

UPA 15-160



General description

UPA 15-160 booster pumps increase the pressure of domestic water to make the required pressure available at showers, taps and other tapping points. A flow switch starts or stops the pump when a tapping point is turned on or off. UPA 15-160 pumps are supplied with an external flow switch, which has to be placed after the outlet of the pump.

The pumps are self-venting and do not require venting before start-up. All UPA pumps are supplied with a cable and plug.

UPA 15-160 high-efficiency boosters are fitted with an electronically commutated motor (ECM) with permanent-magnet rotor and frequency converter. They are energy-optimised due to improved hydraulics and motor efficiency.

Construction

UPA 15-160 circulator pumps for pressure boosting are of the canned-rotor type. Pump and motor form an integral unit without shaft seal. Only two gaskets are required for sealing. The bearings are lubricated by the pumped liquid.

The motor of the UPA 15-160 is a high efficient 4-pole synchronous permanent-magnet motor. The pump controller is incorporated in the control box, which is fitted to the stator housing.

Features

- **Flexibility:** Suitable for installation in existing systems.
- **Comfort:** Low-noise operation.
- **User friendliness:** Plug and play.
- **Reliability:** Proven Grundfos quality.
- **Energy-efficiency:** High-efficiency PM technology. UPA 15-160 consumes up to 87 % less electrical power than a conventional constant-speed booster.
- **Corrosion-resistant:** Cataphoresis-coated pump housing.

Applications

- UPA booster pumps are designed for pressure boosting of domestic water supplied from an external source in residential homes.
- UPA booster pumps are used in open systems and can also be connected directly to the water main.

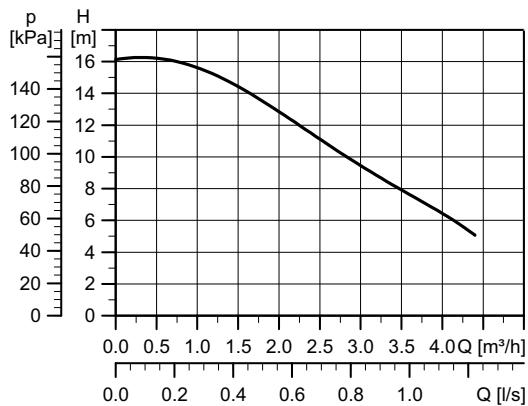
Pumped liquids

- Fresh water
- Potable water without chemical additives
- Chlorinated potable water.

UPA booster pumps are not suitable for the transfer of flammable liquids such as diesel oil and petrol.

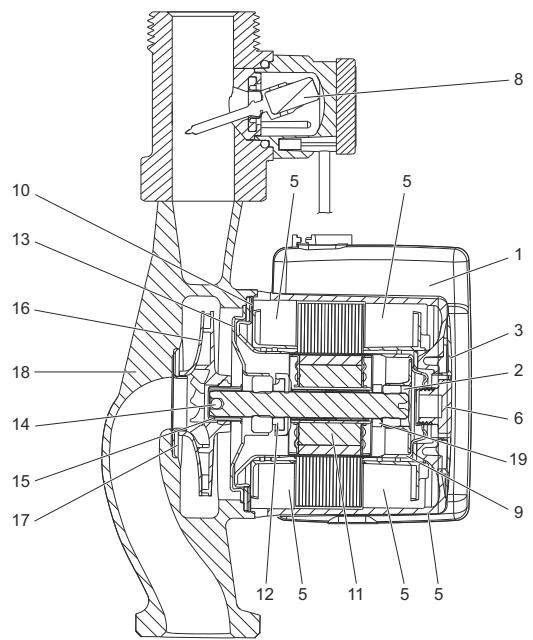
Performance

UPA booster pumps are suitable for residential homes. Accurate sizing of the pump can be based on the pump curve below and local norms and standards.

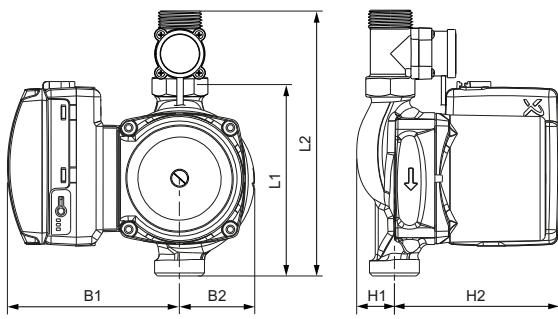


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Sectional drawing



Dimensional sketch



Type	L1 [mm]	L2 [mm]	H1 [mm]	H2 [mm]	B1 [mm]	B2 [mm]	Weight [kg]
UPA 15-160	130	203	25	110	116	50	2.4

Technical data

Version	Voltage [V]	Frequen- cy [Hz]	I _{1/1} [A]	P _{1 max.} [W]	Thread [inch]	Product number
Europe	230 V	50 Hz	1.41	180	G1	99331335
China						99195711

Operating conditions

Max. ambient temperature:	40 °C
Max. liquid temperature:	+2 °C to +95 °C (TF 95)
Max. system pressure:	10 bar
Max. head:	16 m
IP rating:	IPX2D

Materials

Pos.	Component name	Material
1	Terminal box	Composite
2	Radial bearing	Ceramic
3	Nameplate	Composite PA66
5	Stator housing and windings	AlSi10Cu2 / Copper
6	Air vent screw	Brass, nickelated, Ms58
8	Flow switch	Magnet / EPDM rubber / PP
9	Rotor can	Stainless steel
10	Gasket	EPDM rubber
11	Shaft and rotor cladding	Ceramic / Stainless steel
12	Thrust bearing	Carbon
13	Bearing plate	Stainless steel
14	Ball (non-return valve)	EPDM rubber
15	Split cone	Stainless steel
16	Impeller	Composite PES 30 % GF
17	Neck ring	Stainless steel
18	Pump housing	Cast iron
19	Stop ring	Composite PES

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ECM: 1222448