UPA Home Booster

UPA 15-90, UPA 15-120, UPA 120, UPA 15-160

50/60 Hz



GRUNDFOS

6. UPA 15-120



GR-104150

UPA booster pumps increase the pressure of domestic water to make the required pressure available at showers, taps and other tapping points.

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.

The integrated flow switch starts or stops the pump when a tapping point is turned on or off.

Features and benefits

- **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.
- **Corrosion-resistant**: Cataphoresis-coated pump housing.

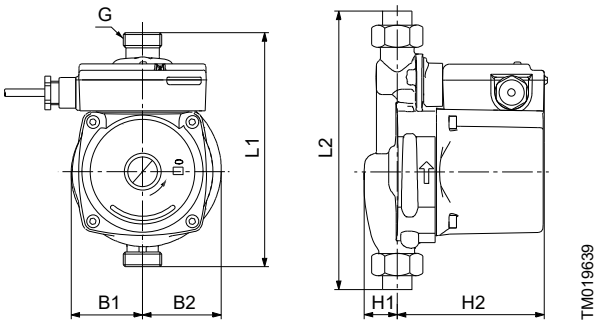
Motor

UPA booster pumps for pressure boosting are of the canned-rotor type, that is 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.

UPA 15-120 pumps have a 2-pole, asynchronous, squirrel-cage motor. The motor incorporates thermal overload protection, so no external motor protection is required.

Technical data

Dimensions and weights



TM019639

Dimensions [mm]					
L1	H1	H2	B1	B2	G
200	20	130	63	69	1"

Net weight [kg]	Gross weight [kg]	Shipping volume [m^3]
4.7	5.0	0.0058

Operating conditions

Enclosure class	IPX2D
Insulation class	F
Connections	G 1 - R 3/4 unions
Operating pressure	Max. 10 bar
Liquid temperature	2-60 °C (TF 95)
Ambient temperature	2-40 °C
Noise level	< 43 dB(A)

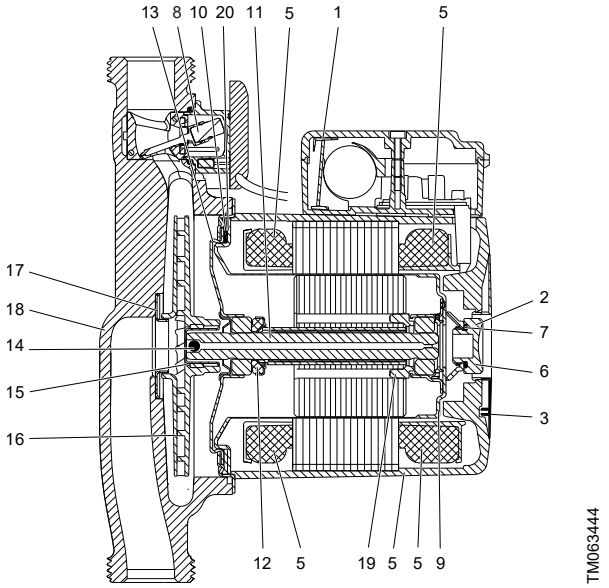
See nameplate data for the specific product model.

Electrical data

Frequency [Hz]	Voltage [V]	$P1_{max}$ [W]	$I_{1/1}$ [A]
50	1 × 230	200	0.89

Construction of UPA 15-120

Material specification



Sectional drawing of UPA 15-120

Pos.	Description	Material
1	Terminal box	Composite PPE/PS
	Electric unit	Composite PET
2	Radial bearing	Ceramic
3	Nameplate	Composite PA66
5	Stator housing	AlSi10Cu2
	Stator winding cap	Composite PET
	Stator windings	Copper
6	Vent screw	Brass, nickelled, Ms58, EN 2.0401.30
7, 10	Gaskets	EPDM rubber
8	Flow switch	Magnet / EPDM rubber / PP
9	Rotor can	Stainless steel EN 1.4301, AISI 304
11	Shaft	Ceramic
12	Thrust bearing	Carbon
	Thrust bearing retainer	EPDM rubber
13	Bearing plate	Stainless steel EN 1.4301, AISI 304
14	Ball (non-return valve)	EPDM rubber
15	Split cone	Stainless steel EN 1.4301, AISI 304
16	Impeller	Composite PSP/PP 30 % GF
17	Neck ring	Stainless steel EN 1.4301, AISI 304
18	Pump housing	Cast iron EN 1561 EN-GJL-150, ASTM 30 B
19	Stop ring	Composite PES
20	Intermediate ring	Stainless steel

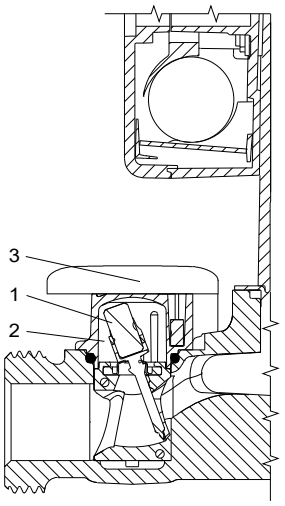
Characteristic materials

Component	Material
Shaft	Aluminium oxide or ceramic
Radial bearing	Ceramic
Thrust bearing	Carbon
Rotor can and bearing plate	Stainless steel
Impeller	Corrosion-resistant material
Pump housing	Cataphoresis-coated cast iron or stainless steel

Flow switch

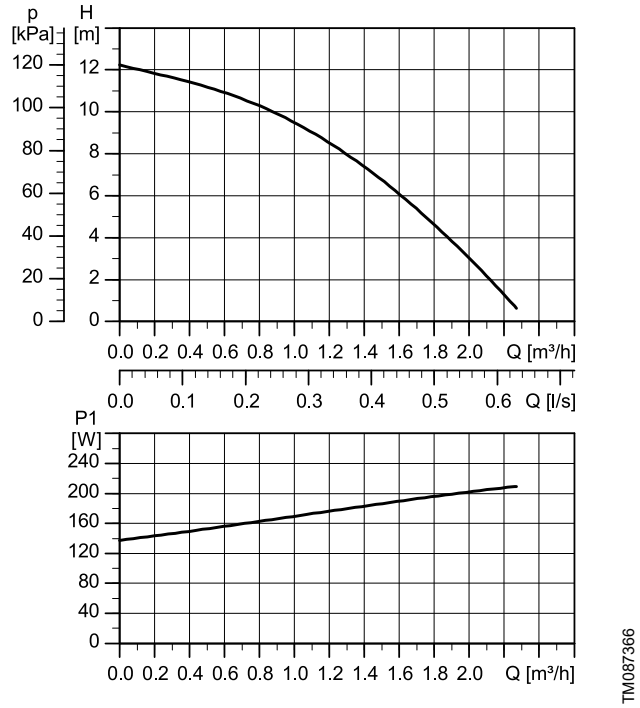
The integrated flow switch starts or stops the pump when a tapping point is turned on or off.

The flow switch consists of an arm with a magnet (1), that moves in a chamber (2). The chamber is separated from the pumped liquid and the terminal box. The magnetic field activates a magnetic contact (3).

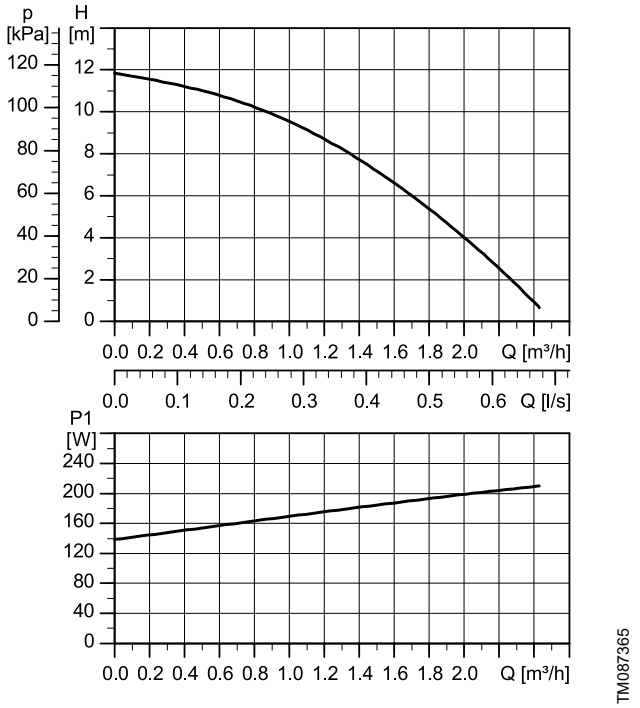


UPA 15-120 flow switch

Performance curves



UPA 15-120 50 Hz



UPA 15-120 60 Hz

Pump type	Voltage [V]	Frequency [Hz]	Port-to-port length [mm]	Pump housing	Connection	Plug/cable type	Product number
UPA 15-120	230	50	200	Cast iron	G 1	Schuko	99553570 [1]
	230	50	200	Cast iron	G 1	Schuko	99891572
	230	50	200	Cast iron	G 1	China	99366078
	230	50	200	Cast iron	G 1	Schuko	99553575
	230	50	200	Cast iron	G 1	No plug	99779302
	230	50	200	Cast iron	G 1	Argentina	99891091
	230	50	200	Cast iron	G 1	UK	99891395
	230	50	200	Cast iron	G 1	Chile	99891430
	230	60	200	Cast iron	G 1	No plug Saudi	99842403
	230	60	200	Cast iron	G 1	Schuko	99891087
	115	60	200	Cast iron	G 1	NEMA 5-15	99891104
	230	60	200	Cast iron	G 1	NEMA 6-15	99891394
	230	50	200	Cast iron	G 1	India	99891427
	230	60	200	Cast iron	G 1	Brazil	99891443
	115	60	200	Cast iron	G 1	Brazil	99891452

1) EAC marking