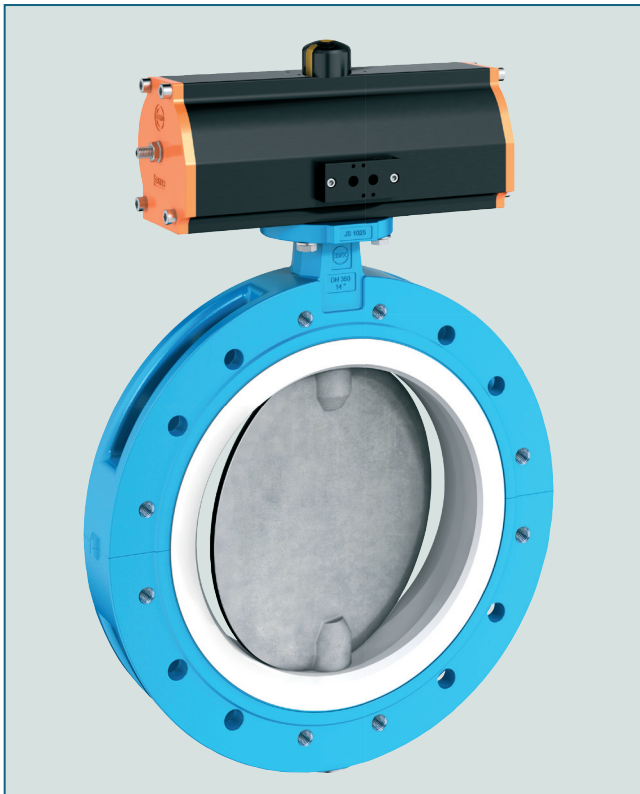


# PTFE-LINED BUTTERFLY VALVE T 212-A



Double flanged PTFE-lined butterfly valve for shut-off and control services in the chemical industry.

## TECHNICAL DATA

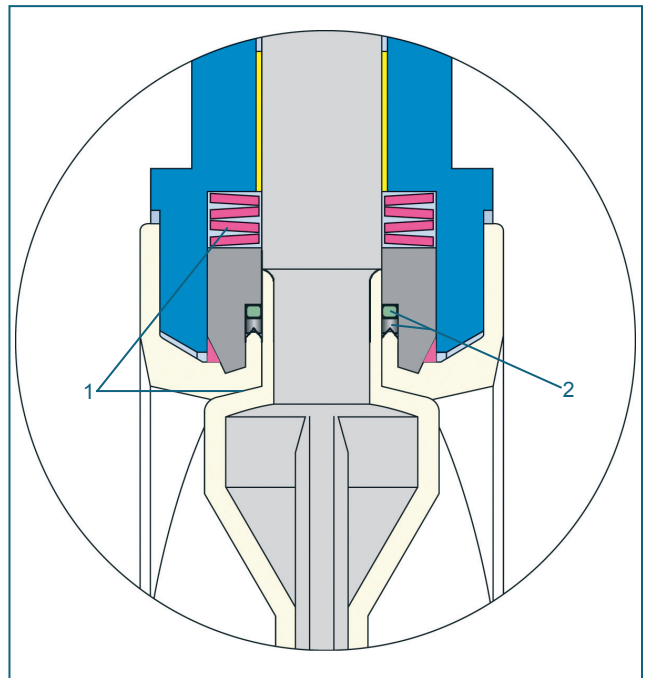
Nominal diameter:	DN 350 - DN 900
Face-to-face:	EN 558 Series 20 ISO 5752 Series 20 API 609 Table 1
Flange accommodation:	EN 1092 PN 10/16 ASME Class 150 ASME B16.47, Series A, Series B AS 4087
Flange Surface Design:	EN 1092 Form A/B ASME RF, FF
Top flange:	EN ISO 5211
Marking:	EN 19
Tightness check:	EN 12266 (Leakage rate A)
Temperature range:	-40°C to +200°C (depending on nominal diameter and operation pressure)
Operating pressure:	max. 6 bar (10 bar for special version)
Vacuum:	DN 350 - 600 max. 200mbar absolut DN 700 - 900 max. 500mbar absolut (with silicon elastomer inserts)

## FEATURES

- PTFE-lined butterfly valve for chemically toxic and highly corrosive media
- Environmental protection via EBRO-Safety seal
- Splitted body design
- Isolation height according to plant prescription
- Can be installed in any desired position
- Maintenance-free
- Can be disassembled, material-specific recycling possible
- Material conform to FDA to EG 1935/2004
- Optional: Special design RWTÜV certified to TA-Air/ VDI 2440

## GENERAL APPLICATIONS

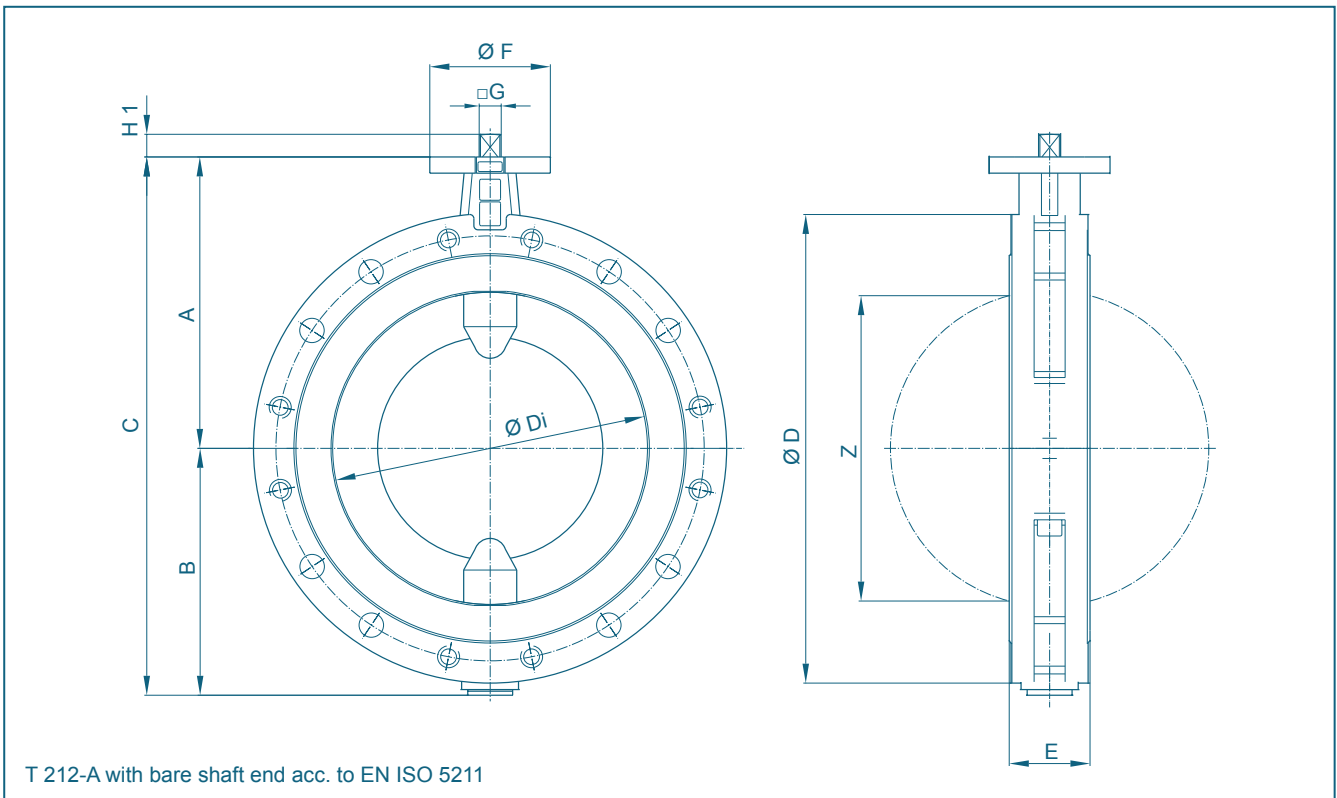
- Chemically highly corrosive and toxic media
- Purification plants
- Pharmaceutical industry
- Adhesives, paper industry, dissolver
- Paint manufacture and processing
- Food industry
- Chlorine production
- Processing of ore



Safety seal at both shaft ends:

- 1.Primary sealing by means of a Belleville spring washer, transmitting prestress on the spherical segment area.
- 2.Secondary sealing of the shaft by means of PTFE-Chevron and O-ring.

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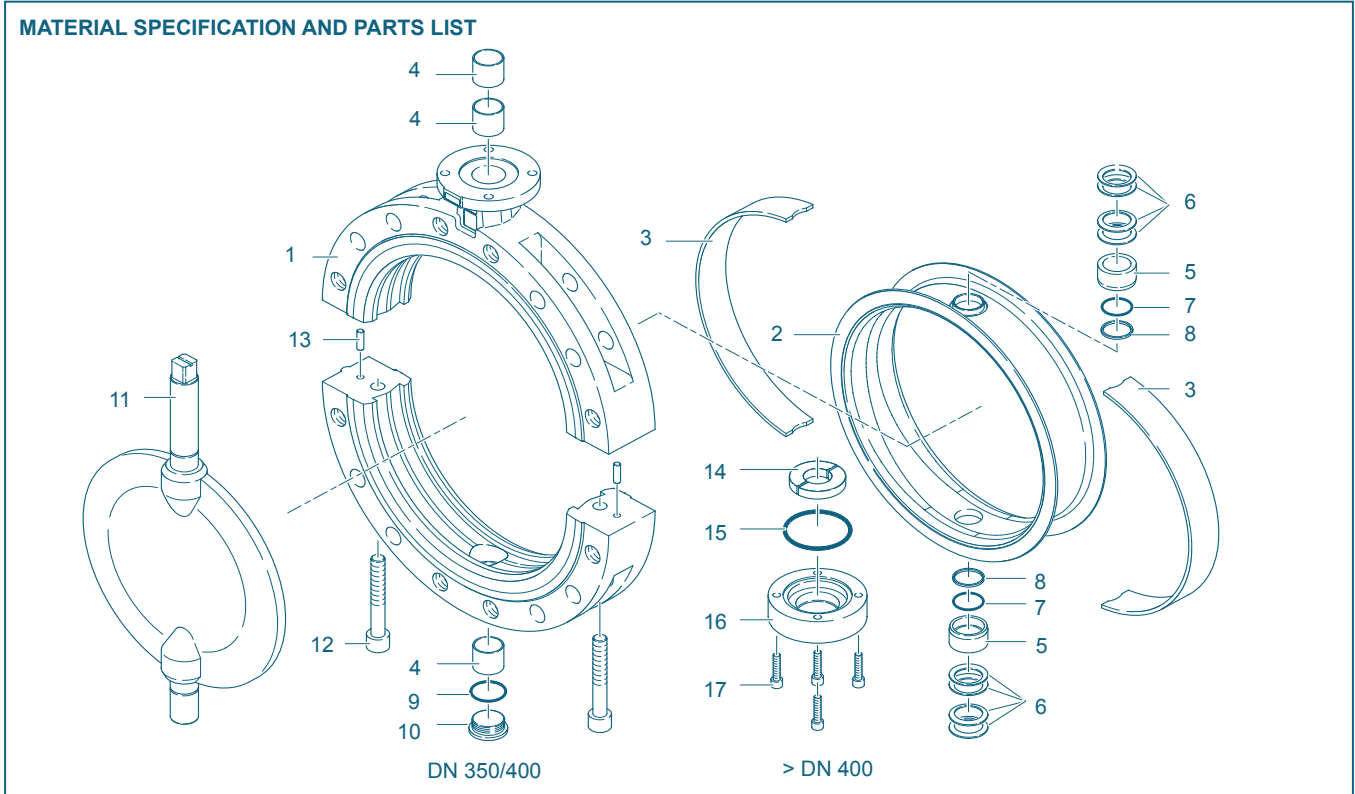


DN [mm]	Size [in]	Dimensions [mm]											Weight [kg]
		A	B	C	D	Di	E	F	Flange	G	H1	Z	
350	14	330	277	607	535	338	78(92)*	150	F12	27	29	327	68
400	16	360	305	665	580	389	102	150	F12	27	29	377	95
450	18	397	363	760	639	437	114	175	F14	36	38	423	130
500	20	437	390	827	715	490	127	175	F14	36	38	475	170
600	24	498	462	960	830	579	154	210	F16	46	48	560	270
700	28	580	496	1076	927	676	165	210	F16	46	47	662	410
750	30	610	538	1148	985	724	165	298	F25	55	56	712	465
800	32	630	563	1193	1060	770	190	298	F25	55	56	759	570
900	36	696	640	1336	1170	881	203	298	F25	55	56	859	750

\* Face to face dim. acc. to EN 558 Tab. 20, 78mm  
Face to face dim. acc. to EN 558 Tab. 25, 92mm

Subject to change without notice

# PTFE-LINED BUTTERFLY VALVE T 212-A



Pt.	Description	Material	Material-No.	ASTM	Pt.	Description	Material	Material-No.	ASTM
<b>1</b>	<b>Body</b>				<b>11***</b>	<b>Disc/Shaft (one-piece type)</b>			
	Nodular Cast Iron	EN-JS 1025	EN 1563	A 395		St. Steel/St. Steel	X2CrNiMo22-5-3/	1.4462/	Duplex
<b>2**</b>	<b>Seat</b>						X2CrNiMo 22-5-.3	1.4462	
	PTFE	Polytetrafluorethylene	PTFE			St.Steel/PFA coated	X2CrNiMo22-5-3/	1.4462/	Duplex/
	M.-PTFE	Polytetrafluorethylene	modified				St52.3-Perfluorakoxy	1.0570-PFA	St./PFA
	Cond.-PTFE	Polytetrafluorethylene	conductive			St. Steel/PFA conductive	X2CrNiMo22-5-3/	1.4462/	Duplex/
<b>3**</b>	<b>Elastomer insert</b>						St52.3-Perfluorakoxy	1.0570-PFA	conductive
	Silicon	Silicon rubber	MVQ	VMQ	<b>12</b>	<b>Screw</b>			
<b>4</b>	<b>DU-bearing</b>					Stainless Steel	A4-70		
	Steel / PTFE coated				<b>13</b>	<b>Set screw</b>			
<b>5**</b>	<b>Thrust collar</b>					Steel	9SMnPb28K	1.0718	SAE12L14
	Stainless Steel	X5CrNiMo17-12-2	1.4401	316	<b>14</b>	<b>Shaft retainer</b>			
<b>6</b>	<b>Belleville spring washer</b>					Steel	St37-2		
	Stainless Steel	X12CrNi177	1.4568	631	<b>15**</b>	<b>O-ring</b>			
<b>7**</b>	<b>O-ring</b>					FPM	Fluorocarbon rubber	FPM	FKM
	FPM	Fluorocarbon rubber	FPM	FKM	<b>16</b>	<b>Cover plate</b>			
<b>8**</b>	<b>Chevron seal</b>					Steel	St37-2		
	PTFE	Polytetrafluorethylene	PTFE	PTFE	<b>17</b>	<b>Screw</b>			
<b>9</b>	<b>Seal</b>					Stainless Steel	A4-70		
	Stainless Steel	X5CrNi18-10	1.4301	304					
<b>10</b>	<b>Plug screw DIN 908</b>								
	Stainless Steel	G-X5CrNiMo19-11-2	1.4408	CF8M					
						Above-mentioned materials of the basic version, other materials upon request			

\*\* recommended spare parts

\*\*\* recommended for coated discs

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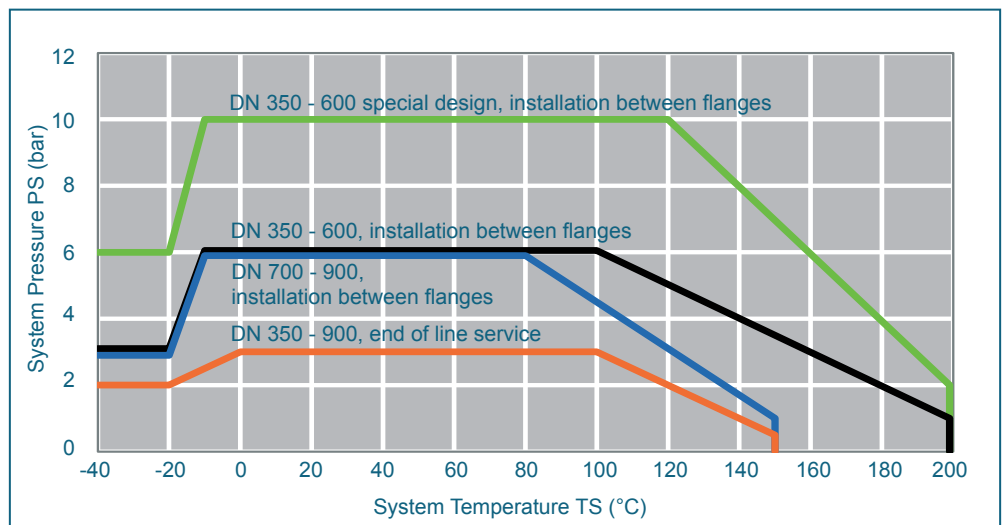
## TORQUE

- The torque values specified (Md) are based on dry media and are measured with air at a temperature of 20 °C
- The values specified are based on the initial breakaway torque (disc disengages from seat, torque then drops)
- Dynamic torque specification available upon request

Regarding the dimensioning of actuators, please contact our engineers.

## PRESSURE/TEMPERATURE DIAGRAM

DN [mm]	350	400	450	500	600	700	750	800	900
Size [in]	14	16	18	20	24	28	30	32	36
MD [Nm]	720	980	1200	1500	2500	3000	3500	4500	6000



Pressure-Temperature-Diagram for valves with Silicone elastomer inserts.

Other elastomer inlays on request

Vacuumservice for Sizes DN 350 - 600 to 200mbar absolut, depending on medium and temperature. Valve installation between flanges

Vacuumservice for Sizes DN 700 - 900 to 500mbar absolut, depending on medium and temperature. Valve installation between flanges

## K<sub>V</sub>-VALUES

- The K<sub>V</sub>-value [m<sup>3</sup> per hour] is the flow of water at a temperature of 5°C to 30°C (41°F to 86°F) at Δp of 1 bar
- The K<sub>V</sub>-values specified are based on tests carried out by the Delfter Hydraulics Laboratories, the Netherlands
- Permissible velocity of flow  
V<sub>max</sub> 4,5 m/s for liquids,  
V<sub>max</sub> 70 m/s for gases
- The throttle function is linear at an angle 30° to 70°

For further values, please contact our engineers.

DN [mm]	Size [in]	Opening angle α°							
		20°	30°	40°	50°	60°	70°	80°	90°
<b>K<sub>V</sub>-values</b>									
350	14	482	464	1042	2126	3625	5449	7507	9708
400	16	627	603	1355	2765	4715	7088	9764	12627
450	18	790	761	1709	3488	5947	8939	12314	15925
500	20	973	936	2104	4293	7320	11003	15158	19602
600	24	1394	1342	3016	6153	10492	15769	21724	28094
700	28	1891	1820	4090	8345	14229	21388	29464	38104
750	30	2167	2084	4685	9560	16303	24507	33763	43664
800	32	2463	2369	5323	10863	18525	27847	38365	49615
900	36	3110	2991	6722	13718	23394	35166	48448	62655

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