

## Multi-stage submersible pumps



-  Clean water  
(Maximum sand content 150 g/m<sup>3</sup>)
-  Domestic use
-  Civil use
-  Agricultural use

### PERFORMANCE RANGE

- Flow rate up to **160 l/min** (7.2 m<sup>3</sup>/h)
- Head up to **95 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+40 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- **20 m** maximum immersion depth (with a sufficiently long power cable)
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- Float switch for single-phase versions

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

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



### INSTALLATION AND USE

Because of their high efficiency and reliability they are suitable for use with clean water in domestic, civil and agricultural applications such as the distribution of water in combination with pressure tanks, for the irrigation of gardens and orchards and for pressure boosting, etc.

### PATENTS - TRADE MARKS - MODELS

- Patent n. EP14755156.8
- Patent n. EP2313658

### OPTIONS AVAILABLE ON REQUEST

- Pumps without float switch
- Pumps fitted with power cables of other lengths
- Other voltages or 60 Hz frequency

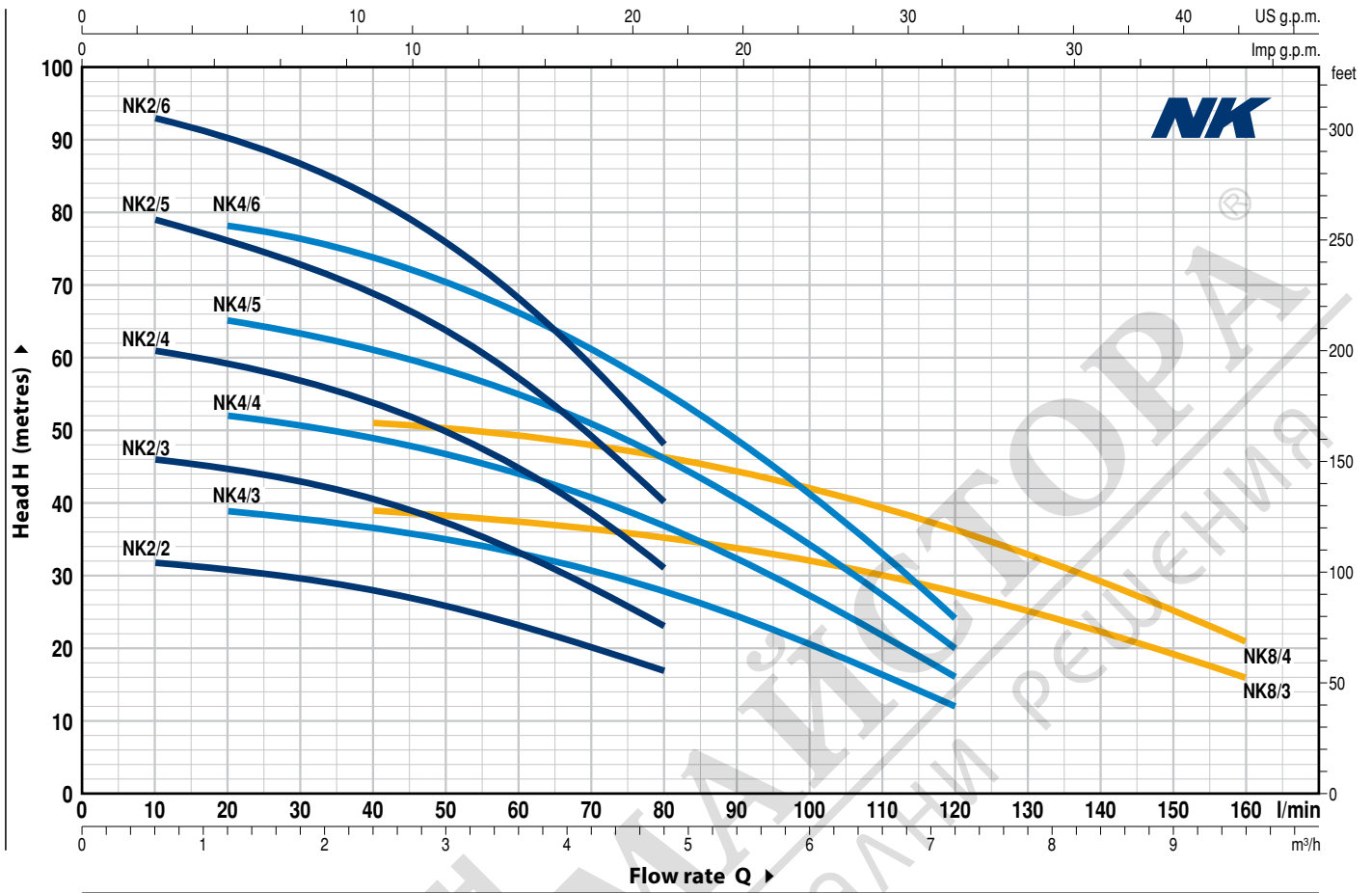
### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n= 2900 min<sup>-1</sup>**



MODEL		POWER (P <sub>2</sub> )		Q	Flow rate (l/min)															
Single-phase	Three-phase	kW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	6.0	6.6	7.2	8.4	9.6		
NKm 2/2 GE	NK 2/2	0.37	0.5	H metres	33	32	31	29.5	28	26	23.5	20.5	17							
NKm 2/3 GE	NK 2/3	0.55	0.75		48	46	44.5	42.8	40.5	37.5	33.5	29	23							
NKm 2/4 GE	NK 2/4	0.75	1		63	61	59	57	54	50	45	39	31							
NKm 2/5 GE	NK 2/5	1.1	1.5		81	79	75.5	73	68.5	63.5	57.5	49.5	40							
NKm 2/6 GE	NK 2/6	1.5	2		95	93	90	87	82	76	68.5	59.5	48							
NKm 4/3 GE	NK 4/3	0.55	0.75		40	-	39	38	37	35	33	30.5	28	20.5	16.5	12				
NKm 4/4 GE	NK 4/4	0.75	1		53	-	52	50.5	49	46.5	44	40.5	37	27.5	22	16				
NKm 4/5 GE	NK 4/5	1.1	1.5		67	-	65	63.5	61.5	58	55	50.5	46.5	34	27.5	20				
NKm 4/6 GE	NK 4/6	1.5	2		80	-	78	76	74	70	66	61	56	41	33	24				
NKm 8/3 GE	NK 8/3	1.1	1.5		40	-	-	-	39	38	37.5	36.5	35	32	30	28	22.5	16		
NKm 8/4 GE	NK 8/4	1.5	2		52	-	-	-	51	50	49	48	46	42	39	36	29	21		

Q = Flow rate H = Total manometric head

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

➡ Single-phase pumps without float switch on request

## POS. COMPONENT

## CONSTRUCTION CHARACTERISTICS

1	<b>EXTERNAL SLEEVE</b>	Stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2	<b>SUCTION FILTER</b>	Stainless steel AISI 304 complete with anti-vibration supports
3	<b>MOTOR SLEEVE</b>	Stainless steel AISI 304
4	<b>IMPELLERS AND DIFFUSERS</b>	Noryl FE1520PW
5	<b>DIAPHRAGMS</b>	Stainless steel AISI 304
6	<b>MOTOR SHAFT</b>	Stainless steel AISI 431
7	<b>TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER</b>	

Seal Model	Shaft Diameter	Position	Materials		
			Stationary ring	Rotational ring	Elastomer
STA-17	Ø 17 mm	Motor side	Ceramic	Graphite	NBR
ST1-16	Ø 16 mm	Pump side	Silicon carbide	Graphite	NBR

8	<b>BEARINGS</b>	<b>6303 2RS - C3 / 6203 ZZ - C3E</b>
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9	<b>CAPACITOR</b>	
<b>Pump</b>	<b>Capacitance</b>	
<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>
NKm 2/2 GE		
NKm 2/3 GE	16 µF - 500 VL	30 µF - 250 VL
NKm 4/3 GE		
NKm 2/4 GE	20 µF - 450 VL	-
NKm 4/4 GE		
NKm 2/5 GE		
NKm 4/5 GE	25 µF - 450 VL	-
NKm 8/3 GE		
NKm 2/6 GE		
NKm 4/6 GE	35 µF - 450 VL	-
NKm 8/4 GE		

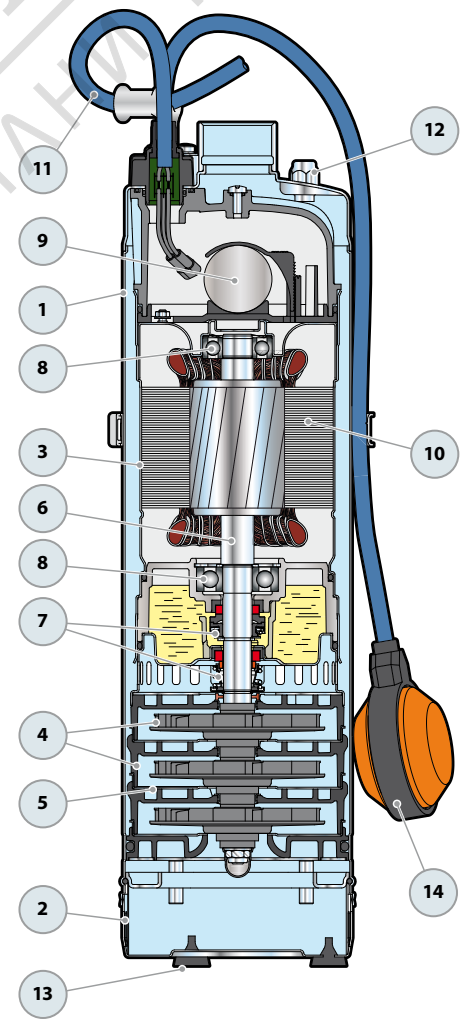
10	<b>ELECTRIC MOTOR</b>	
NKm:	single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.	
NK:	three-phase 400 V - 50 Hz.	
	- Insulation: class F	
	- Protection: IP X8	

11	<b>POWER CABLE</b>
	<ul style="list-style-type: none"> <li>DRINCABLE® type approved for use in drinking water by "WRAS" in compliance with BS 6920, approval n. 7513</li> <li>Standard length 10 metres</li> </ul>

12	<b>AUTOMATIC VENT VALVE</b>
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13	<b>ANTI-VIBRATION SUPPORTS</b>
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14	<b>FLOAT SWITCH</b> (only for single-phase versions)
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## DIMENSIONS AND WEIGHT

MODEL		PORT DN	N. STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
NKm 2/2 GE	NK 2/2	1 1/4"	2	135	459	13.0	13.0
NKm 2/3 GE	NK 2/3		3		486	13.4	13.4
NKm 2/4 GE	NK 2/4		4		543	15.6	14.2
NKm 2/5 GE	NK 2/5		5		570	15.6	15.4
NKm 2/6 GE	NK 2/6		6		617	18.6	17.2
NKm 4/3 GE	NK 4/3		3		486	13.4	13.4
NKm 4/4 GE	NK 4/4		4		543	15.2	14.0
NKm 4/5 GE	NK 4/5		5		570	16.5	15.5
NKm 4/6 GE	NK 4/6		6		617	18.4	17.0
NKm 8/3 GE	NK 8/3		3		516	15.5	14.4
NKm 8/4 GE	NK 8/4		4		563	17.6	15.9



## ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
<b>Single-phase</b>	230 V	240 V	110 V
NKm 2/2 GE	4.3 A	3.9 A	8.6 A
NKm 2/3 GE	5.5 A	4.8 A	11.0 A
NKm 2/4 GE	6.2 A	5.9 A	-
NKm 2/5 GE	7.6 A	7.6 A	-
NKm 2/6 GE	9.2 A	9.0 A	-
NKm 4/3 GE	5.0 A	4.8 A	10.0 A
NKm 4/4 GE	6.2 A	5.9 A	-
NKm 4/5 GE	7.5 A	6.9 A	-
NKm 4/6 GE	8.7 A	8.4 A	-
NKm 8/3 GE	7.1 A	6.8 A	-
NKm 8/4 GE	9.2 A	9.0 A	-

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
<b>Three-phase</b>	230 V	400 V	240 V	415 V
NK 2/2	2.8 A	1.6 A	2.7 A	1.5 A
NK 2/3	3.3 A	1.9 A	3.2 A	1.8 A
NK 2/4	4.0 A	2.3 A	3.9 A	2.2 A
NK 2/5	5.2 A	3.0 A	4.9 A	2.8 A
NK 2/6	5.9 A	3.4 A	5.5 A	3.2 A
NK 4/3	3.2 A	1.8 A	3.1 A	1.7 A
NK 4/4	3.8 A	2.2 A	3.7 A	2.1 A
NK 4/5	4.8 A	2.8 A	4.7 A	2.7 A
NK 4/6	5.5 A	3.2 A	5.4 A	3.1 A
NK 8/3	5.0 A	2.9 A	4.7 A	2.7 A
NK 8/4	5.9 A	3.4 A	5.4 A	3.1 A

## PALLETIZATION

MODEL		GROUPAGE n. pumps	CONTAINER n. pumps
Single-phase	Three-phase		
NKm 2/2 GE	NK 2/2	30	54
NKm 2/3 GE	NK 2/3	30	54
NKm 2/4 GE	NK 2/4	25	45
NKm 2/5 GE	NK 2/5	25	45
NKm 2/6 GE	NK 2/6	25	45
NKm 4/3 GE	NK 4/3	30	54
NKm 4/4 GE	NK 4/4	25	45
NKm 4/5 GE	NK 4/5	25	45
NKm 4/6 GE	NK 4/6	25	45
NKm 8/3 GE	NK 8/3	30	-
NKm 8/4 GE	NK 8/4	25	45