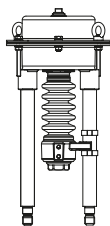


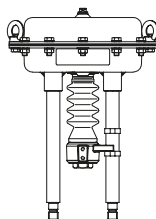
## Pneumatic actuator ARI-DP

### ARI-DP30 Pneumatic actuator



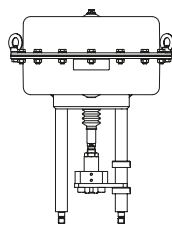
Page 2

### ARI-DP32 ARI-DP33 Pneumatic actuator



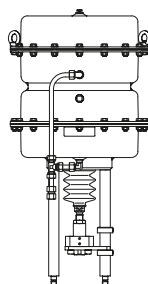
Page 2

### ARI-DP34 Pneumatic actuator



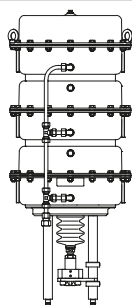
Page 2

### ARI-DP34T Pneumatic actuator



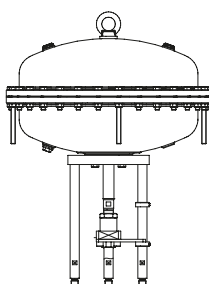
Page 6

### ARI-DP34Tri Pneumatic actuator

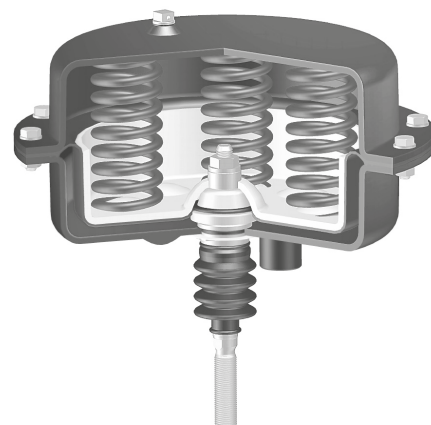


Page 10

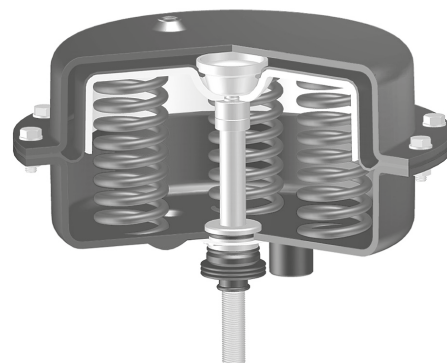
### ARI-DP35 Pneumatic actuator



Page 14



DP-Actuator  
Extended stem on air failure



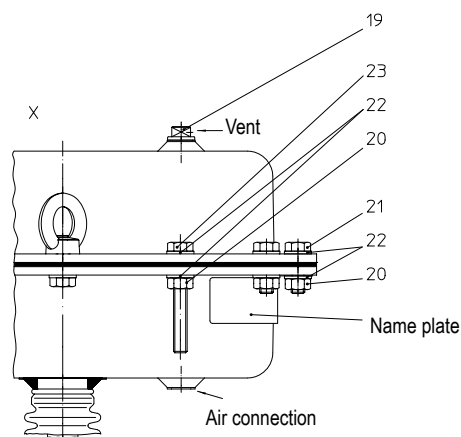
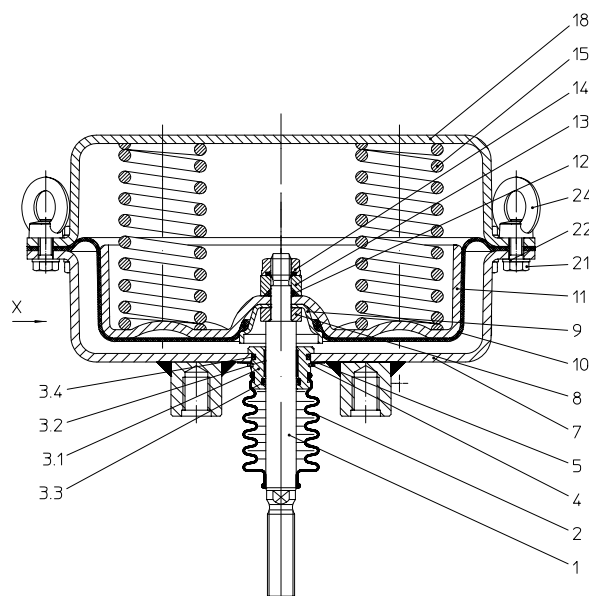
DP-Actuator  
Retracted stem on air failure

#### Features:

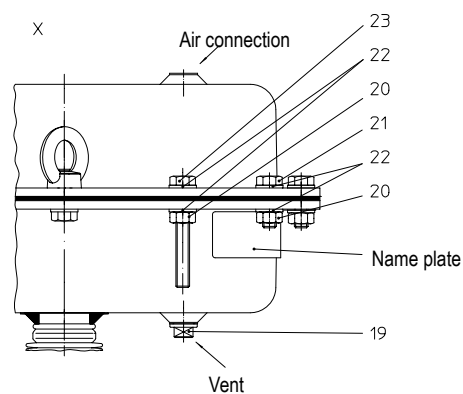
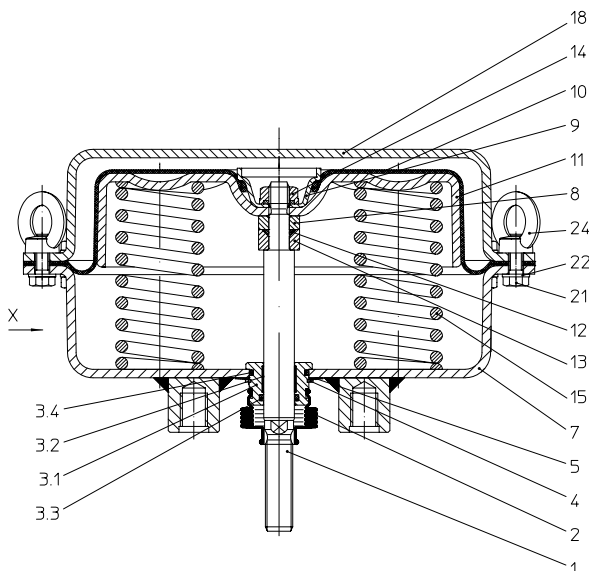
- Compact design
- Actuator with rolling diaphragm
- Actuator mountable in any position
- Travel up to 120 mm
- DP32-34: Direct or reverse acting
- Burnished stem protected by bellow
- Max. air supply pressure 6 bar
- High spring thrust
- Maintenance-free O-ring sealing with flexible guiding
- Assembly of additional devices acc. to DIN IEC 60534-6
- Operative ambient temperatures -10°C up to +100°C (DP32-34Tri optional: -50°C up to +100°C)
- Favourable size / performance ratio
- Optional: C5-M design for DP32-34Tri (-40°C up to +100°C)

## Pneumatic actuator ARI-DP30 / 32 / 33 / 34

Operating mode: Extended stem on air failure



Operating mode: Retracted stem on air failure



| Pos.  | Sp.p. | Description            | Material                                               |                                  |
|-------|-------|------------------------|--------------------------------------------------------|----------------------------------|
|       |       |                        | Standard                                               | C5-M                             |
| 1     |       | Stem                   | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 2     |       | Bellow seal            | EPDM50 or 42CR                                         |                                  |
| 3.1   | x     | Stem guide             | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 3.2   | x     | Guiding band           | PTFE + 25%C                                            |                                  |
| 3.3   | x     | O-ring (stem)          | NBR                                                    |                                  |
| 3.4   | x     | O-ring (guiding)       | NBR                                                    |                                  |
| 4     |       | Retaining ring         | FSt - A2B                                              | A4                               |
| 5     |       | Spring plate           | FSt (Fe/Zn8M)                                          | 1.4310                           |
| 6 / 7 |       | Lower diaphragm casing | DD13+QT, 1.0335+QT (powder coated)                     | DD13+QT, 1.0335+QT (C5-M coated) |
| 8     |       | Bushing                | X20Cr13+QT, 1.4021+QT                                  |                                  |
| 9     |       | Diaphragm flange       | DD13+QT, 1.0335+QT (Fe/Zn12B) or X20Cr13+QT, 1.4021+QT |                                  |
| 10    | x     | Diaphragm              | NBR + Webbing                                          |                                  |
| 11    |       | Diaphragm plate        | DD13+QT, 1.0335+QT (Fe/Zn12B)                          |                                  |

| Pos.          | Sp.p. | Description                  | Material                           |                                  |
|---------------|-------|------------------------------|------------------------------------|----------------------------------|
|               |       |                              | Standard                           | C5-M                             |
| 12            |       | O-ring                       | NBR                                |                                  |
| 13            |       | Bushing                      | X20Cr13+QT, 1.4021+QT              |                                  |
| 14            |       | Collar nut with sealing ring | 8-A2B                              |                                  |
| 15            | x     | Compression spring           | FDSiCr                             |                                  |
| 16            |       | Spring centring              | DC01, 1.0330 (Fe/Zn12B)            |                                  |
| 18            |       | Upper diaphragm casing       | DD13+QT, 1.0335+QT (powder coated) | DD13+QT, 1.0335+QT (C5-M coated) |
| 19            |       | Screwed cap                  | Polyethylene                       |                                  |
| 20            |       | Hexagon nut <sup>1)</sup>    | 8 - A2B                            | A4                               |
| 21            |       | Hexagon screw <sup>1)</sup>  | 8.8 - A2B                          | A4-70                            |
| 22            |       | Washer                       | St - A2B                           | A4                               |
| 23            |       | Hexagon screw <sup>1)</sup>  | 8.8 - A2B                          | A4-70                            |
| 24            |       | Eye nut <sup>1)</sup>        | C15, 1.0401 - A2B                  | A4                               |
| L Spare parts |       |                              |                                    |                                  |

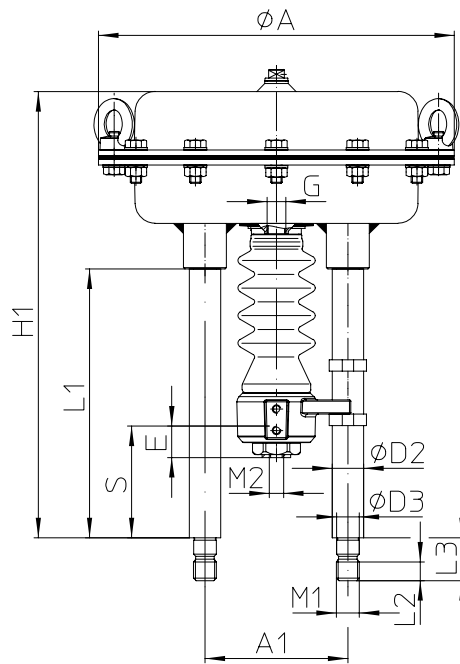
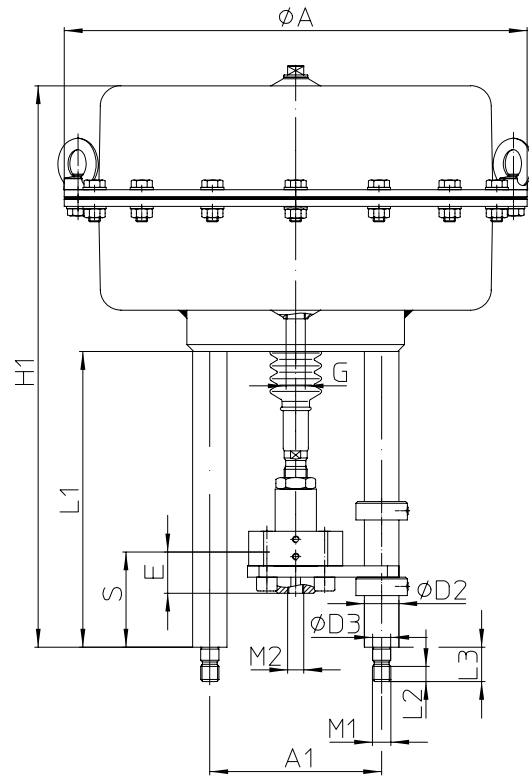
<sup>1)</sup> Studs and nuts at temperatures below -10°C made of A4-70

| Operating mode                                                                                                                                         | Type of actuator            | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 20 mm |               | Travel 30 mm |               | Travel 50 mm |               | Travel 65 mm |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
|                                                                                                                                                        |                             | (bar)        | (bar)                    | (N)    | (pcs.)      | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume |
|                                                                                                                                                        |                             |              |                          |        |             | (l)          | (l)           | (l)          | (l)           |              |               |              |               |
| <br><b>Spring closes on air failure</b><br>(stem extending by spring) | DP30<br>80 cm <sup>2</sup>  | 2,2 - 4,5    | 4,8                      | 2000   | 1           | 0,17         | 0,17          |              |               |              |               |              |               |
|                                                                                                                                                        | DP32<br>250 cm <sup>2</sup> | 0,2 - 1,0    | 1,2                      | 490    | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                        |                             | 0,4 - 1,2    | 1,4                      | 980    | 4           | 0,6          | 0,5           | 0,7          | 0,7           |              |               |              |               |
|                                                                                                                                                        |                             | 0,8 - 2,4    | 2,7                      | 1960   | 8           | 0,6          | 0,5           | 0,7          | 0,7           |              |               |              |               |
|                                                                                                                                                        |                             | 1,5 - 2,9    | 3,2                      | 3675   | 6           | 0,5          | 0,5           | --           | --            |              |               |              |               |
|                                                                                                                                                        |                             | 2,0 - 3,8    | 4,1                      | 4900   | 8           | 0,7          | 0,5           | --           | --            |              |               |              |               |
|                                                                                                                                                        | DP33<br>400 cm <sup>2</sup> | 0,2 - 1,0    | 1,2                      | 780    | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                        |                             | 0,4 - 1,2    | 1,4                      | 1560   | 4           | 1,1          | 0,8           | 1,2          | 1,2           |              |               |              |               |
|                                                                                                                                                        |                             | 0,8 - 2,4    | 2,7                      | 3120   | 8           | 1,1          | 0,8           | 1,2          | 1,2           |              |               |              |               |
|                                                                                                                                                        |                             | 1,5 - 3,0    | 3,3                      | 5850   | 6           | --           | --            | 1,0          | 1,2           |              |               |              |               |
|                                                                                                                                                        |                             | 1,7 - 2,7    | 3,1                      | 6630   | 6           | 1,2          | 0,8           | --           | --            |              |               |              |               |
|                                                                                                                                                        |                             | 2,0 - 4,0    | 4,5                      | 7800   | 8           | --           | --            | 1,0          | 1,2           |              |               |              |               |
|                                                                                                                                                        |                             | 2,3 - 3,7    | 4                        | 8970   | 8           | 1,2          | 0,8           | --           | --            |              |               |              |               |
|                                                                                                                                                        | DP34<br>800 cm <sup>2</sup> | 0,2 - 1,0    | 1,2                      | 1570   | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                        |                             | 0,4 - 1,2    | 1,4                      | 3140   | 4           |              |               | 2,0          | 2,4           | 2,7          | 3,9           | 3,1          | 5,1           |
|                                                                                                                                                        |                             | 0,8 - 2,4    | 2,7                      | 6280   | 8           |              |               | 2,0          | 2,4           | 2,7          | 3,9           | --           | --            |
|                                                                                                                                                        |                             | 1,0 - 2,0    | 2,4                      | 7850   | 4           |              |               | --           | --            | --           | --            | 1,7          | 5,1           |
|                                                                                                                                                        |                             | 1,5 - 3,0    | 3,3                      | 11775  | 6           |              |               | --           | --            | 3,0          | 3,9           | --           | --            |
|                                                                                                                                                        |                             | 2,0 - 4,0    | 4,5                      | 15700  | 8           |              |               | --           | --            | 3,0          | 3,9           | 1,7          | 5,1           |
|                                                                                                                                                        |                             | 2,1 - 3,0    | 3,3                      | 16485  | 6           |              |               | 4,5          | 2,4           | --           | --            | --           | --            |
|                                                                                                                                                        |                             | 2,4 - 3,6    | 4                        | 18840  | 8           |              |               | 3,7          | 2,4           | --           | --            | --           | --            |

| Operating mode                                                                                                                                           | Type of actuator            | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 20 mm |               | Travel 30 mm |               | Travel 50 mm |               | Travel 65 mm |               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
|                                                                                                                                                          |                             | (bar)        | (bar)                    | (N)    | (pcs.)      | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume |
|                                                                                                                                                          |                             |              |                          |        |             | (l)          | (l)           | (l)          | (l)           |              |               |              |               |
| <br><b>Spring opens on air failure</b><br>(stem retracting by spring) | DP30<br>80 cm <sup>2</sup>  | 0,6 - 1,5    | 3                        | 1400   | 1           | 0,2          | 0,17          |              |               |              |               |              |               |
|                                                                                                                                                          |                             |              | 4                        | 2200   | 1           | 0,2          | 0,17          |              |               |              |               |              |               |
|                                                                                                                                                          |                             |              | 5                        | 3000   | 1           | 0,2          | 0,17          |              |               |              |               |              |               |
|                                                                                                                                                          |                             |              | 6                        | 3800   | 1           | 0,2          | 0,17          |              |               |              |               |              |               |
|                                                                                                                                                          | DP32<br>250 cm <sup>2</sup> | 0,2 - 1,0    | 1,2                      | 490    | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 1,4                      | 980    | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 2                        | 2450   | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 3                        | 4900   | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 4                        | 7350   | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 5                        | 9800   | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          |                             |              | 6                        | 12250  | 4           | 0,5          | 0,5           | 0,5          | 0,7           |              |               |              |               |
|                                                                                                                                                          | DP33<br>400 cm <sup>2</sup> | 0,2 - 1,0    | 1,2 <sup>d)</sup>        | 780    | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 1,4 <sup>d)</sup>        | 1560   | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 2 <sup>d)</sup>          | 3900   | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 3 <sup>d)</sup>          | 7800   | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 4                        | 11700  | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 5                        | 15600  | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          |                             |              | 6                        | 19500  | 4           | 0,9          | 0,8           | 0,9          | 1,2           |              |               |              |               |
|                                                                                                                                                          | DP34<br>800 cm <sup>2</sup> | 0,2 - 1,0    | 1,2                      | 1570   | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 1,4                      | 3140   | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 2                        | 7850   | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 3                        | 15700  | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 4                        | 23550  | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 5                        | 31400  | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |
|                                                                                                                                                          |                             |              | 6                        | 39250  | 4           |              |               | 1,4          | 2,4           | 1,6          | 3,9           | 1,8          | 5,1           |

Air supply pressure max. to actuator: 6 bar      Restriction: d) 3,5 bar

When using accessories, the corresponding air consumption has to be observed.


**DP30 / 32 / DP33**

**DP34**

| Type of actuator           |        | DP30                                | DP32 |     |     |     | DP33 |     |     |     |     | DP34                                |     |     |     |     |     |           |     |     |     |     |
|----------------------------|--------|-------------------------------------|------|-----|-----|-----|------|-----|-----|-----|-----|-------------------------------------|-----|-----|-----|-----|-----|-----------|-----|-----|-----|-----|
|                            |        | 2-column mounting                   |      |     |     |     |      |     |     |     |     |                                     |     |     |     |     |     |           |     |     |     |     |
| Ø A                        | (mm)   | 168                                 | 250  |     |     |     | 300  |     |     |     |     | 405                                 |     |     |     |     |     |           |     |     |     |     |
| H1 *                       | (mm)   | 310                                 | 292  | 312 | 323 | 337 | 334  | 354 | 365 | 380 | 394 | 416                                 | 441 | 456 | 468 | 486 | 506 | 456       | 486 | 506 | 538 | 548 |
| L1 *                       | (mm)   | 188                                 | 168  | 188 | 199 | 213 | 168  | 188 | 199 | 213 | 228 | 188                                 | 213 | 228 | 240 | 258 | 278 | 228       | 258 | 278 | 310 | 320 |
| A1                         | (mm)   | 100                                 | 100  |     |     |     | 100  |     |     |     |     | 100                                 |     |     |     |     |     | 150       |     |     |     |     |
| Ø D2                       | (mm)   | 22                                  | 22   |     |     |     | 22   |     |     |     |     | 22                                  |     |     |     |     |     | 30        |     |     |     |     |
| M1                         | (mm)   | M16                                 | M16  |     |     |     | M16  |     |     |     |     | M16                                 |     |     |     |     |     |           |     |     |     |     |
| L2                         | (mm)   | 14                                  | 14   |     |     |     | 14   |     |     |     |     | 14 (19)                             |     |     |     |     |     |           |     |     |     |     |
| L3                         | (mm)   | 30                                  | 30   |     |     |     | 30   |     |     |     |     | 30 (45)                             |     |     |     |     |     |           |     |     |     |     |
| Ø D3                       | (mm)   | 16                                  | 16   |     |     |     | 16   |     |     |     |     | 16                                  |     |     |     |     |     |           |     |     |     |     |
| M2                         | (mm)   | M10 / M12 / M14x1,5 / M16 / M16x1,5 |      |     |     |     |      |     |     |     |     | M10 / M12 / M14x1,5 / M16 / M16x1,5 |     |     |     |     |     | M16 / M20 |     |     |     |     |
| E max.<br>(Screw-in depth) | (mm)   | 22 / 21 / 21 / 19 / 20              |      |     |     |     |      |     |     |     |     | 28                                  |     |     |     |     |     | 36        |     |     |     |     |
| G                          | (inch) | 1/4"                                | 1/4" |     |     |     | 1/4" |     |     |     |     | 3/8"                                |     |     |     |     |     |           |     |     |     |     |
| Weight                     | (kg)   | 5                                   | 9    |     |     |     | 15   |     |     |     |     | 45                                  |     |     |     |     |     |           |     |     |     |     |

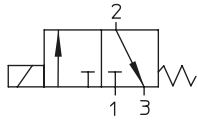
\* The construction heights H1 of the actuator units vary due to the different lengths of the distance columns L1, which results from the excess length of the stem (S = 83 mm, 98 mm, 130 mm), and the different spring ranges (bench settings) of the actuator units.

**Top mounted handwheel** (refer to page 18)

### 3/2-way solenoid valves

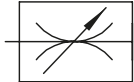
directly controlled with manual operating device

(Air is vented in the rest position  
(incl. standard female connector)



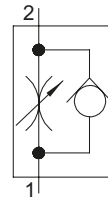
### Throttling valves

(Increases operation time in 'open' and 'closed' direction)



### Check valve with throttling function

(Increases operation time in 'open' or 'closed' direction)



### Lock-up valve

(Holds the air in the actuator in the event of air failure)



### Air set including gauge

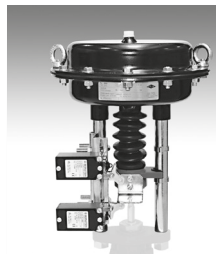
(Reduces air pressure and removes dust and water droplets)



### Limit switch

(to denote end of travel)

**electrical (mechanical)**  
**opener / shutter**



### Limit switch

(to denote end of travel)

**inductive (contactless)**  
**opener / shutter**



### Proximity sensors

(to denote end of travel in housing)

### Position indicator

(analogue feedback of valve position in housing)

### Pneumatic and electropneumatic positioner with column design

(allocation of valve control and control signal)



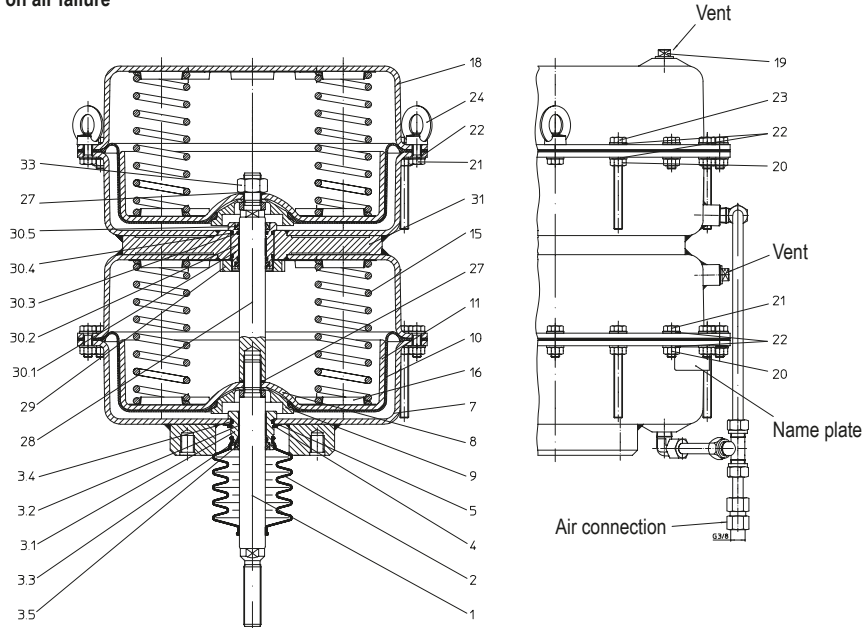
### Electropneumatic positioner with direct mounting (DP32/DP33)

(allocation of valve control and control signal)

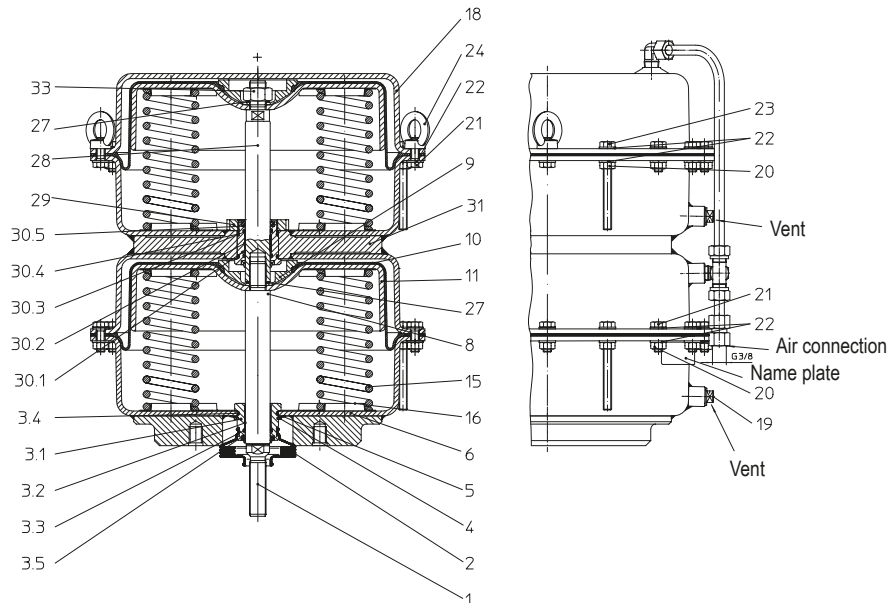


## Pneumatic actuator ARI-DP34T

Operating mode: Extended stem on air failure



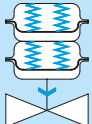
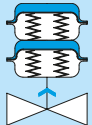
Operating mode: Retracted stem on air failure



| Pos.  | Sp.p. | Description            | Material                                               |                                  |
|-------|-------|------------------------|--------------------------------------------------------|----------------------------------|
|       |       |                        | Standard                                               | C5-M                             |
| 1     |       | Stem                   | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 2     |       | Bellow seal            | EPDM50 or 42CR                                         |                                  |
| 3.1   | x     | Stem guide             | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 3.2   | x     | Guiding band           | PTFE + 25%C                                            |                                  |
| 3.3   | x     | O-ring (stem)          | NBR                                                    |                                  |
| 3.4   | x     | O-ring (guiding)       | NBR                                                    |                                  |
| 3.5   | x     | Scraper                | NBR                                                    |                                  |
| 4     |       | Retaining ring         | FSt - A2B                                              | A2                               |
| 5     |       | Spring plate           | FSt (Fe/Zn8M)                                          | FSt (Fe/NiP50)                   |
| 6 / 7 |       | Lower diaphragm casing | DD13+QT, 1.0335+QT (powder coated)                     | DD13+QT, 1.0335+QT (C5-M coated) |
| 8     |       | Bushing                | X20Cr13+QT, 1.4021+QT                                  |                                  |
| 9     |       | Diaphragm flange       | DD13+QT, 1.0335+QT (Fe/Zn12B) or X20Cr13+QT, 1.4021+QT |                                  |
| 10    | x     | Diaphragm              | NBR + Webbing                                          |                                  |
| 11    |       | Diaphragm plate        | DD13+QT, 1.0335+QT (Fe/Zn12B)                          |                                  |
| 15    | x     | Compression spring     | FDSiCr                                                 |                                  |
| 16    |       | Spring centring        | DC01, 1.0330 (Fe/Zn12B)                                |                                  |
| 18    |       | Upper diaphragm casing | DD13+QT, 1.0335+QT (powder coated)                     | DD13+QT, 1.0335+QT (C5-M coated) |
| 19    |       | Screwed cap            | Polyethylene                                           |                                  |

| Pos.          | Sp.p. | Description                 | Material                           |                                  |
|---------------|-------|-----------------------------|------------------------------------|----------------------------------|
|               |       |                             | Standard                           | C5-M                             |
| 20            |       | Hexagon nut <sup>1)</sup>   | 8 - A2B                            | A4                               |
| 21            |       | Hexagon screw <sup>1)</sup> | 8.8 - A2B                          | A4-70                            |
| 22            |       | Washer                      | St - A2B                           | A4                               |
| 23            |       | Hexagon screw <sup>1)</sup> | 8.8 - A2B                          | A4-70                            |
| 24            |       | Eye nut <sup>1)</sup>       | C15, 1.0401 - A2B                  |                                  |
| 27            |       | Uisit-ring                  | St / NBR                           |                                  |
| 28            |       | Stem extension              | X20Cr13+QT, 1.4021+QT              |                                  |
| 29            |       | Slotted nut                 | St                                 |                                  |
| 30.1          | x     | Stem guide                  | X20Cr13+QT, 1.4021+QT              |                                  |
| 30.2          | x     | Guiding band                | PTFE 25%C                          |                                  |
| 30.3          | x     | O-ring                      | NBR                                |                                  |
| 30.4          | x     | O-ring                      | NBR                                |                                  |
| 30.5          | x     | Scraper                     | NBR                                |                                  |
| 31            |       | Intermediate housing        | DD13+QT, 1.0335+QT (powder coated) | DD13+QT, 1.0335+QT (C5-M coated) |
| 33            |       | Hexagon nut                 | 8 - A2B                            |                                  |
| 88            |       | Pipe works                  | St / X6CrNiMoTi17-12-2, 1.4571     | 1.4571                           |
| L Spare parts |       |                             |                                    |                                  |

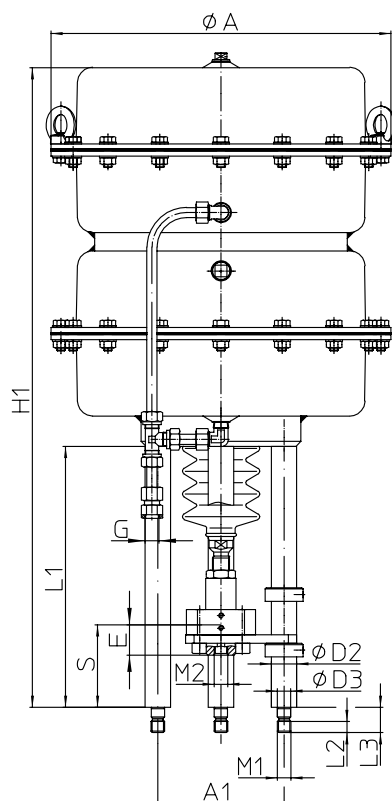
<sup>1)</sup> Studs and nuts at temperatures below -10°C made of A4-70

| Operating mode                                                                                                                                   | Type of actuator                                             | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 30 mm |               | Travel 50 mm |               | Travel 65 mm |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|
|                                                                                                                                                  |                                                              |              |                          |        |             | Dead volume  | Travel volume | Dead volume  | Travel volume | Dead volume  | Travel volume |
|                                                                                                                                                  |                                                              | (bar)        | (bar)                    | (N)    | (pcs.)      | (l)          | (l)           | (l)          | (l)           | (l)          | (l)           |
| <br>Spring closes on air failure<br>(stem extending by spring)  | <b>DP34T</b><br><b>(2x800)</b><br><b>1600 cm<sup>2</sup></b> | 0,2 - 1,0    | 1,5                      | 3140   | 8           | 2,9          | 4,7           | 3,2          | 7,9           | 3,6          | 10,2          |
|                                                                                                                                                  |                                                              | 0,4 - 1,2    | 1,7                      | 6280   | 8           | 4,1          | 4,7           | 5,4          | 7,9           | 6,2          | 10,2          |
|                                                                                                                                                  |                                                              | 0,8 - 2,4    | 2,9                      | 12560  | 16          | 4,1          | 4,7           | 5,4          | 7,9           | --           | --            |
|                                                                                                                                                  |                                                              | 1,0 - 2,0    | 2,5                      | 15700  | 8           | --           | --            | --           | --            | 3,4          | 10,2          |
|                                                                                                                                                  |                                                              | 1,5 - 3,0    | 3,5                      | 23550  | 12          | --           | --            | 6,0          | 7,9           | --           | --            |
|                                                                                                                                                  |                                                              | 2,0 - 4,0    | 4,5                      | 31400  | 16          | --           | --            | 6,0          | 7,9           | 3,4          | 10,2          |
|                                                                                                                                                  |                                                              | 2,1 - 3,0    | 3,5                      | 32970  | 12          | 9,1          | 4,7           | --           | --            | --           | --            |
|                                                                                                                                                  |                                                              | 2,4 - 3,6    | 4,1                      | 37680  | 16          | 7,5          | 4,7           | --           | --            | --           | --            |
| <br>Spring opens on air failure<br>(stem retracting by spring) | <b>DP34T</b><br><b>(2x800)</b><br><b>1600 cm<sup>2</sup></b> | 0,2 - 1,0    | 1,5                      | 7850   | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              | 2                        | 15700  | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              | 3                        | 31400  | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              | 4                        | 47100  | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              | 5                        | 62800  | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              | 6 <sup>1)</sup>          | 78500  | 8           | 5,2          | 2,4           | 7,1          | 3,9           | 8,7          | 5,1           |
|                                                                                                                                                  |                                                              |              |                          |        |             |              |               |              |               |              |               |
|                                                                                                                                                  |                                                              |              |                          |        |             |              |               |              |               |              |               |

Air supply pressure max. to actuator: 6 bar

<sup>1)</sup> strengthened design

When using accessories, the corresponding air consumption has to be observed.



| Type of actuator           |        | DP34T<br>4-column mounting |     |     |     |     |
|----------------------------|--------|----------------------------|-----|-----|-----|-----|
| Ø A                        | (mm)   | 405                        |     |     |     |     |
| H1 *                       | (mm)   | 678                        | 708 | 728 | 760 | 770 |
| L1 *                       | (mm)   | 228                        | 258 | 278 | 310 | 320 |
| A1                         | (mm)   | 150                        |     |     |     |     |
| Ø D2                       | (mm)   | 30                         |     |     |     |     |
| M1                         | (mm)   | M16                        |     |     |     |     |
| L2                         | (mm)   | 14 (19)                    |     |     |     |     |
| L3                         | (mm)   | 30 (45)                    |     |     |     |     |
| Ø D3                       | (mm)   | 16                         |     |     |     |     |
| M2                         | (mm)   | M16 / M20                  |     |     |     |     |
| E max.<br>(Screw-in depth) | (mm)   | 36                         |     |     |     |     |
| G                          | (inch) | 3/8"                       |     |     |     |     |
| Weight                     | (kg)   | 116                        |     |     |     |     |

\* The construction heights H1 of the actuator units vary due to the different lengths of the distance columns L1, which results from the excess length of the stem (S = 83 mm, 98 mm, 130 mm), and the different spring ranges (bench settings) of the actuator units.



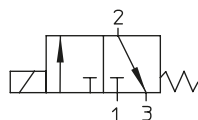
**Top mounted handwheel** (refer to page 18)

**3/2-way solenoid valves**

directly controlled with manual operating device

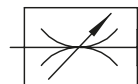
(Air is vented in the rest position

(incl. standard female connector)



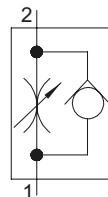
**Throttling valves**

(Increases operation time in 'open' or 'closed' direction)



**Check valve with throttling function**

(Increases operation time in 'open' or 'closed' direction)



**Lock-up valve**

(Holds the air in the actuator in the event of air failure)

**Air set including gauge**

(Reduces air pressure and removes dust and water droplets)

**Limit switch**

(to denote end of travel)

**electrical (mechanical)**

**opener / shutter**

**Limit switch**

(to denote end of travel)

**inductive (contactless)**

**opener / shutter**

**Proximity sensors**

(to denote end of travel in housing)

**Position indicator**

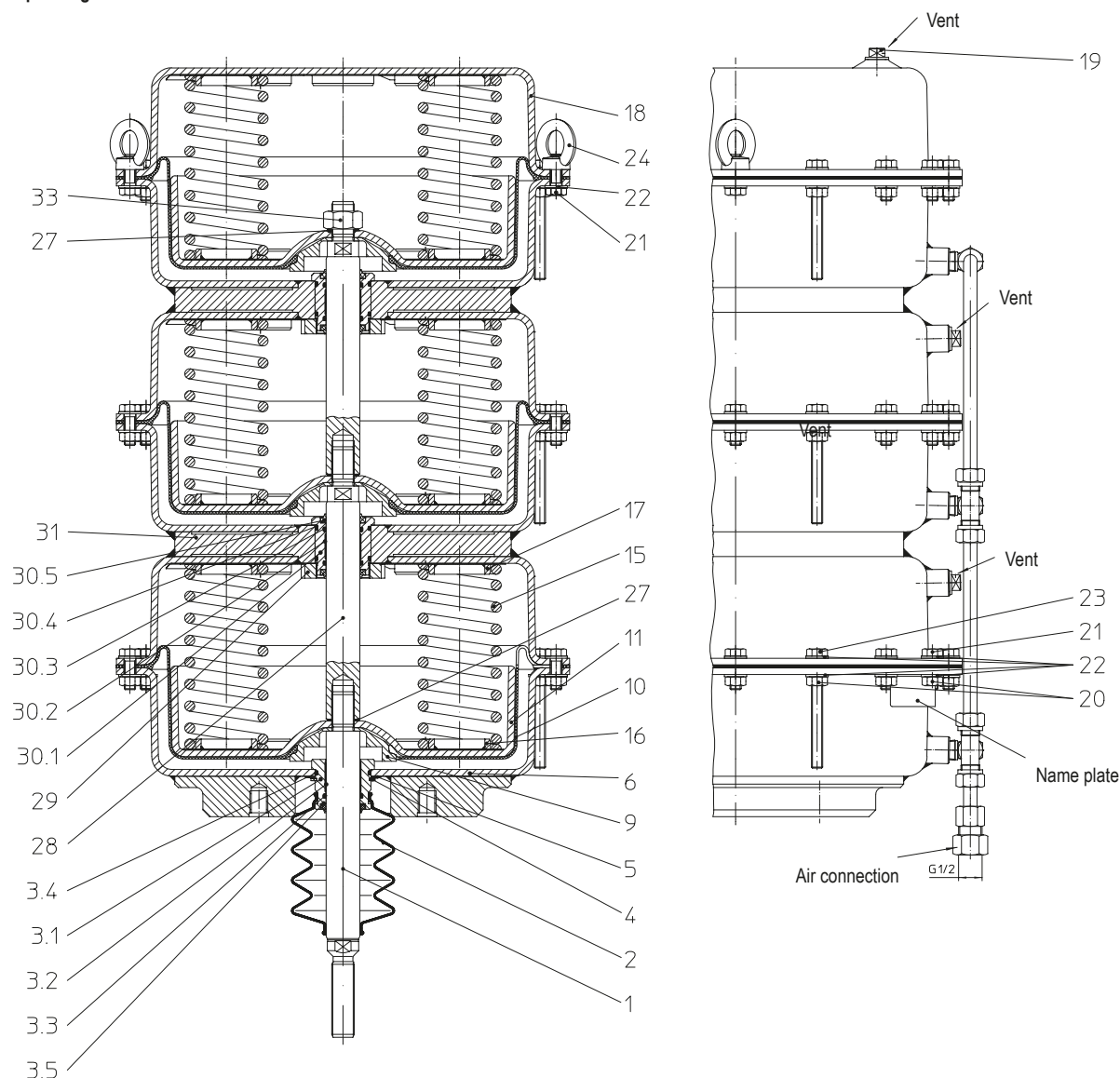
(analogue feedback of valve position in housing)

**Pneumatic and electropneumatic positioner with column design**

(allocation of valve control and control signal)

## Pneumatic actuator ARI-DP34Tri

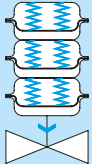
Operating mode: Extended stem on air failure



| Pos.  | Sp.p. | Description            | Material                                               |                                  |
|-------|-------|------------------------|--------------------------------------------------------|----------------------------------|
|       |       |                        | Standard                                               | C5-M                             |
| 1     |       | Stem                   | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 2     |       | Bellow seal            | EPDM50 or 42CR                                         |                                  |
| 3.1   | x     | Stem guide             | X20Cr13+QT, 1.4021+QT                                  | 1.4571                           |
| 3.2   | x     | Guiding band           | PTFE + 25%C                                            |                                  |
| 3.3   | x     | O-ring (stem)          | NBR                                                    |                                  |
| 3.4   | x     | O-ring (guiding)       | NBR                                                    |                                  |
| 3.5   | x     | Scraper                | NBR                                                    |                                  |
| 4     |       | Retaining ring         | FSt - A2B                                              | A2                               |
| 5     |       | Spring plate           | FSt (Fe/Zn8M)                                          | FSt (Fe/NiP50)                   |
| 6 / 7 |       | Lower diaphragm casing | DD13+QT, 1.0335+QT (powder coated)                     | DD13+QT, 1.0335+QT (C5-M coated) |
| 8     |       | Bushing                | X20Cr13+QT, 1.4021+QT                                  |                                  |
| 9     |       | Diaphragm flange       | DD13+QT, 1.0335+QT (Fe/Zn12B) or X20Cr13+QT, 1.4021+QT |                                  |
| 10    | x     | Diaphragm              | NBR + Webbing                                          |                                  |
| 11    |       | Diaphragm plate        | DD13+QT, 1.0335+QT (Fe/Zn12B)                          |                                  |
| 15    | x     | Compression spring     | FDSiCr                                                 |                                  |
| 16    |       | Spring centring        | DC01, 1.0330 (Fe/Zn12B)                                |                                  |
| 18    |       | Upper diaphragm casing | DD13+QT, 1.0335+QT (powder coated)                     | DD13+QT, 1.0335+QT (C5-M coated) |
| 19    |       | Screwed cap            | Polyethylene                                           |                                  |

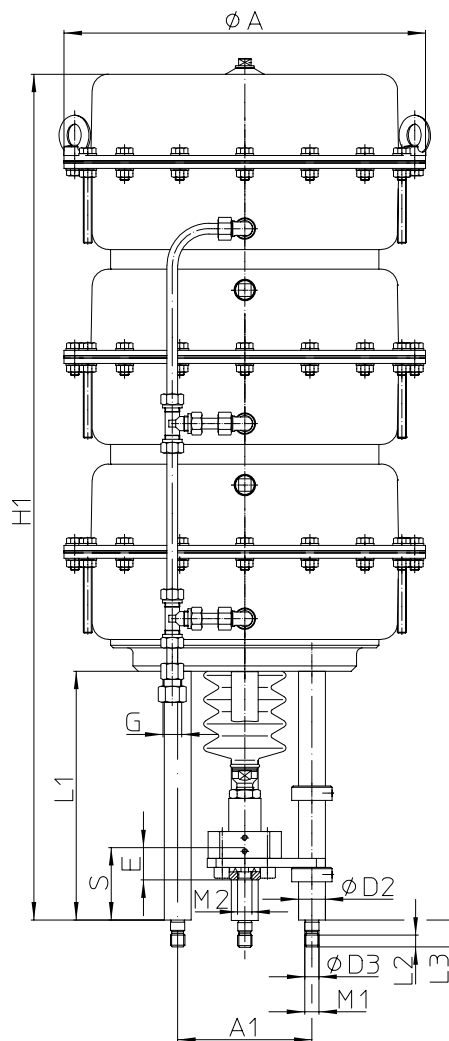
| Pos.          | Sp.p. | Description                 | Material                           |                                  |
|---------------|-------|-----------------------------|------------------------------------|----------------------------------|
|               |       |                             | Standard                           | C5-M                             |
| 20            |       | Hexagon nut <sup>1)</sup>   | 8 - A2B                            | A4                               |
| 21            |       | Hexagon screw <sup>1)</sup> | 8.8 - A2B                          | A4-70                            |
| 22            |       | Washer                      | St - A2B                           | A4                               |
| 23            |       | Hexagon screw <sup>1)</sup> | 8.8 - A2B                          | A4-70                            |
| 24            |       | Eye nut <sup>1)</sup>       | C15, 1.0401 - A2B                  | A4                               |
| 27            |       | Usit-ring                   | St / NBR                           |                                  |
| 28            |       | Stem extension              | X20Cr13+QT, 1.4021+QT              |                                  |
| 29            |       | Slotted nut                 | St                                 |                                  |
| 30.1          | x     | Stem guide                  | X20Cr13+QT, 1.4021+QT              |                                  |
| 30.2          | x     | Guiding band                | PTFE 25%C                          |                                  |
| 30.3          | x     | O-ring                      | NBR                                |                                  |
| 30.4          | x     | O-ring                      | NBR                                |                                  |
| 30.5          | x     | Scraper                     | NBR                                |                                  |
| 31            |       | Intermediate housing        | DD13+QT, 1.0335+QT (powder coated) | DD13+QT, 1.0335+QT (C5-M coated) |
| 33            |       | Hexagon nut                 | 8 - A2B                            |                                  |
| 88            |       | Pipe works                  | St / X6CrNiMoTi17-12-2, 1.4571     | 1.4571                           |
| L Spare parts |       |                             |                                    |                                  |

<sup>1)</sup> Studs and nuts at temperatures below -10°C made of A4-70

| Operating mode                                                                                                                                         | Type of actuator                                    | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 30 mm |               | Travel 50 mm |               | Travel 65 mm |               | Travel 75 mm |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
|                                                                                                                                                        |                                                     |              |                          |        |             | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume |
|                                                                                                                                                        |                                                     | (bar)        | (bar)                    | (N)    | (pcs.)      | (l)          | (l)           | (l)          | (l)           | (l)          | (l)           | (l)          | (l)           |
| <br><b>Spring closes on air failure</b><br>(stem extending by spring) | <b>DP34Tri</b><br><b>(3x800)</b><br><b>2400 cm²</b> | 0,2 - 1,0    | 1,5                      | 4710   | 12          | 4,3          | 7,1           | 4,7          | 11,8          | 5,4          | 15,3          | --           | --            |
|                                                                                                                                                        |                                                     | 0,4 - 1,2    | 1,7                      | 9420   | 12          | 6,1          | 7,1           | 8,0          | 11,8          | 9,3          | 15,3          | --           | --            |
|                                                                                                                                                        |                                                     | 0,55 - 2,4   | 2,9                      | 12950  | 24          | --           | --            | --           | --            | --           | --            | 9,3          | 15,3          |
|                                                                                                                                                        |                                                     | 0,8 - 2,4    | 2,9                      | 18840  | 24          | 6,1          | 7,1           | 8,0          | 11,8          | --           | --            | --           | --            |
|                                                                                                                                                        |                                                     | 1,0 - 2,0    | 2,5                      | 23550  | 12          | --           | --            | --           | --            | 5,1          | 15,3          | --           | --            |
|                                                                                                                                                        |                                                     | 1,5 - 3,0    | 3,5                      | 35325  | 18          | --           | --            | 8,9          | 11,8          | --           | --            | --           | --            |
|                                                                                                                                                        |                                                     | 2,0 - 4,0    | 4,5                      | 47100  | 24          | --           | --            | 8,9          | 11,8          | 5,1          | 15,3          | --           | --            |
|                                                                                                                                                        |                                                     | 2,1 - 3,0    | 3,5                      | 49455  | 18          | 13,6         | 7,1           | --           | --            | --           | --            | --           | --            |
|                                                                                                                                                        |                                                     | 2,4 - 3,6    | 4,1                      | 56520  | 24          | 11,2         | 7,1           | --           | --            | --           | --            | --           | --            |

Air supply pressure max. to actuator: 5 bar

When using accessories, the corresponding air consumption has to be observed.



| Type of actuator |        | DP34Tri<br>4-column mounting |     |     |     |     |
|------------------|--------|------------------------------|-----|-----|-----|-----|
| Ø A              | (mm)   | 405                          |     |     |     |     |
| H1 *             | (mm)   | 900                          | 930 | 950 | 982 | 992 |
| L1 *             | (mm)   | 228                          | 258 | 278 | 310 | 320 |
| A1               | (mm)   | 150                          |     |     |     |     |
| Ø D2             | (mm)   | 30                           |     |     |     |     |
| M1               | (mm)   | M16                          |     |     |     |     |
| L2               | (mm)   | 14 (19)                      |     |     |     |     |
| L3               | (mm)   | 30 (45)                      |     |     |     |     |
| Ø D3             | (mm)   | 16                           |     |     |     |     |
| M2               | (mm)   | M20                          |     |     |     |     |
| E max.           | (mm)   | 36                           |     |     |     |     |
| G                | (inch) | 1/2"                         |     |     |     |     |
| Weight           | (kg)   | 150                          |     |     |     |     |

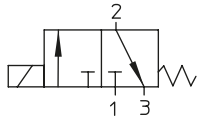
\* The construction heights H1 of the actuator units vary due to the different lengths of the distance columns L1, which results from the excess length of the stem (S = 83 mm, 98 mm, 130 mm), and the different spring ranges (bench settings) of the actuator units.

**Top mounted handwheel** (refer to page 18)

### 3/2-way solenoid valves

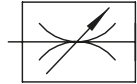
directly controlled with manual operating device

(Air is vented in the rest position  
(incl. standard female connector)



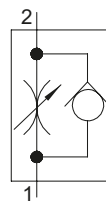
### Throttling valves

(Increases operation time in 'open' or 'closed' direction)



### Check valve with throttling function

(Increases operation time in 'open' or 'closed' direction)



### Lock-up valve

(Holds the air in the actuator in the event of air failure)

### Air set including gauge

(Reduces air pressure and removes dust and water droplets)

### Limit switch

(to denote end of travel)

**electrical (mechanical)**

**opener / shutter**

### Limit switch

(to denote end of travel)

**inductive (contactless)**

**opener / shutter**

### Proximity sensors

(to denote end of travel in housing)

### Position indicator

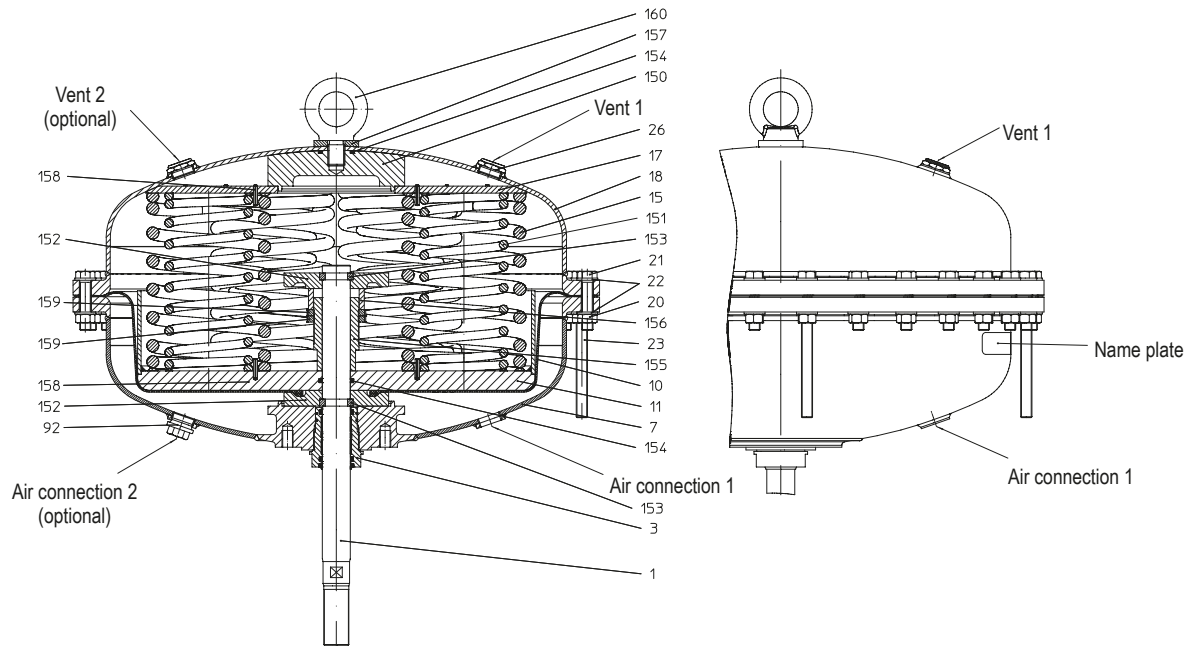
(analogue feedback of valve position in housing)

### Pneumatic and electropneumatic positioner with column design

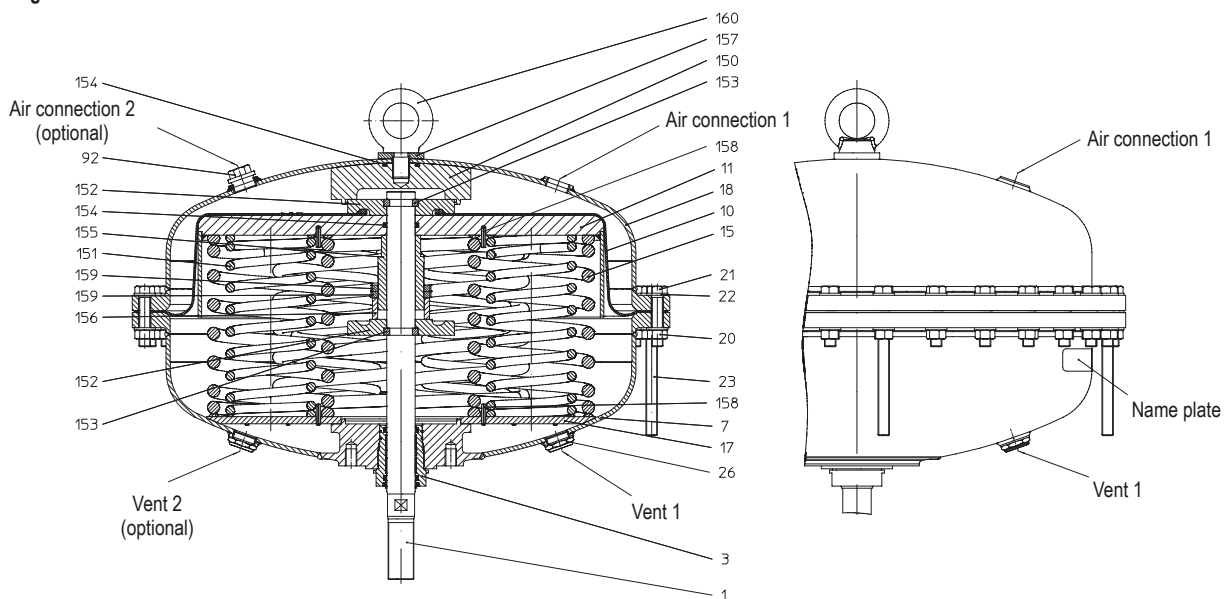
(allocation of valve control and control signal)

## Pneumatic actuator ARI-DP35

Operating mode: Extended stem on air failure



Operating mode: Retracted stem on air failure



| Pos. | Sp.p. | Description                 | Material                        |
|------|-------|-----------------------------|---------------------------------|
| 1    |       | Stem                        | X20Cr13+QT, 1.4021+QT           |
| 3.   | x     | Stem guide                  | X20Cr13+QT, 1.4021+QT           |
| 7    |       | Lower diaphragm casing      | P265GH, 1.0425 / S235JR, 1.0037 |
| 10   | x     | Rolling diaphragm           | NBR + Webbing                   |
| 11   |       | Diaphragm plate             | St 52-3 G 03 g, 1.0570 G 03 g   |
| 15   | x     | Compression spring          | FDSiCr                          |
| 17   |       | Spring centring             | St 52-3 G 03 g, 1.0570 G 03 g   |
| 18   |       | Upper diaphragm casing      | P265GH, 1.0425 / S235JR, 1.0037 |
| 20   |       | Hexagon nut <sup>1)</sup>   | C35E, 1.1181                    |
| 21   |       | Hexagon screw <sup>1)</sup> | 8.8 - A2B                       |
| 22   |       | Washer                      | St - A2B                        |
| 23   |       | Hexagon screw <sup>1)</sup> | 10.9 - A2B                      |
| 150  |       | Limit stopper               | X20Cr13+QT, 1.4021+QT           |

| Pos.          | Sp.p. | Description        | Material              |
|---------------|-------|--------------------|-----------------------|
| 151           | x     | Compression spring | FDSiCr                |
| 152           |       | Diaphragm flange   | X20Cr13+QT, 1.4021+QT |
| 153           |       | Stem ring          | X20Cr13+QT, 1.4021+QT |
| 154           |       | Quadrang           | EPDM                  |
| 155           |       | Clamp screw        | X20Cr13+QT, 1.4021+QT |
| 156           |       | Clamping sleeve    | X20Cr13+QT, 1.4021+QT |
| 157           |       | Spacer disc        | X20Cr13+QT, 1.4021+QT |
| 158           |       | Grooved pin        | A2                    |
| 159           |       | Slotted nut        | 17 - A2B              |
| 160           |       | Ring bolt          | C15E, 1.1141          |
| L Spare parts |       |                    |                       |

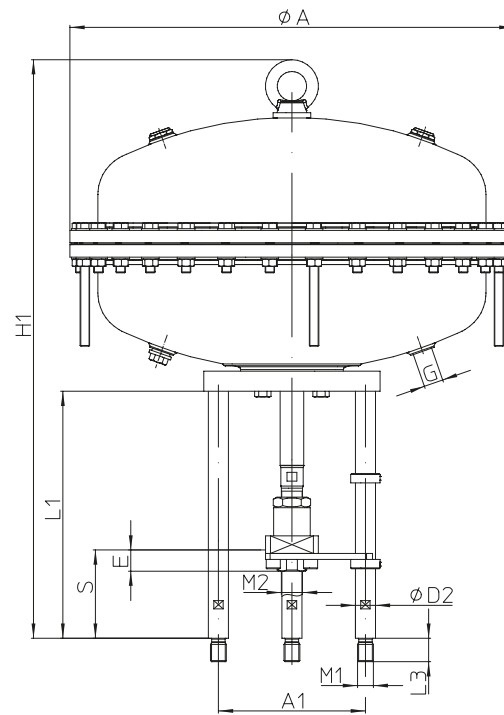
<sup>1)</sup> Studs and nuts at temperatures below -10°C made of A4-70

| Operating mode                                                                                                                                  | Type of actuator             | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 50 mm |               | Travel 65 mm |               | Travel 90 mm |               | Travel 120 mm |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|---------------|---------------|
|                                                                                                                                                 |                              |              |                          |        |             | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume   | Travel-volume |
|                                                                                                                                                 |                              | (bar)        | (bar)                    | (N)    | (pcs.)      | (l)          | (l)           | (l)          | (l)           | (l)          | (l)           | (l)           | (l)           |
| <br>Spring closes on air failure<br>(stem extending by spring) | DP35<br>2800 cm <sup>2</sup> | 2,97 - 3,80  | 4,3                      | 83067  | 12          | 33,7         | 14,1          | --           | --            | --           | --            | --            | --            |
|                                                                                                                                                 |                              | 2,72 - 3,80  | 4,3                      | 76067  | 12          | --           | --            | 29,4         | 18,4          | --           | --            | --            | --            |
|                                                                                                                                                 |                              | 2,30 - 3,80  | 4,3                      | 64400  | 12          | --           | --            | --           | --            | 22,3         | 25,5          | --            | --            |
|                                                                                                                                                 |                              | 1,80 - 3,80  | 4,3                      | 50400  | 12          | --           | --            | --           | --            | --           | --            | 13,8          | 34,0          |

| Operating mode                                                                                                                                  | Type of actuator             | Spring range | Air supply pressure min. | Thrust | Spring qty. | Travel 50 mm |               | Travel 65 mm |               | Travel 90 mm |               | Travel 120 mm |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|--------------------------|--------|-------------|--------------|---------------|--------------|---------------|--------------|---------------|---------------|---------------|
|                                                                                                                                                 |                              |              |                          |        |             | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume  | Travel-volume | Dead volume   | Travel-volume |
|                                                                                                                                                 |                              | (bar)        | (bar)                    | (N)    | (pcs.)      | (l)          | (l)           | (l)          | (l)           | (l)          | (l)           | (l)           | (l)           |
| <br>Spring opens on air failure<br>(stem retracting by spring) | DP35<br>2800 cm <sup>2</sup> | 0,60 - 0,88  | 6                        | 143360 | 3           | 13,8         | 14,1          | --           | --            | --           | --            | --            | --            |
|                                                                                                                                                 |                              | 0,60 - 0,96  | 6                        | 141120 | 3           | --           | --            | 13,8         | 18,4          | --           | --            | --            | --            |
|                                                                                                                                                 |                              | 0,60 - 1,10  | 6                        | 137200 | 3           | --           | --            | --           | --            | 13,8         | 25,5          | --            | --            |
|                                                                                                                                                 |                              | 0,60 - 1,27  | 6                        | 132440 | 3           | --           | --            | --           | --            | --           | --            | 13,8          | 34            |

Air supply pressure max. to actuator: 6 bar

When using accessories, the corresponding air consumption has to be observed.



| Type of actuator |        | DP35<br>4-column mounting |
|------------------|--------|---------------------------|
| Ø A              | (mm)   | 755                       |
| H1 *             | (mm)   | 984                       |
| L1 *             | (mm)   | 420                       |
| A1               | (mm)   | 250                       |
| Ø D2             | (mm)   | 34                        |
| M1               | (mm)   | M27                       |
| L3               | (mm)   | 40                        |
| M2               | (mm)   | M27 / M36 x 1,5           |
| E max.           | (mm)   | 45                        |
| G                | (inch) | 1"                        |
| Weight           | (kg)   | 325                       |

\* The construction heights H1 of the actuator units vary due to the different lengths of the distance columns L1, which results from the excess length of the stem (S = 98mm, 130mm), and the different spring ranges (bench settings) of the actuator units.

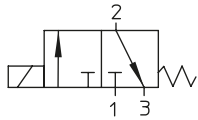


**Top mounted handwheel** (refer to page 18)

**3/2-way solenoid valves**

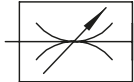
directly controlled with manual operating device

(Air is vented in the rest position  
 (incl. standard female connector)



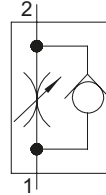
**Throttling valves**

(Increases operation time in 'open' or 'closed' direction)



**Check valve with throttling function**

(Increases operation time in 'open' or 'closed' direction)



**Lock-up valve**

(Holds the air in the actuator in the event of air failure)

**Air set including gauge**

(Reduces air pressure and removes dust and water droplets)

**Limit switch**

(to denote end of travel)

**electrical (mechanical)**

**opener / shutter**

**Limit switch**

(to denote end of travel)

**inductive (contactless)**

**opener / shutter**

**Proximity sensors**

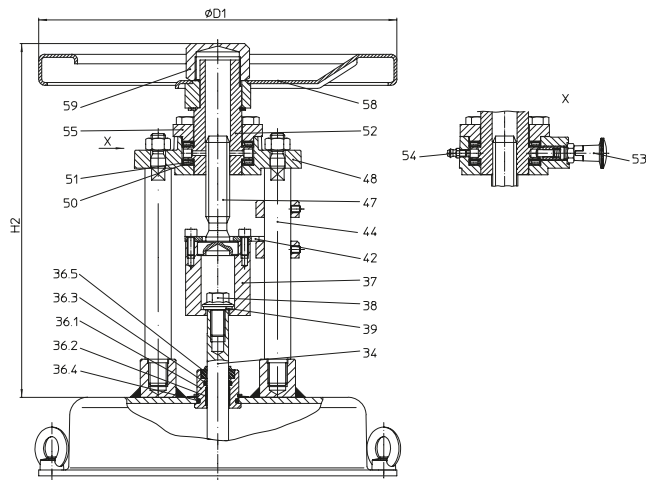
(to denote end of travel in housing)

**Position indicator**

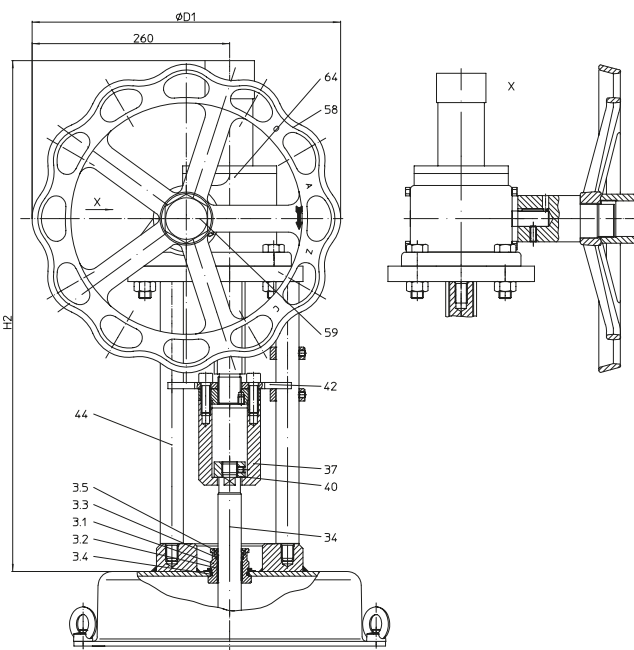
(analogue feedback of valve position in housing)

**Pneumatic and electropneumatic positioner with column design**

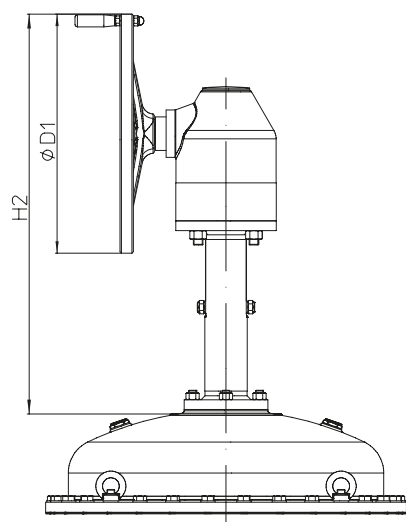
(allocation of valve control and control signal)


**DP30 / DP32 / DP33 / DP34 Top mounted handwheel**

| Dimensions and weights |      | DP30 | DP32 | DP33 | DP34 |
|------------------------|------|------|------|------|------|
| Ø D1                   | (mm) | 225  | 225  | 300  | 397  |
| H2                     | (mm) | 284  | 284  | 297  | 458  |
| Weight (with actuator) | (kg) | 10   | 14   | 20   | 62   |


**DP34T / DP34Tri Top mounted handwheel with worm gear**

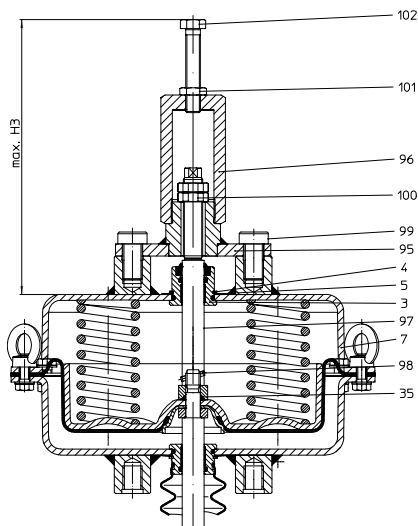
| Dimensions and weights |      | DP34T | DP34Tri |
|------------------------|------|-------|---------|
| Ø D1                   | (mm) | 400   | 400     |
| H2                     | (mm) | 613   | 613     |
| Weight (with actuator) | (kg) | 157   | 191     |


**DP35 Top mounted handwheel with bevel gear**

| Dimensions and weights |      | DP35 |
|------------------------|------|------|
| Ø D1                   | (mm) | 500  |
| H2                     | (mm) | 731  |
| Weight (with actuator) | (kg) | 365  |

**Parts**

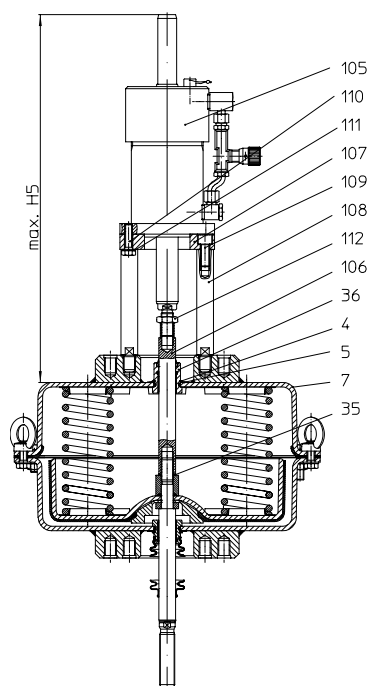
| Pos.          | Sp.p. | Description           | Material                                |                              |
|---------------|-------|-----------------------|-----------------------------------------|------------------------------|
|               |       |                       | Standard                                | C5-M                         |
| 34            |       | Stem extension        | X20Cr13+QT, 1.4021+QT                   | 1.4571                       |
| 35            |       | Usit-ring             | St / NBR                                |                              |
| 36.1          | x     | Stem guide            | X14CrMoS17+QT, 1.4104+QT                | 1.4571                       |
| 36.2          | x     | Guiding band          | PTFE +25%C                              |                              |
| 36.3          | x     | O-ring                | NBR                                     |                              |
| 36.4          | x     | O-ring                | NBR                                     |                              |
| 36.5          | x     | Scraper               | NBR                                     |                              |
| 37            |       | Bushing               | X20Cr13+QT, 1.4021+QT                   |                              |
| 38            |       | Hexagon screw         | 8.8 - A4G                               |                              |
| 39            |       | Washer                | St - A4G                                |                              |
| 40            |       | Nut                   | X20Cr13+QT, 1.4021+QT                   |                              |
| 42            |       | Torsion lock          | S235JR, 1.0037                          | 1.4571                       |
| 43            |       | Cylinder screw        | 8.8 - A4G                               | A4-70                        |
| 44            |       | Distance column       | 11SMn30+C, 1.0715+C (Fe/Zn12B)          | 1.4571                       |
| 47            |       | Stem                  | X20Cr13+QT, 1.4021+QT                   | 1.4571                       |
| 48            |       | Traverse              | EN-JS1049, EN-GJS-400-18U-LT (Fe/Zn12B) | EN-JS1049 (C5-M coated)      |
| 50            |       | Axial-washer          | St                                      |                              |
| 51            |       | Needle bearing        | St                                      |                              |
| 52            |       | Threaded bush         | CuZn35Ni3Mn2AlPb-R490, CW710R-R490      | CC493K                       |
| 53            |       | Catch pin             | St, Cu                                  | 1.4305/PA                    |
| 54            |       | Lubricating nipple    | 5.8 - A4G                               | A4                           |
| 55            |       | Covering for traverse | S235JR, 1.0037 (Fe/Zn12B)               | 1.4571                       |
| 58            |       | Handwheel             | Fe P01, 1.0330 (epoxy coated)           | Fe P01, 1.0330 (C5-M coated) |
| 59            |       | Safety cap            | 11SMn30+C, 1.0715+C (epoxy coated)      | 1.4571                       |
| 64            |       | Worm gear             |                                         |                              |
| L Spare parts |       |                       |                                         |                              |


**DP32 / DP33 / DP34 with travel limitation**

- adjustable mechanical limit stop on the actuator
- for opening and closing direction

| Dimensions and weights |      | DP32 | DP33 | DP34 |
|------------------------|------|------|------|------|
| max. H3                | (mm) | 220  | 230  | 380  |
| Weight                 | (kg) | 13   | 19   | 59   |

| Pos.          | Sp.p. | Description            | Material                           |
|---------------|-------|------------------------|------------------------------------|
| 7             |       | Lower diaphragm casing | DD13+QT, 1.0335+QT (powder coated) |
| 35            |       | Usit-ring              | ST / NBR                           |
| 95            |       | Traverse               | 1.0037 (Fe / Zn / 2B)              |
| 96            |       | Cap                    | X14CrMoS17+QT, 1.4104+QT           |
| 97            |       | Stem extension         | X20Cr13+QT, 1.4021+QT              |
| 98            |       | Straight pin           | X10CrNi18-8, 1.4310                |
| 99            |       | Cylinder screw         | 8.8 - A4G                          |
| 100           |       | Stem guiding           | 11SMnPb30+C, 1.0718+C              |
| 101           |       | Stem guiding           | 17H - A4G                          |
| 102           |       | Hexagon bolt           | 8.8 - A4G                          |
| L Spare parts |       |                        |                                    |


**DP32 / DP33 / DP34 / DP34T with damping tube, hydraulic**

| Dimensions and weights |      | DP32 | DP33 | DP34 | DP34T |
|------------------------|------|------|------|------|-------|
| max. H5                | (mm) | 412  | 412  | 495  | 495   |
| Weight                 | (kg) | 23   | 29   | 62   | 133   |

| Pos.          | Sp.p. | Description            | Material                           |
|---------------|-------|------------------------|------------------------------------|
| 4             |       | Retaining ring         | Fst - A2B                          |
| 5             |       | Spring plate           | C75S, 1.1248                       |
| 7             |       | Lower diaphragm casing | DD13+QT, 1.0335+QT (powder coated) |
| 35            |       | Usit-ring              | St / NBR                           |
| 36            |       | Stem guide             | X14CrMoS17+QT, PTFE, NBR           |
| 105           |       | Damping tube           |                                    |
| 106           |       | Stem extension         | X20Cr13+QT, 1.4021+QT              |
| 107           |       | Flange                 | X20Cr13+QT, 1.4021+QT              |
| 108           |       | Distance column        | X20Cr13+QT, 1.4021+QT              |
| 109           |       | Cylinder screw         | 8.8 - A2B                          |
| 110           |       | Hexagon bolt           | 8.8 - A2G                          |
| 111           |       | Washer                 | St / A4G                           |
| 112           |       | Stem guiding           | 11SMnPb30+C, 1.0718+C              |
| L Spare parts |       |                        |                                    |

**Special design**

Actuators for sub-zero temperatures -40°C to 100°C  
(on request)

Actuators for aggressive environments  
(on request)

DP in short design  
(on request)

Top mounted handwheel - short design  
(on request)

**Application**

The single acting pneumatic actuators series DP are designed to be mounted directly on control valves and stop valves. They supply large forces for the valve operation with short (1-10 seconds) lifting times on air supply or on air failure.

Please contact the supplier or manufacturer if there are any questions.

**Set up and operation mode**

The pneumatic actuators series DP converts pneumatic pressure into a linear travel at the actuator stem. Depending on the air supply pressure and different control signals the actuator is producing appropriate forces at the stem.

Depending on the air supply pressure and different control signals the actuator is producing appropriate forces at the stem.

Thus following operating modes can be achieved: „Extended stem (on air failure) or „Retracted stem (on air failure).

The compression springs and also the rolling diaphragm are laied out for approx. about one million double travels.

**Please indicate when ordering:**

- Type of actuator
- Operating mode
- Spring range
- Nominal travel
- Connection dimensions of the valve
- Accessories

**Example:**

ARI-DP34; Operating mode: extended stem on air failure; 1,5 - 3 bar; travel 50 mm; A = 100 mm; stem excess length = 83 mm; M2 = M12; E = 15 mm.



**Technology for the Future.**  
GERMAN QUALITY VALVES

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