

### PRODUCT DATA

General Description	<b>BUTTERFLY VALVE</b> - Centric rubber lined
Design Code	EN 593
Size Range	DN 50 – 1500, NPS 2" - 60"
Maximum Pressure	16 bar



### DESIGN

Body	Double Flanged type
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
Face to Face	EN 558-1/2 Series 14 ISO 5752 Series 14
Body Seat	Non replaceable Lining bonded to the body
Shaft Seal Design	O-ring bush
Driving Shaft	Anti blow out design acc. EN 736/3 and API 609 with indicator for position of the disc
Special Design Options	-

### TESTING PROCEDURES

Shell strength test	EN 12266-1, P10 DIN 3230, Part 3 API 598
Shell tightness test	EN 12266-1, P11 API 598
Seat tightness test	EN 12266-1, P12, Rate A ISO 5208, Rate A API 598
Operability test	EN 12266-2, F20 DIN 3230, Part 3 API 598

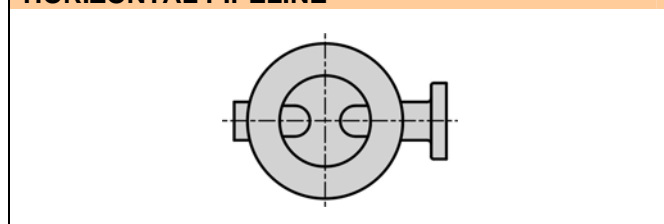
### OPTIONS

Anti Static Design	In accordance with EN 736/3 and API 609
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### FUNCTIONAL CHARACTERISTICS

Application	On/off, regulating, control valve
Design pressure PS	Maximum 16 bar
Design temp. TS	-20°C (-4°F) to +200° (392°F)
Flow velocity	Max. 5 m/s for liquids, max. 50 m/s for gases
Seat tightness rate	Bi-directional - ISO 5208 rate A

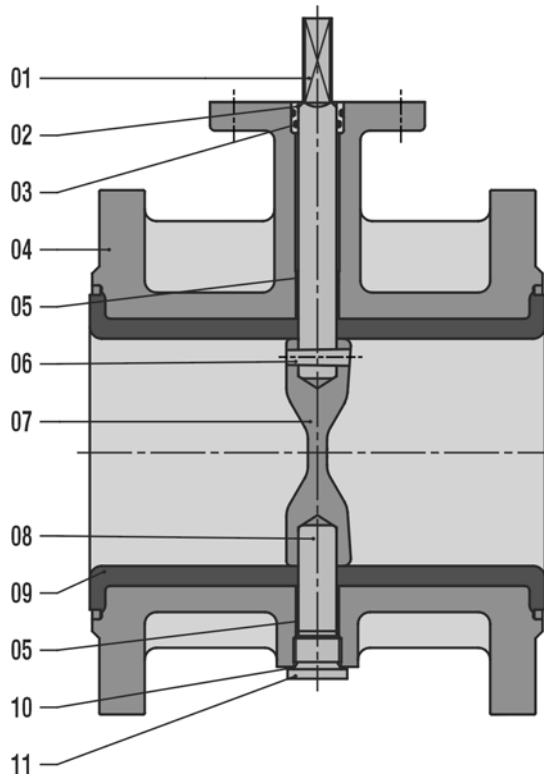
### PREFERRED POSITION WHEN INSTALLED IN HORIZONTAL PIPELINE



### MARKING & CERTIFICATION

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

**PARTS LIST – EVFL 50-350 (2"-14")**

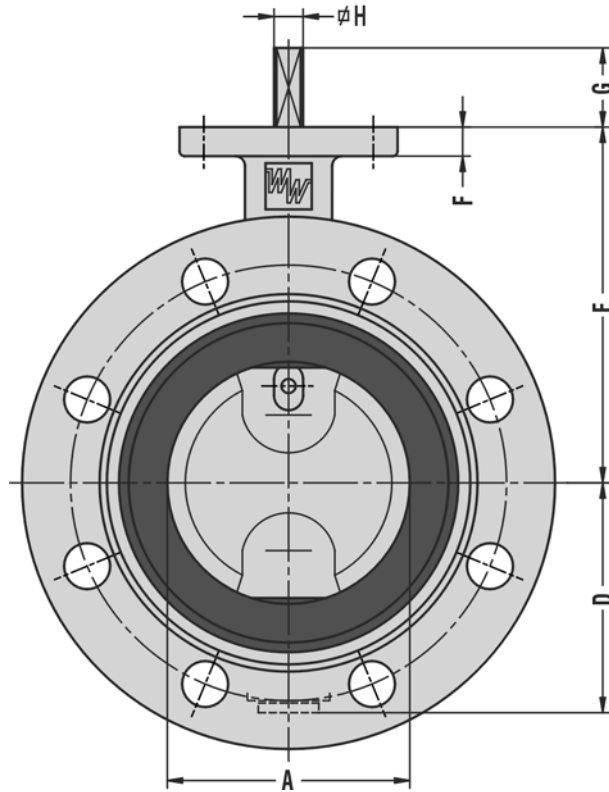
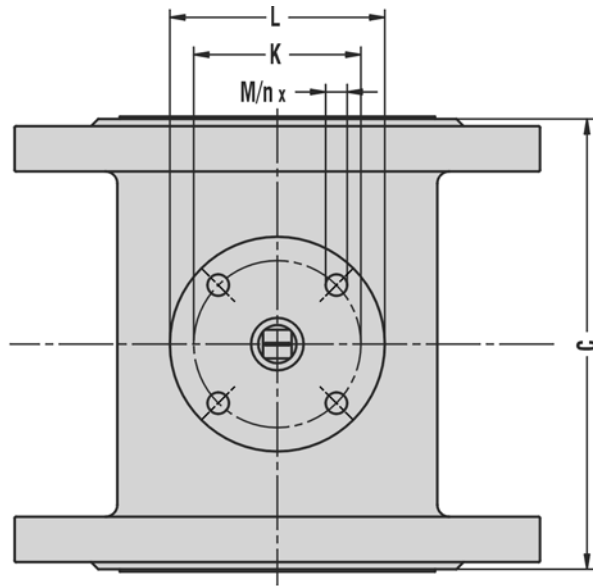


ITEM	DESCRIPTION	MATERIAL <sup>(1)</sup>	EN/DIN	COMPARABLE ASTM
01	Shaft	Duplex SS Martensitic SS Aluminium Bronze Monel K500® Hastelloy-C®	1.4462, EN 10088 1.4057, EN 10088 CuAl10Ni5Fe4, EN/DIN 17665 NA 18, BS 3076 -	A 181, Grade F51 A 276, Grade 431 B 150, C63000 - B 547, N10276
02	Bush	Bronze		
03	O-ring	EPDM NBR FPM		
04	Body	Cast Iron Ductile Iron Ductile Iron (low temp.)	JL 1040, EN 1561 JS 1030, EN 1563 JS 1049, EN 1563	A 126, Class B A 395, 60-40-18 -
05	Bearing	St. / PTFE Lining Bronze / PTFE Lining		
06	Conical pin	See ITEM 01	See ITEM 01	See ITEM 01
07	Disc	Duplex SS Martensitic SS Ductile Iron / Rilsan coated <sup>(2)</sup> Aluminium Bronze Hastelloy-C® CuNi	1.4462, EN 10088 1.4057, EN 10088 JS 1030, EN 1563 G-CuAl10Ni, DIN 1714 - 2.0835, DIN 17658	A 181, Grade F51 A 276, Grade 431 A 395, 60-40-18 B 148, C95800 A 494, CW-12MW -
08	Shaft	See ITEM 01	See ITEM 01	See ITEM 01
09	Lining	EPDM NBR FPM		
10	Sealing ring	Cu		
11	Plug	St./Zn5C		

<sup>(1)</sup> Other materials on request

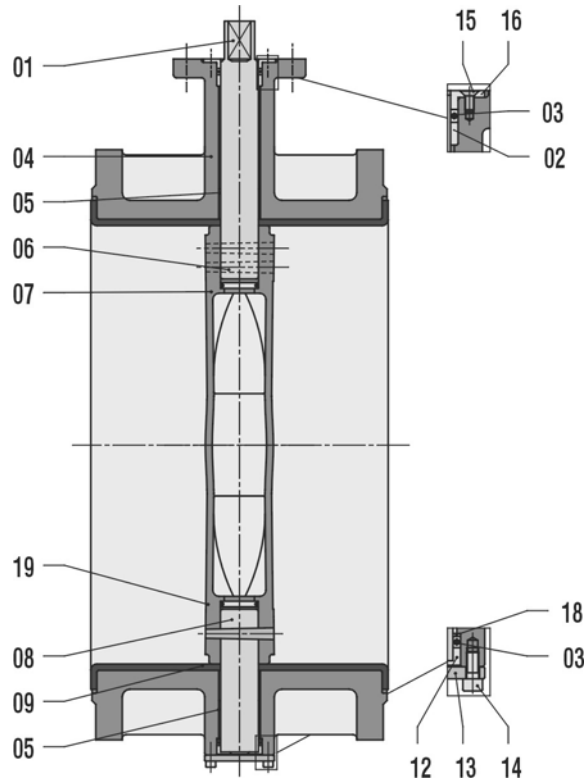
<sup>(2)</sup> For DN 250 and DN 300

**DIMENSIONS – EVFL 50-350 (2"-14")**



DN	NPS	A	C	D	E	F	G	H	ISO 5211	K	L	M	n	MASS ±kg
50	2"	50	150	63	118	12	34	10	F07	70	90	9	4	11
65	2½"	65	170	71	126	12	34	10	F07	70	90	9	4	13
80	3"	80	180	78	133	12	34	10	F07	70	90	9	4	17
100	4"	100	190	98	147	12	34	12	F07	70	90	9	4	20
125	5"	125	200	109	160	12	34	12	F07	70	90	9	4	26
150	6"	150	210	133	180	14	34	16	F07	70	90	9	4	31
200	8"	200	230	158	204	14	34	16	F07	70	90	9	4	45
250	10"	250	250	194	245	15	45	24	F10	102	125	11	4	70
300	12"	300	270	219	270	15	45	24	F10	102	125	11	4	90
350	14"	336	290	256	315	15	45	24	F10	102	125	11	4	120

**PARTS LIST – EVFL 400-1000 (16"-40")**



ITEM	DESCRIPTION	MATERIAL <sup>(1)</sup>	EN/DIN	COMPARABLE ASTM
01	Shaft	Duplex SS Martensitic SS Aluminium Bronze Monel K500® Hastelloy-C®	1.4462, EN 10088 1.4057, EN 10088 CuAl10Ni5Fe4, EN/DIN 17665 NA 18, BS 3076 -	A 181, Grade F51 A 276, Grade 431 B 150, C63000 - B 547, N10276
02	Bush	Bronze		
03	O-ring	EPDM NBR FPM		
04	Body	Cast Iron Ductile Iron Ductile Iron (low temp.)	JL 1040, EN 1561 JS 1030, EN 1563 JS 1049, EN 1563	A 126, Class B A 395, 60-40-18 -
05	Bearing	St. / PTFE Lining Bronze / PTFE Lining		
06	Conical pin	See ITEM 01	See ITEM 01	See ITEM 01
07	Disc	Austenitic SS <sup>(2)</sup> Duplex SS <sup>(3)</sup> Martensitic SS <sup>(4)</sup> Ductile Iron / Rilsan coated Aluminium Bronze Hastelloy-C® <sup>(5)</sup> CuNi <sup>(5)</sup>	1.4408, EN 10213 1.4462, EN 10088 1.4057, EN 10088 JS 1030, EN 1563 G-CuAl10Ni, DIN 1714 - 2.0835, DIN 17658	A 351, CF8M A 181, Grade F51 A 276, Grade 431 A 395, 60-40-18 B 148, C95800 A 494, CW-12MW -
08	Shaft	See ITEM 01	See ITEM 01	See ITEM 01
09	Lining	EPDM NBR FPM		
12	Axial bearing	Bronze		
13	Cover plate	St./Zn5C		
14	Cylinder head screw	St./Zn5C		
15	Counter sunk screw	St./Zn5C		
16	Colar bearing	Bronze		
18	Ring	Bronze		
19	Sealing plate	St./NBR St./FPM		

<sup>(1)</sup> Other materials on request

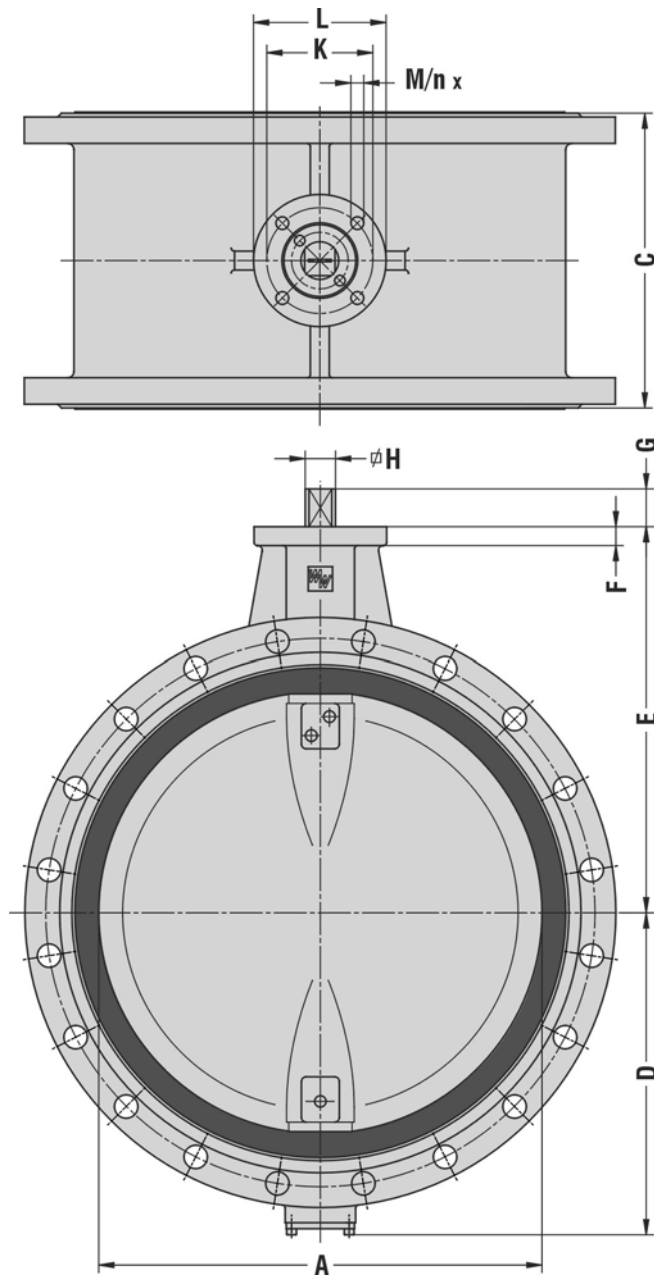
<sup>(2)</sup> for ≥ DN 700

<sup>(3)</sup> forged ≤ DN 600, casted ≥ DN 700, material 1.4517, EN 10213 (ASTM A 351, CD-4MCu)

<sup>(4)</sup> forged ≤ DN 600

<sup>(5)</sup> ≤ DN 500

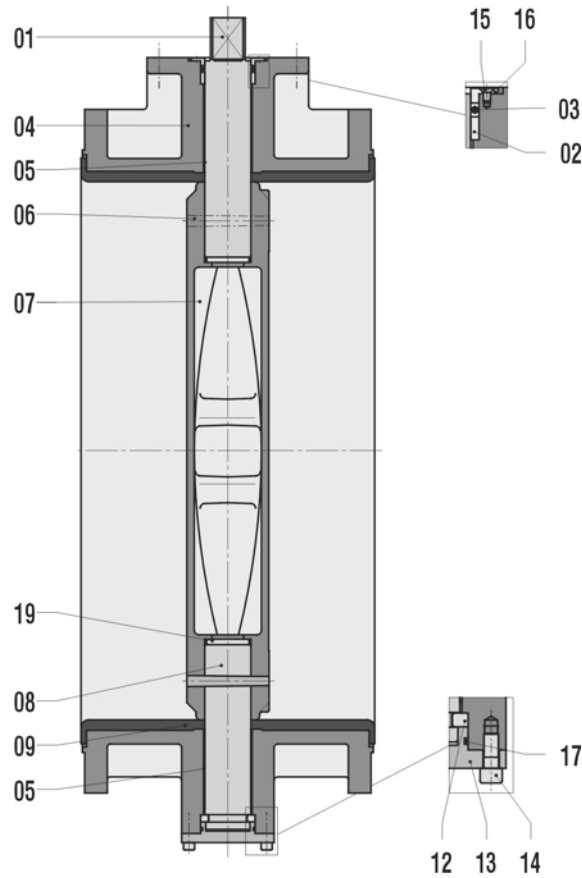
**DIMENSIONS – EVFL 400-1000 (16"-40")**



DN	NPS	A	C	D	E	F	G	H	ISO 5211	K	L	M	n	MASS ±kg
400	16"	386	310	308	363	25	50	30	F14	140	175	17	4	165
450	18"	436	330	334	388	25	50	30	F14	140	175	17	4	200
500	20"	486	350	360	413	25	50	30	F14	140	175	17	4	230
600	24"	586	390	426	510	25	50	40	F14	140	175	17	4	320
700	28"	686	430	480	535	25	60	46	F16	165	210	21	4	420
800	32"	786	470	525	610	25	60	46	F16	165	210	21	4	610
900	36"	886	510	635	690	30	90	60	F25	254	300	17	8	820
1000	40"	986	550	685	740	30	90	60	F25	254	350	17	8	1130
1000	40"	986	550	685	740	30	90	60	F30	298	350	21	8	1130

<sup>c)</sup> Manufacturers standard

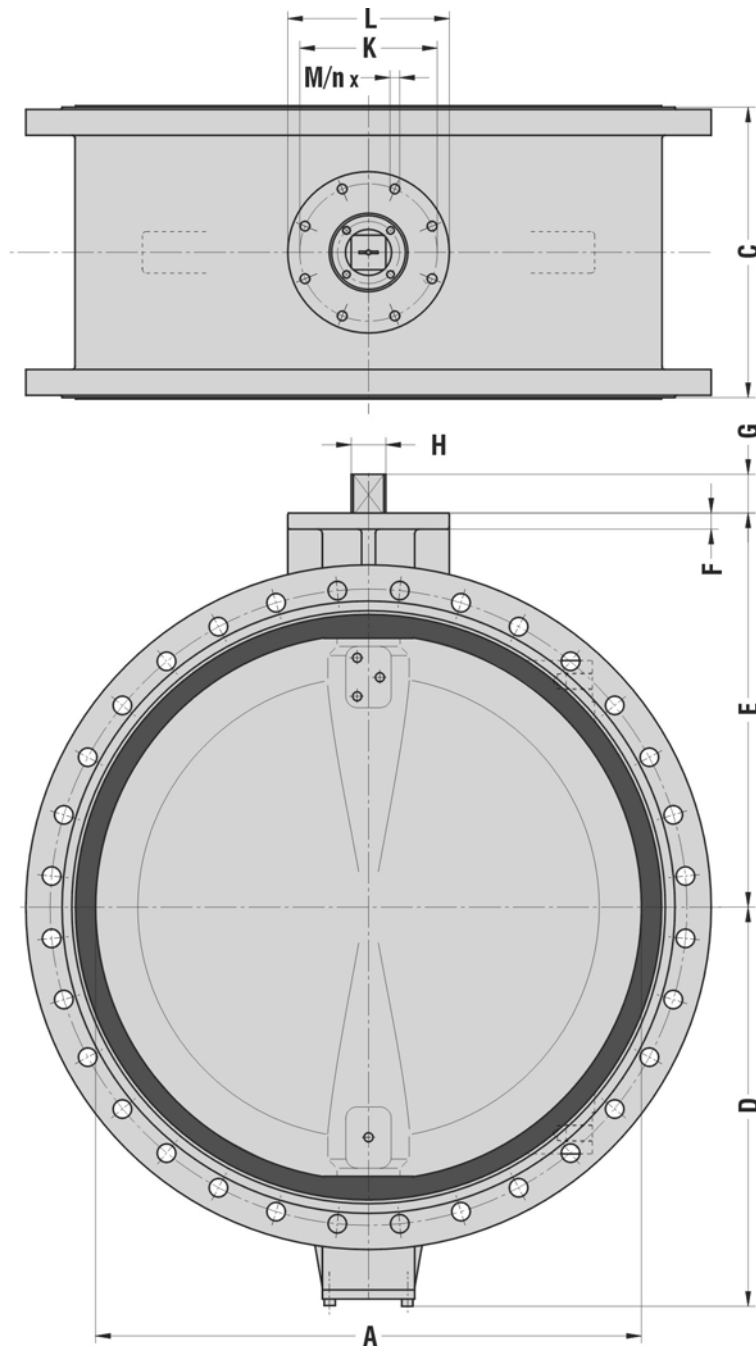
**PARTS LIST – EVFL 1200-2000 (48"-80")**



ITEM	DESCRIPTION	MATERIAL <sup>(1)</sup>	EN/DIN	COMPARABLE ASTM
01	Shaft	Duplex SS Martensitic SS Aluminium Bronze Monel K500®	1.4462, EN 10088 1.4057, EN 10088 CuAl10Ni5Fe4, EN/DIN 17665 NA 18, BS 3076	A 181, Grade F51 A 276, Grade 431 B 150, C63000 -
02	Bush	Bronze		
03	O-ring	EPDM NBR FPM		
04	Body	Cast Iron Ductile Iron Ductile Iron (low temp.)	JL 1040, EN 1561 JS 1030, EN 1563 JS 1049, EN 1563	A 126, Class B A 395, 60-40-18 -
05	Bearing	St. / PTFE Lining Bronze / PTFE Lining		
06	Conical pin	See ITEM 01	See ITEM 01	See ITEM 01
07	Disc	Austenitic SS Duplex SS Ductile Iron / Rilsan coated Aluminium Bronze	1.4408, EN 10213 1.4517, EN 10213 JS 1030, EN 1563 G-CuAl10Ni, DIN 1714	A 351, CF8M A 351, CD-4MCu A 395, 60-40-18 B 148, C95800
08	Shaft	See ITEM 01	See ITEM 01	See ITEM 01
09	Lining	EPDM NBR FPM		
12	Axial bearing	Bronze		
13	Cover plate	St./Zn5C		
14	Cylinder head screw	St./Zn5C		
15	Counter sunk screw	St./Zn5C		
16	Flanged bush	Bronze		
17	O-ring	EPDM NBR FPM		
19	Sealing plate	St./NBR St./FPM		

<sup>(1)</sup> Other materials on request

**DIMENSIONS – EVFL 1200-2000 (48"-80")**



DN	NPS	A	C	D	E	F	G	H	ISO 5211	K	L	M	n	MASS ±kg
1200	48"	1186	630	870	855	35	85	75	F30	298	415	21	8	1600
1200	48"	1186	630	870	855	35	85	75	F35	356	415	31	8	1600
1400	56"	1386	710	980	955	35	85	75	F30	356	415	21	8	2100
1400	56"	1386	710	980	955	35	85	75	F35	356	415	31	8	2100
1400	56"	1386	710	980	955	35	100	90	F35	356	415	31	8	2100
1500	60"	1484	<sup>(1)</sup> 750	1037	1029	50	100	90	F35	356	475	31	8	2500
1500	60"	1484	<sup>(1)</sup> 750	1037	1029	50	120	105	F40	406	475	37	8	2500

<sup>(1)</sup> Manufacturers standard