

Globe Stop Valves [VBS]

Standard: BS 1873

DN 50 (2") ÷ DN 250 (10")
Class 150 ÷ Class 900

Design

- Casted body and bonnet
- Bolted bonnet (BB)
- Rising stem (RS), outside screw and yoke (OS&Y)
- Regulating parabolic disc or perforated disc
- Dimensions >DN 50 with additional, balancing, disc
- Seats are integral or welded on

Applications

- Power plant, Chemical, Petrochemical, Refining water supply and other

Media

- Depending on the valve materials: water, steam, gas, oil and oil derivatives and other non aggressive media

Class and temperature

(table A.3.7)

- Class 150 + Class 900
- Temperature up to 600 °C

Materials (table A.3.1)

- Carbon, heat resistant alloy and stainless steels

Advantages

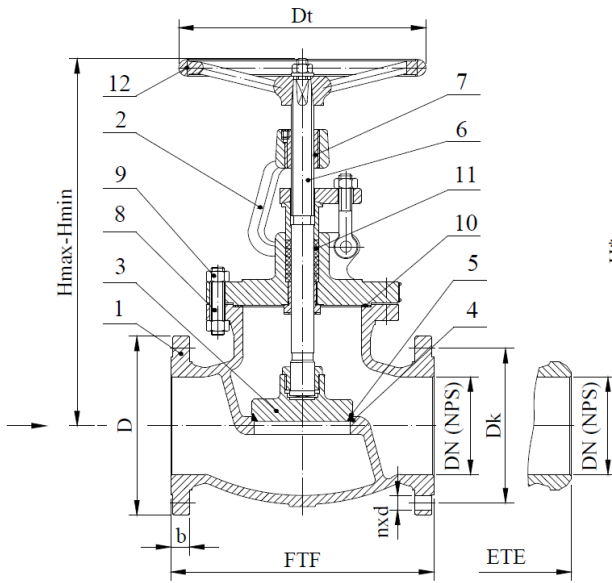
- Long service life
- Respect to emission standards
- Easy handling and maintenance
- Stem packing replacement in working conditions

Options

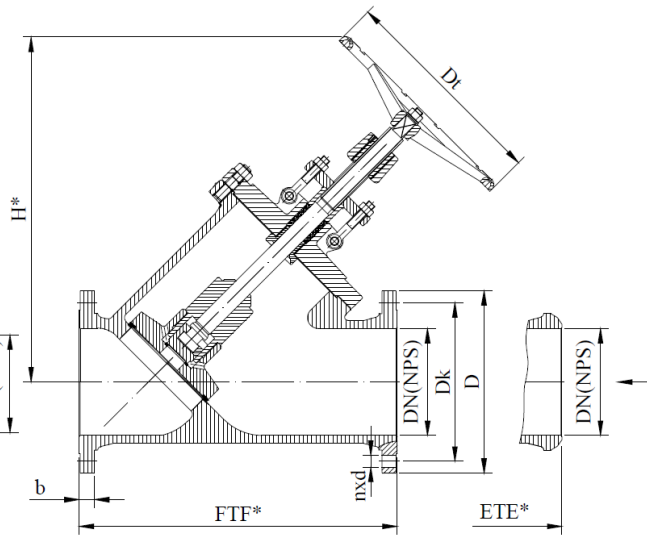
- Electric, hydraulic or pneumatic actuator
- Y-Type Valve
- Position indicator
- Extended stem
- Locking device
- Seats and sealing made of elastic materials
- Flanges and welding ends according to : GOST, DIN, EN.
- Other paint finishes are available upon customer's request
- Valve complete with counter flanges bolting and gaskets

Testing

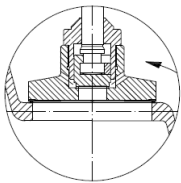
- Every produced valve was tested according to API 598



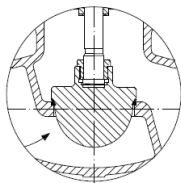
**Drawing A.3.1 Parts and dimensions
Globe stop Valve**



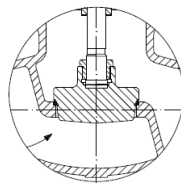
**Drawing A.3.2 Dimensions Globe
stop Valve Y-Type**



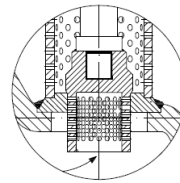
Balancing disc



Regulating disc



Throttling disc



Perforated disc

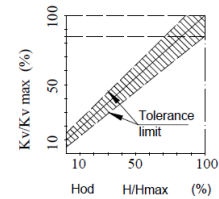


Diagram of the
regulation valve

List of materials

Table A.3.1

Item	Part	Material Group acc. to ASME B16.34					
		1.1	1.3	1.9	1.13	2.2	2.11
		Application					
		-29°C+425°C	-40°C+345°C	-29°C+550°C	-29°C+550°C	-196°C+600°C	-196°C+600°C
		Material Code					
		13	15	23	27	43	45
1	Body	A216 WCB	A352 LCB	A217 WC6	A217 C5	A351 CF8M	A351 CF8C
2	Bonnet	A216 WCB	A352 LCB	A217 WC6	A217 C5	A351 CF8M	A351 CF8C
3	Disc	A216 WCB	A352 LCB	A217 WC6	A217 C5	A351 CF8M	A351 CF8C
4	Trim	Body Seat	Cr13	HF (Stellite)		Basic Material or Stellite	
5		Disc Seat	Cr13	HF (Stellite)		Basic Material or Stellite	
6		Stem	SS 420			SS 316	SS 304
7	Stem Nut	nodular cast iron / Cu alloy					
8	Stud Bolts	A193 B7		A193 B16 / 1.7709		A193 B8M	A193 B8
9	Nuts	A194 2H		A194 4 / 1.7709		A194 8M	A194 8
10	Bonnet Gasket	Reinforced pure graphite / Soft Steel / Spiral-wound / Oval Metal Ring					
11	Stem Packing	graphite with corrosion inhibitor					
12	Handwheel	cast iron / epoxy coated steel					

Standards

Table A.3.2

Globe Stop Valves according to BS 1873	Class 150 ÷ Class 900
Face-to-face dimensions according to	ASME/ANSI B16.10
Flanged ends according to	ASME/ANSI B16.5
End-to-end dimensions according to	ASME/ANSI B16.10
Welding ends according to	ASME/ANSI B16.25

V46

V46 111 (121) class 150-300-600-900 ASME Globe valve flange / butt welding

[VBS] Dimensions Class 150

Table A.3.3

DN (NPS)	FTF/ETE	FTF*/ETE*	D	b	Dk	d	n	H max	H min	H*	Dt	FTF	ETE	FTF*	ETE*
	↔ (mm)										📦 (kg)		📦 (kg*)		
50 (2)	203	229	150	19	120,7	19	4	370	330	360	200	19	15	21	17
65 (1 1/2)	216	279	180	22,7	139,7	19	4	405	360	395	200	23	18	25	20
80 (3)	241	318	190	24	152,4	19	4	450	400	418	250	38	31	42	35
100 (4)	292	368	230	24	190,5	19	8	490	435	530	315	55	45	60	50
150 (6)	406	470	280	25,4	241,3	22,2	8	585	515	640	400	98	82	108	92
200 (8)	495	597	345	29	298,5	22,2	8	785	685	650	400	169	139	186	156
250 (10)	622	673	405	30	362	25,4	12	865	740	720	500	258	225	284	251

[VBS] Dimensions Class 300

Table A.3.4

DN (NPS)	FTV/ETE	D	b	Dk	d	n	H max	H min	Dt	FTV	ETE
	↔ (mm)									📦 (kg)	
50 (2)	267	165	22	127	19	8	430	390	250	24	18
65 (1 1/2)	292	190	25,9	149,2	22,2	8	445	400	250	31	23
80 (3)	318	210	28,5	168,3	22,2	8	520	470	250	55	44
100 (4)	356	255	32	200	22,2	8	560	505	315	97	81
150 (6)	444	320	36,5	269,9	22,2	12	725	655	400	165	135
200 (8)	559	380	41,5	330,2	25,4	12	915	815	500	303	252
250 (10)	622	445	48,1	387,4	28,6	16	986	821	500	405	340

[VBS] Dimensions Class 600

Table A.3.5

DN (NPS)	FTV/ETE	D	b	Dk	d	n	H max	H min	Dt	FTV	ETE
	↔ (mm)									📦 (kg)	
50 (2)	292	165	31,8	127	19	8	475	435	250	41	34
65 (1 1/2)	330	190	35,6	149,2	22,2	8	490	445	250	53	45
80 (3)	356	210	38,4	168,3	22,2	8	585	535	315	73	62
100 (4)	432	275	44,4	215,9	25,4	8	680	625	400	125	108
150 (6)	559	355	54,4	292,1	28,6	12	855	785	500	270	240
200 (8)	660	420	62,4	349,2	31,7	12	995	895	630	480	392

[VBS] Dimensions Class 900

Table A.3.6

DN (NPS)	FTV/ETE	D	b	Dk	d	n	H max	H min	Dt	FTV	ETE
	↔ (mm)									📦 (kg)	
50 (2)	368	215	45,1	165,1	25,4	8	560	503	400	88	71
65 (1 1/2)	419	245	48,3	190,5	28,6	8	565	520	400	130	103
80 (3)	381	240	45,1	190,5	25,4	8	660	590	500	115	97
100 (4)	457	290	51,5	235	31,7	8	683	611	500	165	142
150 (6)	610	380	62,6	317,5	31,7	12	911	811	630	356	320
200 (8)	737	470	70,5	393,7	38,1	12	995	870	730	610	565