

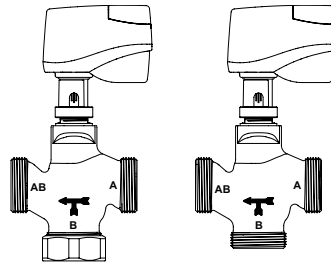
Control valve in 3-way-/straightway form in compact-design for HVAC Applications - Fig. 491 / Fig. 492

Control valve in 3-way-/straightway form for HVAC Applications - Fig. 485/487 / Fig. 486/488

ARI-STEVI® H 491 / 492

Electric actuator

- Enclosure IP 40
- Supply voltage 24V AC/DC
input signal 0-10V
feedback 0-10V
- Supply voltage 24/230V AC
3-point control
- Handwheel



Page 2



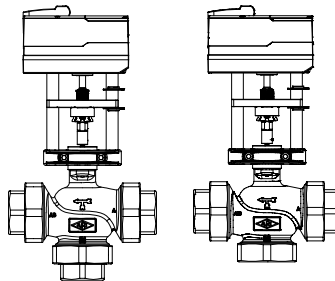
Fig. 487

ARI-STEVI® H 487 / 488

Electric actuator

AVM

- Enclosure IP 54
- Supply voltage 24V AC/DC
input signal 0-10V, 4-20mA, 2/3-point
feedback 0-10V
- Supply voltage 230V AC
2/3-point control
- Handwheel
- Additional devices available,
e.g. feedback 4-20mA



Page 4

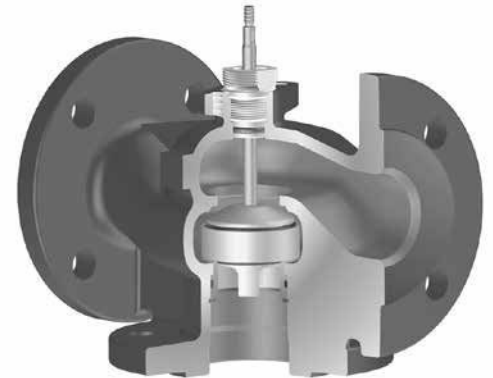


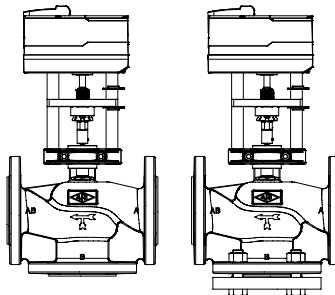
Fig. 485

ARI-STEVI® H 485 / 486

Electric actuator

AVM

- Supply voltage 24V AC/DC
input signal 0-10V, 4-20mA, 2/3-point
feedback 0-10V
- Supply voltage 230 VAC
2/3-point control



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ARI-PACO® 2G 1,6kN

- Supply voltage 24V AC/DC
input signal 0/2-0V
feedback 0/2-10V
- Supply voltage 230V AC
3-point control

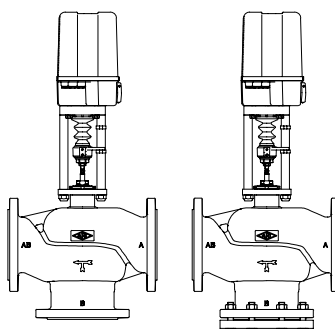
ARI-STEVI® H 485 / 486

Electric actuator

ARI-PREMIO® 2,2-15kN

ARI-PREMIO®-Plus 2G 2,2-15kN

- Enclosure IP 65
- Supply voltage 24V AC/DC
- Supply voltage 100-240V AC
- optional input signal:
-3-point from 12 to 250VAC/DC
-0-10V
-4-20mA
- 2 torque switches
- Handwheel
- Additional devices available,
e.g. potentiometer, feedback 0-10V/4-20mA

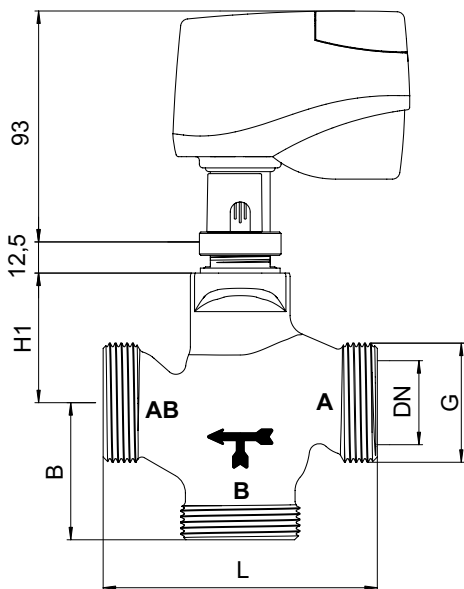
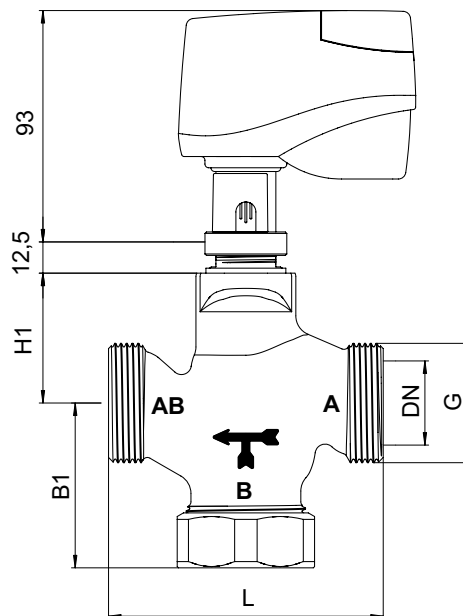
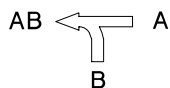
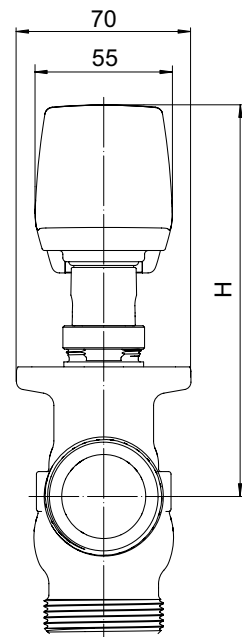
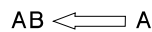


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W. T. Maye, Inc. (WTMI)
1-877-705-9864
info@wtmi-usa.com
www.wtmi-usa.com

Control valve in compact-design for heating, ventilation and air-conditioning - 3-way with threaded joint - Fig. 491

Control valve in compact-design for heating, ventilation and air-conditioning - straight through with threaded joint - Fig. 492


Fig. 491 Mixing function

Fig. 492 Straight through function


| Figure | Nominal pressure | Material | Nominal diameter | Stem sealing | Temperature range |
|--|---|----------|-----------------------|--------------|-------------------|
| 72.491 | PN16 | CC499K | DN15-50 | EPDM-O-ring | 0°C to +120°C |
| 72.492 | PN16 | CC499K | DN15-50 | EPDM-O-ring | 0°C to +120°C |
| Other materials and versions on request. | | | | | |
| Plug design | | | Guiding | Rangeability | |
| standard: | <ul style="list-style-type: none"> A Parabolic plug, Metal-seated B V-port plug, Metal-seated | | Stem and seat guiding | 30 : 1 | |
| Flow characteristic | | | | | |
| standard: | <ul style="list-style-type: none"> A equal percentage to DN32 / A linear DN40 and DN50 B linear | | | | |
| Shut off class (seat / plug leakage classes) | | | | | |
| Metal: | <ul style="list-style-type: none"> DIN EN 60534-4 0,05% of the Kvs | | | | |
| Technical data for actuator refer to data sheet. | | | | | |

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | | |
|--|------------------------------|----------|--|------------------|---------|-----------|-----|---------|---------|
| Kvs-value | | | | | | | | | |
| Kvs-value | Parabolic plug / V-port plug | Standard | (m³/h) | 2,5 | 6,3 | 10 | 16 | 25 | 35 |
| | | Reduced | (m³/h) | 1,6 / 1,0 / 0,63 | 4 | 8,0 / 6,3 | 10 | -- | -- |
| Seat-Ø | | (mm) | 18 | 21 | 27 | 31 | 41 | 51 | |
| Travel | | (mm) | 10 | | | | | | |
| Face-to-face dimension FTF series 1 according to DIN EN 558 | | | | | | | | | |
| L | | (mm) | 80 | 90 | 110 | 120 | 130 | 150 | |
| Connections | | | | | | | | | |
| Ø G | | PN16 | (inch) | G 1 1/8 | G 1 1/4 | G 1 1/2 | G 2 | G 2 1/4 | G 2 3/4 |
| Heights | | | | | | | | | |
| H | | (mm) | 152 | 152 | 158 | 162 | 171 | 171 | |
| H1 | | (mm) | 46 | 46 | 52 | 56 | 65 | 65 | |
| H3 | | (mm) | 65 | 65 | 66 | 67 | 72 | 77 | |
| B | | (mm) | 55 | 55 | 55 | 55 | 60 | 65 | |
| B1 | | (mm) | 65 | 65 | 66 | 67 | 72 | 77 | |
| Weights | | | | | | | | | |
| BR491 | | PN16 | (kg) | 1,3 | 1,4 | 1,6 | 2,2 | 2,6 | 3,7 |
| BR492 | | PN16 | (kg) | 1,4 | 1,5 | 1,8 | 2,4 | 2,9 | 4,2 |
| Closing pressures | | | max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below. | | | | | | |
| Max. allowable differential pressure at flow | | (bar) | 1 | 1 | 1 | 1 | 1 | 0,7 | |
| 0,5 kN | Closing pressure | | (bar) | 12,1 | 9,2 | 5,0 | 3,5 | 1,5 | 0,7 |
| | Operating time | | (s) | 220 | | | | | |
| | Operating speed | | (mm/s) | 0,045 | | | | | |
| Pressure-temperature-ratings | | | | | | | | | |
| acc. to DIN EN 1092-3 | | | 0°C to 120°C | | | | | | |
| CC499K | | PN16 | (bar) | 16 | | | | | |

| Parts | | |
|----------------|--------------|-------------|
| Description | Fig. 72.487 | Fig. 72.488 |
| Body | CC499K | |
| Seat ring | 1.4021+QT | |
| O-ring | EPDM | |
| Retaining ring | FSt | |
| Plug | CW614N | |
| O-ring | EPDM | |
| Stem | 1.4021+QT | |
| Screw joint | CW614N | |
| Retaining ring | CW452K | |
| O-ring | EPDM | |
| Bush | PTFE | |
| Washer | CW508L | |
| O-ring | EPDM | |
| Gasket | Centellen | |
| Sleeve nut | TMP / chrom. | |
| Blind plate | -- | 1.0037 |

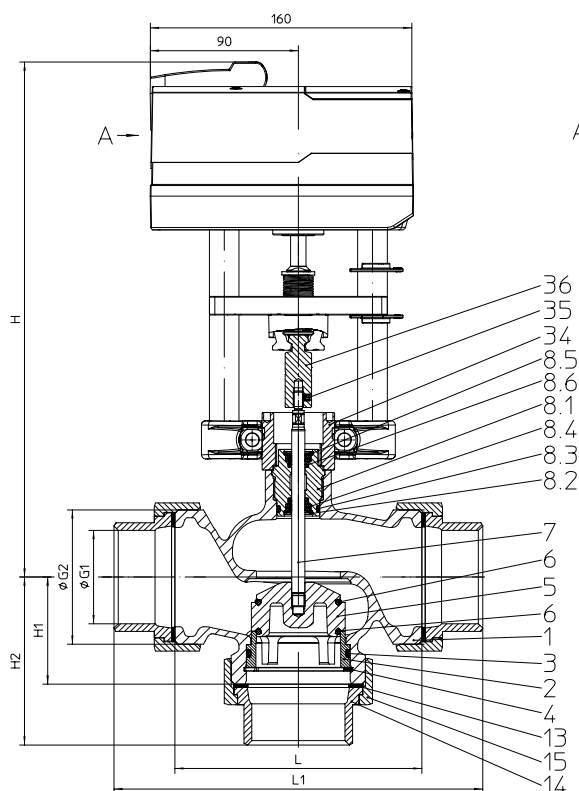
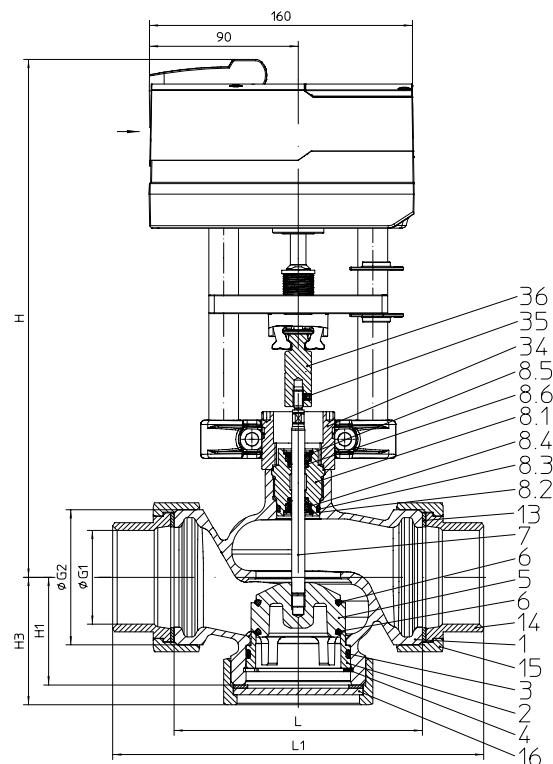
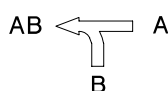
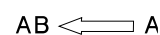
Information / restriction of technical rules need to be observed!

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).

Control valve for heating, ventilation and air-conditioning - 3-way with threaded joint - Fig. 487

Control valve for heating, ventilation and air-conditioning - straight through with threaded joint - Fig. 488


Fig. 487 Mixing function

Fig. 488 Straight through function


| Figure | Nominal pressure | Material | Nominal diameter | Stem sealing | Temperature range |
|--|---|----------|-----------------------|--------------|--|
| 72.487 | PN16 | CC499K | DN15-50 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| 72.488 | PN16 | CC499K | DN15-50 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| Other materials and versions on request. | | | | | |
| Plug design | | | Guiding | Rangeability | |
| standard: | <ul style="list-style-type: none"> A Parabolic plug with EPDM-O-ring B V-port plug with EPDM-O-ring | | Stem and seat guiding | 30 : 1 | |
| Flow characteristic | | | | | |
| standard: | <ul style="list-style-type: none"> A equal percentage B linear | | | | |
| Shut off class (seat / plug leakage classes) | | | | | |
| Metal / Soft seal: | • DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1) | | | | |
| Technical data for actuator refer to data sheet. | | | | | |

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | | |
|--|------------------------------|----------|---|------------------------|--------------|---------|--------------|---------|-----|
| Kvs-value | | | | | | | | | |
| Kvs-value | Parabolic plug / V-port plug | Standard | (m³/h) | 4 | 6,3 | 10 | 16 | 25 | 40 |
| | | Reduced | (m³/h) | 2,5 / 1,6 / 1,0 / 0,63 | 4 | 6,3 | 10 | 16 | 25 |
| Seat-Ø | | (mm) | 18 | 21 | 27 | 31 | 41 | 51 | |
| Travel | | (mm) | 14 | | | | | | |
| Face-to-face dimension FTF series 1 according to DIN EN 558 | | | | | | | | | |
| L | | (mm) | 80 | 90 | 110 | 120 | 130 | 150 | |
| Connections | | | | | | | | | |
| Ø G1 | PN16 | (inch) | G 1/2 | G 3/4 | G 1 | G 1 1/4 | G 1 1/2 | G 2 | |
| Ø G2 | PN16 | (inch) | G 1 1/8 | G 1 1/4 | G 1 1/2 | G 2 | G 2 1/4 | G 2 3/4 | |
| Dimensions | | | | | | | | | |
| L1 | (mm) | 128 | 138 | 166 | 186 | 199 | 223 | | |
| H | (mm) | 294 | 294 | 300 | 304 | 313 | 313 | | |
| H1 | (mm) | 55 | 55 | 55 | 55 | 60 | 65 | | |
| H2 | (mm) | 79 | 79 | 83 | 88 | 94,5 | 101,5 | | |
| H3 | (mm) | 65 | 65 | 66 | 67 | 72 | 75 | | |
| Weights | | | | | | | | | |
| BR487 | PN16 | (kg) | 3,2 | 3,4 | 4 | 4,9 | 5,5 | 7,1 | |
| BR488 | PN16 | (kg) | 3,2 | 3,4 | 4 | 4,9 | 5,5 | 7,1 | |
| Closing pressures | | | max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below. | | | | | | |
| Max. allowable differential pressure at flow | | (bar) | 2 | 2 | 1,5 | 1,5 | 1,5 | 1,5 | |
| AVM 322S/F | Closing pressure | | (bar) | 16 | 16 | 11,3 | 8,3 | 4,4 | 2,6 |
| | Operating time | | (s) | 84 | | | | | |
| | Operating speed | | (mm/s) | 0,17 | | | | | |
| | | | | | | | | | |
| Pressure-temperature-ratings | | | Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. | | | | | | |
| acc. to DIN EN 1092-3 | | | -10°C to 20°C | | 100°C | | 130°C | | |
| CC499K | PN16 | (bar) | 16 | | 16 | | 16 | | |

| Parts | | | Fig. 72.487 | Fig. 72.488 |
|--------------|------------------|----------------|--------------------|--------------------|
| Pos. | Sp.p. | Description | | |
| 1 | | Body | CC499K | |
| 2 | | Seat ring | 1.4021+QT | |
| 3 | | O-ring | EPDM | |
| 4 | | Retaining ring | FSt | |
| 5 | | Plug | CW614N | |
| 6 | | O-ring | EPDM | |
| 7 | | Stem | 1.4571 | |
| 8.1 | x (cop. unit) | Screw joint | CW614N | |
| 8.2 | | Retaining ring | CW452K | |
| 8.3 | | O-ring | EPDM | |
| 8.4 | | Bush | PTFE | |
| 8.5 | | Washer | CW508L | |
| 8.6 | | O-ring | EPDM | |
| 13 | | Gasket | Centellen | |
| 14 | | Sleeve | EM-JM1130 | |
| 15 | | Sleeve nut | EM-JM1130 | |
| 16 | | Blind plate | -- | 1.0037 |
| 34 | | Adapter | 1.0715+C | |
| 35 | | Grub screw | 45H-A2B | |
| 36 | | Stem adapter | 1.4021+QT | |
| | | L Spare parts | | |

Information / restriction of technical rules need to be observed!

A production permission acc. to TRB 801 No. 45 is available.

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).

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

Control valve for heating, ventilation and air-conditioning - straight through with flanges - Fig. 486

with AVM

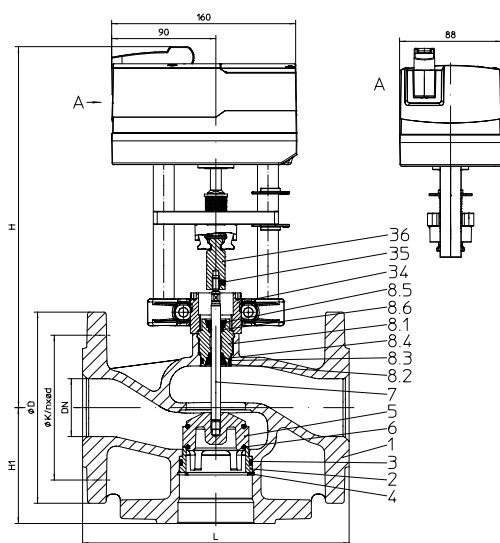


Fig. 485 Mixing function

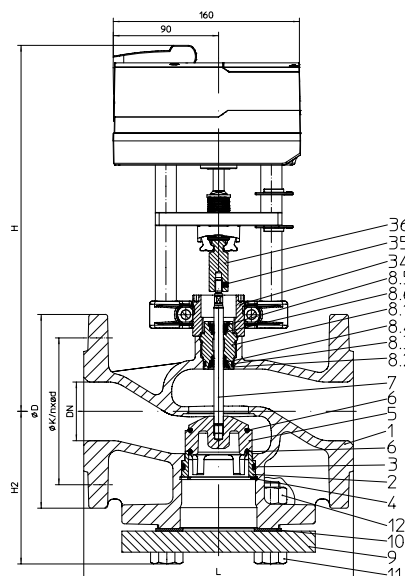
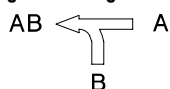
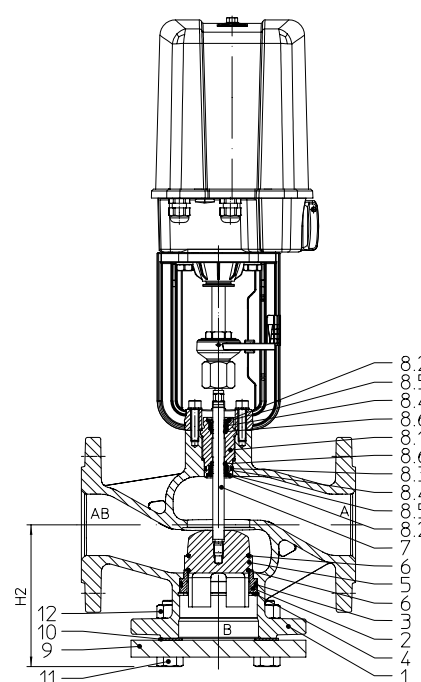
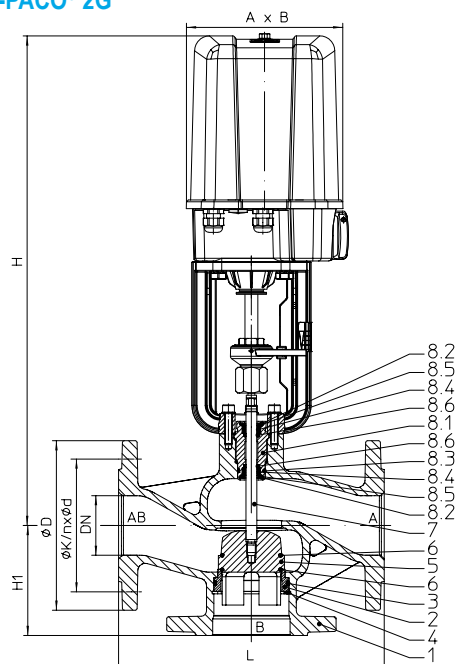


Fig. 486 Straight through function



with ARI-PACO® 2G



| Figure | Nominal pressure | Material | Nominal diameter | Stem sealing | Temperature range |
|--------|------------------|-----------|------------------|--------------|--|
| 10.485 | PN6 | EN-JL1040 | DN15-100 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| 12.485 | PN16 | EN-JL1040 | DN15-100 | | |
| 10.486 | PN6 | EN-JL1040 | DN15-100 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| 12.486 | PN16 | EN-JL1040 | DN15-100 | | |

Other materials and versions on request.

| Plug design | Guiding | Rangeability |
|---|--|--------------|
| standard: <ul style="list-style-type: none"> • A Parabolic plug with EPDM-O-ring • B V-port plug with EPDM-O-ring | Stem and seat guiding | 30 : 1 |
| Flow characteristic | | |
| standard: <ul style="list-style-type: none"> • A equal percentage • B linear | | |
| Shut off class (seat / plug leakage classes) | | |
| Metal / Soft seal: | DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1) | |
| Technical data for actuator refer to data sheet. | | |

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | | |
|---|------------------------------|---|----------------------|------------------------|--------|--------|----------------------|--------|--------|--------|--------|-----|
| Kvs-Werte | | | | | | | | | | | | |
| Kvs-value | Parabolic plug / V-port plug | Standard | (m³/h) | 4 | 6,3 | 10 | 16 | 25 | 40 | 63 | 100 | 160 |
| | | Reduced | (m³/h) | 2,5 / 1,6 / 1,0 / 0,63 | 4 | 6,3 | 10 | 16 | 25 | 40 | 63 | 100 |
| Seat-Ø | | (mm) | | 18 | 21 | 27 | 31 | 41 | 51 | 66 | 81 | 101 |
| Travel | | (mm) | | | | 14 | | | | | 30 | |
| Face-to-face dimension FTF series 1 according to DIN EN 558 | | | | | | | | | | | | |
| L | | (mm) | | 130 | 150 | 160 | 180 | 200 | 230 | 290 | 310 | 350 |
| Flanges acc. to DIN EN 1092-2 | | | | | | | | | | | | |
| | | Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545 | | | | | | | | | | |
| ØD | PN6 | (mm) | 80 | 90 | 100 | 120 | 130 | 140 | 160 | 190 | 210 | |
| | PN16 | (mm) | 95 | 105 | 115 | 140 | 150 | 165 | 185 | 200 | 220 | |
| ØK | PN6 | (mm) | 55 | 65 | 75 | 90 | 100 | 110 | 130 | 150 | 170 | |
| | PN16 | (mm) | 65 | 75 | 85 | 100 | 110 | 125 | 145 | 160 | 180 | |
| n x Ød | PN6 | (mm) | 4 x 11 | 4 x 11 | 4 x 11 | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 18 | 4 x 18 | |
| | PN16 | (mm) | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 18 | 4 x 18 | 4 x 18 | 4 x 18 | 8 x 18 | 8 x 18 | |
| Heights | | | | | | | | | | | | |
| H (with AVM) | | (mm) | 294 | 294 | 300 | 293 | 304 | 312 | -- | -- | -- | |
| H (with ARI-PACO® 2G) | | (mm) | -- | -- | -- | -- | -- | -- | 537 | 547 | 562 | |
| H1 | | (mm) | 65 | 70 | 75 | 95 | 100 | 100 | 120 | 130 | 150 | |
| H2 | PN6 | (mm) | 86 | 93 | 98 | 119 | 124 | 124 | 144 | 158 | 178 | |
| | PN16 | (mm) | 89 | 96 | 101 | 123 | 128 | 130 | 150 | 162 | 182 | |
| Weights | | | | | | | | | | | | |
| BR485 | PN6 | (kg) | 3,6 | 4,6 | 5,3 | 7,1 | 9,1 | 10,3 | 21,6 | 28,6 | 38,6 | |
| | PN16 | (kg) | 4,4 | 5,3 | 6,3 | 8,8 | 10,8 | 13,8 | 26,6 | 31,6 | 41,6 | |
| BR486 | PN6/16 | (kg) | 4,2 | 5,5 | 6,4 | 8,6 | 10,9 | 12,4 | 25,6 | 32,6 | 44,6 | |
| | PN6/16 | (kg) | 6,4 | 6,6 | 7,9 | 11,2 | 13,5 | 17,5 | 30,6 | 37,6 | 48,6 | |
| Closing pressures | | | | | | | | | | | | |
| max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below. | | | | | | | | | | | | |
| Max. allowable differential pressure at flow | | (bar) | 2 | | | 1,5 | | | 1 | 0,8 | 0,6 | |
| AVM 32S/F | Closing pressure | (bar) | 16 | 16 | 11,3 | 8,3 | 4,4 | 2,6 | -- | -- | -- | |
| | Operating time | (s) | 84 | | | | | | -- | | | |
| | Operating speed | (mm/s) | 0,17 | | | | | | -- | | | |
| ARI-PACO® 2G 1,6 kN | Closing pressure | (bar) | -- | -- | -- | -- | -- | -- | 3,2 | 2 | 1,2 | |
| | Operating time | (s) | -- | | | | | | 120 | | | |
| | Operating speed | (mm/s) | 0,25 | | | | | | -- | | | |
| Pressure-temperature-ratings | | | | | | | | | | | | |
| Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. | | | | | | | | | | | | |
| acc. to DIN EN 1092-2 | | | -10°C to 120°C | | | 120°C | | | 130°C | | | |
| EN-JL1040 | PN6 | (bar) | 6 | | | 6 | | | 5,8 | | | |
| EN-JL1040 | PN16 | (bar) | 16 | | | 16 | | | 15,5 | | | |
| Parts | | | | | | | | | | | | |
| Pos. | Sp.p. | Description | Fig. 10.485 / 12.485 | | | | Fig. 10.486 / 12.486 | | | | | |
| 1 | | Body | EN-JL1040 | | | | | | | | | |
| 2 | | Seat ring | 1.4021+QT | | | | | | | | | |
| 3 | | O-ring | EPDM | | | | | | | | | |
| 4 | | Retaining ring | FSt | | | | | | | | | |
| 5 | | Plug | CW614N | | | | | | | | | |
| 6 | | O-ring | EPDM | | | | | | | | | |
| 7 | | Stem | 1.4571 | | | | | | | | | |
| 8.1 | x (cpt. unit) | Screw joint | CW614N | | | | | | | | | |
| 8.2 | | Retaining ring | CW452K | | | | | | | | | |
| 8.3 | | O-ring | EPDM | | | | | | | | | |
| 8.4 | | Bush | PTFE | | | | | | | | | |
| 8.5 | | Washer | CW508L | | | | | | | | | |
| 8.6 | | O-ring | EPDM | | | | | | | | | |
| 9 | | Flange | -- | | | | 1.0037 | | | | | |
| 10 | | Gasket | -- | | | | Centellen | | | | | |
| 11 | | Hexagon screws | -- | | | | 5,6 - A2B | | | | | |
| 12 | | Hexagon nut | -- | | | | C35E - A2B | | | | | |
| 34 | | Adapter | 1.0715+C | | | | | | | | | |
| 35 | | Grub screw | 45H-A2B | | | | | | | | | |
| 36 | | Stem adapter | 1.4021+QT | | | | | | | | | |
| | L Spare parts | | | | | | | | | | | |

Information / restriction of technical rules need to be observed!

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

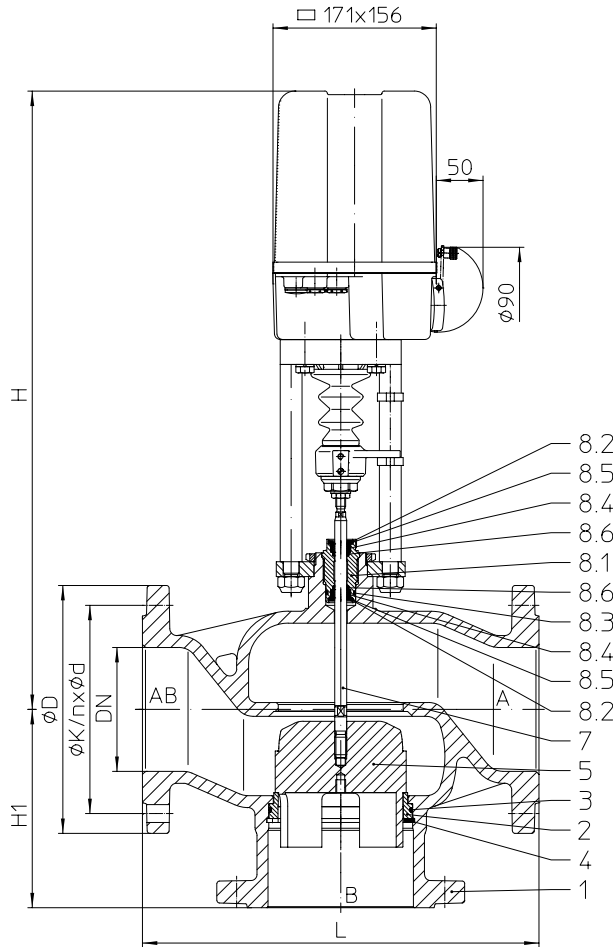
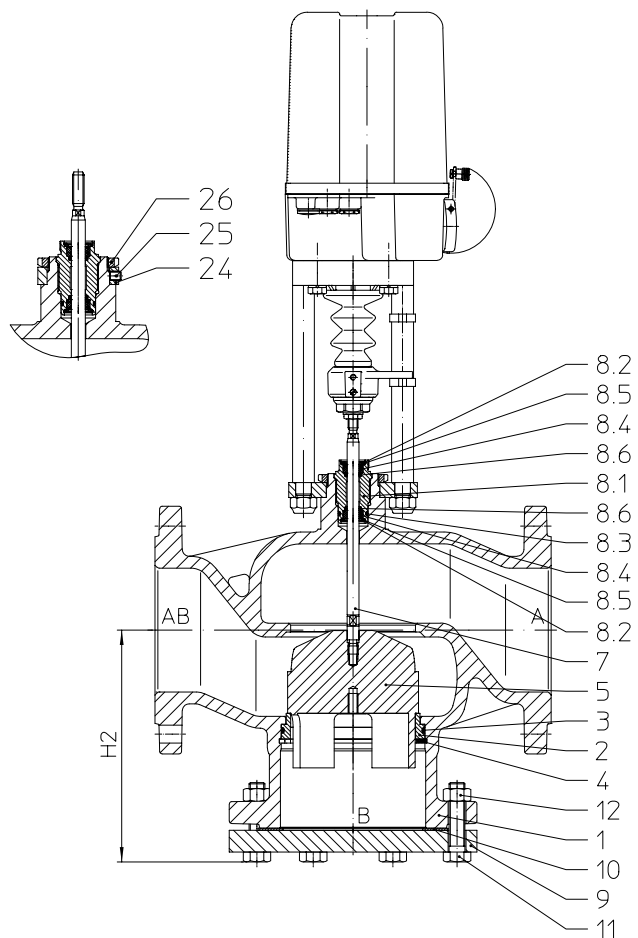
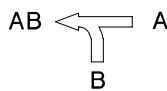
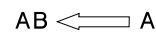
A production permission acc. to TRB 801 No. 45 is available (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

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).

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

Control valve for heating, ventilation and air-conditioning - straight through with flanges - Fig. 486


Fig. 485 Mixing function

Fig. 486 Straight through function


| Figure | Nominal pressure | Material | Nominal diameter | Stem sealing | Temperature range |
|--|---|-----------------------|------------------|--------------|--|
| 12.485 | PN16 | EN-JL1040 | DN125-150 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| 12.486 | PN16 | EN-JL1040 | DN125-150 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| Other materials and versions on request. | | | | | |
| Plug design | | Guiding | | Rangeability | |
| standard: | <ul style="list-style-type: none"> A Parabolic plug, metal seat B V-port plug, metal seat | Stem and seat guiding | | 30 : 1 | |
| Flow characteristic | | | | | |
| standard: | <ul style="list-style-type: none"> A equal percentage B linear | | | | |
| Shut off class (seat / plug leakage classes) | | | | | |
| Metal / Metal: | • 0,05% vom Kvs | | | | |
| Technical data for actuator refer to data sheet. | | | | | |

| | | | |
|------------------|------------------------------|------------|-------------------|
| DN | | 125 | 150 |
| Kvs-value | | | |
| Kvs-value | Parabolic plug / V-port plug | Standard | (m³/h) 220 |
| | | Reduced | (m³/h) -- |
| Seat-Ø | | (mm) 126 | 151 |
| Travel | | (mm) | 40 |

| | | | |
|--|------|-----|-----|
| Face-to-face dimension FTF series 1 according to DIN EN 558 | | | |
| L | (mm) | 400 | 480 |

| | | | | |
|--------------------------------------|------|------|--|--------|
| Flanges acc. to DIN EN 1092-2 | | | Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545 | |
| ØD | PN16 | (mm) | 250 | 285 |
| ØK | PN16 | (mm) | 210 | 240 |
| n x Ød | PN16 | (mm) | 8 x 18 | 8 x 22 |

| | | | | |
|----------------|--|------|-----|-----|
| Heights | | | | |
| H | | (mm) | 617 | 638 |
| H1 | | (mm) | 200 | 210 |
| H2 | | (mm) | 234 | 247 |

| | | | | | |
|----------------|------|--------|------|------|------|
| Weights | | | | | |
| BR485 | PN16 | 2,2 kN | (kg) | 58 | 82 |
| | PN16 | 5 kN | (kg) | 58,5 | 82,5 |
| BR486 | PN16 | 2,2 kN | (kg) | 67,5 | 94,5 |
| | PN16 | 5 kN | (kg) | 68 | 95 |

| | | | | |
|--------------------------|--|--|--|--|
| Closing pressures | max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below. | | | |
|--------------------------|--|--|--|--|

| | | | | |
|--|------------------|--------|------|-----|
| Max. allowable differential pressure at flow | | (bar) | 0,6 | |
| 2,2 kN | Closing pressure | (bar) | 1,1 | 0,7 |
| | Operating time | (s) | 105 | |
| | Operating speed | (mm/s) | 0,38 | |
| 5 kN | Closing pressure | (bar) | 3,3 | 2,2 |
| | Operating time | (s) | 105 | |
| | Operating speed | (mm/s) | 0,38 | |

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

| | | | | | |
|------------------------------|------|-------|-----------------------|--------------|--------------|
| acc. to DIN EN 1092-2 | | | -10°C to 120°C | 120°C | 130°C |
| EN-JL1040 | PN16 | (bar) | 16 | 16 | 15,5 |

| Parts | | | | | |
|--------------|------------------|----------------|-------------|-------------|--|
| Pos. | Sp.p. | Description | Fig. 12.485 | Fig. 12.486 | |
| 1 | | Body | EN-JL1040 | | |
| 2 | x | Seat ring | 1.4021+QT | | |
| 3 | x | O-ring | EPDM | | |
| 4 | x | Retaining ring | FSt | | |
| 5 | x | Plug | 1.4021+QT | | |
| 6 | x | O-ring | EPDM | | |
| 7 | | Stem | 1.4571 | | |
| 8.1 | x (cpt. unit) | Screw joint | CW614N | | |
| 8.2 | | Retaining ring | CW452K | | |
| 8.3 | | O-ring | EPDM | | |
| 8.4 | | Bush | PTFE | | |
| 8.5 | | Washer | CW508L | | |
| 8.6 | | O-ring | EPDM | | |
| 9 | x | Flange | -- | 1.0037 | |
| 10 | x | Gasket | -- | Centellen | |
| 11 | | Hexagon screws | -- | 5.6 - A2B | |
| 12 | | Hexagon nut | -- | C35E - A2B | |
| 24 | | Traverse | 1.0037 | | |
| 25 | | Grub screw | St-A2B | | |
| 26 | | Groove nut | St-A4G | | |
| | L Spare parts | | | | |

Information / restriction of technical rules need to be observed!

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production permission acc. to TRB 801 No. 45 is available (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

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).

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

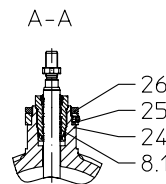
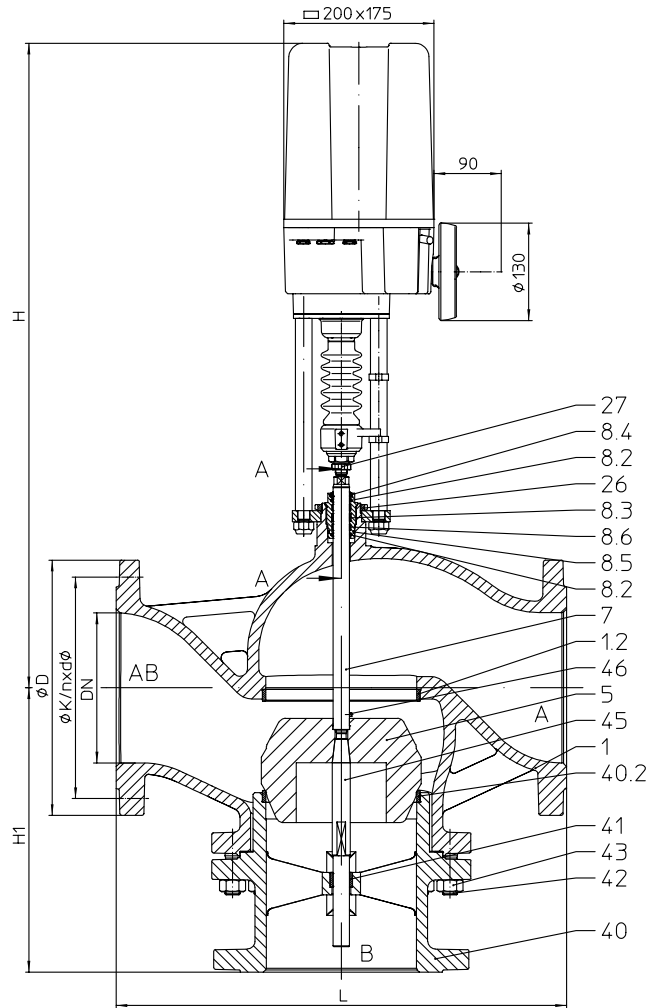
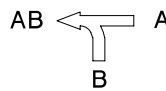


Fig. 485 Mixing function



| Figure | Nominal pressure | Material | Nominal diameter | Stem sealing | Temperature range |
|--|--|-----------|---------------------|--------------|--|
| 12.485 | PN16 | EN-JL1040 | DN200-250 | EPDM-O-ring | 0°C to +130°C; with stem heating to -10°C |
| Other materials and versions on request. | | | | | |
| Plug design | | | Guiding | Rangeability | |
| standard: | <ul style="list-style-type: none"> • A Parabolic plug, metal seat • B Parabolic plug, metal seat | | double plug guiding | 30 : 1 | |
| Flow characteristic | | | | | |
| standard: | <ul style="list-style-type: none"> • A linear • B linear | | | | |
| Shut off class (seat / plug leakage classes) | | | | | |
| Metal / Metal: | • 0,05% vom Kvs | | | | |
| Technical data for actuator refer to data sheet. | | | | | |

| | | | |
|------------------|----------------|------------|-------------------|
| DN | | 200 | 250 |
| Kvs-value | | | |
| Kvs-value | Parabolic plug | Standard | (m³/h) 630 |
| | | Reduced | (m³/h) -- |
| Seat-Ø | | (mm) 201 | 251 |
| Travel | | (mm) | 65 |

| | | | |
|--|------|-----|-----|
| Face-to-face dimension FTF series 1 according to DIN EN 558 | | | |
| L | (mm) | 600 | 730 |

| | | | | |
|--------------------------------------|------|------|--|---------|
| Flanges acc. to DIN EN 1092-2 | | | Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545 | |
| ØD | PN16 | (mm) | 340 | 405 |
| ØK | PN16 | (mm) | 295 | 355 |
| n x Ød | PN16 | (mm) | 12 x 22 | 12 x 26 |

| | | | |
|----------------|------|-----|-----|
| Heights | | | |
| H | (mm) | 873 | 919 |
| H1 | (mm) | 379 | 439 |

| | | | |
|----------------|------|----------|----------|
| Weights | | | |
| BR485 | PN16 | 12/15 kN | (kg) 173 |
| | | | 283 |

| | | | |
|--------------------------|--|--|--|
| Closing pressures | | max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below. | |
|--------------------------|--|--|--|

| | | | | |
|--|------------------|--------|------|-----|
| Max. allowable differential pressure at flow | | (bar) | 0,6 | |
| 12 kN | Closing pressure | (bar) | 3,3 | 2,1 |
| | Operating time | (s) | 171 | |
| | Operating speed | (mm/s) | 0,38 | |
| 15 kN | Closing pressure | (bar) | 4,2 | 2,7 |
| | Operating time | (s) | 171 | |
| | Operating speed | (mm/s) | 0,38 | |

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

| | | | | |
|------------------------------|------|-----------------------|--------------|--------------|
| acc. to DIN EN 1092-2 | | -10°C to 120°C | 120°C | 130°C |
| EN-JL1040 | PN16 | (bar) 16 | 16 | 15,5 |

| Parts | | | |
|---|------------------|----------------|-------------|
| Pos. | Sp.p. | Description | Fig. 12.485 |
| 1 | | Body | EN-JL1040 |
| 1.2 | x | Seat ring | 1.4021+QT |
| 3 | x | O-ring | EPDM |
| 4 | x | Retaining ring | FSt |
| 5 | x | Plug | 1.4021+QT |
| 6 | x | O-ring | EPDM |
| 7 | x | Stem | 1.4571 |
| 8.1 | x (cpt. unit) | Screw joint | CW614N |
| 8.2 | | O-ring | EPDM |
| 8.3 | | Guide bush | PTFE |
| 8.4 | | Scraper | Polyurethan |
| 8.5 | | O-ring | EPDM |
| 8.6 | | Lubricant | |
| 24 | | Traverse | 1.0037 |
| 25 | | Grub screw | St-A2B |
| 26 | | Groove nut | St-A4G |
| 40 | | Bottom flange | EN-JS1049 |
| 40.1 | | Seat ring | 1.4021+QT |
| 41 | | Guide bushing | 1.4021+QT |
| 42 | | Stud | 1.7218 |
| 43 | | Hexagon nut | 1.1181 |
| 44 | | Gasket | Graphite |
| 45 | | Plug shaft | 1.4021+QT |
| 46 | | Grub screw | A2 |
| L Spare parts (Pos. 8.1 - 8.6 will be supplied as unit) | | | |

Information / restriction of technical rules need to be observed!

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

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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).

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 - Product data could be taken for a direct order.
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 - Tender specifications also possible in GAEB format.
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