

Centrifugal pumps with open impeller











PERFORMANCE RANGE

- Flow rate up to **350 l/min** (21 m³/h)
- Head up to 20 m

APPLICATION LIMITS

- Manometric suction lift up to 7 m
- Liquid temperature between -10 °C and +90 °C (up to +40 for the version with the technopolymer impeller)
- 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 60034-1 IEC 60034-1 **CEI 2-3**



CERTIFICATIONS









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. As a result 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 at least sheltered from inclement weather.

OPTIONALS AVAILABLE ON REQUEST

- Pump with technopolymer impeller
- Special mechanical seal
- Other voltages or 60 Hz frequency

GUARANTEE

2 years subject to terms and conditions

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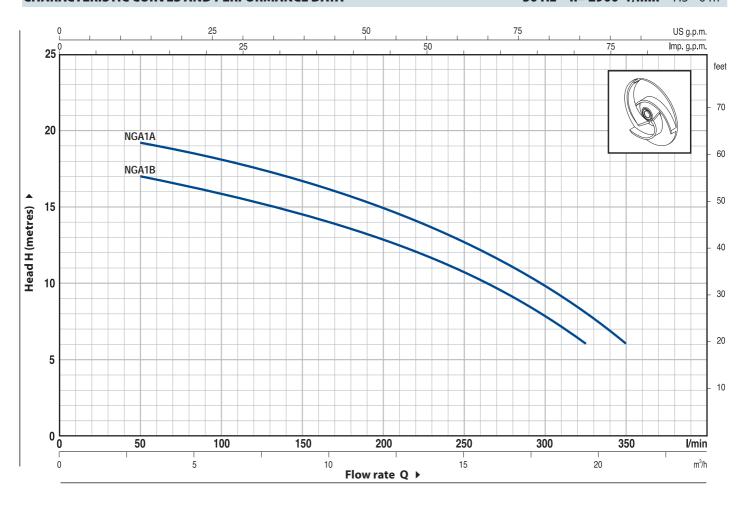
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CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS = 0 m



МО	DEL	PO	WER	m³/h	0	3	6	9	12	15	18	19.5	21
Single-phase	Three-phase	kW	HP	l/min	0	50	100	150	200	250	300	325	350
NGAm 1B	NGA 1B	0.55	0.75		18	17	16	14.5	13	10.5	8	6	
NGAm 1A	NGA 1A	0.75	1	H metres	20	19.5	18	16.5	15	12.5	10	8	6

 $\mathbf{Q} = \mathsf{Flow} \; \mathsf{rate} \; \; \mathbf{H} = \mathsf{Total} \; \mathsf{manometric} \; \mathsf{head} \; \; \mathbf{HS} = \mathsf{Suction} \; \mathsf{height}$

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

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POS	. COMPONENT	CONSTRUCTIO	N CHARACTERIS	TICS										
1	PUMP BODY	Cast iron, comple	Cast iron, complete with threaded ports in compliance with ISO 228/1											
2	BODY BACKPLATE	Stainless steel AIS	Stainless steel AISI 304											
3	IMPELLER	Open impeller in	Open impeller in stainless steel 316											
4	MOTOR SHAFT	Stainless steel EN	Stainless steel EN 10088-3 - 1.4104											
5	MECHANICAL SEAL	Seal	Shaft		Materials									
		Model	Diameter	Stationary ring	Rotational ring	Elastomer								
		AR-14	Ø 14 mm	Ceramic	Graphite	NBR								
6	BEARINGS	6203 ZZ / 6203 Z	z											
7	CAPACITOR	Pump	Capacitance											
		Single-phase	(230 V or 240 V)	(110	V)									
		NGAm 1B	16 μF 450 VL	60	μF 300 VL									
		NGAm 1A	20 μF 450 VL		μF 300 VL									

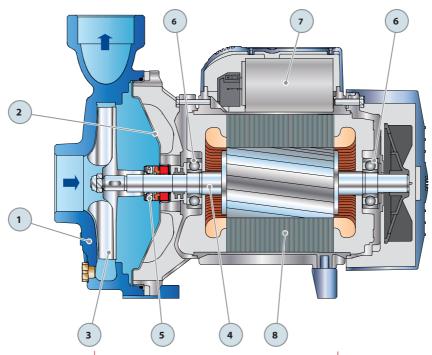
8 ELECTRIC MOTOR

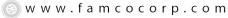
 $\textbf{NGAm}: \ single-phase\ 230\ V-50\ Hz\ with\ thermal\ overload\ protector\ built-in\ to\ the\ winding.$

NGA: three-phase 230/400 V - 50 Hz.

■ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance

Insulation: F class.Protection: IP 44.





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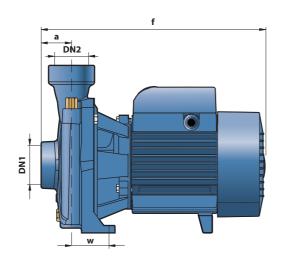
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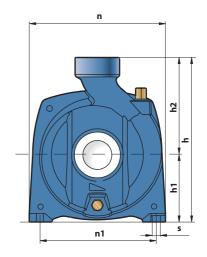
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DIMENSIONS AND WEIGHT





МС	MODEL		RTS		DIMENSIONS mm									
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	W	S	1~	3~
NGAm 1B	NGA 1B	11///	11/ //	41	207	227	02	125	100	160	F0	10	12.7	11.8
NGAm 1A	NGA 1A	11/2″	11/2"	41	297	227	92	135	190	160	50	10	12.8	11.9

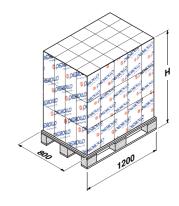
ABSORPTION

MODEL	VOLTAGE (single-phase)								
Single-phase	230 V	240 V	110 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)										
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V					
NGA 1B	3.3 A	1.9 A	1.1 A	3.2 A	1.85 A	1.1 A					
NGA 1A	3.7 A	2.1 A	1.2 A	3.7 A	2.1 A	1.2 A					

PALLETIZATION

МС	(GROUP	AGE		CONTAINER				
	n°	H kg		n°	Н	k	g		
Single-phase	Three-phase	pumps	(mm)	1~	3~	pumps	(mm)	1~	3~
NGAm 1B	NGA 1B	70	1415	910	840	112	2180	1440	1340
NGAm 1A NGA 1A		70	1415	920	850	112	2180	1450	1350



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Stainless steel pump with open impeller







PERFORMANCE RANGE

- Flow rate up to **350 l/min** (21 m³/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 \$1

CONSTRUCTION AND SAFETY STANDARDS

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



CERTIFICATIONS









INSTALLATION AND USE

Suitable for use with clean water and 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. All of the components in contact with the pumped liquid are constructed in stainless steel AISI 316. As a result of these characteristics the PRO-NGA series pumps find specific use in assemblies for washing fruit, vegetables, fish and shellfish, in industrial assemblies for washing metallic objects and glass containers, as well as for the circulation of cooling liquids.

The pump should be installed in an enclosed environment, or at least sheltered from inclement weather.

OPTIONALS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency

GUARANTEE

2 years subject to terms and conditions

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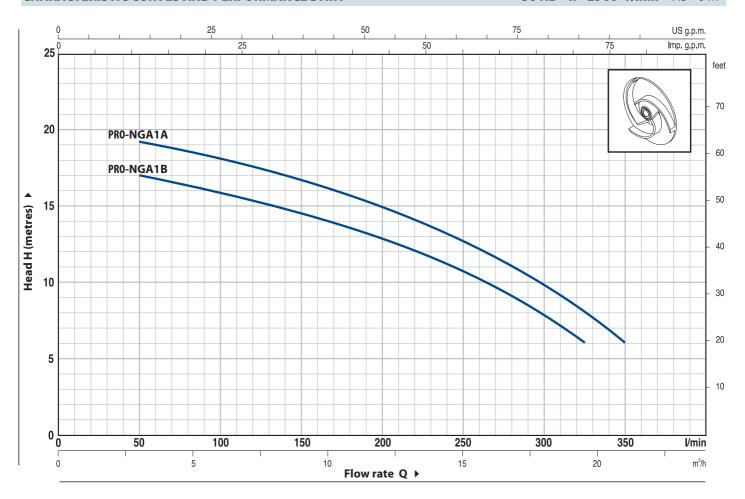
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CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m



МОГ	DEL	PO	VER	m³/h	0	3	6	9	12	15	18	19.5	21
Single-phase	Three-phase	kW	HP	l/min	0	50	100	150	200	250	300	325	350
PR0-NGAm 1B	PRO-NGA 1B	0.55	0.75		18	17	16	14.5	13	10.5	8	6	
PR0-NGAm 1A	PRO-NGA 1A	0.75	1	H metres	20	19.5	18	16.5	15	12.5	10	8	6

 $\mathbf{Q} = \mathsf{Flow} \; \mathsf{rate} \; \; \mathbf{H} = \mathsf{Total} \; \mathsf{manometric} \; \mathsf{head} \; \; \mathbf{HS} = \mathsf{Suction} \; \mathsf{height} \; \;$

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

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PRO-NGA

ELECTRIC MOTOR



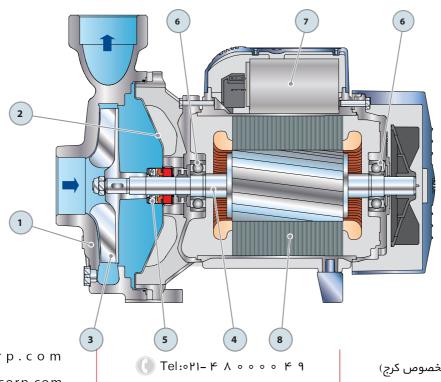
POS	. COMPONENT	CONSTRUCTION	ON CHARACTEI	RISTICS									
1	PUMP BODY	Stainless steel A	ISI 316, complete v	with threaded	ports in comp	liance with ISO 228/1							
2	BODY BACKPLATE	Stainless steel A	ISI 316										
3	IMPELLER	Open impeller i	Open impeller in stainless steel 316										
4	MOTOR SHAFT	Stainless steel A	Stainless steel AISI 316										
5	MECHANICAL SEAL	Seal Model AR-14S	Shaft Diameter Ø 14 mm	Stationary ring Ceramic	Materials Rotational ring Graphite	Elastomer Viton							
6	BEARINGS	6203 ZZ / 6203	ZZ										
7	CAPACITOR	Pump Single-phase PRO-NGAm 1B PRO-NGAm 1A	Capacitano (230 V or 240 16 μF 450 V 20 μF 450 V	<i>v</i>) 'L	(110 V) 60 μF 300 VL 60 μF 300 VL								

PRO-NGAm: single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding.

three-phase 230/400 V - 50 Hz.

⇒ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance

- Insulation: F class. - Protection: IP 44.



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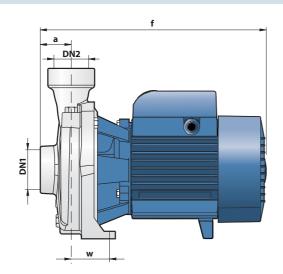
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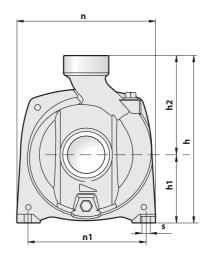
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DIMENSIONS AND WEIGHT





МС	MODEL				DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	S	1~	3~	
PR0-NGAm 1B	PRO-NGA 1B	43/11	41/11	44	207	227	00	125	100	160	50	10	13.0	11.9	
PR0-NGAm 1A	PRO-NGA 1A	11/2"	11/2"	41	297	227	92	135	190	160	50	10	13.1	12.0	

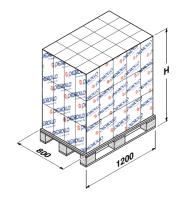
ABSORPTION

MODEL	VO	LTAGE (single-ph	ase)
Single-phase	230 V	240 V	110 V
PR0-NGAm 1B	5.6 A	5.3 A	11.2 A
PR0-NGAm 1A	6.2 A	6.0 A	12.0 A

MODEL		VOLTAGE (three-phase)										
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V						
PRO-NGA 1B	3.3 A	1.9 A	1.1 A	3.2 A	1.85 A	1.1 A						
PRO-NGA 1A	3.6 A	2.1 A	1.2 A	3.5 A	2.0 A	1.2 A						

PALLETIZATION

МС	DDEL	(GROUP	AGE		CONTAINER					
		n°	Н	k	g	n°	Н	k	g		
Single-phase	Three-phase	pumps	(mm)	1~	3~	pumps	(mm)	1~	3~		
PRO-NGAm 1B	PRO-NGA 1B	70	1415	930	850	112	2180	1480	1350		
PR0-NGAm 1A	PRO-NGA 1A	70	1415	940	860	112	2180	1490	1360		



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