

limitent

Hardness monitoring unit

The limitent automatic hardness control device with controller is installed in the soft water pipe after softening units and is used to continuously monitor the soft water for residual hardness. The measuring principle is based on resin shrinkage or expansion, so the device does not require any chemicals or water. A hardness breakthrough is indicated visually and is provided as a potential-free changeover contact.

BENEFITS

- Proven and reliable hardness control device
- No use of water and chemicals
- No complex maintenance and calibration required
- Easy replacement of the shrink resin sensor
- Hardness breakdown is also indicated optically (in addition to the output as potential-free changeover contact)

APPLICATIONS

- Installation after softening plants
- Protection of downstream stages or consumers against hard water breakthrough



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DESCRIPTION

Scope of delivery

- Differential pressure transmitter as flow-through fitting for generating a sample water flow
- Hardness sensor based on resin shrinkage with shut-off valves
- Connecting hoses
- Replacement sensor for exchange after hardness break-through and fault
- Sensor unit with reed contact
- Controller in PVC housing with LED indicators for operation and "hard water" fault
- Output for fault messages as potential-free changeover contact, for example for actuating a visual or acoustic signal or for switching off a downstream reverse osmosis system
- Connection cable (1.75 m) with safety plug

Optionally available

- Replacement sensor for limitent / limitron (370 031)
- Upper part for limitent / limitron (370 034)
- Lower part for limitent / limitron (370 034)
- Controller for limitent (370 024)
- Raw water section (art. no. differs depending on flow rate)

CONDITIONS OF USE

An overpressure protection must be installed in the feed water line upstream of the hardness control unit.
The spare sensor must be flushed with soft water before installation and soaked in soft water / permeate when stored.

| | |
|-----------------------|-----------------|
| Operating temperature | 5 – 35 °C |
| Ambient temperature | 0 – 40 °C |
| Feed water pressure | 2 – 6 ± 0.2 bar |

TECHNICAL DATA OF SERIES

| | |
|------------------|------------------------|
| Protection class | IP 54 |
| Contact | floating |
| Loading max. | 250 V / 5 A / 600 W |
| LED displays | Operation / hard water |

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| Product name | Flow rate m ³ /h | Hydraulic connection | Mains connection V / Hz | Dimensions in mm W x D x H | Item number |
|-----------------|--------------------------------|----------------------|----------------------------|-------------------------------|-------------|
| limitent 3/4" | 0.025 – 2.5 | R 3/4" | 230 / 50 | 80 x 120 x 430 | 370 037 |
| limitent 1" | 0.20 – 7.0 | R 1" | 230 / 50 | 80 x 120 x 430 | 370 067 |
| limitent 1 1/4" | 0.50 – 12.0 | R 1 1/4" | 230 / 50 | 80 x 120 x 430 | 370 043 |
| limitent 1 1/2" | 1.50 – 16.0 | R 1 1/2" | 230 / 50 | 80 x 120 x 430 | 370 068 |
| limitent 2" | 3.00 – 25.0 | R 2" | 230 / 50 | 80 x 120 x 430 | 370 055 |