



BLUEONE

SMART, HIGHLY EFFICIENT
DOMESTIC HOT WATER PUMPS BY VORTEX

THE NEW SERIES BWO 155



PUMPS
UNIVERSAL MOTORS
REPLACING OLD WITH NEW

**MADE IN
GERMANY**



English

BLUEONE BWO 155 – THE UNIVERSAL MOTOR

UNIVERSAL – SIMPLE – HIGHLY EFFICIENT

The universal motor in the new BWO 155 series by VORTEX is a highly efficient, electronically commutated DC motor (ECM technology), compatible with all commercially available pump housings (shown below: R pump housings).

All of our BlueOne universal motors are equipped with a permanent magnet spherical motor, built according to the original spherical motor principle by VORTEX.

The BlueOne universal motor is available with all VORTEX BlueOne control modules.



AUTOlearn TECHNOLOGY

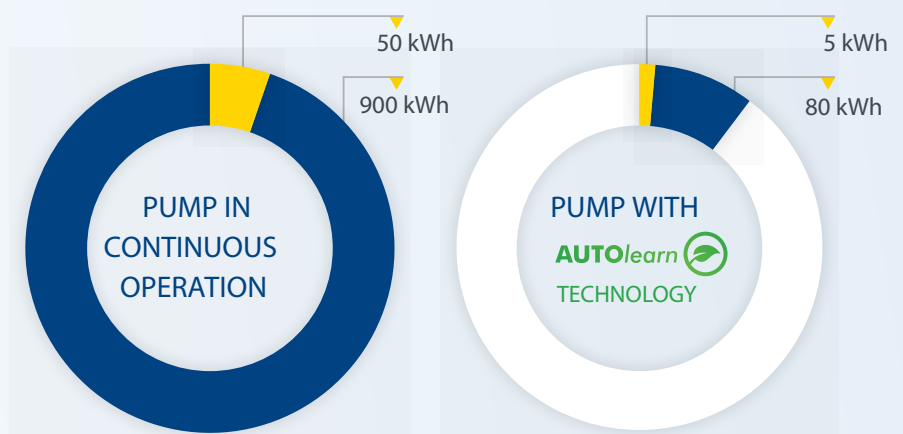
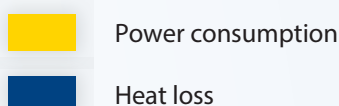
BWO 155 SL pumps and motors with AUTOlearn technology automatically and quickly learn the times at which consumers tend to need hot water. The pump will automatically adapt to any change in usage patterns.

Through a temperature sensor on the flow side, the BWO 155SL detects when the consumer requires hot water. The system notes this and predictively provides hot water at these times each day. When hot water is not needed, the pump does not run. This creates huge potential for savings in terms of heat loss and water and power consumption.

EXTREMELY ECONOMICAL: BWO 155 SL

ENERGY SAVINGS OF OVER 90 %

Reduction in energy loss in a typical detached house of over 90 % per year with AUTOlearn technology, compared to a domestic hot water pump in continuous operation.



THE NEW CONTROL MODULES

BLUEONE VO 155 SERIES

SL MODULE



AUTOlearn TECHNOLOGY

Self-learning module with AUTOlearn technology

- ▼ AUTOlearn technology
- ▼ Autostart function
- ▼ Weekend/holiday detection
- ▼ 5 comfort settings
- ▼ Operating display
- ▼ Continuous operation and permanently off functions
- ▼ Anti-legionella function

Z MODULE



Digital Timer

- ▼ 24-hour clock face
- ▼ Smallest increment – 30 minutes
- ▼ Adjustable via pushbuttons
- ▼ Operating display
- ▼ Continuous operation and permanently off functions

ZM MODULE



Mechanical Timer

- ▼ 24-hour clock face
- ▼ Smallest increment – 15 minutes
- ▼ Adjustable via mechanical sliders
- ▼ Continuous operation and permanently off functions
- ▼ Optional: KT version with anti-scaling thermostat (switch-off temp. 55 °C / switch-on temp. 45 °C)

ERT MODULE



Electronic control thermostat

- ▼ Shutdown temperature adjustable from 35 °C to 75 °C
- ▼ Start point 7 K below the shutdown temperature
- ▼ Operating display
- ▼ Continuous operation and permanently off functions

MODULE CAP



Without control module (continuous operation)

- ▼ Continuous operation function

MODULE CAP 12V



Without control module (continuous operation)

- ▼ Continuous operation function
- ▼ 12V DC version

REPLACING OLD WITH NEW

THE NEW DOMESTIC HOT WATER PUMPS IN THE

BLUEONE BWO 155 SERIES

Pumps in the 152 and 153 series can be easily replaced with the new, highly efficient BlueOne pumps or with the BlueOne universal motors. The pumps are available with "V" or "R" pump housing (pumps below shown with V pump housing).

152 - 153 SERIES – OLD

NEW: 155 SERIES – BLUEONE



BWZ 152 OT/KT

Mechanical timer
with or without anti-scaling thermostat

BWZ 152 V oT/ KT

BWZ 152 R 1/2" oT/ KT

BWZ 152 oT/KT motor



BW 153 ERT

Electronic control thermostat

BW 153 V ERT

BW 153 R 1/2" ERT

BW 153 ERT motor



BW 152 OT/KT

Continuous operation
with or without anti-scaling thermostat

BW 152 V oT/KT

BW 152 R 1/2" oT/KT

BW 152 oT/KT motor



BWO 155 SL

AUTOlearn TECHNOLOGY

BWO 155 V SL

BWO 155 R SL

BWO 155 SL universal motor



BWO 155 Z

Digital timer

BWO 155 V Z

BWO 155 R Z

BWO 155 Z universal motor



BWO 155 ZM/ZM KT

Mechanical timer
with or without anti-scaling thermostat

BWO 155 V ZM/ZM KT

BWO 155 R ZM/ZM KT

BWO 155 ZM/ZM KT universal motor



BWO 155 ERT

Electronic control thermostat

BWO 155 V ERT

BWO 155 R ERT

BWO 155 ERT universal motor



BWO 155

Continuous operation

BWO 155 V

BWO 155 R

BWO 155 universal motor



BWO 155 12 V

Continuous operation for 12 V DC

BWO 155 V 12 V

BWO 155 R 12 V

BWO 155 12 V universal motor

oT = without thermostat

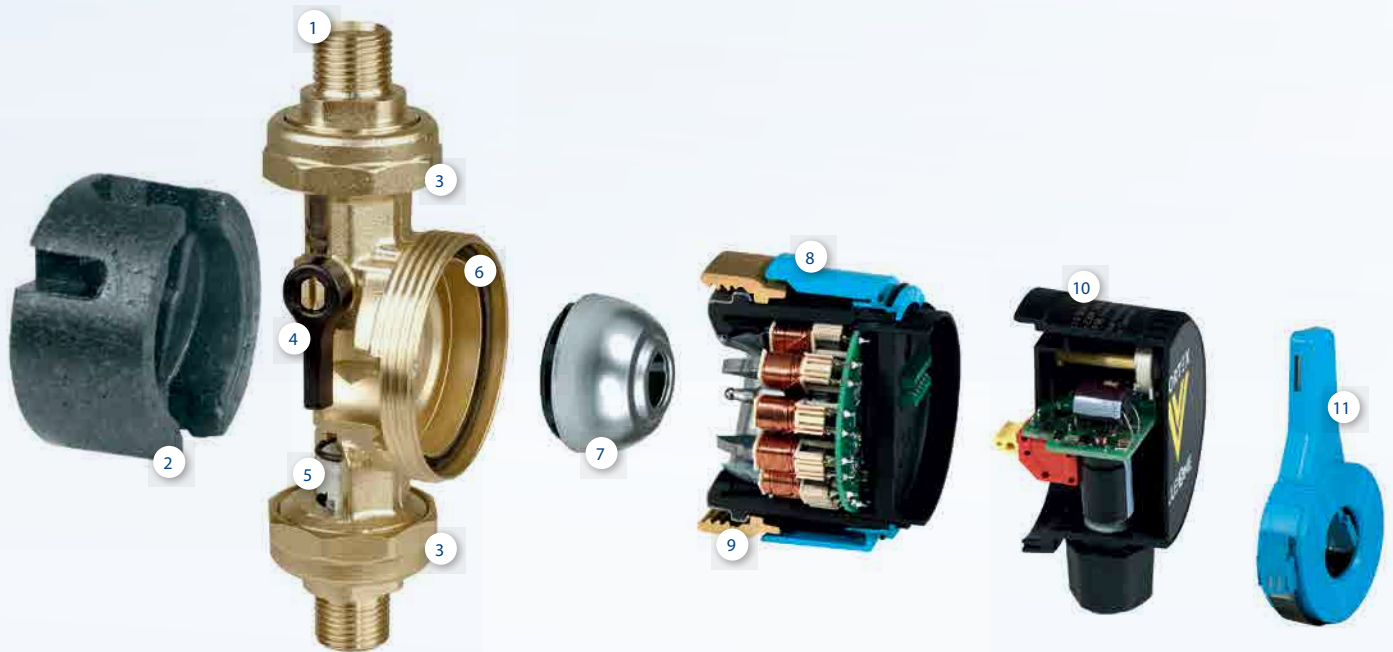
KT = with anti-scaling thermostat

BLUE ONE DOMESTIC HOT WATER PUMPS

OVERVIEW OF COMPONENTS



VORTEX pumps are mainly intended for installations in domestic pressurised hot water circulation systems suitable for single and two family houses. Depending on the layout of the pipe system, the pumps can even be deployed in multi-family houses if auto-balancing circulation controllers are installed for circuit regulation. Special versions for other applications and media are available on request.



1 PUMP HOUSING

- ▼ V-pump housing with R 1 1/4" external thread for cap fittings, non-return valve and ball shut-off valve.

Optional: ▼

- R-pump housing with R 1/2" internal thread.



2 INSULATION SHELL

- ▼ Prevents unnecessary heat losses

3 CAP FITTINGS

- ▼ For screwing, soldering or pressfitting.

4 BALL SHUT-OFF VALVE

- ▼ Defines direction of flow.
- ▼ Prevents gravity circulation.

6 SEALING RING

7 PERMANENT MAGNET ROTOR OR

- ▼ Can be cleaned and replaced.

8 PERMANENT MAGNET MOTOR OR

- ▼ Electronically commutated DC motor (ECM technology), voltage transformer for 230 V~.
- ▼ Also available as a 12V DC pump.
- ▼ Built according to Vortex' original spherical motor principle.
- ▼ Dry run protection – Interrupts rotor run automatically.

9 CAP NUT

- ▼ Enables quick demounting of the motor from the pump housing.
- ▼ Cleaning or descaling of the wetted parts is made easy.

10 CAP OR CONTROL MODULE

- ▼ With speed control.
- ▼ Hexagon socket screws.
- ▼ Pumps BWO 155 without a control module can be retrofitted with a control module (ERT, Z, SL) by just replacing the cap.

11 CABLE BOX

- ▼ For BWO 155 SL.
- ▼ With temperature contact sensor for the supply line.

BENEFITS OF THE NEW BLUEONE 155 SERIES

- ▼ Extremely quiet
- ▼ Minimal power consumption – as low as 1 watt on average (based on the power-on time)
- ▼ High pump rate as required
- ▼ Compact design
- ▼ Simple connection – cables connected without tools
- ▼ Extremely versatile – many control modules to choose from
- ▼ BWO 155 universal motor – compatible with all commercially available pump housings

BLUEONE PUMPS MADE IN GERMANY UNIVERSAL – SIMPLE – HIGHLY EFFICIENT



Brochures, as well as operating and installation instructions, can be downloaded from:
www.deutsche-vortex.com

50 YEARS

More than 50 years of experience in the development and production of domestic hot water pumps.

All models with shaftless, blocking current resistant spherical motor with ECM technology

Max. delivery head: 1.3 mWC

Max. pump rate: 950 l/h

Electrical connection: 1~115-230 V/50-60 Hz or 12 V =

Pumped medium: domestic hot water (unrestricted water hardness), 2 °C - 95 °C



DEUTSCHE VORTEX GMBH & CO. KG

Kästnerstraße 6 | 71642 Ludwigsburg | Germany
Phone: +49(0)7141.2552-0 | Fax: +49(0)7141.2552-70
info@deutsche-vortex.com

WWW.DEUTSCHE-VORTEX.COM

