

NKVE 10-15-20-32-45-65-95

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER



TECHNICAL DATA

Operating range:

from 4 to 118 m³/h with head up to 231 metres.

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-crystallised and chemically neutral, with properties similar to water.

Pumped liquid temperature range: from -15 °C to +80 °C.

Maximum ambient temperature: +40 °C.

Maximum operating pressure:

25 bar (2500kPa) NKV 10-15-20-65-95

32 bar (3200kPa) NKV 32-45

Installation: fixed, vertical position.

Special executions on request:

60 Hz version.

Version entirely in stainless steel.

APPLICATIONS

Vertical multistage centrifugal pump suitable for medium to large user water systems. Recommended for pressurisation units, boiler supply, hot water and cooling water circulation, fire fighting and washing systems, drinking water supply and filling of pressure vessels, sprinkler and watering systems and water purification systems.

ADVANTAGES OF USE

Operating pressure stability – **Excellent energy savings** (up to 60 %) – Reduced hammering effects – Reduced space requirements – Less maintenance – Reduced pump wear – Less power factor correction required – Less water consumption – Integrated protections.

CONSTRUCTION FEATURES OF THE PUMP

NKV 10-15-20

All the parts in contact with the liquid are rust-proof.

Microcast AISI 304 stainless steel internal pump body, ULTEM diffusers, AISI 431 pump shaft, microcast steel impellers, AISI 304 liner.

Cast iron external pump body treated with cataphoresis paint coating, cast iron support. Maintenance-free "cartridge" silicon/silicon mechanical seal, removable without removing the motor starting from 5,5 kW. Rigid motor-pump coupling.

NKV 32-45-65-95

AISI 304 stainless steel impellers, diffusers and liner, to ensure durability and high performance. AISI 431 stainless steel pump shaft. Cast iron pump body and seal disc, treated with cataphoresis paint coating. Carbon stage body bushing, to ensure durability in case of dry operation. Oversized ball bearings, fitted on the motor support to ensure duration and eliminate axial adjustments. PTFE floating adjustment ring, WRAS approved, for constant performance. Silicon carbide/graphite mechanical seal, removable without removing the motor starting from 5,5 kW. Rigid motor-pump coupling. Special version fully made of stainless steel available on request.

CONSTRUCTION FEATURES OF THE MOTOR

Shaft with rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Construction according to CEI 2-3.

Controlled by MCE inverter.

Protection class: IP 55

Insulation class: F.

Standard single-phase voltage: 1x230 V / 50-60 Hz

Special version on request: three-phase 3x400 V / 50 Hz, or three-phase 3x460 V / 60 Hz

Standard three-phase voltage: 3x400 V / 50 Hz

Special version on request: 3x460 V / 60 Hz

NKVE 10-15-20-32-45-65-95

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.

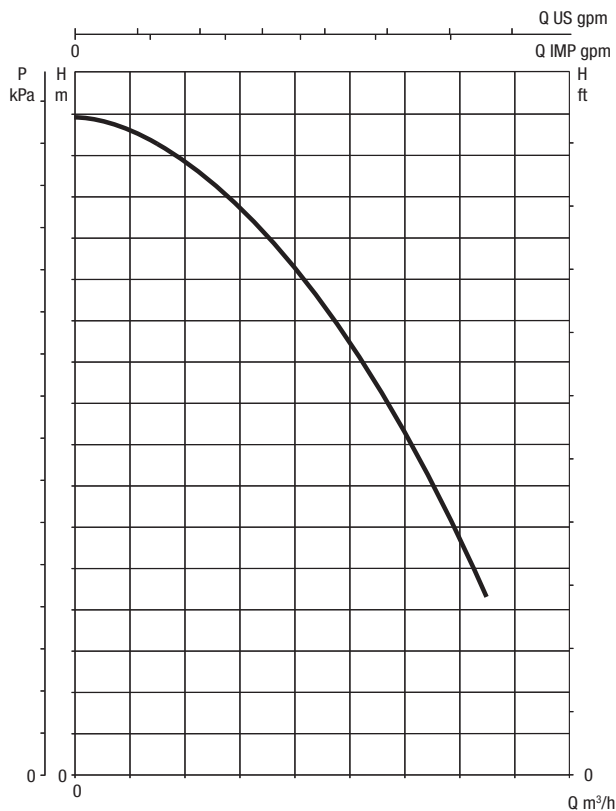
The other electric pumps, also with variable speed, are activated in cascade after the first one has reached maximum speed. Through modulation, they compensate the pressure fluctuations of the system.

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

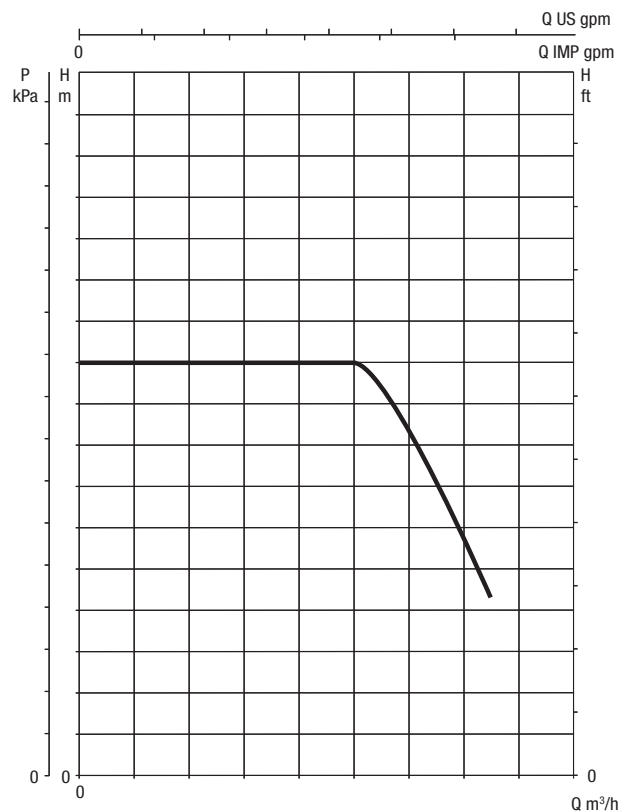
It is possible to set operation times for each individual pump, switching to another pump after such set times.

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.

For more information refer to the technical appendix.

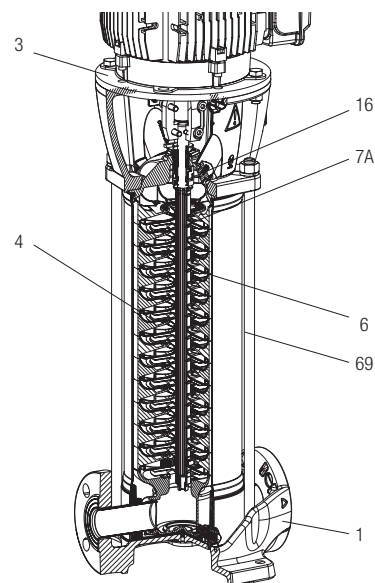
NKVE 10-15-20-32-45-65-95

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

MATERIALS NKV 10-15-20

N.	PARTS	MATERIALS *
1	EXTERNAL PUMP BODY	CATAPHORESIS TREATED CAST IRON
	INTERNAL PUMP BODY*	AISI 304 STAINLESS STEEL
3	SUPPORT	CATAPHORESIS TREATED CAST IRON
4	IMPELLER*	AISI 304 STAINLESS STEEL
6	DIFFUSER*	"ULTEM" TECHNOPOLYMER
7A	PUMP SHAFT*	AISI 431 STAINLESS STEEL
16	MECHANICAL SEAL*	SiC/GRAPHITE/EPDM CARTRIDGE
69	OUTER LINER	AISI 304 STAINLESS STEEL

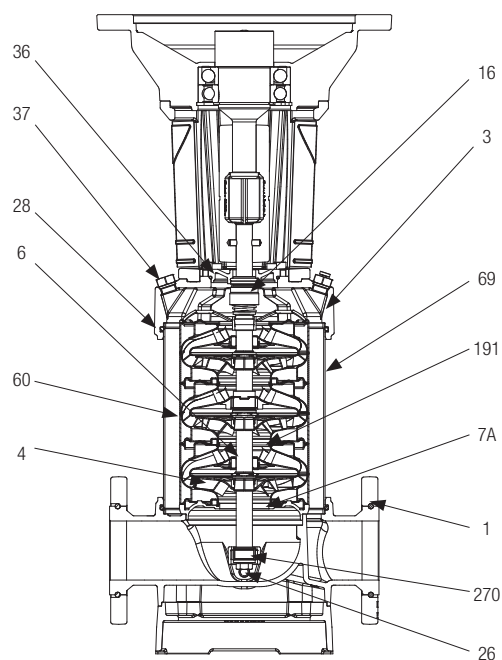
* In contact with the liquid



MATERIALS NKV 32-45-65-95

N.	PARTS	MATERIALS *
1	PUMP BODY	CATAPHORESIS TREATED CAST IRON
3	FLANGE	CATAPHORESIS TREATED CAST IRON
4	IMPELLER	AISI 304 STAINLESS STEEL
6	PUMP BODY AND DIFFUSER	AISI 304 STAINLESS STEEL
7A	PUMP SHAFT	AISI 431 STAINLESS STEEL
16	MECHANICAL SEAL	SiC, GRAPHITE, EPDM
26	DISCHARGE CAP	AISI 304 STAINLESS STEEL
28	O-RING	EPDM
36	SEAL RING	AISI 316 STAINLESS STEEL
37	FILLING CAP	AISI 304 STAINLESS STEEL
60	INTERMEDIATE BEARING BUSHING	GRAPHITE
69	OUTER LINER	AISI 304 STAINLESS STEEL
191	FLOATING ADJUSTMENT RING	PTFE
270	GUIDE BUSHING	TUNGSTEN CARBIDE

* In contact with the liquid



NKVE 10-15-20-32-45-65-95

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

SELECTION TABLE - NKVE 10

MODEL	Q=m ³ /h	0	4	8	10	12
	Q=l/min	0	66	132	167	200
NKVE 10/2 M MCE11/P	H (m)	20,2	20	18,3	15,8	12,5
NKVE 10/3 M MCE11/P		30,3	31	27,5	23,6	18,8
NKVE 10/4 M MCE11/P		40,4	41	36,7	31,5	25,1
NKVE 10/5 M MCE15/P		50,5	51	45,8	39,4	31,3
NKVE 10/6 M MCE15/P		60,5	61	55,0	47,3	37,6
NKVE 10/7 T MCE30/P		70,6	72	64,2	55,1	43,8
NKVE 10/8 T MCE30/P		80,7	82	73,3	63,0	50,1
NKVE 10/9 T MCE30/P		90,8	92	82,5	70,9	56,4
NKVE 10/10 T MCE30/P		100,9	102	91,7	78,8	62,6
NKVE 10/12 T MCE55/P		121,1	123	110,0	94,5	75,2
NKVE 10/14 T MCE55/P		141,3	143	128,3	110,3	87,7
NKVE 10/16 T MCE55/P		161,5	164	146,7	126,0	100,2
NKVE 10/18 T MCE55/P		181,6	184	165,0	141,8	112,7
NKVE 10/20 T MCE55/P		201,8	205	183,3	157,5	125,3
NKVE 10/22 T MCE110/P		222	225	202	173,3	137,8

SELECTION TABLE - NKVE 15

MODEL	Q=m ³ /h	0	4	8	10	12	14	16	18	20	22	24
	Q=l/min	0	66	132	167	200	233	264	300	334	367	400
NKVE 15/2 M MCE15/P	H (m)	27,2	26,7	26	26,1	25,5	24,5	23,2	21,6	19,8	17,4	14,6
NKVE 15/3 T MCE30/P		40,8	40,0	40	39,1	38,3	36,8	34,8	32,5	29,7	26,1	21,9
NKVE 15/4 T MCE30/P		54,4	53,4	53	52,1	51,0	49,0	46,4	43,3	39,6	34,8	29,2
NKVE 15/5 T MCE55/P		68,0	66,7	66	65,2	63,8	61,3	58,1	54,1	49,5	43,5	36,5
NKVE 15/6 T MCE55/P		81,6	80,1	79	78,2	76,5	73,6	69,7	64,9	59,4	52,2	43,8
NKVE 15/7 T MCE55/P		95,2	93,4	92	91,2	89,3	85,8	81,3	75,8	69,3	60,9	51,1
NKVE 15/8 T MCE55/P		108,8	106,8	106	104,3	102,0	98,1	92,9	86,6	79,2	69,6	58,4
NKVE 15/9 T MCE55/P		122,4	120,1	119	117,3	114,8	110,3	104,5	97,4	89,1	78,4	65,7
NKVE 15/10 T MCE110/P		136,0	133,5	132	130,4	127,5	122,6	116,1	108,2	99,0	87,1	73,0
NKVE 15/12 T MCE110/P		163,2	160,2	158	156,4	153,0	147,1	139,3	129,9	118,8	104,5	87,6
NKVE 15/14 T MCE110/P		190,4	186,9	185	182,5	178,5	171,6	162,6	151,5	138,6	121,9	102,2
NKVE 15/16 T MCE110/P		217,6	213,6	211	208,6	204,0	196,1	185,8	173,2	158,4	139,3	116,8
NKVE 15/17 T MCE150/P		231,2	226,9	225	221,6	216,7	208,4	197,4	184	168,3	148	124,1

NKVE 10-15-20-32-45-65-95

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

SELECTION TABLE - NKVE 20

MODEL	Q=m ³ /h	0	4	8	10	12	14	16	18	20	22	24	26	29
	Q=l/min	0	66	132	167	200	233	264	300	334	367	400	433	483
NKVE 20/2 M MCE15/P	H (m)	29,3	28,8	28,8	28,6	28	27,6	26,9	25,9	24,6	22,9	21,2	19,1	15,8
NKVE 20/3 T MCE30/P		43,9	43,2	43,1	42,9	42	41,5	40,4	38,8	36,9	34,4	31,8	28,7	23,6
NKVE 20/4 T MCE55/P		58,6	57,6	57,5	57,2	56	55,3	53,8	51,8	49,2	45,9	42,4	38,2	31,5
NKVE 20/5 T MCE55/P		73,2	71,9	71,9	71,5	71	69,1	67,3	64,7	61,5	57,4	52,9	47,8	39,4
NKVE 20/6 T MCE55/P		87,9	86,3	86,3	85,8	85	82,9	80,7	77,7	73,8	68,8	63,5	57,4	47,3
NKVE 20/7 T MCE55/P		102,5	100,7	100,6	100,1	99	96,8	94,2	90,6	86,1	80,3	74,1	66,9	55,2
NKVE 20/8 T MCE110/P		117,2	115,1	115,0	114,4	113	110,6	107,6	103,6	98,4	91,8	84,7	76,5	63,1
NKVE 20/9 T MCE110/P		131,8	129,5	129,4	128,8	127	124,4	121,1	116,5	110,8	103,2	95,3	86,0	70,9
NKVE 20/10 T MCE110/P		146,5	143,9	143,8	143,1	141	138,2	134,5	129,5	123,1	114,7	105,9	95,6	78,8
NKVE 20/12 T MCE110/P		175,8	172,7	172,5	171,7	169	165,9	161,4	155,4	147,7	137,6	127,1	114,7	94,6
NKVE 20/14 T MCE150/P		205,1	201,4	201,3	200,3	198	193,5	188,3	181,3	172,3	160,6	148,2	133,8	110,4

SELECTION TABLE - NKVE 32

MODEL	Q=m ³ /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	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		60	54,5	53	50,5	48	44	38	31,5	23,5
NKVE 32/3 T MCE 110/P		73	65	63,5	61	59	55	50	43,5	35,5
NKVE 32/4 T MCE 110/P		98	88	86	83	80,5	75	69	60	49,5
NKVE 32/5-2 T MCE 110/P		109,5	99,5	97	93	89,5	83	74	63	49,5
NKVE 32/5 T MCE 150/P		122,5	109,5	107	103,5	100	93,5	85,5	75	61,5
NKVE 32/6 T MCE 150/P		146,5	131	128	123,5	119,5	111,5	102	89	73
NKVE 32/7-2 T MCE 150/P		158	142,5	139	133,5	128,5	119	107	91,5	72,5

SELECTION TABLE - NKVE 45

MODEL	Q=m ³ /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	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		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		73,5	72	71	70	69	67	65,5	63	60	52,5	47	41	34
NKVE 45/4 T MCE 150/P		97,5	96	94,5	93	91,5	89	86,5	84	79,5	69,5	62	54,5	45

NKVE 10-15-20-32-45-65-95

VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER

SELECTION TABLE - NKVE 65

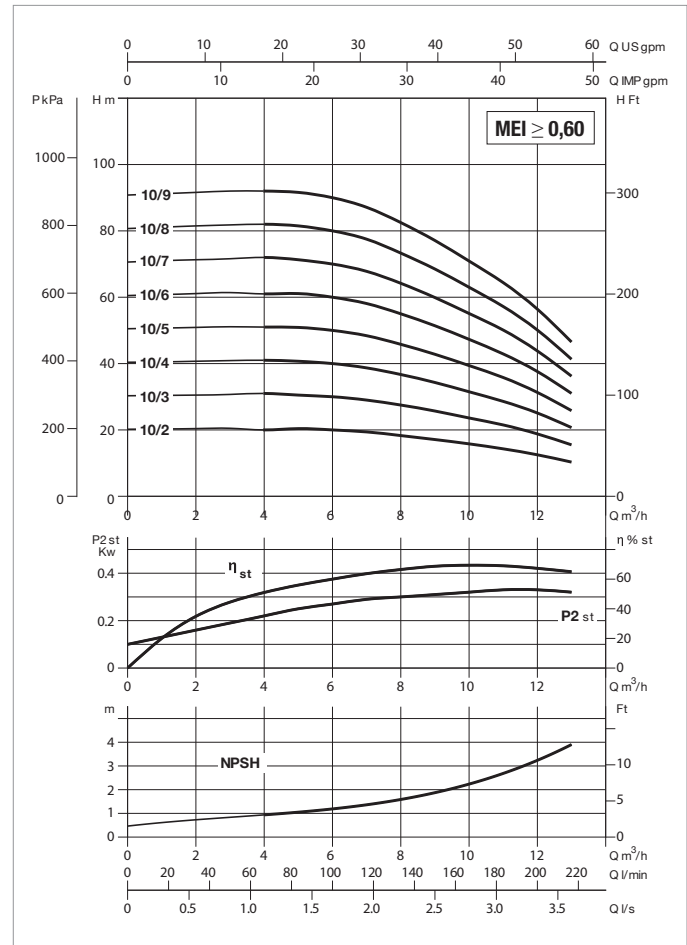
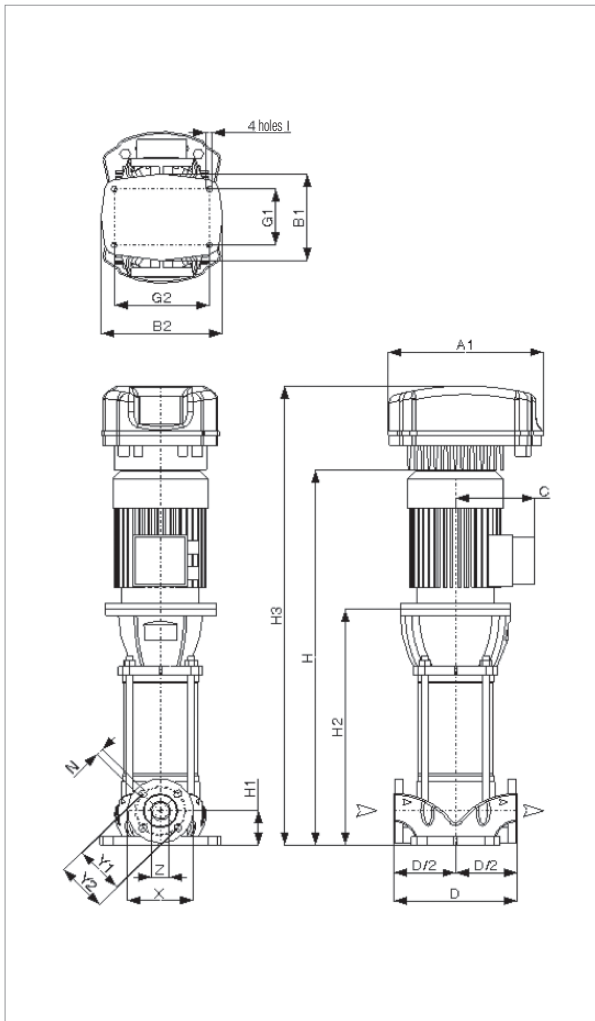
MODEL	Q=m ³ /h	0	30	36	42	45	54	60	72	78	85
	Q=l/min	0	500	600	700	750	900	1000	1200	1300	1417
NKVE 65/2-2 T MCE 110/P	H (m)	39	37,5	36,5	35,5	35	33	31	25	22	17,5
NKVE 65/2 T MCE 110/P		56,5	51	49,5	48,5	48	46	45	41	38,5	34,5
NKVE 65/3-2 T MCE 150/P		67,5	63,5	62	60,5	59,5	56,5	54	46,5	42	35,5

SELECTION TABLE - NKVE 95

MODEL	Q=m ³ /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/P	H (m)	44,5	43	42	41	38,5	36,5	34	28,5	21,5	15
NKVE 95/2 T MCE 150/P		62	55,5	53	51,5	49	47,5	45	41	35	28,5

NKVE 10 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 13 m³/h



See hydraulic efficiency details on page 241.

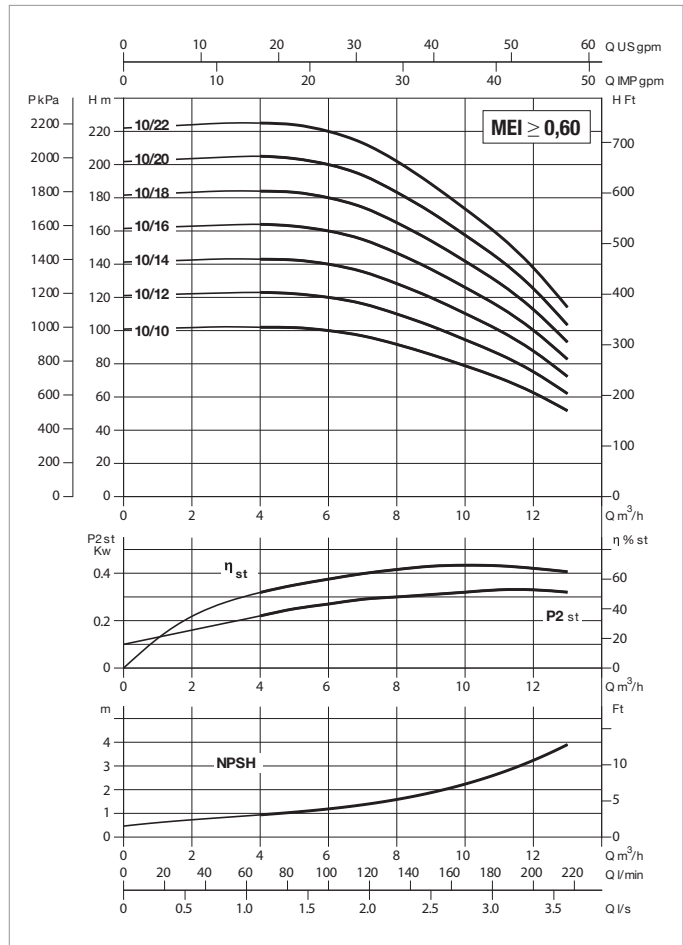
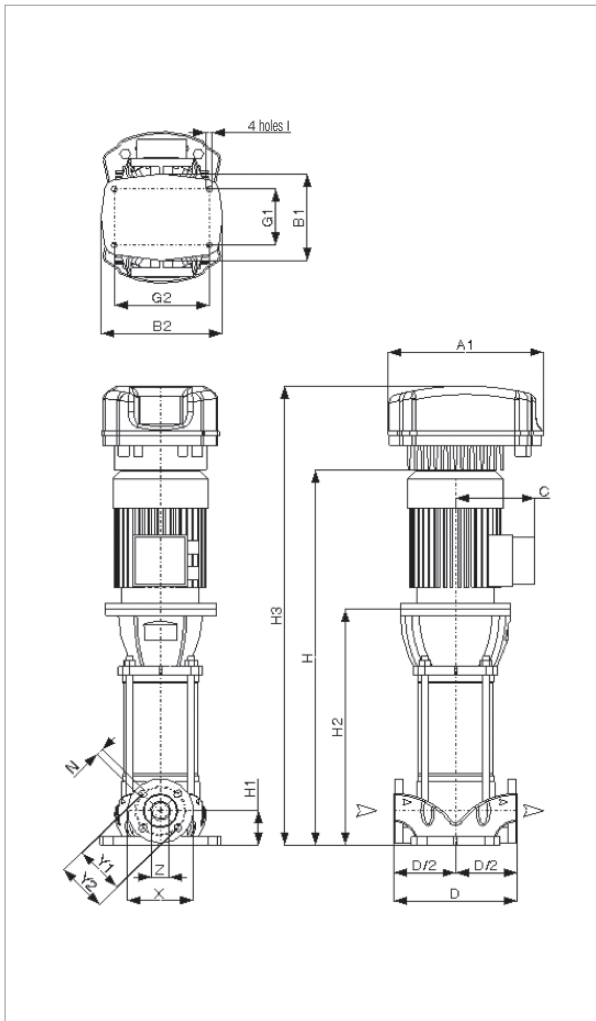
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 10/2 M MCE11/P	1 x 230 V ~	0,8	1	7,17	2896
NKVE 10/3 M MCE11/P	1 x 230 V ~	1,1	2	9,92	2888
NKVE 10/4 M MCE11/P	1 x 230 V ~	1,5	2	12,74	2904
NKVE 10/5 M MCE15/P	1 x 230 V ~	2,2	3	15,30	2911
NKVE 10/6 M MCE15/P	1 x 230 V ~	2,2	3	17,51	2890
NKVE 10/7 T MCE30/P	3 x 400 V ~	3,0	4	6,06	2922
NKVE 10/8 T MCE30/P	3 x 400 V ~	3,0	4	6,54	2906
NKVE 10/9 T MCE30/P	3 x 400 V ~	3,0	4	7,13	2886

MODEL	A1	B1	B2	G1	G2	ØI	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMEN- SIONS			VOL. m ³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 10/2 M MCE11/P	262	201	274	130	215	13,5	140	280	140	623,2	80	368,2	823,2	150	110	115	40	17,5	800	400	400	0,128	47,8
NKVE 10/3 M MCE11/P	262	201	274	130	215	13,5	140	280	140	656,2	80	401,2	856,2	150	110	115	40	17,5	960	400	370	0,142	49,3
NKVE 10/4 M MCE11/P	262	201	274	130	215	13,5	160	280	140	704,2	80	434,2	904,2	150	110	115	40	17,5	960	400	370	0,142	54,2
NKVE 10/5 M MCE15/P	262	201	274	130	215	13,5	160	280	140	762,2	80	467,2	962,2	150	110	115	40	17,5	1150	500	400	0,230	59,0
NKVE 10/6 M MCE15/P	262	201	274	130	215	13,5	160	280	140	795,2	80	500,2	995,2	150	110	115	40	17,5	1150	500	400	0,230	59,9
NKVE 10/7 T MCE30/P	352	201	274	130	215	13,5	180	280	140	875,2	80	550,2	1075,2	150	110	115	40	17,5	1150	500	400	0,230	73,3
NKVE 10/8 T MCE30/P	352	201	274	130	215	13,5	180	280	140	908,2	80	583,2	1108,2	150	110	115	40	17,5	1150	500	400	0,230	74,2
NKVE 10/9 T MCE30/P	352	201	274	130	215	13,5	180	280	140	941,2	80	616,2	1141,2	150	110	115	40	17,5	1360	500	530	0,360	75,1

NKVE 10 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 13 m³/h



See hydraulic efficiency details on page 241.

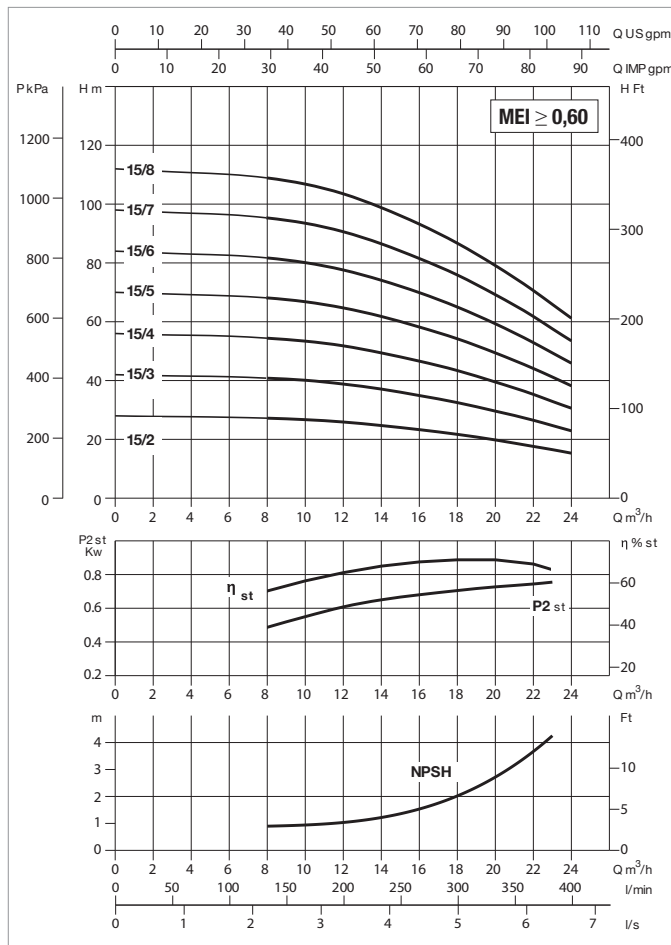
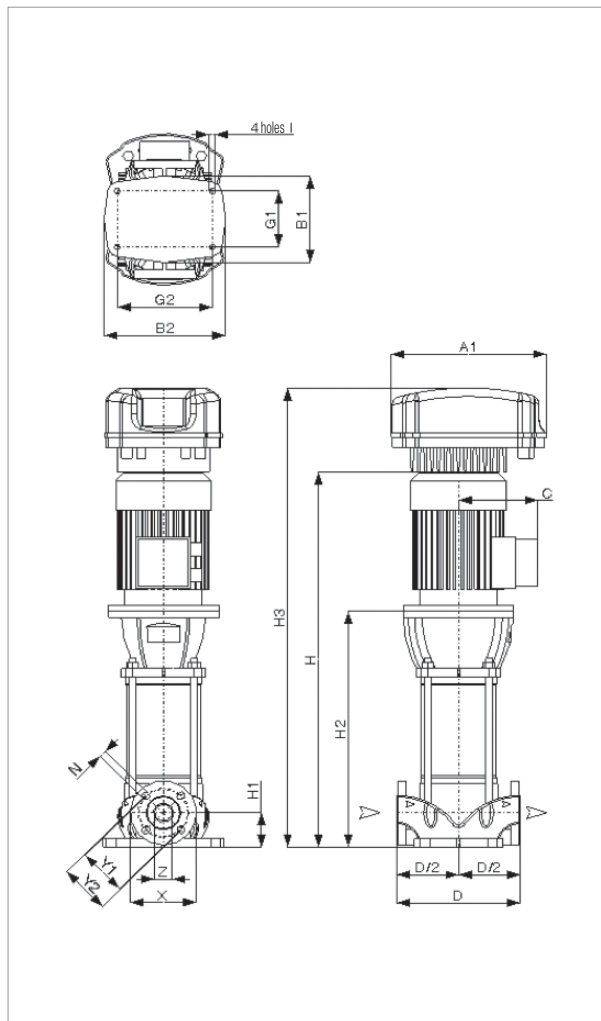
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 10/10 T MCE30/P	3 x 400 V ~	4,0	6	8,66	2929
NKVE 10/12 T MCE55/P	3 x 400 V ~	4,0	6	10,08	2911
NKVE 10/14 T MCE55/P	3 x 400 V ~	5,5	8	11,78	2923
NKVE 10/16 T MCE55/P	3 x 400 V ~	5,5	8	13,17	2909
NKVE 10/18 T MCE55/P	3 x 400 V ~	7,5	10	14,72	2922
NKVE 10/20 T MCE55/P	3 x 400 V ~	7,5	10	16,05	2912
NKVE 10/22 T MCE110/P	3 x 400 V ~	7,5	10	17,29	2902

MODEL	A1	B1	B2	G1	G2	ØI	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMENSIONS			VOL. m³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 10/10 T MCE30/P	352	201	274	130	215	13,5	190	280	140	989,2	80	649,2	1189,2	150	110	115	40	17,5	1360	500	530	0,360	84,9
NKVE 10/12 T MCE55/P	352	201	274	130	215	13,5	190	280	140	1055,2	80	715,2	1255,2	150	110	115	40	17,5	1360	500	530	0,360	86,5
NKVE 10/14 T MCE55/P	352	201	274	130	215	13,5	210	280	140	1250,6	80	860,6	1450,6	150	110	115	40	17,5	1650	500	580	0,479	115,1
NKVE 10/16 T MCE55/P	352	201	274	130	215	13,5	210	280	140	1316,6	80	926,6	1516,6	150	110	115	40	17,5	1650	500	580	0,479	116,8
NKVE 10/18 T MCE55/P	352	201	274	130	215	13,5	210	280	140	1382,6	80	992,6	1632,6	150	110	115	40	17,5	1850	500	580	0,537	129,6
NKVE 10/20 T MCE55/P	352	201	274	130	215	13,5	210	280	140	1448,6	80	1058,6	1698,6	150	110	115	40	17,5	1850	500	580	0,537	131,2
NKVE 10/22 T MCE110/P	425	201	341	130	215	13,5	210	280	140	1514,6	80	1124,6	1764,6	150	110	115	40	17,5	1850	500	580	0,537	132,9

NKVE 15 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 24 m³/h



See hydraulic efficiency details on page 241.

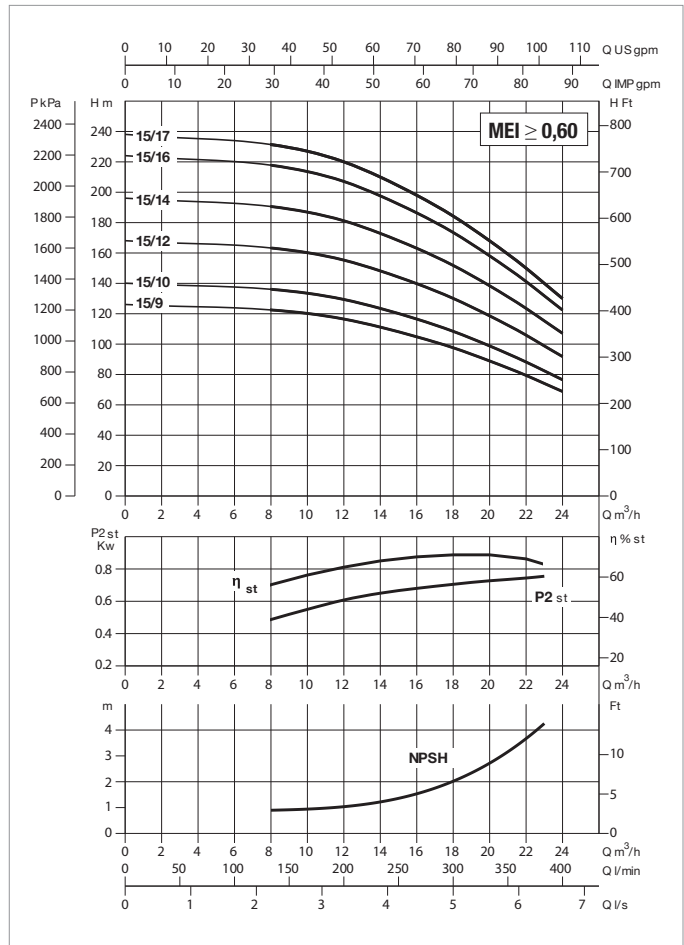
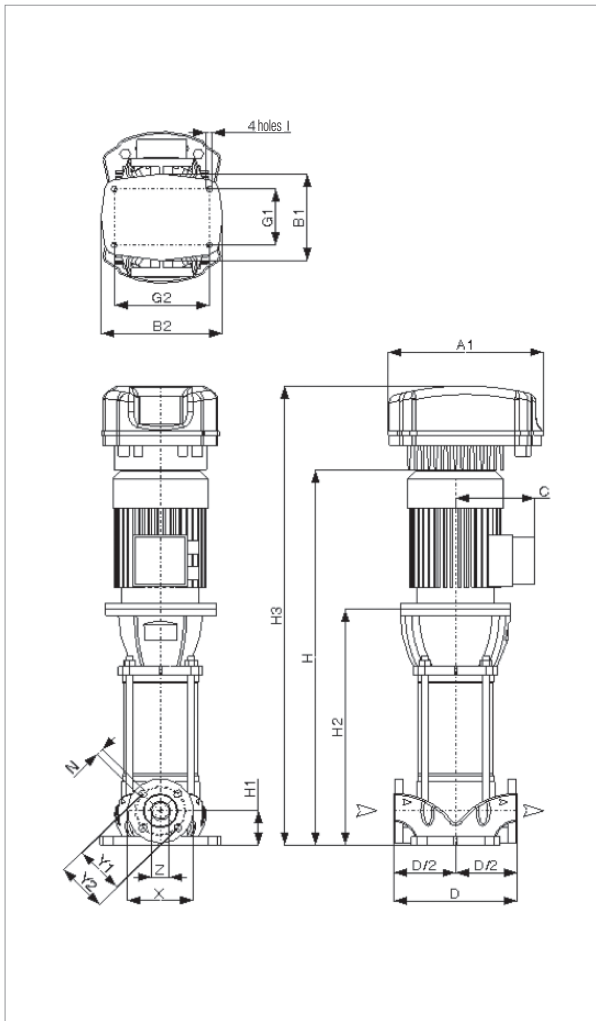
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 15/2 M MCE15/P	1 x 230 V ~	2,2	3	14,49	2919
NKVE 15/3 T MCE30/P	3 x 400 V ~	3,0	4	6,06	2922
NKVE 15/4 T MCE30/P	3 x 400 V ~	4,0	6	7,95	2938
NKVE 15/5 T MCE55/P	3 x 400 V ~	4,0	6	9,77	2915
NKVE 15/6 T MCE55/P	3 x 400 V ~	5,5	8	10,97	2932
NKVE 15/7 T MCE55/P	3 x 400 V ~	5,5	8	12,84	2912
NKVE 15/8 T MCE55/P	3 x 400 V ~	7,5	10	14,74	2922

MODEL	A1	B1	B2	G1	G2	Ø1	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMEN- SIONS			VOL. m³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 15/2 M MCE15/P	262	201	274	130	215	13,5	160	300	150	717,9	90	422,9	917,9	165	125	-	67	18	960	400	370	0,142	59,1
NKVE 15/3 T MCE30/P	352	201	274	130	215	13,5	180	300	150	814,4	90	489,4	1014,4	165	125	-	67	18	1150	500	400	0,230	72,5
NKVE 15/4 T MCE30/P	352	201	274	130	215	13,5	190	300	150	878,9	90	538,9	1078,9	165	125	-	67	18	1150	500	400	0,230	82,7
NKVE 15/5 T MCE55/P	352	201	274	130	215	13,5	190	300	150	928,4	90	588,4	1128,4	165	125	-	67	18	1360	500	530	0,360	84,0
NKVE 15/6 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1107,3	90	717,3	1307,3	165	125	-	67	18	1360	500	530	0,360	112,2
NKVE 15/7 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1156,8	90	766,8	1356,8	165	125	-	67	18	1650	500	580	0,479	113,4
NKVE 15/8 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1206,3	90	816,3	1456,3	165	125	-	67	18	1650	500	580	0,479	125,7

NKVE 15 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 24 m³/h



See hydraulic efficiency details on page 241.

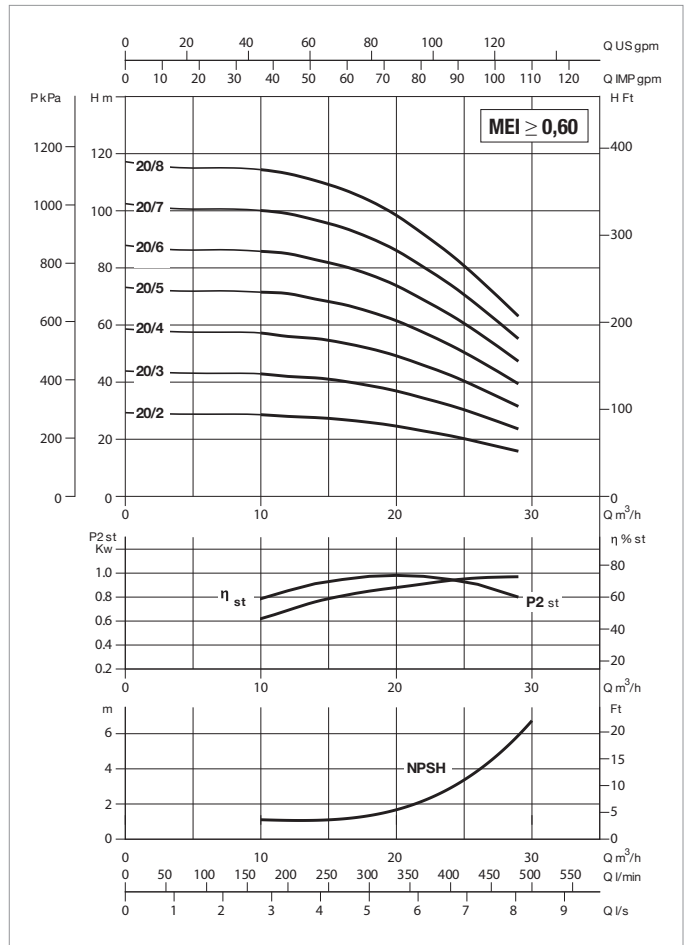
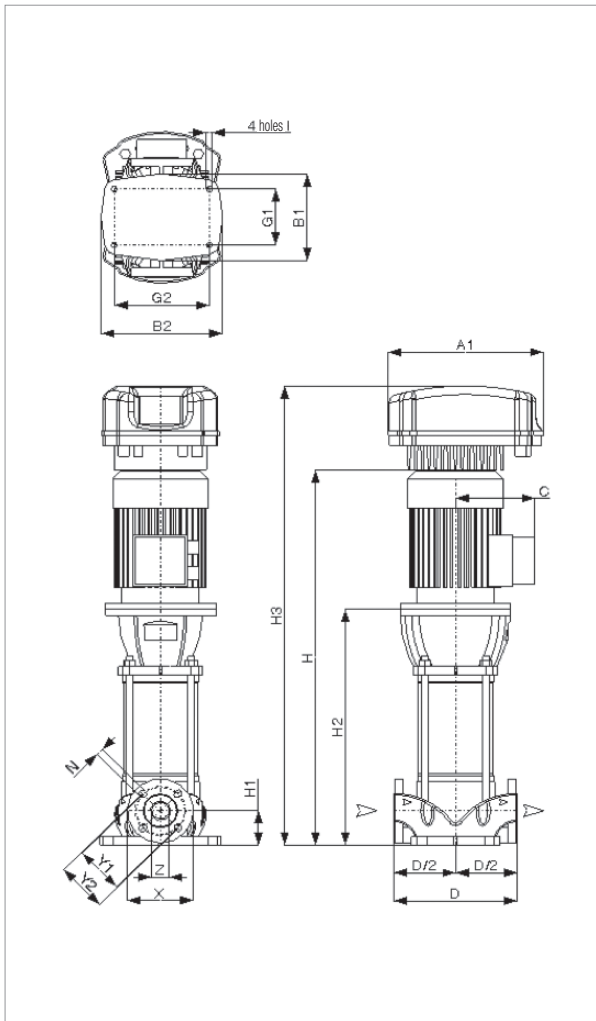
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 15/9 T MCE55/P	3 x 400 V ~	7,5	10	16,30	2910
NKVE 15/10 T MCE110/P	3 x 400 V ~	11,0	15	18,82	2952
NKVE 15/12 T MCE110/P	3 x 400 V ~	11,0	15	21,94	2941
NKVE 15/14 T MCE110/P	3 x 400 V ~	11,0	15	25,04	2931
NKVE 15/16 T MCE110/P	3 x 400 V ~	15,0	20	29,13	2953
NKVE 15/17 T MCE150/P	3 x 400 V ~	15,0	20	30,54	2949

MODEL	A1	B1	B2	G1	G2	ØI	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMENSIONS			VOL. m ³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 15/9 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1255,8	90	865,8	1505,8	165	125	-	67	18	1650	500	580	0,479	127,0
NKVE 15/10 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1449,5	90	944,5	1699,5	165	125	-	67	18	1850	500	580	0,537	183,2
NKVE 15/12 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1548,5	90	1043,5	1798,5	165	125	-	67	18	1850	500	580	0,537	185,7
NKVE 15/14 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1647,5	90	1142,5	1897,5	165	125	-	67	18	2050	500	580	0,595	188,2
NKVE 15/16 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1746,5	90	1241,5	1996,5	165	125	-	67	18	2050	500	580	0,595	198,7
NKVE 15/17 T MCE150/P	425	201	341	130	215	13,5	248	300	150	1796	90	1291	2046	165	125	-	67	18	2050	500	580	0,595	199,9

NKVE 20 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURIZATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 29 m³/h



See hydraulic efficiency details on page 241.

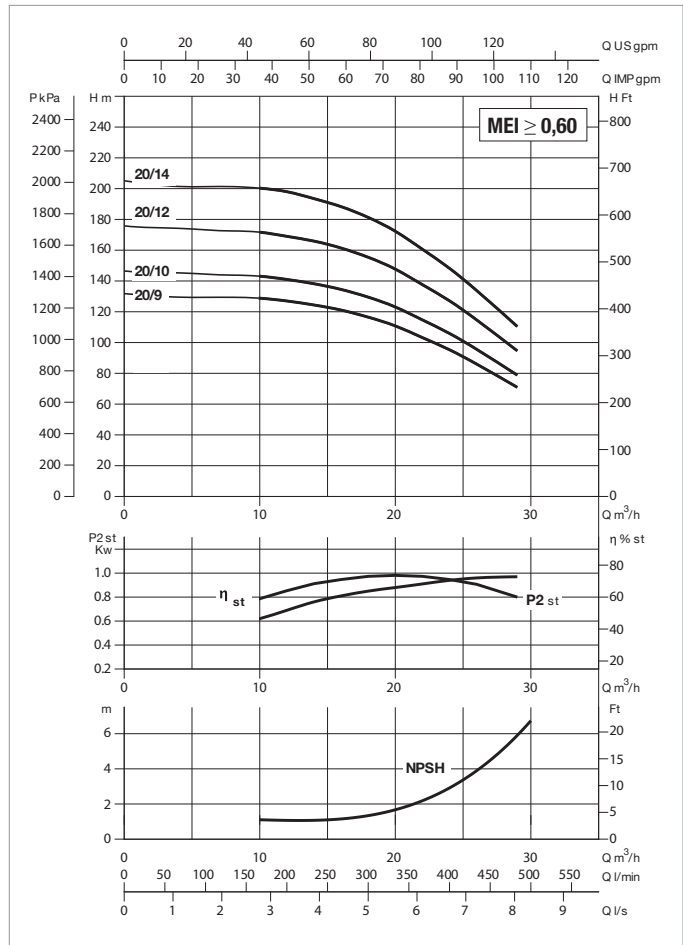
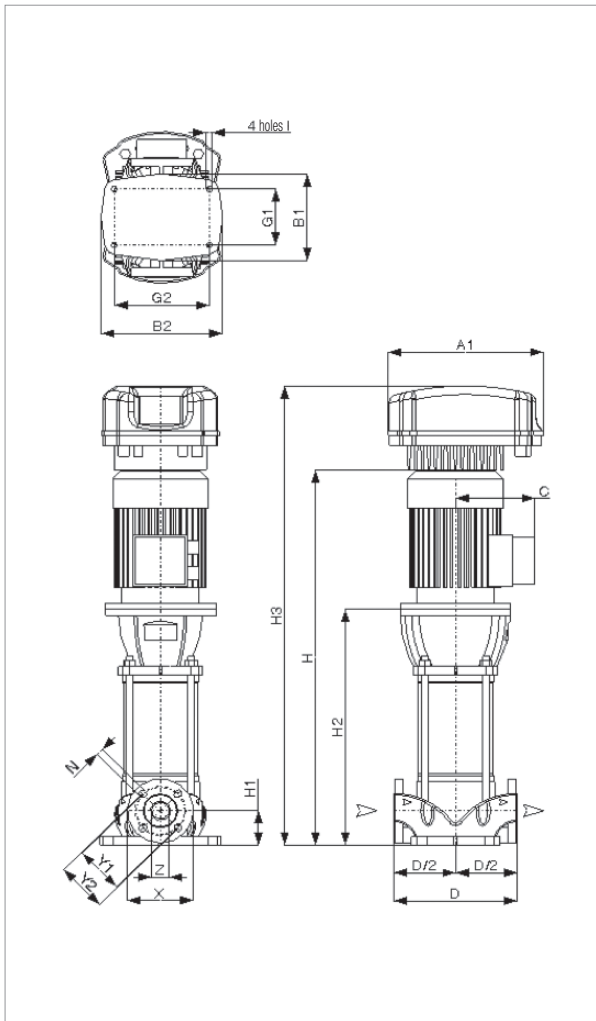
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 20/2 M MCE15/P	1 x 230 V ~	2,2	3	17,58	2889
NKVE 20/3 T MCE30/P	3 x 400 V ~	4,0	6	7,81	2940
NKVE 20/4 T MCE55/P	3 x 400 V ~	5,5	8	10,26	2939
NKVE 20/5 T MCE55/P	3 x 400 V ~	5,5	8	11,68	2924
NKVE 20/6 T MCE55/P	3 x 400 V ~	7,5	10	14,38	2925
NKVE 20/7 T MCE55/P	3 x 400 V ~	7,5	10	16,07	2911
NKVE 20/8 T MCE110/P	3 x 400 V ~	11,0	15	19,13	2951

MODEL	A1	B1	B2	G1	G2	Øl	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMEN- SIONS			VOL. m ³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 20/2 M MCE15/P	262	201	274	130	215	13,5	160	300	150	717,9	90	422,9	917,9	165	125	-	67	18	960	400	370	0,142	49,4
NKVE 20/3 T MCE30/P	352	201	274	130	215	13,5	190	300	150	829,4	90	489,4	1029,4	165	125	-	67	18	1150	500	400	0,230	67,8
NKVE 20/4 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1008,3	90	618,3	1208,3	165	125	-	67	18	1360	500	530	0,360	81,8
NKVE 20/5 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1057,8	90	667,8	1257,8	165	125	-	67	18	1360	500	530	0,360	83,8
NKVE 20/6 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1107,3	90	717,3	1357,3	165	125	-	67	18	1650	500	580	0,479	95,9
NKVE 20/7 T MCE55/P	352	201	274	130	215	13,5	210	300	150	1156,8	90	766,8	1406,8	165	125	-	67	18	1650	500	580	0,479	96,9
NKVE 20/8 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1350,5	90	845,5	1600,5	165	125	-	67	18	1650	500	580	0,479	128,9

NKVE 20 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 29 m³/h



See hydraulic efficiency details on page 241.

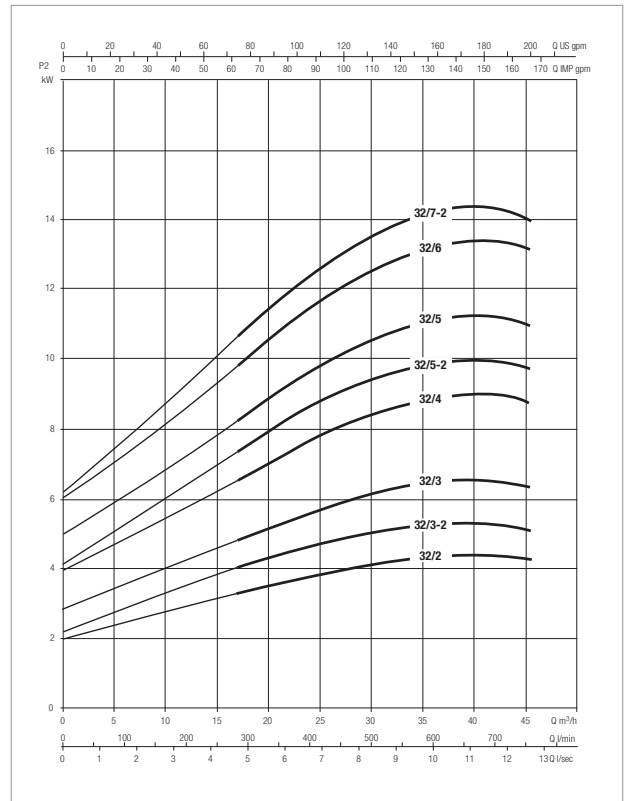
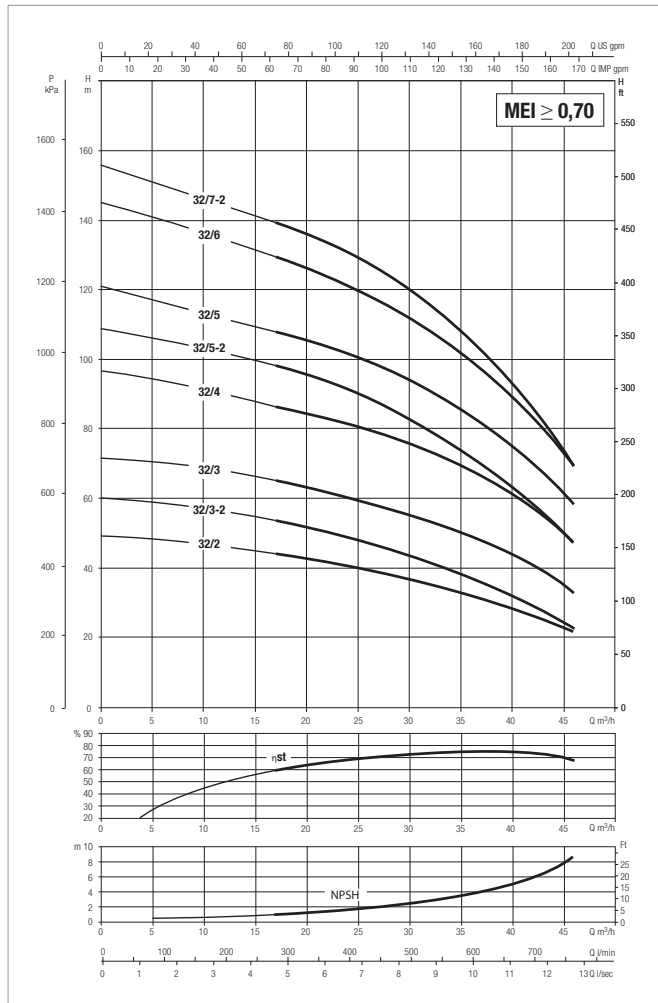
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 20/9 T MCE110/P	3 x 400 V ~	11,0	15	20,74	2945
NKVE 20/10 T MCE110/P	3 x 400 V ~	11,0	15	23,26	2937
NKVE 20/12 T MCE110/P	3 x 400 V ~	15,0	20	27,87	2956
NKVE 20/14 T MCE150/P	3 x 400 V ~	15,0	20	31,97	2945

MODEL	A1	B1	B2	G1	G2	ØI	C	D	D/2	H	H1	H2	H3	DNA=DNM (DN40)					PACKING DIMEN- SIONS			VOL. m ³	WEIGHT kg
														X	Y1	Y2	Z	N	L/A	L/B	H		
NKVE 20/9 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1400	90	895	1650	165	125	-	67	18	1850	500	580	0,537	129,9
NKVE 20/10 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1449,5	90	944,5	1699,5	165	125	-	67	18	1850	500	580	0,537	140,9
NKVE 20/12 T MCE110/P	425	201	341	130	215	13,5	248	300	150	1548,5	90	1043,5	1798,5	165	125	-	67	18	1850	500	580	0,537	153,9
NKVE 20/14 T MCE150/P	425	201	341	130	215	13,5	248	300	150	1647,5	90	1142,5	1897,5	165	125	-	67	18	2050	500	580	0,595	155,9

NKVE 32 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 46 m³/h



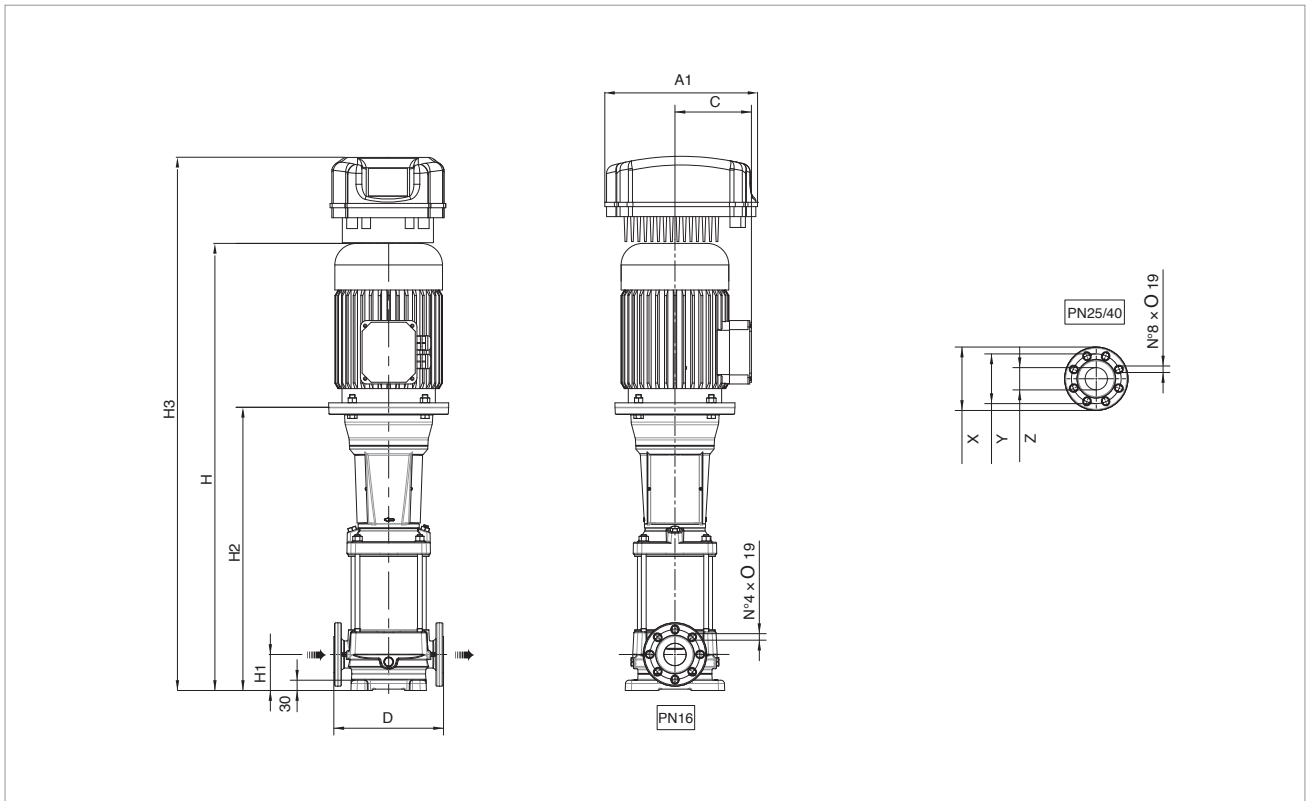
See hydraulic efficiency details on page 241.

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	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 32/2 T MCE 55/P	3 x 400 V ~	5,5	7,5	13,1	2889
NKVE 32/3-2 T MCE 55/P	3 x 400 V ~	5,5	7,5	13,1	2940
NKVE 32/3 T MCE 110/P	3 x 400 V ~	7,5	10	17,6	2939
NKVE 32/4 T MCE 110/P	3 x 400 V ~	11	15	25,5	2924
NKVE 32/5-2 T MCE 110/P	3 x 400 V ~	11	15	25,5	2925
NKVE 32/5 T MCE 150/P	3 x 400 V ~	15	20	34	2911
NKVE 32/6 T MCE 150/P	3 x 400 V ~	15	20	34	2951
NKVE 32/7-2 T MCE 150/P	3 x 400 V ~	15	20	34	2945

NKVE 32 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

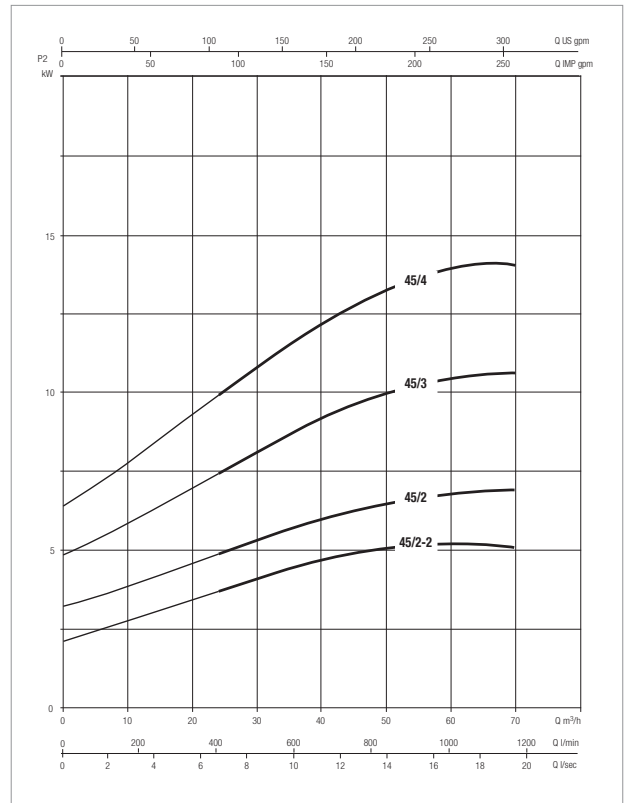
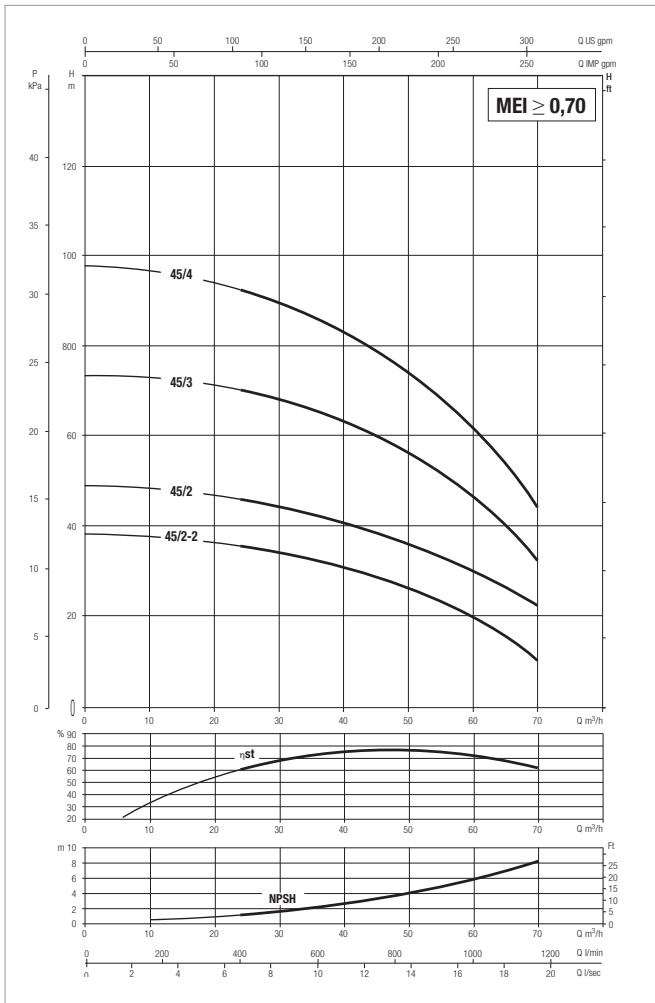
Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 46 m³/h



MODEL	N. OF STAGES	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 65)			PACKING DIMENSIONS			VOL. m ³	WEIGHT kg
									X	Y	Z	L/A	L/B	H		
NKVE 32/2 T MCE 55/P	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	3	352	161	320	1196	105	806	1392	185	145	65	1820	500	630	0,58	152
NKVE 32/3 T MCE 110/P	3	425	161	320	1196	105	806	1440	185	145	65	1820	500	630	0,58	163
NKVE 32/4 T MCE 110/P	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	5	425	198	320	1495	105	990	1739	185	145	65	1820	500	630	0,58	222
NKVE 32/5 T MCE 150/P	5	425	198	320	1495	105	990	1739	185	145	65	1820	500	630	0,58	236
NKVE 32/6 T MCE 150/P	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	7	425	198	320	1659	105	1154	1903	185	145	65	2520	500	750	0,95	244

NKVE 45 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 70 m³/h



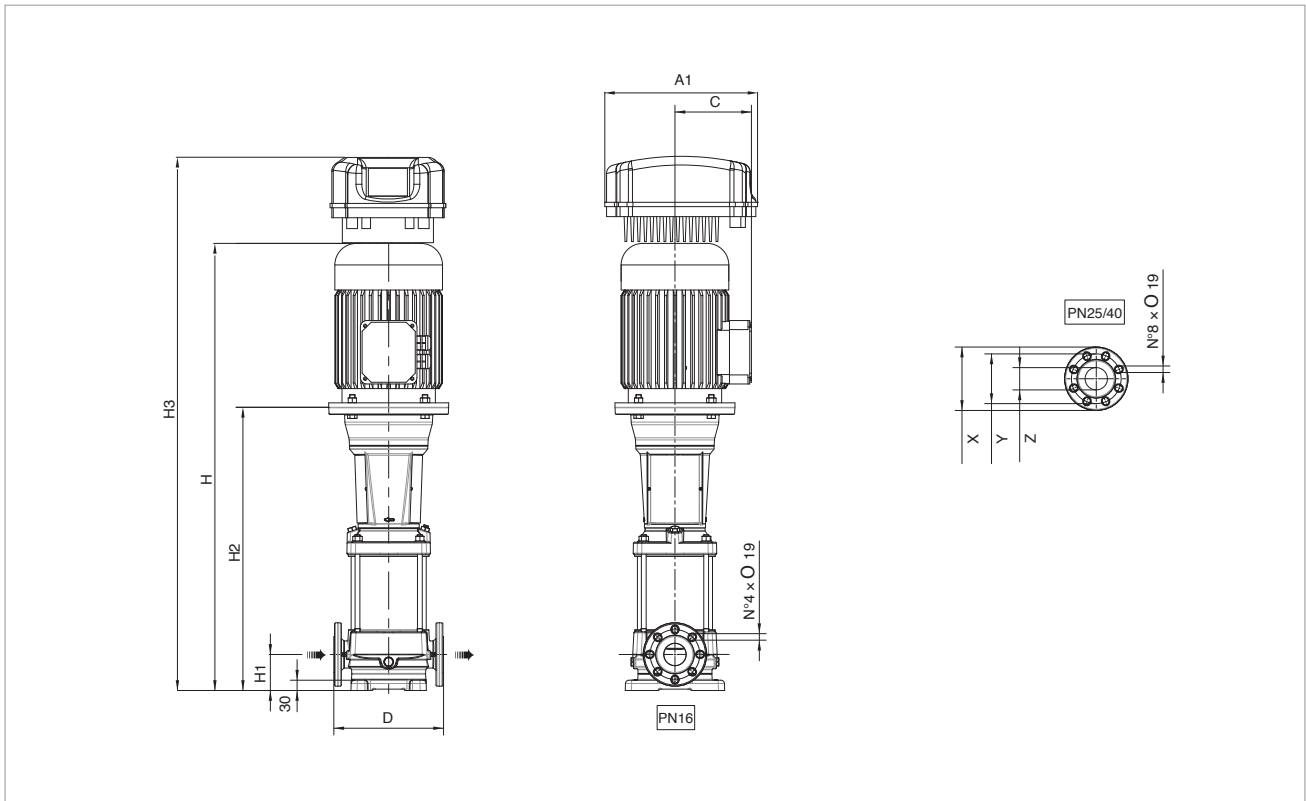
See hydraulic efficiency details on page 241.

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	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 45/2-2 T MCE 55/P	3 x 400 V ~	5,5	7,5	13,1	2980
NKVE 45/2 T MCE 110/P	3 x 400 V ~	7,5	10	17,6	2980
NKVE 45/3 T MCE 110/P	3 x 400 V ~	11	15	25,5	2980
NKVE 45/4 T MCE 150/P	3 x 400 V ~	15	20	34	2980

NKVE 45 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

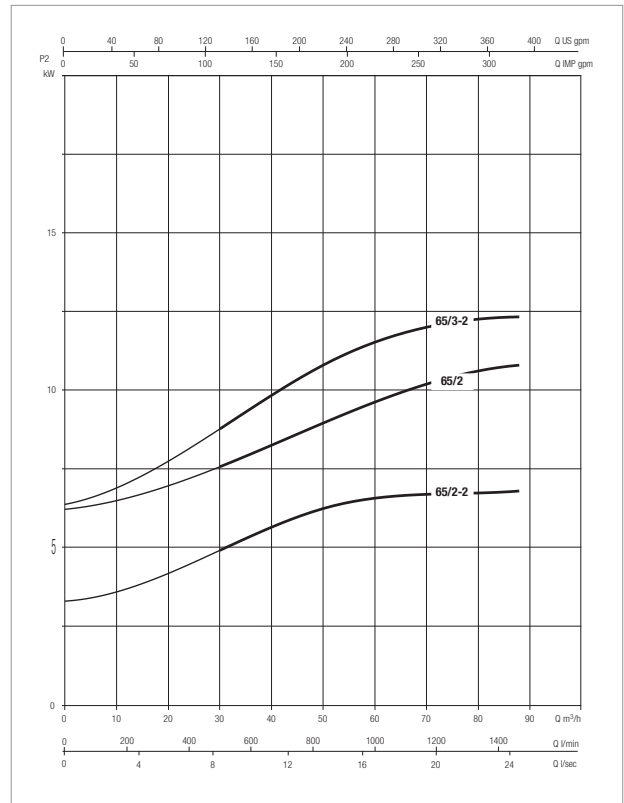
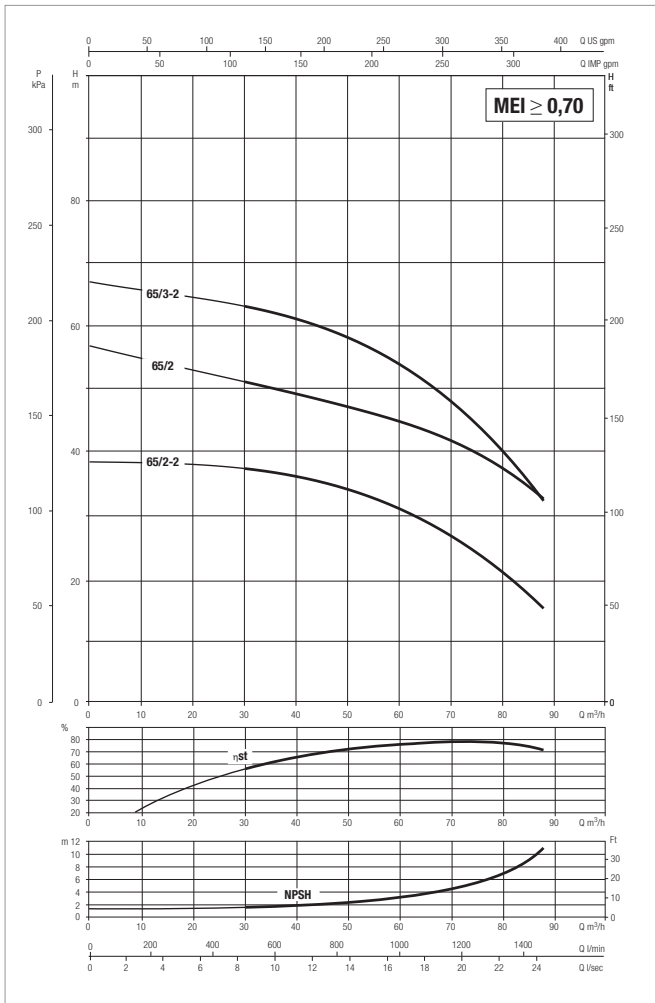
Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 70 m³/h



MODEL	N. OF STAGES	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 65)			PACKING DIMENSIONS			VOL. m ³	WEIGHT kg
									X	Y	Z	L/A	L/B	H		
NKVE 45/2-2 T MCE 55/P	2	352	161	365	1149	140	759	1345	200	160	80	1820	500	630	0,58	154
NKVE 45/2 T MCE 110/P	2	425	161	365	1149	140	759	1393	200	160	80	1820	500	630	0,58	165
NKVE 45/3 T MCE 110/P	3	425	198	365	1366	140	861	1610	200	160	80	1820	500	630	0,58	220
NKVE 45/4 T MCE 150/P	4	425	198	365	1448	140	943	1692	200	160	80	1820	500	630	0,58	238

NKVE 65 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 88 m³/h



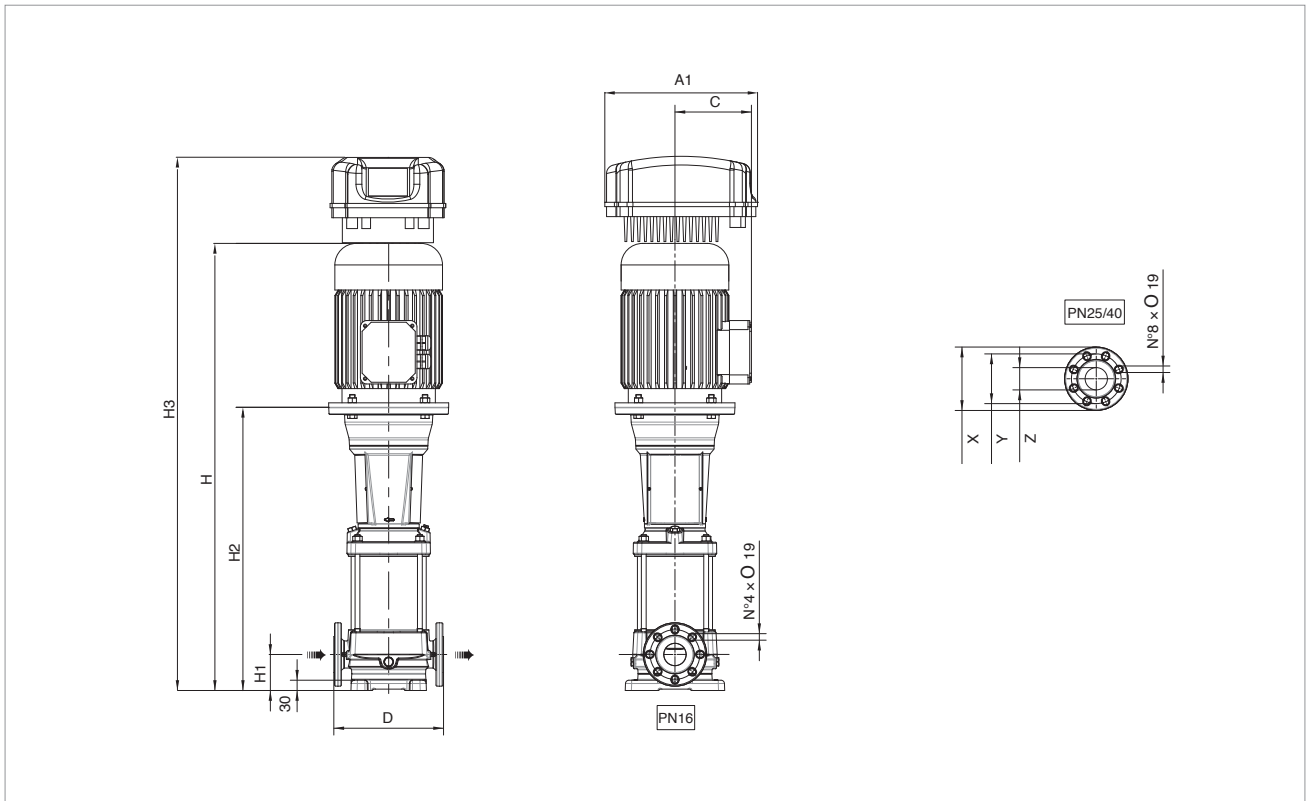
See hydraulic efficiency details on page 241.

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	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKVE 65/2-2 T MCE 110/P	3 x 400 V ~	7,5	10	17,6	2900
NKVE 65/2 T MCE 110/P	3 x 400 V ~	11	15	25,5	2930
NKVE 65/3-2 T MCE 150/P	3 x 400 V ~	15	20	34	2940

NKVE 65 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

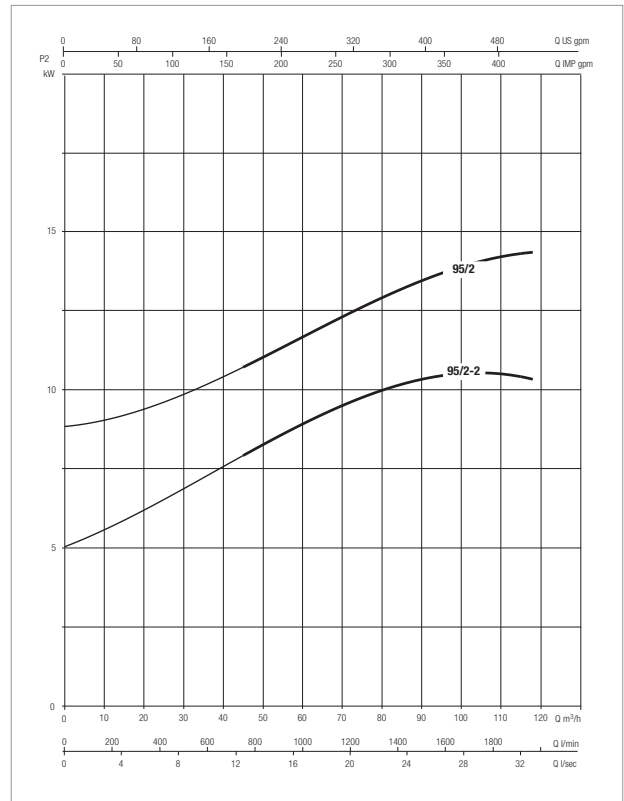
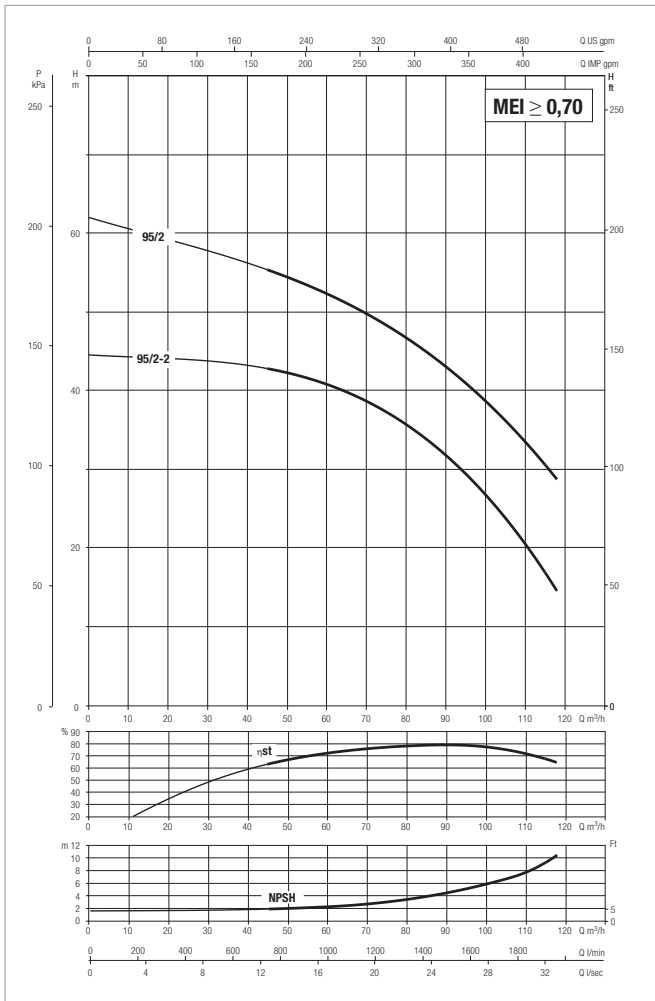
Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 88 m³/h



MODEL	N. OF STAGES	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 100)			PACKING DIMENSIONS			VOL. m ³	WEIGHT kg
									X	Y	Z	L/A	L/B	H		
NKVE 65/2-2 T MCE 110/P	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	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	3	425	198	365	1446,3	140	941,3	1711,3	230	180	100	1820	500	630	0,58	239

NKVE 95 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 118 m³/h



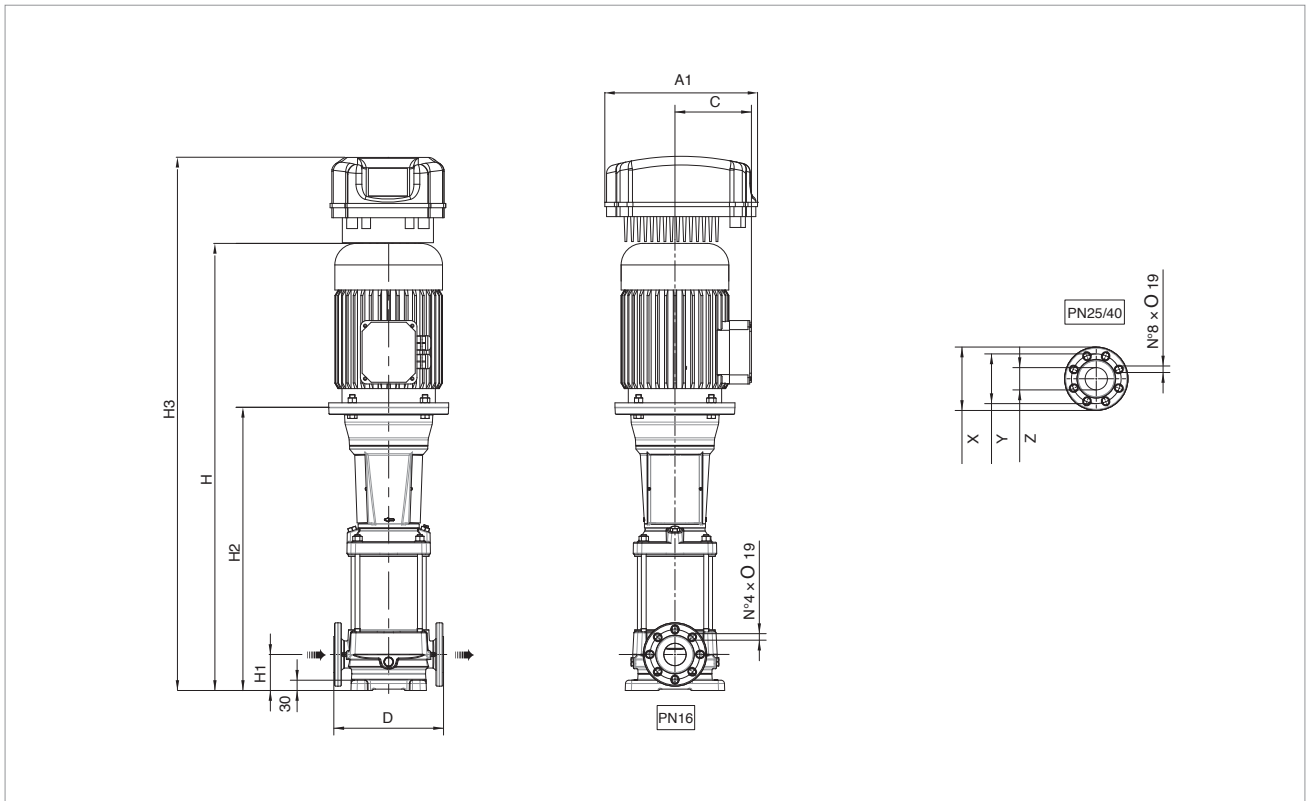
See hydraulic efficiency details on page 241.

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	POWER INPUT 50 Hz	P2 NOMINAL		In A	r.p.m.
		kW	HP		
NKV 95/2-2 T	3 x 400 V ~	11	15	25,5	2930
NKV 95/2 T	3 x 400 V ~	15	20	34	2940

NKVE 95 - VERTICAL AXIS MULTISTAGE CENTRIFUGAL PUMPS WITH MCE/P INVERTER FOR PRESSURISATION SYSTEMS

Pumped liquid temperature range: from 15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 118 m³/h



MODEL	N. OF STAGES	A1	C	D	H	H1	H2	H3	DNA = DNM (DN 100)			PACKING DIMENSIONS			VOL. m ³	WEIGHT kg
									X	Y	Z	L/A	L/B	H		
NKV 95/2-2 T	2	425	198	380	1354,2	140	849,2	1619,2	230	180	100	1820	500	630	0,58	221
NKV 95/2 T	3	425	198	380	1354,2	140	849,2	1619,2	230	180	100	1820	500	630	0,58	235