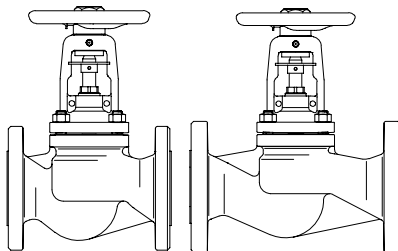


Free of maintenance stop valve with bellow seal - metallic sealing

ARI-FABA®-Plus ANSI
Class 150 / Class 300
Straight through with flanges

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04



SA216WCB

Fig. 041

Page 2

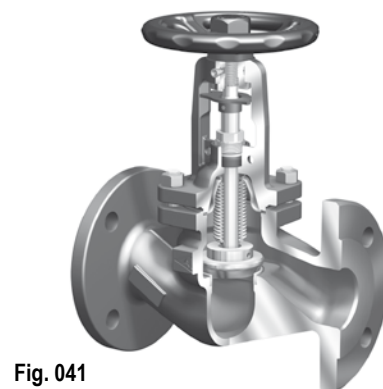
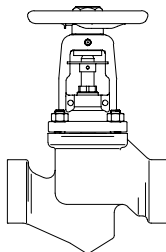


Fig. 041

ARI-FABA®-Plus ANSI
Class 300
Straight through with screwed sockets
Straight through with socket weld ends

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04



SA105

Fig. 049

Page 3

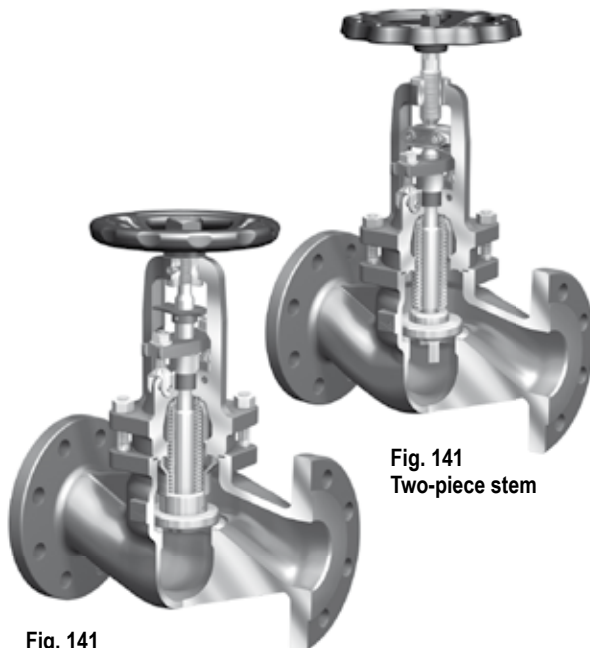
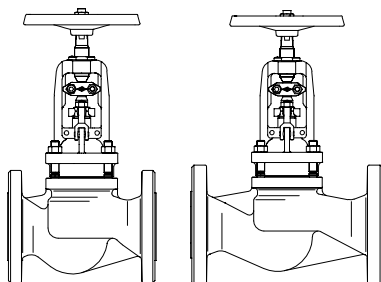


Fig. 141
Two-piece stem

ARI-FABA®-Supra I ANSI
ARI-FABA®-Supra C ANSI
Class 150 / Class 300
Straight through with flanges

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04



SA216WCB

Fig. 141

Page 4

Fig. 141
One-piece stem

Features:

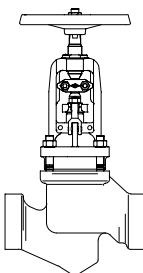
- Double wall bellows seal as standard
- Plug with marginal seat
- Stem with fine thread
- Flat lubricating nipple
- Locking device, countersunk
- Bonnet optimised for accessories
- Secondary sealing: gland packing
- Position indicator as standard
- Non-rotation lock for each nominal diameter

Additional features ARI-FABA®-Supra:

- Bellows seal welded to bonnet
- Bellows seal 10.000 load cycles
- Industrial version: Bellows seal shielded
Chemical version: Bellows seal flushed
- Stem back seal
- Yoke gasket, double chambered
- Welded seat
- Actuator retrofitting

ARI-FABA®-Supra I ANSI
ARI-FABA®-Supra C ANSI
Class 300
Straight through with screwed sockets
Straight through with socket weld ends

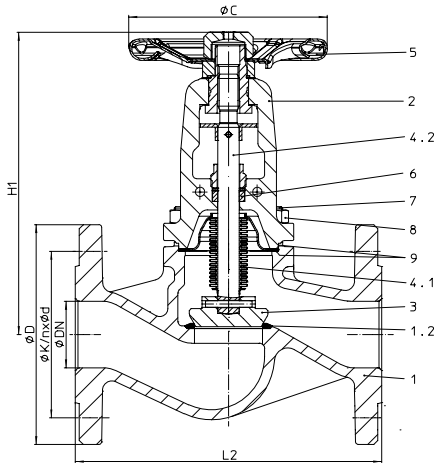
- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04



SA105

Fig. 149

Page 6

Stop valve - straight through with flanges and bellows seal - Class 150 / 300 (SA216WCB)


| Figure-No. | Nominal pressure | Material | Nominal diameter |
|------------|------------------|----------|--------------------------|
| 32.041 | ANSI150 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 35.041 | ANSI300 | SA216WCB | DN 15-250 / NPS 1/2"-10" |

Test: • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04

Flanges: • acc. to ASME / ANSI B16.5

Plug design: • Plug with marginal seat standard

At high differential pressures a balancing plug is necessary! (refer to page 8)

| Parts | | | |
|-------|-------|---------------|--|
| Pos. | Sp.p. | Description | Fig. 32. / 35.041 |
| 1 | | Body | SA216WCB |
| 1.2 | | Seat | E347-16 |
| 2 | | Bonnet | SA216WCB |
| 3 | x | Plug | ≤ DN200 / NPS 8": SA276Gr.420 (hardened) / DN250 / NPS 10": SA516Gr.60 / Stellite 21 |
| 4 | | Spindle unit | |
| 4.1 | x | Bellows seal | SA240Gr.316Ti |
| 4.2 | | Stem | SA276Gr.420 |
| 5 | x | Handwheel | ≤ DN100 / NPS 4": A366 (cataphoretic coating) / ≥ DN150 / NPS 6": SA278Class40 (epoxy-coating) |
| 6 | | Packing ring | Pure graphite |
| 7 | | Stud | SA193-B7 |
| 8 | | Hexagon nut | SA194-2H |
| 9 | x | Gasket | Pure graphite (CrNi laminated with graphite) |
| | | L Spare parts | |

| DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 |
|-----|------|------|----|--------|----|--------|----|-----|-----|-----|-----|
| NPS | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | 8" | 10" |

| Face-to-face dimension acc. to ANSI B16.10 | | | | | | | | | | | | | |
|--|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L2 | ANSI150 | (mm) | 108 | 117 | 127 | 165 | 203 | 216 | 241 | 292 | 406 | 495 | 622 |
| | ANSI300 | (mm) | 152 | 178 | 203 | 229 | 267 | 292 | 318 | 356 | 444 | 559 | 622 |

| Dimensions | | Standard-flange dimensions refer to page 12 | | | | | | | | | | | |
|------------|---------|---|-----|-----|------|------|-----|-----|-----|-----|-----|-----|------|
| H1 | (mm) | 205 | 205 | 210 | 225 | 230 | 245 | 265 | 365 | 425 | 550 | 720 | |
| ØC | (mm) | 125 | 125 | 125 | 150 | 150 | 175 | 225 | 300 | 400 | 520 | 520 | |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 16 | 20 | 25 | 40 | 50 | 70 | |
| Kvs-value | ANSI150 | (m³/h) | 4,8 | 6,6 | 11,1 | 26,5 | 41 | 70 | 100 | 153 | 378 | 610 | 980 |
| Zeta-value | ANSI150 | -- | 3,5 | 5,9 | 5,1 | 5,8 | 5,9 | 5,8 | 6,5 | 6,8 | 5,7 | 6,9 | 6,5 |
| Kvs-value | ANSI300 | (m³/h) | 5,3 | 7,2 | 12 | 28,5 | 43 | 75 | 105 | 170 | 405 | 675 | 1090 |
| Zeta-value | ANSI300 | -- | 2,9 | 4,9 | 4,3 | 5 | 5,4 | 5,1 | 5,9 | 5,5 | 4,9 | 5,6 | 5,2 |

| Weights | | | | | | | | | | | | |
|---------|------|-----|-----|-----|-----|------|----|------|------|----|-----|-----|
| 32.041 | (kg) | 5,2 | 5,4 | 5,8 | 6,5 | 12 | 21 | 24,5 | 40,2 | 78 | 168 | 261 |
| 35.041 | (kg) | 5,4 | 6,3 | 8,6 | 9,5 | 14,9 | 23 | 29 | 49,2 | 94 | 211 | 317 |

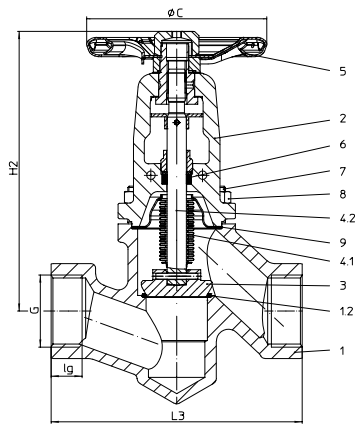
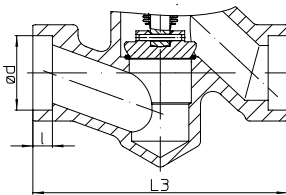
Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

A production allowance acc. to TRB 801 No. 45 exists.

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).

Stop valve in straightway form with screwed sockets / Socket weld ends and Bellows seal - Class 300 (SA105)

Fig. 049....2 with screwed sockets

Fig. 049....3 with socket weld ends

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|-------------|------------------|----------|------------------------|
| 45.049....2 | ANSI300 | SA105 | DN 15-50 / NPS 1/2"-2" |

| | |
|------------------|---|
| Screwed sockets: | • acc. to DIN ISO 228 (BSP) or • acc. to ASME / ANSI B1.20.1 (NPT) (refer to page 12) |
|------------------|---|

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|-------------|------------------|----------|------------------------|
| 45.049....3 | ANSI300 | SA105 | DN 15-50 / NPS 1/2"-2" |

| | |
|-------------------|--|
| Socket weld ends: | • acc. to ASME / ANSI B16.11 (refer to page 12) |
|-------------------|--|

| | |
|-------|--|
| Test: | • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04 |
|-------|--|

| | |
|--------------|------------------------------------|
| Plug design: | • Plug with marginal seat standard |
|--------------|------------------------------------|

| Parts | | | |
|-------|-------|---------------|--|
| Pos. | Sp.p. | Description | Fig. 45.049....2 / 45.049....3 |
| 1 | | Body | SA105 |
| 1.2 | | Seat | E347-16 |
| 2 | | Bonnet | SA216WCB |
| 3 | x | Plug | SA276Gr.420 (hardened) |
| 4 | | Spindle unit | |
| 4.1 | x | Bellows seal | SA240Gr.316Ti |
| 4.2 | | Stem | SA276Gr.420 |
| 5 | x | Handwheel | A366 (cataphoretic coating) |
| 6 | | Packing ring | Pure graphite |
| 7 | | Stud | SA193-B7 |
| 8 | | Hexagon nut | SA194-2H |
| 9 | x | Gasket | Pure graphite (CrNi laminated with graphite) |
| | | L Spare parts | |

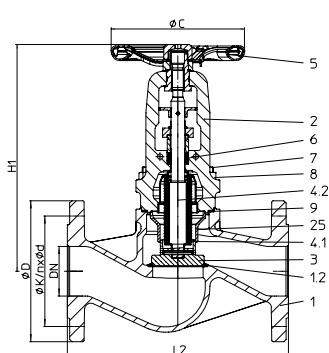
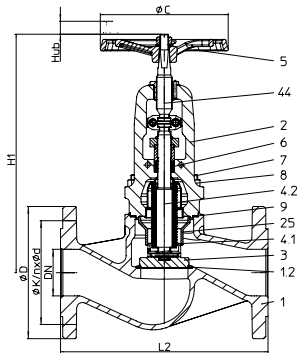
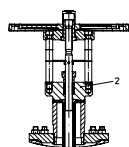
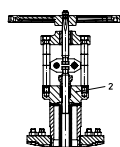
| DN | 15 | 20 | 25 | 32 | 40 | 50 |
|-----|------|------|----|--------|--------|----|
| NPS | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

| Face-to-face dimension | | Screwed socket dimensions and socket weld end dimensions refer to page 12 | | | | | |
|------------------------|------|---|-----|-----|-----|-----|-----|
| L3 | (mm) | 117 | 117 | 139 | 186 | 186 | 209 |

| Dimensions | | | | | | | |
|------------|--------|-----|-----|-----|------|------|------|
| H2 | (mm) | 203 | 203 | 215 | 230 | 230 | 240 |
| ØC | (mm) | 125 | 125 | 125 | 150 | 150 | 150 |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 13 |
| Kvs-value | (m³/h) | 3,1 | 5,5 | 8,6 | 12,8 | 20 | 26 |
| Zeta-value | -- | 8,4 | 8,4 | 8,4 | 10,2 | 10,2 | 14,8 |

| Weights | | | | | | | |
|---------------------|------|-----|-----|-----|-----|-----|-----|
| 45.049....2 /3 | (kg) | 2,9 | 2,9 | 3,7 | 5,9 | 5,9 | 7,3 |

Information / restriction of technical rules need to be observed!
 Operating and installation instructions can be downloaded at www.ari-armaturen.com.
 A production allowance acc. to TRB 801 No. 45 exists.
 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).

Stop valve - straight through with flanges and bellows seal - Industrial version (SA216WCB)

Fig. 141....111 DN15-150 / NPS 1/2"-6"
One-piece stem

Fig. 141....112 DN15-150 / NPS 1/2"-6"
Two-piece stem

Bonnet DN200-250 / NPS 8"-10"
One-piece stem

Bonnet DN200-250 / NPS 8"-10"
Two-piece stem

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|---------------|------------------|----------|--------------------------|
| 32.141....111 | ANSI150 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 35.141....111 | ANSI300 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 32.141....112 | ANSI150 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 35.141....112 | ANSI300 | SA216WCB | DN 15-250 / NPS 1/2"-10" |

| | |
|-------|---|
| Test: | • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04 |
|-------|---|

| | |
|----------|-----------------------------|
| Flanges: | • acc. to ASME / ANSI B16.5 |
|----------|-----------------------------|

| | |
|--------------|------------------------------------|
| Plug design: | • Plug with marginal seat standard |
|--------------|------------------------------------|

At high differential pressures a balancing plug is necessary!
(refer to page 8)

| Parts | | | | | |
|---------------|-------|--------------|--|---|--|
| Pos. | Sp.p. | Description | Fig. 32. / 35.141....111 One-piece stem | Fig. 32. / 35.141....112 Two-piece stem | |
| 1 | | Body | SA216WCB | | |
| 1.2 | | Seat | E347-16 | | |
| 2 | | Bonnet | ≤ DN150 / NPS 6": SA216WCB / ≥ DN200 / NPS 8": SA105, SA106Gr.B, SA516Gr.60 | | |
| 3 | x | Plug | ≤ DN150 / NPS 6": SA276Gr.420 (hardened) / ≥ DN200: SA516Gr.60 / Stellite 21 | | |
| 4.1 | | Bellows seal | SA240Gr.316Ti | | |
| 4.2 | | Stem | SA479Gr.316Ti | | |
| 5 | x | Handwheel | ≤ DN100 / NPS 4": A366 (cataphoretic coating) / ≥ DN150 / NPS 6": SA395 (epoxy-coating) | SA395 (epoxy-coating) | |
| 6 | | Packing ring | Pure graphite | | |
| 7 | | Stud | SA193-B7 | | |
| 8 | | Hexagon nut | SA194-2H | | |
| 9 | x | Gasket | Pure graphite (with CrNi-grooved) | | |
| 25 | | Guide bush | ≤ DN25 / NPS 1": SA240Gr.316Ti / ≥ DN40 / NPS 1 1/2": SA351CF8M | | |
| 44 | | Stem, top | -- | AISI440 | |
| L Spare parts | | | | | |

| DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 |
|-----|------|------|----|--------|----|--------|----|-----|-----|-----|-----|
| NPS | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | 8" | 10" |

| Face-to-face dimension acc. to ANSI B16.10 | | | Standard-flange dimensions refer to page 12 | | | | | | | | | | |
|--|---------|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L2 | ANSI150 | (mm) | 108 | 117 | 127 | 165 | 203 | 216 | 241 | 292 | 406 | 495 | 622 |
| | ANSI300 | (mm) | 152 | 178 | 203 | 229 | 267 | 292 | 318 | 356 | 444 | 559 | 622 |

| Dimensions | | | | | | | | | | | | | |
|---------------------|---------|--------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|------|
| H1 One-piece stem | (mm) | 225 | 225 | 230 | 270 | 275 | 300 | 380 | 460 | 570 | 785 | 940 | |
| H1 Two-piece stem | (mm) | 240 | 240 | 240 | 290 | 295 | 335 | 395 | 505 | 605 | 810 | 940 | |
| ØC (one-piece stem) | (mm) | 125 | 125 | 125 | 150 | 150 | 175 | 225 | 300 | 400 | 520 | 520 | |
| ØC (two-piece stem) | (mm) | 140 | 140 | 140 | 160 | 160 | 180 | 225 | 300 | 400 | 520 | 520 | |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 16 | 20 | 25 | 40 | 50 | 70 | |
| Kvs-value | ANSI150 | (m³/h) | 4,2 | 6,1 | 10 | 26 | 40,5 | 70 | 100 | 153 | 378 | 615 | 980 |
| Zeta-value | ANSI300 | -- | 4,6 | 6,9 | 6,2 | 6 | 6,1 | 5,8 | 6,5 | 6,8 | 5,7 | 6,8 | 6,5 |
| Kvs-value | ANSI150 | (m³/h) | 4,7 | 6,4 | 11 | 28 | 42,5 | 75 | 105 | 170 | 405 | 675 | 1090 |
| Zeta-value | ANSI300 | -- | 3,7 | 6,2 | 5,2 | 5,2 | 5,5 | 5,1 | 5,9 | 5,5 | 4,9 | 5,6 | 5,2 |

| Weights | | | | | | | | | | | | | |
|---------|------|-----|-----|-----|------|------|------|------|------|-----|-----|-----|--|
| 32.141 | (kg) | 5,8 | 6 | 6,6 | 7,5 | 13,5 | 23,8 | 29,6 | 52,8 | 85 | 193 | 288 | |
| 35.141 | (kg) | 6 | 6,9 | 9,4 | 10,5 | 16,4 | 25,8 | 34,1 | 61,8 | 101 | 230 | 335 | |

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

A production allowance acc. to TRB 801 No. 45 exists.

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).

Stop valve - straight through with flanges and bellows seal - Chemical version (SA216WCB)

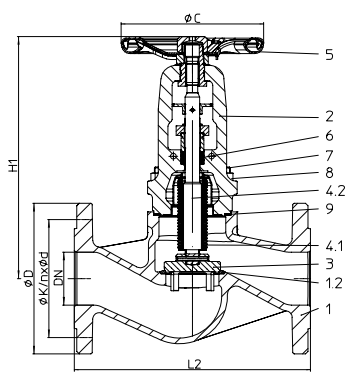


Fig. 141....153 DN15-150 / NPS 1/2"-6"
One-piece stem

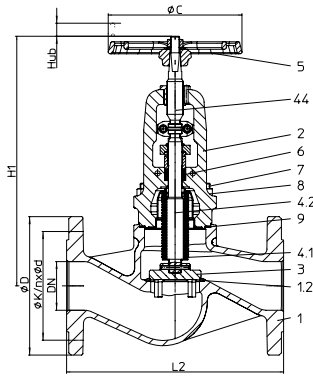
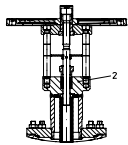
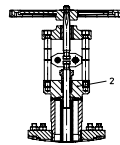


Fig. 141....154 DN15-150 / NPS 1/2"-6"
Two-piece stem



Bonnet DN200-250 / NPS 8"-10"
One-piece stem



Bonnet DN200-250 / NPS 8"-10"
Two-piece stem

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|---------------|------------------|----------|--------------------------|
| 32.141....153 | ANSI150 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 35.141....153 | ANSI300 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 32.141....154 | ANSI150 | SA216WCB | DN 15-250 / NPS 1/2"-10" |
| 35.141....154 | ANSI300 | SA216WCB | DN 15-250 / NPS 1/2"-10" |

| | |
|--------------|---|
| Test: | • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04 |
| Flanges: | • acc. to ASME / ANSI B16.5 |
| Plug design: | • V-port plug with marginal seat standard |

At high differential pressures a balancing plug is necessary!
(refer to page 8)

| Parts | | | | |
|-------|-------|--------------|--|---|
| Pos. | Sp.p. | Description | Fig. 32. / 35.141....153 One-piece stem | Fig. 32. / 35.141....154 Two-piece stem |
| 1 | | Body | SA216WCB | |
| 1.2 | | Seat | E347-16 | |
| 2 | | Bonnet | ≤ DN150 / NPS 6": SA216WCB / ≥ DN200 / NPS 8": SA105, SA106Gr.B, SA516Gr.60 | |
| 3 | x | Plug | ≤ DN150 / NPS 6": SA276Gr.420 (hardened) / ≥ DN200 / NPS 8": SA516Gr.60 / Stellite 21 | |
| 4.1 | | Bellows seal | SA240Gr.316Ti | |
| 4.2 | | Stem | SA479Gr.316Ti | |
| 5 | x | Handwheel | ≤ DN100 / NPS 4": A366 (cataphoretic coating) / ≥ DN150 / NPS 6": SA395 (epoxy-coating) | SA395 (epoxy-coating) |
| 6 | | Packing ring | Pure graphite | |
| 7 | | Stud | SA193-B7 | |
| 8 | | Hexagon nut | SA194-2H | |
| 9 | x | Gasket | Pure graphite (with CrNi-grooved) | |
| 44 | | Stem, top | -- | AISI440 |

L Spare parts

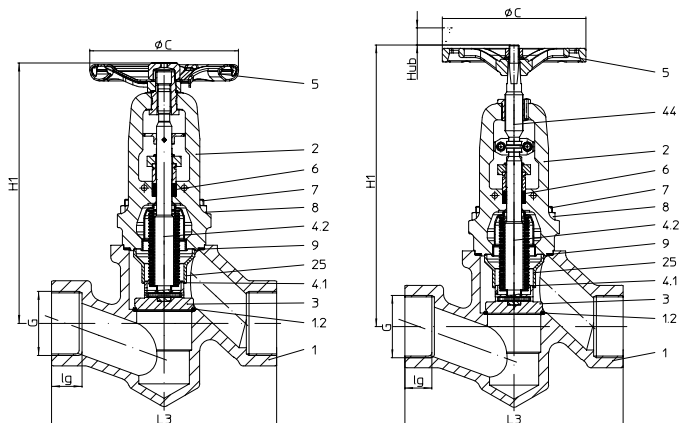
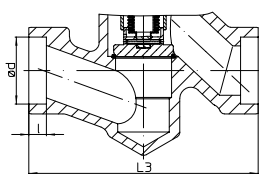
| DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 |
|-----|------|------|----|--------|----|--------|----|-----|-----|-----|-----|
| NPS | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | 8" | 10" |

| Face-to-face dimension acc. to ANSI B16.10 | | | Standard-flange dimensions refer to page 12 | | | | | | | | | | |
|--|--------------|--|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L2 | ANSI150 (mm) | | 108 | 117 | 127 | 165 | 203 | 216 | 241 | 292 | 406 | 495 | 622 |
| | ANSI300 (mm) | | 152 | 178 | 203 | 229 | 267 | 292 | 318 | 356 | 444 | 559 | 622 |

| Dimensions | | | | | | | | | | | | |
|---------------------|--------|-----|-----|-----|------|------|-----|-----|------|-----|-----|-----|
| H1 One-piece stem | (mm) | 225 | 225 | 230 | 270 | 275 | 300 | 380 | 460 | 570 | 785 | 940 |
| H1 Two-piece stem | (mm) | 240 | 240 | 240 | 290 | 295 | 335 | 395 | 505 | 605 | 810 | 940 |
| ØC (one-piece stem) | (mm) | 125 | 125 | 125 | 150 | 150 | 175 | 225 | 300 | 400 | 520 | 520 |
| ØC (two-piece stem) | (mm) | 140 | 140 | 140 | 160 | 160 | 180 | 225 | 300 | 400 | 520 | 520 |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 16 | 20 | 25 | 40 | 520 | 520 |
| Kvs-value ANSI150 | (m³/h) | 4 | 5,5 | 9,2 | 24 | 37 | 60 | 86 | 122 | 305 | 524 | 796 |
| Zeta-value ANSI150 | -- | 5,1 | 8,4 | 7,4 | 7,1 | 7,3 | 7,9 | 8,8 | 10,7 | 8,7 | 9,3 | 9,8 |
| Kvs-value ANSI300 | (m³/h) | 4,4 | 6 | 10 | 25,5 | 38,5 | 64 | 90 | 135 | 325 | 580 | 885 |
| Zeta-value ANSI300 | -- | 4,2 | 7,1 | 6,2 | 6,3 | 6,7 | 7 | 8,1 | 8,8 | 7,7 | 7,6 | 8 |

| Weights | | | | | | | | | | | | |
|---------|------|-----|-----|-----|------|------|------|------|------|-----|-----|-----|
| 32.141 | (kg) | 5,8 | 6 | 6,6 | 7,5 | 13,5 | 23,8 | 29,6 | 52,8 | 85 | 193 | 288 |
| 35.141 | (kg) | 6 | 6,9 | 9,4 | 10,5 | 16,4 | 25,8 | 34,1 | 61,8 | 101 | 230 | 335 |

Information / restriction of technical rules need to be observed!
 Operating and installation instructions can be downloaded at www.ari-armaturen.com.
 A production allowance acc. to TRB 801 No. 45 exists.
 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).

Stop valve in straightway form with screwed sockets / Socket weld ends and Bellows seal - Industrial version (SA105)

Fig. 149....111....2 with screwed sockets
One-piece stem
Fig. 149....112....2 with screwed sockets
Two-piece stem

Fig. 149....111....3 /112....3 with socket weld ends

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|--------------------|------------------|----------|--------------------------|
| 45.149....111....2 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |
| 45.149....112....2 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |

| | |
|------------------|---|
| Screwed sockets: | • acc. to DIN ISO 228 (BSP) or acc. to ASME / ANSI B1.20.1 (NPT) |
|------------------|---|

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|--------------------|------------------|----------|--------------------------|
| 45.149....111....3 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |
| 45.149....112....3 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |

| | |
|-------------------|------------------------------|
| Socket weld ends: | • acc. to ASME / ANSI B16.11 |
|-------------------|------------------------------|

| | |
|-------|---|
| Test: | • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04 |
|-------|---|

| | |
|--------------|------------------------------------|
| Plug design: | • Plug with marginal seat standard |
|--------------|------------------------------------|

| Parts | | | | |
|---------------|-------|--------------|---|-----------------------------------|
| Pos. | Sp.p. | Description | Fig. 45.149....111 One-piece stem | Fig. 45.149....112 Two-piece stem |
| 1 | | Body | SA105 | |
| 1.2 | | Seat | E347-16 | |
| 2 | | Bonnet | SA216WCB | |
| 3 | x | Plug | SA276Gr.420 (hardened) | |
| 4.1 | | Bellows seal | SA240Gr.316Ti | |
| 4.2 | | Stem | SA479Gr.316Ti | |
| 5 | x | Handwheel | A366 (cataphoretic coating) | SA395 (epoxy-coating) |
| 6 | | Packing ring | Pure graphite | |
| 7 | | Stud | SA193-B7 | |
| 8 | | Hexagon nut | SA194-2H | |
| 9 | x | Gasket | Pure graphite (with CrNi-grooved) | |
| 25 | | Guide bush | ≤ DN25 / NPS 1": SA240Gr.316Ti / ≥ DN40 / NPS 1 1/2": SA351CF8M | |
| 44 | | Stem, top | -- | AISI440 |
| L Spare parts | | | | |

| DN | 15 | 20 | 25 | 32 | 40 | 50 |
|-----|------|------|----|--------|--------|----|
| NPS | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

| Face-to-face dimension | | Screwed socket dimensions and socket weld end dimensions refer to page 12 | | | | | |
|------------------------|------|---|-----|-----|-----|-----|-----|
| L3 | (mm) | 117 | 117 | 139 | 186 | 186 | 209 |

| Dimensions | | | | | | | |
|---------------------|--------|------|------|-----|------|------|------|
| H1 One-piece stem | (mm) | 225 | 225 | 235 | 275 | 275 | 285 |
| H1 Two-piece stem | (mm) | 240 | 240 | 255 | 295 | 295 | 305 |
| ØC (one-piece stem) | (mm) | 125 | 125 | 125 | 150 | 150 | 150 |
| ØC (two-piece stem) | (mm) | 140 | 140 | 140 | 160 | 160 | 160 |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 13 |
| Kvs-value | (m³/h) | 2,8 | 5 | 8 | 12,5 | 20 | 26 |
| Zeta-value | -- | 10,3 | 10,2 | 9,7 | 10,7 | 10,2 | 14,8 |

| Weights | | | | | | | |
|--------------------|------|-----|-----|-----|-----|-----|-----|
| 45.149....2 / ...3 | (kg) | 3,5 | 3,5 | 4,5 | 6,7 | 6,9 | 8,8 |

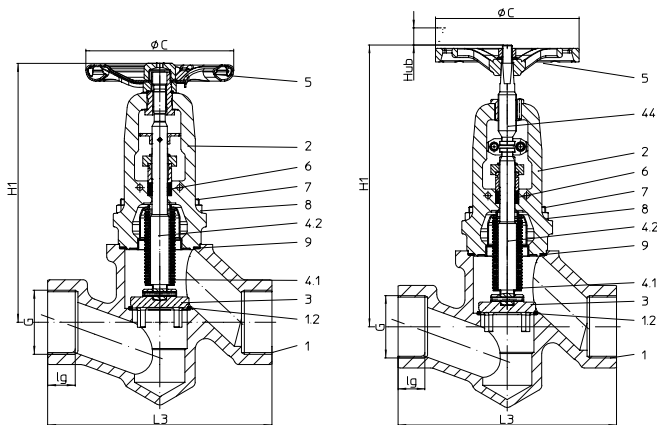
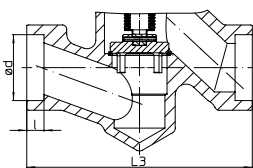
Information / restriction of technical rules need to be observed!

 Operating and installation instructions can be downloaded at www.ari-armaturen.com.

A production allowance acc. to TRB 801 No. 45 exists.

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).

Stop valve in straightway form with screwed sockets / Socket weld ends and Bellows seal - Chemical version (SA105)

Fig. 149....153....2 with screwed sockets
One-piece stem
Fig. 149....154....2 with screwed sockets
Two-piece stem

Fig. 149....153....3 /154....3 with socket weld ends

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|--|------------------|----------|--------------------------|
| 45.149....153....2 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |
| 45.149....154....2 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |
| Screwed sockets: <ul style="list-style-type: none"> • acc. to DIN ISO 228 (BSP) or acc. to ASME / ANSI B1.20.1 (NPT) (refer to page 12) | | | |

| Figure-No. | Nominal pressure | Material | Nominal diameter |
|--------------------|------------------|----------|--------------------------|
| 45.149....153....3 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |
| 45.149....154....3 | ANSI300 | SA105 | DN 15 - 50 / NPS 1/2"-2" |

| | |
|-------------------|---|
| Socket weld ends: | • acc. to ASME / ANSI B16.11 (refer to page 12) |
|-------------------|---|

| | |
|-------|--|
| Test: | • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04 |
|-------|--|

| | |
|--------------|---|
| Plug design: | • V-port plug with marginal seat standard |
|--------------|---|

| Parts | | | | |
|---------------|-------|--------------|-----------------------------------|-----------------------------------|
| Pos. | Sp.p. | Description | Fig. 45.149....153 One-piece stem | Fig. 45.149....154 Two-piece stem |
| 1 | | Body | SA105 | |
| 1.2 | | Seat | E347-16 | |
| 2 | | Bonnet | SA216WCB | |
| 3 | x | Plug | SA276Gr.420 (hardened) | |
| 4.1 | | Bellows seal | SA240Gr.316Ti | |
| 4.2 | | Stem | SA479Gr.316Ti | |
| 5 | x | Handwheel | A366 (cataphoretic coating) | SA395 (epoxy-coating) |
| 6 | | Packing ring | Pure graphite | |
| 7 | | Stud | SA193-B7 | |
| 8 | | Hexagon nut | SA194-2H | |
| 9 | x | Gasket | Pure graphite (with CrNi-grooved) | |
| 44 | | Stem, top | -- | AISI440 |
| L Spare parts | | | | |

| DN | 15 | 20 | 25 | 32 | 40 | 50 |
|-----|------|------|----|--------|--------|----|
| NPS | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

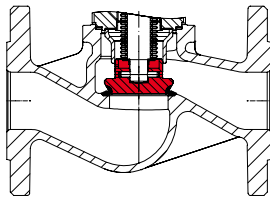
| Face-to-face dimension | | Screwed socket dimensions and socket weld end dimensions refer to page 12 | | | | | |
|------------------------|------|---|-----|-----|-----|-----|-----|
| L3 | (mm) | 117 | 117 | 139 | 186 | 186 | 209 |

| Dimensions | | | | | | | |
|---------------------|--------|-----|------|------|------|------|------|
| H1 One-piece stem | (mm) | 225 | 225 | 235 | 275 | 275 | 285 |
| H1 Two-piece stem | (mm) | 240 | 240 | 255 | 295 | 295 | 305 |
| ØC (one-piece stem) | (mm) | 125 | 125 | 125 | 150 | 150 | 150 |
| ØC (two-piece stem) | (mm) | 140 | 140 | 140 | 160 | 160 | 160 |
| Travel | (mm) | 6 | 6 | 8 | 13 | 13 | 13 |
| Kvs-value | (m³/h) | 2,6 | 4,7 | 7,3 | 11 | 18,2 | 23,5 |
| Zeta-value | -- | 12 | 11,6 | 11,7 | 13,8 | 12,3 | 18,1 |

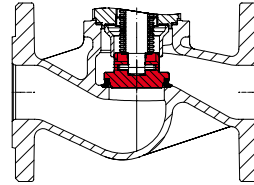
| Dimensions | | | | | | | |
|---------------------|------|-----|-----|-----|-----|-----|-----|
| 45.149....2 /3 | (kg) | 3,5 | 3,5 | 4,5 | 6,7 | 6,9 | 8,8 |

Information / restriction of technical rules need to be observed!
 Operating and installation instructions can be downloaded at www.ari-armaturen.com.
 A production allowance acc. to TRB 801 No. 45 exists.
 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).

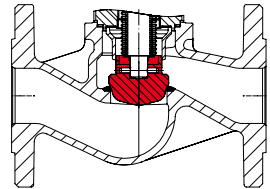
ARI-FABA®-Plus / ARI-FABA®-Supra I



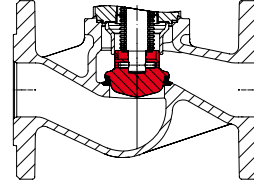
Isolation plug with marginal seat; stellited seat and plug ¹⁾



Plug with soft seal
Max. operating temperature 200°C at PTFE + 25% carbon

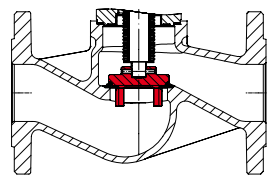


Regulating plug with marginal seat ¹⁾

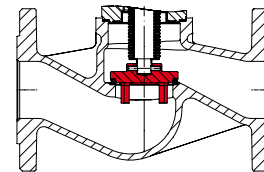


Regulating plug with soft seal ¹⁾
Max. operating temperature 200°C at PTFE + 25% carbon

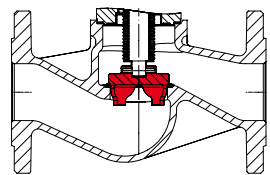
ARI-FABA®-Supra C



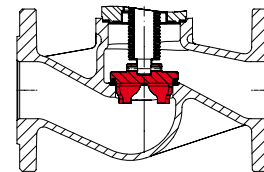
V-port plug with marginal seat; stellited



V-port plug with soft seal
Max. operating temperature 200°C at PTFE + 25% carbon

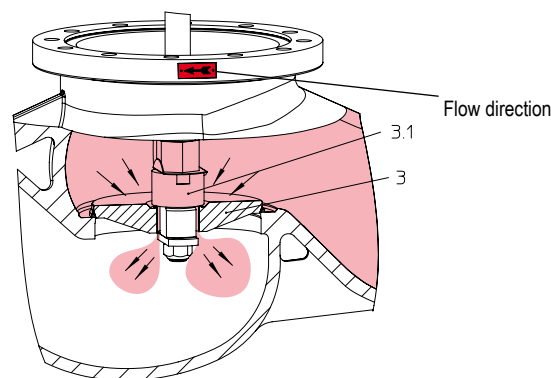


V-port regulating plug with marginal seat



V-port regulating plug with soft seal PTFE + 25% carbon
Max. operating temperature 200°C at PTFE + 25% carbon

¹⁾ for max. permissible ΔP in throttling function, refer to annex: Flow diagram (FABA-Plus)



Balancing plug

Valves with balancing plugs have to be installed with medium flowing over the plug (3) as indicated by flow direction arrow on valve body and the stem is vertically upright.

Working principles:

When the valve is closed, anticlockwise rotation of the hand wheel lifts the pilot plug (3.1) off the larger balancing plug (3).

This allows the medium to pass through the plug and equalizes the pressure of the medium under the plug (3). After the pressures have been equalized within the values stated in the table, the valve can be opened by turning the valve further with normal manual force.

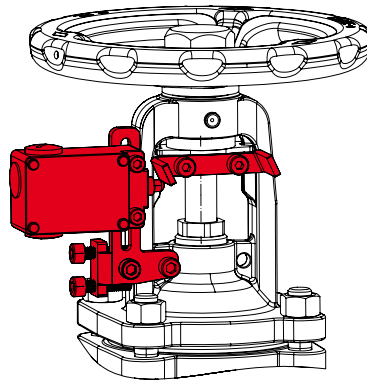
Balancing plugs are fully effective only in closed systems.

The pressures of the medium on either side of the plug can not be equalized if the medium is discharged into open air.

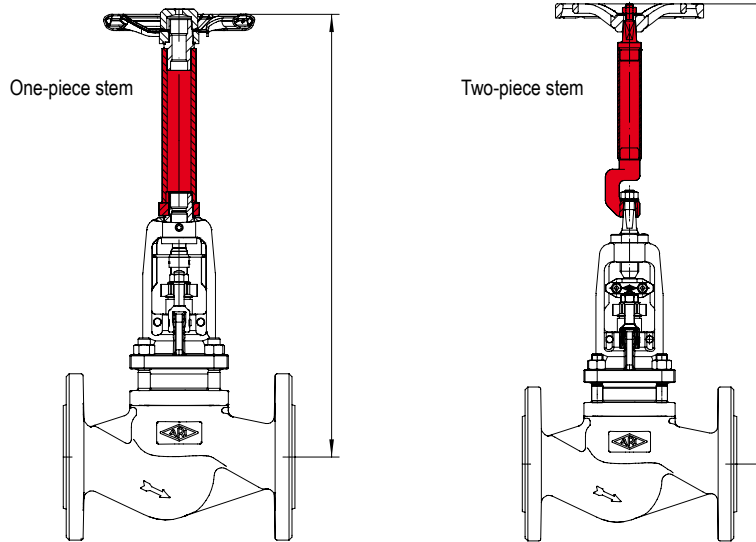
A bypass line or some other arrangement is necessary if too much time is required for pressure equalization owing to the volume in the piping system.

ARI-stop valves with differential pressures exceeding the following pressures, have to be fitted with pressure balancing plugs

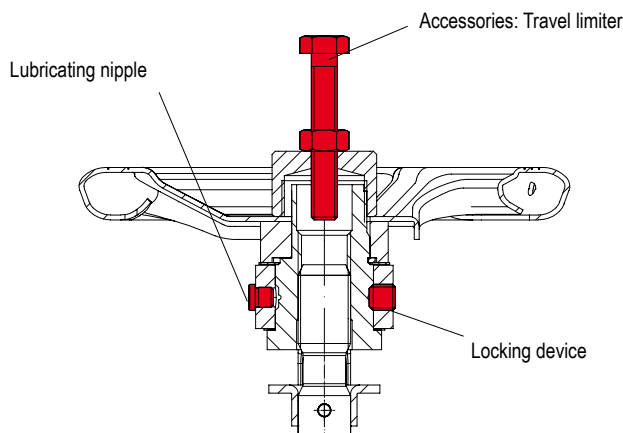
| DN | 150 | 200 | 250 |
|---|-----|-----|-----|
| NPS | 6" | 8" | 10" |
| max. differential pressure (ΔP) (bar) | 21 | 14 | 9 |



Limit switch



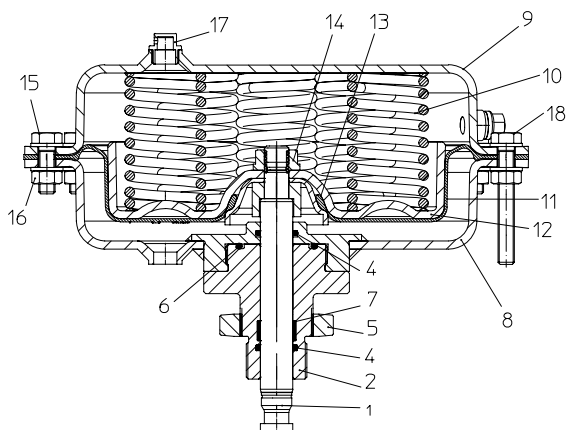
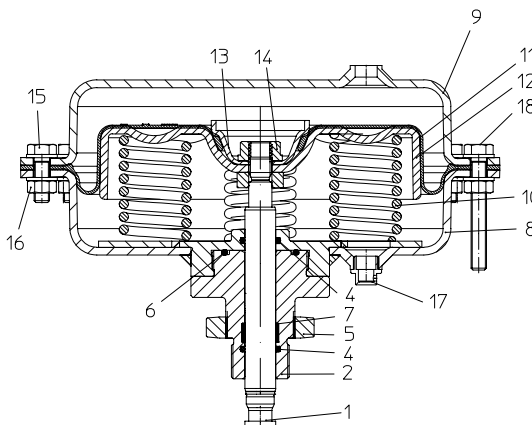
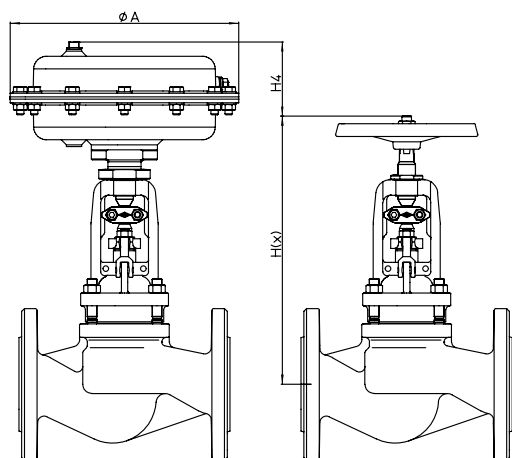
Stem extension (please specify height in your order)



Lubricating nipple / Locking device / Travel limiter
 (only construction FABA-Plus and FABA-Supra with one-piece stem)

Travel limiter
 (Accessories are not included !)

| DN | NPS | Hexagon screw |
|-------|---------|---------------|
| (mm) | (inch) | (mm x mm) |
| 15-80 | 1/2"-3" | M8 x 55 |
| 100 | 4" | M12 x 70 |
| 150 | 6" | M12 x 80 |
| 200 | 8" | M12 x 100 |
| 250 | 10" | M12 x 120 |

Pneumatic actuator ARI-FA

Spring closes (Extended stem on air failure)

Spring opens on air failure (Retracted stem on air failure)

Important:

The pneumatic actuator ARI-FA can be combined with all ARI-FABA-Supra versions with two-piece stem!





Max. medium temperature in the valve 482°F / 250°C !





Not applicable for design with balancing plugs !

| Parts | | | |
|---------------|-------|------------------------------|--------------------------|
| Pos. | Sp.p. | Description | Material |
| 1 | | Stem | SA276Gr.420 |
| 2 | | Head | SA276Gr.420 |
| 4 | x | O-ring | NBR |
| 5 | | Lock nut | AISI1213 (Fe/Zn12B) |
| 6 | x | O-ring | NBR |
| 7 | x | Guiding band | PTFE -+25%C |
| 8 | | Lower diaphragm casing | AISI1008 (powder coated) |
| 9 | | Upper diaphragm casing | AISI1008 (powder coated) |
| 10 | x | Spring | AISI9254 |
| 11 | x | Rolling diaphragm | NBR + webbing |
| 12 | | Diaphragm plate | AISI1008 (Fe/Zn12B) |
| 13 | | Diaphragm flange | AISI1008 (Fe/Zn12B) |
| 14 | x | Collar nut with sealing ring | St |
| 15 | | Hexagon bolt | St (galvanised) |
| 16 | | Hexagon nut | St (galvanised) |
| 17 | x | Vent plug | Polyethylene |
| L Spare parts | | | |

| Type of actuator | | FA160 | FA250 | FA400 | FA800 |
|--------------------|-------|---------------------|-------|-------|-------|
| Ø A | (mm) | 210 | 250 | 300 | 405 |
| H(x) | (mm) | refer to page 4 - 6 | | | |
| max. H4 | (mm) | 90 | 105 | 120 | 165 |
| max. pressure | (bar) | 6 | 6 | 6 | 6 |
| Weight (Actuator.) | (kg) | 6,5 | 9 | 17 | 50 |

max. permissible closing pressures on flow-to-open P2 = 0.
Observe regulations, refer to page 12.

| DN | | | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | |
|--|--|------|-------|------|----|--------|------|--------|------|------|-----|--|
| NPS | | | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | |
| Travel | | (mm) | 6 | 6 | 8 | 13 | 13 | 16 | 20 | 25 | 40 | |
| FA160 Spring closes  (Extended stem on air failure) | Air supply pressure min. (bar) ¹⁾ | | | | | | | | | | | |
| | | 4 | (bar) | 40 | 40 | 26,7 | | | | | | |
| | | 4,5 | (bar) | | | | 20,5 | 11,1 | 1,6 | | | |
| | | 4,5 | (bar) | | | | 40 | 31 | 14,8 | 6,5 | 1,4 | |
| FA250 Spring closes  (Extended stem on air failure) | | | | | | | | | | | | |
| FA400 Spring closes  (Extended stem on air failure) | | | | | | | | | | | | |
| FA800 Spring closes  (Extended stem on air failure) | | | | | | | | | | | | |
| | | 5 | (bar) | | | | | | | 17,4 | 4,3 | |

| DN | | | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | |
|---|--|-------|-------|------|----|--------|------|--------|------|------|------|--|
| NPS | | | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | |
| Travel | | (mm) | 6 | 6 | 8 | 13 | 13 | 16 | 20 | 25 | 40 | |
| FA160 Spring opens  (Retracted stem on air failure) | Air supply pressure min. (bar) ¹⁾ | 3 | (bar) | 40 | 40 | 21,1 | | | | | | |
| | | 4 | (bar) | 40 | 40 | 40 | | | | | | |
| | | 5 | (bar) | 40 | 40 | 40 | | | | | | |
| | | 6 | (bar) | 40 | 40 | 40 | | | | | | |
| FA250 Spring opens  (Retracted stem on air failure) | | 3 | (bar) | | | 13,8 | 6,9 | | | | | |
| | 4 | (bar) | | | | 30 | 17,3 | 6,2 | | | | |
| | 5 | (bar) | | | | 40 | 27,8 | 12,5 | | | | |
| | 6 | (bar) | | | | 40 | 38,2 | 18,7 | | | | |
| FA400 Spring opens  (Retracted stem on air failure) | | 3 | (bar) | | | | | 9,6 | 3,9 | | | |
| | 4 | (bar) | | | | | | 19,6 | 10,5 | 4,7 | | |
| | 5 | (bar) | | | | | | 29,6 | 17,1 | 9 | | |
| | 6 | (bar) | | | | | | 39,5 | 23,8 | 13,2 | | |
| FA800 Spring opens  (Retracted stem on air failure) | | 3 | (bar) | | | | | | | 10,4 | 1,8 | |
| | 4 | (bar) | | | | | | | | 18,9 | 5,6 | |
| | 5 | (bar) | | | | | | | | 27,5 | 9,4 | |
| | 6 | (bar) | | | | | | | | 36 | 13,2 | |

¹⁾Air supply pressure max. to actuator: 6 bar

| | | | | | | | | | | | |
|-----|------|------|----|--------|----|--------|----|-----|-----|-----|-----|
| DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 |
| NPS | 1/2" | 3/4" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | 8" | 10" |

| Standard-flange dimensions | | | | | | | | | | | | Flanges acc. to ANSI B16.5 | |
|----------------------------|---------|----------|--------|---------|--------|--------|--------|--------|--------|--------|---------|----------------------------|---------|
| ANSI150 | ØD1 | (mm) | 89 | 99 | 108 | 127 | 153 | 178 | 191 | 229 | 279 | 343 | 406 |
| ANSI150 | ØK1 | (mm) | 60 | 70 | 79 | 98 | 121 | 140 | 152 | 191 | 241 | 298 | 362 |
| ANSI150 | n x Ød1 | (n x mm) | 4 x 16 | 4 x 16 | 4 x 16 | 4 x 16 | 4 x 19 | 4 x 19 | 4 x 19 | 8 x 19 | 8 x 22 | 8 x 22 | 12 x 25 |
| ANSI300 | ØD2 | (mm) | 95 | 117 | 124 | 155 | 165 | 191 | 210 | 254 | 318 | 381 | 445 |
| ANSI300 | ØK2 | (mm) | 66,5 | 82,5 | 89 | 114 | 127 | 149 | 168 | 200 | 270 | 330 | 387 |
| ANSI300 | n x Ød2 | (n x mm) | 4 x 16 | 1 4 x 9 | 4 x 19 | 4 x 22 | 8 x 19 | 8 x 22 | 8 x 22 | 8 x 22 | 12 x 22 | 12 x 25 | 16 x 29 |

| | | | | | | |
|-----|------|------|----|--------|--------|----|
| DN | 15 | 20 | 25 | 32 | 40 | 50 |
| NPS | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

| Screwed socket dimensions | | | | | | | | |
|---------------------------|---------|--------|-----|------|------|-------|-------|------|
| ANSI300 | lg | (mm) | 15 | 16,3 | 19,1 | 21,4 | 21,4 | 25,7 |
| ANSI300 | G (BSP) | (inch) | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 |
| ANSI300 | G (NPT) | (inch) | | | | | | |

| | | | | | | |
|-----|------|------|----|--------|--------|----|
| DN | 15 | 20 | 25 | 32 | 40 | 50 |
| NPS | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

| Socket weld ends dimensions | | | | | | | | |
|-----------------------------|----|------|------|------|------|------|------|------|
| ANSI300 | l | (mm) | 10 | 13 | 13 | 13 | 13 | 16 |
| ANSI300 | Ød | (mm) | 21,7 | 27,1 | 33,8 | 42,5 | 48,7 | 61,1 |

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

| acc. to ANSI | | | -29°C to 38°C | 93°C | 149°C | 204°C | 260°C | 315°C | 343°C | 371°C | 399°C | 427°C |
|------------------|---------|-------|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| SA216WCB / SA105 | ANSI150 | (bar) | 19,6 | 17,9 | 15,8 | 13,8 | 11,7 | 9,6 | 8,69 | 7,6 | 6,6 | 5,5 |
| SA216WCB / SA105 | ANSI300 | (bar) | 51,1 | 46,6 | 45,2 | 43,8 | 41,4 | 39,3 | 37,9 | 36,6 | 34,8 | 28,3 |

Please indicate when ordering

- Figure-No.
- Nominal pressure
- Nominal diameter
- Special design / accessories

Example:

Figure 32.041; Class 150; DN 100.