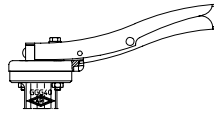




**ARI-ZESA® - Fig. 012 - Free of maintenance butterfly valve with elongated eyelets - soft sealed**

**ARI-GESA® - Fig. 013 - Free of maintenance butterfly valve with threaded eyelets - soft sealed**

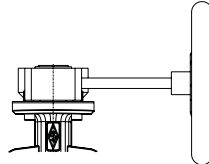
**ARI-ZESA® / ARI-GESA®**  
**with notch lever**



page 6

**ARI-ZESA® / ARI-GESA®**  
**with worm gear**

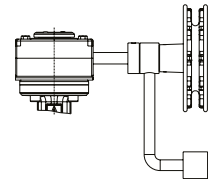
- With variable adjustment
- Self-locking



page 6

**ARI-ZESA® / ARI-GESA®**  
**with gear and chain wheel**

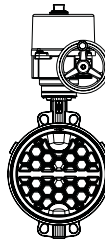
- With variable adjustment
- Self-locking
- With variable length of chain



page 6

**ARI-ZESA® / ARI-GESA®**  
**with electric rotary actuator ARI-OM**

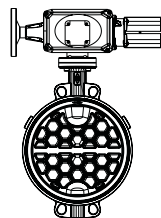
- For short time duty S 2-5 min.  
(Periodic duty S3 30% ED)
- 230 V 50 Hz, 24 V DC, 24 V 50 Hz
- Enclosure IP67



page 7

**ARI-ZESA® / ARI-GESA®**  
**with electric rotary actuator Deufra**

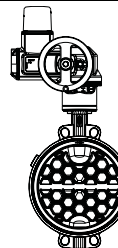
- Type of operation, on/off S4 30% (or control S4 50%)
- 230 V 50 Hz (400 V 50 Hz)
- Enclosure IP67



page 8

**ARI-ZESA® / ARI-GESA®**  
**with electric rotary actuator Auma**

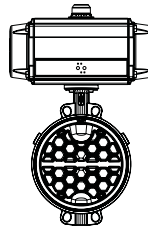
- For short time duty S 2-15 min. (or control S4 25%)
- 400 V 50 Hz (230 V 50 Hz)
- Enclosure IP68



page 9

**ARI-ZESA® / ARI-GESA®**  
**with pneumatic rotary actuator**  
**AIR-TORQUE / VT**

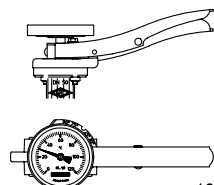
- Function: Double acting
- Function: Single acting, Spring closes on air failure (opens)
- Actuating pressure 6 bar (=0.6 MPa)



page 10 / 11

**ARI-ZESA® / ARI-GESA®**  
**with integrated Thermo - Appliance**

- Cold (-20 up to +40 °C) or warm (0 up to +120 °C)
- With Lever
- Precision class 1.0



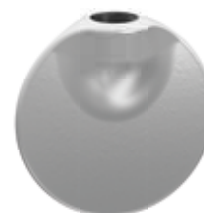
page 12



**Fig. 012 - ARI-ZESA®**



**Fig. 013 - ARI-GESA®**



**DN 25-DN 50  
SINGLE SHAFT**



**DN 65-DN 200  
CURVED**



**DN 250-DN 600  
HEXO**

**Features:**

- Soft sealing
- Maintenance-free
- Good flow characteristic due to excellent Zeta-values
- Seat materials EPDM / NBR / FPM
- Double sealing of the stem
- Stainless steel disc
- Dew point barrier
- Central disc bearing
- Nodular iron body
- High quality two-component coating
- Spindle blow out protection
- Changeable lining, body detachable
- Shaft / Disc connection not in contact with the medium
- Slip on flange DIN EN 1092-1
- EPDM with DIN DVGW Reg. drinking water

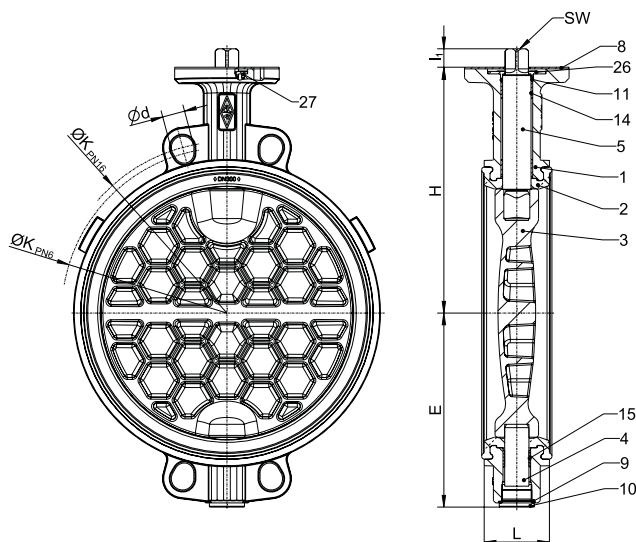
**ARI-ZESA®:**

- Wafer type

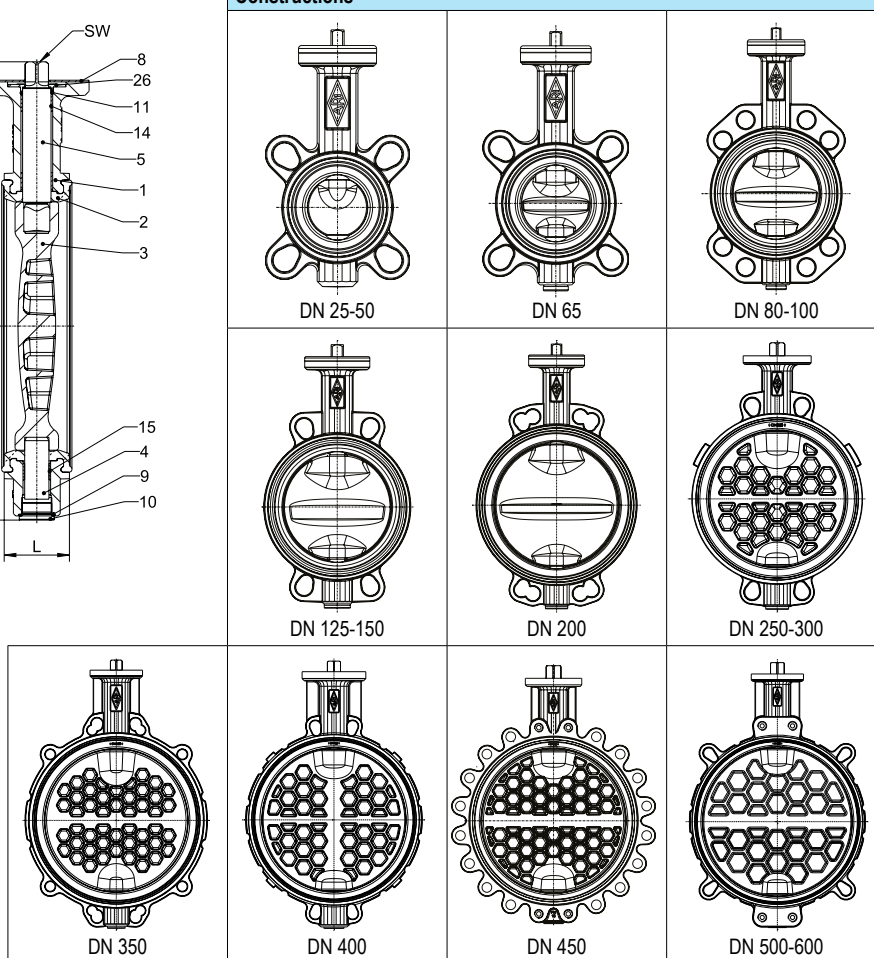
**ARI-GESA®:**

- Lug type
- Pipeline one-side detachable

## Butterfly valve with elongated eyelets (SG iron)



### Constructions



| Figure                             | Nominal pressure                               | Material                                                | Nominal diameter                                   | Disc                                                         | Stem                                                                                |
|------------------------------------|------------------------------------------------|---------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 20.012 (included in 22.012)        | PN 6                                           | 5.3106 / EN-JS1030                                      | DN 25-600                                          | 1.4581                                                       | 1.4021+QT<br>(optional: ≤ DN 300 1.4571 / ≥ DN 350 1.4542)                          |
| 21.012 (included in 22.012)        | PN 10                                          | 5.3106 / EN-JS1030                                      | DN 25-600                                          |                                                              |                                                                                     |
| 22.012                             | PN 16                                          | 5.3106 / EN-JS1030                                      | DN 25-600                                          |                                                              |                                                                                     |
| <b>Seat:</b>                       |                                                |                                                         | <b>Actuation arrangement:</b> (refer to page 6-11) |                                                              |                                                                                     |
| • EPDM                             | -10 °C to +130 °C                              | • Notch lever<br>• Worm gear<br>• Gear with chain wheel |                                                    |                                                              | • Electric actuator (ARI-OM, Deufra, Auma)<br>• Pneumatic actuator (AIR-TORQUE, VT) |
| • NBR                              | -10 °C to +80 °C                               |                                                         |                                                    |                                                              |                                                                                     |
| • FPM                              | 0 °C to +150 °C<br>(not for hot water useable) |                                                         |                                                    |                                                              |                                                                                     |
| <b>Max. differential pressure:</b> |                                                |                                                         | <b>Test:</b>                                       |                                                              |                                                                                     |
| • 16 bar                           | DN 25-150                                      | Sealing leakage test:                                   |                                                    | • DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1) |                                                                                     |
| • 10 bar                           | DN 200-600                                     | DVGW-Registration:                                      |                                                    | • EPDM for drinking water acc. to DIN EN 1074-1/-2           |                                                                                     |

| Parts         |       |                                   |                                                                                                   |
|---------------|-------|-----------------------------------|---------------------------------------------------------------------------------------------------|
| Pos.          | Sp.p. | Description                       | Fig. 20. / 21. / 22.012                                                                           |
| 1             |       | Body                              | 5.3106 / EN-JS1030 (optional: 5.3103 / EN-JS1049)                                                 |
| 2             | x     | Seat                              | EPDM 73 / NBR 73 / FPM 73                                                                         |
| 3             |       | Disc                              | 1.4581 (optional: DN 40-500 CC333G / DN 100-500 5.3106 / EN-JS 1030 - disc with different design) |
| 4             |       | Pivot                             | 1.4021+QT (optional: DN 65-300 1.4571 / DN 350-600 1.4542)                                        |
| 5             |       | Stem                              | 1.4021+QT (optional: DN 25-300 1.4571 / DN 350-600 1.4542)                                        |
| 8             | x     | Insulating cap / Condensate plate | PA6 (Insulating cap DN 25-200) /<br>Novapress 850 (Condensate plate DN 250-600)                   |
| 9             | x     | Gasket                            | CU                                                                                                |
| 10            | x     | Hexagon head screw plug           | 5.8-A2B                                                                                           |
| 11            | x     | O-ring                            | EPDM 73 / NBR 73 / FPM 73                                                                         |
| 14 / 15       |       | Parallel bushing                  | P1                                                                                                |
| 26            | x     | Stem retaining washer             | DN 25-200: Iglidur® J260 (optional: 1.4021+Q or 1.4571) / DN 250-600: 1.4021+Q (optional: 1.4571) |
| 27            | x     | Countersunk screw                 | 8.8-A2B                                                                                           |
| L Spare parts |       |                                   |                                                                                                   |

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

| DN | 25 <sup>1)</sup> | 32 <sup>1)</sup> | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----|------------------|------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|----|------------------|------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

| Face-to-face dimension FTF series 20 acc. to DIN EN 558-1 |      |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |
|-----------------------------------------------------------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| L                                                         | (mm) | 33 | 33 | 33 | 43 | 46 | 46 | 52 | 56 | 56 | 60 | 68 | 78 | 78 | 102 | 114 | 127 | 154 |

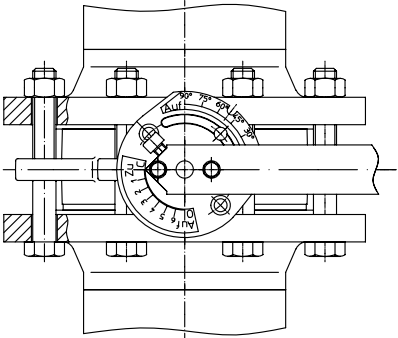
| Dimensions     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| H              | (mm) | 123 | 123 | 129 | 135 | 145 | 153 | 174 | 192 | 208 | 242 | 265 | 294 | 360 | 409 | 444 | 497 | 557 |
| E              | (mm) | 58  | 58  | 66  | 69  | 81  | 100 | 109 | 124 | 140 | 167 | 203 | 232 | 257 | 298 | 319 | 356 | 418 |
| I <sub>1</sub> | (mm) | 13  | 13  | 13  | 13  | 13  | 13  | 13  | 17  | 17  | 17  | 22  | 22  | 22  | 27  | 37  | 36  | 46  |
| SW             | (mm) | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 17  | 17  | 17  | 22  | 22  | 22  | 27  | 36  | 36  | 46  |

| Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length) |                      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
|-----------------------------------------------------------------------|----------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|
| PN 6                                                                  | ØK                   | (mm)   | 75   | 90   | 100  | 110  | 130  | 150  | 170  | 200  | 225  | 280  | 335  | 395  | 445  | 495  | --   |     | 600  |     | 705  |     |
|                                                                       | n x Ød1              | (mm)   | 4x11 | 4x14 | 4x14 | 4x14 | 4x14 | 4x18 | 4x18 | 8x18 | 8x18 | 8x18 | 4x18 | 4x22 | 4x22 | 4x22 | --   |     | 4x22 |     | 4x26 |     |
|                                                                       | Screws               | (pcs.) | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 8    | 8    | 8    | 12   | 12   | 12   | 16   | --   |     | 16   | 8   | 16   | 8   |
|                                                                       | Thread               |        | M10  | M12  | M12  | M12  | M12  | M16  | M16  | M16  | M16  | M16  | M16  | M20  | M20  | M20  | --   |     | M20  | M20 | M24  | M24 |
|                                                                       | Length <sup>2)</sup> | (mm)   | 80   | 80   | 80   | 90   | 90   | 100  | 110  | 120  | 120  | 130  | 140  | 160  | 160  | 180  | --   |     | 220  | 50  | 250  | 70  |
| PN 10                                                                 | ØK                   | (mm)   | 85   | 100  | 110  | 125  | 145  | 160  | 180  | 210  | 240  | 295  | 350  | 400  | 460  | 515  | 565  |     | 620  |     | 725  |     |
|                                                                       | n x Ød1              | (mm)   | 4x18 | 4x18 | 4x18 | 4x18 | 4x18 | 4x18 | 4x18 | 8x18 | 8x22 | 8x22 | 4x22 | 4x22 | 4x22 | 4x28 | 4x28 |     | 4x28 |     | 4x36 |     |
|                                                                       | Screws               | (pcs.) | 4    | 4    | 4    | 4    | 4    | 8    | 8    | 8    | 8    | 8    | 12   | 12   | 16   | 16   | 16   | 8   | 16   | 8   | 16   | 8   |
|                                                                       | Thread               |        | M12  | M16  | M16  | M16  | M16  | M16  | M16  | M16  | M20  | M20  | M20  | M20  | M20  | M24  | M24  | M24 | M24  | M24 | M27  | M27 |
|                                                                       | Length <sup>2)</sup> | (mm)   | 90   | 90   | 90   | 100  | 110  | 110  | 120  | 130  | 130  | 140  | 150  | 160  | 160  | 200  | 200  | 70  | 220  | 50  | 260  | 70  |
| PN 16                                                                 | ØK                   | (mm)   | 85   | 100  | 110  | 125  | 145  | 160  | 180  | 210  | 240  | 295  | 355  | 410  | 470  | 525  | 585  |     | 650  |     | 770  |     |
|                                                                       | n x Ød1              | (mm)   | 4x14 | 4x18 | 4x18 | 4x18 | 4x18 | 4x18 | 4x18 | 8x18 | 8x22 | 8x22 | 4x26 | 4x26 | 4x26 | 4x30 | 4x30 |     | 4x33 |     | 4x36 |     |
|                                                                       | Screws               | (pcs.) | 4    | 4    | 4    | 4    | 4    | 8    | 8    | 8    | 8    | 12   | 12   | 12   | 16   | 16   | 16   | 8   | 16   | 8   | 16   | 8   |
|                                                                       | Thread               |        | M12  | M16  | M16  | M16  | M16  | M16  | M16  | M16  | M20  | M20  | M24  | M24  | M25  | M27  | M27  | M27 | M30  | M30 | M33  | M33 |
|                                                                       | Length <sup>2)</sup> | (mm)   | 90   | 90   | 90   | 100  | 110  | 110  | 120  | 130  | 130  | 140  | 160  | 170  | 180  | 220  | 220  | 75  | 260  | 70  | 320  | 90  |

| Weights             |      |     |     |     |     |   |     |     |     |     |      |      |      |      |      |     |     |     |
|---------------------|------|-----|-----|-----|-----|---|-----|-----|-----|-----|------|------|------|------|------|-----|-----|-----|
| Fig. 20./21./22.012 | (kg) | 1.4 | 1.4 | 1.7 | 2.3 | 3 | 3.6 | 4.6 | 7.7 | 8.9 | 12.5 | 20.6 | 29.2 | 42.7 | 65.3 | 124 | 110 | 195 |

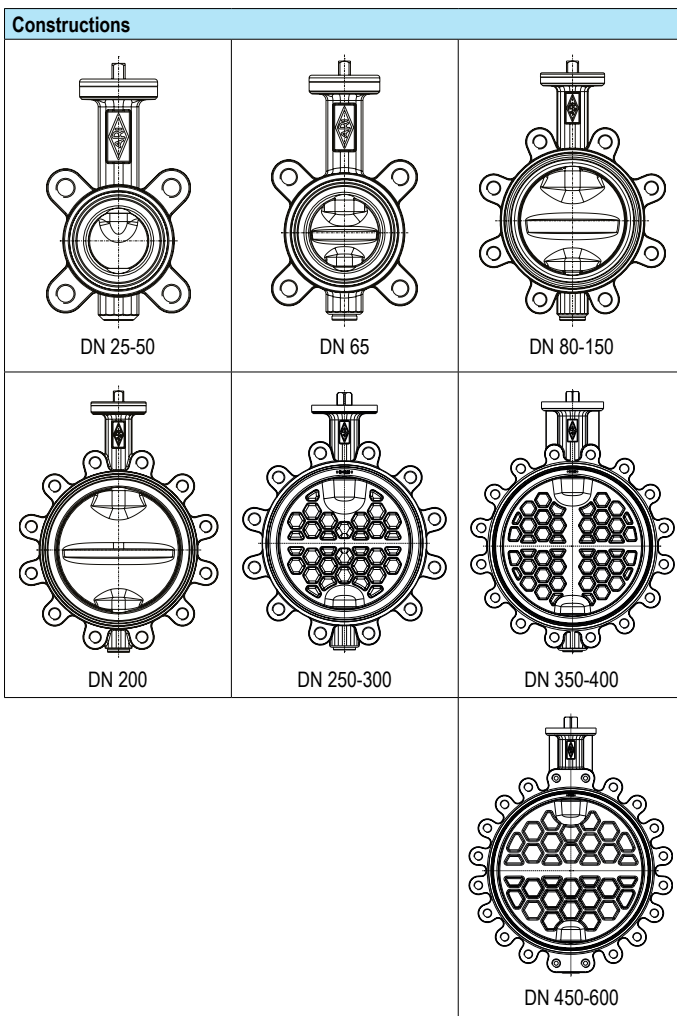
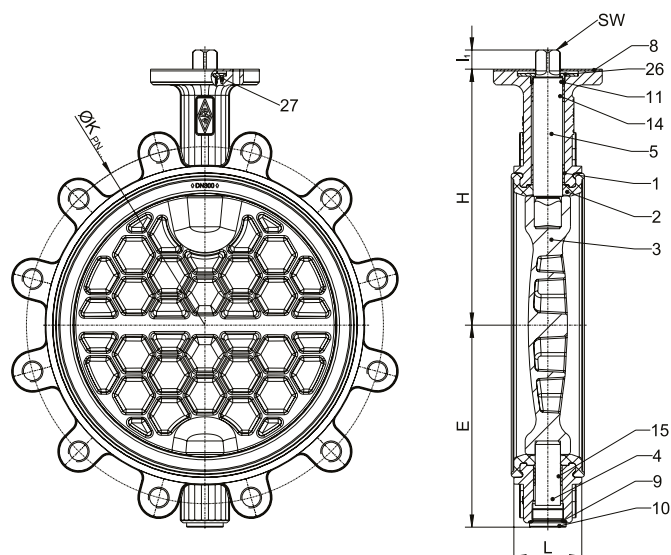
<sup>1)</sup> Can be clamped between flanges PN 16 / DN 20

<sup>2)</sup> The actual screw length required depends on the installation components used on site. Screw lengths must be checked by the customer before ordering.

| Mounting variations                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  <p>Welding neck flanges<br/>PN 6 / PN 10 / PN 16<br/>DIN EN 1092-1 / 11 / B1</p> <p>Hexagon screw<br/>DIN EN ISO 4016 W.-No. 4.6</p> <p>Hexagon nut<br/>DIN EN ISO 4034 W.-No. 5</p> <p><b>ZESA® -Wafer-type-valve</b></p> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| Pressure-temperature-ratings |    |       | Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. |                |       |       |
|------------------------------|----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-------|
| acc. to DIN EN 1092-2        | PN |       | -20°C to -10°C                                                                                                                                      | -10°C to 120°C | 130°C | 150°C |
| 5.3106 / EN-JS1030           | 16 | (bar) | -                                                                                                                                                   | 16             | 15,8  | 15,5  |
| 5.3103 / EN-JS1049           | 16 | (bar) | 16                                                                                                                                                  | 16             | 15,8  | 15,5  |

Butterfly valve with threaded eyelets (SG iron)



| Figure | Nominal pressure | Material           | Nominal diameter | Disc   | Stem                                                       |
|--------|------------------|--------------------|------------------|--------|------------------------------------------------------------|
| 21.013 | PN 10            | 5.3106 / EN-JS1030 | DN 25-600        | 1.4581 | 1.4021+QT<br>(optional: ≤ DN 300 1.4571 / ≥ DN 350 1.4542) |
| 22.013 | PN 16            | 5.3106 / EN-JS1030 | DN 25-600        |        |                                                            |

| Seat:  |                                               | Actuation arrangement:                                                                                                |                                                                                                                                             |
|--------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| • EPDM | -10 °C to +130 °C                             | <ul style="list-style-type: none"> <li>• Notch lever</li> <li>• Worm gear</li> <li>• Gear with chain wheel</li> </ul> | <ul style="list-style-type: none"> <li>• Electric actuator (ARI-OM, Deufra, Auma)</li> <li>• Pneumatic actuator (AIR-TORQUE, VT)</li> </ul> |
| • NBR  | -10 °C to +80 °C                              |                                                                                                                       |                                                                                                                                             |
| • FPM  | 0 °C to +150 °C<br>(ot for hot water useable) |                                                                                                                       |                                                                                                                                             |

| Max. differential pressure: |            | Test:                 |                                                              |
|-----------------------------|------------|-----------------------|--------------------------------------------------------------|
| • 16 bar                    | DN 25-150  | Sealing leakage test: | • DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1) |
| • 10 bar                    | DN 200-600 | DVGW-Registration:    | • EPDM for drinking water acc. to DIN EN 1074-1/-2           |

| Parts         |       |                                   |                                                                                                   |
|---------------|-------|-----------------------------------|---------------------------------------------------------------------------------------------------|
| Pos.          | Sp.p. | Description                       | Fig. 21. / 22.013                                                                                 |
| 1             |       | Body                              | 5.3106 / EN-JS1030 (optional: 5.3103 / EN-JS1049)                                                 |
| 2             | x     | Seat                              | EPDM 73 / NBR 73 / FPM 73                                                                         |
| 3             |       | Disc                              | 1.4581 (optional: DN 40-500 CC333G / DN 100-500 5.3106 / EN-JS 1030 - disc with different design) |
| 4             |       | Pivot                             | 1.4021+QT (optional: DN 65-300 1.4571 / DN 350-600 1.4542)                                        |
| 5             |       | Stem                              | 1.4021+QT (optional: DN 25-300 1.4571 / DN 350-600 1.4542)                                        |
| 8             | x     | Insulating cap / Condensate plate | PA6 (Insulating cap DN 25-200) / Novapress 850 (Condensate plate DN 250-600)                      |
| 9             | x     | Gasket                            | CU                                                                                                |
| 10            | x     | Hexagon head srew plug            | 5.8-A2B                                                                                           |
| 11            | x     | o-ring                            | EPDM 73 / NBR 73 / FPM 73                                                                         |
| 14 / 15       |       | Parallel bushing                  | P1                                                                                                |
| 26            | x     | Stem retaining washer             | DN 25-200: Iglidur® J260 (optional: 1.4021+Q or 1.4571) / DN 250-600: 1.4021+Q (optional: 1.4571) |
| 27            | x     | Countersunk screw                 | 8.8-A2B                                                                                           |
| L Spare parts |       |                                   |                                                                                                   |

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).



| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

**Face-to-face dimension FTF series 20 acc. to DIN EN 558-1**

| L | (mm) | 33 | 33 | 33 | 43 | 46 | 46 | 52 | 56 | 56 | 60 | 68 | 78 | 78 | 102 | 114 | 127 | 154 |
|---|------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
|---|------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|

**Dimensions**

| H              | (mm) | 123 | 123 | 129 | 135 | 145 | 153 | 174 | 192 | 208 | 242 | 265 | 294 | 360 | 409 | 444 | 497 | 557 |
|----------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| E              | (mm) | 58  | 58  | 66  | 69  | 81  | 100 | 109 | 124 | 140 | 167 | 203 | 232 | 257 | 298 | 319 | 356 | 418 |
| I <sub>1</sub> | (mm) | 13  | 13  | 13  | 13  | 13  | 13  | 13  | 17  | 17  | 17  | 22  | 22  | 22  | 27  | 37  | 36  | 46  |
| SW             | (mm) | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 17  | 17  | 17  | 22  | 22  | 22  | 27  | 36  | 36  | 46  |

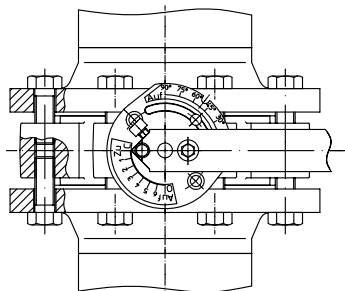
**Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)**

|       |                      |        |       |       |     |     |       |     |     |       |     |        |        |     |        |        |        |        |        |    |     |    |
|-------|----------------------|--------|-------|-------|-----|-----|-------|-----|-----|-------|-----|--------|--------|-----|--------|--------|--------|--------|--------|----|-----|----|
| PN 10 | ØK                   | (mm)   | 85    | 100   | 110 | 125 | 145   | 160 | 180 | 210   | 240 | 295    | 350    | 400 | 460    | 515    | 565    | 620    | 725    |    |     |    |
|       | n x M                | (mm)   | 4xM12 | 4xM16 |     |     | 8xM16 |     |     | 8xM20 |     |        | 12xM20 |     | 16xM20 | 16xM24 | 20xM24 | 20xM24 | 20xM27 |    |     |    |
|       | Screws               | (pcs.) | 8     | 8     | 8   | 8   | 8     | 16  | 16  | 16    | 16  | 16     | 24     | 24  | 32     | 32     | 32     | 8      | 32     | 8  | 32  | 8  |
|       | Thread               |        | M12   | M16   |     |     | M16   |     |     | M20   |     |        | M20    |     | M20    | M24    | M24    | M24    | M27    |    |     |    |
|       | Length <sup>1)</sup> | (mm)   | 30    | 30    | 30  | 35  | 35    | 40  | 40  | 45    | 45  | 50     | 55     | 55  | 60     | 70     | 80     | 70     | 85     | 50 | 100 | 70 |
| PN 16 | ØK                   | (mm)   | 85    | 100   | 110 | 125 | 145   | 160 | 180 | 210   | 240 | 295    | 355    | 410 | 470    | 525    | 585    | 650    | 770    |    |     |    |
|       | n x Ød1              | (mm)   | 4xM12 | 4xM16 |     |     | 8xM16 |     |     | 8xM20 |     | 12xM20 | 12xM24 |     | 16xM24 | 16xM27 | 20xM27 | 20xM30 | 20xM33 |    |     |    |
|       | Screws               | (pcs.) | 8     | 8     | 8   | 8   | 8     | 16  | 16  | 16    | 16  | 24     | 24     | 24  | 32     | 32     | 32     | 8      | 32     | 8  | 32  | 8  |
|       | Thread               |        | M12   | M16   |     |     | M16   |     |     | M20   |     |        | M24    |     | M24    | M27    | M27    | M30    | M33    |    |     |    |
|       | Length <sup>1)</sup> | (mm)   | 30    | 30    | 30  | 35  | 35    | 40  | 40  | 45    | 45  | 50     | 55     | 60  | 60     | 75     | 85     | 75     | 100    | 70 | 120 | 90 |

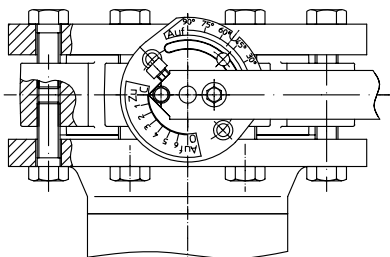
**Weights**

| Fig. 21./22.013 | (kg) | 1.9 | 1.9 | 2.1 | 2.9 | 3.6 | 5.2 | 6.6 | 10 | 11.7 | 17 | 26.2 | 36.4 | 56.1 | 86.7 | 125.1 | 152 | 262 |
|-----------------|------|-----|-----|-----|-----|-----|-----|-----|----|------|----|------|------|------|------|-------|-----|-----|
|-----------------|------|-----|-----|-----|-----|-----|-----|-----|----|------|----|------|------|------|------|-------|-----|-----|

<sup>1)</sup> The actual screw length required depends on the installation components used on site. Screw lengths must be checked by the customer before ordering.

**Mounting variations**

**GESA®- Wafer-type-valve**

Welding neck flanges  
PN 10 / PN 16  
DIN EN 1092-1 / 11 / B1  
Hexagon screw  
DIN EN ISO 4016 W.-No 4.6


**GESA®- Pipe-end-valve**

Welding neck flanges  
PN 10 / PN 16  
DIN EN 1092-1 / 11 / B1  
Hexagon screw  
DIN EN ISO 4016 W.-No 4.6

When used on end of line applications, a safety precaution (blind flange, etc.) is recommended.

**To ensure the seat tightness, a blind or counter flange is necessary.**

The installation between deviating flanges is not or only under special care possible. Please consult us.

**For all installation, modification or maintenance work, please observe regulations in force and the ARI-operating instructions.**

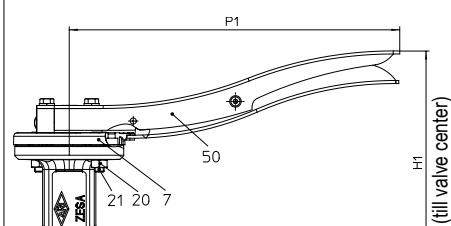
**Pressure-temperature-ratings**

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

| acc. to DIN EN 1092-2 | PN |       | -20°C to -10°C | -10°C to 120°C | 130°C | 150°C |
|-----------------------|----|-------|----------------|----------------|-------|-------|
| 5.3106 / EN-JS1030    | 16 | (bar) | -              | 16             | 15,8  | 15,5  |
| 5.3103 / EN-JS1049    | 16 | (bar) | 16             | 16             | 15,8  | 15,5  |

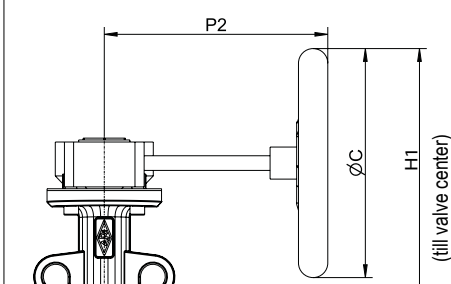
## ARI-ZESA® / ARI-GESA® with manual actuation arrangement

### Notch lever

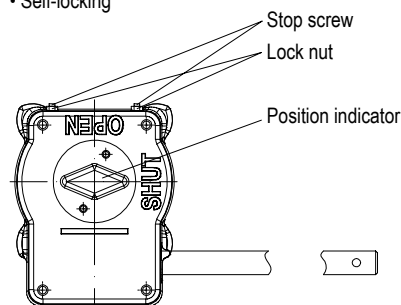


For diameters larger than DN 125 we recommend using a gear mechanism. Gear recommended for inaccessible installation (see below).

### Worm gear

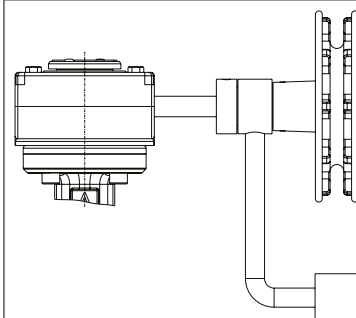


- With variable adjustment
- Self-locking



The SHUT-position can be adjusted to  $\pm 5^\circ$  by a locking screw.

### Gear with chain wheel



- With variable adjustment
- Self-locking
- With variable length of chain
- Dimensions and details on request

### Parts

| Pos.          | Sp.p. | Description                       | Fig. 20. / 21. / 22.012; 21. / 22.013                                        |
|---------------|-------|-----------------------------------|------------------------------------------------------------------------------|
| 7             | x     | Lever cap                         | PA 6 (optional: 1.0330 (surface treatment))                                  |
| 8             | x     | Insulating cap / Condensate plate | PA6 (Insulating cap DN 25-200) / Novapress 850 (Condensate plate DN 250-600) |
| 20            | x     | Hexagon nut                       | 5-A2B                                                                        |
| 21            | x     | Cheese head screw                 | 8.8-A2B                                                                      |
| 50            | x     | Notch lever                       | 1.0330 (optional: 5.3106 / EN-JS1030) (surface treatment)                    |
| 50            | x     | Worm gear                         |                                                                              |
| L Spare parts |       |                                   |                                                                              |

| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

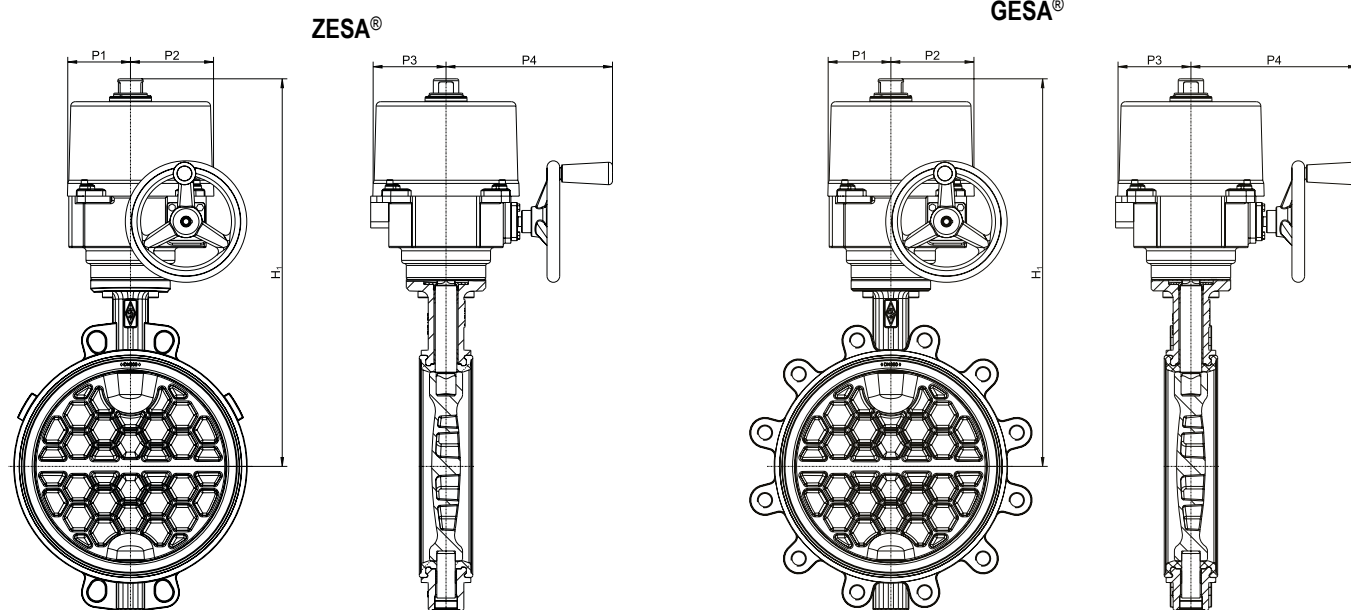
### Dimensions

|              |            |      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|--------------|------------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| H1           | with lever | (mm) | 184     | 184     | 190     | 196     | 206     | 214     | 235     | 261     | 277     | 311     | --      | --      | --      | --      | --      | --      |         |
|              | with gear  | (mm) | 210     | 210     | 216     | 222     | 232     | 240     | 261     | 278     | 294     | 349     | 415     | 445     | 510     | 591     | 780     | 833     | 903     |
| P1           |            | (mm) | 184     | 184     | 184     | 184     | 184     | 184     | 184     | 273     | 273     | 273     | --      | --      | --      | --      | --      | --      | --      |
| P2           |            | (mm) | 147     | 147     | 147     | 147     | 147     | 147     | 147     | 147     | 147     | 147     | 249     | 244     | 244     | 333     | 437     | 437     | 480     |
| ØC           |            | (mm) | 125     | 125     | 125     | 125     | 125     | 125     | 125     | 125     | 125     | 125     | 250     | 250     | 250     | 300     | 600     | 600     | 600     |
| Type of gear |            |      | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-10M | 242-20M | 242-30S | 242-30S | 242-30L | 242-40M | 242-40M | AB1250N |

### Weights

| ZESA® | with lever | (kg) | 1.9 | 1.9 | 2.1 | 2.5 | 3.3 | 3.8 | 4.6 | 8.7  | 10.4 | 14.1 | --   | --   | --   | --   | --    | --    | --    |
|-------|------------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-------|-------|-------|
|       |            | (kg) | 2.3 | 2.3 | 2.5 | 3.3 | 4   | 5.6 | 7   | 10.8 | 12.5 | 16.3 | --   | --   | --   | --   | --    | --    | --    |
| ZESA® | with gear  | (kg) | 2.9 | 2.9 | 3.2 | 3.8 | 4.5 | 5.1 | 6.1 | 9.2  | 10.4 | 14   | 24.1 | 31.2 | 47.7 | 70.9 | 134.7 | 120.7 | 221.8 |
|       |            | (kg) | 3.4 | 3.4 | 3.6 | 4.4 | 5.1 | 6.7 | 8.1 | 11.5 | 13.2 | 18.5 | 29.7 | 41.4 | 61.1 | 92.3 | 135.8 | 162.7 | 288.8 |

## Butterfly valve with electric rotary actuator



(Figures show DN 300)

|                                                                                                                                                                                                                                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Type: ARI-OM</b>                                                                                                                                                                                                                                          |  |
| <ul style="list-style-type: none"> <li>• for short time duty S 2-5 min.<br/>(Periodic duty S3 30% duty cycle, max. 60 c/h,<br/>max. modulating torque = ca. 50% rated torque)</li> <li>• Enclosure IP67</li> <li>• Temperature guard in the motor</li> </ul> |  |
| <b>Voltages:</b>                                                                                                                                                                                                                                             |  |
| <ul style="list-style-type: none"> <li>• 230 V 50 Hz</li> <li>• 24 V AC/DC</li> </ul> (Other voltages on request)                                                                                                                                            |  |
| <b>Accessories:</b>                                                                                                                                                                                                                                          |  |
| <ul style="list-style-type: none"> <li>• Potentiometer (1000 Ohm)</li> <li>• Positioner 4-20 mA</li> <li>• Position-transmitter 4-20 mA</li> <li>• Heating</li> <li>• Travel switch</li> </ul>                                                               |  |

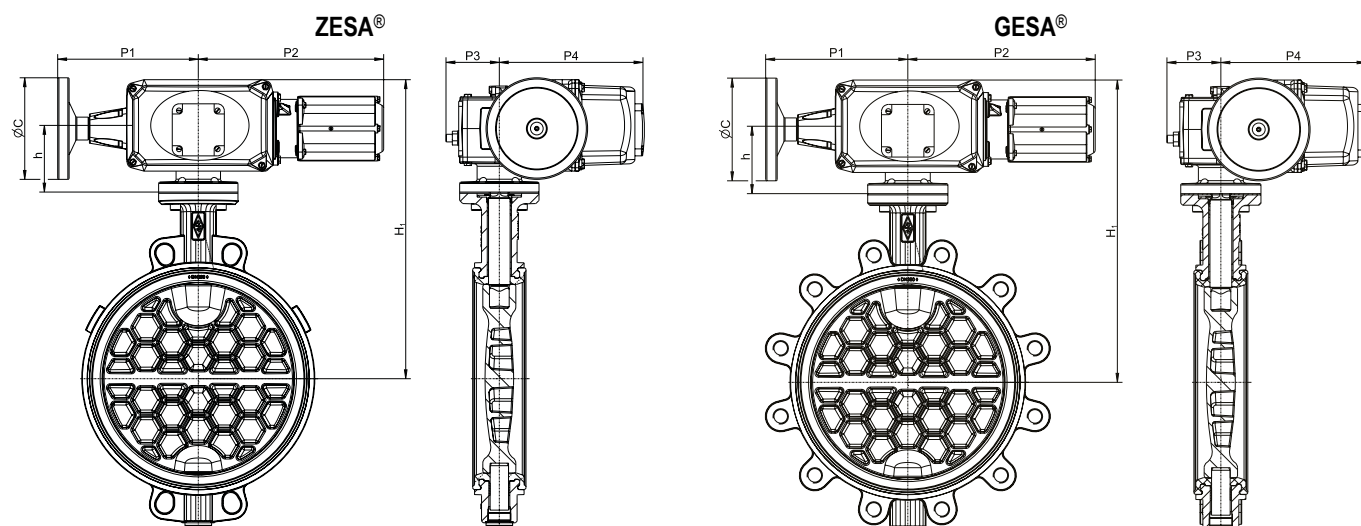
For connection refer to terminal connection in the operating instructions of the actuator !

| DN               |      | 25   | 32  | 40  | 50  | 65  | 80  | 100  | 125  | 150  | 200  | 250  | 300 <sup>1)</sup> |  |
|------------------|------|------|-----|-----|-----|-----|-----|------|------|------|------|------|-------------------|--|
| Actuator         |      |      |     |     |     |     |     |      |      |      |      |      |                   |  |
| Type of actuator |      | OM-1 |     |     |     |     |     | OM-A | OM-2 | OM-3 |      | OM-4 |                   |  |
| Operating time   |      | (s)  | 13  |     |     |     |     |      | 24   | 17   | 26   |      | 18                |  |
| Dimensions       |      |      |     |     |     |     |     |      |      |      |      |      |                   |  |
| H1               | (mm) | 273  | 273 | 279 | 285 | 295 | 303 | 374  | 447  | 463  | 497  | 585  | 614               |  |
| P1               | (mm) | 35   | 35  | 35  | 35  | 35  | 35  | 54   | 82   | 82   | 82   | 94   | 94                |  |
| P2               | (mm) | 80   | 80  | 80  | 80  | 80  | 80  | 54   | 118  | 118  | 118  | 126  | 126               |  |
| P3               | (mm) | 54   | 54  | 54  | 54  | 54  | 54  | 54   | 100  | 100  | 100  | 110  | 110               |  |
| P4               | (mm) | 54   | 54  | 54  | 54  | 54  | 54  | 54   | 230  | 230  | 230  | 262  | 262               |  |
| Weights          |      |      |     |     |     |     |     |      |      |      |      |      |                   |  |
| ZESA®            | (kg) | 3.4  | 3.4 | 3.7 | 4.3 | 5   | 5.6 | 6.6  | 9.2  | 10.4 | 14   | 24.1 | 34.2              |  |
| GESA®            | (kg) | 3.9  | 3.9 | 4.1 | 4.9 | 5.6 | 7.2 | 8.6  | 11.5 | 13.2 | 18.5 | 29.7 | 41.4              |  |

<sup>1)</sup> Max differential pressure against tight shut off 6 bar

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

## Butterfly valve with electric rotary actuator



(Figures show DN 300)

### Type: Deufra

- Type of operation on/off S4 30% (optional: for control S4 50%)
- Enclosure IP67
- Temperature guard in the motor
- Heating

### Voltages:

- 230 V 50 Hz
- 400 V 50 Hz (not for SQ4)
- Other voltages on request

### Accessories:

- Travel switch
- Potentiometer
- Valve positioner 0-10 V / 4-20 mA
- Position-transmitter

### Special actuators:

- Reset to start on failure Type FQ

For connection refer to terminal connection in the operating instructions of the actuator !

| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

### Actuator

| Type of actuator   | SQ4 |  |  |  |  |  | SQ6 | SQ10 | SQ15 | SQ25 | SQ60 | SQ120 | SQ250 |
|--------------------|-----|--|--|--|--|--|-----|------|------|------|------|-------|-------|
| Operating time (s) | 6   |  |  |  |  |  | 6   | 6    | 15   | 10   | 30   | 30    | 70    |

### Dimensions

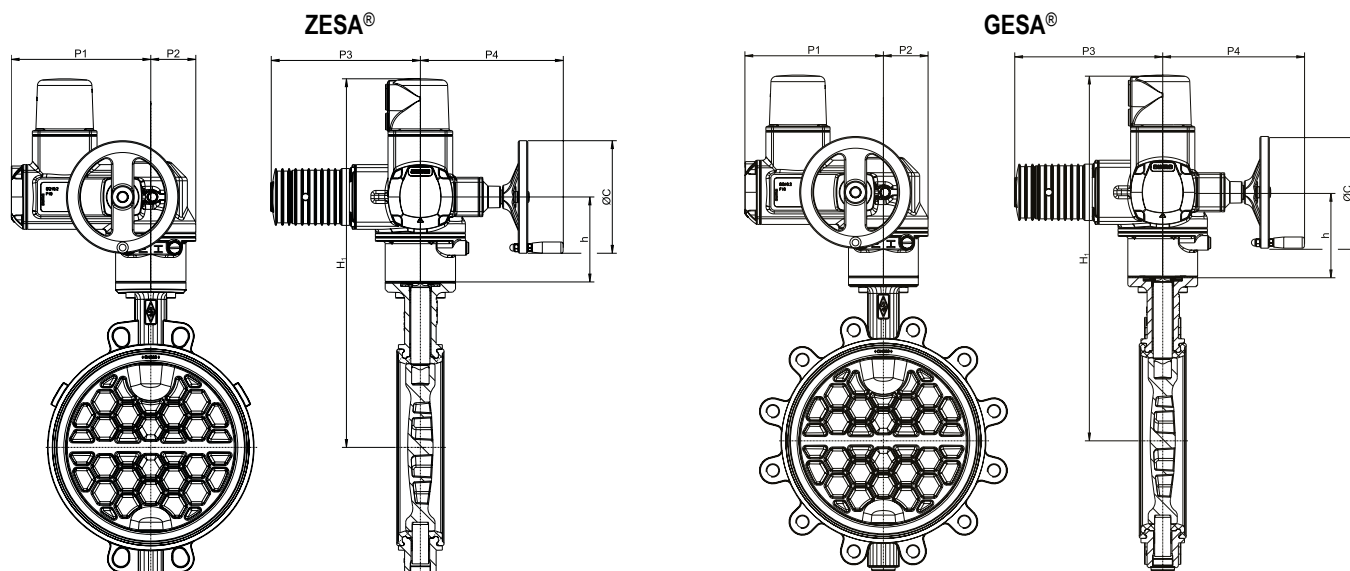
|    | (mm) | 347 | 347 | 353 | 359 | 369 | 377 | 398 | 416 | 432 | 466 | 445 | 519 | 585 | 620 | 657 | 708 | 838 |
|----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| H1 | (mm) | 53  | 53  | 53  | 53  | 53  | 53  | 53  | 53  | 53  | 53  | 100 | 100 | 100 | 86  | 86  | 86  | 70  |
| h  | (mm) | 60  | 60  | 60  | 60  | 60  | 60  | 60  | 60  | 60  | 100 | 160 | 250 | 250 | 250 | 250 | 250 | 300 |
| ØC | (mm) | 90  | 90  | 90  | 90  | 90  | 90  | 90  | 90  | 90  | 98  | 167 | 169 | 169 | 172 | 172 | 172 | 475 |
| P1 | (mm) | 160 | 160 | 160 | 160 | 160 | 160 | 202 | 202 | 202 | 260 | 312 | 340 | 340 | 392 | 392 | 392 | 188 |
| P2 | (mm) | 65  | 65  | 65  | 65  | 65  | 65  | 65  | 65  | 65  | 65  | 89  | 89  | 89  | 133 | 133 | 133 | 130 |
| P3 | (mm) | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 226 | 226 | 226 | 284 | 284 | 284 | 333 |
| P4 | (mm) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

### Weights

|       | (kg) | 7.4 | 7.4 | 7.7 | 8.3 | 9   | 9.6  | 11.6 | 14.7 | 15.9 | 19.5 | 38.6 | 49.2 | 62.7 | 95.3  | 154   | 140 | 252 |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-------|-------|-----|-----|
| ZESA® | (kg) | 7.9 | 7.9 | 8.1 | 8.9 | 9.6 | 11.2 | 13.6 | 17   | 18.7 | 24   | 44.2 | 56.4 | 76.1 | 116.7 | 155.1 | 182 | 319 |
| GESA® | (kg) |     |     |     |     |     |      |      |      |      |      |      |      |      |       |       |     |     |

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

## Butterfly valve with electric rotary actuator



(Figures show DN 300)

|                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type: Auma</b>                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• For short time duty S 2-15 min. (for control S4 25%)</li> <li>• Enclosure IP68</li> <li>• Temperature guard in the motor</li> <li>• Heating</li> </ul> |
| <b>Voltages:</b>                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• 400 V 50 Hz</li> <li>• 230 V 50 Hz</li> </ul> (Other voltages on request)                                                                              |
| <b>Accessories:</b>                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>• Travel switch</li> <li>• Potentiometer</li> <li>• Auma Matic</li> <li>• Valve positioner 0-10 V / 4-20 mA</li> <li>• Position-transmitter</li> </ul>   |

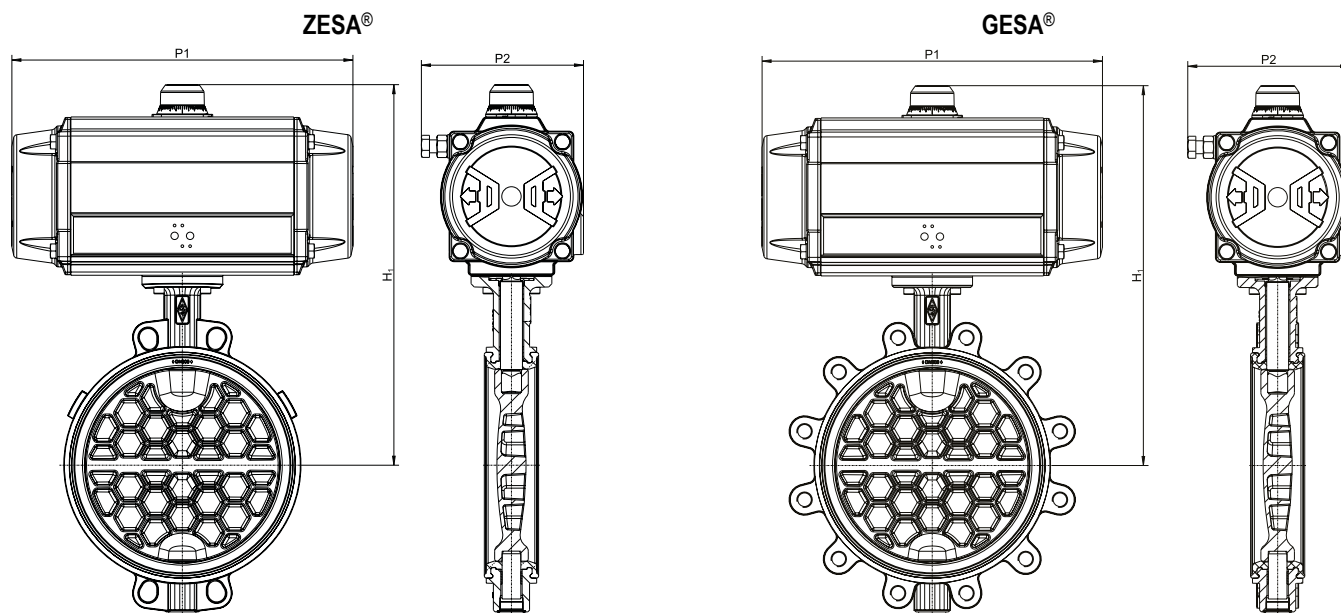
For connection refer to terminal connection in the operating instructions of the actuator !

| DN               |      | 25     | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250    | 300    | 350  | 400    | 450   | 500                | 600 |
|------------------|------|--------|------|------|------|------|------|------|------|------|------|--------|--------|------|--------|-------|--------------------|-----|
| Actuator         |      |        |      |      |      |      |      |      |      |      |      |        |        |      |        |       |                    |     |
| Type of actuator |      | SQ05.2 |      |      |      |      |      |      |      |      |      | SQ07.2 | SQ10.2 |      | SQ12.2 |       | SA07.6<br>+GS125.3 |     |
| Operating time   | (s)  | 16     |      |      |      |      |      |      |      |      |      | 16     | 16     |      | 22     |       | 69                 |     |
| Dimensions       |      |        |      |      |      |      |      |      |      |      |      |        |        |      |        |       |                    |     |
| H1               | (mm) | 467    | 467  | 473  | 479  | 489  | 497  | 518  | 536  | 552  | 586  | 635    | 655    | 821  | 834    | 871   | 922                | 869 |
| h                | (mm) | 134    | 134  | 134  | 134  | 134  | 134  | 134  | 134  | 134  | 134  | 160    | 151    | 151  | 215    | 215   | 215                | 115 |
| ØC               | (mm) | 160    | 160  | 160  | 160  | 160  | 160  | 160  | 160  | 160  | 160  | 160    | 200    | 200  | 200    | 200   | 200                | 160 |
| P1               | (mm) | 238    | 238  | 238  | 238  | 238  | 238  | 238  | 238  | 238  | 238  | 238    | 248    | 248  | 248    | 248   | 248                | 194 |
| P2               | (mm) | 62.5   | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5   | 80     | 80   | 105    | 105   | 105                | 537 |
| P3               | (mm) | 265    | 265  | 265  | 265  | 265  | 265  | 265  | 265  | 265  | 265  | 265    | 265    | 265  | 265    | 265   | 265                | 139 |
| P4               | (mm) | 249    | 249  | 249  | 249  | 249  | 249  | 249  | 249  | 249  | 249  | 249    | 254    | 254  | 254    | 254   | 254                | 374 |
| Weights          |      |        |      |      |      |      |      |      |      |      |      |        |        |      |        |       |                    |     |
| ZESA®            | (kg) | 22.4   | 22.4 | 22.7 | 23.3 | 24   | 24.6 | 25.6 | 28.7 | 29.9 | 33.5 | 41.6   | 55.2   | 68.7 | 100.3  | 159   | 145                | 262 |
| GESA®            | (kg) | 22.9   | 22.9 | 23.1 | 23.9 | 24.6 | 26.2 | 27.6 | 31   | 32.7 | 38   | 47.2   | 62.4   | 82.1 | 121.7  | 160.1 | 187                | 329 |

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).



## Butterfly valve with pneumatic rotary actuator



(Figures show DN 300)

### Type: AIR TORQUE

- Function: double acting  
single acting, Spring closes on air failure (opens)
- Actuating pressure 6 bar (=0,6 MPa)
- Position indicator

### Accessories:

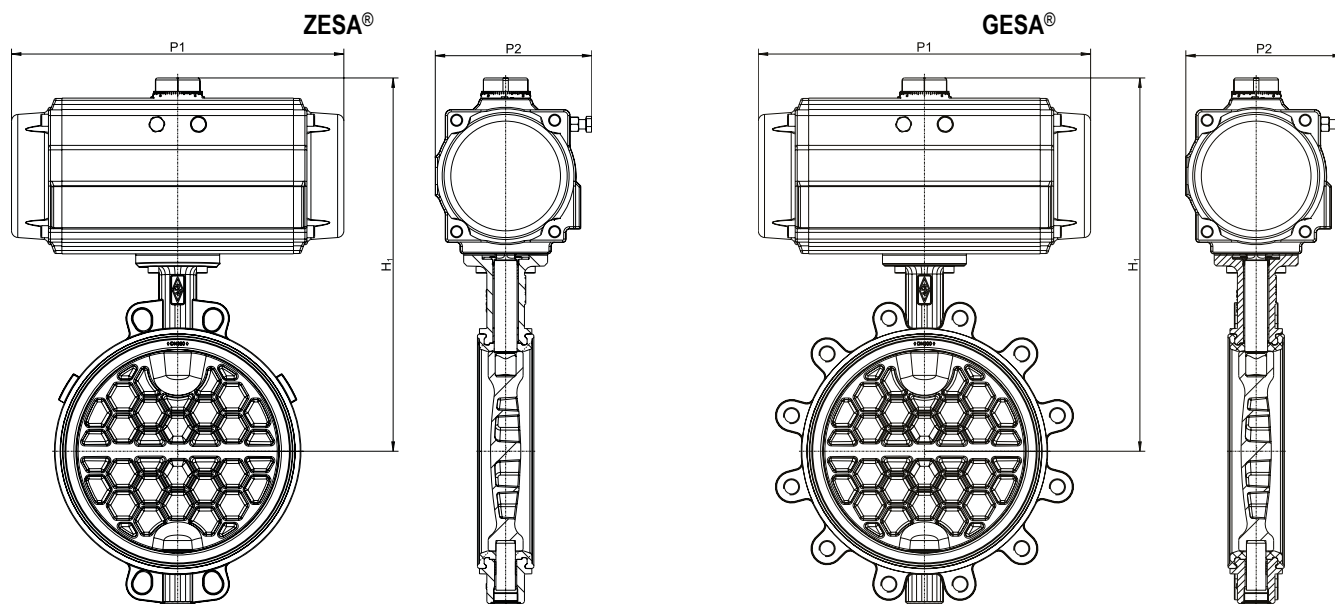
- Limit switch open / close
- Solenoid valve: double acting: 5/2 - way / single acting: 3/2 - way
- Exhaust silencer with throttling function (double acting)
- Speed regulating plate (single acting)
- Valve positioner
- Other actuating pressures on request

For connection refer to terminal connection in the operating instructions of the actuator !

| DN            |                           | 25   | 32       | 40  | 50  | 65  | 80       | 100       | 125       | 150       | 200       | 250       | 300       | 350        | 400   | 450        | 500        | 600        |            |
|---------------|---------------------------|------|----------|-----|-----|-----|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------|------------|------------|------------|------------|
| double acting | Actuator                  |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | Type of actuator          |      | DR30     |     |     |     |          |           | DR60      | DR100     |           | DR150     | DR220     | DR450      |       | DR600      | DR900      | DR1200     | DR3000     |
|               | Dimensions                |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | H1                        | (mm) | 228      | 228 | 234 | 240 | 250      | 258       | 296       | 327       | 343       | 389       | 450       | 511        | 569   | 637        | 715        | 794        | 937        |
|               | P1                        | (mm) | 159      | 159 | 159 | 159 | 159      | 159       | 211       | 248       | 248       | 269       | 315       | 409        | 409   | 438        | 474        | 543        | 728        |
|               | P2                        | (mm) | 83       | 83  | 83  | 83  | 83       | 83        | 95        | 106       | 106       | 123       | 141       | 172        | 172   | 187        | 200        | 222        | 329        |
|               | Weights                   |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | ZESA®                     | (kg) | 3        | 3   | 3.3 | 3.9 | 4.6      | 5.2       | 7.3       | 11.5      | 12.7      | 17.7      | 28.7      | 43.4       | 56.9  | 83.1       | 148.3      | 144.3      | 271.3      |
|               | GESA®                     | (kg) | 3.5      | 3.5 | 3.7 | 4.5 | 5.2      | 6.8       | 9.3       | 13.8      | 15.5      | 22.2      | 34.3      | 50.6       | 70.3  | 104.5      | 149.4      | 186.3      | 338.3      |
| single acting | Actuator                  |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | Type of actuator (closed) |      | SC 30- 6 |     |     |     | SC 60- 6 | SC 100- 6 | SC 150- 6 | SC 220- 6 | SC 300- 6 | SC 450- 6 | SC 600- 6 | SC 1200- 6 |       | SC 2000- 6 | SC 2000- 6 | SC 3000- 6 | SC 5000- 6 |
|               | Type of actuator (open)   |      | SO 30- 5 |     |     |     | SO 60- 5 | SO 100- 5 |           | SO 150- 5 | SO 220- 5 |           | SO 450- 5 | SO 900- 5  |       | SO 1200- 5 | SO 2000- 6 | SO 2000- 5 | SO 4000- 5 |
|               | Dimensions                |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | H1                        | (mm) | 228      | 228 | 234 | 240 | 250      | 258       | 296       | 327       | 343       | 389       | 450       | 511        | 569   | 637        | 715        | 794        | 937        |
|               | P1                        | (mm) | 159      | 159 | 159 | 159 | 211      | 248       | 269       | 315       | 345       | 409       | 438       | 543        | 543   | 621        | 605        | 684        | 855        |
|               | P2                        | (mm) | 83       | 83  | 83  | 83  | 95       | 106       | 123       | 141       | 152       | 172       | 187       | 222        | 222   | 262        | 262        | 330        | 418        |
|               | Weights                   |      |          |     |     |     |          |           |           |           |           |           |           |            |       |            |            |            |            |
|               | ZESA®                     | (kg) | 3.3      | 3.3 | 3.6 | 4.2 | 6        | 8         | 10.6      | 17.1      | 21.3      | 29.6      | 42        | 72.8       | 86.3  | 134.3      | 193        | 205.5      | 363.5      |
| GESA®         | (kg)                      | 3.8  | 3.8      | 4   | 4.8 | 6.6 | 9.6      | 12.6      | 19.4      | 24.1      | 34.1      | 47.6      | 80        | 99.7       | 155.7 | 194.1      | 247.5      | 430.5      |            |

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

## Butterfly valve with pneumatic rotary actuator



(Figures show DN 300)

### Type: VT

- Function: double acting  
single acting, Spring closes / opens on air failure
- Actuating pressure 6 bar (=0,6 MPa)

### Accessories:

- Limit switch open / close
- Solenoid valve: double acting: 5/2 - way / single acting: 3/2 - way
- Exhaust silencer with throttling function (double acting)
- Speed regulating plate (single acting)
- Valve positioner
- Other actuating pressures on request

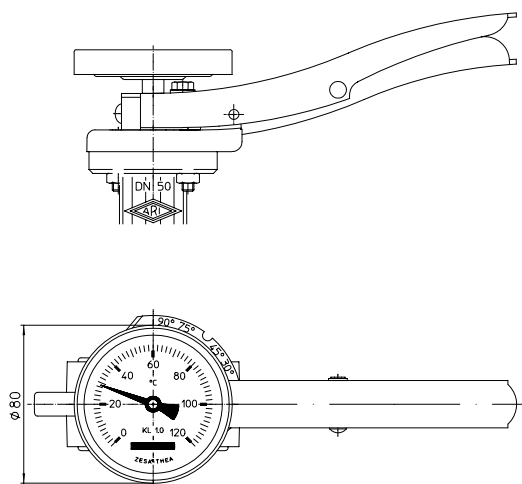
For connection refer to terminal connection in the operating instructions of the actuator !

| DN                             |                  | 25   | 32            | 40  | 50  | 65  | 80            | 100  | 125           | 150  | 200           | 250  | 300           | 350   | 400           | 450           | 500           | 600           |               |               |               |               |               |               |         |               |  |
|--------------------------------|------------------|------|---------------|-----|-----|-----|---------------|------|---------------|------|---------------|------|---------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|---------------|--|
| double acting                  | Actuator         |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | Type of actuator |      | VT065DN       |     |     |     |               |      | VT075DN       |      | VT095DN       |      | VT110DN       |       | VT125DN       |               | VT140DN       |               | VT160DN       |               | VT190DN       |               | VT210DN       |               | VT240DN |               |  |
|                                | Dimensions       |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | H1               | (mm) | 232           | 232 | 238 | 244 | 254           | 262  | 294           | 335  | 351           | 398  | 456           | 502   | 590           | 571           | 706           | 782           | 879           |               |               |               |               |               |         |               |  |
|                                | P1               | (mm) | 189           | 189 | 189 | 189 | 189           | 189  | 210           | 264  | 264           | 266  | 337           | 377   | 414           | 490           | 490           | 550           | 602           |               |               |               |               |               |         |               |  |
|                                | P2               | (mm) | 90            | 90  | 90  | 90  | 90            | 90   | 103           | 126  | 126           | 139  | 157           | 175   | 196           | 217           | 217           | 236           | 262           |               |               |               |               |               |         |               |  |
|                                | Weights          |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | ZESA®            | (kg) | 3.3           | 3.3 | 3.6 | 4.2 | 4.9           | 5.5  | 7             | 12.7 | 13.9          | 19   | 30.8          | 44.3  | 64            | 94.6          | 453.3         | 147.7         | 249.2         |               |               |               |               |               |         |               |  |
| GESA®                          | (kg)             | 3.8  | 3.8           | 4   | 4.8 | 5.5 | 7.1           | 9    | 15            | 16.7 | 23.5          | 36.4 | 51.5          | 77.4  | 116           | 154.4         | 189.7         | 316.2         |               |               |               |               |               |               |         |               |  |
| single acting<br>spring closes | Actuator         |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | Type of actuator |      | VT065 S10N FC |     |     |     | VT085 S12N FC |      | VT095 S12N FC |      | VT125 S12N FC |      | VT140 S12N FC |       | VT160 S12N FC |               | VT210 S11N FC |               | VT240 S12N FC |               | VT270 S12N FC |               | VT350 S12N FC |               |         |               |  |
|                                | Dimensions       |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | H1               | (mm) | 232           | 232 | 238 | 244 | 277           | 285  | 317           | 383  | 399           | 450  | 495           | 579   | 645           | 741           | 805           | 858           | 997           |               |               |               |               |               |         |               |  |
|                                | P1               | (mm) | 189           | 189 | 189 | 189 | 229           | 229  | 264           | 337  | 337           | 377  | 414           | 550   | 550           | 602           | 672           | 672           | 845           |               |               |               |               |               |         |               |  |
|                                | P2               | (mm) | 90            | 90  | 90  | 90  | 112           | 112  | 126           | 157  | 157           | 175  | 196           | 236   | 236           | 262           | 295           | 295           | 385           |               |               |               |               |               |         |               |  |
|                                | Weights          |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | ZESA®            | (kg) | 3.6           | 3.6 | 3.9 | 4.5 | 7             | 7.6  | 10.4          | 19.8 | 21            | 28.4 | 46.2          | 77.6  | 91.1          | 143.1         | 214.6         | 200.6         | 383.1         |               |               |               |               |               |         |               |  |
| GESA®                          | (kg)             | 4.1  | 4.1           | 4.3 | 5.1 | 7.6 | 9.2           | 12.4 | 22.1          | 23.8 | 32.9          | 51.8 | 84.8          | 104.5 | 164.5         | 215.7         | 242.6         | 450.1         |               |               |               |               |               |               |         |               |  |
| single acting<br>spring open   | Actuator         |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | Type of actuator |      | VT065 S10N FO |     |     |     | VT075 S11N FO |      | VT085 S11N FO |      | VT095 S10N FO |      | VT125 S11N FO |       |               | VT160 S11N FO |               | VT190 S11N FO |               | VT210 S11N FO |               | VT240 S11N FO |               | VT270 S10N FO |         | VT350 S11N FO |  |
|                                | Dimensions       |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | H1               | (mm) | 232           | 232 | 238 | 244 | 265           | 285  | 317           | 283  | 399           | 433  | 495           | 556   | 622           | 694           | 766           | 858           | 997           |               |               |               |               |               |         |               |  |
|                                | P1               | (mm) | 189           | 189 | 189 | 189 | 210           | 229  | 264           | 337  | 337           | 337  | 414           | 490   | 490           | 550           | 602           | 672           | 845           |               |               |               |               |               |         |               |  |
|                                | P2               | (mm) | 90            | 90  | 90  | 90  | 103           | 112  | 126           | 157  | 157           | 157  | 196           | 217   | 217           | 236           | 262           | 295           | 385           |               |               |               |               |               |         |               |  |
|                                | Weights          |      |               |     |     |     |               |      |               |      |               |      |               |       |               |               |               |               |               |               |               |               |               |               |         |               |  |
|                                | ZESA®            | (kg) | 3.6           | 3.6 | 3.9 | 4.5 | 5.8           | 7.6  | 10.4          | 19.8 | 21            | 24.6 | 46.2          | 63    | 76.5          | 113.7         | 201.8         | 200.6         | 383.1         |               |               |               |               |               |         |               |  |
| GESA®                          | (ka)             | 4.1  | 4.1           | 4.3 | 5.1 | 6.4 | 9.2           | 12.4 | 22.1          | 23.8 | 29.1          | 51.8 | 70.2          | 89.9  | 135.1         | 202.9         | 242.6         | 450.1         |               |               |               |               |               |               |         |               |  |

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).



## THEA® - integrated THERmo-Appliance



### Standard thermometer ranges

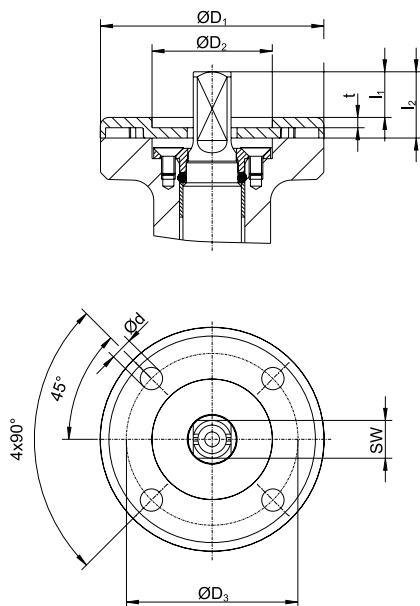
- cold (-20 °C to +40 °C)
- warm (0 °C to +120 °C)

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| Indication:     | Precision class 1.0<br>(thermometer adjusted to ARI-THEA)        |
| Diameter range: | DN 25 / 32 - DN 40<br>DN 50 - DN 80<br>DN 100<br>DN 125 - DN 200 |
| Order data:     | Thermo-Appliance with range .....,<br>for diameter range .....   |

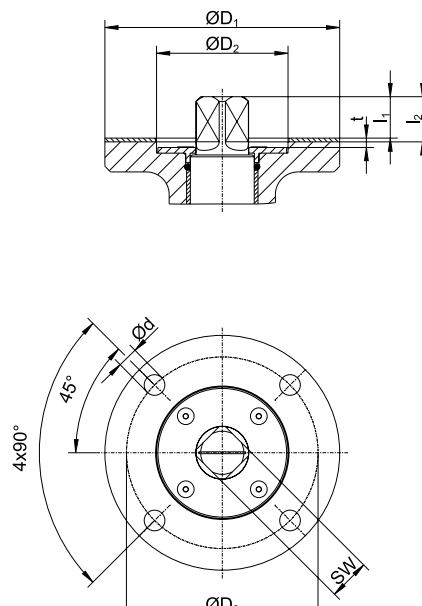
Indicator installed by insertion into the bore hole of the lever and the stem - convertible on site\*

\* not possible with stem of 1.4571

## Actuator flange connection



DN 25-200



DN 250-600

| DN                          | 25                | 32 | 40 | 50 | 65 | 80 | 100 | 125               | 150 | 200 | 250  | 300 | 350 | 400  | 450 | 500 | 600 |
|-----------------------------|-------------------|----|----|----|----|----|-----|-------------------|-----|-----|------|-----|-----|------|-----|-----|-----|
| Anschluss EN ISO 5211       | F 05              |    |    |    |    |    |     | F 07              |     |     | F 10 |     |     | F 14 |     |     | F16 |
| 4-square SW (parallel) (mm) | 11                |    |    |    |    |    |     | 17                |     |     | --   |     |     | --   | --  | --  | --  |
| 4-square SW (diagonal) (mm) | --                |    |    |    |    |    |     | --                |     |     | 22   |     |     | 27   | 36  |     | 46  |
| Ød (mm)                     | 7                 |    |    |    |    |    |     | 9                 |     |     | 11   |     |     | 18   |     |     | 22  |
| ØD1 (mm)                    | 65                |    |    |    |    |    |     | 90                |     |     | 125  |     |     | 175  |     |     | 210 |
| ØD2 (mm)                    | 35 <sup>H10</sup> |    |    |    |    |    |     | 55 <sup>H10</sup> |     |     | 70   |     |     | 100  |     |     | 130 |
| ØD3 (mm)                    | 50                |    |    |    |    |    |     | 70                |     |     | 102  |     |     | 140  |     |     | 165 |
| l <sub>1</sub> (mm)         | 13                |    |    |    |    |    |     | 17                |     |     | 22   |     |     | 27   | 37  | 36  | 46  |
| l <sub>2</sub> (mm)         | 19                |    |    |    |    |    |     | 23                |     |     | 24   |     |     | 29   | 39  | 38  | 48  |
| t (mm)                      | 3                 |    |    |    |    |    |     | 3                 |     |     | 5    |     |     | 6    |     |     | 7   |

### Please indicate when ordering:

- Figure-No.
- Nominal pressure
- Nominal diameter
- Soft seal seat material
- Stem / disc material
- Actuation arrangement
- Special design / accessories

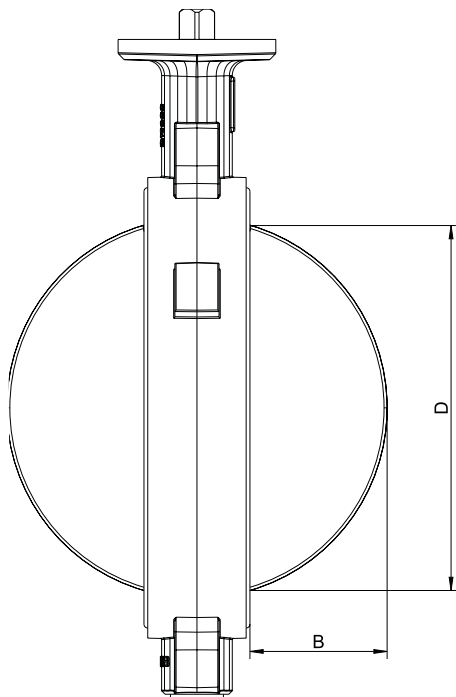
Please indicate in your order, if the valves are to be installed in hazardous areas (ATEX).

### Example:

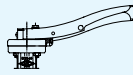
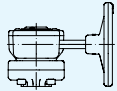
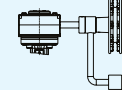
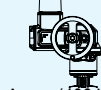
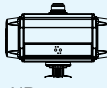
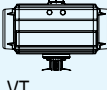
Figure 22.012; Nominal pressure PN 16; Nominal diameter DN 100; Seat of EPDM, Washer/Stem of 1.4581/1.4021, with notch lever and integrated Thermo-Indication (-20 to 40 °C)..

| Kvs-value / Zeta-value |        | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  | 350   | 400   | 450   | 500   | 600   |
|------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| DN                     |        | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  | 350   | 400   | 450   | 500   | 600   |
| Kvs-value              | (m³/h) | 41   | 46   | 91   | 172  | 299  | 420  | 763  | 1086 | 1790 | 3280 | 5400 | 7950 | 10900 | 13400 | 16700 | 23050 | 32500 |
| Zeta-value             | --     | 0,37 | 0,79 | 0,49 | 0,34 | 0,32 | 0,37 | 0,27 | 0,33 | 0,25 | 0,24 | 0,21 | 0,20 | 0,20  | 0,23  | 0,24  | 0,19  | 0,20  |

| Difference between disc outside-diameter and face-to-face |      | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|-----------------------------------------------------------|------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DN                                                        |      | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
| B                                                         | (mm) | -- | -- | 5  | 5  | 11 | 18 | 25  | 36  | 48  | 71  | 91  | 112 | 132 | 147 | 168 | 188 | 224 |
| D                                                         | (mm) | -- | -- | 26 | 29 | 49 | 68 | 88  | 115 | 142 | 194 | 243 | 292 | 333 | 383 | 436 | 486 | 580 |





| DN                           |                                                                                                            |               | 25-50         | 65   | 80            | 100           | 125           | 150           | 200           | 250      | 300           | 350           | 400           | 450     | 500           | 600                    |               |               |
|------------------------------|------------------------------------------------------------------------------------------------------------|---------------|---------------|------|---------------|---------------|---------------|---------------|---------------|----------|---------------|---------------|---------------|---------|---------------|------------------------|---------------|---------------|
| Anschlussflansch EN ISO 5211 |                                                                                                            |               | F 05          |      |               |               | F 07          |               |               | F 10     |               |               | F 14          |         |               | F16                    |               |               |
| 4-square SW (parallel)       |                                                                                                            | (mm)          | 11            |      |               |               | 17            |               |               |          |               |               |               |         |               |                        |               |               |
| 4-square SW (diagonal)       |                                                                                                            | (mm)          |               |      |               |               |               |               |               | 22       |               |               | 27            | 36      |               | 46                     |               |               |
| Manual actuation             | <br>Notch lever           | Size          | I             |      |               |               | II            |               |               | --       |               |               |               |         |               |                        |               |               |
|                              | <br>Worm gear             | Type          | 242-10M       |      |               |               | 242-10M       |               |               | 242-20M  | 242-30S       |               | 242-30L       | 242-40M |               | AB 1250N               |               |               |
|                              | <br>Gear with chain wheel | Type          | AB210N        |      |               |               | AB210N        |               |               | 242-30S  |               |               | 242-30L       | AB1250N |               | AB 2000N               |               |               |
| Electric rotary actuator     | <br>ARI-OM (230 V 50 Hz)  | Type          | OM-1          |      |               | OM-A          | OM-2          | OM-3          |               | OM-4     |               | --            |               |         |               |                        |               |               |
|                              | <br>Deufra (230 V 50 Hz)  | Type          | SQ4           |      |               | SQ6           | SQ10          |               | SQ15          | SQ25     | SQ60          |               | SQ120         |         |               | SQ250                  |               |               |
|                              | <br>Auma (400 V 50 Hz)   | Type          | SQ05.2        |      |               |               |               |               |               | SQ07.2   | SQ10.2        |               | SQ12.2        |         |               | SA07.6<br>+GS<br>125.3 |               |               |
| Pneumatic rotary actuator    | <br>AIR TORQUE          | double acting |               | Type | DR30          |               |               | DR60          | DR100         |          | DR150         | DR220         | DR450         |         | DR600         | DR900                  | DR1200        | DR3000        |
|                              |                                                                                                            | single acting | Spring closes | Type | SC 30-6       | SC 60-6       | SC 100-6      | SC 150-6      | SC 220-6      | SC 300-6 | SC 450-6      | SC 600-6      | SC 1200-6     |         | SC 2000-6     |                        | SC 3000-6     | SC 5000-6     |
|                              |                                                                                                            |               | Spring opens  | Type | SO 30-5       | SO 60-5       | SO 100-5      |               | SO 150-5      | SO 220-5 |               | SO 450-5      | SO 900-5      |         | SO 1200-5     | SO 2000-6              | SO 2000-5     | SC 4000-5     |
|                              | <br>VT                  | double acting |               | Type | VT065DN       |               |               | VT075DN       | VT095DN       |          | VT110DN       | VT125DN       | VT140DN       | VT160DN | VT190DN       |                        | VT210DN       | VT240DN       |
|                              |                                                                                                            | single acting | Spring closes | Type | VT065 S10N FC | VT085 S12N FC |               | VT095 S12N FC | VT125 S12N FC |          | VT140 S12N FC | VT160 S12N FC | VT210 S11N FC |         | VT240 S12N FC | VT270 S12N FC          |               | VT350 S12N FC |
|                              |                                                                                                            |               | Spring opens  | Type | VT065 S10N FO | VT075 S11N FO | VT085 S11N FO | VT095 S10N FO | VT125 S11N FO |          |               | VT160 S11N FO | VT190 S11N FO |         | VT210 S11N FO | VT240 S11N FO          | VT270 S11N FO | VT350 S11N FO |

