NK

Multi-stage submersible pumps

PERFORMANCE RANGE

- Flow rate up to **120 l/min** (7.2 m^3/h)
- Head up to **105 m**

APPLICATION LIMITS

- Maximum liquid temperature **+40 °C**
- Maximum sand content **50 g/m^3**
- **20 m** maximum immersion depth
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

➠ Complete with **20 m** long power cable

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

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

CE

CERTIFICATIONS

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2008 SINCERT DNV

АИ30

INSTALLATION AND USE

As a result 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 sets, for the irrigation of gardens and allotments and for pressure boosting, etc.

OPTIONALS AVAILABLE ON REQUEST

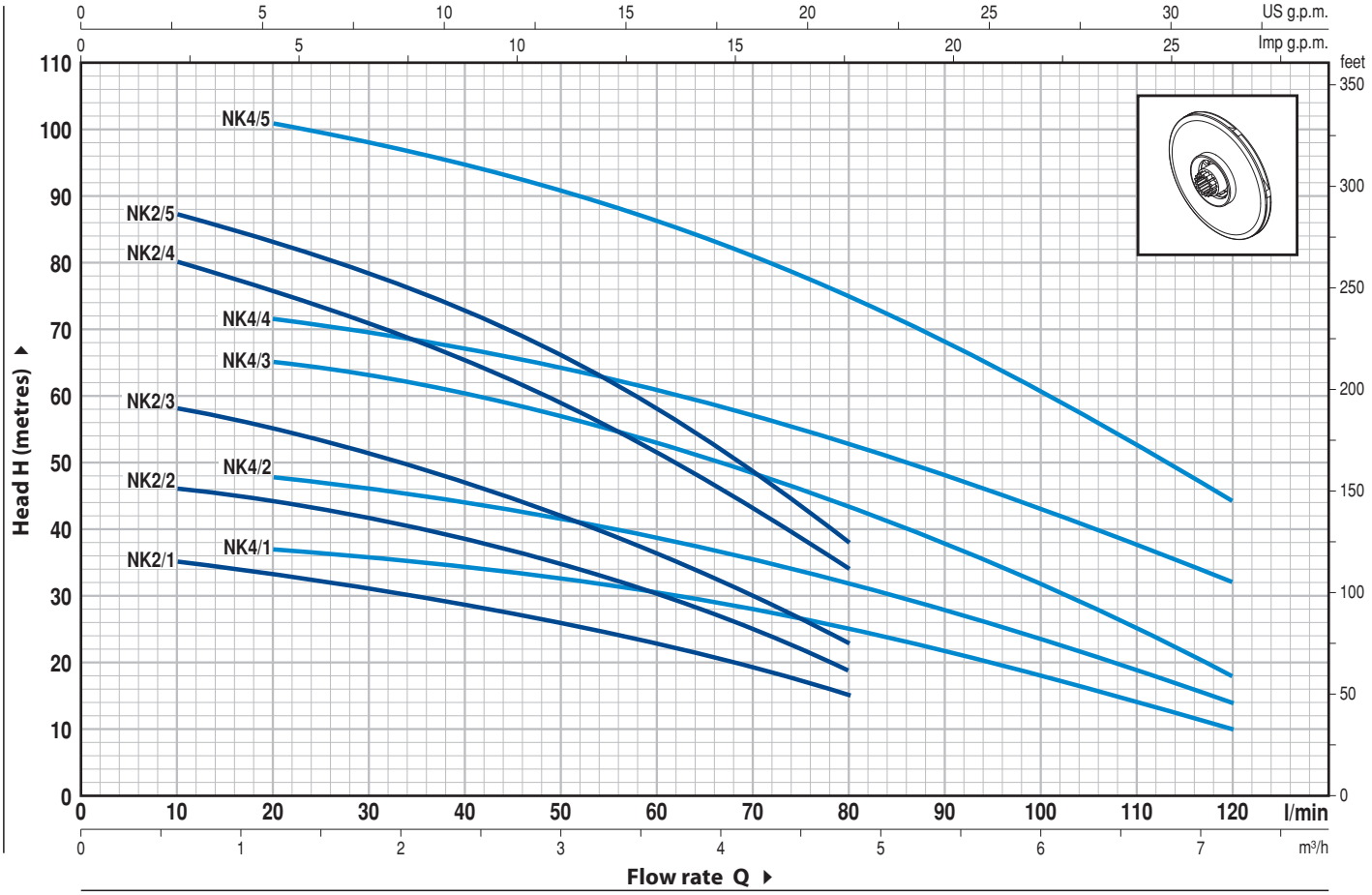
- Pumps fitted with power cables of other lengths
- Other voltages or 60 Hz frequency

GUARANTEE

1 year subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



VERSION WITHOUT FLOAT SWITCH

MODEL		POWER		Q	m³/h	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2
Single-phase	Three-phase	kW	HP		l/min	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
NKm 2/1	–	0.45	0.6			36	35	33	31	28.5	26	23	19	15				
NKm 2/2	–	0.55	0.75			48	46	44	41.5	39	35	30	25	19				
NKm 2/3	**NK 2/3**	0.75	1			60	58	55	51	47	42	36	30	23				
NKm 2/4	**NK 2/4**	1.1	1.5			84	80	75	70	65	59	51	42.5	34				
NKm 2/5	**NK 2/5**	1.5	2			90	87	83	78	73	66	58	48	38				
NKm 4/1	–	0.55	0.75	**H**	metres	40	–	37	36	34.5	32.5	30	28	25	21.5	18.5	14.5	10
NKm 4/2	**NK 4/2**	0.75	1			50	–	48	46	44	41	38	35	32	28	24	19	14
NKm 4/3	**NK 4/3**	1.1	1.5			67	–	65	62.5	60	56.5	52	48	44	38	32	25	18
NKm 4/4	**NK 4/4**	1.5	2			75	–	72	69	66	64	60	57	53	48	43	38	32
NKm 4/5	**NK 4/5**	2.2	3			105	–	101	98	94	90	86	80	75	67	60	52	44

"GE" VERSION WITH FLOAT SWITCH

MODEL	POWER		Q	m³/h	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2
Single-phase	kW	HP		l/min	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
NKm 2/1 - GE	0.45	0.6			36	35	33	31	28.5	26	23	19	15				
NKm 2/2 - GE	0.55	0.75			48	46	44	41.5	39	35	30	25	19				
NKm 2/3 - GE	0.75	1			60	58	55	51	47	42	36	30	23				
NKm 2/4 - GE	1.1	1.5			84	80	75	70	65	59	51	42.5	34				
NKm 2/5 - GE	1.5	2			90	87	83	78	73	66	58	48	38				
NKm 4/1 - GE	0.55	0.75	**H**	metres	40	–	37	36	34.5	32.5	30	28	25	21.5	18.5	14.5	10
NKm 4/2 - GE	0.75	1			50	–	48	46	44	41	38	35	32	28	24	19	14
NKm 4/3 - GE	1.1	1.5			67	–	65	62.5	60	56.5	52	48	44	38	32	25	18
NKm 4/4 - GE	1.5	2			75	–	72	69	66	64	60	57	53	48	43	38	32
NKm 4/5 - GE	2.2	3			105	–	101	98	94	90	86	80	75	67	60	52	44

Q = Flow rate **H** = Total manometric head

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

NK (0.45÷1.1 kW)

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**EXTERNAL SLEEVE**	Stainless steel AISI 304, complete with threaded delivery port in compliance with ISO 228/1
2	**SUCTION FILTER**	Stainless steel AISI 304
3	**MOTOR SLEEVE**	Stainless steel AISI 304
4	**IMPELLERS AND DIFFUSERS**	Noryl GFN2V
5	**DIAPHRAGMS**	Stainless steel AISI 304, complete with anti-wear ring
6	**MOTOR SHAFT**	Stainless steel EN 10088-3 - 1.4104

7 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal	*Shaft*	*Position*		*Materials*	
Model	***Diameter***		*Stationary ring*	*Rotational ring*	*Elastomer*
MG1-16	**Ø 16** mm	Motor side	Silicon carbide	Graphite	NBR
MG1-15 SIC	**Ø 15** mm	Pump side	Silicon carbide	Silicon carbide	NBR

8 BEARINGS **6303 2RS - C3 / 6203 ZZ - C3**

9 CAPACITOR

Pump	*Capacitance*	
Single-phase	***(230 V or 240 V)***	***(110 V)***
NKm 2/1	**16** µF 500 VL	**30** µF 250 VL
NKm 2/2 **NKm 4/1**	**16** µF 500 VL	**30** µF 250 VL
NKm 2/3 **NKm 4/2**	**20** µF 500 VL	–
NKm 2/4 **NKm 4/3**	**25** µF 500 VL	–

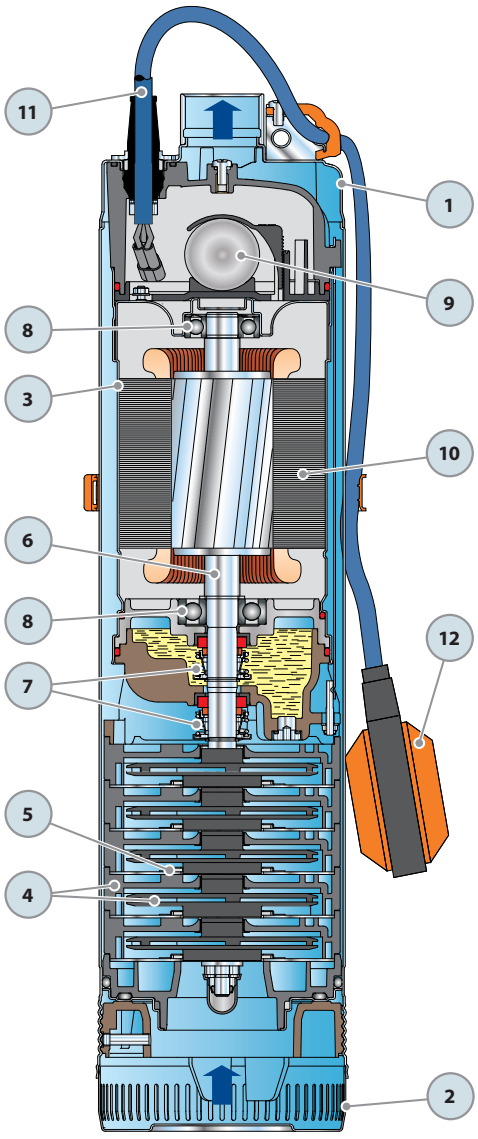
10 ELECTRIC MOTOR

NKm: single-phase 230 V - 50 Hz
with thermal overload protector built-in to the winding.
NK: three-phase 400 V - 50 Hz.
– Insulation: F class.
– Protection: IP 68.

11 POWER CABLE

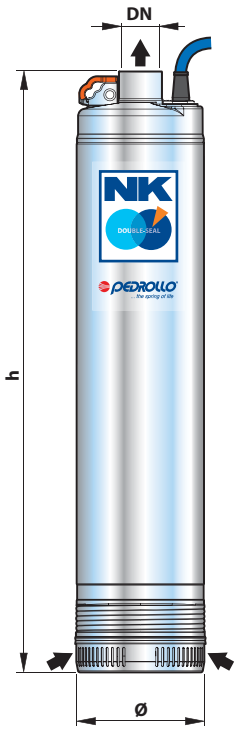
➠ **20 metre long DRINCABLE® for permanent immersion in drinking water**

12 FLOAT SWITCH



DIMENSIONS AND WEIGHT

MODEL		PORT	N° STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase	DN		Ø	h	1~	3~
NKm 2/1	–		3		495	**13.9**	–
NKm 2/2	–		4		519	**14.5**	–
NKm 2/3	–		5		573	**16.3**	–
–	NK 2/3				543	–	**15.0**
NKm 2/4	NK 2/4	**1¼"**	7	135	621	**18.1**	**18.0**
NKm 4/1	–		4		519	**14.3**	–
NKm 4/2	–		5		573	**16.2**	–
–	NK 4/2				543	–	**15.1**
NKm 4/3	NK 4/3		7		621	**18.1**	**18.0**



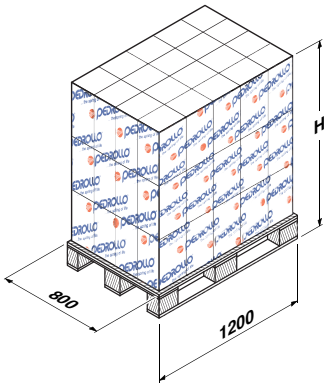
ABSORPTION

MODEL	VOLTAGE (single-phase)		
Single-phase	230 V	240 V	110 V
NKm 2/1	**4.5** A	**4.5** A	**9.0** A
NKm 2/2	**5.0** A	**5.0** A	**10.0** A
NKm 2/3	**6.0** A	**6.0** A	–
NKm 2/4	**7.5** A	**7.5** A	–
NKm 4/1	**5.0** A	**5.0** A	**10.0** A
NKm 4/2	**6.0** A	**6.0** A	–
NKm 4/3	**7.5** A	**7.5** A	–

MODEL	VOLTAGE (three-phase)			
Three-phase	230 V	400 V	240 V	415 V
NK 2/3	**4.5** A	**2.6** A	**4.5** A	**2.6** A
NK 2/4	**5.2** A	**3.0** A	**5.2** A	**3.0** A
NK 4/2	**4.5** A	**2.6** A	**4.5** A	**2.6** A
NK 4/3	**5.2** A	**3.0** A	**5.2** A	**3.0** A

PALLETIZATION

MODEL		GROUPAGE				CONTAINER			
		n°	H	kg		n°	H	kg	
Single-phase	Three-phase	pumps	(mm)	1~	3~	pumps	(mm)	1~	3~
NKm 2/1	–	**30**	1015	434	–	**60**	1890	852	–
NKm 2/2 NKm 4/1	–	**30**	1015	452	–	**60**	1890	887	–
NKm 2/3 NKm 4/2	–	**25**	869	425	–	**40**	1307	670	–
–	NK 2/3 NK 4/2	**30**	1015	–	470	**60**	1890	–	915
NKm 2/4 NKm 4/3	NK 2/4 NK 4/3	**25**	869	469	467	**40**	1307	740	737



NK (1.5÷2.2 kW)

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**EXTERNAL SLEEVE**	Stainless steel AISI 304, complete with threaded delivery port in compliance with ISO 228/1
2	**SUCTION FILTER**	Stainless steel AISI 304
3	**MOTOR SLEEVE**	Stainless steel AISI 304
4	**IMPELLERS AND DIFFUSERS**	Noryl GFN2V
5	**DIAPHRAGMS**	Stainless steel AISI 304, complete with anti-wear ring
6	**MOTOR SHAFT**	Stainless steel EN 10088-3 - 1.4104

7 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal	*Shaft*	*Position*		*Materials*	
Model	***Diameter***		*Stationary ring*	*Rotational ring*	*Elastomer*
MG1-19	**Ø 19** mm	Motor side	Silicon carbide	Graphite	NBR
MG1-18 SIC	**Ø 18** mm	Pump side	Silicon carbide	Silicon carbide	NBR

8 BEARINGS **6304 2RS - C3 / 6203 ZZ - C3**

9 CAPACITOR

Pump	*Capacitance*
Single-phase	***(230 V or 240 V)***
NKm 2/5 **NKm 4/4**	**35 µF 450 VL**
NKm 4/5	**50 µF 450 VL**

10 ELECTRIC MOTOR

NKm: single-phase 230 V - 50 Hz.
Windings up to **1.5 kW** with built-in thermal overload protector.
➠ The **NKm4/5 2.2 kW** pump is equipped with an external manual reset overload protector housed in the control box.

NK: three-phase 400 V - 50 Hz.

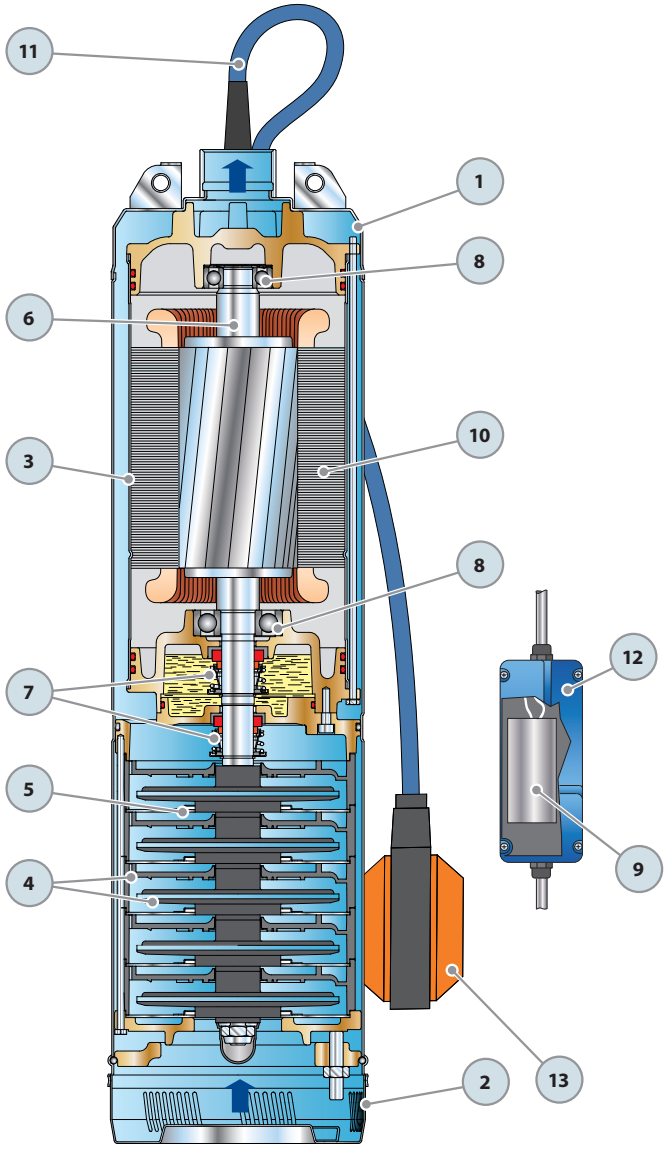
– Insulation: F class.
– Protection: IP 68.

11 POWER CABLE

➠ **20 metre long DRINCABLE® with removable connector for permanent immersion in drinking water**

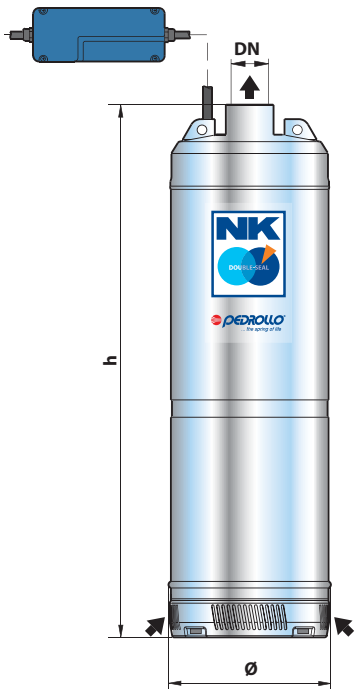
12 CONTROL BOX (for single-phase versions)

13 FLOAT SWITCH



DIMENSIONS AND WEIGHT

MODEL		PORT	N° STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase	DN		Ø	h	1~	3~
NKm 2/5	NK 2/5		6		612	**26.7**	**23.8**
NKm 4/4	NK 4/4	**1¼"**	5	153	582	**26.0**	**24.4**
NKm 4/5	NK 4/5		7		642	**30.5**	**28.0**



ABSORPTION

MODEL	VOLTAGE (single-phase)	
Single-phase	230 V	240 V
NKm 2/5	**9.0** A	**9.0** A
NKm 4/4	**9.5** A	**9.5** A
NKm 4/5	**14.0** A	**14.0** A

MODEL	VOLTAGE (three-phase)			
Three-phase	230 V	400 V	240 V	415 V
NK 2/5	**6.2** A	**3.6** A	**6.2** A	**3.6** A
NK 4/4	**6.2** A	**3.6** A	**6.2** A	**3.6** A
NK 4/5	**8.5** A	**4.9** A	**8.5** A	**4.9** A

PALLETIZATION

MODEL		GROUPAGE				CONTAINER			
		n°	H	kg		n°	H	kg	
Single-phase	Three-phase	pumps	(mm)	1~	3~	pumps	(mm)	1~	3~
NKm 2/5	NK 2/5	**20**	1100	551	493	**40**	2060	1085	969
NKm 4/4	NK 4/4	**20**	1100	537	505	**40**	2060	1058	993
NKm 4/5	NK 4/5	**20**	1100	627	576	**40**	2060	1237	1136