resideo Control Valves

Braukmann Alwa-Comfort

Throttle valve for floor circulation systems

APPLICATION

Alwa-Comfort is used as floor throttle valve for hydraulic balancing in warm-water circulation systems. Due to the minimal volume flow of < 0.1 m³/h, Alwa-Comfort valves can be used in floor lines and other smaller circulation circuits.

These applications are found in particular wherever more stringent hygienic requirements apply or for reasons of comfort, hot water must be available immediately upon opening an extraction point.

To implement hydraulic balancing, the valve is preset to a fixed temperature. The throttle valve opens and closes independently, regulating the flow as a function of water temperature in the floor circulation line.

According to the specifications in DVGW worksheet W554, Alwa-Comfort supports thermal disinfection starting at a water temperature of 70 °C.

APPROVALS

• DVGW

SPECIAL FEATURES

- DVGW certification according to W554
- All materials in contact with drinking water according to European directives
- For regulation according to DVGW worksheets W551 and W553
- Precise regulation of the volume flow with patented bypass function
- Valve housing and all parts with flow-contact made of corrosion-resistant red bronze
- Cavitation-free due to plastic valve insert
- Small installation size due to inline design
- High control accuracy due to arrangement of thermocouple in the medium
- Hydraulic balancing also during thermal disinfection
- Shut-off function is outside the valve
- Robust design

TECHNICAL DATA

| Media | |
|------------------------------------|------------------------|
| Medium: | Water |
| Connections/Sizes | |
| Connection size: | DN15 |
| Pressure values | |
| Max. operating pressure: | 10 bar |
| Max. kv. _{min} - value | 0.1 m ³ /h |
| Min. kv. _{max} - value | 0.6 m ³ /h |
| kv. _{TD} - value | ≤0.1 m ³ /h |
| Operating temperatures | |
| Max. operating temperature medium: | 90 °C |



CONSTRUCTION



METHOD OF OPERATION

Alwa-Comfort is used as flow throttle valve to limit the flow of domestic hot water circulation systems.

This is performed automatically with the preset water temperature. The valve is set to the desired water temperature and the thermocouple keeps this temperature constant at the valve.

When the temperature drops, the valve opens so that hot water can flow. When the temperature rises, the valve closes (down to a minimum flow rate) once the desired temperature is obtained. There is permanent regulation of the water temperature, thus ensuring optimal supply of floor lines with the lowest possible use of energy.

Alwa-Comfort supports thermal disinfection starting at a water temperature of 70 °C according to DVGW worksheet W554.

| Components | Materials |
|-------------------------------|-----------------|
| Valve housing in straight | Red bronze |
| pattern with internal threads | |
| or external threads | |
| Not depicted components: | |
| Internally located | Red bronze |
| thermocouple | |
| Regulating cone | Fortron |
| Ball valve | Stainless steel |
| Springs | Spring steel |
| O-rings | EPDM |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

TRANSPORTATION AND STORAGE

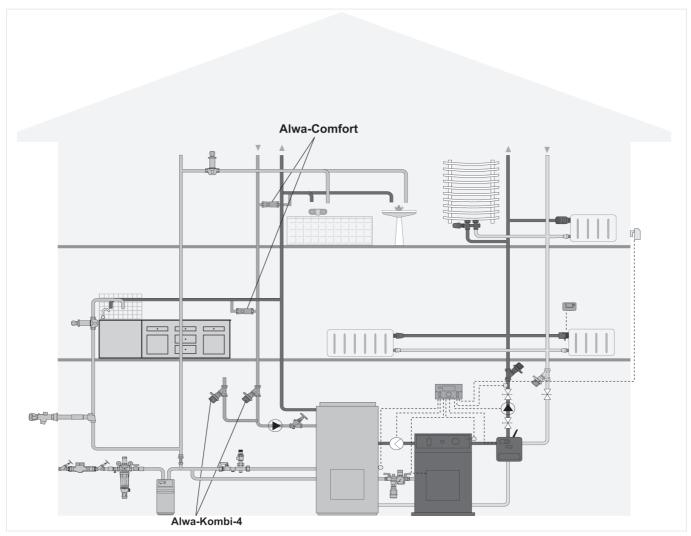
Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

| Parameter | Value |
|--------------|---------------------------|
| Environment: | clean, dry and dust free, |
| | indoor use only |

INSTALLATION GUIDELINES

Installation Example



TECHNICAL CHARACTERISTICS

Pressure drop characteristics

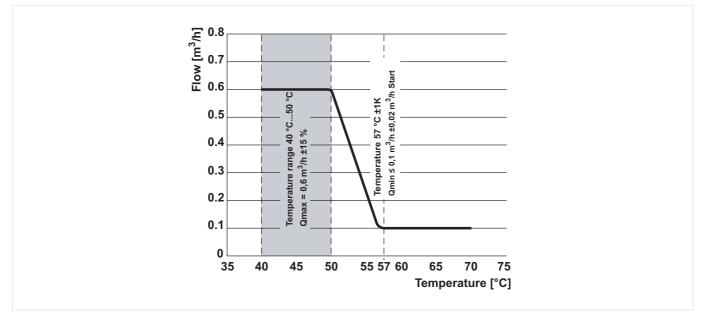


Fig. 1 Alwa-Comfort presetting 57 °C

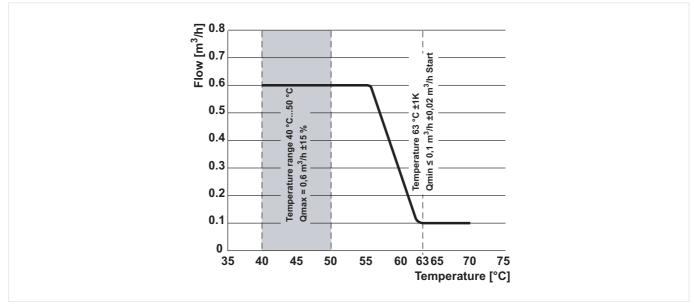
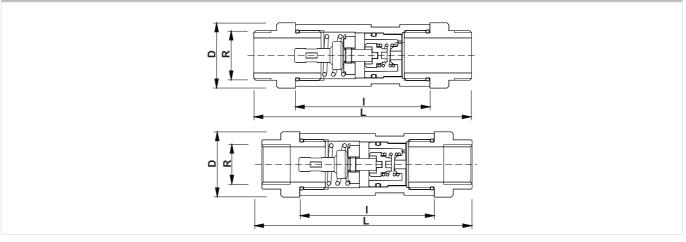


Fig. 2 Alwa-Comfort presetting 63 °C

DIMENSIONS

V1840...

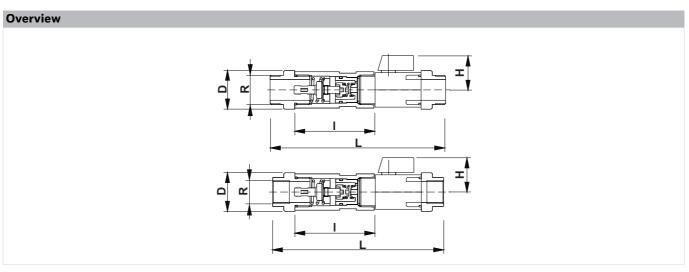
Overview



| Parameter | | Values | | | | |
|-------------|---|------------------------|--------------------|------------------------|--------|--|
| | | V1840X0015 V1840X0015H | | V1840Y0015 V1840Y0015H | | |
| Dimensions: | R | G ³ | G ³ /4" | | Rp1/2" | |
| | D | max. 34.5 | | max. 34.5 | | |
| | l | 7 | 71 | | 1 | |
| | L | 115 | | 111 | | |

Note: All dimensions in mm unless stated otherwise.

V1850...

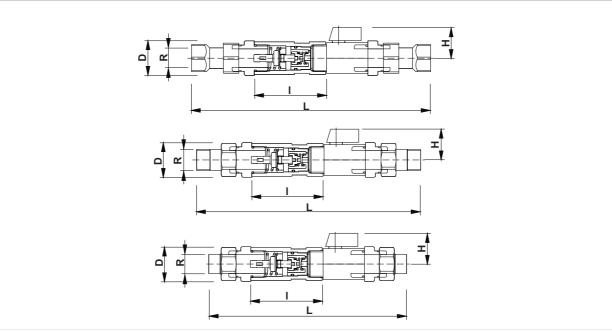


| Parameter | | Values | | | | |
|-------------|---|--------------------|-------------|----------------------------------|-------------|--|
| | | V1850X0015 | V1850X0015H | V1850Y0015 | V1850Y0015H | |
| Dimensions: | R | G ³ /4" | | Rp ¹ / ₂ " | | |
| | D | max. 34.5 | | max. 34.5 | | |
| L H | | 71 | | 71 | | |
| | | 158 | | 154 | | |
| | | 31 | | 31 | | |

Note: All dimensions in mm unless stated otherwise.

V1850...with nozzles

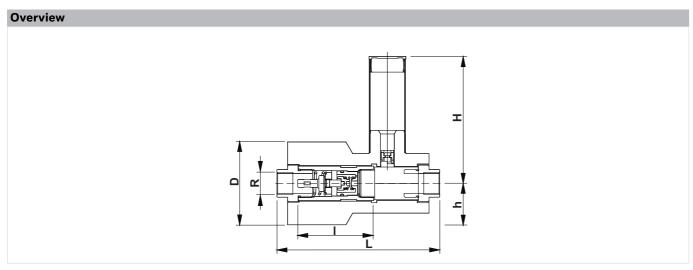
Overview



| Parameter Values | | | | ues | | | |
|------------------|---|------------|-------------|------------|-------------|------------|-------------|
| | | V1850XY015 | V1850XY015H | V1850XX015 | V1850XX015H | V1850XS015 | V1850XS015H |
| Dimensions: | R | Ga | 3/4" | Rp | 1/2" | 19 | |
| | D | max | . 34.5 | max | . 34.5 | max | . 34.5 |
| | 1 | 7 | 1 | 7 | 1 | 7 | 1 |
| | L | 23 | 39 | 22 | 24 | 19 | 98 |
| | Н | 3 | 31 | 3 | 31 | 3 | 31 |

Note: All dimensions in mm unless stated otherwise.

V1860...

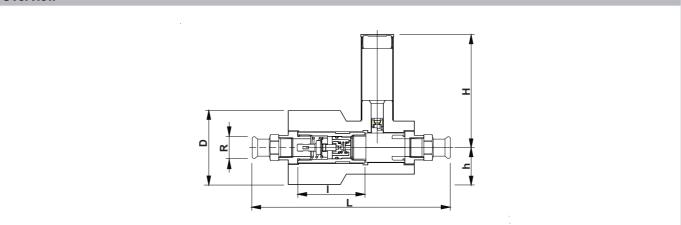


| Parameter | | L. L | /alues |
|-------------|---|---|----------------------------------|
| | | V1860Y0015 | V1860Y0015H |
| Dimensions: | R | le de la construcción de la constru | Rp ¹ / ₂ " |
| | D | | 78 |
| | l | | 71 |
| | L | | 154 |
| | Н | | 120 |
| | h | | 39 |

Note: All dimensions in mm unless stated otherwise.

V1866...

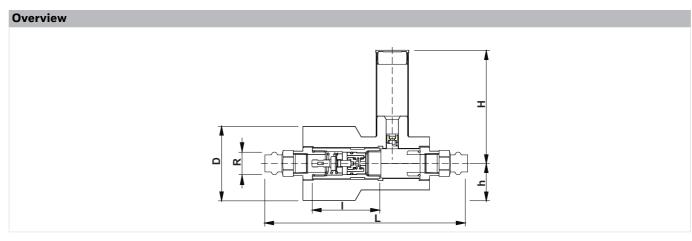
Overview



| Parameter | | Values | | |
|-------------|---|------------|-------------|--|
| | | V1866Y0015 | V1866Y0015H | |
| Dimensions: | R | MAP | RESS | |
| | D | 7 | 8 | |
| | l | 7 | 1 | |
| | L | 21 | 10 | |
| | Н | 12 | 20 | |
| | h | 3 | 9 | |

Note: All dimensions in mm unless stated otherwise.

V1867...



| Parameter | | Values | | |
|-------------|---|------------|-------------|--|
| | | V1867Y0015 | V1867Y0015H | |
| Dimensions: | R | SANF | PRESS | |
| | D | 7 | 8 | |
| | l | 7 | 1 | |
| | L | 2. | 14 | |
| | Н | 11 | 20 | |
| | h | 3 | 9 | |

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

Alwa-Comfort - on wall mounted versions

| OSNo.: | Presetting: | Connections: | with ball valve: |
|--------------|-------------|---------------------------|------------------|
| V1840X0015 | | External thread | - |
| V1840Y0015 | | Internal thread | - |
| V1850X0015 | | External thread | • |
| V1850Y0015 | 57°C | Internal thread | • |
| V1850XX0015 | | Threaded male connections | • |
| V1850XY0015 | | Threaded male connections | • |
| V1850XS0015 | | Soldered connection | • |
| V1840X0015H | | External thread | - |
| V1840Y0015H | | Internal thread | - |
| V1850X0015H | | External thread | • |
| V1850Y0015H | 63°C | Internal thread | • |
| V1850XX0015H | | Threaded male connections | • |
| V1850XY0015H | | Threaded male connections | • |
| V1850XS0015H | | Soldered connection | • |

Alwa-Comfort-UP - under wall mounted versions

| OSNo.: | Presetting: | Connections: | with ball valve: |
|-------------|-------------|-----------------|------------------|
| V1860Y0015 | | Internal thread | |
| V1866Y0015 | 57°C | MAPRESS | |
| V1867Y0015 | | SANRESS | |
| V1860Y0015H | | Internal thread | • |
| V1866Y0015H | 63°C | MAPRESS | |
| V1867Y0015H | | SANRESS | |

Accessories

| | Descriptio | n | Dimension | Part No. |
|---|------------|--|------------------|------------------|
| • | VA7400 | Union nut, sealing and red bronze tailpiece f | | ads |
| | | DN15, for 15 mm pipe-Ø | DN15 | VA7400A015 |
| | | DN15, for 16 mm pipe-Ø | DN15 | VA7400A016 |
| | VA7401 | Union nut, sealing and externally threaded re threads | ed bronze tailpi | ece for external |
| | | | DN15 | VA7401A015 |
| | VA7402 | Union nut, sealing and steel soldering tailpie | ce | |
| | | | DN15 | VA7402A015 |
| | VA7403 | Union nut with Mapress-fitting for external t | threads | |
| | | For pipe-Ø 15 mm | DN15 | VA7403A015 |
| | | For pipe-Ø 18 mm | DN15 | VA7403A018 |
| | VA7404 | Sanpress red bronze crimp fitting with sealing | g | |
| | | For pipe-Ø 15 mm | DN15 | VA7404A015 |
| | | For pipe-Ø 18 mm | DN15 | VA7404A018 |
| | VA7405 | Union nut, sealing and internally threades re | d bronze tailpie | ce |
| | | | DN15 | VA7405A015 |
| | VA2510 | Insulation shells | | |
| | | | DN15 | VA2510E015 |
| | VA2610 | Ball Valve | | |
| | | | DN15 | VA2610A015 |
| | VA2410G | Rosette | | |
| | | | DN15 | VA2410G015 |



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