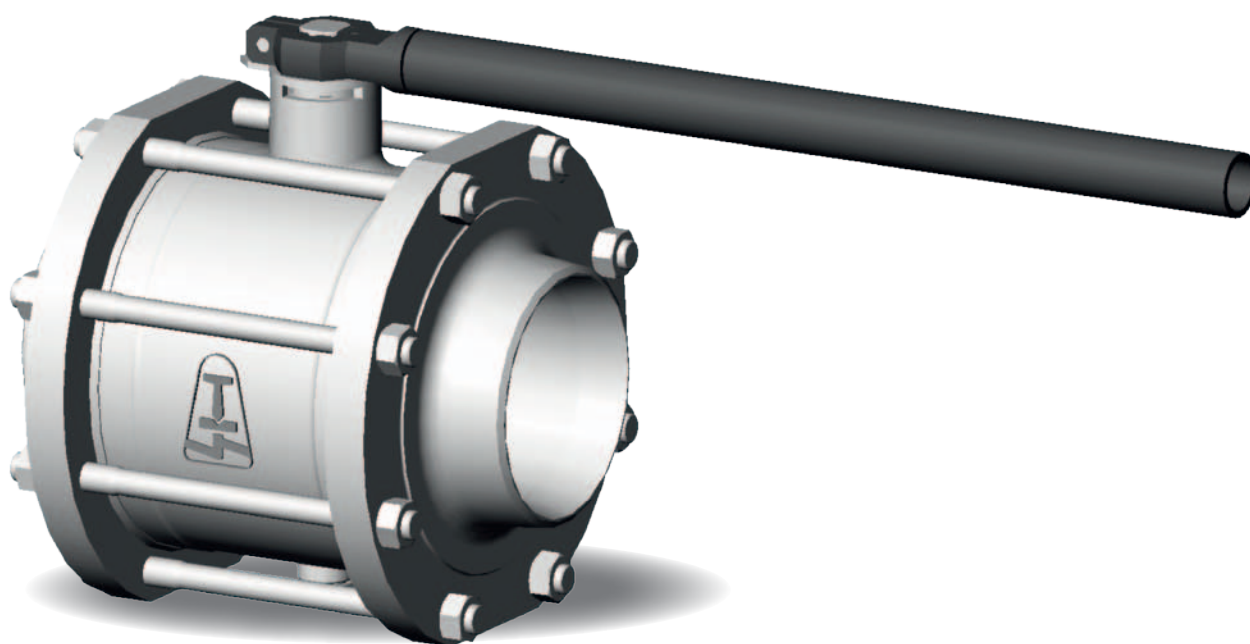


BALL VALVE C05.1

PN 10–63; DN 10–65; T_{MAX} : 200 °C

PN 10–25; DN 80–150; T_{MAX} : 200 °C



BALL VALVE C05.1

APPLICATION

- liquid, steam, gas and others

CONNECTION

- weld ends, flanged screw ends, (inside thread)

OPERATION

- hand lever, gearbox, electric actuator, adjustment for pneumatic actuator or hydraulic actuator

DESCRIPTION

- modular design
- full-flow
- closing element - stainless steel ball in PTFE seats
- gasket: PTFE, FPM
- low temperatures design
- complies with the requirements of the directive 2014/68/EU and standard EN 1983
- testing is carried out according to standard EN 12266-1, part 2

BASIC DESIGN OPTIONS

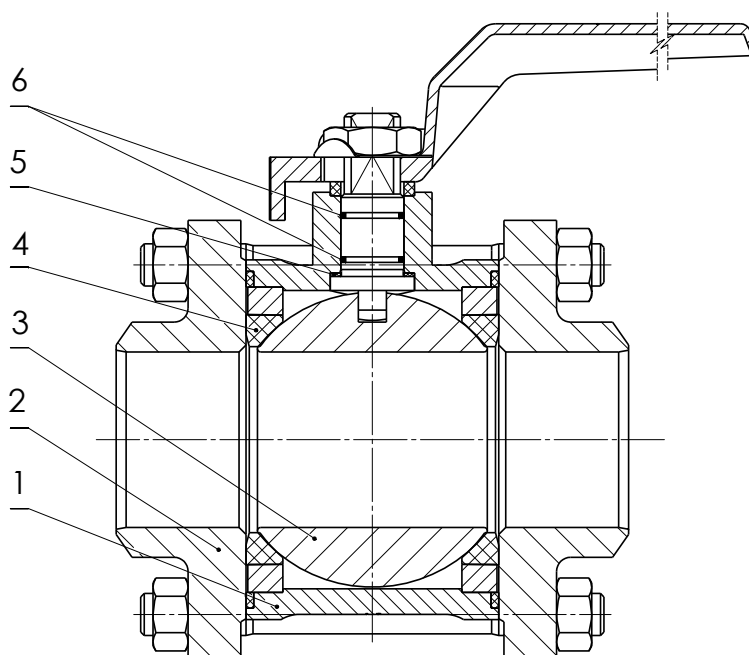
- adjustment for actuator, flange according to ISO 5211
- seal elements change possible
- in the case of manual lever control the ball valve can be retrofitted by locking the open-closed positions with a padlock or positioner, which reports the open-closed position remotely
- in the case of electric or pneumatic drive control, it can be retrofitted with other accessories, for example position limit switches

PRESSURE-TEMPERATURE-RATINGS

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]				
		-196	-10	0	100	200
GP240GH (1.0619, A216WCB)	10	-	10	10	10	10
	16	-	16	16	16	16
	25	-	25	25	25	25
	40	-	40	40	40	40
	63	-	63	63	63	63
GX5CrNiMo19-11-2 (1.4408, A351CF-8M)	10	10 ¹⁾	10	10	10	10
	16	16 ¹⁾	16	16	16	16
	25	25 ¹⁾	25	25	25	25
	40	40 ¹⁾	40	40	40	40
	63	63 ¹⁾	63	63	63	63

1) only with a design for a deep chill

USED MATERIALS



Pos.	Part	Material	
1	Body	GP240GH/1.0619 (A216 Gr. WCB)	GX5CrNiMo19-11-2/1.4408 (A351 CF-8M)
2	Flange	GP240GH/1.0619 (A216 Gr. WCB)	GX5CrNiMo19-11-2/1.4408 (A351 CF-8M) (X6CrNiTi 18-10 / 1.4541)
3	Ball	S.S.316 GX5CrNiMo19-11-2/1.4408 (X5CrNiMo17-12-2/1.4401)	S.S.316 GX5CrNiMo19-11-2/1.4408 (X5CrNiMo17-12-2/1.4401)
4	Ring	PTFE	
5	Ring	PTFE	
6	Ring	FPM/PTFE	

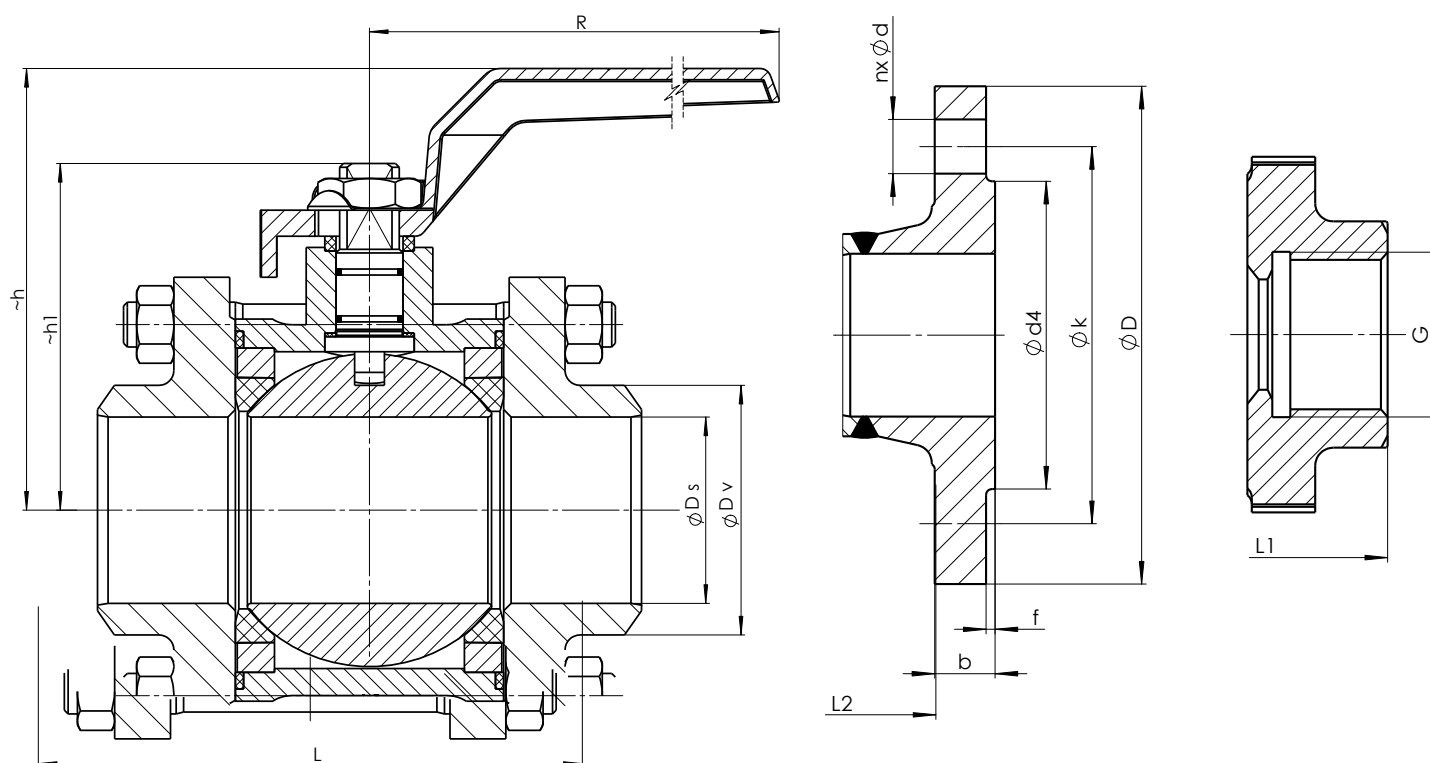
VALVE DIMENSIONS

1. Weld ends, inside thread

Face-to-face dimensions: as per table
Weld ends: DIN 3239 – part 1
Groove form: DIN 2559 – sheet 1 – form 22

2. Flanged

Face-to-face dimensions: as per table
Flanged: EN 1092-1, (DIN 2501/1972)



WELDING DESIGN

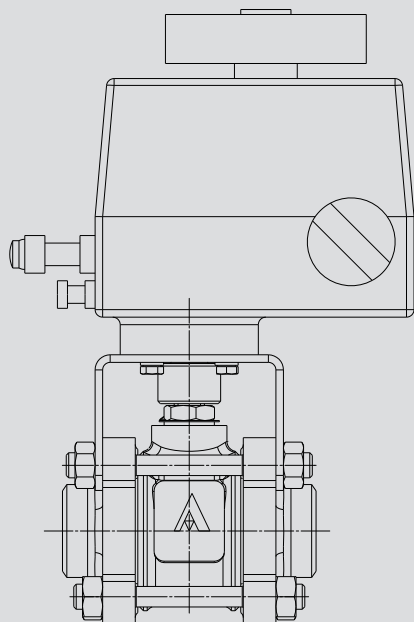
Nominal pressure	Nominal size	Face-to-face	Face-to-face (screw ends)	Centre-to-top	Centre-to-top	Hand lever	Weld ends		Pipe dimensions	Inside thread dimension	Approximate weight
PN	DN	L	L1	h	h1	R	Dv	Ds		G	m [kg]
10, 16, 25	10	65	60	70	52	130	20	13	16x1,5	3/8"	0,75
	15	75	75	74	54	130	24	18	22x2	1/2"	1,0
	20	85	80	77	58	130	31	24	28x2	3/4"	1,5
	25	100	90	93	67	160	37	28	32x2	1"	2,3
	32	100	110	100	74	160	42,5	33	38x2,5	1 1/4"	2,6
	40	125	120	115	82	200	54	39,5	44,5x2,5	1 1/2"	4,3
	50	145	140	125	90	200	67	51	57x3	2"	7,3
	65	160	-	125	105	200	83	68	76x4	-	12,7
	80	200	-	150	145	450	96	83	89x3	-	24,0
	100	250	-	165	160	500	121	102	108x3	-	36,6
	125	310	-	195	190	700	147	125	133x4	-	82,0
	150	370	-	240	230	700	176	151	159x4	-	99,0
40	10	65	60	70	52	130	20	13	16x1,5	3/8"	0,75
	15	75	75	74	54	130	24	18	22x2	1/2"	1,0
	20	85	80	77	58	130	31	24	28x2	3/4"	1,5
	25	100	90	93	67	160	37	28	32x2	1"	2,3
	32	100	110	100	74	160	42,5	33	38x2,5	1 1/4"	2,6
	40	125	120	115	82	200	54	39,5	44,5x2,5	1 1/2"	4,3
	50	145	140	125	90	200	67	51	57x3	2"	7,3
	65	160	-	125	105	200	83	68	76x4	-	12,7
63	10	65	60	70	52	130	20	13	17,2x2,0	3/8"	0,75
	15	75	75	74	54	130	24	18	21,3x2,0	1/2"	1,0
	20	85	80	77	58	130	31	24	26,9x2,3	3/4"	1,5
	25	100	90	93	67	160	37	28	33,7x2,6	1"	2,3
	32	100	110	100	74	160	42,5	33	42,4x2,6	1 1/4"	2,6
	40	125	120	115	82	200	54	39,5	48,3x2,6	1 1/2"	4,3
	50	145	140	125	90	200	67	51	60,3x3,2	2"	7,3
	65	160	-	125	105	200	83	68	76,1x5,6	-	12,7

FLANGE DESIGN

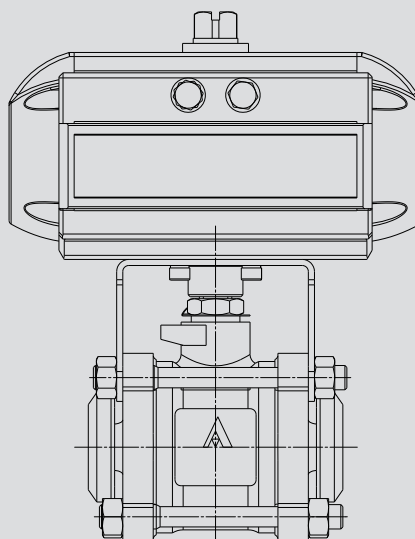
Nominal pressure	Nominal size	Face-to-face	Centre-to-top	Centre-to-top	Hand lever	Number of holes	Hole	Pitch circle	Flange diameter	Flange thickness	Sealing bar	Approximate weight
PN	DN	L ₂	h	h ₁	R	n	ød	øk	øD	b	ød _{xf}	m [kg]
10, 16	10	130	70	52	130	4	14	60	90	16	40x2	2,2
	15	130	74	54	130	4	14	65	95	16	45x2	2,6
	20	150	77	58	130	4	14	75	105	18	58x2	3,7
	25	160	93	67	160	4	14	85	115	18	68x2	4,9
	32	180	100	74	160	4	18	100	140	18	78x2	6,6
	40	200	115	82	200	4	18	110	150	18	88x3	8,7
	50	230	125	90	200	4	18	125	165	18	102x3	13
	65	290	125	105	200	8	18	145	185	18	122x3	21,2
	80	310	150	145	450	8	18	160	200	20	138x3	34,6
	100	350	165	160	500	8	18	180	220	20	162x3	49,5
	125	400	195	190	700	8	18	210	250	22	188x3	99,0
	150	450	240	230	700	8	22	240	285	22	218x3	120
25	10	130	70	52	130	4	14	60	90	16	40x2	2,2
	15	130	74	54	130	4	14	65	95	16	45x2	2,6
	20	150	77	58	130	4	14	75	105	18	58x2	3,7
	25	160	93	67	160	4	14	85	115	18	68x2	4,9
	32	180	100	74	160	4	18	100	140	18	78x2	6,6
	40	200	115	82	200	4	18	110	150	18	88x3	8,7
	50	230	125	90	200	4	18	125	165	20	102x3	13
	65	290	125	105	200	8	18	145	185	22	122x3	21,2
	80	310	150	145	450	8	18	160	200	24	138x3	34,6
	100	350	165	160	500	8	22	190	235	24	162x3	49,5
	125	400	195	190	700	8	26	220	270	26	188x3	99,0
	150	450	240	230	700	8	26	250	300	28	218x3	120
40	10	130	70	52	130	4	14	60	90	16	40x2	2,2
	15	130	74	54	130	4	14	65	95	16	45x2	2,6
	20	150	77	58	130	4	14	75	105	18	58x2	3,7
	25	160	93	67	160	4	14	85	115	18	68x2	4,9
	32	180	100	74	160	4	18	100	140	18	78x2	6,6
	40	200	115	82	200	4	18	110	150	18	88x3	8,7
	50	230	125	90	200	4	18	125	165	20	102x3	13
	65	290	125	105	200	8	18	145	185	22	122x3	21,2

DESIGN VARIANTS

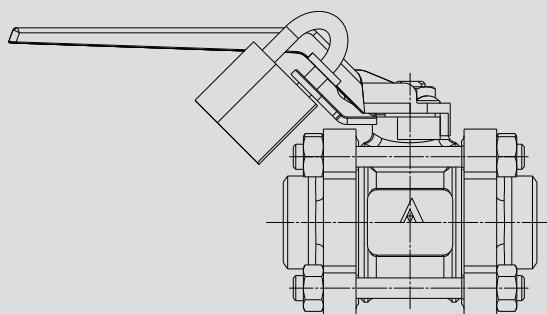
Design with electric actuator



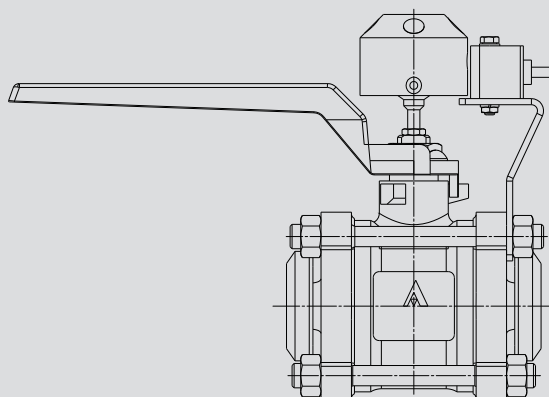
Design with pneumatic actuator



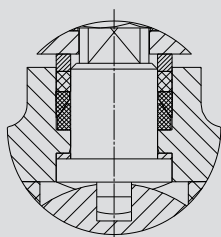
Manual design with locking



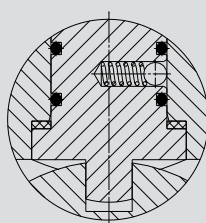
Manual design with positioner



Manual design deep cold

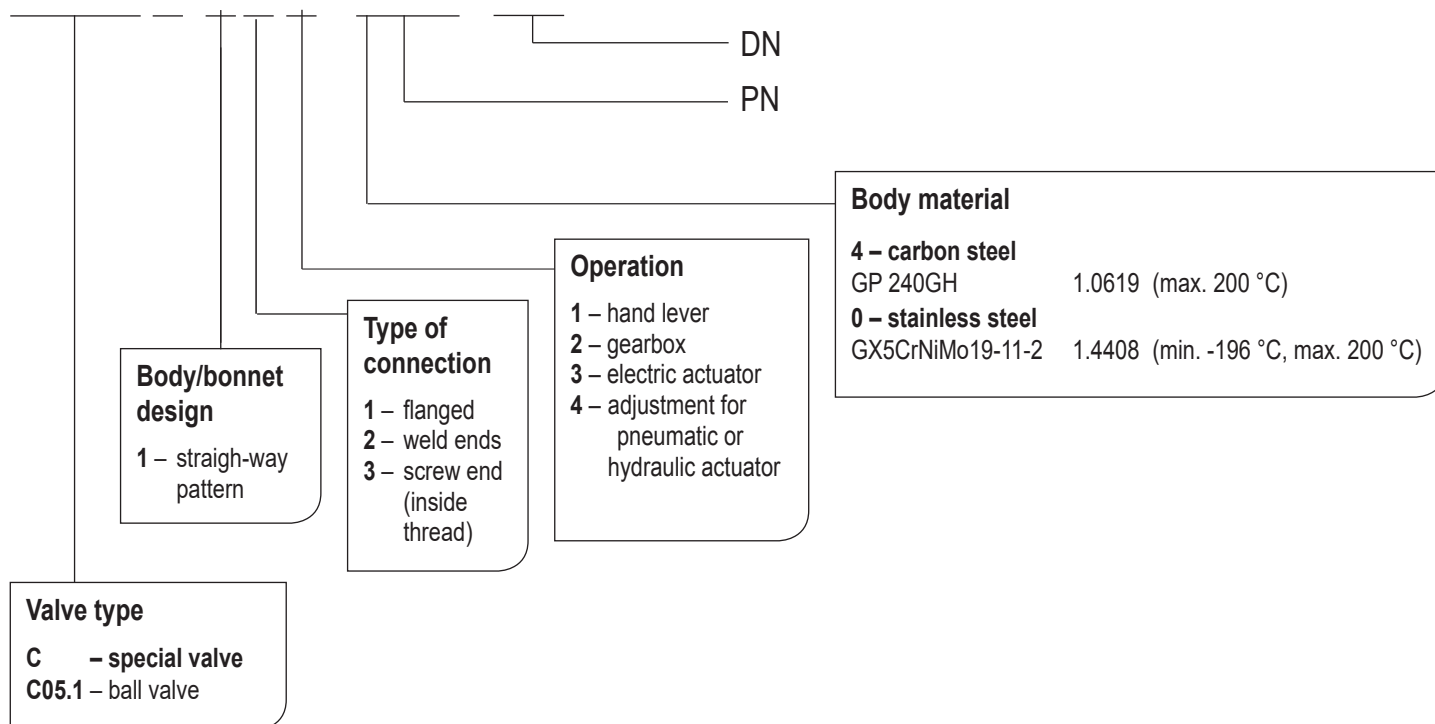


Antistatic design



VALVE DESCRIPTION CODE

C05.1 121–040–25



VALVE INSTALLATION

Valve can be built into both vertical and horizontal pipeline. When operating by pneumatic or electric actuator, the actuator regulations must be observed. Medium can flow in one direction and the other. After completion of the assembly it is necessary to check the control function (open-closed).

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, for example with using filters
- 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.