
CIRCULATORS FOR HOT WATER SYSTEMS



GENERAL INFORMATION

Applications

Pump for circulating hot domestic water in closed and pressurised or open tank systems.
Also suitable for solar power systems.

Construction characteristics

Single body comprising bronze hydraulic unit and wet rotor motor

Die-cast aluminium motor casing.

Technopolymer impeller. Ceramic driving shaft mounted on graphite bearings lubricated by the pumped liquid.

Stainless steel protective rotor sleeve, stator sleeve and closing flange.


Ceramic thrust bearing, E.P.D.M. O-rings and brass air outlet cap.

Two or four pole asynchronous motor with squirrel cage rotor.

Motor self-protected against resistance.

No overload protection required.

Protection level: IP 44

Insulating class: F 

Cable grommet: PG 11

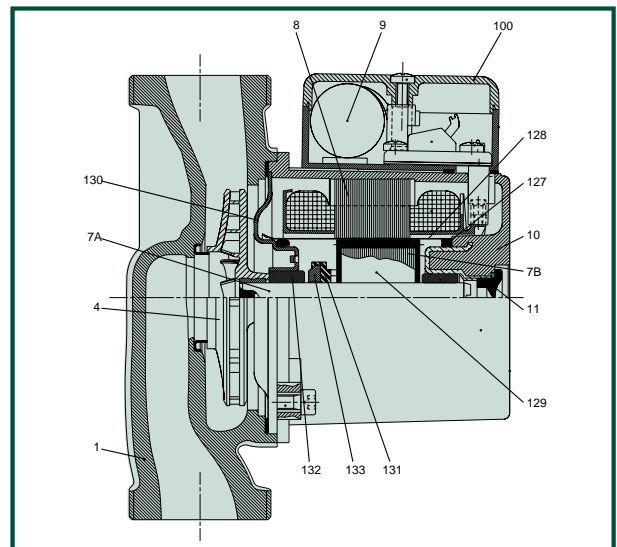
Rated voltage: single-phase 230 V / 50 Hz

This product complies with EN 60335-2-51 European standard

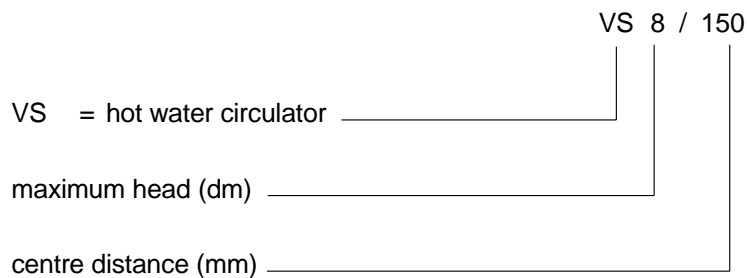
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TECHNICAL DATA

| N. | PARTS | MATERIALS |
|-----|--------------------|--------------------|
| 1 | PUMP BODY | BRONZE |
| 4 | IMPELLER | TECHNOPOLYMER |
| 7A | DRIVE SHAFT | CERAMICS |
| 7B | ROTOR | - |
| 8 | STATOR | - |
| 9 | CAPACITOR | - |
| 10 | MOTOR CASING | DIE CAST ALUMINIUM |
| 11 | AIR OUTLET CAP | BRASS |
| 100 | TERMINAL BOARD BOX | - |
| 127 | O-RING | E.P.D.M |
| 128 | STATOR SLEEVE | STAINLESS STEEL |
| 129 | ROTOR SLEEVE | STAINLESS STEEL |
| 130 | CLOSING FLANGE | STAINLESS STEEL |
| 131 | THRUST BOX SUPPORT | E.P.D.M. |
| 132 | BEARINGS | GRAPHITE |
| 133 | THRUST BOX | CERAMICS |



– Denomination index:
(example)



Operating range:

from 0.6 to 5 m³/h with head up to 6.5 metres.

Liquid temperature range:

from +2°C to +60°C.

To prevent condensation from forming inside the motor, the pumped liquid temperature must always be over the room temperature. To prevent scale from forming, the pumped liquid should not exceed 65°C and an anti-scale system should be fitted if the water is harder than 15 French degrees.

Characteristics of pumped liquid:

clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).

Maximum operating pressure:

10 bar (1000 kPa).

MINIMUM HEAD

PRESSURE

values are shown in the relative tables.

Installation:

with MOTOR AXIS HORIZONTAL.

Special versions on request:

other voltages and/or frequencies.

Accessories on request:

unions measuring 1/2" F - 3/4" F - 1" F

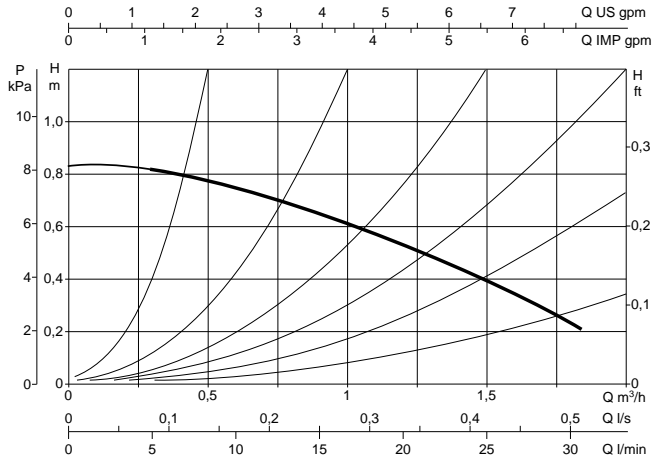
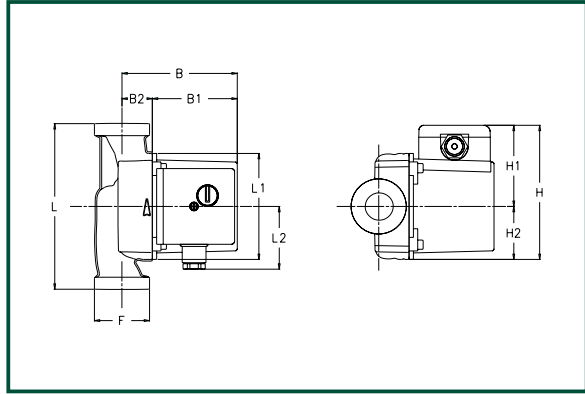
unions for copper pipes for welding: Ø 22 mm
Ø 28 mm

Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 2548.

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liquid temperature range: from +2°C to +60°C
 maximum operating pressure: 10 bar (1000 kPa)

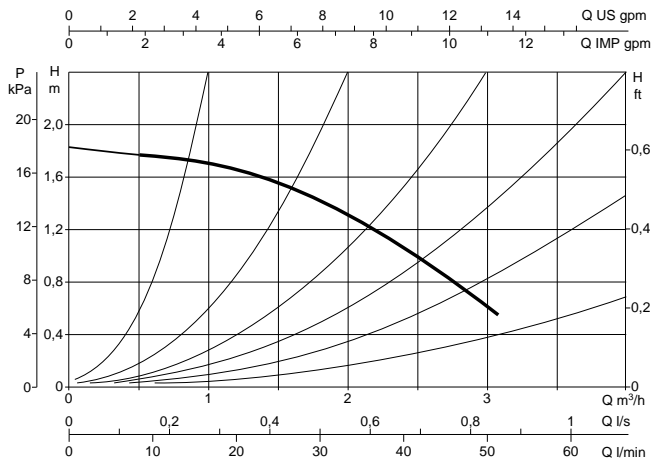
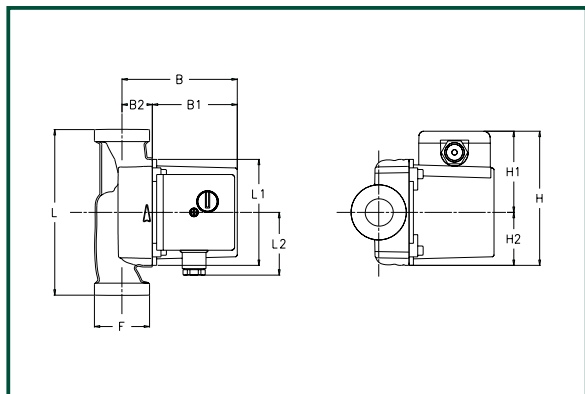
VS 8/150 SINGLE WITH UNIONS



| L | L1 | L2 | B | B1 | B2 | H | H1 | H2 | F | PACKING DIMENSIONS | | | VOLUME | WEIGHT |
|-----|----|----|-----|----|----|-----|----|----|----------|--------------------|-----|-----|----------------|--------|
| | | | | | | | | | | L | B | H | m ³ | Kg |
| 150 | 98 | 60 | 104 | 78 | 26 | 124 | 75 | 49 | 1 1/2" G | 130 | 185 | 135 | 0,0032 | 2,6 |

| MODEL | VOLTAGE 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | ELECTRICAL DATA | | | | | MINIMUM HEAD PRESSURE |
|----------|------------------|--------------------------|---|-----------------|-------------|---------|-----------|-----|-----------------------------|
| | | | | n r.p.m. | P1 MAX W | In A | CAPACITOR | | |
| | | | | μF | Vc | | | | |
| VS 8/150 | 1x230 V ~ | 150 | BRASS: 1/2"F - 3/4"F - 1"F COPPER: Ø 22 - Ø 28 | 1225 | 40 | 0,23 | 2 | 450 | t° +60°C mt. 1,5 |

VS 16/150 SINGLE WITH UNIONS



| L | L1 | L2 | B | B1 | B2 | H | H1 | H2 | F | PACKING DIMENSIONS | | | VOLUME | WEIGHT |
|-----|----|----|-----|----|----|-----|----|----|----------|--------------------|-----|-----|----------------|--------|
| | | | | | | | | | | L | B | H | m ³ | Kg |
| 150 | 98 | 60 | 104 | 78 | 26 | 124 | 75 | 49 | 1 1/2" G | 130 | 185 | 135 | 0,0032 | 2,6 |

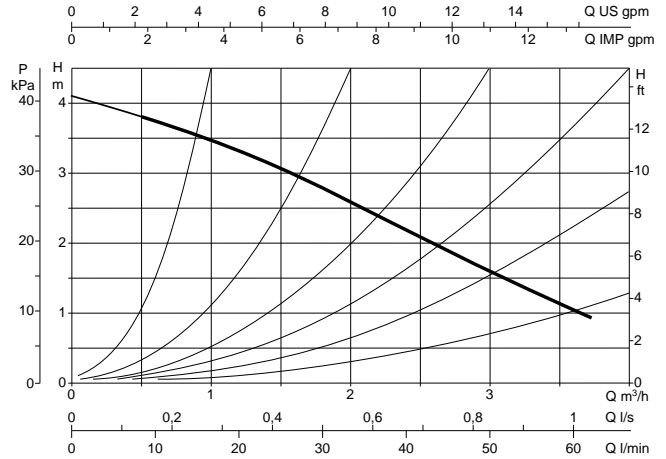
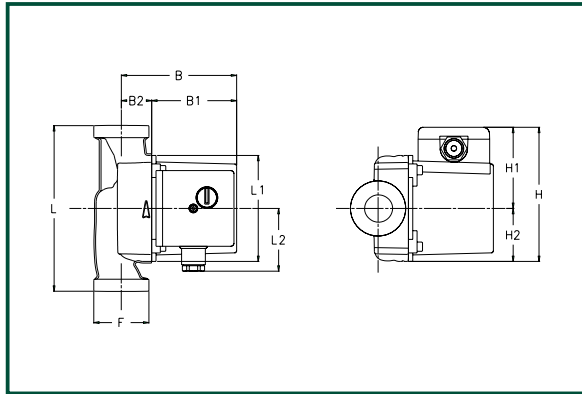
| MODEL | VOLTAGE 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | ELECTRICAL DATA | | | | | MINIMUM HEAD PRESSURE |
|-----------|------------------|--------------------------|---|-----------------|-------------|---------|-----------|-----|-----------------------------|
| | | | | n r.p.m. | P1 MAX W | In A | CAPACITOR | | |
| | | | | μF | Vc | | | | |
| VS 16/150 | 1x230 V ~ | 150 | BRASS: 1/2"F - 3/4"F - 1"F COPPER: Ø 22 - Ø 28 | 2680 | 54 | 0,25 | 1,5 | 450 | t° +60°C mt. 1,5 |

Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 2548.

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liquid temperature range: from +2°C to +60°C
 maximum operating pressure: 10 bar (1000 kPa)

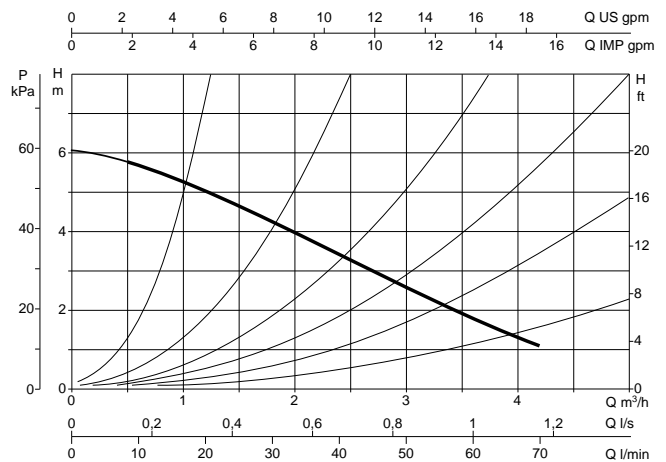
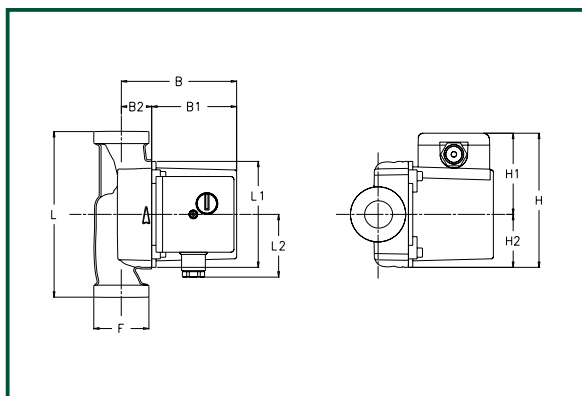
VS 35/150 SINGLE WITH UNIONS



| L | L1 | L2 | B | B1 | B2 | H | H1 | H2 | F | PACKING DIMENSIONS | | | VOLUME | WEIGHT |
|-----|----|----|-----|----|----|-----|----|----|----------|--------------------|-----|-----|----------------|--------|
| | | | | | | | | | | L | B | H | m ³ | Kg |
| 150 | 98 | 60 | 104 | 78 | 26 | 124 | 75 | 49 | 1 1/2" G | 130 | 185 | 135 | 0,0032 | 2,6 |

| MODEL | VOLTAGE 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | ELECTRICAL DATA | | | | | MINIMUM HEAD PRESSURE |
|-----------|------------------|--------------------------|--|-----------------|-------------|---------|-----------|-----|-----------------------------|
| | | | | n r.p.m. | P1 MAX W | In A | CAPACITOR | | |
| | | | | μF | Vc | | | | |
| VS 35/150 | 1x230 V ~ | 150 | BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28 | 2360 | 71 | 0,32 | 2 | 450 | t° +60°C mt. 1,5 |

VS 65/150 SINGLE WITH UNIONS



| L | L1 | L2 | B | B1 | B2 | H | H1 | H2 | F | PACKING DIMENSIONS | | | VOLUME | WEIGHT |
|-----|----|----|-----|----|----|-----|----|----|----------|--------------------|-----|-----|----------------|--------|
| | | | | | | | | | | L | B | H | m ³ | Kg |
| 150 | 98 | 60 | 104 | 78 | 26 | 124 | 75 | 49 | 1 1/2" G | 130 | 185 | 135 | 0,0032 | 2,6 |

| MODEL | VOLTAGE 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | ELECTRICAL DATA | | | | | MINIMUM HEAD PRESSURE |
|-----------|------------------|--------------------------|--|-----------------|-------------|---------|-----------|-----|-----------------------------|
| | | | | n r.p.m. | P1 MAX W | In A | CAPACITOR | | |
| | | | | μF | Vc | | | | |
| VS 65/150 | 1x230 V ~ | 150 | BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28 | 2105 | 103 | 0,45 | 2,5 | 450 | t° +60°C mt. 1,5 |