

## **ECONOSTO - GLOBE VALVES**

### **General Design & Application:**

Econosto Globe Valves are very efficient for throttling service because disc and seat design provide the flow characteristics with proportional relationship between valve travel and flow rate. This assures accurate regulated flow.

Globe Valves with metal disc 45 degree should not be used for close throttling in high velocity flow when erosion or wire drawing may result. For close throttling a plug type disc is recommended.

Econosto Globe Valves are full port. This full port feature reduces the pressure drop to the minimum and also assures the end user of the full valve.

As explained above Globe valves are generally recommended for use in services handling liquid, vapor or gas in applications where it is necessary to throttle or regulate the flow by positioning the disc in fully open, fully closed or intermediate position. In addition to throttling, globe valves are recommended in applications where rapid cycle of operation is anticipated.

Due to the design of the Globe Valve the path of the fluid changes direction several times causing a condition of turbulent flow which in turn will cause an increase in the pressure drop through the valve. Due to this we do not recommend the use of the Globe Valve where the pressure drop has to be kept to a minimum.

In applications where absolute minimum pressure drop plus positive closure is essential in such cases we recommend that the next larger size globe valve be installed by use of necessary connections rather than attempt to use a gate valve.

Econosto Cast Iron Globe Valves have outside screw and yoke (OS & Y) construction. This design isolates the stem threads from heat and corrosive conditions inside the valve. It also enables the stem threads to be cleaned and lubricated easily.

## ECON Bronze Globe Valve PN16, Fig: 250S

### Specification:

BS 5154 PN16, Series B  
 Rising stem & rising handwheel  
 Screwed in Bonnet  
 BS 21 (BSPP) threaded ends, Metal Seated

### Hydrostatic Test Pressure:

Body : 24 bar  
 Seat : 17.6 bar

### Pressure / Temperature Rating:

7 bar at 170 deg.C  
 16 bar from -10 to 100 deg.C

### On request (forward delivery):

Available with NPT threads.  
 Available in PN20 rating.  
 Available in MSS-SP-80 standard.

### Pressure v/s Temperature Graph:

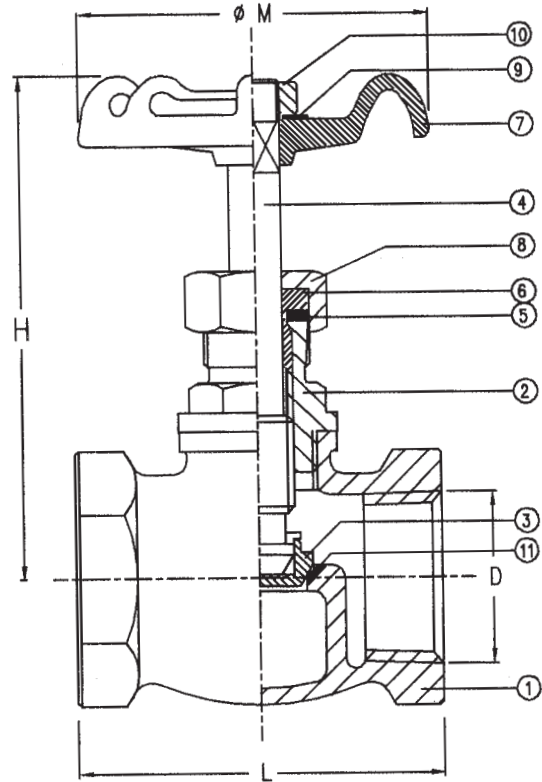
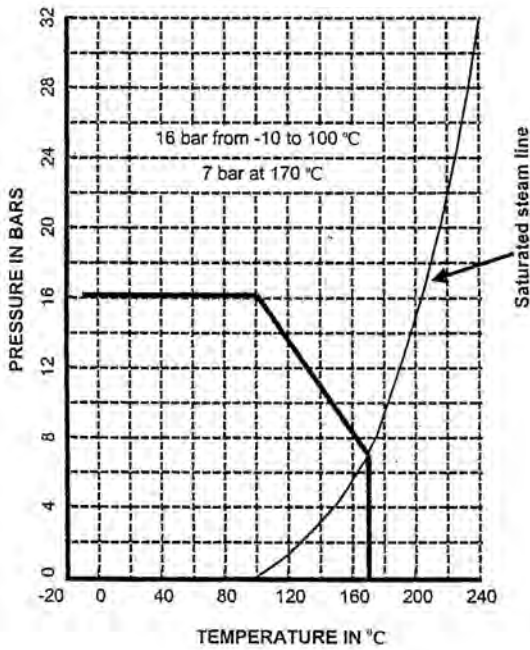


Fig: 250S

### Material Specification:

No.	Component	Material	DIN	BS
1	Body	Bronze	G-CuSn5ZnPb	1400LG2
2	Bonnet	Bronze	G-CuSn5ZnPb	1400LG2
3	Disc upto 11/2" - 4"	Brass	CuZn39Pb2	2874-CZ121
		Bronze	G-CuSn5ZnPb	1400LG2
4	Stem	Brass (H.T)	CuZn39Pb2	2874-CZ121
5	Packing	PTFE	PTFE	PTFE
6	Gland	Brass	CuZn39Pb2	2874-CZ121
7	Handwheel upto 2" - 4"	Aluminium	-	-
		Cast Iron	1691GG25	1452Gr260
8	Packing Nut	Brass	CuZn39Pb2	2874-CZ121
9	Name plate	Aluminium	-	-
10	Hand Wheel Nut	Steel	-	-
11	Seat	Bronze	-	-

### Dimensions and Weights:

Nom. Size inches	Dimensions (millimeters)			Wt. Kg.
	L	H	$\phi M$	
1/4	45	75	55	0.2
1/2	49	75	55	0.24
3/4	56	83	63	0.32
1	64	94	63	0.49
1 1/4	74	113	70	0.68
1 1/2	84	124.5	80	0.98
2	100	137	90	1.63
2 1/2	118	160	110	2.90
3	136	187	125	4.15
4	170	208	140	7.30

# ECON Cast Iron Globe Valve PN 16, Fig: 2241

### Specification:

Technical conditions as per DIN3230  
 Face to face dimensions according to  
 DIN 3202 - series F1 (EN 558)  
 Rising stem, Outside screw and yoke  
 SS trim - 13% Chrome, Bolted Bonnet,  
 Flanged to DIN 2633 (EN 1092) / BS 4504 PN16 (EN 1092)  
 Raised face flanges drilled to DIN 2501 (EN 1092)

### Coating :

Internal and external coated with wet epoxy paint.  
 Coating thickness (DFT) = 100 microns.

### Hydrostatic Test Pressure:

Body : 24 bar  
 Seat : 17.6 bar

### Pressure / Temperature Rating:

13 bar at 220 deg.C  
 16 bar from -10 to 120 deg.C

### On request (forward delivery):

Available in bronze trim Fig: 268 (Pls refer our E5 Catalogue)  
 Available in MSS-SP-85 standard (CL 125, CL 250)

### Pressure v/s Temperature Graph:

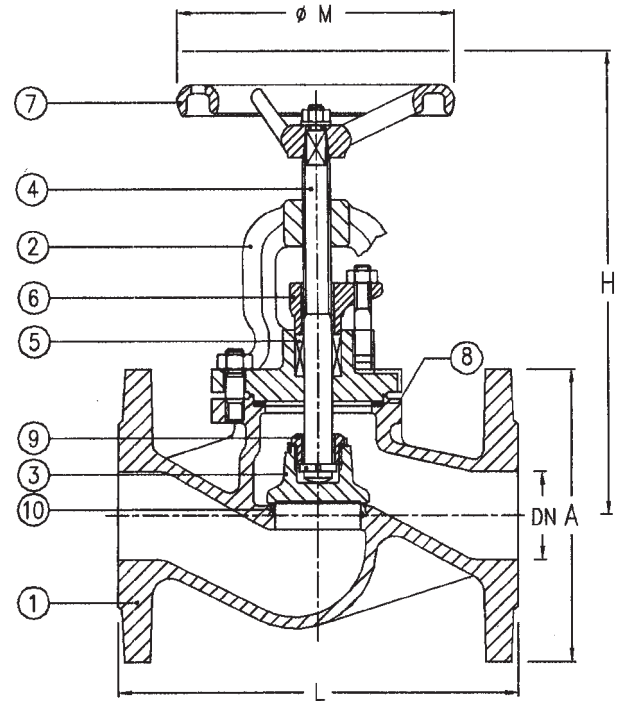
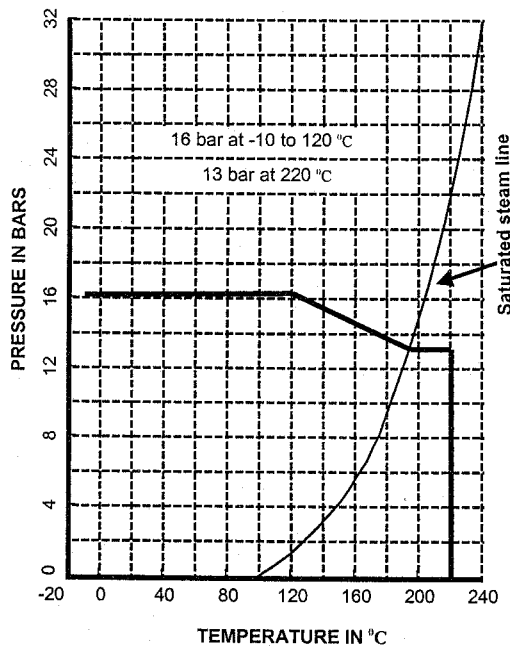


Fig: 2241

### Material Specification:

No.	Component	Material	DIN	BS
1	Body	Cast Iron	1691GG251452Gr260	
2	Bonnet	Cast Iron	1691GG251452Gr260	
3	Disc	Cast Iron + SS overlay	1691GG251452Gr260	
4	Stem	Stainless Steel	X20Cr13	420 S37
5	Gland Packing	Graphite	-	-
6	Gland	Cast Iron	1691GG251452Gr260	
7	Handwheel	Cast Iron	1691GG251452Gr260	
8	Bonnet Gasket	Graphite/Steel	-	-
9	Disc Lock nut	Steel	9S20K	-
10	Seat	Stainless Steel	X20Cr13	420 S37

### Dimensions and Weights:

Nom. Size	Dimensions (millimeters)					Wt. Kg.
	mm	mm	mm	mm	mm	
DN	L	A	H	ø M		
15	130	95	150	100		3.0
20	150	105	170	100		4.0
25	160	115	190	100		5.5
32	180	140	220	120		8.0
40	200	150	240	140		11.0
50	230	165	300	140		14.7
65	290	185	340	200		17.8
80	310	200	400	200		35.0
100	350	220	430	240		40.0
125	400	250	510	280		60.0
150	480	285	570	320		82.0
200	600	340	685	360		142.0
250	730	405	780	520		243.0
300	850	460	890	520		341.0