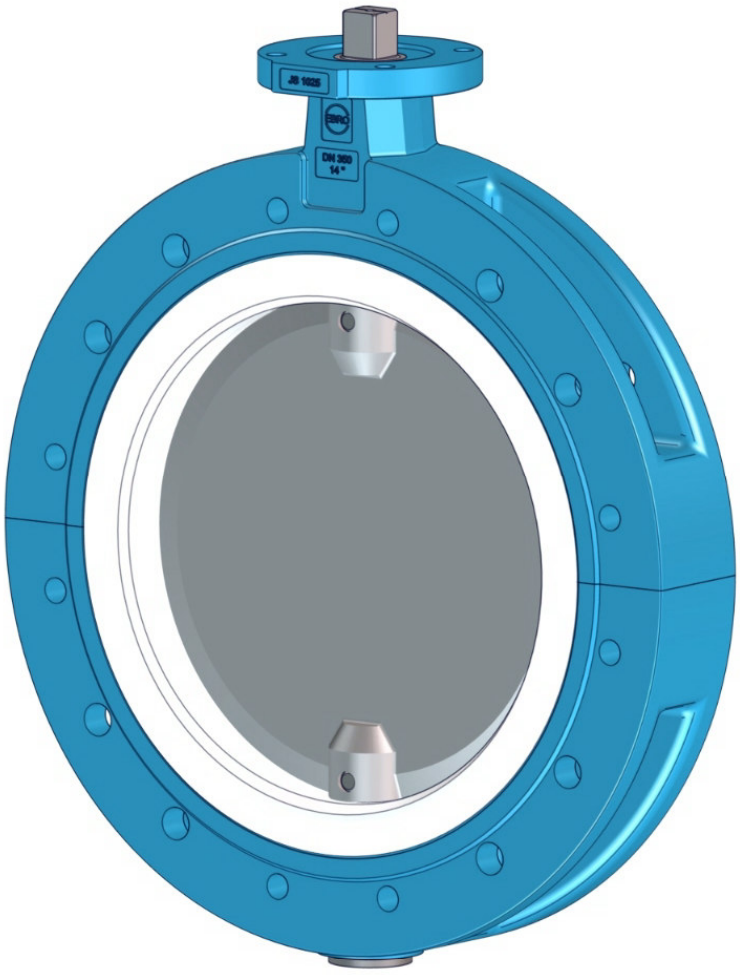
AFD ARMATUREN FERTIGUNGS- UND DIENSTLEISTUNGS GMBH
Service: +49 3461 4342 43 Email: AFD-Armaturen@t-online.de

Technical data sheet

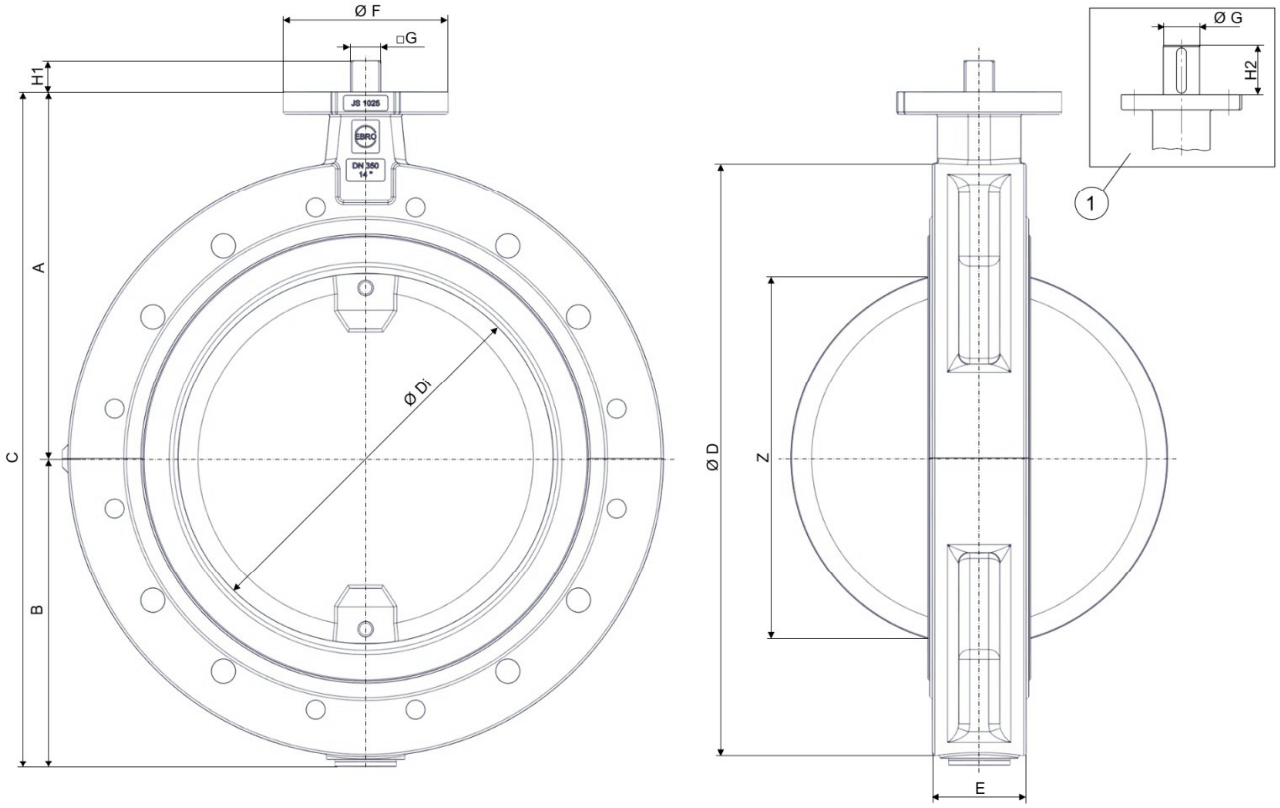
Double-flanged butterfly valve T212-A
with bare shaft



EBRO ARMATUREN®

en
Version 1.1 from 04/08/2026

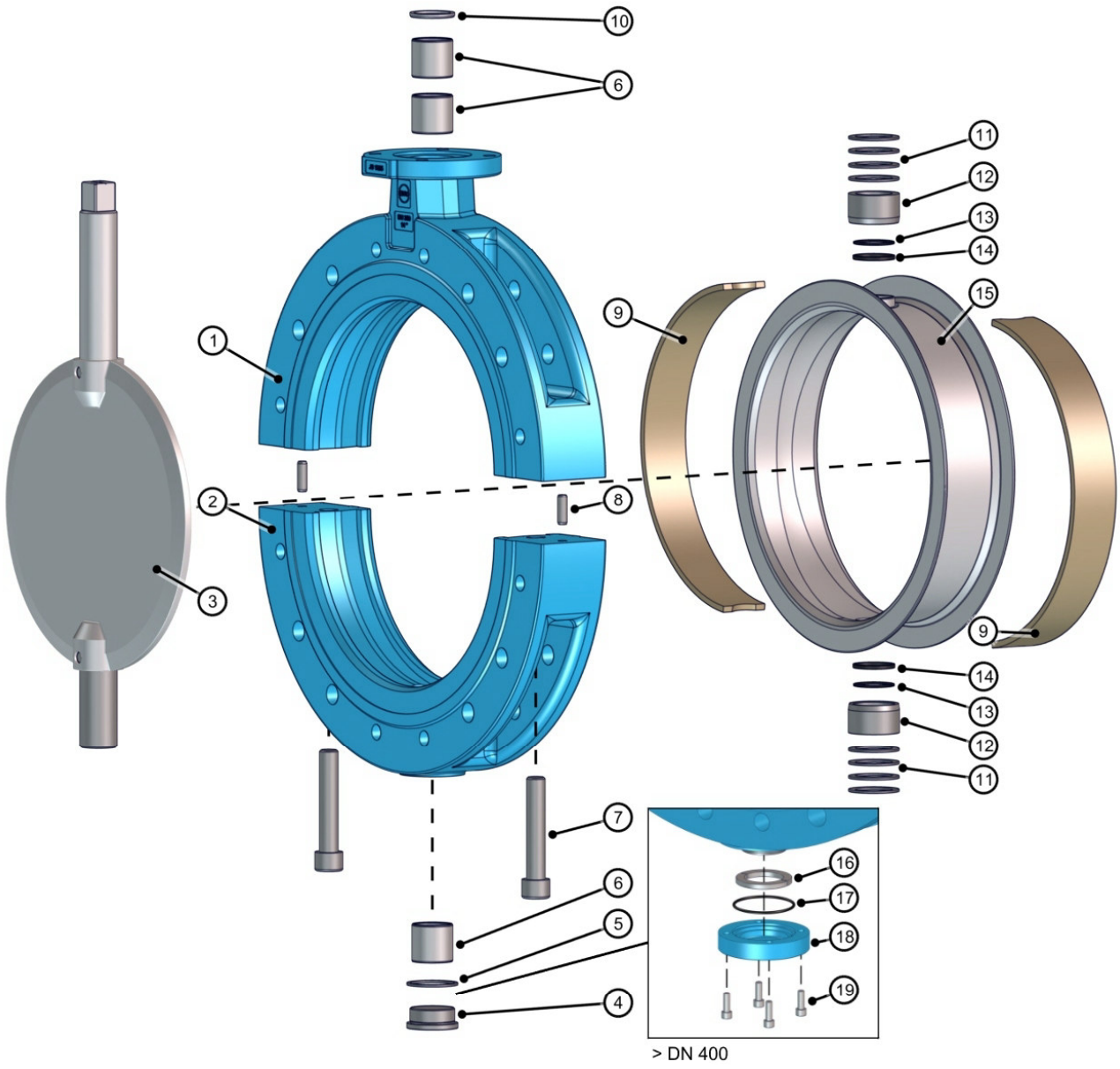
Dimension sheet



DN	NPS	Main dimensions [mm]													Weight [kg]
		A	B	C	Ø D	Ø Di	E	Ø F	Flange	□G	H1	ØG	H2	Z	
350	14	330	277	607	535	338	92	150	F12	27	29	-	-	325	68
400	16	360	305	665	580	389	102	150	F12	27	29	-	-	376	95
450	18	397	363	760	639	437	114	175	F14	36	38	-	-	423	130
500	20	437	390	827	715	490	127	175	F14	36	38	-	-	475	170
600	24	498	462	960	830	579	154	210	F16	46	48	-	-	559	270
650	26	555	471	1026	870	626	165	210	F16	46	48	-	-	610	360
700	28	580	496	1076	927	681	165	210	F16	46	48	-	-	662	455
750	30	610	538	1148	985	731	165	298	F25	55	57	72	108	713	465
800	32	630	563	1193	1060	781	190	298	F25	55	57	-	-	759	570
900	36	696	625	1321	1170	881	203	298	F25	55	57	80	110	858	750
1000	40	775	691	1466	1290	981	216	350	F30	75	77	-	-	958	940

Notices
Item 1 = Optional special configuration: Round shaft with fitting key

Material specifications & bill of materials



Item	Naming	Piece	Material group [1]	Material no.
1	Body top	1	Cast iron	5.3103
			Stainless steel [2]	1.4408
2	Body bottom	1	Cast iron	5.3103
			Stainless steel [2]	1.4408

Item	Naming	Piece	Material group [1]	Material no.
3	Shaft/valve disc	1	Duplex steel / duplex steel	1.4462
			Duplex steel / PTFE	1.4462 / PTFE
			(Duplex) steel / conductive PTFE	1.4462 / (conductive)-PTFE
			(Duplex) steel / modified PTFE	1.4462 / (modified)-PTFE
			(Duplex) steel / titanium	1.4462 / Titanium
			(Duplex) steel / Hastelloy	1.4462 / Hastelloy
4	Screw plug	1	Stainless steel	
5	Seal ring [4]	1	Stainless steel	
6	DU bearing	3	Steel / PTFE coated	
7	Cheese head screw	2 [3]	Stainless steel	
8	Dowel pin	2	Steel	
9	Elastomer insert [4]	2	EPDM	
			FKM	
			VMQ	
10	Scraper ring [4]	1	PTFE	
11	Cup spring	8	Stainless steel	
12	Pressure piece	2	Stainless steel	
13	O-ring [4]	2	FKM	
14	Roof liner [4]	2	PTFE	
15	Liner [4]	1	PTFE	
			Conductive PTFE	
			Modified PTFE	
			EBRODUR	
16	Shaft lock [5]	1	Steel	
17	O-ring [4], [5]	1	FKM	
18	End cap [5]	1	Steel	
19	Screw [5]	4	Stainless steel	

Notices
[1] Materials in the default version. Other materials and surface treatments available upon request.
[2] Available for nominal sizes DN 350, DN 400, and DN 500
[3] number ≤ DN 400: 2 units, DN 450 - DN 700: 4 units, ≥ DN 750: 6 units
[4] Recommended spare parts
[5] Configuration end cap> 400

Temperature limits for T200 valves

Liner	DN	Disc sheathed	PS[1] [bar]	Elastomer insert	TS min.	TS max.
PTFE mod. PTFE electr. conductive	350-600		10	EPDM	-10 °C	120 °C
				FKM	-10 °C	180 °C
				VMQ	-40 °C	200 °C
PTFE	350-1000	Duplex/PTFE/PFA	6	EPDM	-10 °C	120 °C
				FKM	-10 °C	180 °C
				VMQ	-40 °C	200 °C
EBRODUR	350-600	Duplex	6		-10 °C	80 °C

[1] Attention: The max. permissible pressure PS specification should not exceed the value of the PN/class specification!
Example: PS = 10 bar, but flange connection PN6 has the indication PS = 6 bar!

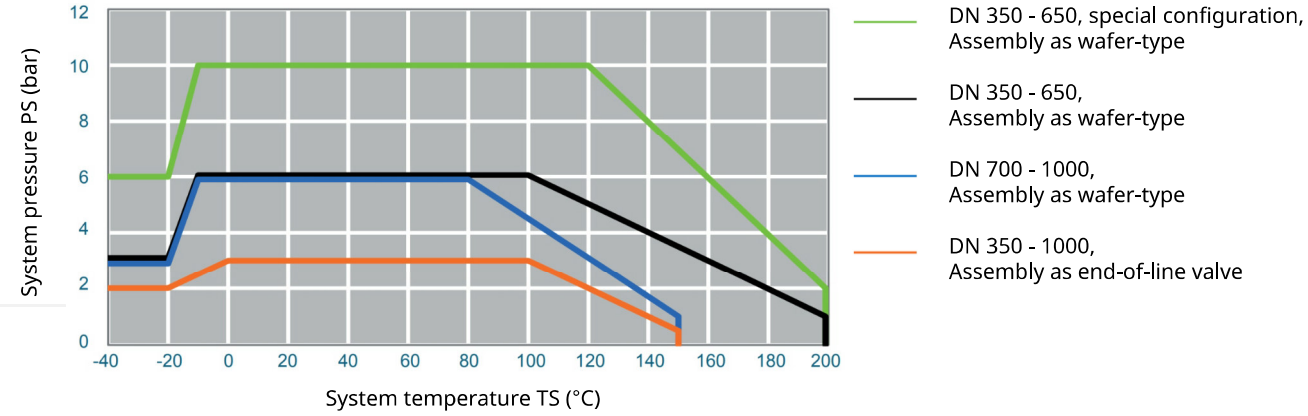
Torques

NOTICE

The values listed in the table are breakaway torques determined for liquid/ lubricating media from the position of the valve disc. They should be considered reference values since the actual torques depend on various factors such as operating pressure, medium, operating conditions, etc.
Valve discs in special configurations can be provided.

DN	350	400	450	500	600	650	700	750	800	900	1000
NPS	14	16	18	20	24	26	28	30	32	36	40
Torque (Md) [Nm]	720	980	1200	1500	2500	2770	3000	3500	4500	6000	7700

Pressure-temperature chart



K_v values

NOTICE

The $K_v$value [m^3/h] indicates the water flow rate at a temperature of 5 °C to 30 °C and a Δp of 1 bar.
The allowable flow velocity V_{max} is 4.5 m/s for liquids and 70 m/s for gases. At an opening angle of 30° to 70°, the valve disc is in the optimum control range. The curve is flat between 20° and 30° and between 70° and 90°, so that changing the opening angle has little effect on the flow control. Avoid cavitation.

		Opening angle α°							
DN	**NPS**	**20°**	**30°**	**40°**	**50°**	**60°**	**70°**	**80°**	**90°**
350	14	350	940	1500	2200	3900	6600	8300	8800
400	16	420	990	1800	2700	4500	7700	10500	11500
450	18	470	1100	1900	3200	5200	8500	13500	14800
500	20	580	1300	2400	3800	6300	10300	16500	18400
600	24	820	1900	3450	5500	9050	14800	23600	30000
650	26	980	2200	4030	6400	10600	17300	27500	35000
700	28	1200	2600	4700	7500	12400	20200	32300	41000
750	30	1400	3000	5500	8800	14500	23700	37800	48000
800	32	1600	3500	6400	10300	14900	27600	44000	56000
900	36	2000	4500	8200	13100	21500	35200	56100	71000
1000	40	2400	5400	9750	15600	25700	42000	66900	84900

Information in m^3/h.

Technical features

Designation	Description
Nominal sizes	DN 350 – DN 1000
Body design	Double-flanged butterfly valve (2-piece)
Temperature range [1]	-40 °C to +200 °C
Use with vacuum [2]	up to DN 600 max. 200 mbar absolute, up to DN 650 max. 500 mbar absolute
Maximum allowable pressure (PS) [3]	6 bar
Notices [1] Depending on pressure, medium and material selection [2] With silicone elastomer inserts [3] Special configuration in 10 bar	

Standards

Designation	Description
Standard of use	DIN EN 593:2018-01
Marking	DIN EN 19:2024-03
Top flange	DIN EN ISO 5211:2024-10
Face-to-face	DIN EN 558:2022-09 Series 20
	ISO 5752:2021-06 Series 20
	API STD 609:2021-04 Table 1
Flange connection	DIN EN 1092-1:2018-12 PN 10/16
	ASME B16.5:2020 Class 150
	ASME B16.47 Series A, Series B
	AS 4087:2011
Tightness test	DIN EN 12266-1:2012-06 Leakage rate A
Shape of the mating flange sealing surface	DIN EN 1092-1:2018-12 Form A/B
	ASME B16.5:2020 RF, FF

Certificates and approvals

Designation	Description
Pressure equipment	Directive 2014/68/EU, CRN, PE(S)R
Fugitive emissions	DIN EN ISO 15848-1:2017-07
International approvals	EAC (TR 004, TR 010, TR020) SITIIAS UKCA P
Shipbuilding	DNV
Safety integrity level	DIN EN 61508 Beiblatt 1:2005-10 Level 2 (SIL 2)
Transport of dangerous goods	VDTÜV type test for GGVSEB/ADR/RID
Notices Further certificates and approvals available upon request. Applicable only for specific nominal sizes and material combinations (except for directive on pressure equipment and safety integrity level).	