



in line with European Directive
ErP 2009/125/EC (formerly EuP) of 2015

TECHNICAL DATA

Operating range: 0,4-3,3 m³/h with head up to 6,9 metres.

Pumped liquid temperature range: from +2 °C to +95 °C.

Working pressure: 10 bar (1000 kPa).

Protection class: IP 44.

Insulation class: F.

Installation: with horizontal motor axis.

Standard power input: single-phase 1 x 230 V~ 50/60 Hz.

Pumped liquid: Clean, free of solids and mineral oils, non-viscous, chemically neutral, with properties similar to water (glycol max 30%).

APPLICATIONS

Low energy consumption electronic pump for hot water circulation in all types of domestic heating systems.

ADVANTAGES

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, with significant benefits in terms of energy saving. For this reason, the new **EVOSTA** circulator not only complies with European Directive ErP 2009/125/EC (formerly EuP) (**EEI ≤ 0,23**). The circulator has a built-in electronic device that detects the changes demanded by the system, and automatically adapts the circulator performance accordingly, always ensuring optimum efficiency and minimum energy consumption.

The **EVOSTA** circulator is also suitable for replacing old three-speed circulators, both as far as size, as it has the same dimensions of the VA series, and for its capability of covering pumps with heads of 4, 5, and 6 metres with one single model. It can also simplify the work of the user, thanks to a single sequential setting button and a breather plug used to degas the system and unlock the motor shaft if required.

The EVOSTA circulator can operate in 2 different modes:

- proportional differential pressure



6 curves

- Fixed curve



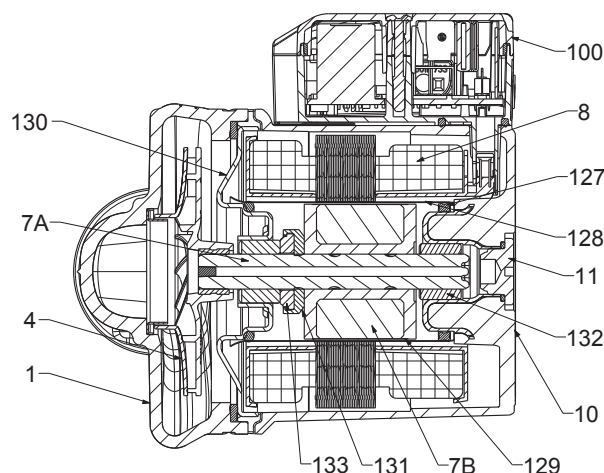
3 curves

CONSTRUCTION FEATURES

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

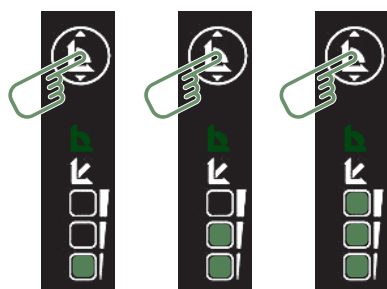
MATERIALS

N.	PARTS	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 LINER	STAINLESS STEEL
129	ROTOR LINER	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	EPDM
132	BUSHINGS	GRAPHITE
133	THRUST RING	CERAMIC



OPERATING MODES

FIXED CURVE OPERATION



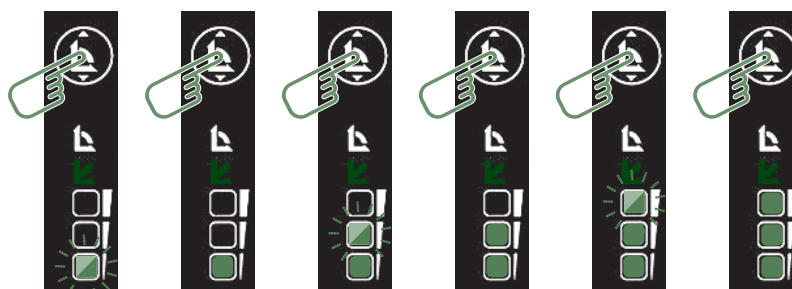
CS1

CS2

CS3



PROPORTIONAL DIFFERENTIAL PRESSURE OPERATION



PP1

PP2

PP3

PP4

PP5

PP6



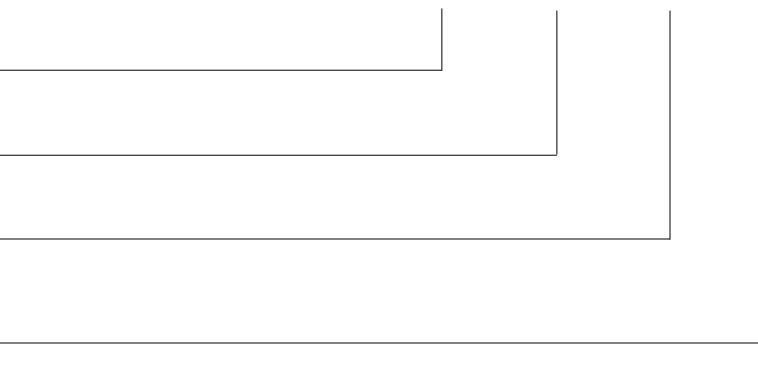
- Legend:
(example)

threaded ports electronic circulator

maximum head range (dm)

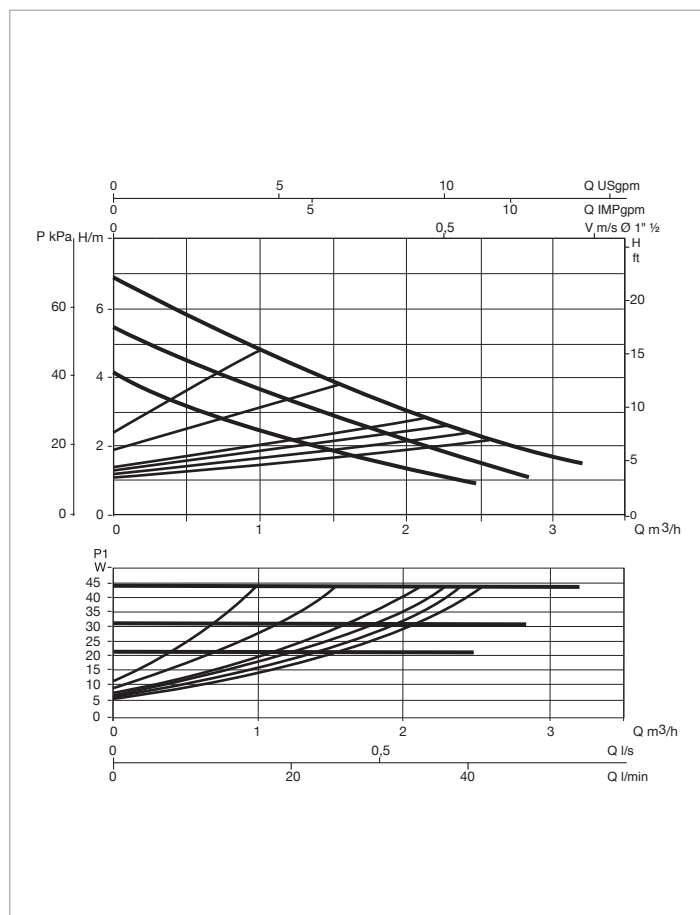
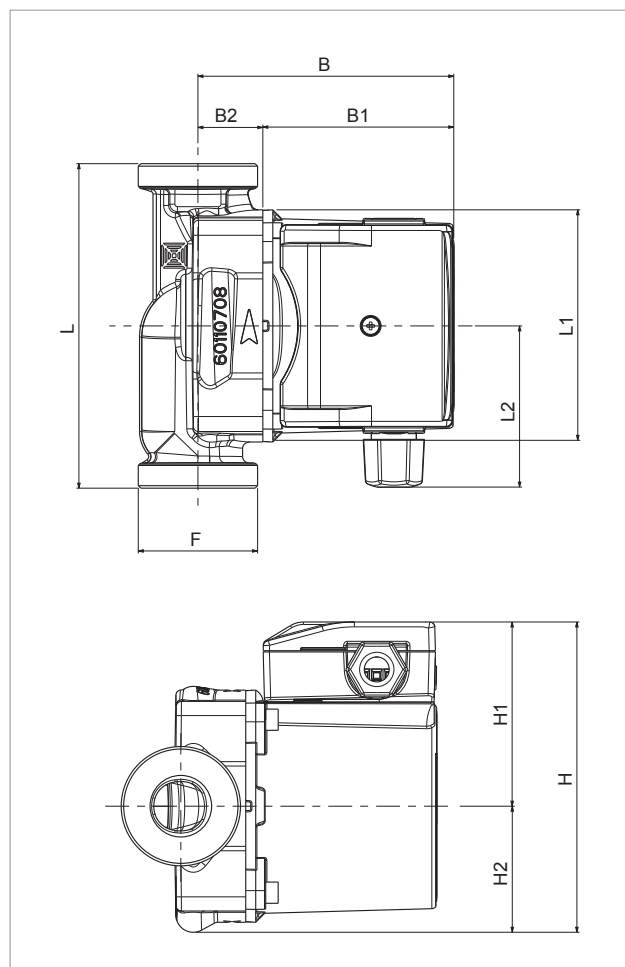
centre distance (mm)

$\frac{1}{2}$ " = 1" $\frac{1}{2}$ threaded ports
 $\frac{1}{2}$ " = 1" threaded ports

EVOSTA 40-70/ 130 $\frac{1}{2}$ "

EVOSTA - ELECTRONIC CIRCULATORS FOR DOMESTIC HEATING SYSTEMS - SINGLE, WITH UNIONS

Pumped liquid temperature range: from +2 °C to +95 °C - Maximum operating pressure: 10 bar (1000 kPa)



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m³/h	0	0,6	1,2	1,8	2,4	3
	Q=l/min	0	10	20	30	40	50
EVOSTA 40-70/130	H (m)	6,88	5,5	4,42	3,35	2,41	1,71
EVOSTA 40-70/130 1/2"		6,88	5,5	4,42	3,35	2,41	1,71
EVOSTA 40-70/180		6,88	5,5	4,42	3,35	2,41	1,71

MODEL	CENTRE DISTANCE mm	UNIONS ON REQUEST		POWER INPUT 50 Hz	P1 MAX W	In A	EEI *	MINIMUM SUCTION PRESSURE	
		STANDARDISED	SPECIAL					t°	90 °
EVOSTA 40-70/130	130	1" F	¾" F - 1¼" M	1 x 230 V ~	6 44	0,08 0,38	EEI ≤ 0,23	m.c.w.	10
EVOSTA 40-70/130 1/2"	130	½" F	-	1 x 230 V ~	6 44	0,08 0,39	EEI ≤ 0,23	m.c.w.	10
EVOSTA 40-70/180	180	1" F	¾" F - 1¼" M	1 x 230 V ~	6 44	0,08 0,38	EEI ≤ 0,23	m.c.w.	10

The parameter of reference for the more efficient circulators is EEI ≥ 0,20.

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING 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	2,4
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	2,4
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