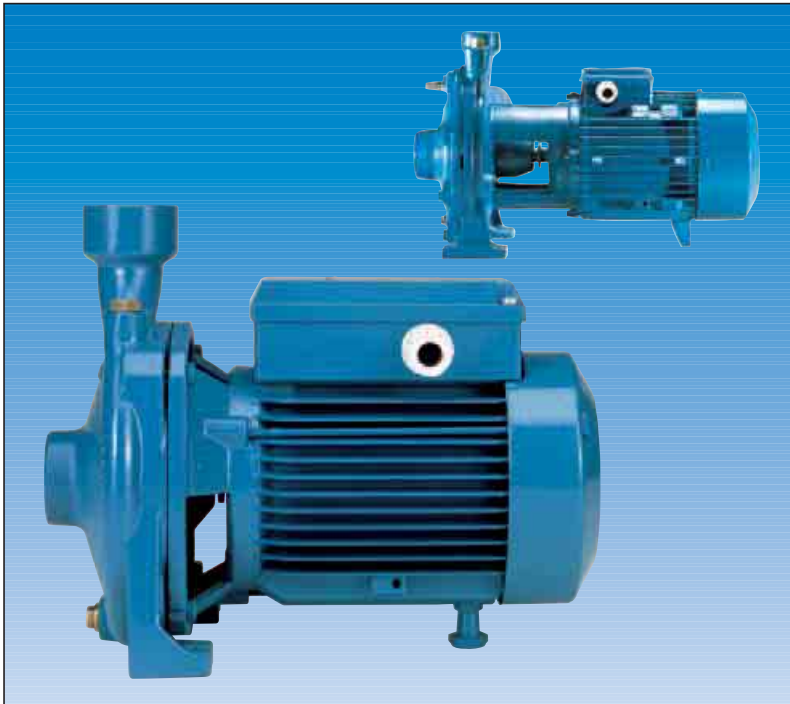


INTEROBIZ

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NM, NMD

Close Coupled Centrifugal Pumps with threaded ports



Construction

Close-coupled, centrifugal pumps; electric motor with extended shaft directly connected to the pump.

NM: single-impeller

NMD: with two back-to-back impellers (with axial thrust balancing).

Connections: threaded ports ISO 228/1 (BS 2779).

Applications

- For clean liquids without abrasives, which are non-aggressive for the pump materials (solids content up to 0.2%).
- For water supply.
- For heating, air-conditioning, cooling and circulation plants.
- For civil and industrial applications.
- For fire fighting applications.
- For irrigation.

Operating conditions

Liquid temperature from -10 °C to +90 °C.

Ambient temperature up to 40° C.

Total suction lift up to 7 m.

Maximum permissible working pressure up to 10 bar (16 bar for pumps NMD 25/190; NMD 32/210; NMD 40/180).

Continuous duty.

Motor

2-pole induction motor, 50 Hz (n = 2900 rpm).

NM, NMD: three-phase 230/400 V ± 10% up to 3 kW;
400/690 V ± 10% from 4 to 9,2 kW;

NMM, NMDM: single-phase 230 V ± 10%, with thermal protector.

Insulation class F.

Protection IP 54.

Constructed in accordance with IEC 60034.

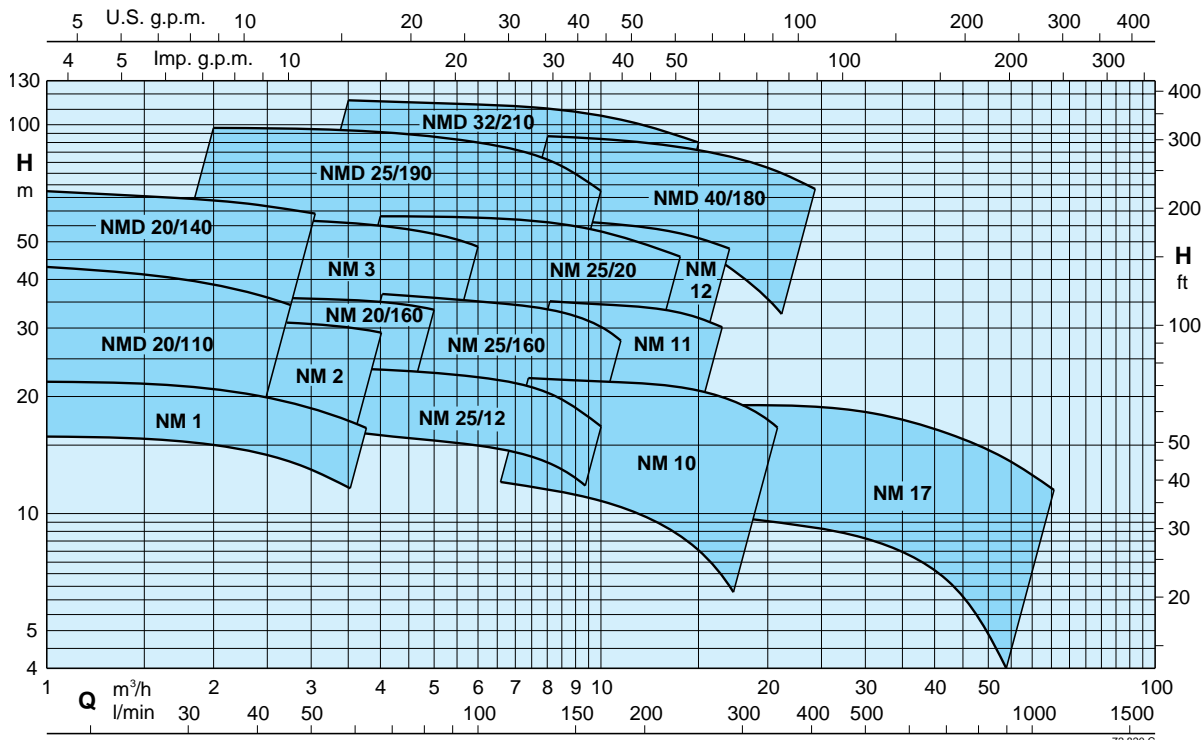
Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

Materials

Components	NM, NMD	B-NM, B-NMD	I-NM, I-NMD
Pump casing	Cast iron	Bronze	Cr Ni Mo steel AISI 316
Lantern bracket	GJL 200 EN 1561	G-Cu Sn 10 EN 1982	
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705		Cr Ni Mo steel AISI 316
NM 17	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982	
Shaft	Cr steel AISI 430	Cr Ni Mo steel AISI 316	
	Cr Ni steel AISI 303 1,1 -1,5 - 2,2 kW		
Mechanical seal	Carbon - Ceramic - NBR		

Coverage chart $n \approx 2900$ rpm



Performance $n \approx 2900$ rpm

	NM	P ₂		Q m ³ /h l/min	1	1,2	1,5	1,89	2,4	3	3,6	4,2	4,8	5,4	6	6,6	7,5	8,4	
		kW	HP		16	20	25	31,5	40	50	60	70	80	90	100	110	125	140	
		H m																	
	NM 1/AE ●	0,37	0,5	H m	22	21,6	21,3	20,9	20,3	19,4	18,1	16,3							
	NM 2/BE ●	0,55	0,75		27	26,5	26	25,5	25	24	23	22	20						
	NM 2/SE ●	0,55	0,75		31	30,5	30	29	27,5	25,5	23,5	20	16						
	NM 2/AE ●	0,75	1		33,5	33	32,5	32	31,5	30,5	29,5	28,5	27	26	24				
	NMM 3/CE	1,1	1,5			37,5	37,5	37	36,5	36	35	34	32						
	NM 3/CE	1,1	1,5			37,5	37,5	37	36,5	36	35	34	32	30,5*	28,5*				
	NMM 3/BE	1,5	2			42	42	41	41,5	40,5	40	39	37	35*	32*				
	NM 3/BE	1,5	2			47	47	46,5	46	45,5	45	44	43	41,5*	40*	37,5*	33*	26*	
	NM 3/AE	2,2	3			56	55,5	55,5	55	54,5	53,5	52,5	51,5	50*	48*	46*	42*	36*	

B-NM B-NMD I-NMD	NM NMD	P ₂		Q m ³ /h l/min	1	1,2	1,5	1,89	2,4	3	3,6	4,2	4,8	5,4	6	6,6	7,5	8,4	
		kW	HP		16	20	25	31,5	40	50	60	70	80	90	100	110	125	140	
		H m																	
B-NMD 20/110BE ●	NMD 20/110BE ●	0,45	0,6	H m	33	32	31	29	26,5	23	18								
B-NMD 20/110ZE ●	NMD 20/110ZE ●	0,55	0,75		37	36	35	33	30,5	27,5	23	18*							
B-NMD 20/110AE ●	NMD 20/110AE ●	0,75	1		43	42	40,5	39	36,5	33	29	25*							
I-B-NMDM 20/140BE	NMDM 20/140BE	1,1	1,5		52	51,5	51	50	48,5	47	45								
I-B-NMD 20/140BE	NMD 20/140BE	1,1	1,5		53	52,5	52	51	50	48	46	43,5	40						
I-B-NMDM 20/140AE	NMDM 20/140AE	1,5	2		57,5	57	56,5	55,5	54	51,5	49	46	43	40	36				
I-B-NMD 20/140AE	NMD 20/140AE	1,5	2		67	66,5	66	64,5	63	61,5	59	57	53,5	50	46				
B-NM 20/160BE ●	NM 20/160BE ●	0,75	1					30,5	30	29,5	28,5	27,5	26,5	25,5	24	22*			
B-NM 20/160AE ●	NM 20/160AE ●	1,1	1,5					36	35,5	35	34,5	33,5	32	30,5	29	27*			

B-NMD, B-NMD I-NM, I-NMD	NM NMD	P ₂		Q m ³ /h l/min	2,4	3	3,6	4,8	6	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	
		kW	HP		40	50	60	80	100	110	125	140	160	180	200	220	250	280	
		H m																	
B-NM 25/125BE ●	NM 25/125BE ●	0,55	0,75	H m	20	19,9	19,8	19,3	18,5	18	17,3	16,3	15*	13,2*	11*				
B-NM 25/125AE ●	NM 25/125AE ●	0,75	1		23,5	23,4	23,3	22,9	22,1	21,7	20,9	20	18,7*	17,1*	15,2*				
B-NM 25/160BE ●	NM 25/160BE ●	1,1	1,5			31	30,7	30	28,5	28	27	26	23						
B-NM 25/160AE ●	NM 25/160AE ●	1,5	2			36,5	36,2	35,5	34,5	34	33,5	32,5	31	28,5*	26*				
I-B-NM 25/200BE	NM 25/200BE	2,2	3			42,5	42	41	40	39,5	38,5	37,5	36	33*	29*				
I-B-NM 25/200AE	NM 25/200AE	3	4			50	49,7	49	48	47,5	47	46,5	45,5	44*	42*	39*			
I-B-NM 25/200SE	NM 25/200SE	4	5,5			59	58,5	58	57,5	57	56,5	55,5	54,5	53	51,5	49*	44,5*	37*	
I-B-NMD 25/190CE	NMD 25/190CE	2,2	3			62	60,5	59	55,5	51	48,5	44	38*						
I-B-NMD 25/190BE	NMD 25/190BE	3	4			76	75	74	70	66	64	60	54	46*					
I-B-NMD 25/190AE	NMD 25/190AE	4	5,5		98	97	96	93,5	90	88	84	79	70*						

	NM	P ₂		Q m ³ /h l/min	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30	
		kW	HP		110	125	140	160	180	200	220	250	280	315	350	400	450	500	
		H m																	
	NM 10/FE ●	0,55	0,75	H m	12,5	12,5	12	11,5	11	10	9	7,5							
	NM 10/DE ●	0,75	1		18	18	17,5	17	16,5	16	15,5	14							
	NM 10/AE ●	1,1	1,5		23	23	22,5	22	21,5	21	20,5	19							
	NM 10/SE ●	1,5	2		23,5	23,5	23	22,5	22	21,5	21	20,5	19*	18,5*	16,5*	13*			
	NMM 11/BE	1,5	2		26,5	25,5	25	24	23	22,5	21,5	19,5	17,5						
	NM 11/BE	1,5	2		29,5	29,5	29	28,5	27,5	27	26	25*	22,5*						
	NM 11/AE	2,2	3		35,5	35,5	35	34,5	34	33,5	33	32*	30*						
	NM 12/DE	2,2	3		38	37,5	37	36	35	33,5	32								
	NM 12/CE	3	4		45	44,5	44	43,5	42,5	41	40	38	36*						
	NM 12/AE	4	5,5		57,5	57	56	55,5	55	54,5	53,5	51,5	49*						

Performance $n \approx 2900$ rpm

B-NMD I-NMD	NMD	P ₂		Q m ³ /h l/min	5,4	6	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24
		kW	HP		90	100	110	125	140	160	180	200	220	250	280	315	350	400
B-NMD 32/210DE	NMD 32/210DE	4	5,5	H m	71	69	67,5	65	62,5	58	53	46	37*					
B-NMD 32/210CE	NMD 32/210CE	5,5	7,5		84	83	82	81	79	76	73	69	64*	54*				
B-NMD 32/210BE	NMD 32/210BE	7,5	10		104	103	102	100	98	95	92	88	84*	76*				
B-NMD 32/210AE	NMD 32/210AE	9,2	12,5		114	113	112	110	108	105	103	99	96*	90*				
I-B-NMD 40/180DE	NMD 40/180DE	4	5,5					60	59,5	57	56	53	51,5	48	44	39	34*	25*
I-B-NMD 40/180CE	NMD 40/180CE	5,5	7,5					69	68	67	66	64,5	63	60	57	53	48*	40*
I-B-NMD 40/180BE	NMD 40/180BE	7,5	10					87	86	85	84	82,5	81	78	75	71	66*	59*
I-B-NMD 40/180AE	NMD 40/180AE	9,2	12,5					94	93	92	91	89,5	88	85	82	78	74*	67*

B-NM	NM	P ₂		Q m ³ /h l/min	21	24	27	30	33	37,8	42	48	54	60	66	75	84	96
		kW	HP		350	400	450	500	550	630	700	800	900	1000	1100	1250	1400	1600
B-NM 17/HE ●	NM 17/HE ●	1,1	1,5	H m	9,5	9,2	9	8,6	8,2	7,5	6,7	5,5	3,5*					
B-NM 17/GE ●	NM 17/GE ●	1,5	2		12	11,7	11,5	11,2	11	10,3	9,7	8,5	7*	4*				
B-NM 17/FE	NM 17/FE	2,2	3			16	16	15,5	15	14,5	14	13	11,5*	10*	8*			
B-NM 17/DE	NM 17/DE	3	4					18	18	17,5	17	16,5	15,5	14*	13*	11,5*		

NM, NMD Standard construction.
B-NM, B-NMD Bronze construction.
I-NM, I-NMD Stainless steel construction.

P₂ Rated motor power output.
H Total head in m.

● With single-phase motor = NMM - NMDM.
 * Maximum suction lift 1-2 m.
 Tolerances according to ISO 9906, annex A.

Rated currents

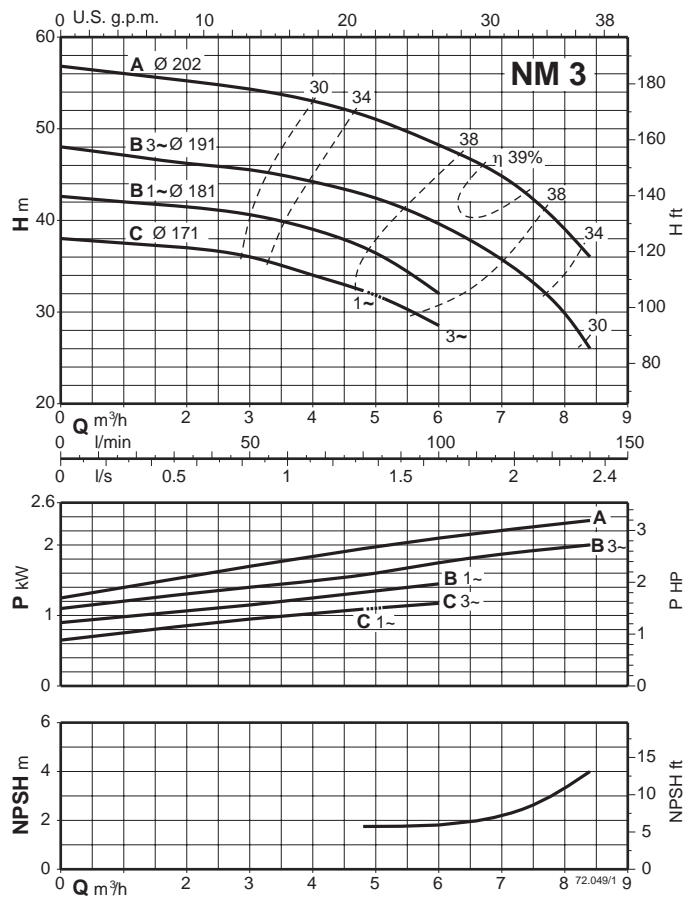
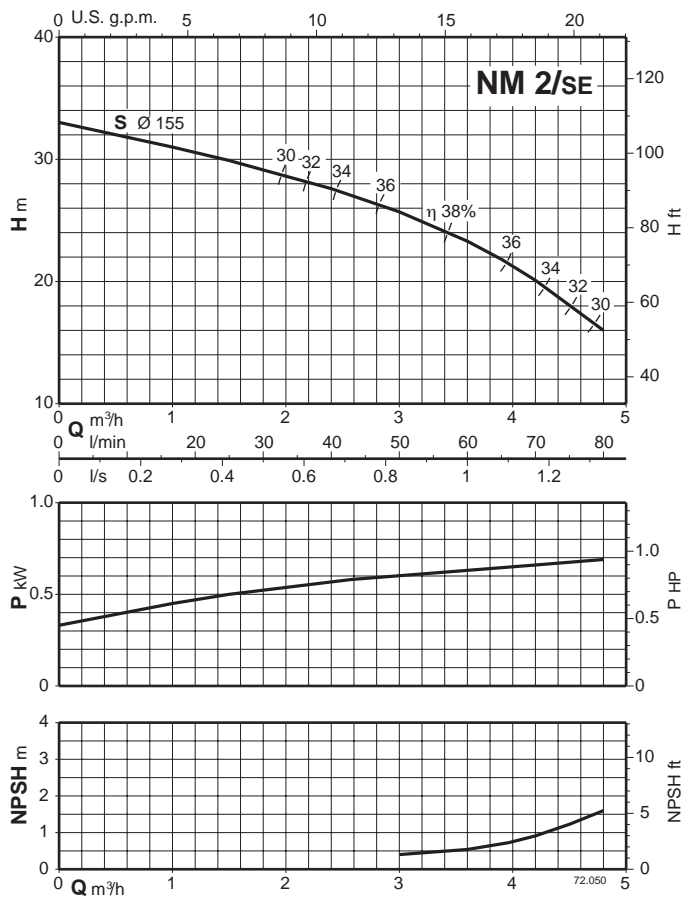
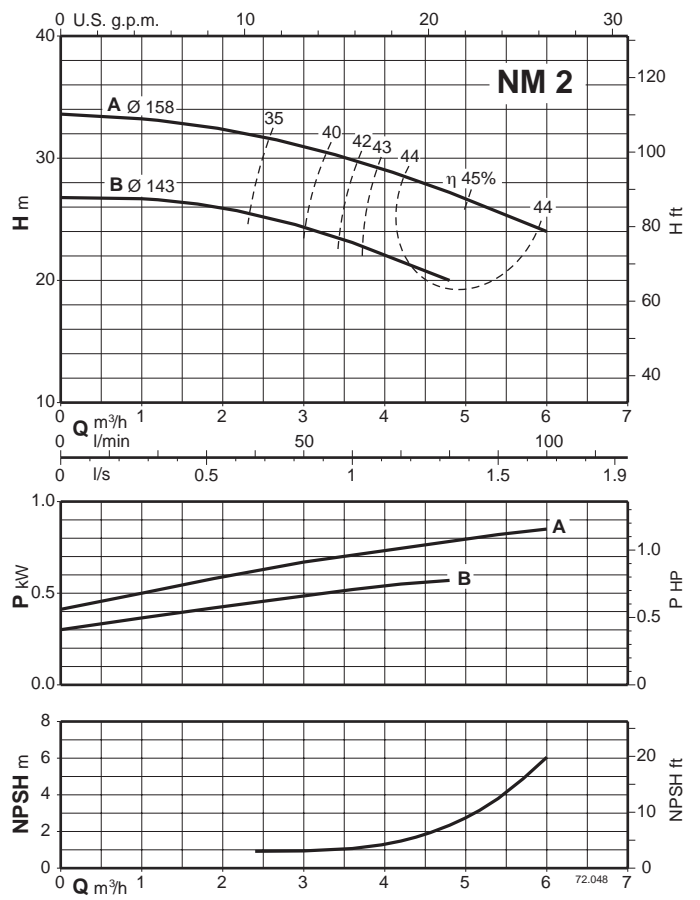
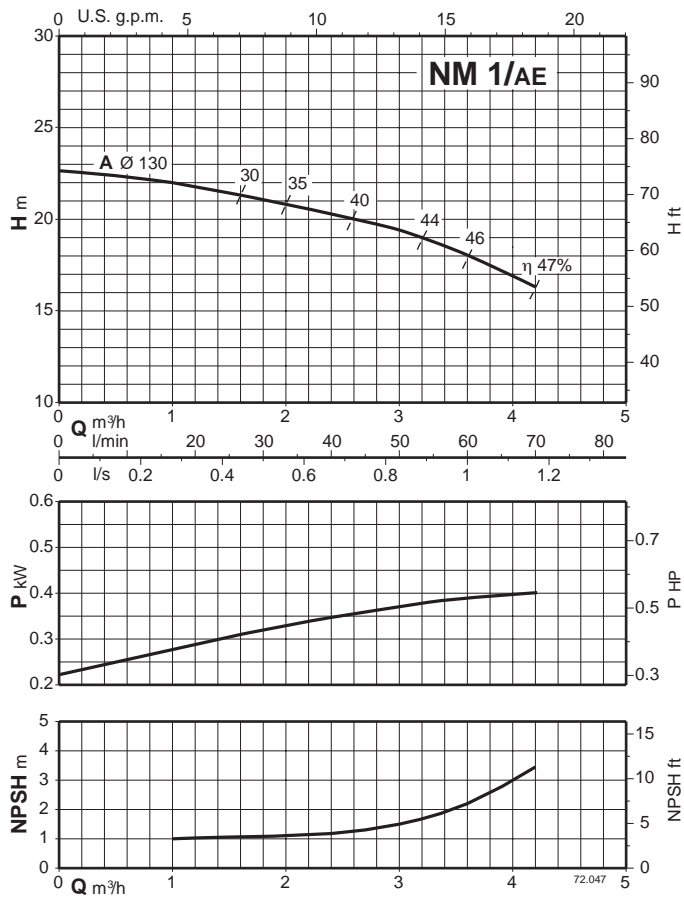
P1 kW	P2		230 V 1~ IN A	IA/IN	P2		230 V Δ / 400 V Y 400 V Δ / 690 V Y			IA/IN
	kW	HP			kW	HP	IN A	IN A	IN A	
0,62	0,37	0,5	3	2,7	0,37	0,5	2,3	1,3		3,8
0,72	0,45	0,6	3,6	2,9	0,45	0,6	2,3	1,3		3,5
0,91	0,55	0,75	4,5	3,1	0,55	0,75	3	1,7		4,3
1,2	0,75	1	5,8	3	0,75	1	4	2,3		5,2
1,6	1,1	1,5	7,4	3	1,1	1,5	5	2,9		5,3
2	1,5	2	9,2	3,8	1,5	2	7,5	4,3		5,8
					2,2	3	9,15	5,3		6
					3	4	11,5	6,6		7,9
					4	5,5		9,6	5,5	7,3
					5,5	7,5		12	7	8,3
					7,5	10		16	9,2	8,8
					9,2	12,5		20	11,5	10

P1 Maximum power input.
 P2 Rated motor power output.
 IA/IN D.O.L. starting current / Nominal current

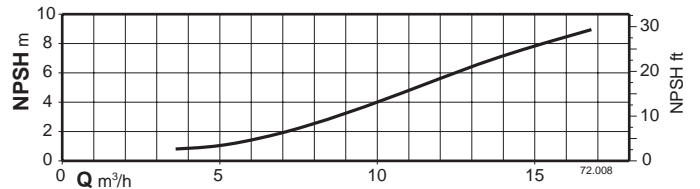
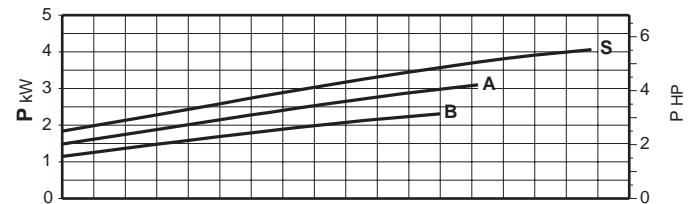
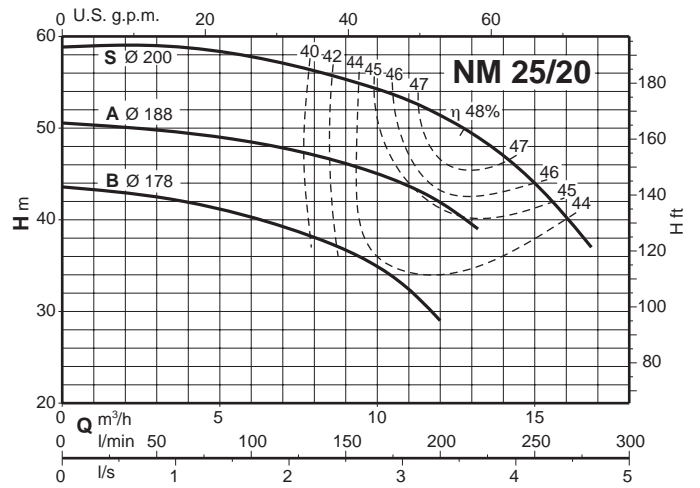
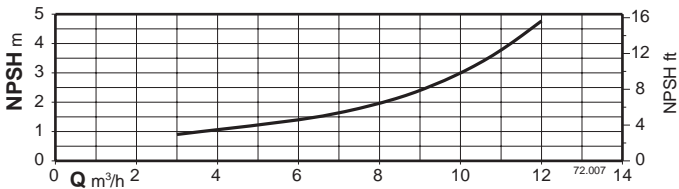
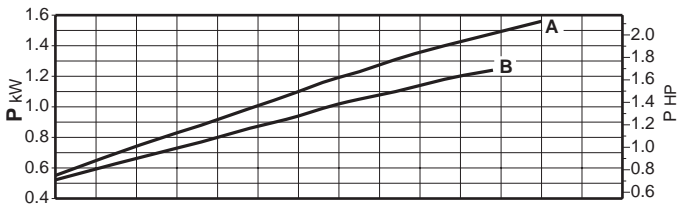
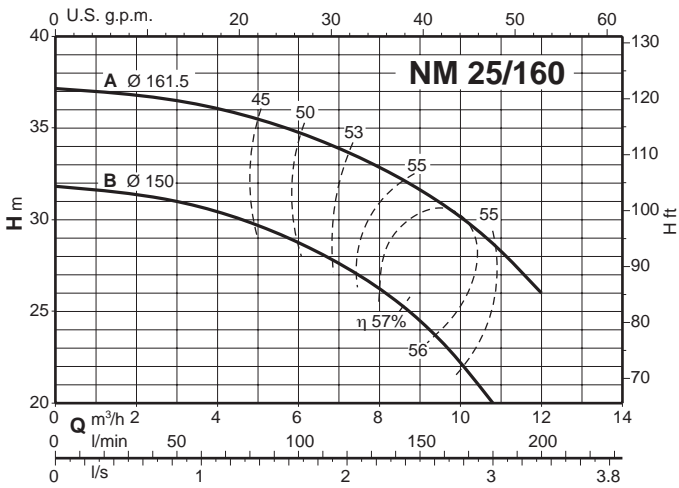
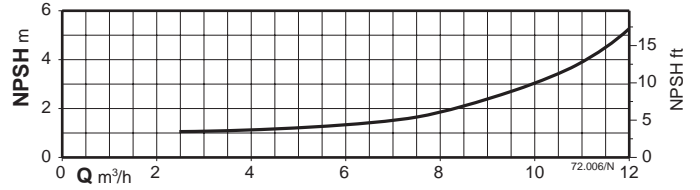
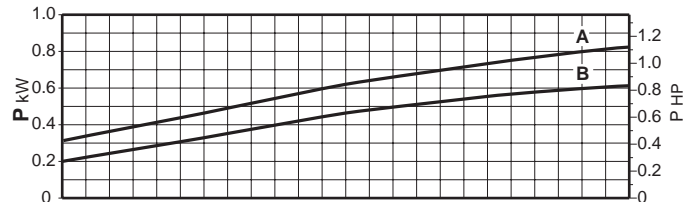
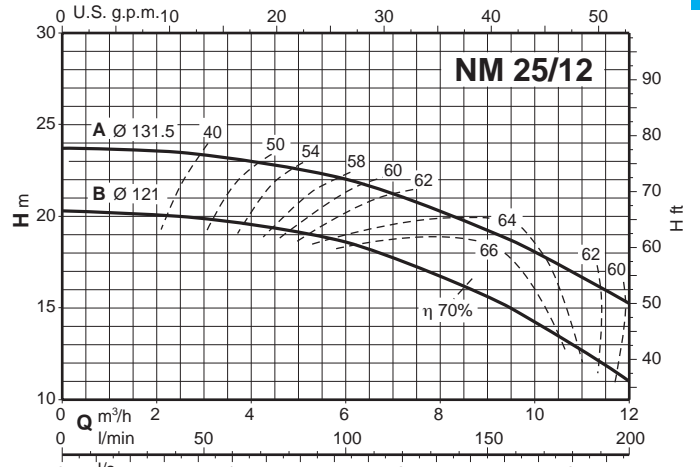
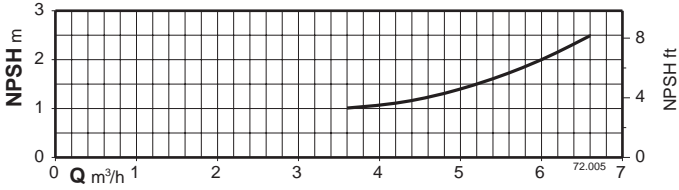
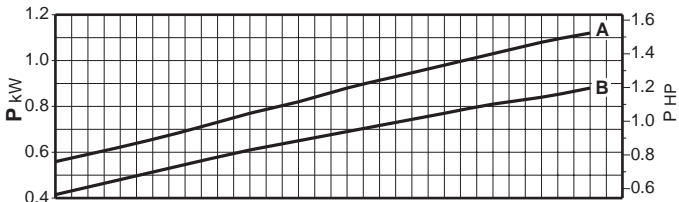
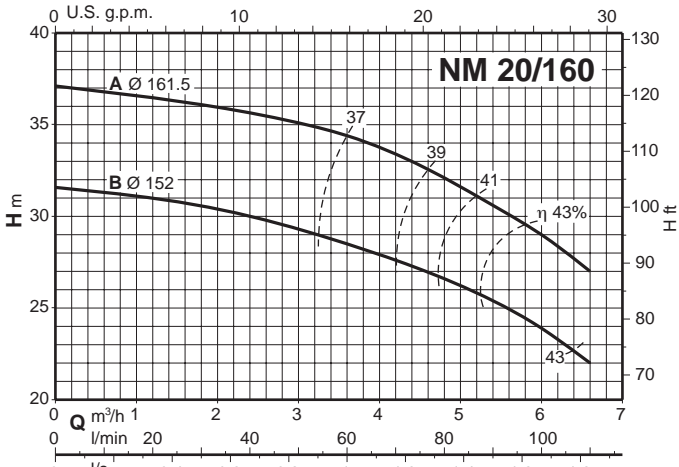


Close Coupled Centrifugal Pumps with threaded ports

Characteristic curves $n \approx 2900$ rpm



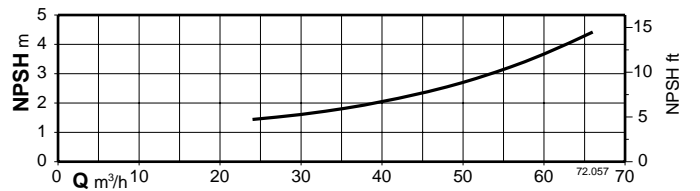
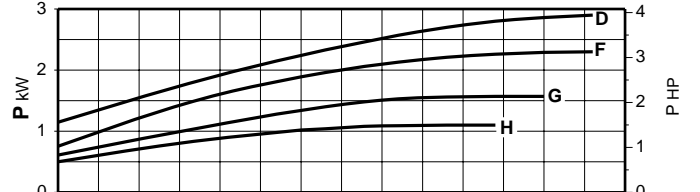
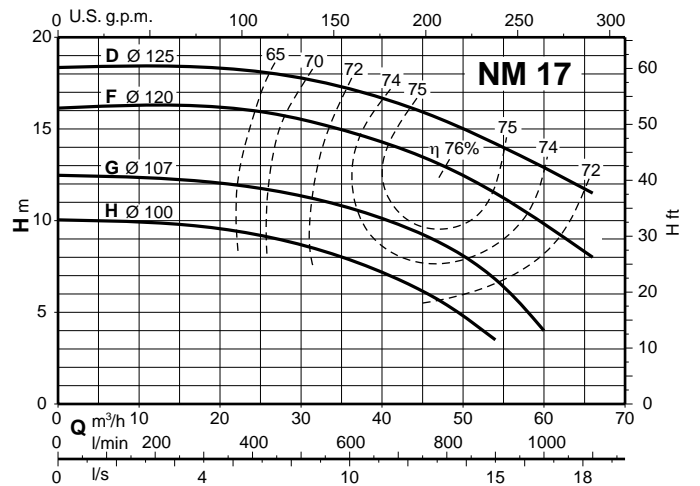
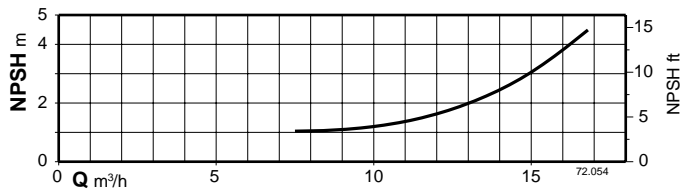
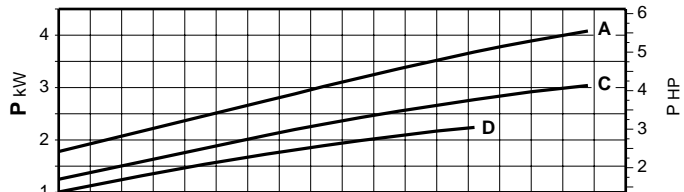
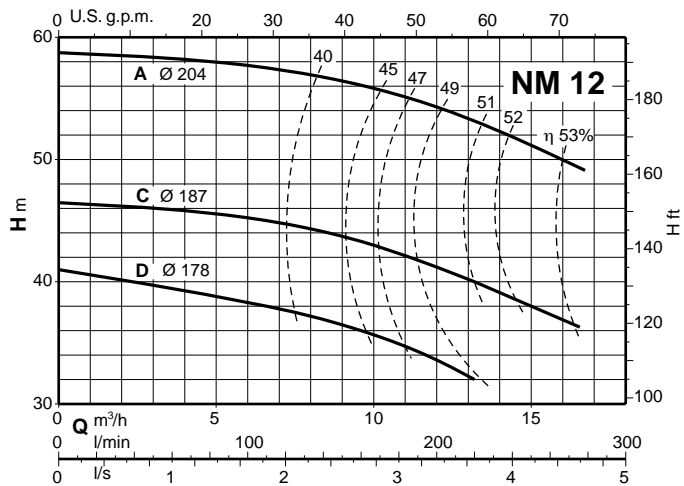
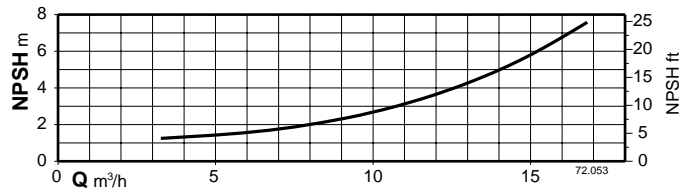
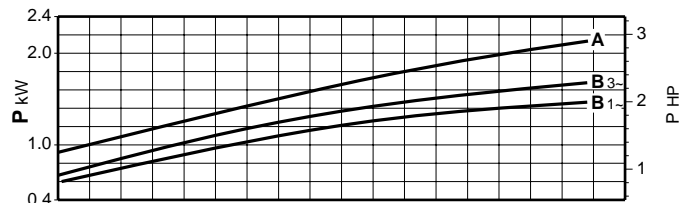
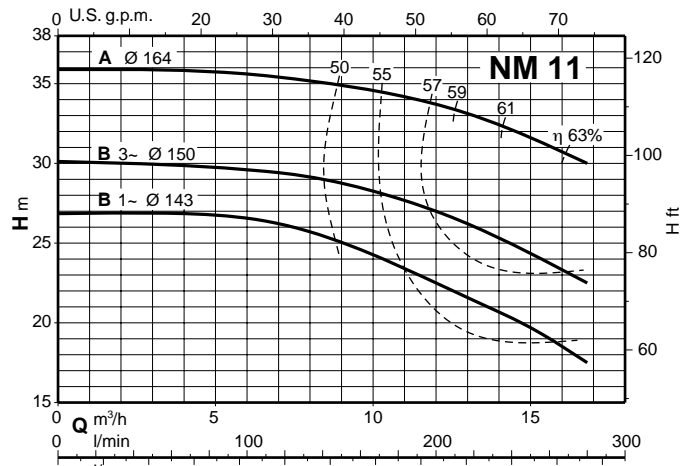
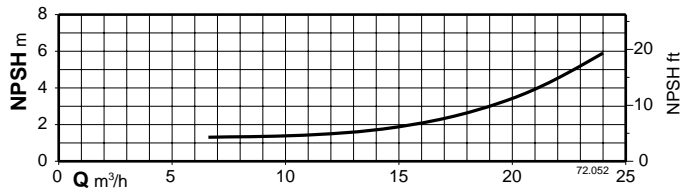
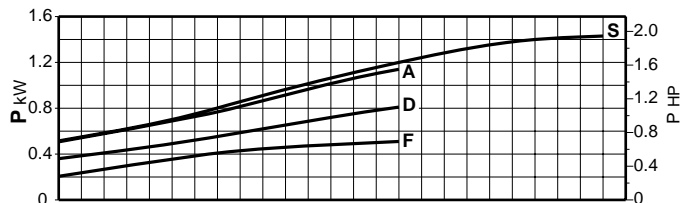
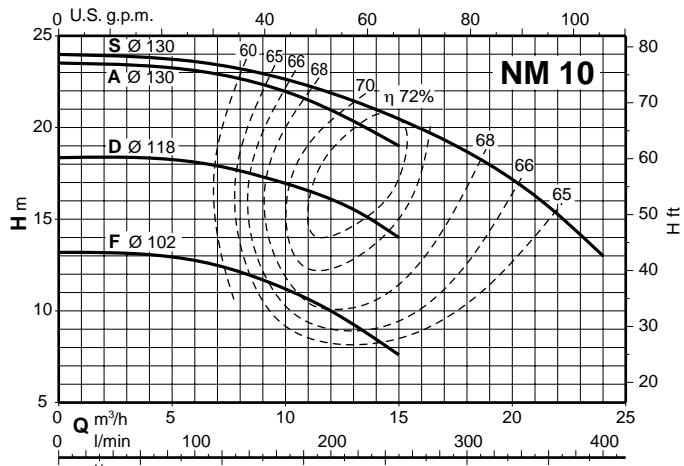
Characteristic curves $n \approx 2900$ rpm



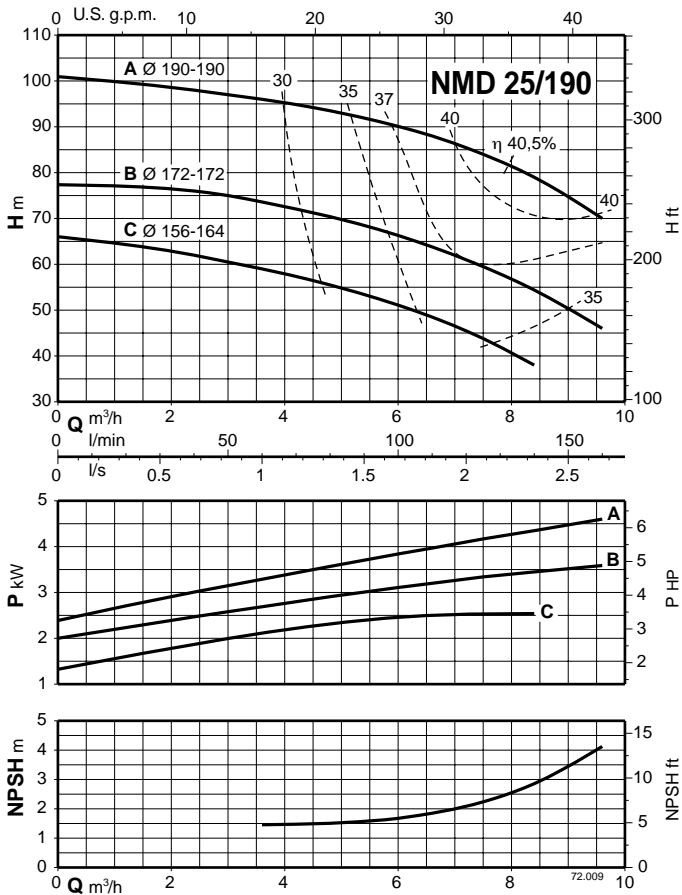
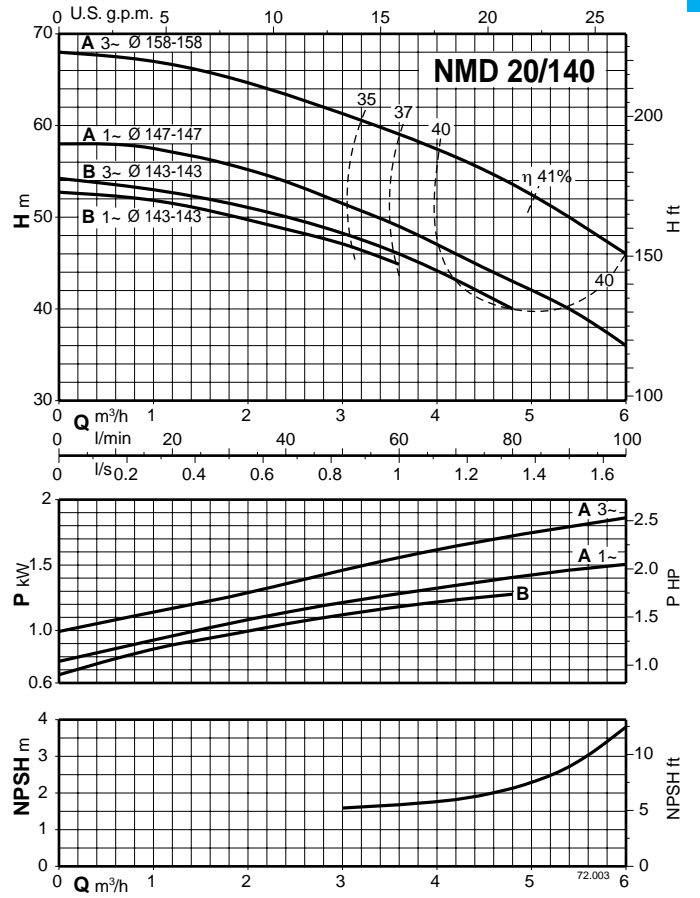
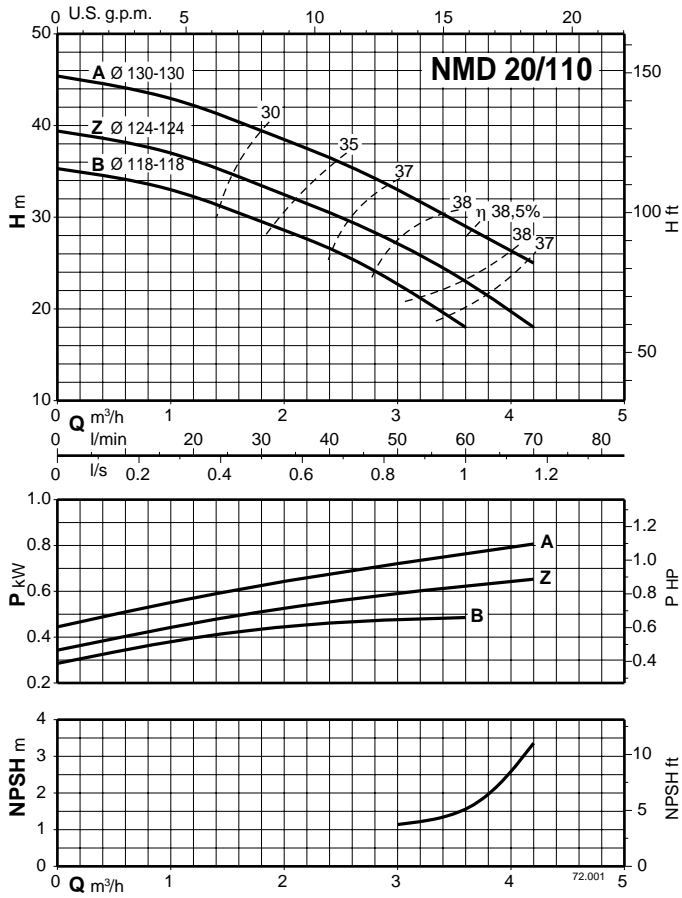


Close Coupled Centrifugal Pumps with threaded ports

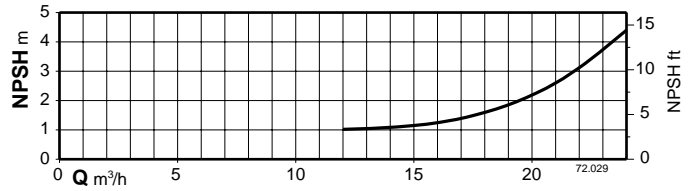
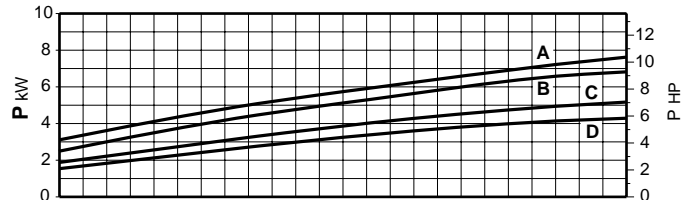
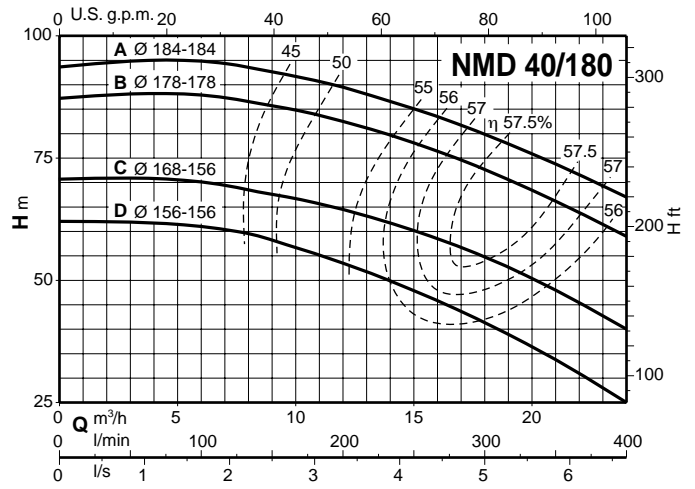
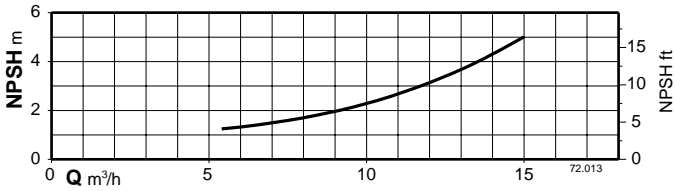
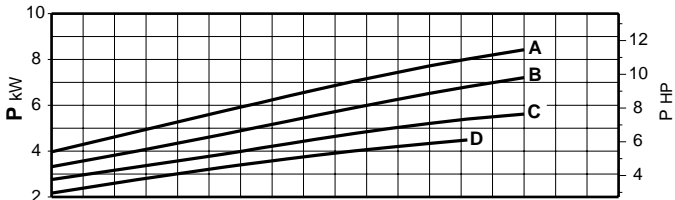
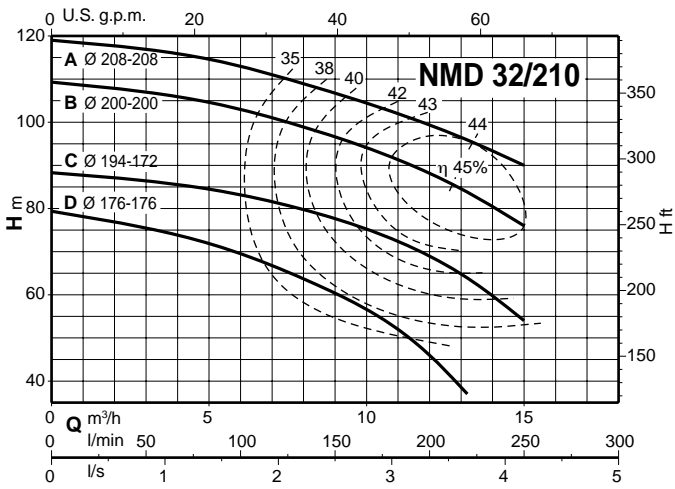
Characteristic curves $n \approx 2900$ rpm



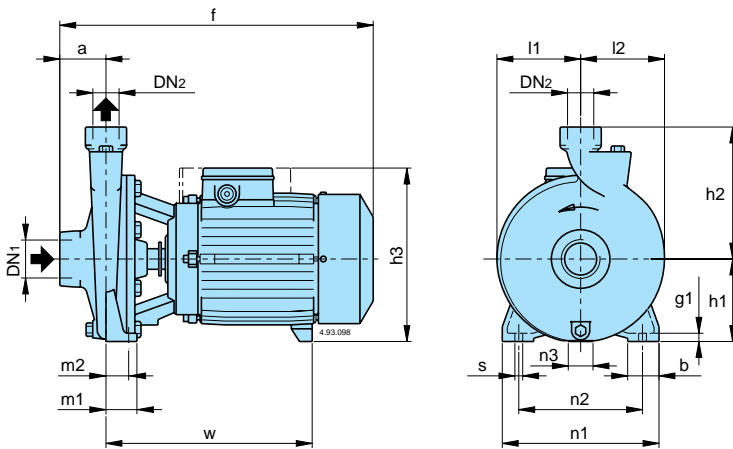
Characteristic curves $n \approx 2900$ rpm



Characteristic curves $n \approx 2900$ rpm



Dimensions and weights

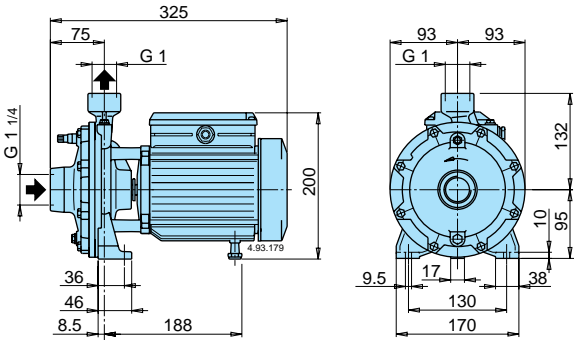


TYPE	NMM kg	NM kg	B-NM kg	I-NM kg
NM 1/AE	8,7	8,6		
NM 2/BE	14	13,1		
NM 2/SE	14,2	13,3		
NM 2/AE	15,1	14,2		
NM 3/CE	24	22,9		
NM 3/BE	26	25,1		
NM 3/AE		26,1		
B- NM 20/160BE	19,9	18,4	21	
B- NM 20/160AE	20,7	19,7	22,5	
NM 25/12BE	13,2	12,3		
NM 25/12AE	14,2	13,3		
B- NM 25/125BE			18,2	
B- NM 25/125AE			18,2	
B- NM 25/160BE	20,4	19,7	22,8	
B- NM 25/160AE	22,5	21,5	24	
NM 25/20BE		28,6		
NM 25/20AE		37,9		
NM 25/20SE		41,7		
I- B- NM 25/200BE			32,7	31
I- B- NM 25/200AE			40,7	38,6
I- B- NM 25/200SE			44,7	42,6
NM 10/FE	19,3	18,5		
NM 10/DE	19,4	18,8		
NM 10/AE	20,2	19,3		
NM 10/SE	22,1	21,5		
NM 11/BE	24,7	24,1		
NM 11/AE		25,1		
NM 12/DE		30,5		
NM 12/CE		39		
NM 12/AE		43		
B- NM 17/HE	23	22,2	29,2	
B- NM 17/GE	24,2	23,2	30,2	
B- NM 17/FE		25,2	32,2	
B- NM 17/DE		33,2	40,2	

B-NM I-NM	NM	DN1 ISO 228	DN2 ISO 228	mm															
				a	f	h1	h2	h3	m1	m2	n1	n2	n3	b	s	l1	l2	w	g1
	NM 1/AE	G 1	G 1	40	261	80	132	176	40	32	170	140	17	35	9,5	77	81	171	10
	NM 2/AE-SE-BE	G 1	G 1	45	305	95	150	203	40	32	190	160	17	35	9,5	87	90	218	10
	NM 3/AE-BE-CE	G 1	G 1	50	375	112	180	222	55	43	245	205	37	45	11,5	110	113	244	12
B-NM 20/160AE-BE	NM 20/160AE-BE	G 1 1/4	G 3/4	53	375	100	150	210	37,5	27,5	190	150	30	38	9,5	102	102	246	10
	NM 25/12AE-BE	G 1 1/2	G 1	56	313	90	140	195	37,5	27,5	170	130	9	38	9,5	85	88	195	10
B-NM 25/125AE-BE		G 1 1/2	G 1	56	380	90	140	200	37,5	27,5	170	130	9	38	9,5	85	88	250	10
B-NM 25/160AE-BE	NM 25/160AE-BE	G 1 1/2	G 1	56	380	100	160	210	37,5	27,5	190	150	30	38	9,5	102	102	246	10
	NM 25/20BE	G 1 1/2	G 1	63	393	125	180	235	45	32,5	245	200	49	45	11,5	125	125	251	11
	NM 25/20AE-SE	G 1 1/2	G 1	63	460	125	180	253	45	32,5	245	200	42	45	11,5	125	125	295	11
I- B- NM 25/200BE		G 1 1/2	G 1	63	405	125	180	235	45	32,5	245	200	49	45	11,5	125	125	263	11
I- B- NM 25/200AE-SE		G 1 1/2	G 1	63	455	125	180	253	45	32,5	245	200	42	45	11,5	125	125	295	11
	NM 10/SE-AE-DE-FE	G 2	G 1 1/4	63	382	100	150	210	50	35	190	140	30	50	13	90	97	239	14
	NM 11/AE-BE	G 2	G 1 1/4	70	400	112	170	222	50	35	210	160	37	50	15	103	110	247	14
	NM 12/DE			70	400	132	190	242	50	35	240	190	47	50	15	125	127	247	14
	NM 12/AE-CE			70	470	132	190	260	50	35	240	190	45	50	15	125	127	300	14
B-NM 17/FE- GE-HE	NM 17/FE- GE-HE	G 2 1/2	G 2 1/2	80	417	112	160	222	50	35	210	160	37	50	14	96	113	257	14
B-NM 17/DE	NM 17/DE	G 2 1/2	G 2 1/2	80	480	112	160	240	50	35	210	160	20	50	14	96	113	295	14

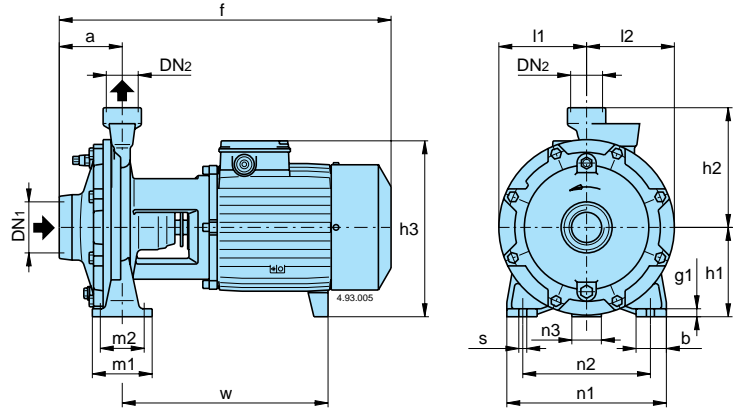
Dimensions and weights

NMD 20/110



TYPE	NMDM kg	NMD kg	B-NMD kg
B- NMD 20/110BE	13	12,1	13,4
B- NMD 20/110ZE	14	13	14,2
B- NMD 20/110AE	15,1	14,2	17,4

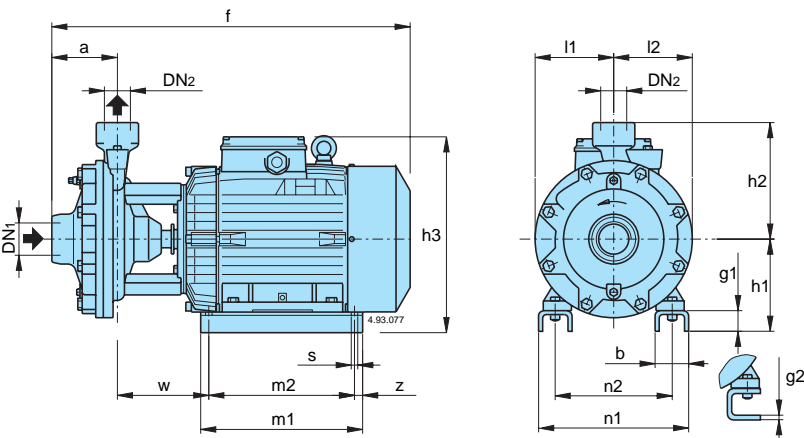
NMD 20/140 NMD 25/190



TYPE	NMDM kg	NMD kg	B-NMD kg	I-NMD kg
I- B- NMD 20/140BE	23,9	22,7	25,2	25
I- B- NMD 20/140AE	25,2	24,8	27,6	29,2
I- B- NMD 25/190CE		39	42,7	40
I- B- NMD 25/190BE		46,7	51	48
I- B- NMD 25/190AE		51	55	52

B-NMD I-NMD	NMD	DN1 ISO 228	DN2	mm																
				a	f	h1	h2	h3	m1	m2	n1	n2	n3	b	s	l1	l2	w	g1	
I-B- NMD 20/140AE-BE	NMD 20/140AE-BE	G 1 1/4	G 1	80	410	112	150	222	75	55	200	160	37	38	9,5	110	110	256	10	
I-B- NMD 25/190CE	NMD 25/190CE	G 1 1/2	G 1	97	500	140	180	268	100	70	240	190	49	50	14	133	133	306	13	
I-B- NMD 25/190BE	NMD 25/190BE																			274
I-B- NMD 25/190AE	NMD 25/190AE																			306

NMD 32/210 NMD 40/180



TYPE	NMD kg	B-NMD kg	I-NMD kg
B- NMD 32/210DE	60	66	
B- NMD 32/210CE	70	76	
B- NMD 32/210BE	76,5	82	
B- NMD 32/210AE	99	105	
I- B- NMD 40/180DE	59	65	61
I- B- NMD 40/180CE	69	75	71
I- B- NMD 40/180BE	75,5	81	77
I- B- NMD 40/180AE	97	102	99

B-NMD I-NMD	NMD	DN1 ISO 228	DN2	mm																	
				a	f	h1	h2	h3	m1	m2	n1	n2	z	b	s	l	l1	l2	w	g1	g2
B- NMD 32/210DE	NMD 32/210DE	G 2	G 1 1/4	110	530	155	215	283	205	175	194	140	15	68	10	-	150	150	139	-	6
B- NMD 32/210BE-CE	NMD 32/210BE-CE				550	150	215	310	280	250	258	190	15	68	12	-	150	150	108	38	-
B- NMD 32/210AE	NMD 32/210AE				625	170		355	298	268	286	216		70	12	-				152	38
I- B- NMD 40/180DE	NMD 40/180DE	G 2	G 1 1/2	121	535	155	215	283	205	175	194	140	15	68	10	-	145	145	133	-	6
I- B- NMD 40/180BE-CE	NMD 40/180BE-CE				555	150	215	310	280	250	258	190	15	68	12	-	145	145	102	38	-
I- B- NMD 40/180AE	NMD 40/180AE				630	170		355	298	268	286	216		70	12	-				145	38



Construction

Close-coupled centrifugal pumps; electric motor with extended shaft directly connected to the pump.

Pump casing with axial suction and radial delivery on top, main dimensions and performance according to EN 733.

Connections: Flanges according to PN 10, EN 1092-2.

Counter-flanges (on request)

Sizes	Flanges
from NM 32/... to NM 50/...	Screwed flanges EN 1092-1, PN 16
from NM 65/... to NM 100/250	Flanges for welding EN 1092-1, PN 10

Applications

- For clean liquids without abrasives, which are non-aggressive for the pump materials (solids content up to 0.2%).
- For water supply.
- For heating, air conditioning, cooling and circulation plants.
- For civil and industrial applications.
- For fire fighting applications. - For irrigation.

Operating conditions

Liquid temperature from -10 °C to +90 °C.

Ambient temperature up to 40° C.

Total suction lift up to 7 m.

Maximum permissible working pressure up to 10 bar.

Continuous duty.

Motor

2-pole induction motor, 50 Hz (n = 2900 rpm).

NM: three-phase 230/400 V ± 10% up to 3 kW;
400/690 V ± 10% from 4 to 75 kW.

Insulation class F.

Protection IP 54.

Constructed in accordance with IEC 60034.

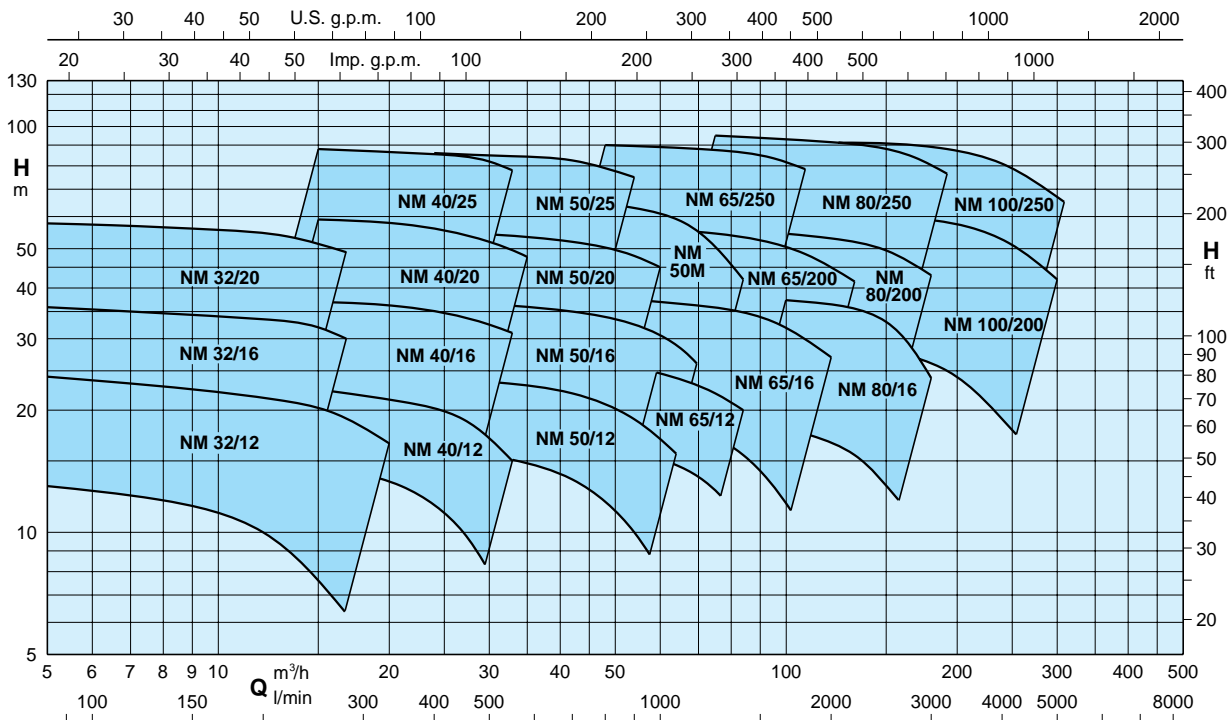
Special features on request

- Other voltages. - Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.- Special mechanical seal.
- Packed gland (only for NM standard construction).
- Single-phase motor (NMM) up to 1.5 kW.
- Explosion proof construction in accordance with Directive 94/9 EEC (ATEX).
- Higher or lower liquid or ambient temperatures.

Materials

Components	NM	B-NM	I-NM
Pump casing	Cast iron	Bronze	Cr Ni Mo steel AISI 316
Lantern bracket	G.JL 200 EN 1561	G-Cu Sn 10 EN 1982	
Impeller	Cast iron	Bronze	
	G.JL 200 EN 1561	G-Cu Sn 10 EN 1982	
	Brass P- Cu Zn 40 Pb 2 UNI 5705 for NM 32/12-16-20, NM 40/20 B-NM 32/125-160-200, B-NM 40/200		
Shaft	Cr Ni steel AISI 303 up to 2.2 kW	Cr Ni Mo steel AISI 316	
	Cr steel AISI 430 from 3 kW to 75 kW		
Mechanical seal	Carbon - Ceramic - NBR		
Counter-flanges	Steel Fe 430B UNI 7070		

Coverage chart n ≈ 2900 rpm





Close Coupled Centrifugal Pumps with flanged connections

Performance $n \approx 2900$ rpm

B-NM I-NM	NM	P ₂		Q m ³ /h l/min	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30		
		kW	HP		H m															
					110	125	140	160	180	200	220	250	280	315	350	400	450	500		
B-NM 32/125FE	NM 32/12FE	0,55	0,75	H m	12,5	12,5	12	11,5	11	10	9	7,5								
B-NM 32/125DE	NM 32/12DE	0,75	1		18	18	17,5	17	16,5	16	15,5	14								
B-NM 32/125AE	NM 32/12AE	1,1	1,5		23	23	22,5	22	21,5	21	20,5	19								
B-NM 32/125SE	NM 32/12SE	1,5	2		23,5	23,5	23	22,5	22	21,5	21	20,5	19*	18,5*	16,5*	13*				
B-NM 32/160BE	NM 32/16BE	1,5	2		29,5	29,5	29	28,5	27,5	27	26	25*	22,5*							
B-NM 32/160AE	NM 32/16AE	2,2	3		35,5	35,5	35	34,5	34	33,5	33	32*	30*							
I-B-NM 32/200DE	NM 32/20DE	2,2	3		38	37,5	37	36	35	33,5	32									
I-B-NM 32/200CE	NM 32/20CE	3	4		45	44,5	44	43,5	42,5	41	40	38	36*							
I-B-NM 32/200AE	NM 32/20AE	4	5,5		57,5	57	56	55,5	55	54,5	53,5	51,5	49*							

B-NM I-NM	NM	P ₂		Q m ³ /h l/min	15	16,8	18,9	21	24	27	30	33	37,8	42	48	54	60	66		
		kW	HP		H m															
					250	280	315	350	400	450	500	550	630	700	800	900	1000	1100		
B-NM 40/125FE	NM 40/12FE	1,1	1,5	H m	14,5	14	13,5	13	11,5	10	8*									
B-NM 40/125CE	NM 40/12CE	1,5	2		18	17,5	17	16,5	15,5	14	12	10*								
B-NM 40/125AE	NM 40/12AE	2,2	3		22,5	22	21,5	21	20	19	17,5	15*								
B-NM 40/160CE	NM 40/16CE	2,2	3		26	25,5	25	24	23	21										
B-NM 40/160BE	NM 40/16BE	3	4		31,5	31	30,5	30	29	27,5	25,5									
B-NM 40/160AE	NM 40/16AE	4	5,5		37	36,8	36,3	36	35	34	32,5	31*								
B-NM 40/200CE	NM 40/20CE	4	5,5		44	43	42	41	39	36,5										
B-NM 40/200BE	NM 40/20BE	5,5	7,5		51,5	51	50	49	48	46	43,5	40,5								
	NM 40/20ARE	5,5	7,5		55	54,5	54	53	51	49										
B-NM 40/200AE	NM 40/20AE	7,5	10		59	58,5	58	57,5	56	54	52	49	45	40*						
I-B-NM 4025/CE	NM 40/25CE	9,2	12,5	63,5	63	62,5	61,5	60	58*	55,5*	52*									
I-B-NM 4025/BE	NM 40/25BE	11	15	71,5	71	70,5	69,5	68	67*	65*	62*									
I-B-NM 4025/AE	NM 40/25AE	15	20	88	87,5	87	86,5	85,5	84*	82*	78*									

B-NM I-NM	NM	P ₂		Q m ³ /h l/min	24	27	30	33	37,8	42	48	54	60	66	75	84	96	108		
		kW	HP		H m															
					400	450	500	550	630	700	800	900	1000	1100	1250	1400	1600	1800		
B-NM 50/125FE	NM 50/12FE	2,2	3	H m			15,5	15	14,5	13,5	12	10*	8*							
B-NM 50/125DE	NM 50/12DE	3	4				18,5	18	17,5	16,5	15,5	13,5*	11,5*							
B-NM 50/125AE	NM 50/12AE	4	5,5				23,5	23	22,5	22	20,5	19*	17,5*	15*						
B-NM 50/160BE	NM 50/16BE	5,5	7,5				31	30,5	30	29	27,5	25,5	23,5*	21*						
B-NM 50/160AE	NM 50/16AE	7,5	10					36,5	36	35,5	35	34	32,5	30,5*	28*	23*				
B-NM 50/200BE	NM 50/20BE	9,2	12,5			48	47,5	47	46,5	45,5	44,5	43*	41*	37*						
B-NM 50/200AE	NM 50/20AE	11	15			55	55	54,5	54	53	52	50,5*	48*	45*						
I-B-NM 5025/CE	NM 50/25CE	11	15			60,5	59,5	58,5	57,5	55	52	47*	40*							
I-B-NM 5025/BE	NM 50/25BE	15	20			71	70,5	70	69,5	68	66,5	64*	60*							
I-B-NM 5025/AE	NM 50/25AE	18,5	25			86	85,5	85	84,5	84	82,5	80*	75*							
I-B-NM 5025/65EE	NM 50M/EE	11	15			48	47,5	47	46	45	43	40	37	32	24					
I-B-NM 5025/65DE	NM 50M/DE	15	20				57	56,5	56	55	53	51	48	44,5	37	25*				
I-B-NM 5025/65CE	NM 50M/CE	18,5	25				68	67,5	67	66,5	65	63	61	58	51,5	42*				

B-NM I-NM	NM	P ₂		Q m ³ /h l/min	37,8	42	48	54	60	66	75	84	96	108	120	132	150	168		
		kW	HP		H m															
					630	700	800	900	1000	1100	1250	1400	1600	1800	2000	2200	2500	2800		
	NM 65/12EE	4	5,5	H m	18	17,5	17	16,5	16	15	13,5*									
B-NM 65/125CE	NM 65/12CE	5,5	7,5		22	21,5	21	20,5	20	19,5	18	15,5*								
B-NM 65/125AE	NM 65/12AE	7,5	10		26	25,5	25	24,5	24	23,5	22	20*								
B-NM 65/160EE	NM 65/16EE	5,5	7,5				20	19,5	19	18,5	17	15,5	13*	10*						
B-NM 65/160DE	NM 65/16DE	7,5	10					26	25,5	25	24,5	23,5	22	20*	16,5*	13*				
B-NM 65/160CE	NM 65/16CE	9,2	12,5					30	29,5	29	28,5	28	26,5	24,5*	21,5*	18*				
B-NM 65/160BE	NM 65/16BE	11	15					33,5	33	32,5	32	31	30	28*	25,5*	22*				
B-NM 65/160AE	NM 65/16AE	15	20					38	37,5	37	36,5	36	35	33*	30,5*	27*				
B-NM 65/200CE	NM 65/20CE	15	20					44	43,5	43	42,5	41	39,5	37,5*	35*	31*	27*			
B-NM 65/200BE	NM 65/20BE	18,5	25					50	49,5	49	48,5	47,5	46,5	44,5*	42*	39*	35*	35*		
B-NM 65/200AE	NM 65/200AE	22	30					56,5	56	55,5	55	54,5	53,5	51*	48,5*	45,5*	41,5*			
B-NM 65/250CE	NM 65/250CE	22	30				64	63,5	63	61,5*	60*	57,5*	54,5*	50*						
I-B-NM 65/250BE	NM 65/250BE	30	40				79,5	79	78,5	78*	77*	75*	72*	67*						
I-B-NM 65/250AE	NM 65/250AE	37	50				90	89,5	89	88,5*	87,5*	86*	83,5*	78,5*						



Close Coupled Centrifugal Pumps with flanged connections

Performance $n \approx 2900$ rpm

B-NM	NM	P ₂		Q m ³ /h l/min	H m															
		kW	HP		75	84	96	108	120	132	150	168	180	192	210	240	270	300		
B-NM 80/160EE	NM 80/16EE	7,5	10	20	19,3	18,5	17,5*	16,5*	15,5*	13*										
B-NM 80/160DE	NM 80/16DE	9,2	12,5	23	22,5	22	21*	19,5*	18*	15*										
B-NM 80/160CE	NM 80/16CE	11	15	27,5	27	26,5	25,5*	24,5*	23*	20*	16*									
B-NM 80/160BE	NM 80/16BE	15	20	34	33,5	33	32,5*	32*	31*	28*	23*	18*								
B-NM 80/160AE	NM 80/16AE	18,5	25	38,5	38	37,5	37*	36,5*	36*	33*	29*	24*								
	NM 80/200BE	22	30	46,5	46	45,5	44,5	43,5*	42*	39*	35,5*	32*								
	NM 80/200AE	30	40	56	55,5	55	54	53*	52*	49,5*	46*	43*								
	NM 80/250EE	22	30	51	50	48,5	46,5	44,5*	42*	38*	33*	29*								
	NM 80/250DE	30	40	65	64	62,5	61	59*	56,5*	53*	49*	45,5*	41*							
	NM 80/250CE	37	50	73,5	73	72	70,5	69*	67*	63*	59*	55,5*	51,5*							
	NM 80/250BE	45	60	84	83,5	82,5	81,5	80*	78*	74,5*	70,5*	67*	63*							
	NM 80/250AE	55	75	95	94,5	93,5	92,5	91,5*	90*	87,5*	84*	80,5*	76,5*							
	NM 100/200EE	18,5	25				30	29,5	29	28	27	26*	25*	23*	19*					
	NM 100/200DE	22	30				36	35,5	35	34	33	32*	31*	29*	24,5*	19*				
	NM 100/200CE	30	40				45	44,5	44	43,5	42,5	41,5*	40,5*	39*	34,5*	29*	22°			
	NM 100/200BE	37	50				54	53,5	53	52,5	51,5	50,5*	49,5*	48*	44*	38,5*	32°			
	NM 100/200AE	45	60				61,5	61	60,5	60	59,5	58,5*	58*	56,5*	53*	48*	42°			
	NM 100/250BE	55	75				73,5	73	72,5	71,5	70	68,5*	67*	65*	61*	55,5*	48,5°			
	NM 100/250AE	75	100				91	90,5	90	89,5	88,5	88*	87*	85*	81*	75*	67°			

NM Standard construction.

B-NM Bronze construction.

I-NM Stainless steel construction.

P₂ Rated motor power output.

H Total head in m.

* Maximum suction lift 1-2 m.

◦ With 1 m suction head.

Tolerances according to ISO 9906, annex A.

Rated currents

P ₂		230V Δ / 400V Y 400V Δ / 690V Y			I _A /I _N
kW	HP	I _N A	I _N A	I _N A	
0,55	0,75	3	1,7		4,3
0,75	1	4	2,3		5,2
1,1	1,5	5	2,9		5,3
1,5	2	7,5	4,3		5,8
2,2	3	9,15	5,3		6
3	4	11,5	6,6		7,9
4	5,5		9,6	5,5	7,3
5,5	7,5		12	7	8,3
7,5	10		16	9,2	8,8
9,2	12,5		18,5	10,7	8,3
11	15		21,5	12,4	8,4
15	20		27,5	15,9	8,8
18,5	25		34	19,6	9,7
22	30		42	24,2	9
30	40		54	31,2	9
37	50		68	39,5	8,5
45	60		85	49	8
55	75		105	60	7,2
75	100		140	81	6

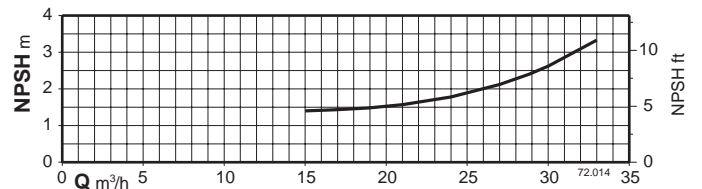
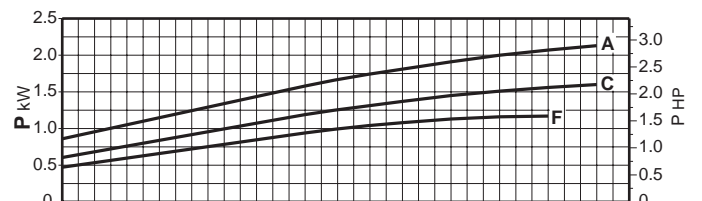
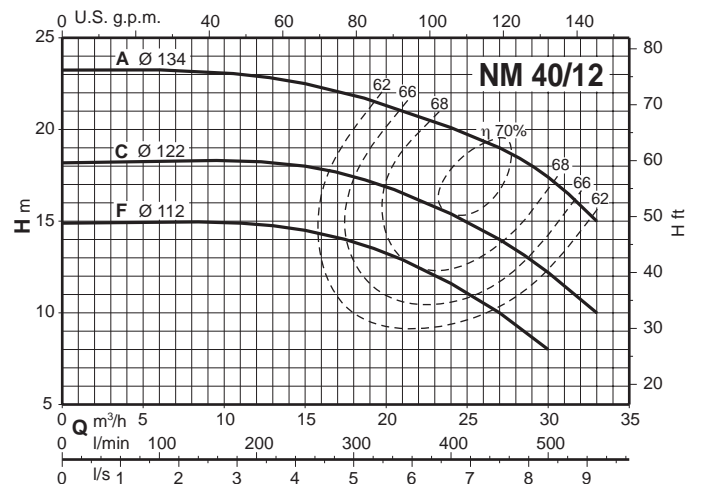
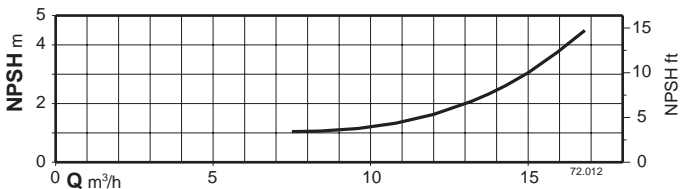
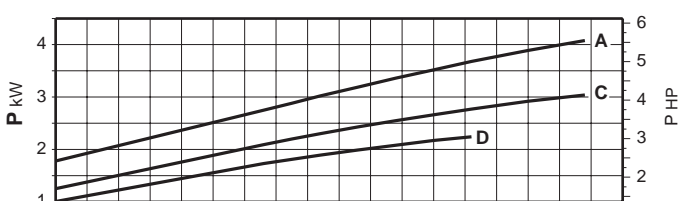
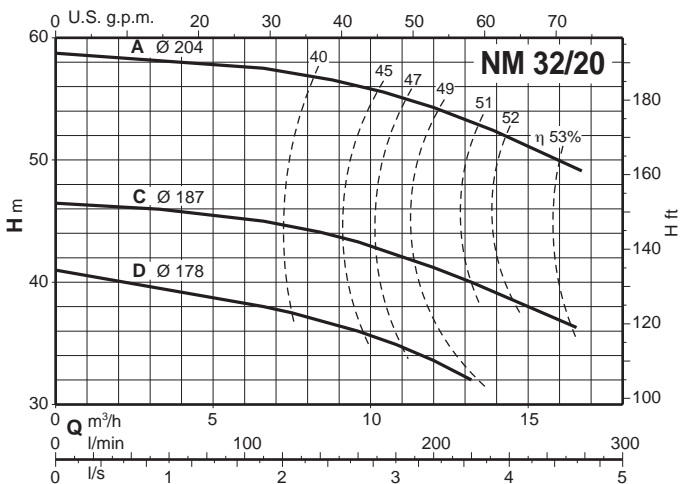
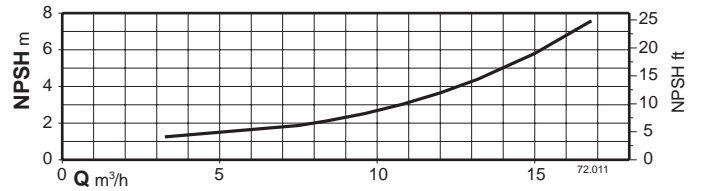
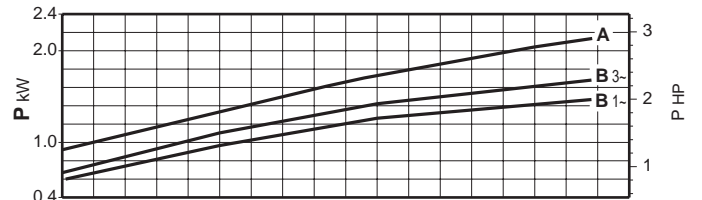
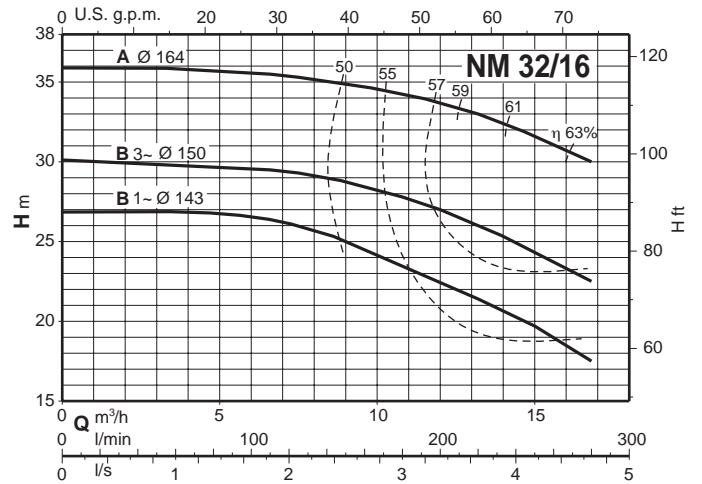
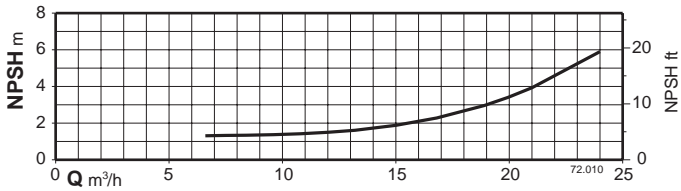
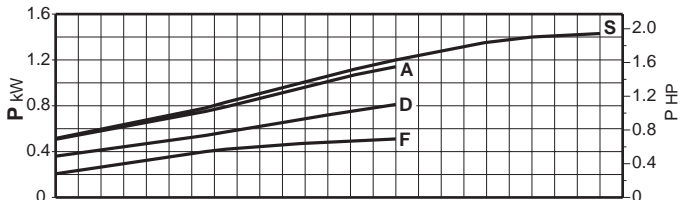
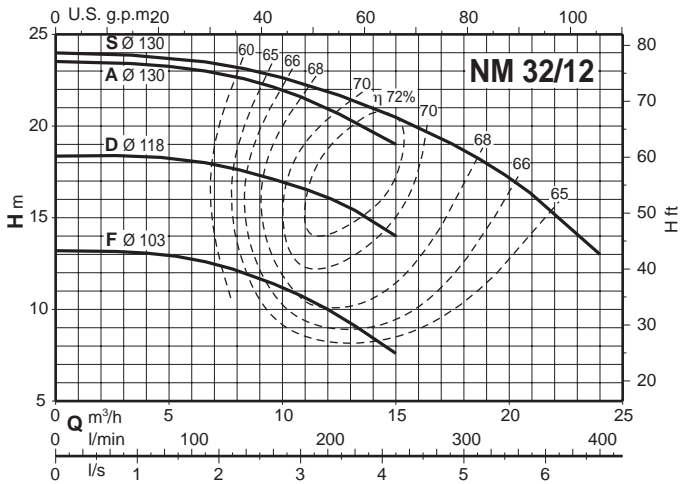
P₂ Rated motor power output.

I_A/I_N D.O.L. starting current / Nominal current



Close Coupled Centrifugal Pumps with flanged connections

Characteristic curves $n \approx 2900$ rpm

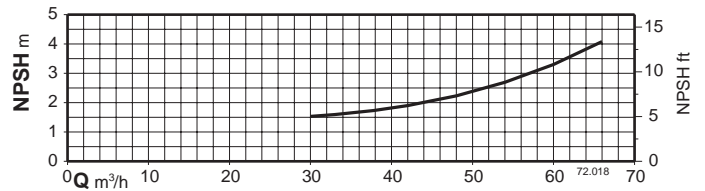
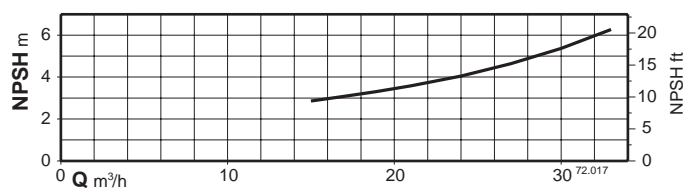
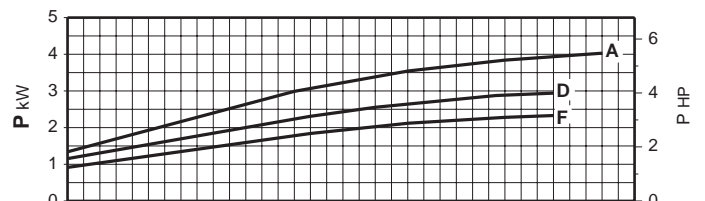
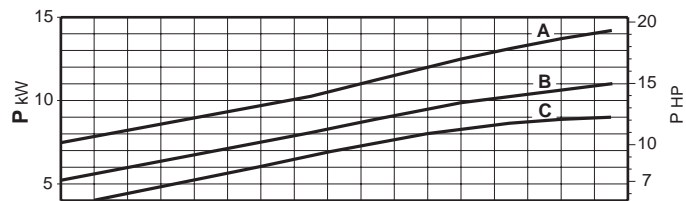
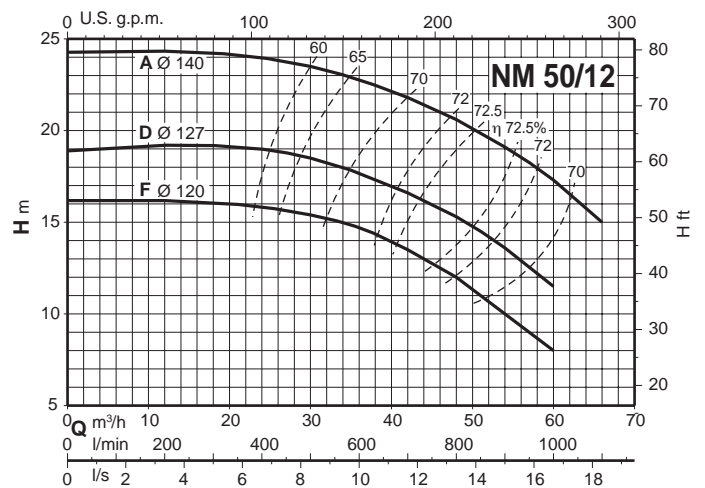
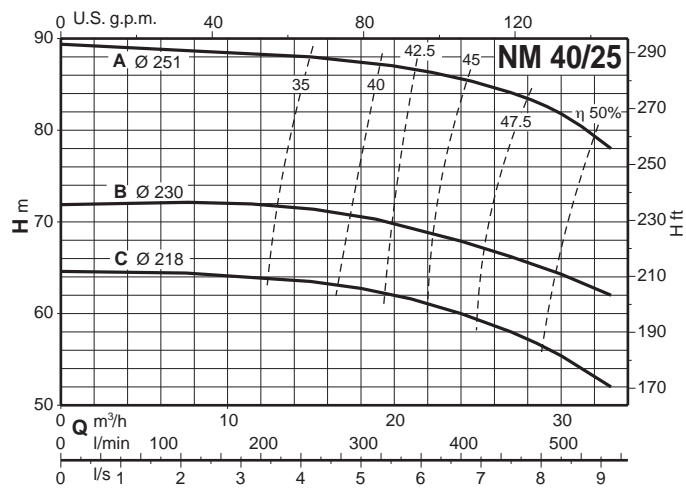
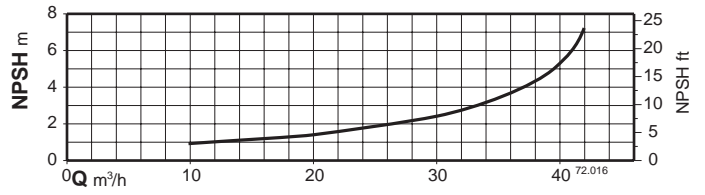
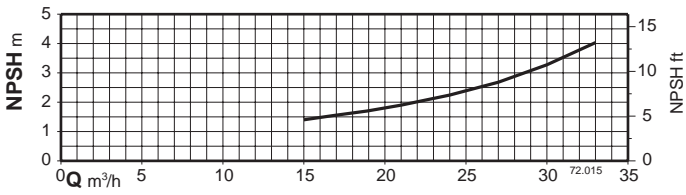
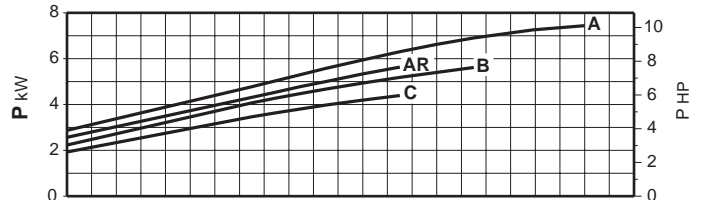
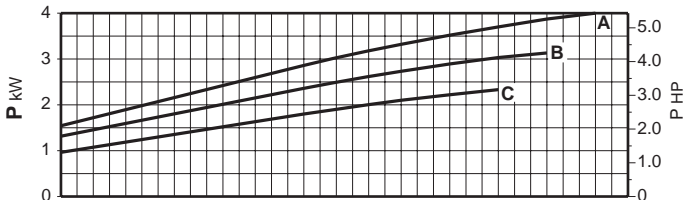
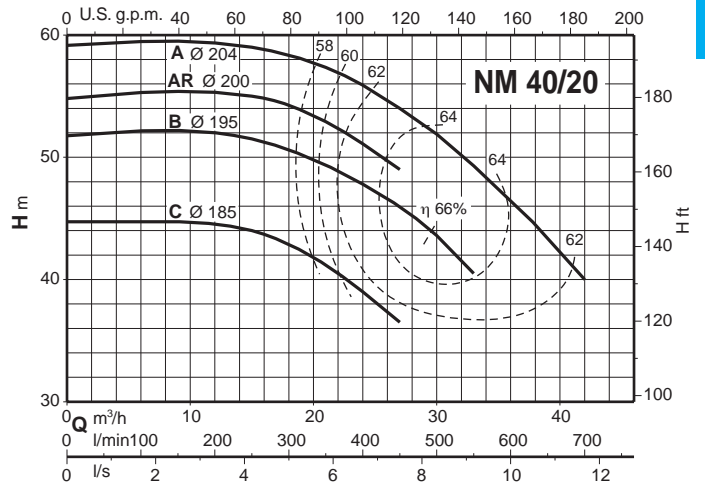
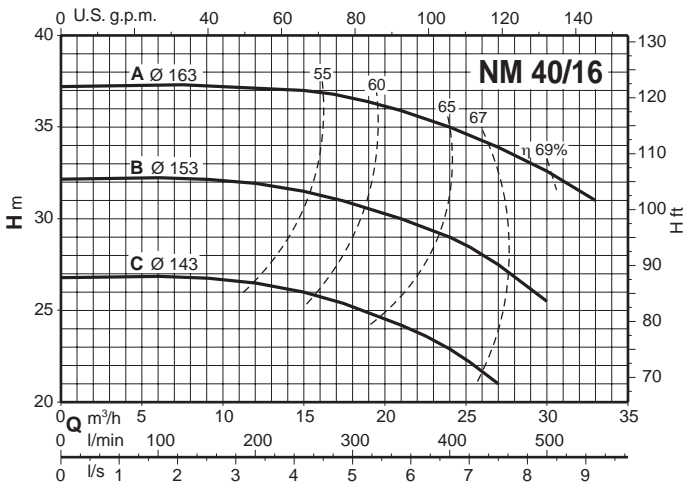




Close Coupled Centrifugal Pumps with flanged connections

Characteristic curves $n \approx 2900$ rpm

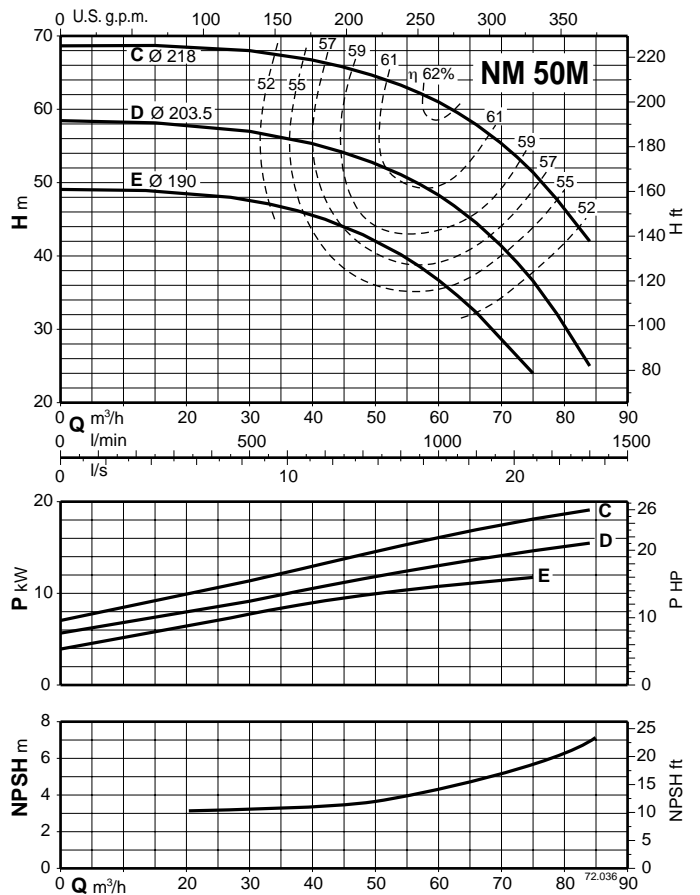
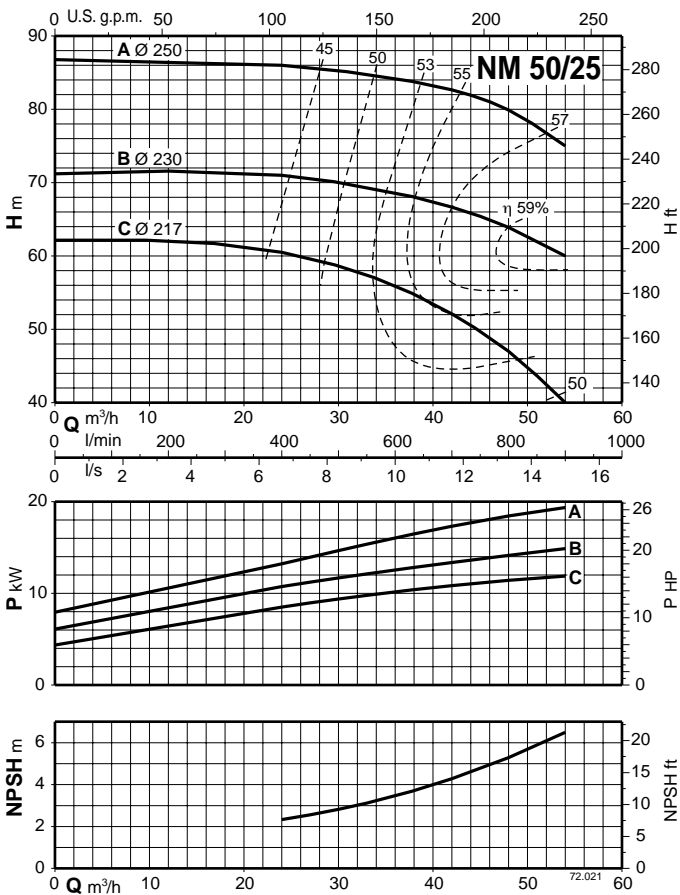
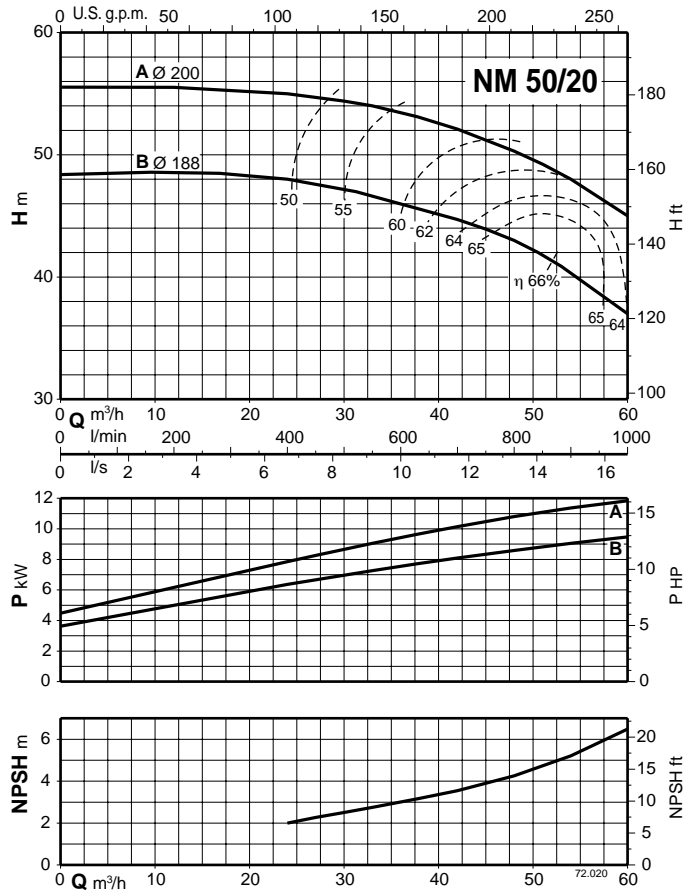
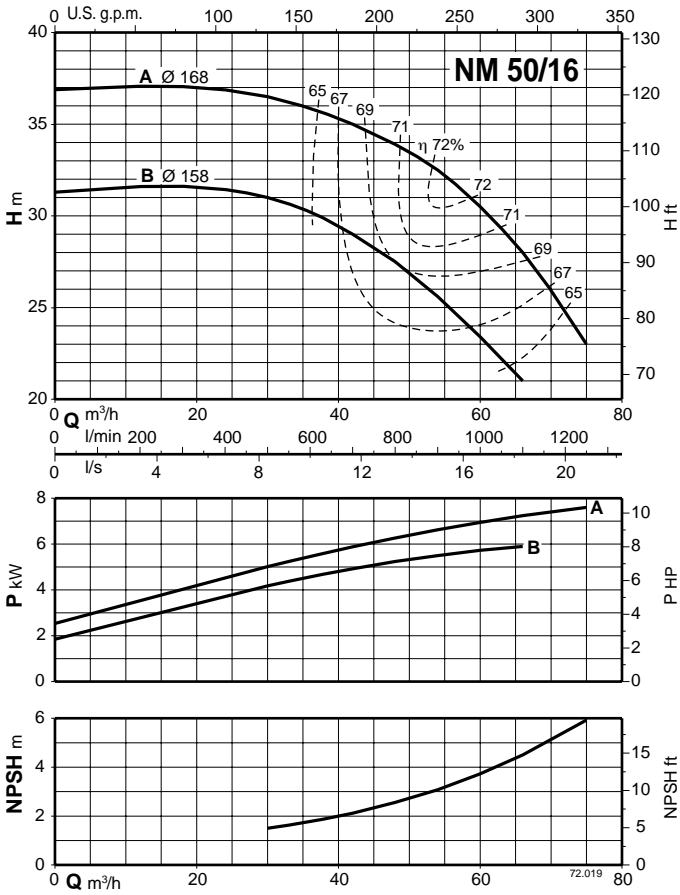
2





Close Coupled Centrifugal Pumps with flanged connections

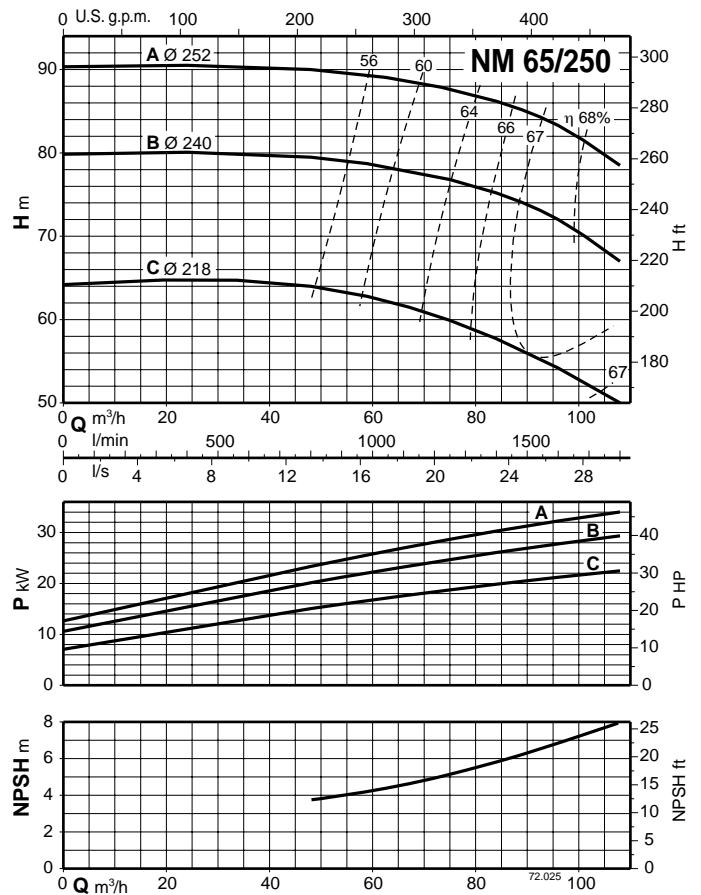
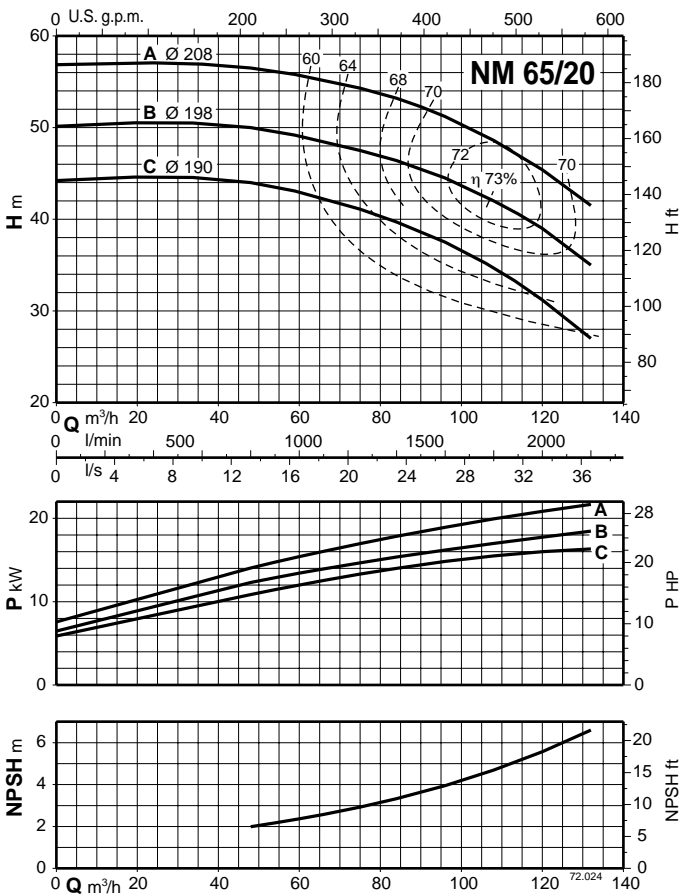
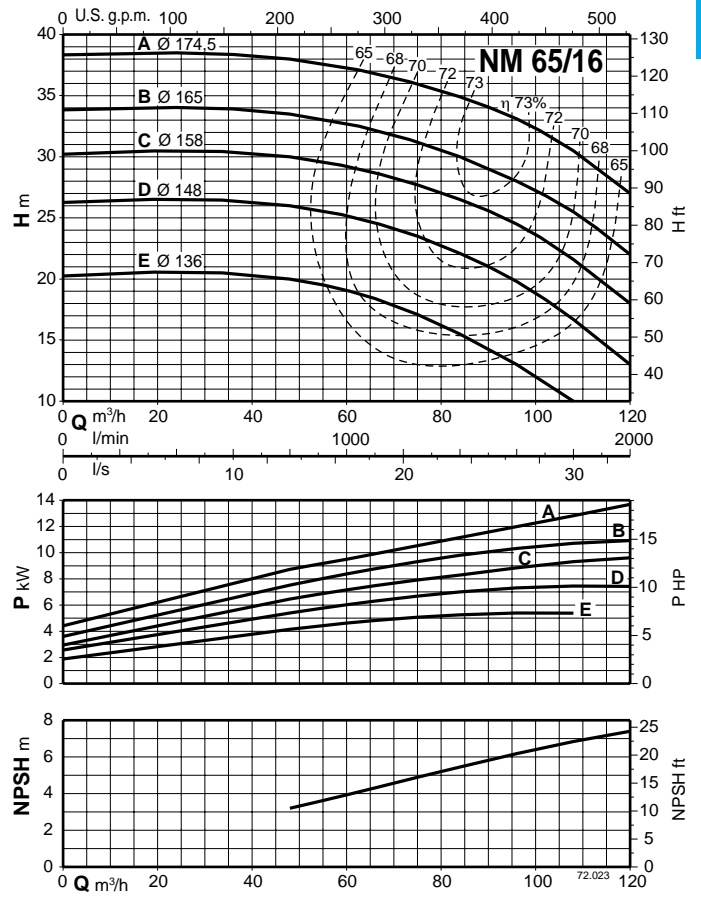
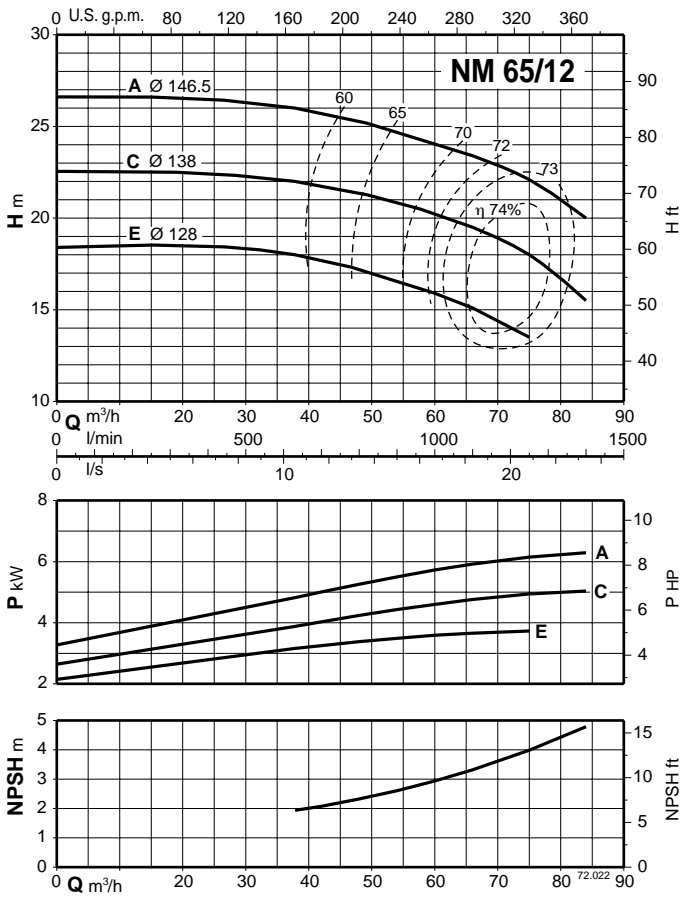
Characteristic curves $n \approx 2900$ rpm





Close Coupled Centrifugal Pumps with flanged connections

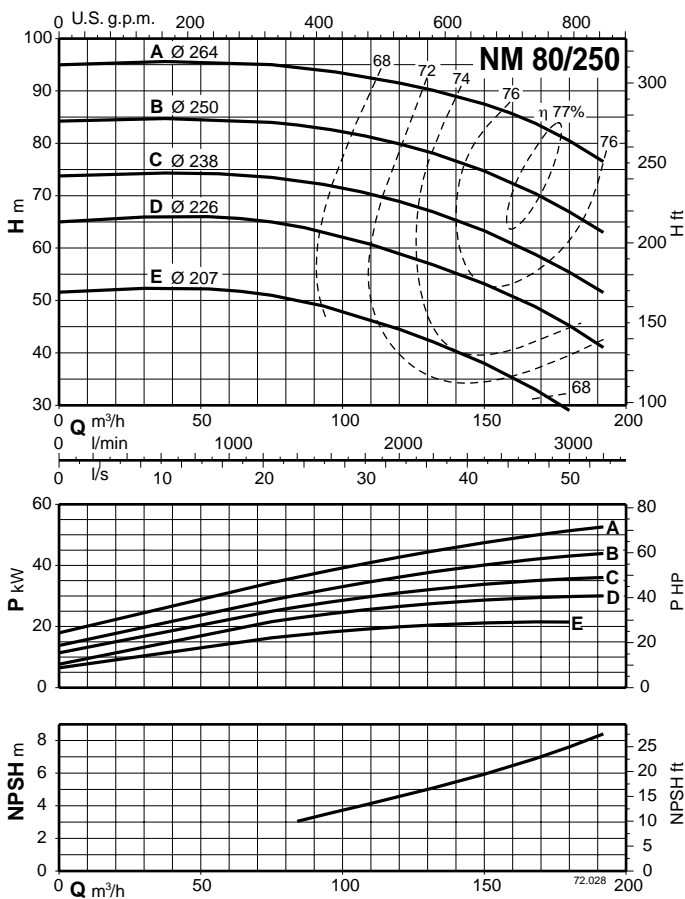
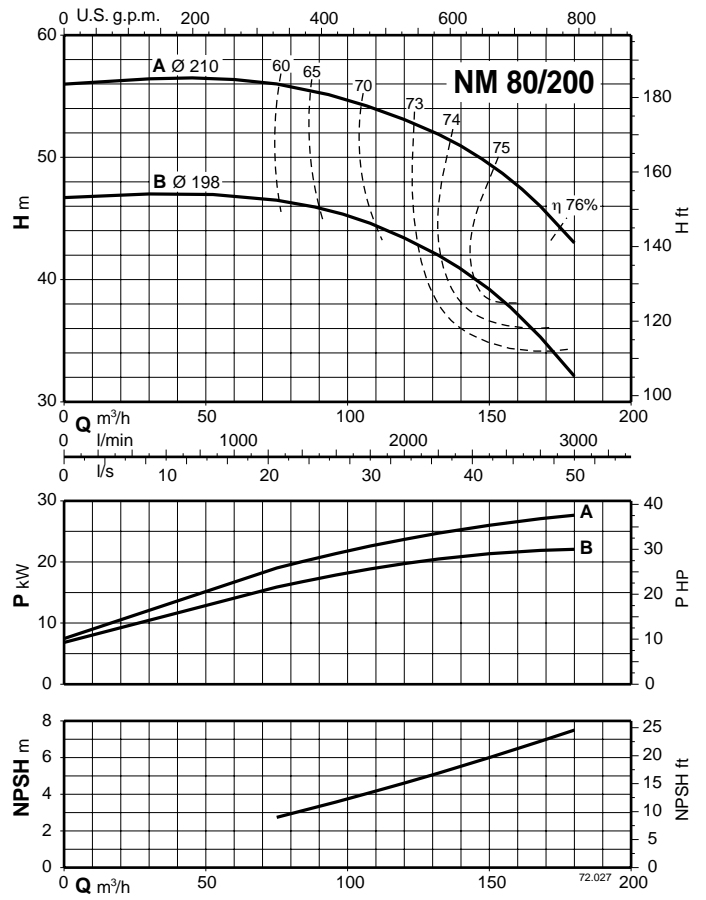
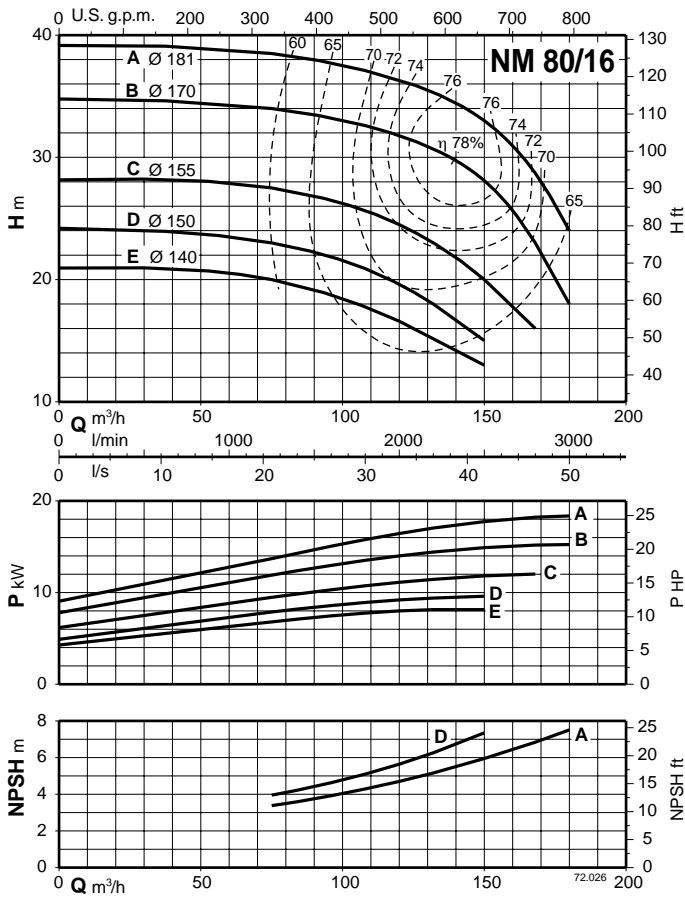
Characteristic curves $n \approx 2900$ rpm





Close Coupled Centrifugal Pumps with flanged connections

Characteristic curves $n \approx 2900$ rpm

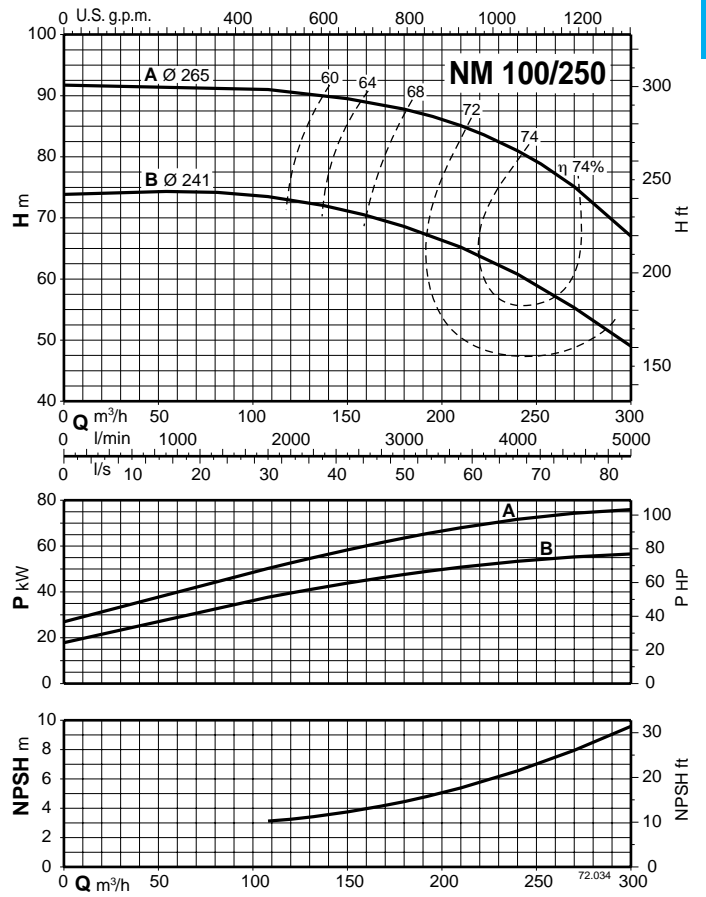
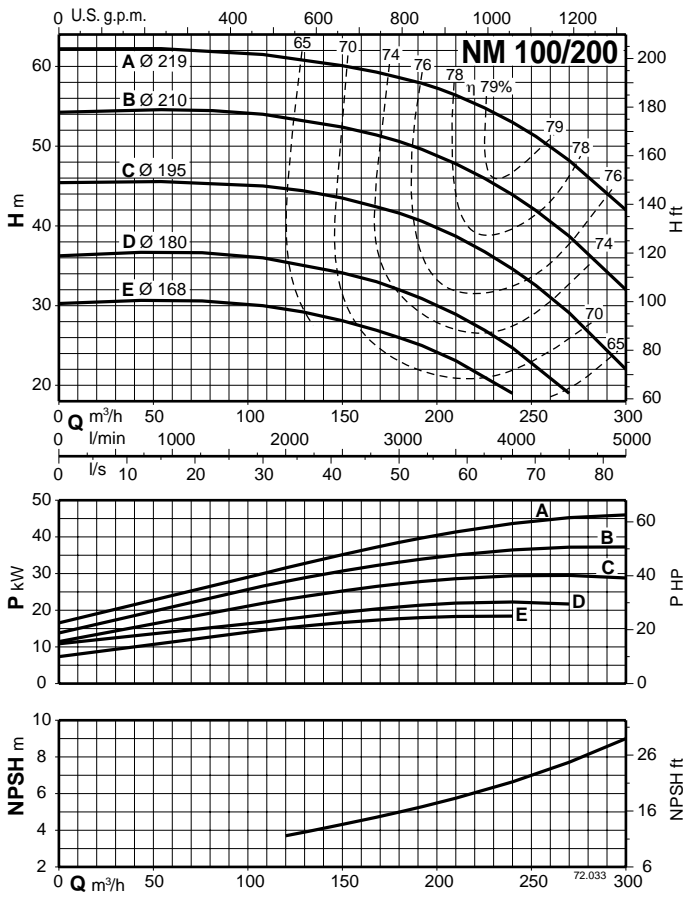




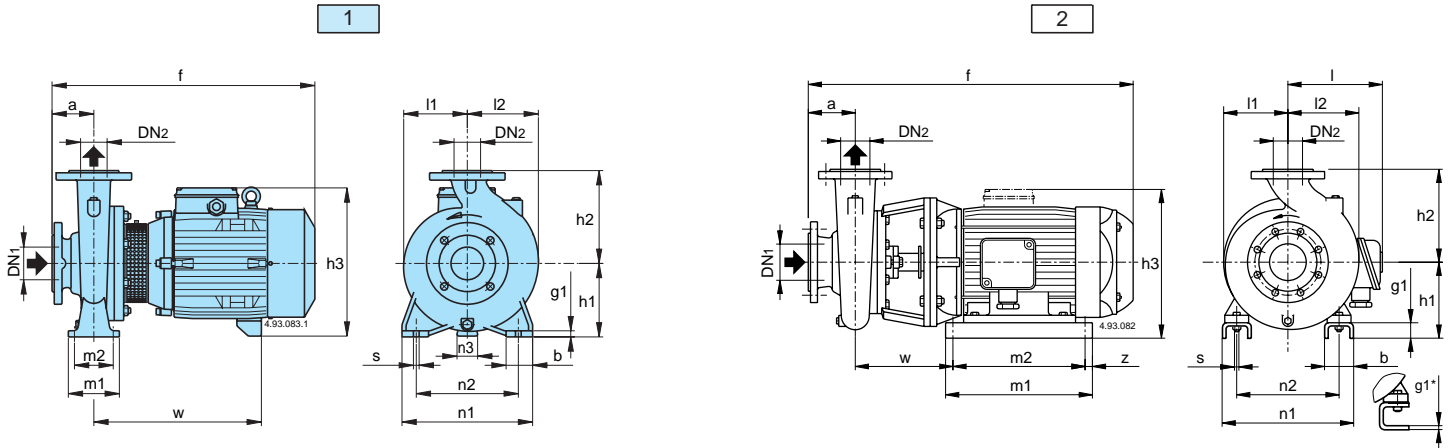
Close Coupled Centrifugal Pumps with flanged connections

Characteristic curves $n \approx 2900$ rpm

2

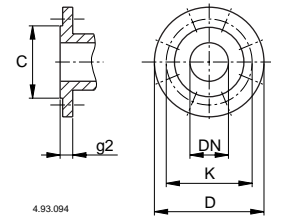


Dimensions and weights



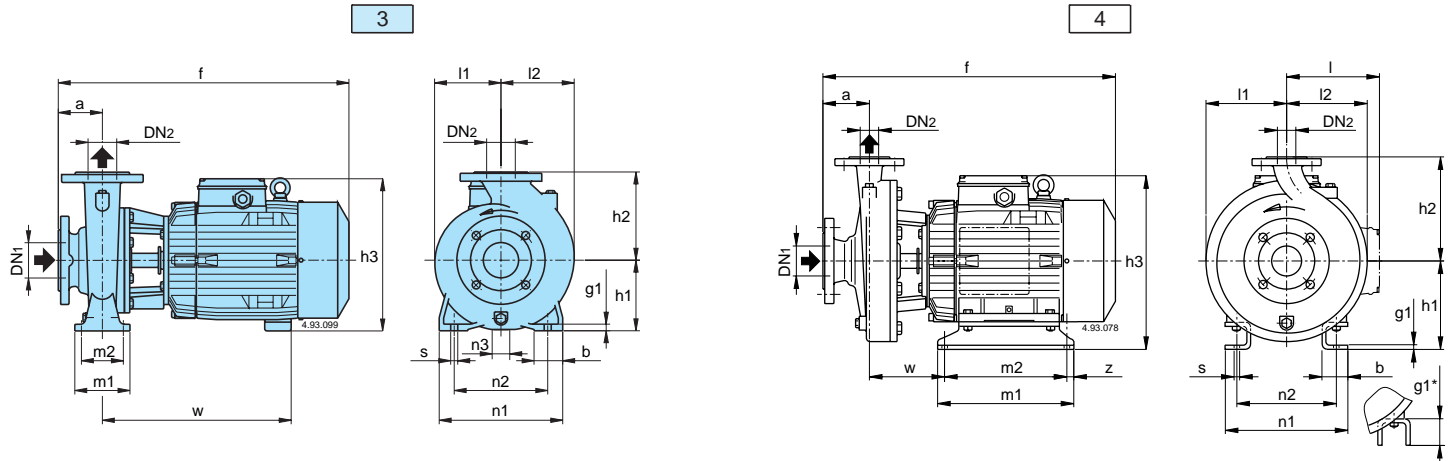
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1	NM 32/12SE-AE-DE-FE	50	32	80	405	112	140	222	100	70	190	140	37	-	50	14	-	93	97	245	12	27-25-24-24										
	NM 32/16AE-BE	50	32	80	410	132	160	242	100	70	240	190	47	-	50	14	-	120	120	250	12	36-34										
	NM 32/20DE	50	32	80	410	160	180	270	100	70	240	190	62	-	50	14	-	140	140	250	39	12	39									
	NM 32/20CE				475			288					60							295	49											
	NM 32/20AE				475			288					60							295	52											
	NM 40/12AE-CE-FE	65	40	80	410	112	140	222	100	70	210	160	37	-	50	14	-	100	113	250	12	31-29-27										
	NM 40/16CE	65	40	80	410	132	160	242	100	70	240	190	47	-	50	14	-	119	119	250	36	12	36									
	NM 40/16BE				475			260					45							295	45											
	NM 40/16AE				475			260					45							295	49											
	NM 40/20CE	65	40	100	495	160	180	288	100	70	265	212	60	-	50	14	-	140	140	295	55	12	72-65-65									
	NM 40/20AE-ARE-BE				525			320			49	320	49																			
	NM 40/25BE-CE	65	40	100	640	180	225	365	125	95	320	250	50	-	65	14	-	175	175	410	116-110	15	133									
	NM 40/25AE				690			320					460							133												
	NM 50/12FE	65	50	100	430	132	160	242	100	70	240	190	47	-	50	14	-	121	137	250	38	12	38									
NM 50/12DE	495				260			45					295							47												
NM 50/12AE	495				260			45					295							51												
NM 50/16AE-BE	65	50	100	525	160	180	320	100	70	265	212	49	-	50	14	-	127	141	320	14	70-64											
NM 50/20AE-BE	65	50	100	640	160	200	345	100	70	265	212	40	-	50	14	-	140	153	410	15	106-100											
NM 50/25CE	65	50	100	645	180	225	365	125	95	320	250	50	-	65	14	-	175	175	415	126	15	126										
NM 50/25BE				695			320					465							132													
NM 50/25AE				720			320					465							147													
2	NM 50M/EE	65	50	100	700	192	225	377	298	258	262	216	-	20	69	12	-	175	175	239	6*	135										
	NM 50M/DE				750																	151										
	NM 50M/CE				775																	165										
1	NM 65/12EE	80	65	100	495	160	180	288	125	95	280	212	60	-	65	14	-	134	156	295	55	15	73-67									
	NM 65/12AE-CE				525			320					49							320	49											
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	NM 65/16BE-CE				640			345					40							410	121											
NM 65/16AE	690	345	40	460	121																											
NM 65/20CE	80	65	100	690	180	225	365	125	95	320	250	50	-	65	14	-	155	175	460	127	15	139										
NM 65/20BE				715			320					465							147													
2	NM 65/200AE	80	65	100	825	202	225	408	400	360	344	254	-	20	90	14	-	155	175	245	42	164										
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NM 65/250AE	945				425			408					318								25	90	18	290	263	45	299					
1	NM 80/16EE	100	80	125	545	180	225	340	125	95	320	250	60	-	65	14	-	165	193	320	83	15	113-108									
	NM 80/16CE-DE				670			365					50							465	130											
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	NM 80/250AE-BE-CE				970			425					408							318	25	90	18	290	263	45	377-361-331					
	NM 100/200EE	125	100	125	800	192	280	377	298	258	262	216	-	20	69	12	-	180	212	239	173	6*	173									
	NM 100/200CE-DE				850			408					400							360	344			254	-	20	90	14	-	245	42	195-174
	NM 100/200AE-BE				970			425					408							318	25			90	18	290	263	45	355-323			
NM 100/250BE	125	100	140	980	245	280	-	475	425	408	318	-	25	90	104	18	290	330	263	386	45	478										
NM 100/250AE				1050			480												430	460			356	-	25	104	305	50				

Flanges EN 1092-2

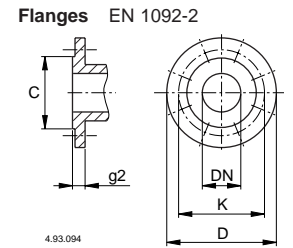


mm						
DN	C	K	D	Holes		g2
				N°	Ø	
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22
100	156	180	220	8	19	24
125	184	210	250	8	19	24

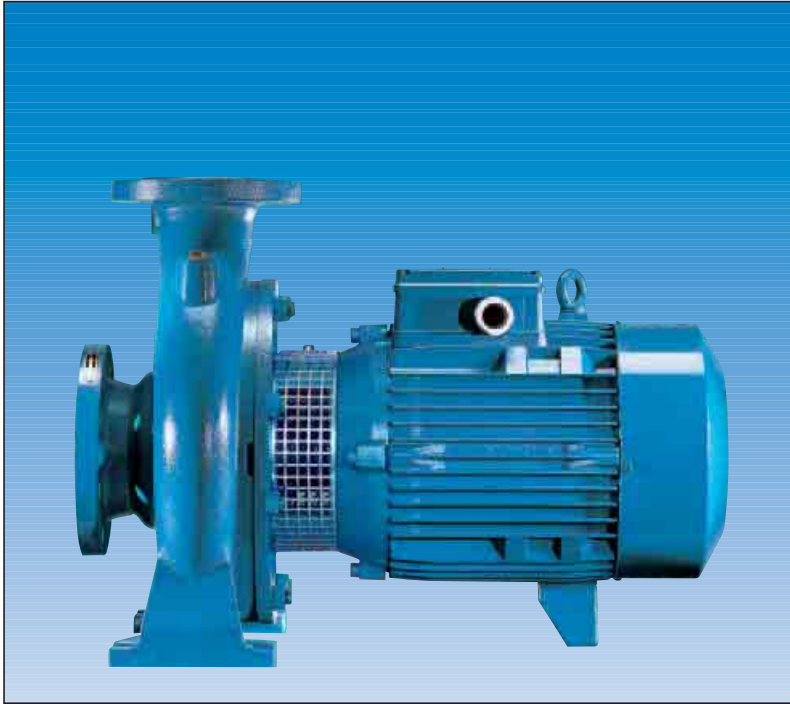
Dimensions and weights



Picture	B-NM I-NM	mm																			kg		
		DN1	DN2	a	f	h1	h2	h3	m1	m2	n1	n2	n3	z	b	s	l	l1	l2	w	g1	B-NM	I-NM
3	B-NM 32/125SE-AE B-NM 32/125DE-FE	50	32	80	450	112	140	222	100	70	190	140	37	-	50	14	-	93	97	290	12	33-32 31-29	
	B-NM 32/160BE B-NM 32/160AE	50	32	80	455 475	132	160	242	100	70	240	190	47	-	50	14	-	120	120	295 315	12	44 45	
	I-B-NM 32/200DE I-B-NM 32/200CE I-B-NM 32/200AE	50	32	80	475 530 530	160	180	288 288	100	70	240	190	60 60	-	50	14	-	140	140	315 350 350	12	49 57 61	45 55 59
	B-NM 40/125FE B-NM 40/125AE-CE	65	40	80	455 475	112	140	222	100	70	210	160	37	-	50	14	-	100	113	295 315	12	33 37-35	
	B-NM 40/160CE B-NM 40/160BE B-NM 40/160AE	65	40	80	475 530 530	132	160	242 260 260	100	70	240	190	47 45 45	-	50	14	-	119	119	315 350 350	12	45 53 57	
	B-NM 40/200CE B-NM 40/200AE-BE	65	40	100	550 580	160	180	288 320	100	70	265	212	60 49	-	50	14	-	140	140	350 375	12	63 80-74	
4	I-B-NM 4025/BE-CE I-B-NM 4025/AE	65	40	100	635 685	192	225	377	298	258	262	216	-	20	69	12	-	175	175	174	6	130-124 147	127-120 144
	B-NM 50/125FE B-NM 50/125DE B-NM 50/125AE	65	50	100	495 550 550	132	160	242 260 260	100	70	240	190	47 45 45	-	50	14	-	121	137	315 350 350	12	49 58 63	
3	B-NM 50/160AE-BE	65	50	100	580	160	180	320	100	70	265	212	49	-	50	14	-	127	141	375	14	80-74	
	B-NM 50/200AE-BE	65	50	100	695	192	200	377	298	258	262	216	-	20	69	12	-	140	153	234	6	128-121	
4	I-B-NM 5025/CE I-B-NM 5025/BE I-B-NM 5025/AE	65	50	100	635 685 710	192	225	377	298	258	262	216	-	20	69	12	-	175	175	174	6	135 144 155	130 138 149
	I-B-NM 5025/65EE I-B-NM 5025/65DE I-B-NM 5025/65CE	65	50	100	635 685 710	192	225	377	298	258	262	216	-	20	69	12	-	175	175	174	6	135 144 155	130 138 149
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3	B-NM 65/160DE-EE B-NM 65/160CE	80	65	100	575 660	160	200	320 345	125	95	280	212	49 40	-	65	14	-	150	172	375 430	15	83-78 108	
	B-NM 65/160BE B-NM 65/160AE	80	65	100	695 745	192	200	377	298	258	262	216	-	20	69	12	-	150	172	234	6	149 166	
4	B-NM 65/200CE B-NM 65/200BE B-NM 65/200AE	80	65	100	750 775 825	192 192 202	225	377 377 408	298 258 400	258 262 360	262 216 344	216	-	20	69 69 90	12 12 14	-	155	175	239 239 245	6 6 42*	157 177 179	
	B-NM 65/250BE-CE I-B-NM 65/250BE I-B-NM 65/250AE	80	65	100	825 840 945	202 222 245	250	408 - 475	400 387 425	360 347 408	344 369 318	254	-	20	90 90 25	14 14 18	-	270	175	245 258 263	42* 42* 45*	210-189 277 343	
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4	B-NM 80/160CE B-NM 80/160BE B-NM 80/160AE	100	80	125	725 775 800	192	225	377	298	258	262	216	-	20	69	12	-	165	193	239	6	155 163 166	



mm						
DN	C	K	D	Holes		g2
				N°	Ø	
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22
100	156	180	220	8	19	24
125	184	210	250	8	19	24



Construction

Close-coupled centrifugal pumps; electric motor with extended shaft directly connected to the pump. Pump casing with axial suction and radial delivery on top, main dimensions and performance according to EN 733 with additional sizes for completion.

Connections

Sizes	Connections
NM4 25/125, 25/160, 25/200	Threaded ports ISO 228
from NM4 32/16 to NM4 150/400	Flanges according to PN 10, EN 1092-2

Counter-flanges (on request)

Sizes	Flanges
from NM4 32/16 to NM4 50/25.	Screwed flanges EN 1092-1, PN 16
from NM4 32/16 to NM4 150/400	Flanges for welding EN 1092-1, PN 10

Applications

- For clean liquids without abrasives, which are non-aggressive for the pump materials (contents of solids up to 0.2%).
- For water supply. - For heating, air conditioning, cooling and circulation plants. - For civil and industrial applications.
- When low noise operating is required. - For irrigation.

Operating conditions

Liquid temperature from -10 °C to +90 °C.
 Ambient temperature up to 40 °C.
 Total suction lift up to 7 m.
 Maximum permissible working pressure up to 10 bar.
 Continuous duty.

Motor

4-pole induction motor, 50 Hz ($n = 1450$ rpm).
NM4: three-phase 230/400 V $\pm 10\%$ up to 3 kW;
 400/690 V $\pm 10\%$ from 4 to 75 kW;
 Insulation class F.
 Protection IP 54.
 Constructed in accordance with IEC 60034.

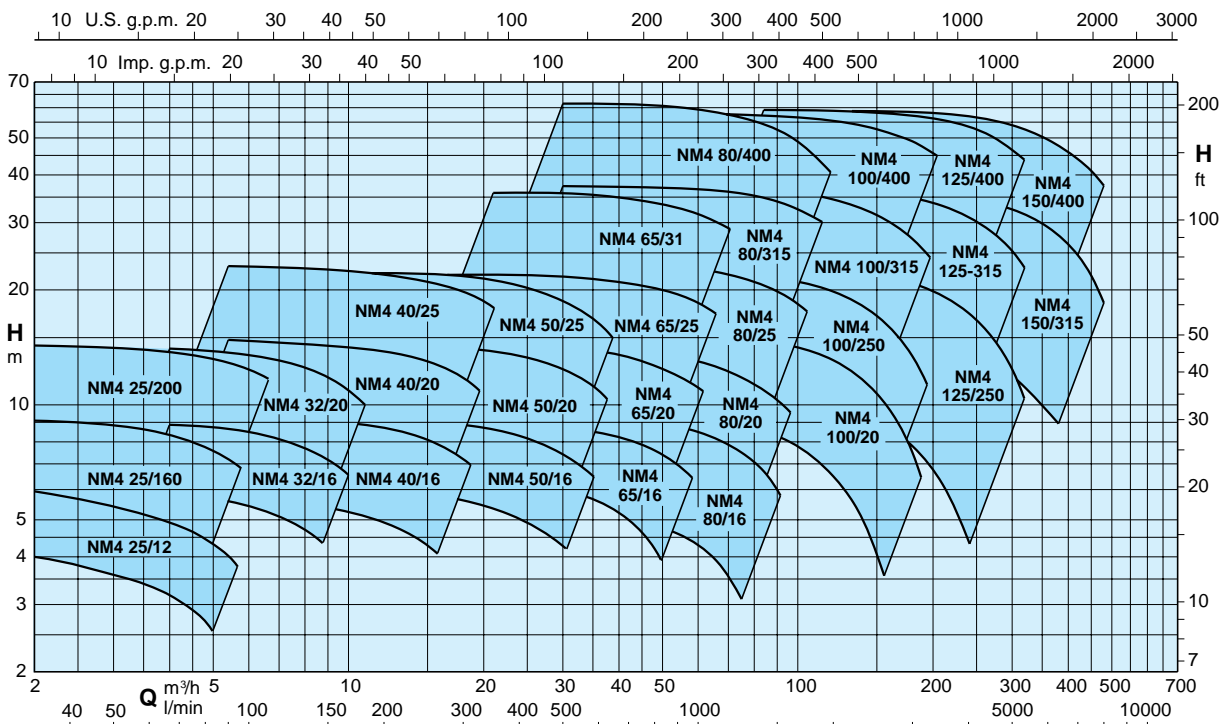
Special features on request

- Other voltages. - Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55. - Special mechanical seal.
- Higher or lower liquid or ambient temperatures.

Material

Components	NM4	B-NM4	I-NM4
Pump casing	Cast iron	Bronze	Cr Ni Mo steel AISI 316
Lantern bracket	GJL 200 EN 1561	G-Cu Sn 10 EN 1982	
Impeller	Cast iron	Bronze	
	GJL 200 EN 1561	G-Cu Sn 10 EN 1982	
	Brass P- Cu Zn 40 Pb 2 UNI 5705 For NM4 25/125 - 25/160 - 25/200 NM4 32/16 - 32/20 - 40/20		
Shaft	Cr Ni steel AISI 303 up to 1,1 kW	Cr Ni Mo steel AISI 316	
	Cr steel AISI 430 from 1,5 kW to 75 kW		
Mechanical seal	Carbon - Ceramic - NBR		
Counter-flanges	Steel Fe 430B UNI 7070		

Coverage chart $n = 1450$ rpm



Performance $n \approx 1450 \text{ rpm}$

	NM4	P ₂		Q m ³ /h	H m																			
		kW	HP		48	54	60	66	75	84	96	108	120	132	150	168	180	192	210	240	270	300	330	
				l/min	800	900	1000	1100	1250	1400	1600	1800	2000	2200	2500	2800	3000	3200	3500	4000	4500	5000	5500	
NM4 100/20CE	3	4	9,4	9,3	9,2	9,1	8,9	8,5	8	7,3	6,5	5,6	4*											
NM4 100/20BE	4	5,5	12	11,9	11,8	11,7	11,5	11,2	10,7	10	9,3	8,4	6,7*	4,5*										
NM4 100/20AE	5,5	7,5	15,2	15,2	15,1	15	14,9	14,7	14,3	13,8	13,1	12,2	10,7*	9*	7,5*	6*								
NM4 100/25BE	7,5	10	19,5	19,5	19,4	19,3	19	18,7	18,2	17,5	16,6	15,6	13,8*	11,7*	10*	8,4*	5,5*							
NM4 100/25AE	9,2	12,5	22,3	22,3	22,2	22,1	21,9	21,7	21,2	20,5	19,8	18,8	17,1*	15*	13,4*	11,7*	8,9*							
NM4 100/315CE	11	15	26,9	26,9	26,8	26,6	26,2	25,7	24,9	23,8	22,7	21,3	18,9*	15,9*	13,7*	11,3*								
NM4 100/315BE	15	20	31,5	31,5	31,4	31,3	31,2	30,8	30,2	29,3	28,2	26,9	24,6*	21,8*	19,8*	17,6*	14*							
NM4 100/315AE	18,5	25	36,9	36,9	36,8	36,7	36,6	36,4	36	35,3	34,5	33,4	31,4*	29*	27,2*	25,3*	22,2*							
NM4 100/400CE	22	30	41,3	41,2	41,1	41	40,7	40,4	39,8	39	38	36,5	34*	31*	28,7*	26*								
NM4 100/400BE	30	40	50,2	50,1	50	49,9	49,7	49,4	48,8	48	47,1	46	44*	41,3*	39,5*	37*	33,5*							
NM4 100/400AE	37	50	58,2	58,1	58	57,9	57,8	57,6	57,2	56,3	55,7	54,5	52,7*	50,5*	49*	47*	44*							

	NM4	P ₂		Q m ³ /h	H m																	
		kW	HP		84	96	108	120	132	150	168	180	192	210	240	270	300	330	360	390	420	450
				l/min	1400	1600	1800	2000	2200	2500	2800	3000	3200	3500	4000	4500	5000	5500	6000	6500	7000	7500
NM4 125/25EE	5,5	7,5	11	10,8	10,5	10,1	9,7	9,1	8,3	7,8	7,2	6,2	4,4*									
NM4 125/25DE	7,5	10	14	13,9	13,7	13,4	13	12,4	11,6	11	10,4	9,4	7,4*	5,1*								
NM4 125/25CE	9,2	12,5	16,7	16,6	16,4	16,2	15,9	15,4	14,6	14,1	13,5	12,5	10,4*	8,2*	5,8*							
NM4 125/250BE	11	15	19,3	19,2	19,1	18,9	18,7	18,2	17,5	17	16,3	15,3	13,3*	10,9*	8,2*							
NM4 125/250AE	15	20	22,7	22,7	22,6	22,4	22,2	21,8	21,2	20,8	20,1	19,3	17,4*	15*	12,4*	9,3*						
NM4 125/315CE	18,5	25	27,9	27,8	27,7	27,6	27,2	26,5	25,6	24,9	24	22,8	20,2*	17*	13,5*	9,5*						
NM4 125/315BE	22	30	31,8	31,7	31,6	31,5	31,1	30,6	29,7	29,1	28,5	27,3	24,9*	22*	18,5*	14,3*						
NM4 125/315AE	30	40	36,8	36,8	36,7	36,6	36,4	35,9	35,2	34,7	34,2	33,2	31*	28,4*	25,3*	21,6*						
NM4 125/400CE	37	50	45,4	45,3	45,2	45,1	44,9	44,4	43,7	43	42	40	37*	33*	28,5*	23,5*						
NM4 125/400BE	45	60	51,4	51,3	51,2	51,1	50,9	50,4	49,7	49	48,2	46,8	44*	40,5*	36*	31,5*						
NM4 125/400AE	55	75	59,2	59,1	59	58,9	58,7	58,2	57,7	57,2	56,7	55,7	53,5*	50,5*	46,5*	42,5*						
NM4 150/315DE	18,5	25					22,8	22,6	22,3	22	21,7	21,1	20	18,6	17	15,1	13	10,6*	8*			
NM4 150/315CE	22	30					25,6	25,4	25,1	24,9	24,7	24,2	23,3	22	20,4	18,5	16,5	14,1*	11,6*	8,9*		
NM4 150/315BE	30	40					30,6	30,6	30,5	30,3	30,1	29,7	29	27,9	26,5	24,9	23	20,8*	18,3*	15,4*		
NM4 150/315AE	37	50					35,6	35,6	35,5	35,4	35,3	35,2	34,6	33,7	32,5	31	29,2	27,1*	24,7*	21,8*	18,5*	
NM4 150/400CE	45	60					45	44,9	44,7	44,5	44	43,5	42,5	40,5	38,5	36	33,5	30,5*	27*	23,5*	19,5*	
NM4 150/400BE	55	75					50,8	50,7	50,5	50,3	50	49,5	48,5	47	45	43	40,5	38*	35*	32*	28,5*	
NM4 150/400AE	75	100					58,8	58,7	58,6	58,5	58,3	57,9	57	55,5	54	52	49,5	47*	44*	41*	37,5*	

NM4 Standard construction.

B-NM4 Bronze construction.

I-NM4 Stainless steel construction.

P₂ Rated motor power output.

H Total head in m.

* Maximum suction lift 1-2 m.

Tolerances according to ISO 9906, annex A.

Rated currents

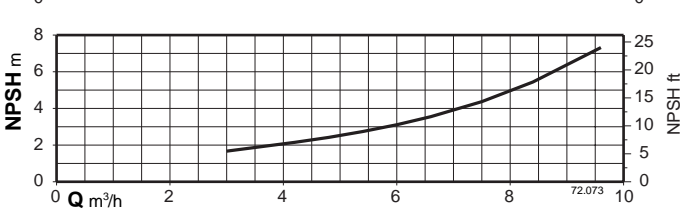
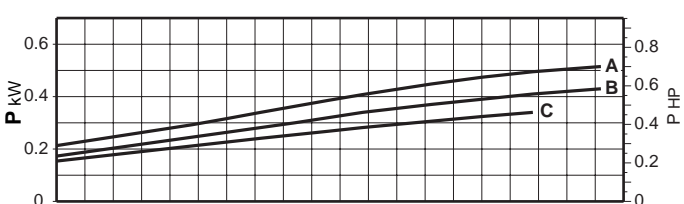
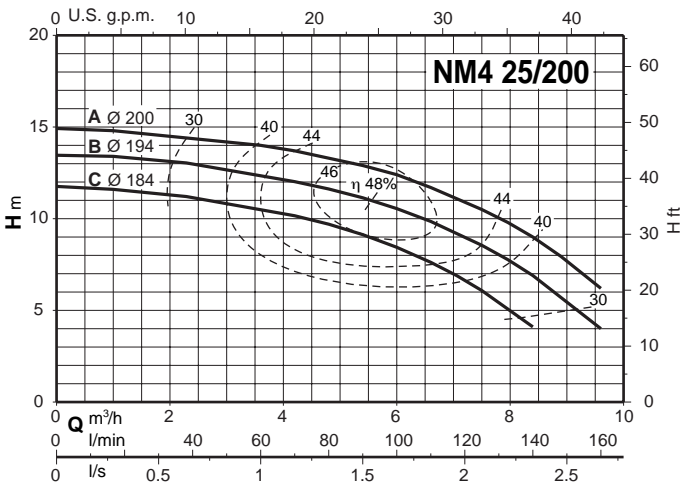
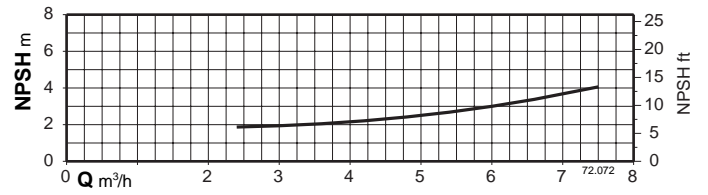
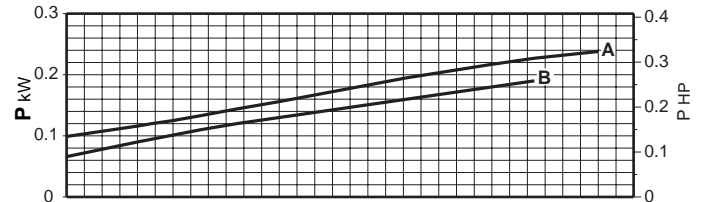
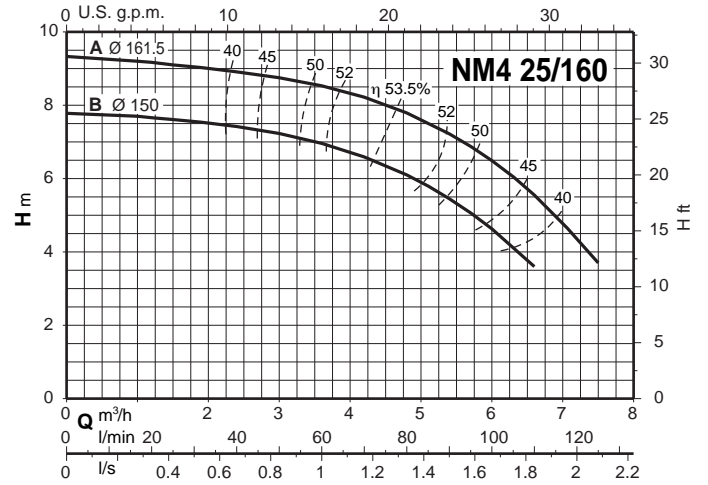
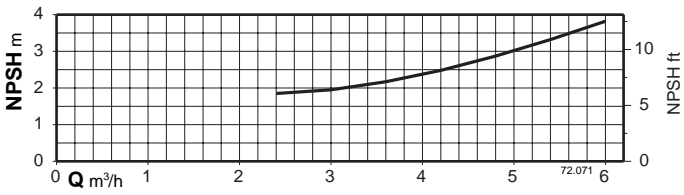
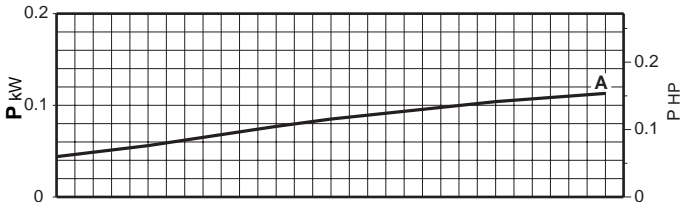
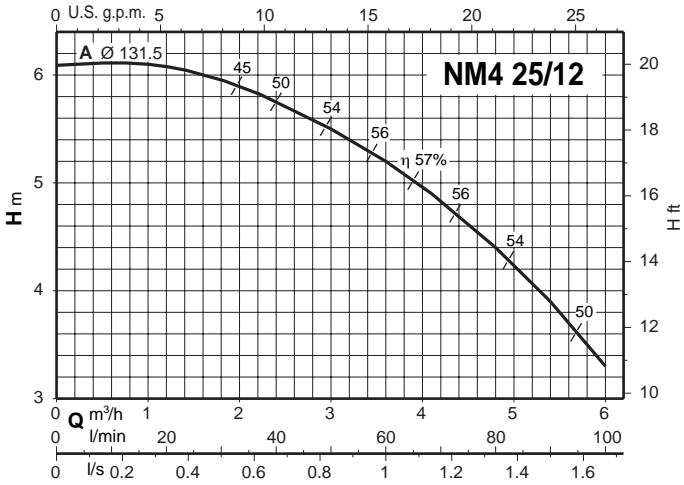
P ₂		230 V Δ / 400 V Y		
kW	HP	I _N A	I _A A	I _A /I _N
0,25	0,34	1,4	0,8	3,7
0,37	0,5	1,65	0,95	4,2
0,55	0,75	2,6	1,5	4,8
0,75	1	3,3	1,9	5,2
1,1	1,5	5	2,9	4,7
1,5	2	6	3,5	5,5
2,2	3	8,6	5	6
3	4	10,9	6,3	6

P ₂		400 V Δ / 690 V Y		
kW	HP	I _N A	I _A A	I _A /I _N
4	5,5	8,5	4,9	6,9
5,5	7,5	12,5	7,2	8
7,5	10	16	9,2	8,1
9,2	12,5	19	11	8,9
11	15	22,5	13	7
15	20	29	16,7	7
18,5	25	36,5	21	7,3
22	30	43	25	7,5
30	40	56	32	7,5
37	50	69	40	6
45	60	83	48	6,4
55	75	101	58	7,3
75	100	136	78	6

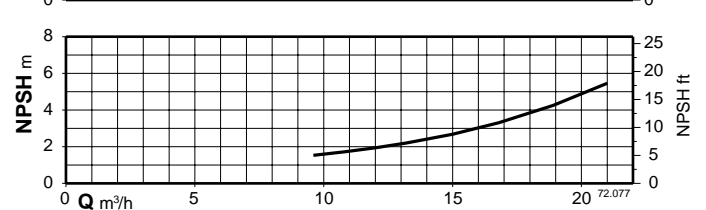
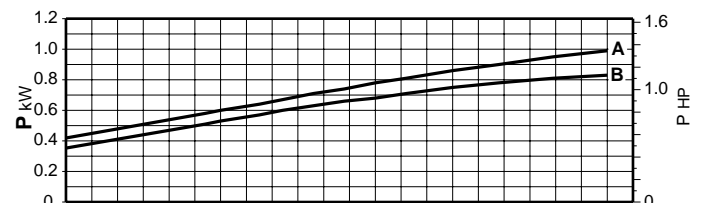
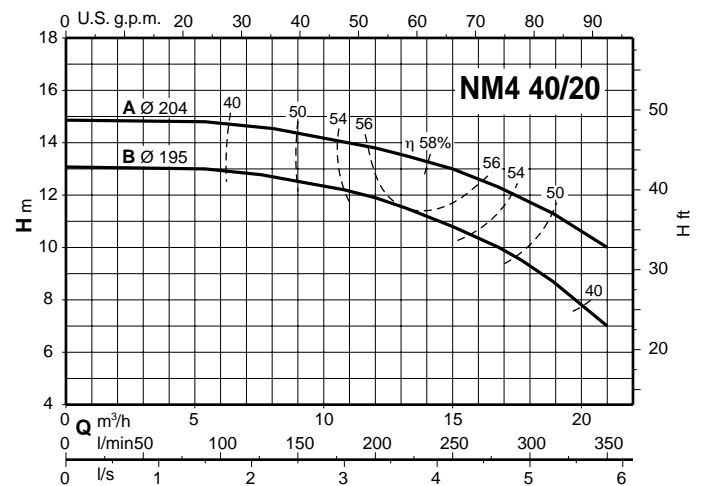
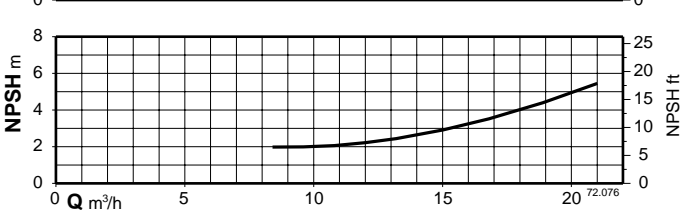
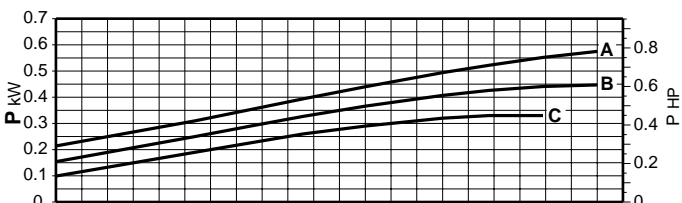
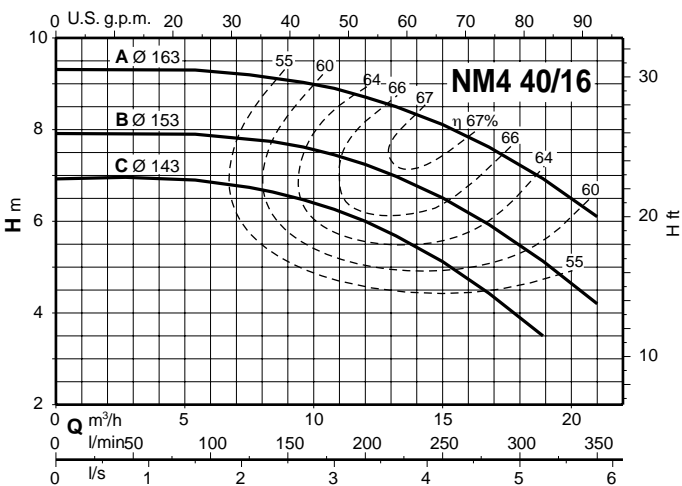
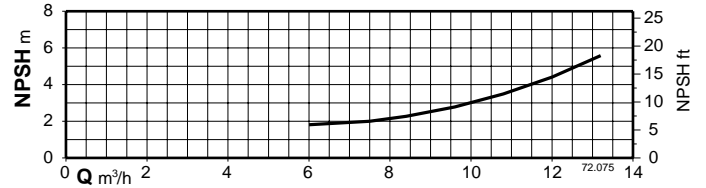
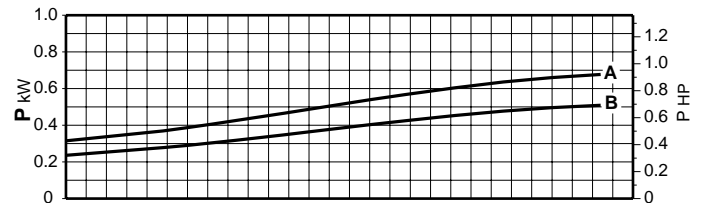
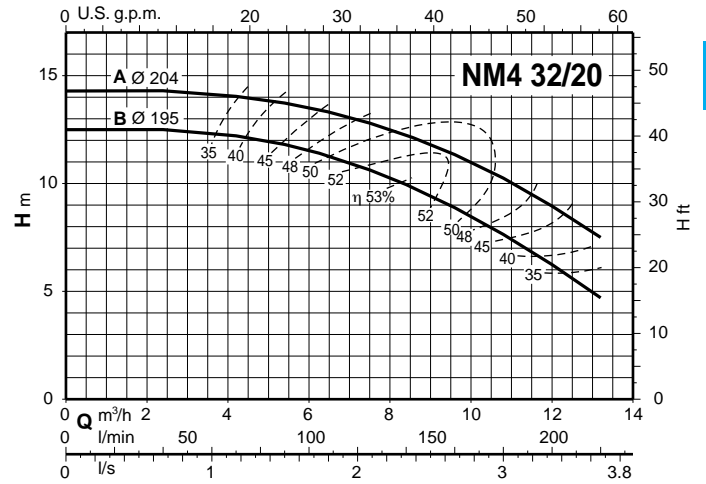
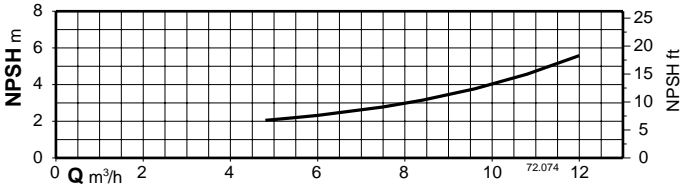
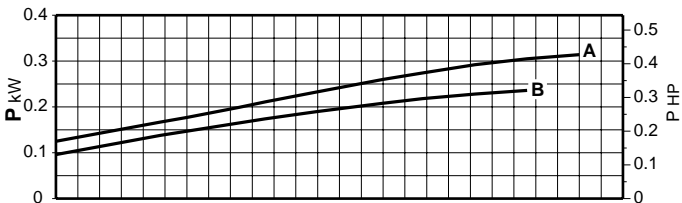
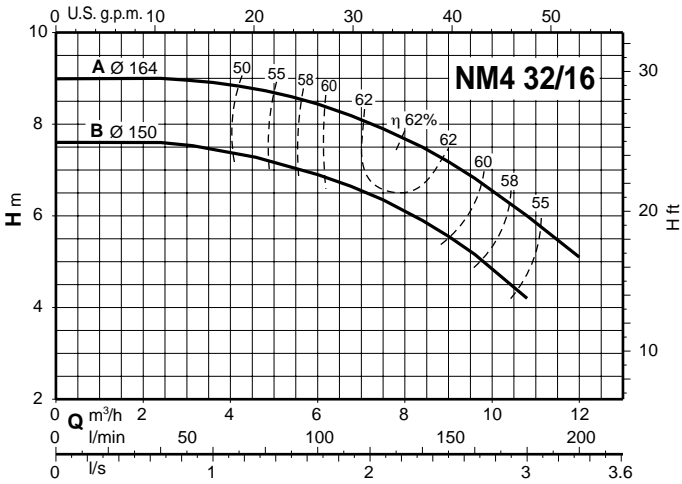
P₂ Rated motor power output.

I_A/I_N D.O.L. starting current / Nominal current

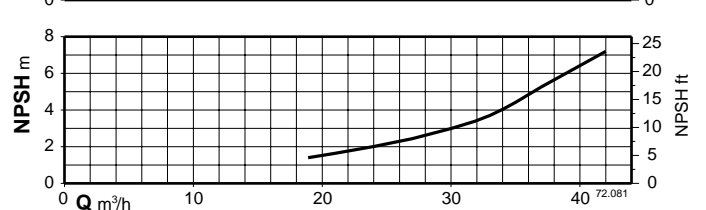
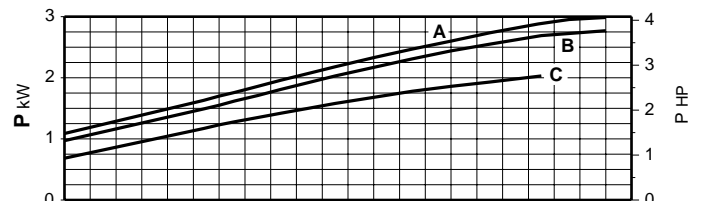
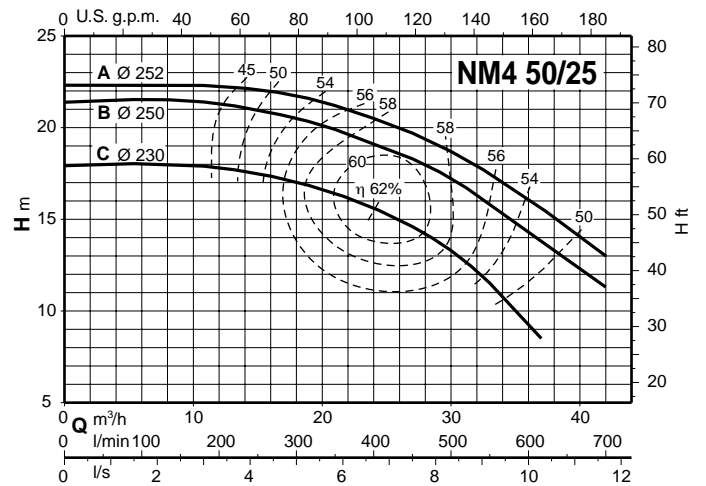
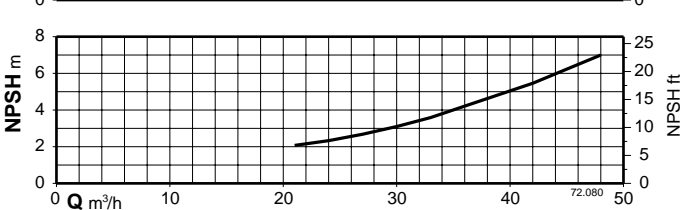
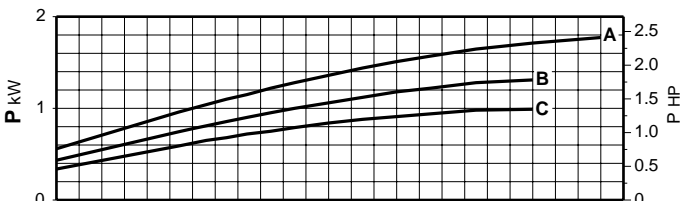
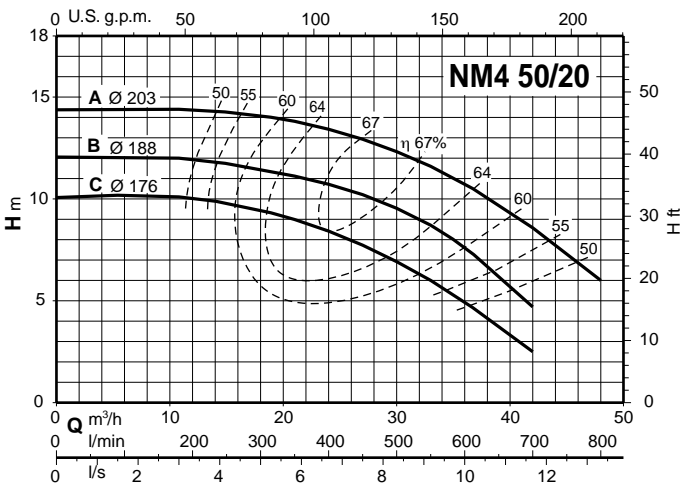
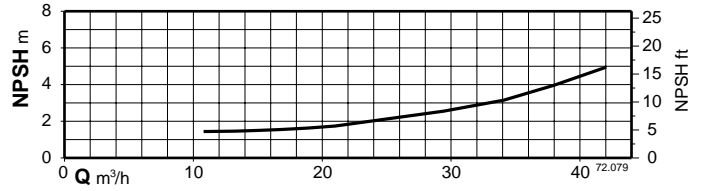
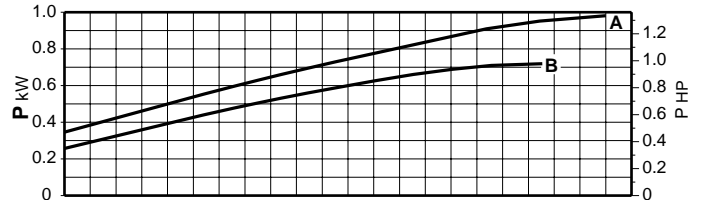
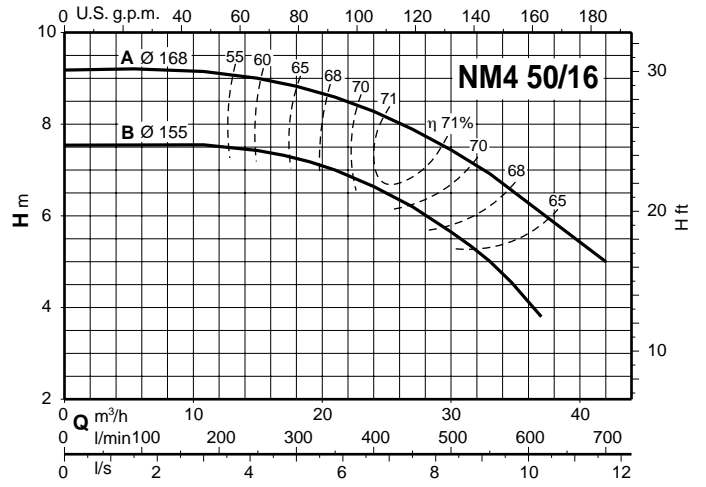
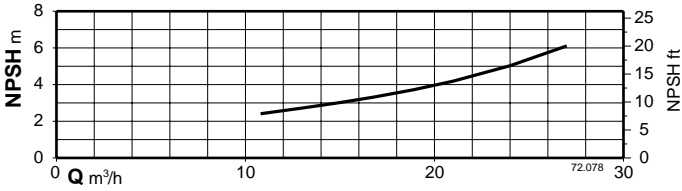
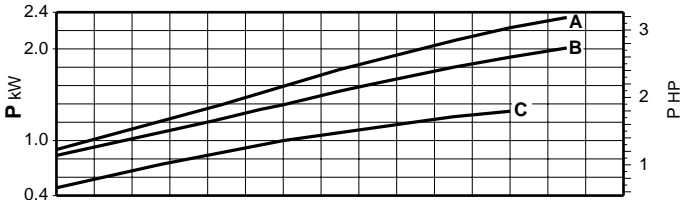
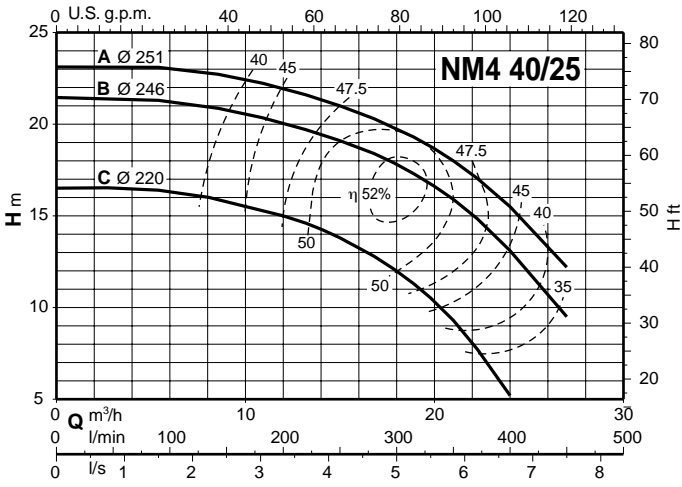
Characteristic curves $n \approx 1450$ rpm



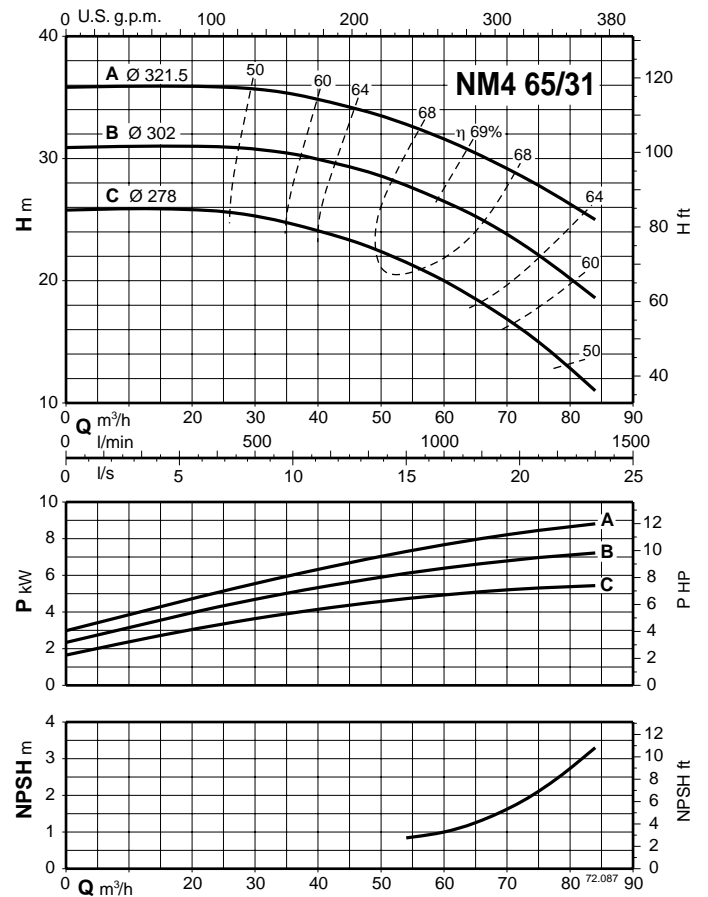
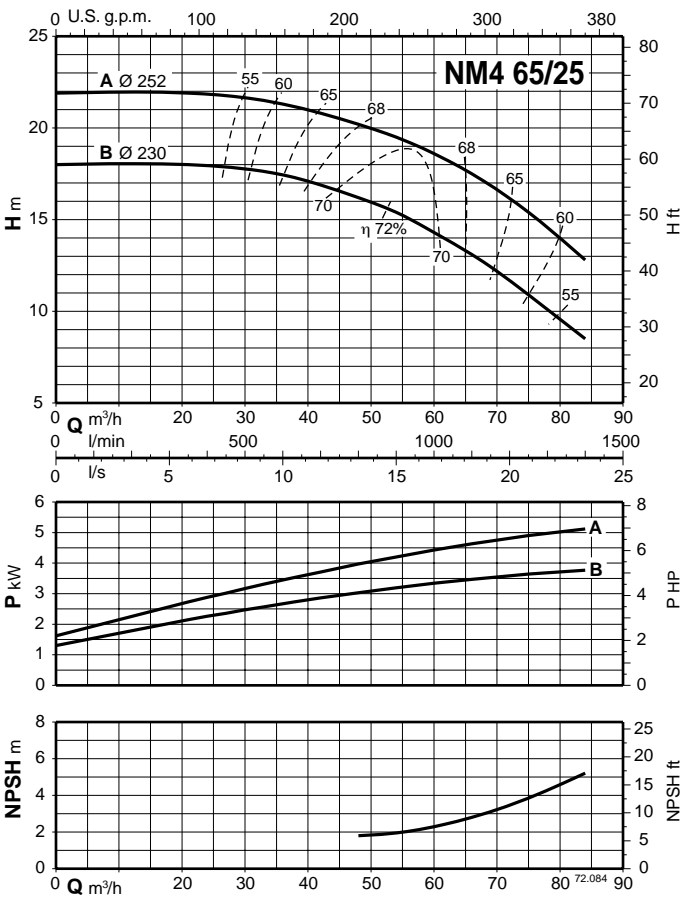
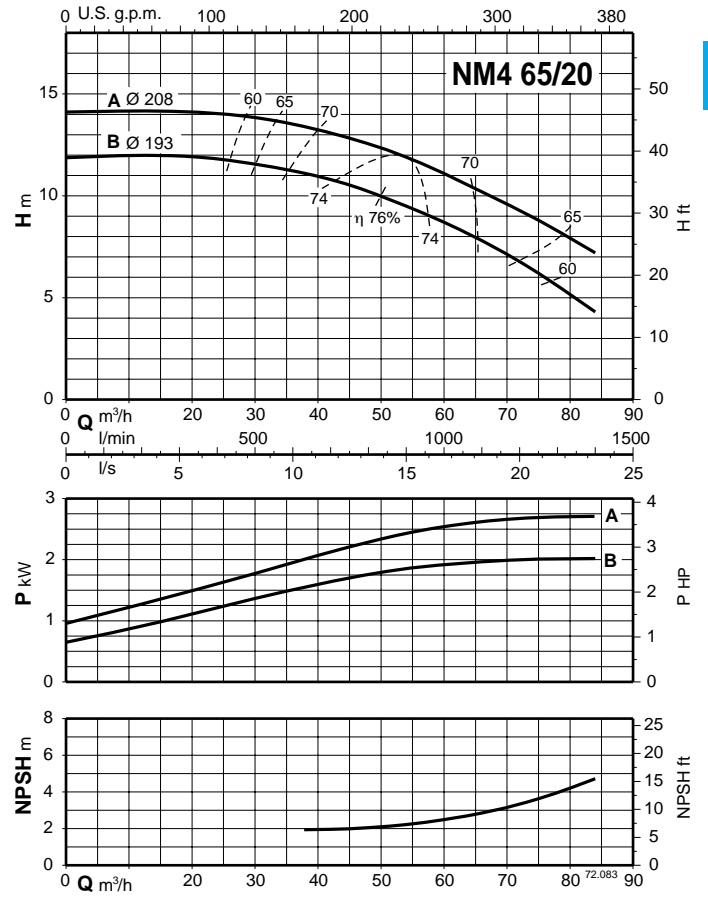
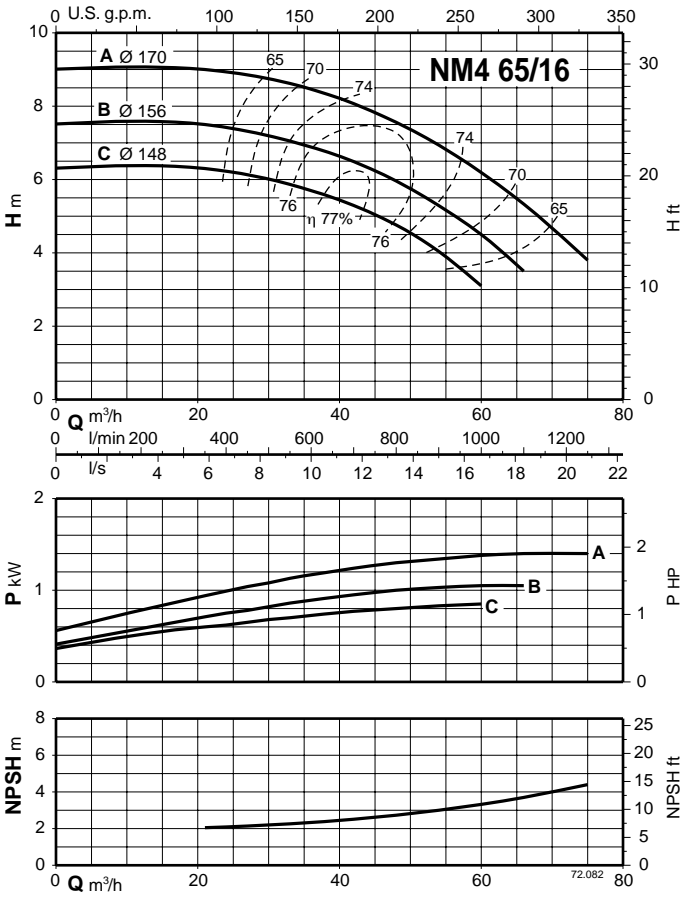
Characteristic curves $n \approx 1450$ rpm



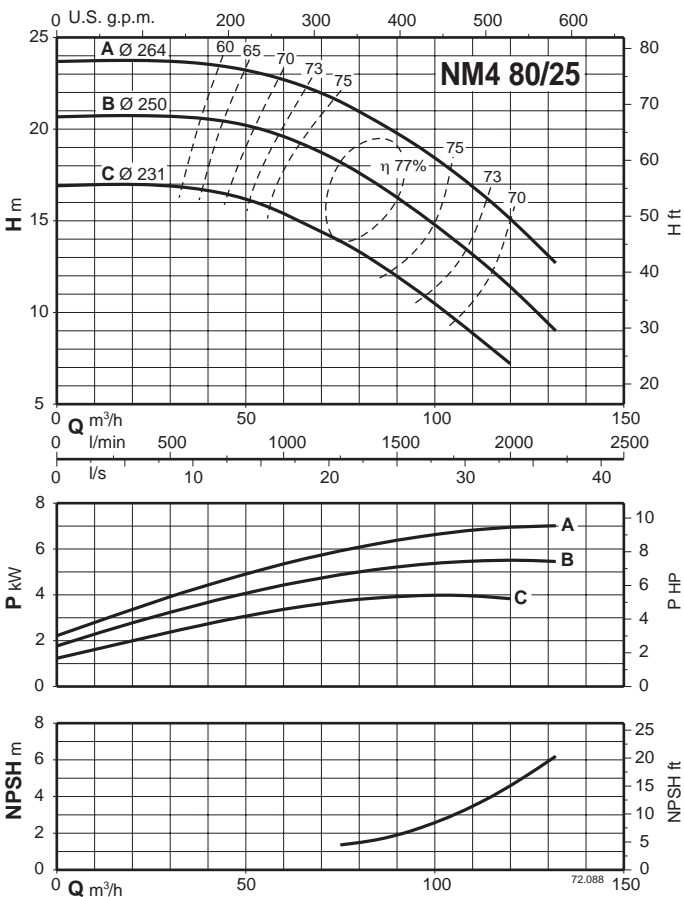
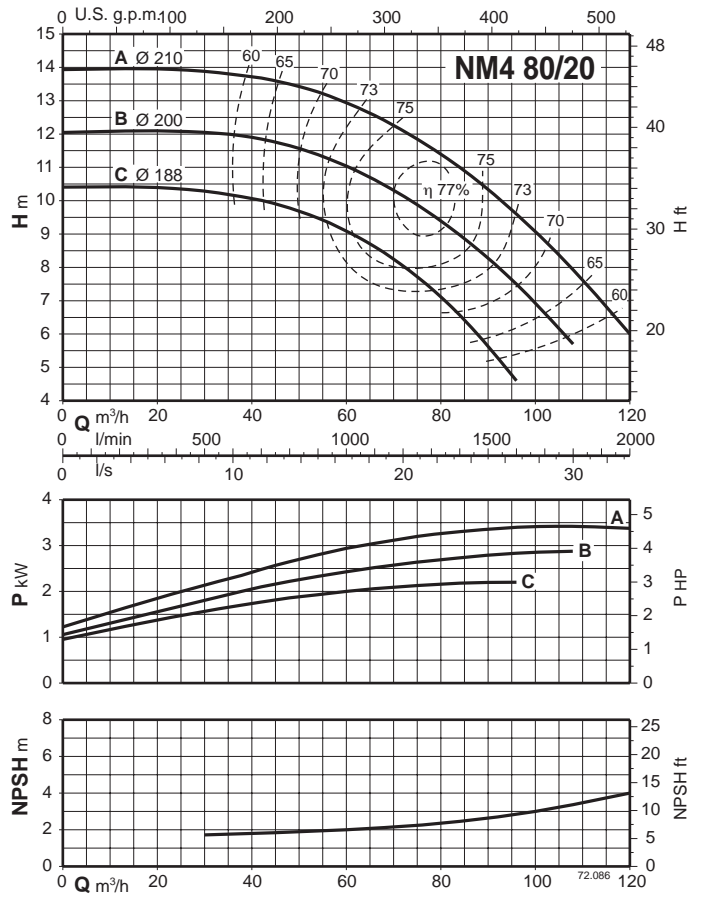
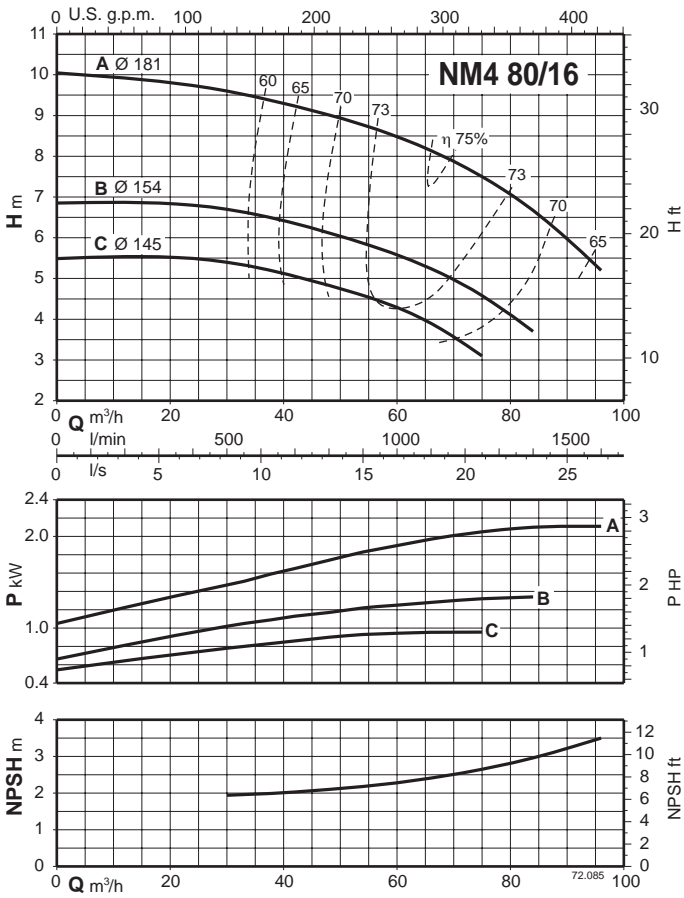
Characteristic curves $n \approx 1450$ rpm



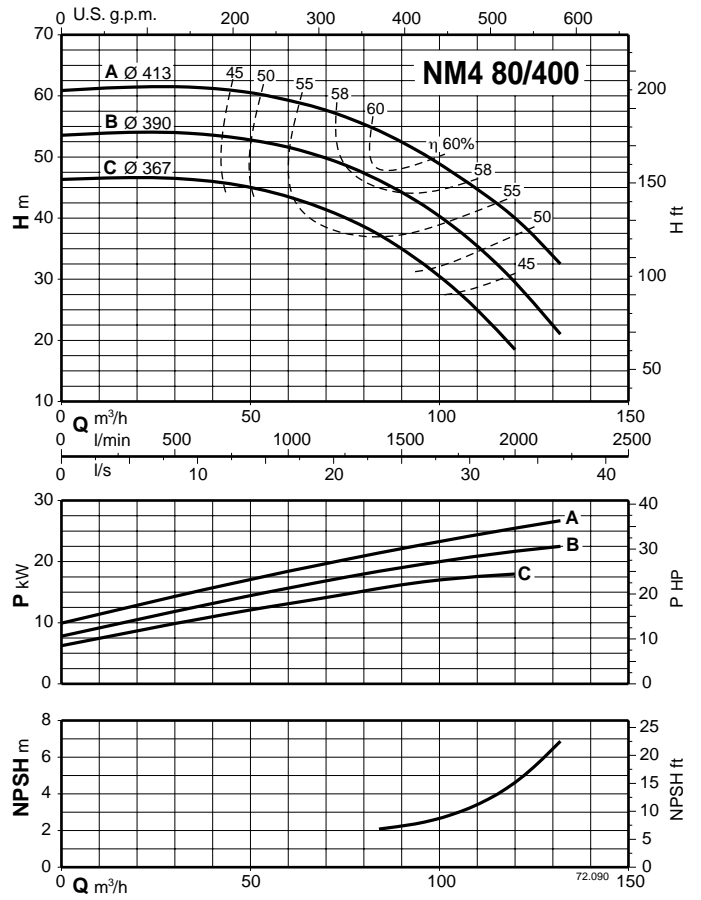
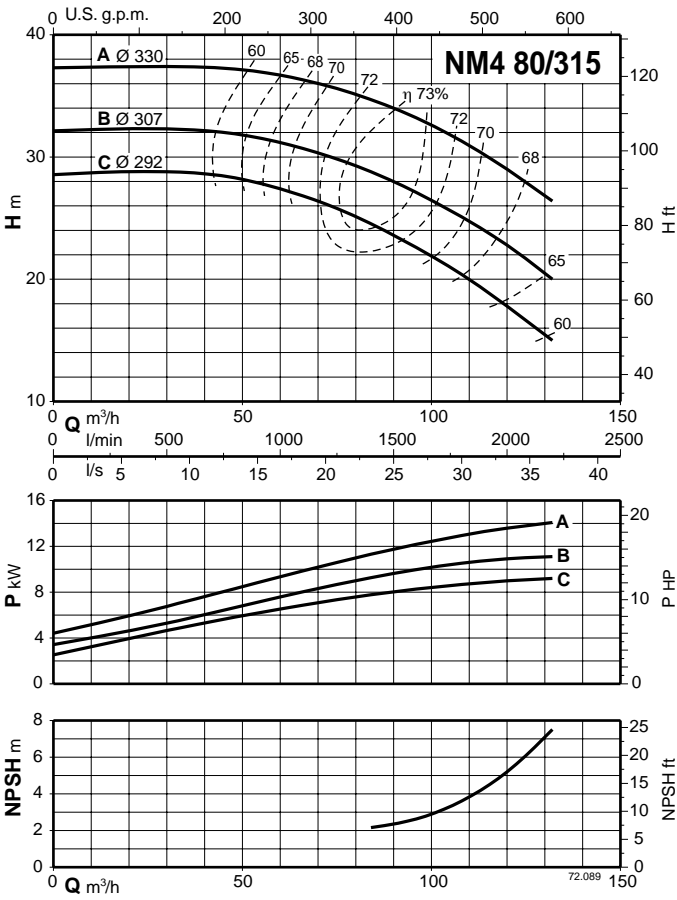
Characteristic curves $n \approx 1450$ rpm



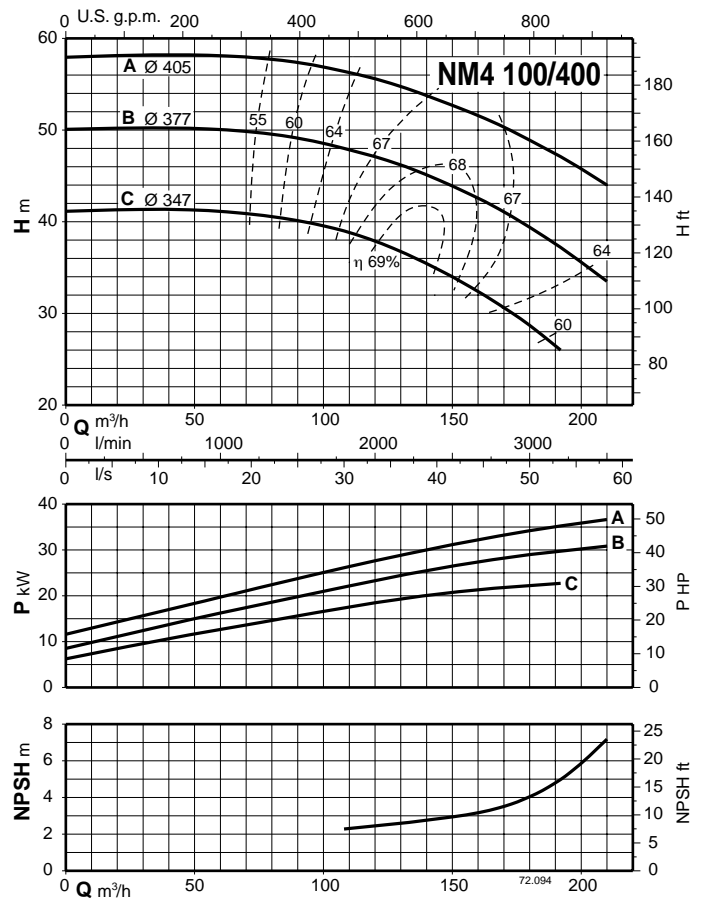
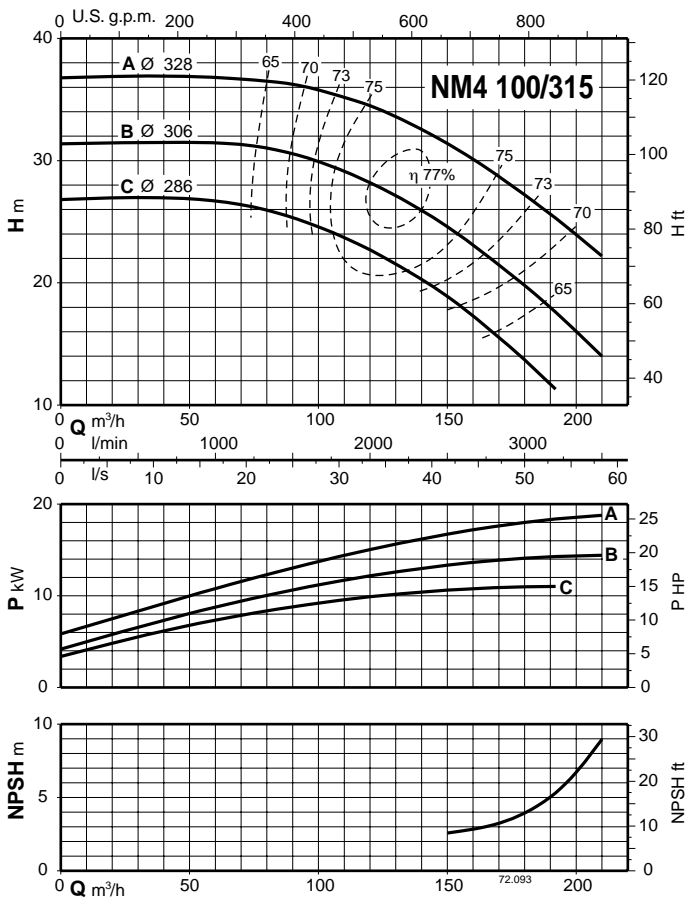
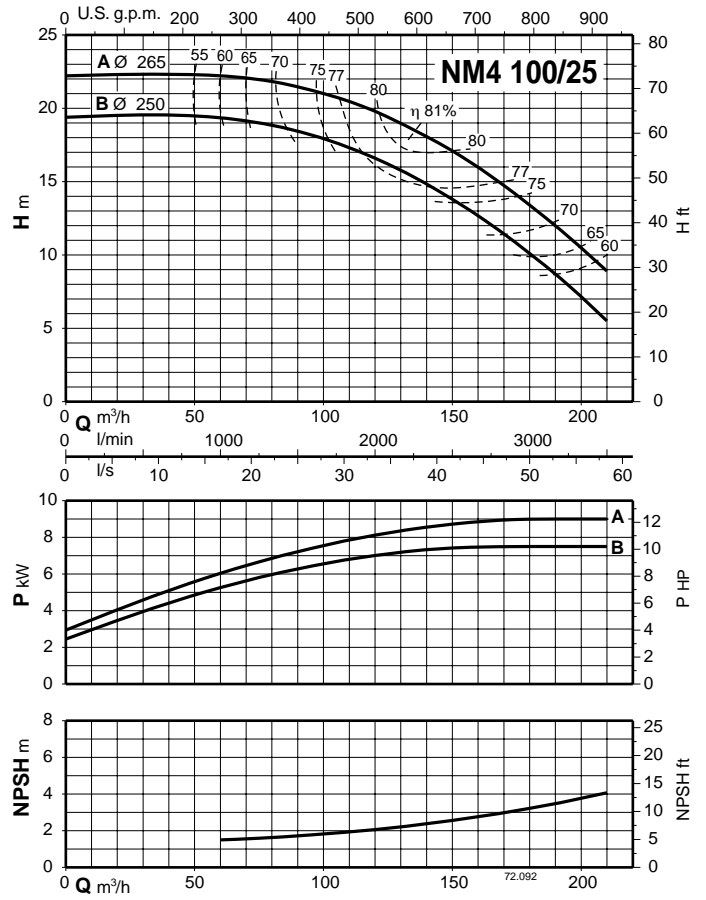
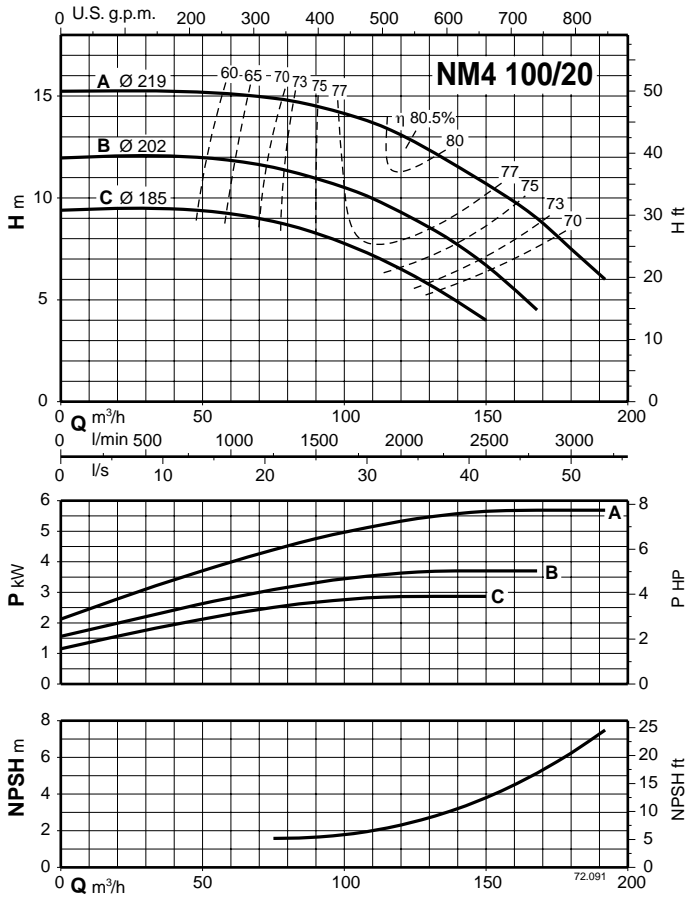
Characteristic curves $n \approx 1450$ rpm



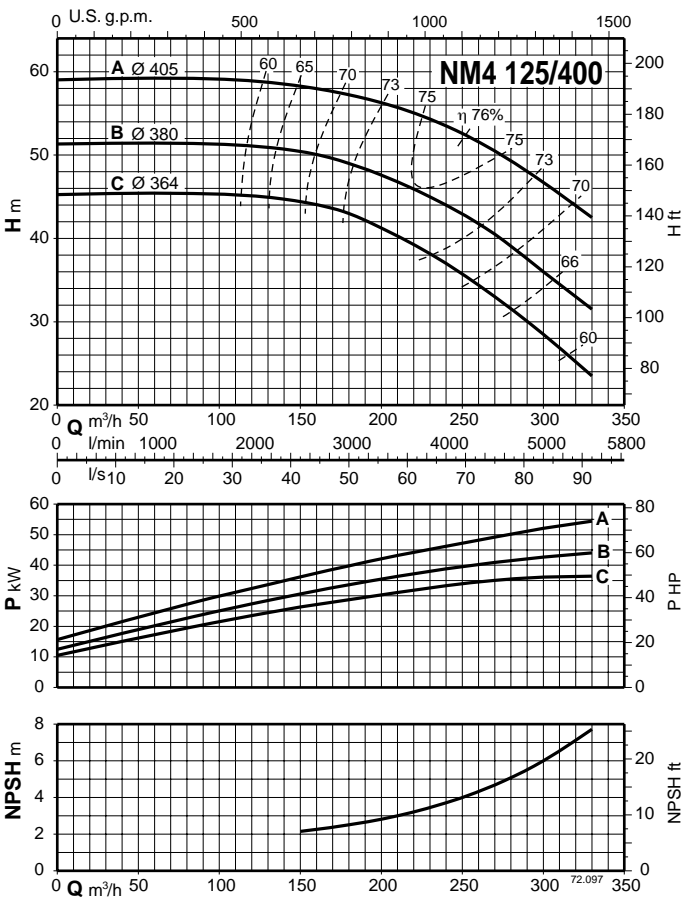
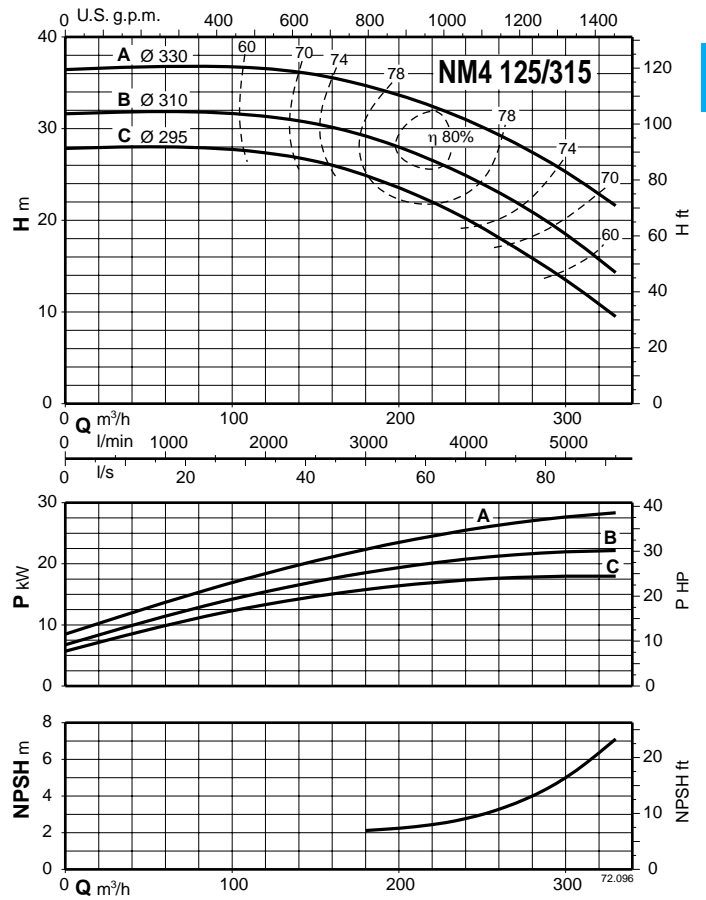
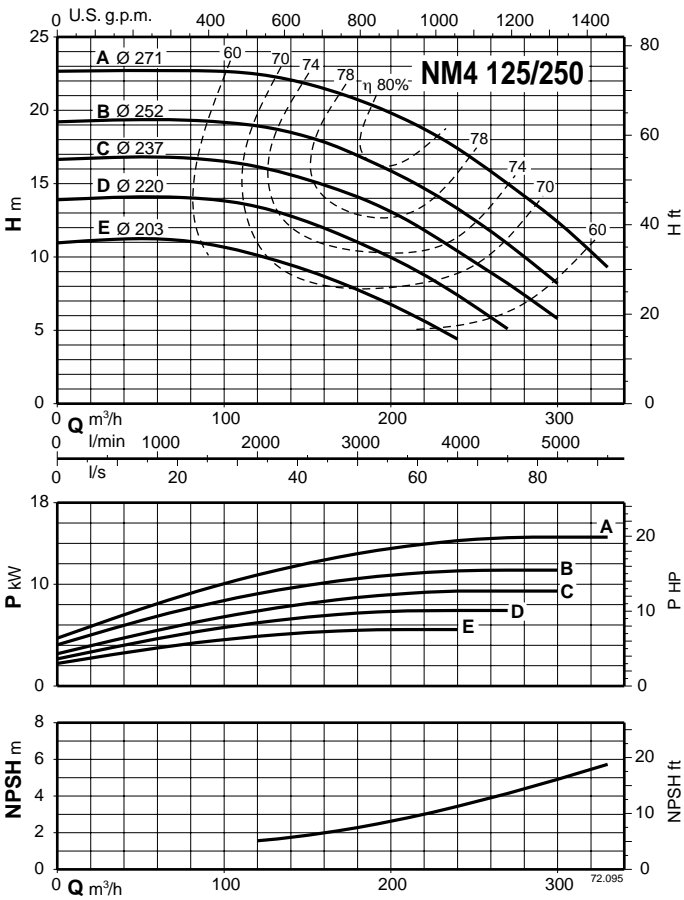
Characteristic curves $n \approx 1450$ rpm



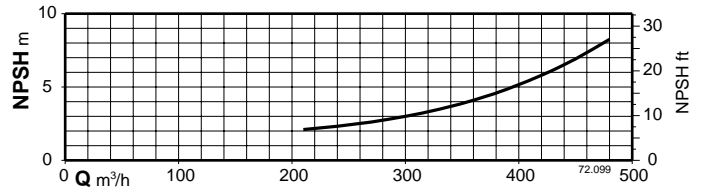
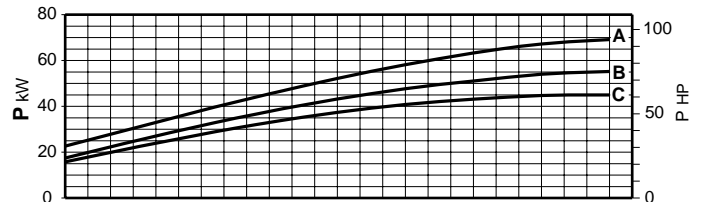
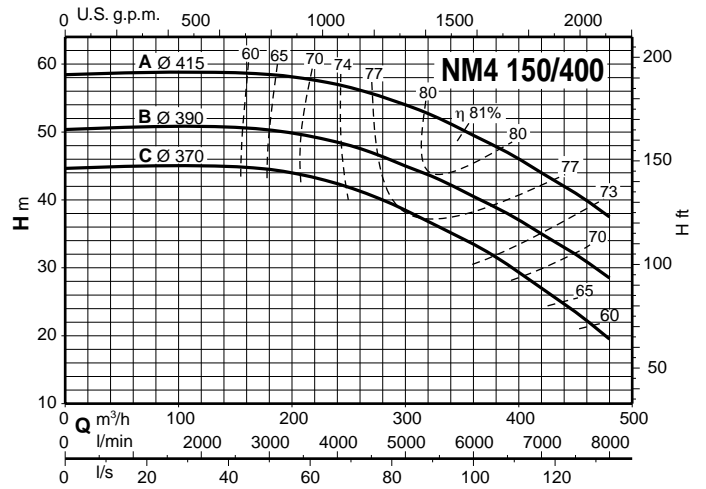
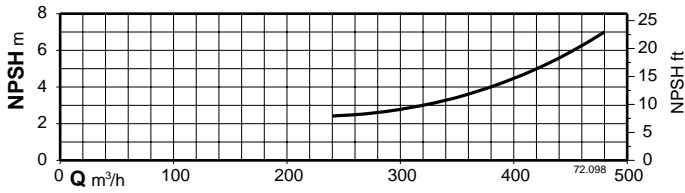
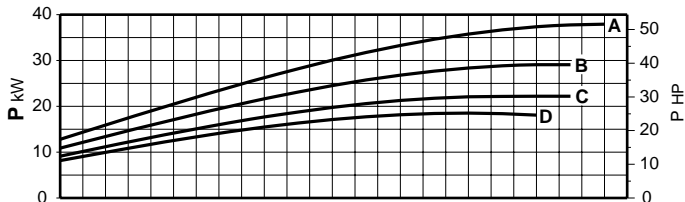
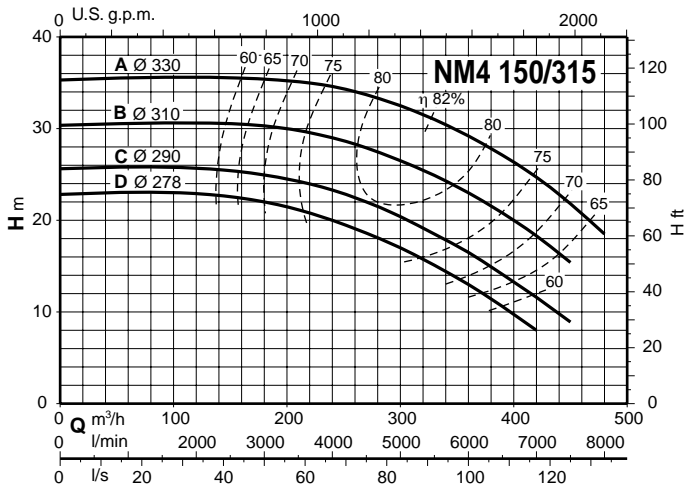
Characteristic curves $n \approx 1450$ rpm



Characteristic curves $n \approx 1450$ rpm

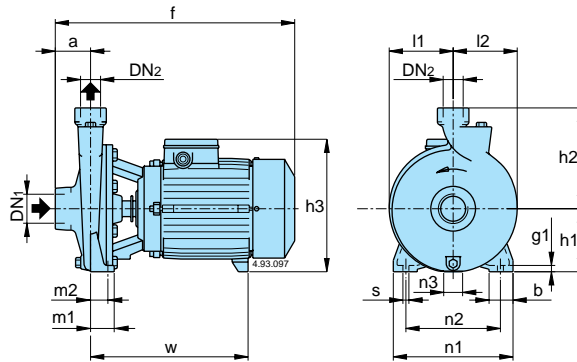


Characteristic curves $n \approx 1450$ rpm



Dimensions and weights

1



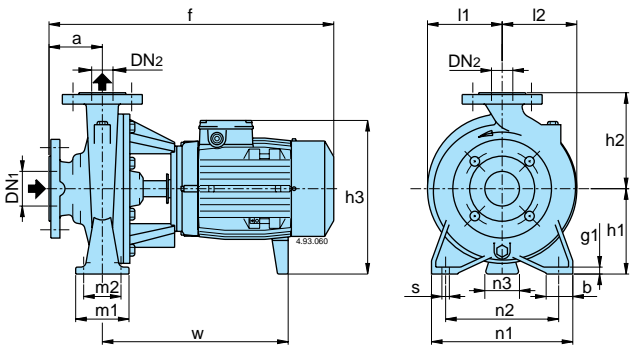
Standard construction

Picture	NM4	DN1	DN2	mm																kg		
				ISO 228	a	f	h1	h2	h3	m1	m2	n1	n2	n3	b	s	l	l1	l2	w	g	I-NM4
1	NM4 25/12AE	G 1 1/2	G 1	56	313	90	140	195	37,5	27,5	170	130	9	38	9,5	85	88	250	10	13,5		
	NM4 25/160AE-BE			56	380	100	160	210	37,5	27,5	190	150	30	38	9,5	102	102	250	10	17,5		
	NM4 25/200AE-BE-CE			63	385	125	180	235	45	32,5	245	200	49	45	11,5	125	125	250	11	25-23-21,5		

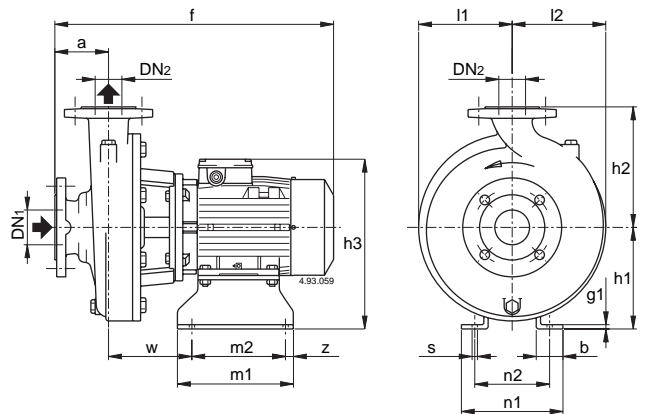
Bronze construction B-NM4 and Stainless steel construction I-NM4

Picture	B-NM4 I-NM4	DN1	DN2	mm																kg				
				ISO 228	a	f	h1	h2	h3	m1	m2	n1	n2	n3	z	b	s	l	l1	l2	w	g	I-NM4	B-NM4
1	B-NM4 25/160AE-BE	G 1 1/2	G 1	56	380	100	160	210	37,5	27,5	190	150	30	-	38	9,5	-	102	102	250	10			19-19
	I-B-NM4 25/200AE-BE-CE			63	400	125	180	235	45	32,5	245	200	49	-	45	11,5	-	125	125	250	11			26-24-22

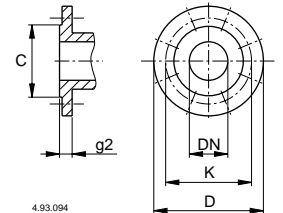
2



3



Flanges EN 1092-2

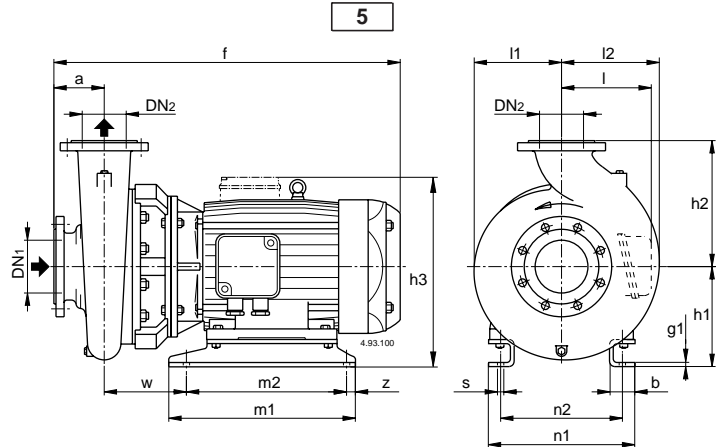
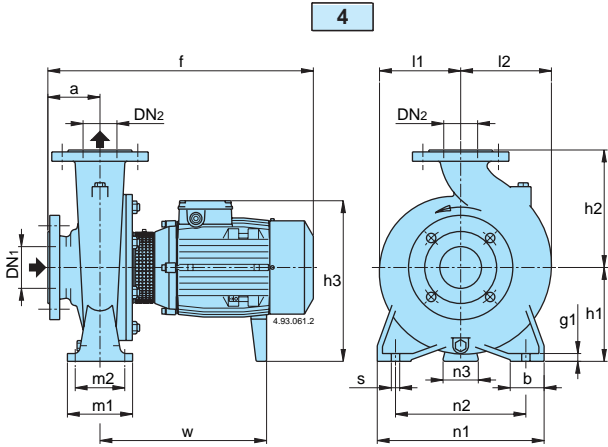


Bronze construction B-NM4 and Stainless steel construction I-NM4

Picture	B-NM4 I-NM4	DN1	DN2	mm																kg				
				a	f	h1	h2	h3	m1	m2	n1	n2	n3	z	b	s	l	l1	l2	w	g1	I-NM4	B-NM4	
2	B-NM4 32/160AE-BE	50	32	80	455	132	160	242	100	70	240	190	47	-	50	14	-	120	120	295	12			38-38
	I-B-NM4 32/200AE-BE	50	32	80	455	160	180	270	100	70	240	190	62	-	50	14	-	140	140	295	12			43-41
	B-NM4 40/160AE-BE-CE	65	40	80	455	132	160	242	100	70	240	190	47	-	50	14	-	119	119	295	12			41-40-38
	B-NM4 40/200AE-BE	65	40	100	495	160	180	270	100	70	265	212	62	-	50	14	-	140	140	315	12			52-52
3	I-B-NM4 4025/BE-CE	65	40	100	535	190	225	318	205	175	190	140	-	15	54	10	-	175	175	156	6	70-65	73-70	
	I-B-NM4 4025/AE				560	190	225	350	280	250	230	190	140	-	15	60	12	-	175	175	125	6	84	89
2	B-NM4 50/160AE-BE	65	50	100	495	160	180	270	100	70	265	212	62	-	50	14	-	127	141	315	12			52-52
3	I-B-NM4 5025/CE	65	50	100	535	190	225	318	205	175	190	140	-	15	54	10	-	175	175	156	6	70	77	
	I-B-NM4 5025/AE-BE				560	190	225	350	280	250	230	190	140	-	15	60	12	-	175	175	125	6	93-85	105-92
2	B-NM4 65/160BE-CE	80	65	100	435	160	200	270	125	95	280	212	62	-	65	14	-	150	172	315	15			60-60
	B-NM4 65/160AE				545	160	200	288	125	95	280	212	60	-	65	14	-	150	172	350	15			68

mm						
DN	C	K	D	Holes N°	∅	g2
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22

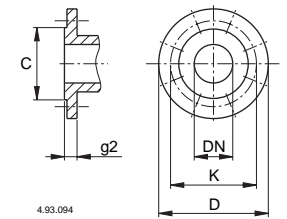
Dimensions and weights



Standard construction

Picture	NM4	mm																			kg		
		DN1	DN2	a	f	h1	h2	h3	m1	m2	n1	n2	n3	z	b	s	l	l1	l2	w		g1	
4	NM4 32/16AE-BE	50	32	80	410	132	160	242	100	70	240	190	47	-	50	14	-	120	120	255	12	30,5-30	
	NM4 32/20AE-BE	50	32	80	410	160	180	270	100	70	240	190	62	-	50	14	-	140	140	255	12	36-34,5	
	NM4 40/16AE-BE-CE	65	40	80	410	132	160	242	100	70	240	190	47	-	50	14	-	119	119	255	12	35-33-31	
	NM4 40/20AE-BE	65	40	100	430	160	180	270	100	70	265	212	62	-	50	14	-	140	140	255	12	41-40,5	
	NM4 40/25BE-CE	65	40	100	495	180	225	308	125	95	320	250	60	-	65	14	-	175	175	300	330	15	64-59
	NM4 40/25AE				525			340															78
	NM4 50/16AE-BE	65	50	100	430	160	180	270	100	70	265	212	62	-	50	14	-	127	141	255	12	40-39,5	
	NM4 50/20CE	65	50	100	440	160	200	270	100	70	265	212	62	-	50	14	-	140	153	265	310	14	44,5
	NM4 50/20AE-BE				505			288															54,5-49,5
	NM4 50/25CE	65	50	100	490	180	225	308	125	95	320	250	60	-	65	14	-	175	175	300	330	15	65,5
	NM4 50/25AE-BE				530			340															85,5-77,5
	NM4 65/16BE-CE	80	65	100	430	160	200	270	125	95	280	212	62	-	65	14	-	150	172	255	300	15	46-46
	NM4 65/16AE				495			288															51,5
	NM4 65/20BE	80	65	100	505	180	225	308	125	95	320	250	60	-	65	14	-	155	175	310	330	15	58,5
	NM4 65/20AE				525			340															73,5
	NM4 65/25BE	80	65	100	540	200	250	360	160	120	360	280	60	-	80	18	-	175	190	345	415	18	97
	NM4 65/25AE				645			385															116
	NM4 65/31BE-CE	80	65	125	670	225	280	410	160	120	400	315	75	-	80	18	-	220	220	415	465	20	164-153
	NM4 65/31AE				720			465															176
	NM4 80/16CE	100	80	125	455	180	225	290	125	95	320	250	62	-	65	14	-	165	193	255	300	15	53
NM4 80/16AE-BE	520				308			63-58															
NM4 80/20CE	100	80	125	540	180	250	308	125	95	345	280	60	-	65	14	-	170	194	320	340	15	72	
NM4 80/20AE-BE				560			340															91-82	
NM4 80/25CE	100	80	125	565	200	280	360	160	120	400	315	60	-	80	18	-	191	210	335	415	20	102	
NM4 80/25AE-BE				670			385															135-124	
NM4 80/31CE	100	80	125	720	250	315	435	160	120	400	315	90	-	80	18	-	220	232	465	20	181		
5	NM4 80/315AE-BE	100	80	125	850	260	315	466	435	395	314	254	-	20	74	14	-	220	232	210	6	250-227	
	NM4 80/400CE	125	80	125	865	270	355	-	482	397	350	279	-	78	14	270	268	268	216	216	6	336	
	NM4 80/400BE				905				520	435	350	279		78	14	270						268	365
	NM4 80/400AE				970				290	540	455	396		318	84	18						290	233
4	NM4 100/20BE-CE	125	100	125	565	200	280	360	160	120	360	280	60	-	80	18	-	180	212	330	410	20	99-90
	NM4 100/20AE				665			385															109
	NM4 100/25BE				685			225															280
NM4 100/25AE	735	465																					
5	NM4 100/315BE-CE	125	100	140	865	260	315	466	435	395	314	254	-	20	74	14	-	230	250	210	6	261-240	
	NM4 100/315AE				880				250	432	382	350		279	25	78	14	270	268	223	216	313	
5	NM4 100/400CE	125	100	140	920	290	355	-	435	395	350	279	-	20	78	14	270	268	280	221	233	6	368
	NM4 100/400AE-BE				980				540	455	396	318		25	84	18	290						233
4	NM4 125/25DE-EE	150	125	140	685	250	355	435	160	120	400	315	90	-	80	18	-	235	268	415	465	20	161-149
	NM4 125/25CE				735																		465
5	NM4 125/250AE-BE	150	125	140	865	260	355	466	435	395	314	254	-	20	74	14	-	235	268	210	6	242-222	
	NM4 125/315CE	150	125	140	880	270	355	-	482	397	350	279	-	78	14	270	247	278	216	216	6	331	
	NM4 125/315BE				920				520	435	350	279		78	14	270						247	365
	NM4 125/315AE				980				540	455	396	318		84	18	290						233	414
	NM4 125/400CE	150	125	140	980	300	400	-	455	396	318	300	-	25	84	18	290	330	280	305	233	6	459
	NM4 125/400AE-BE				1045				325	461	440	356		8	585-550								
	NM4 150/315DE	200	150	160	900	290	400	-	435	395	371	300	-	20	78	14	270	260	298	248	233	6	363
	NM4 150/315CE				940				540	455	396	318		25	84	18	290						372
	NM4 150/315AE-BE				1000				540	455	396	318		25	84	18	290						437-424
	NM4 150/400BE-CE	200	150	160	1065	325	450	-	540	461	440	356	-	25	92	18	330	295	328	274	290	8	590-555
NM4 150/400AE	1145				320				625	535	500	406		45	104	22	355						614

Flanges EN 1092-2



mm						
DN	C	K	D	Holes	g2	
				N° Ø		
32	76	100	140	4 19	18	18
40	84	110	150	4 19	18	18
50	99	125	165	4 19	20	20
65	118	145	185	4 19	20	20
80	132	160	200	8 19	22	22
100	156	180	220	8 19	24	24
125	184	210	250	8 19	24	24
150	211	240	285	8 23	26	26
200	266	295	340	8 23	30	30