

## Data Sheet

# Return Temperature Limiter Type FJVR - Sensor and Valve Body

### Application



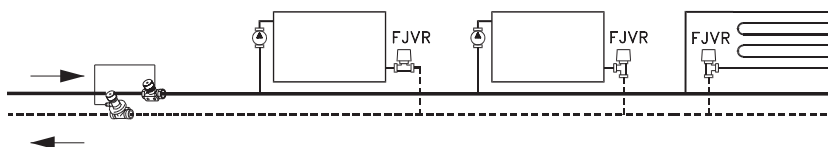
The return limiter type FJVR automatically controls the return temperature from radiators, convectors and floor heating pipes.

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

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

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	<b>003L1040</b>
	White RAL 9010	10 - 80 °C	<b>003L1070</b>
	Chrome	10 - 50 °C	<b>003L1072</b>

#### Valve bodies

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

<sup>1)</sup> Outlet connection is prepared for Danfoss compression fittings.

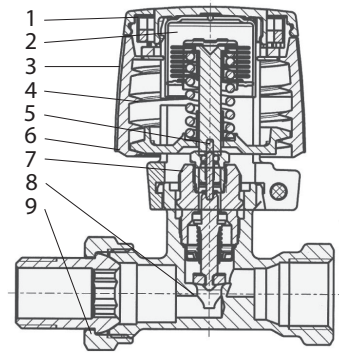
<sup>2)</sup> The  $k_v$ -value indicates the water flow (Q) in m<sup>3</sup>/h at a pressure drop ( $\Delta p$ ) across the valve of 1 bar.

<sup>3)</sup> 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.)	<b>013G0290</b>

**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.

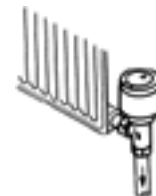
Valve body and other metal parts	Ms 58
Pressure pin in gland seal	Chrome steel
O-ring	EPDM
Valve cone	NBR

**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**

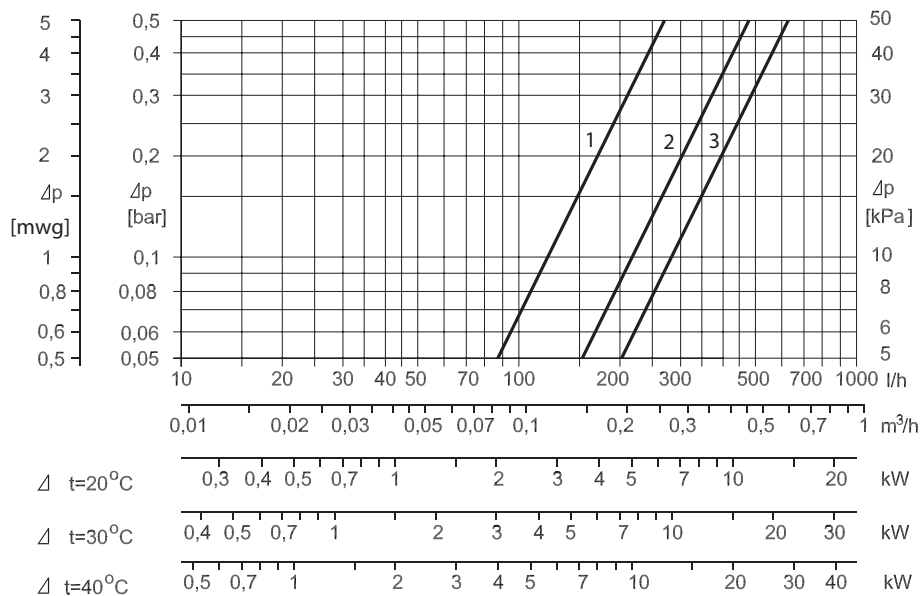
1	2	3	4
10	20	30	40 45 50 °C

*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.

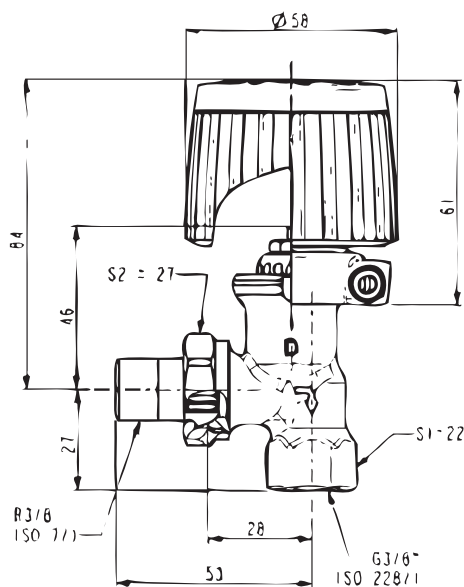
Capacities



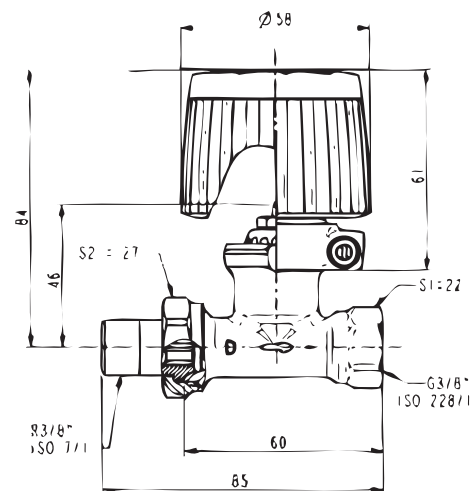
- 1. DN10
- 2. DN15 angle

- 3. DN15 straight

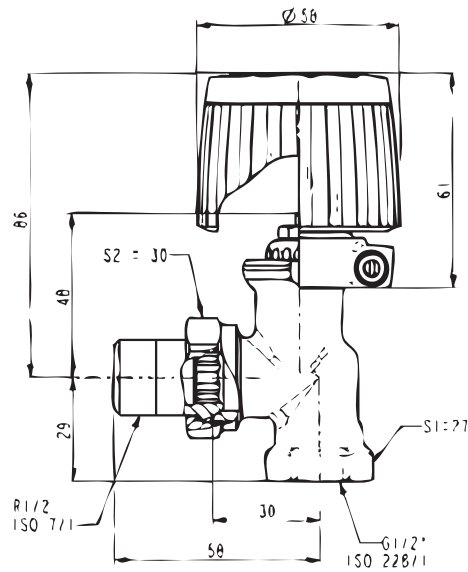
Dimensions



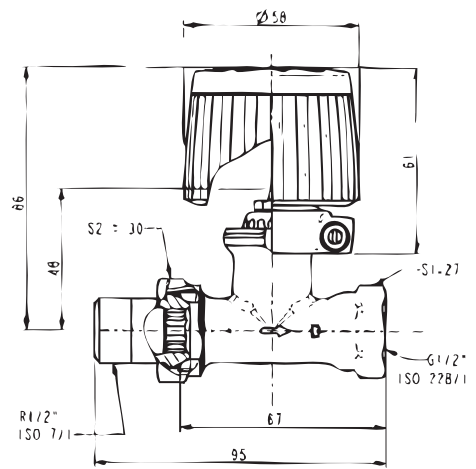
FJVR 10 (3/8") angle version



FJVR 10 (3/8") straight version



FJVR 15 (1/2") angle version



FJVR 15 (1/2") straight version

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