DAB
WATER • TECHNOLOGY

EVOSTA

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Technical Sheet

EVOSTA

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

TECHNICAL DATA

Operating range: from 0.4 to 3.3 m3/h with head up to 6.9 meters.
Liquid temperature range: from +2 °C to +95 °C.
Working pressure: 10 bar (1000 kPa)
Protection rating: IP 44
Insulation class: F
Installation: with horizontal motor shaft.
Standard power supply: single-phase 1x230 V ~ 50/60 Hz
Pumped liquid: clean, free from solids and mineral oils, not viscous, chemically neutral, close to the properties of water (max. glycol contents 30%).

APPLICATIONS

Low power consumption pump for circulation of hot water, suitable for all types of domestic heating systems.

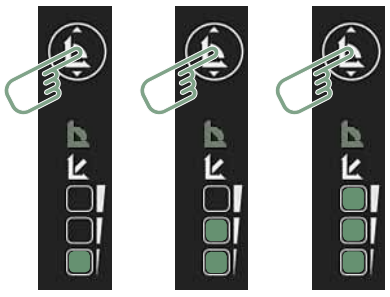
BENEFITS

Thanks to the advanced technology employed, **the permanent magnet synchronous motor,** and the **frequency converter,** the new range of **EVOSTA** circulators ensures high efficiency in all applications, bringing appreciable benefits in terms of energy saving. For this reason, the new, **EVOSTA** circulator, is in line with the European Directive 2009/125/EC Erp (formerly EuP) and is ready to meet the 2015 Erp requirements (**EEI** $\leq$ **0.23**). The circulator features an electronic device that detects the changes demanded by the system and automatically adapts the circulator performance accordingly, always ensuring optimal efficiency and minimum energy consumption.
The **EVOSTA** circulator is also ideal to replace the old three-speed circulators, as it has the same dimensions of the VA series and it can cover with a single model pumps with head of 4.5 and 6 meters. In addition, it is a product that can simplify the user's work, thanks to a single sequential setting button and a breather plug used to degas the system and unlock the motor shaft.
The EVOSTA series circulator can operate in 2 different modes:

- Constant curve — 3 curves
- Proportional differential pressure — 6 curves

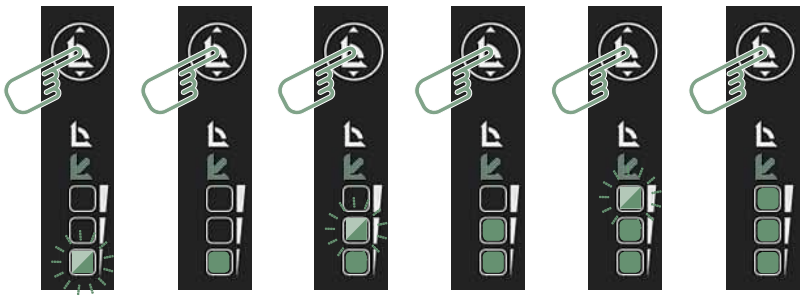
OPERATING MODES

CONSTANT CURVE OPERATION



Slow flashing LED LED with steady light

PROPORTIONAL DIFFERENTIAL PRESSURE OPERATION



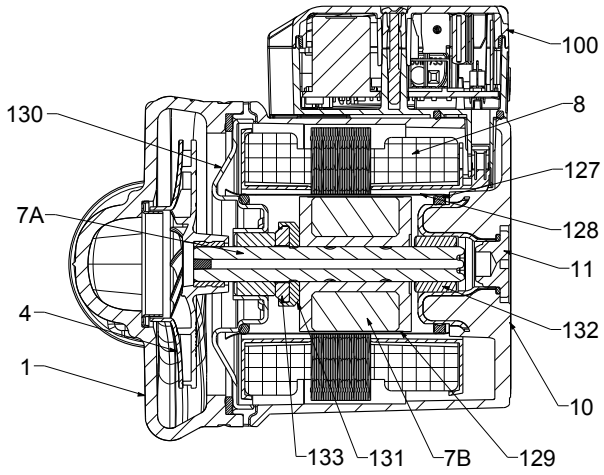
Slow flashing LED LED with steady light

CONSTRUCTION CHARACTERISTICS

Cast iron pump body and wet rotor motor. Motor casing in die-cast aluminium. Technopolymer impeller. Ceramic motor shaft mounted on graphite bushings lubricated by the pumped liquid. Stainless steel rotor jacket, stator jacket and closing flange. Ceramic thrust ring. EPDM seal rings and brass breather plug. Thanks to the internal protection of the motor, the pump does not require any form of overload protection.

MATERIALS

N°	PART	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	MOTOR SHAFT	CERAMIC
7B	ROTOR	MAGNET
8	STATOR	-
10	MOTOR CASING	DIE CAST ALUMINIUM
11	BREATHER PLUG	BRASS
100	ELECTRONIC BOX	TECHNOPOLYMER
127	SEAL RING	EPDM
128	STATOR JACKET	STAINLESS STEEL
129	ROTOR JACKET	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	EPDM
132	BUSHINGS	GRAPHITE
133	THRUST RING	CERAMIC



- DESIGNATION INDEX:
(example)

EVOSTA 40-70/ 130 ½"

electronic circulator with threaded ports

maximum head range (dm)

centre distance (mm)

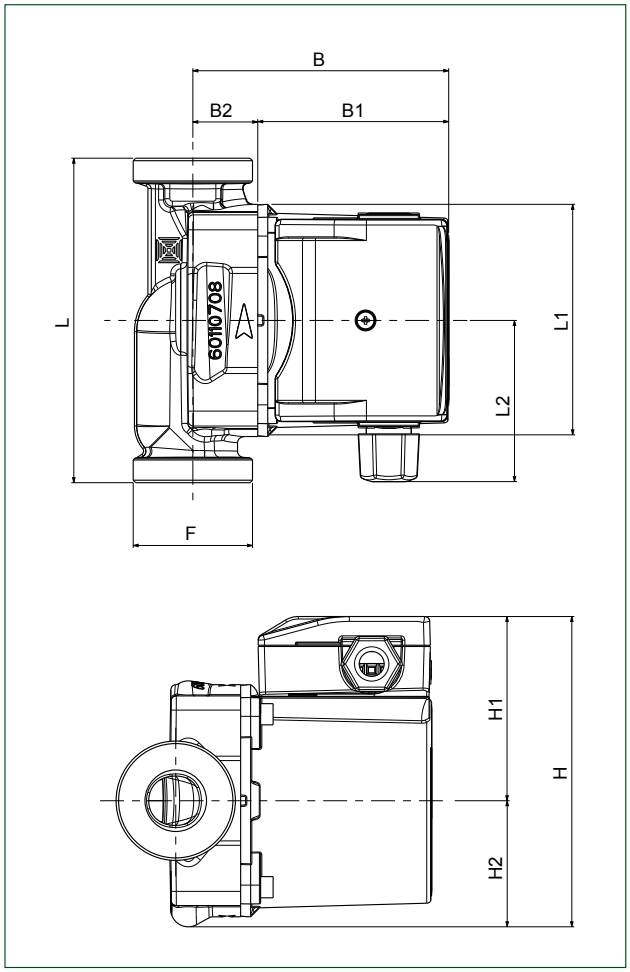
= 1" ½ threaded ports
½" = 1" threaded ports

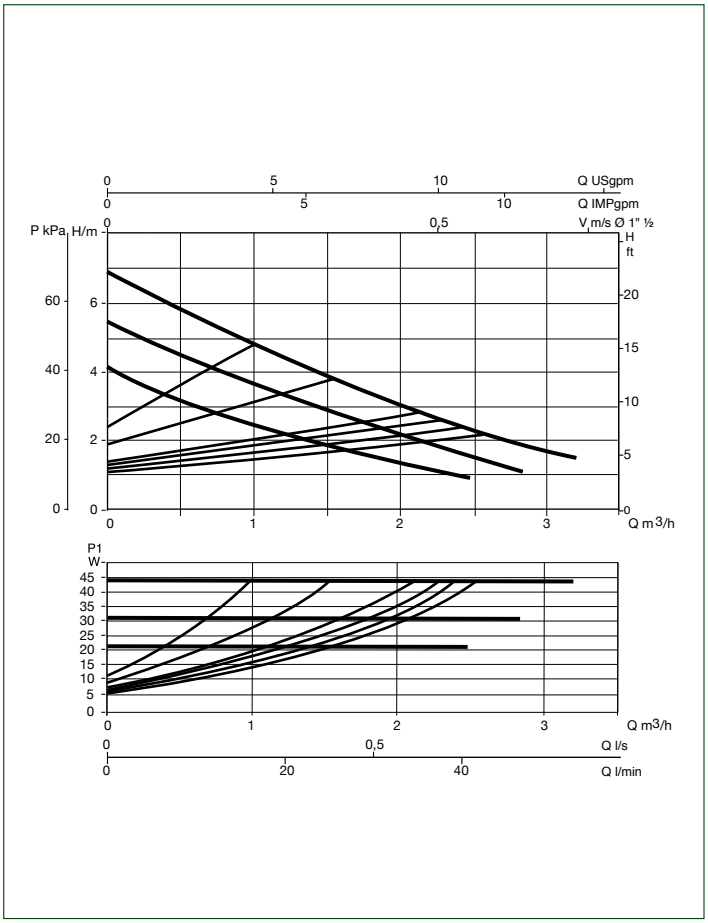
EVOSTA 40-70 Single with unions

Liquid temperature range: from +2°C to +95°C.
Maximum working pressure: 10 bar (1000 kPa)

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA			MINIMUM SUCTION PRESSURE	
			STANDARDIZED	SPECIAL		P W	In A	t°	m.c.a.
EVOSTA 40-70/130	1x230 V ~	130	1" F	¾" F - 1¼" M	MIN MAX	6 44	0,08 0,38	90°	10
EVOSTA 40-70/130 1/2"	1x230 V ~	130	½" F	-	MIN MAX	6 44	0,08 0,39	90°	10
EVOSTA 40-70/180	1x230 V ~	180	1" F	¾" F - 1¼" M	MIN MAX	6 44	0,08 0,38	90°	10

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME m³	WEIGHT Kg
											L	B	H		
EVOSTA 40-70/130	130	93	59	102,5	76,5	26	124	73,5	50,5	1"1/2	135	135	150	0.0027	2,6
EVOSTA 40-70/130 1/2"	130	93	59	102,5	76,5	26	124	73,5	50,5	1"	135	135	150	0.0027	2,7
EVOSTA 40-70/180	180	93	59	102,5	76,5	26	124	73,5	50,5	1"1/2	130	190	150	0.0037	2,8





The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO9906.

NOTES

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