

Globe valve (V30,V46-STOP) butt welding / flange PN40

Globe valve (V40-regulating) butt welding / flange PN40

V30 (V40) 121 540 PN40 DN15-DN300 / Tmax.400°C

V46 (V40) 121 240 PN40 DN15-DN300 / Tmax.550°C (575 °C)

V30 (V40) 111 540 PN40 DN15-DN300 / Tmax.400°C

V46 (V40) 111 240 PN40 DN15-DN300 / Tmax.550°C (57 5°C)

Globe valve (V46-STOP) butt welding / flange PN63

Globe valve (V40-regulating) butt welding / flange PN63

V46 (V40) 121 463 PN63 DN15-DN25 / Tmax.400°C

V46 (V40) 121 563 PN63 DN32-DN200 / Tmax.400°C

V46 (V40) 111 463 PN63 DN15-DN25 / Tmax.400°C

V46 (V40) 111 563 PN63 DN32-DN200 / Tmax.400°C

V46 (V40) 121 363 PN63 DN15-DN25 / Tmax.550°C (575 °C)

V46 (V40) 121 263 PN63 DN32-DN200 / Tmax.550°C (575°C)

V46 (V40) 111 363 PN63 DN15-DN25 / Tmax.550°C (575 °C)

V46 (V40) 111 263 PN63 DN32-DN200 / Tmax.550°C (57 5°C)

Globe valve (V46-STOP)butt welding / flange PN100

Globe valve (V40-regulating) butt welding / flange PN100

V46 (V40) 121 4100 PN100 DN15-DN25/ Tmax.400°C

V46 (V40) 121 5100 PN100 DN32-DN200 / Tmax.400°C

V46 (V40) 111 4100 PN100 DN15-DN25 / Tmax.400°C

V46 (V40) 111 5100 PN100 DN32-DN200 / Tmax.400°C

V46 (V40) 121 3100 PN100 DN15-DN25 / Tmax.550°C (575°C)

V46 (V40) 121 2100 PN100 DN32-DN200 / Tmax.550°C (575°C)

V46 (V40) 111 3100 PN100 DN15-DN25 / Tmax.550°C (575°C)

V46 (V40) 111 2100 PN100 DN32-DN200 / Tmax.550°C (575°C)

Globe valve (V46-STOP) butt welding / flange PN160

Globe valve (V40-regulating) butt welding / flange PN160

V46 (V40) 121 4160 PN160 DN15-DN25 / Tmax.400°C

V46 (V40) 121 5160 PN160 DN32-DN200 / Tmax.400°C

V46 (V40) 111 4160 PN160 DN15-DN25 / Tmax.400°C

V46 (V40) 111 5160 PN160 DN32-DN200 / Tmax.400°C

V46 (V40) 121 3160 PN160 DN15-DN25 / Tmax.550°C (575°C)

V46 (V40) 121 2160 PN160 DN32-DN200 / Tmax.550°C (575°C)

V46 (V40) 111 3160 PN160 DN15-DN25 / Tmax.550°C (575°C)

V46 (V40) 111 2160 PN160 DN32-DN200 / Tmax.550°C (575°C)

.. 121 ... butt welding

.. 111 ... flange



Globe Stop Valves [VENS] Globe Regulating Valves [VENR]

Standard: EN 13709

DN 15 ÷ DN 300

PN 25 ÷ PN 160

Design

- Forged or casted body and bonnet
- Bolted bonnet (BB)
- Rising stem (RS), outside screw and yoke (OS&Y)
- Dimensions >DN 50 with additional, balancing, disc
- Regulating parabolic disc (VENR)
- 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

Pressure and temperature (table A.1.7)

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

Materials (table A.1.1)

- 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

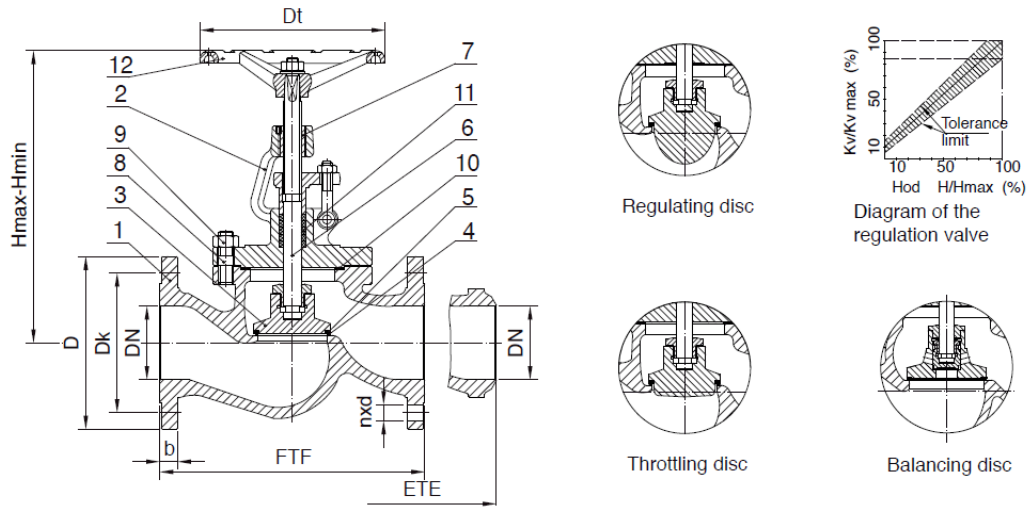
- Electric, hydraulic or pneumatic actuator
- Position indicator
- Extended stem
- Locking device
- Seats and sealing made of elastic materials
- Flanges and welding ends according to : GOST, DIN, ANSI.
- Other paint finishes are available upon customer's request
- Valve complete with counter flanges,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

Testing

- Every produced valve was tested according to EN 12266, Part 1 and Part 2

V46

V46 GLOBE VALVE STOP PN40-PN160 V40 GLOBE VALVE REGULATING PN40-PN160



Drawing A.1.1 Parts and dimensions

List of materials

Table A.1.1

Item	Part	Material Group acc. to EN 12516-1						
		3E0	4E0	5E0	6E0	11E0	14E0	
		Application						
		up to 400°C	up to 500°C	up to 550°C	up to 575°C	-196°C+500°C	-196°C+600°C	
		Material Code						
		10 or 11	20 or 21	22 or 23	24 or 25	40 or 41	42 or 43	
1	Body	up to DN 25	1.0460	1.5415	1.7335	1.7383	1.4301	1.4401
		over DN 25	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
2	Bonnet	up to DN 25	1.0460	1.5415	1.7335	1.7383	1.4301	1.4401
		over DN 25	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
3	Disc	up to DN 50	1.4021	1.5415	1.7335	1.7383	1.4301	1.4401
		over DN 50	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
4	Body Seat	13Cr	17Cr (up to 450°C) or Stellite 6			Basic Material or Stellite 6		
5	Trim	Disc Seat	13Cr	17Cr (up to 450°C) or Stellite 6			Basic Material or Stellite 6	
6	Stem	1.4021		1.4122		1.4301	1.4401	
7	Stem Nut	nodular cast iron / Cu alloy						
8	Stud Bolts	1.7225	1.7709			1.4301	1.4401	
9	Nuts	1.1191	1.7709			1.4301	1.4401	
10	Bonnet Gasket	reinforced pure graphite						
11	Stem Packing	graphite with corrosion inhibitor						
12	Handwheel	cast iron or epoxy coated steel						

Standards

Table A.1.2

Globe Stop Valves according to EN 13709	PN 25 / PN 40	PN 63 / PN 100 / PN 160
Face-to-face dimensions according to	EN 558-1, Serie 1	EN 558-1, Serie 2
Flanged ends according to	EN 1092-1, Type B1	
End-to-end dimensions according to	EN 12982, Serie 64	EN 12982, Serie 65
Welding ends according to	EN 12627	

V46

V46 GLOBE VALVE STOP PN40-PN160 V40 GLOBE VALVE REGULATING PN40-PN160

[VENS] and [VENR] Dimensions PN 25 and PN 40

Table A.1.3

DN	FTF	ETE	D	b	Dk	d	n	H max	H min	Dt	FTF	ETE
	↔ (mm)										⚖ (kg)	
15	130	130	95	16	65	14	4	235	220	120	4	2,3
20	150	130	105	18	75	14	4	235	220	120	4,5	2,5
25	160	130	115	18	85	14	4	235	220	120	5,5	3
32	180	160	140	18	100	18	4	315	295	160	8,5	5
40	200	180	150	18	110	18	4	315	295	160	12	8
50	230	210	165	20	125	18	4	324	295	160	19	14
65	290	290	185	22	145	18	8	324	295	200	26	16
80	310	310	200	24	160	18	8	365	325	250	37	28
100	350	350	235	24	190	22	8	410	365	250	50	39
125	400	400	270	26	220	26	8	500	450	315	70	55
150	480	480	300	28	250	26	8	545	485	315	98	79
200	600	600	360	30	310	26	12	635	565	400	166	141
			375	34	320	30					175	
250	730	730	425	32	370	30	12	830	730	400	313	255
			450	38	385	33					333	
300	850	850	485	34	430	30	16	1000	880	500	347	295
			515	42	450	33					385	

* PN 40

[VENS] and [VENR] Dimensions PN 63

Table A.1.4

DN	FTF	ETE	D	b	Dk	d	n	H max	H min	Dt	FTF	ETE
	↔ (mm)										⚖ (kg)	
15	210	150	105	20	75	14	4	235	220	160	6,8	4,4
20	230	150	130	22	90	18	4	235	220	160	8,5	4,6
25	230	160	140	24	100	18	4	235	220	160	10	4,8
32	260	180	155	26	110	22	4	315	295	200	17	11
40	260	210	170	28	125	22	4	315	295	200	18	12
50	300	250	180	26	135	22	4	370	334	250	32	20
65	340	340	205	26	160	22	8	415	385	315	41	34
80	380	380	215	28	170	22	8	492	457	315	69	57
100	430	430	250	30	200	26	8	585	540	400	94	76
125	500	500	295	34	240	30	8	635	580	400	184	155
150	550	550	345	36	280	33	8	705	645	500	189	147
200	650	650	415	42	345	36	12	960	870	500	343	277

[VENS] and [VENR] Dimensions PN 100

Table A.1.5

DN	FTF	ETE	D	b	Dk	d	n	H max	H min	Dt	FTF	ETE
	↔ (mm)										⚖ (kg)	
15	210	150	105	20	75	14	4	235	220	160	6,8	4,4
20	230	150	130	22	90	18	4	235	220	160	8,5	4,6
25	230	160	140	24	100	18	4	235	220	160	11	4,8
32	260	180	155	26	110	22	4	315	295	200	17	11
40	260	210	170	28	125	22	4	315	295	200	21	12
50	300	250	195	30	145	26	4	370	334	250	35	24
65	340	340	220	34	170	26	8	415	385	315	43	34
80	380	380	230	36	180	26	8	492	457	315	70	67
100	430	430	265	40	210	30	8	585	540	400	114	96
125	500	500	315	40	250	33	8	635	580	400	188	155
150	550	550	355	44	290	33	12	705	645	500	295	251
200	650	650	430	52	360	36	12	960	870	500	500	423

[VENS] and [VENR] Dimensions PN 160

Table A.1.6

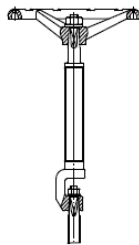
DN	FTF	ETE	D	b	Dk	d	n	H max	H min	Dt	FTF	ETE
	↔ (mm)										⚖ (kg)	
15	210	150	105	20	75	14	4	235	220	160	6,8	4,4
20	230	150	130	22	90	18	4	235	220	160	8,5	4,6
25	230	160	140	24	100	18	4	235	220	160	10	5
32	260	180	155	26	110	22	4	315	295	200	17	11
40	260	210	170	28	125	22	4	315	295	200	18	12
50	300	250	195	30	145	26	4	370	334	250	34	20
65	340	340	220	34	170	26	8	415	385	315	45	34
80	380	380	230	36	180	26	8	492	457	315	70	65
100	430	430	265	40	210	30	8	585	540	400	117	96
125	500	500	315	44	250	33	8	635	580	400	192	155
150	550	550	355	50	290	33	12	705	645	500	303	251
200	650	650	430	60	360	36	12	960	870	500	510	423

Range of application for valves with flanged ends

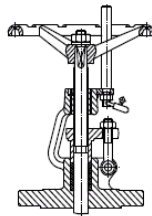
Table A.1.7

Material Group (Code)	Materials	PN	Pressure (bar) / temperature (°C) ratings according to EN 12516-1																					
			RT	50	100	150	200	250	300	350	375	400	425	450	475	500	510	520	530	550	575	600		
3E0 (10,11)	1.0460 1.0619	16	16	15	14	13	11	10	9	9	9	8												
		25	24	23	21	20	18	16	15	14	14	13												
		40	39	37	34	32	28	26	24	22	22	21												
		63	61	59	54	50	45	41	37	35	34	33												
		100	97	93	85	79	71	65	59	55	54	53												
		160	156	149	136	127	114	104	94	88	86	84												
4E0 (20,21)	1.5415 1.5419	16	16	16	16	15	14	13	11	10	10	10	10	9	9	7								
		25	26	26	25	24	22	20	17	16	16	15	15	15	15	11								
		40	41	41	40	38	35	32	28	26	25	24	24	24	23	18								
		63	64	64	63	60	55	51	43	41	40	38	38	37	37	29								
		100	102	102	100	95	87	81	69	65	63	61	60	59	58	46								
		160	163	163	160	151	140	130	110	104	101	97	96	94	93	73								
5E0 (22,23)	1.7335 1.7357	16	16	16	16	16	15	14	13	12	12	11	11	10	9	8	7	6	4					
		25	26	26	25	25	23	22	21	19	19	18	17	17	16	14	13	11	9	6				
		40	41	41	41	40	37	36	33	31	30	29	28	27	25	22	21	17	14	9				
		63	64	64	64	62	59	56	52	49	47	45	44	42	39	35	33	27	22	14				
		100	102	102	102	99	93	89	83	77	75	72	69	67	62	56	52	42	35	22				
		160	163	163	163	158	149	143	133	123	120	115	111	107	100	89	84	68	56	35				
6E0 (24,25)	1.7383 1.7379	16	16	16	16	16	15	15	14	13	12	12	11	11	10	9	8	7	6	5	3			
		25	26	26	25	25	24	23	21	20	19	18	17	17	16	14	13	12	10	8	5			
		40	41	41	41	40	39	37	34	32	31	29	28	27	25	22	21	19	16	12	9			
		63	64	64	64	62	61	58	53	50	48	45	44	42	39	35	33	29	26	19	14			
		100	102	102	102	99	96	91	85	79	77	72	69	67	62	56	53	46	41	31	21			
		160	163	163	163	158	154	146	135	127	123	115	111	107	100	89	84	74	65	49	34			
11E0 (40,41)	1.4301 1.4308	16	15	13	12	11	10	9	8	8	7	7	7	7	7	7								
		25	24	21	18	17	15	14	13	12	12	12	11	11	11	11								
		40	38	33	29	27	24	22	21	20	19	19	18	18	18	17								
		63	60	52	46	42	38	35	33	31	30	29	29	28	28	27								
		100	95	83	73	66	60	56	52	49	48	46	46	45	45	44								
		160	152	133	117	106	96	89	83	79	77	74	74	72	71	70								
14E0 (42,43)	1.4401 1.4308	16	16	15	13	12	11	10	10	9	9	9	9	8	8	8	7	7	7	7	6			
		25	24	23	21	19	17	16	15	14	14	14	14	13	13	13	12	11	11	11	11	10		
		40	39	37	33	30	27	26	24	23	22	22	22	21	21	21	20	18	17	17	17	16		
		63	61	58	52	47	43	40	38	36	35	34	34	34	33	33	31	29	27	27	26	26		
		100	97	92	83	75	69	64	60	57	56	54	54	54	53	52	49	45	44	43	42	41		
		160	155	148	133	120	110	102	96	91	89	87	86	86	85	83	78	73	70	68	67	65		

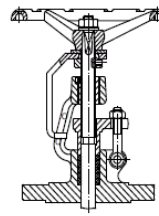
Optional execution



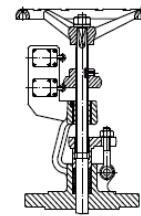
Extended stem



Locking device



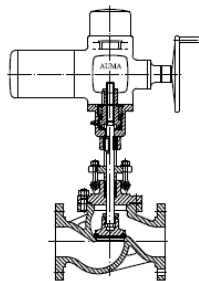
Position indicator



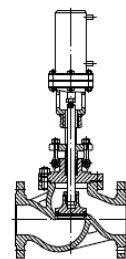
Limit switches



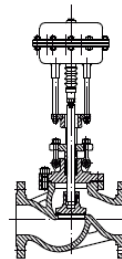
Operated with chain



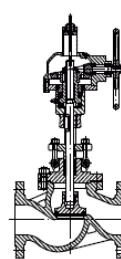
Electric actuator



Hydraulic actuator



Pneumatic actuator



Gear operated