

## 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

- **20 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 Pending n. PCT/IB2014/063126

### OPTIONS AVAILABLE ON REQUEST

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

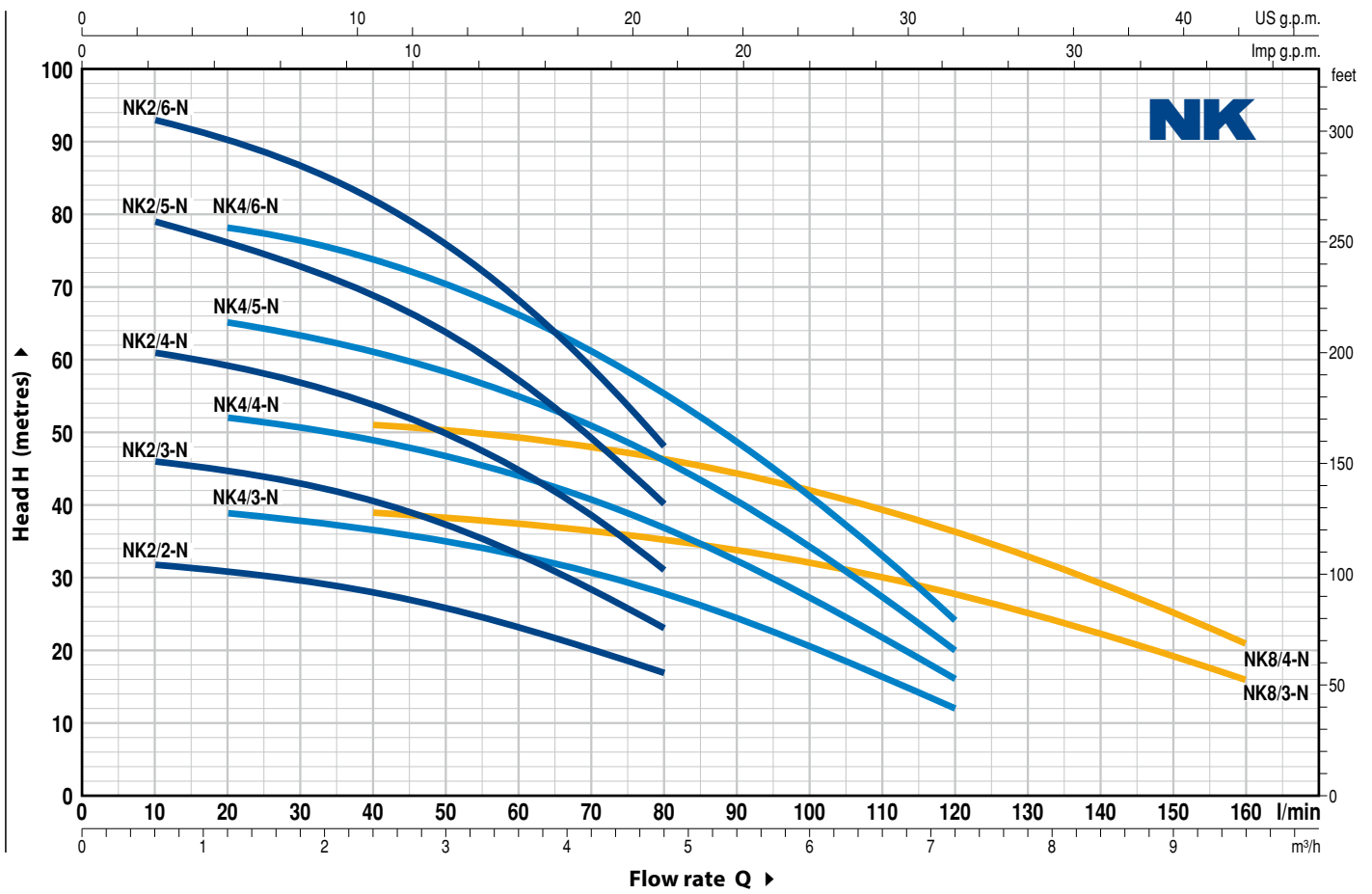
### CERTIFICATIONS

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



### CHARACTERISTIC CURVES AND PERFORMANCE DATA

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



MODEL		POWER (P <sub>2</sub> )		Q	H metres															
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		
				l/min	0	10	20	30	40	50	60	70	80	100	110	120	140	160		
NKm 2/2 GE-N	NK 2/2-N	0.37	0.5		33	32	31	29.5	28	26	23.5	20.5	17							
NKm 2/3 GE-N	NK 2/3-N	0.55	0.75		48	46	44.5	42.8	40.5	37.5	33.5	29	23							
NKm 2/4 GE-N	NK 2/4-N	0.75	1		63	61	59	57	54	50	45	39	31							
NKm 2/5 GE-N	NK 2/5-N	1.1	1.5		81	79	75.5	73	68.5	63.5	57.5	49.5	40							
NKm 2/6 GE-N	NK 2/6-N	1.5	2		95	93	90	87	82	76	68.5	59.5	48							
NKm 4/3 GE-N	NK 4/3-N	0.55	0.75		40	-	39	38	37	35	33	30.5	28	20.5	16.5	12				
NKm 4/4 GE-N	NK 4/4-N	0.75	1		53	-	52	50.5	49	46.5	44	40.5	37	27.5	22	16				
NKm 4/5 GE-N	NK 4/5-N	1.1	1.5		67	-	65	63.5	61.5	58	55	50.5	46.5	34	27.5	20				
NKm 4/6 GE-N	NK 4/6-N	1.5	2		80	-	78	76	74	70	66	61	56	41	33	24				
NKm 8/3 GE-N	NK 8/3-N	1.1	1.5		40	-	-	-	39	38	37.5	36.5	35	32	30	28	22.5	16		
NKm 8/4 GE-N	NK 8/4-N	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 EN 10088-3 - 1.4104

### 7 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

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 BEARINGS 6303 2RS - C3 / 6203 ZZ - C3E

### 9 CAPACITOR

Pump	Capacitance
Single-phase	(220-230 V or 240 V)

NKm 2/2 GE-N	
NKm 2/3 GE-N	16 µF - 500 VL
NKm 4/3 GE-N	
NKm 2/4 GE-N	20 µF - 450 VL
NKm 4/4 GE-N	
NKm 2/5 GE-N	
NKm 4/5 GE-N	25 µF - 450 VL
NKm 8/3 GE-N	
NKm 2/6 GE-N	
NKm 4/6 GE-N	35 µF - 450 VL
NKm 8/4 GE-N	

### 10 ELECTRIC MOTOR

**NKm:** single-phase 220-230 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 POWER CABLE

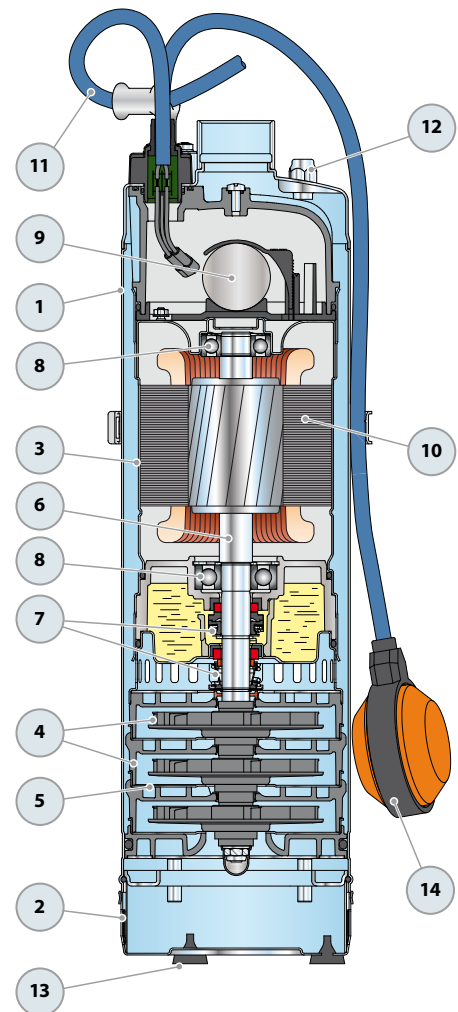
⇒ **DRINCABLE® type**  
approved for use in drinking water by "WRAS"  
in compliance with BS 6920, approval n. 7513  
**Standard length 20 metres**

### 12 AUTOMATIC VENT VALVE

### 13 ANTI-VIBRATION SUPPORTS

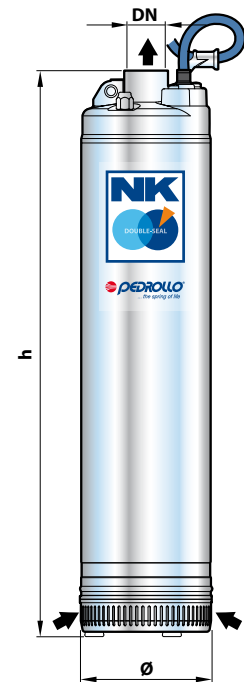
### 14 FLOAT SWITCH

(only for single-phase versions)



## DIMENSIONS AND WEIGHT

MODEL		PORT DN	N. STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
NKm 2/2 GE-N	NK 2/2-N	1¼"	2	135	459	14.0	13.8
NKm 2/3 GE-N	NK 2/3-N		3		486	14.5	14.3
NKm 2/4 GE-N	NK 2/4-N		4		543	16.1	15.3
NKm 2/5 GE-N	NK 2/5-N		5		570	17.5	16.7
NKm 2/6 GE-N	NK 2/6-N		6		617	19.8	18.8
NKm 4/3 GE-N	NK 4/3-N		3		486	14.5	14.3
NKm 4/4 GE-N	NK 4/4-N		4		543	16.1	15.3
NKm 4/5 GE-N	NK 4/5-N		5		570	17.5	16.7
NKm 4/6 GE-N	NK 4/6-N		6		617	19.8	18.8
NKm 8/3 GE-N	NK 8/3-N		3		516	18.0	17.2
NKm 8/4 GE-N	NK 8/4-N		4		563	20.2	19.2



## ABSORPTION

MODEL	VOLTAGE	
	230 V	240 V
<b>Single-phase</b>		
NKm 2/2 GE-N	4.4 A	4.3 A
NKm 2/3 GE-N	5.4 A	5.2 A
NKm 2/4 GE-N	6.2 A	6.0 A
NKm 2/5 GE-N	7.6 A	7.3 A
NKm 2/6 GE-N	8.8 A	8.5 A
NKm 4/3 GE-N	5.0 A	4.8 A
NKm 4/4 GE-N	6.2 A	6.0 A
NKm 4/5 GE-N	7.5 A	6.9 A
NKm 4/6 GE-N	8.7 A	8.4 A
NKm 8/3 GE-N	7.5 A	6.9 A
NKm 8/4 GE-N	8.7 A	8.4 A

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
<b>Three-phase</b>				
NK 2/2-N	2.8 A	1.6 A	2.7 A	1.5 A
NK 2/3-N	3.3 A	1.9 A	3.2 A	1.8 A
NK 2/4-N	4.0 A	2.3 A	3.9 A	2.2 A
NK 2/5-N	5.0 A	2.9 A	4.9 A	2.8 A
NK 2/6-N	5.7 A	3.3 A	5.5 A	3.2 A
NK 4/3-N	3.2 A	1.8 A	3.1 A	1.7 A
NK 4/4-N	3.8 A	2.2 A	3.7 A	2.1 A
NK 4/5-N	4.8 A	2.8 A	4.7 A	2.7 A
NK 4/6-N	5.5 A	3.2 A	5.4 A	3.1 A
NKm 8/3-N	4.8 A	2.8 A	4.7 A	2.7 A
NKm 8/4-N	5.5 A	3.2 A	5.4 A	3.1 A

## PALLETIZATION

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