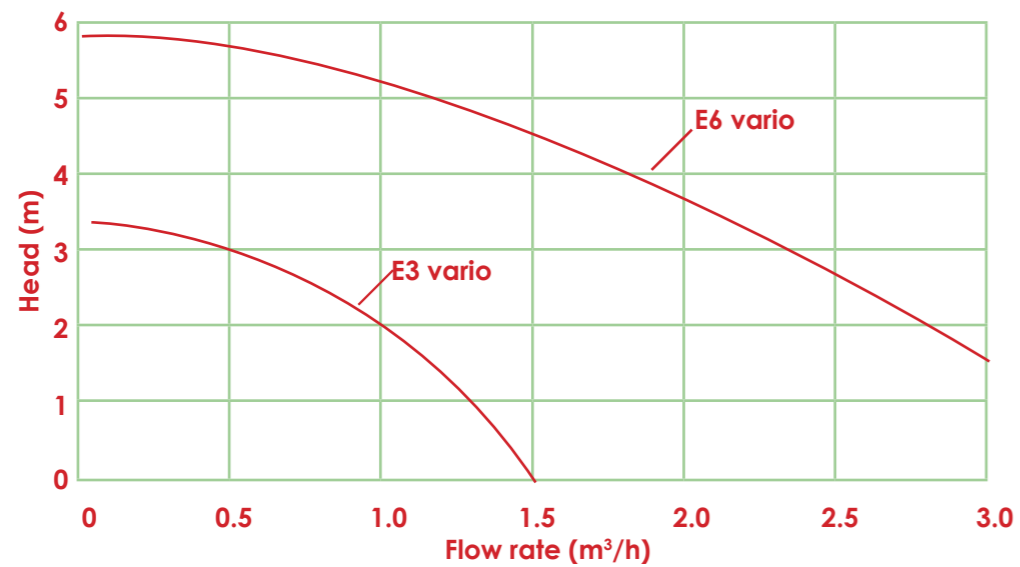


Sanitary and Heating Circulators Performance



Note - performance curves indicate performance at maximum speed

Model	Power Range	Pump housing length	Connection	for union fittings	Pump housing material
GPS-E3 vario-20/110	5-35 watts	110mm	1/2" F or 1 1/4" M BSP	3/4" BSP	Bronze
GPS-E6 vario-20/130	9-63 watts	130mm	1 1/4" BSP	3/4" BSP	Cast Iron
GPS-E6 vario-25/130	9-63 watts	130mm	1 1/4" BSP	1" BSP	Cast Iron



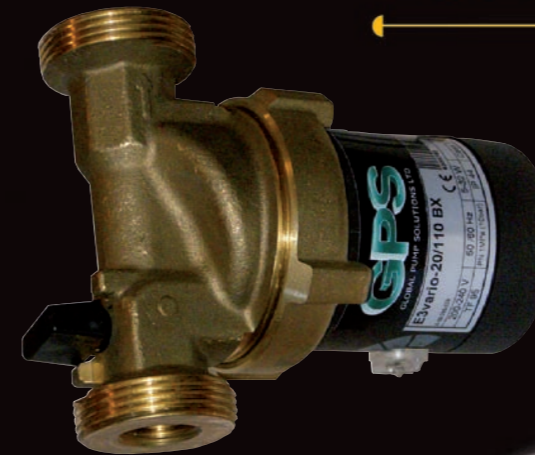
Galvanised union kit for E6 Vario



Bronze union kit for E3 vario

Efficiency is affordable!

The revolutionary heating circulator
ecocirc[®] vario



up to 68%
more efficient
than conventional
circulator options



Efficiency at a low price:

The revolutionary **ecocirc[®]** vario series. With efficient electronically commutated permanent magnet motor technology.

This means high efficiency and reliability for the price of standard circulators.

Hot Water and Heating Circulators

ecocirc® vario

There are two main applications for circulators:

- Heating circuits, such as underfloor heating, radiators, solar systems, cooling systems. Fluid is circulated in a closed system. The E6 vario is perfect for this.
- Instant hot water. Usually, in extensive hot water systems, there is a considerable distance between the hot water cylinder and the furthest tap, and it is necessary to run cold water out of the system before hot water appears. The beauty of the E3 vario is that hot water circulates through the hot water plumbing of the property, so it's available at the turn of a tap. No more wasting water.

With extremely low energy consumption, the **ecocirc®** vario sets a new standard in efficiency and economy.

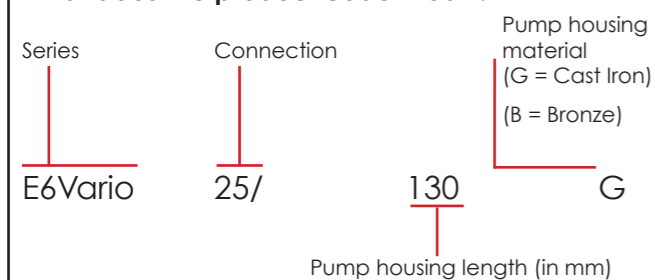
No longer do you have to select from pre-set speeds. The **ecocirc®** vario pumps have minutely variable speed, allowing the operator to choose the speed best suited to the situation, minimising energy consumption and water heating costs.

Uniquely, the motor has a permanent magnetic field, meaning there is no capacitor. This makes the motor more reliable and reduces power consumption.

Remember

ecocirc® circulators are up to 68% more efficient than conventional circulators and circulators by nature run for long periods of time so an efficient motor is very important.

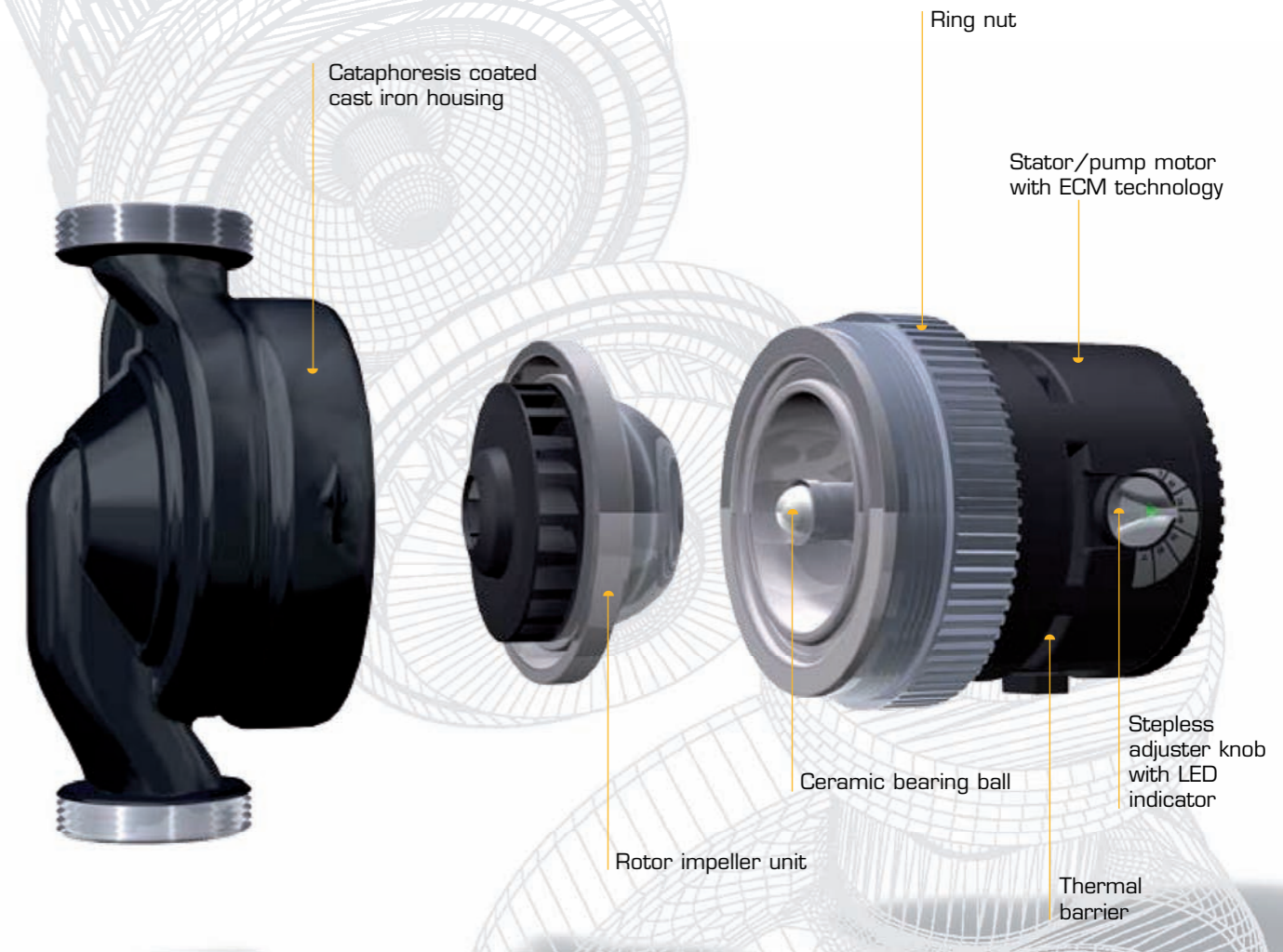
What does the product code mean?



Technical data	
Motor design	electronically commutated shaftless spherical motor with permanent magnet technology
Max. system pressure	6 bar
Electrical supply	200-240 Volt, 50/60 Hertz
Suitable for the following liquids:	water, water/glycol mixtures*
Temperature range	-10°C** to +95° C
Power consumption	series E3: 5-32 Watt series E4: 9-35 Watt series E6: 9-63 Watt
Protection class	IP 44
Insulation class	F
* check hydraulic performance with more than 20% glycol	
** non-freezing	

Design

Heating circulator Ecocirc® vario



Efficiency

Electronic commutation results in significant energy savings with the same performance. The basis for the higher efficiency is the permanent magnet rotor. The magnetic field required in the motor is permanently present therefore losses do not occur in creating the magnetic field.

Compared to standard circulators, electronically commutated pumps save energy at full load, and especially when running at reduced rpm.

A microprocessor installed in the pump creates a rotating magnetic field with variable frequency in the stator coils (electronic commutation), which turns the rotor. Compared to state of the art pumps even higher rpm are possible, resulting in higher performance in a smaller package. The starting torque, too, is significantly increased.

Stepless speed control

All **ecocirc®** vario heating circulators can be speed controlled over a very wide range to adjust them to the requirements of the system. When comparing the **ecocirc®** to standard circulators at full speed, they are ideally suited for modern heating systems in which only a fraction of the circulating power is required as the heating system reaches its target temperature. Setting the appropriate performance is facilitated by 7 reference points on the dial of the speed adjuster knob.

The green LED in the transparent knob gives information about the operational status of the pump.