

RadCon

DN10-DN20

Application

RadCon is a pressure independent Radiator Valve (PIRV) for use in 2-pipe radiator systems.

Combined with the elegant thermostatic sensor head RadCon provides optimal comfort along with the highest energy efficiency and easy commissioning.

The valve can be preset from 20 l/h to 340 l/h (0.006 l/s to 0.094 l/s) and provides modulating control regardless of any fluctuations in the differential pressure of the radiator system .

It combines an externally adjustable presetting, a differential pressure controller and a modulating radiator valve.

100% control of the water flow in the building is achieved easily, while creating high comfort and energy savings. At the same time maximizing the ΔT is possible due to the increased system stability.



Benefits

Design

- Less time to define and select the right presetting. Just set the required flow for the radiator. No KV calculation needed
- Flexibility if the system is modified after the initial installation

Installation

- No further regulating valves required in the radiator system when the differential pressure does not exceed 70 kPa
- Minimized commissioning time due to automatic balancing of the system
- Simplified radiator system design
- Thermostatic sensor with M30x1.5 thread or RA-connection

Operation

- High comfort for end-users due to high precision temperature control
- Anti-frost thermostatic head protects the system and reduces the risk of mould
- No flow noise due to the built in differential pressure controller in the valve
- No overflow through the radiator ensuring the optimal ΔT in the radiator system
- Easy maintenance - replacable internals

Features

- The constant differential pressure across the modulating control component guarantees 100% authority
- Automatic balancing eliminates overflows, regardless of fluctuating pressure conditions in the system
- Thermostatic sensor head with small dimension
- Differential pressure up to 70 kPa
- Complete programme DN10-DN20
- Theft protection of thermostatic head

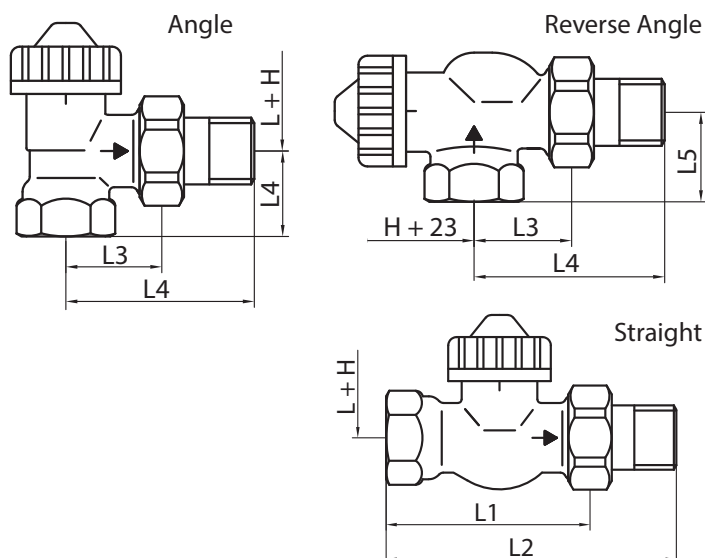
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DN10-DN20

RadCon Radiator Valve

Technical Data

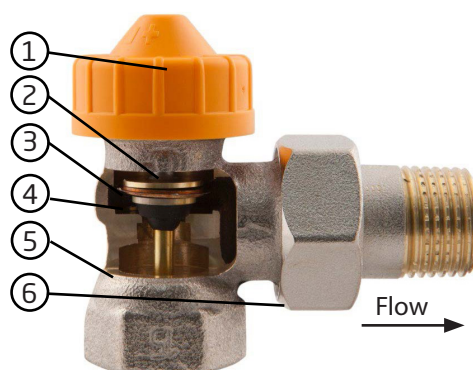
| | |
|------------------------------------|-------------------|
| Valve housing: | Red Bronze |
| Spindle: | Stainless steel |
| Spring: | Stainless steel |
| O-rings: | EPDM |
| Pressure class: | PN10 |
| Flow range: | 20 – 340l/h |
| Min. differential pressure | 15 kPa |
| Max. differential pressure: | 70 kPa |
| Medium temperature range: | 0°C to 90°C |
| Thread: | ISO 228 |
| Closing dimension: | 12.0 mm (+0/-0.2) |
| Stroke: | 0.8 mm |
| Max. actuator force: | 120 N |



Dimensions

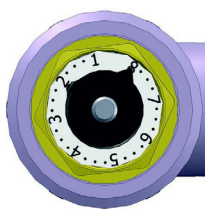
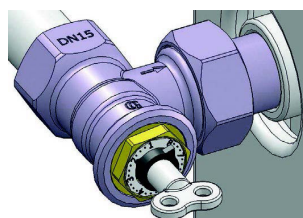
| Dimension | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | L4 [mm] | L5 [mm] | H [mm] Thermostat height |
|-------------|--------|---------|---------|---------|---------|---------|--------------------------|
| DN10 (3/8") | 23 | 59 | 85 | 26 | 52 | 25 | 80 |
| DN15 (1/2") | 23 | 66 | 95 | 29 | 58 | 26 | 80 |
| DN20 (3/4") | 23 | 74 | 106 | 34 | 66 | 29 | 80 |

Cut View



1. Protective cap
2. Spindle
3. Modulating valve stem
4. Differential pressure controller
5. Valve housing
6. Coupling

Presetting Flow



Example: Presetting in position 8

| Preset | 1 | 1. | 1.. | 1... | 2 | 2. | 2.. | 2... | 3 | 3. | 3.. | 3... | 4 | 4. | 4.. | 4... | 5 | 5. | 5.. | 5... | 6 | 6. | 6.. | 6... | 7 | 7. | 7.. | 7... | 8 |
|------------|----|----|-----|------|----|----|-----|------|----|----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|
| Flow [l/h] | 20 | 20 | 25 | 25 | 35 | 40 | 45 | 55 | 65 | 80 | 90 | 100 | 115 | 135 | 145 | 160 | 170 | 185 | 200 | 215 | 230 | 245 | 260 | 275 | 290 | 300 | 315 | 330 | 340 |

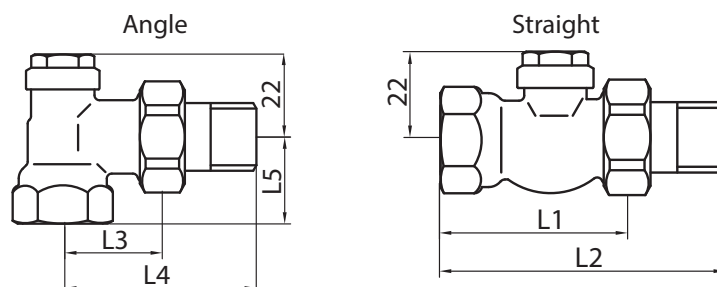
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DN10-DN20

RadCon Lock Shield Valve

Technical Data

| | |
|----------------------------------|--------------|
| Valve housing: | Red Bronze |
| Pressure class: | PN10 |
| Kvs value | 1.1 |
| Medium temperature range: | 0°C to 120°C |
| Thread: | ISO 228 |



Drain:

In connection with the Lockshield vales, the accessory RadCon Drain can be installed for emptying the radiator

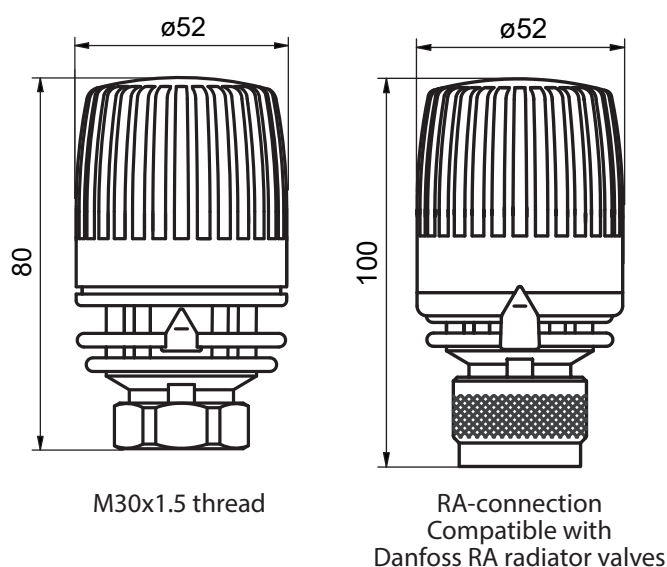
Dimensions

| Dimension | L1 [mm] | L2 [mm] | L3 [mm] | L4 [mm] | L5 [mm] |
|-------------|---------|---------|---------|---------|---------|
| DN15 (1/2") | 51 | 80 | 29 | 58 | 26 |
| DN20 (3/4") | 59 | 91 | 34 | 66 | 29 |

RadCon Thermostatic Head

Technical Data

| | |
|-----------------------------|---------------------------------|
| Housing: | Plastic, white RAL 9016 |
| Connection: | Brass nickel plated |
| Ambient temperature: | -10°C to 50°C |
| Connection: | M30x1.5 thread or RA-connection |



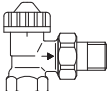
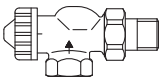
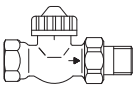
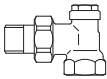
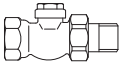

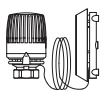
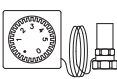


Presetting temperature

| Preset | * | 1 | 2 | 3 | 4 | 5 |
|-------------|-----|------|------|------|------|------|
| Temperature | 6°C | 14°C | 17°C | 20°C | 23°C | 26°C |

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DN10-DN20





Produkt Programme

| | Product | Type | Dimension | Frese no. |
|---|--------------------------|--------------------------------------|------------------|-----------|
|  | RadCon Radiator Valve | Angle | DN10 (3/8") | 38-1101 |
| | | | DN15 (1/2") | 38-1102 |
| | | | DN20 (3/4") | 38-1103 |
|  | RadCon Radiator Valve | Reverse Angle | DN15 (1/2") | 38-1107 |
|  | RadCon Radiator Valve | Straight | DN10 (3/8") | 38-1111 |
| | | | DN15 (1/2") | 38-1112 |
| | | | DN20 (3/4") | 38-1113 |
|  | RadCon Lock Shield Valve | Angle | DN15 (1/2") | 38-5102 |
| | | | DN20 (3/4") | 38-5103 |
|  | RadCon Lock Shield Valve | Straight | DN15 (1/2") | 38-5112 |
| | | | DN20 (3/4") | 38-5113 |
| | Product | Type / Connection | Capillary length | Frese no. |
|  | RadCon Thermostatic Head | M30x1.5 | - | 38-9000 |
| | | Anti frost / M30x1.5 | - | 38-9001 |
| | | Tamper proof / M30x1.5 | - | 38-9003 |
|  | RadCon Thermostatic Head | Remote sensor / M30x1.5 | 2 m | 38-9013 |
| | | Tamper proof Remote sensor / M30x1.5 | | 38-9014 |
|  | RadCon Remote Preset | Remote Preset and Sensor / M30x1.5 | 2 m | 38-9010 |
| | | | 5 m | 38-9011 |
|  | RadCon Thermostatic Head | RA | - | 38-9002 |
|  | RadCon Thermostatic Head | Remote sensor / RA | 2 m | 38-9012 |

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DN10-DN20

Accessories

| | Product | Type | Frese no. |
|---|-----------------------------|------------------------|-----------|
|  | RadCon Theft Protection | for Thermostatic Head | 38-9020 |
|  | RadCon Setting Key | - | 38-9021 |
|  | RadCon Radiator Drain Valve | for Lock Shield Valves | 38-9022 |
|  | Thermic Actuator | On/Off, 24V NC | 48-5525 |
| | | On/Off, 230V NC | 48-5526 |

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