ARMSTRONG

Domestic Circulators and Condensate Pumps

High efficiency, electronically controlled wet rotor circulators and condensate pumps for domestic applications

CE | EEI≤=0.20 Best in Class*

*HEP OPTIMO (N)/HEP OPTIMO BASIC (N)/HEP OPTIMO L+

SOLUTION OUTLINE

FILE NO: 11.20NONEU/ENG
DATE: FEBRUARY 2019

SUPERSEDES: NEW
DATE: NEW

Armstrong Fluid Technology, global leaders in high-efficiency, energy saving solutions bring our expertise in fluid flow and control to the domestic market.

The new Armstrong range of circulators offers installers a versatile choice of high efficiency, maintenance-free, in-line, wet rotor circulator suitable for any domestic heating and cold water application.

HIGH EFFICIENCY, MAINTENANCE-FREE, IN-LINE, WET ROTOR CIRCULATORS

The high specification quality engineered products incorporate permanent magnet technology and best in class European ErP compliant motors to optimise energy efficiency and performance, delivering savings for the home owner/ occupant.

- High level efficiency
- Electronic controls
- Permanent magnet technology
- Simple start-up
- Smooth running
- Very low energy consumption
- Air-vent screw
- Simple operation
- Space-saving axially
- Integrated terminal box
- Automatic adjustment for demand conditions
- Maintenance free

The HEP Optimo range of high efficiency, wet rotor circulators are electronically controlled, with advanced permanent magnet technology driving their superior performance levels.

HEATING SYSTEM
PRODUCTS

HEP OPTIMO

High efficiency pumps with LED display for use in heating systems with variable or constant rates of flow.

HEP OPTIMO BASIC

HEP OPTIMO L

HEP OPTIMO L+

HUPA

HLPA

HGPA

DRINKING WATER
PRODUCTS

HEP OPTIMO (N)

High efficiency pumps with LED display for use in heating, solar and drinking water systems with variable or constant rates of flow, stainless steel housing.

HEP OPTIMO BASIC (N)

BUPA (N)

BGPA (N)

SOLAR SYSTEM
PRODUCTS

HEP OPTIMO L SOLAR

High efficiency pumps with LCD display for use in solar heating systems with variable or constant rates of flow.

GEOTHERMAL SYSTEM
PRODUCTS

HEP OPTIMO GEO

High efficiency pumps with LED display and protected against condensation, for use in heating and cold water systems with variable or constant rates of flow.

HEP OPTIMO L GEO

	HEP OPTIMO	HEP OPTIMO BASIC	HEP OPTIMO L	HEP OPTIMO L+	HUPA	HLPA	HGPA	HEP OPTIMO (N)	HEP OPTIMO BASIC (N)	BUPA (N)	BGPA (N)	HEP OPTIMO L SOLAR	HEP OPTIMO GEO	HEP OPTIMO L GEO
Integrated night economy feature (optional)	✓	✓		✓				✓	✓				✓	
Compact design				✓	✓	✓	✓							
Thermal Insulation	✓*		✓*	✓				✓*				✓*	✓*	✓*
LCD Display	✓		✓	✓								✓	✓	✓
Cataphoretic coated cast iron pump housing	✓	✓	✓		✓	✓	✓					✓	✓	✓
Steel pump housing								✓	✓	✓	✓			
Pre-mounted, screwable angle entry plug	✓							✓					✓	
Pre-mounted one metre cable		✓							✓					
Collective fault signal			✓									✓		✓
Potted motor													✓	✓
Optical fault indication and optical display control mode	✓	✓		✓				✓	✓					

*180mm only

TECHNICAL OVERVIEW

HEP OPTIMO / HEP OPTIMO (N) / HEP OPTIMO GEO

Rate of flow

up to 3.6 m³/h for Optimo Geo

up to 4.4 m³/h for Optimo and Optimo (N)

Pressure head

4 m/6 m for Optimo Geo

4 m/6 m/8 m for Optimo and Optimo (N)

Control

Δpc + Δpv + fixed rpm

EEI

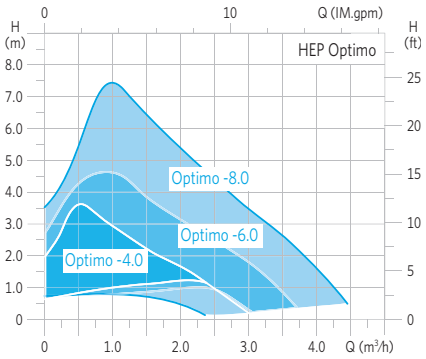
≤ 0.17 HEP Optimo XX-4.0 GXXX

≤ 0.18 HEP Optimo XX-6.0 GXXX

≤ 0.20 HEP Optimo XX-8.0 GXXX

≤ 0.17 HEP Optimo (N) XX-4.0 NXXX

≤ 0.18 HEP Optimo (N) XX-6.0 NXXX



≤ 0.20 HEP Optimo (N) XX-8.0 NXXX

≤ 0.17 HEP Optimo Geo XX-4.0 GXXX

≤ 0.18 HEP Optimo Geo XX-6.0 GXXX

HEP OPTIMO BASIC / HEP OPTIMO BASIC (N)

Rate of flow

up to 4.4 m³/h for Optimo and Optimo (N)

Pressure head

4 m/6 m/8 m for Optimo and Optimo (N)

Control

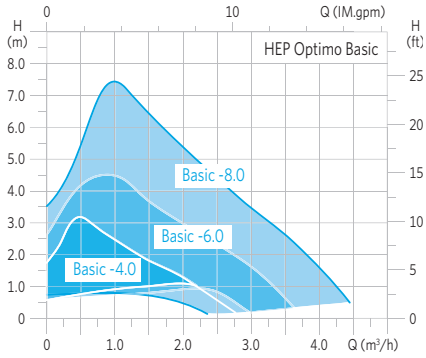
Δpc + Δpv + fixed rpm

EEI

≤ 0.17 HEP Optimo Basic XX-4.0 GXXX

≤ 0.18 HEP Optimo Basic XX-6.0 GXXX

≤ 0.20 HEP Optimo Basic XX-8.0 GXXX



HEP OPTIMO L / HEP OPTIMO L SOLAR / HEP OPTIMO L GEO

Rate of flow

up to 10 m³/h

Pressure head

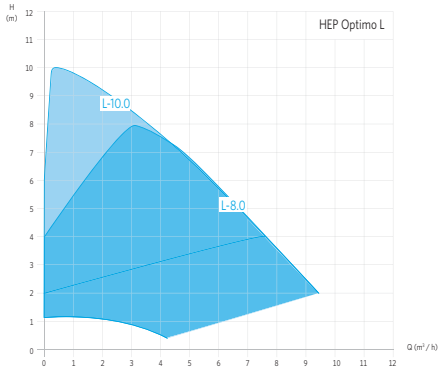
8 m/10 m

Control

Internal: Δpc + Δpv + fixed rpm

External:

- Digital: PWM (characteristic lines for heating and solar per VDMA device paper 24224)
  Frequency F nominal: 100-1000 Hz
  Voltage U nominal: 5-15 V
  Power I: 10 mA
- Analogue: 0-10 V with cable break detection
  Power I: 1 mA
  Impedance: 10 kOhm



EEI

≤ 0.23 HEP Optimo L XX-8.0 GXXX

≤ 0.23 HEP Optimo L XX-10.0 GXXX

OPTIMO L+

Rate of flow

up to 45m3/h

Pressure head

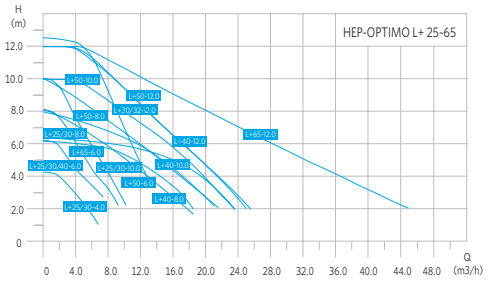
6 m/ 8 m/ 10 m /12 m

Control

Internal: Δpc + Δpv + Eco Mode + fixed rpm
External: analogue 0-10 V Start/Stop
(bridged terminal ex works)

EEI

≤ 0.20



HUPA/HLPA/HGPA

Rate of flow

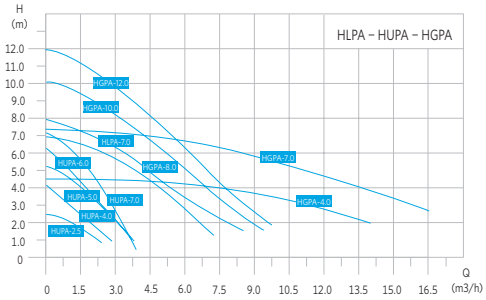
up to 3.8m3/h (HUPA)
up to 7m3/h (HLPA)
up to 12m3/h (HGPA)

Pressure head

up to 7m (HUPA/HLPA)
up to 12m (HGPA)

Control

3-step switch with
manual speed selection



BUPA (N)

Rate of flow

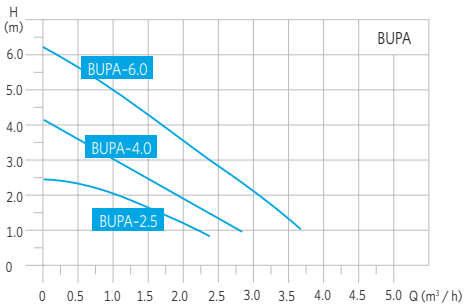
up to 4.0 m³/h

Pressure head

up to 6 m

Control

3-step switch with
manual speed selection



BGPA (N)

Rate of flow

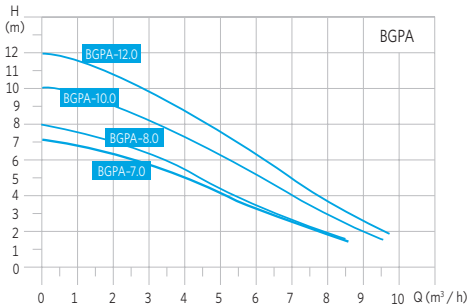
up to 12.0 m³/h

Pressure head

up to 12 m

Control

3-step switch with
manual speed selection



LIFT CONDENSATE PUMPS

LIFT, LIFT BASIC, LIFT NT25

The Lift condensate pump series is designed for gas condensing boilers up to 400 kW.

The Lift Basic series is designed for gas condensing boilers up to 300 kW.

The Lift NT25 condensate pump is designed for gas and oil condensing boilers (only) up to 25 kW. It is expandable up to 100 kW with NB2 and NT50 accessories.

LIFT

Fully encapsulated pump unit (IP 55) resistant to water jets from any direction

Pump unit also suitable for use in external tank (tank height min. 62 mm, max. 70 mm)

LIFT BASIC

Housing made from ABS plastics is resistant to condensate

Lift condensate pumps are fully automatic units designed for the extraction of condensate. They can be used when condensate separation through gravity is not possible, or where there is no direct drain.

FEATURES

1. **Space-saving construction**
2. **Overflow protection through separate float**
3. **Potential-free alarm connection (NO normally open/NC normally closed)**

LIFT NT25

Fully automatic condensate pump delivered completely ready for connection, including neutralization tank

Noise-reducing electronic controls, with follow-up time to reduce switching frequency

Integrated collection/neutralization tank, included, first fill with neutralization granulate (1 kg) – sufficient for about 12 months for systems up to 25 kW

Upstream suction filter as well as check valve for discharge hose

Connection for discharge hose (0.6 × 1.5 mm)

Pre-mounted power cable (1.0 m) include shockproof plug

LIFT

Rate of flow

350 l/h for Lift

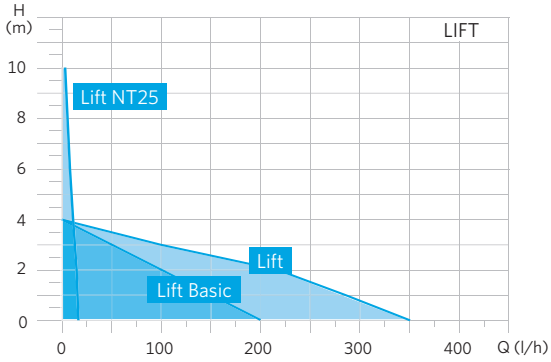
200 l/h for Lift Basic

14 l/h for Lift NT25

Pressure head

4m Lift and Lift Basic

10m Lift NT25



LIFT BASIC

LIFT NT25

OTHER CIRCULATORS IN THE RANGE

ARMSTRONG

Armstrong's extensive circulator range extends beyond domestic sized models. Our AGE3 and Compass ranges offer products for larger buildings up to light commercial size.

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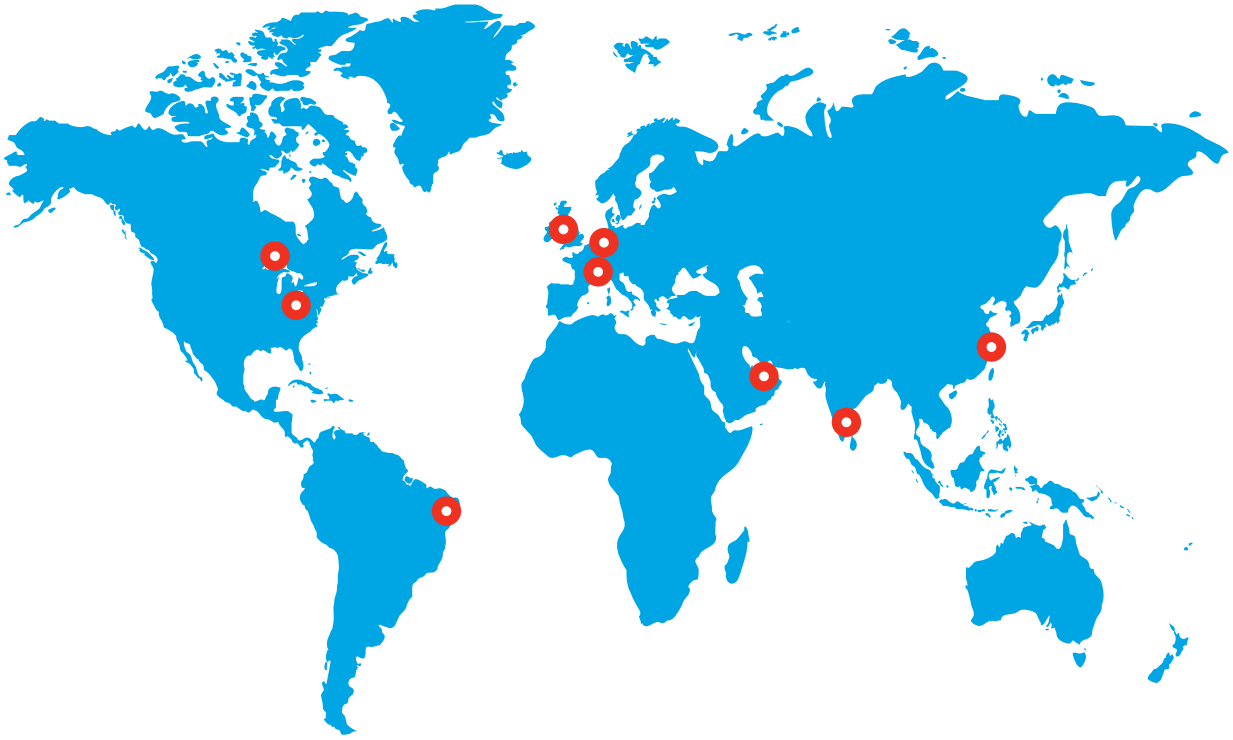

FOR FURTHER INFORMATION PLEASE SEE
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