

NKVE

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

D+CONNECT



VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER



TECHNICAL DATA

Operating range :

NNKVE 1, 3, 6, 10, 15, 20 S: from 1 m³/h to 30 m³/h with head up to 320 m

NKVE 32, 45, 65, 95: from 1 m³/h to 120 m³/h with head up to 320 m

Type of pumped liquid: Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral

Maximum percentage of glycol: 30%

Supported liquid temperature min. and max.: From -30 to +120°C (EPDM)
From -15°C to +120°C (Viton/FKM)

Maximum ambient temperature: +50° C

Maximum operating pressure bar / kPa:

NKVE from 1 S to 20 S: 25 bar / 2500 kPa

NKVE 32, 45: 32 bar / 3200 kPa

NKVE 65, 95: 25 bar / 2500 kPa

Degree of protection of the engine: IP 55

Engine insulation class: F

Impellers construction material: AISI 304 stainless steel

On request X version with AISI 316 stainless steel.

Single phase power supply:

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

Three-phase power supply:

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

380 - 415 V at 50 Hz from 3 kW

Power cord (m) and plug: Not provided

Type of installation possible: Vertical position

Special versions available on request:

- different types of mechanical seals (for example for aggressive liquids)
- connections (round flanges, oval, Victaulic, clamp)
- parts in contact with the liquid in stainless steel AISI 316 (versions X)
- different voltages and frequencies
- ATEX version

Certifications: NKVE from 1 S to 20 S or X: WRAS, ACS

NKVE from 32 to 95 X version: WRAS, ACS

APPLICATIONS

NKVE are AISI 304 stainless steel multi-impeller vertical centrifugal pumps with coupling; with MCE-P variable frequency drive installed as standard. The pumps are designed for pressurization in civil and commercial environments, they can also be used in agriculture and in watering systems.

Possibility of remote control with D.Connect (D.Connect Box supplied separately).

CONSTRUCTION FEATURES OF THE PUMP - NKV 1-3-6-10-15-20 S

The use of advanced stainless-steel processing technologies for the main hydraulic components helps to achieve very high-performance levels. The pumps are versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. The parts in contact with the liquid are made of AISI 304 stainless steel for NKVE S models, or AISI 316 stainless steel for NKVE X models (only available on request). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling.

CONSTRUCTION FEATURES OF THE PUMP - NKV 32-45-65-95

The use of advanced stainless-steel processing technologies for the main hydraulic components helps to achieve very high-performance levels. They are extremely versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. Their pump body and upper flange are in cataphoretic paint coated cast iron; impellers, diffusers and pump liner are made of AISI 304 stainless steel (AISI 316 stainless steel available on request - X version). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling.

CONSTRUCTION FEATURES OF THE MOTOR

Standard mechanical seal E1 (= Graphite/ Silicon Carbide/AISI 316/EPDM) and on request among the various custom seals there are also with FKM/Viton. The seal can be dismantled without removing the motor from 5.5 kW. Rigid coupling. Motor frame B14 up to 4 kW motor size and B5 from 5,5 kW motor size.

- Denomination index:

(example)	NKVE 32	/	13	-	2	X	300	E1	IE3
NOMINAL FLOW RATE (m³/h)									
NUMBER OF STAGES/IMPELLERS									
NUMBER AND TYPE OF TURNED IMPELLER									
MATERIALS*: S= AISI 304; X= AISI 316									
MOTOR POWER P2 KW X 10 (300 = 30KW)									
Type of mechanical seal (E1=STANDARD)									
E1=BQGE=Carbon/Silicon carbide/AISI 316/EPDM STD									
E2=QQGE=Silicon Carbide/Silicon Carbide/AISI 316/EPDM									
V3=QQGV=Silicon Carbide/Silicon Carbide/AISI 316/FKM-Viton									
V4=BQGV= Carbon/Silicon carbide /AISI 316/ FKM-Viton									
E5=UUGE=Tungsten carbide/Tungsten carbide/AISI 316/EPDM									
Motor efficiency									

*MATERIALS:

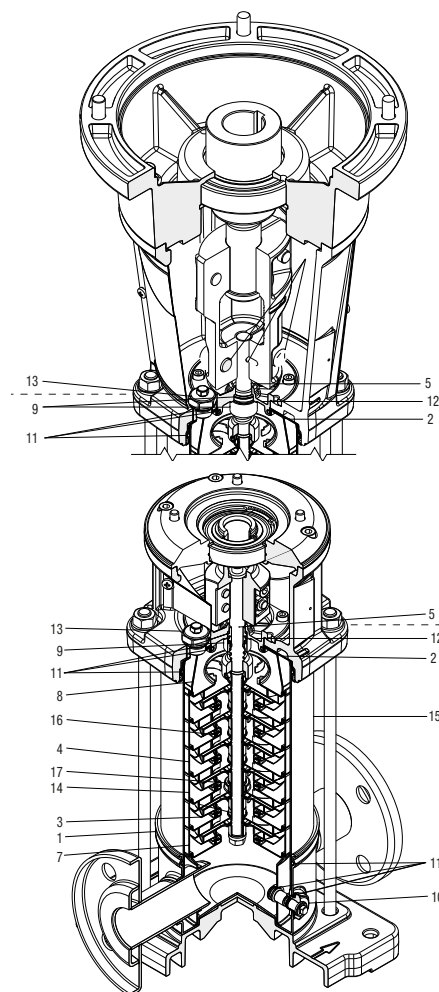
"S" version with pump body/impellers/diffusers in AISI 304 stainless steel - "X" version with pump body/impellers/diffusers in AISI 316 stainless steel

" " standard version with pump body in cast iron and impellers in AISI 304 stainless steel (for NKV 32-45-65-95)

NKVE 1-3-6-10-15-20 MATERIAL

N°	PART	MATERIAL* (S VERSION - AISI 304)	MATERIAL* (X VERSION - AISI 316)
1	Pump body	Stainless Steel AISI 304	Stainless Steel AISI 316
2	Upper flange	Stainless Steel AISI 304	Stainless Steel AISI 316
3	Impeller	Stainless Steel AISI 304	Stainless Steel AISI 316
4	Diffuser body and diffuser	Stainless Steel AISI 304	Stainless Steel AISI 316
5	Pump shaft	Stainless Steel AISI 304	Stainless Steel AISI 316
7	Initial stage housing	Stainless Steel AISI 304	Stainless Steel AISI 316
8	Stage centering outlet	Stainless Steel AISI 304	Stainless Steel AISI 316
9	Mechanical seal	Carbon/Silicon carbide/AISI 316/ EPDM	Carbon/Silicon carbide/AISI 316/ EPDM
10	Discharge plug	Stainless Steel AISI 304	Stainless Steel AISI 316
11	O-ring	EPDM	EPDM
12	Seal disk	Stainless Steel AISI 304	Stainless Steel AISI 316
13	Filling plug	Stainless Steel AISI 304	Stainless Steel AISI 316
14	Stage housing and diffuser with bearing	Stainless Steel AISI 304/Tungsten carbide	Stainless Steel AISI 316/Tungsten carbide
15	External sleeve	Stainless Steel AISI 304	Stainless Steel AISI 316
16	Floating wear ring	PPS	PPS
17	Intermediate bushing	Tungsten carbide	Tungsten carbide

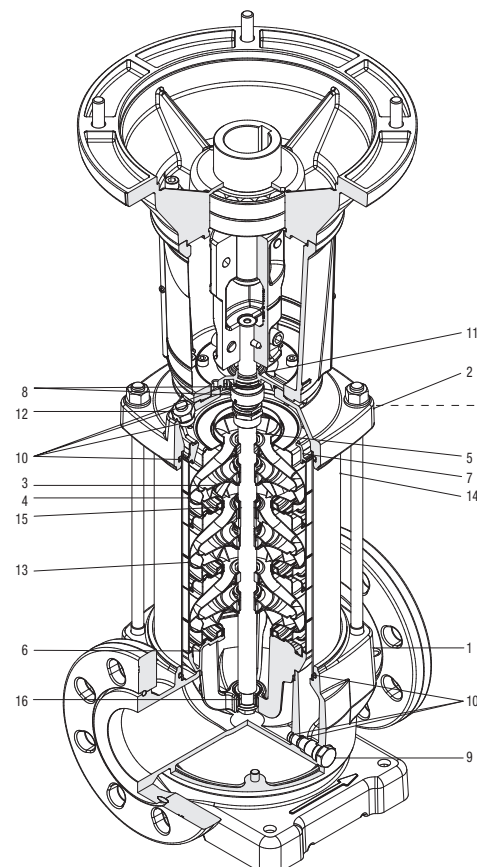
* In contact with the liquid.



NKVE 32-45-65-95 MATERIAL

N°	PART	MATERIAL* (STANDARD VERSION)	MATERIAL* (X VERSION - AISI 316)
1	Pump body	Cast iron with cataphoresis	Stainless Steel AISI 316
2	Upper flange	Stainless Steel AISI 304	Stainless Steel AISI 316
3	Impeller	Stainless Steel AISI 304	Stainless Steel AISI 316
4	Diffuser body and diffuser	Stainless Steel AISI 304/Carbon	Stainless Steel AISI 316/Carbon
5	Pump shaft	Stainless Steel AISI 431	Stainless Steel AISI 329
6	Stage centering inlet	Stainless Steel AISI 316	Stainless Steel AISI 316
7	Stage centering outlet	Stainless Steel AISI 304	Stainless Steel AISI 316
8	Mechanical seal	Carbon/Silicon carbide/AISI 316/ EPDM	Carbon/Silicon carbide/AISI 316/ EPDM
9	Discharge plug	Stainless Steel AISI 304	Stainless Steel AISI 316
10	O-ring	EPDM	EPDM
11	Seal disk	Stainless Steel AISI 304	Stainless Steel AISI 316
12	Filling plug	Stainless Steel AISI 304	Stainless Steel AISI 316
13	Stage housing and diffuser with bearing	Stainless Steel AISI 304	Stainless Steel AISI 316
14	External sleeve	Stainless Steel AISI 304	Stainless Steel AISI 316
15	Floating wear ring	PTFE	PTFE
16	Intermediate bushing	Stainless Steel AISI 316/Tungsten carbide	Stainless Steel AISI 316/Tungsten carbide

* In contact with the liquid.



MATERIAL TABLE SELECTION

PUMP MODEL	IMPELLER / DIFFUSER	BASE	FLANGES
NKV 32, 45, 65, 95	Inox 304	Cast iron	Cast iron
NKV 1, 3, 6, 10, 15, 20 S	Inox 304	Inox 304	Inox 304
NKV 1, 3, 6, 10, 15, 20, 32, 45, 65, 95 X	Inox 316	Inox 316	Inox 316

LIQUID TABLE SELECTION

Type of mechanical seal (E1=STANDARD)

E1=BQGE=Carbon/Silicon carbide/AISI 316/EPDM STD

E2=QQGE=Silicon Carbide/Silicon Carbide/AISI 316/EPDM

V3=QQGV=Silicon Carbide/Silicon Carbide/AISI 316/FKM-Viton

V4=BQGV= Carbon/Silicon carbide /AISI 316/ FKM-Viton

E5=UUGE=Tungsten carbide/Tungsten carbide/AISI 316/EPDM

LIQUID (WATER SOLUTION)	CONCENTRATION [%]	MIN/MAX TEMPERATURE [°C]	NKV MODEL		
			STANDARD (NKV 32-95)	S (NKV 1-20)	X (NKV 1-95)
Acetic acid	10 ÷ 40	+0/+70	-	-	E1
Citric Acid	5	+5/+70	-	E1	E1
Hydrochloric Acid	2	+5/+25	-	-	V3
Formic Acid	5	+5/+25	-	E1	E1
Phosphoric Acid	10	+5/+30	-	-	E1
Nitric Acid	40	+5/+30	-	V3	V3
Sulfuric Acid	2	+5/+25	-	-	V4
Tannic Acid	20	+5/+50	-	-	E1
Tartaric Acid	50	+5/+25	-	V3	V3
Deionized Water, Demineralized	100	+5/+110	E1	E1	E1
Sodium Bicarbonate	6	+5/+60	-	-	E1
Chloroform	100	-10/+30	V4	V4	V4
Oil In Water Emulsion	100	+15/+90	V4	V4	V4
Phosphates, Polyphosphates	10	+5/+90	-	V3	V3
Ethylene Glycol	10 ÷ 30	-15/+120	-	E1	E1
Propylene Glycol	30	-10/+100	V3	V3	V3
Sodium Hypochlorite	1	+5/+25	-	-	V3
Sodium Nitrate	10	+5/+60	-	V3	V3
Diathermic Oil	100	+90/+120	V4	V4	V4
Mineral Oil	100	+90/+120	V4	V4	V4
Vegetable Oil	100	+70/+100	E1	E1	E1
Perchlorethylene	100	-10/+30	V4	V4	V4
Sodium Hydroxide	25	+5/+70	E2	E2	E2
Aluminium Sulphate	10 ÷ 25	+5/+50	-	-	E2
Ammonium Sulphate	10	-10/+60	-	-	E2
Ferric Sulphate	10	+5/+30	-	-	E1
Trichloroethylene	100	-10/+40	V4	V4	V4

For use with sea water, please consult the technical office. This table should be considered a general guide.

It is important to consider the specific operating conditions, in particular the concentration in the pumped liquid, the specific weight and/or the viscosity, the temperature of the liquid and its pressure.

All these conditions are essential for engine and pump performance.

When pumping hazardous liquids, it is recommended to take safety precautions. You can contact us for more information.

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VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

MCE/P INVERTER

MCE-P

CONSTRUCTION FEATURES OF THE ELECTRONICS: MCE/P INVERTER

The inverter continuously adjusts the rotation speed of the electric pump, keeping the pressure constant, even when the flow rate varies.

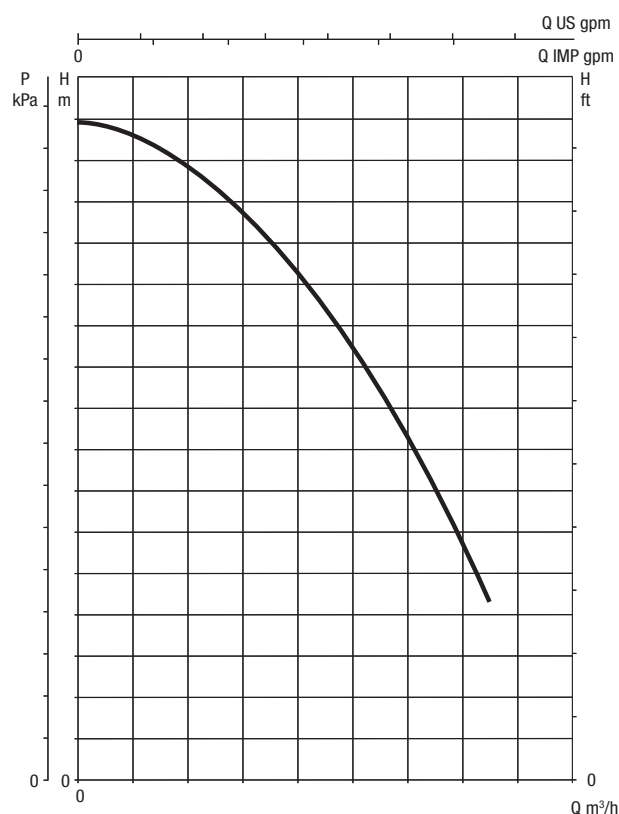
The other electric pumps, also with variable speed, are activated in cascade after the first one has reached maximum speed. Through modulation, they compensate the pressure fluctuations of the system.

For every operating cycle, it is possible to switch the restart to a different pump, therefore ensuring even use of all electric pumps.

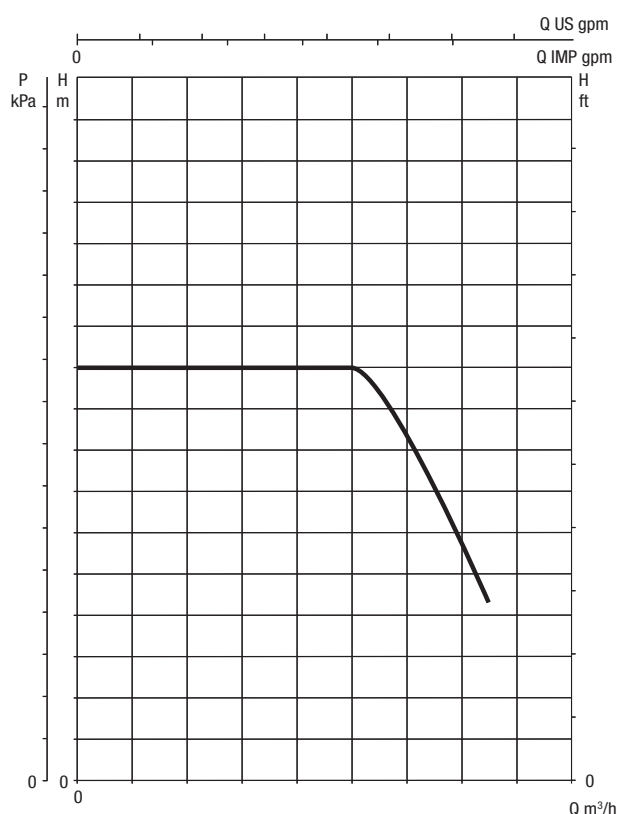
It is possible to set operation times for each individual pump, switching to another pump after such set times.

The "SP" pressure can be adjusted by the user using the "+" and "-" keys found on the MCE/P (as a rule, all the pumps are set to the same pressure value). With the new MCE/P, it is sufficient to set the data on one of the devices, and it will be automatically propagated to the other pumps of the system.

MODES OF OPERATION



PERFORMANCE CURVES WITHOUT INVERTER



PERFORMANCE CURVES WITH INVERTER

The inverter is capable of maintaining a constant pressure even when the flow rate varies.

The operating pressure can be adjusted by the user.

A good pressure set-point is between 1/3 and 2/3 of the maximum head of the electric pump. In this way, high efficiency of the pump is maintained, together with maximum saving.

In addition, the MCE/P does not block the pump if the pressure is not reached, but the flow is present. This prevents service interruptions in case of high flows.



Only the MCE/P with D.Connect READY label are D.Connect compatible

D.CONNECT SERVICE

REMOTE CONTROL FOR ELECTRONIC RESIDENTIAL AND COMMERCIAL SYSTEMS

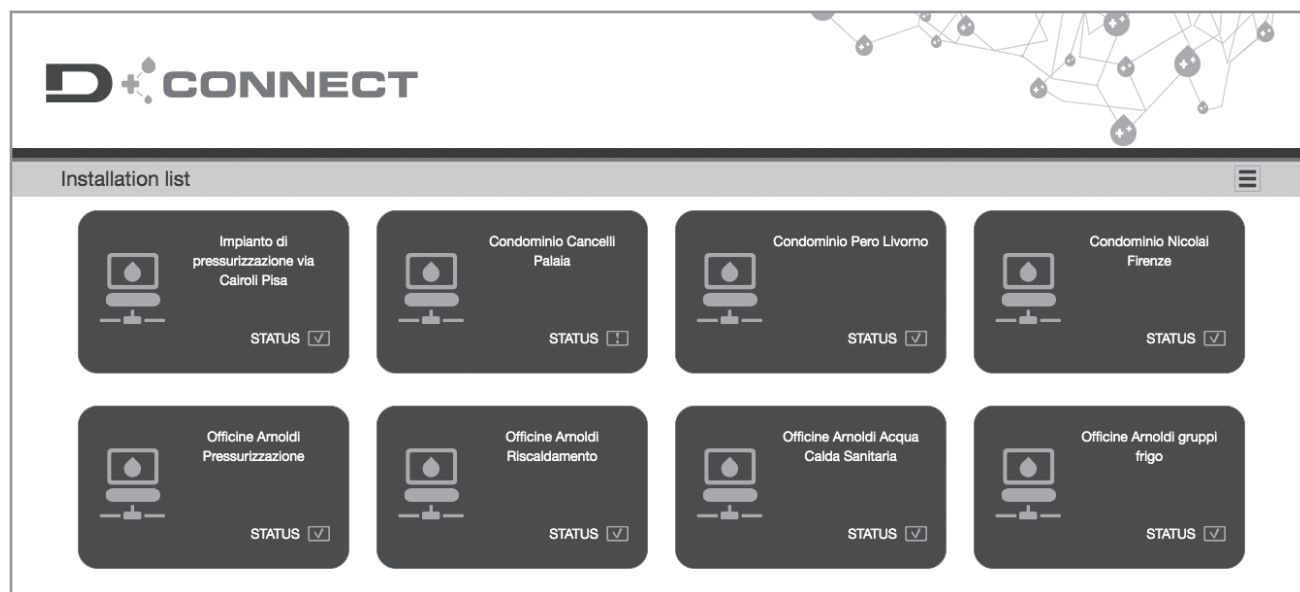
INTRODUCTION

The D.Connect service offers simple and intuitive remote control of your installation, without the need of a server or specialist personnel. With D.Connect, you can remotely manage your installations as if you were right in front of them.

Thanks to the system operation charts, you will also be able to optimise operation. You will also receive prompt notifications of any system faults.

THE CONNECTIVITY SERVICE ALLOWS YOU TO:

EASILY MONITOR YOUR SYSTEMS



D.CONNECT

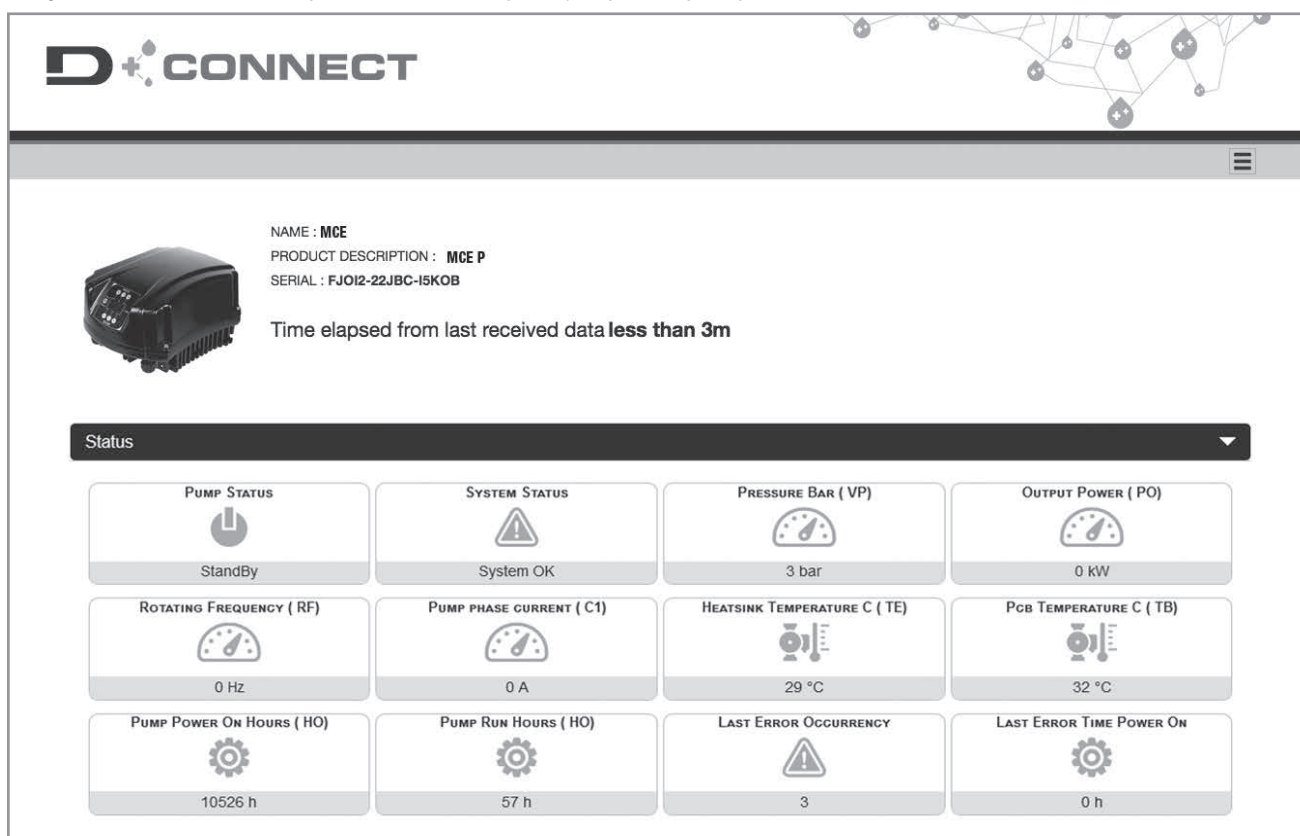
Installation list

 Impianto di pressurizzazione via Cairolli Pisa STATUS ✓	 Condominio Cancelli Palala STATUS !	 Condominio Pero Livorno STATUS ✓	 Condominio Nicolai Firenze STATUS ✓
 Officine Arnoldi Pressurizzazione STATUS ✓	 Officine Arnoldi Riscaldamento STATUS ✓	 Officine Arnoldi Acqua Calda Sanitaria STATUS ✓	 Officine Arnoldi gruppi frigo STATUS ✓

The installations with green status are OK, while the orange ones need attention, and the red ones are experiencing problems

TAKE ANY NECESSARY ACTIONS AS IF YOU WERE RIGHT IN THE PUMP ROOM

Using the internet site or the APPs, you will be able to easily and quickly control your systems.



D.CONNECT

NAME : MCE
 PRODUCT DESCRIPTION : MCE P
 SERIAL : FJOI2-22JBC-I5KOB

 Time elapsed from last received data less than 3m

Status

PUMP STATUS  StandBy	SYSTEM STATUS  System OK	PRESSURE BAR (VP)  3 bar	OUTPUT POWER (PO)  0 kW
ROTATING FREQUENCY (RF)  0 Hz	PUMP PHASE CURRENT (C1)  0 A	HEATSINK TEMPERATURE C (TE)  29 °C	PCB TEMPERATURE C (TB)  32 °C
PUMP POWER ON HOURS (HO)  10526 h	PUMP RUN HOURS (HO)  57 h	LAST ERROR OCCURENCY  3	LAST ERROR TIME POWER ON  0 h

D.CONNECT SERVICE

REMOTE CONTROL FOR ELECTRONIC RESIDENTIAL AND COMMERCIAL SYSTEMS

Connect to the website: <https://dconnect.dabpumps.com>, using Internet Browsers such as Microsoft Edge or Google Chrome.
The Android and iOS D.Connect APPs can be downloaded from the relevant Stores:



In order to use the D.Connect service, registration and connected products are required.

REMOTE ALARMS

In case of alarm, the D.Connect service will promptly send you a notification, so that you can check what is happening and organise a visit to the system before the issue becomes an emergency for your customer.

WHAT PRODUCTS CAN YOU MANAGE USING THE D.CONNECT SERVICE?

MCE/P, AD AC, Active driver Plus, E.box, Evoplus, E.sybox, E.sybox mini.

WHAT DO YOU NEED TO USE THE SERVICE?

1. D.Connect Box
2. Cables for the connection of the D.Connect Box to the products to control
3. One or more compatible products
4. An internet connection in the system to control

For more information visit: <https://dconnect.dabpumps.com/getstarted>

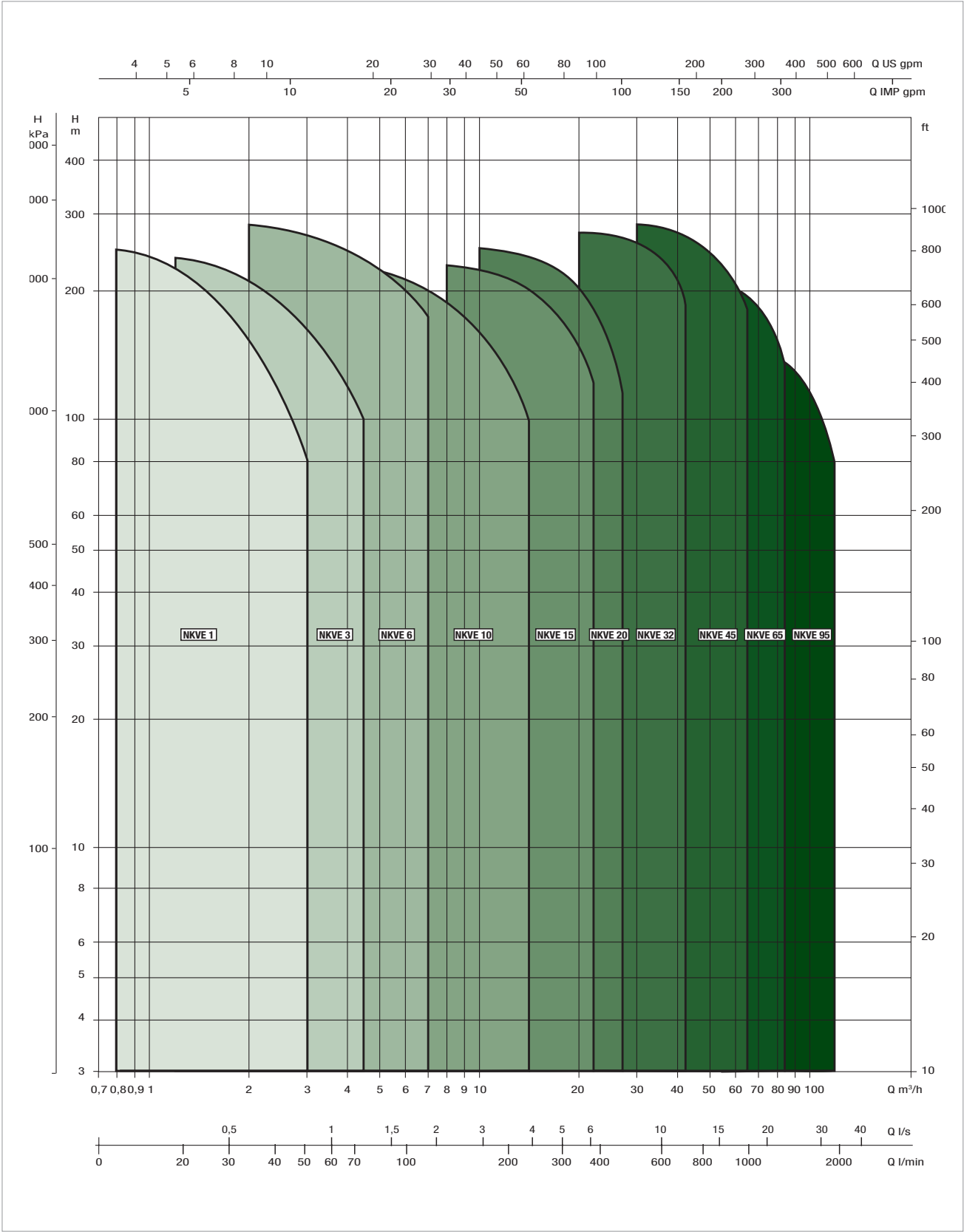
GAMMA NKVE

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

PERFORMANCE RANGE

The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHICAL SELECTION TABLE



SELECTION TABLE - NKVE 1

MODEL	Q=m³/h	0	0.5	1	1.5	2	2.5
	Q=l/min	0	8.3	16.7	25.0	33.3	42
NKVE 1/03 M MCE11/P IE3	H (m)	21.5	20	19	17	14	11
NKVE 1/05 M MCE11/P IE3		35	33	30.5	27	22.5	17
NKVE 1/07 M MCE11/P IE3		48	45	41.5	36.5	30	22
NKVE 1/09 M MCE11/P IE3		61.5	58	53	47	39	28.5
NKVE 1/11 M MCE11/P IE3		74.5	69.5	64	56.5	46.5	34
NKVE 1/13 M MCE11/P IE3		89.5	84.5	77.5	68.5	57	42
NKVE 1/15 M MCE11/P IE3		102.5	96	88	78	64	47
NKVE 1/19 M MCE11/P IE3		131	123.5	114	101	84	62
NKVE 1/22 M MCE11/P IE3		150.5	141.5	130	115	95	69.5
NKVE 1/25 M MCE11/P IE3		174	164	151.5	134.5	112	83.5
NKVE 1/30 M MCE11/P IE3		206.5	194.5	179	158	131	96.5
NKVE 1/34 M MCE15/P IE3		238	225.5	208.5	185.5	155.5	116.5
NKVE 1/37 M MCE15/P IE3		258	244	225.5	200.5	167.5	125

SELECTION TABLE - NKVE 3

MODEL	Q=m³/h	0	1	1.5	2	2.5	3	3.5	4	4.5
	Q=l/min	0	16.7	25.0	33.3	42	50.0	58.3	67	75.0
NKVE 3/04 M MCE11/P IE3	H (m)	30	28.5	27.5	26	24	21.5	18.5	15	10.5
NKVE 3/06 M MCE11/P IE3		44.5	42.5	40.5	38.5	35.5	32	27	21.5	15
NKVE 3/09 M MCE11/P IE3		67	64	61.5	58	53.5	48	41	32.5	22.5
NKVE 3/11 M MCE11/P IE3		82.5	79.5	76.5	72.5	67	60.5	52	42	29.5
NKVE 3/13 M MCE11/P IE3		96.5	93	89	84.5	78	70	60	47.5	33.5
NKVE 3/15 M MCE11/P IE3		112.5	109	105	99.5	92.5	83	71.5	58	41.5
NKVE 3/17 M MCE11/P IE3		127	122.5	118	111.5	103.5	93	80	64	45.5
NKVE 3/21 M MCE15/P IE3		158.5	153.5	148	140.5	130.5	118	102	83	60
NKVE 3/25 T MCE30/P IE3		187.5	181	174.5	165.5	153.5	138	119	96	68.5
NKVE 3/29 T MCE30/P IE3		220	213.5	206.5	196.5	183.5	166	144	117.5	86
NKVE 3/33 T MCE30/P IE3		249.5	242	234	222	206.5	187	162	131.5	95.5

SELECTION TABLE - NKVE 6

MODEL	Q=m³/h	0	2.5	3	3.5	4	4.5	5	5.4	6	7
	Q=l/min	0	42	50.0	58.3	67	75.0	83.3	90	100.0	116.7
NKVE 6/02 M MCE11/P IE3	H (m)	15	14	13.5	13	12.5	12	11.5	11	10	8
NKVE 6/04 M MCE11/P IE3		29.5	27	26	25	24	22.5	21.5	20.5	18.5	14.5
NKVE 6/06 M MCE11/P IE3		44.5	41	39.5	37.5	36	34	32.5	30.5	28	22
NKVE 6/09 M MCE11/P IE3		67	61.5	59	56.5	54	51.5	48.5	46	42.5	33.5
NKVE 6/11 M MCE11/P IE3		82.5	76.5	73.5	71	67.5	64.5	61	58	53.5	42.5
NKVE 6/13 M MCE11/P IE3		97	89	86	82	78.5	74.5	70.5	67	61.5	48.5
NKVE 6/16 M MCE15/P IE3		120.5	112	108	104	99	94.5	89.5	85.5	78.5	62.5
NKVE 6/19 M MCE15/P IE3		142	131.5	126.5	121.5	115.5	110	104	99	91	72
NKVE 6/21 T MCE30/P IE3		159	149.5	144.5	139	133	127	120.5	115	106	85.5
NKVE 6/25 T MCE30/P IE3		189	175.5	170	164	157.5	150.5	142.5	135.5	123.5	98.5
NKVE 6/28 T MCE30/P IE3		214	200.5	194.5	188	181	173.5	164.5	156.5	143	115.5
NKVE 6/33 T MCE30/P IE3		251.5	234.5	227	219.5	211	201.5	191	182	166	133.5
NKVE 6/36 T MCE55/P IE3		275	257.5	249.5	241.5	232.5	222.5	211.5	201.5	184	148.5

SELECTION TABLE - NKVE 10

MODEL	Q=m³/h	0	6	7	8	9	10	11	14
	Q=l/min	0	100.0	116.7	133	150.0	166.7	183	233.3
NKVE 10/02 M MCE11/P IE3	H (m)	20	18.5	17.5	17	16	15	13.5	9
NKVE 10/03 M MCE11/P IE3		30	27.5	26.5	25.5	24	22.5	20.5	13.5
NKVE 10/04 M MCE11/P IE3		40.5	37	35.5	34	32.5	30.5	28	18
NKVE 10/05 M MCE11/P IE3		50.5	45.5	43.5	41.5	39.5	37	33.5	21.5
NKVE 10/06 M MCE15/P IE3		61	56	54	51.5	49	46	42	27.5
NKVE 10/07 M MCE15/P IE3		70.5	64.5	62	59.5	56	52.5	48	31
NKVE 10/08 T MCE30/P IE3		81.5	75.5	73	70	66.5	62.5	57.5	38
NKVE 10/09 T MCE30/P IE3		91.5	84.5	81.5	78	74	69.5	64	42
NKVE 10/10 T MCE30/P IE3		102.5	96	93	89	84.5	79.5	73.5	49
NKVE 10/12 T MCE30/P IE3		123	114	110	105.5	100.5	94	87	57.5
NKVE 10/15 T MCE55/P IE3		153.5	142.5	138	132	125.5	118	109	72
NKVE 10/17 T MCE55/P IE3		173.5	160.5	155	148.5	141	132.5	122	80.5
NKVE 10/19 T MCE55/P IE3		195	182	176	169	160.5	151	139.5	93
NKVE 10/23 T MCE55/P IE3		235.5	218.5	211	202	192	180.5	166.5	110
NKVE 10/24 T MCE110/P IE3		248	234	227	218	208	196	182	122.5

SELECTION TABLE - NKVE 15

MODEL	Q=m³/h	0	8	10	12	14	16	18	20	22	24
	Q=l/min	0	133	167	200	233	266	300	333	367	400
NKVE 15/02 M MCE22/P IE3	H (m)	29	26	25	24	23	21.5	19.5	17	14	11
NKVE 15/03 T MCE30/P IE3		43.5	39	38	36.5	34.5	32.5	29.5	26	21.5	17
NKVE 15/04 T MCE30/P IE3		58	52.5	51	49	46.5	44	40.5	35.5	29.5	23.5
NKVE 15/05 T MCE30/P IE3		72.5	65.5	63.5	60.5	57.5	54.5	49.5	43	36	28.5
NKVE 15/06 T MCE55/P IE3		87.5	79.5	77	74	71	67	61.5	54	46	36.5
NKVE 15/07 T MCE55/P IE3		102	92	89	86	82	77.5	70.5	62	52.5	41.5
NKVE 15/08 T MCE110/P IE3		117	106.5	103	99.5	95	90	82.5	72.5	62	49
NKVE 15/09 T MCE110/P IE3		131.5	119	115.5	111	106	100.5	92	81	69	54.5
NKVE 15/10 T MCE110/P IE3		147.5	134.5	131	126.5	121	115	106	94	80.5	65
NKVE 15/12 T MCE110/P IE3		176.5	161	156.5	151	144.5	137.5	126.5	112	96	77
NKVE 15/14 T MCE110/P IE3		205.5	187.5	182	175.5	168	159	146	129	110.5	88
NKVE 15/16 T MCE150/P IE3		235.5	214	208	200.5	192	182.5	167.5	148	126.5	101.5
NKVE 15/17 T MCE150/P IE3		249.5	227.5	220.5	213	203.5	193	177.5	156.5	134	107

SELECTION TABLE - NKVE 20

MODEL	Q=m³/h	0	10	12	14	16	18	20	22	24	26	28
	Q=l/min	0	167	200	233	266	300	333	367	400	433.5	466.5
NKVE 20/02 M MCE22/P IE3	H (m)	31	27.5	27	26	25	24	22.5	20.5	18	15	12
NKVE 20/03 T MCE30/P IE3		46.5	41.5	40.5	39.5	38	36.5	34.5	31	27.5	23	18.5
NKVE 20/04 T MCE30/P IE3		62.5	56	55	53.5	51.5	49.5	46.5	42.5	37	31.5	25.5
NKVE 20/05 T MCE55/P IE3		78	70	68.5	66.5	64.5	62	58	53	47	40	32.5
NKVE 20/06 T MCE55/P IE3		94.5	86.5	84.5	82.5	80	77.5	73.5	67.5	60	52	42.5
NKVE 20/07 T MCE55/P IE3		110	100.5	98	95.5	93	90	85	77.5	69	59.5	48.5
NKVE 20/08 T MCE110/P IE3		126.5	117	114	112	109	106	100.5	92.5	82.5	72	59.5
NKVE 20/09 T MCE110/P IE3		142.5	131	128	125.5	122	118.5	112.5	103.5	92.5	80.5	66.5
NKVE 20/10 T MCE110/P IE3		158	145.5	142	139	135	131.5	124.5	114	102	88.5	73
NKVE 20/12 T MCE150/P IE3		189.5	174.5	170.5	167	162	157.5	149	137	122.5	106.5	87.5
NKVE 20/14 T MCE150/P IE3		220.5	202.5	198	193.5	188	182.5	172.5	158	141	122	100.5

SELECTION TABLE - NKVE 32

MODEL	Q=m³/h	0	15	18	22	25	30	35	40	45
	Q=l/min	0	250	300	367	417	500	583	667	750
NKVE 32/2 T MCE 55/P IE3	H (m)	48,5	43,5	42,5	41	39,5	36,5	33,5	29	23,5
NKVE 32/3-2 T MCE 55/P IE3		60	54,5	53	50,5	48	44	38	31,5	23,5
NKVE 32/3 T MCE 110/P IE3		73	65	63,5	61	59	55	50	43,5	35,5
NKVE 32/4 T MCE 110/P IE3		98	88	86	83	80,5	75	69	60	49,5
NKVE 32/5-2 T MCE 110/P IE3		109,5	99,5	97	93	89,5	83	74	63	49,5
NKVE 32/5 T MCE 150/P IE3		122,5	109,5	107	103,5	100	93,5	85,5	75	61,5
NKVE 32/6 T MCE 150/P IE3		146,5	131	128	123,5	119,5	111,5	102	89	73
NKVE 32/7-2 T MCE 150/P IE3		158	142,5	139	133,5	128,5	119	107	91,5	72,5

SELECTION TABLE - NKVE 45

MODEL	Q=m³/h	0	15	18	22	25	30	35	40	45	54	60	65	70
	Q=l/min	0	250	300	367	417	500	583	667	750	900	1000	1083	1166
NKVE 45/2-2 T MCE 55/P IE3	H (m)	38,5	37,5	37	36,5	35,5	34,5	33	31	28,5	23	18,5	14,5	10
NKVE 45/2 T MCE 110/P IE3		48,5	47,5	47	46	45,5	44	43	41,5	39	34	30,5	26,5	23
NKVE 45/3 T MCE 110/P IE3		73,5	72	71	70	69	67	65,5	63	60	52,5	47	41	34
NKVE 45/4 T MCE 150/P IE3		97,5	96	94,5	93	91,5	89	86,5	84	79,5	69,5	62	54,5	45

SELECTION TABLE - NKVE 65

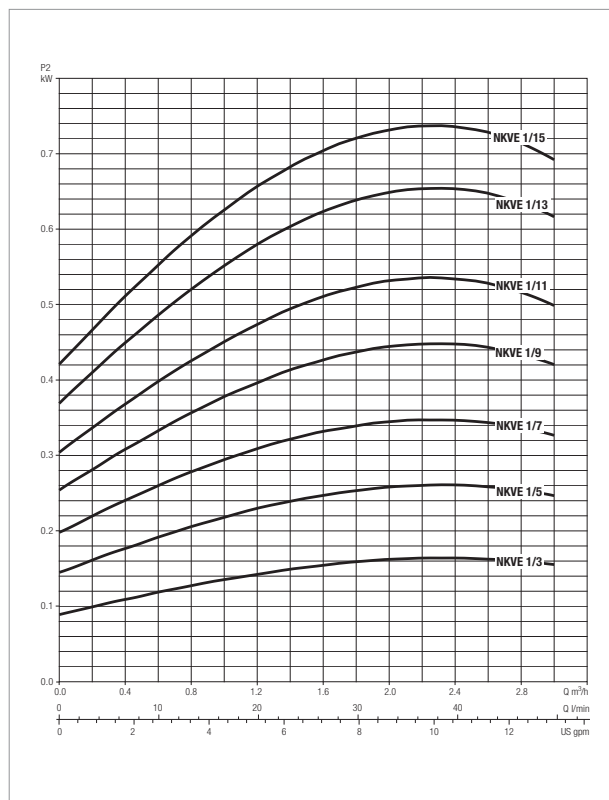
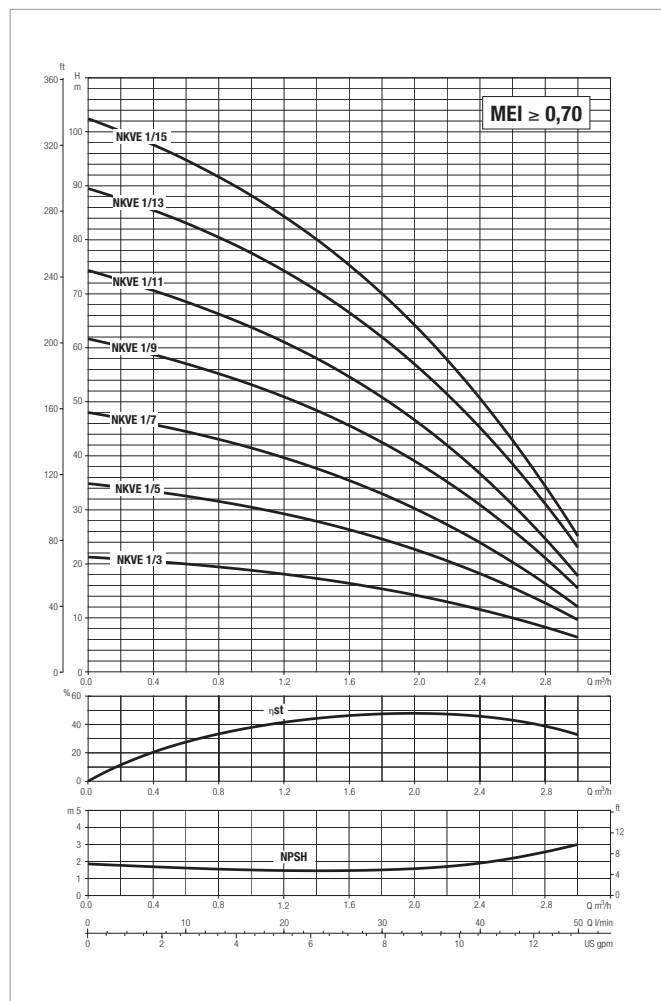
MODEL	Q=m³/h	0	30	36	42	45	54	60	72	78	85
	Q=l/min	0	500	600	700	750	900	1000	1200	1300	1417
NKVE 65/2-2 T MCE 110/P IE3	H (m)	39	37,5	36,5	35,5	35	33	31	25	22	17,5
NKVE 65/2 T MCE 110/P IE3		56,5	51	49,5	48,5	48	46	45	41	38,5	34,5
NKVE 65/3-2 T MCE 150/P IE3		67,5	63,5	62	60,5	59,5	56,5	54	46,5	42	35,5

SELECTION TABLE - NKVE 95

MODEL	Q=m³/h	0	45	54	60	72	78	85	96	108	118
	Q=l/min	0	750	900	1000	1200	1300	1417	1600	1800	1967
NKVE 95/2-2 T MCE 110/PIE3	H	44,5	43	42	41	38,5	36,5	34	28,5	21,5	15
NKVE 95/2 T MCE 150/PIE3	(m)	62	55,5	53	51,5	49	47,5	45	41	35	28,5

NKVE 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



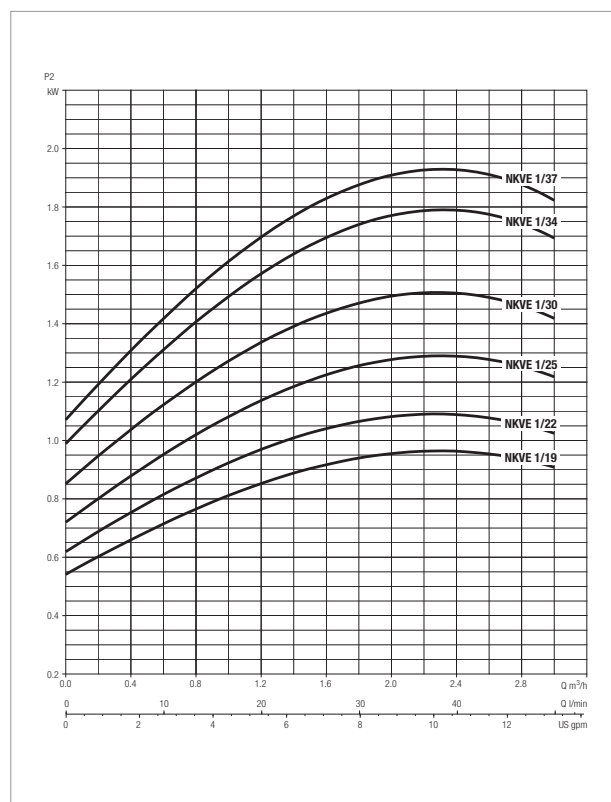
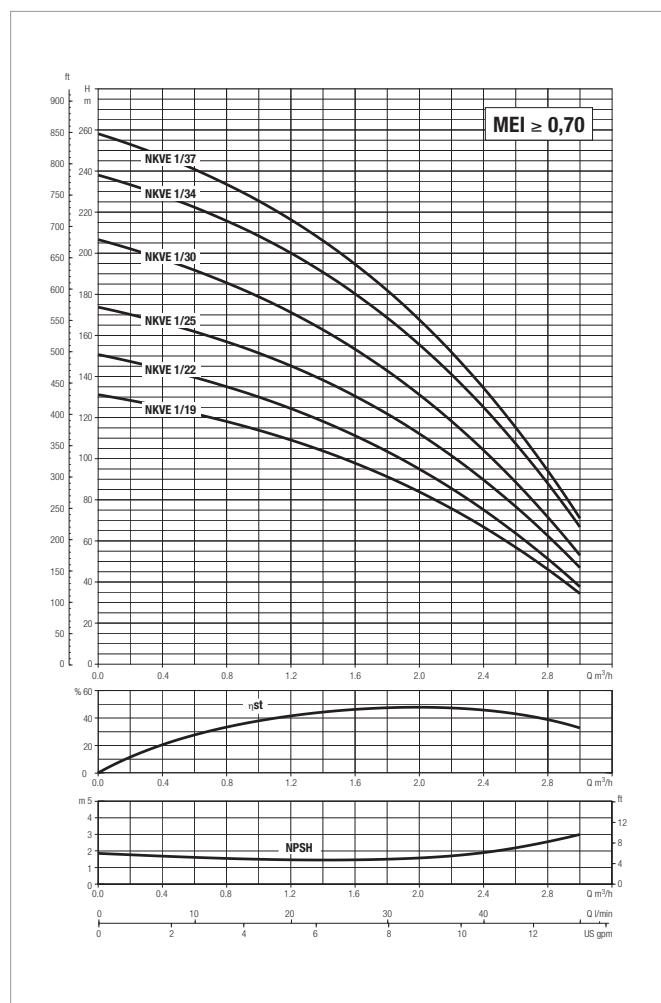
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 1/03 M MCE11/P IE3	1 x 230 V	0,37	0,50	5,5	B14	71	2800	78,5	0,80-0,70
NKVE 1/05 M MCE11/P IE3	1 x 230 V	0,37	0,50	5,5	B14	71	2800	78,5	0,80-0,70
NKVE 1/07 M MCE11/P IE3	1 x 230 V	0,37	0,50	5,5	B14	71	2800	78,5	0,80-0,70
NKVE 1/09 M MCE11/P IE3	1 x 230 V	0,55	0,75	7,2	B14	71	2830	80	0,80-0,70
NKVE 1/11 M MCE11/P IE3	1 x 230 V	0,55	0,75	7,2	B14	71	2830	80	0,80-0,70
NKVE 1/13 M MCE11/P IE3	1 x 230 V	0,75	1,00	8,1	B14	80S	2910	81	0,81-0,71
NKVE 1/15 M MCE11/P IE3	1 x 230 V	0,75	1,00	8,1	B14	80S	2910	81	0,81-0,71

NKVE 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

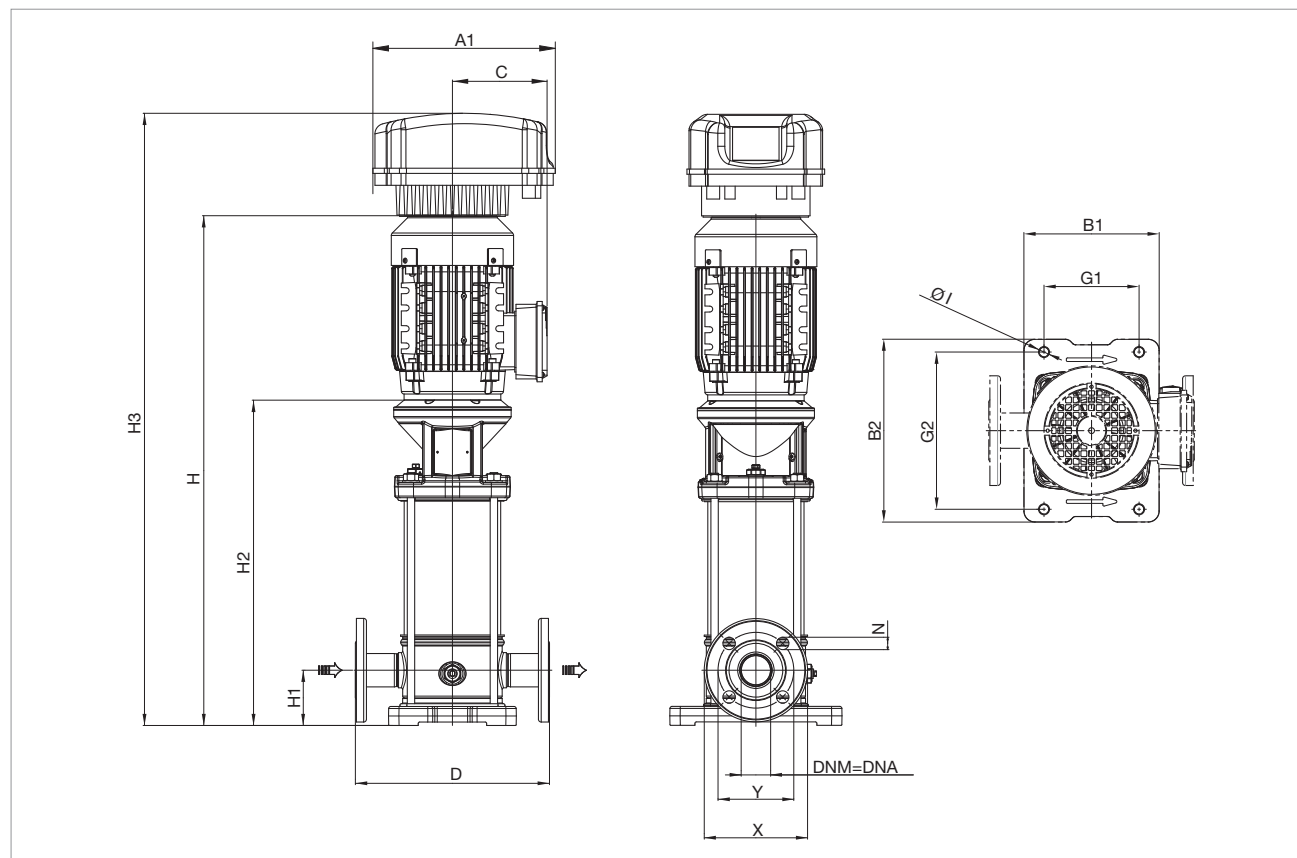


See hydraulic efficiency details on page 37.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 1/19 M MCE11/P IE3	1 x 230 V	1,10	1,50	10.9	B14	80M	2870	82,7	0,84-0,76
NKVE 1/22 M MCE11/P IE3	1 x 230 V	1,10	1,50	10.9	B14	80M	2870	82,7	0,84-0,76
NKVE 1/25 M MCE11/P IE3	1 x 230 V	1,50	2,00	13.9	B14	90S	2875	84,2	0,85-0,75
NKVE 1/30 M MCE11/P IE3	1 x 230 V	1,50	2,00	13.9	B14	90S	2875	84,2	0,85-0,75
NKVE 1/34 M MCE15/P IE3	1 x 230 V	2,20	3,00	19.4	B14	90L	2880	86,5	0,87-0,80
NKVE 1/37 M MCE15/P IE3	1 x 230 V	2,20	3,00	19.4	B14	90L	2880	86,5	0,87-0,80

NKVE 1 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

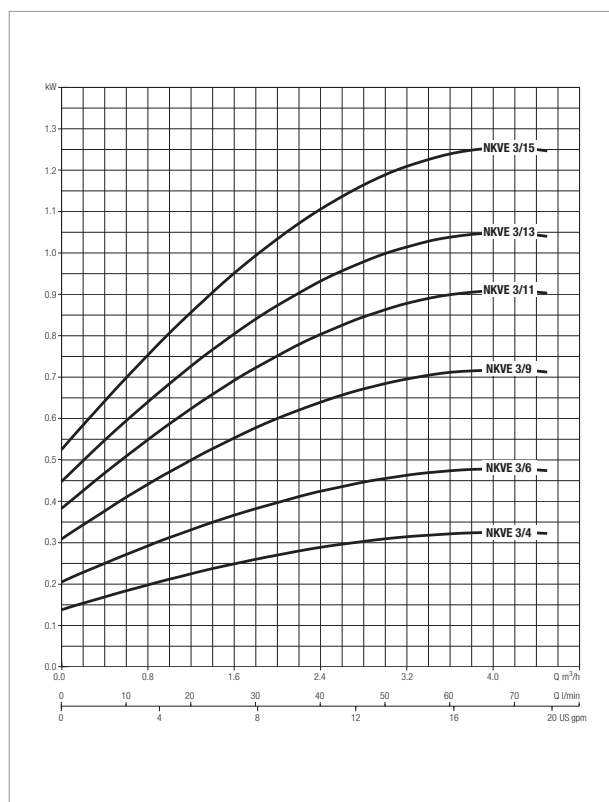
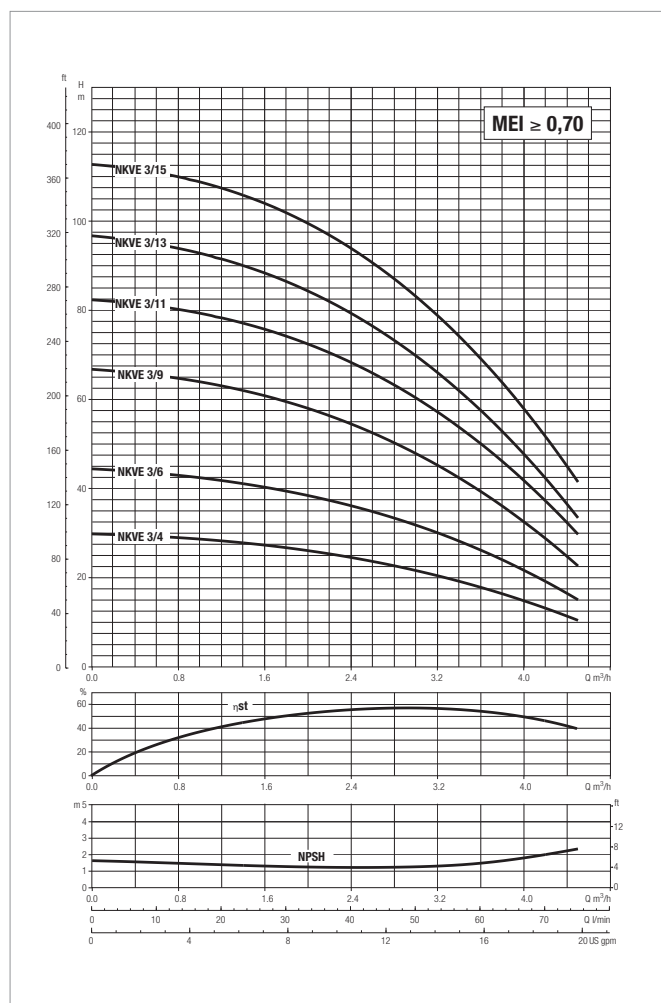


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	ØI	C	D	H3	H	H1	H2	DNA = DNM (DN 25)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 1/03 M MCE11/P IE3	3	262	150	210	100	180	13	110	250	752	552	75	336	115	85	14	950	290	440	0,121	23,8
NKVE 1/05 M MCE11/P IE3	5	262	150	210	100	180	13	110	250	797	597	75	381	115	85	14	950	290	440	0,121	24,8
NKVE 1/07 M MCE11/P IE3	7	262	150	210	100	180	13	110	250	842	642	75	426	115	85	14	950	290	440	0,121	25,8
NKVE 1/09 M MCE11/P IE3	9	262	150	210	100	180	13	110	250	887	687	75	471	115	85	14	950	290	440	0,121	27,2
NKVE 1/11 M MCE11/P IE3	11	262	150	210	100	180	13	110	250	932	732	75	516	115	85	14	1220	280	430	0,147	28,2
NKVE 1/13 M MCE11/P IE3	13	262	150	210	100	180	13	129	250	993	793	75	561	115	85	14	1220	280	430	0,147	32,5
NKVE 1/15 M MCE11/P IE3	15	262	150	210	100	180	13	129	250	1038	838	75	606	115	85	14	1220	280	430	0,147	33,0
NKVE 1/19 M MCE11/P IE3	19	262	150	210	100	180	13	129	250	1128	928	75	696	115	85	14	1220	280	430	0,147	36,6
NKVE 1/22 M MCE11/P IE3	22	262	150	210	100	180	13	129	250	1195	995	75	763	115	85	14	1412	377	530	0,282	38,1
NKVE 1/25 M MCE11/P IE3	25	262	150	210	100	180	13	138	250	1308	1108	75	841	115	85	14	1412	377	530	0,282	43,0
NKVE 1/30 M MCE11/P IE3	30	262	150	210	100	180	13	138	250	1420	1220	75	953	115	85	14	1610	340	480	0,263	45,0
NKVE 1/34 M MCE15/P IE3	34	262	150	210	100	180	13	138	250	1510	1310	75	1043	115	85	14	1610	340	480	0,263	49,0
NKVE 1/37 M MCE15/P IE3	37	262	150	210	100	180	13	138	250	1578	1378	75	1111	115	85	14	1820	500	630	0,573	50,5

NKVE 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



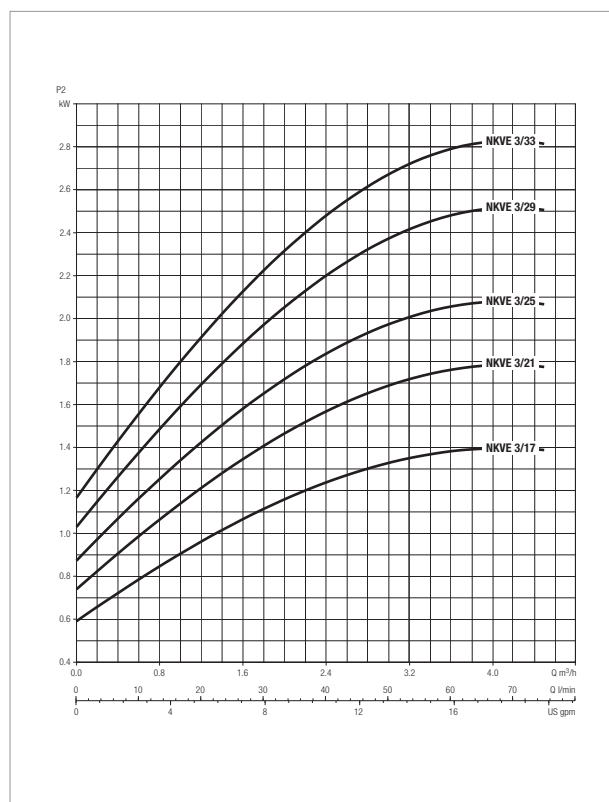
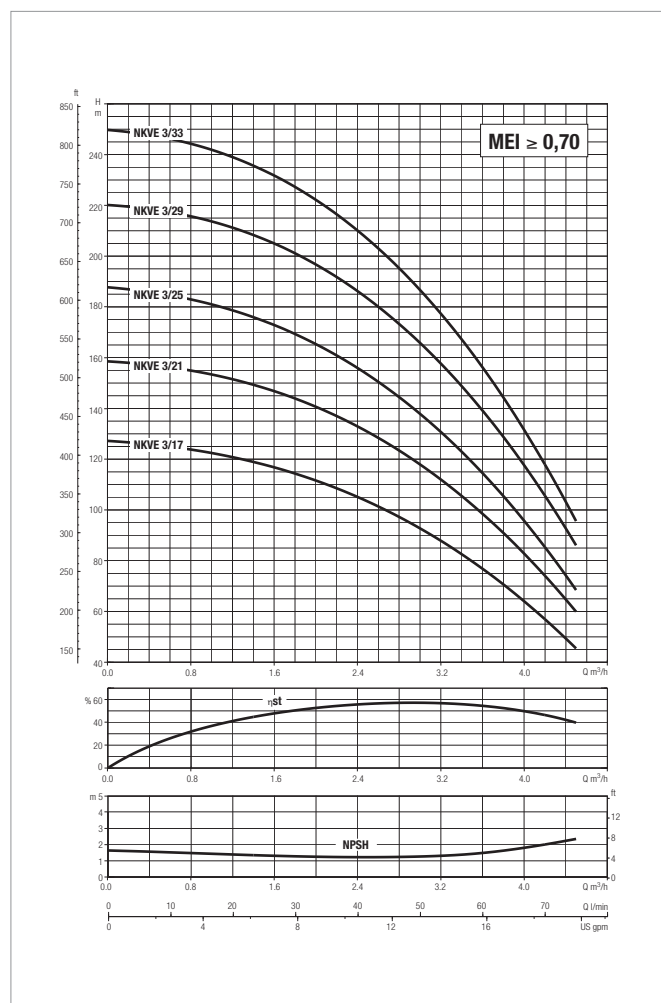
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 3/04 M MCE11/P IE3	1 x 230 V	0,37	0,50	5,5	B14	71	2800	78,5	0,80-0,70
NKVE 3/06 M MCE11/P IE3	1 x 230 V	0,55	0,75	7,2	B14	71	2830	80	0,80-0,70
NKVE 3/09 M MCE11/P IE3	1 x 230 V	0,75	1,00	8,1	B14	80S	2910	81	0,81-0,71
NKVE 3/11 M MCE11/P IE3	1 x 230 V	1,10	1,50	10,9	B14	80M	2870	82,7	0,84-0,76
NKVE 3/13 M MCE11/P IE3	1 x 230 V	1,10	1,50	10,9	B14	80M	2870	82,7	0,84-0,76
NKVE 3/15 M MCE11/P IE3	1 x 230 V	1,50	2,00	13,9	B14	90S	2875	84,2	0,85-0,75

NKVE 3 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



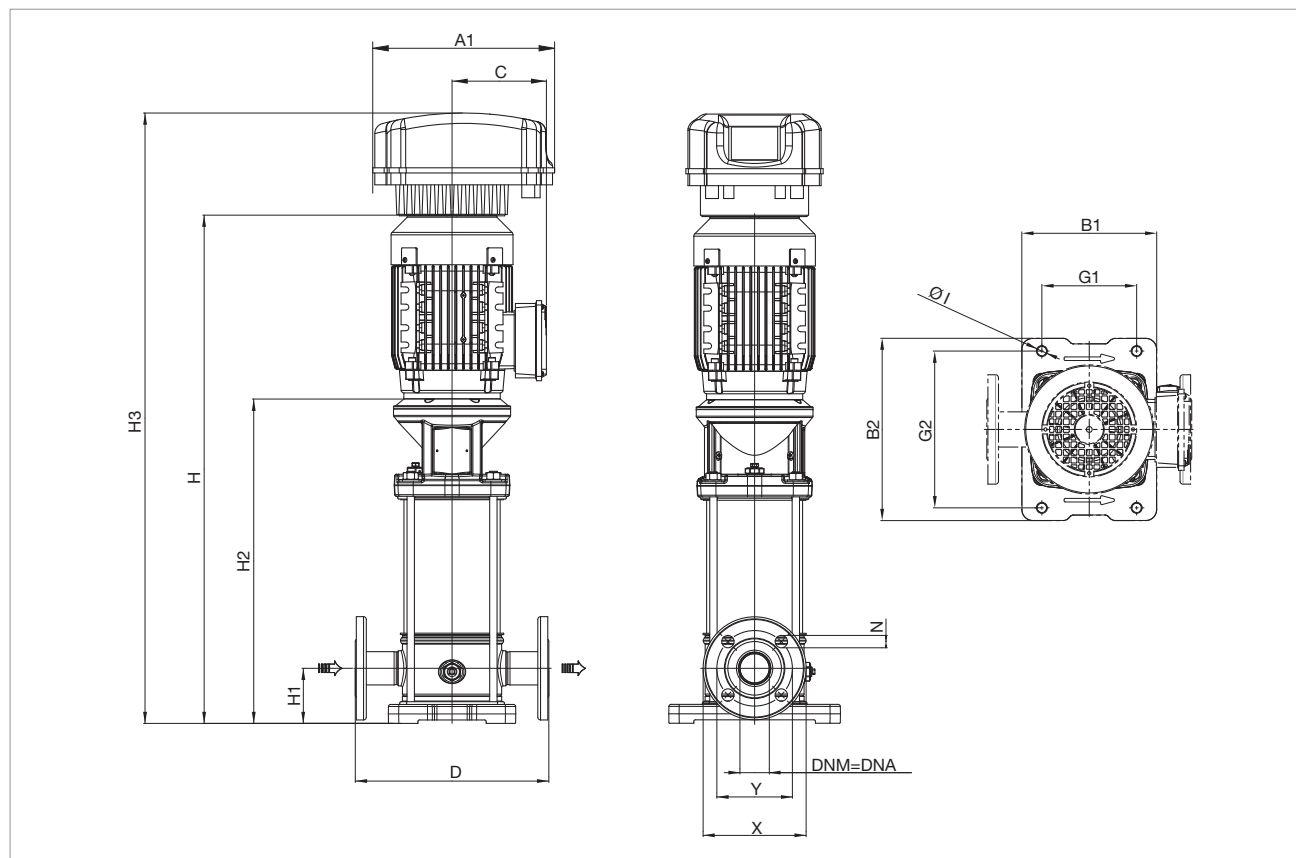
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 3/17 M MCE11/P IE3	1 x 230 V	1,50	2,00	13.9	B14	90S	2875	84,2	0,85-0,75
NKVE 3/21 M MCE15/P IE3	1 x 230 V	2,20	3,00	19.4	B14	90L	2880	86,5	0,87-0,80
NKVE 3/25 T MCE30/P IE3	3 x 380-415Δ	2,20	3,00	5.4	B14	90L	2880	86,5	0,87-0,80
NKVE 3/29 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.2	B14	100L	2900	87,1	0,89
NKVE 3/33 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.1	B14	100L	2900	87,1	0,89

NKVE 3 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

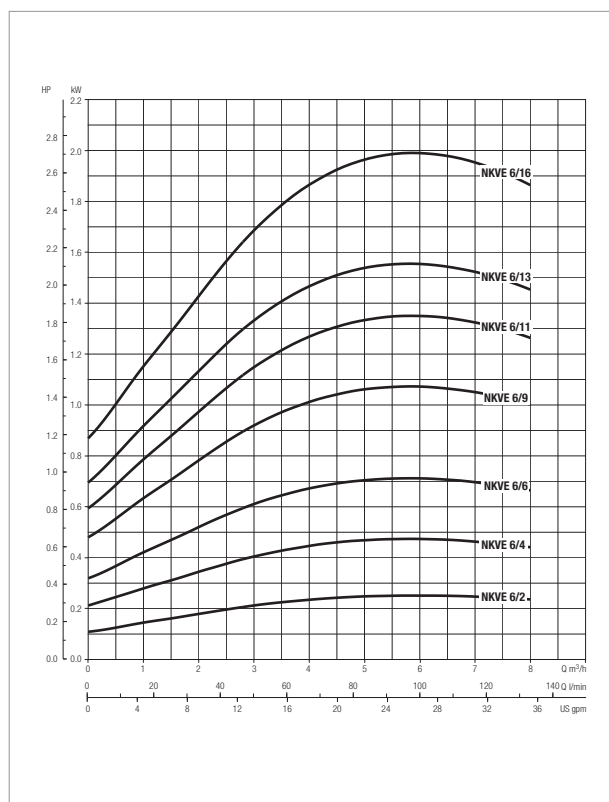
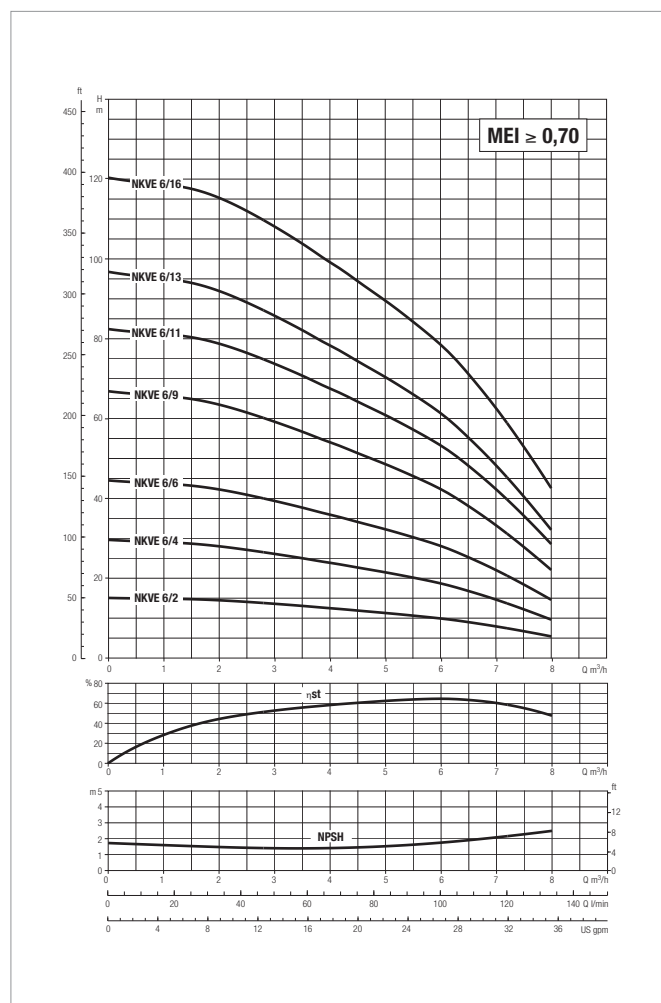


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	ØI	C	D	H3	H	H1	H2	DNA = DNM (DN 25)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 3/04 M MCE11/P IE3	4	262	150	210	100	180	13	110	250	774	574	75	358	115	85	14	950	290	440	0,121	24,3
NKVE 3/06 M MCE11/P IE3	6	262	150	210	100	180	13	110	250	819	619	75	403	115	85	14	950	290	440	0,121	25,7
NKVE 3/09 M MCE11/P IE3	9	262	150	210	100	180	13	129	250	903	658	75	426	115	85	14	950	290	440	0,121	30,5
NKVE 3/11 M MCE11/P IE3	11	262	150	210	100	180	13	129	250	948	748	75	516	115	85	14	1220	280	430	0,147	33,1
NKVE 3/13 M MCE11/P IE3	13	262	150	210	100	180	13	129	250	993	793	75	561	115	85	14	1220	280	430	0,147	34,1
NKVE 3/15 M MCE11/P IE3	15	262	150	210	100	180	13	138	250	1083	883	75	616	115	85	14	1220	280	430	0,147	38,5
NKVE 3/17 M MCE11/P IE3	17	262	150	210	100	180	13	138	250	1128	928	75	661	115	85	14	1220	280	430	0,147	39,0
NKVE 3/21 M MCE15/P IE3	21	262	150	210	100	180	13	138	250	1218	1018	75	751	115	85	14	1412	377	530	0,282	43,0
NKVE 3/25 T MCE30/P IE3	25	352	150	210	100	180	13	138	250	1308	1108	75	841	115	85	14	1610	340	480	0,263	45,0
NKVE 3/29 T MCE30/P IE3	29	352	150	210	100	180	13	145	250	1447	1247	75	941	115	85	14	1610	340	480	0,263	57,3
NKVE 3/33 T MCE30/P IE3	33	352	150	210	100	180	13	145	250	1537	1337	75	1031	115	85	14	1820	500	630	0,573	59,3

NKVE 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



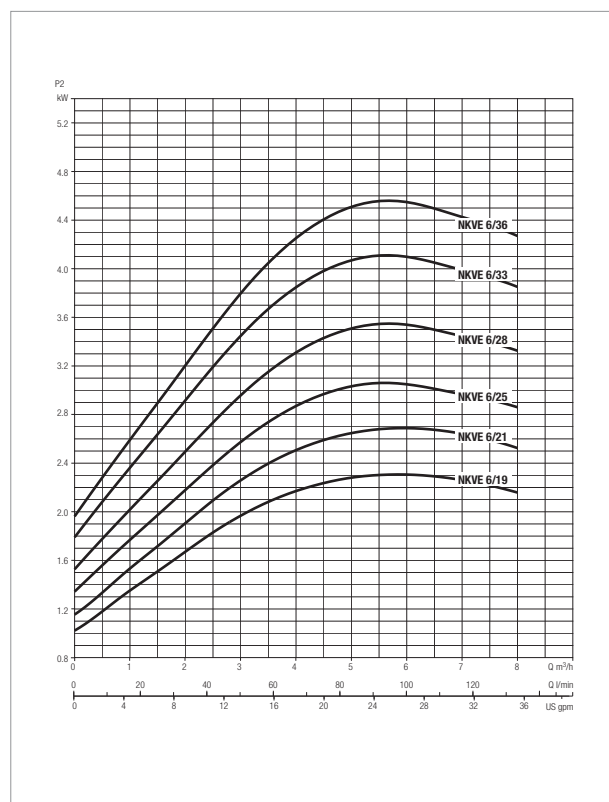
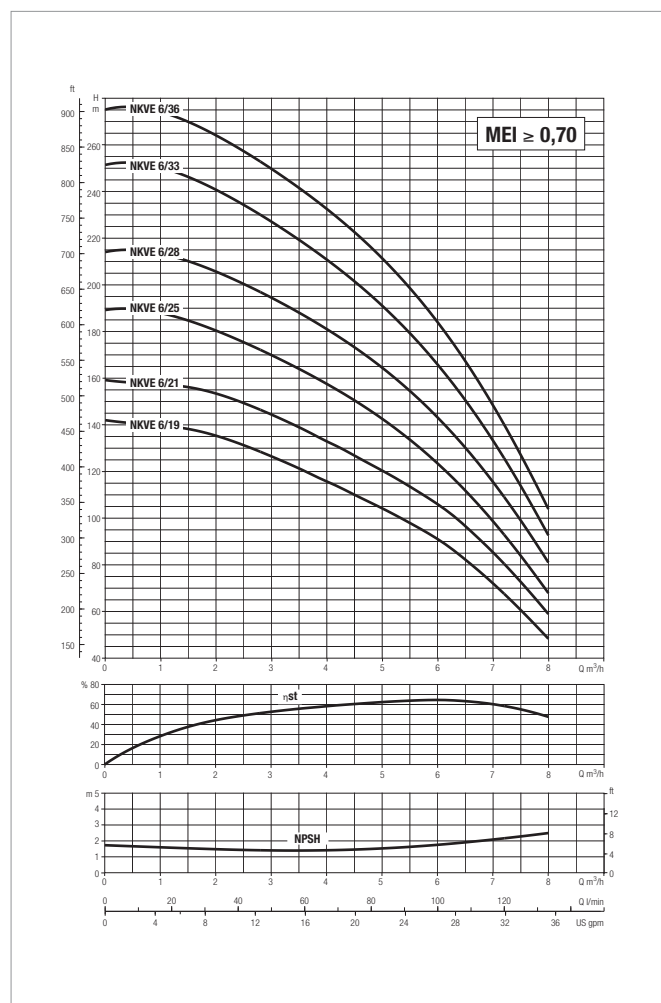
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 6/02 M MCE11/P IE3	1 x 230 V	0,37	0,50	5,5	B14	71	2800	78,5	0,80-0,70
NKVE 6/04 M MCE11/P IE3	1 x 230 V	0,55	0,75	7,2	B14	71	2830	80	0,80-0,70
NKVE 6/06 M MCE11/P IE3	1 x 230 V	0,75	1,00	8,1	B14	80S	2910	81	0,81-0,71
NKVE 6/09 M MCE11/P IE3	1 x 230 V	1,10	1,50	10,9	B14	80M	2870	82,7	0,84-0,76
NKVE 6/11 M MCE11/P IE3	1 x 230 V	1,50	2,00	13,9	B14	90S	2875	84,2	0,85-0,75
NKVE 6/13 M MCE11/P IE3	1 x 230 V	1,50	2,00	13,9	B14	90S	2875	84,2	0,85-0,75
NKVE 6/16 M MCE15/P IE3	1 x 230 V	2,20	3,00	19,4	B14	90L	2880	86,5	0,87-0,80

NKVE 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



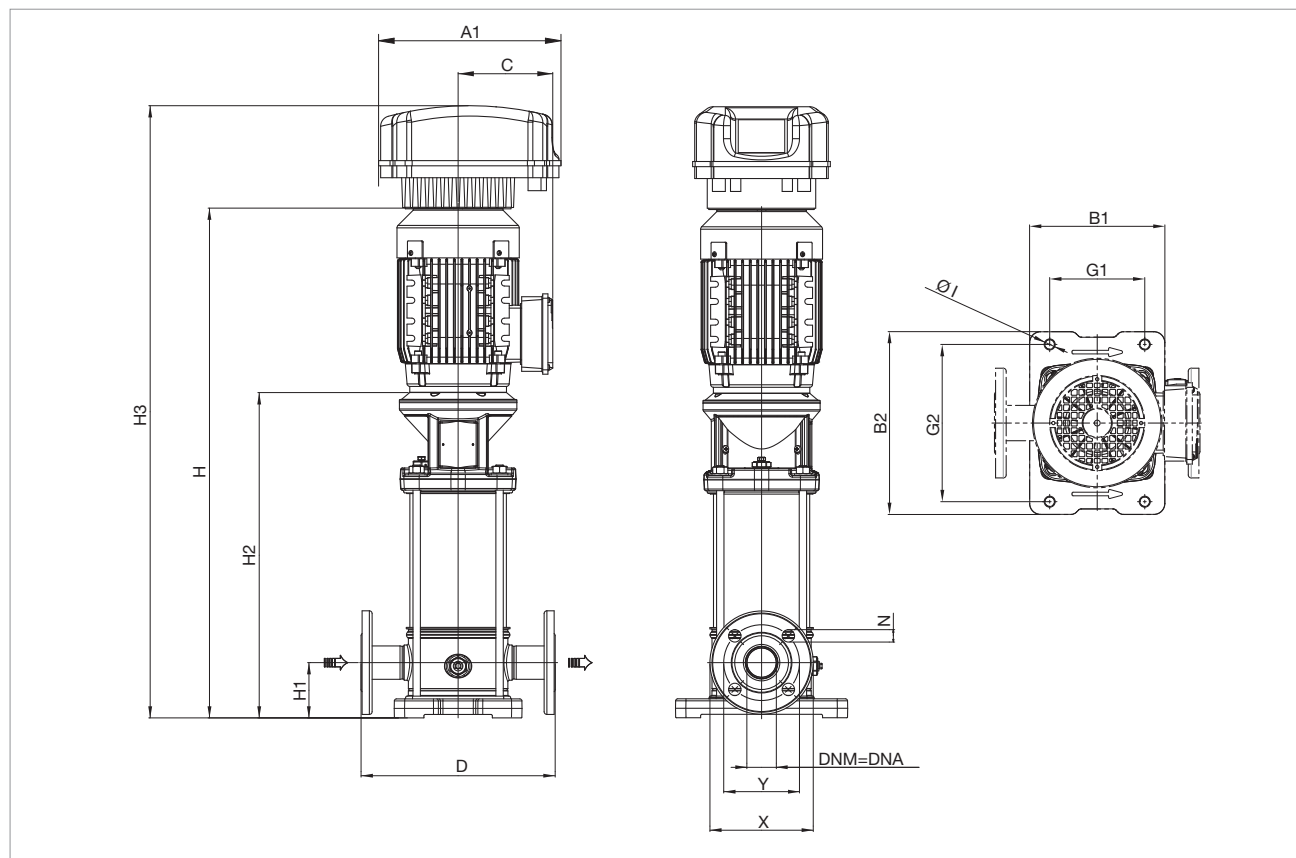
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 6/19 M MCE15/P IE3	1 x 230 V	2,20	3,00	19,4	B14	90L	2880	86,5	0,87-0,80
NKVE 6/21 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7,1	B14	100L	2900	87,1	0,89
NKVE 6/25 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7,1	B14	100L	2900	87,1	0,89
NKVE 6/28 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8,9	B14	112M	2920	88,1	0,81
NKVE 6/33 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8,9	B14	112M	2920	88,1	0,81
NKVE 6/36 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12,6	B5	132S	2935	89,2	0,87

NKVE 6 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

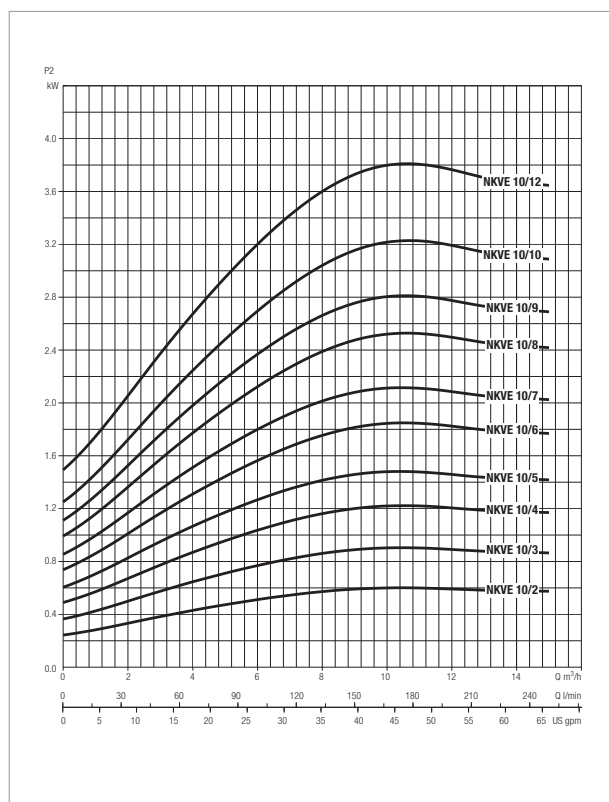
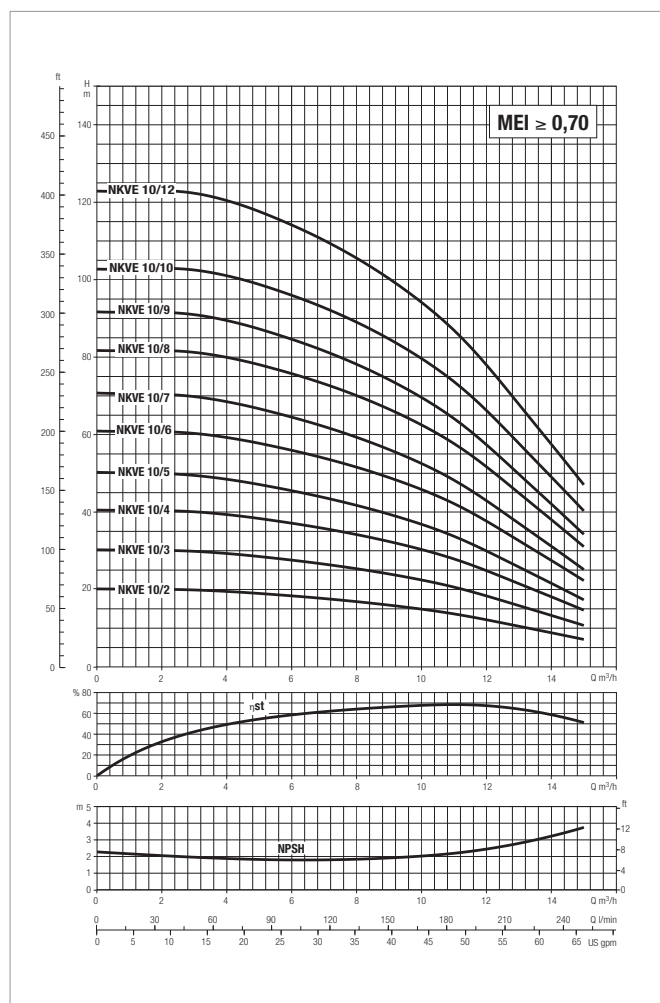


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	Ø1	C	D	H3	H	H1	H2	DNA = DNM (DN 32)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 6/02 M MCE11/P IE3	2	262	150	210	100	180	13	110	250	736	536	75	320	140	100	19	950	290	440	0,121	23,8
NKVE 6/04 M MCE11/P IE3	4	262	150	210	100	180	13	110	250	788	588	75	372	140	100	19	950	290	440	0,121	25,2
NKVE 6/06 M MCE11/P IE3	6	262	150	210	100	180	13	129	250	856	656	75	424	140	100	19	950	290	440	0,121	29,5
NKVE 6/09 M MCE11/P IE3	9	262	150	210	100	180	13	129	250	934	734	75	502	140	100	19	1220	280	430	0,147	32,6
NKVE 6/11 M MCE11/P IE3	11	262	150	210	100	180	13	138	250	1031	831	75	564	140	100	19	1220	280	430	0,147	37,5
NKVE 6/13 M MCE11/P IE3	13	262	150	210	100	180	13	138	250	1083	883	75	616	140	100	19	1220	280	430	0,147	38,5
NKVE 6/16 M MCE15/P IE3	16	262	150	210	100	180	13	138	250	1161	961	75	694	140	100	19	1220	280	430	0,147	42,0
NKVE 6/19 M MCE15/P IE3	19	262	150	210	100	180	13	138	250	1239	1039	75	772	140	100	19	1412	377	530	0,282	43,5
NKVE 6/21 T MCE30/P IE3	21	352	150	210	100	180	13	145	250	1340	1140	75	834	140	100	19	1412	377	530	0,282	54,8
NKVE 6/25 T MCE30/P IE3	25	352	150	210	100	180	13	145	250	1444	1244	75	938	140	100	19	1610	340	480	0,263	56,8
NKVE 6/28 T MCE30/P IE3	28	352	150	210	100	180	13	145	250	1522	1322	75	1016	140	100	19	1610	340	480	0,263	62,0
NKVE 6/33 T MCE30/P IE3	33	352	150	210	100	180	13	145	250	1652	1452	75	1146	140	100	19	1820	500	630	0,573	65,0
NKVE 6/36 T MCE55/P IE3	36	352	150	210	100	180	13	160	250	1928	1728	75	1400	140	100	19	2550	500	750	0,956	93,1

NKVE 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



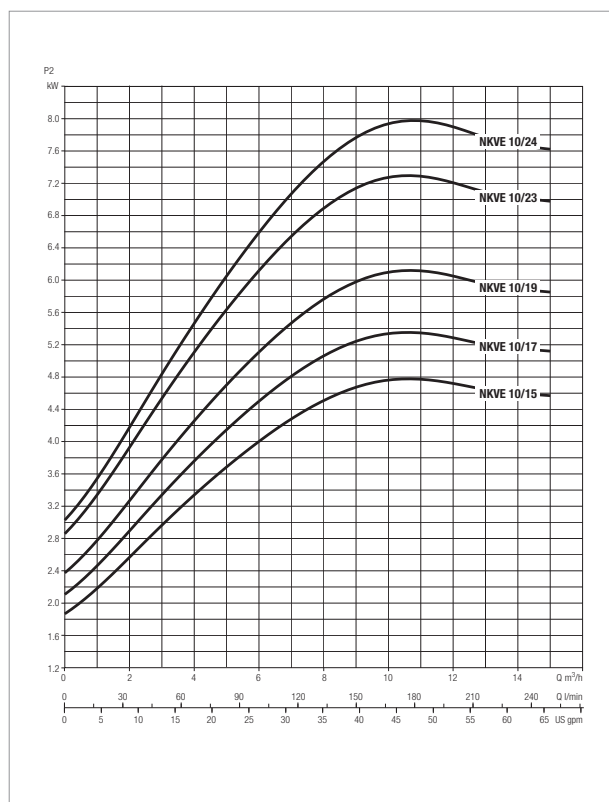
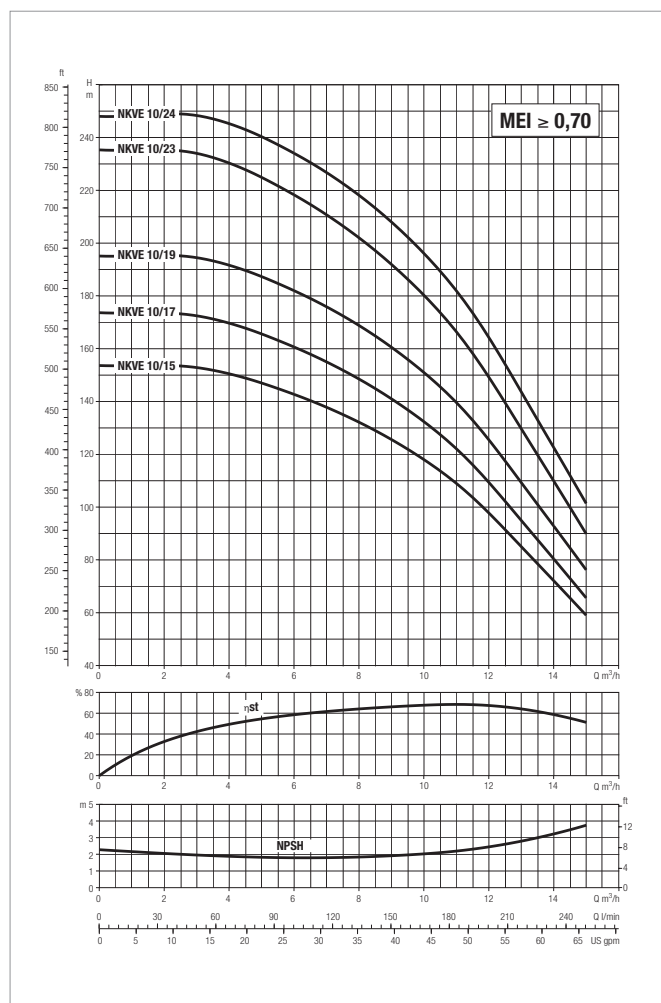
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 10/02 M MCE11/P IE3	1 x 230 V	0,75	1,00	8.1	B14	80S	2910	81	0,81-0,71
NKVE 10/03 M MCE11/P IE3	1 x 230 V	1,10	1,50	10.9	B14	80M	2870	82,7	0,84-0,76
NKVE 10/04 M MCE11/P IE3	1 x 230 V	1,50	2,00	13.9	B14	90S	2875	84,2	0,85-0,75
NKVE 10/05 M MCE11/P IE3	1 x 230 V	1,50	2,00	13.9	B14	90S	2875	84,2	0,85-0,75
NKVE 10/06 M MCE15/P IE3	1 x 230 V	2,20	3,00	19	B14	90L	2880	86,5	0,87-0,80
NKVE 10/07 M MCE15/P IE3	1 x 230 V	2,20	3,00	19.4	B14	90L	2880	86,5	0,87-0,80
NKVE 10/08 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.1	B14	100L	2900	87,1	0,89
NKVE 10/09 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.1	B14	100L	2900	87,1	0,89
NKVE 10/10 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8.9	B14	112M	2920	88,1	0,81
NKVE 10/12 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8.9	B14	112M	2920	88,1	0,81

NKVE 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



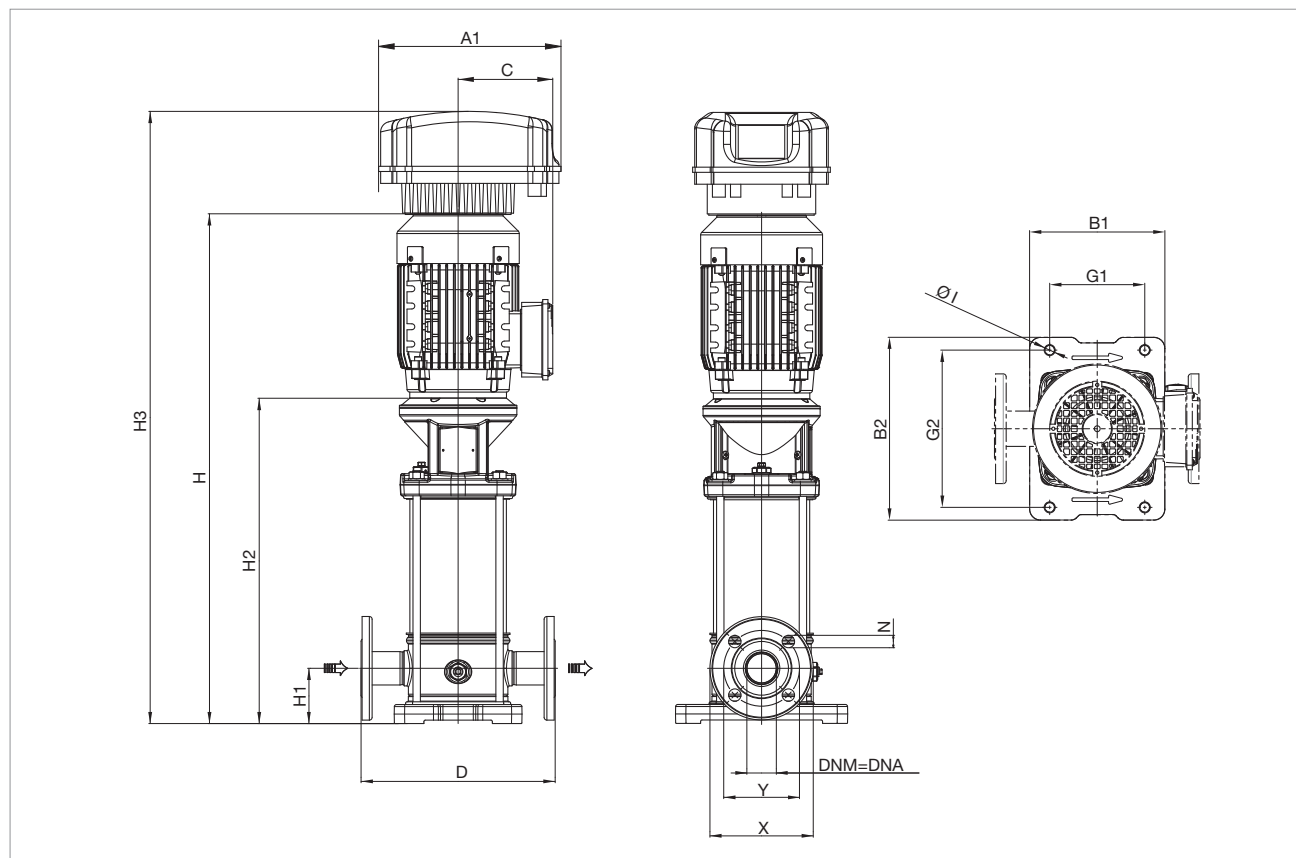
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 10/15 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12,6	B5	132S	2935	89,2	0,87
NKVE 10/17 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12,6	B5	132S	2935	89,2	0,87
NKVE 10/19 T MCE55/P IE3	3 x 380-415Δ	7,50	10,00	16,5	B5	132S	2930	90,1	0,84
NKVE 10/23 T MCE55/P IE3	3 x 380-415Δ	7,50	10,00	16,5	B5	132S	2930	90,1	0,84
NKVE 10/24 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24,8	B5	160M	2950	91,2	0,89

NKVE 10 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C- Maximum working pressure: 25 bar (2500 kPa)

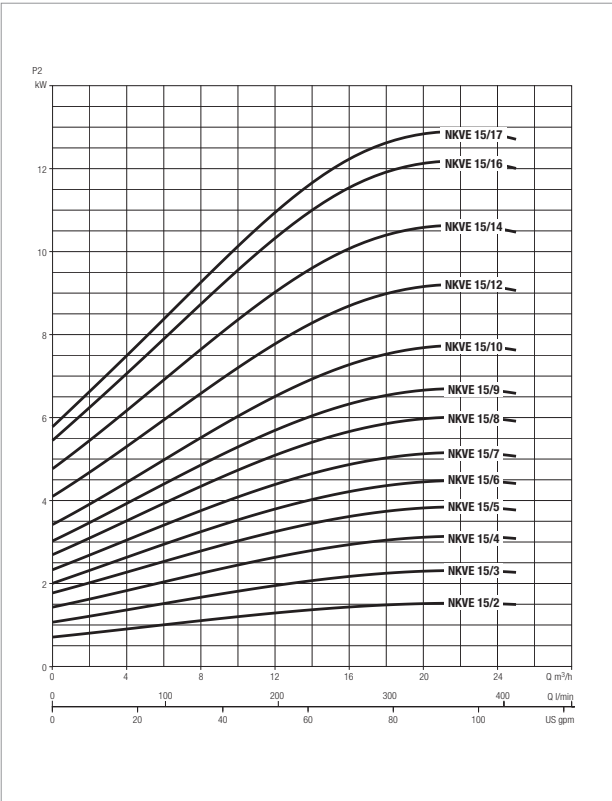
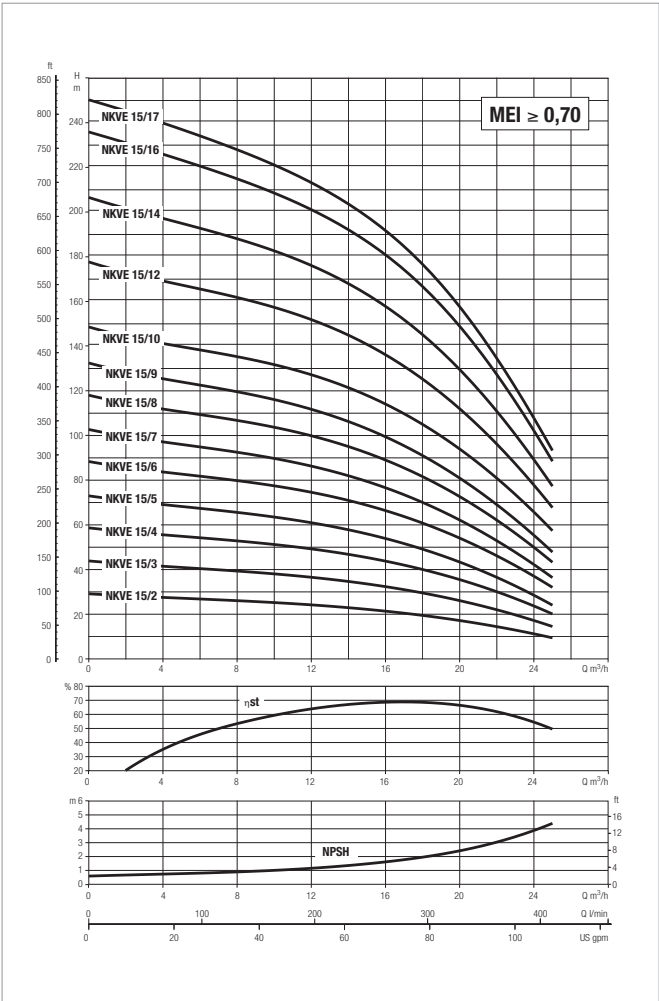


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	Ø I	C	D	H3	H	H1	H2	DNA = DNM (DN 40)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 10/02 M MCE11/P IE3	2	262	185	250	130	215	13	129	280	773	573	80	341	150	110	18	1050	340	490	0,175	28,5
NKVE 10/03 M MCE11/P IE3	3	262	185	250	130	215	13	129	280	803	603	80	371	150	110	18	1050	340	490	0,175	31,1
NKVE 10/04 M MCE11/P IE3	4	262	185	250	130	215	13	138	280	878	678	80	411	150	110	18	1050	340	490	0,175	35,0
NKVE 10/05 M MCE11/P IE3	5	262	185	250	130	215	13	138	280	908	708	80	441	150	110	18	1050	340	490	0,175	35,5
NKVE 10/06 M MCE15/P IE3	6	262	185	250	130	215	13	138	280	938	738	80	471	150	110	18	1050	340	490	0,175	38,5
NKVE 10/07 M MCE15/P IE3	7	262	185	250	130	215	13	138	280	968	768	80	501	150	110	18	1050	340	490	0,175	39,0
NKVE 10/08 T MCE30/P IE3	8	352	185	250	130	215	13	145	280	1047	847	80	541	150	110	18	1412	377	530	0,282	50,3
NKVE 10/09 T MCE30/P IE3	9	352	185	250	130	215	13	145	280	1077	877	80	571	150	110	18	1412	377	530	0,282	50,8
NKVE 10/10 T MCE30/P IE3	10	352	185	250	130	215	13	145	280	1107	907	80	601	150	110	18	1412	377	530	0,282	55,0
NKVE 10/12 T MCE30/P IE3	12	352	185	250	130	215	13	145	280	1167	967	80	661	150	110	18	1412	377	530	0,282	56,5
NKVE 10/15 T MCE55/P IE3	15	352	185	250	130	215	13	160	280	1454	1254	80	926	150	110	18	1820	500	630	0,573	85,1
NKVE 10/17 T MCE55/P IE3	17	352	185	250	130	215	13	160	280	1514	1314	80	986	150	110	18	1820	500	630	0,573	86,1
NKVE 10/19 T MCE55/P IE3	19	352	185	250	130	215	13	160	280	1646	1396	80	1046	150	110	18	1820	500	630	0,573	96,0
NKVE 10/23 T MCE55/P IE3	23	352	185	250	130	215	13	160	280	1766	1516	80	1166	150	110	18	2550	500	750	0,956	98,5
NKVE 10/24 T MCE110/P IE3	24	425	185	250	130	215	13	194	280	1891	1641	80	1216	150	110	18	2550	500	750	0,956	124,5

**NKVE 15 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

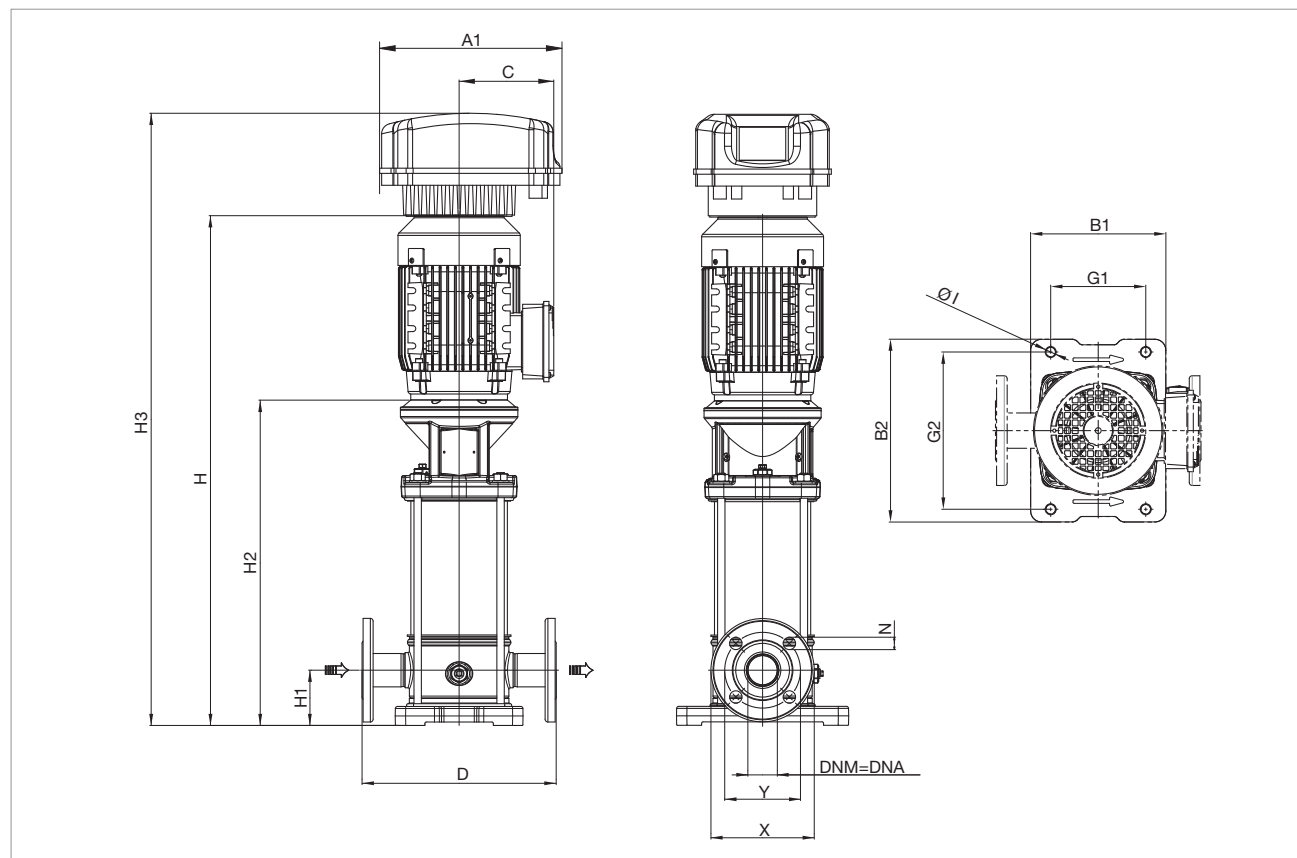


See hydraulic efficiency details on page 37.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 15/02 M MCE22/P IE3	1 x 230 V	2,20	3,00	19.7	B14	90L	2880	86,5	0,87-0,80
NKVE 15/03 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.2	B14	100L	2900	87,1	0,89
NKVE 15/04 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8.9	B14	112M	2920	88,1	0,81
NKVE 15/05 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8.9	B14	112M	2920	88,1	0,81
NKVE 15/06 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12.6	B5	132S	2935	89,2	0,87
NKVE 15/07 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12.6	B5	132S	2935	89,2	0,87
NKVE 15/08 T MCE110/P IE3	3 x 380-415Δ	7,50	10,00	16.5	B5	132S	2930	90,1	0,84
NKVE 15/09 T MCE110/P IE3	3 x 380-415Δ	7,50	10,00	16.5	B5	132S	2930	90,1	0,84
NKVE 15/10 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 15/12 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 15/14 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 15/16 T MCE150/P IE3	3 x 380-415Δ	15,00	20,00	33.6	B5	160M	2940	91,9	0,89
NKVE 15/17 T MCE150/P IE3	3 x 380-415Δ	15,00	20,00	33.6	B5	160M	2940	91,9	0,89

NKVE 15 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

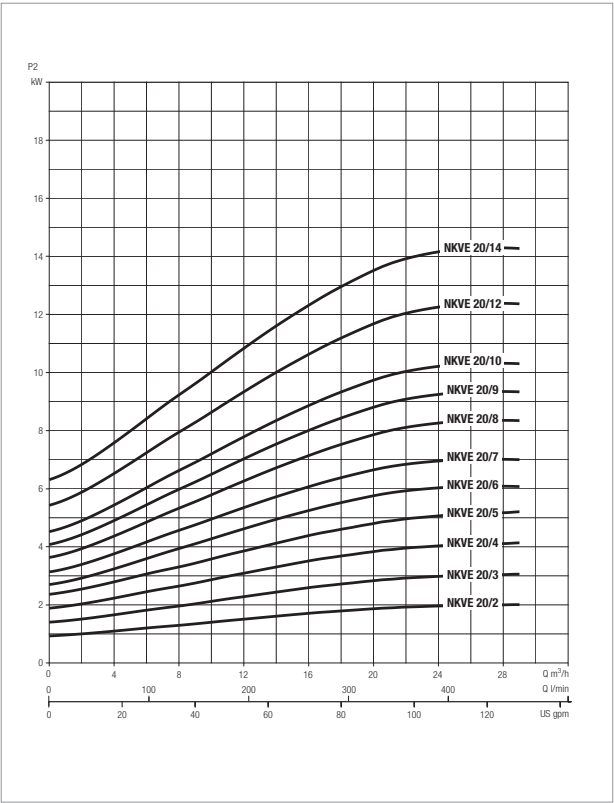
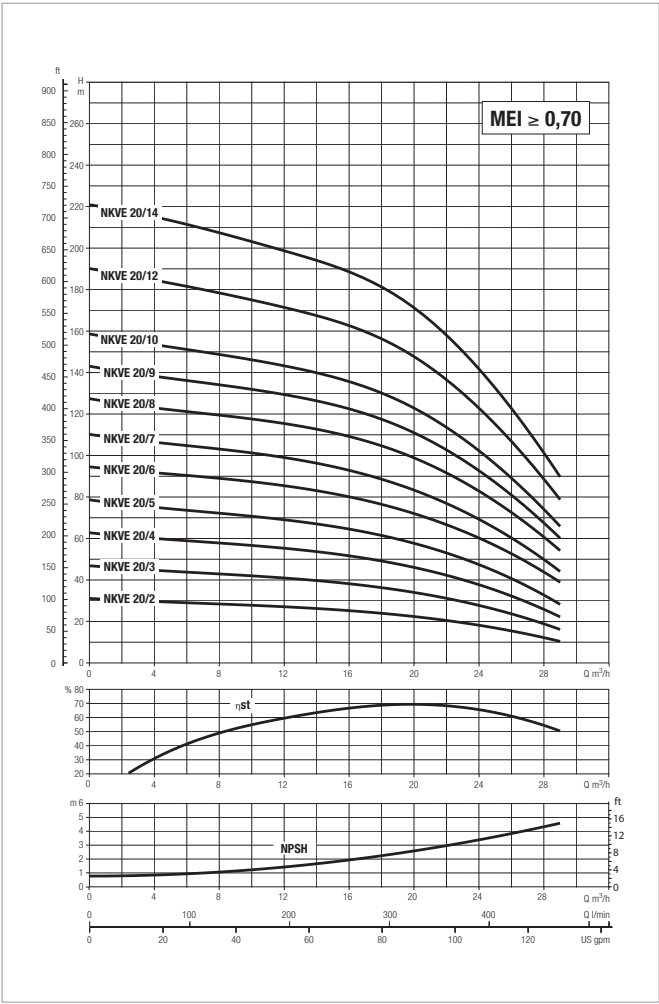


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	Ø I	C	D	H3	H	H1	H2	DNA = DNM (DN 50)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 15/02 M MCE22/P IE3	2	262	185	250	130	215	13	138	300	878	678	90	411	165	127	19	1050	340	490	0,175	43,0
NKVE 15/03 T MCE30/P IE3	3	352	185	250	130	215	13	145	300	975	775	90	469	165	127	19	1050	340	490	0,175	54,8
NKVE 15/04 T MCE30/P IE3	4	352	185	250	130	215	13	145	300	1023	823	90	517	165	127	19	1412	377	530	0,282	60,0
NKVE 15/05 T MCE30/P IE3	5	352	185	250	130	215	13	145	300	1071	871	90	565	165	127	19	1412	377	530	0,282	61,5
NKVE 15/06 T MCE55/P IE3	6	352	185	250	130	215	13	160	300	1328	1128	90	800	165	127	19	1412	377	530	0,282	90,1
NKVE 15/07 T MCE55/P IE3	7	352	185	250	130	215	13	160	300	1376	1176	90	848	165	127	19	1412	377	530	0,282	91,6
NKVE 15/08 T MCE110/P IE3	8	425	185	250	130	215	13	160	300	1496	1246	90	896	165	127	19	1820	500	630	0,573	101,5
NKVE 15/09 T MCE110/P IE3	9	425	185	250	130	215	13	160	300	1544	1294	90	944	165	127	19	1820	500	630	0,573	103,0
NKVE 15/10 T MCE110/P IE3	10	425	185	250	130	215	13	194	300	1687	1437	90	1012	165	127	19	1820	500	630	0,573	130,0
NKVE 15/12 T MCE110/P IE3	12	425	185	250	130	215	13	194	300	1783	1533	90	1108	165	127	19	2550	500	750	0,956	133,0
NKVE 15/14 T MCE110/P IE3	14	425	185	250	130	215	13	194	300	1879	1629	90	1204	165	127	19	2550	500	750	0,956	136,0
NKVE 15/16 T MCE150/P IE3	16	425	185	250	130	215	13	194	300	2026	1776	90	1300	165	127	19	2550	500	750	0,956	147,5
NKVE 15/17 T MCE150/P IE3	17	425	185	250	130	215	13	194	300	2074	1824	90	1348	165	127	19	2550	500	750	0,956	149,0

NKVE 20 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

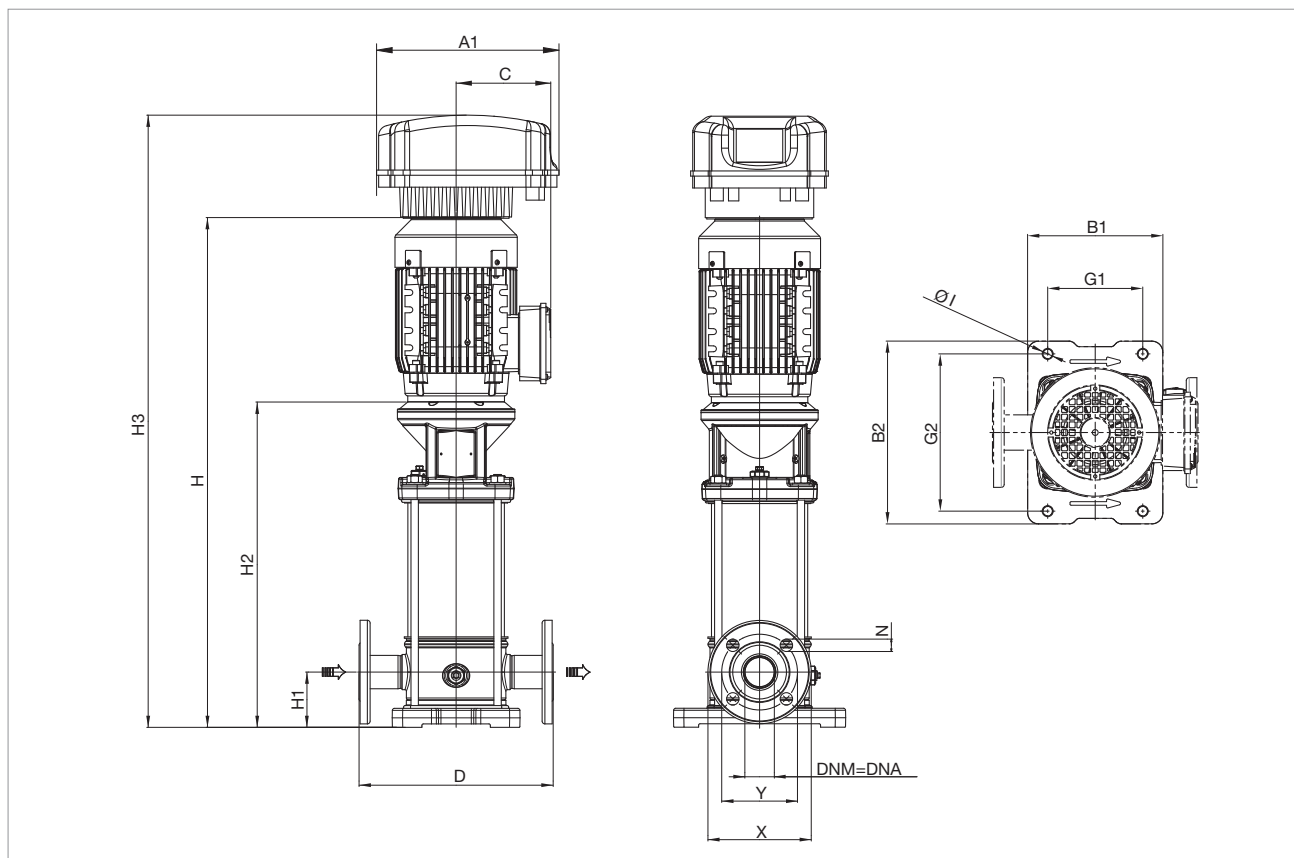


See hydraulic efficiency details on page 37.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 20/02 M MCE22/P IE3	1 x 230 V	2,20	3,00	19.7	B14	90L	2880	86,5	0,87-0,80
NKVE 20/03 T MCE30/P IE3	3 x 380-415Δ	3,00	4,00	7.1	B14	100L	2900	87,1	0,89
NKVE 20/04 T MCE30/P IE3	3 x 380-415Δ	4,00	5,50	8.9	B14	112M	2920	88,1	0,81
NKVE 20/05 T MCE55/P IE3	3 x 380-415Δ	5,50	7,50	12.9	B5	132S	2935	89,2	0,87
NKVE 20/06 T MCE55/P IE3	3 x 380-415Δ	7,50	10,00	16.5	B5	132S	2930	90,1	0,84
NKVE 20/07 T MCE55/P IE3	3 x 380-415Δ	7,50	10,00	16.5	B5	132S	2930	90,1	0,84
NKVE 20/08 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 20/09 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 20/10 T MCE110/P IE3	3 x 380-415Δ	11,00	15,00	24.8	B5	160M	2950	91,2	0,89
NKVE 20/12 T MCE150/P IE3	3 x 380-415Δ	15,00	20,00	33.6	B5	160M	2940	91,9	0,89
NKVE 20/14 T MCE150/P IE3	3 x 380-415Δ	15,00	20,00	33.6	B5	160M	2940	91,9	0,89

NKVE 20 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

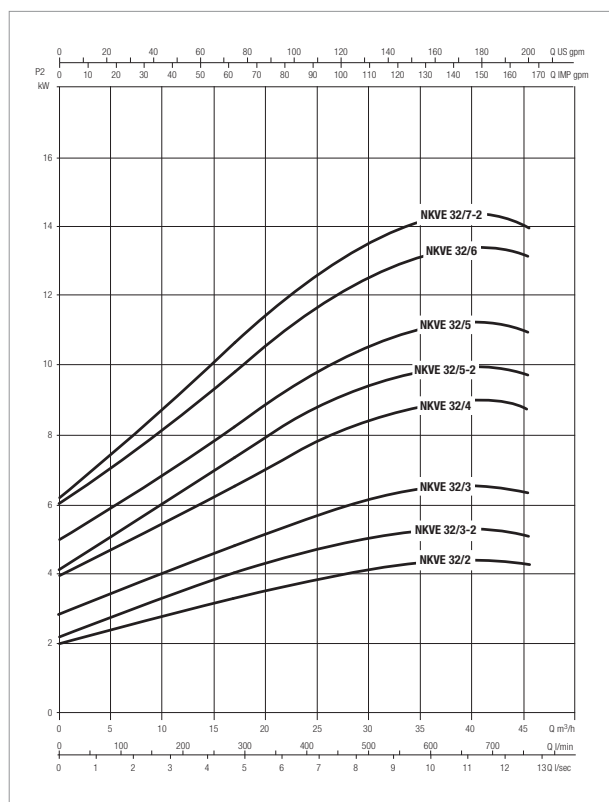
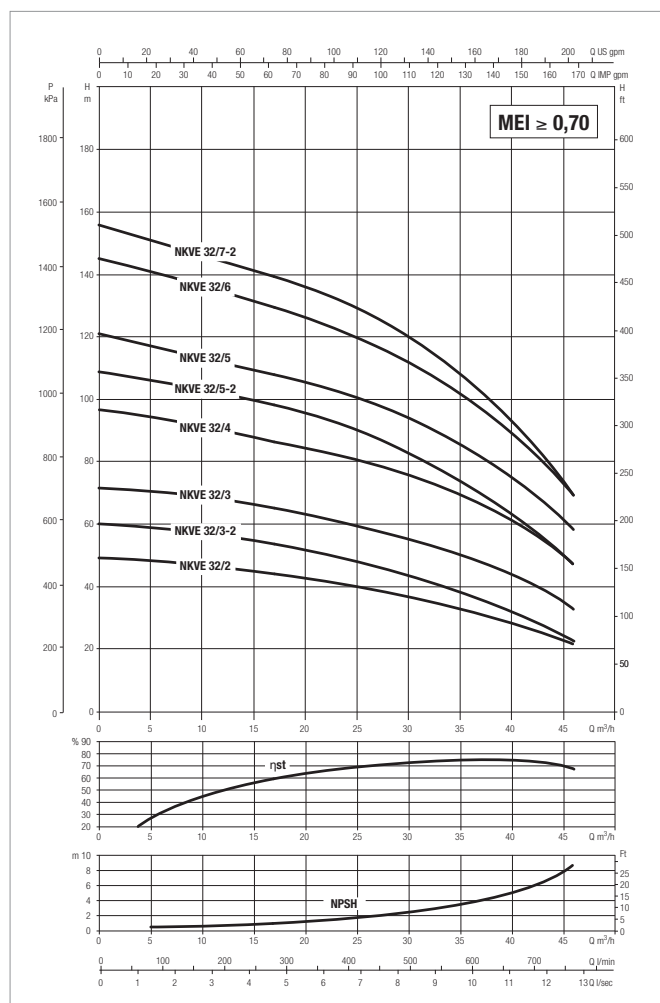


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	B1	B2	G1	G2	Ø I	C	D	H3	H	H1	H2	DNA = DNM (DN 40)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
														X	Y	N	L/A	L/B	H		
NKVE 20/02 M MCE22/P IE3	2	262	185	250	130	215	13	138	300	878	678	90	411	165	127	19	1050	340	490	0,175	43,0
NKVE 20/03 T MCE30/P IE3	3	352	185	250	130	215	13	145	300	975	775	90	469	165	127	19	1050	340	490	0,175	54,8
NKVE 20/04 T MCE30/P IE3	4	352	185	250	130	215	13	145	300	1023	823	90	517	165	127	19	1412	377	530	0,282	60,0
NKVE 20/05 T MCE55/P IE3	5	352	185	250	130	215	13	160	300	1280	1080	90	752	165	127	19	1412	377	530	0,282	89,1
NKVE 20/06 T MCE55/P IE3	6	352	185	250	130	215	13	160	300	1400	1150	90	800	165	127	19	1820	500	630	0,573	99,0
NKVE 20/07 T MCE55/P IE3	7	352	185	250	130	215	13	160	300	1448	1198	90	848	165	127	19	1820	500	630	0,573	100,0
NKVE 20/08 T MCE110/P IE3	8	425	185	250	130	215	13	194	300	1591	1341	90	916	165	127	19	1820	500	630	0,573	127,5
NKVE 20/09 T MCE110/P IE3	9	425	185	250	130	215	13	194	300	1639	1389	90	964	165	127	19	1820	500	630	0,573	129,0
NKVE 20/10 T MCE110/P IE3	10	425	185	250	130	215	13	194	300	1687	1437	90	1012	165	127	19	1820	500	630	0,573	130,0
NKVE 20/12 T MCE150/P IE3	12	425	185	250	130	215	13	194	300	1834	1584	90	1108	165	127	19	2550	500	750	0,956	142,0
NKVE 20/14 T MCE150/P IE3	14	425	185	250	130	215	13	194	300	1930	1680	90	1204	165	127	19	2550	500	750	0,956	145,0

NKVE 32 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)



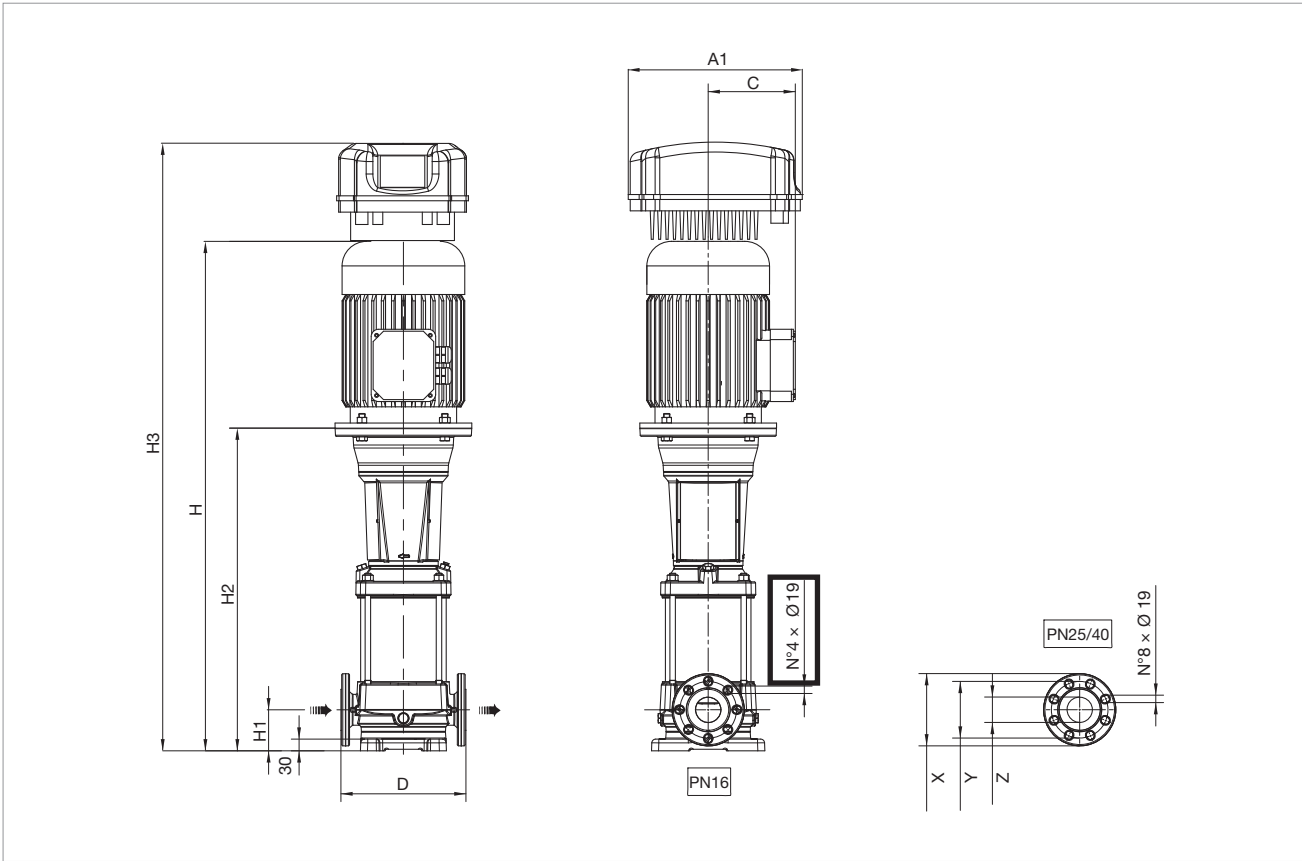
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 32/2 T MCE 55/P IE3	3 x 380-415 Δ	5,50	7,50	13.1	B5	132S	2935	89,2	0,87
NKVE 32/3-2 T MCE 55/P IE3	3 x 380-415 Δ	5,50	7,50	13.1	B5	132S	2935	89,2	0,87
NKVE 32/3 T MCE 110/P IE3	3 x 380-415 Δ	7,50	10,00	17.6	B5	132S	2930	90,1	0,84
NKVE 32/4 T MCE 110/P IE3	3 x 380-415 Δ	11,00	15,00	25.5	B5	160M	2950	91,2	0,89
NKVE 32/5-2 T MCE 110/P IE3	3 x 380-415 Δ	11,00	15,00	25.5	B5	160M	2950	91,2	0,89
NKVE 32/5 T MCE 150/P IE3	3 x 380-415 Δ	15,00	20,00	34	B5	160M	2940	91,9	0,89
NKVE 32/6 T MCE 150/P IE3	3 x 380-415 Δ	15,00	20,00	34	B5	160M	2940	91,9	0,89
NKVE 32/7-2 T MCE 150/P IE3	3 x 380-415 Δ	15,00	20,00	34	B5	160M	2940	91,9	0,89

**NKVE 32 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

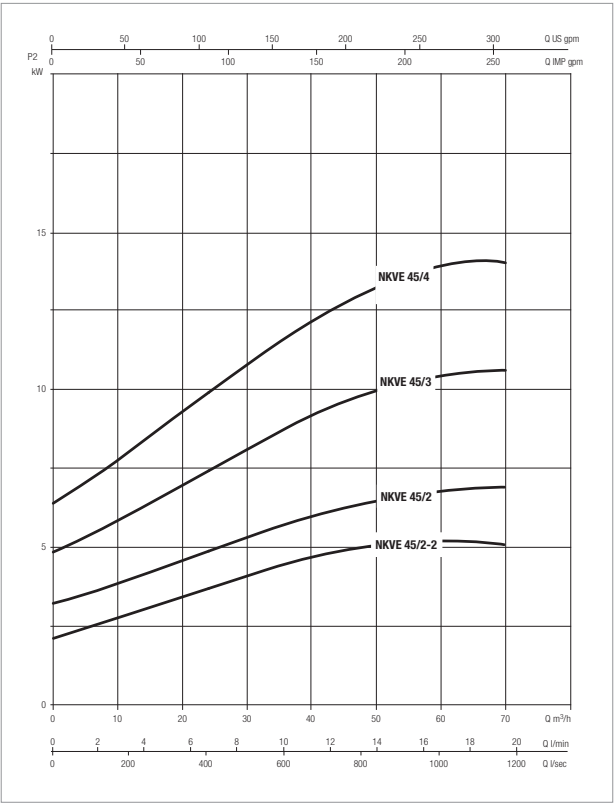
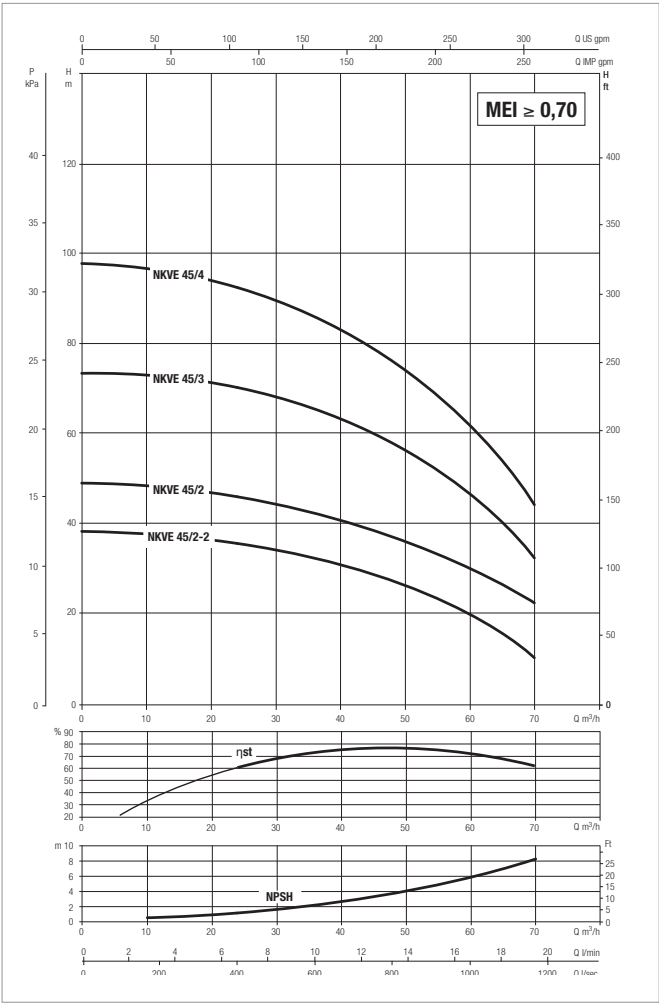


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 65)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
									X	Y	Z	L/A	L/B	H		
NKVE 32/2 T MCE 55/P IE3	2	352	161	320	1115	105	724	1311	185	145	65	1820	500	630	0,58	148
NKVE 32/3-2 T MCE 55/P IE3	3	352	161	320	1196	105	806	1392	185	145	65	1820	500	630	0,58	152
NKVE 32/3 T MCE 110/P IE3	3	425	161	320	1196	105	806	1440	185	145	65	1820	500	630	0,58	163
NKVE 32/4 T MCE 110/P IE3	4	425	198	320	1413	105	908	1657	185	145	65	1820	500	630	0,58	218
NKVE 32/5-2 T MCE 110/P IE3	5	425	198	320	1495	105	990	1739	185	145	65	1820	500	630	0,58	222
NKVE 32/5 T MCE 150/P IE3	5	425	198	320	1495	105	990	1739	185	145	65	1820	500	630	0,58	236
NKVE 32/6 T MCE 150/P IE3	6	425	198	320	1577	105	1072	1821	185	145	65	2520	500	750	0,95	240
NKVE 32/7-2 T MCE 150/P IE3	7	425	198	320	1659	105	1154	1903	185	145	65	2520	500	750	0,95	244

**NKVE 45 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

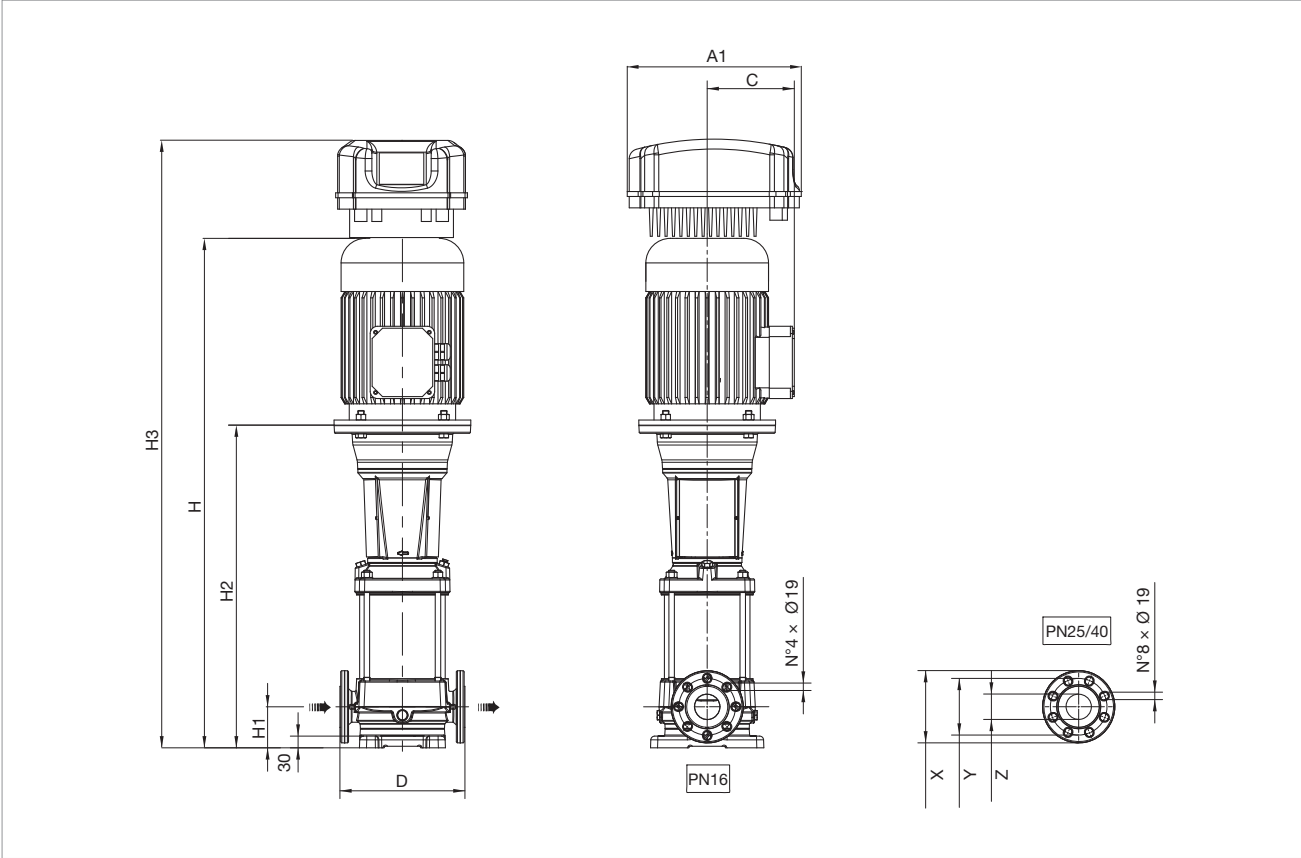


See hydraulic efficiency details on page 37.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 45/2-2 T MCE 55/P IE3	3 x 380-415Δ	5,50	7,50	13.1	B5	132S	2935	89,2	0,87
NKVE 45/2 T MCE 110/P IE3	3 x 380-415Δ	7,50	10,00	17.6	B5	132S	2930	90,1	0,84
NKVE 45/3 T MCE 110/P IE3	3 x 380-415Δ	11,00	15,00	25.5	B5	160M	2950	91,2	0,89
NKVE 45/4 T MCE 150/P IE3	3 x 380-415Δ	15,00	20,00	34	B5	160M	2940	91,9	0,89

**NKVE 45 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

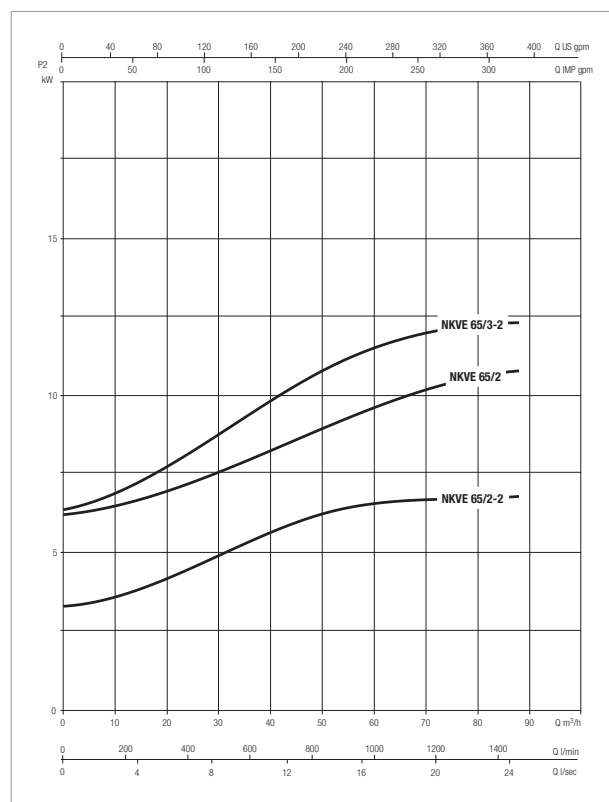
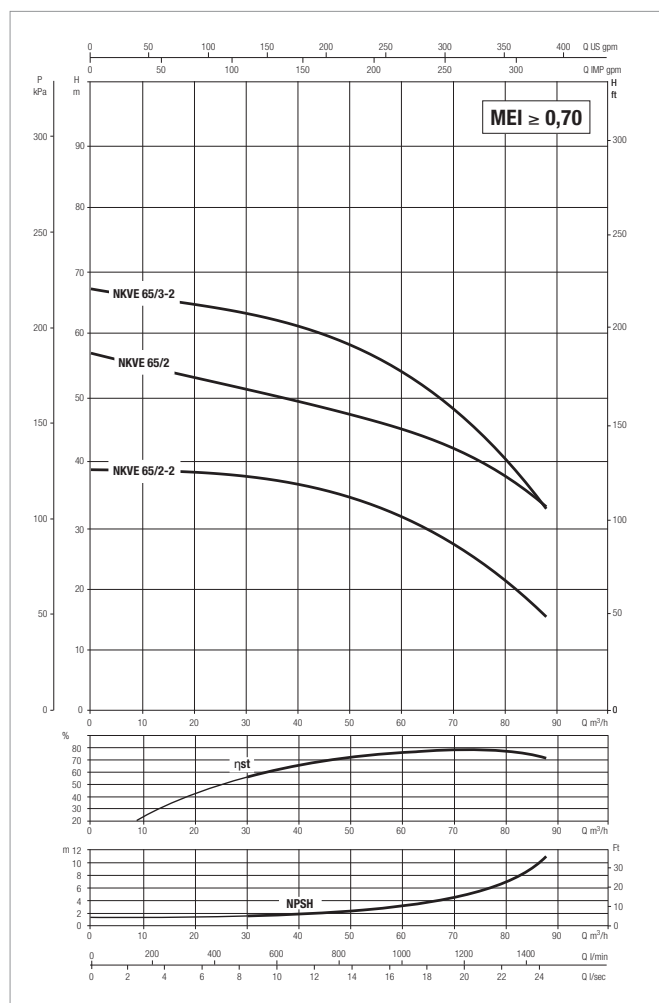


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 80)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
									X	Y	Z	L/A	L/B	H		
NKVE 45/2-2 T MCE 55/P IE3	2	352	161	365	1149	140	759	1345	200	160	80	1820	500	630	0,58	154
NKVE 45/2 T MCE 110/P IE3	2	425	161	365	1149	140	759	1393	200	160	80	1820	500	630	0,58	165
NKVE 45/3 T MCE 110/P IE3	3	425	198	365	1366	140	861	1610	200	160	80	1820	500	630	0,58	220
NKVE 45/4 T MCE 150/P IE3	4	425	198	365	1448	140	943	1692	200	160	80	1820	500	630	0,58	238

NKVE 65 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS, FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



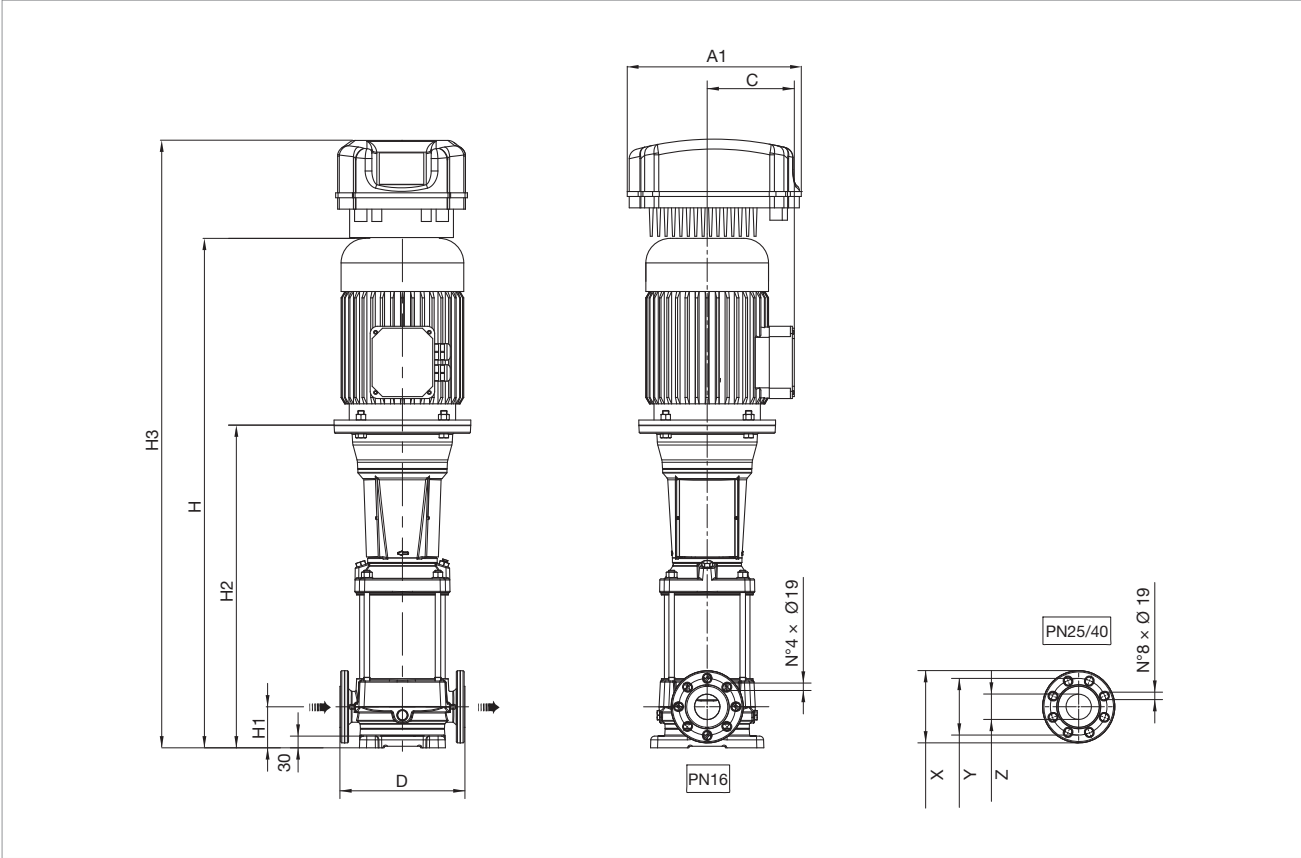
See hydraulic efficiency details on page 37.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 65/2-2 T MCE 110/P IE3	3 x 380-415Δ	5,50	7,50	17,6	B5	132S	2935	89,2	0,87
NKVE 65/2 T MCE 110/P IE3	3 x 380-415Δ	7,50	10,00	25,5	B5	132S	2930	90,1	0,84
NKVE 65/3-2 T MCE 150/P IE3	3 x 380-415Δ	11,00	15,00	34	B5	160M	2950	91,2	0,89

**NKVE 65 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

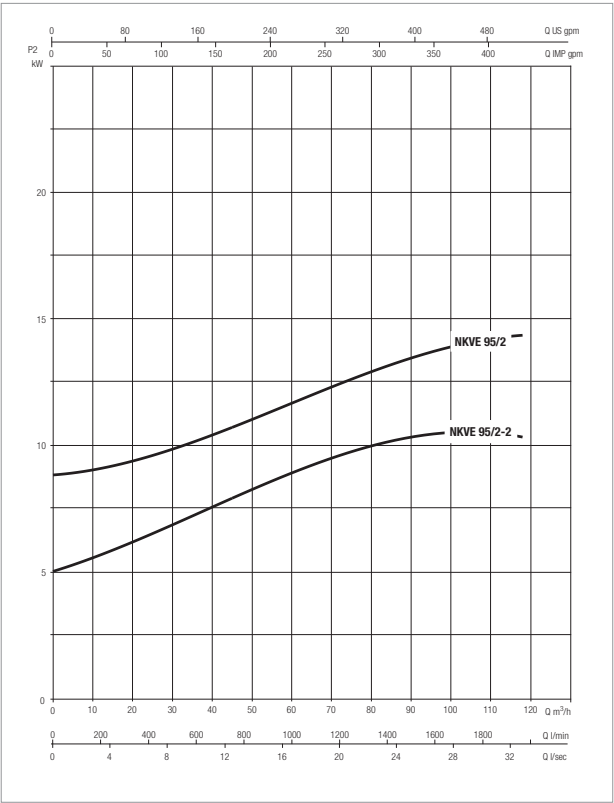
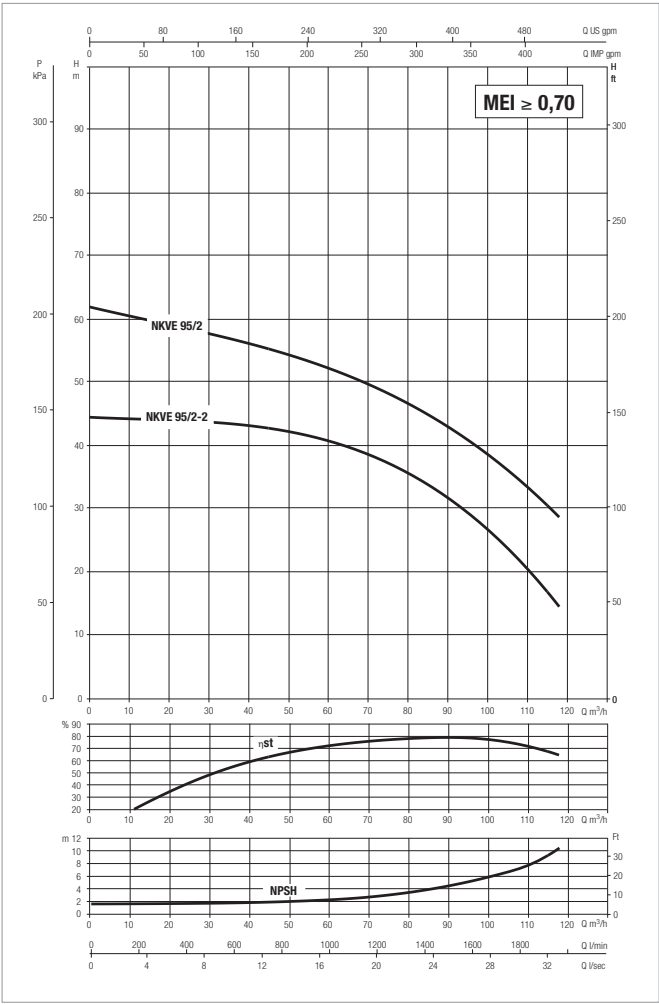


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 100)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
									X	Y	Z	L/A	L/B	H		
NKVE 65/2-2 T MCE 110/P IE3	2	425	161	365	1266,2	140	829,2	1484,2	230	180	100	1820	500	630	0,58	169,5
NKVE 65/2 T MCE 110/P IE3	2	425	198	365	1354,2	140	849,2	1619,2	230	180	100	1820	500	630	0,58	220,5
NKVE 65/3-2 T MCE 150/P IE3	3	425	198	365	1446,3	140	941,3	1711,3	230	180	100	1820	500	630	0,58	239

NKVE 95 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

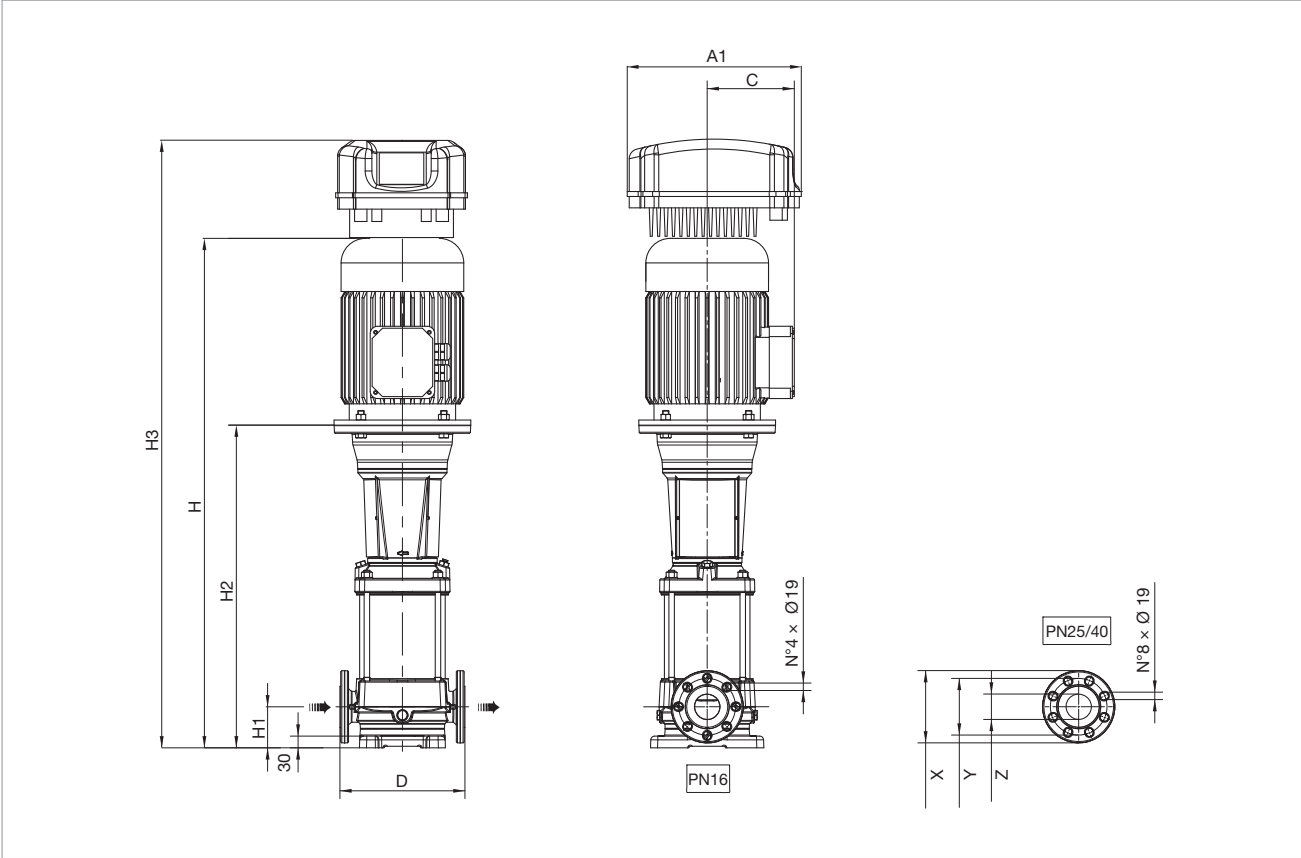


See hydraulic efficiency details on page 37.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP						
NKVE 95/2-2 T MCE 110/PIE3	3 x 380-415Δ	11,00	15,00	25.5	B5	160M	2950	91,2	0,89
NKVE 95/2 T MCE 150/PIE3	3 x 380-415Δ	15,00	20,00	34	B5	160M	2940	91,9	0,89

**NKVE 95 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS,
FOR CIVIL AND INDUSTRIAL PRESSURIZATION UNITS**

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 100)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
									X	Y	Z	L/A	L/B	H		
NKVE 95/2-2 T MCE 110/PIE3	2	425	198	380	1354,2	140	849,2	1619,2	230	180	100	1820	500	630	0,58	221
NKVE 95/2 T MCE 150/PIE3	3	425	198	380	1354,2	140	849,2	1619,2	230	180	100	1820	500	630	0,58	235

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

GENERAL INFORMATION

With the aim of defining a comparable performance threshold value among all water pumps present on the market, an index has been created which considers the size of the pump and its specific rotation speed: the MEI (Minimum Efficiency Index).

The regulation applies to centrifugal pumps for pumping clean water included in these product categories:

- END SUCTION OWN BEARING PUMPS (ESOB)
- END SUCTION CLOSE COUPLED PUMPS (ESCC)
- END SUCTION CLOSE COUPLED INLINE PUMPS (ESCCI)
- VERTICAL MULTISTAGE PUMPS (MS-V)
- SUBMERSIBLE MULTISTAGE PUMPS (MSS)

MEI represents a dimensionless indicator for hydraulic performance and is a measurement of the sizing of the pump with respect to its performance. The higher the MEI value, the better the sizing of the pump with respect to its performance and the lower the yearly energy consumption due to use of the pump. The upper limit of the MEI values is theoretically open, and depends only on physical and technological limits.

The minimum efficiency index (MEI) is based on the maximum diameter of the impeller. Multistage vertical pumps must undergo tests in a version with 3 stages.

The reference value for the most efficient water pumps is $MEI \geq 0.70$.

The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller adapts the pump to a fixed work point, with a consequent lower energy consumption.

The operation of this water pump with variable operating points may be more efficient and economic if controlled, for example, by means of a variable speed motor which adapts pump operation to the system.

You can find information on reference efficiency at the address: www.dabpumps.com or contact our sales network.

The efficiency graphs for $MEI=0.7$ and $MEI=0.4$ for the different types of pumps are available on the site: www.europump.org/efficiencycharts

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 1/03 M MCE11/P IE3	3	$\geq 0,70$	44,78	47,27	46,72
NKVE 1/05 M MCE11/P IE3	5		44,78	47,27	46,72
NKVE 1/07 M MCE11/P IE3	7		44,78	47,27	46,72
NKVE 1/09 M MCE11/P IE3	9		44,78	47,27	46,72
NKVE 1/11 M MCE11/P IE3	11		44,78	47,27	46,72
NKVE 1/13 M MCE11/P IE3	13		44,78	47,27	46,72
NKVE 1/15 M MCE11/P IE3	15		44,78	47,27	46,72
NKVE 1/19 M MCE11/P IE3	19		44,78	47,27	46,72
NKVE 1/22 M MCE11/P IE3	22		44,78	47,27	46,72
NKVE 1/25 M MCE11/P IE3	25		44,78	47,27	46,72
NKVE 1/30 M MCE11/P IE3	30		44,78	47,27	46,72
NKVE 1/34 M MCE15/P IE3	34		44,78	47,27	46,72
NKVE 1/37 M MCE15/P IE3	37		44,78	47,27	46,72

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PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 3/04 M MCE11/P IE3	4	$\geq 0,70$	50,8	53,44	52,79
NKVE 3/06 M MCE11/P IE3	6		50,8	53,44	52,79
NKVE 3/09 M MCE11/P IE3	9		50,8	53,44	52,79
NKVE 3/11 M MCE11/P IE3	11		50,8	53,44	52,79
NKVE 3/13 M MCE11/P IE3	13		50,8	53,44	52,79
NKVE 3/15 M MCE11/P IE3	15		50,8	53,44	52,79
NKVE 3/17 M MCE11/P IE3	17		50,8	53,44	52,79
NKVE 3/21 M MCE15/P IE3	21		50,8	53,44	52,79
NKVE 3/25 T MCE30/P IE3	25		50,8	53,44	52,79
NKVE 3/29 T MCE30/P IE3	29		50,8	53,44	52,79
NKVE 3/33 T MCE30/P IE3	33		50,8	53,44	52,79

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 6/02 M MCE11/P IE3	2	$\geq 0,70$	60,47	64,55	62,87
NKVE 6/04 M MCE11/P IE3	4		60,47	64,55	62,87
NKVE 6/06 M MCE11/P IE3	6		60,47	64,55	62,87
NKVE 6/09 M MCE11/P IE3	9		60,47	64,55	62,87
NKVE 6/11 M MCE11/P IE3	11		60,47	64,55	62,87
NKVE 6/13 M MCE11/P IE3	13		60,47	64,55	62,87
NKVE 6/16 M MCE15/P IE3	16		60,47	64,55	62,87
NKVE 6/19 M MCE15/P IE3	19		60,47	64,55	62,87
NKVE 6/21 T MCE30/P IE3	21		60,47	64,55	62,87
NKVE 6/25 T MCE30/P IE3	25		62,5	66,2	64,98
NKVE 6/28 T MCE30/P IE3	28		62,5	66,2	64,98
NKVE 6/33 T MCE30/P IE3	33		62,5	66,2	64,98
NKVE 6/36 T MCE55/P IE3	36		62,5	66,2	64,98

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 10/02 M MCE11/P IE3	2	$\geq 0,70$	64,72	67,58	66,82
NKVE 10/03 M MCE11/P IE3	3		64,72	67,58	66,82
NKVE 10/04 M MCE11/P IE3	4		64,72	67,58	66,82
NKVE 10/05 M MCE11/P IE3	5		64,72	67,58	66,82
NKVE 10/06 M MCE15/P IE3	6		64,72	67,58	66,82
NKVE 10/07 M MCE15/P IE3	7		64,72	67,58	66,82
NKVE 10/08 T MCE30/P IE3	8		64,72	67,58	66,82
NKVE 10/09 T MCE30/P IE3	9		64,72	67,58	66,82
NKVE 10/10 T MCE30/P IE3	10		64,72	67,58	66,82
NKVE 10/12 T MCE30/P IE3	12		64,72	67,58	66,82
NKVE 10/15 T MCE55/P IE3	15		64,72	67,58	66,82
NKVE 10/17 T MCE55/P IE3	17		64,72	67,58	66,82
NKVE 10/19 T MCE55/P IE3	19		64,72	67,58	66,82
NKVE 10/23 T MCE55/P IE3	23		64,72	67,58	66,82
NKVE 10/24 T MCE110/P IE3	24		64,72	67,58	66,82

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PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 15/02 M MCE22/P IE3	2	$\geq 0,70$	61,59	65,63	64,65
NKVE 15/03 T MCE30/P IE3	3		61,59	65,63	64,65
NKVE 15/04 T MCE30/P IE3	4		61,59	65,63	64,65
NKVE 15/05 T MCE30/P IE3	5		61,59	65,63	64,65
NKVE 15/06 T MCE55/P IE3	6		64,68	69,13	68,28
NKVE 15/07 T MCE55/P IE3	7		64,68	69,13	68,28
NKVE 15/08 T MCE110/P IE3	8		64,68	69,13	68,28
NKVE 15/09 T MCE110/P IE3	9		64,68	69,13	68,28
NKVE 15/10 T MCE110/P IE3	10		64,68	69,13	68,28
NKVE 15/12 T MCE110/P IE3	12		64,68	69,13	68,28
NKVE 15/14 T MCE110/P IE3	14		64,68	69,13	68,28
NKVE 15/16 T MCE150/P IE3	16		64,68	69,13	68,28
NKVE 15/17 T MCE150/P IE3	17		64,68	69,13	68,28

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 20/02 M MCE22/P IE3	2	$\geq 0,70$	61,78	66,22	65,64
NKVE 20/03 T MCE30/P IE3	3		61,78	66,22	65,64
NKVE 20/04 T MCE30/P IE3	4		61,78	66,22	65,64
NKVE 20/05 T MCE55/P IE3	5		61,78	66,22	65,64
NKVE 20/06 T MCE55/P IE3	6		64,59	69,58	68,67
NKVE 20/07 T MCE55/P IE3	7		64,59	69,58	68,67
NKVE 20/08 T MCE110/P IE3	8		64,59	69,58	68,67
NKVE 20/09 T MCE110/P IE3	9		64,59	69,58	68,67
NKVE 20/10 T MCE110/P IE3	10		64,59	69,58	68,67
NKVE 20/12 T MCE150/P IE3	12		64,59	69,58	68,67
NKVE 20/14 T MCE150/P IE3	14		64,59	69,58	68,67

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 32/2 T MCE 55/P IE3	2	$\geq 0,70$	70,08	74,12	73,16
NKVE 32/3-2 T MCE 55/P IE3	3		67,38	71,10	70,20
NKVE 32/3 T MCE 110/P IE3	3		70,08	74,12	73,16
NKVE 32/4 T MCE 110/P IE3	4		70,08	74,12	73,16
NKVE 32/5-2 T MCE 110/P IE3	5		68,40	72,20	71,44
NKVE 32/5 T MCE 150/P IE3	5		70,08	74,12	73,16
NKVE 32/6 T MCE 150/P IE3	6		70,08	74,12	73,16
NKVE 32/7-2 T MCE 150/P IE3	7		68,82	72,70	72,04

HYDRAULIC EFFICIENCY

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PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 45/2-2 T MCE 55/P IE3	2	$\geq 0,70$	69,13	71,65	70,46
NKVE 45/2 T MCE 110/P IE3	2		73,47	76,37	75,25
NKVE 45/3 T MCE 110/P IE3	3		73,47	76,37	75,25
NKVE 45/4 T MCE 150/P IE3	4		73,47	76,37	75,25

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 65/2-2 T MCE 110/P IE3	2	$\geq 0,70$	70,92	77,97	77,08
NKVE 65/2 T MCE 110/P IE3	2		73,71	78,96	77,11
NKVE 65/3-2 T MCE 150/P IE3	3		72,27	77,22	76,17

PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKVE 95/2-2 T-IE3	2	$\geq 0,70$	72,37	78,87	77,79
NKVE 95/2 T-IE3	2		74,38	79,43	77,94

DAB

P U M P S S E L E C T O R



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