

Data Sheet

Return Temperature Limiter Type FJVR - Sensor and Valve Body

Application

The return limiter type FJVR automatically controls the return temperature from radiators, convectors and floor heating pipes.

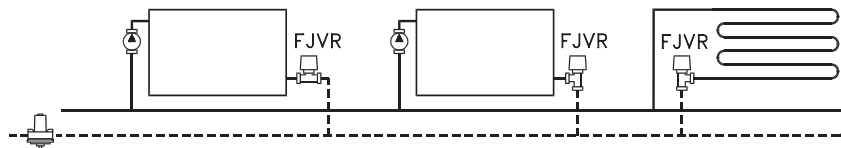
In ventilation systems FJVR ensures a certain minimal circulation in the pipe system up to the heat exchanger.

FJVR is a self-acting P-band regulator, used in 2-pipe systems with pump.

Setting can be limited and locked.
FJVR valve bodies are nickel-plated.



System



Data and Ordering

Sensors

| Type | Colour | Setting range | Code no. |
|---------------------------------|----------------|---------------|----------|
| FJVR Return Temperature Limiter | White RAL 9010 | 10 - 50 °C | 003L1040 |
| | White RAL 9010 | 10 - 80 °C | 003L1070 |
| | Chrome | 10 - 50 °C | 003L1072 |

Valve bodies

| Valve bodies | Connections | | $k_{vs}^{2)}$ | Max. pressure | | | Max. water temp. | Code no. |
|-------------------|-------------------------------|--|---------------|---------------|--------------------------|--------|------------------|----------|
| | Inlet | Outlet ¹⁾ | | Working | Different. ³⁾ | Test | | |
| FJVR 10, angle | R ³ / ₈ | R _p ³ / ₈ | 0.39 | 10 bar | 1 bar | 16 bar | 120 °C | 003L1009 |
| FJVR 10, straight | | | | | | | | 003L1010 |
| FJVR 15, angle | R ¹ / ₂ | R _p ¹ / ₂ | 0.68 | 10 bar | 1 bar | 16 bar | 120 °C | 003L1013 |
| FJVR 15, straight | | | 0.90 | | | | | 003L1014 |

¹⁾ Outlet connection is prepared for Danfoss compression fittings.

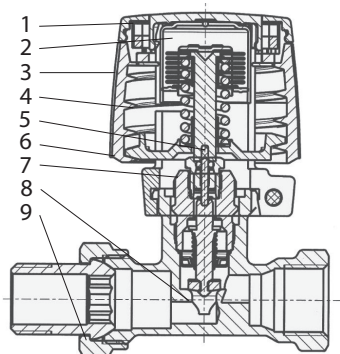
²⁾ The k_v -value indicates the water flow (Q) in m³/h at a pressure drop (Δp) across the valve of 1 bar.

³⁾ The max. differential pressure indicates the limit for an optimal valve performance. To ensure quiet operation it is recommended to choose a pump which provides the correct pressure to circulate the required flow of water. In most systems a differential pressure of 0.1-0.3 bar is sufficient. The differential pressure may be reduced by using Danfoss differential pressure controls.

Spare parts

| | |
|----------------------|----------|
| Product | Code no. |
| Gland seal (10 pcs.) | 013G0290 |

Design



- 1. Sensor
- 2. Bellows
- 3. Setting handle
- 4. Spring
- 5. Pressure pin
- 6. Gland seal
- 7. Valve top
- 8. Valve cone
- 9. Valve body

The return temperature limiter includes a thermo-static element type FJVR and a valve body type FJVR 10. The element and the valve body are ordered separately. The gland of the valve can be exchanged without draining down system.

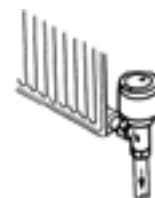
| | |
|----------------------------------|--------------|
| Valve body and other metal parts | Ms 58 |
| Pressure pin in gland seal | Chrome steel |
| O-ring | EPDM |
| Valve cone | NBR |

Materials in contact with water

Mounting



Straight valve



Angle valve

FJVR is mounted in the radiator outlet. The valve and sensor can be fitted in any position as long as flow direction is observed.

During construction, the heat can be controlled by turning the slotted screw in the valve cap, prior to fitting the element.

Setting

FJVR 003L1070

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 10 | 20 | 30 | 40 | 45 | 50 | 60 | 65 | 70 | 80 °C |

FJVR 003L1040 / 003L1072

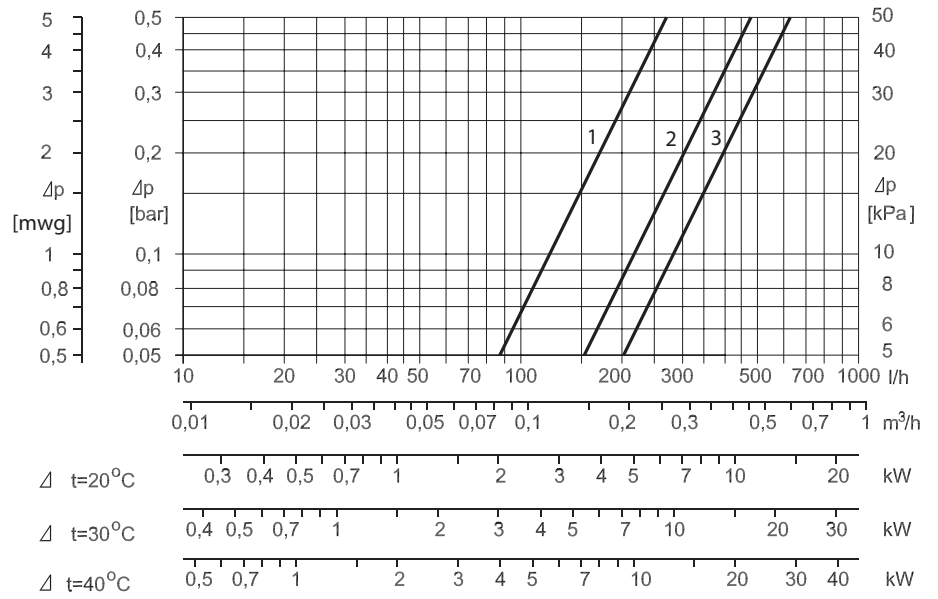
| | | | | | |
|----|----|----|----|----|-------|
| 1 | 2 | 3 | 4 | | |
| 10 | 20 | 30 | 40 | 45 | 50 °C |

Frost protection setting = 10 °C

Required return water temperature can be set by turning the dial.

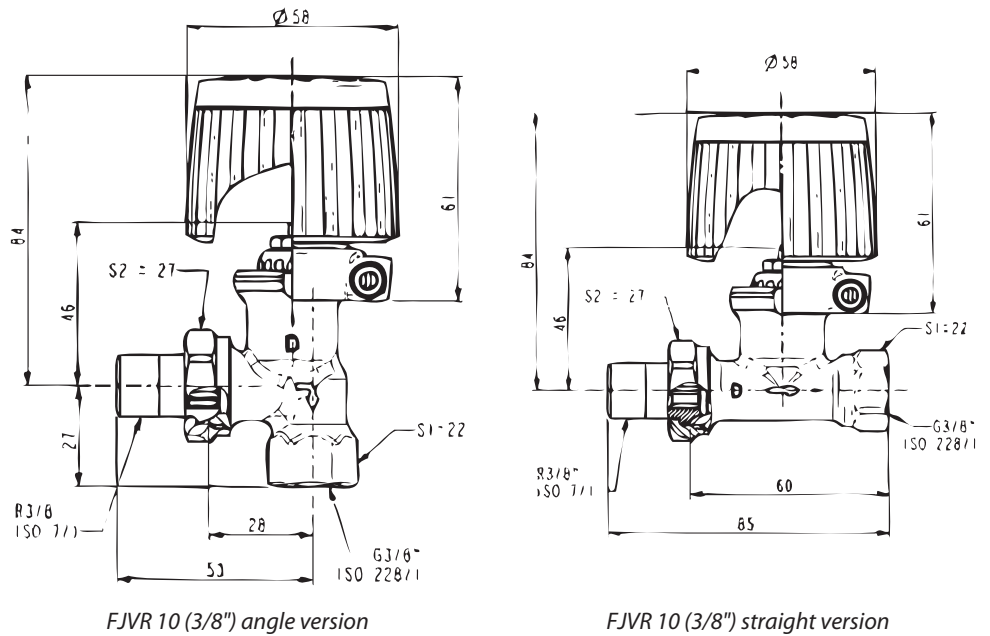
The scale figure indications appear as in the illustration.

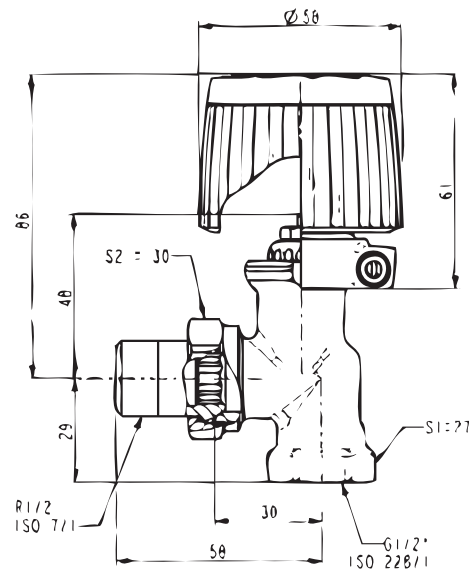
Capacities



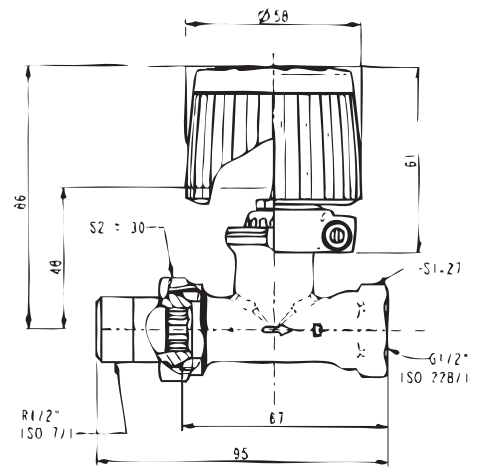
1. DN10
2. DN15 angle
3. DN15 straight

Dimensions





FJVR 15 (1/2") angle version



FJVR 15 (1/2") straight version

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