

Standard heating circulation pumps, speed step switch (3-step)

HUPA series, H product group



Discontinuation of delivery from January 2013:

The majority of wet rotor circulation pumps for heating and air conditioning currently available on the market will soon be prohibited from use in the European Union as stand-alone circulator. Standard pumps must only be used as integrated applications in the EU.

This is the outcome of the regulation for circulation pumps under the European eco-design directive. From 2013, it sets out three stages of increasingly strict requirements on the energy efficiency of wet rotor pumps. The HUPA series is just available until December 2012!

Technical data

Rate of flow:	up to 3.8 m ³ / h
Pressure head:	up to 7 m
Media temperature:	-10 °C to 110 °C
Installation length:	130 and 180 mm
Threaded connection:	1", 1½" and 2"
Protection class:	IP 44
Insulation class:	F
Nominal pressure:	PN 10
Control:	3-step switch with manual speed selection
Voltage tolerance:	+/- 10 %

Product features

- energy-optimised
- manual start-up feature
- space-saving axially integrated terminal box
- KTL coated pump housing

Use

The HUPA series circulation pumps are wet rotor circulators designed for use in heating systems with constant or weakly variable flow rates. With the 3-step rotary switch and the finely graded default programme, almost every working point on a system can be set economically.

Main areas of use

Heating, air-conditioning and industry systems as

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

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

Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polyamide (PA - GF 35)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	-10 °C to 110 °C

Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media 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

The motor winding is resistant to stall current, so that motor protection is not required.

Speed switching

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

Sound pressure level

The sound pressure level is < 45 dB (A)

Minimum inflow pressure

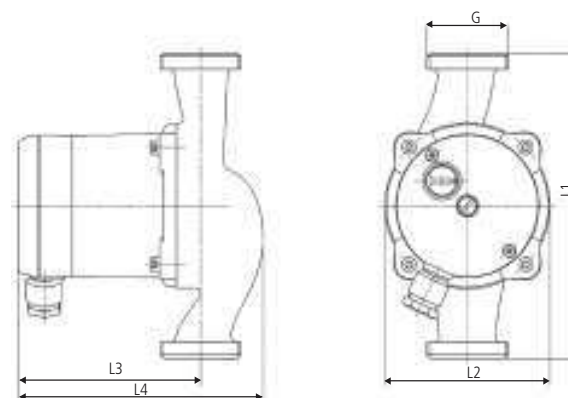
Please determine the minimum inflow pressure for corresponding temperature from the following table.

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

Dimensions

Type	L1	L2	L3	L4
HUPA	130 / 180	98	108	145

Dimension illustration



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Type	Connection pipe	Threaded connection	Installation length (mm)	Voltage (V)	P1 (W)	In (A)	Weight (kg)	Product No. for non-EU countries from 1.1.2013
HUPA 15-2.5 U 130	½"	1"	130	230	27 ... 35	0.12 ... 0.15	2.6	0321-33003
HUPA 15-4.0 U 130	½"	1"	130	230	33 ... 44	0.14 ... 0.19	2.6	0321-33004
HUPA 15-5.0 U 130	½"	1"	130	230	43 ... 77	0.19 ... 0.34	2.6	0321-33005
HUPA 15-6.0 U 130	½"	1"	130	230	43 ... 80	0.19 ... 0.34	2.6	0321-33006
HUPA 15-7.0 U 130	½"	1"	130	230	54 ... 97	0.24 ... 0.39	2.6	0321-33007
HUPA 20-2.5 U 130	¾"	1 ¼"	130	230	27 ... 35	0.12 ... 0.15	2.6	0322-33103
HUPA 20-4.0 U 130	¾"	1 ¼"	130	230	33 ... 44	0.14 ... 0.19	2.6	0322-33104
HUPA 20-5.0 U 130	¾"	1 ¼"	130	230	43 ... 77	0.19 ... 0.34	2.6	0322-33105
HUPA 20-6.0 U 130	¾"	1 ¼"	130	230	43 ... 80	0.19 ... 0.34	2.6	0322-33106
HUPA 20-7.0 U 130	¾"	1 ¼"	130	230	54 ... 97	0.24 ... 0.39	2.6	0322-33107
HUPA 25-2.5 U 130	1"	1 ½"	130	230	27 ... 35	0.12 ... 0.15	2.6	0323-33003
HUPA 25-4.0 U 130	1"	1 ½"	130	230	33 ... 44	0.14 ... 0.19	2.6	0323-33004
HUPA 25-5.0 U 130	1"	1 ½"	130	230	43 ... 77	0.19 ... 0.34	2.6	0323-33005
HUPA 25-6.0 U 130	1"	1 ½"	130	230	43 ... 80	0.19 ... 0.34	2.6	0323-33006
HUPA 25-7.0 U 130	1"	1 ½"	130	230	54 ... 97	0.24 ... 0.39	2.6	0323-33007
HUPA 25-2.5 U 180	1"	1 ½"	180	230	27 ... 35	0.12 ... 0.15	2.7	0323-33203
HUPA 25-4.0 U 180	1"	1 ½"	180	230	33 ... 44	0.14 ... 0.19	2.7	0323-33204
HUPA 25-5.0 U 180	1"	1 ½"	180	230	43 ... 77	0.19 ... 0.34	2.7	0323-33205
HUPA 25-6.0 U 180	1"	1 ½"	180	230	43 ... 80	0.19 ... 0.34	2.8	0323-33206
HUPA 25-7.0 U 180	1"	1 ½"	180	230	54 ... 97	0.24 ... 0.39	2.8	0323-33207
HUPA 30-2.5 U 180	1 ¼"	2"	180	230	27 ... 35	0.12 ... 0.15	2.8	0324-33203
HUPA 30-4.0 U 180	1 ¼"	2"	180	230	33 ... 44	0.14 ... 0.19	2.8	0324-33204
HUPA 30-5.0 U 180	1 ¼"	2"	180	230	43 ... 77	0.19 ... 0.34	2.8	0324-33205
HUPA 30-6.0 U 180	1 ¼"	2"	180	230	43 ... 80	0.19 ... 0.34	2.8	0324-33206
HUPA 30-7.0 U 180	1 ¼"	2"	180	230	54 ... 97	0.24 ... 0.39	2.8	0324-33207

