

High efficiency pumps with LED display

AGE4 series



TECHNICAL DATA

Rate of flow: Threaded: up to 9m³/h (2.5 l/s)
Flanged: up to 83m³/h (23.0 l/s)

Pressure head: 6 m/8 m/10 m/12 m/18 m

Control range: 10-90W/10-180W/25-270W/25-480W/25-560W/
25-1100W/38-1100W/20-1500W/45-1600W

Media temperature: +2 °C to +110 °C

Installation length: 180 mm (threaded)
220, 250, 280, 340 and 360 mm (flanged)

Circulator connection: 1" and ½" (threaded),
DN32, 40, 50, 65, 80 and 100 (flanged)

Protection class: IP 44

Insulation class: F

Nominal pressure: 6/10 bar (flanged)
10 bar (threaded)

EEI: ≤ 0.23

Control:

Internal:

- Constant-pressure Δp_c or proportional-pressure Δp_v control
- Auto Mode with dynamic differential pressure setpoint adjustment
- Constant speed control with manual selection

External:

- 0-10 V external speed control
- MODBUS RTU or BACNet MS/TP

PRODUCT FEATURES

- LED display
- manual start-up feature
- smooth running
- very low energy consumption
- collective fault signal
- convenient operation
- front facing integrated terminal box
- automatic adjustment to pressure conditions

USE

The Armstrong AGE4 is a high-efficiency, variable speed wet rotor Circulator with ECM technology and permanent magnet rotor. It offers operating flexibility and an industry-leading feature set to support a wide range of heating and cooling applications.

MAIN AREAS OF USE

- heating
- cooling
- plumbing applications

CONTROLS FUNCTION

You can make adjustments with the integrated control keys at the front. The LED display shows the total electrical input power as a numeric value in [W] watts. Different icons at the top of the display show the function, setting and the modes of operation.

MATERIALS

Component	Material	Material no.
Pump housing	Cast Iron	
Impeller	PES	PES GF 30
Shaft	Stainless steel	AISI 420
Bearing	Graphite	
Bearing plate	Stainless steel	
Can	Stainless steel	AISI 316

TEMPERATURE RANGE

Ambient temperature: 0 °C to +40 °C

Temperature class: TF 110

Media temperature: +2 °C to +110 °C

AMBIENT TEMPERATURE

Ambient temp.	Media temp. min.	Media temp. max.
Up to 25 °C	-10 °C	110 °C
30 °C	-10 °C	100 °C
35 °C	-10 °C	90 °C
40 °C	-10 °C	80 °C

MOTOR PROTECTION

External motor protection is not required.

MINIMUM INFLOW PRESSURE

Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 80 °C	90 °C
Minimum inflow pressure	0.05 bar	0.28 bar

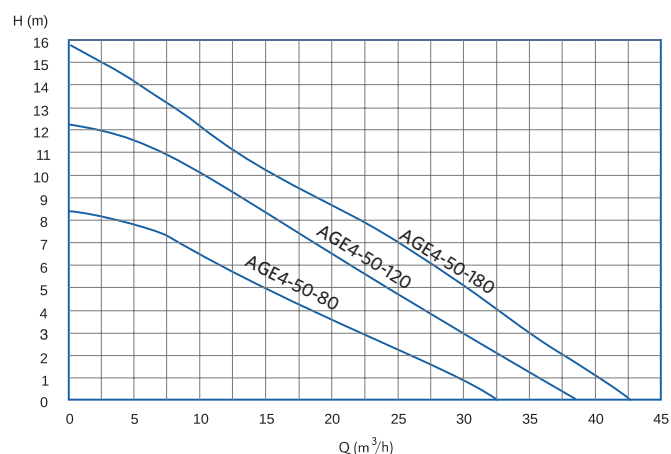
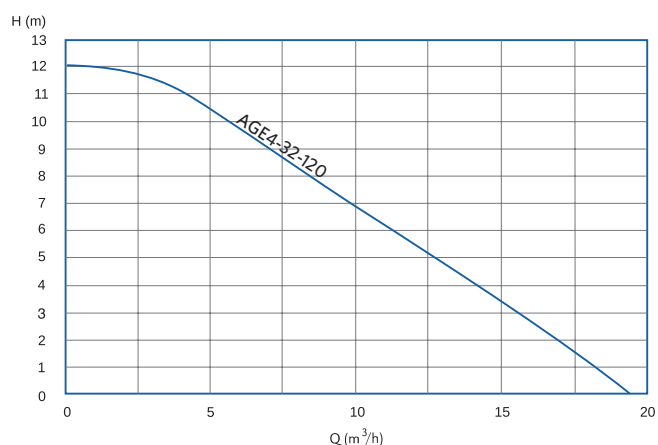
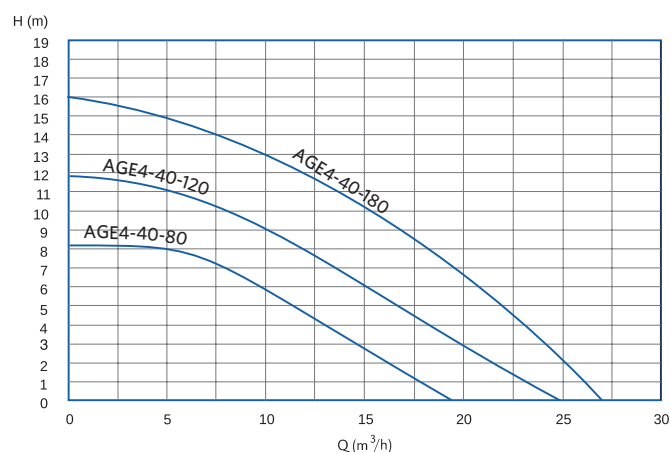
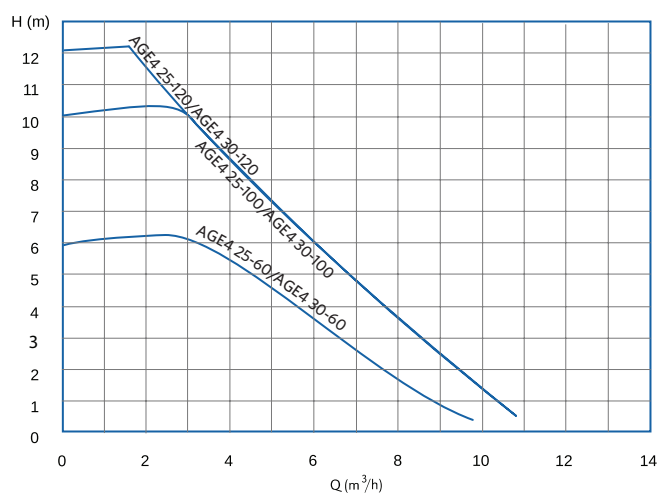
SOUND PRESSURE LEVEL

The sound pressure level is < 43 dB (A).

TECHNICAL DATA

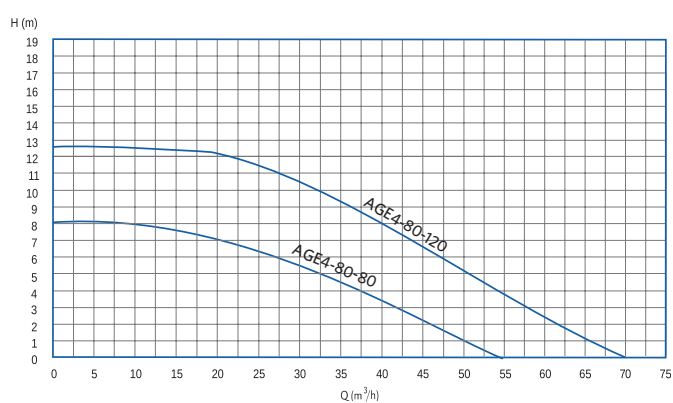
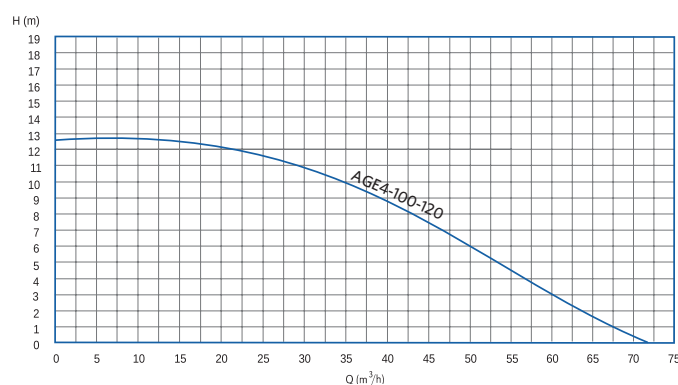
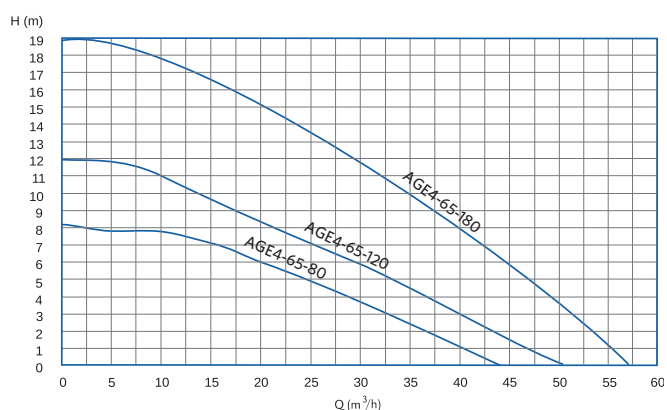
TYPE	CONNECTION PIPE	THREADED CONNECTION	FLANGE	INSTALLATION LENGTH (MM)	VOLTAGE / FREQUENCY	P1 (W)	I _{max} (A)	NET-WEIGHT (KG)	PRODUCT NO.	EEL
AGE4 25-60	RP 1"	G1 ½"		180	230/1/50	10 ... 90	0,75	3.2	0323-95206-71	≤ 0.21
AGE4 25-100	RP 1"	G1 ½"		180	230/1/50	10 ... 180	1,5	3.2	0323-95210-71	≤ 0.21
AGE4 25-120	RP 1"	G1 ½"		180	230/1/50	10 ... 180	1,5	3.2	0323-95212-71	≤ 0.21
AGE4 30-60	RP 1¼"	G2"		180	230/1/50	10 ... 90	0,75	3.5	0324-95206-71	≤ 0.21
AGE4 30-100	RP 1¼"	G2"		180	230/1/50	10 ... 180	1,5	3.5	0324-95210-71	≤ 0.21
AGE4 30-120	RP 1¼"	G2"		180	230/1/50	10 ... 180	1,5	3.5	0324-95212-71	≤ 0.21
AGE4 32-120	DN 32		DN 32	220	230/1/50	25 ... 480	1,5	11.7	0324-95312-71	≤ 0.21
AGE4 40-80	DN 40		DN 40	220	230/1/50	25 ... 270	3,8	13.16	0325-95308-71	≤ 0.21
AGE4 40-120	DN 40		DN 40	220	230/1/50	25 ... 480	3,8	13.4	0325-95412-71	≤ 0.21
AGE4 40-180	DN 40		DN 40	220	230/1/50	25 ... 1100	3,8	13.4	0325-95418-71	≤ 0.23
AGE4 50-80	DN 50		DN 50	280	230/1/50	25 ... 270	3,8	14.5	0326-95508-71	≤ 0.22
AGE4 50-120	DN 50		DN 50	280	230/1/50	25 ... 560	3,8	14.5	0326-95512-71	≤ 0.21
AGE4 50-180	DN 50		DN 50	280	230/1/50	25 ... 1100	4,8	14.5	0326-95518-71	≤ 0.23
AGE4 65-80	DN 65		DN 65	340	230/1/50	25 ... 560	3,8	17.9	0327-95608-71	≤ 0.22
AGE4 65-120	DN 65		DN 65	340	230/1/50	38 ... 1100	4,8	18.4	0327-95612-71	≤ 0.23
AGE4 65-180	DN 65		DN 65	340	230/1/50	20 ... 1500	6,7	23.8	0327-95618-71	≤ 0.23
AGE4 80-80	DN 80		DN 80	360	230/1/50	45 ... 1600	6,9	24.8	0328-95708-71	≤ 0.23
AGE4 80-120	DN 80		DN 80	360	230/1/50	45 ... 1600	6,9	30	0328-95712-71	≤ 0.23
AGE4 100-120	DN 100		DN 100	360	230/1/50	45 ... 1600	6,9	35.1	0329-95818-71	≤ 0.23

PERFORMANCE CURVES



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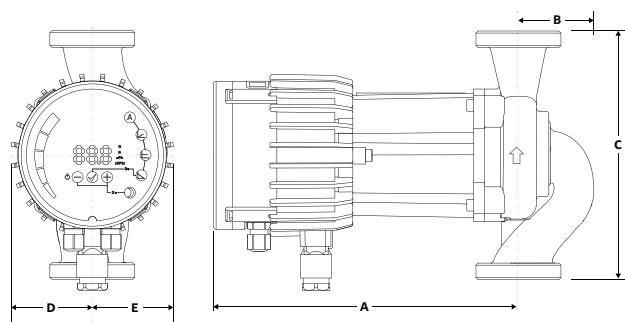
AGE4 series



DIMENSIONS

TYPE	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)
AGE4 25-60	180	95	180	58.5	58.5
AGE4 25-100	180	95	180	58.5	58.5
AGE4 25-120	180	95	180	58.5	58.5
AGE4 30-60	180	95	180	58.5	58.5
AGE4 30-100	180	95	180	58.5	58.5
AGE4 30-120	180	95	180	58.5	58.5
AGE4 32-120	296	65	220	80.5	80.5
AGE4 40-80	296	65	220	80.5	80.5
AGE4 40-120	296	65	250	80.5	80.5
AGE4 40-180	306	65	250	80.5	80.5
AGE4 50-80	287	72	280	80.5	92
AGE4 50-120	287	72	280	80.5	92
AGE4 50-180	297	72	280	80.5	92
AGE4 65-80	297	75	340	92.5	103
AGE4 65-120	307	75	340	92.5	103
AGE4 65-180	359	75	340	94.5	103
AGE4 80-80	317	93	360	98	123
AGE4 80-120	369	93	360	123.4	98.3
AGE4 100-120	403	110	360	105	125

DIMENSION ILLUSTRATION (THREADED VERSION)



DIMENSION ILLUSTRATION (FLANGE VERSION)

