VALVE DATA SHEET

C17X CAST STEEL BALL VALVE

CE

Application

Tight shut off Ball valve 2 pieces bolted construction split body

- **Nominal size DN 15 to 150 and NPS½ to 6”**
- **Nominal pressure ASME CLASS 150 and 300**
- **Temperatures -60 ˚C/-80 ˚C to +230 ˚C**

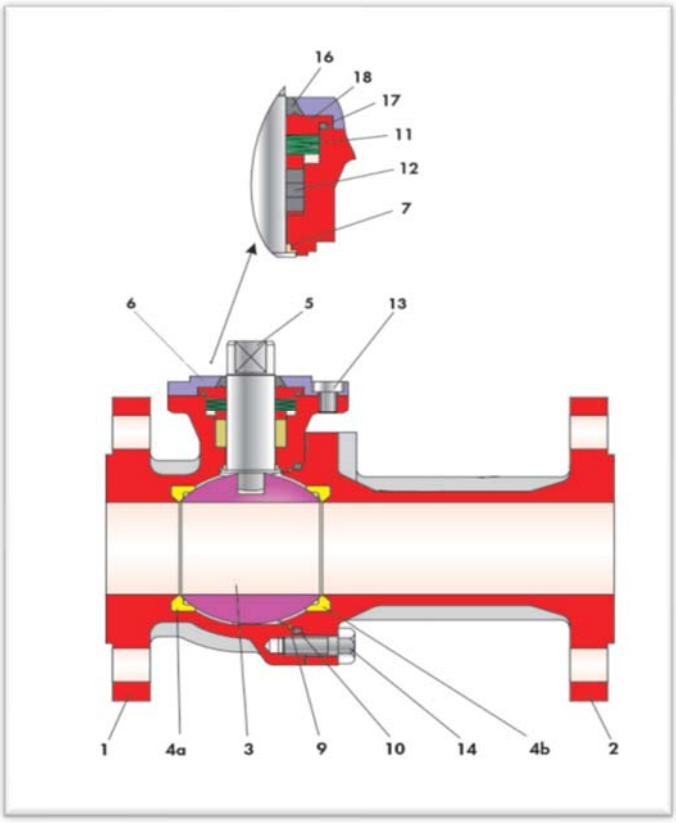
Ball valve are designed with the following features:

- **Design**
  - Fire-safe version with test certificate
    - API 607 6th ed. & EN ISO 10497
- Valve body made of carbon steel A216 WCB and stainless steel A351 CF8M
- Exchangeable seat rings
- On/off operation with leakage rate A acc. to DIN EN 12266-1/ ISO5208, bubble-tight version
- Stem sealing with a self-adjusting packing, supported by disc springs, maintenance-free
- Blowout-proof stem made of F51for an easy automation,
- TA Luft/ ISO 15848-1 certificate available
- ANSI face-to-face dimensions acc. to ASME B16.10
- Flange finish to ASME B16.5
- Connecting flange for actuators according to DIN ISO 5211
- Double body seal system
- Antistatic device

Versions

C17X Ball valves are optionally available in the following versions:

- Ball valve bare stem
- Ball valve with lever
- Ball valve with manual gear
- Ball valve with pneumatic quarter-turn actuator



PART LIST

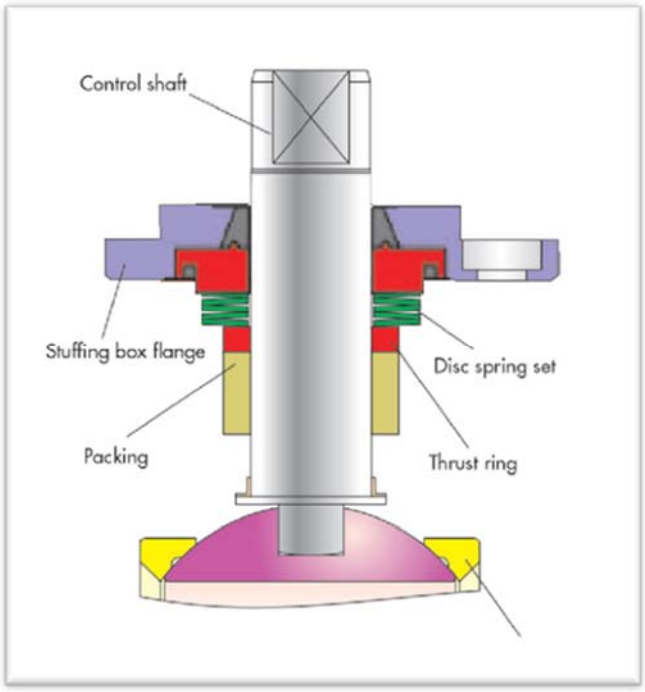
Item	Description
1	Body
2	End Connection
3	Ball
4	Seat
5	Stem
6	Gland Flange
7	Thrust Washer
9	First Body Gasket

Item	Description
10	Emergency Body Seal
11	Spring Washer
12	Packing Ring
13	Gland Flange Screw
14	Bolts
16	Emergency Stem Seal
17	Emergency Gland Flange Seal
18	Gland Flange Back Ring

MATERIALS

	STAINLESS STEEL	CARBON STEEL
Main body	ASTM A351 CF8M	A216 WCB
Side body	ASTM A351 CF8M	A216 WCB
Ball	ASTM A351 CF8M	ASTM A351 CF8M
Shaft	ASTM A182 Gr.F51	ASTM A182 GR.F51
Seat rings	PTFE	PTFE
Packing	PTFE	PTFE
Body sealing	PTFE	PTFE

Advantages of the live-loaded sealing system



- Maintenance-free and self-adjusting
- Highest tightness, even under extreme pressure and temperature conditions
- High durability

KVS and COEFFICIENT

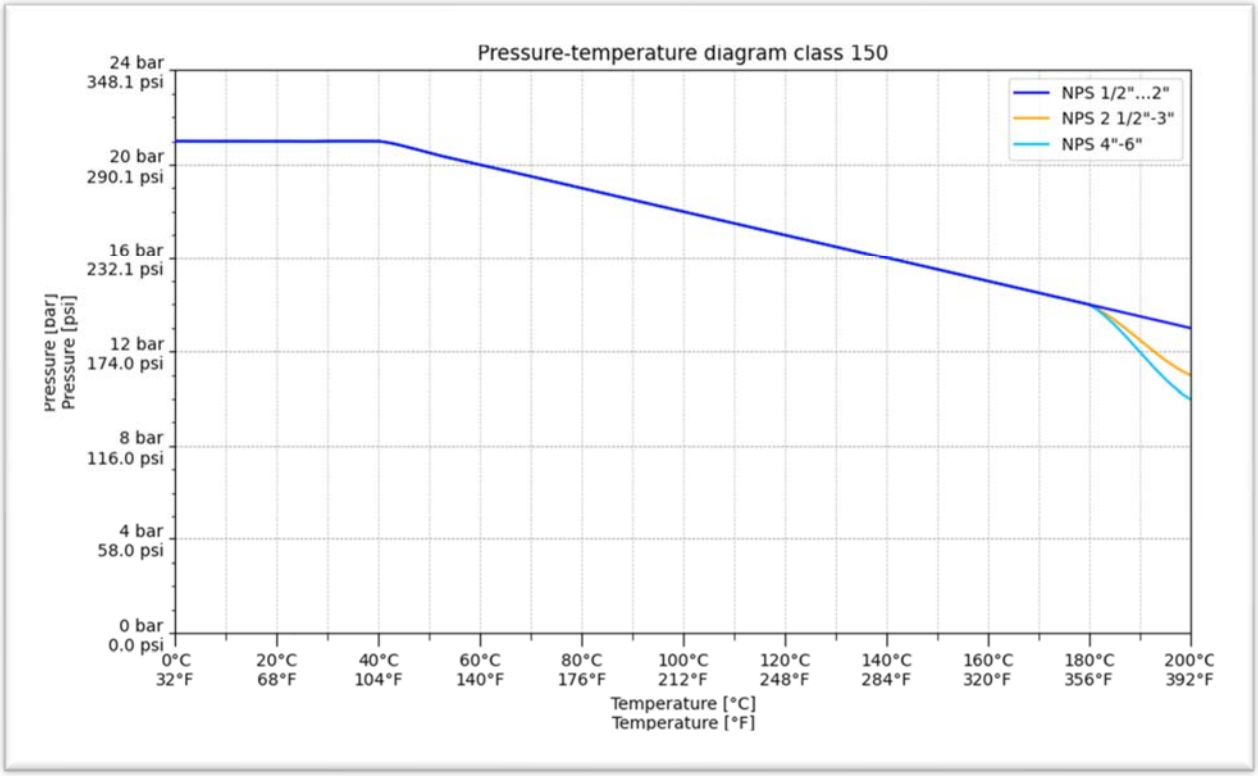
DN	15	20	25	40	50	80	100	150
NPS	½	¾	1	1 ½	2	3	4	6
kvs	12	23	49	116	178	422	610	1575
Cv	14	27	57	135	207	491	709	1830

[1] On request

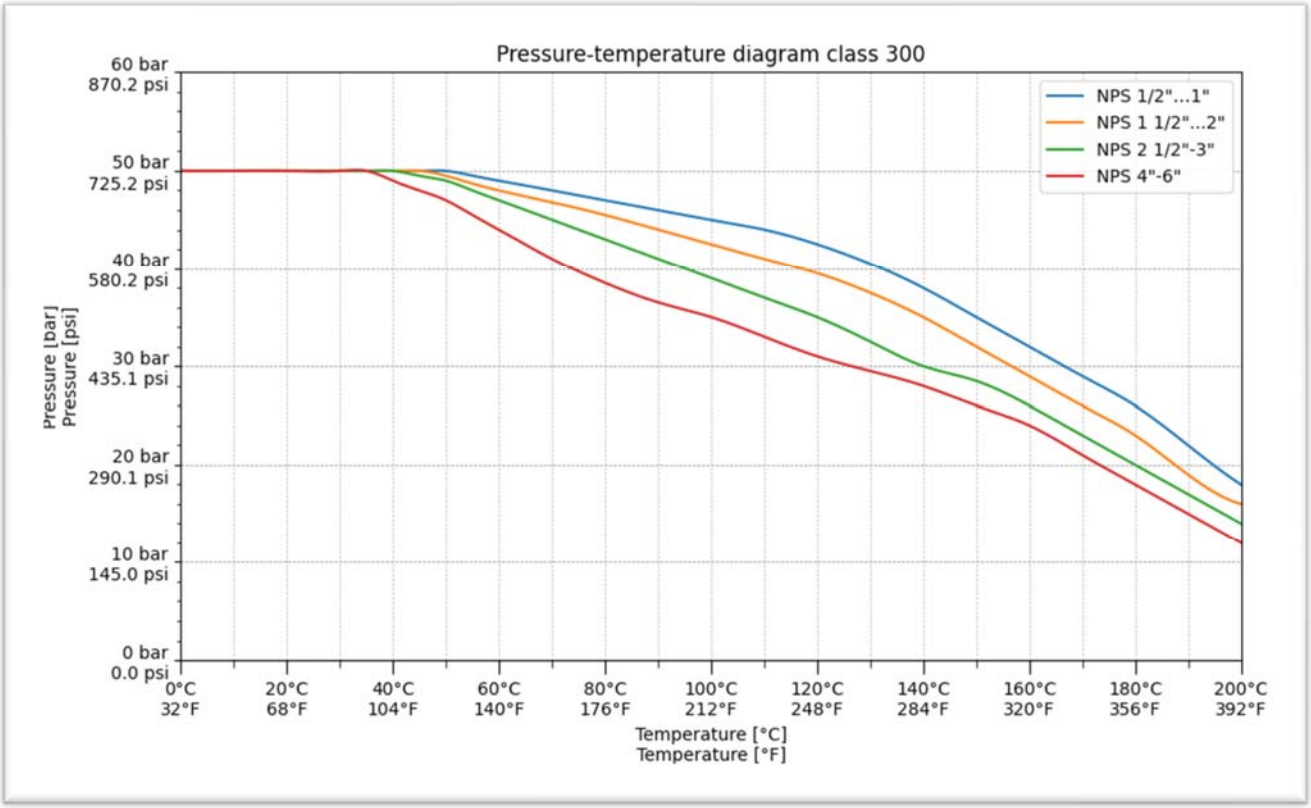
PRESSURE TEMPERATURE DIAGRAMS

The operating range is given by the pressure-temperature diagram. Process data and medium may influence the values in the diagram.

- **Pressure-temperature diagram, Class 150**



- **Pressure-temperature diagram, Class 300**

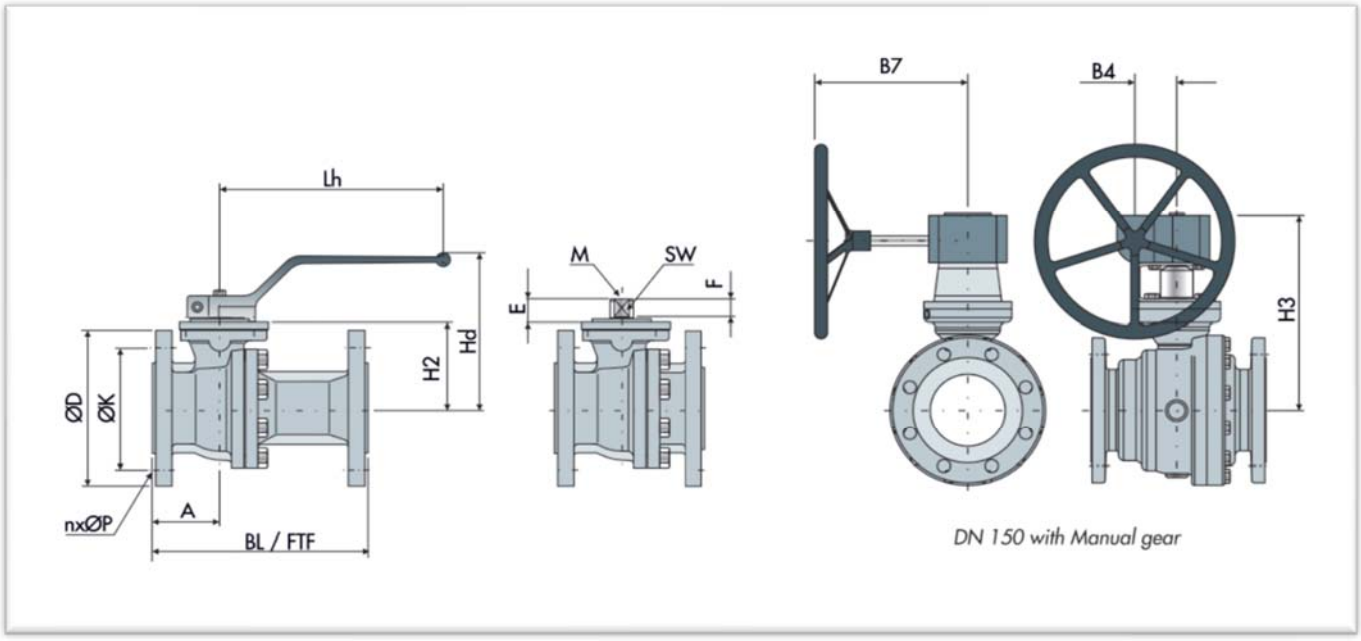


TORQUE VALUES

Differential pressure			Δp in bar	0	5	10	16	20	25	30	40	50
DN	**NPS**	**Md max. Shaft in Nm**	**Md in Nm**	**Md in Nm**								
15	**½**	81	3	5	6	7	7	8	9	10	11	13
20	**-**	338	5	10	12	15	17	19	21	24	28	33
-	**¾**	81	4	10	12	15	17	19	21	24	28	33
25	**1**	338	5	10	12	14	17	19	21	24	28	33
40	**1½**	654	10	20	24	28	33	36	40	44	52	60
50	**2**	654	15	30	35	41	47	52	57	62	73	84
80	**3**	988	25	60	71	81	94	102	113	123	144	-
100	**4**	988	40	90	110	130	154	171	191	211	251	-
150	**6**	3992	110	240	300	360	432	-	-	-	-	-

Note: the above listed torques are based on the opening of the ball valve at the differential pressure for water with corrosion inhibitors added at room temperature and with one-day non-actuation.
Since temperature, pressure, process medium, switching frequencies and idle times considerably affect the arising torques, corresponding factors need to be taken into consideration on selecting and sizing the actuator.

WEIGHTS AND DIMENSIONS



Dimensions in mm and weights in kg

NPS		½	¾	1	1½	2	3	4	6
BL/FTF	cl150	108	117	127	165	178	203	229	394
	cl300	140	152	165	190	216	283	305	403
A		46.5	56	54	62.5	62.5	79.5	120	
ØD	cl150	88.9	89.6	108	127	152.4	190.5	228.6	279
	cl300	95.2	117.3	124	155.4	165.1	209.6	254	318
E		13	13	19	22	22	26	26	37
F		9	9.5	14	17	17	19	19	30
H2		46.5	47.5	58	83	91	130.5	143	223
Hd		98.5	99.5	109.5	143.5	151.5	177	189.5	-
Lh		151	151	155	250	250	550	550	-
DIN/ISO connection		F03	F04	F05	F07	F07	F10	F10	F14
ØK	cl150	60.3	69.9	79.4	98.4	120.6	152.4	190,5	241.3
nxØP		4x15.9	4x15.7	4x15.9	4x15.9	4x19	4x19	4x19.1	8x22.3
ØK	cl300	66.7	82.6	88.9	114.5	127	168.3	200.2	269.7
nxØP		4x15.9	4x19	4x19	4x22.2	8x19	8x22.2	8x22.3	12x22.3
M		M5	M5	M6	M6	M6	M8	M8	M8
SW		9	9	14	17	17	19	19	30
Weight	cl150	2.5	2.7	4	8	9	20	42	93
	cl300	3	3.7	5	9	11	25	51.3	110