

Hygienic centrifugal pump

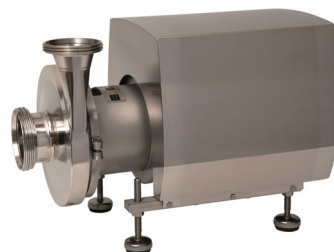
Flooded suction and self-priming



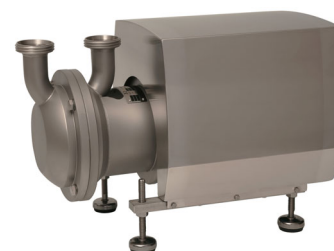
Type NHK and SHK

TECHNICAL DATA

Output:	max. 200 m ³ /h
Head:	max. 85 m
Speed:	max. 3000 rpm or 1500 rpm
Material:	Stainless steel
Temperature:	max. 130 °C or 90 °C
Casing pressure:	PN 16
Shaft seal:	single or double mechanical seal
Connections:	threaded connection to DIN 11851 or flanged
Direction of rotation:	clockwise, viewed from drive end



flooded suction, type NHK



self-priming, type SHK

APPLICATION

Hygienic centrifugal pumps of the NHK and SHK range are used within the food and beverage industry such as breweries and dairies. Applications areas for these pumps include:

- Brewing (Mash, wort, beer)
- Dairying (milk, cream, fats)
- Filtration (Filtration, separation, mixing)
- Cleaning (Up & Downstream CIP)
- Filling (Beer, soft drinks, juices)
- Sterile and pure water

Design

The single stage NHK is a hygienic volute-casing pump with open impeller (for optimised pumping of shear sensitive media) rotating on a robust shaft. The thick-walled stainless steel casing is fixed by a sturdy quick-release clamp ring with sanitary grade O-ring sealing. All process-wetted parts are constructed from electro-polished AISI 316L stainless steel. Importantly, the volute casing is rolled steel whilst the casing cover is forged in order to give a heavy-duty construction. All other parts are made of AISI 304.

The SHK range is a single stage, self-priming, hygienic side channel pump. All process-wetted parts are made of AISI 316L. All other parts are made of AISI 304.

The NHK and SHK range are in accordance with food-grade standards 3A1 with a surface roughness $R_a \leq 3,2 \mu\text{m}$ (other standards are optional). The Modular and compact design, the use of standard motors and several options guarantee a reliable performance within the food and beverage industry.

CONSTRUCTION

Casing pressure:

NHK 25:	max. 10 bar up to +130 °C
NHK from 50:	max. 16 bar up to +130 °C
SHK:	max. 10 bar up to + 90 °C

Flange location:

Axial suction, radially vertical discharge.

Connections:

Threaded connections to DIN 11851 or flanged.

Hydraulic:

Design code A for $n = 1450 \text{ 1/min}$

Design code B for $n = 2900 \text{ 1/min}$

Shaft sealing:

Shaft sealing can be either single or double mechanical seal.

Design code X0A: single mechanical seal, seal face materials SiC/SiC, elastomer EPDM

Design code X0B: double mechanical seal, seal face materials product side SiC/SiC, elastomer EPDM, atmospheric side Cr-Steel/carbon, elastomer EPDM

Options

Connections:

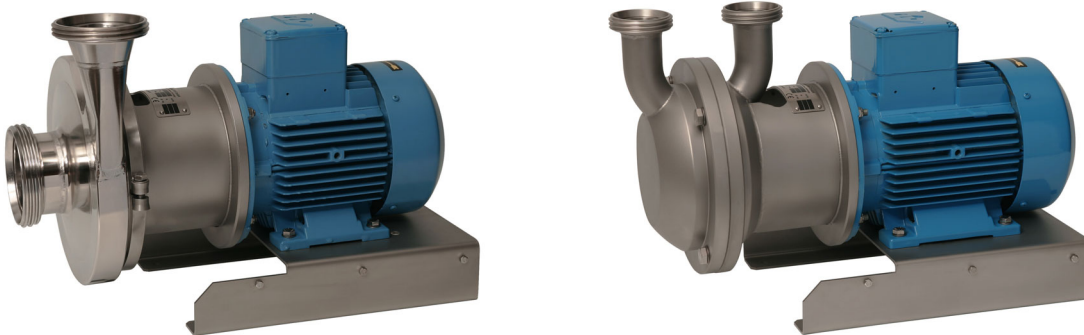
The **NHK** range is equipped with threaded connections according to DIN 11851 as standard. Optional small flanges are also available.
The **SHK** range is equipped with threaded connections according to DIN 11851.

Installation:

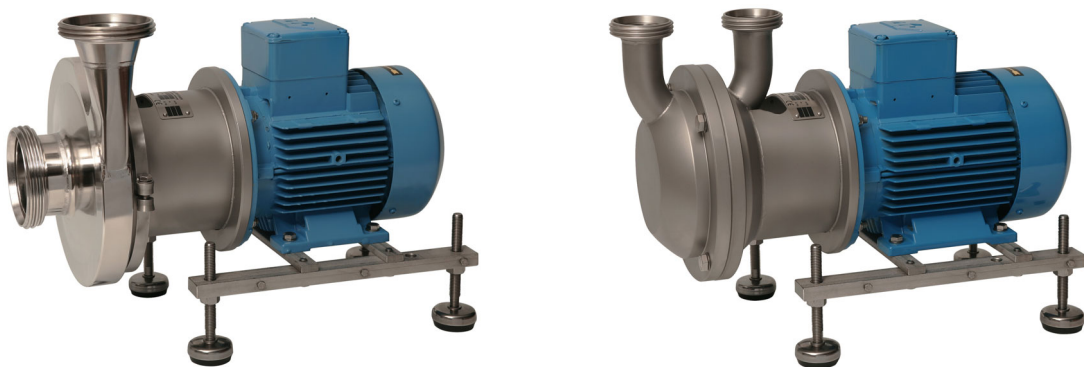
a) Motor mounting (Standard execution)



b) Stainless steel foot mounting



c) Adjustable height stainless steel base frame



Accessories:

a) Stainless steel cover

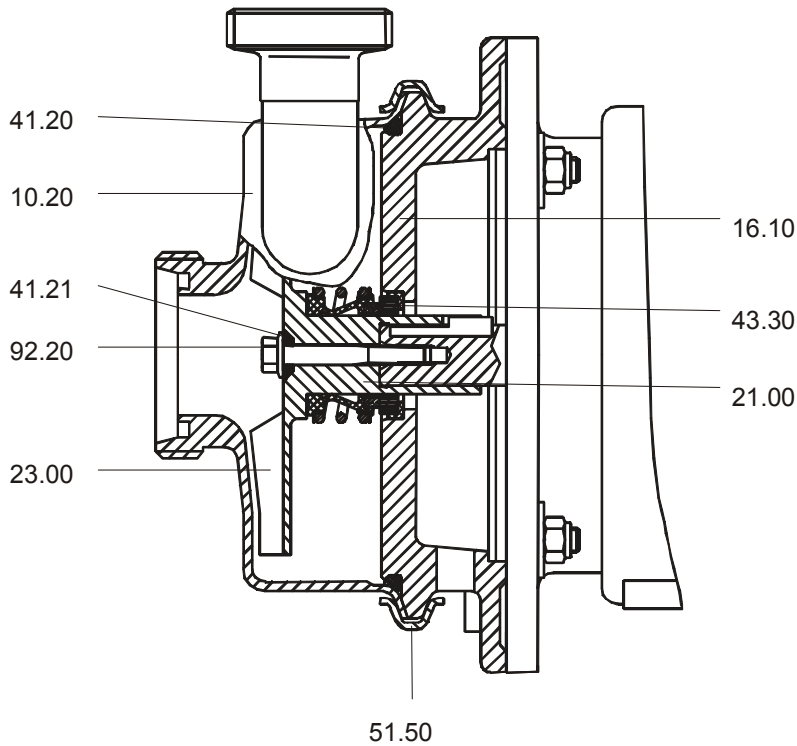


Frequency converter:

Optionally available for motors up to 7.5 kW.

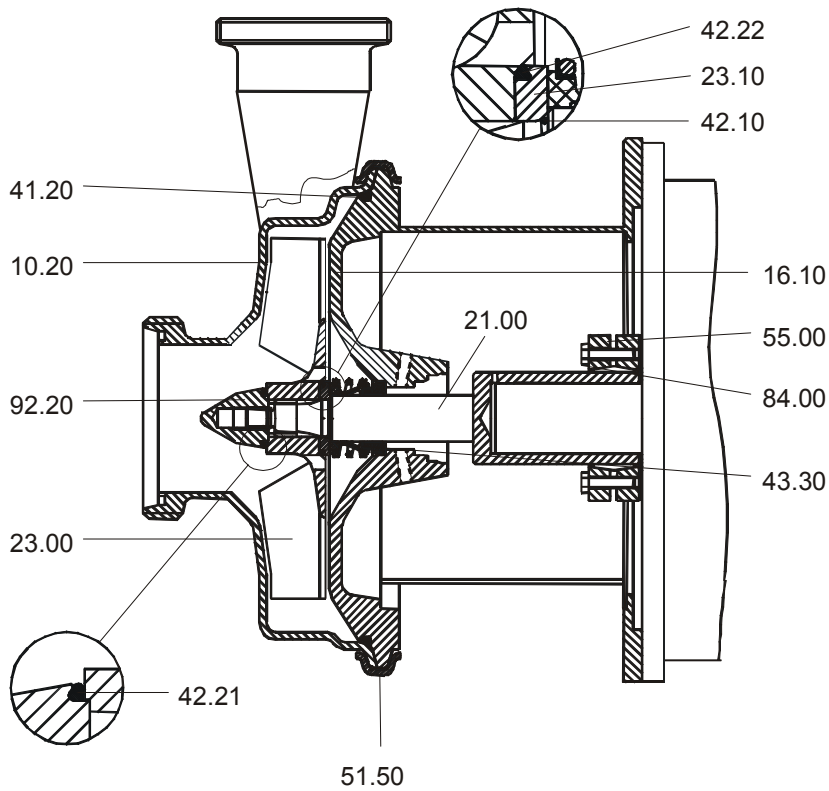
Sectional drawing and materials

NHK 25



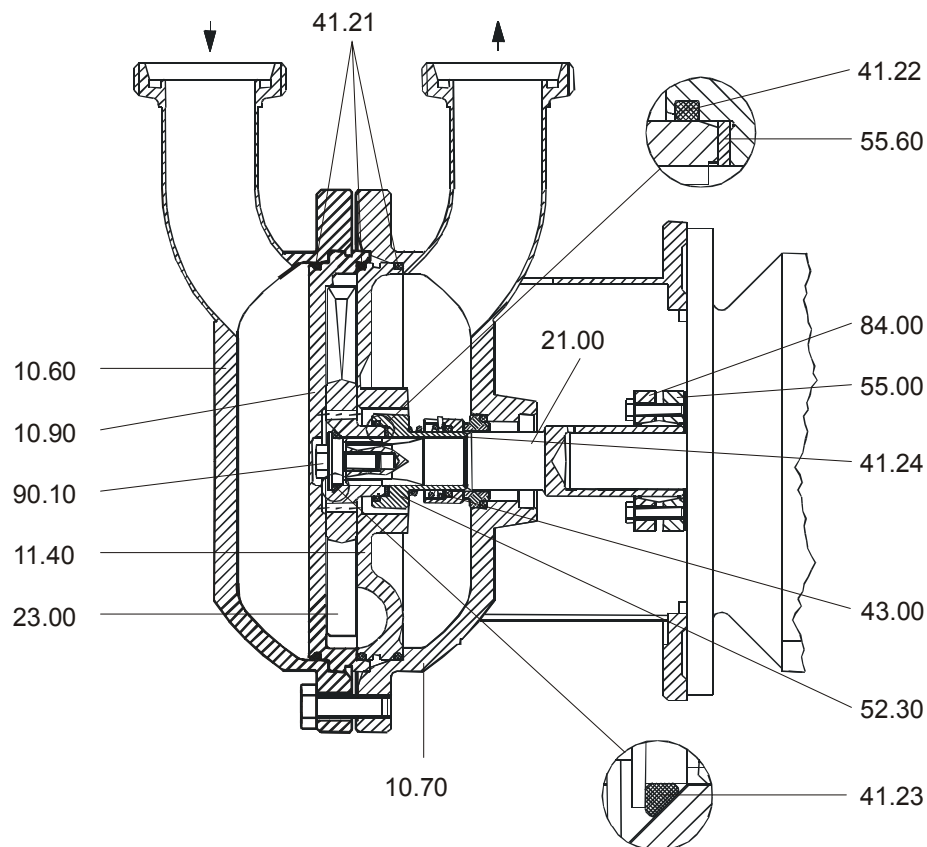
Pos.	Part	Material
10.20	Volute casing	1.4404 / AISI 316 L
16.10	Casing cover	1.4404 / AISI 316 L
21.00	Shaft	1.4404 / AISI 316 Ti
23.00	Impeller	1.4404 / AISI 316 L
41.20	Casing sealing	EPDM
41.21	Impeller sealing	EPDM
43.30	Mechanical seal	SiC/SiC/EPDM
51.50	Clamp ring	Stainless steel
92.20	Impeller nut	Stainless steel

NHK 50 up to 66



Pos.	Part	Material
10.20	Volute casing	1.4435 / AISI 316 L
16.10	Casing cover	1.4404 / AISI 316 L
21.00	Shaft	1.4404 / AISI 316 Ti
23.00	Impeller	1.4404 / AISI 316 L
23.10	Sealing bush	1.4404 / AISI 316 L
41.20	Casing sealing	EPDM
42.10	Radial sealing	EPDM
42.21	Impeller sealing	EPDM
42.22	Impeller sealing	EPDM
43.30	Mechanical seal	SiC/SiC/EPDM
51.50	Clamp ring	1.4301
55.00	Disc	1.4301
84.00	Shrink disk	Steel
92.20	Impeller nut	1.4404 / AISI 316 L

SHK 40 up to 65



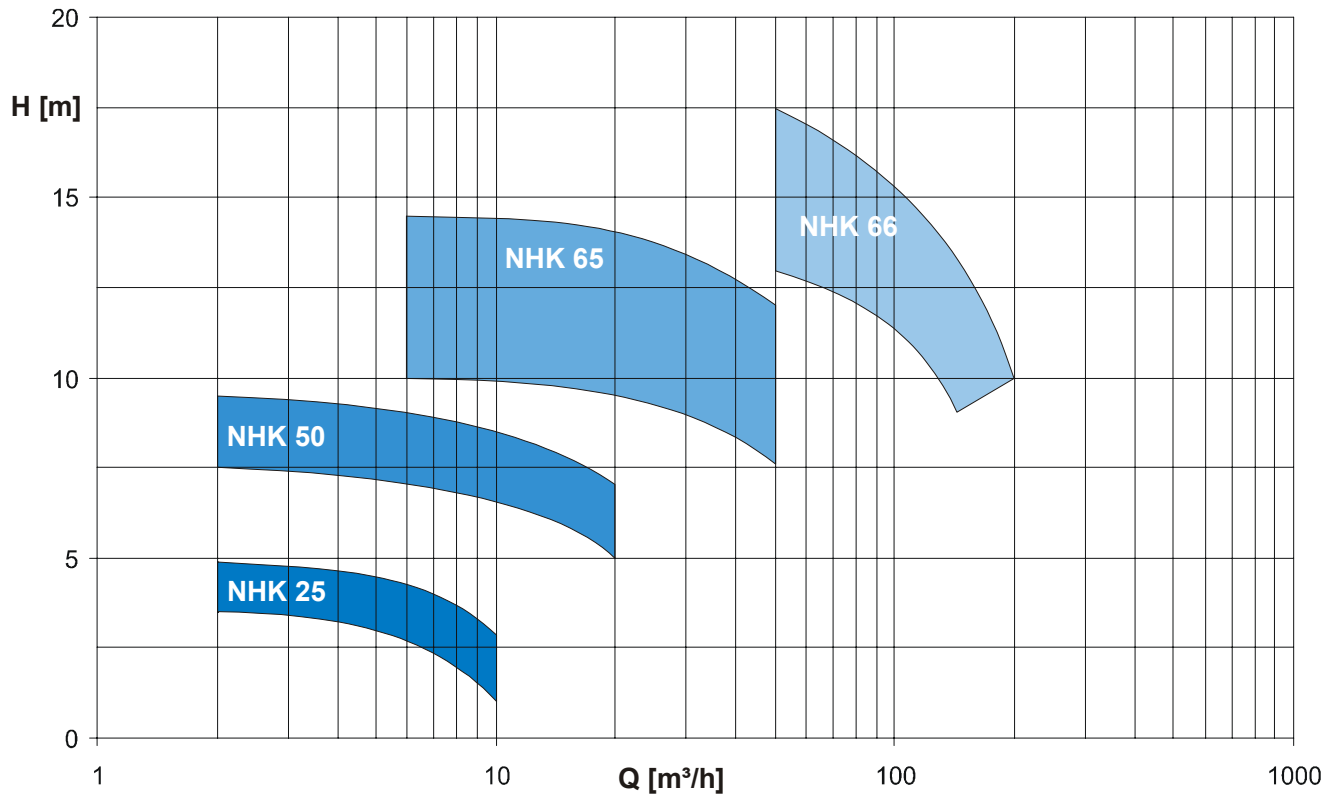
Pos.	Part	Material
10.60	Suction casing	1.4404 / AISI 316 L
10.70	Discharge casing	1.4404 / AISI 316 L
10.90	Suction disk	1.4404 / AISI 316 L
11.40	Discharge disk	1.4404 / AISI 316 L
21.00	Shaft	1.4404 / AISI 316 L
23.00	Impeller	1.4404 / AISI 316 L
41.21	Casing sealing	EPDM
41.22	Sealing sealing bush	EPDM
41.23	Sealing impeller	EPDM
41.24	Sealing shaft	EPDM
43.30	Mechanical seal	SiC/SiC/EPDM
52.30	Sealing bush	1.4404 / AISI 316 L
55.00	Disc	1.4301
55.60	Adjusting disc	1.4301
84.00	Shrink disc	Steel
90.10	Impeller screw	1.4404 / AISI 316 L

Performance range

50 Hz

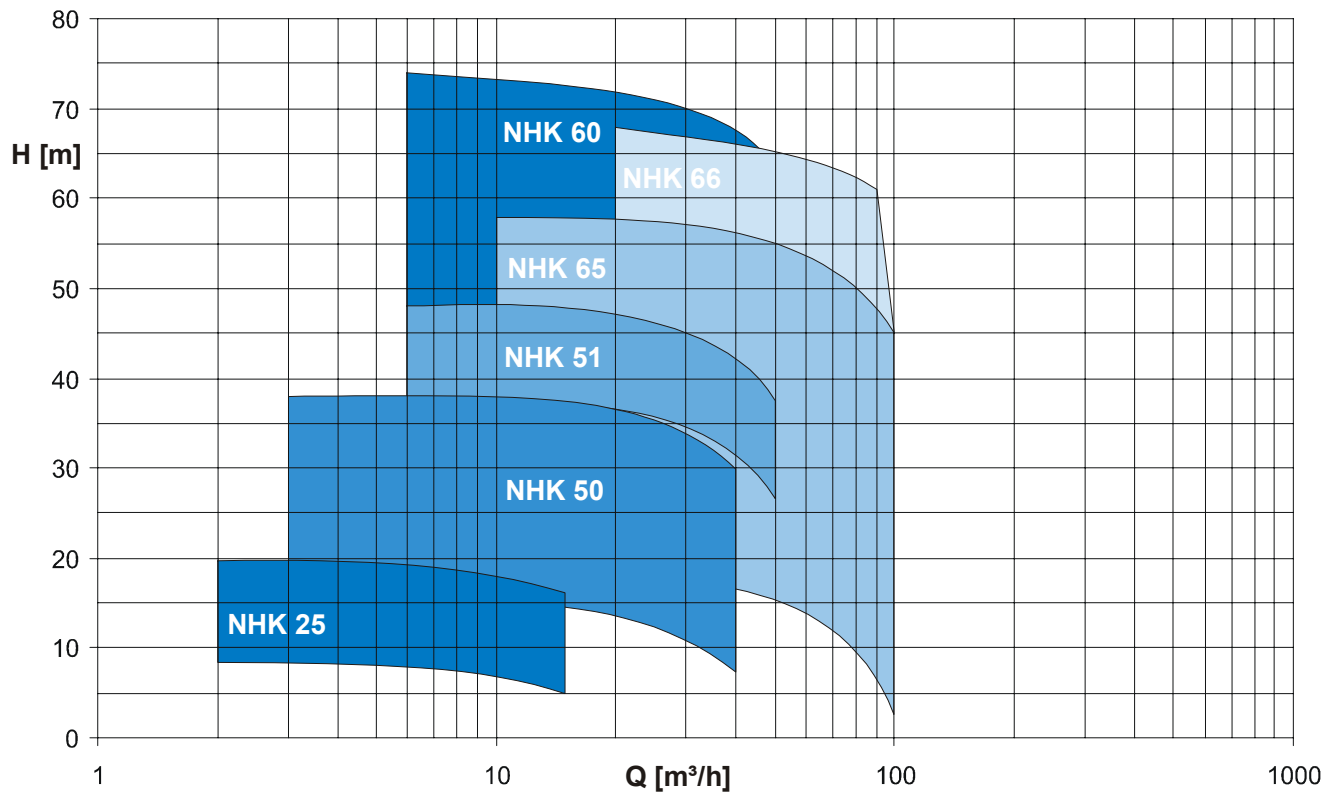
Type NHK

n = 1450 rpm



Type NHK

n = 2900 rpm



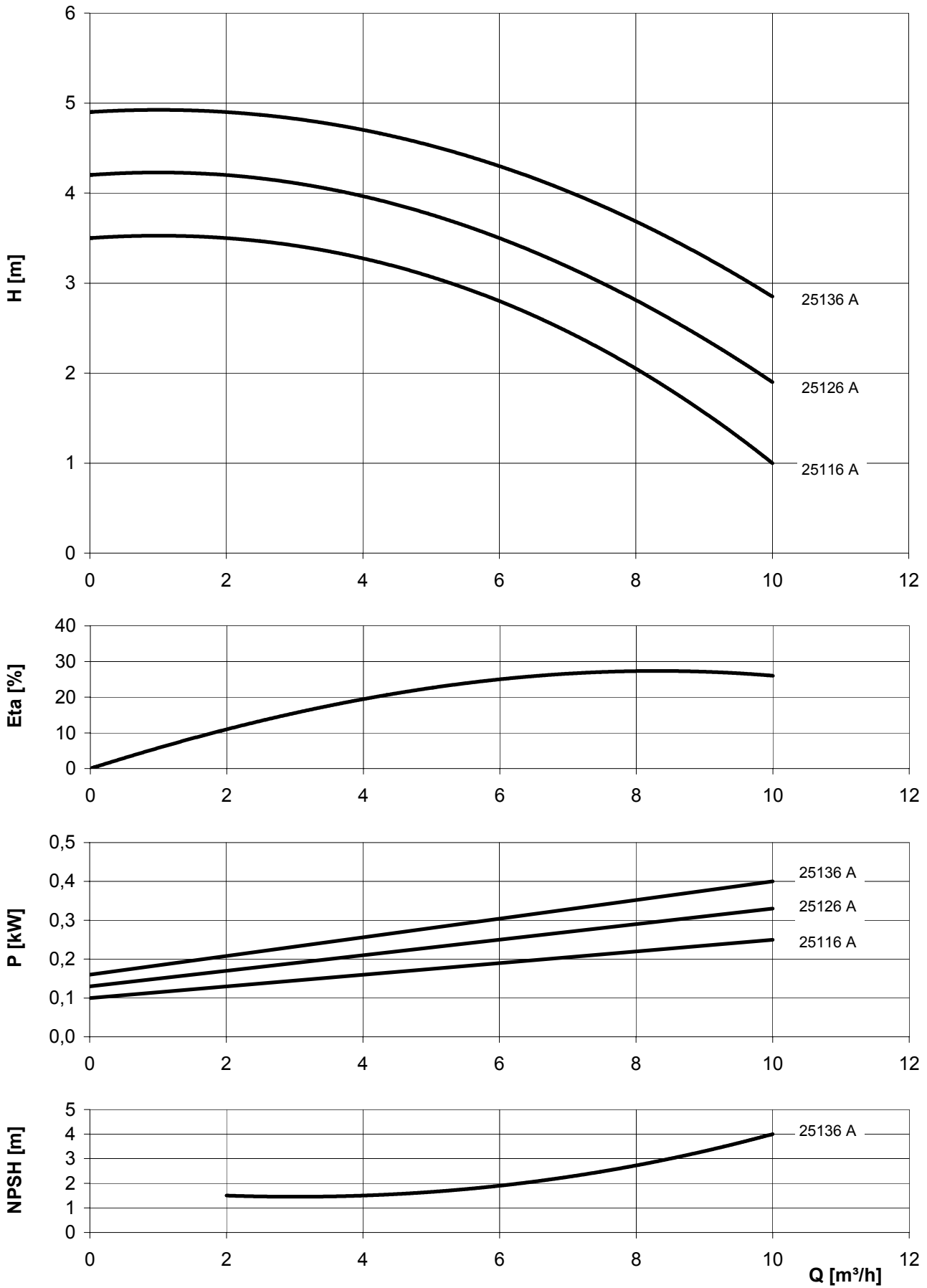
Type SHK see page 16

Performance curve

50 Hz
n = 1450 rpm

Curves are valid for water at 20 °C.

NHK 25116 A to 25136 A

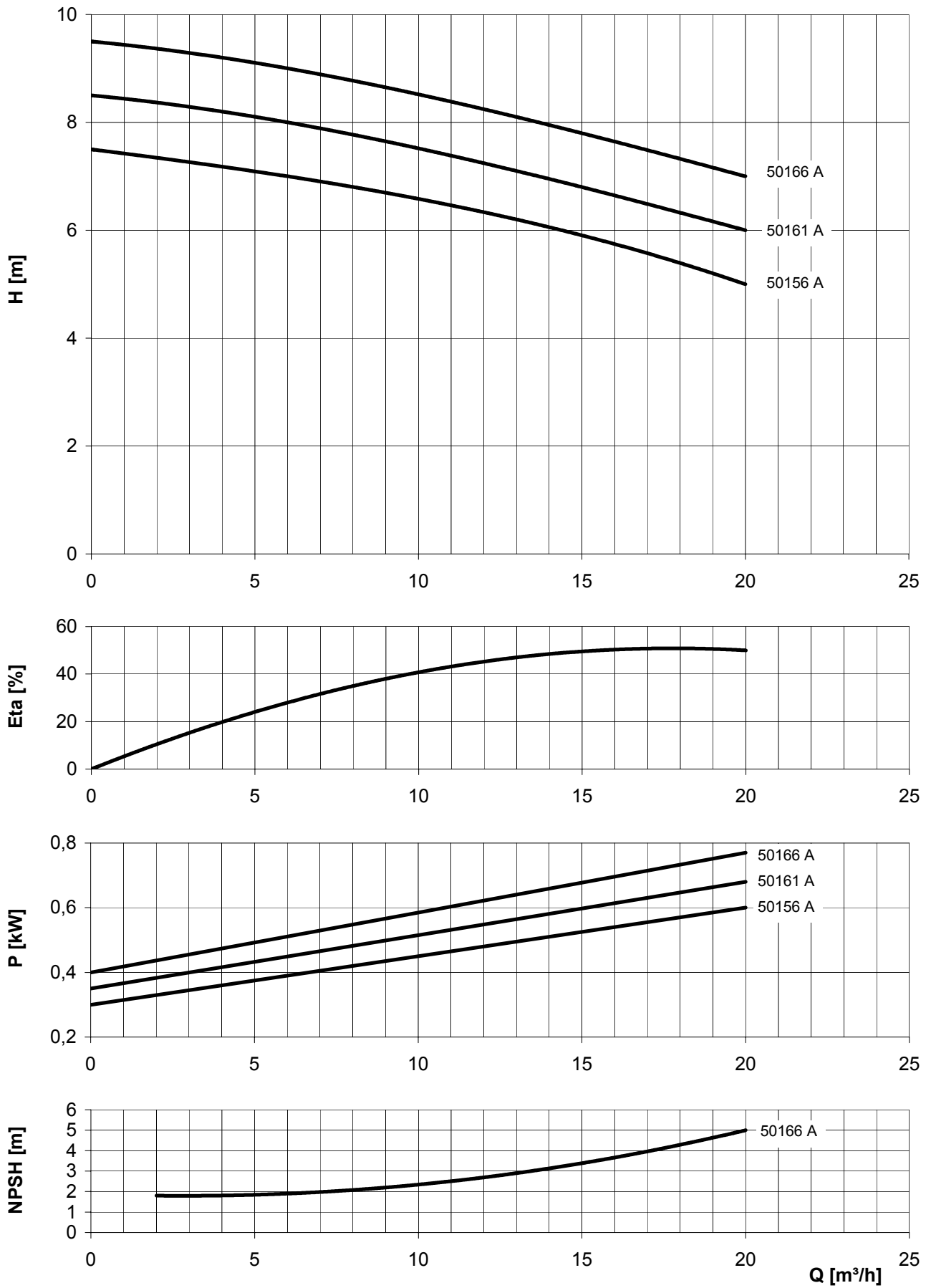


Performance curve

50 Hz
n = 1450 rpm

Curves are valid for water at 20 °C.

NHK 50156 A to 50166 A

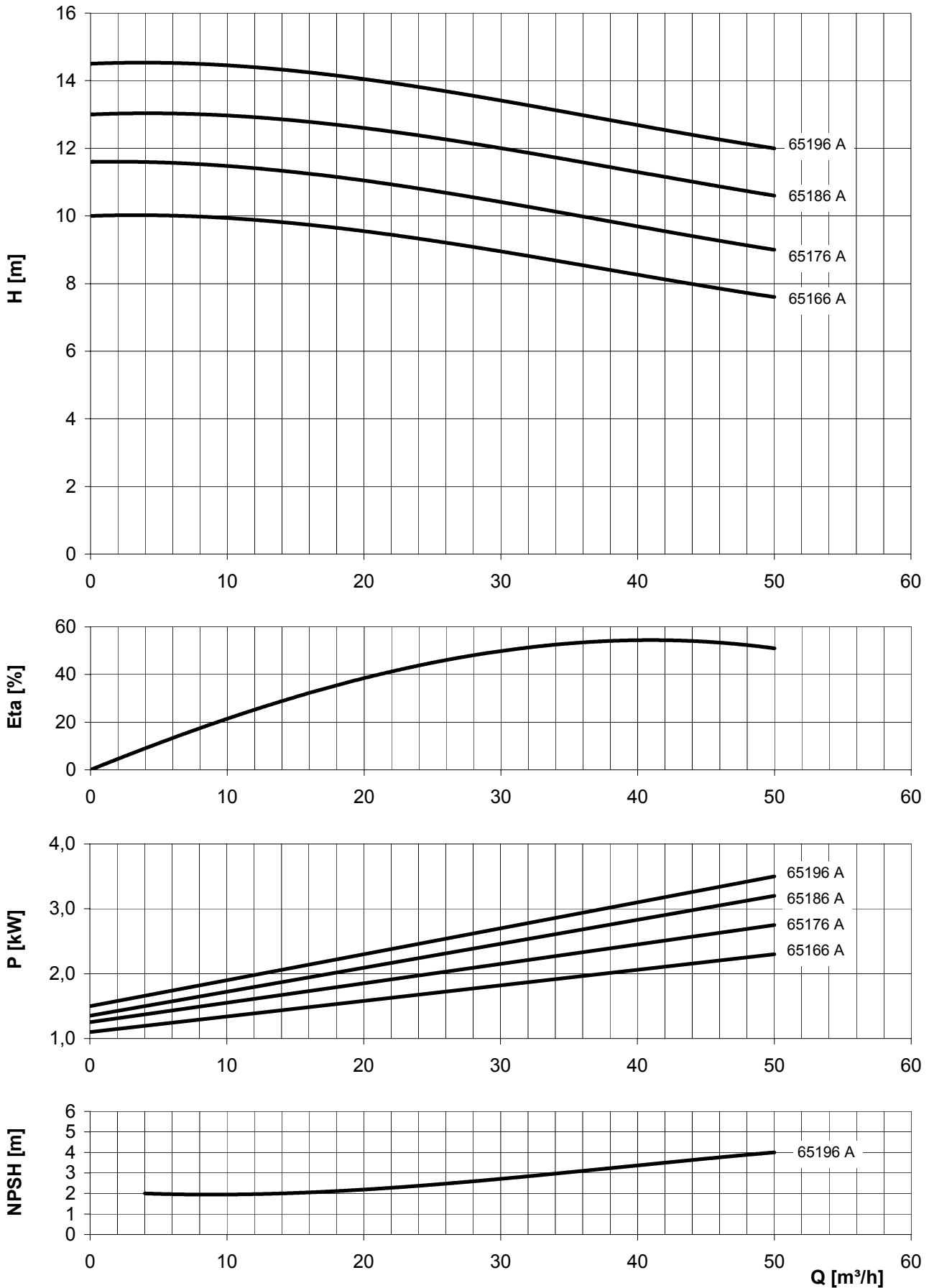


Performance curve

50 Hz
n = 1450 rpm

Curves are valid for water at 20 °C.

NHK 65166 A to 65196 A

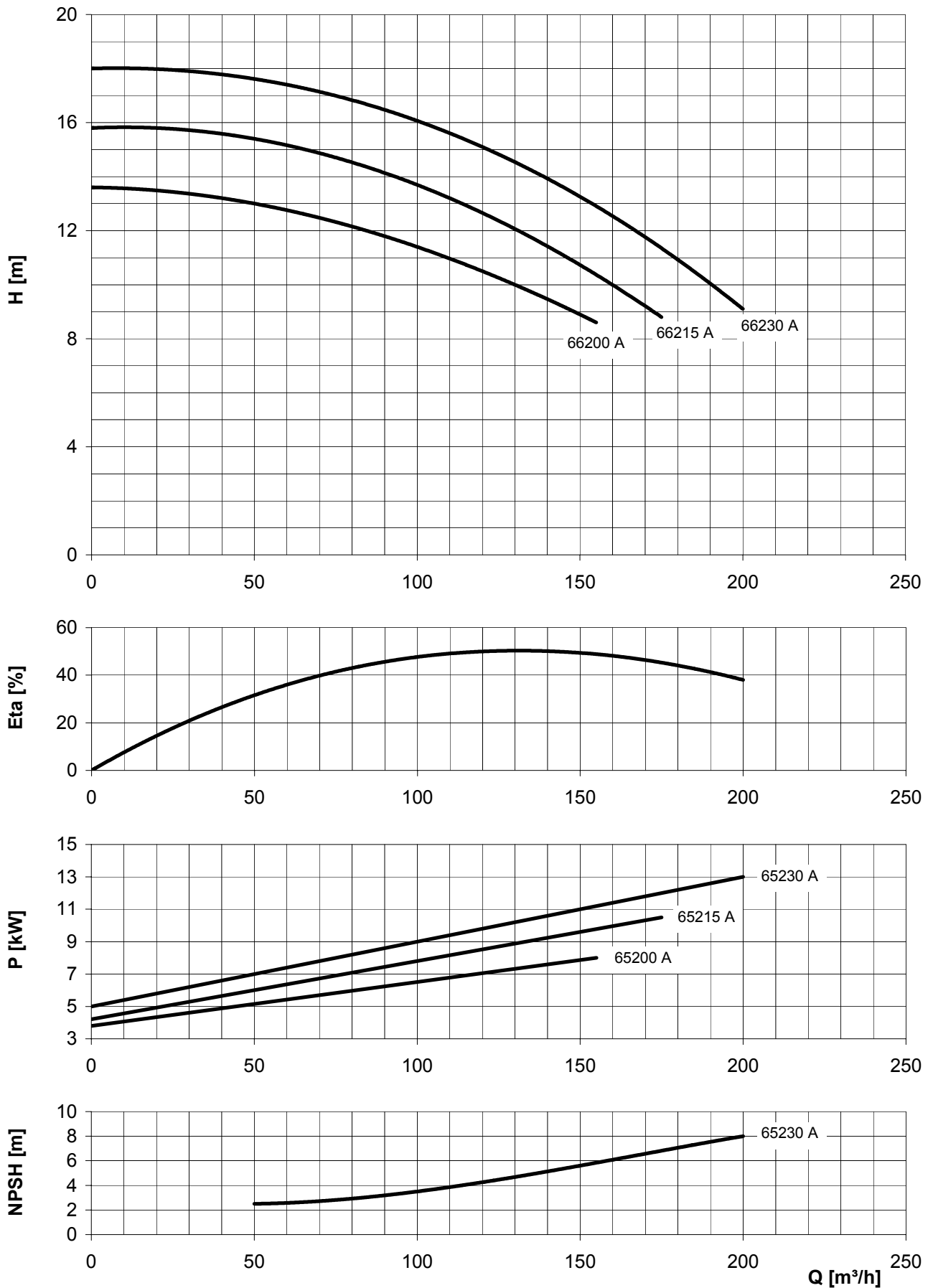


Performance curve

50 Hz
n = 1450 rpm

Curves are valid for water at 20 °C.

NHK 66200 A to 66230 A

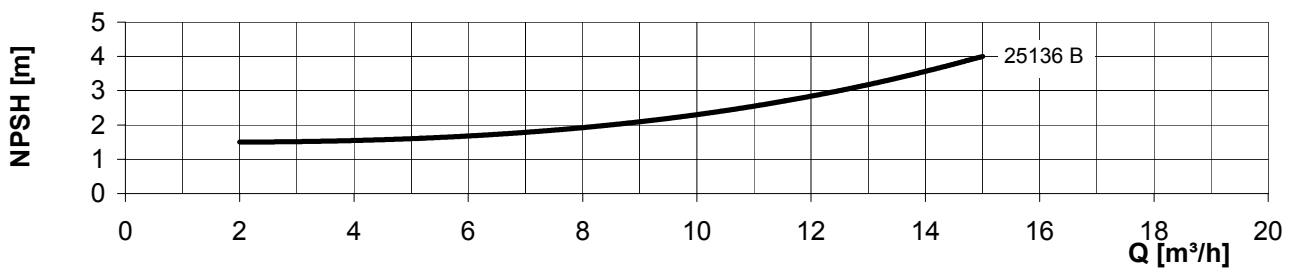
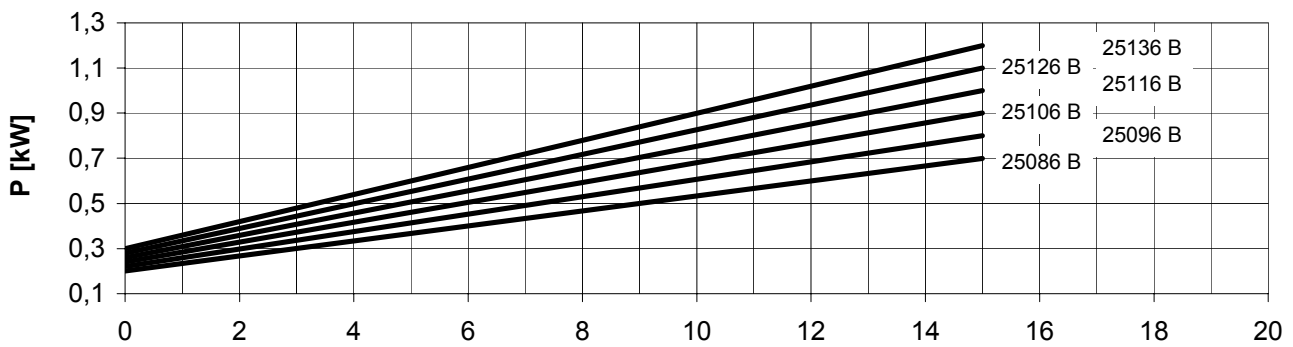
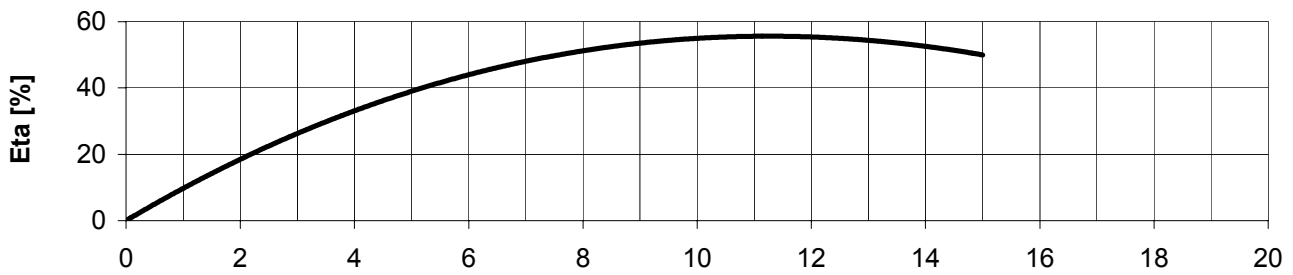
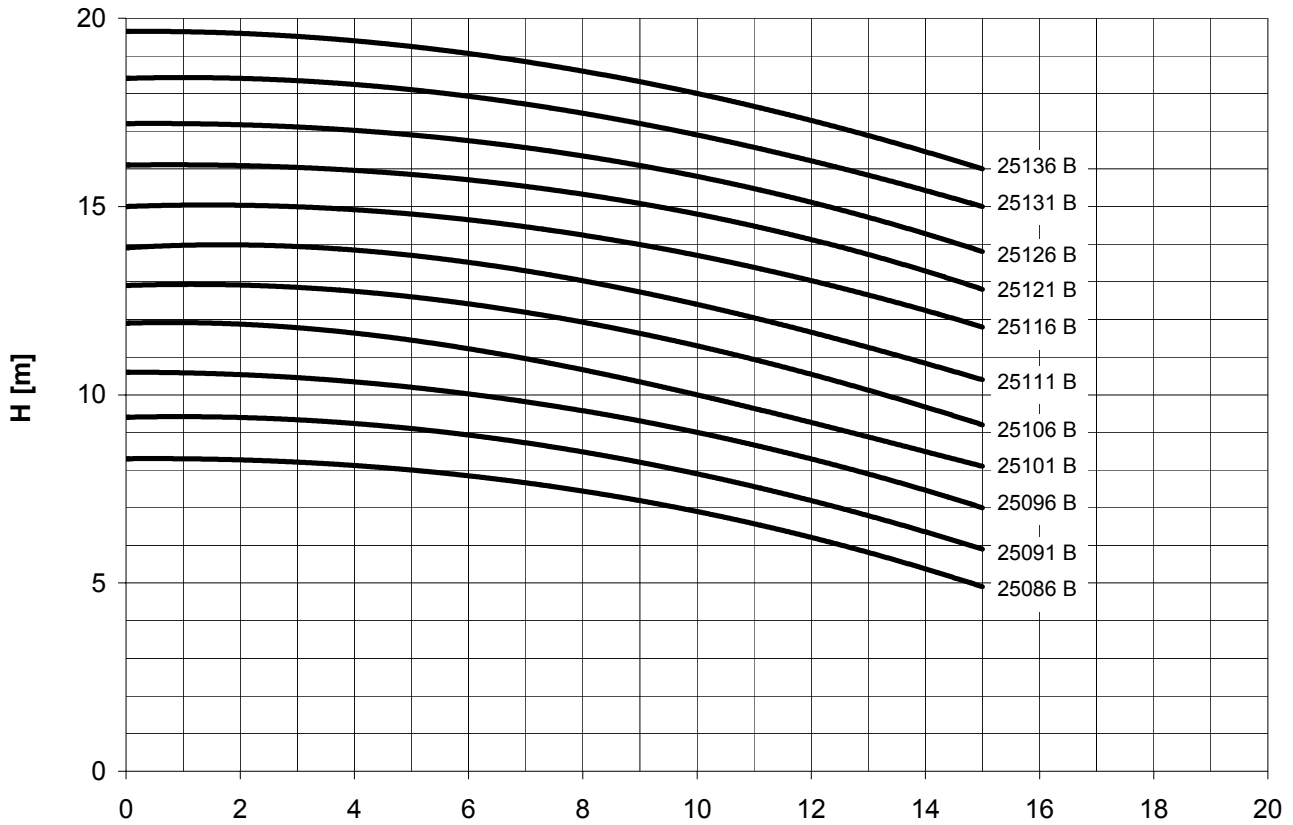


Performance curve

50 Hz
n = 2900 rpm

Curves are valid for water at 20 °C.

NHK 25086B to 25136 B

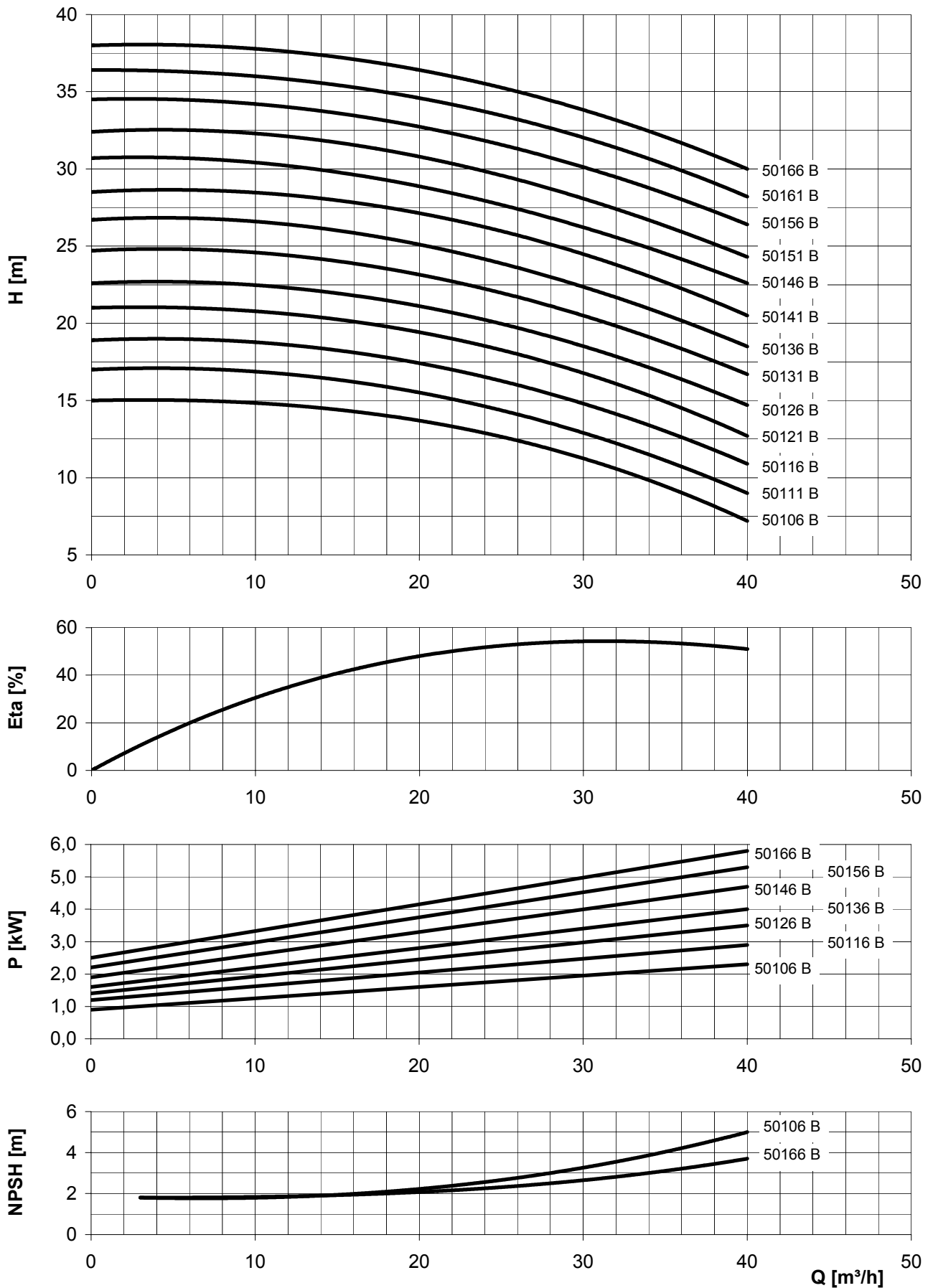


Performance curve

50 Hz
n = 2900 rpm

Curves are valid for water at 20 °C.

NHK 50106 B to 50166 B

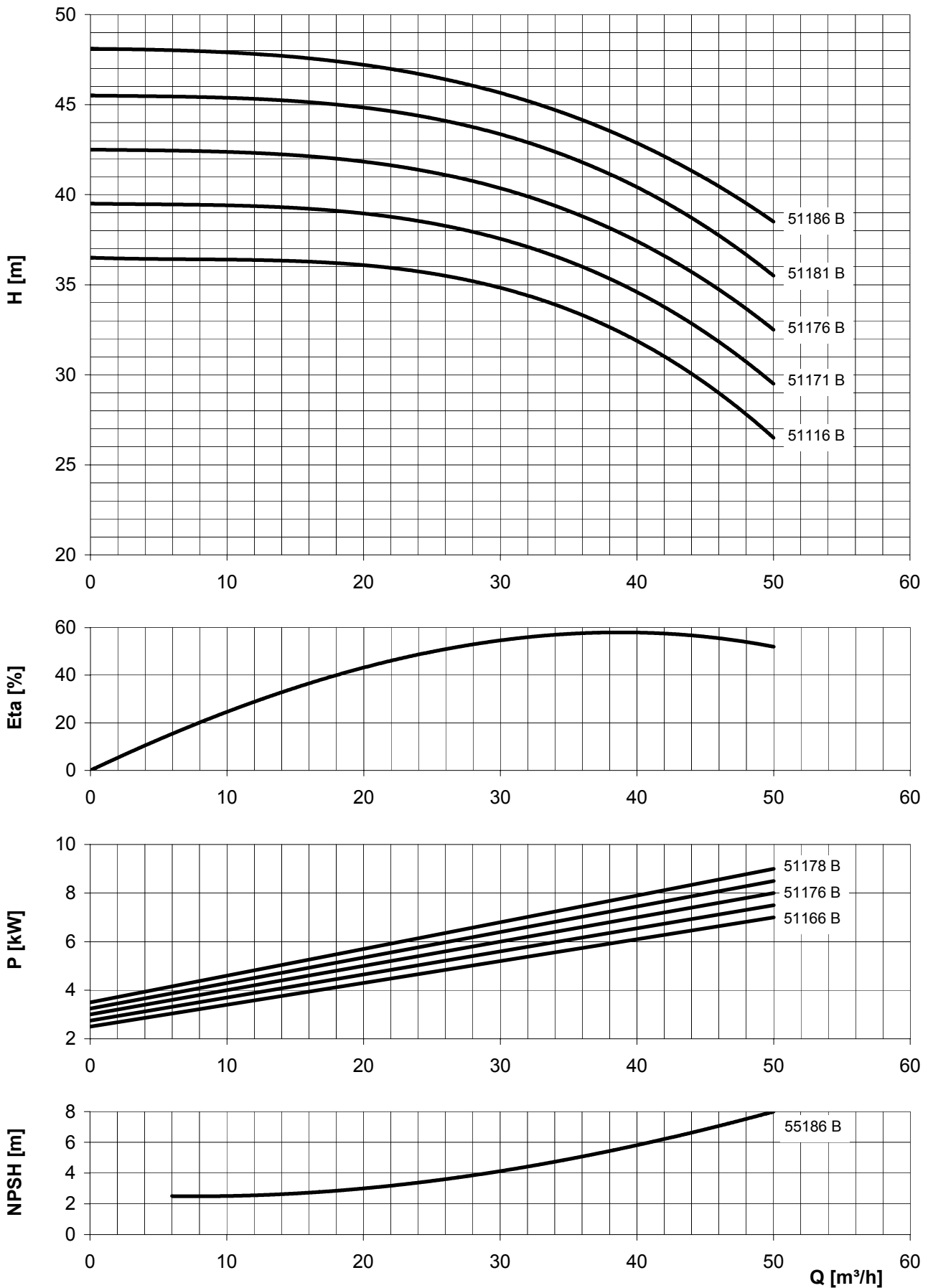


Performance curve

50 Hz
n = 2900 rpm

Curves are valid for water at 20 °C.

NHK 51166 B to 51186 B

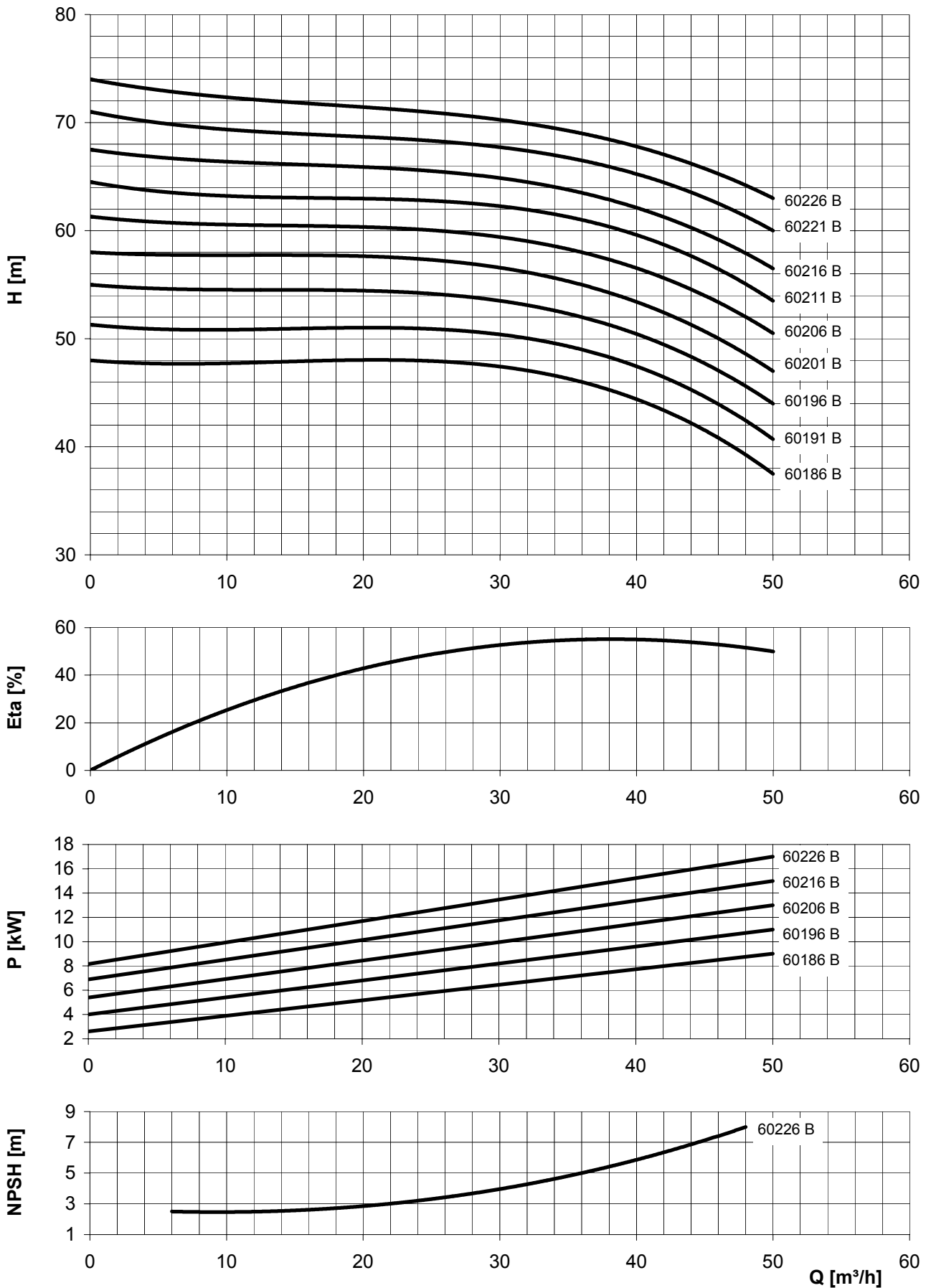


Performance curve

50 Hz
n = 2900 rpm

Curves are valid for water at 20 °C.

NHK 60186 B to 60226 B

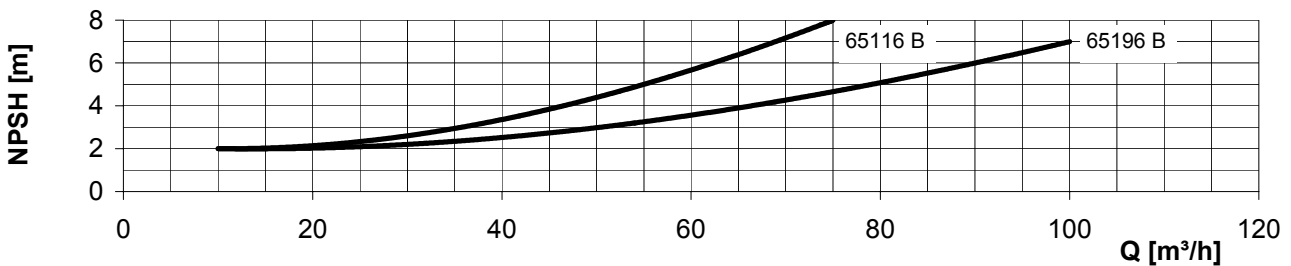
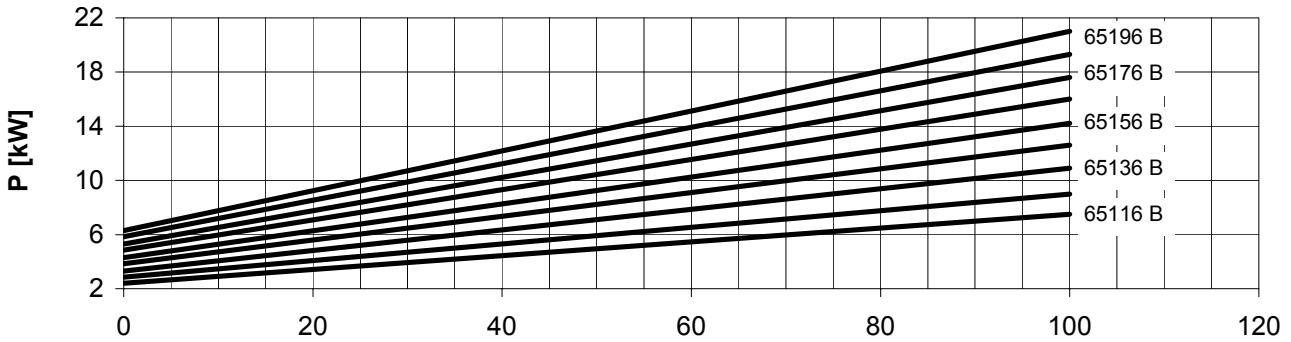
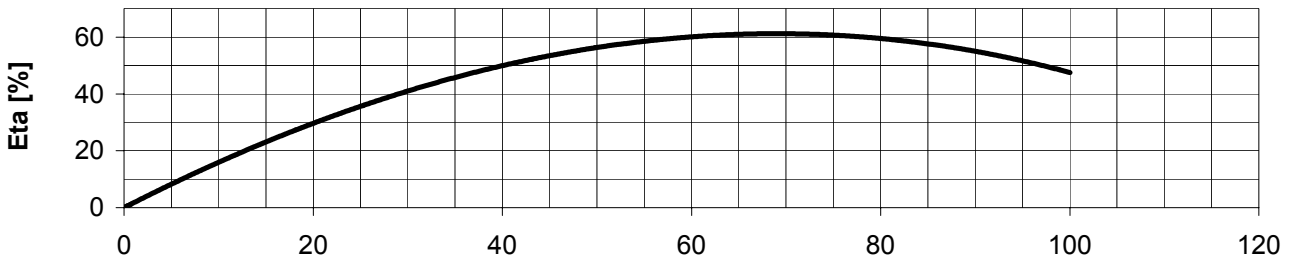
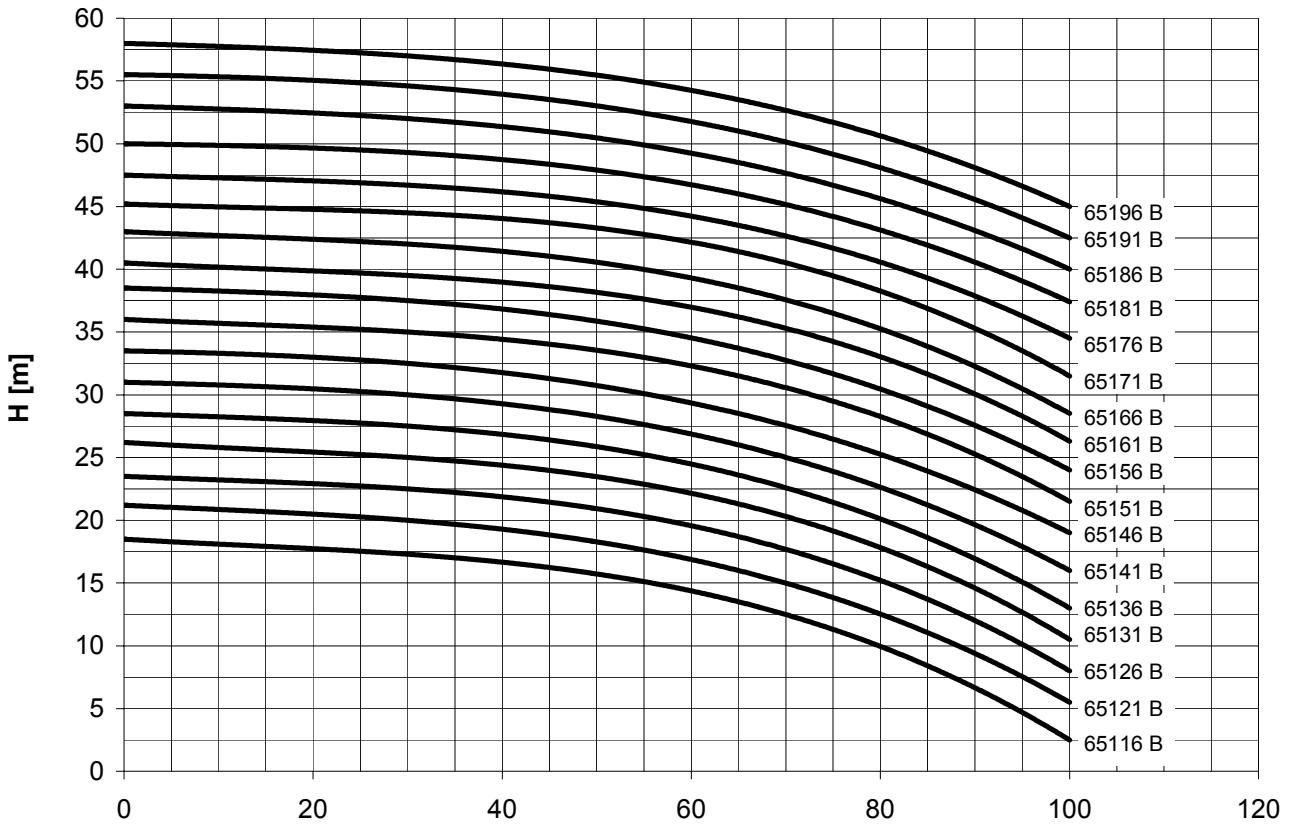


Performance curve

50 Hz
n = 2900 rpm

Curves are valid for water at 20 °C.

NHK 65116 B to 65196 B

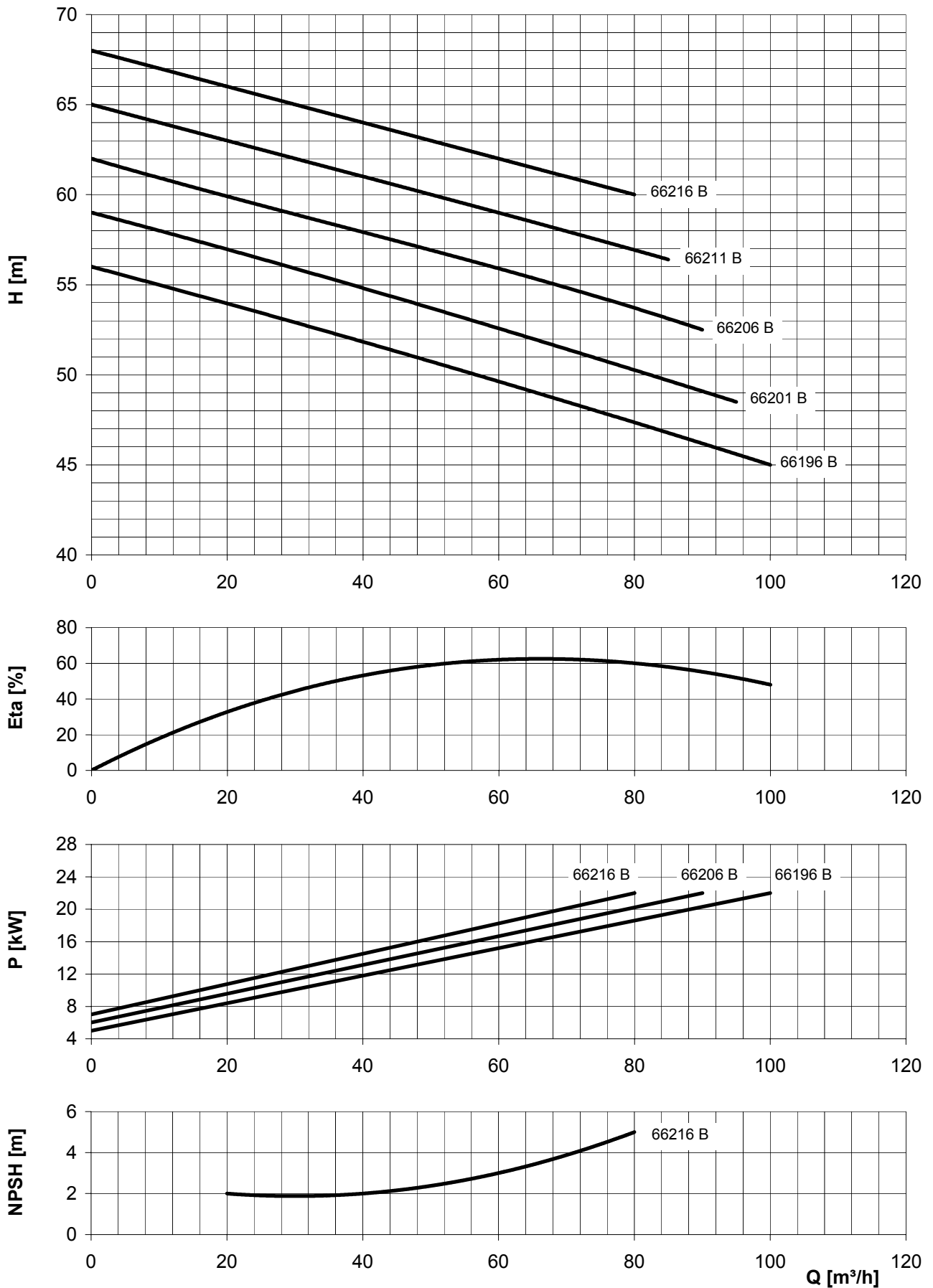


Performance curve

**50 Hz
n = 2900 rpm**

Curves are valid for water at 20 °C.

NHK 66196 B to 66216 B

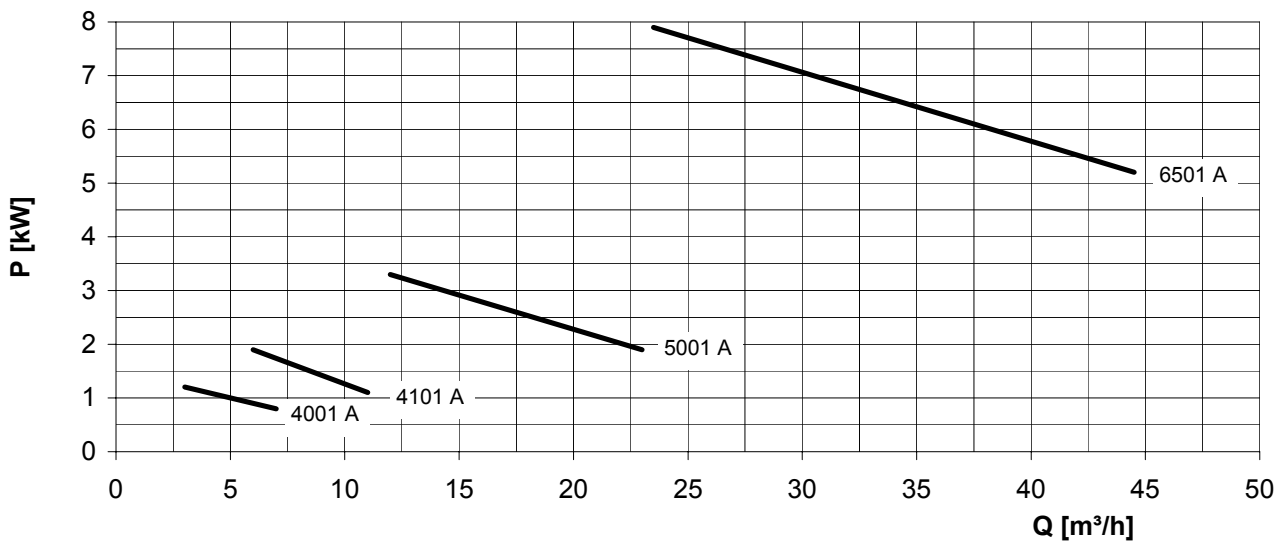
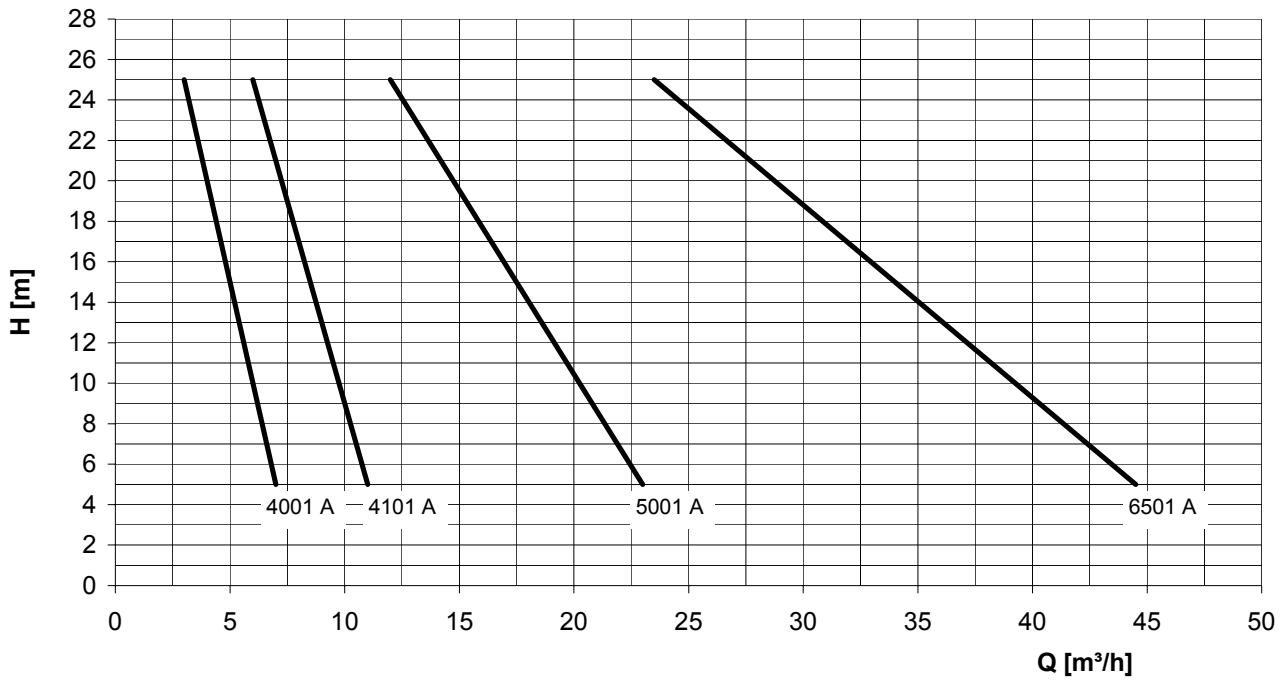


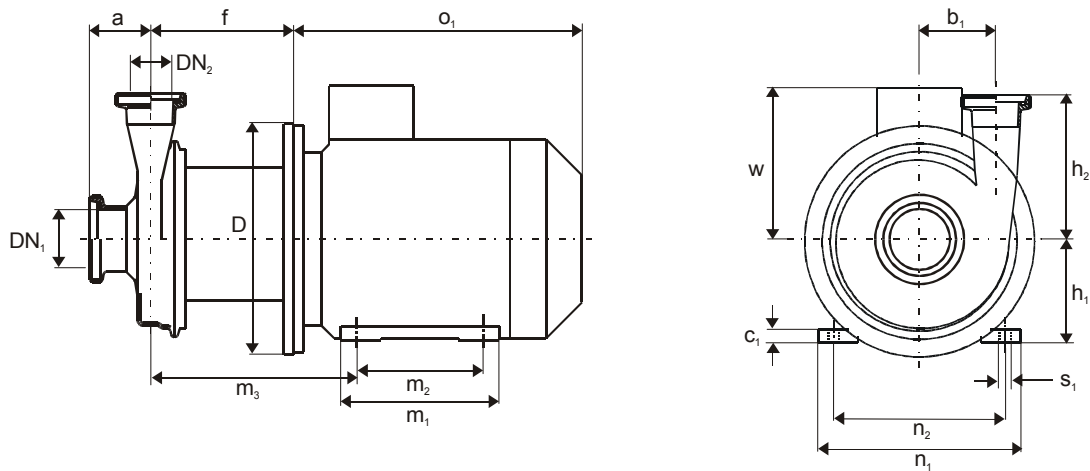
Performance curve

50 Hz
n = 1450 rpm

Curves are valid for water at 20 °C.

SHK 4001 A to 6501 A





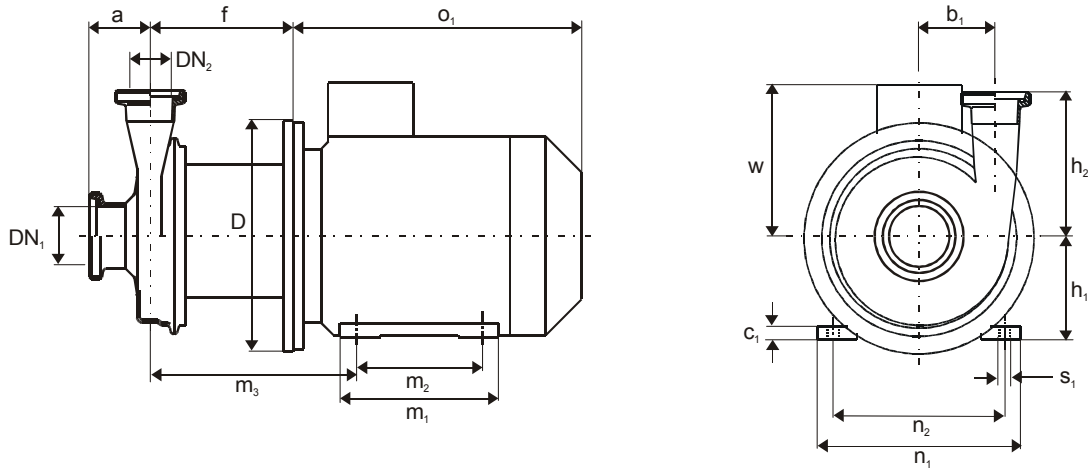
Dimensions in mm.

size	DN ₁	DN ₂	connection	a	b ₁	h ₂	connection	a	b ₁	h ₂
25	40	40	threaded to DIN 11851	48	55	110	small flange (FN1)	62	55	124
50	50	50	threaded to DIN 11851	70	85	161	small flange (FN1)	59	85	150
	65	50	threaded to DIN 11851	67	85	161	small flange (FN1)	51	85	150
51	65	65	threaded to DIN 11851	67	85	166	small flange (FN1)	51	85	150
	65	65	threaded to DIN 11851	67	85	166	small flange (FN1)	51	85	150
60	65	50	threaded to DIN 11851	78	108	174	small flange (FN1)	81	108	163
	80	65	threaded to DIN 11851	78	108	179	small flange (FN1)	57	108	195
60	50	50	threaded to DIN 11851	81	128	183	small flange (FN1)	103	128	172
	65	65	threaded to DIN 11851	79	128	188	small flange (FN1)	81	128	204
65	80	65	threaded to DIN 11851	79	128	188	small flange (FN1)	58	128	204
	65	65	threaded to DIN 11851	90	102	218	small flange (FN1)	74	102	202
65	80	80	threaded to DIN 11851	86	102	223	small flange (FN1)	65	102	225
66 – 1450 rpm	125	100	threaded to DIN 11851	93	115	264	small flange (FN1)	74	115	234
66 – 2900 rpm	100	80	threaded to DIN 11851	93	123	233	small flange (FN1)	63	123	236

Dimensions in mm.

size	speed [rpm]	motor power [kW]	c ₁	D	f	h ₁	m ₁	m ₂	m ₃	n ₁	n ₂	o ₁	s ₁	w	weight [kg]
25116 to 25136	1450	0.55	10	200	62	80	125	100	112	156	125	255	9	128	15
25086 to 25106	2900	1.1	10	200	62	80	125	100	112	156	125	255	9	128	17
25111 to 25136		1.5*	10	200	62	80	125	100	112	156	125	255	9	128	18
50156 to 50166	1450	1.1	11	205	149	90	130	100	205	170	140	244	9	149	25
50106 to 50116	2900	2.2	11	205	149	90	155	125	205	170	140	269	9	149	28
		3.0	13	255	159	100	176	140	222	195	160	303	12	153	33
50121 to 50131	2900	4.0	15	255	159	112	176	140	229	225	190	320	12	169	36
50136 to 50151		4.0	15	255	159	112	176	140	229	225	190	320	12	169	36
50156 to 50166		5.5*	15	255	159	112	176	140	229	225	190	320	12	169	42
51166	2900	7.5*	15	255	159	112	176	140	229	225	190	320	12	169	50
51176 to 51186	2900	9.2*	18	305	179	132	218	178	270	256	216	405	12	188	70
60186	2900	9.2*	18	305	180	132	218	178	269	256	216	405	12	188	76
60191 to 60201		9.2*	18	305	180	132	218	178	269	256	216	405	12	188	76
		11.0*	18	305	180	132	218	178	269	256	216	405	12	188	84
60206 to 60216		9.2*	18	305	180	132	218	178	269	256	216	405	12	188	76
		11.0*	18	305	180	132	218	178	269	256	216	405	12	188	84
60221 to 60226		15.0	22	355	215	160	260	210	323	320	254	517	14	222	123
		15.0	22	355	215	160	260	210	323	320	254	517	14	222	123
60226		18.5	22	355	215	160	260	210	323	320	254	517	14	222	123

* = special motor



Dimensions in mm.

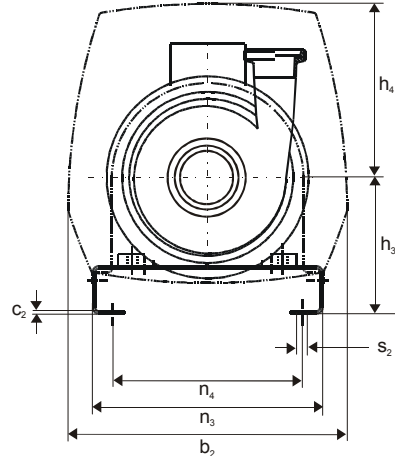
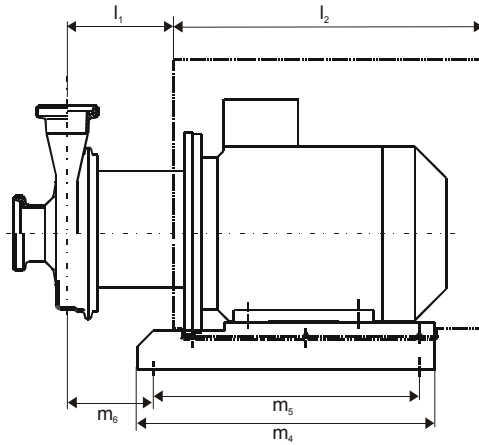
size	DN ₁	DN ₂	connection	a	b ₁	h ₂	connection	a	b ₁	h ₂
25	40	40	threaded to DIN 11851	48	55	110	small flange (FN1)	62	55	124
50	50	50	threaded to DIN 11851	70	85	161	small flange (FN1)	59	85	150
	65	50	threaded to DIN 11851	67	85	161	small flange (FN1)	51	85	150
51	65	65	threaded to DIN 11851	67	85	166	small flange (FN1)	51	85	150
	80	65	threaded to DIN 11851	78	108	174	small flange (FN1)	81	108	163
60	50	50	threaded to DIN 11851	78	108	179	small flange (FN1)	57	108	195
	80	65	threaded to DIN 11851	81	128	183	small flange (FN1)	103	128	172
65	50	50	threaded to DIN 11851	79	128	188	small flange (FN1)	81	128	204
	80	65	threaded to DIN 11851	79	128	188	small flange (FN1)	58	128	204
65	65	65	threaded to DIN 11851	90	102	218	small flange (FN1)	74	102	202
	80	80	threaded to DIN 11851	86	102	223	small flange (FN1)	65	102	225
66 – 1450 rpm	125	100	threaded to DIN 11851	93	115	264	small flange (FN1)	74	115	234
66 – 2900 rpm	100	80	threaded to DIN 11851	93	123	233	small flange (FN1)	63	123	236

Dimensions in mm.

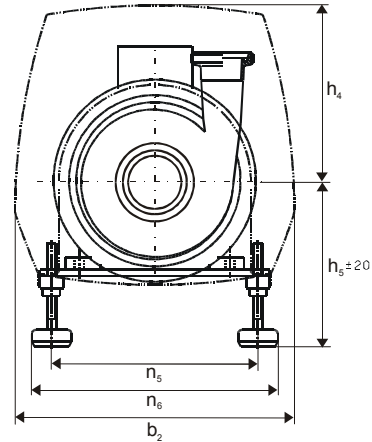
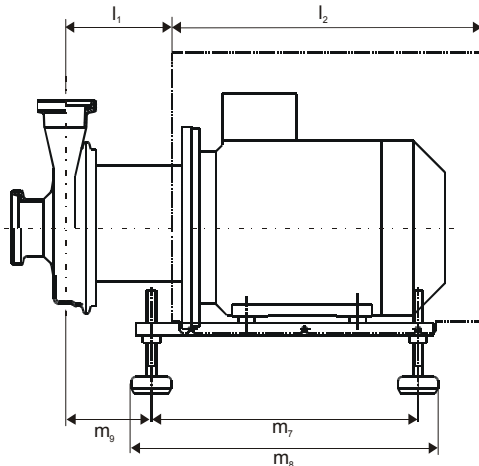
size	speed [1/min]	motor power [kW]	c ₁	D	f	h ₁	m ₁	m ₂	m ₃	n ₁	n ₂	o ₁	s ₁	w	weight [kg]
65166	1450	2.2	13	255	164	100	176	140	227	195	160	303	12	153	32
65176		3.0	13	255	164	100	176	140	227	195	160	303	12	153	40
65186		4.0	15	255	164	112	176	140	234	225	190	320	12	169	44
65196		7.5*	15	255	164	112	176	140	234	225	190	320	12	169	49
65116	2900	11.0*	18	305	184	132	218	178	273	256	216	405	12	188	79
65121 to 65136		15.0	22	355	219	160	260	210	327	320	254	517	14	222	120
65141 to 65161		18.5	22	355	219	160	304	254	327	320	254	517	14	222	120
65166 to 65186		22.0	20	355	219	180	300	241	340	356	279	578	15	321	193
65191 65196		7.5	18	305	202	132	218	178	291	256	216	405	12	188	85
66200	1450	11.0	22	355	238	160	260	210	345	320	254	517	14	222	113
66215		15.0	22	355	238	160	304	254	345	320	254	517	14	222	132
66230		22.0	20	355	223	180	300	241	344	356	279	578	15	321	198
66196 to 66216	2900	22.0	20	355	223	180	300	241	344	356	279	578	15	321	198

* = special motor

Stainless steel motor foot and cover



Stainless steel base frame and cover

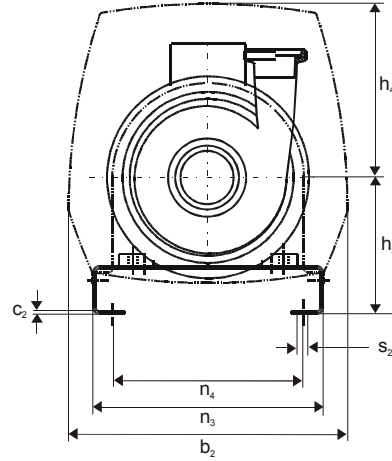
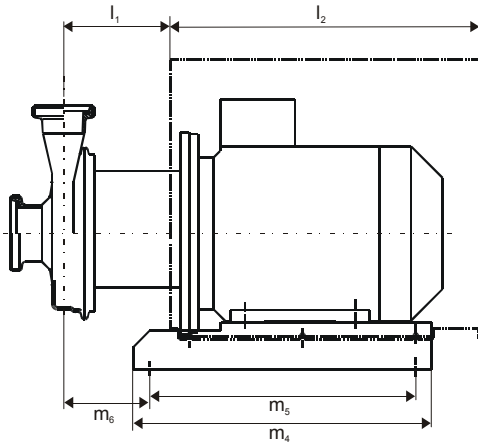


Dimensions in mm.

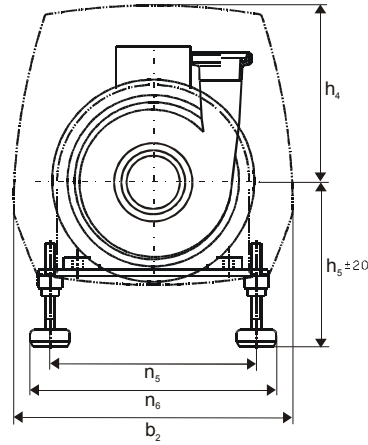
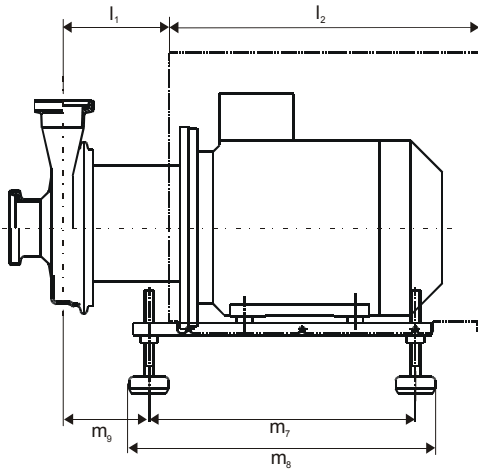
size	speed [rpm]	motor power [kW]	T y p e	Dimension motor foot									T y p e	Dimension base frame						T y p e	Dimension cover			
				c ₂	h ₃	m ₄	m ₅	m ₆	n ₃	n ₄	s ₂	h ₅		m ₇	m ₈	m ₉	n ₅	n ₆	b ₂		h ₄	l ₁	l ₂	
25116 to 25136	1450	0.55	A	2,5	120	226	190	67	220	176	13	A	180	190	230	67	176	216	A	222	133	44	300	
25086 to 25106	2900	1.1	A	2,5	120	226	190	67	220	176	13	A	180	190	230	67	176	216	A	222	133	44	300	
25111 to 25136		1.5	A	2,5	120	226	190	67	220	176	13	A	180	190	230	67	176	216	A	222	133	44	300	
50156 to 50166	1450	1.1	B	3	160	326	286	99	250	200	9	B	187	286	336	99	220	270	B	302	191	129	333	
50106 to 50116	2900	2.2 3.0	C	3	160	376	336	102	290	240	12	C	197	336	386	102	260	310	C	352	233	128	390	
50121 to 50131		4.0	D	3	172	376	336	109	290	240	12	D	209	336	386	109	260	310	D	352	221	128	390	
50136 to 50151		4.0	D	3	172	376	336	109	290	240	12	D	209	336	386	109	260	310	D	352	221	149	390	
50156 to 50166		5.5*	D	3	172	376	336	109	290	240	12	D	209	336	386	109	260	310	D	352	221	149	390	
		7.5*	D	3	172	376	336	109	290	240	12	D	209	336	386	109	260	310	D	352	221	149	390	
51166 51171	2900	7.5*	D	3	172	376	336	109	290	240	12	D	209	336	386	109	260	310	D	352	221	151	390	
51176 to 51186		9.2*	E	3	200	440	400	131	320	270	12	E	230	400	450	131	290	340	E	423	289	151	500	
60186	2900	9.2*	E	3	200	440	400	130	320	270	12	E	230	400	450	130	290	340	E	423	289	150	500	
60191 to 60201		9.2*	E	3	200	440	400	130	320	270	12	E	230	400	450	130	290	340	E	423	289	150	500	
60206 to 60216		11.0*	E	3	200	440	400	130	320	270	12	E	230	400	450	130	290	340	E	423	289	150	500	
		9.2*	E	3	200	440	400	130	320	270	12	E	230	400	450	130	290	340	E	423	289	150	500	
		11.0*	E	3	200	440	400	130	320	270	12	E	230	400	450	130	290	340	E	423	289	150	500	
60221 to 60226		15.0	F	4	230	540	500	165	380	310	13	F	264	500	575	165	340	415	F	423	283	185	617	
		18.5	F	4	230	540	500	165	380	310	13	F	264	500	575	165	340	415	F	423	283	185	617	

* special motor

Stainless steel motor foot and cover



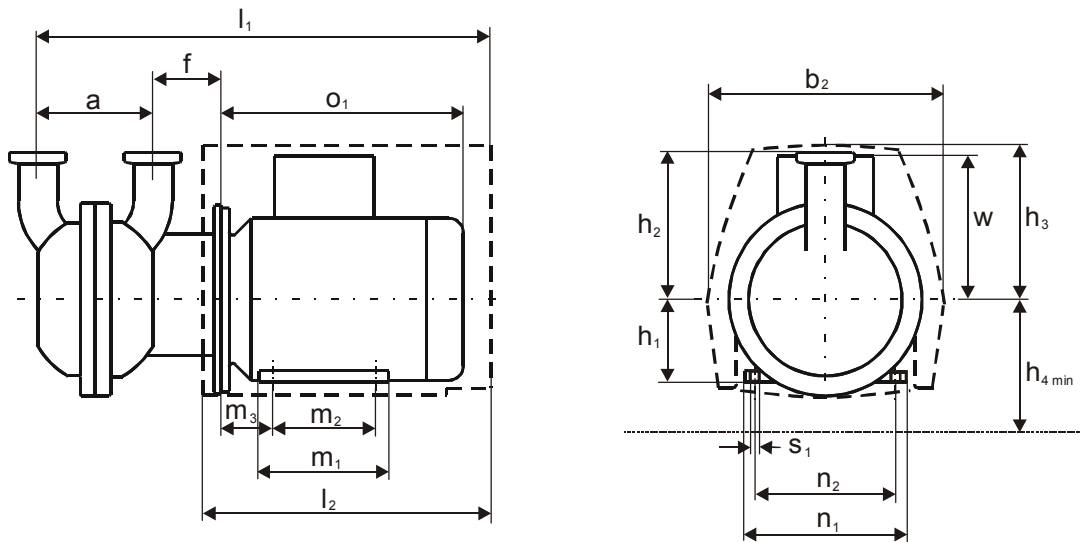
Stainless steel base frame and cover



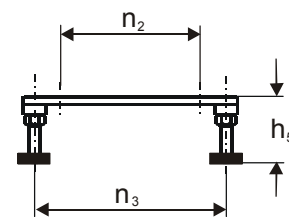
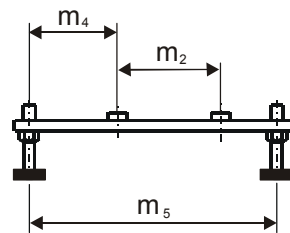
Dimensions in mm.

size	speed [rpm]	motor power [kW]	T y p e	Dimension motor foot								T y p e	Dimension base frame						T y p e	Dimension cover			
				c ₂	h ₃	m ₄	m ₅	m ₆	n ₃	n ₄	s ₂		h ₅	m ₇	m ₈	m ₉	n ₅	n ₆		b ₂	h ₄	l ₁	l ₂
65166	1450	2.2	C	3	160	376	336	107	290	240	12	C	197	336	386	107	260	310	C	352	233	133	390
65176		3.0	C	3	160	376	336	107	290	240	12	C	197	336	386	107	260	310	C	352	233	133	390
65186		4.0	D	3	172	376	336	114	290	240	12	D	209	336	386	114	260	310	D	352	221	140	390
65196		7.5*	D	3	172	376	336	114	290	240	12	D	209	336	386	114	260	310	D	352	221	140	390
65121 to 65136	2900	11.0*	E	3	200	440	400	134	320	270	12	E	230	400	450	134	290	340	E	423	289	154	500
65141 to 65161		15.0	F	4	230	540	500	169	380	310	13	F	264	500	575	169	340	415	F	423	283	189	617
65166 to 65186		18.5	F	4	230	540	500	169	380	310	13	F	264	500	575	169	340	415	F	423	283	189	617
65191		22.0	G	4	250	602	562	232	380	310	13	G	284	562	637	232	340	415	G	463	350	179	740
65196																							
66200	1450	7.5	D	3	172	376	336	152	290	240	12	D	209	336	386	152	260	310	D	352	221	172	390
66215		11.0	F	4	230	540	500	187	380	310	13	F	264	500	575	187	340	415	F	423	283	207	617
66230		15.0	F	4	230	540	500	187	380	310	13	F	264	500	575	187	340	415	F	423	283	207	617
66196 to 66216	2900	22.0	G	4	250	602	562	236	380	310	13	G	284	562	637	236	340	415	G	463	350	183	740

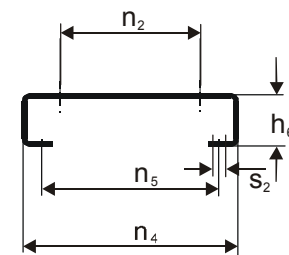
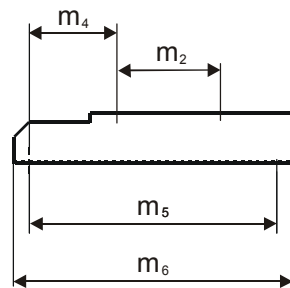
* special motor



Stainless steel base frame



Stainless steel motor foot



Dimensions in mm.

size	speed [rpm]	motor power [kW]	Dimension pump																weight [kg]
			DN ₁	DN ₂	a	f	h ₁	h ₂	h ₄	l ₁	m ₁	m ₂	m ₃	o ₁	s ₁	n ₁	n ₂	w	
4001	1450	1,5	40	40	124	80	90	171	160	517	155	125	56	269	9	170	140	149	42
4101	1450	2,2	40	40	124	90	100	171	160	573	176	140	63	303	12	195	160	153	63
5001	1450	4,0	50	50	156	93	112	200	180	615	176	140	70	320	12	225	190	169	73
6501	1450	7,5	65	65	172	150	132	229	200	757	218	210	89	405	12	256	216	188	110

Dimensions in mm.

size	speed [rpm]	motor power [kW]	Dimension motor foot										Dimension base frame							
			Type	h ₆	m ₂	m ₄	m ₅	m ₆	n ₂	n ₄	n ₅	s ₂	Typ	h ₅ min	h ₅ max	m ₂	m ₄	m ₅	n ₂	n ₃
4001	1450	1,5	B	70	125	106	286	326	140	250	200	9	B	77	117	125	106	286	140	220
4101	1450	2,2	C	60	140	120	336	376	160	290	240	12	C	77	117	140	120	336	160	260
5001	1450	4,0	D	60	140	120	336	376	190	290	240	12	D	77	117	140	120	336	190	260
6501	1450	7,5	E	68	210	158	400	440	216	320	270	12	E	77	117	210	158	400	216	290

Dimensions in mm.

size	speed [rpm]	motor power [kW]	Dimension cover			
			Type	b ₂	h ₃	l ₂
4001	1450	1,5	B	302	191	333
4101	1450	2,2	C	352	233	390
5001	1450	4,0	D	352	221	390
6501	1450	7,5	E	423	228	500

Data regarding size – order information NHK

Size	Hydraulic + Bearing	Shaft sealing	Material	Casing sealing	Motor size	Connections	Diameter DN ₁ /DN ₂								
	A • = 1450 rpm B • = 2900 rpm • Z = motor bearing	X0A = single mech. seal X0B = double mech. seal	4B = stainless steel	1 = O-ring EPDM		1 = threaded connection DIN 11851 2 = small flange (FN1)	1 = 40/40 2 = 50/50 3 = 65/65 4 = 80/80 5 = 80/65 6 = 100/80 7 = 125/100 8 = 65/50								
25116	AZ	X0A	4B	1	FB	1 2	1								
25126															
25136															
25086	BZ				X0A			4B	1	1 2	1				
25091															
25096															
25101															
25106															
25111															
25116															
25121															
25126															
25131															
25136															
50156	AZ	X0A X0B	4B	1		HB	1 2					2 3 8			
50161															
50166	BZ				X0A X0B	4B		1	1 2	2 3 8					
50106															
50111															
50116															
50121															
50126															
50131															
50136															
50141															
50146															
50151															
50156															
50161															
50166															
51166										BZ	X0A X0B	4B	1	1 2	5 8
51171															
51176															
51181															
51186															
60186	BZ	X0A X0B	4B	1			1 2								
60191															
60196															
60201															
60206															
60211															
60216															
60221															
60226															
65166	AZ	X0A X0B	4B	1	KB	1 2	3 4								
65176															
65186	BZ				X0A X0B			4B	1	1 2					3 4
65196															
65116															
65121															
65126															
65131															
65136															
65141															
65146															
65151															
65156															
65161															
65166															
65171															

Size	Hydraulic + Bearing	Shaft sealing	Material	Casing sealing	Motor size	Connections	Diameter DN ₁ /DN ₂
	A • = 1450 rpm B • = 2900 rpm • Z = motor bearing	X0A = single mech. seal X0B = double mech. seal	4B = stainless steel	1 = O-ring EPDM		1 = threaded connection DIN 11851 2 = small flange (FN1)	1 = 40/40 2 = 50/50 3 = 65/65 4 = 80/80 5 = 80/65 6 = 100/80 7 = 125/100 8 = 65/50
65176	BZ	X0A X0B	4B	1	UA	1 2	3 4
65181					VA		
65186							
65191							
65196					PB SB UB		7
66200	AZ						
66215							
66230	BZ				VA		6
66196							
66201							
66206							
66211							
66216							

Data regarding size – order information SHK

Size	Hydraulic + Bearing	Shaft sealing	Material	Casing sealing	Motor size	Connections	Diameter DN ₁ /DN ₂
	A • = 1450 rpm • Z = motor bearing	X0A = single mech. seal	4B = stainless steel	1 = O-ring EPDM		1 = threaded-connection DIN 11851	1 = 40/40 2 = 50/50 3 = 65/65
4001	AZ	X0A	4B	1	JB	1	1
4101					KB		
5001					MB		
6501					PB		

Motor code for NHK and SHK

Motor speed = 1450 rpm			Motor speed = 2900 rpm		
kW	size	code	kW	size	code
0,55	80 a	FB	0,75	80 a	FA
0,75	80 b	GB	1,1	80 b	GA
1,1	90 S	HB	1,5	80 b	DW
1,5	90 L	JB	2,2	90 L	JA
2,2	100 L	KB	3,0	100 L	KA
3,0	100 L	LB	4,0	112 M	MA
4,0	112 M	MB	5,5*	112 M	AW
5,5	132 S	NB	7,5*	112 M	BW
7,5	132 M	PB	9,2*	132 M	PA
11,0	160 M	SB	11,0*	132 M	CW
15,0	160 L	UB	15,0	160 M	TA
			18,5	160 L	UA
			22,0	180 M	VA

* special motor

Technische Änderungen vorbehalten.

Sterling SIHI GmbH
Lindenstraße 170, D-25524 Itzehoe, Germany
Telefon: +49 (0)48 21 / 7 71-01

Telefax: +49 (0)48 21 / 7 71-274