

Heating circulation pumps, speed step switch (3-step), pressure head 7-12 m



TECHNICAL DATA

Rate of flow:	up to 12 m ³ /h
Pressure head:	up to 12 m
Media temperature:	+2 °C to +110 °C
Installation length:	180 mm
Threaded connection:	1½" and 2"
Protection class:	IP 44
Insulation class:	H
Nominal pressure:	PN 10
Control:	3-step switch with manual speed selection

PRODUCT FEATURES

- manual start-up feature
- smooth running
- convenient operation
- space-saving axially integrated terminal box
- compact design

USE

The HGPA series circulation pumps are specially designed for heating systems in which large pressure heads and capacities are equally required. These circulation pumps are designed for use in heating systems with variable or constant flow rates.

MAIN AREAS OF USE

Heating, air-conditioning and industry systems as

- dual pipe system
- underfloor heating
- boiler/primary circuit
- storage charging circuit

MATERIALS

Component	Material	Material no.
Pump housing	Grey-cast iron	0.6020
Impeller	Polypropylene (PP - GF 50)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Brass	20.401
Can	Stainless steel	14.301

FLOW MEDIA

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm²/s
- operating data must be checked above 20 % glycol

TEMPERATURE RANGE

Ambient temperature:	0 °C to +40 °C
Temperature class:	TF 110
Media temperature:	+2 °C to +110 °C

AMBIENT TEMPERATURE

To avoid condensation forming in the terminal box and stator, the media temperature must always be the same or higher than the ambient temperature.

Ambient temp.	Media temp. min.	Media temp. max.
0	2	110
10	10	110
20	20	110
30	30	110
35	35	110
40	40	110

MOTOR PROTECTION

External motor protection is not required.

SPEED SWITCHING

The respective speed is set via a rotary switch integrated in the axial terminal box.

MINIMUM INFLOW PRESSURE

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

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

SOUND PRESSURE LEVEL

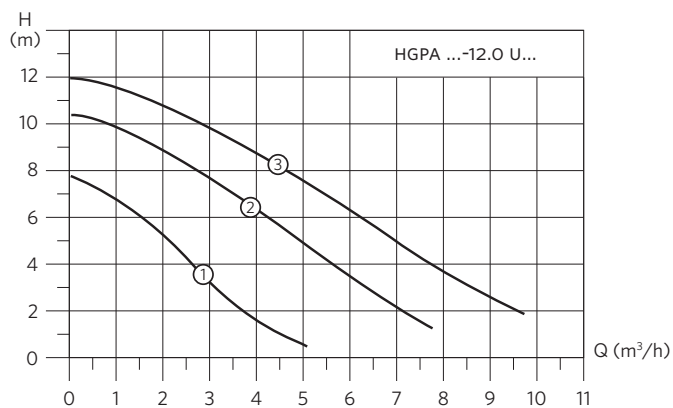
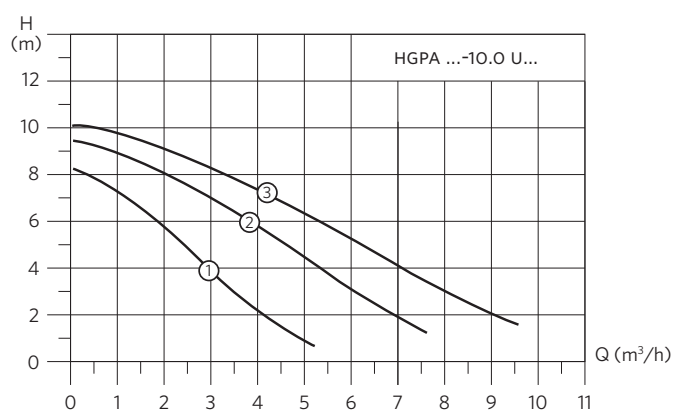
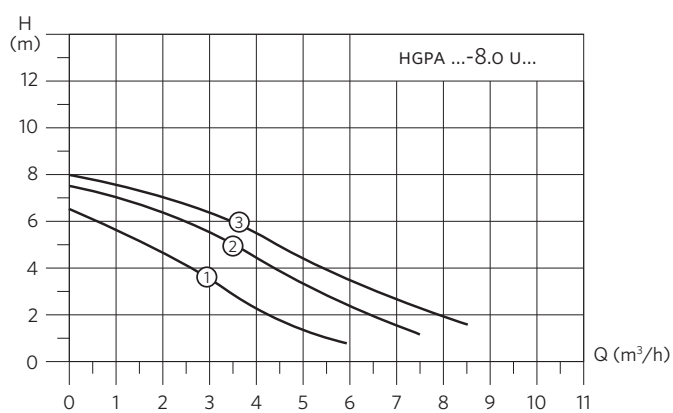
The sound pressure level is < 45 dB (A).

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TECHNICAL DATA

TYPE	CONNECTION PIPE	THREADED CONNECTION	INSTALLATION LENGTH (MM)	VOLTAGE / FREQUENCY	P1 (W)	I _{max} (A)	NET-WEIGHT (KG)	PRODUCT NO.
HGPA 25-8.0 U180	1"	1½"	180	230	260 ... 286	1.23 ... 1.25	6.5	0323-41208-71
HGPA 25-10.0 U180	1"	1½"	180	230	283 ... 357	1.35 ... 1.56	6.5	0323-41210-71
HGPA 25-12.0 U180	1"	1½"	180	230	285 ... 400	1.36 ... 1.73	6.5	0323-41212-71
HGPA 30-8.0 U180	1¼"	2"	180	230	260 ... 286	1.23 ... 1.25	6.6	0324-41208-71
HGPA 30-10.0 U180	1¼"	2"	180	230	283 ... 357	1.35 ... 1.56	6.6	0324-41210-71
HGPA 30-12.0 U180	1¼"	2"	180	230	285 ... 400	1.36 ... 1.73	6.6	0324-41212-71

PERFORMANCE CURVES



DIMENSIONS

TYPE	L1 (MM)	L2 (MM)	L3 (MM)	L4 (MM)
BGPA (N)	180	135.5	166	206

DIMENSION ILLUSTRATION

