

DESIGN

| | |
|------------------------|--|
| Body | Flangeless wafer 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 JIS 5K/10K/16K |
| Face to Face | EN558-1/2 Series 20 API 609 Cat. A |
| Body Seat | Non replaceable Lining bonded to the body |
| Shaft Seal Design | O-ring bush |
| Driving Shaft | With indication for position of the disc |
| Special Design Options | - |

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 |

OPTIONS

| | |
|--------------------|---|
| Anti-Static Design | In accordance with EN 736/3 and API 609 |
|--------------------|---|

FUNCTIONAL CHARACTERISTICS

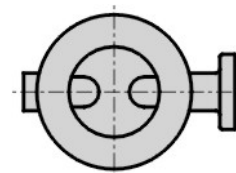
| | |
|---------------------|---|
| Application | On/off, regulating, control valve |
| Design pressure PS | Maximum 16 bar |
| Design temp. TS | -20°C (-4°F) to +200° (392°F) |
| Flow velocity | Max. 5 m/s for liquids, max. 50 m/s for gases |
| Seat tightness rate | Bi-directional - ISO 5208 rate A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

MARKING & CERTIFICATION

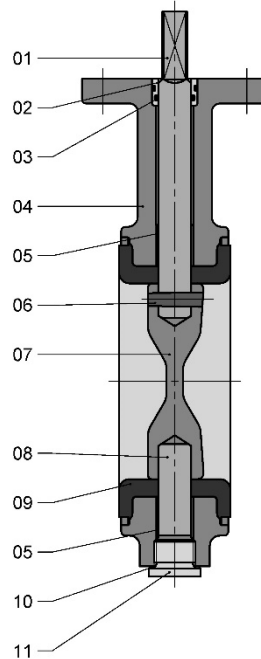
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|---------------|--------------------------|
| Marking | EN 19, MSS SP 25 |
| Certification | EN 10204 - 2.2, 3.1, 3.2 |

**PRODUCT DATA**

| | |
|---------------------|---|
| General Description | BUTTERFLY VALVE - Centric rubber lined |
| Design Code | EN 593 |
| Size Range | DN 50 - 1400, NPS 2" - 56" |
| Maximum Pressure | 10/16 bar - optional 20 bar for ≤ DN 600 |

PREFERRED POSITION WHEN INSTALLED IN HORIZONTAL PIPELINE

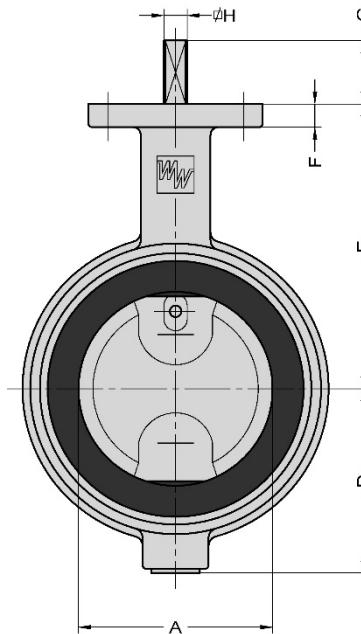
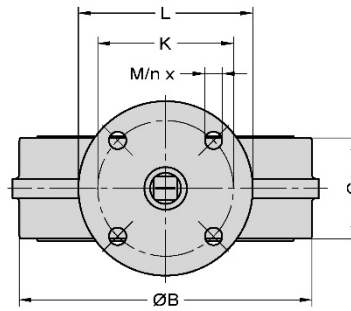
PARTS LIST - EVS 50-350 (2"-14")



| Item | Description | Material ⁽¹⁾ | 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 12163 NA 18, BS 3076 - | A 182, 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.) Carbon Steel Bronze | 5.1301, EN 1561 (JL1040) 5.3106, EN 1563 (JS1030) 5.3103, EN 1563 (JS1049) 1.0619, EN 10213 2.1096.01, DIN 1705 | A 126, Class B A 395, 60-40-18 - A 216, WCB B 584, C.836.00 |
| 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 ⁽²⁾ Aluminium Bronze Hastelloy-C [*] CuNi | 1.4462, EN 10088 1.4057, EN 10088 5.3106, EN 1563 (JS1030) CC333G, EN 1982 - 2.0835, DIN 17658 | A 182, 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 | | |

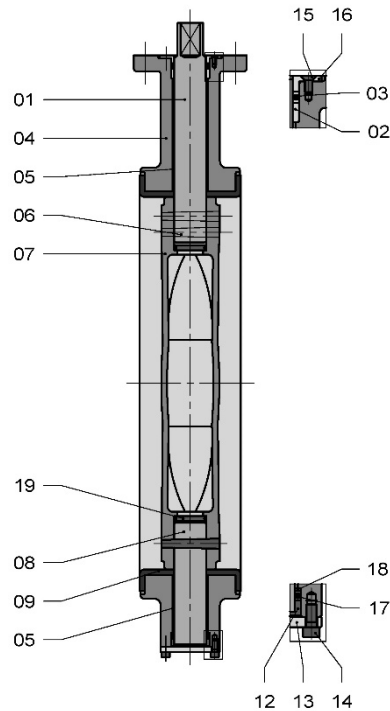
⁽¹⁾ Other materials on request⁽²⁾ For DN 250 and DN 300

DIMENSIONS - EVS 50-350 (2"-14")



| DN | NPS | A | B | C | D | E | F | G | H | ISO 5211 | K | L | M | n | MASS ±kg |
|-----|-----|-----|-----|----|-----|-----|----|----|----|----------|-----|-----|----|---|----------|
| 50 | 2" | 50 | 100 | 43 | 63 | 118 | 12 | 34 | 10 | F07 | 70 | 90 | 9 | 4 | 2.6 |
| 65 | 2½" | 65 | 115 | 46 | 71 | 126 | 12 | 34 | 10 | F07 | 70 | 90 | 9 | 4 | 3.2 |
| 80 | 3" | 80 | 130 | 46 | 78 | 133 | 12 | 34 | 10 | F07 | 70 | 90 | 9 | 4 | 3.5 |
| 100 | 4" | 100 | 150 | 52 | 98 | 147 | 12 | 34 | 12 | F07 | 70 | 90 | 9 | 4 | 4.5 |
| 125 | 5" | 125 | 182 | 56 | 109 | 160 | 12 | 34 | 12 | F07 | 70 | 90 | 9 | 4 | 6.3 |
| 150 | 6" | 150 | 210 | 56 | 133 | 180 | 14 | 34 | 16 | F07 | 70 | 90 | 9 | 4 | 8.8 |
| 200 | 8" | 200 | 262 | 60 | 158 | 204 | 14 | 34 | 16 | F07 | 70 | 90 | 9 | 4 | 13.2 |
| 250 | 10" | 250 | 315 | 68 | 194 | 245 | 15 | 45 | 24 | F10 | 102 | 125 | 11 | 4 | 22 |
| 300 | 12" | 300 | 371 | 78 | 219 | 270 | 15 | 45 | 24 | F10 | 102 | 125 | 11 | 4 | 32 |
| 350 | 14" | 336 | 405 | 78 | 236 | 315 | 15 | 45 | 24 | F10 | 102 | 125 | 11 | 4 | 40 |

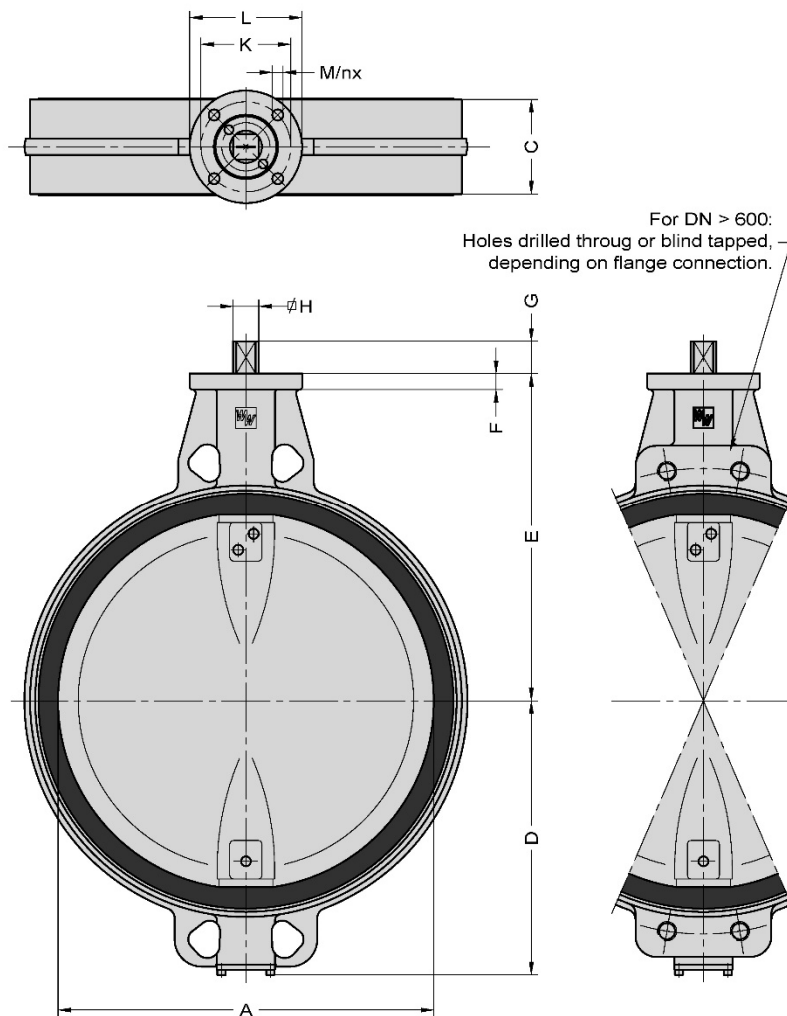
PARTS LIST - EVS 400-1000 (16"-40")



| Item | Description | Material ⁽¹⁾ | 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 12163 NA 18, BS 3076 - | A 182, 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.) Carbon Steel | 5.1301, EN 1561 (JL1040) 5.3106, EN 1563 (JS1030) 5.3103, EN 1563 (JS1049) 1.0619, EN 10213 | A 126, Class B A 395, 60-40-18 - A 216, WCB |
| 05 | Bearing | St. / PTFE Lining Bronze / PTFE Lining | | |
| 06 | Conical pin | See ITEM 01 | See ITEM 01 | See ITEM 01 |
| 07 | Disc | Austenitic SS ⁽²⁾ Duplex SS ⁽³⁾ Martensitic SS ⁽⁴⁾ Ductile Iron / Rilsan coated Aluminium Bronze Hastelloy-C* ⁽⁵⁾ CuNi ⁽⁵⁾ | 1.4408, EN 10213 1.4462, EN 10088 1.4057, EN 10088 5.3106, EN 1563 (JS1030) CC333G, EN 1982 - 2.0835, DIN 17658 | A 351, CF8M A 182, 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 | Collar bearing | Bronze | | |
| 18 | Ring | Bronze | | |
| 19 | Sealing plate | St./NBR St./FPM | | |

⁽¹⁾ Other materials on request⁽²⁾ for \geq DN 500⁽³⁾ forged \leq DN 450, casted \geq DN 500, material 1.4517, EN 10213 (ASTM A 351, CD-4MCu)⁽⁴⁾ forged \leq DN 450⁽⁵⁾ \leq DN 500

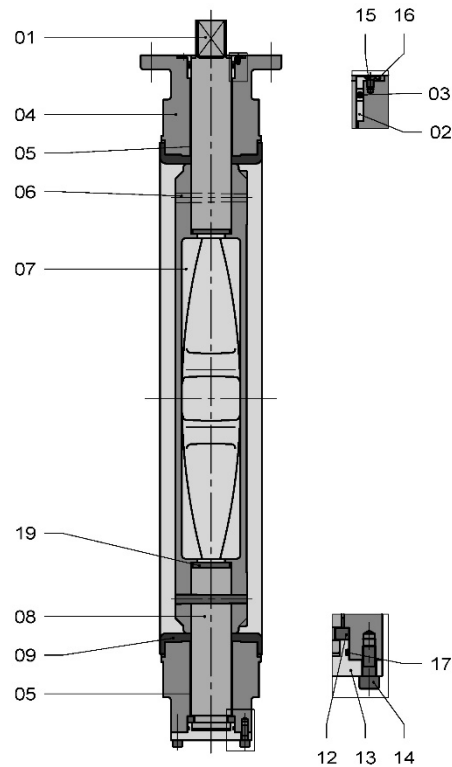
DIMENSIONS - EVS 400-1000 (16"-40")



| DN | NPS | A | B | C | D | E | F | G | H | ISO 5211 | K | L | M | n | MASS ±kg |
|------|-----|-----|------|--------------------|-----|-----|----|----|----|----------|-----|-----|----|---|----------|
| 400 | 16" | 386 | 470 | 102 | 308 | 363 | 25 | 50 | 30 | F14 | 140 | 175 | 17 | 4 | 75 |
| 450 | 18" | 436 | 522 | 114 | 334 | 388 | 25 | 50 | 30 | F14 | 140 | 175 | 17 | 4 | 90 |
| 500 | 20" | 486 | 576 | 127 | 360 | 413 | 25 | 50 | 30 | F14 | 140 | 175 | 17 | 4 | 120 |
| 550 | 22" | 536 | 630 | ⁽¹⁾ 154 | 401 | 485 | 25 | 50 | 40 | F14 | 140 | 175 | 17 | 4 | 165 |
| 600 | 24" | 586 | 672 | 154 | 426 | 510 | 25 | 50 | 40 | F14 | 140 | 175 | 17 | 4 | 180 |
| 650 | 26" | 636 | 726 | ⁽¹⁾ 165 | 474 | 535 | 25 | 60 | 46 | F16 | 165 | 210 | 21 | 4 | 245 |
| 700 | 28" | 686 | 776 | 165 | 499 | 560 | 25 | 60 | 46 | F16 | 165 | 210 | 21 | 4 | 295 |
| 750 | 30" | 736 | 826 | ⁽¹⁾ 190 | 524 | 585 | 25 | 60 | 46 | F16 | 165 | 210 | 21 | 4 | 295 |
| 800 | 32" | 786 | 880 | 190 | 549 | 610 | 25 | 60 | 46 | F16 | 165 | 210 | 21 | 4 | 345 |
| 900 | 36" | 886 | 980 | 203 | 625 | 690 | 30 | 90 | 60 | F25 | 254 | 300 | 17 | 8 | 475 |
| 1000 | 40" | 986 | 1085 | 216 | 685 | 740 | 30 | 90 | 60 | F25 | 254 | 350 | 17 | 8 | 635 |
| 1000 | 40" | 986 | 1085 | 216 | 685 | 740 | 30 | 90 | 60 | F30 | 298 | 350 | 21 | 8 | 635 |

⁽¹⁾ Manufacturer's standard

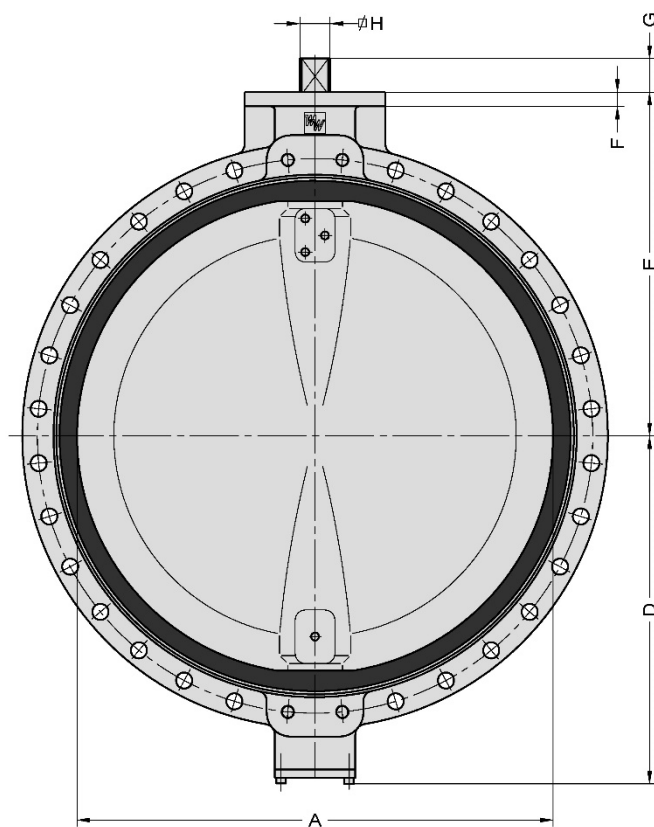
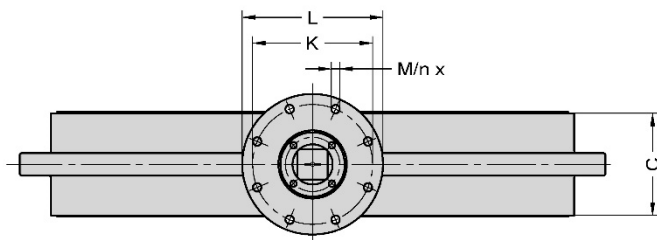
PARTS LIST - EVS 1200-1400 (48"-56")



| Item | Description | Material ¹⁾ | 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 12163 NA 18, BS 3076 - | A 182, 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.) | 5.1301, EN 1561 (JL1040) 5.3106, EN 1563 (JS1030) 5.3103, EN 1563 (JS1049) | 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 5.3106, EN 1563 (JS1030) CC333G, EN 1982 | 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 | | |

¹⁾ Other materials on request

DIMENSIONS - EVS 1200-1400 (48"-56")



| DN | NPS | A | B | C | D | E | F | G | H | ISO 5211 | K | L | M | n | MASS ±kg |
|------|-----|------|------|--------------------|-----|-----|----|-----|----|----------|-----|-----|----|---|----------|
| 1200 | 48" | 1186 | 1300 | 254 | 870 | 866 | 35 | 85 | 75 | F30 | 298 | 415 | 21 | 8 | 1500 |
| 1200 | 48" | 1186 | 1300 | 254 | 870 | 866 | 35 | 85 | 75 | F35 | 356 | 415 | 31 | 8 | 1500 |
| 1400 | 56" | 1386 | 1500 | ⁽¹⁾ 250 | 980 | 966 | 35 | 85 | 75 | F35 | 356 | 415 | 31 | 8 | 1900 |
| 1400 | 56" | 1386 | 1500 | ⁽¹⁾ 250 | 980 | 966 | 35 | 100 | 90 | F35 | 356 | 415 | 31 | 8 | 1900 |

⁽¹⁾ Manufacturer's standard