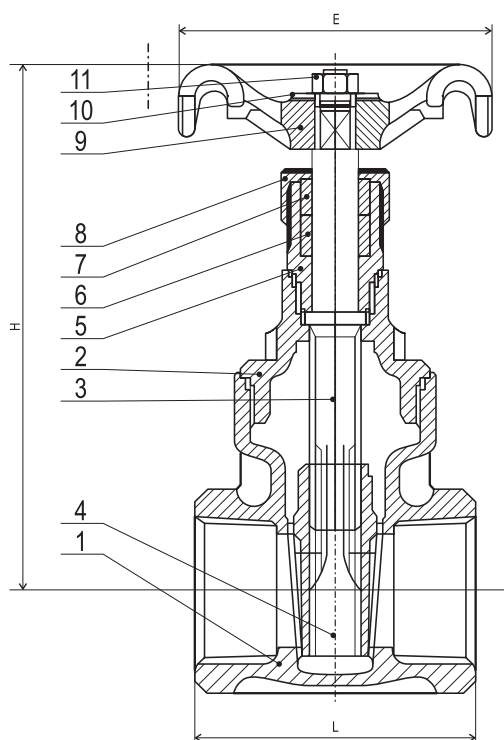
NON-RISING STEM

CONFORMS TO BS 5154/MSS SP-80



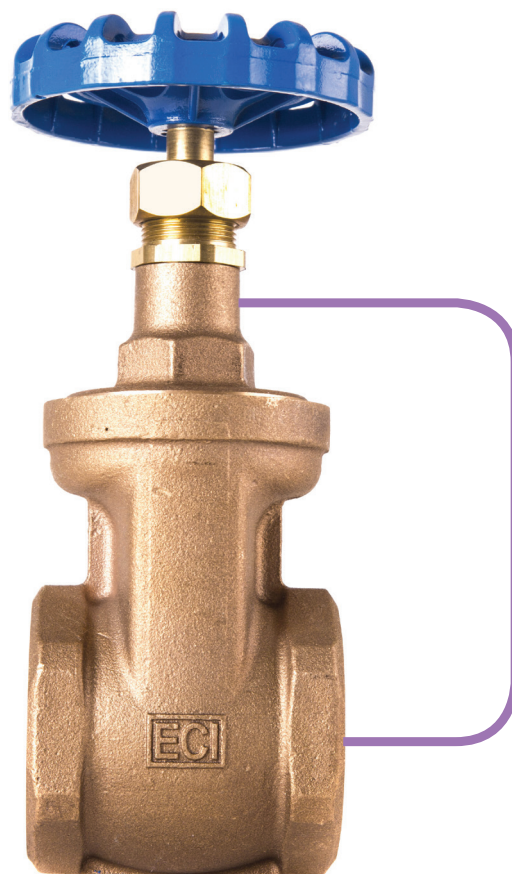
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Specifications:

- PRESSURE RATING: PN 25
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- TAPER THREAD TO NPT AND ISO 7-1 (EX. BS-21)



Dimensions (mm)

DN	SIZE INCH	L	H	E	WEIGHT KGS
8	1/4"	46	75	45	0.284
10	3/8"	46	75	45	0.268
15	1/2"	51	82	52	0.341
20	3/4"	55	95	65	0.582
25	1"	63	118	70	0.878
32	1 1/4"	71	144	79	1.360
40	1 1/2"	73	166	92	1.750
50	2"	83	190	103	2.810

Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Bonnet	Bronze CC491K
3	Stem	DZR Brass CW602N
4	Disc	Bronze CC491K
5	Stuffing Box	DZR Brass CW602N
6	Packing Ring	P.T.F.E
7	Gland	Brass CW614N
8	Packing Nut	Brass CW614N
9	Handwheel	Aluminum
10	Identification Plate	Aluminum
11	Handwheel Nut	Brass CW614N



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BR 582

BRONZE GATE VALVE

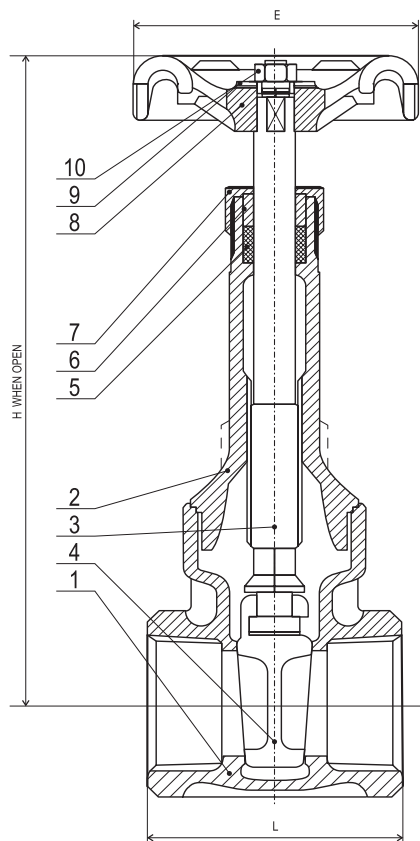
PN 32

RISING STEM

CONFORMS TO BS 5154/MSS SP-80

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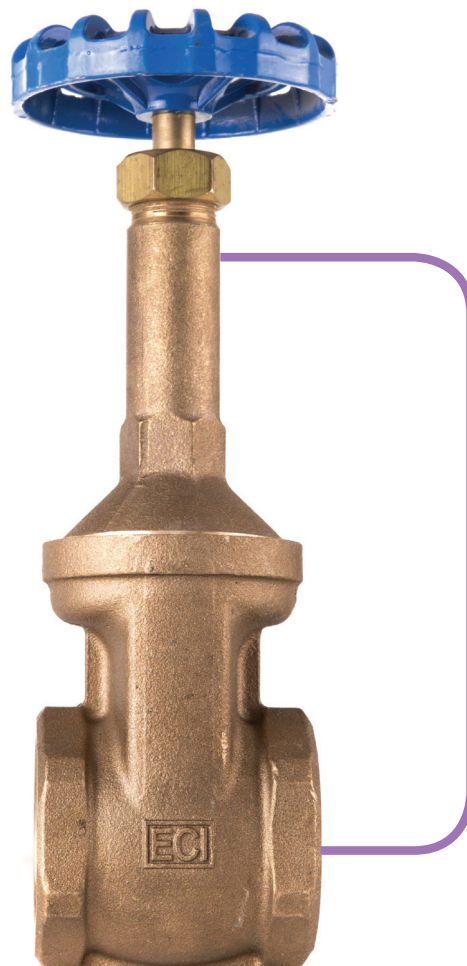


Specifications:

- PRESSURE RATING: PN 32
- SUITABLE MEDIA: WATER, OIL, AIR & STEAM
- WORKING TEMPERATURE: $T \leq 170^{\circ}\text{C}$
- TAPER PIPE THREAD TO NPT AND ISO 7-1 (EX. BS-21)

Dimensions (mm)

DN	SIZE INCH	L	H	E	WEIGHT KGS
8	1/4"	46	126	45	0.320
10	3/8"	46	126	45	0.310
15	1/2"	51	129	52	0.400
20	3/4"	55	159	65	0.643
25	1"	63	189	70	0.998
32	1 1/4"	72	219	78	1.519
40	1 1/2"	73	246	92	2.064
50	2"	83	301	92	3.191
65	2 1/2"	108	369	134	5.800
80	3"	117	416	134	8.520



Material

No.	DESCRIPTION	MATERIAL
1	Body	Bronze CC491K
2	Bonnet	Bronze CC491K
3	Stem	Bronze CC491K
4	Disc	Bronze CC491K
5	Packing	P.T.F.E
6	Clamping Ring	Brass CW614N
7	Packing Nut	Brass CW614N
8	Handwheel	Aluminum
9	Id Plate	Aluminum
10	Handwheel Nut	Brass CW614N

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BR 825

BRONZE FIXED ORIFICE
DOUBLE REGULATING VALVE (DRV)

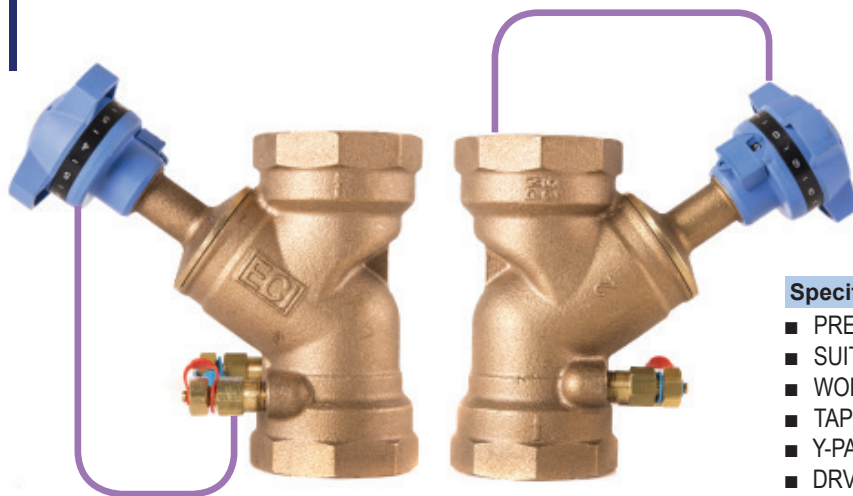
PN 25

CONFORMS TO BS7350



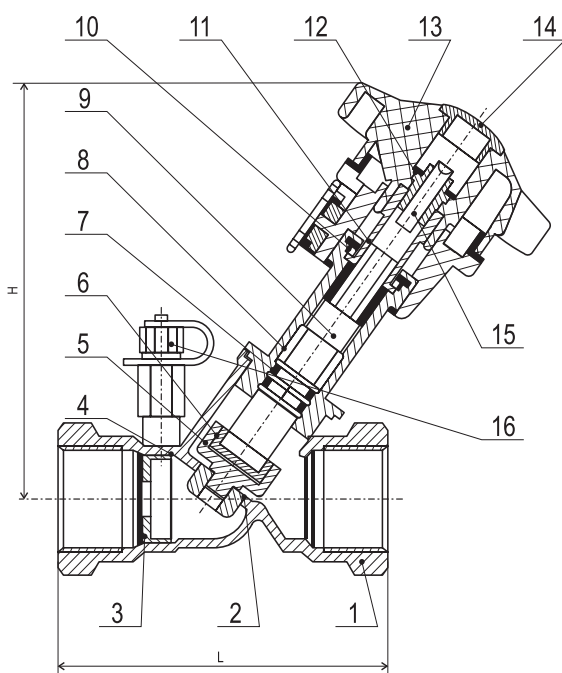
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Specifications:

- PRESSURE RATING: PN 25
- SUITABLE MEDIUM: WATER
- WORKING TEMPERATURE: $T \leq 120^{\circ}\text{C}$
- TAPER PIPE THREAD TO ISO 7-1 (EX. BS-21)
- Y-PATTERN GLOBE VALVE WITH THROTTLING DISC
- DRV WITH A FIXED ORIFICE DESIGN
- ACCURACY $\pm 5\%$ ON ALL SETTINGS
- DRV ALLOWS VALVE OPENING TO BE SET WITH ALLEN KEY.
- DRV HAS A MICROSET HAND WHEEL
- FOR USE IN HVAC & PLUMBING SYSTEMS
- TO BE USED FOR ISOLATING & TO BE RE-OPENED TO ITS PRE-SET POSITION
- SUPPLIED WITH TWO TEST POINTS
- DESIGN AND MANUFACTURE CONFORM TO BS7350



Material

No.	DESCRIPTION	MATERIAL	SIZES
1	Body	Bronze CC491K	All
2	Disc Face	P.T.F.E	1"-2"
2	Disc Face	DZR Brass CW602N	1/2"-3/4"
3	Orifice Plate	DZR Brass CW602N	All
4	Nut	DZR Brass CW602N	All
5	Disc	DZR Brass CW602N	All
6	Disc Retaining Ring	DZR Brass CW602N	All
7	O Ring	N.B.R	All
8	Bonnet	DZR Brass CW602N	1/2"-1 1/4"
8	Bonnet	Bronze CC491K	1 1/2"-2"
9	Stem	DZR Brass CW602N	All
10	Retainer Ring	Stainless Steel 304	All
11	Sleeve	Brass CW617N	All
12	Screw	Brass CW614N	All
13	Handwheel	PA	All
14	Cap	PA	All
15	Screw	Stainless Steel 304	All
16	Test Points	DZR Brass CW602N	All

Dimensions (mm) & Coefficients

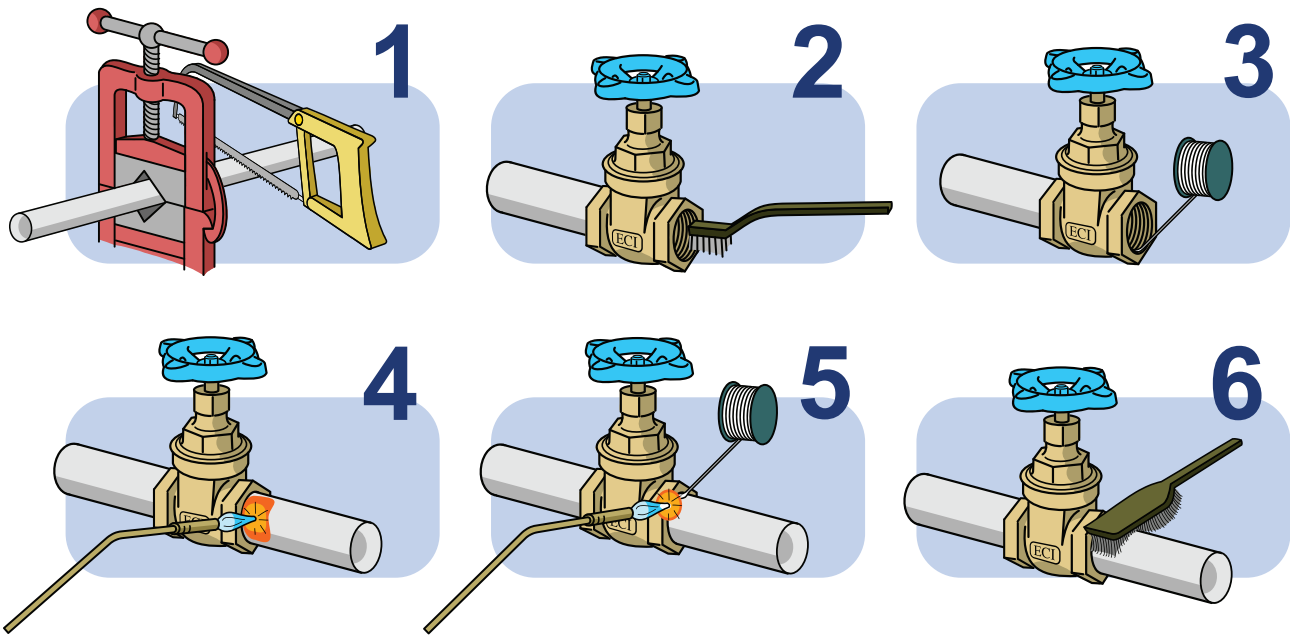
DN	SIZE INCH	L	H	FLOW (KV)	KVS	WEIGHT KGS
15	1/2"	87	105	1.72	2.2	0.580
20	3/4"	96	106	2.97	4.6	0.650
25	1	100	127	4.75	8.5	0.890
32	1 1/4"	114	128	10.25	16.7	1.110
40	1 1/2"	125	143	16.83	26.1	1.460
50	2"	146	144	27.26	43.2	1.980



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Valve Installation Tips



Soldering and Silver Brazing

The most important thing is to consider is choosing the correct valve best suited for the application needed. Soldering and silver brazing is the most common method to joining the Bronze valves to tubes or fittings. Poor quality installation can lead to poor and damaged joints. This will lead to leakage and the damaging of the valve.

Perform the following steps to ensure a proper installation:

- 1 Start by cutting the tube end square, use either a tube cutter or a hack saw. Ream, burr and size the tube according to valve size.
- 2 Clean both ends of the cut tube, use a sand cloth or steel wire brush or even a nylon abrasive pad. It is important to eliminate all oxides and any soil from the tube ends to ensure a clean flow through the tubes.
- 3 Apply flux on the outside of the tube ends and the inside of the solder cups. It is best to use a soldering flux that can dissolve and remove any remaining drops of oxide and surface soil from the cleaned surfaces to be joined. It is important that the surface that will be joined to be completely covered in a thin layer of flux.
- 4 Make sure the valve is fully open. Start by applying heat to the tube ends first. Use the tube then to transfer the heat to the valve ends. When using the Silver Brazing Method assemble the part to be brazed. Assemble the tube with the valve ends so that they are joined. It should be noted that the assembly should be firmly supported, and that there can be no change in alignment once the brazing operations starts. Apply flame using a torch to the valve ends. Heat uniformly around the end, moving from valve end to the tube end. Perform heating until noise from heating the flux is gone. For valves that are one-inch and larger it is difficult to raise the temperature around the entire joint to the same temperature. It is recommended to use a double tip torch to allow a uniform temperature around a larger area. A desirable method is using an oxy-acetylene flame. Make sure that the flame is at least 1 inch away from the valve end. Apply heat uniformly on to the valve. Make sure the flame does not remain on any one point. Overheating the valve ends can lead to a damaged valve.
- 5 For the wire use a $\frac{1}{2}$ " solder for a $\frac{1}{2}$ " valve, increase wire size as the size of the valve increases. Excess use of solder can go through the tube and clog the sealing area. A constant run of solder or brazing alloy will be present when the joint is filled. When using the Silver Brazing Method feed the brazing alloy into the joint between the tube and the fitting. Add the brazing only when the metals are heated to brazing temperatures. The flame can be moved away from the valve and tube end when the brazing alloy is applied. Move the flame back and forth as the alloy is inserted into the joint. The brazing alloy will diffuse readily into space between tube outer wall and valve socket. After the joint area is filled a continuous rim of brazing alloy will be visible.
- 6 Any flux residue or excess solder should be brushed off. A fillet should be visible around the valve end as it cools.

Silver Brazing Tips

Using different types of brazing materials does not affect how strong the brazing joint is. The strength of the joint depends a lot on the procedure. If the brazing alloy is applied correctly on the outside tube and the valve socket, then the joint will hold.

Threading Connection Tips

Any type of dirt, residue, or soil that go into the valve can highly damage parts of the valve and hinder its effectiveness. When using a threaded pipe connection, clean the threaded area to remove any deposits from it. Use air or steam to thoroughly remove any residue. Applying steam or air through the valve is also a good way to remove unwanted residue that can damage the valve.

Before installation, check line of flow through valve so that valve will function properly. Close valve completely before installation. Apply wrench to hex next to pipe and guard against possible distortion. After installation of valve, support line; a sagging pipe line can distort valve and cause failure.

Flanged Connection Tips

There are several steps to follow to make sure that a flanged joint will be properly assembled. First, clean the joint carefully. Then loosely assemble the joint by putting in the bottom two or three bolts. Then carefully insert the gasket into place. The bottom bolts will help locate the gasket and hold it in position. Then insert the rest of the bolts into place and tighten all of the bolts evenly—not in rotation, but by the cross-over method to load the bolts evenly and eliminate concentrated stresses. The bolts should be checked for tightness after an appropriate interval of use and retightened if necessary.