

PRODUCT / DESIGN DATA

General Description	Butterfly valve
Design Code	EN 593 & API 609
Type	Concentric
End Connection	Flangeless wafer - semi lug type
Size Range	DN 40 - 350, NPS 1,5" - 14"
End connection	EN 1092 PN 6, 10 and 16 ASME B16.5 cl. 150 / B16.47 cl. 150 MSS SP 44 cl. 150"
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

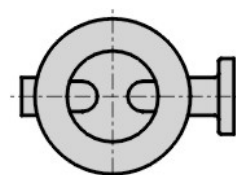
Shell strength test	EN 12266-1, P10 ISO 5208 API 598
Shell tightness test	EN 12266-1, P11 ISO 5208 API 598
Seat tightness test	EN 12266-1, P12, Rate A ISO 5208, Rate A API 598
Operability test	EN 12266-2, F20 ISO 5208 API 598

**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

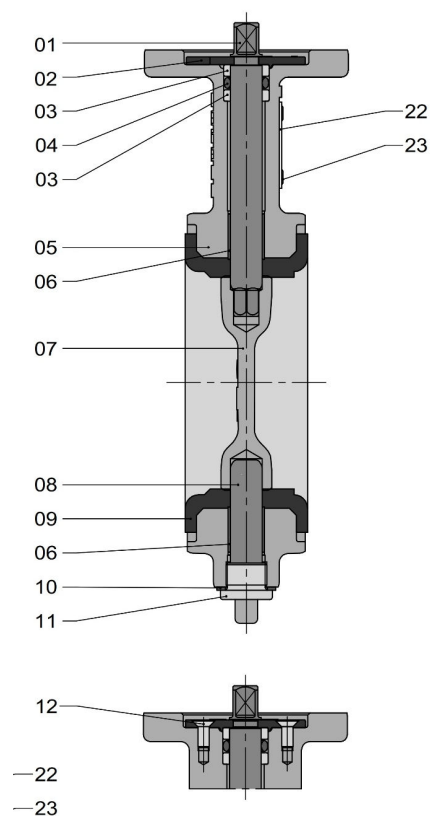
MARKING & CERTIFICATION

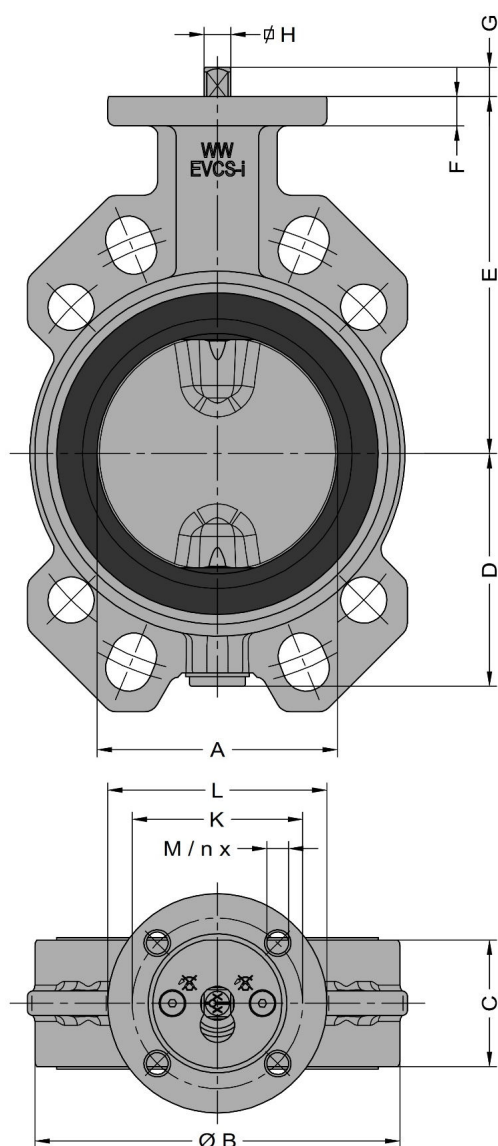
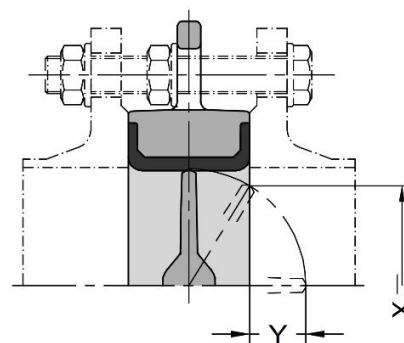
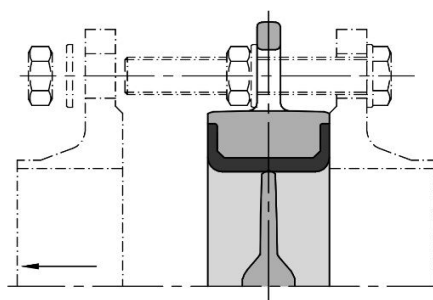
Marking	EN 19, MSS SP 25
Certification	EN 10204 - 2.2, 3.1, 3.2

**PREFERRED POSITION WHEN INSTALLED
IN HORIZONTAL PIPELINE**

PARTS LIST - EVCS-i-N 40-350 (1,5"-14")

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	Steel / PTFE Lining Bronze / PTFE Lining		
07	Disc	Martensitic SS [*] Austenitic SS Duplex SS Duplex SS Super Duplex SS Ductile Iron / Rilsan 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 352, CA6NM 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		
10	Seal ring	SS/NBR		
11	Plug	Steel - zinc plated		
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		



DIMENSIONS - EVCS-i-N 40-350 (1,5"-14")

IN LINE INSTALLATION

DEAD END SERVICE


DN	NPS	PS MAX (bar)	A	B	C	D	E	F	G	H	ISO 5211	K	L	M	n	X	Y	MAS ±KG
40	1,5"	16	40	86	33	58	113	12	15	9	F07	70	90	9	4	24	4	2
50	2"	16	50	100	43	63	118	12	15	9	F07	70	90	9	4	27	4	3
65	2,5"	16	65	115	46	71	126	12	15	9	F07	70	90	9	4	47	10	4
80	3"	16	80	130	46	78	133	12	15	9	F07	70	90	9	4	67	18	4
100	4"	16	100	150	52	98	147	12	15	11	F07	70	90	9	4	87	25	5
125	5"	16	125	182	56	109	160	12	16	14	F07	70	90	9	4	113	35	8
150	6"	16	150	210	56	133	180	14	16	14	F07	70	90	9	4	140	48	9
200	8"	16	200	262	60	158	204	14	19	17	F07	70	90	9	4	191	70	14
250	10"	16	250	315	68	194	245	15	24	22	F10	102	125	11	4	242	92	23
300	12"	16	300	371	78	219	270	15	24	22	F10	102	125	11	4	289	111	35
350	14"	16	336	405	78	236	315	15	24	22	F12	125	150	13	4	328	130	43