



STAIRS PUMPS

General data

HBI, HBN

Applications

Water supply and pressure boosting
 Air-conditioning
 Water treatment
 Heating and cooling in industrial processes
 Industrial washing and dish-washing machines
 softened water
 Pressure boosting of process water
 Fertilizer/dosing systems



Pump

A horizontal, multistage centrifugal pump is made of stainless steel. The pump is a non-self priming type and fitted with a mechanical shaft seal.

Connection \ Pump	HBI(N) 2	HBI(N) 4	HBI(N) 8	HBI(N) 12
Suction port	Rp 1	Rp1 1/4	Rp 1 1/2	Rp 1 1/2
Discharge port	Rp 1	Rp1 1/4	Rp 1 1/2	Rp 1 1/2
Drain hole, priming hole	G 3/8	G 3/8	G 3/8	G 3/8

Motor

Totally enclosed and fan-cooled standard motor.

Standard voltages:	50HZ 1Ø		50HZ 3Ø	
	0. 5HP~3. 0HP	220~240V	0. 5HP~4. 0HP	220~240V/380~415V
	60HZ 1Ø		60HZ 3Ø	
	0. 5HP~1. 0HP	110/220V	0. 5HP~1. 5HP	220~255V/380~440V
Insulation class: F	0. 5HP~3. 0HP	220~240V	2. 0HP~4. 0HP	220~277V/380~480V

Enclosure class: IP54

Operating conditions

Liquid temperature range: 0°C ~+110°C

Maximum ambient temperature: +40°C

Maximum operating pressure: 10 kg./cm².

Maximum inlet pressure is limited by maximum operating pressure.

Liquids to be pumped

These pumps are designed for pumping freely flowing non-corrosive, non-explosive. and non-flammable liquids. The liquids to be pumped must also be free of solid matter, sands, fibers, and similar materials.

Most common non-highly corrosive watery liquids, oily liquids, hot and cold liquids can be pumped with these pumps.

The suitability of these pumps for pumping any particular liquid depends upon a number of factors, such as the ph value, contents of chemicals such as chlorides, oils, the temperature of the liquids, etc..

Please contact your distributor or the factory if there are any questions as to whether certain liquids are suitable for pumping with these pumps.

Type key

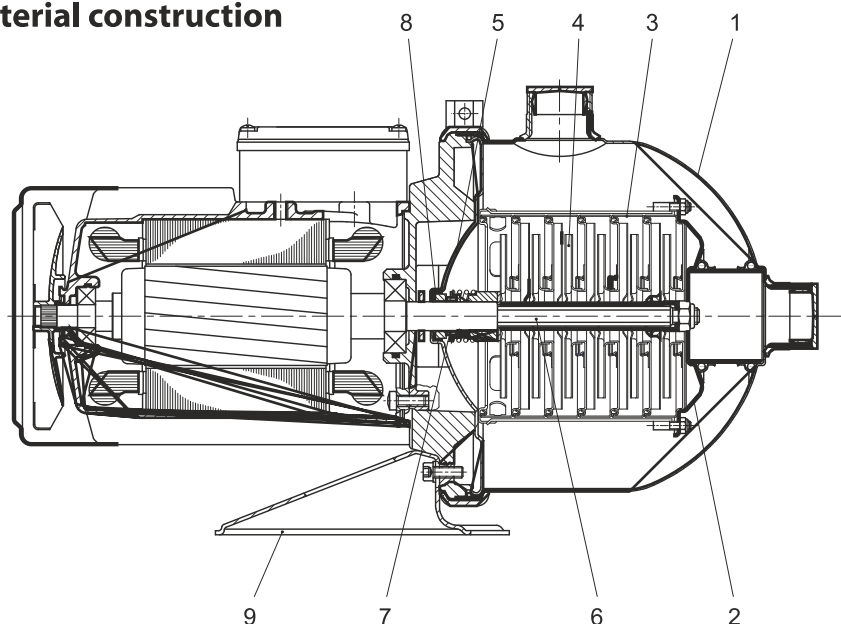
Example: HBI	4	-	30	-	HQBE
HBN	4	-	30	-	HQQE
Type	Nominal flow rate (m ³ /h)		Number of stages x 10		Mechanical Seals

Mechanical seals

List of Materials		Mechanical Seals	HBI 2/4	HBI 8/12	HBN 2/4	HBN 8/12
Q : Silicon carbide	E : EPDM	HQB	●	●	Optional	Optional
B : Carbon	V : Viton	HQQ	Optional	Optional	●	●
H : Seal Type		O-rings				
		E	●	●	●	●
		V	●	●	●	●

● Standard

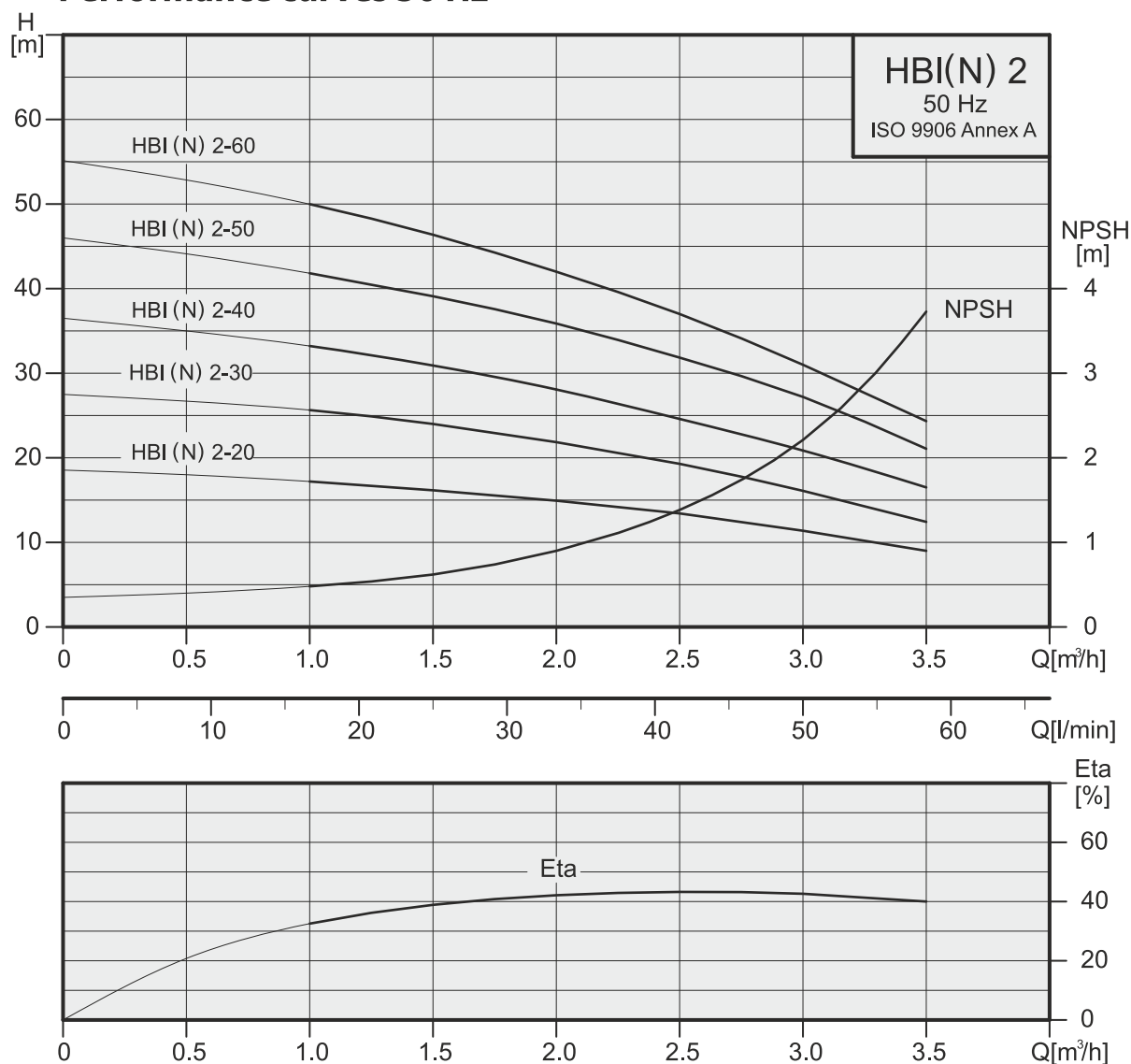
Material construction



Materials

Pos.	Description	Materials	
		HBI	HBN
1	Pump casing	SS304	SS316
2	Suction inter-connector	SS304	SS316
3	Chamber	SS304	SS316
4	Impeller	SS304	SS316
5	Cover plate	SS304	SS316
6	Shaft	SS431	SS316
7	Mechanical seal	Silicon carbide/Carbon	Silicon carbide/S i c
8	O-ring	EPDM or Viton	EPDM or Viton
9	Base plate	Steel	Steel

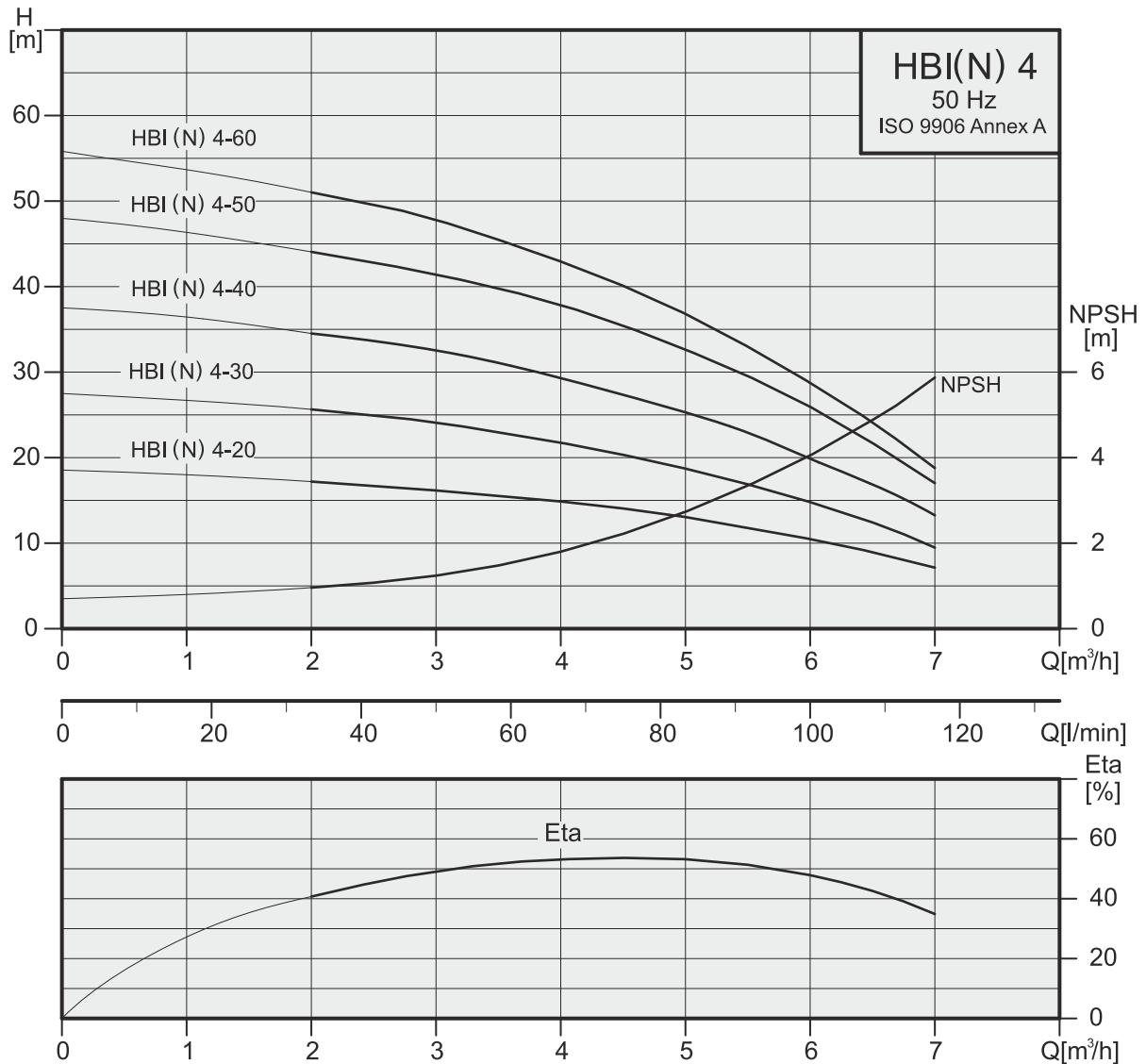
Performance curves 50 Hz



Electrical data, 2850 min⁻¹

pump type	1 x 220-240 V		3 x 220-240 △/380-415 Y V	
	P _i [W]	I _{i/n} [A]	P _i [W]	I _{i/n} [A]
HBI/HBN 2-20	360	1.7-1.9	370	2.0-2.7 / 1.2-1.6
HBI/HBN 2-30	470	2.3-2.2	550	2.4-2.8 / 1.4-1.6
HBI/HBN 2-40	580	2.7-2.6	650	2.4-2.7 / 1.4-1.6
HBI/HBN 2-50	720	3.2-3.3	810	2.7-3.0 / 1.6-1.8
HBI/HBN 2-60	830	3.8-3.6	910	2.9-3.3 / 1.7-1.9

Performance curves 50 Hz



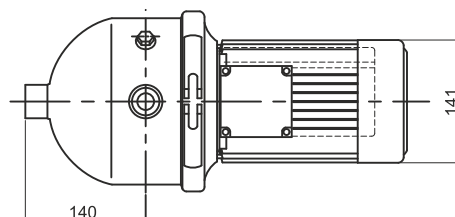
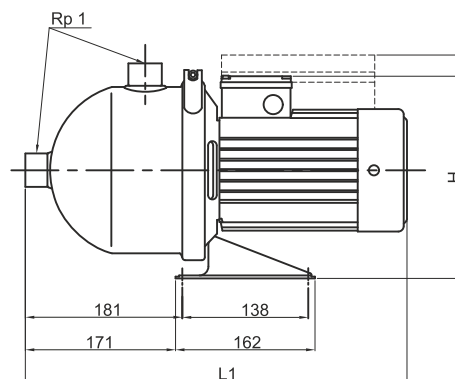
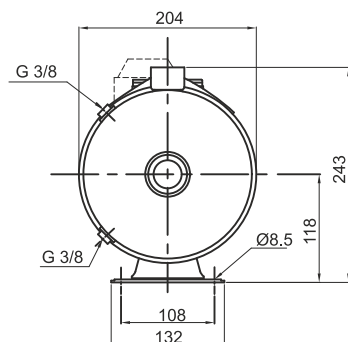
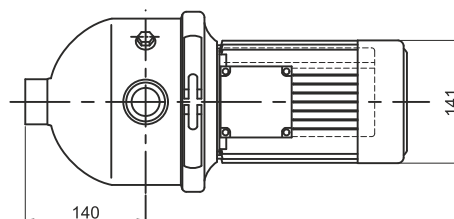
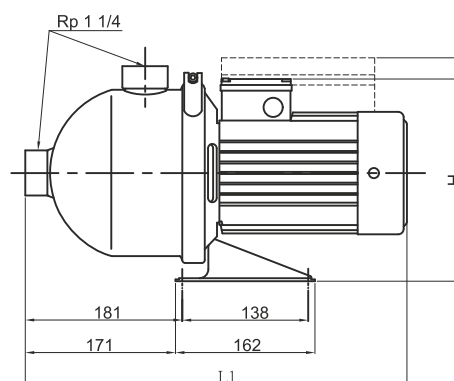
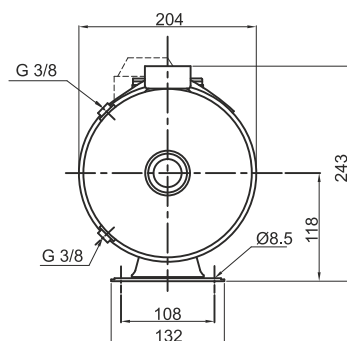
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pump type	1 x 220-240 V		3 x 220-240 Δ / 380-415 Y V	
	P _i [W]	I _{1/1} [A]	P _i [W]	I _{1/1} [A]
HBI/HBN 4-20	580	2.7-2.6	660	2.5-2.9 / 1.5-1.7
HBI/HBN 4-30	820	3.9-3.7	850	2.8-3.0 / 1.6-1.7
HBI/HBN 4-40	1000	4.6-4.4	1060	3.3-3.5 / 1.9-2.0
HBI/HBN 4-50	1240	5.8-5.5	1310	4.2-4.5 / 2.4-2.6
HBI/HBN 4-60	1510	7.1-6.9	1550	5.2-5.6 / 3.0-3.3



HBI, HBN

HBI(N)-2

**HBI(N)-4**

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