

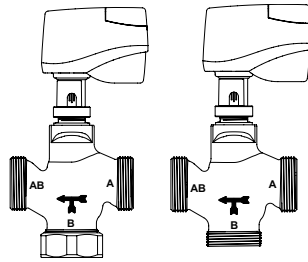
Control valve in 3-way-/straightway form in compact-design for HVAC Applications - Fig. 491 / Fig. 492

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



Page 2



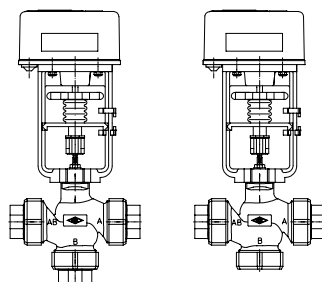
Fig. 487

**ARI-STEVI® H 487 / 488**

**Electric actuator**

**ARI-PACO 0,85kN**

- Supply voltage 24V/50Hz  
input signal 0-10 V  
feedback 0-10 V
- Supply voltage 24/230V AC  
3-step control
- Handwheel
- Travel indicator
- Additional devices available,  
e.g. potentiometer



Page 4

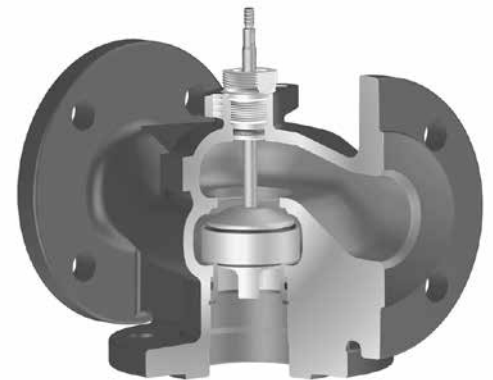


Fig. 485

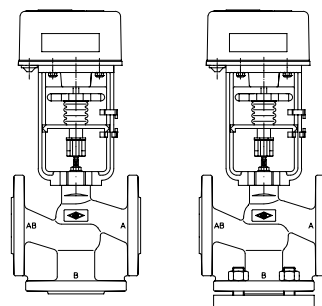
**ARI-STEVI® H 485 / 486**

**Electric actuator**

**ARI-PACO 0,85kN**

**ARI-PACO 2G 1,6kN**

- Supply voltage 24V/50Hz  
input signal 0-10 V  
feedback 0-10 V
- Supply voltage 24/230 V AC  
3-step control
- Handwheel
- Travel indicator
- Additional devices available,  
e.g. potentiometer



Page 6

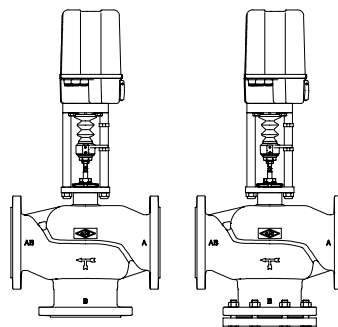
**ARI-STEVI® H 485 / 486**

**Electric actuator**

**ARI-PREMIO 2,2-15kN**

**ARI-PREMIO-Plus 2G 2,2-15kN**

- Enclosure IP 65
- Supply voltage 24V AC/DC
- Supply voltage 90-264V 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



Page 8

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

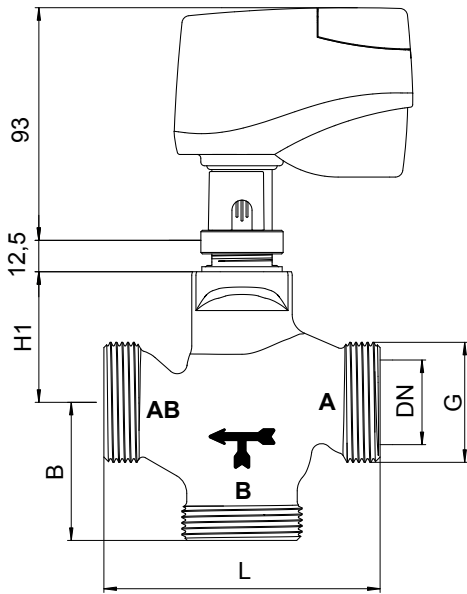


Fig. 491 Mixing function

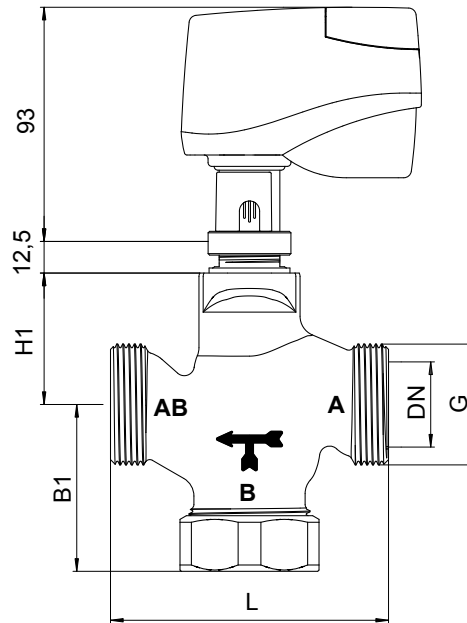
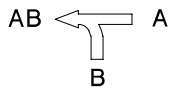
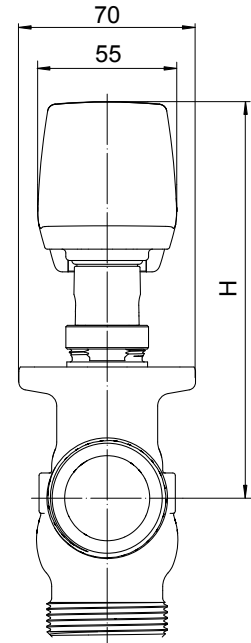
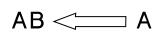


Fig. 492 Straight through function



| 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"> <li>A Parabolic plug, Metal-seated</li> <li>B V-port plug, Metal-seated</li> </ul>   |          | Stem and seat guiding | 30 : 1       |                   |
| Flow characteristic                              |   |          |                       |              |                   |
| standard:  | <ul style="list-style-type: none"> <li>A equal percentage to DN32 / A linear DN40 and DN50</li> <li>B linear</li> </ul> |          |                       |              |                   |
| Shut off class (seat / plug leakage classes)     |   |          |                       |              |                   |
| Metal:   | <ul style="list-style-type: none"> <li>DIN EN 60534-4 0,05% of the Kvs</li> </ul>                                       |          |                       |              |                   |
| Technical data for actuator refer to data sheet. |   |          |                       |              |                   |

| DN   |                              | 15       | 20   | 25               | 32      | 40        | 50  |         |         |
|--|------------------------------|----------|--|------------------|---------|-----------|-----|---------|---------|
| <b>Kvs-value</b>   |                              |          |  |                  |         |           |     |         |         |
| Kvs-value  | Parabolic plug / V-port plug | Standard | (m <sup>3</sup> /h)  | 2,5              | 6,3     | 10        | 16  | 25      | 35      |
|  |                              | Reduced  | (m <sup>3</sup> /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   |                  |         |           |     |         |         |
| <b>Face-to-face dimension FTF series 1 according to DIN EN 558</b> |                              |          |  |                  |         |           |     |         |         |
| L  |                              | (mm)     | 80   | 90               | 110     | 120       | 130 | 150     |         |
| <b>Connections</b>   |                              |          |  |                  |         |           |     |         |         |
| 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 |
| <b>Heights</b>   |                              |          |  |                  |         |           |     |         |         |
| 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      |         |
| <b>Weights</b>   |                              |          |  |                  |         |           |     |         |         |
| 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     |
| <b>Closing pressures</b>   |                              |          | <b>max. permissible closing pressures</b> on flow-to-open P2 = 0.<br>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            |         |           |     |         |         |
| <b>Pressure-temperature-ratings</b>                                |                              |          |  |                  |         |           |     |         |         |
| <b>acc. to DIN EN 1092-3</b>                                       |                              |          | <b>0°C to 120°C</b>  |                  |         |           |     |         |         |
| CC499K   |                              | PN16     | (bar)  | 16               |         |           |     |         |         |

| <b>Parts</b>   |                       |                |
|----------------|-----------------------|----------------|
| Description    | Fig. 72.487           | Fig. 72.488    |
| Body           | CuSn5Zn5Pb5-C, CC499K |                |
| Seat ring      | X20Cr13+QT, 1.4021+QT |                |
| O-ring         | EPDM                  |                |
| Retaining ring | FSt                   |                |
| Plug           | CuZn39Pb3, CW614N     |                |
| O-ring         | EPDM                  |                |
| Stem           | X20Cr13+QT, 1.4021+QT |                |
| Screw joint    | CuZn39Pb3, CW614N     |                |
| Retaining ring | CuSn6, CW452K         |                |
| O-ring         | EPDM                  |                |
| Bush           | PTFE                  |                |
| Washer         | CuZn37, CW508L        |                |
| O-ring         | EPDM                  |                |
| Gasket         | Centellen             |                |
| Sleeve nut     | TMP / chrom.          |                |
| Blind plate    | --                    | S235JR, 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).

**myValve®GBT - Your Valve Sizing-Program.**

"myValve® HVAC", the ARI valve sizing program, provides direct access to all information which is relevant for planning and engineering your individual application. In addition to the industrial version, you can now also benefit from a new version that was created especially for HVAC applications and is optimised for heating, cold water, air conditioning, ventilation and cooling. With myValve® HVAC you not only calculate your ARI system components. You also have access to all other data about the selected product, such as order information, tender specifications, spare parts drawings, operating instructions, data sheets, 3D CAD data, etc., whenever you need it.



- Product guidance:** - Preselection of different HVAC systems to guide you to the ideal products
- Product sizing:** - CONTROL (including selection of the electric actuators), ISOLATION-valves, ISOLATION-butterfly valves (including actuators), FLOW REGULATION and SAFETY
- Media:** **Integrated media database for the media used in HVAC applications:**
- Glycols
  - Water mixtures
- Special features:**
- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number.
  - Direct output or calculation and product data in PDF format.
  - Product data could be taken for a direct order.
  - Settings with over pressure or absolute pressure.
  - All ARI valves for HVAC applications are integrated in a data bank.
  - Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram, spare part drawings, CAD symbols and tender specifications.
  - CAD-Dateien im BIM-REVIT-Format geplant
  - Tender specifications also possible in GAEB format.
  - Operation in company networks possible (no complex installations on individually PC's necessary).
  - Extensive catalogue extending over several product groups.
- System Requirements:** Windows operating systems, Linux, etc.

Have we sparked your interest? Please contact us at [info.vertrieb@ari-armaturen.com](mailto:info.vertrieb@ari-armaturen.com) or register for a free download link at [www.ari-armaturen.com/myvalve-gbt](http://www.ari-armaturen.com/myvalve-gbt)