

# Concentric Butterfly Valve to DIN/EN Wafer Type

## PN16, DN40 ~ DN300

## Series 81W(E)-PN16

### Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:  
CF8M/CF8/CI/DI

### Standards

- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

### Limitation

- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes  $\geq 4"$ .

### Options

- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon

| Materials List |            |                      |
|----------------|------------|----------------------|
| NO             | PARTS NAME | MATERIAL             |
| 1              | BODY       | CF8M / CF8 / CI / DI |
| 2              | DISC*      | CF8M / CF8 / CI / DI |
| 3              | SEAT       | NBR / EPDM / VITON   |
| 4              | STEM       | SS410                |
| 5              | TAPER PIN  | SS                   |
| 6              | BUSHING    | PTFE                 |
| 7              | O-RING     | EPDM                 |

\*Coated disc option available.  
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

### Dimensions (mm)

| Size |     | H1  | H2  | H3 | L  | ØD    | ØC  | N-ØM   | ØA   | ØE  | ØB  | ØF | S  |
|------|-----|-----|-----|----|----|-------|-----|--------|------|-----|-----|----|----|
| IN   | DN  |     |     |    |    |       |     |        |      |     |     |    |    |
| 1½"  | 40  | 70  | 110 | 32 | 35 | 42.4  | 110 | 4-Ø18  | 12.7 | 92  | 70  | 9  | 9  |
| 2"   | 50  | 76  | 162 | 32 | 45 | 52.9  | 125 | 4-Ø18  | 12.7 | 92  | 70  | 9  | 9  |
| 2½"  | 65  | 89  | 175 | 32 | 48 | 64.6  | 145 | 4-Ø18  | 12.7 | 92  | 70  | 9  | 9  |
| 3"   | 80  | 95  | 181 | 32 | 49 | 79    | 160 | 4-Ø18  | 12.7 | 92  | 70  | 9  | 9  |
| 4"   | 100 | 114 | 200 | 32 | 55 | 104.4 | 180 | 8-Ø18  | 15.8 | 92  | 70  | 9  | 11 |
| 5"   | 125 | 127 | 213 | 32 | 58 | 129.5 | 210 | 8-Ø18  | 19   | 92  | 70  | 9  | 14 |
| 6"   | 150 | 140 | 225 | 32 | 59 | 155.8 | 240 | 8-Ø18  | 19   | 92  | 70  | 9  | 14 |
| 8"   | 200 | 177 | 260 | 36 | 64 | 202.7 | 295 | 12-Ø23 | 22.2 | 125 | 102 | 11 | 17 |
| 10"  | 250 | 203 | 292 | 36 | 70 | 250.7 | 355 | 12-Ø27 | 28.6 | 125 | 102 | 11 | 22 |
| 12"  | 300 | 242 | 337 | 36 | 80 | 301.9 | 410 | 12-Ø27 | 31.8 | 150 | 120 | 13 | 22 |

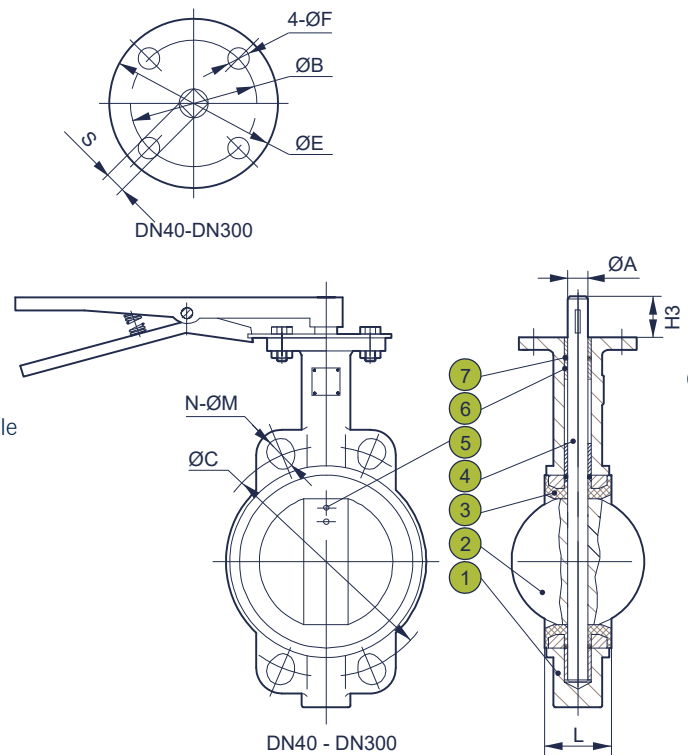


Table A: Maximum Pressure Rating

| SIZE                          | RUBBER SEAT        | PTFE SEAT          | PTFE SEAT+ PTFE COATED DISC |
|-------------------------------|--------------------|--------------------|-----------------------------|
| ≤DN150 (6")                   | 13.7 bar (200psi)  | 13.7 bar (200psi)  | 10.3 bar (150 psi)          |
| DN200 (8")                    | 13.7 bar (200psi)  | 10.3 bar (150 psi) | 10.3 bar (150 psi)          |
| DN250 (10")~DN300 (12")       | 13.7 bar (200psi)  | 10.3 bar (150 psi) | 6.9 bar (100 psi)           |
| DN350 (14")~DN600 (24")       | 10.3 bar (150 psi) | 6.9 bar (100 psi)  | 6.9 bar (100 psi)           |
| ≥DN600 (24")                  | 6.9 bar (100 psi)  | -                  | -                           |
| Gear Operation Recommendation | ≥ 300              | ≥ DN150            | ≥ 100                       |

Table B: Temperature Rating

| SEAT  | APPLICABLE TEMPEPRATURE            |
|-------|------------------------------------|
| NBR   | -20°C to +80°C ( -4°F to 176°F )   |
| EPDM  | -20°C to +120°C ( -4°F to 248°F )  |
| VITON | -10°C to +200°C ( +14°F to 392°F ) |
| PTFE  | -20°C to +150°C ( -4°F to 302°F )  |

# Concentric Butterfly Valve to DIN/EN Wafer Type

## PN16, DN350 ~ DN1200

## Series 81W(E)-PN16

### Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

PMA: See Table A

TMA: See Table B

### Selection:

Material of Body:  
CF8M/CF8/CI/DI

### Standards

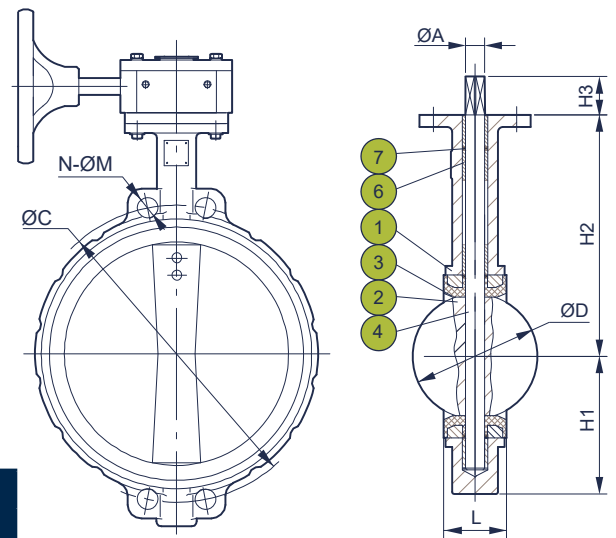
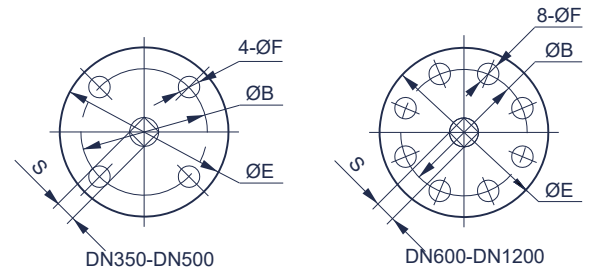
- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

### Limitation

- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes  $\geq 4"$ .

### 4 Options

- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon



DN350-DN1200

| Materials List |            |                      |
|----------------|------------|----------------------|
| NO             | PARTS NAME | MATERIAL             |
| 1              | BODY       | CF8M / CF8 / CI / DI |
| 2              | DISC*      | CF8M / CF8 / CI / DI |
| 3              | SEAT       | NBR / EPDM / VITON   |
| 4              | STEM       | SS410                |
| 5              | TAPER PIN  | SS                   |
| 6              | BUSHING    | PTFE                 |
| 7              | O-RING     | EPDM                 |

\*Coated disc option available.  
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

### Dimensions (mm)

| Size |      | H1  | H2  | H3  | L   | ØD    | ØC   | N-ØM   | ØA   | ØE  | ØB  | ØF | S  |
|------|------|-----|-----|-----|-----|-------|------|--------|------|-----|-----|----|----|
| IN   | DN   |     |     |     |     |       |      |        |      |     |     |    |    |
| 14"  | 350  | 267 | 368 | 45  | 80  | 333.3 | 470  | 16-Ø27 | 31.8 | 150 | 120 | 13 | 22 |
| 16"  | 400  | 298 | 400 | 51  | 90  | 389.6 | 525  | 16-Ø30 | 33.3 | 210 | 165 | 22 | 22 |
| 18"  | 450  | 318 | 422 | 51  | 109 | 439.9 | 585  | 20-Ø30 | 38   | 210 | 165 | 22 | 27 |
| 20"  | 500  | 349 | 479 | 64  | 135 | 491.6 | 650  | 20-Ø33 | 41   | 210 | 165 | 22 | 27 |
| 24"  | 600  | 410 | 562 | 70  | 156 | 592.3 | 770  | 20-Ø36 | 50   | 300 | 254 | 18 | 36 |
| 28"  | 700  | 520 | 624 | 72  | 169 | 694.1 | 840  | 24-Ø36 | 55   | 300 | 254 | 18 | 40 |
| 30"  | 750  | 516 | 624 | 72  | 175 | 744.2 | -    | -      | 55   | 300 | 254 | 18 | 40 |
| 32"  | 800  | 591 | 672 | 83  | 195 | 794.2 | 950  | 24-Ø39 | 55   | 300 | 254 | 18 | 40 |
| 36"  | 900  | 611 | 768 | 77  | 211 | 863.4 | 1050 | 28-Ø39 | 74   | 300 | 254 | 18 | 53 |
| 40"  | 1000 | 665 | 823 | 85  | 229 | 963.4 | 1160 | 28-Ø42 | 84   | 300 | 254 | 18 | 60 |
| 48"  | 1200 | 955 | 880 | 206 | 249 | 1185  | 1380 | 32-Ø39 | 92   | 350 | 298 | 22 | 60 |

Table B: Temperature Rating

| SEAT  | APPLICABLE TEMPERATURE             |
|-------|------------------------------------|
| NBR   | -20°C to +80°C ( -4°F to 176°F )   |
| EPDM  | -20°C to +120°C ( -4°F to 248°F )  |
| VITON | -10°C to +200°C ( +14°F to 392°F ) |
| PTFE  | -20°C to +150°C ( -4°F to 302°F )  |