

# H-piece valves type RLV-K for valve radiators



- with adjustable radiator share for one-pipe and two-pipe systems
- blockable and drainable



RLV-K straight, radiator connection G 1/2 and G 3/4 A

RLV-K angle, radiator connection G 1/2 and G 3/4 A

Fill and drain tap

**Application**

By means of the H-piece valve type RLV-K, every valve radiator with a centre distance between the connections of 50 mm can be blocked individually, e.g. in order to carry out trouble-free maintenance without affecting other parts of the system.

H-piece valve type RLV-K is nickel plated and is available in straight and angle versions. Special adapters ensure that the H-piece valve can be used both for radiators with an internal thread of G 1/2 and with an external thread of G 3/4 A. All adapters are self-sealing.

RLV-K can be shifted from two-pipe to one-pipe operation. The factory setting is for two-pipe operation.

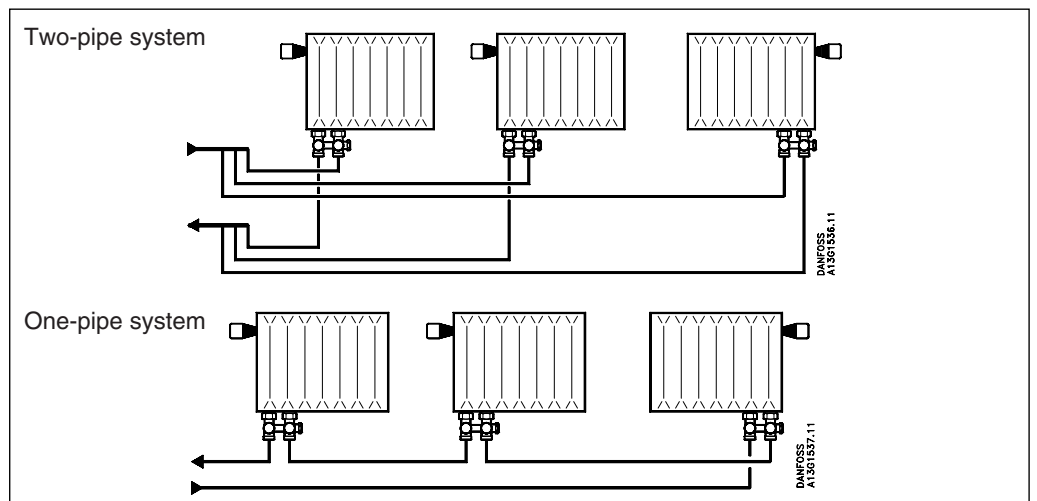
In one-pipe operation, the water flow to the radiator can be set infinitely variably. The shift to one-pipe operation is simply done by turning the bypass spindle.

A fill and drain tap is available as an accessory to RLV-K. The fill and drain tap is only available without nickel plating.

Connection to copper, soft steel, PEX and Alupex pipes is made with Danfoss compression fittings. See separate datasheet.

In order to avoid deposition and corrosion, the composition of the hot water should be in accordance with the VDI 2035 guideline (Verein Deutscher Ingenieure).

**System**



**Ordering and data**

| Type  | Version  | Connection |         | Max. operation pressure | Test pressure | Max. water temperature | Code no. |
|-------|----------|------------|---------|-------------------------|---------------|------------------------|----------|
|       |          | Radiator   | System  |                         |               |                        |          |
| RLV-K | Angle    | G 1/2 A    | G 3/4 A | 10 bar                  | 16 bar        | 120 °C                 | 003L0282 |
|       | Straight |            |         |                         |               |                        | 003L0280 |
|       | Angle    | G 3/4      | G 3/4 A |                         |               |                        | 003L0283 |
|       | Straight |            |         |                         |               |                        | 003L0281 |

Accessories

| Product  |  | Code no. |
|--|--|----------|
| Fill and drain tap without nickel plating, with 3/4" external thread and hose nozzle       |  | 003L0152 |
| Adapter <sup>1)</sup> incl. seal for valve radiator with G 3/4 A external thread           |  | 003L0294 |
| Self-sealing connection nipple <sup>1)</sup> for valve radiator with G 1/2 internal thread |  | 003L0295 |
| Convection brake <sup>1)</sup> for one-pipe systems  |  | 003L0296 |

RLV-K is suitable for connecting copper, soft steel or plastic pipes. Use Danfoss compression fittings.

<sup>1)</sup> Packing size = 20 pcs.

Capacity

| RLV-K   | Radiator share                      | k <sub>v</sub> -value (m <sup>3</sup> /h) |     |     |     |     |     |
|---|-------------------------------------|---|-----|-----|-----|-----|-----|
|   |                                     | 100% <sup>2)</sup>                        | 50% | 35% | 30% | 25% | 20% |
| RLV-K   | k <sub>vs</sub> -value              | 1.4                                       | 1.8 | 2.0 |     |     |     |
| RLV-K with RA-N integrated valve <sup>1)</sup>            | k <sub>v</sub> -value <sup>3)</sup> | 0.7                                       | 1.2 | 1.5 |     |     |     |
| RLV-K set to 35% with RA-N integrated valve <sup>1)</sup> | k <sub>v</sub> -value               |   |     |     | 1.4 | 1.3 | 1.2 |
|   | Presetting value                    | N   | N   | N   | 6   | 5   | 4   |

<sup>1)</sup> Radiator flow in accordance with the setting of the bypass regulation with radiator and Danfoss integrated valve, type RA-N.

<sup>2)</sup> Factory setting = two-pipe operation.

<sup>3)</sup> The k<sub>v</sub>-values give the flow volume (Q) in m<sup>3</sup>/h through the RLV-K union in combination with a Danfoss built-in valve with k<sub>v</sub> = 0.87 m<sup>3</sup>/h at Xp = 2 K.

Setting of bypass regulation in one-pipe operation

The factory setting RLV-K is for two-pipe operation. This means that the integral bypass regulation is turned off.

Shifting to one-pipe operation is made by opening the bypass spindle. The radiator share (flow) can be adjusted infinitely variably.

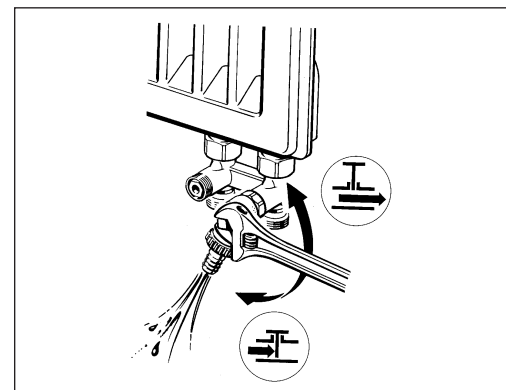
The connection between flow and number of turns can be seen from the diagram next to this text (at setting "N" of the Danfoss integrated valve and at Xp = 2 K).



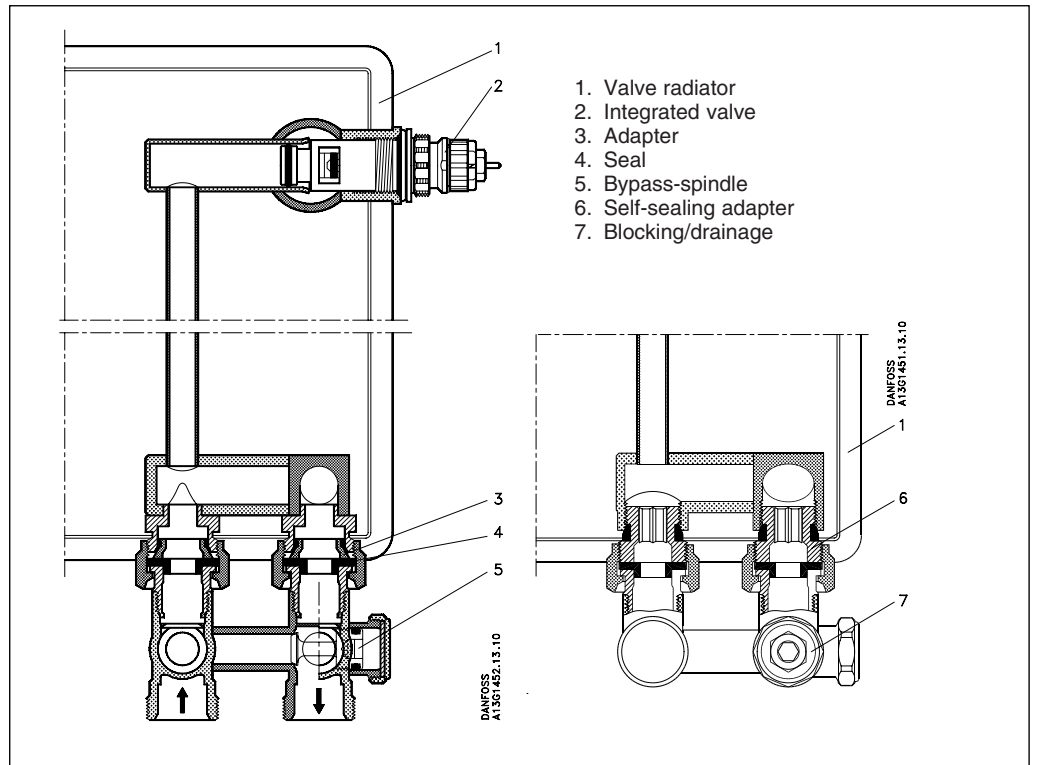
Draining of the radiator

To drain the radiator, first unscrew the cover caps. Then shut-off the inlet and return flow. When the drain tap has been mounted, open it by turning the square (see ill.).

The accompanying hose nozzle can revolve in any direction.



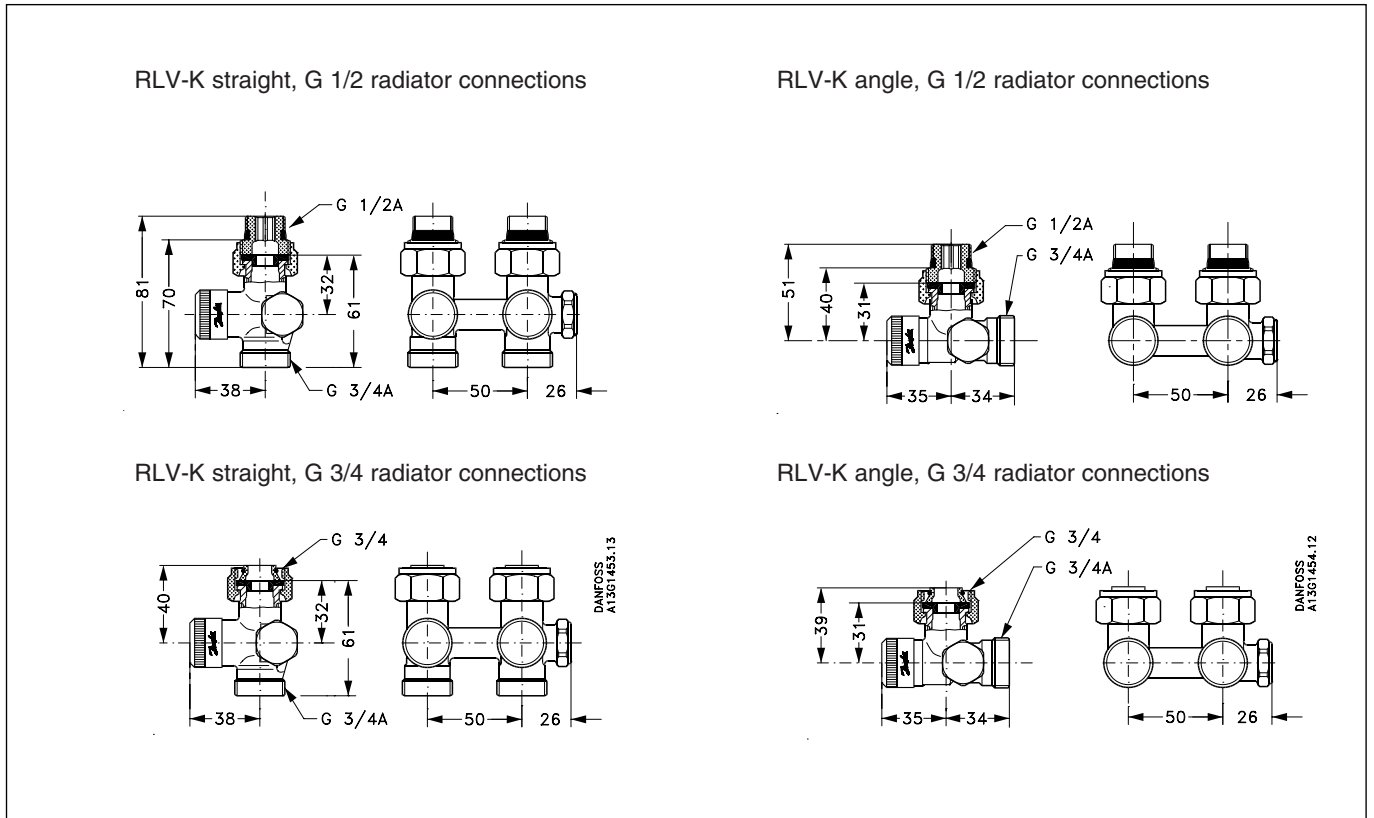
Design



Materials in contact with water

|                                  |       |
|----------------------------------|-------|
| Valve body and other metal parts | Ms 58 |
| O-rings                          | EPDM  |

Dimensions



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