

PRODUCT / DESIGN DATA

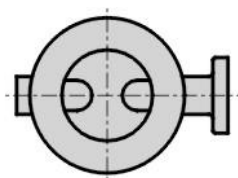
General Description	BUTTERFLY VALVE
Design Code	EN 593 & API 609
Type	Concentric
End Connection	Wafer - U Section
Size Range	DN 600 - 2200, NPS 24" - 88"
End connection	EN 1092 PN 6, 10 and 16 ASME B16.5 cl. 150 / B16.47 cl. 150 MSS SP 44 cl. 150 AWWA C207 cl. B, D and E BS 10 table D and E JIS 5K/10K/16K
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 9/10 - Series 20 ISO 5752 Table 4 - Series 20 API 609 Table 3C - Cat. B Class 150
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

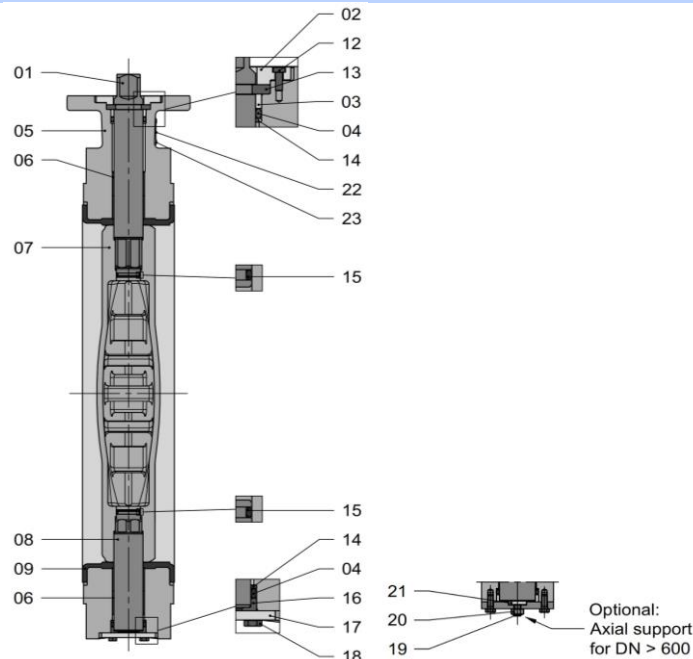
PREFERRED POSITION WHEN INSTALLED IN HORIZONTAL PIPELINE**FUNCTIONAL CHARACTERISTICS**

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

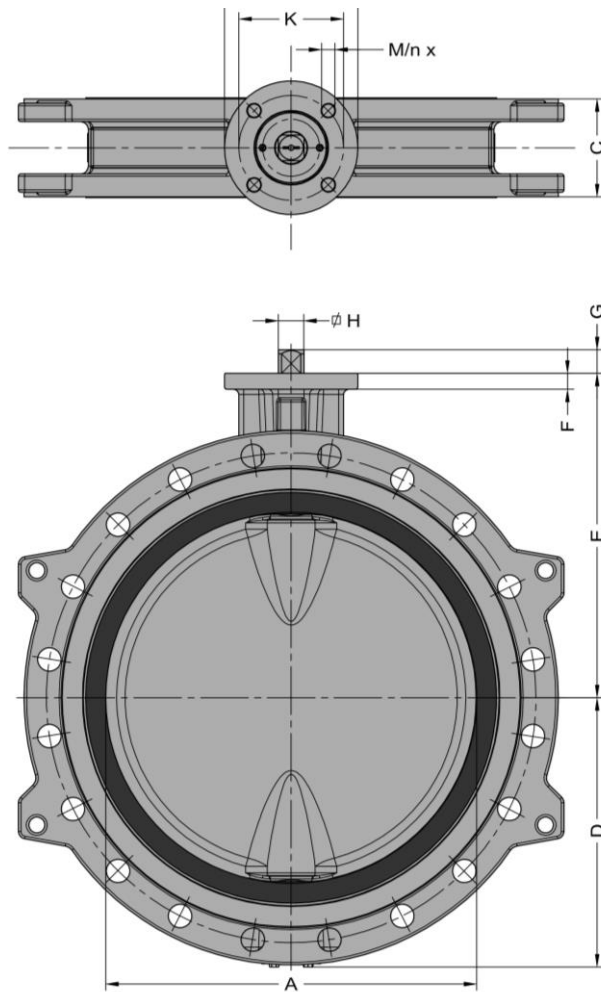
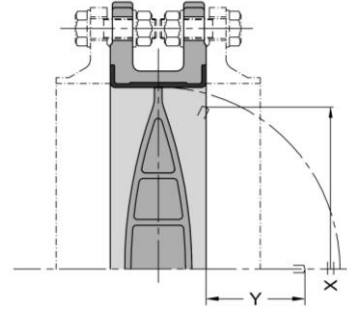
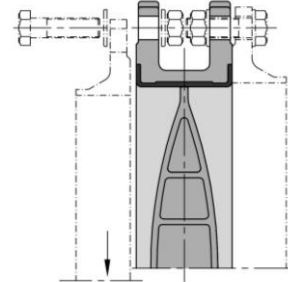
Marking	EN 19, MSS SP 25
Certification	EN 10204 - 2.2, 3.1, 3.2

PARTS LIST - EVUS-i 600-1000 (24"-40")



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 Aluminium 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 CC333G, EN 1982	SA 395, 60-40-18 - SA 216, WCB SB 584, C83600 SB 584, C90500 SB 584, C93200 SB 148, C95800
06	Bearing	Steel / PTFE Lining Bronze / PTFE Lining		
07	Disc	Austenitic SS Duplex SS Super Duplex SS Ductile Iron / Rilsan coated ⁽²⁾ Aluminium Bronze Bronze Bronze	1.4408, 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, 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		

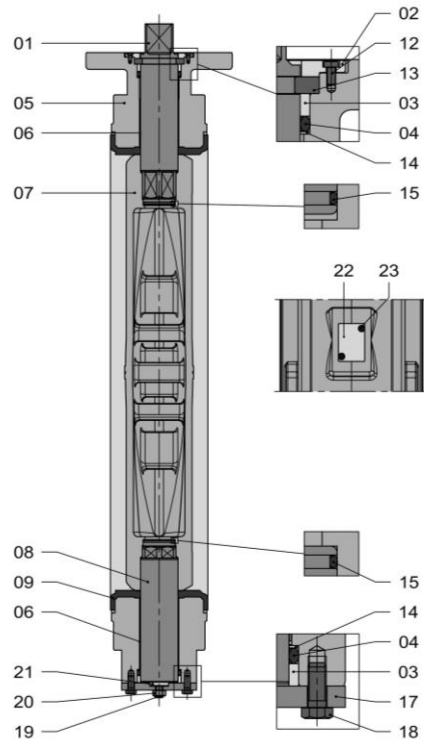
⁽¹⁾ Other materials on request.⁽²⁾ Other coating on request.

DIMENSIONS - EVUS-i 600-1000 (24"-40")

IN LINE INSTALLATION

DEAD END SERVICE


DN	NPS	PS max [bar]	A	C	D	E	F	G	H	ISO 5211	K	L	M	n	X	Y	MASS ±kg
600	24"	10	586	154	423	510	25	37	36	F14	140	210	17	4	566	216	285
600	24"	16	586	154	423	510	25	37	36	F16	165	210	21	4	566	216	285
700	28"	10	686	165	520	560	25	37	36	F16	165	210	21	4	667	261	325
700	28"	16	686	165	520	560	25	48	46	F16	165	210	21	4	667	261	325
750	30"	10	736	(*)190	545	585	25	37	36	F16	165	210	21	4	713	274	375
750	30"	16	736	(*)190	545	585	25	57	55	F25	254	300	17	8	713	274	375
800	32"	10	786	190	570	610	25	48	46	F16	165	210	21	4	764	299	425
800	32"	16	786	190	570	610	25	57	55	F25	254	300	17	8	764	299	425
900	36"	10	886	203	640	690	30	48	46	F25	254	300	17	8	862	342	560
900	36"	16	886	203	640	690	30	57	55	F25	254	300	17	8	862	342	560
1000	40"	10	986	216	690	740	30	57	55	F25	254	350	17	8	962	385	760
1000	40"	16	986	216	690	740	30	77	75	F30	298	350	21	8	962	385	760

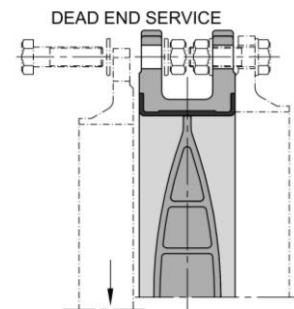
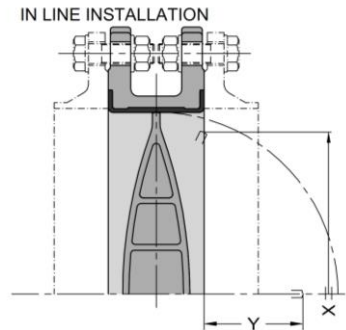
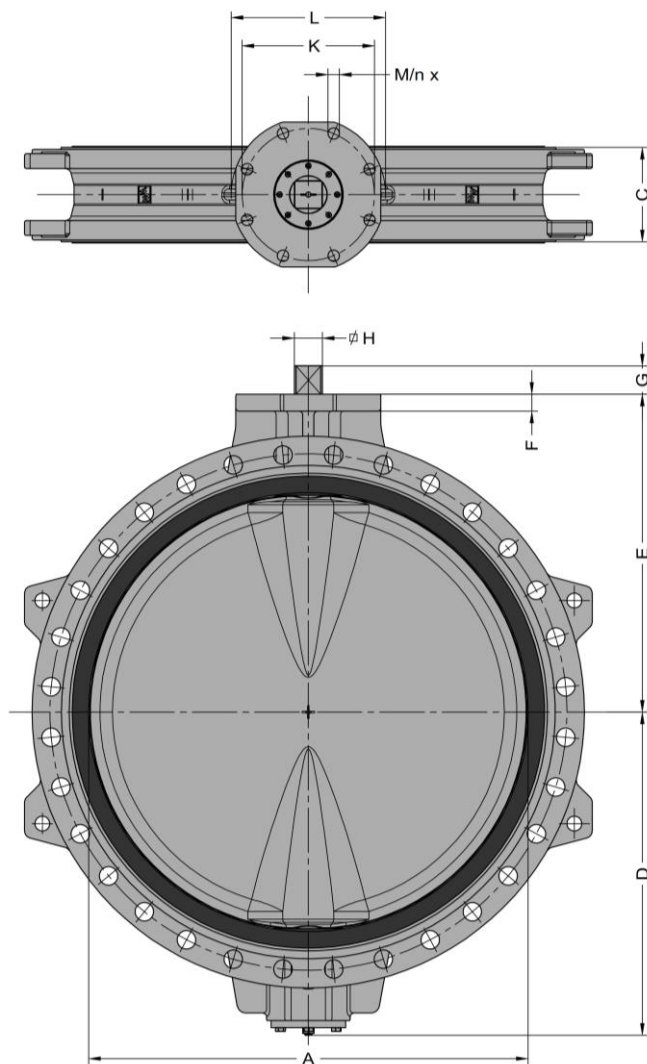
(*) Manufacturer's standard

PARTS LIST – EVUS-i 1050-2200 (42"-88")



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		
05	Body	Ductile Iron Ductile Iron (low temp.) Carbon Steel Aluminium Bronze Aluminium Bronze Bronze Bronze Bronze	5.3106, EN 1563 (JS1030) 5.3103, EN 1563 (JS1049) 1.06019, EN 10213 CC333G, EN 1982 - 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 148, C95800 SB 148, C95500 SB 584, C83600 SB 584, C90500 SB 584, C93200
06	Bearing	Steel / PTFE Lining Bronze / PTFE Lining		
07	Disc	Austenitic SS Duplex SS Super Duplex SS Ductile Iron / Rilsan coated ⁽²⁾ Aluminium Bronze Aluminium Bronze	1.4408, EN 10213 1.4470, EN 10213 1.4469, EN 10213 5.3106, EN 1563 (JS1030) CC333G, EN 1982 -	SA 351, CF8M SA 351, Grade 4A SA 995, 5A/6A SA 395, 60-40-18 SB 148, C95800 SB 148, C95500
08	Shaft	See Item 01	See Item 01	See Item 01
09	Lining	EPDM NBR FPM		
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
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 - EVUS-i 1050-2200 (42"-88")


DN	NPS	PS max [bar]	A	C	D	E	F	G	H	ISO 5211	K	L	M	n	X	Y	MASS ±kg
1050	42"	16	1036	216	700	740	30	57	55	F25	254	350	17	8	960	384	880
1100	44"	16	1086	235	815	805	35	77	75	F30	298	415	21	8	1062	426	900
1200	48"	10	1186	254	870	855	35	57	55	F30	298	415	21	8	1157	466	1100
1200	48"	16	1186	254	870	855	35	77	75	F35	356	415	31	8	1157	466	1100
1300	52"	10	1286	279	916	955	35	77	75	F30	298	415	21	8	1255	504	1250
1300	52"	16	1286	279	916	955	35	92	90	F35	356	415	31	8	1255	504	1250
1400	56"	10	1386	279	966	955	35	77	75	F30	298	415	21	8	1357	533	1800
1400	56"	16	1386	279	966	955	35	92	90	F35	356	415	31	8	1357	533	1800
1450	58"	10	1386	279	966	955	40	77	75	F30	298	415	21	8	1357	533	1870
1450	58"	16	1386	279	966	955	40	92	90	F35	356	415	31	8	1357	533	1870
1500	60"	10	1486	318	1047	1034	50	77	75	F35	356	415	31	8	1452	585	2180
1500	60"	16	1486	318	1047	1034	50	120	105	F40	406	475	37	8	1452	585	2180
1600	64"	10	1586	318	1086	1129	50	92	90	F35	356	475	31	8	1556	635	2450
1600	64"	16	1586	318	1086	1129	50	120	105	F40	406	475	37	8	1556	635	2450
1650	66"	10	1586	318	1086	1129	50	92	90	F35	356	475	31	8	1556	635	2470
1650	66"	16	1586	318	1086	1129	50	120	105	F40	406	475	37	8	1556	635	2470
1700	68"	10	1676	337	1143	1126	50	92	90	F35	356	475	31	8	1645	671	2500
1700	68"	16	1676	337	1143	1126	50	140	120	F40	406	475	37	8	1645	671	2500
1800	72"	10	1776	356	1192	1176	50	92	90	F40	406	475	37	8	1742	711	3200
1800	72"	16	1776	356	1192	1176	50	140	120	F40	406	475	37	8	1742	711	3200
2000	80"	10	1976	406	1291	1319	50	120	105	F40	406	560	37	8	1936	786	3400
2000	80"	16	1976	406	1291	1319	50	150	135	F48	483	560	37	12	1936	786	3400
2100	84"	10	2080	406	1346	1399	50	120	105	F40	406	560	37	8	2042	838	4800
2100	84"	16	2080	406	1346	1399	50	150	135	F48	483	560	37	12	2042	838	4800
2200	88"	10	2180	406	1396	1419	50	140	120	F40	406	560	37	8	2144	888	4470
2200	88"	16	2180	406	1396	1419	50	165	150	F48	483	560	37	12	2144	888	4470

⌚ Manufacturer's standard