

## Centrifugal pumps with open impeller

-  Clean water
-  Domestic use
-  Agricultural use
-  Industrial use



### PERFORMANCE RANGE

- Flow rate up to **350 l/min** (21 m<sup>3</sup>/h)
- Head up to **20 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Max. working pressure **6 bar**
- Passage of suspended solids up to **Ø 10 mm**
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



EU REGULATION N. 547/2012

### INSTALLATION AND USE

Suitable for use with liquids that are not chemically aggressive towards the materials from which the pump is made.

The open impeller design allows **liquids containing relatively high levels of impurities** to be pumped without the risk of the impeller clogging. Because of these characteristics the **NGA** series pumps are used specifically in industry and for transferring water from canals, rivers, reservoirs, tanks, etc. The pump should be installed in an enclosed environment or sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

- Registered EU Design n. 002098434

### OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency

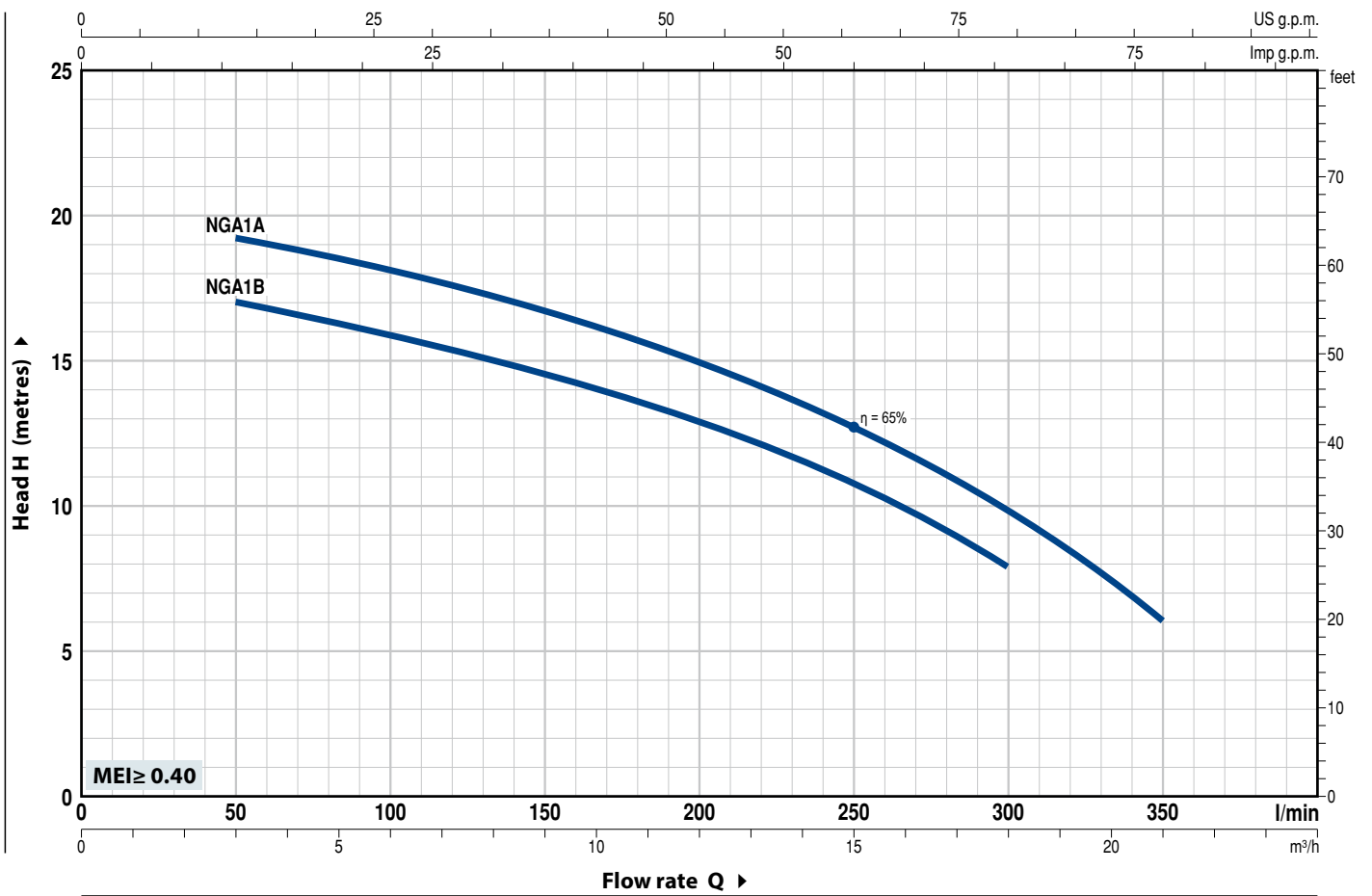
### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT AND SAFETY



### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



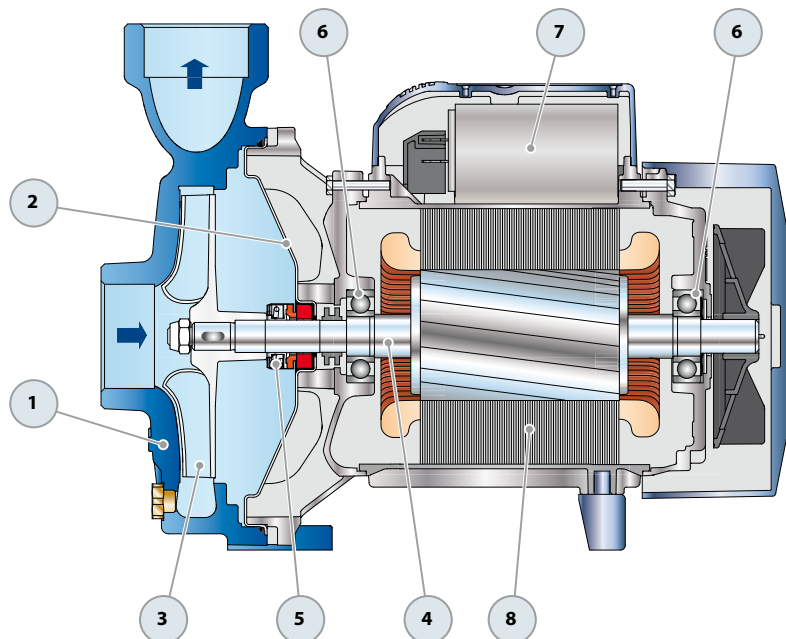
MODEL		POWER (P <sub>2</sub> )		Q	Flow rate (l/min)							
Single-phase	Three-phase	kW	HP		0	3	6	9	12	15	18	21
NGAm 1B	NGA 1B	0.55	0.75	H metres	18	17	16	14.5	13	10.5	8	
NGAm 1A	NGA 1A	0.75	1	H metres	20	19.5	18	16.5	15	12.5	10	6

Q = Flow rate H = Total manometric head HS = Suction height

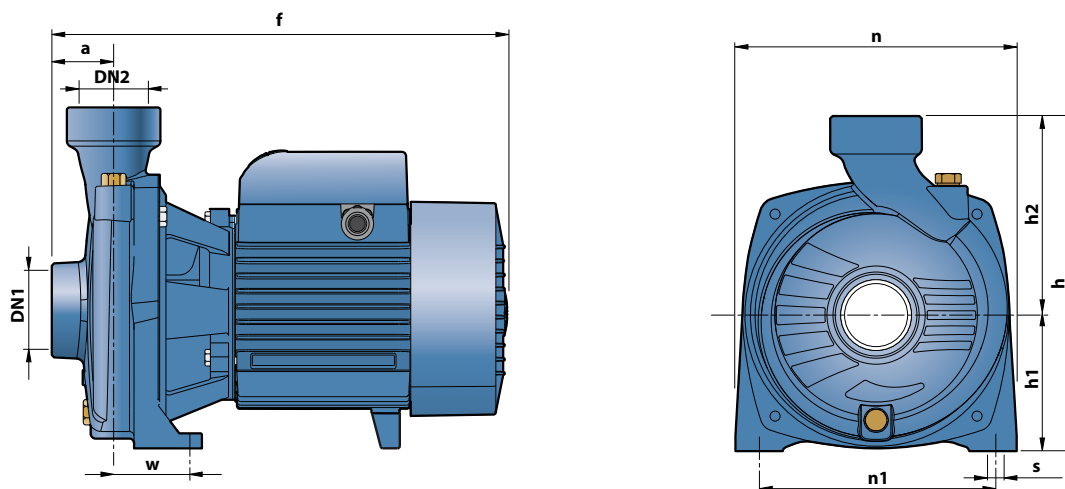
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	Cast iron complete with threaded ports in compliance with ISO 228/1				
2	<b>BODY BACKPLATE</b>	Stainless steel AISI 304				
3	<b>IMPELLER</b>	Open impeller in stainless steel 316				
4	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 - 1.4104				
5	<b>MECHANICAL SEAL</b>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>		
		<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		<b>AR-14</b>	<b>Ø 14 mm</b>	Ceramic	Graphite	NBR
6	<b>BEARINGS</b>	<b>6203 ZZ / 6203 ZZ</b>				
7	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>		
		<b>NGAm 1B</b>	<b>16 µF - 450 VL</b>	<b>60 µF - 300 VL</b>		
		<b>NGAm 1A</b>	<b>20 µF - 450 VL</b>	<b>60 µF - 300 VL</b>		
8	<b>ELECTRIC MOTOR</b>	<p><b>NGAm:</b> single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.  <b>NGA:</b> three-phase 230/400 V - 50 Hz.</p> <p>⇒ <b>The three-phase pumps are fitted with high performance motors in class IE2 (IEC 60034-30)</b></p> <ul style="list-style-type: none"> <li>- Insulation: class F</li> <li>- Protection: IP X4</li> </ul>				



## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
NGAm 1B	NGA 1B	1½"	1½"	41	297	227	92	135	190	160	50	10	12.5	12.5
NGAm 1A	NGA 1A												12.6	12.5

## ABSORPTION

MODEL	VOLTAGE		
	Single-phase	230 V	240 V
NGAm 1B	5.6 A	5.3 A	11.2 A
NGAm 1A	6.2 A	6.0 A	12.0 A

MODEL	VOLTAGE					
	Three-phase	230 V	400 V	690 V	240 V	415 V
NGA 1B	3.3 A	1.9 A	1.1 A	3.2 A	1.8 A	1.0 A
NGA 1A	3.7 A	2.1 A	1.2 A	3.6 A	2.0 A	1.1 A