

PRODUCT / DESIGN DATA

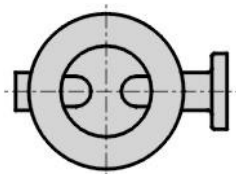
General Description	BUTTERFLY VALVE
Design Code	EN 593 & API 609
Type	Concentric
End Connection	Flangeless wafer type
Size Range	DN 400 - 600, NPS 16" - 24"
End connection	EN 1092 PN 6, 10 and 16 ASME B16.5 cl. 150 / B16.47 cl. 150 MSS SP 44 cl. 150 AWWA C207 cl. B, D and E BS 10 table D and E JIS 5K/10K/16K
Body Material	See Parts List
Body Seat	Non replaceable rubber lining, vulcanized, bonded to the body
Trim Material	See Parts List
Design pressure PS	10/16 bar - optional 20 bar
Design temperature TS	Min. -20 °C (-4 °F) to max. +200 °C (392 °F), depending on materials selected
Face to Face	EN 558 Table 2 - Series 20 ISO 5752 Table 1 - Series 20 API 609 Table 2 - Cat. A
Shaft Seal Design	O-ring
Driving Shaft	With indication for position of the disc

OPTIONS

Anti-Static Design	Compliant with EN 736/3 and API 609
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TESTING PROCEDURES

Shell strength test	EN 12266-1, P10 ISO 5208 API 598
Shell tightness test	EN 12266-1, P11 ISO 5208 API 598
Seat tightness test	EN 12266-1, P12, Rate A ISO 5208, Rate A API 598
Operability test	EN 12266-2, F20 ISO 5208 API 598

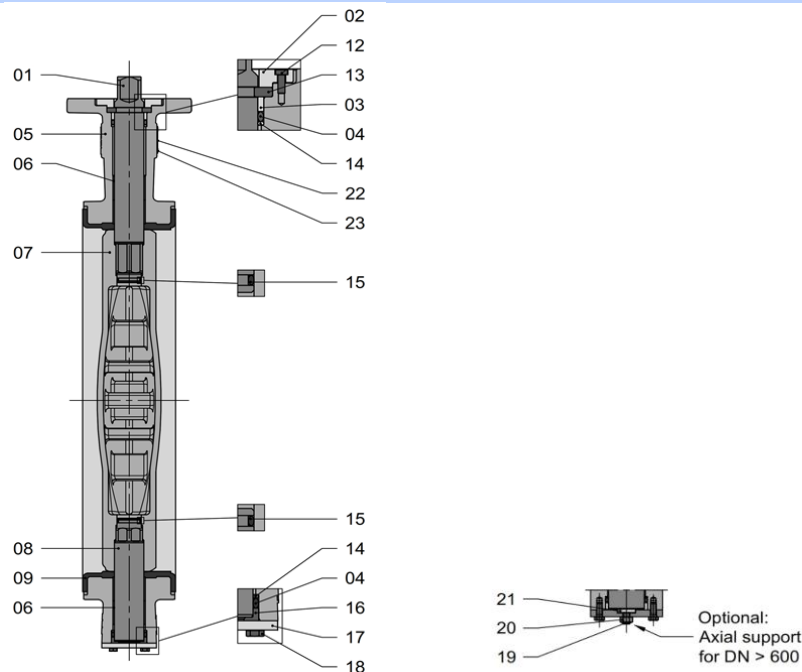
PREFERRED POSITION WHEN INSTALLED IN HORIZONTAL PIPELINE**FUNCTIONAL CHARACTERISTICS**

Application	Isolating, regulating, control valve
Flow velocity	Max. 5 m/s for liquids, max. 50 m/s for gases
Seat tightness rate	ISO 5208 rate A - Bi-directional bubble tight

MARKING & CERTIFICATION

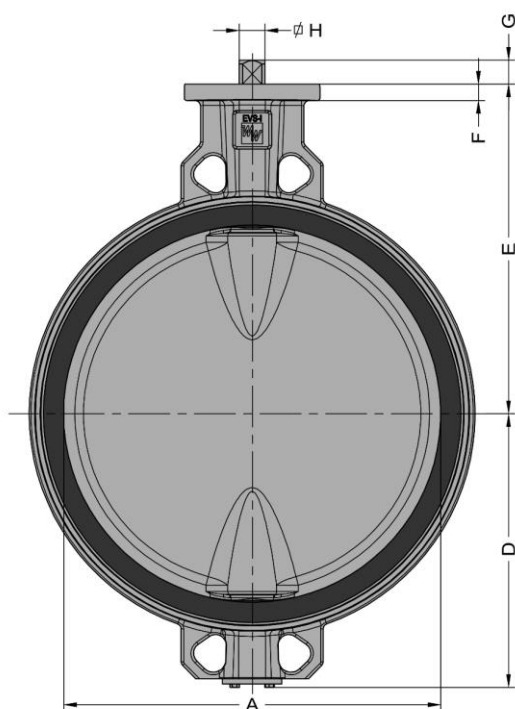
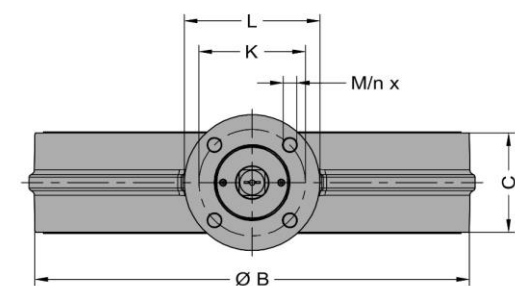
Marking	EN 19, MSS SP 25
Certification	EN 10204 - 2.2, 3.1, 3.2

PARTS LIST - EVS-i 400-600 (16"-24")

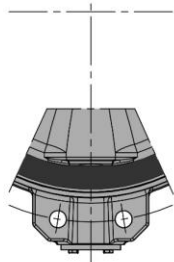
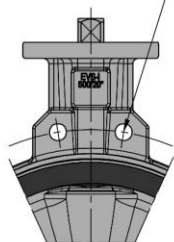
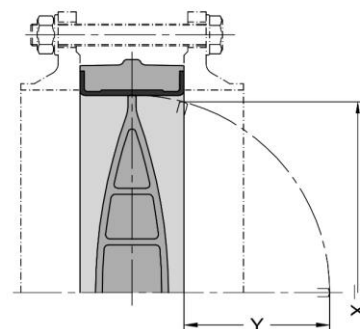


Item	Description	Material ⁽¹⁾	Standard	Comparable ASME
01	Shaft	Duplex SS Super Duplex SS Martensitic SS Aluminium Bronze Monel K500 [*]	1.4462, EN 10088 1.4501, EN 10272 1.4021, EN 10088 CuAl10Ni5Fe4, EN 12163 NA 18, BS 3076	SA 182, Grade F51 SA 479, UNS 32760 SA 276, Grade 420 SB 150, C63000 -
02	Anti-blow-out cover	POM Steel - zinc plated	Polyoxymethylene, ISO 29988-1	
03	Radial bearing	POM Bronze	Polyoxymethylene, ISO 29988-1 CC493K, EN 1982	
04	O-ring	EPDM NBR FPM		
05	Body	Ductile Iron Ductile Iron (low temp.) Carbon Steel Bronze Bronze Bronze	5.3106, EN 1563 (JS1030) 5.3103, EN 1563 (JS1049) 1.0619, EN 10213 2.1096.01, DIN 1705 (CC491K, EN 1982) 2.1086.01, DIN 1705 (CC482K, EN 1982) CC493K, EN 1982	SA 395, 60-40-18 - SA 216, WCB SB 584, C83600 SB 584, C90500 SB 584, C93200
06	Bearing	St. / PTFE Lining Bronze / PTFE Lining		
07	Disc	Austenitic SS Duplex SS Duplex SS Super Duplex SS Ductile Iron / Rilsan coated ⁽²⁾ Aluminium Bronze Bronze Bronze	1.4408, EN 10213 1.4517, EN 10213 1.4470, EN 10213 1.4469, EN 10213 5.3106, EN 1563 (JS1030) CC333G, EN 1982 2.1096.01, DIN 1705 (CC491K, EN 1982) 2.1086.01, DIN 1705 (CC482K, EN 1982)	SA 351, CF8M SA 351, CD-4MCu SA 351, Grade 4A SA 995, Grade 5A/6A SA 395, 60-40-18 SB 148, C95800 SB 584, C83600 SB 584, C90500
08	Shaft	See Item 01	See Item 01	See Item 01
09	Lining	EPDM NBR FPM Silicone		
12	Hex shc screw	Steel - zinc plated		
13	Axial bearing	POM	Polyoxymethylene, ISO 29988-1	
14	Support ring	POM Bronze	Polyoxymethylene, ISO 29988-1 CC493K, EN 1982	
15	O-ring	See Item 04	See Item 04	See Item 04
16	Axial bearing	POM	Polyoxymethylene, ISO 29988-1	
17	Cover plate	Steel - zinc plated		
18	Hexagon head bolt	Steel - zinc plated		
19	Hex. socket set screw	Steel - zinc plated		
20	Bearing disc	Bronze	CC493K, EN 1982	
21	Hexagon nut	Steel - zinc plated		
22	Identification plate	SS		
23	Blind rivet	SS		

⁽¹⁾ Other materials on request.⁽²⁾ Other coating on request.

DIMENSIONS - EVS-i 400-600 (16"-24")


For DN 500:
Holes drilled through
or blind tapped,
depending on
flange connection.


IN LINE INSTALLATION


DN	NPS	PS max [bar]	A	B	C	D	E	F	G	H	ISO 5211	K	L	M	n	X	Y	MASS ±kg
400	16"	16	386	470	102	305	363	25	28	27	F14	140	175	17	4	374	143	73
450	18"	16	436	522	114	330	388	25	28	27	F14	140	175	17	4	422	162	86
500	20"	10	486	576	127	373	460	25	28	27	F14	140	210	17	4	470	180	125
500	20"	16	486	576	127	373	460	25	37	36	F16	165	210	21	4	470	180	125
600	24"	10	586	672	154	423	510	25	37	36	F14	140	210	17	4	566	216	170
600	24"	16	586	672	154	423	510	25	37	36	F16	165	210	21	4	566	216	170