

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



TECHNICAL DATA

Rate of flow:	up to 3.8 m ³ /h
Pressure head:	up to 7 m
Media temperature:	+2 °C to +110 °C
Installation length:	130 and 180 mm
Threaded connection:	1", 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
- energy-optimised
- space-saving axially integrated terminal box
- cathaphoretic 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

MATERIALS

Component	Material	Material no.
Pump housing	Grey-cast iron	0.6020
Impeller	Polyamide (PA - GF 35)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	14.301
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

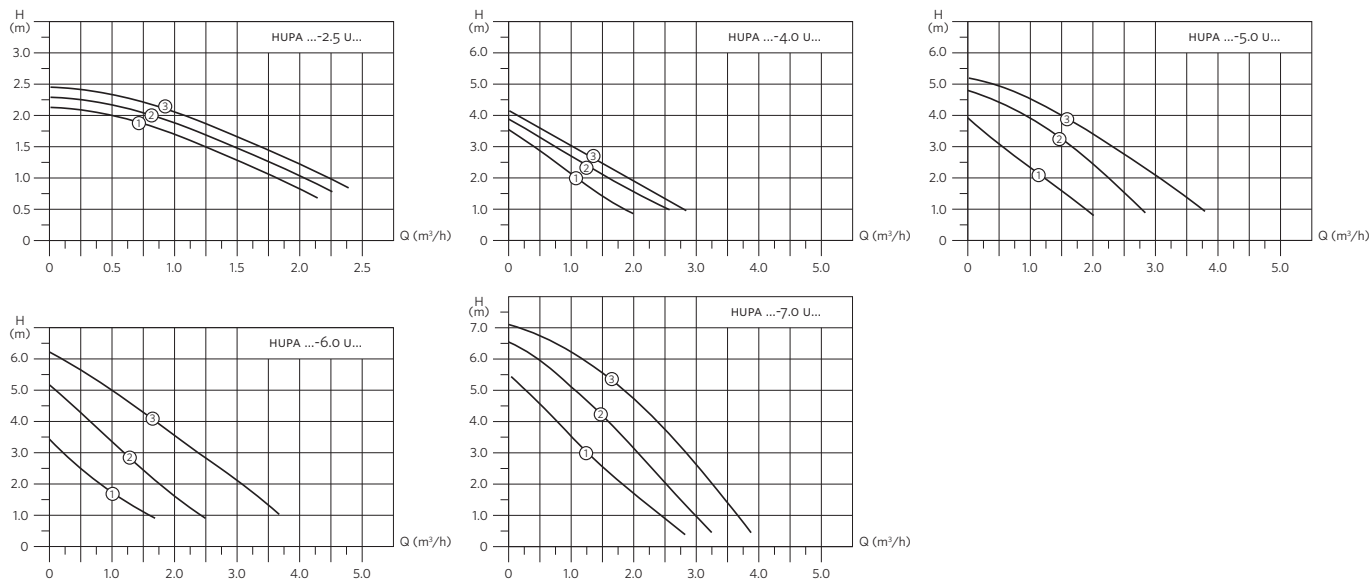
The sound pressure level is < 45 dB (A).

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TYPE	CONNECTION PIPE	THREADED CONNECTION	INSTALLATION LENGTH (MM)	VOLTAGE / FREQUENCY	P1 (W)	I _{max} (A)	NET-WEIGHT (KG)	PRODUCT NO.
HUPA 15-2.5 U130	½"	1"	130	230	27 ... 35	0.12 ... 0.15	2.6	0321-33003-71
HUPA 15-4.0 U130	½"	1"	130	230	33 ... 44	0.14 ... 0.19	2.6	0321-33004-71
HUPA 15-5.0 U130	½"	1"	130	230	43 ... 77	0.19 ... 0.34	2.6	0321-33005-71
HUPA 15-6.0 U130	½"	1"	130	230	43 ... 80	0.19 ... 0.34	2.6	0321-33006-71
HUPA 15-7.0 U130	½"	1"	130	230	54 ... 93	0.24 ... 0.41	2.6	0321-33007-71
HUPA 20-2.5 U130	¾"	1 ¼"	130	230	27 ... 35	0.12 ... 0.15	2.6	0322-33003-71
HUPA 20-4.0 U130	¾"	1 ¼"	130	230	33 ... 44	0.14 ... 0.19	2.6	0322-33004-71
HUPA 20-5.0 U130	¾"	1 ¼"	130	230	43 ... 77	0.19 ... 0.34	2.6	0322-33005-71
HUPA 20-6.0 U130	¾"	1 ¼"	130	230	43 ... 80	0.19 ... 0.34	2.6	0322-33006-71
HUPA 20-7.0 U130	¾"	1 ¼"	130	230	54 ... 93	0.24 ... 0.41	2.6	0322-33007-71
HUPA 25-2.5 U130	1"	1 ½"	130	230	27 ... 35	0.12 ... 0.15	2.6	0323-33003-71
HUPA 25-4.0 U130	1"	1 ½"	130	230	33 ... 44	0.14 ... 0.19	2.6	0323-33004-71
HUPA 25-5.0 U130	1"	1 ½"	130	230	43 ... 77	0.19 ... 0.34	2.6	0323-33005-71
HUPA 25-6.0 U130	1"	1 ½"	130	230	43 ... 80	0.19 ... 0.34	2.6	0323-33006-71
HUPA 25-7.0 U130	1"	1 ½"	130	230	54 ... 93	0.24 ... 0.41	2.6	0323-33007-71
HUPA 25-2.5 U180	1"	1 ½"	180	230	27 ... 35	0.12 ... 0.15	2.7	0323-33203-71
HUPA 25-4.0 U180	1"	1 ½"	180	230	33 ... 44	0.14 ... 0.19	2.7	0323-33204-71
HUPA 25-5.0 U180	1"	1 ½"	180	230	43 ... 77	0.19 ... 0.34	2.7	0323-33205-71
HUPA 25-6.0 U180	1"	1 ½"	180	230	43 ... 80	0.19 ... 0.34	2.8	0323-33206-71
HUPA 25-7.0 U180	1"	1 ½"	180	230	54 ... 93	0.24 ... 0.41	2.8	0323-33207-71
HUPA 30-2.5 U180	1 ¼"	2"	180	230	27 ... 35	0.12 ... 0.15	2.8	0324-33203-71
HUPA 30-4.0 U180	1 ¼"	2"	180	230	33 ... 44	0.14 ... 0.19	2.8	0324-33204-71
HUPA 30-5.0 U180	1 ¼"	2"	180	230	43 ... 77	0.19 ... 0.34	2.8	0324-33205-71
HUPA 30-6.0 U180	1 ¼"	2"	180	230	43 ... 80	0.19 ... 0.34	2.8	0324-33206-71
HUPA 30-7.0 U180	1 ¼"	2"	180	230	54 ... 93	0.24 ... 0.41	2.8	0324-33207-71

PERFORMANCE CURVES



DIMENSIONS

TYPE	L1 (MM)	L2 (MM)	L3 (MM)	L4 (MM)
HUPA	130/150/180	98	108	145

DIMENSION ILLUSTRATION

