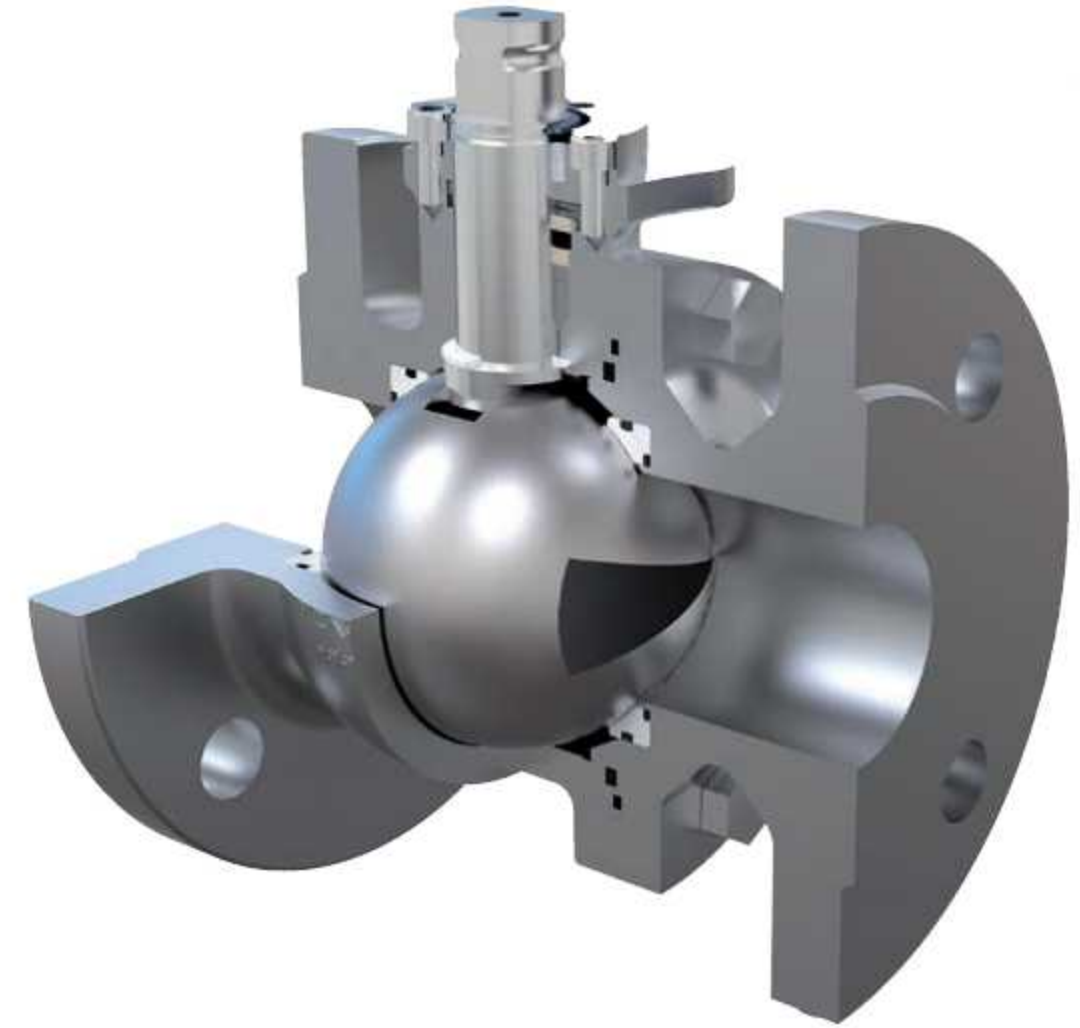


ENT V-port balancing valve made of super duplex stainless steel ASTM A995 6A which can delivers an great performance in a wide range of balancing application.

The V-port design is ideal for flow control balancing. This design is mainly use on industrial and marine applications for high temperature and corrosive fluid usage.



## Key features

- **Super Duplex Stainless Steel**  
For high media resistance and longer valve life span
- **Numeral Lever Handle**  
Ensure accurate adjustment and straight forward balancing with a removable lever design

## Technical Data

Application:  
Heating and cooling system

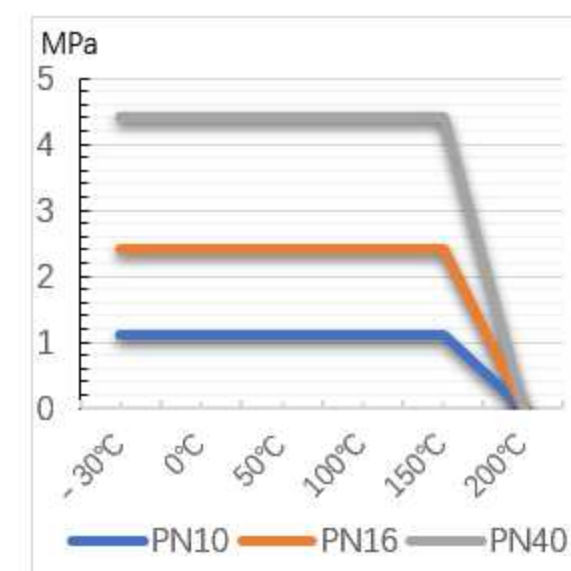
Functions:  
Balancing, Pre-setting, Measuring and Shut-off

Media:  
Clean freshwater.  
Also suitable for seawater and other media  
e.g. process water etc.  
Note: Y-strainer is recommended at inlet for clean  
fluid entry.

Marking:  
Body and flanges: Traceability No.  
Label on body: ENT, DN, PN, material, heat No.

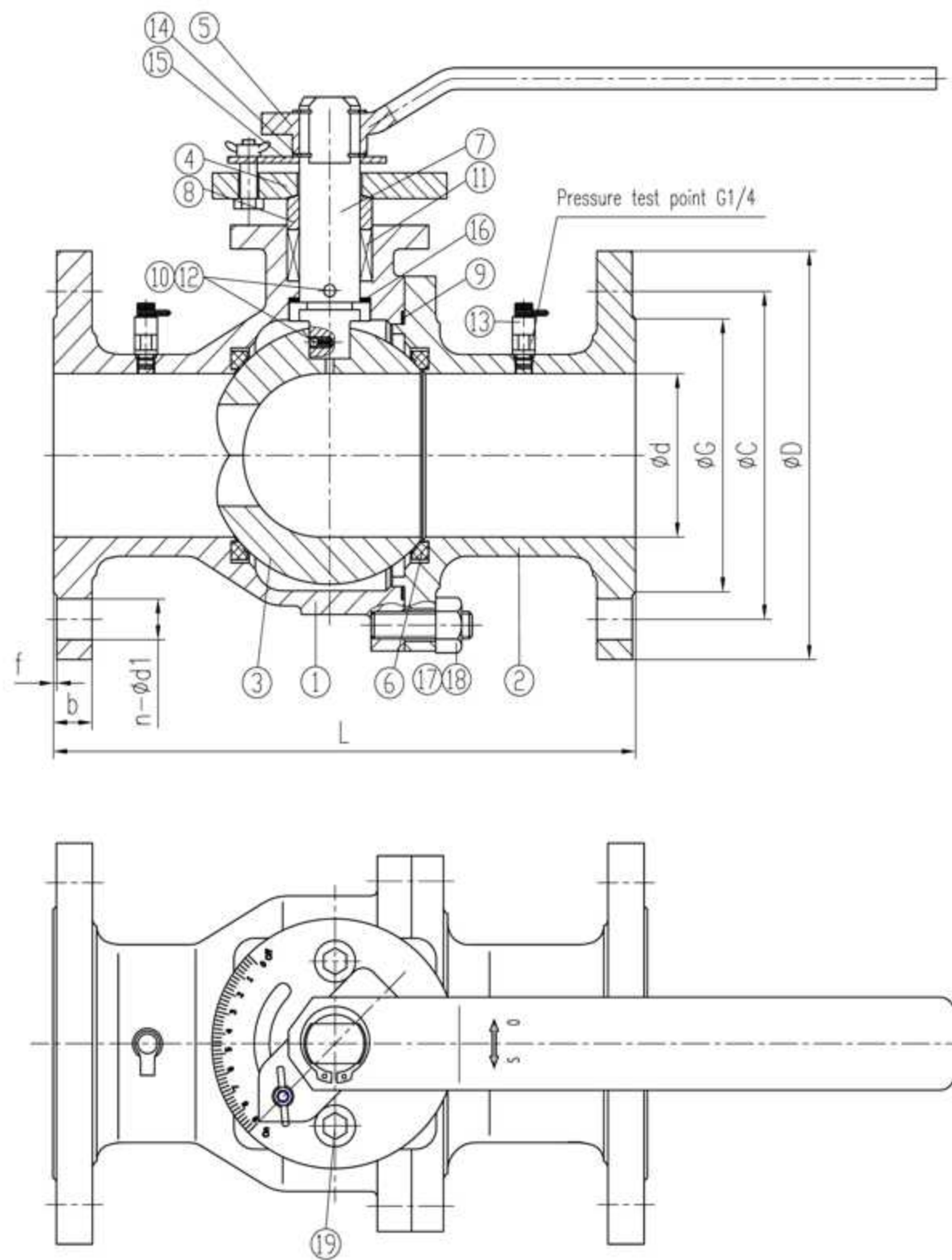
Connection:  
EN1092-1, PN10, PN16, PN40  
(ANSI connection on request, please consult factory)  
Also available with threaded end design DIN ISO 228 (DIN 259) BSP  
(ANSI B1.20.01 NPT on request, please consult factory)

Temperature:  
Working temperature: -10 to 200 degC



Pressure Class:  
DN15 ~ DN50: 40 bar  
DN65 ~ DN150: 16 bar

**ENT V-port Balancing Ball Valve**  
**Model: BCT**



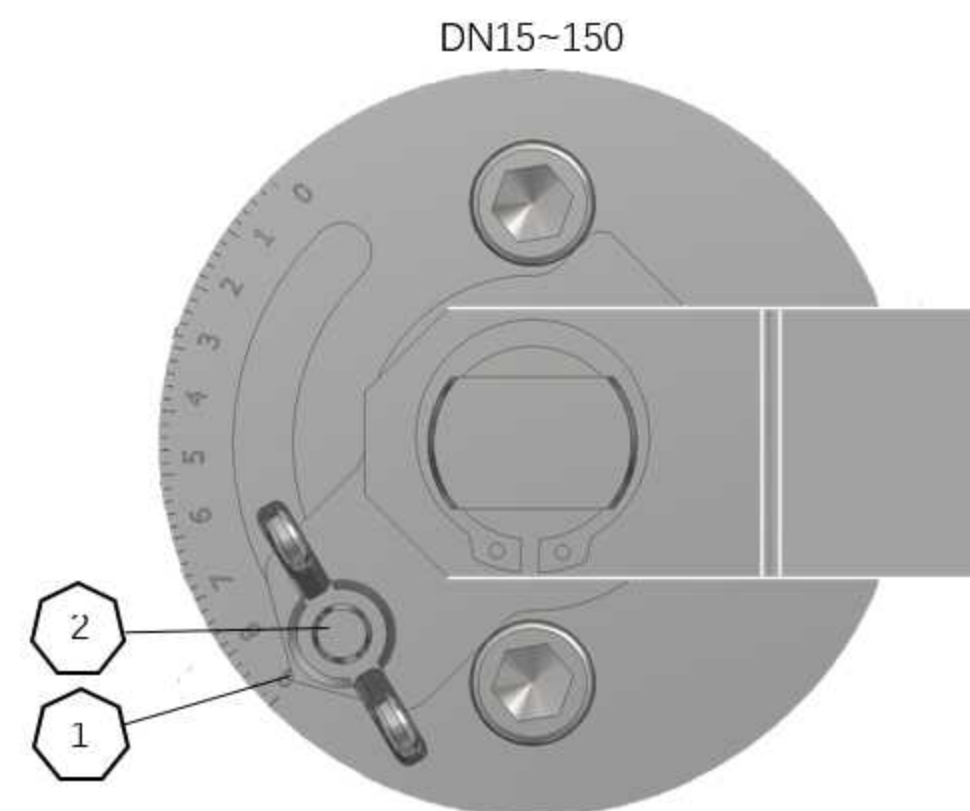
No	Part	Material
1	Body	ASTM A995 6A
2	Bonnet	ASTM A995 6A
3	V-Ball	ASTM A182 F55
4	Gland Flange	ASTM A182 F316
5	Wrench	SS316
6	Seat Ring	RPTFE
7	Stem	ASTM A182 F55
8	Gland	ASTM A276 S32760
9	Gasket	SPW Graphite/ SS
10	Steel Ball	ASTM A276 316
11	Packing	PTFE
12	Spring	ASTM A276 316
13	Nipple	Copper
14	Retainer	SS316
15	Stop Plate	SS316
16	Thrust Plate	PTFE
17	Stub	ASTM A193 B8M
18	Nut	ASTM A194 8M
19	Screw	ASTM A193 B8M

**Dimension**

DN	PN	L	$\Phi D$	$\Phi C$	$\Phi G$	$\Phi d$	b	f	n	$\Phi d1$	Weight (Kg)
15	16/40	250	95	65	45	13	14	2	4	14	1.78
20	16/40	250	105	75	58	19	16	2	4	14	2.0
25	16/40	250	115	96	68	25	16	2	4	14	3.51
32	16/40	280	140	100	78	32	18	2	4	18	6.5
40	16/40	280	150	110	88	38	18	3	4	18	7.23
50	16/40	290	165	125	102	51	20	3	4	18	11.05
65	16	290	185	145	122	64	20	3	8	18	14
80	16	310	200	160	138	76	20	3	8	18	22
100	16	350	220	180	158	102	22	3	8	18	53
150	16	480	285	240	212	152	24	3	8	22	108

## Operating Instruction

- Loosen the locking screw of the limiter (2)
- Adjust the lever to desire position (1)
- Tighten the locking screw of the limiter to secure the position desire (2)



## Flow Coefficient Cv Charts

Percent and Angle of Ball Rotation												
Valve Size	V-Port Angle	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
DN15	60°	0	0.04	0.28	0.73	1.11	1.83	2.92	4.29	7.00	9.43	12.78
DN20	60°	0	0.07	0.35	0.93	1.46	2.42	3.85	5.64	9.21	12.41	16.25
DN25	60°	0	0.09	0.68	1.74	2.78	5.13	8.00	11.88	18.71	23.22	32.81
DN32	60°	0	0.07	0.67	2.04	3.41	6.47	10.80	15.39	22.35	33.37	43.45
DN40	60°	0	0.09	0.92	2.81	4.69	8.89	14.85	21.16	30.73	45.88	59.74
DN50	60°	0	0.11	1.51	5.80	10.39	20.60	33.98	48.75	69.04	102.23	135.75
DN65	60°	0	0.13	1.46	5.91	11.90	23.24	37.92	59.31	83.29	113.65	162.50
DN80	60°	0	0.15	2.89	6.70	15.82	29.36	46.32	73.60	106.74	149.88	193.20
DN100	60°	0	0.26	2.20	12.44	33.67	62.98	106.26	160.49	233.96	329.50	437.29
DN150	60°	0	0.46	5.41	22.15	59.97	112.16	189.24	285.82	416.68	586.83	800.80

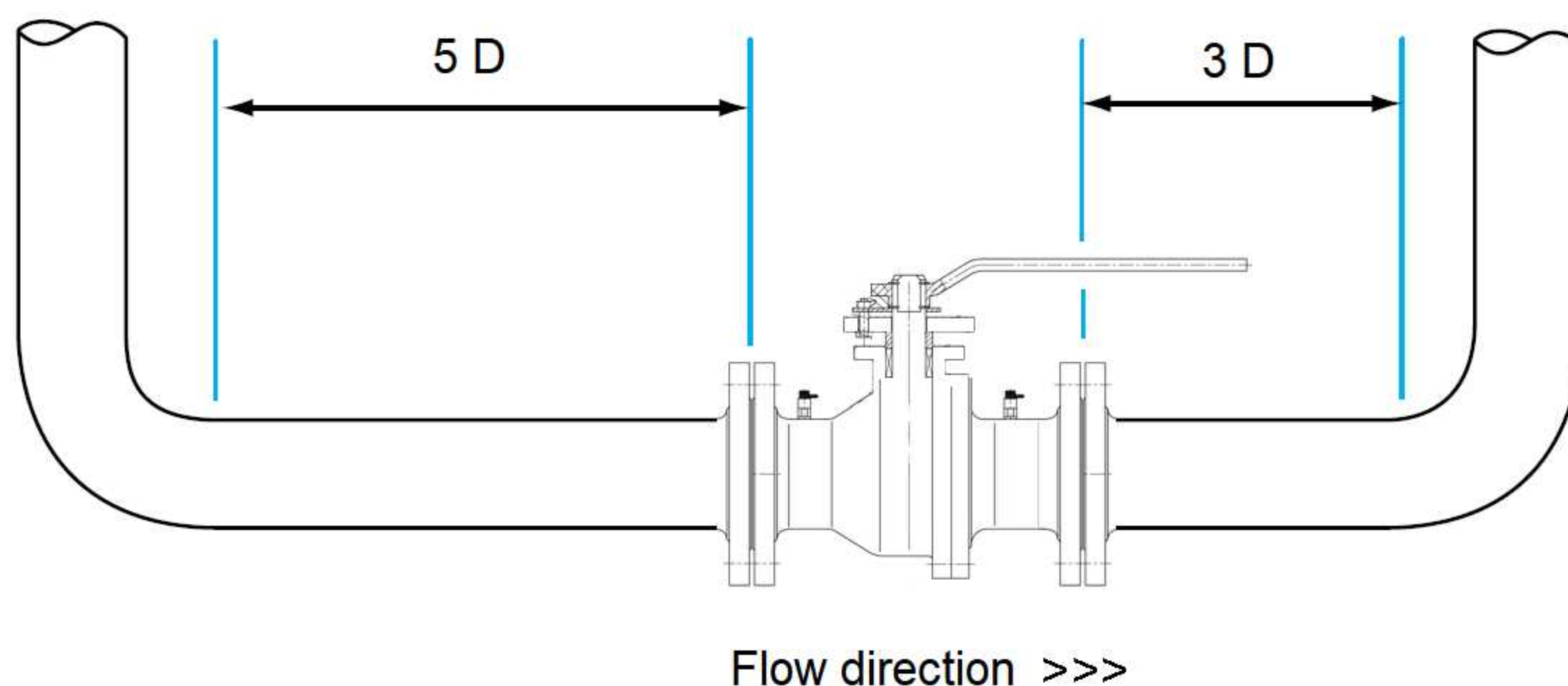
Recommended Cv: Adjustment on balance control above 20% opening.

## Liquid Pressure Recovery & Pressure Drop Ratio Factors

Size	PERCENTAGE OPEN								
	20	30	40	50	60	70	80	90	100
F <sub>i</sub>	0.95	0.94	0.93	0.92	0.90	0.88	0.86	0.82	0.75
X <sub>r</sub>	0.77	0.71	0.67	0.64	0.63	0.62	0.55	0.43	0.40

## Installation Distance Instructions

To obtain an accurate flow balancing and also for material and life span protection of the V-port balancing ball valve, we recommend user to follow our installation guide. This has been all common engineering practises for using control valve/ equipment use in the pipeline with considering factor on the unstable turbulence effect from pumps, short elbow joints etc.



## Recommended Distance With Pumps Installation

