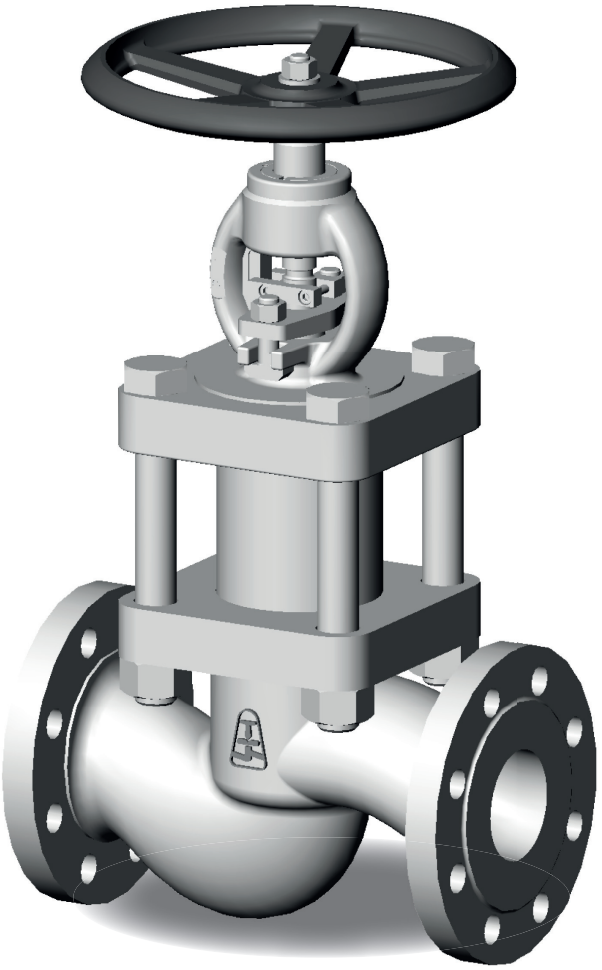
SHUT – OFF GLOBE VALVE WITH BELLOWS C09.1/C09.5

PN 10–40; DN 15–80; T_{MAX}: 400 °C



APPLICATION

- water, steam, gases, oils, petroleum products, non-aggressive and aggressive substances

CONNECTION

- flanged, weld ends

OPERATION

- handwheel, gearbox, electric actuator

DESCRIPTION

- shut-off globe valve C09.1 and shut-off globe valve with control cone with bellows C09.5
- non-rotating rising stem
- the bellows prevents the medium from penetrating into the gland space
- classic bonnet construction
- the shape of the body is straight
- sealing surfaces of seats are welded by hard steel (except for stainless steel types)
- complies with the requirements of the directive 2014/68/EU, EN 13 709
- testing is carried out according to EN 12266-1

BASIC DESIGN OPTIONS

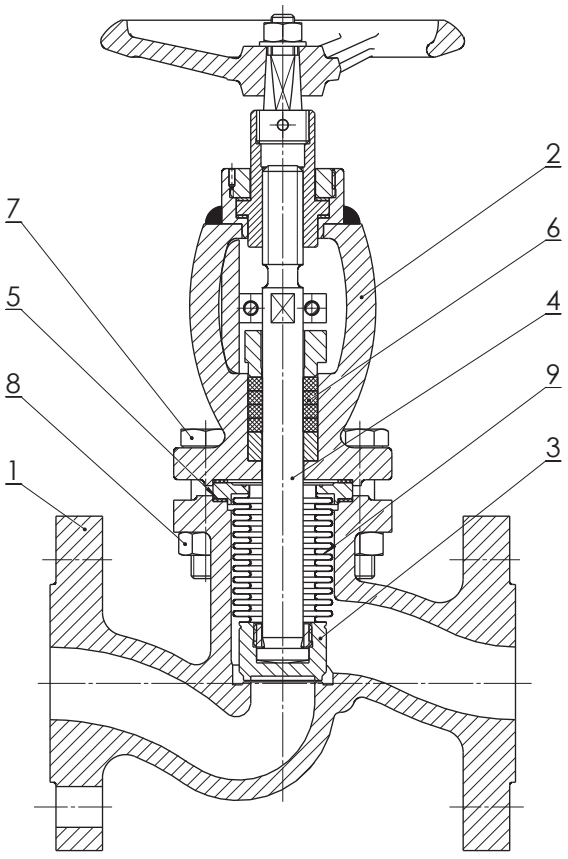
- control cone (for rough control)
- according to TRD 201
- TA-Luft

PRESSURE-TEMPERATURE-RATINGS

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]										
		-50	-30	-10	50	100	150	200	250	300	350	400
GX5CrNiMo 19-11-2 (1.4408) [1)]	10	10	10	10	10	9,3	8,4	7,8	7,3	-	-	-
	16	16	16	16	16	14,9	13,5	12,4	11,7	-	-	-
	25	25	25	25	25	23,3	21,1	19,4	18,3	-	-	-
	40	40	40	40	40	37,3	33,8	31,1	29,3	-	-	-
GX5CrNi19-10 (1.4308)	10	10	10	10	9,3	8,4	7,6	6,9	6,4	-	-	-
	16	16	16	16	14,9	13,5	12,1	11	10,3	-	-	-
	25	25	25	25	23,3	21,1	18,9	17,2	16,1	-	-	-
	40	40	40	40	37,3	33,8	30,2	27,6	25,8	-	-	-
G21Mn5 (1.1138)	10	-	10	10	10	9,2	8,7	7,9	7,2	6,5	-	-
	16	-	16	16	16	14,8	14	12,8	11,8	10,8	-	-
	25	-	25	25	25	23	21	19,2	18,2	17,2	-	-
	40	-	40	40	40	37	35	32	29,5	27	-	-
GP240GH (1.0619)	10	-	-	10	10	9,3	8,7	7,8	7,1	6,4	6	5,8
	16	-	-	16	16	14,9	13,9	12,4	11,4	10,3	9,6	9,2
	25	-	-	25	25	23,3	21,7	19,4	17,8	16,1	15	14,4
	40	-	-	40	40	37,3	34,7	30,2	28,4	25,8	24	23,1

1) Application for temperatures from - 196 °C to + 250 °C on request

USED MATERIALS



Pos.	Part	Material											
1	Body	GP240GH (1.0619)					G21Mn5 (1.1138)					GX5CrNi19-10 (1.4308)	GX5CrNiMo19-11-2 (1.4408)
	Hard facing of sealing surface	13Cr	13Cr	18Cr9Ni	18Cr9Ni	Stellite 6	13Cr	13Cr	18Cr9Ni	18Cr9Ni	Stellite 6	-	
2	Yoke	GP 240 GH (1.0619)					G21Mn5 (1.1138)					GX5CrNi19-10 (1.4308)	GX5CrNiMo19-11-2 (1.4408)
3	Disc	X6CrNiTi18-10 (1.4541)					X6CrNiTi18-10 (1.4541)					X6CrNiTi18-10 (1.4541)	X6CrNiMoTi17-12-2 (1.4571)
	Hard facing of sealing surface	-					-					-	
4	Stem	X20Cr13 (1.4021)					X20Cr13 (1.4021)					X5CrNi18-10 (1.4301)	X6CrNiMoTi17-12-2 (1.4571)
5	Gasket	Graphite										PTFE	
6	Gland packing	Graphite										PTFE	
7	Bolt	A2-70											
8	Nut	A2-70											
9	Bellows	X6CrNiTi18-10 (1.4541)											

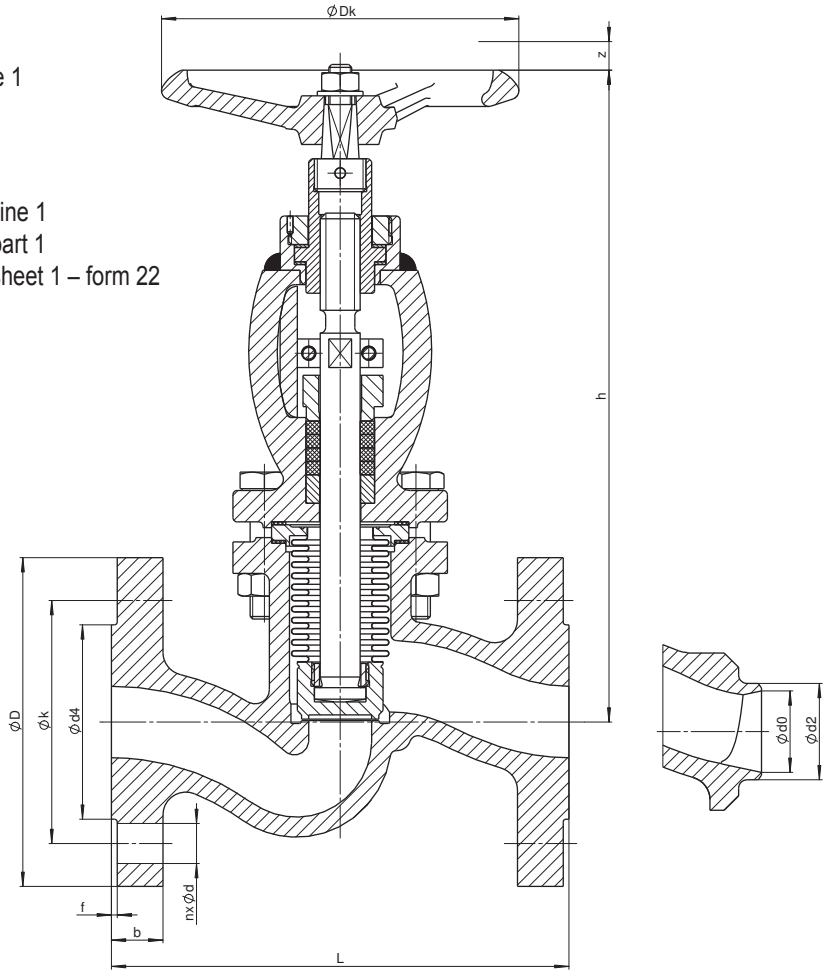
VALVE DIMENSIONS

1. Flanged

Face-to-face dimensions: EN 558 – line 1
Flanges: EN 1092-1

2. Weld ends

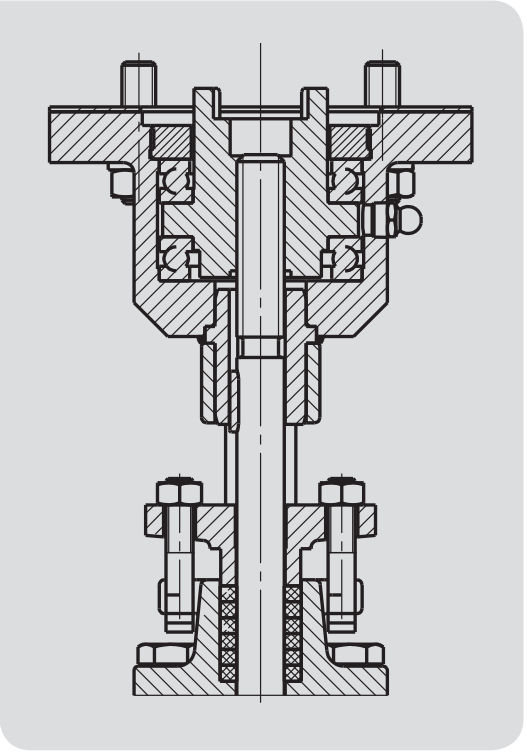
Face-to-face dimensions: EN 12982 – line 1
Dimensions of welding ends: DIN 3239 – part 1
Groove form: DIN 2559 – sheet 1 – form 22



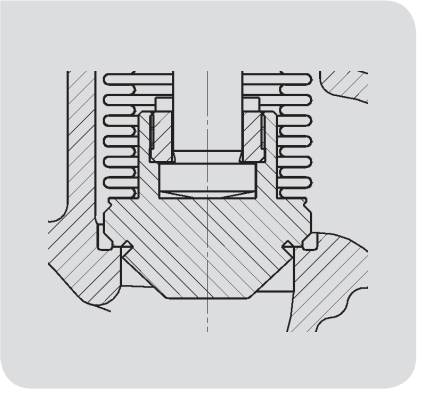
Nominal pressure	Nominal size	Face-to-face	Centre-to-top-height	Stroke	Handwheel	Flanged							Weld ends			
PN	DN	L [mm]	h [mm]	z [mm]	Dk [mm]	n	d [mm]	k [mm]	D [mm]	b [mm]	d4×f [mm]	m [kg]	d2 [mm]	d0 [mm]	m [kg]	Pipe dimension
10, 16, 25, 40	15	130	186	4	125	4	14	65	95	16	45×2	3,5	22	17	2,5	21,3×2,0
	20	150	225	6	125	4	14	75	105	18	58×2	5,5	28	22	4,0	26,9×2,3
	25	160	230	8	125	4	14	85	115	18	68×2	6,0	34	28,5	4,5	33,7×2,6
	32	180	250	9	160	4	18	100	140	18	78×2	9,0	43	37	6,0	42,4×2,6
	40	200	275	11	200	4	18	110	150	18	88×3	11,5	49	43	8,5	48,3×2,6
	50	230	290	13	200	4	18	125	165	20	102×3	16,5	61	54	12,0	60,3×3,2
25, 40	65	290	425	16	250	8	18	145	185	22	122×3	36,5	77	69	30,5	76,1×3,6
	80	310	425	16	250	8	18	160	200	24	138×3	41,0	90	81	34,0	88,9×4,0

DESIGN VARIANTS

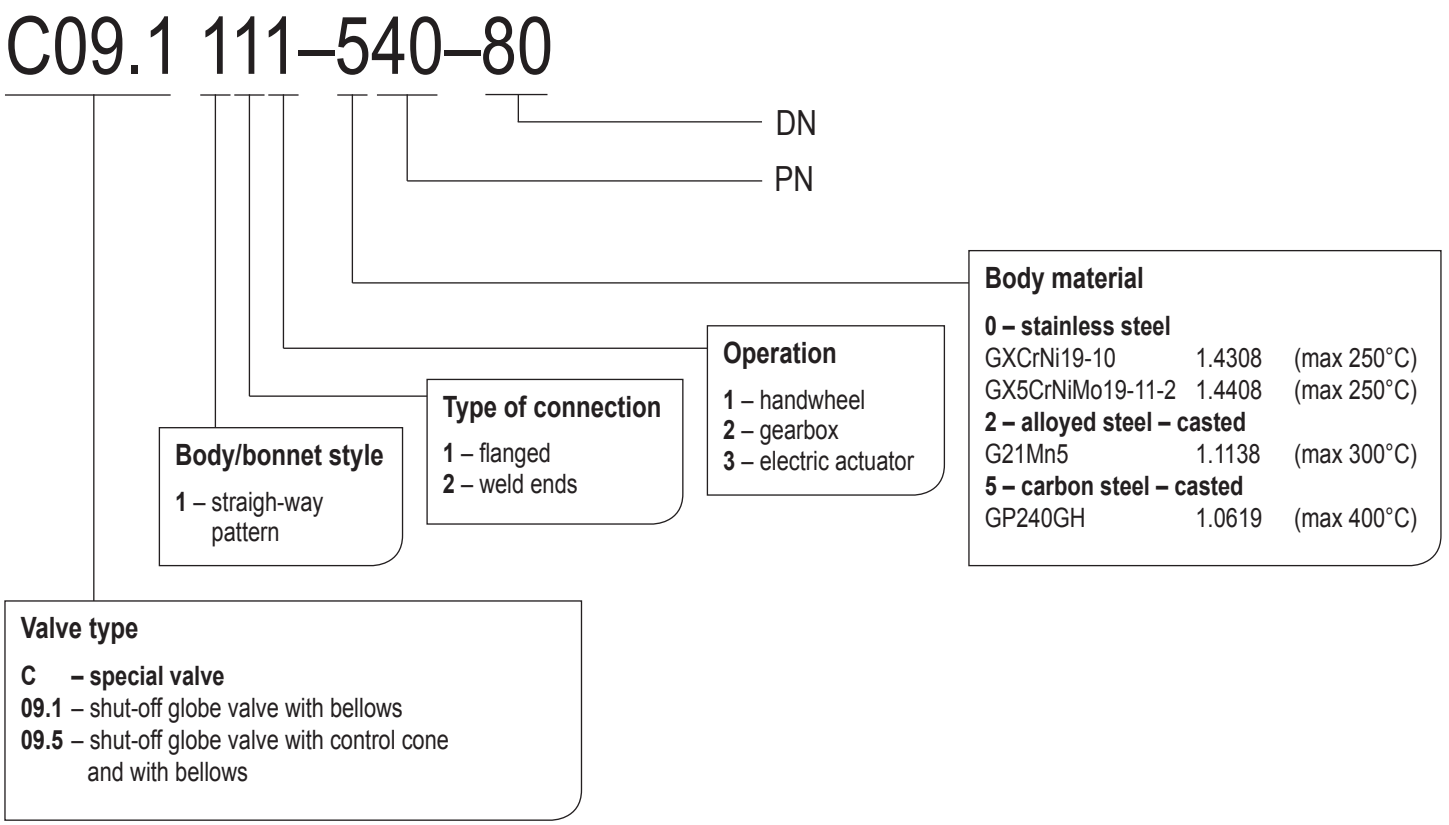
ADJUSTMENT FOR ACTUATOR – FORM C ACCORDING TO EN ISO 5210



CONTROL CONE



VALVE DESCRIPTION CODE



VALVE INSTALLATION

Valve can be installed in any position. Medium must flow in accordance with the direction indicated on the body. It is necessary to consider the following points during assembly and operation:

- operating conditions must comply with operating parameters of the valve
- proper function of the valve is affected by the presence of impurities in the pipeline and flowing medium, therefore it is necessary keep working environment a pipeline clean
- medium used must comply with the corrosion resistance of the valve material
- use of mechanically damaged valves during the operation is prohibited

The service life of valves significantly extends regular maintenance and minor repairs carried out by trained personnel.