

Globe Stop and Check Valves [VENSC]

Standard: EN 13709

DN 15 ÷ DN 150

PN 16 ÷ PN 160

Design

- Forged or casted body and bonnet
- Bolted bonnet (BB)
- Rising stem (RS), outside screw and yoke (OS&Y)
- Built-in spring converts globe stop valve into check valve
- Seats are integral or welded on

Applications

- Power plant, Chemical, Petrochemical, Refining

Media

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

Pressure and temperature

(Table A.9.9)

- Pressure up to 160 bar
- Temperature up to 600°C

Materials (Table A.9.1)

- Carbon, heat resistant alloy and stainless steels

Advantages

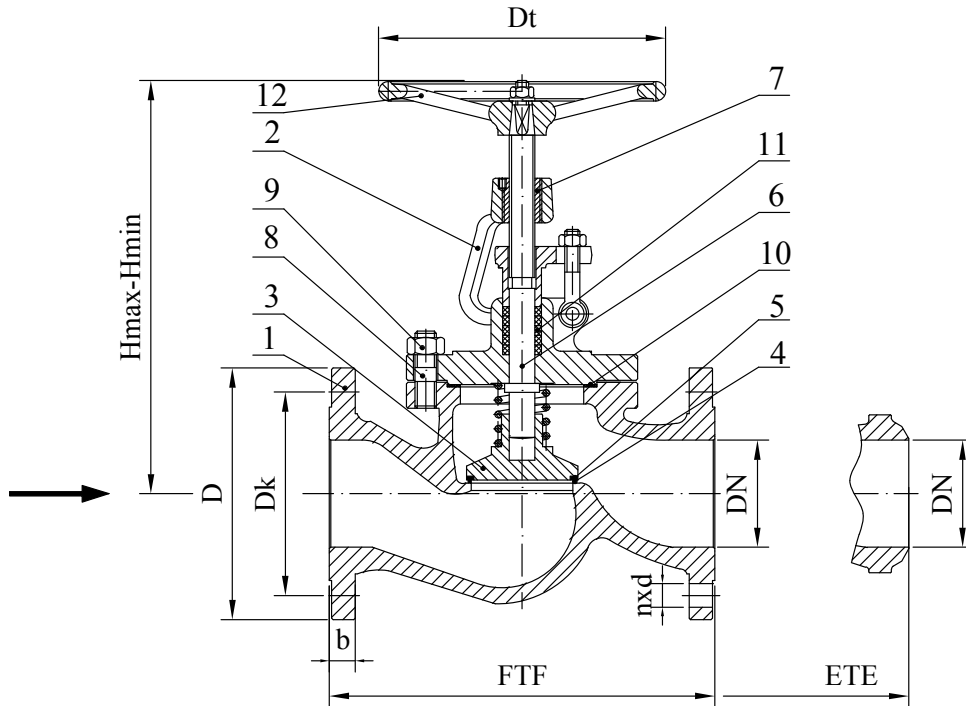
- Long service life
- Respect to emission standards
- Easy handling and maintenance
- Stem packing replacement in working conditions

Options

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

Testing

- Every produced valve was tested according to EN 12266



Drawing A.9.1 Parts and dimensions

List of materials

Table A.9.1

Item	Part	Material Group acc. to EN 12516-1					
		3E0	4E0	5E0	6E0	11E0	15E0 / 14E0
		Application					
		up to 400°C	up to 550°C	up to 550°C	up to 600°C	-196°C÷600°C	-196°C÷600°C
1	Body ⁽¹⁾	1.0460 / 1.0619	1.5415 / 1.5419	1.7335 / 1.7357	1.7383 / 1.7379	1.4301 / 1.4308	1.4571 / 1.4408
2	Bonnet ⁽¹⁾	1.0460 / 1.0619	1.5415 / 1.5419	1.7335 / 1.7357	1.7383 / 1.7379	1.4301 / 1.4308	1.4571 / 1.4408
3	Disc ⁽¹⁾	1.4021 / 1.0619	1.5415 / 1.5419	1.7335 / 1.7357	1.7383 / 1.7379	1.4301 / 1.4308	1.4571 / 1.4408
4	Body welded on with	13Cr	17Cr (up to 450°C) or Stellite			Basic material or Stellite	
5	Disc welded on with	13Cr	17Cr (up to 450°C) or Stellite			Basic material or Stellite	
6	Stem	1.4021 / 1.4122				1.4301	1.4571
7	Stud Bolts	1.0715 / 1.7225 / Cu alloy					
8	Nuts	A193 B7 / 1.7225	A193 B16 / 1.7709			A193 B8 / 1.4301	A193 B8M / 1.4401
9	Bonnet Gasket	A194 2H / 1.1191	A194 4 / 1.7709			A194 8 / 1.4301	A194 8M / 1.4401
10	Stem Packing	spiral-wound / reinforced pure graphite					
11	Handwheel	graphite with corrosion inhibitor					
12	Stud Bolts	epoxy coated steel					

⁽¹⁾other materials available according to EN standard

Standards

Table A.9.2

Globe Stop and Check Valves according to EN 13709	PN 16 / PN 25 / PN 40	PN 63 / PN 100 / PN 160
Face-to face dimensions according to	EN 558, Serie 1	EN 558, Serie 2
Flanged ends according to	EN 1092-1	
End-to-end dimensions according to	EN 12982, Serie 64	EN 12982, Serie 65
Welding ends according to	EN 12627	

[VENSC] Dimensions PN 16
Table A.9.3

DN	15	20	25	32	40	50	65	80	100	125	150	
[mm]	FTF	130	150	160	180	200	230	290	310	350	400	480
	ETE	130	130	130	160	180	210	290	310	350	400	480
	D	95	105	115	140	150	165	185	200	220	250	285
	Dk	65	75	85	100	110	125	145	160	180	210	240
	nxd	4x14	4x14	4x14	4x18	4x18	4x18	(2)x18	8x18	8x18	8x18	8x22
	b	16	18	18	18	18	18	18	20	20	22	22
	Hmax	235	235	235	315	315	324	324	365	410	500	545
	Hmin	220	220	220	295	295	295	295	325	365	450	485
	Dt	125	125	125	150	150	150	200	250	250	300	300
kg	FTF	5	6	7	11	14	18	25	36	50	74	99
	ETE	4,3	4,3	4,5	7,2	10,5	14	18	26	43	60	85

⁽²⁾ 8 holes is preferred however 4 holes may be supplied upon special request by the purchaser

[VENSC] Dimensions PN 25
Table A.9.4

DN	15	20	25	32	40	50	65	80	100	125	
[mm]	FTF	130	150	160	180	200	230	290	310	350	400
	ETE	130	130	130	160	180	210	290	310	350	400
	D	95	105	115	140	150	165	185	200	235	270
	Dk	65	75	85	100	110	125	145	160	190	220
	nxd	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26
	b	16	18	18	18	18	20	22	24	24	26
	Hmax	235	235	235	315	315	324	324	365	410	500
	Hmin	220	220	220	295	295	295	295	325	365	450
	Dt	125	125	125	150	150	150	200	250	250	300
kg	FTF	5	6	7	11	14	18,5	26	37	52	77
	ETE	4,3	4,3	4,5	7,2	10,5	14	18	26	43	60

[VENSC] Dimensions PN 40
Table A.9.5

DN	15	20	25	32	40	50	65	80	100	
[mm]	FTF	130	150	160	180	200	230	290	310	350
	ETE	130	130	130	160	180	210	290	310	350
	D	95	105	115	140	150	165	185	200	235
	Dk	65	75	85	100	110	125	145	160	190
	nxd	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22
	b	16	18	18	18	18	20	22	24	24
	Hmax	235	235	235	315	315	324	324	365	410
	Hmin	220	220	220	295	295	295	295	325	365
	Dt	125	125	125	150	150	150	200	250	250
kg	FTF	5	6	7	11	14	18,5	26	37	52
	ETE	4,3	4,3	4,5	7,2	10,5	14	18	26	43

[VENSC] Dimensions PN 63
Table A.9.6

DN	15	20	25	32	40	50	65	80	
[mm]	FTF	210	230	230	260	260	300	340	380
	ETE	150	150	160	180	210	250	340	380
	D	105	130	140	155	170	180	205	215
	Dk	75	90	100	110	125	135	160	170
	nxd	4x14	4x18	4x18	4x22	4x22	4x22	8x22	8x22
	b	20	22	24	26	28	26	26	28
	Hmax	235	235	235	315	315	370	415	492
	Hmin	220	220	220	295	295	334	385	457
	Dt	150	150	150	200	200	250	300	300
kg	FTF	7	8	11	17	17,5	32	48	73
	ETE	4,8	4,8	5	12,5	13,5	23,5	38,5	60

[VENSC] Dimensions PN 100
Table A.9.7

DN	15	20	25	32	40	50	65	
[mm]	FTF	210	230	230	260	260	300	340
	ETE	150	150	160	180	210	250	340
	D	105	130	140	155	170	180	205
	Dk	75	90	100	110	125	145	170
	nxd	4x14	4x18	4x18	4x22	4x22	4x22	8x26
	b	20	22	24	26	28	30	34
	Hmax	235	235	235	315	315	370	415
	Hmin	220	220	220	295	295	334	385
	Dt	150	150	150	200	200	250	300
kg	FTF	7	9	11	18,5	21,4	35,2	50
	ETE	4,8	4,8	5	12,5	13,5	23,5	38,5

[VENSC] Dimensions PN 160
Table A.9.8

DN	15	20	25	32	40	50	65	80	100	125	150	200	
[mm]	FTF	210	230	230	260	260	300	340	380	430	500	550	650
	ETE	150	150	160	180	210	250	340	380	430	500	550	650
	D	105	130	140	155	170	195	220	230	265	315	355	430
	Dk	75	90	100	110	125	145	170	180	210	250	290	360
	nxd	4x14	4x18	4x18	4x22	4x22	4x26	8x26	8x26	8x30	8x33	12x33	12x36
	b	20	22	24	26	28	30	34	36	40	44	50	60
	Hmax	235	235	235	315	315	370	415	492	585	635	705	960
	Hmin	220	220	220	295	295	334	385	457	540	580	645	870
	Dt	150	150	150	200	200	250	300	300	400	400	500	500
kg	FTF	7	9	11	18	21	35	50	79	124	192	288	510
	ETE	4,8	4,8	5	12	14	24	39	60	100	155	238	446

