TECHNICAL DATE SHEET

Update : 08/2021

Reference
10CD121Z – 10CD120
10CD020 – 10CD020R*
*(*With gearbox)*

BUTTERFLY VALVE SERIE 10C LUG TYPE - BODY DUCTILE IRON – DI OR STAINLESS STEEL DISC - SEAT EPDM FROM DN32/40 TO DN400





From DN200, the lug holes are reinforced

Références	Pression de service	Ø DN												
		32	40	50	65	80	100	125	150	200	250	300	350	400
10CD121Z	16 bar	●	●	●	●	●	●							
10CD120	16 bar							●	●	●	●	●		
10CD020	10 bar									●	●	●		
10CD020R	10 bar												●	●

1. Standards

- ✓ Manufacturer certified ISO 9001 : 2015
- ✓ Design according to ISO 10631 and EN 593
- ✓ DIRECTIVE 2014/68/EU : CE N° 0038 Risk category III module H
- ✓ Certificate 3.1 on request
- ✓ Pressure tests according to EN 12266-1, Table A
- ✓ Between flanges according to EN 1092-1 PN10/16
- ✓ ISO 5211 mounting pad
- ✓ Length according to: ISO 5752 series 20, EN 558 series 20 (NF 29305), BS 5155 series 4, DIN 3202, serie K1, API 609 Table 1 until DN600, ASME B16.10 Table 8 column 3 until DN350, column 4 beyond.
- ✓ SIL2 level of dependability according to IEC / EN 61508, SIL 3 possible depending on the architecture of the installation.
- ✓ A.C.S. N° 19 ACC LY 080
- ✓ Marine certification BUREAU VERITAS From DN32 to 1000 on request

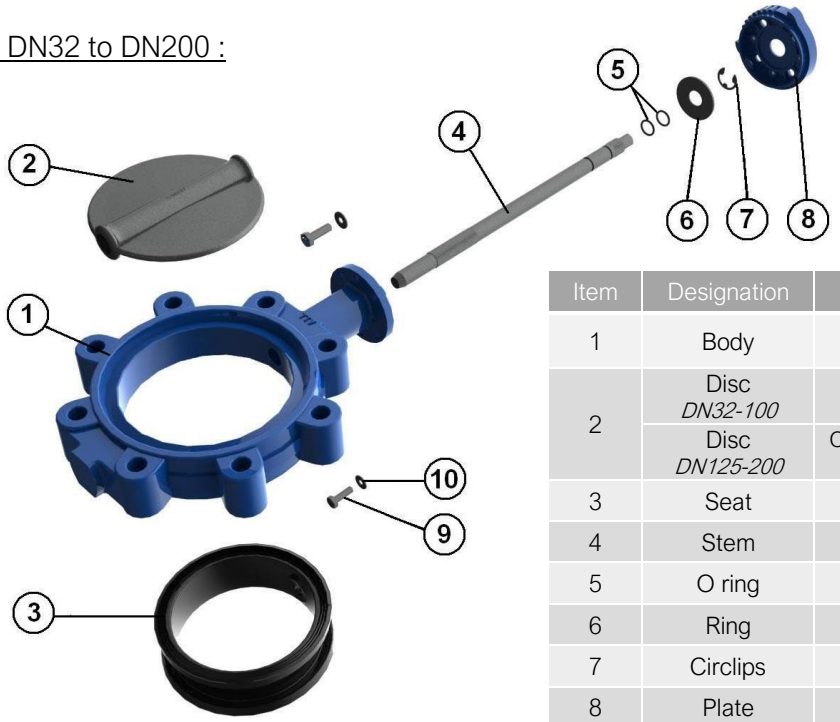
2. Features

Use :	Cold and hot water, drinkable water
Size :	DN32 to DN400
Connexion :	Between flanges PN10/16
Temperature Mini :	-20°C
Temperature Maxi :	+110°C
Pressure Maxi :	16 Bars until DN300, 10 Bars beyond
Features :	Long neck for thermal insulation Lug type Full crossing stem Motorizable (direct mounting pad ISO 5211)
Materials :	Ductile iron EN GJS-500-7 rilsan coated, seat EPDM ACS

Information provided as an indication and subject to possible modification

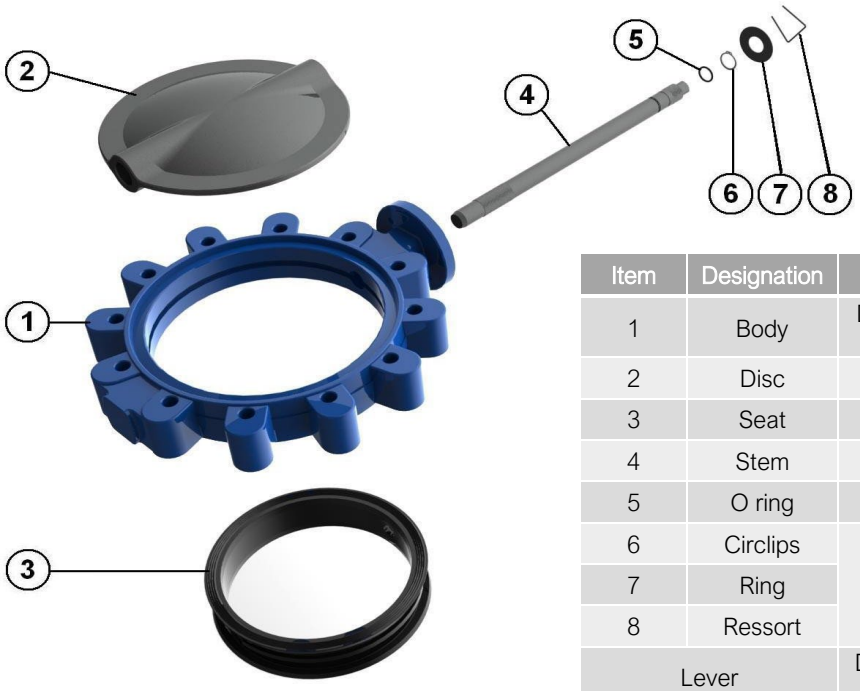
3. Materials

From DN32 to DN200 :



Item	Designation	Materials
1	Body	Cast iron EN GJS-500-7 with rilsanized paint color RAL 5024 thickness 250-300µ
2	Disc *DN32-100*	ASTM A351 CF8M
	Disc *DN125-200*	Cast iron EN GJS-500-7 coated with black rilsan +/- 300µ
3	Seat	EPDM ACS
4	Stem	AISI 420 Stainless steel
5	O ring	NBR
6	Ring	Steel
7	Circlips	Steel
8	Plate	Aluminium
9	Plate screw	5.6
10	Wahser	Steel
Lever		Aluminium ADC10 with epoxy painting 50µ thickness

From DN250 to DN400 :

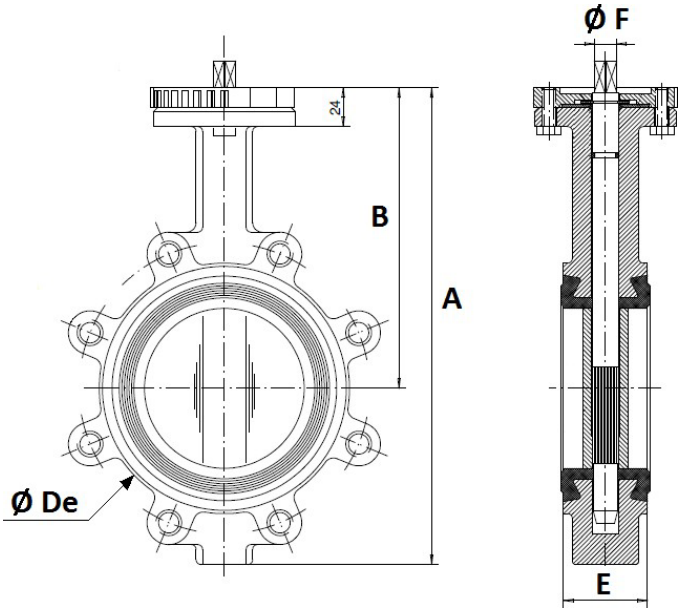


Item	Designation	Materials
1	Body	Ductile iron EN GJS-500-7 rilsan coated color RAL 5024 250-300 µ thickness
2	Disc	EN GJS-500-7 black rilsan coated disc +/- 300 µ
3	Seat	EPDM ACS
4	Stem	AISI 420 Stainless steel
5	O ring	NBR
6	Circlips	Steel
7	Ring	
8	Ressort	
Lever		Ductile iron EN GJS-500-7 with epoxy painting 50µ thickness

Information provided as an indication and subject to possible modification

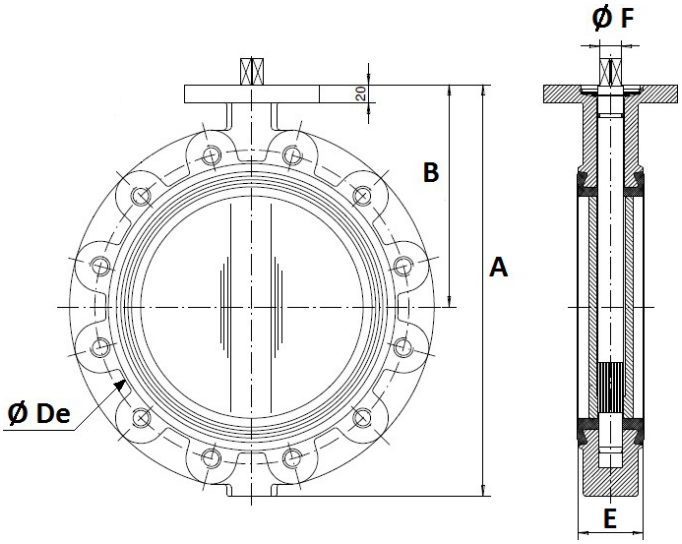
4. Valve sizes (in mm)

From DN32 to DN150 :



DN	32/40	50	65	80	100	125	150
A	205	226	246	259	295	325	352
B	140	156	161	169	187	206	215
Ø De	83	102	115	136	157	192	220
E	33	43	46	46	52	56	56
Ø F	9.5	9.5	12	14	14	17	17
weight (Kg)	2.7	4.1	4.7	6.1	7.9	10.9	11.85

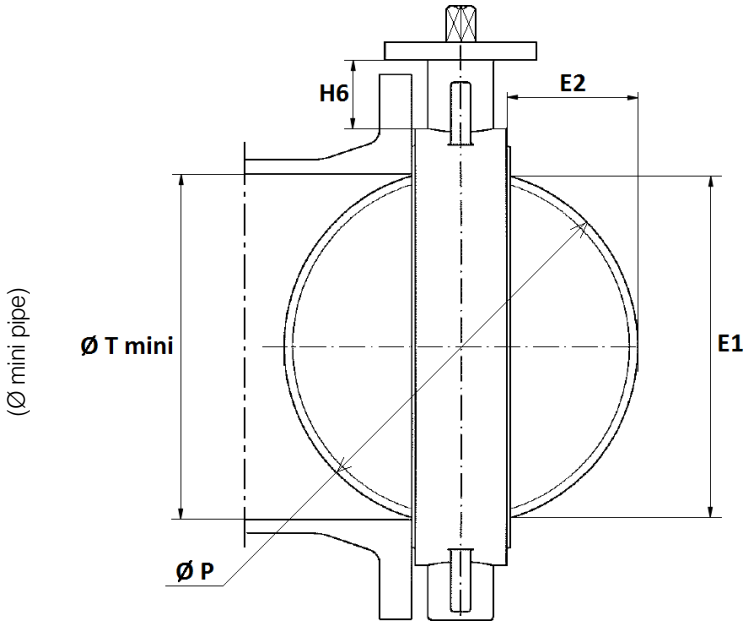
From DN200 to DN400 :



DN	200	250	300	350	400
A	422	460	523	570	644
B	255	248	280	300	340
Ø De	275	329	378	436	487
E	60	68	78	78	102
Ø F	21	23	26.5	26.5	33
Weight (Kg)	18.5	31.8	47.80	53	77

Information provided as an indication and subject to possible modification

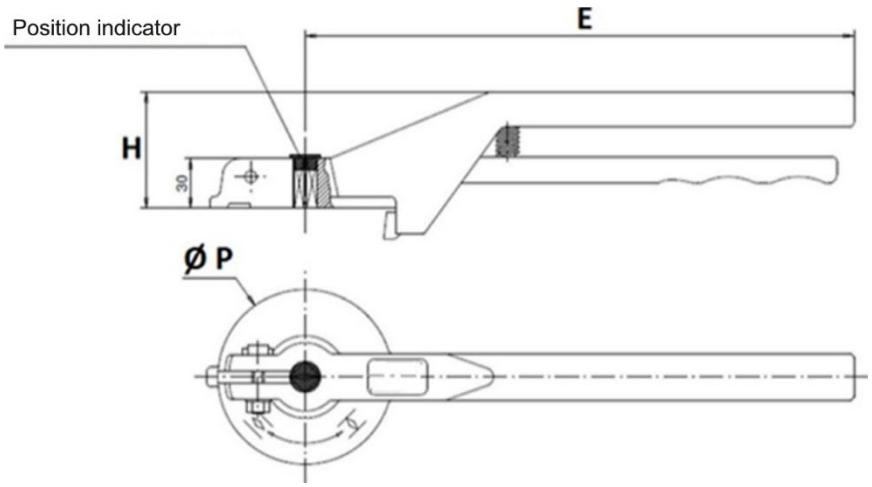
5. Neck and disc size



DN	32/40	50	65	80	100	125	150	200	250	300	350	400
E1	23	24.5	46	65	85	109	136	188	238	289	331	385
E2	3.5	3.5	9.5	17	24	33.5	45.5	69	90	110.5	131	148
H6	76	82	80	80	88	93	89	99	71	76	69	80
Ø T mini	26	27.5	49	68	88	112	139	191	241	292	334	388
Ø P	40	50	65	80	100	123	147	198	248	299	340	398

6. Standard levers size (in mm)

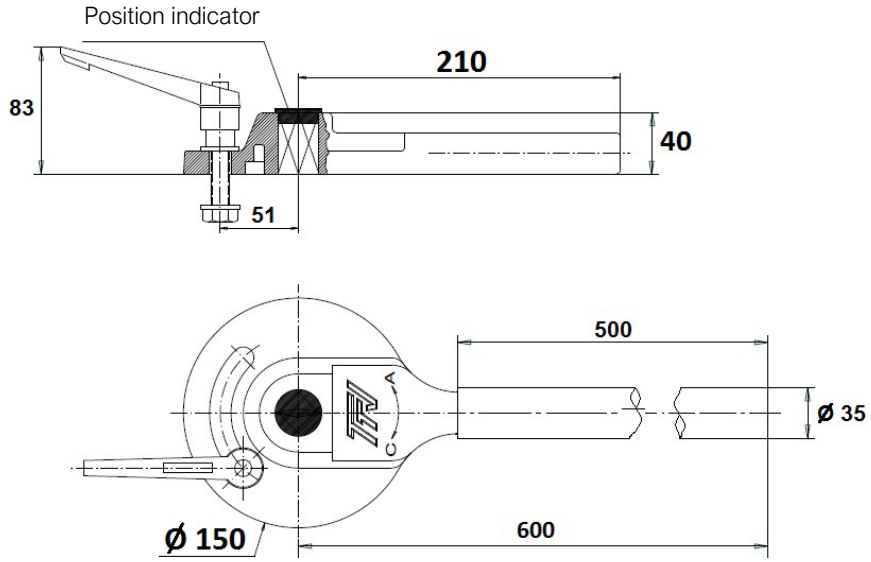
DN32 – 200 :



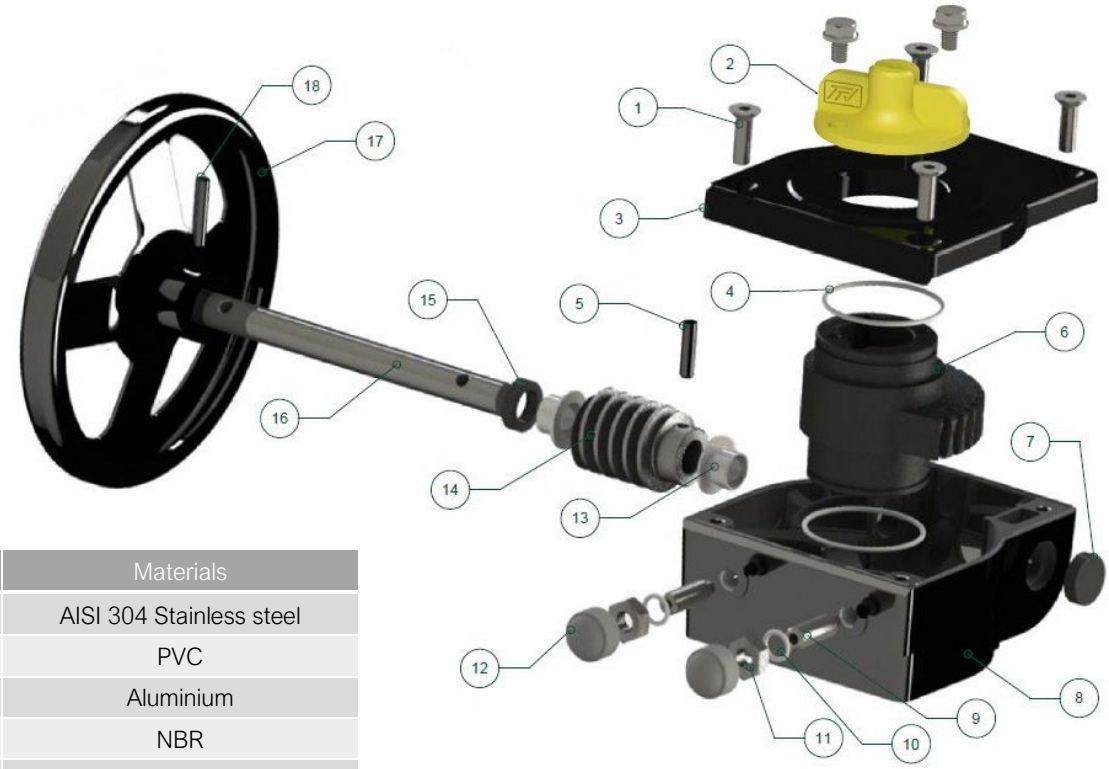
DN	32-100	125-200
E	205	330
H	57	70
Ø P	88	105

Information provided as an indication and subject to possible modification

DN250 – 300 :



7. Nomenclature et Dimensions du réducteurs (en mm)

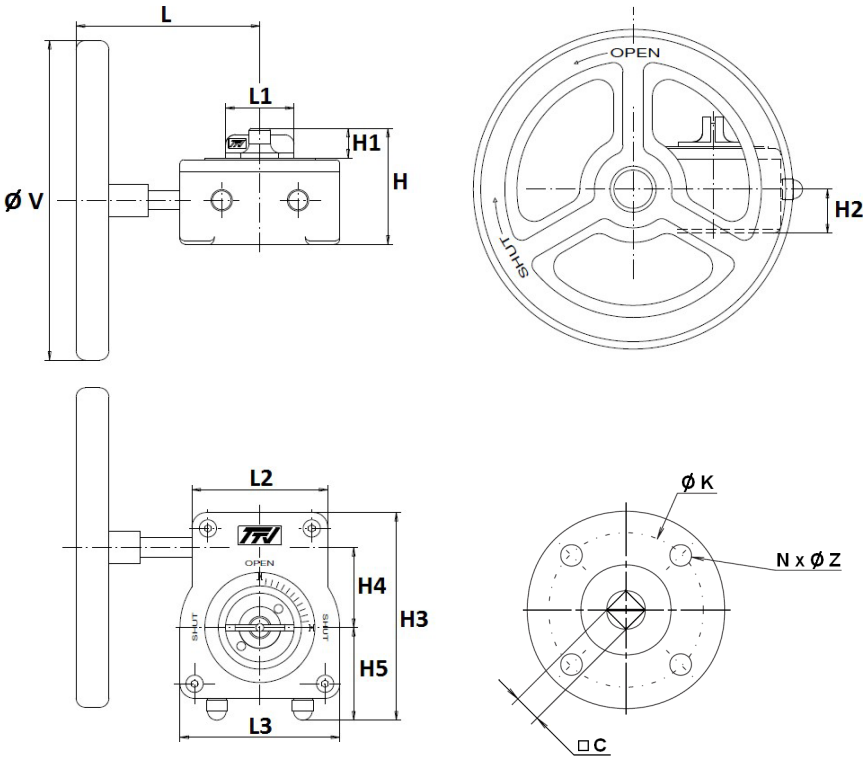


Item	Designation	Materials
1	Screw	AISI 304 Stainless steel
2	Pointer	PVC
3	Bonnet	Aluminium
4	O'Ring	NBR
5	Pin	Acier
6	Quadrant	Ductile Iron EN GJS-400-15
7	Gasket	NBR
8	Body	Aluminium
9	Adjusting bolt	Carbon steel
10	Wahser	Galvanized steel
11	Nut	Galvanized steel
12	Cap	NBR 70

Item	Designation	Materials
13	Bushing	Bronze
14	Worm	Carbon steel 45
15	Gasket	NBR
16	Stem	Carbon steel 45
17	Handwheel	Carbon steel
18	Pin	Carbon steel

Information provided as an indication and subject to possible modification

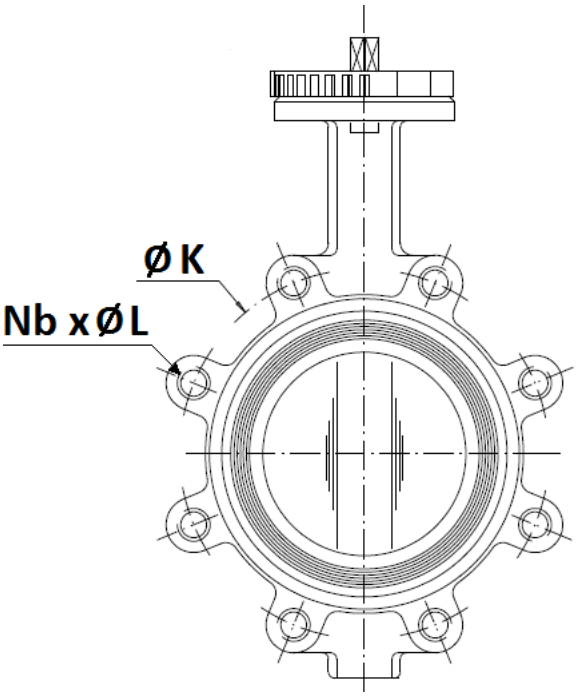
From DN350 to DN400 :



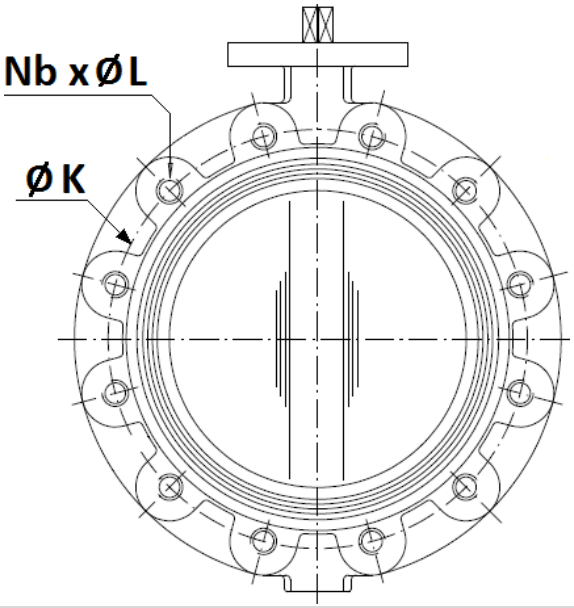
DN	350	400
L	325	325
L1	75	75
L2	150	150
L3	185	185
H	126	126
H1	32	32
H2	51	51
H3	224	224
H4	80	80
H5	98	98
Ø V	400	400
C	22	27
Ø K	140	140
ISO	F14	F14
N x Ø Z	4 x M16	4 x M16
Poids (en Kg)	9.5	9.5

8. Between flanges (in mm)

DN 32-150



DN 200-400

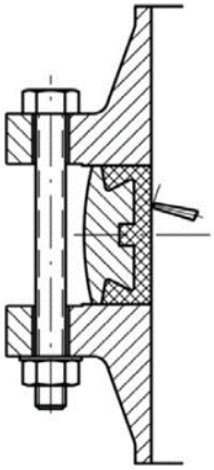


Information provided as an indication and subject to possible modification

BUTTERFLY VALVE SERIE 10C LUG TYPE - BODY DUCTILE IRON – DI OR STAINLESS STEEL DISC - SEAT EPDM FROM DN32/40 TO DN400

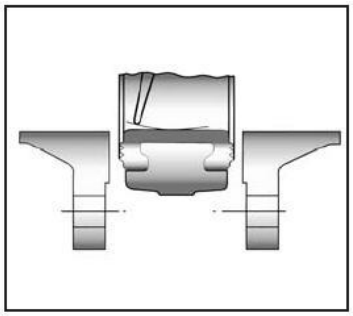
	DN (mm)	32	40	50	65	80	100	125	150	200	250	300	350	400
	NPS (")	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"	10"	12"	14"	16"
PN10	Ø K	100	110	125	145	160	180	210	240	295	350	400	460	515
	Nb x Ø L	4 x M16				8 x M16			8 x M20		12 x M20		16x M20	16x M24
PN16	Ø K	100	110	125	145	160	180	210	240	295	355	410	470	525
	Nb x Ø L	4 x M16				8 x M16			8xM20	12xM20	12 x M24		16x M24	16x M27
Class 150	Ø K	88.9	98.5	120.6	139.7	152.4	190.5	215.9	241.3	298.5	362	431.8	476.3	539.8
	Nb x Ø L	4 x 1/2"		4 x 5/8"			8x5/8"		8 x 3/4"		12 x 7/8"		12 x 1"	16 x 1"

9. Maximum tightening torques for bolting flanges

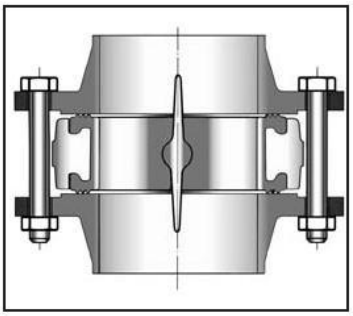


	Maximum Torques (Nm)				
	Bolting types	5,6/A307 GrB	8,8/A193 B7	10,9	12,9
Bolting DN	M12 - 1/2"	41,16	84,28	117,6	142,1
	M14 - 9/16"	66,64	132,3	186,2	225,4
	M16 - 5/8"	102,9	205,8	289,1	347,9
	M18 - 3/4"	142,1	284,2	396,9	475,3
	M20 - 3/4"	196	401,8	568,4	676,2
	M22 - 7/8"	259,7	539	764,4	911,4
	M24 - 1"	338,1	695,8	980	1176
	M27 - 1"1/8	499,8	1029	1470	1764
	M30 - 1"1/4	666,4	1421	1960	2352

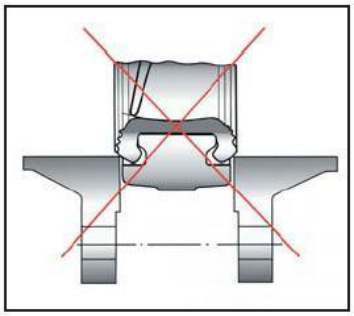
10. Installation instructions



Half open valve introduction



Complete opened disc valves when screw tightening



See our supplementary technical documentation including:

- ✓ Flow coefficients
- ✓ Pressure loss calculation
- ✓ Pressure/temperature curve (excluding steam)
- ✓ Gearbox specifications including: ratio factor, turn number for closing / opening, input/output torques.

Information provided as an indication and subject to possible modification