



NM, NMD

60 Hz

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).

The pumps in bronze are supplied fully painted.

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, 60 Hz (n ≈ 3450 rpm).

NM, NMD: three-phase 220/380 V, 380/660 V.

NMM, NMDM: single-phase 220 V.

With thermal protector up to 1.1 kW.

Insulation class F.

Protection IP 54.

Classification scheme IE2 for three-phase motors from 0,75 kW.

Constructed in accordance with EN 60034-1; EN 60034-30.

EN 60335-1, EN 60335-2-41.

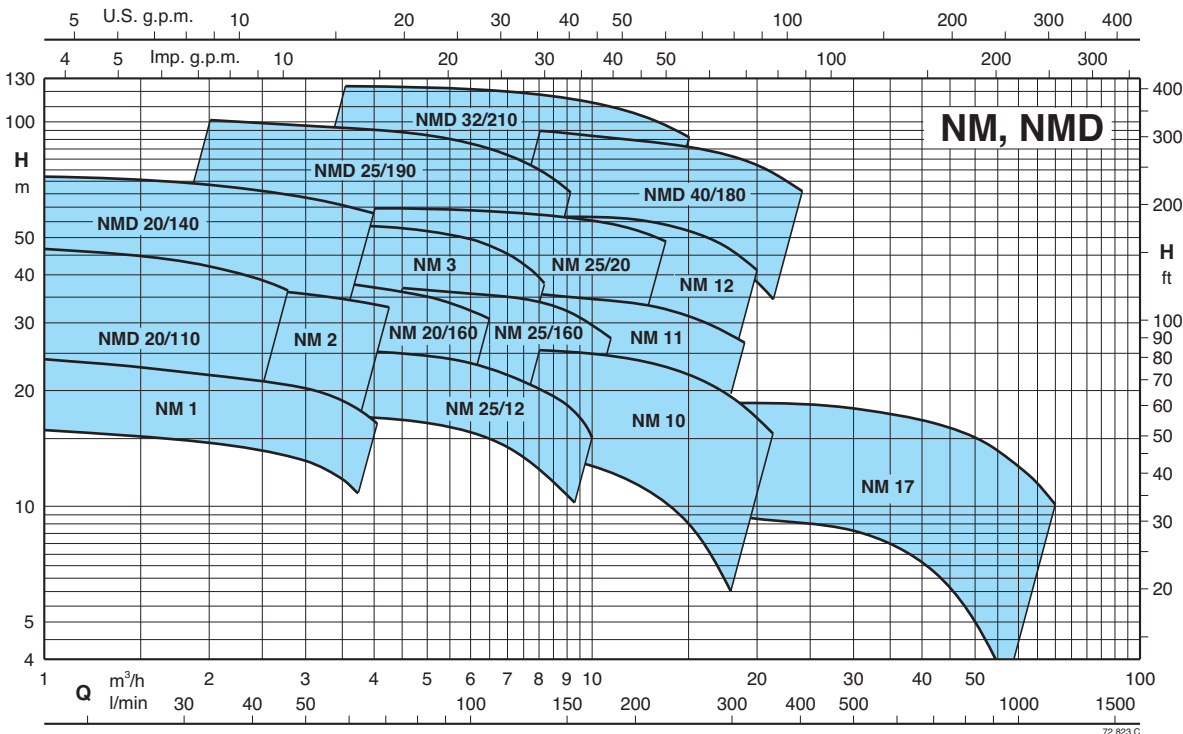
Materials

Components	NM, NMD	B-NM, B-NMD
Pump casing	Cast iron	Bronze
Lantern bracket	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705	
NM 17	Cast iron	Bronze
	GJL 200 EN 1561	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	

Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.
- Motor suitable operation with frequency converter.

Coverage chart n ≈ 3450 rpm



Performance n ≈ 3450 rpm

	NM	P ₂		Q m³/h																
		kW	HP																	
				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		
					16	20	25	31,5	40	50	60	70	80	90	100	110	125	140		
	NM 1/AE-60●	0,37	0,5	H m	22	21,8	21,5	21	20,6	19,4	18,1	16,3	14,2							
	NM 1/S-60●	0,45	0,6		26	25,9	25,6	25,2	24,6	23,8	22,7	21,3	19,5							
	NM 2/B-60/A●	0,55	0,75		27	26,5	26	25,5	25	24	23	22	20							
	NM 2/S-60/A●	0,55	0,75		32	31,5	31	30,5	30	28	25,5	23	19,5							
	NM 2/A-60/A●	0,75	1		36	35,5	35	34,5	34	32,5	31,5	30	28,5	27						
	NMM 3/CE-60	1,1	1,5			39,5	39	39	38	37	36,5	35	33,5							
	NM 3/CE-60	1,1	1,5			40	39,5	39,5	39	38	37	36	34	32*	29*					
	NMM 3/BE-60	1,5	2			45,5	45	45	44,5	44	43	42	41	39*	36*	32*				
	NM 3/BE-60	1,5	2			47	46,5	46	45,5	45	44,5	43,5	42	40*	37*	33,5*	28*			
	NMM 3/A-60	1,8	2,5			51,5	51,3	51	51	51	50,5	50	49	46,5	44	41	35,5	28,5		
	NM 3/A-60/A	2,2	3			55,5	55	54,5	54	53,5	53	52,5	52	51*	49*	46,5*	42*	35*		

B-NM B-NMD	NM NMD	P ₂		Q m³/h																
		kW	HP																	
				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		
					16	20	25	31,5	40	50	60	70	80	90	100	110	125	140		
B-NMD 20/110B-60/A●	NMD 20/110B-60/A●	0,45	0,6	H m	36,5	35,5	34	32	28,5	24	19*									
B-NMD 20/110Z-60/A●	NMD 20/110Z-60/A●	0,55	0,75		41	40	38	36	32,5	28	23	17*								
B-NMD 20/110A-60/A●	NMD 20/110A-60/A●	0,75	1		47	46,5	45	42,5	39	34	29	23,5*								
B-NMDM 20/140BE-60	NMDM 20/140BE-60	1,1	1,5		59	58,5	58	57	55	52	47,5									
B-NMD 20/140BE-60	NMD 20/140BE-60	1,1	1,5		60	59,5	59	58	56	53	49	45								
B-NMDM 20/140AE-60	NMDM 20/140AE-60	1,5	2		66,5	65,5	65	64	62,5	60	57,5	55	51	47,5						
B-NMD 20/140AE-60	NMD 20/140AE-60	1,5	2		77	76,5	76	75	73,5	71	69	66	63	59	54					
B-NM 20/160BE-60●	NM 20/160BE-60●	0,75	1					33	33	32	31	30	28,5	26,5	25	23*				
B-NM 20/160AE-60●	NM 20/160AE-60●	1,1	1,5					39	38,5	38	37	36	35	34	33	31*				

B-NM B-NMD	NM NMD	P ₂		Q m³/h																
		kW	HP																	
				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	18	
					40	50	60	80	100	110	125	140	160	180	200	220	250	280	300	
B-NM 25/12B-60/A●	NM 25/12B-60/A●	0,55	0,75	H m	20,8	20,8	20,7	20,3	19,6	19,2	18,4	17,6	16,1	14,3	12	9,3				
B-NM 25/12A-60/A●	NM 25/12A-60/A●	0,75	1		24,5	24,6	24,6	24,3	23,6	23,1	22,4	21,6	20,4	19	17	14,5				
B-NM 25/160BE-60●	NM 25/160BE-60●	1,1	1,5			32	31,5	31	30	29	28	26,5	23,5*							
B-NM 25/160AE-60●	NM 25/160AE-60●	1,5	2			38	37,5	37	36	35,5	34,5	33	31	27,5	22,5*					
B-NM 25/200B-60/B	NM 25/20B-60/B	2,2	3		44,6	44,4	44,1	43,6	43	42,6	42	41,4	40,3	39	37,4	35,4	31,5			
B-NM 25/200A-60/B	NM 25/20A-60/B	3	4		52,3	52,1	52	51,6	51,1	50,8	50,3	49,8	48,9	48	46,8	45,3	42,3	38,2		
B-NM 25/200S-60/B	NM 25/20S-60/B	4	5,5		60,5	60,4	60,2	59,8	59,2	59	58,5	58	57,3	56,5	55,6	54,4	48,4	48,4	45,2	
B-NMD 25/190C-60/A	NMD 25/190C-60/A	2,2	3		69	67	65	60	53	50	42									
B-NMD 25/190B-60/A	NMD 25/190B-60/A	3	4		81	80	78	73	67,5	64	58	51,5	41*							
B-NMD 25/190A-60/A	NMD 25/190A-60/A	4	5,5		98	97	95	92	87	84	79	72,5	63*							

	NM	P ₂		Q m³/h																
		kW	HP																	
				l/min	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30		
					110	125	140	160	180	200	220	250	280	315	350	400	450	500		
	NM 10/FE-60●	0,55	0,75	H m	17	16,8	16,5	15,9	15,3	14,5	13,6	12,1								
	NM 10/DE-60●	0,75	1		18,8	18,5	18,3	17,8	17,2	16,5	15,8	14,4								
	NM 10/AE-60●	1,1	1,5		24,3	24,1	23,8	23,4	22,8	22,2	21,4	20,1								
	NM 10/SE-60●	1,5	2		25,2	25	24,8	24,3	23,8	23,2	22,5	21,2	19,7	17,8	15,6	12				
	NMM 11/BE-60	1,5	2		29,5	29	28,5	28	27	26	25	22,5	20							
	NM 11/BE-60	1,5	2		31	30,5	30	29,5	29	28	27	25	23*							
	NM 11/A-60/A	2,2	3		36,5	36	35,5	35	34	33	32,5	31	29*							
	NM 12/D-60/A	2,2	3		39	38	37,5	36,5	35	34	32*									
	NM 12/C-60/A	3	4		45	44,5	44	43	42	41	40	37	34*							
	NM 12/A-60/A	4	5,5		57	56,5	56	55,5	55	54	53	51	49*							

Performance n ≈ 3450 rpm

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B-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 32/210D-60/A	NMD 32/210D-60/A	4	5,5	H m	68	67	65	63	60	55	50	45	40*						
B-NMD 32/210C-60/A	NMD 32/210C-60/A	5,5	7,5		89	88	87	85	83	79	74	68	63	52*					
B-NMD 32/210B-60/A	NMD 32/210B-60/A	7,5	10		110	109	108	106	104	100	96	91	86	78*					
B-NMD 32/210A-60/A	NMD 32/210A-60/A	9,2	12,5		121	120	119	118	117	114	110	105	99	89*					
B-NMD 40/180D-60/A	NMD 40/180D-60/A	4	5,5					60	58,5	57	55,5	53,5	51,5	47,5	43,5	38,5	33,5		
B-NMD 40/180C-60/A	NMD 40/180C-60/A	5,5	7,5					68	67,5	66,5	65,5	64	63	59,5	57	50	47,5		
B-NMD 40/180B-60/A	NMD 40/180B-60/A	7,5	10					86,5	86	84,5	83,5	82	80	77,5	74	68	65,5	58*	
B-NMD 40/180A-60/A	NMD 40/180A-60/A	9,2	12,5					93,5	92,5	91,5	90,5	89	87	84,5	83	75,5	73,5	66*	

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-60●	NM 17/HE-60●	1,1	1,5	H m	9,2	9	8,7	8,5	8	7,5	6,5	5	3,5*					
B-NM 17/GE-60●	NM 17/GE-60●	1,5	2		12	11,8	11,6	11,5	11	10,5	9,5	8	6,5	4,5*				
B-NM 17/F-60/A	NM 17/F-60/A	2,2	3			16	15,8	15,5	15	14,5	14	12,7	11,5	10	8*			
B-NM 17/D-60/A	NM 17/D-60/A	3	4					18	17,7	17,5	17	16,5	15,5	14	12,5	11*		

NM, NMD Standard construction.
B-NM, B-NMD Bronze 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 UNI EN ISO 9906:2012.

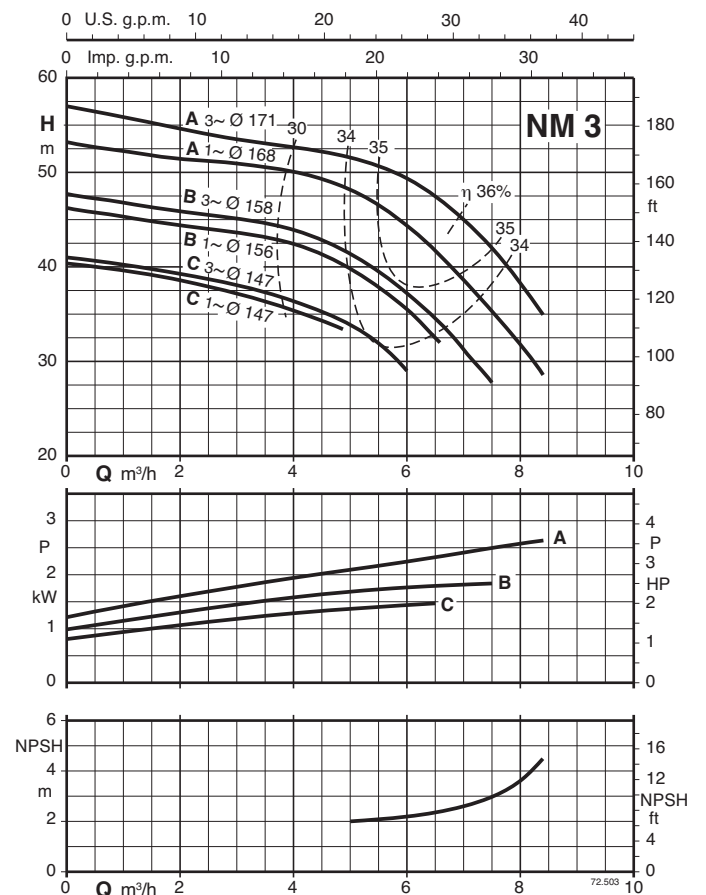
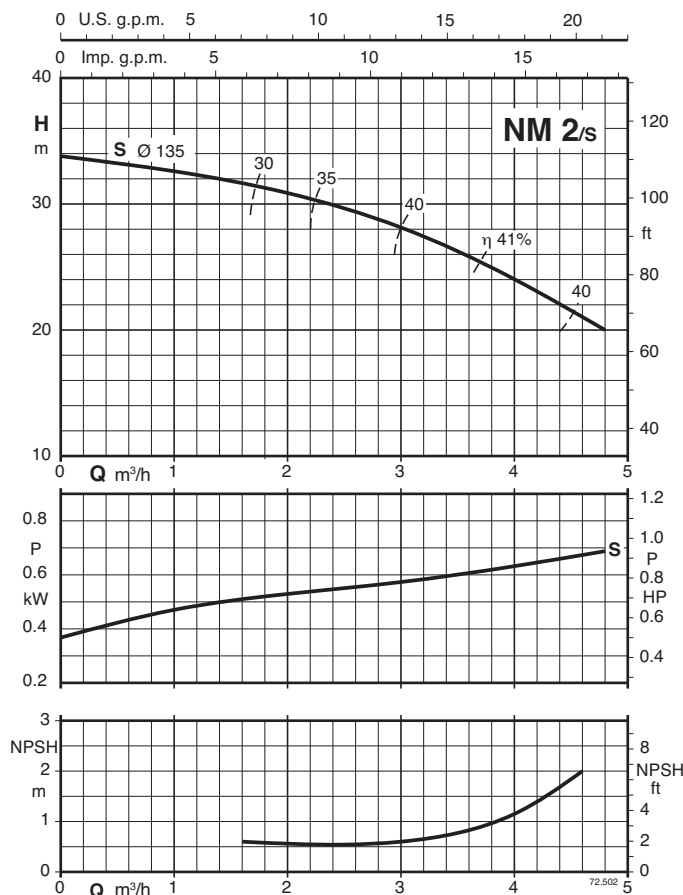
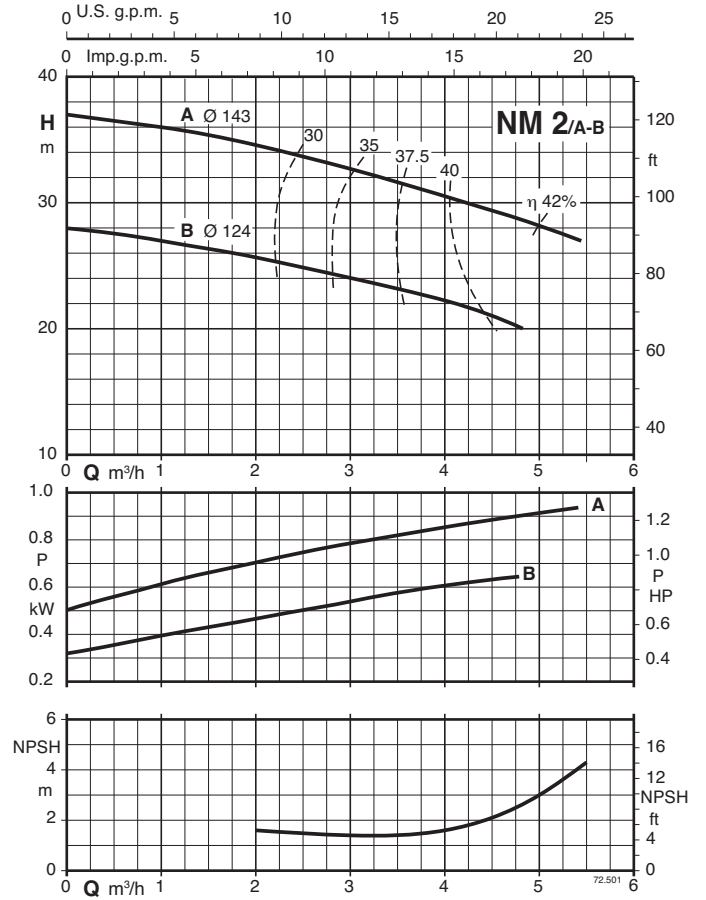
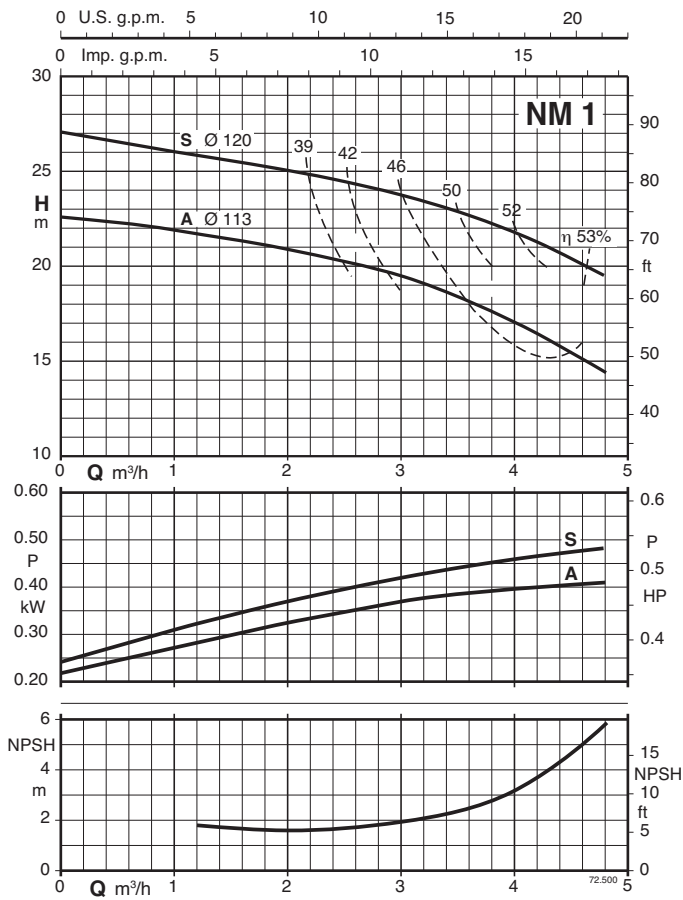
Rated currents

P ₂		220 V 1~ IN A		IA/IN
kW	HP			
0,37	0,5	3,4	2,3	
0,45	0,6	4,1	2,5	
0,55	0,75	5,2	3,1	
0,75	1	6,5	2,9	
1,1	1,5	8,5	3	
1,5	2	10,6	3,8	

P ₂		220 V Δ / 380 V Y 380 V Δ / 660 V Y			IA/IN
kW	HP	IN A	IN A	IN A	
0,37	0,5	3	1,7		3,8
0,45	0,6	2,6	1,5		3,5
0,55	0,75	3,3	1,9		4,3
0,75	1	4,5	2,6		6,8
1,1	1,5	5,7	3,3		5,5
1,5	2	9	5,2		5,4
2,2	3	11,1	6,5		7,3
3	4	13,4	7,7		8,4
4	5,5		11,2	6,5	7,8
5,5	7,5		13,7	7,9	8,7
7,5	10		17	9,8	9,2
9,2	12,5		22	12,7	8,2

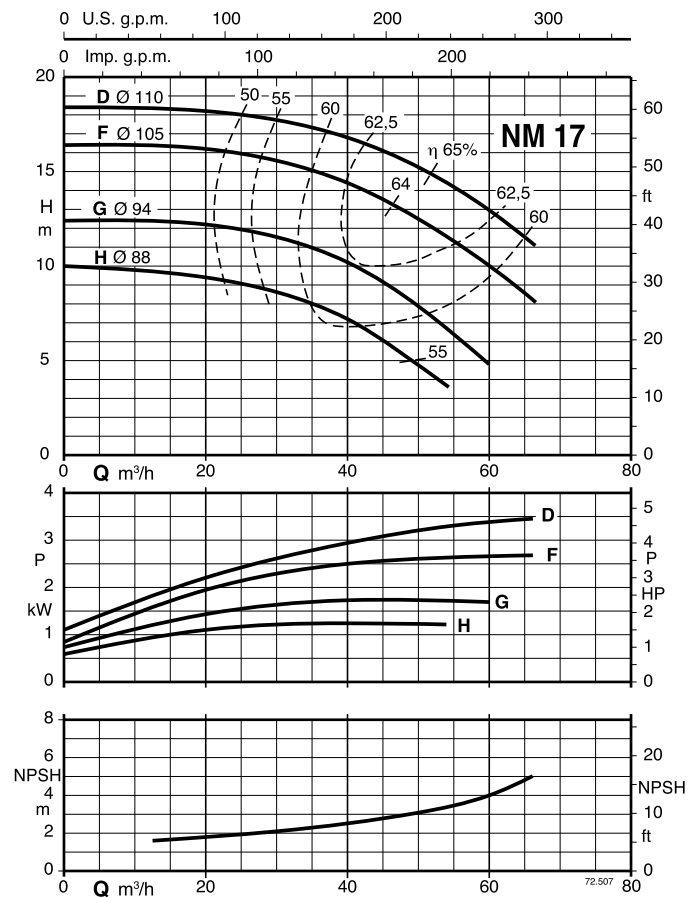
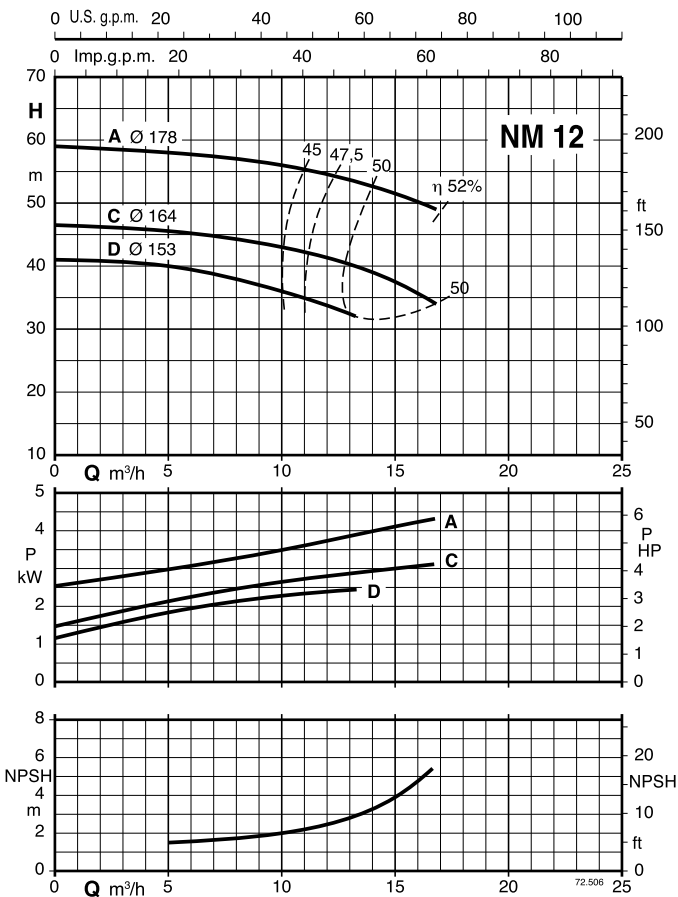
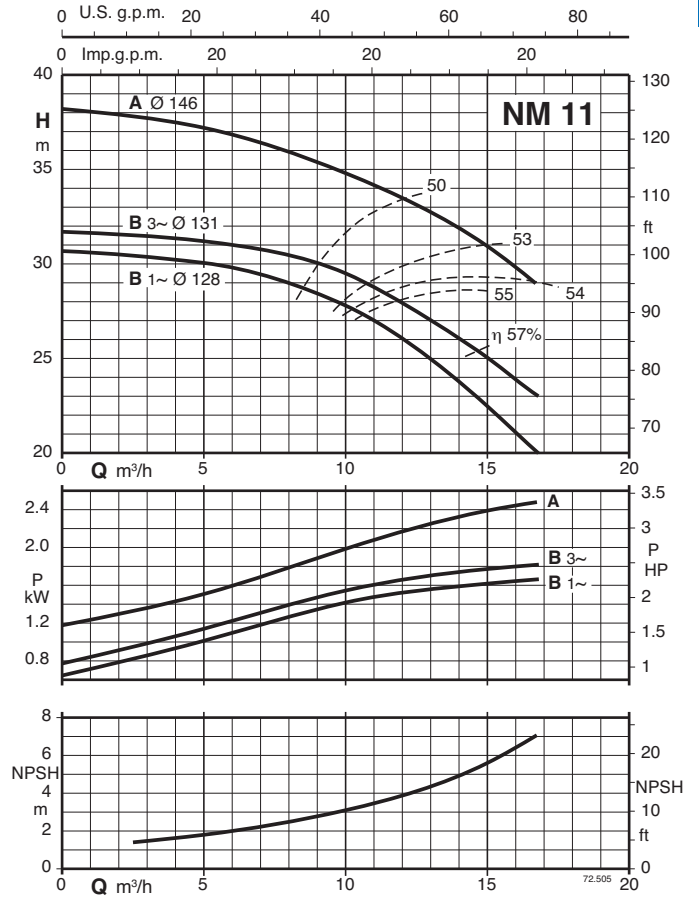
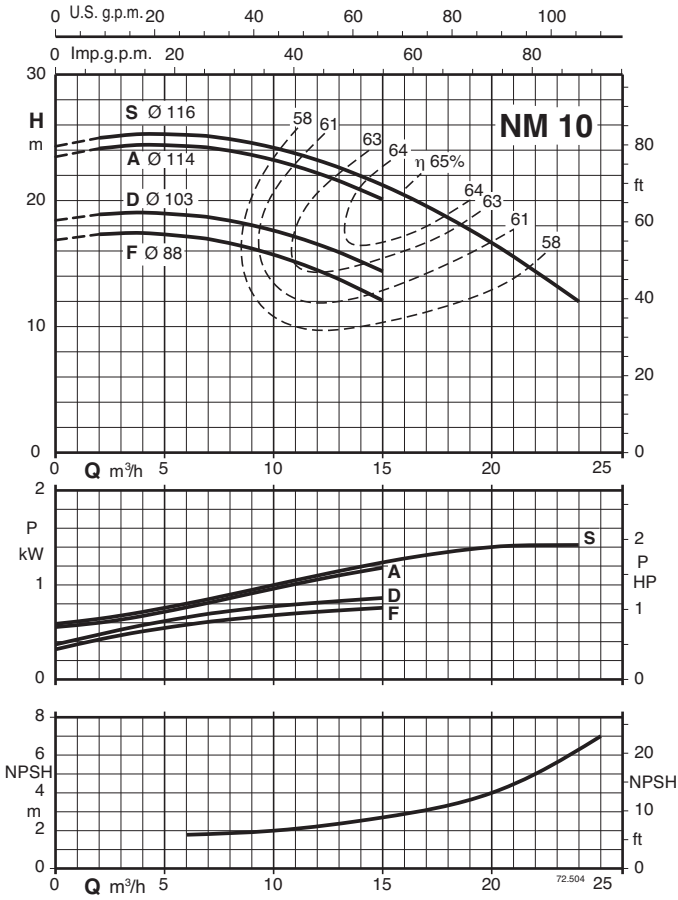
P₂ Rated motor power output.
 IA/IN D.O.L. starting current / Rated current

Characteristic curves $n \approx 3450$ rpm

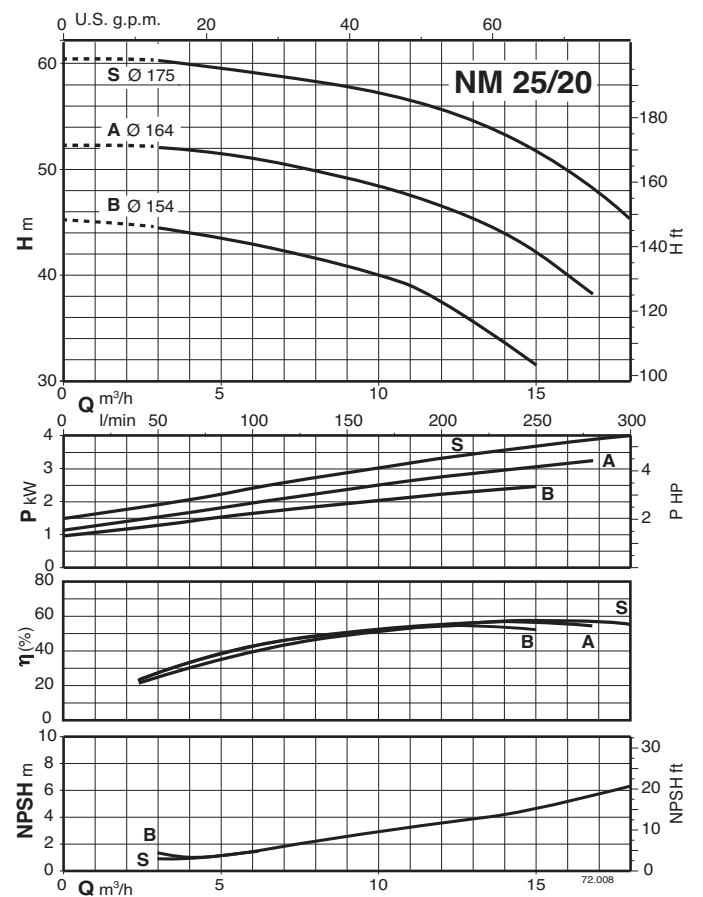
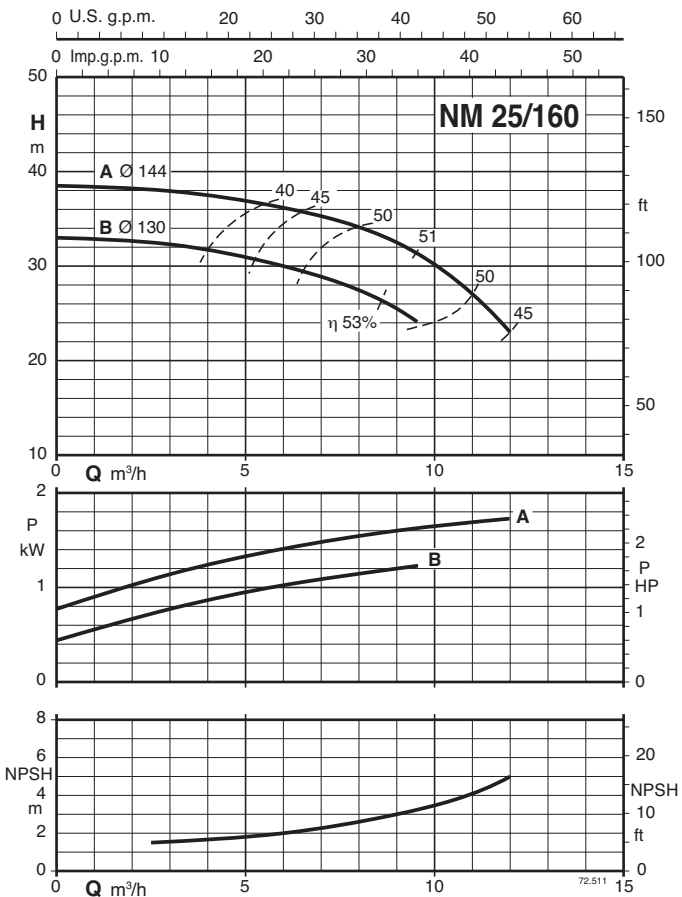
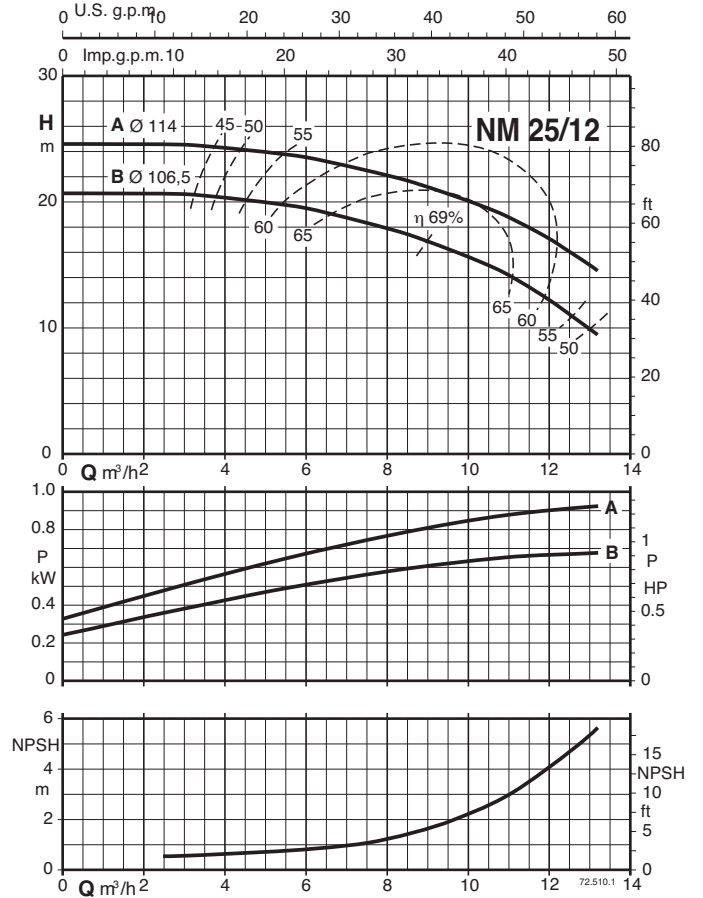
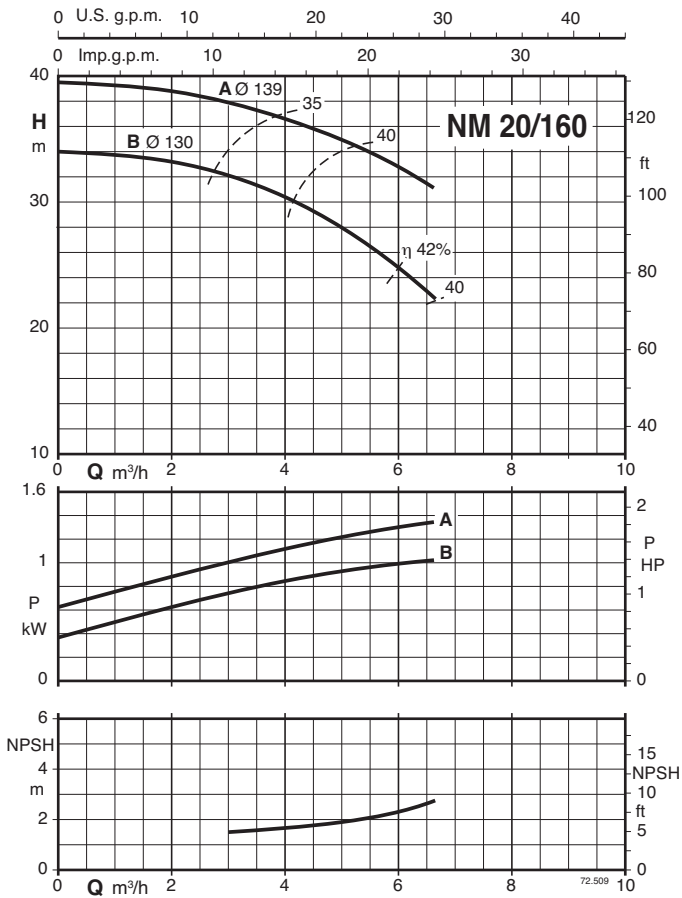


Characteristic curves n ≈ 3450 rpm

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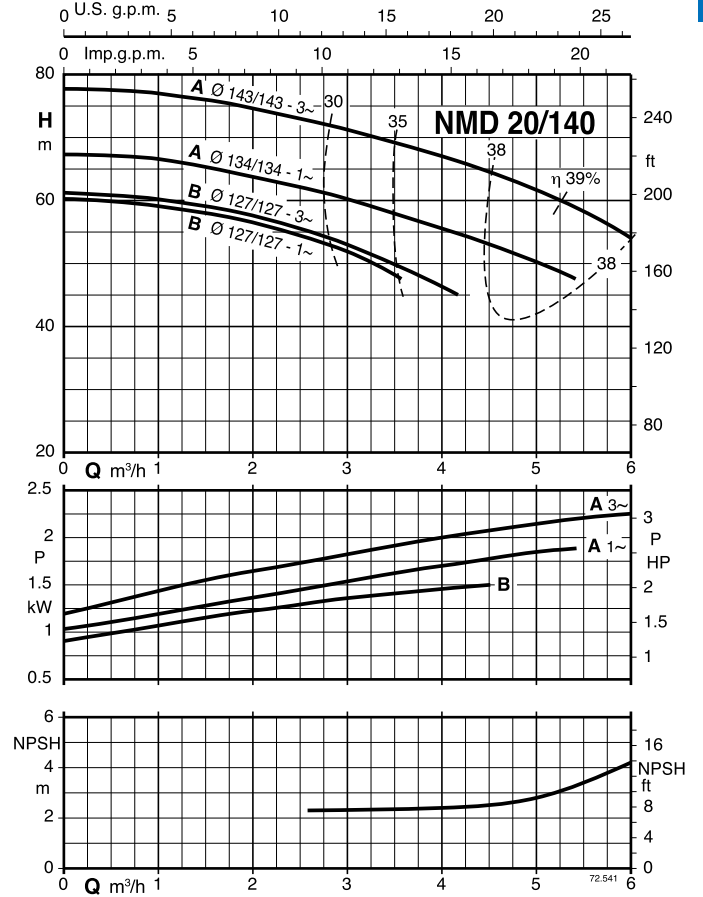
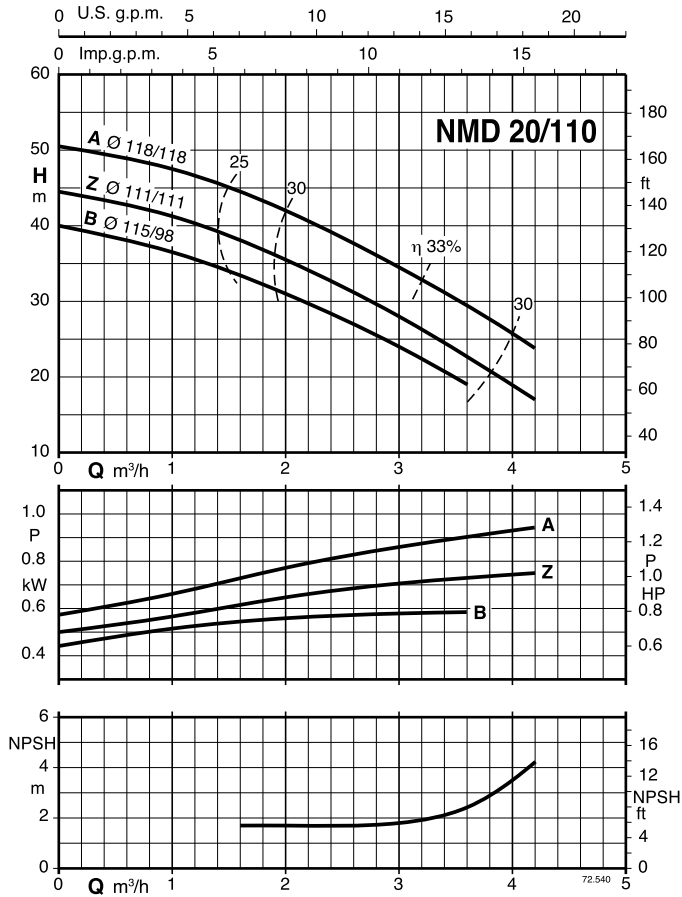


Characteristic curves $n \approx 3450$ rpm

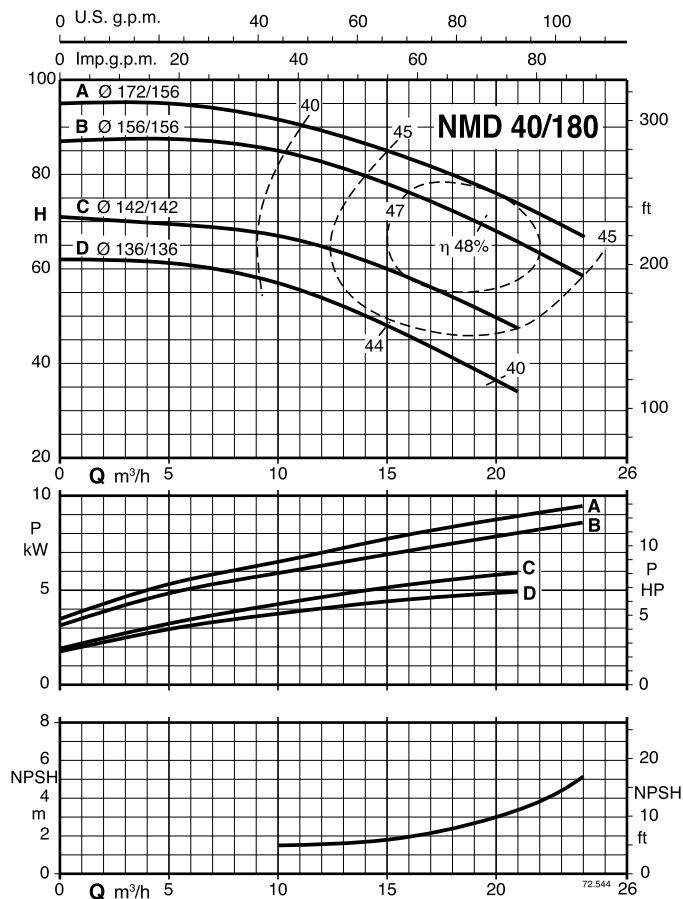
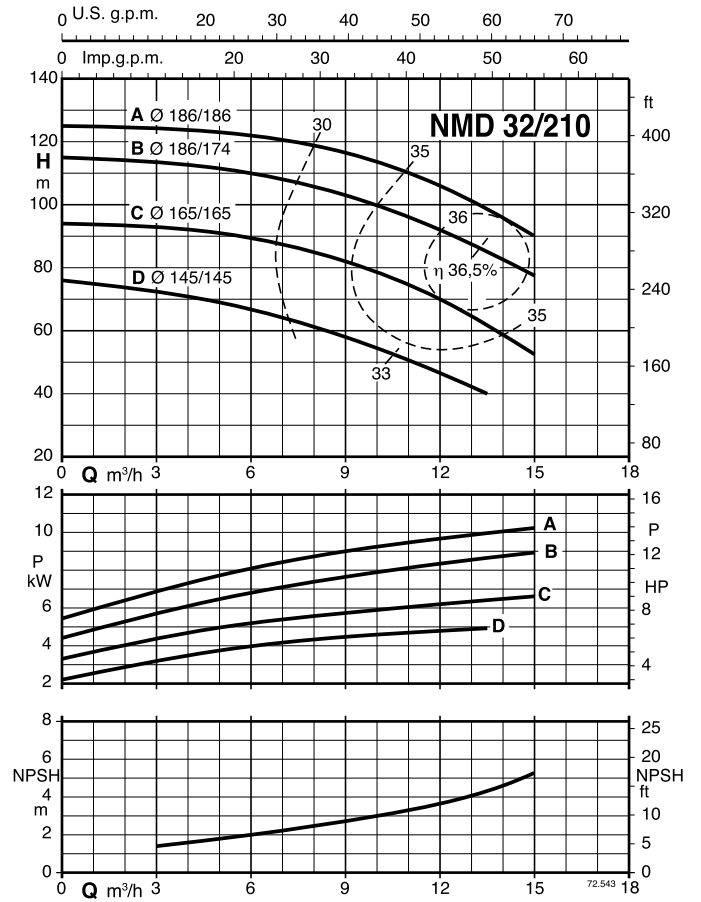
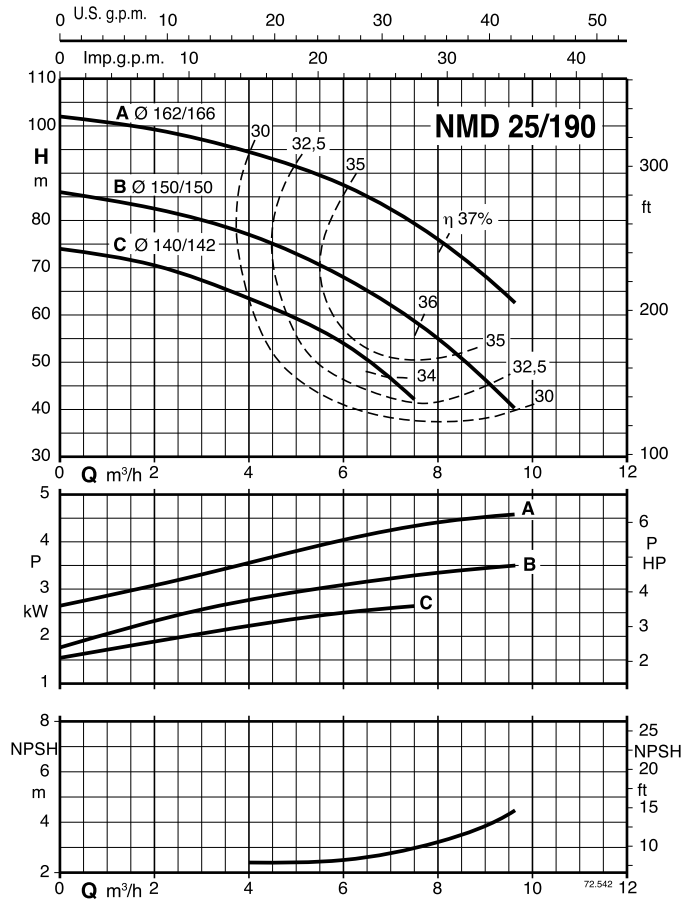


Characteristic curves $n \approx 3450$ rpm

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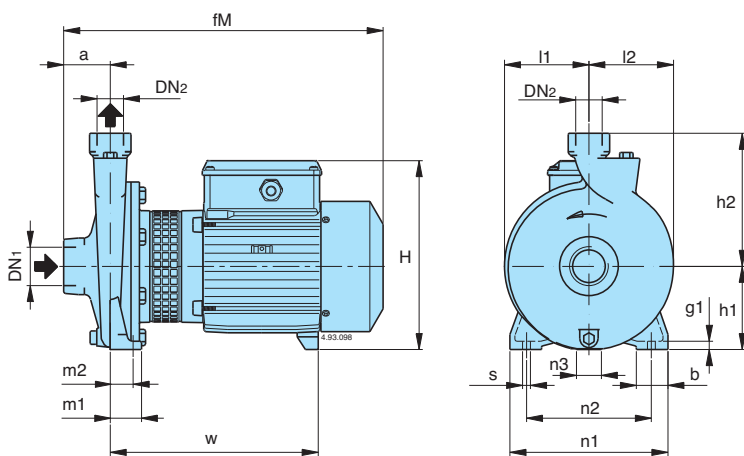


Characteristic curves $n \approx 3450$ rpm



Dimensions and weights

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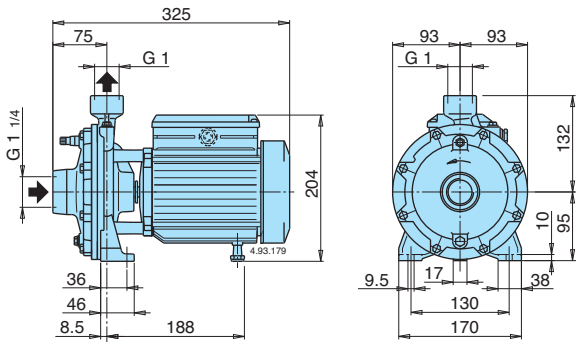


	NMM kg	NM kg	B-NM kg
NM 1/AE-60	8,7	8,6	
NM 1/S-60	9,3	9,2	
NM 2/B-60/A	14	13,1	
NM 2/S-60/A	14,2	13,3	
NM 2/A-60/A	15,1	14,2	
NM 3/CE-60	24	22,9	
NM 3/BE-60	26	25,1	
NM 3/A-60/A	30,4	29,1	
B- NM 20/160BE-60	19,9	18,4	21
B- NM 20/160AE-60	20,7	19,7	22,5
B- NM 25/12B-60/A	13,2	12,3	13,5
B- NM 25/12A-60/A	14,2	13,3	14,5
B- NM 25/160BE-60	20,4	19,7	22,8
B- NM 25/160AE-60	22,5	21,5	24
NM 25/20B-60/B		31,6	
NM 25/20A-60/B		40,9	
NM 25/20S-60/B		42,2	
B- NM 25/200B-60/B			35,7
B- NM 25/200A-60/B			43,7
B- NM 25/200S-60/B			45,2
NM 10/FE-60	19,3	18,5	
NM 10/DE-60	19,4	18,8	
NM 10/AE-60	20,2	19,3	
NM 10/SE-60	22,1	21,5	
NM 11/BE-60	24,7	24,1	
NM 11/A-60/A		28,1	
NM 12/D-60/A		33,5	
NM 12/C-60/A		42	
NM 12/A-60/A		43,5	
B- NM 17/HE-60	23	22,2	29,2
B- NM 17/GE-60	24,2	23,2	30,2
B- NM 17/F-60/A		28,2	35,2
B- NM 17/D-60/A		36,2	43,2

B-NM	NM	DN1 DN2		mm															
		ISO 228		a	fM	h1	h2	H	m1	m2	n1	n2	n3	b	s	l1	l2	w	g1
	NM 1/S-60,AE-60	G 1	G 1	40	261	80	132	176	40	32	170	140	17	35	9,5	77	81	171	10
	NM 2/A-60/A,S-60/A,B-60/A	G 1	G 1	45	305	95	150	207	40	32	190	160	17	35	9,5	87	90	203	10
	NM 3/BE-60,CE-60	G 1	G 1	50	375	112	180	240	55	43	245	205	37	45	11,5	110	113	244	12
	NM 3/A-60/A	G 1	G 1	50	415	112	180	240	55	43	245	205	37	45	11,5	110	113	284	12
B-NM 20/160AE-60,BE-60	NM 20/160AE-60,BE-60	G 1 1/4	G 3/4	53	375	100	150	228	37,5	27,5	190	150	30	38	9,5	102	102	246	10
B-NM 25/12A-60/A,B-60/A	NM 25/12A-60/A,B-60/A	G 1 1/2	G 1	56	313	90	140	199	37,5	27,5	170	130	9	38	9,5	85	88	195	10
B-NM 25/160AE-60,BE-60	NM 25/160AE-60,BE-60	G 1 1/2	G 1	56	380	100	160	228	37,5	27,5	190	150	30	38	9,5	102	102	246	10
	NM 25/20B-60/B	G 1 1/2	G 1	63	433	125	180	253	45	32,5	245	200	49	45	11,5	125	125	291	11
	NM 25/20A-60/B,S-60/B	G 1 1/2	G 1	63	460	125	180	263	45	32,5	245	200	42	45	11,5	125	125	295	11
B-NM 25/200B-60/B		G 1 1/2	G 1	63	445	125	180	253	45	32,5	245	200	49	45	11,5	125	125	303	11
B-NM 25/200A-60/B,-S-60/B		G 1 1/2	G 1	63	460	125	180	263	45	32,5	245	200	42	45	11,5	125	125	295	11
	NM 10/SE-60,AE-60,DE-60,FE-60	G 2	G 1 1/4	63	382	100	150	228	50	35	190	140	30	50	13	90	97	239	14
	NM 11/BE-60	G 2	G 1 1/4	70	400	112	170	240	50	35	210	160	37	50	15	103	110	247	14
	NM 11/A-60/A	G 2	G 1 1/4	70	440	112	170	240	50	35	210	160	37	50	15	103	110	287	14
	NM 12/D-60/A	G 2	G 1 1/4	70	440	132	190	260	50	35	240	190	47	50	15	125	127	287	14
	NM 12/A-60/A,C-60/A	G 2	G 1 1/4	70	470	132	190	270	50	35	240	190	45	50	15	125	127	300	14
B-NM 17/GE-60,HE-60	NM 17/GE-60,HE-60	G 2 1/2	G 2 1/2	80	417	112	160	240	50	35	210	160	37	50	14	96	113	257	14
B-NM 17/F-60/A	NM 17/F-60/A	G 2 1/2	G 2 1/2	80	463	112	160	240	50	35	210	160	37	50	14	96	113	304	14
B-NM 17/D-60/A	NM 17/D-60/A	G 2 1/2	G 2 1/2	80	480	112	160	250	50	35	210	160	20	50	14	96	113	295	14

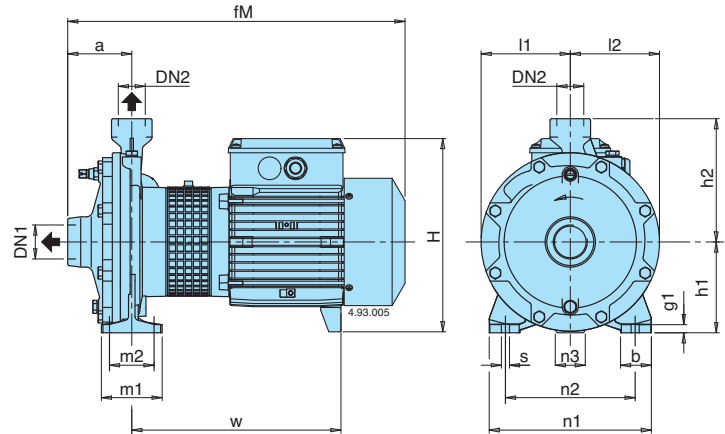
Dimensions and weights

NMD 20/110



	NMDM kg	NMD kg	B-NMD kg
B- NMD 20/110B-60/A	13	12,1	13,4
B- NMD 20/110Z-60/A	14	13	14,2
B- NMD 20/110A-60/A	15,1	14,2	17,4

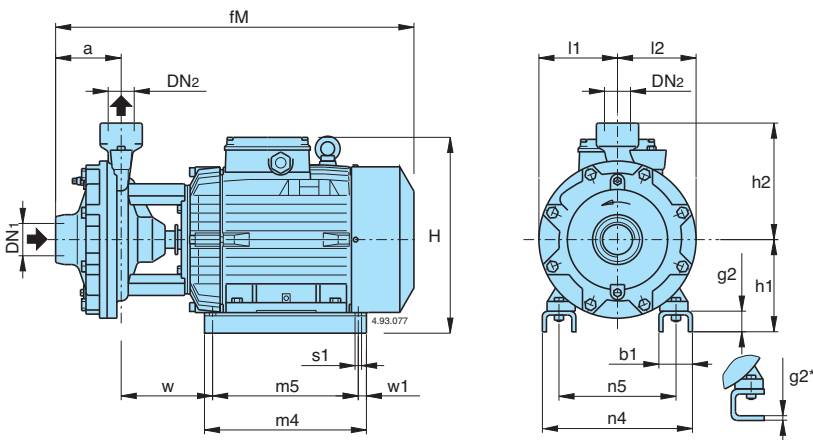
NMD 20/140 NMD 25/190



	NMDM kg	NMD kg	B-NMD kg
B- NMD 20/140B-60/A	23,9	22,7	25,2
B- NMD 20/140A-60/A	25,2	24,8	27,6
B- NMD 25/190C-60/A		42	45,7
B- NMD 25/190B-60/A		49,7	54
B- NMD 25/190A-60/A		51,5	55,5

B-NMD	NMD	DN1 ISO 228	DN2 ISO 228	mm																
				a	fm	h1	h2	H	m1	m2	n1	n2	n3	b	s	l1	l2	w	g1	
B-NMD 20/140AE-60, BE-60	NMD 20/140AE-60, BE-60	G 1 1/4	G 1	80	417	112	152	243	75	55	200	160	37	38	9,5	110	110	256	10	
B-NMD 25/190C-60/A	NMD 25/190C-60/A	G 1 1/2	G 1	97	487	140	180	268	100	70	240	190	50	49	50	14	133	133	314	306
B-NMD 25/190A-60/A, B-60/A	NMD 25/190A-60/A, B-60/A																			

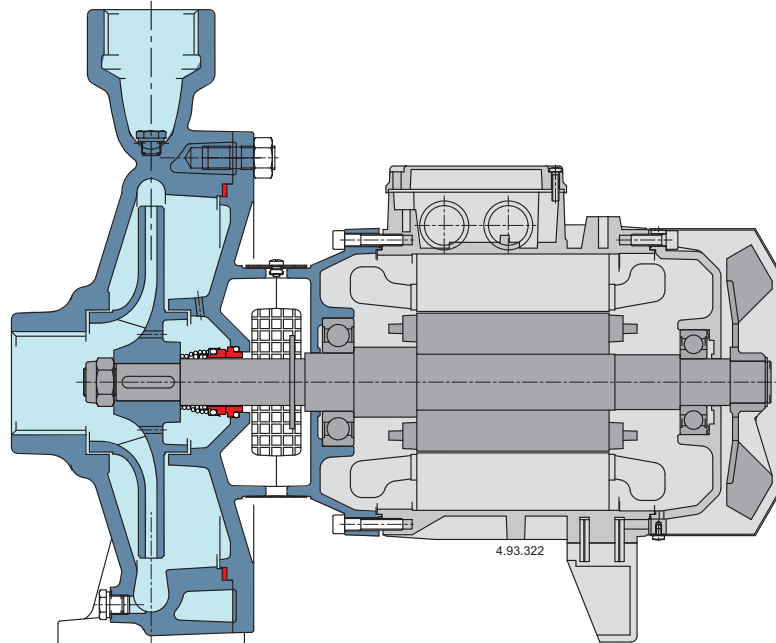
NMD 32/210 NMD 40/180



	NMD kg	B-NMD kg
B- NMD 32/210D-60/A	60,5	66,5
B- NMD 32/210C-60/A	71	77
B- NMD 32/210B-60/A	77	82,5
B- NMD 32/210A-60/A	99	105
B- NMD 40/180D-60/A	59,5	65,5
B- NMD 40/180C-60/A	70	76
B- NMD 40/180B-60/A	76	81,5
B- NMD 40/180A-60/A	97	102

B-NMD	NMD	DN1 ISO 228	DN2 ISO 228	mm															
				a	fm	h1	h2	H	m4	m5	n4	n5	w1	b1	s1	l1	l2	w	g2
B-NMD 32/210D-60/A	NMD 32/210D-60/A	G 2	G 1 1/4	110	530	155	215	293	205	175	194	140		54	10			139	6*
B-NMD 32/210B-60/A, C-60/A	NMD 32/210B-60/A, C-60/A			110	550	150	215	310	280	250	258	190	15	68	12	150	150	108	38
B-NMD 32/210A-60/A	NMD 32/210A-60/A			110	625	170		355	298	268	286	216		70	12			152	38
B-NMD 40/180D-60/A	NMD 40/180D-60/A	G 2	G 1 1/2	121	535	155		293	205	175	194	140		54	10			133	6*
B-NMD 40/180B-60/A, C-60/A	NMD 40/180B-60/A, C-60/A			121	555	150	215	310	280	250	258	190	15	68	12	145	145	102	38
B-NMD 40/180A-60/A	NMD 40/180A-60/A			121	630	170		355	298	268	286	216		70	12			145	38*

NM



Compact Design

The compact design allows for easy installation even in confined spaces.

Robustness

The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistance to mechanical stress.

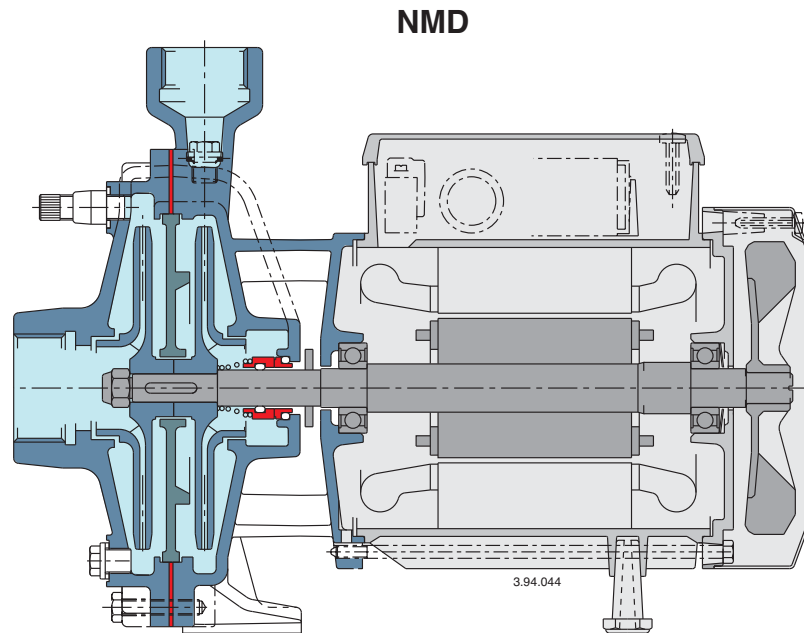
A unique design

The lantern bracket design prevents contact with the pumps rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Features



Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NMD series pumps to be selected for use with different types of liquids.

Robustness

The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistance to mechanical stress.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.



Windsor Pump Co.

Head Office

3057 Marentette Ave
Windsor, On N8X 4G1

Phone: 1-(519) 969-2190
Fax: 1-(519) 969-2047

Email: sales@windsorpump.com

Sales and Engineering

Dan Kurtz
Phone: 1-(226) 377-4100
Fax: 1-(905) 847-2425

Email: dan@windsorpump.com
www.windsorpump.com

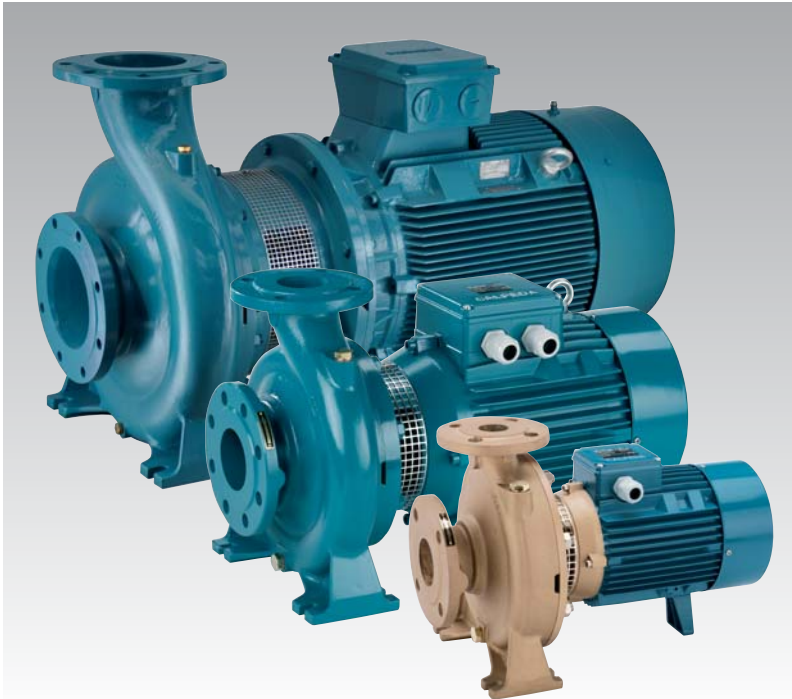
Peter Kurtz
Phone: 1-(905) 302-3933
Fax: 1-(905) 847-2425

E-mail: peter@windsorpump.com
www.windsorpump.com



NM, NMS 60 Hz

Close Coupled Centrifugal Pumps with flanged connections



2

Construction

Close-coupled centrifugal pumps; electric motor with extended shaft directly connected to the pump up to 30 kW, new bracket construction for standard motors (stub-shaft construction) from 37 to 75 kW with integrated thrust bearing.

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

NM(S): version with pump casing and lantern bracket in cast iron.

B-NM(S): version with pump casing and lantern bracket/casing cover in bronze. (the pumps are supplied fully painted).

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 NMS 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, 60 Hz (n ≈ 3450 rpm).

NM, NMS: three-phase 220/380 V, 380/660 V.

Insulation class F. Protection IP 54.(IP 55 for NMS).

Motor suitable for operation with frequency converter from 2,2 kW.

Classification scheme IE2 for three-phase motor from 0,75 kW.

Constructed in accordance with: EN 60034-1; EN 60034-30.

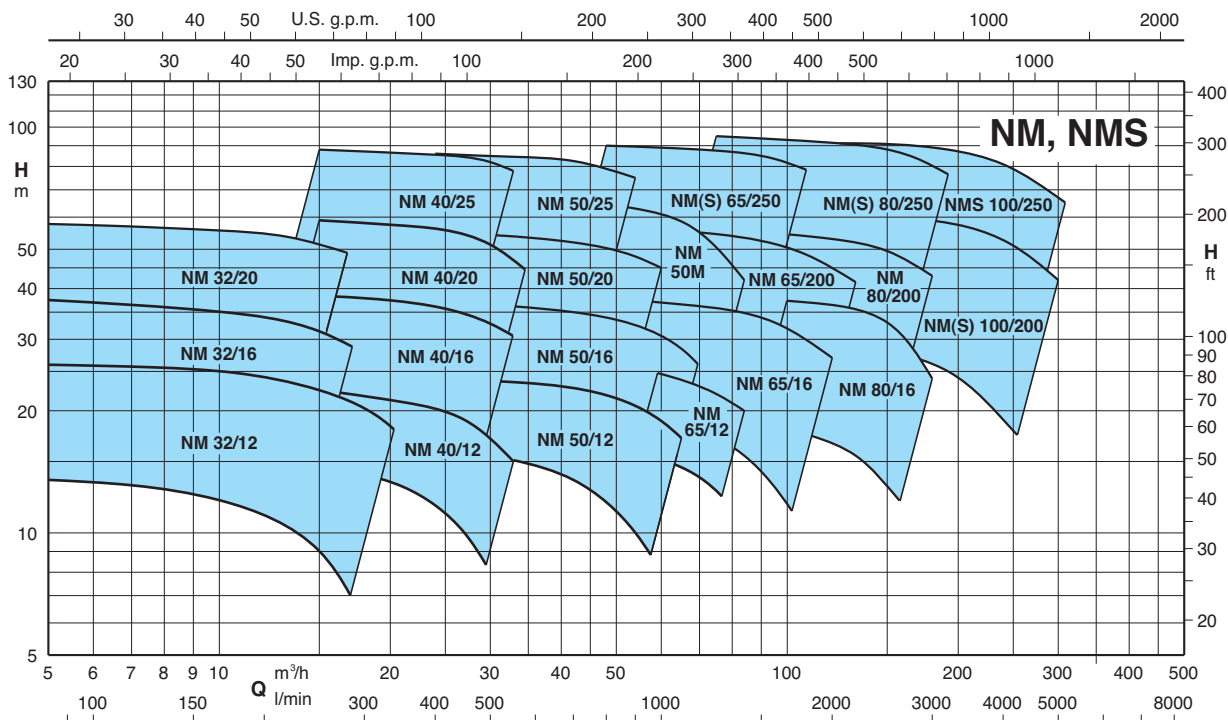
Special features on request

- Other voltages. - Protection IP 55.
- Bronze impeller. - 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.
- Motor suitable for operation with frequency converter up to 1,5 kW.

Materials

Components	NM, NMS	B-NM, B-NMS
Pump casing	Cast iron	Bronze
Lantern bracket NM	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
Casing cover for NMS	Cast iron GJL 200 EN 1561	
Lantern bracket NMS	Cast iron GJL 200 EN 1561	
Impeller	Cast iron GJL 200 EN 1561	Bronze 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	AISI 303 up to 2.2 kW	Cr Ni Mo steel
	AISI 430 from 3 kW to 75 kW	AISI 316
Mechanical seal	Carbon - Ceramic - NBR	
Counter-flanges	Steel Fe 430B UNI 7070	

Coverage chart n = 3450 rpm



Performance n ≈ 3450 rpm

B-NM	NM	P ₂		Q m³/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
B-NM 32/12F-60	NM 32/12FE-60	0,55	0,75	H m	17	16,8	16,5	15,9	15,3	14,5	13,6	12,1						
B-NM 32/12D-60	NM 32/12DE-60	0,75	1		18,8	18,5	18,3	17,8	17,2	16,5	15,8	14,4						
B-NM 32/12A-60	NM 32/12AE-60	1,1	1,5		24,3	24,1	23,8	23,4	22,8	22,2	21,4	20,1						
B-NM 32/12S-60	NM 32/12SE-60	1,5	2		25,2	25	24,8	24,3	23,8	23,2	22,5	21,2	19,7*	17,8*	15,6*	12*		
B-NM 32/16B-60	NM 32/16BE-60	1,5	2		31	30,5	30	29,5	29	28	27	25*	23*					
B-NM 32/16A-60/A	NM 32/16A-60/A	2,2	3		36,5	36	35,5	35	34	33	32,5	31*	29*					
B-NM 32/20D-60/A	NM 32/20D-60/A	2,2	3		39	38	37,5	36,9	35	34	32							
B-NM 32/20C-60/A	NM 32/20C-60/A	3	4		45	44,5	44	43	42	41	40	37	34*					
B-NM 32/20A-60/A	NM 32/20A-60/A	4	5,5		57	56,5	56	55,5	55	54	53	51	49*					

B-NM	NM	P ₂		Q m³/h l/min	15	16,8	18,9	21	24	27	30	33	37,8	39	42	45	48	54
		kW	HP		H m	250	280	315	350	400	450	500	550	630	650	700	750	800
B-NM 40/12F-60	NM 40/12F-60/A	1,1	1,5	H m	15,4	14,9	14,3	13,4	11,8	10	7,8	5,6						
B-NM 40/12C-60	NM 40/12C-60/A	1,5	2		18,5	18,1	17,6	17	15,8	14,2	12,4	10,5	6,9					
B-NM 40/12A-60/A	NM 40/12A-60/B	2,2	3		22,5	22,3	21,9	21,4	20,6	19,6	18,3	16,7	13,7	12,9				
B-NM 40/16C-60/A	NM 40/16C-60/B	2,2	3		25,5	25,1	24,4	23,6	22,1	20,1	17,8	15,4	10,6					
B-NM 40/16B-60/A	NM 40/16B-60/B	3	4		31	30,6	30,3	29,6	28,5	27,1	25,4	23,2	19,2	18,1				
B-NM 40/16A-60/A	NM 40/16A-60/B	4	5,5		37,1	36,9	36,5	36,1	35,2	34,3	33,2	31,8	28,8	27,9	25,6	23		
B-NM 40/20C-60/A	NM 40/20C-60/A	4	5,5		44	43	42	41	39	36								
B-NM 40/20B-60/A	NM 40/20B-60/A	5,5	7,5		52	51,5	50,5	49,5	47,5	44,5	40	35						
B-NM 40/200A-60/A	NM 40/20A-60/A	7,5	10		56,5	56	55	54	52	49								
B-NM 40/200A-60/A	NM 40/20A-60/A	7,5	10		59,5	59	58,5	58	56	53,5	50,5	47	38,5					
B-NM 40/25C-60/B	NM 40/25C-60/B	9,2	12,5	65,4	65	64,4	63,5	61,5	58,6	54,2	49							
B-NM 40/25B-60/B	NM 40/25B-60/B	11	15	71,5	71,3	70,8	70,3	68,9	66,4	63,3	59,2	50						
B-NM 40/25A-60/B	NM 40/25A-60/B	15	20	90,4	90,2	89,7	89,1	88,5	87,3	86,1	83,8	78	76					

B-NM	NM	P ₂		Q m³/h l/min	24	27	30	33	37,8	42	48	54	60	66	69	72	75	84
		kW	HP		H m	400	450	500	550	630	700	800	900	1000	1100	1150	1200	1250
B-NM 50/12F-60/A	NM 50/12F-60/B	2,2	3	H m			16,1	15,4	14,2	13	11,1	8,6	5,8					
B-NM 50/12D-60/A	NM 50/12D-60/B	3	4				19,4	19	18	17	15,5	13,5	11,1	8,4				
B-NM 50/12A-60/A	NM 50/12A-60/B	4	5,5				24,8	24,6	24	23,4	22,3	20,8	19	17	16	14,8	13,6	
B-NM 50/160B-60/B	NM 50/16B-60/B	5,5	7,5				35,3	34,9	33,6	32,4	30,1	27,5	24,5	20,9	19	17,1	15,1	
B-NM 50/160A-60/B	NM 50/16A-60/B	7,5	10				42,7	41,6	41,2	40,3	38,5	36,3	33,8	30,9	29,4	27,8	26,1	20,4
B-NM 50/200B-60/B	NM 50/20B-60/B	9,2	12,5		51	50,6	50,4	49,8	48,5	47,1	44	40,5	36	30,2	27,3			
B-NM 50/200A-60/B	NM 50/20A-60/B	11	15		57,6	57,7	57,3	56,9	55,7	54,6	52,2	49,5	46	41,8	39	36,2	33,2	
B-NM 50/25C-60/B	NM 50/25C-60/B	11	15		61,9	61,2	60,3	59,3	57,2	55	50	44	36,5					
B-NM 50/25B-60/B	NM 50/25B-60/B	15	20		74,6	73,9	73,2	72	70,1	68,1	64,3	59,3	52,8	43,8				
B-NM 50/25A-60/B	NM 50/25A-60/B	18,5	25		87,6	87,3	86,9	86,2	84,7	83	79,8	76	72	66,9				
B-NM 50/25/65E-60/A	NM 50M/E-60/A	11	15			47,5	47	46	45	42	38,5	34	29	26	24	20		
B-NM 50/25/65D-60/A	NM 50M/D-60/A	15	20			58	57,5	56	55	53	50,5	47,5	44	42	40	36,5	25*	
B-NM 50/25/65C-60/A	NM 50M/C-60/A	18,5	25			69	68,5	67,5	66,5	64,5	62,5	60,5	57,5	56	54	51	42*	

B-NM	NM	P ₂		Q m³/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
B-NM 65/12E-60/A	NM 65/12E-60/A	4	5,5	H m	19	18,5	18	17	16	15	13*							
B-NM 65/125C-60/A	NM 65/12C-60/A	5,5	7,5		23	22,5	22	21,5	21	19,5	17,5	15*						
B-NM 65/125A-60/A	NM 65/12A-60/A	7,5	10		27	26,5	26	25,5	25	24	22	19,5*						
B-NM 65/160E-60/A	NM 65/16E-60/A	5,5	7,5				20	19,5	19	18	17	15	13*	10*				
B-NM 65/160D-60/A	NM 65/16D-60/A	7,5	10				26	25,5	25	24,5	23,5	22	19,5*	16,5*	13*			
B-NM 65/160C-60/A	NM 65/16C-60/A	9,2	12,5				30	29,5	29	28,5	27,5	26,5	24*	21*	18*			
B-NM 65/160B-60/A	NM 65/16B-60/A	11	15				33,5	33	32,5	32	31	29,5	28*	25*	22,5*			
B-NM 65/160A-60/A	NM 65/16A-60/A	15	20				37,5	37	37	36,5	36	34,5	33*	30*	27*			
B-NM 65/200C-60/A	NM 65/20C-60/A	15	20				44	43,5	43	42,5	41	40	37,5*	35*	31*	27*		
B-NM 65/200B-60/A	NM 65/20B-60/A	18,5	25				49,5	49	48,5	48	47,5	46,5	44,5*	42*	38,5*	35*		
B-NM 65/200A-60/A	NM 65/200A-60/A	22	30			56	55,5	55	54,5	54	53,5	51*	48*	45*	41*			
B-NM 65/250C-60/A	NM 65/250C-60/A	22	30			64	63	62,5	61,5*	60*	57,5*	54,5*	50*					
B-NM 65/250B-60/A	NM 65/250B-60/A	30	40			79,5	79	78,5	78*	77*	75*	71*	66,5*					
B-NMS 65/250A-60	NMS 65/250A-60	37	50			90	89,5	89	88,5*	87*	86*	83*	78,5*					

Performance n ≈ 3450 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 80/160E-60/A	NM 80/16E-60/A	7,5	10	19,5	19	18	17,5*	16,5*	15*	13*										
B-NM 80/160D-60/A	NM 80/16D-60/A	9,2	12,5	23	22,5	22	21*	19,5*	18*	15*										
B-NM 80/160C-60/A	NM 80/16C-60/A	11	15	27,5	27	25,5	25*	24,5*	23*	20*	16*									
B-NM 80/160B-60/A	NM 80/16B-60/A	15	20	34	33,5	33	32,5*	31,5*	31*	28*	22,5*	18*								
B-NM 80/160A-60/A	NM 80/16A-60/A	18,5	25	38,5	38	37,5	37*	36,5*	36*	33*	28,5*	24*								
B-NMS 80/200B-60	NM 80/200B-60/A	22	30	46,5	46	45,5	44,5	43,5*	42*	39*	35*	32*								
B-NMS 80/200A-60	NM 80/200A-60/A	30	40	56	55,5	55	54	53,5*	52*	49*	46*	43*								
B-NMS 80/250E-60	NM 80/250E-60/A	22	30	51	50	48,5	46,5	44,5*	42*	38*	33*	29*								
B-NMS 80/250D-60	NM 80/250D-60/A	30	40	65	64	62,5	61	59*	56,5*	53*	49*	45*	41*							
B-NMS 80/250C-60	NMS 80/250C-60	37	50	73,5	73	72	70,5	69*	67*	63*	59*	55*	51*							
B-NMS 80/250B-60	NMS 80/250B-60	45	60	84	83,5	82,5	81	80*	78*	74*	70*	67*	62,5*							
B-NMS 80/250A-60	NMS 80/250A-60	55	75	94,5	94	93	92,5	91,5*	90*	87,5*	84*	80*	76,5*							
B-NMS 100/200E-60	NM 100/200E-60/A	18,5	25				30	29,5	29	28	27	26*	24,5*	22,5*	19*					
B-NMS 100/200D-60	NM 100/200D-60/A	22	30				36	35,5	35	34	33	32*	31*	29*	24*					
B-NMS 100/200C-60	NM 100/200C-60/A	30	40				45	44,5	44	43	42,5	41*	40*	39*	34*	28*				
B-NMS 100/200B-60	NMS 100/200B-60	37	50				54	53,5	53	52,5	51,5	50*	49*	47,5*	43*	38*				
B-NMS 100/200A-60	NMS 100/200A-60	45	60				61,5	61	60,5	60	59,5	59*	58*	56*	52,5*	48*	42*			
B-NMS 100/250B-60	NMS 100/250B-60	55	75				73,5	73	72,5	71,5	70	69*	67*	65*	60*	55*	48*	42*		
B-NMS 100/250A-60	NMS 100/250A-60	75	100				90,5	90	90	89	88,5	87,5*	87*	85*	81*	75*	67*	67*		

2

NM(S) Standard construction.
B-NM(S) Bronze construction.

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

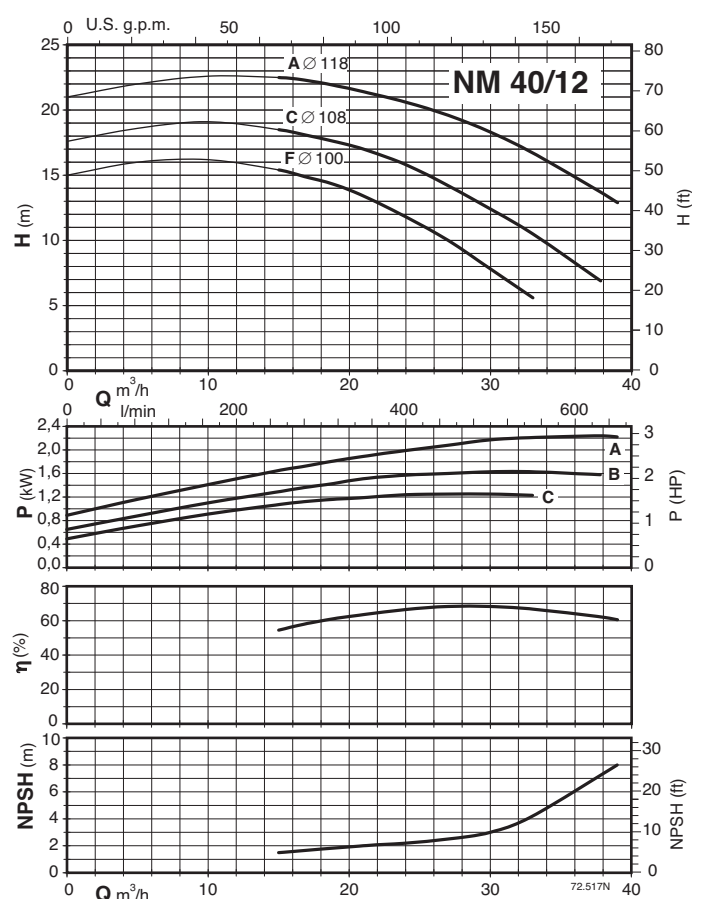
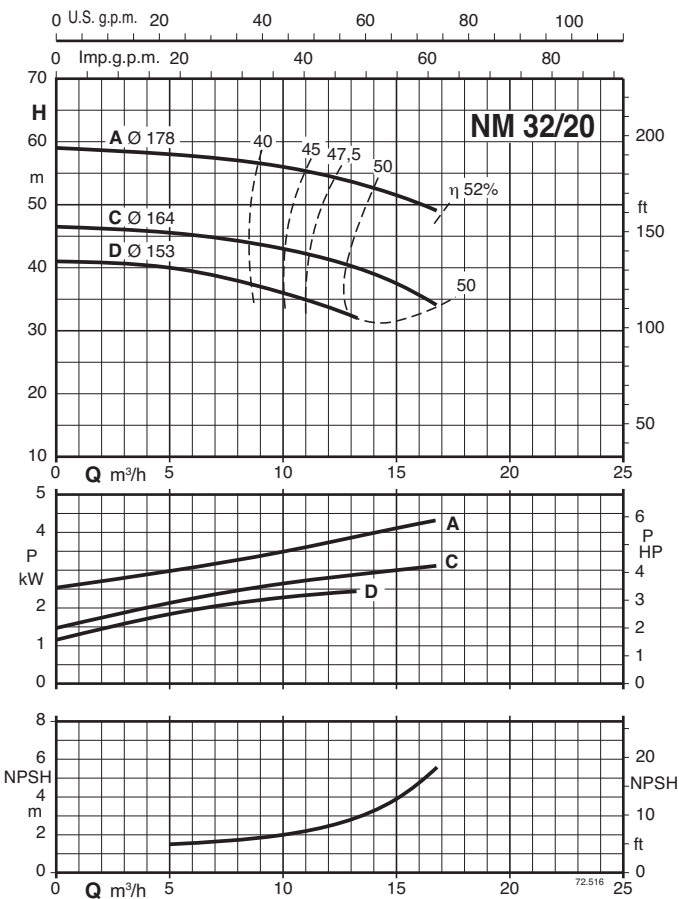
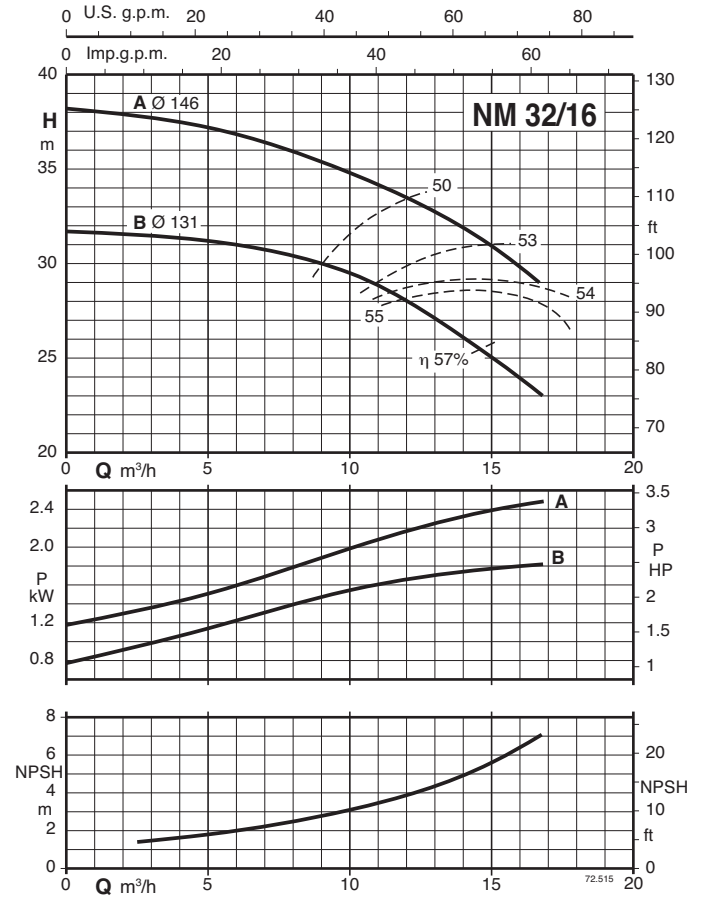
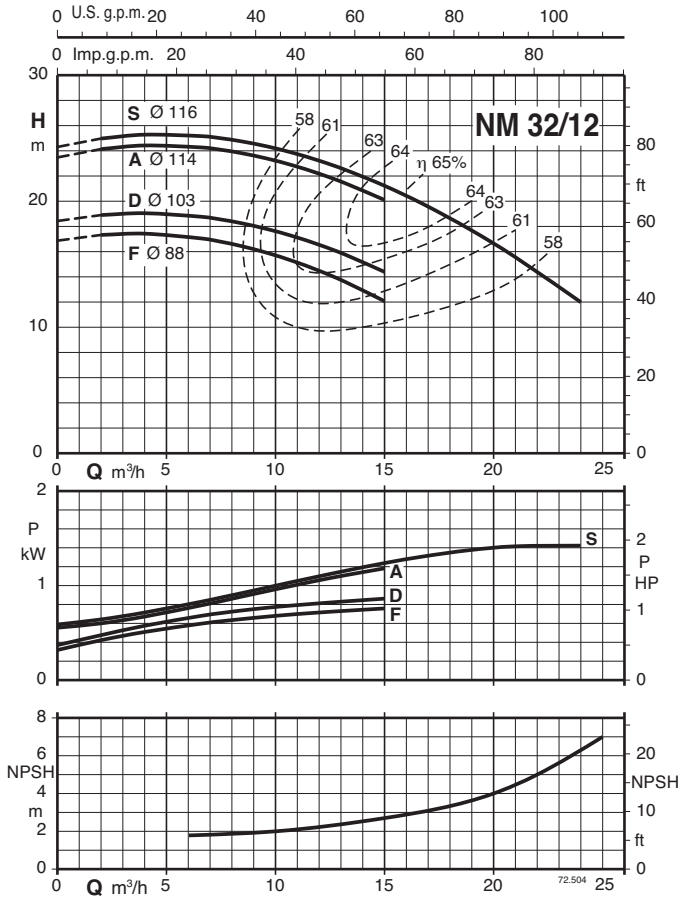
* Maximum suction lift 1-2 m.
 ◦ With 1 m suction head.
 Tolerances according to UNI EN ISO 9906:2012.

Rated currents

P ₂		220V Δ / 380V Y 380V Δ / 660V Y			I _A /I _N
kW	HP	I _N A	I _N A	I _N A	
0,55	0,75	4,5	2,6		5,2
0,75	1	4,5	2,6		5,2
1,1	1,5	5,7	3,3		6,8
1,5	2	9	5,2		5,4
2,2	3	11,1	6,5		7,3
3	4	13,4	7,7		8,4
4	5,5		11,2	6,5	7,8
5,5	7,5		13,7	7,9	8,7
7,5	10		17	9,8	9,2
9,2	12,5		22	12,7	8,2
11	15		25,8	14,9	8,5
15	20		33,2	19,2	9,4
18,5	25		41,2	23,8	9,3
22	30		49,8	28,8	10,6
30	40		65,4	37,8	8,7
37	50		82	47	8,5
45	60		97	56	8
55	75		119	68,5	7,2
75	100		157	90	6

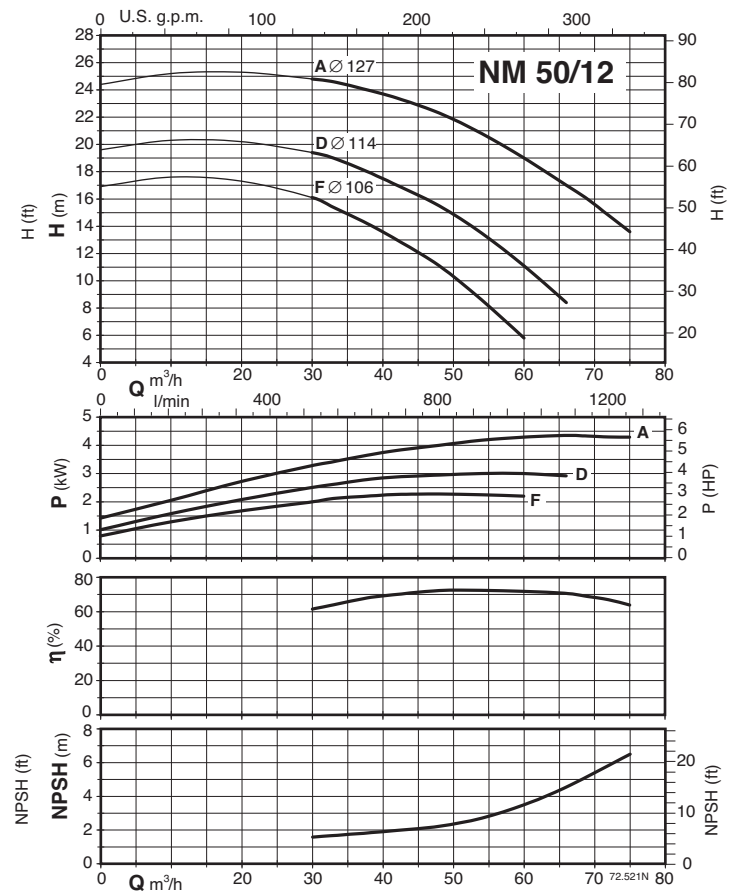
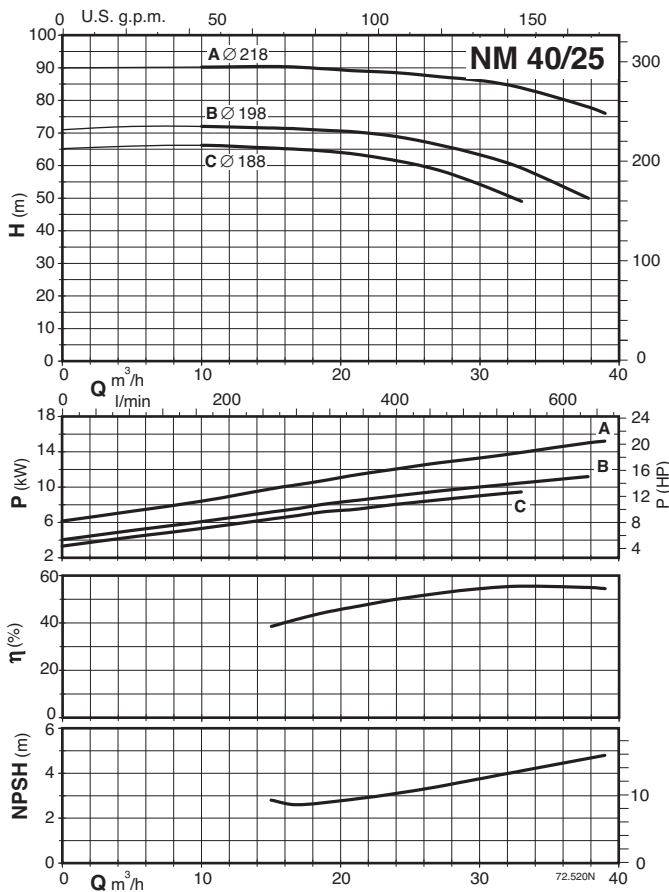
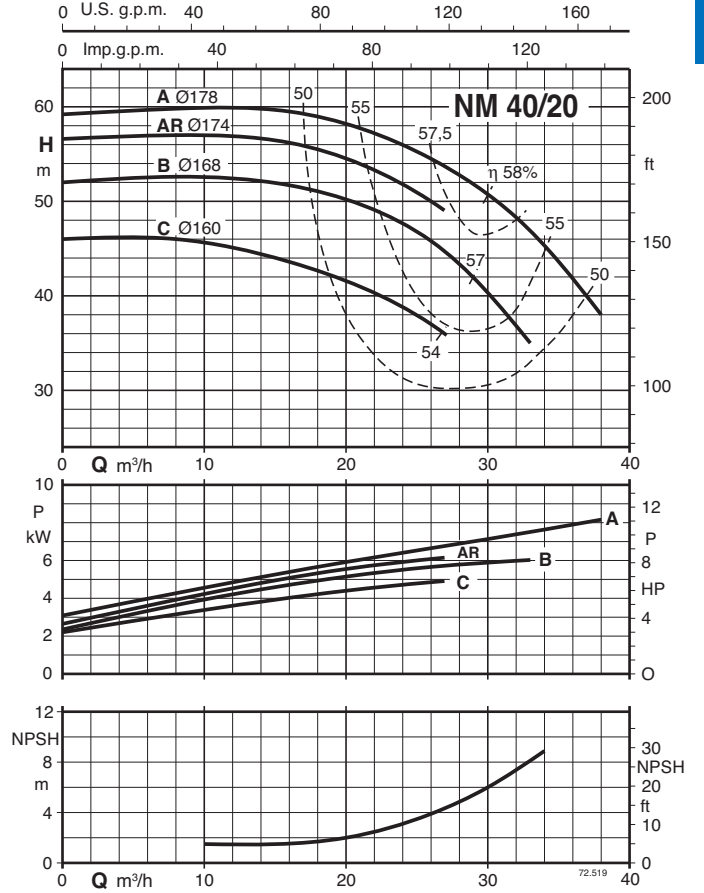
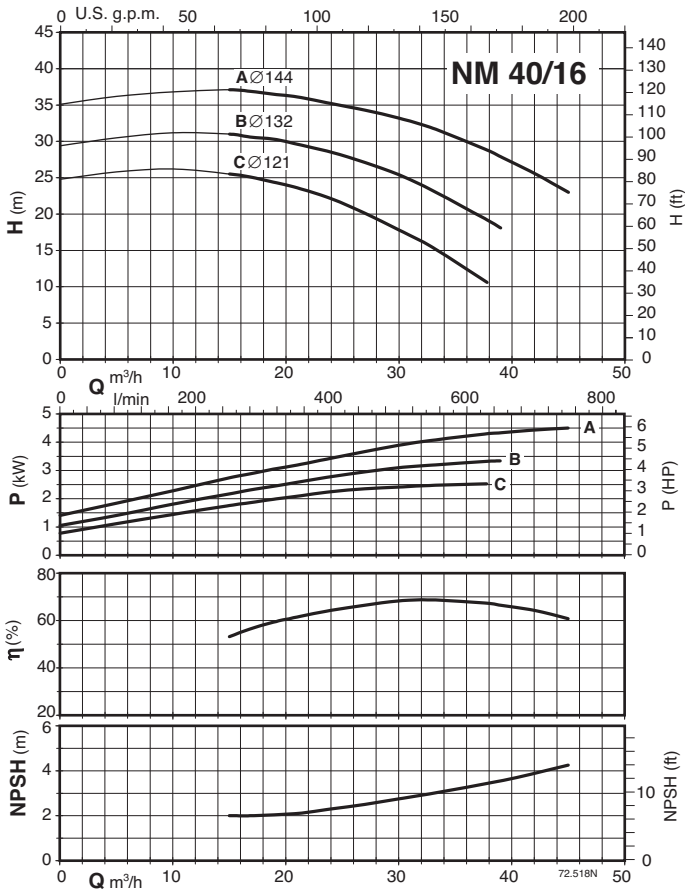
P₂ Rated motor power output.
 I_A/I_N D.O.L. starting current / Rated current

Characteristic curves n = 3450 rpm

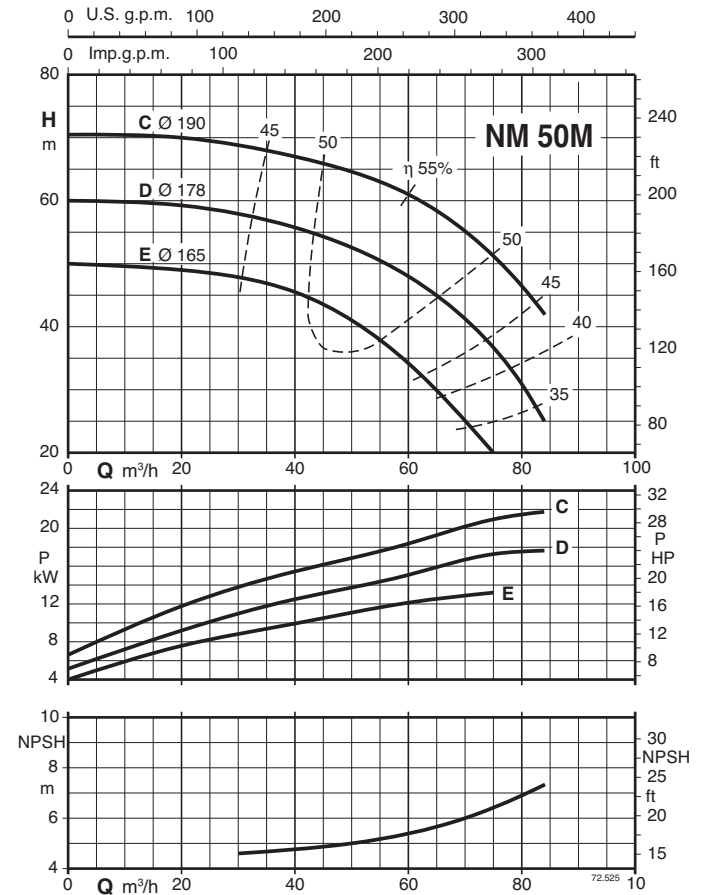
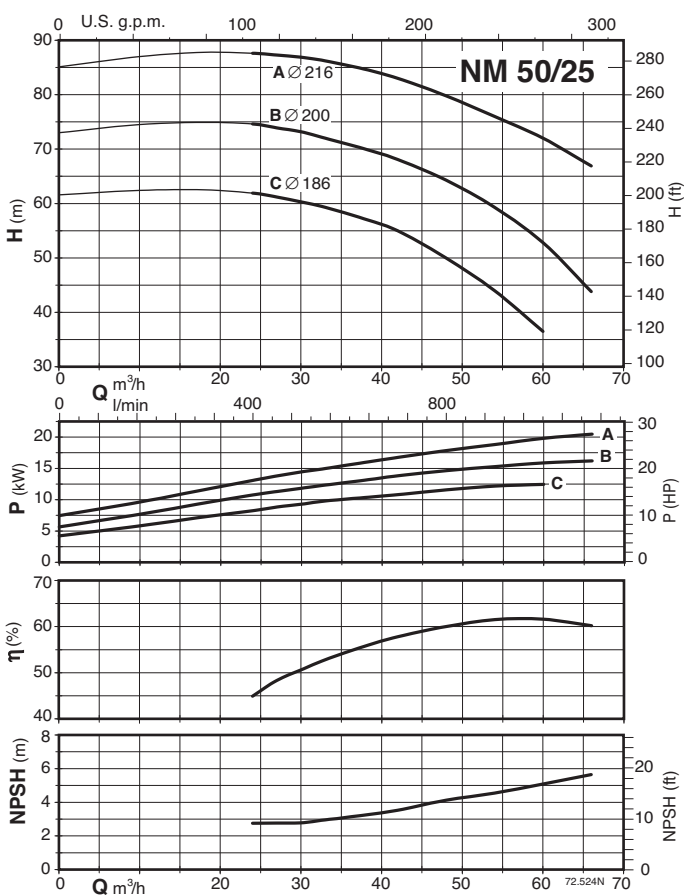
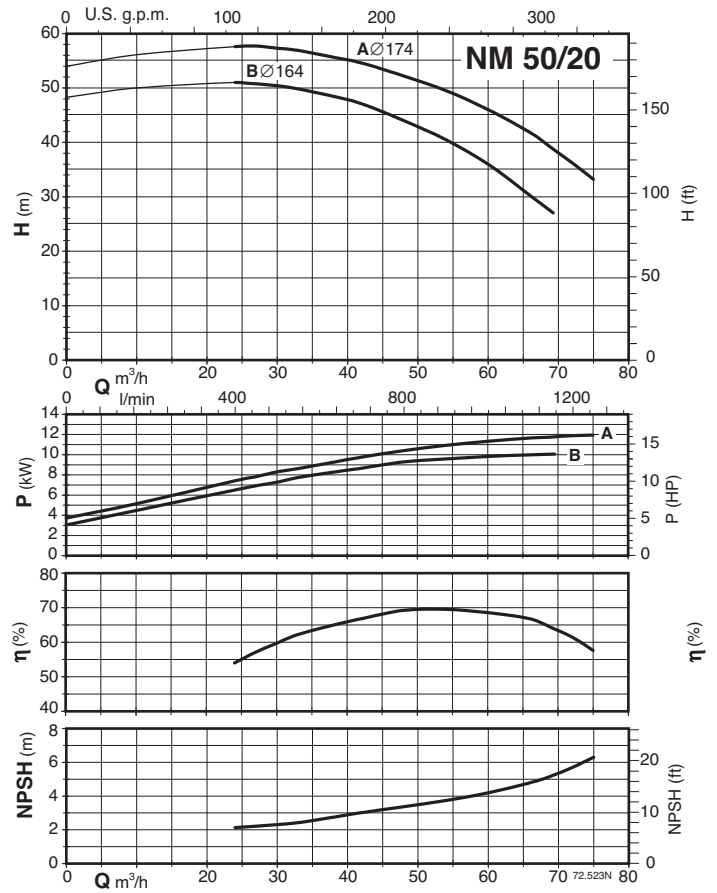
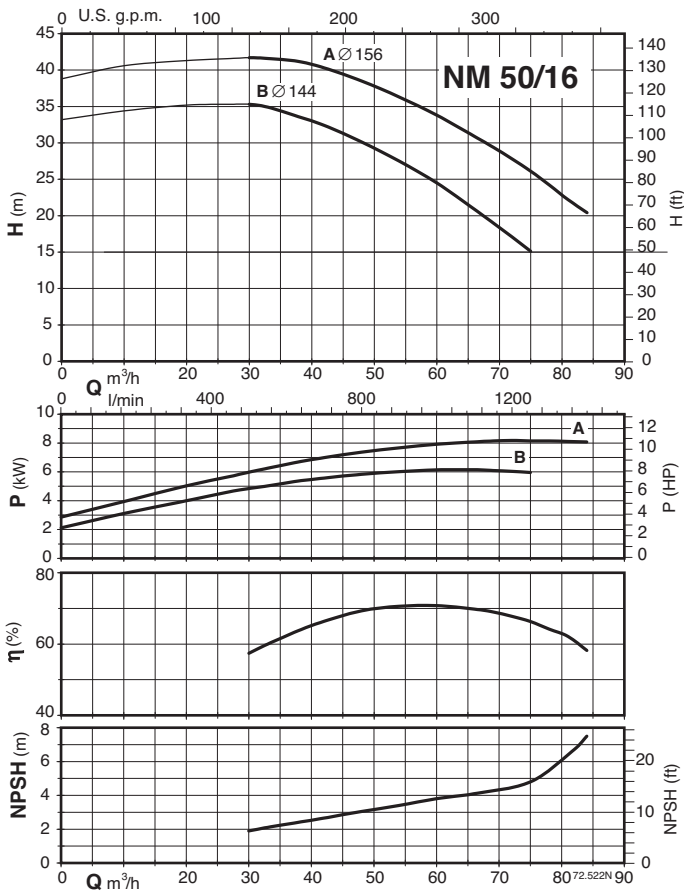


Characteristic curves n = 3450 rpm

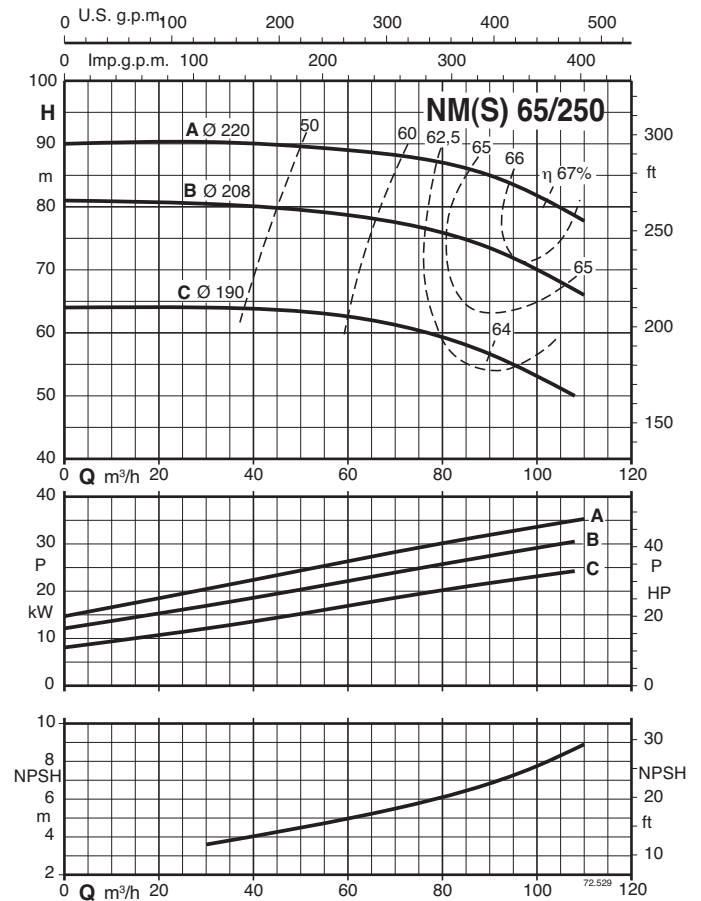
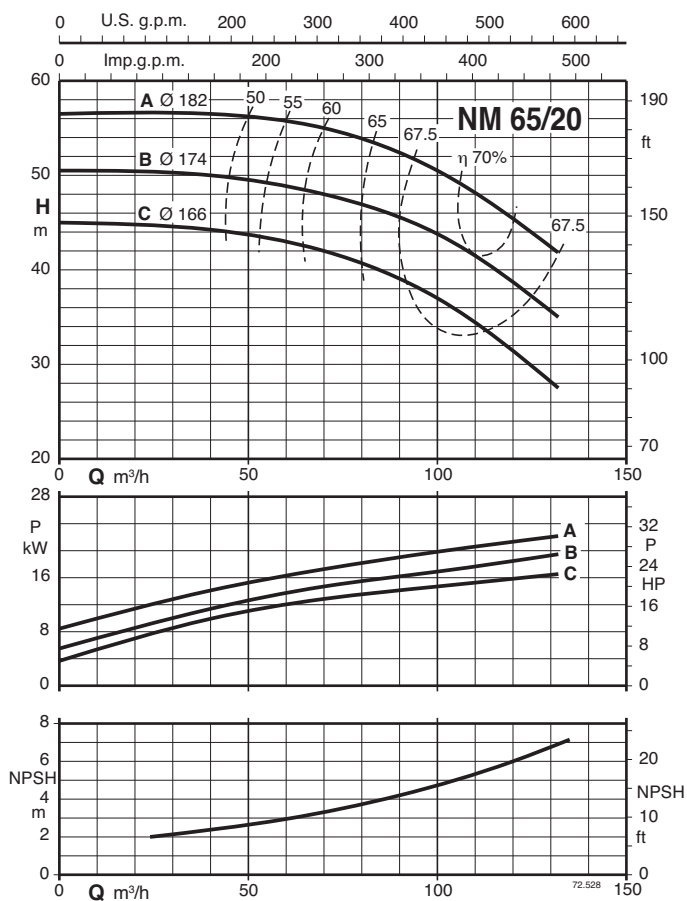
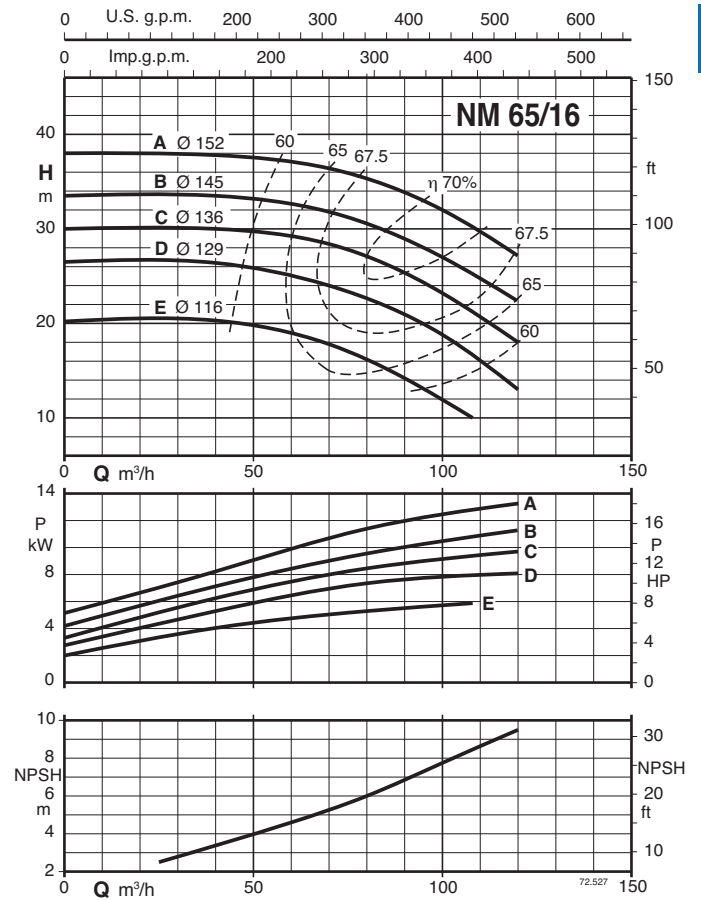
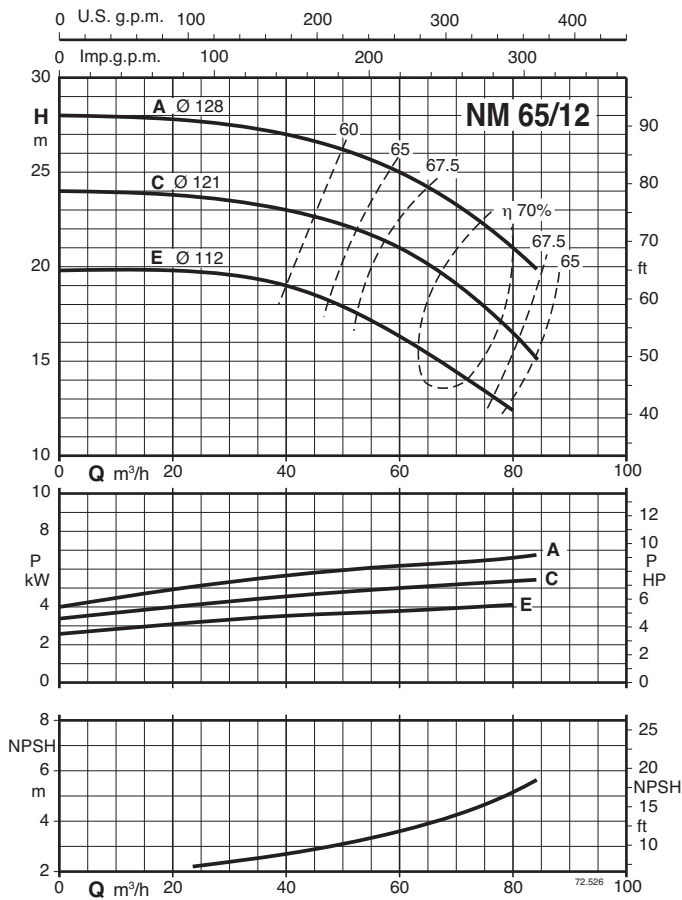
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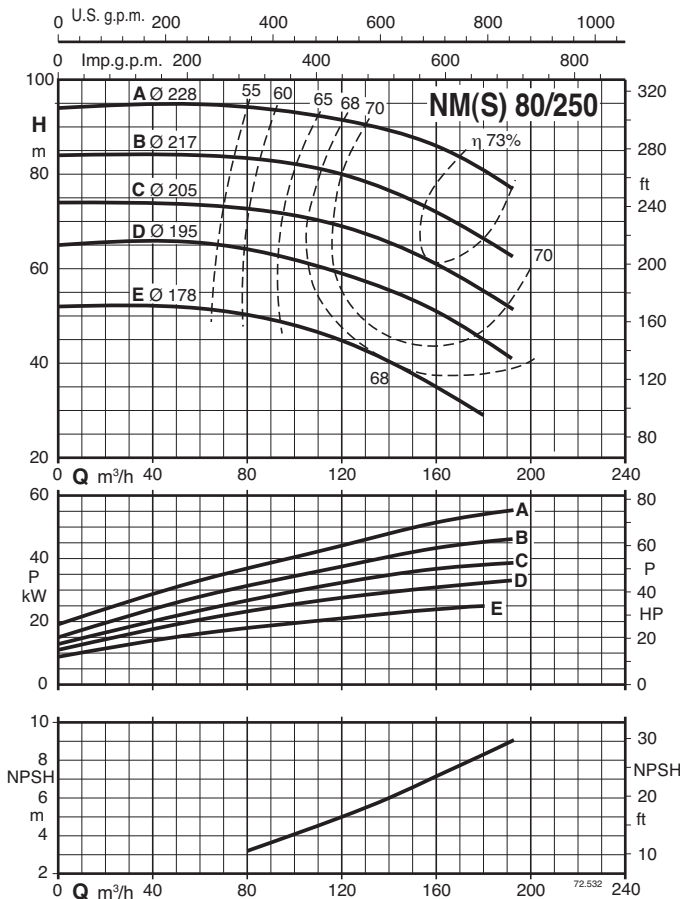
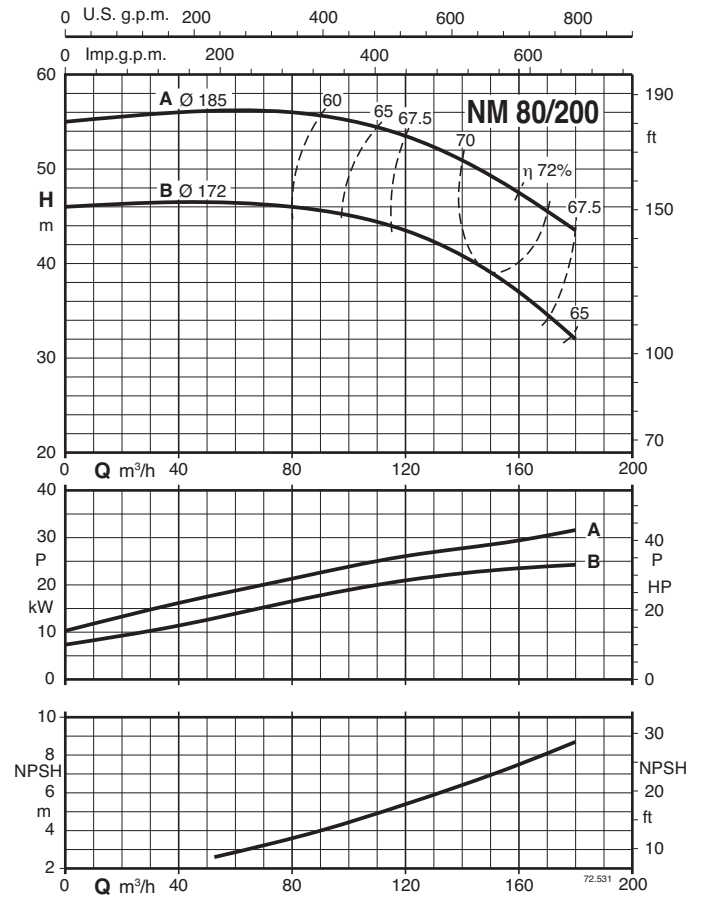
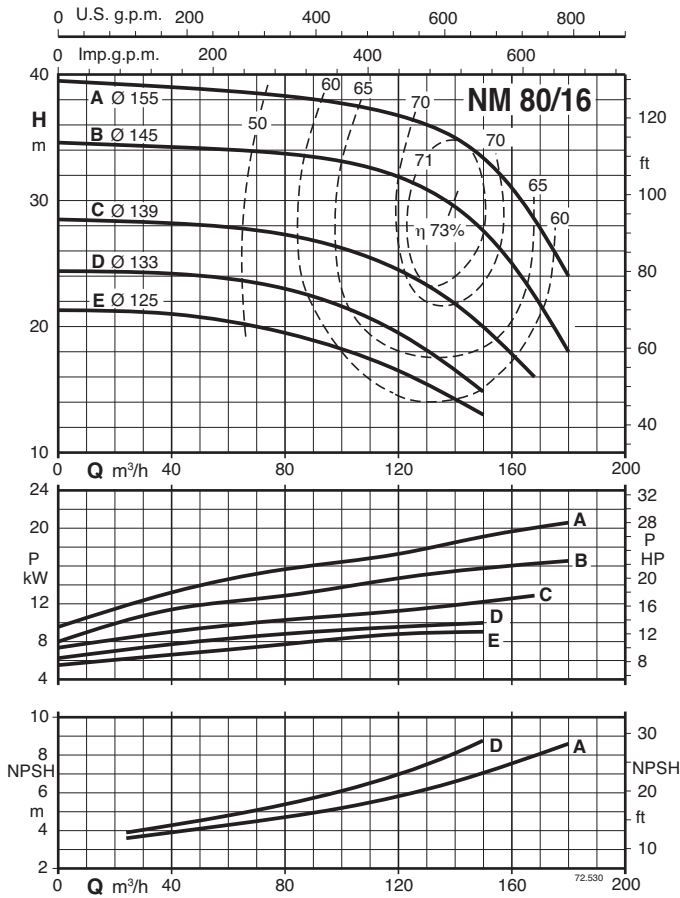
Characteristic curves n = 3450 rpm



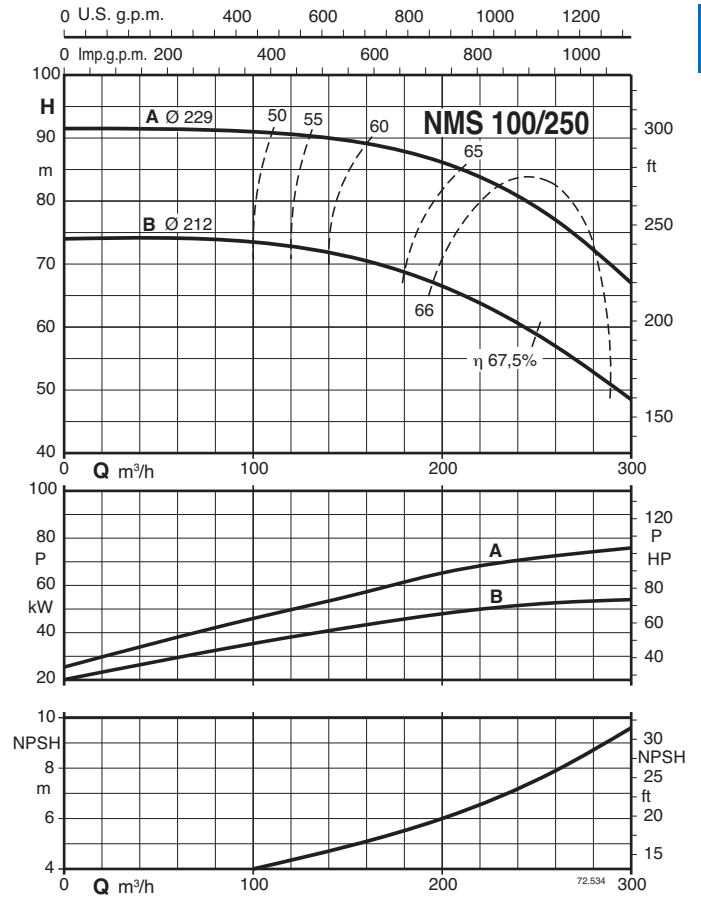
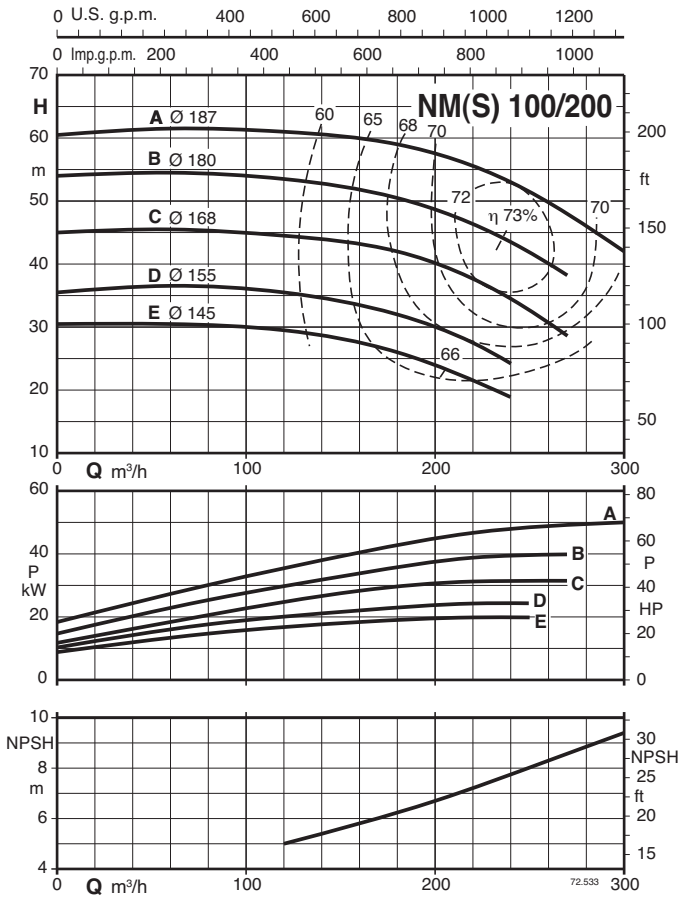
Characteristic curves n = 3450 rpm



Characteristic curves n = 3450 rpm



Characteristic curves n = 3450 rpm



2



Windsor Pump Co.

Head Office

3057 Marentette Ave
Windsor, On N8X 4G1

Phone: 1-(519) 969-2190
Fax: 1-(519) 969-2047

Email: sales@windsorpump.com

Sales and Engineering

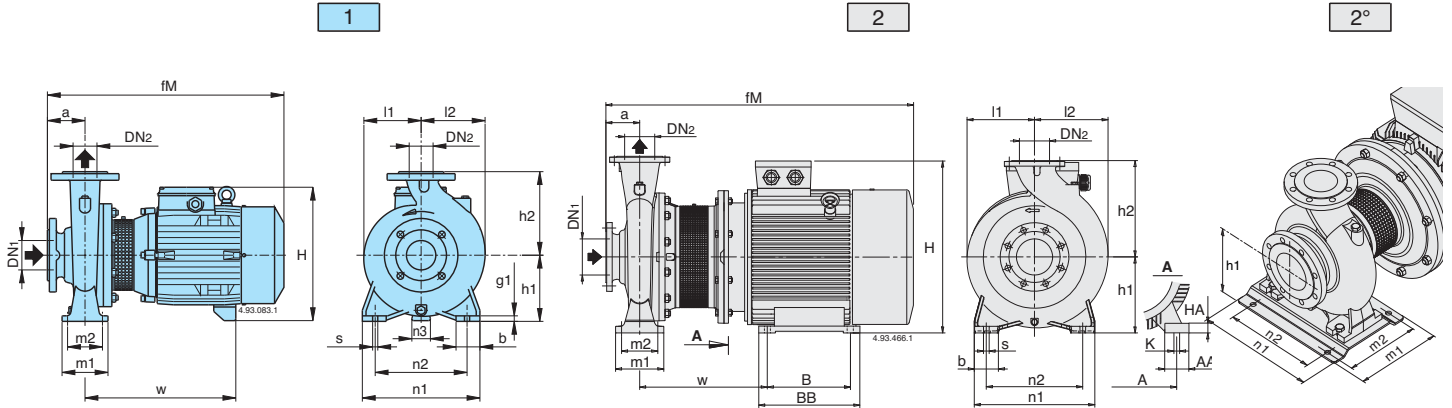
Dan Kurtz
Phone: 1-(226) 377-4100
Fax: 1-(905) 847-2425

Email: dan@windsorpump.com
www.windsorpump.com

Peter Kurtz
Phone: 1-(905) 302-3933
Fax: 1-(905) 847-2425

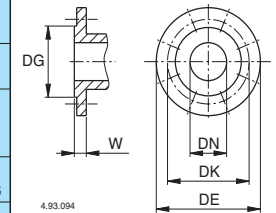
E-mail: peter@windsorpump.com
www.windsorpump.com

Dimensions and weights



Picture	NM	mm																				kg							
		DN1	DN2	a	fM	h1	h2	H	h4	m1	m2	n1	n2	n3	n5	w1	b	b1	s	s1	l1		l2	w	m4	m5	g1	g2	
1	NM 32/12DE-60-FE-60 NM 32/12SE-60-AE-60	50	32	80	405	112	140	240	-	100	70	190	140	37	-	-	50	-	14	-	93	97	245	-	-	12	-	24-24 27-25	
	NM 32/16BE-60 NM 32/16A-60/A	50	32	80	410 450	132	160	260	-	100	70	240	190	47	-	-	50	-	14	-	120	120	250 290	-	-	12	-	34 39	
	NM 32/20D-60/A NM 32/20C-60/A NM 32/20A-60/A	50	32	80	450 475 475	160	180	288 298	-	100	70	240	190	62 60	-	-	50	-	14	-	140	140	290 295 295	-	-	12	-	42 52 52,5	
	NM 40/12C-60/A-F-60/A NM 40/12A-60/B	65	40	80	410 450	112	140	240	-	100	70	210	160	37	-	-	50	-	14	-	100	113	250 290	-	-	12	-	29-27 34	
	NM 40/16C-60/B NM 40/16B-60/B NM 40/16A-60/B	65	40	80	450 475 475	132	160	270 270	-	100	70	240	190	45 45	-	-	50	-	14	-	119	119	290 295 295	-	-	12	-	39 48 49,5	
	NM 40/20C-60/A-D-60/A NM 40/20A-60/A-AR-60/A-B-60/A	65	40	100	495 525	160	180	298 320	-	100	70	265	212	60 49	-	-	50	-	14	-	140	140	295 320	-	-	12	-	55,5-55,5 72,5-66-66	
	NM 40/25B-60/B-C-60/B NM 40/25A-60/B	65	40	100	640 715	180	225	365	-	125	95	320	250	50	-	-	65	-	14	-	175	175	400 460	-	-	15	-	116-110 145,5	
	NM 50/12F-60/B NM 50/12D-60/B NM 50/12A-60/B	65	50	100	470 495 495	132	160	270 270	-	100	70	240	190	45 45	-	-	50	-	14	-	121	137	290 295 295	-	-	12	-	41 50 51,5	
	NM 50/16A-60/B-B-60/B NM 50/20A-60/B-B-60/B	65	50	100	525 640	160	180	320 345	-	100	70	265	212	49	-	-	50	-	14	-	127	141	320	-	-	14	-	70,5-64 106-100	
	NM 50/25C-60/B NM 50/25B-60/B NM 50/25A-60/B	65	50	100	645 720 720	180	225	365	-	125	95	320	250	50	-	-	65	-	14	-	175	175	415 465 465	-	-	15	-	126 144,5 153	
	NM 50M/E-60/A NM 50M/D-60/A NM 50M/C-60/A	65	50	100	645 720 720	180	225	365	-	125	95	320	250	50	-	-	65	-	14	-	175	175	415 465 465	-	-	15	-	117,5 144 162	
	NM 65/12E-60/A NM 65/12A-60/A-C-60/A	80	65	100	495 525	160	180	298 320	-	125	95	280	212	60 49	-	-	65	-	14	-	134	156	295 320	-	-	15	-	55,5 73,5-68	
	NM 65/16D-60/A-E-60/A NM 65/16B-60/A-C-60/A NM 65/16A-60/A	80	65	100	525 640 715	160	200	320 345 345	-	125	95	280	212	49 40 40	-	-	65	-	14	-	150	172	320 410 460	-	-	15	-	75-70 106-100 133,5	
	NM 65/20C-60/A NM 65/20B-60/A	80	65	100	715	180	225	365	-	125	95	320	250	50	-	-	65	-	14	-	155	175	460	-	-	15	-	139,5 145	
	4	NM 65/200A-60/A NM 65/250B-60/A-C-60/A	80	65	100	825	202	225	408	22	125	95	320	250	-	254	20	80	90	18	14	155	175	245	400	360	-	42°	185
	1	NM 80/16E-60/A NM 80/16C-60/A-D-60/A NM 80/16B-60/A NM 80/16A-60/A	100	80	125	545 670 745 745	180	225	340 365 365 365	-	125	95	320	250	60 50 50 50	-	-	65	-	14	-	165	193	320 415 465 465	-	-	15	-	83,5 113-108 142,5 150
	4	NM 80/200A-60/A-B-60/A NM 80/250D-60/A-E-60/A NM 100/200E-60/A NM 100/200C-60/A-D-60/A	100	80	125	850	202	250	408	22	160	120	345	280	-	254	20	80	90	18	14	170	194	245	400	360	-	42°	200-194
			100	80	125	850	202	280	408	2	160	120	400	315	-	254	20	80	90	18	14	191	210	245	400	360	-	42°	209-203
			125	100	125	800	200	280	345	-	160	120	360	280	-	216	20	80	69	18	12	180	212	239	298	258	-	6	179
			125	100	140	1324	280	280	712	260	220	410	315	457	-	-	-	100	-	18	24	24	275	275	516	479	-	368	201-195

Flanges EN 1092-2

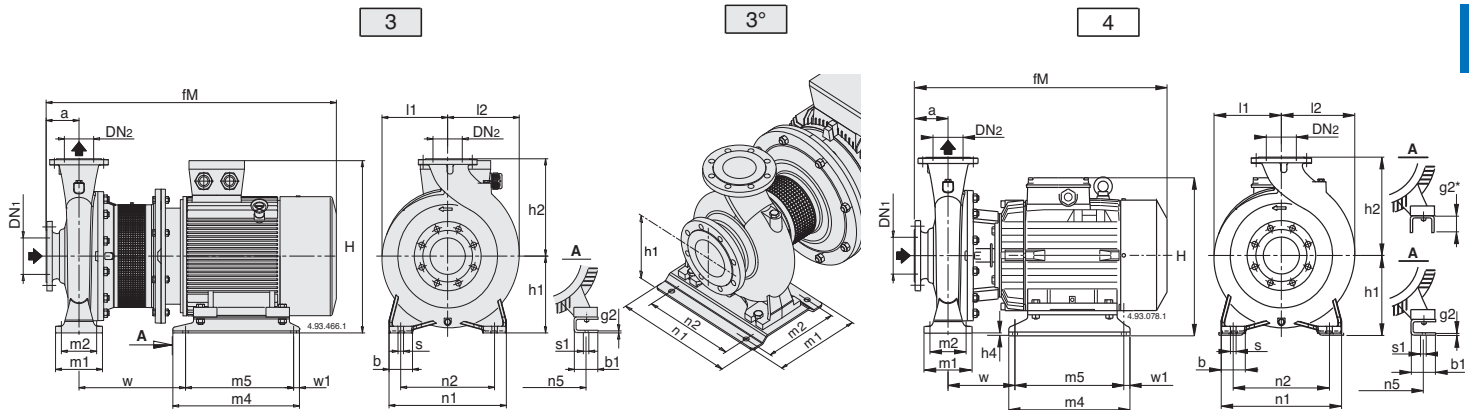


mm					
DN	DG	DK	DE	Holes N°	W
32	76	100	140	4	19
40	84	110	150	4	19
50	99	125	165	4	19
65	118	145	185	4	19
80	132	160	200	8	19
100	156	180	220	8	19
125	184	210	250	8	19

Picture	NMS	mm																				kg									
		DN1	DN2	a	fM	h1	h2	H	m1	m2	n1	n2	A	n5	w1	b	AA	b1	s	K	s1		l1	l2	w	BB	m4	B	m5	HA	g2
2	NMS 65/250A-60 NMS 80/250C-60	80	65	100	1074	200	250	500	160	120	360	280	318	-	-	80	70	-	18	19	-	200	200	406	355	-	305	-	25	-	347
2°	NMS 80/250B-60	100	80	125	1164	225	280	550	298	258	410	315	356	-	-	80	70	-	18	19	-	225	225	445	361	-	311	-	34	-	416
3°	NMS 80/250A-60	100	80	125	1235	280	280	672	260	220	410	315	-	406	25	-	-	-	100	18	-	24	275	275	443	-	500	-	450	-	8
2	NMS 100/200B-60	125	100	125	1099	200	280	500	160	120	360	280	318	-	-	80	70	-	18	19	-	200	212	406	355	-	305	-	25	-	345
2°	NMS 100/200A-60	125	100	125	1164	225	280	550	298	258	410	315	356	-	-	80	70	-	18	19	-	225	225	445	361	-	311	-	34	-	409
3°	NMS 100/250B-60	125	100	140	1250	280	280	672	260	220	410	315	-	440	25	-	-	-	100	18	-	24	275	275	443	-	500	-	450	-	8
2°	NMS 100/250A-60	125	100	140	1324	280	280	712	260	220	410	315	457	-	-	-	-	-	100	18	24	24	275	275	516	479	-	368	-	40	-

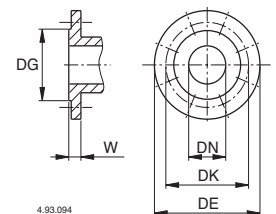
Pumps with packed gland, dimensions available on request (excluded NMS).

Dimensions and weights



Picture	B- NM	mm																						kg					
		DN1	DN2	a	fm	h1	h2	H	h4	m1	m2	n1	n2	n3	n5	w1	b	b1	s	s1	l1	l2	w	m4	m5	g1	g2	B-NM	
1	B-NM 32/12S-60-A-60-D-60-F-60	50	32	80	405	112	140	240	-	100	70	190	140	37	-	-	50	-	14	-	93	97	245	-	-	12	-	33-32-31-29	
	B-NM 32/16B-60	50	32	80	410	132	160	260	-	100	70	240	190	47	-	-	50	-	14	-	120	120	250	-	-	12	-	44	
	B-NM 32/16A-60/A	50	32	80	450	132	160	260	-	100	70	240	190	47	-	-	50	-	14	-	120	120	290	-	-	12	-	48	
	B-NM 32/20D-60/A	50	32	80	450	160	180	288	-	100	70	240	190	45	-	-	50	-	14	-	140	140	290	-	-	12	-	52	
	B-NM 32/20C-60/A	50	32	80	475	160	180	298	-	100	70	240	190	60	-	-	50	-	14	-	140	140	295	-	-	12	-	60	
	B-NM 32/20A-60/A	50	32	80	475	160	180	298	-	100	70	240	190	60	-	-	50	-	14	-	140	140	295	-	-	12	-	61,5	
1*	B-NM 40/12C-60-F-60	65	40	80	410	112	140	240	-	100	70	210	160	37	-	-	50	-	14	-	100	113	250	-	-	12	-	35-33	
	B-NM 40/12A-60/A	65	40	80	450	112	140	240	-	100	70	210	160	37	-	-	50	-	14	-	100	113	290	-	-	12	-	40	
4	B-NM 40/16C-60/A	65	40	80	450	132	160	260	-	100	70	240	190	45	-	-	50	-	14	-	119	119	290	-	-	12	-	48	
	B-NM 40/16B-60/A	65	40	80	475	132	160	270	-	100	70	240	190	45	-	-	50	-	14	-	119	119	295	-	-	12	-	56	
	B-NM 40/16A-60/A	65	40	80	475	132	160	270	-	100	70	240	190	45	-	-	50	-	14	-	119	119	295	-	-	12	-	57,5	
1*	B-NM 40/20C-60/A-D-60/A	65	40	100	495	160	180	298	-	100	70	265	212	60	-	-	50	-	14	-	140	140	295	-	-	12	-	63,5-62,5	
	B-NM 40/200A-60/A-B-60/A	65	40	100	580	160	180	320	-	100	70	265	212	49	-	-	50	-	14	-	140	140	375	-	-	12	-	80,5-75	
4	B-NM 40/25B-60/B-60/B	65	40	100	635	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	130-124	
	B-NM 40/25A-60/B	65	40	100	705	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	159,5	
1	B-NM 50/12F-60/A	65	50	100	470	132	160	260	-	100	70	240	190	45	-	-	50	-	14	-	121	137	290	-	-	12	-	52	
	B-NM 50/12D-60/A	65	50	100	495	132	160	270	-	100	70	240	190	45	-	-	50	-	14	-	121	137	295	-	-	12	-	61	
	B-NM 50/12A-60/A	65	50	100	495	132	160	270	-	100	70	240	190	45	-	-	50	-	14	-	121	137	295	-	-	12	-	63,5	
1*	B-NM 50/160A-60/B-B-60/B	65	50	100	580	160	180	320	-	100	70	265	212	49	-	-	50	-	14	-	127	141	375	-	-	14	-	80,5-74,5	
4	B-NM 50/200A-60/B-B-60/B	65	50	100	695	192	200	377	32	100	70	265	212	-	216	20	65	69	14	12	140	153	234	298	258	-	6	128-121	
	B-NM 50/25C-60/B	65	50	100	635	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	135	
	B-NM 50/25B-60/B	65	50	100	710	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	144	
	B-NM 50/25A-60/B	65	50	100	710	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	161	
1*	B-NM 50/25/65E-60/A	65	50	100	635	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	135	
	B-NM 50/25/65D-60/A	65	50	100	710	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	156,5	
	B-NM 50/25/65C-60/A	65	50	100	710	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	175	175	174	298	258	-	6	161	
4	B-NM 65/125A-60/A-C-60/A	80	65	100	580	160	180	320	-	125	95	280	212	49	-	-	65	-	14	-	134	156	375	-	-	15	-	93,5-73	
	B-NM 65/160D-60/A-E-60/A	80	65	100	575	160	200	320	-	125	95	280	212	49	-	-	65	-	14	-	150	172	375	-	-	15	-	83,5-79	
	B-NM 65/160C-60/A	80	65	100	660	160	200	345	-	125	95	280	212	49	-	-	65	-	14	-	150	172	430	-	-	15	-	108	
4	B-NM 65/160B-60/A	80	65	100	695	192	200	377	32	125	95	280	212	-	216	20	65	69	14	12	150	172	234	298	258	-	6	149	
	B-NM 65/160A-60/A	80	65	100	770	192	200	377	32	125	95	280	212	-	216	20	65	69	14	12	150	172	234	298	258	-	6	178,5	
	B-NM 65/200B-60/A-C-60/A	80	65	100	775	192	225	377	12	125	95	320	250	-	216	20	65	69	14	12	155	175	239	298	258	-	6	183-169,5	
1*	B-NM 65/200A-60/A	80	65	100	825	202	225	408	12	125	95	320	250	-	254	20	65	90	14	12	14	155	175	245	400	360	-	42*	200
	B-NM 65/250B-60/A-C-60/A	80	65	100	825	202	250	408	2	160	120	360	280	-	254	20	80	90	18	14	175	190	245	400	360	-	42*	216-210	
4	B-NM 80/160E-60/A	100	80	125	605	180	225	340	-	125	95	320	250	60	-	-	65	-	14	-	165	193	375	-	-	15	-	108,5	
	B-NM 80/160D-60/A	100	80	125	685	180	225	365	-	125	95	320	250	50	-	-	65	-	14	-	165	193	430	-	-	15	-	116	
4	B-NM 80/160C-60/A	100	80	125	725	192	225	377	12	125	95	340	250	-	216	20	65	69	14	12	165	193	239	298	258	-	6	155	
	B-NM 80/160B-60/A	100	80	125	800	192	225	377	12	125	95	340	250	-	216	20	65	69	14	12	165	193	239	298	258	-	6	175,5	
4	B-NM 80/160A-60/A	100	80	125	800	192	225	377	12	125	95	340	250	-	216	20	65	69	14	12	165	193	239	298	258	-	6	182	

Flanges EN 1092-2



mm						
DN	DG	DK	DE	Holes	W	
				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

Picture	B-NMS	mm																						kg						
		DN1	DN2	a	fm	h1	h2	H	m1	m2	n1	n2	A	n5	w1	b	AA	b1	s	K	s1	l1	l2	w	BB	m4	B	m5	HA	g2
2	B-NMS 65/250A-60	80	65	100	1074	200	250	500	160	120	360	280	318	-	-	80	70	-	18	19	-	200	200	406	355	-	305	-	25	-
3	B-NMS 80/200A-60-B-60	100	80	125	936	180	250	387	125	95	345	280	-	254	20	65	-	60	14	-	15	175	194	331	-	350	-	310	-	5
	B-NMS 80/250D-60-E-60	100	80	125	936	200	280	407	160	120	400	315	-	254	20	80	-	60	18	-	15	191	210	331	-	350	-	310	-	6
2	B-NMS 80/250C-60	100	80	125	1099	200	280	500	160	1																				

Features

Cutting edge hydraulics

The geometry of the impeller and the pump casing are optimized to achieve maximum efficiency and the best suction capability.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NM and NM4 series pumps to be selected for use with different types of liquids.

Compact Design

The compact design allows for easy installation even in confined spaces.

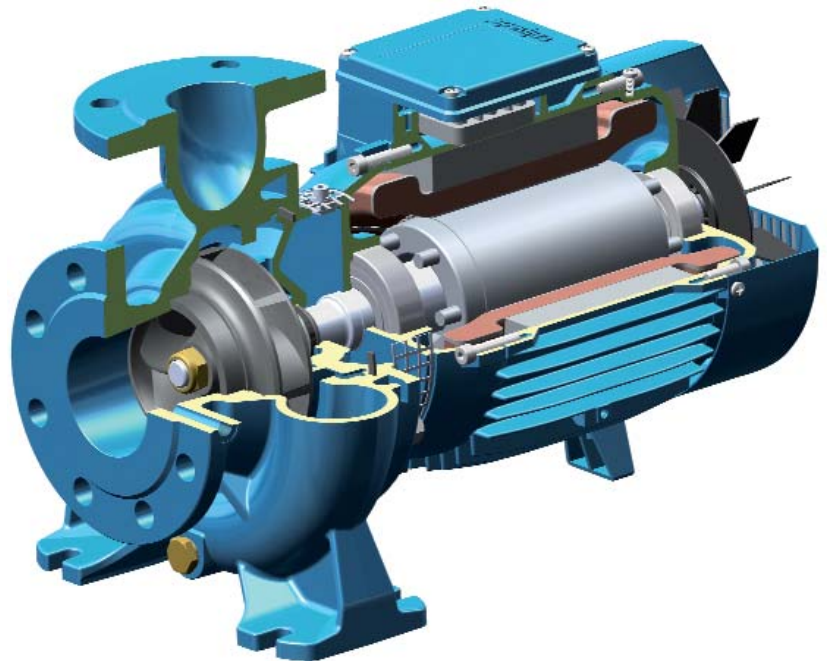
Exclusive design

An innovative, patented guard prevents contact with rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

NM



Cutting edge hydraulics

The geometry of the impeller and the pump casing are optimized to achieve maximum efficiency and the best suction capability.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NMS and NMS4 series pumps to be selected for use with different types of liquids.

New lantern bracket construction

The lantern brackets incorporate a thrust bearing on the hydraulic side which guarantees the elimination of additional loads on the motor bearings. The flange is sized to be used with standard motors B35.

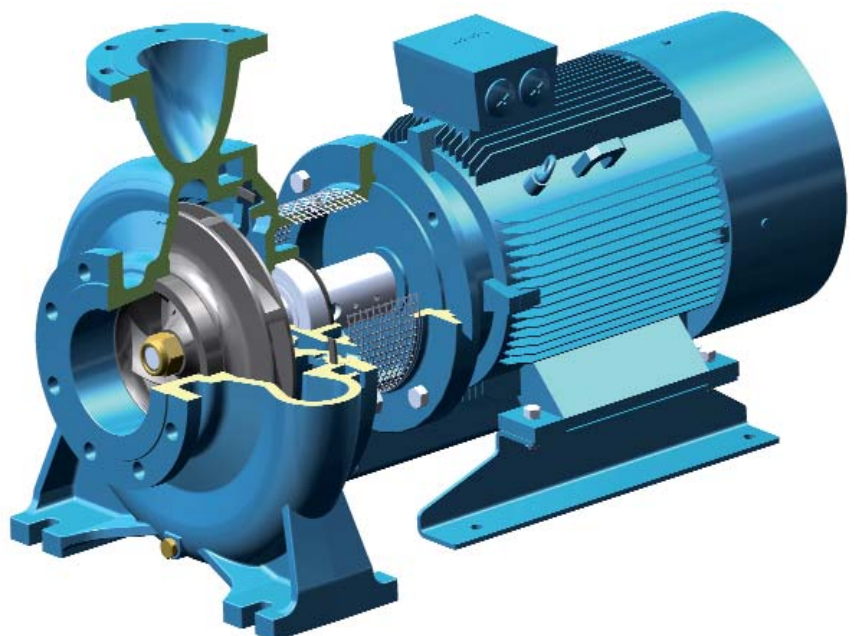
Exclusive design

An innovative, patented guard prevents contact with rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Simplified motor maintenance

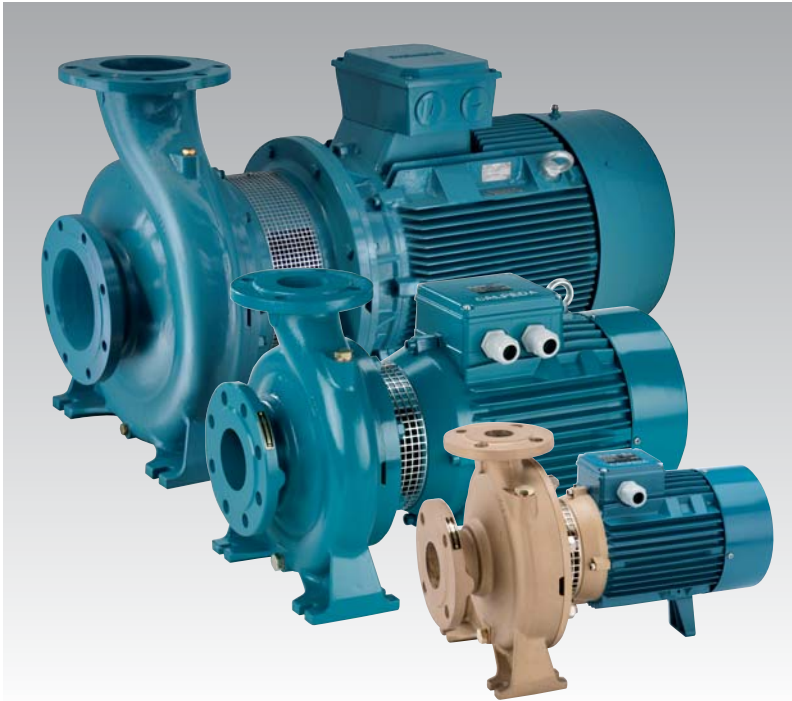
The presence of the thrust bearing on the hydraulic side makes it easier to remove the motor, facilitating maintenance operations and eliminating the risks of damage to the hydraulic parts.

NMS





NM4, NMS4 60 Hz Close Coupled Centrifugal Pumps



3

Construction

Close-coupled centrifugal pumps; electric motor with extended shaft directly connected to the pump up to 15 kW, new bracket construction for standard motors (Stub-shaft construction) from 18,5 to 75 kW with integrated thrust bearing. Pump casing with axial suction and radial delivery on top, main dimensions and performance according to EN 733 with additional sizes for completion.

NM(S)4: version with pump casing and lantern bracket in cast iron.
 B-NM(S)4: version with pump casing and lantern bracket/casing cover in bronze. (the pumps are supplied fully painted).

Connections

Sizes	Connections
NM4 25/...	Threaded ports ISO 228
from NM4 32/.. to NMS4 150/400	Flanges according to PN 10, EN 1092-2

Counter-flanges (on request)

Sizes	Flanges
from NM4 32/.. to NM4 50/..	Screwed flanges EN 1092-1, PN 16
from NM4 32/.. to NMS4 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, 60 Hz ($n \approx 1750$ rpm).

NM4, NMS4: three-phase 220/380 V, 380/660 V.

Insulation class F. Protection IP 54. (IP 55 for NMS4).

Motor suitable for operation with frequency converter from 1,1 kW.

Constructed in accordance with: EN 60034-1; EN 60034-30.

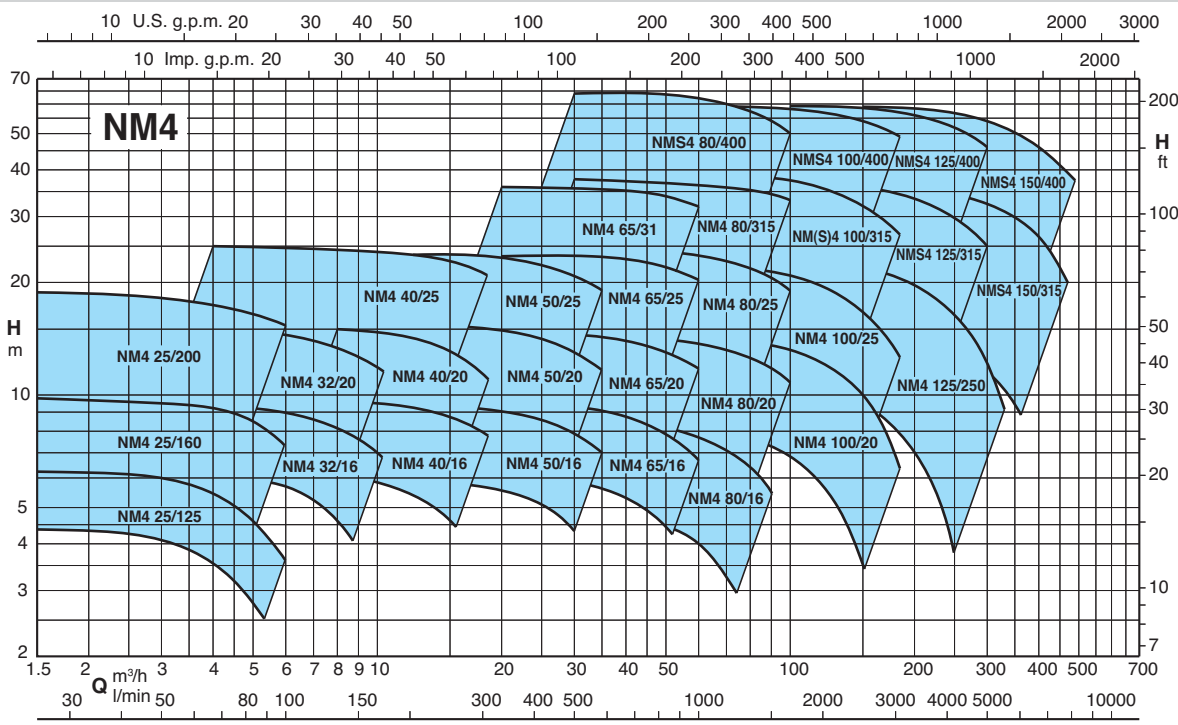
Special features on request

- Other voltages. - Protection IP 55.
- Bronze impeller. - Special mechanical seal.
- Higher or lower liquid or ambient temperatures.
- Motor suitable for operation with frequency converter up to 0,75 kW.

Materiali

Components	NM4, NMS4	B-NM4, B-NMS4
Pump casing Lantern bracket NM4 Casing cover for NMS4	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Lantern bracket NMS4	Cast iron GJL 200 EN 1561	
Impeller	Cast iron GJL 200 EN 1561	Bronze 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	AISI 303 up to 1,1 kW	Cr Ni Mo steel AISI 316
	AISI 430 from 1,5 kW to 75 kW	
Mechanical seal	Carbon - Ceramic - NBR	
Counter-flanges	Steel Fe 430B UNI 7070	

Coverage chart $n = 1750$ rpm



NM4, NMS4 60 Hz Close Coupled Centrifugal Pumps with flanged connections



Performance n ≈ 1750 rpm

B - NM4	NM4	P ₂		Q m ³ /h																				
		kW	HP																					
				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	9,6	10,8	12	13,2	15	
	NM4 25/12A-60/A	0,25	0,34	H m	6,25	6,2	6,1	6,1	6	5,7	5,4	5	4,6	4,1	3,6									
B-NM4 25/160BE-60	NM4 25/160BE-60	0,37	0,5		7,95	7,9	7,85	7,8	7,7	7,5	7,2	6,9	6,5	5,8	5									
B-NM4 25/160AE-60	NM4 25/160AE-60	0,37	0,5		9,9	9,9	9,8	9,75	9,7	9,4	9,3	9	8,5	8	7,2	6,5								
B-NM4 25/200C-60/A	NM4 25/200C-60/A	0,37	0,5		11,8	11,8	11,8	11,7	11,6	11,5	11,3	11,1	10,9	10,5	10,1	9,7	8,8	7,7	5,9	3,7				
B-NM4 25/200B-60/A	NM4 25/200B-60/A	0,55	0,75		15,4	15,4	15,3	15,3	15,2	15,1	14,9	14,8	14,5	14,3	14	13,7	13,1	12,3	11	9,2	6,8			
B-NM4 25/200A-60/B	NM4 25/200A-60/B	0,75	1		19,1	19,1	19,1	19	18,9	18,8	18,7	18,6	18,4	18,2	18	17,7	17,2	16,6	15,6	14,4	12,8	10,3		

B - NM4	NM4	P ₂		Q m ³ /h																					
		kW	HP																						
				l/min	2,4	3	3,6	4,2	4,8	5,4	6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30	
B-NM4 32/16B-60	NM4 32/16BE-60	0,37	0,5	H m	7,6	7,6	7,5	7,4	7,4	7,3	7,1	6,6	6,1	5,3	4,4										
B-NM4 32/16A-60	NM4 32/16AE-60	0,37	0,5		9,2	9,2	9,1	9,1	9	9	8,8	8,3	7,8	7,2	6,4	5,4*									
B-NM4 32/20B-60	NM4 32/20BE-60	0,55	0,75		13,1	13	12,9	12,8	12,6	12,4	12,2	11,4	10,8	9,8	8,7	7,3*	5,7*								
B-NM4 32/20A-60/A	NM4 32/20A-60/A	0,75	1		14,9	14,8	14,7	14,6	14,5	14,3	14,1	13,6	13,2	12,4	11,4	10*	8,5*								
B-NM4 40/16C-60	NM4 40/16C-60/A	0,37	0,5							6,75	6,75	6,65	6,53	6,35	6,15	5,9	5,53	4,9	4,2	3,2					
B-NM4 40/16B-60	NM4 40/16B-60/A	0,55	0,75							8,1	8,1	8	7,95	7,8	7,6	7,4	7,2	6,75	6,25	5,5	4,6				
B-NM4 40/16A-60/A	NM4 40/16A-60/B	0,75	1							9,7	9,7	9,65	9,6	9,5	9,37	9,2	9	8,7	8,3	7,8	7	5,8			
B-NM4 40/20B-60/A	NM4 40/20B-60/A	1,1	1,5							13,3	13,2	13,1	13	12,7	12,5	12	11,5	10,5	9,5	7,8					
B-NM4 40/20A-60/A	NM4 40/20A-60/A	1,1	1,5							15,3	15,2	15,1	15	14,7	14,5	14	13,7	13	12,2	10,8	9,3				
B-NM4 40/25C-60/B	NM4 40/25C-60/B	1,5	2							18,3	18,2	18,1	18	17,9	17,6	17,3	16,8	15,7	14,2	11,8	8,9	4,4			
B-NM4 40/25B-60/B	NM4 40/25B-60/B	2,2	3							22,7	22,7	22,7	22,6	22,6	22,5	22,3	22,1	21,6	20,6	19,2	17,5	14,2	10,1		
B-NM4 40/25A-60/B	NM4 40/25A-60/B	3	4							25,1	25	25	24,9	24,9	24,8	24,6	24,4	24	23,6	22,6	21,3	18,5	15	10,7*	

B - NM4	NM4	P ₂		Q m ³ /h																				
		kW	HP																					
				l/min	10,8	12	13,2	15	16,8	18,9	21	24	27	30	33	37,8	42	48	54	60	66	75	84	
B-NM4 50/16B-60/A	NM4 50/16B-60/B	1,1	1,5	H m	9	9	9	8,95	8,8	8,55	8,25	7,7	7	6,25	5,4	3,8*								
B-NM4 50/16A-60/A	NM4 50/16A-60/B	1,1	1,5		10,5	10,6	10,6	10,6	10,6	10,5	10,3	9,9	9,3	8,6	7,9	6,6*	5,3*							
	NM4 50/20C-60/B	1,1	1,5		11,2	11,2	11,1	11	10,8	10,4	10	9,1	8	6,8	5,3	2,7								
	NM4 50/20B-60/A	1,5	2		12,8	12,8	12,8	12,75	12,6	12,3	11,9	11,3	10,5	9,4	8,1	5,8	3,4							
	NM4 50/20A-60/B	2,2	3		16,7	16,8	16,9	16,9	16,9	16,8	16,6	16,3	15,74	15,2	14,4	13	11,2	8,5	5,4					
B-NM4 50/25C-60/B	NM4 50/25C-60/B	2,2	3		18,9	18,9	18,9	18,8	18,5	18,2	17,8	17,1	16,2	15,1	13,3	10,3	7,2*							
B-NM4 50/25B-60/B	NM4 50/25B-60/B	3	4		23,1	23,1	23,1	23	22,8	22,6	22,2	21,5	20,5	19,5	18,2	15,3	12*							
B-NM4 50/25A-60/B	NM4 50/25A-60/B	4	5,5		24,1	24,1	24,1	24	23,8	23,6	23,2	22,6	21,9	21	19,7	17	14*							
B-NM4 65/16C-60/A	NM4 65/16C-60/A	1,1	1,5							6,6	6,6	6,5	6,4	6,3	6	5,7	5,2	4,5	3,7					
B-NM4 65/16B-60/A	NM4 65/16B-60/A	1,1	1,5							7,9	7,8	7,7	7,7	7,5	7,2	7	6,5	5,8	5	4,1*				
B-NM4 65/16A-60/A	NM4 65/16A-60/A	1,5	2							9,3	9,3	9,2	9,2	9,1	8,9	8,6	8,1	7,5	6,8	6*	4,5*			
	NM4 65/20B-60/A	2,2	3							12,5	12,4	12,3	12,2	12,1	11,7	11,4	10,8	10	9,2	8,3*	6,6*			
	NM4 65/20A-60/A	3	4							14,5	14,4	14,3	14,2	14,1	13,9	13,6	13,1	12,5	11,8	11*	9,5*	8*		
	NM4 65/25B-60/A	4	5,5							19	19	18,8	18,7	18,6	18,3	18	17,5	16,8	15,6	14,2*	11,8*	9*		
	NM4 65/25A-60/A	5,5	7,5							23,2	23,1	23	22,8	22,6	22,4	21,8	21,2	20,4	19,2*	17*	14*			
	NM4 65/31C-60/A	5,5	7,5							27	27	26,5	26	26	25,5	25	24,5	23,5	22	20*	17*	13*		
	NM4 65/31B-60/A	7,5	10							32	32	31,5	31	31	30,5	30	29,5	29	28	26,5*	24*	20,5*		
	NM4 65/31A-60/A	9,2	12,5							36	36	35,5	35	35	34,5	34	33,5	33	32	31*	29*	26,5*		

B-NMS4	NM4	P ₂		Q m ³ /h																				
		kW	HP																					
				l/min	30	33	37,8	42	48	54	60	66	75	84	96	108	120	132	150	168	180	192	210	
	NM4 80/16C-60/A	1,1	1,5	H m	5,3	5,2	5,1	5	4,9	4,5	4,1	3,8	3											
	NM4 80/16B-60/A	1,5	2		6,6	6,5	6,4	6,3	6,1	5,9	5,5	5,2	4,6	3,7										
	NM4 80/16A-60/A	2,2	3		8,6	8,5	8,4	8,3	8,1	7,9	7,6	7,3	6,9	6,1	4,5									
	NM4 80/20C-60/A	2,2	3		10,9	10,8	10,7	10,6	10,5	10,3	10	9,7	9,1	8,2	6,7									
	NM4 80/20B-60/A	3	4		12,5	12,5	12,4	12,3	12,1	12	11,7	11,4	10,6	9,8	8,5	6,5*								
	NM4 80/20A-60/A	4	5,5		14,2	14,1	14	14	13,9	13,8	13,5	13,4	12,8	12	11	9,2*	7,4*							
	NM4 80/25C-60/A	4	5,5		17,4	17,3	17,1	17	16,6	16,1	15,8	15,2	14,1	13	11,3	9,5*								
	NM4 80/25B-60/A	5,5	7,5		20,8	20,8	20,7	20,7	20,5	20,1	19,8	19,4	18,3	17,3	15,7	13,8*	11,5*							
	NM4 80/25A-60/A	7,5	10		24,2	24,2	24,1	24	24	23,9	23,4	23	22	21,1	19,4	17,5*	15,2*	12,7*						
	NM4 80/31C-60/A	9,2	12,5		28,5	28,5	28,5	28	27,5	27,5	27	26	25	23	21*	18*								
B-NMS4 80/315B-60	NM4 80/315B-60/A	11	15		32,5	32,5	32,5	32	32	31,5	31,5	31	30,5	29,5	28	25,5*	23*	21*						
B-NMS4 80/315A-60	NM4 80/315A-60/A	15	20		37,5	37,5	37,5	37	37	36,5	36,5	36	35,5	35	33	31,5*	29,5*	27*						
B-NMS4 80/400C-60	NMS4 80/400C-60	18,5	25		49,5	49,5	49	49	48	47	46	44	41	37,5	32	25*								
B-NMS4 80/400B-60	NMS4 80/400B-60	22	30		56,5	56,5	56	55,5	55	54,5	53	52	49,5	47	41	35*	27*							
B-NMS4 80/400A-60	NMS4 80/400A-60	30	40		63,5	63,5	63	63	62,5	62	61	60	58	55,5	52	46*	40*	33,5*						

NM4, NMS4 60 Hz Close Coupled Centrifugal Pumps with flanged connections



Performance n ≈ 1750 rpm

B-NMS4	NM4	P ₂		Q m ³ /h	Q																			
		kW	HP		l/min																			
						48	54	60	66	75	84	96	108	120	132	150	168	180	192	210	240	270	300	330
	NM4 100/20C-60/A	3	4		9,4	9,4	9,2	9,1	8,9	8,5	8	7,2	6,4	5,5	4*									
	NM4 100/20B-60/A	4	5,5		11,7	11,7	11,6	11,5	11,4	11,2	10,8	10	9,2	8,3	6,5*	4,6*								
	NM4 100/20A-60/A	5,5	7,5		14	14	13,9	13,9	13,8	13,7	13,3	12,7	12	11,3	9,8*	8,2*	7*	5,5*						
	NM4 100/25B-60/A	7,5	10		19,4	19,4	19,3	19,2	19	18,6	18	17,4	16,5	15,5	13,8*	11,5*	10*	8,2*	5,5*					
	NM4 100/25A-60/A	9,2	12,5		22,4	22,4	22,2	22,1	21,9	21,4	21	20,4	19,6	18,8	17*	15*	13,3*	11,6*	8,8*					
B-NMS4 100/315C-60	NM4 100/315C-60/A	11	15	H m	28	28	27,9	27,9	27,5	27	26	25	23,5	22	19,5*	15,5*	13*	10*						
B-NMS4 100/315B-60	NM4 100/315B-60/A	15	20		32,5	32,5	32,4	32,3	32	31,5	31	30,5	29,5	28,5	26*	22,5*	20*	17,5*	13,5*					
B-NMS4 100/315A-60	NM4 100/315A-60	18,5	25		38,5	38,5	38,3	38,3	38	37,9	37,5	37	36	35	32,5*	30*	28*	26*	21*					
B-NMS4 100/400C-60	NMS4 100/400C-60	22	30		43	42,8	42,5	42,5	42	42	41	40	38,5	37	34*	30,5*	28*							
B-NMS4 100/400B-60	NMS4 100/400B-60	30	40		51,5	51,3	51	50,8	50,5	50,3	50	49	48	46	44*	41*	39*	37*	33*					
B-NMS4 100/400A-60	NMS4 100/400A-60	37	50		59,5	59,3	59	58,8	58,5	58,3	58	57,7	57	56	53,5*	51*	49*	47*	44*					

3

B-NMS4	NM4	P ₂		Q m ³ /h	Q																		
		kW	HP		l/min																		
						84	96	108	120	132	150	168	180	192	210	240	270	300	330	360	390	420	450
	NM4 125/25E-60/A	5,5	7,5		11,2	11	10,7	10,4	10	9,4	8,5	8	7,3	6,2									
	NM4 125/25D-60/A	7,5	10		14	13,9	13,7	13,4	13	12,4	11,6	11	10,4	9,3	7,3*	5*							
	NM4 125/25C-60/A	9,2	12,5		16,8	16,6	16,4	16,1	15,8	15,2	14,6	14	13,3	12,3	10,3*	8*	5,4*						
B-NMS4 125/250B-60	NM4 125/250B-60/A	11	15	H m	19,4	19,2	19	18,8	18,6	18	17,4	17	16,3	15,2	13,2*	10,8*	8*						
B-NMS4 125/250A-60	NM4 125/250A-60/A	15	20		23	22,9	22,8	22,7	22,5	22	21,5	20,9	20,3	19,2	17,2*	14,9*	12,2*	9*					
B-NMS4 125/315C-60	NMS4 125/315C-60	18,5	25		28	27,8	27,5	27,3	27	26,5	25,5	25	24	23	20*	17*	13*						
B-NMS4 125/315B-60	NMS4 125/315B-60	22	30		32	31,7	31,5	31	30,8	30,5	29,5	29	28,5	27	25*	22*	18,5*	14,5*					
B-NMS4 125/315A-60	NMS4 125/315A-60	30	40		37	36,7	36,5	36	35,8	35,5	35	34,5	34	32,5	30,5*	28*	25*	21,5*					
B-NMS4 125/400C-60	NMS4 125/400C-60	37	50		45,5	45	44,8	44,6	44,5	44,3	43,5	43	42	40	36,5*	32,5*	28*						
B-NMS4 125/400B-60	NMS4 125/400B-60	45	60		51,7	51,5	51,3	51	50,7	50	49,5	49	48	46,5	43,5*	40*	35,5*	31*					
B-NMS4 125/400A-60	NMS4 125/400A-60	55	75		59,5	59,3	59	58,8	58,7	58	57,5	57	56,5	55,5	53*	50*	46*	41,5*					
B-NMS4 150/315D-60	NMS4 150/315D-60	18,5	25						22,8	22,6	22,3	22	21,8	21,2	20	18,5	16,7	14,7	12,4	10*	7,4*		
B-NMS4 150/315C-60	NMS4 150/315C-60	22	30						25,8	25,6	25,4	25,2	24,9	24,4	23,2	21,9	20,2	18,4	16,2	14*	11,4*		
B-NMS4 150/315B-60	NMS4 150/315B-60	30	40					30,5	30,4	30,2	30,1	30	29,8	29	27,9	26,5	24,8	22,8	20,7*	18,2*	15,4*		
B-NMS4 150/315A-60	NMS4 150/315A-60	37	50					35,6	35,5	35,4	35,3	35,2	35	34,4	33,7	32,5	30,9	29	26,8*	24,4*	21,8*		
B-NMS4 150/400C-60	NMS4 150/400C-60	45	60					45,5	45	44,5	44	43,8	43,5	42	40,5	38,5	36	33	30*	27*			
B-NMS4 150/400B-60	NMS4 150/400B-60	55	75					51	50,5	50	49,5	49,3	49	48	46,5	44,5	42,5	40	37,5*	34,5*	31,5*		
B-NMS4 150/400A-60	NMS4 150/400A-60	75	100					59	58,5	58,3	58	57,8	57,5	57	55,5	54	52	49,5	47*	44*	41*	37,5*	

NM4, NMS4 Standard construction.
B-NM4, B-NMS4 Bronze construction.

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

* Maximum suction lift 1-2 m.
Tolerances according to UNI EN ISO 9906:2012.

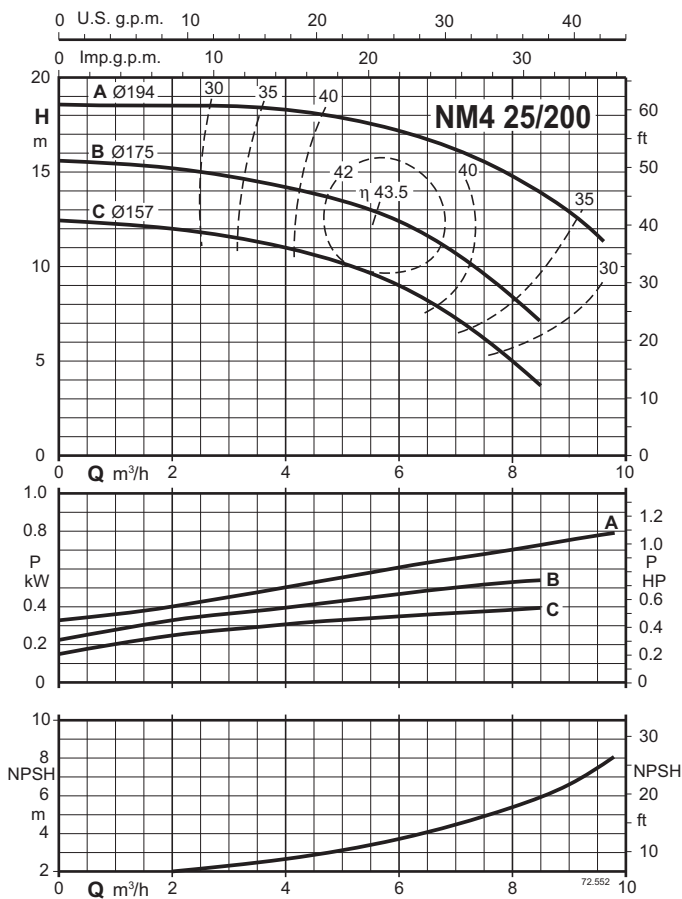
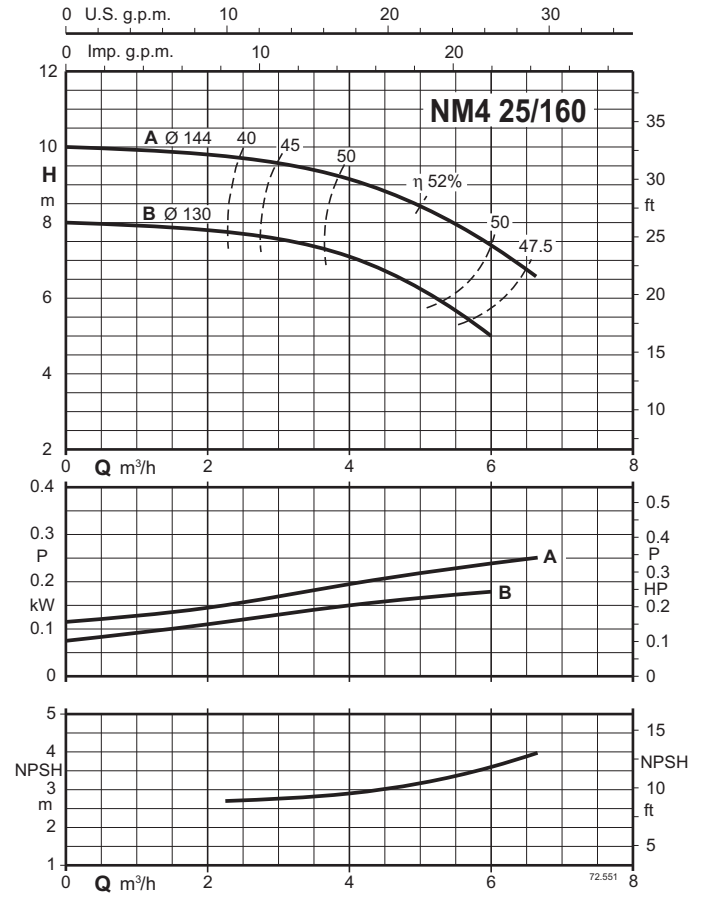
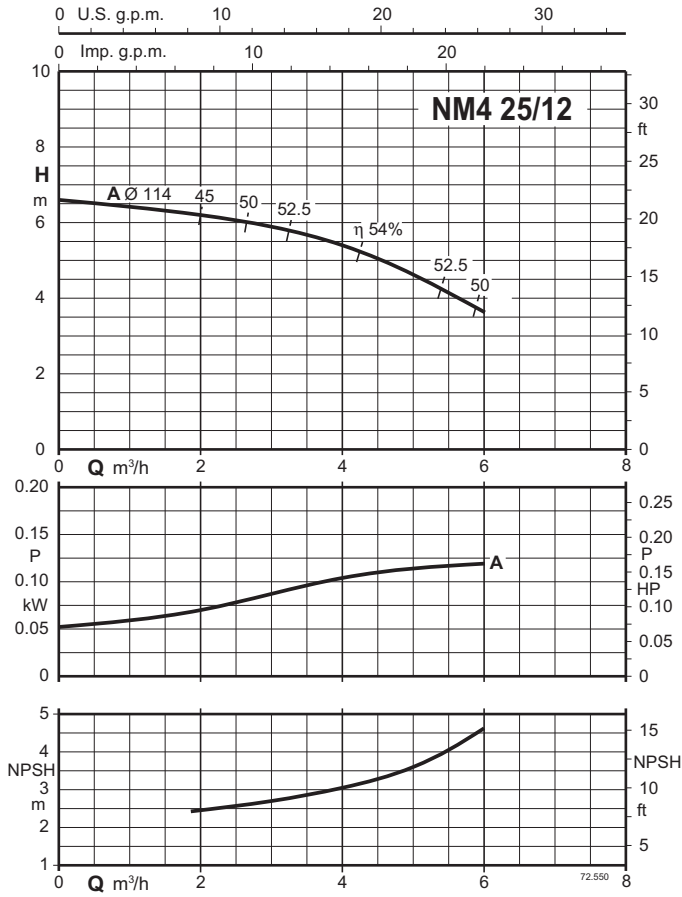
Rated currents

P ₂		220 V Δ / 380 V Y		
kW	HP	In A	In A	IA/In
0,25	0,34	1,7	1	3,5
0,37	0,5	1,65	0,95	4,1
0,55	0,75	2,6	1,5	4,5
0,75	1	3,8	2,2	5,7
1,1	1,5	5,8	3,3	3,3
1,5	2	7	4	7,8
2,2	3	9,8	5,7	7,6
3	4	13,5	7,8	5,7

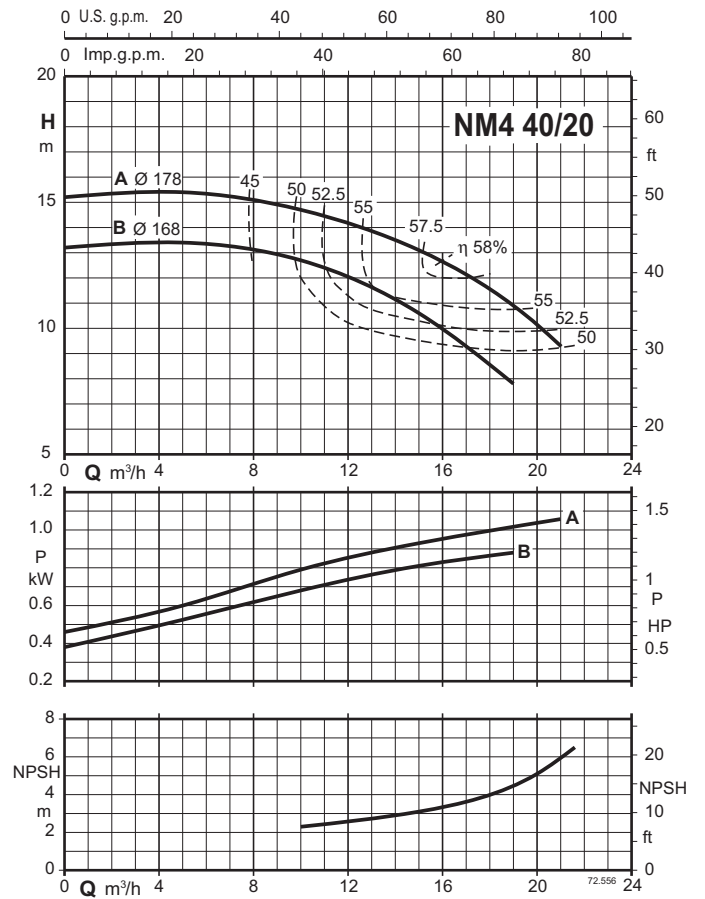
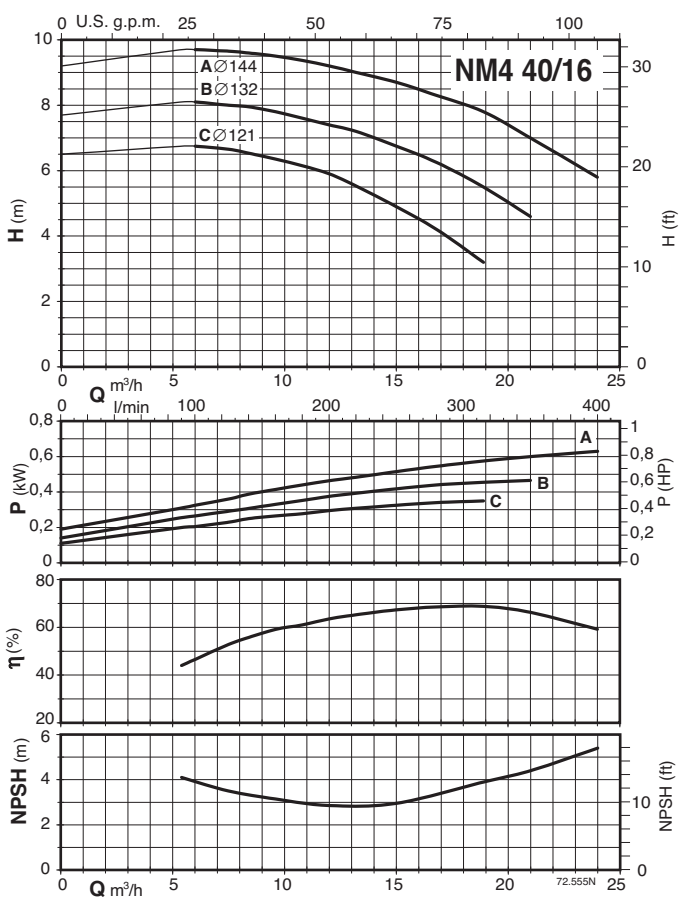
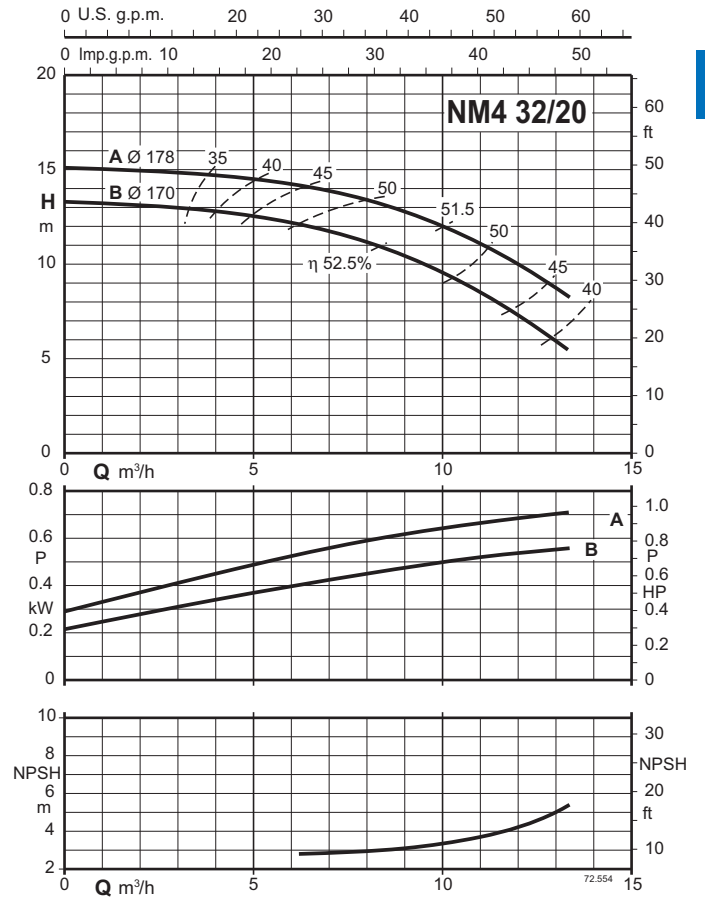
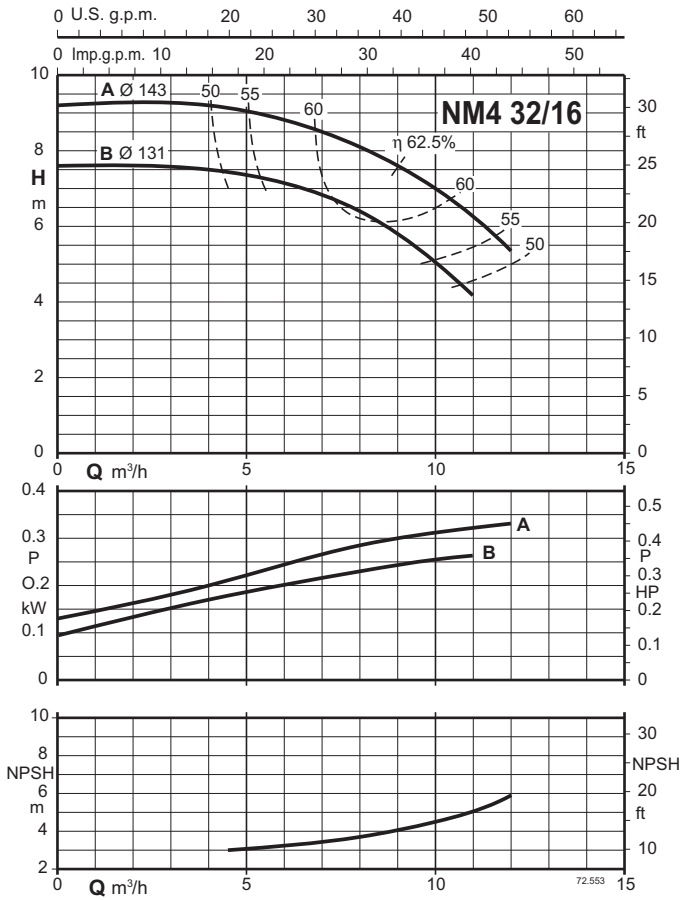
P ₂		380 V Δ / 660 V Y		
kW	HP	In A	In A	IA/In
4	5,5	10,2	5,9	7,1
5,5	7,5	15,3	8,7	8
7,5	10	19,1	11,1	8,2
9,2	12,5	22,6	13,2	8,5
11	15	26,8	15,5	8,6
15	20	34,5	20	9
18,5	25	42	24,2	7,3
22	30	49,6	28,5	7,5
30	40	64,5	37,2	7,5
37	50	84	48,5	6
45	60	95,5	55	6,4
55	75	120	69	7,3
75	100	166	95,5	6

P₂ Rated motor power output.
IA/In D.O.L. starting current / Rated current

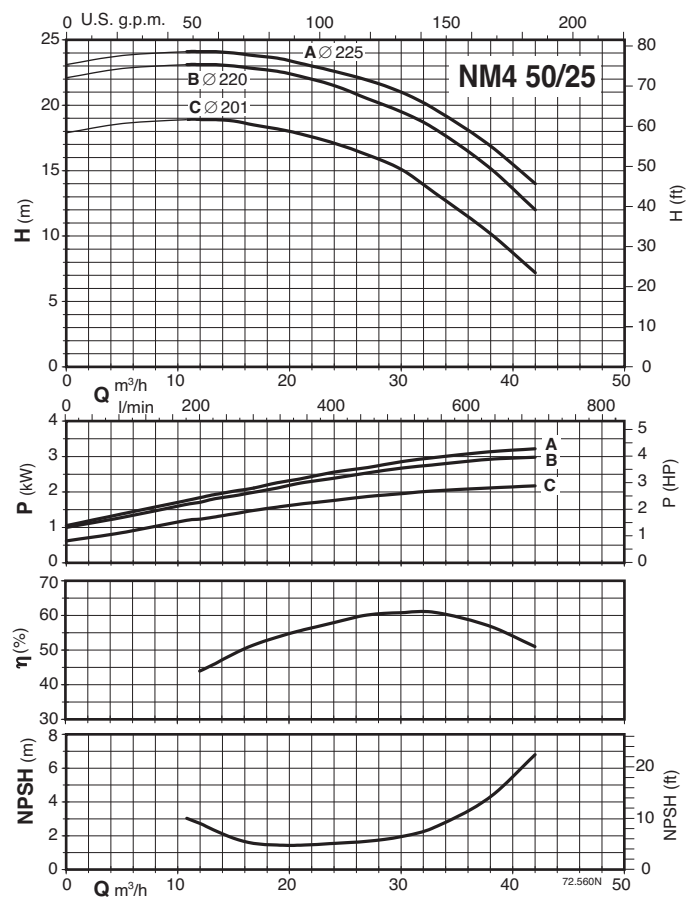
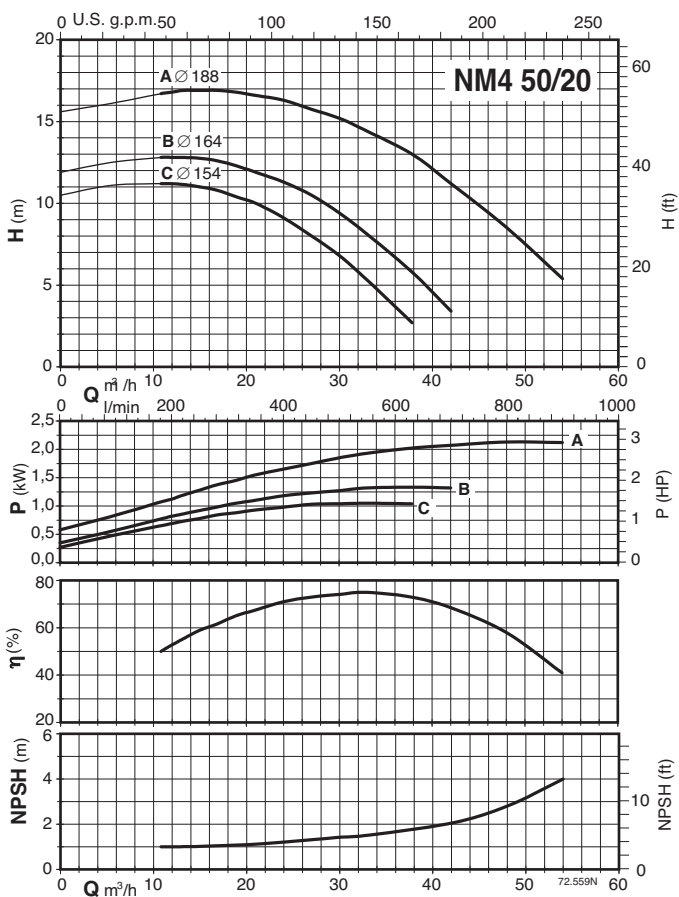
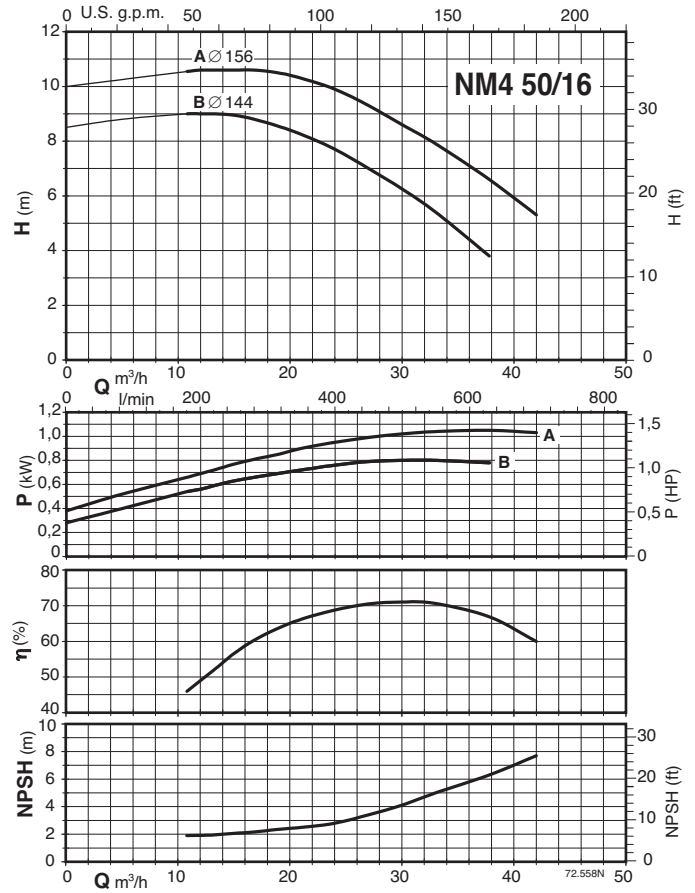
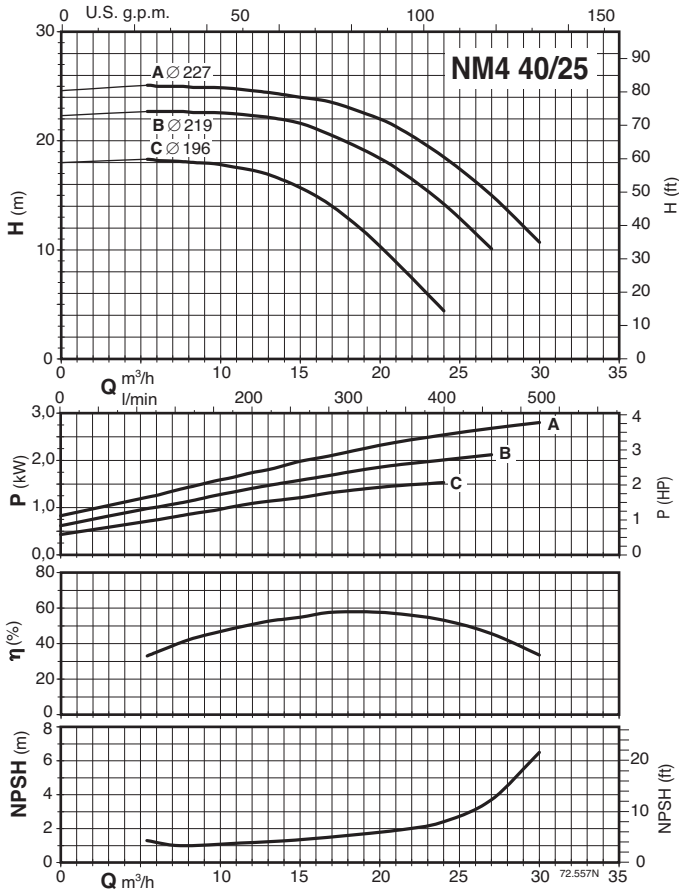
Characteristic curves n = 1750 rpm



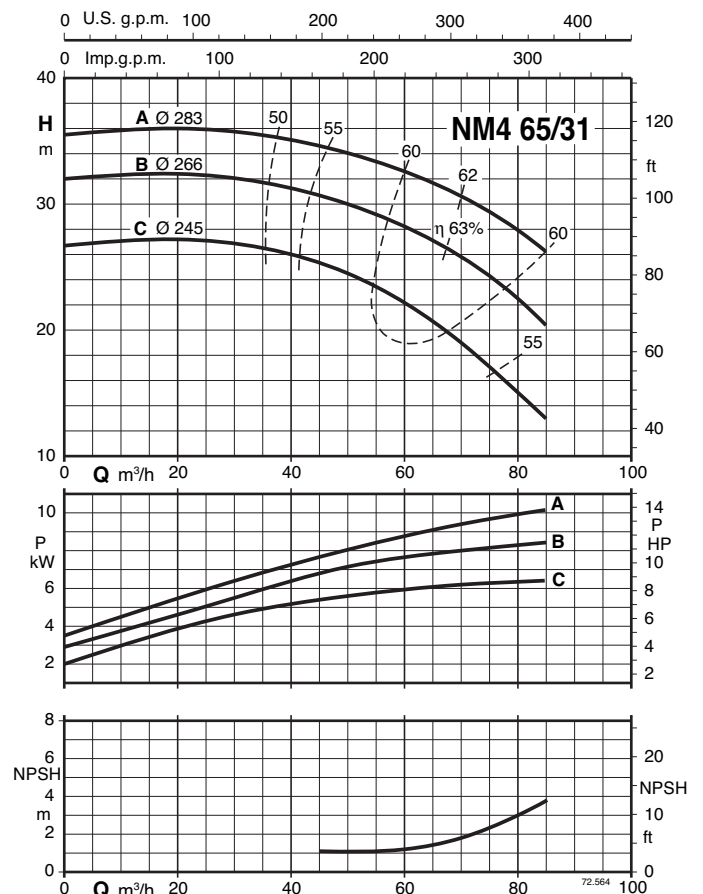
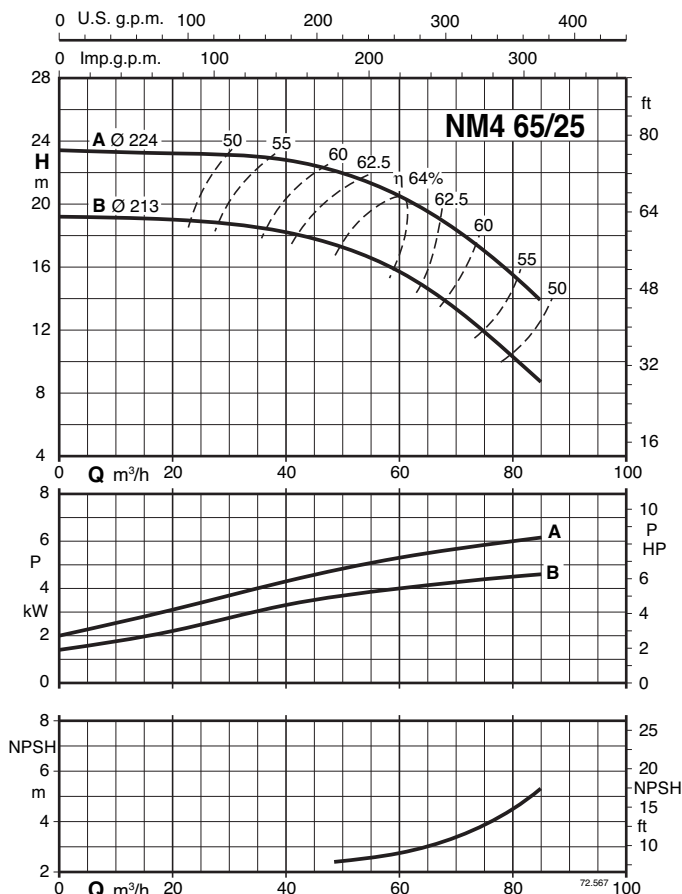
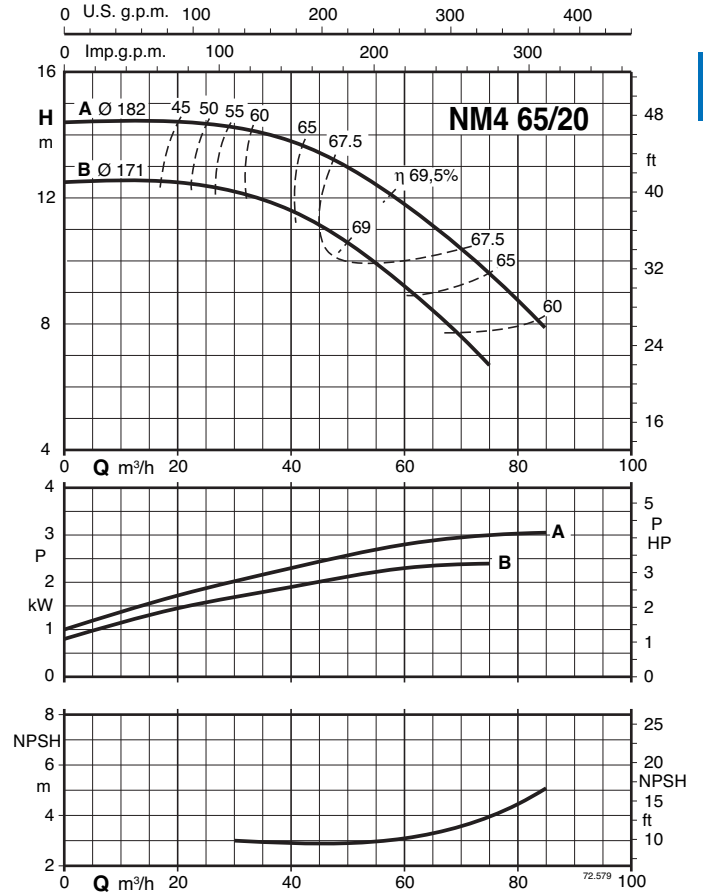
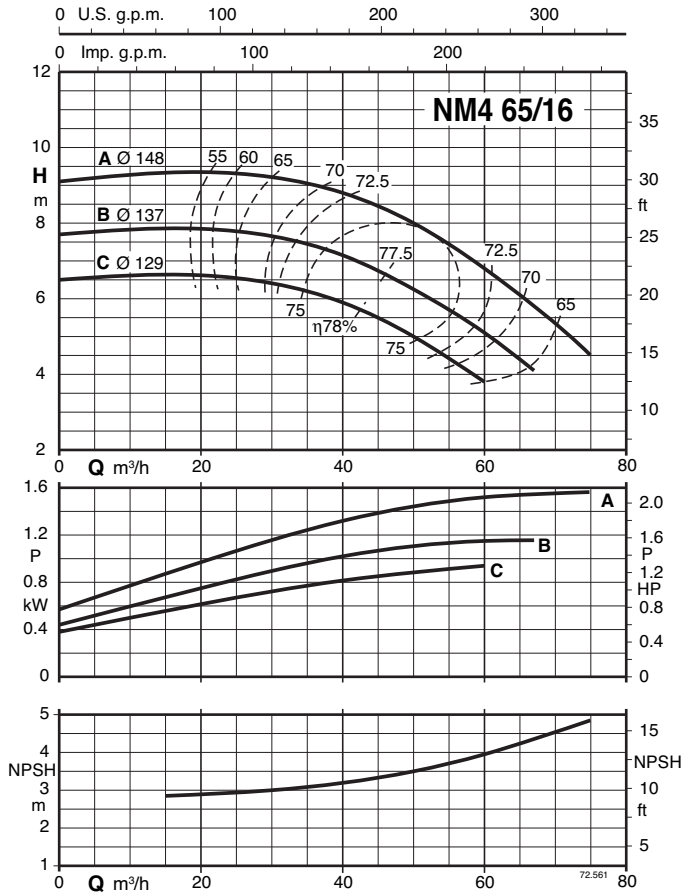
Characteristic curves n = 1750 rpm



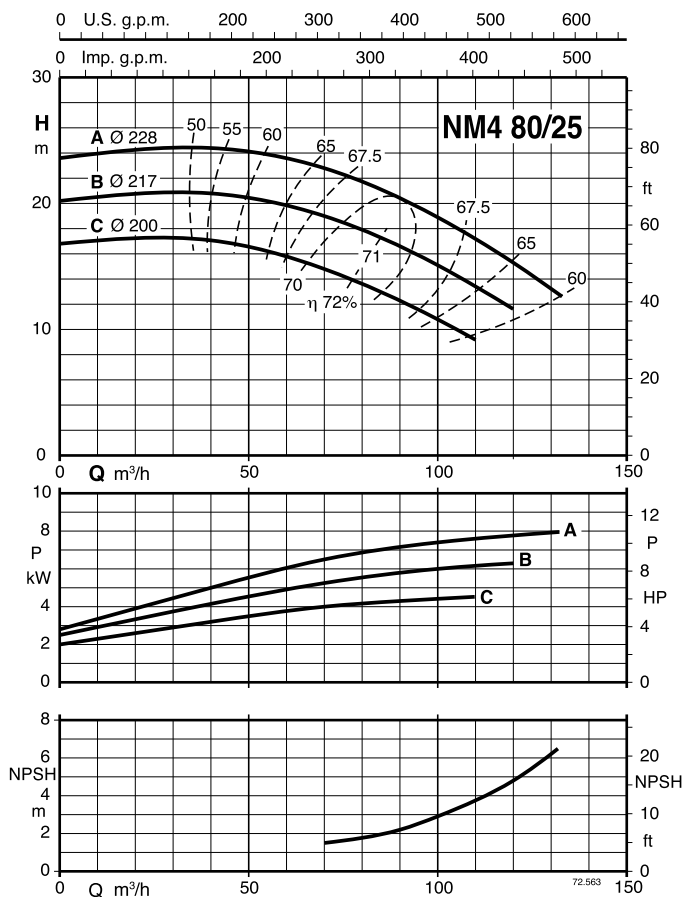
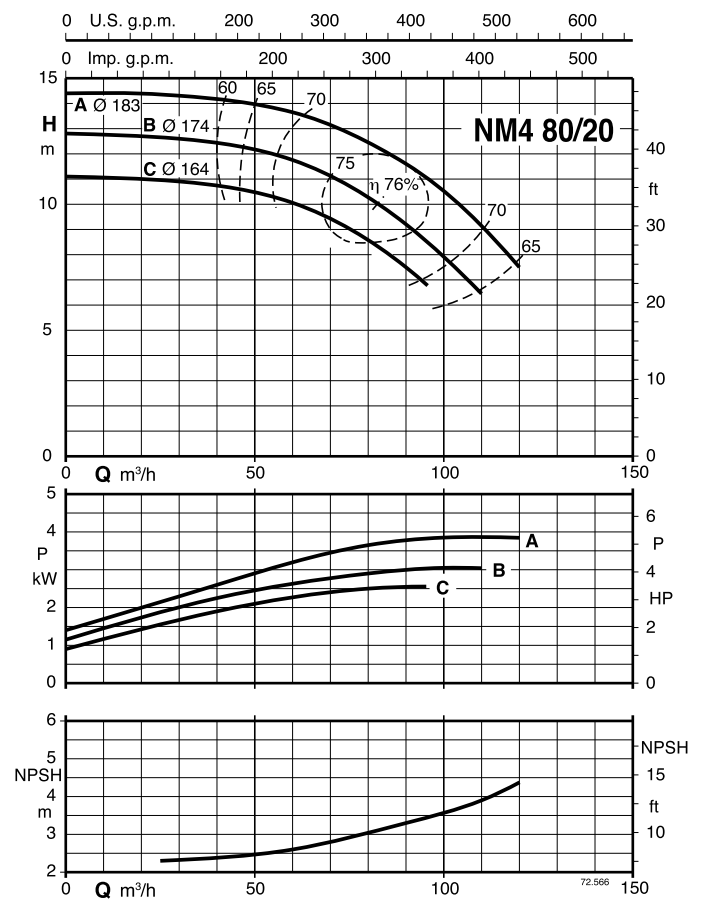
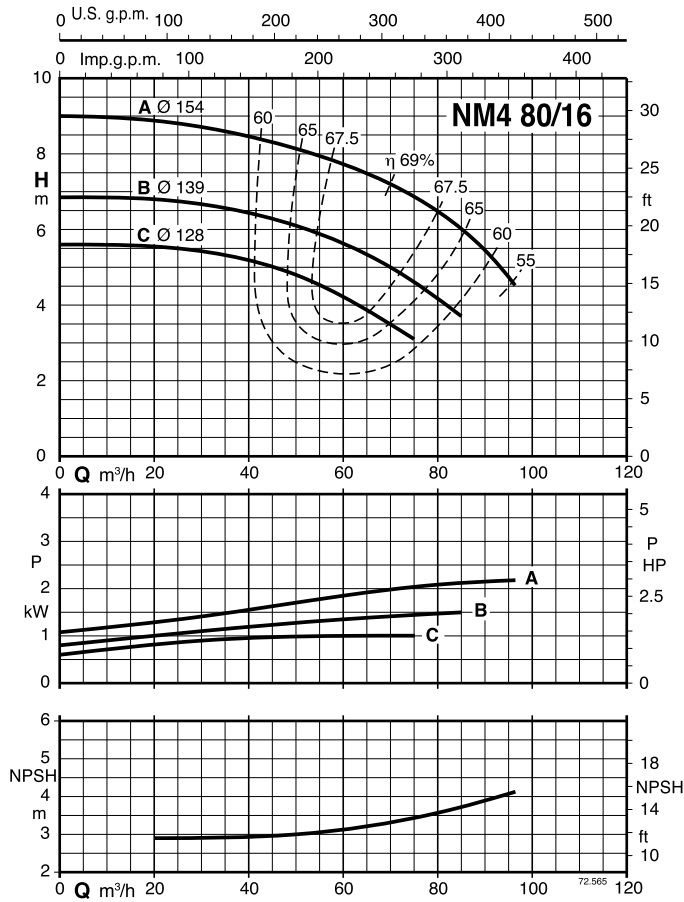
Characteristic curves n = 1750 rpm



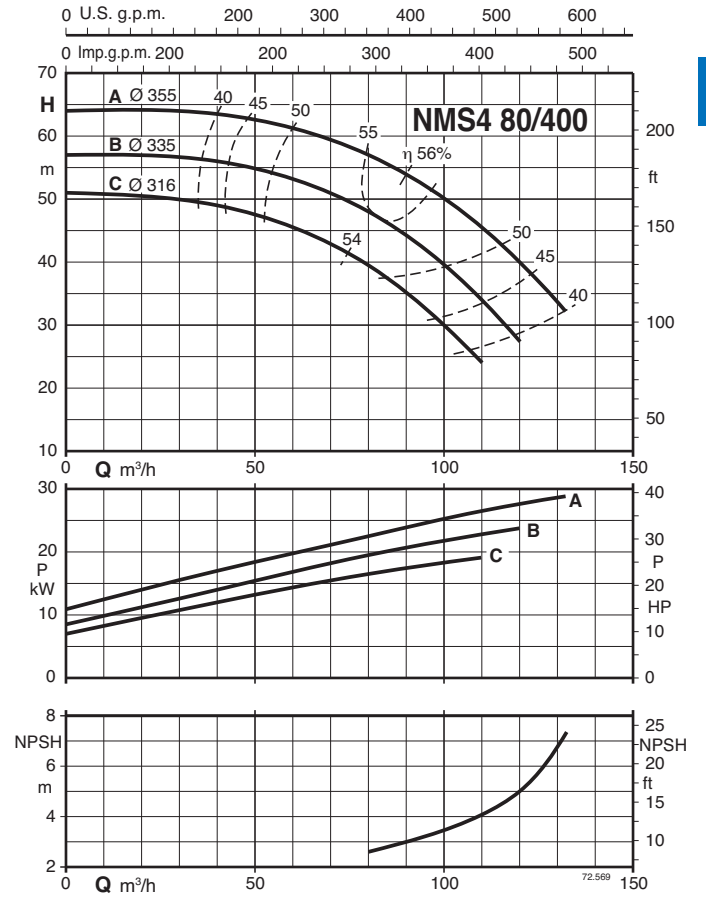
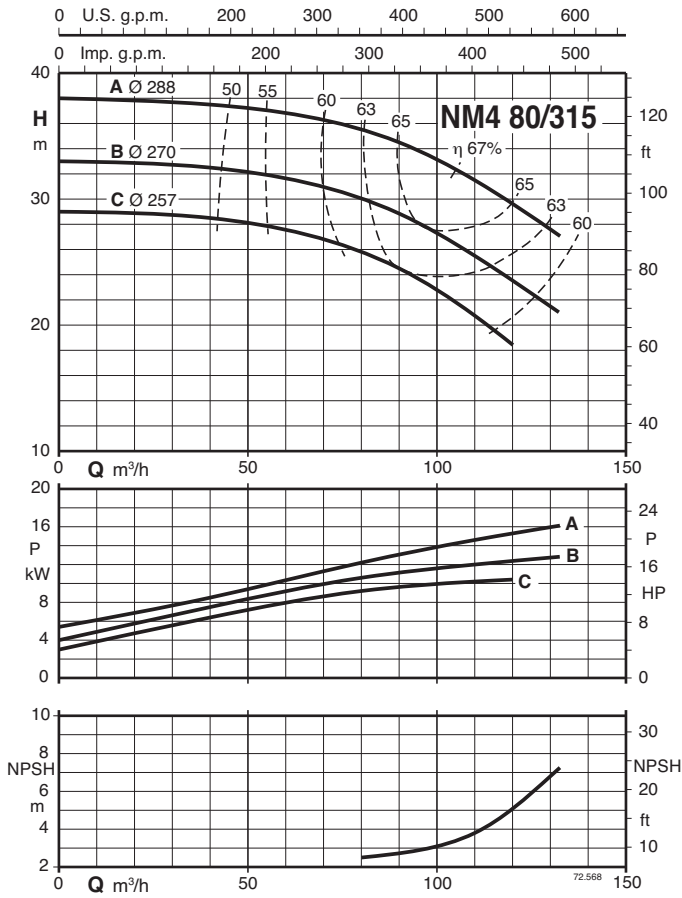
Characteristic curves n = 1750 rpm



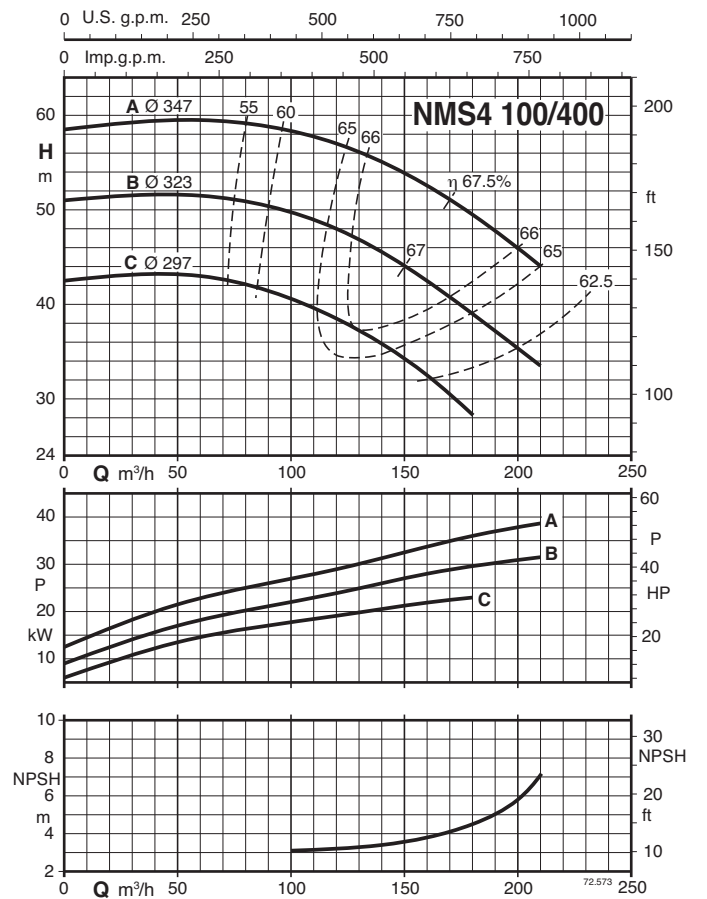
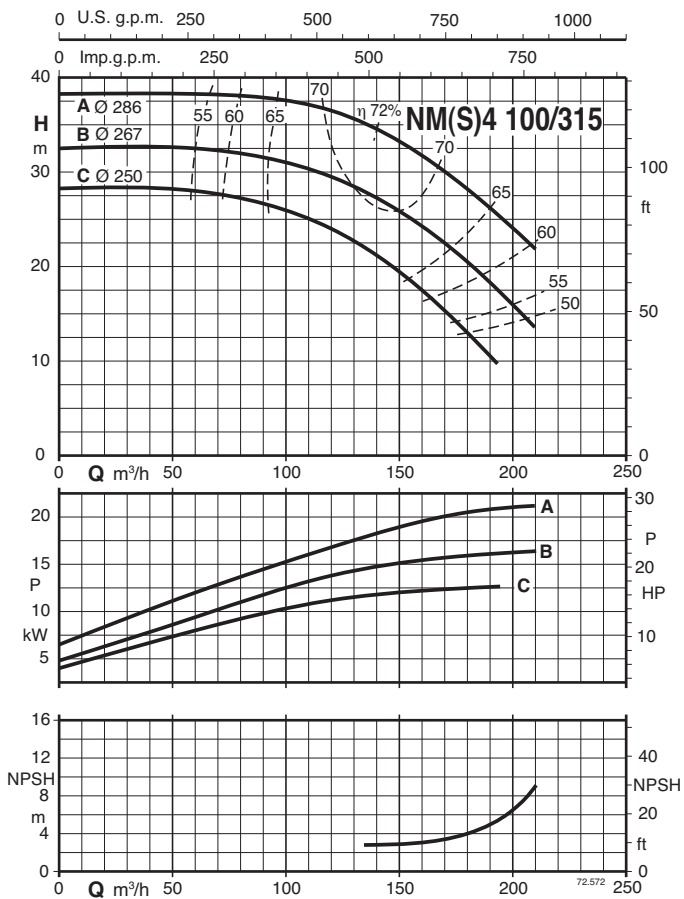
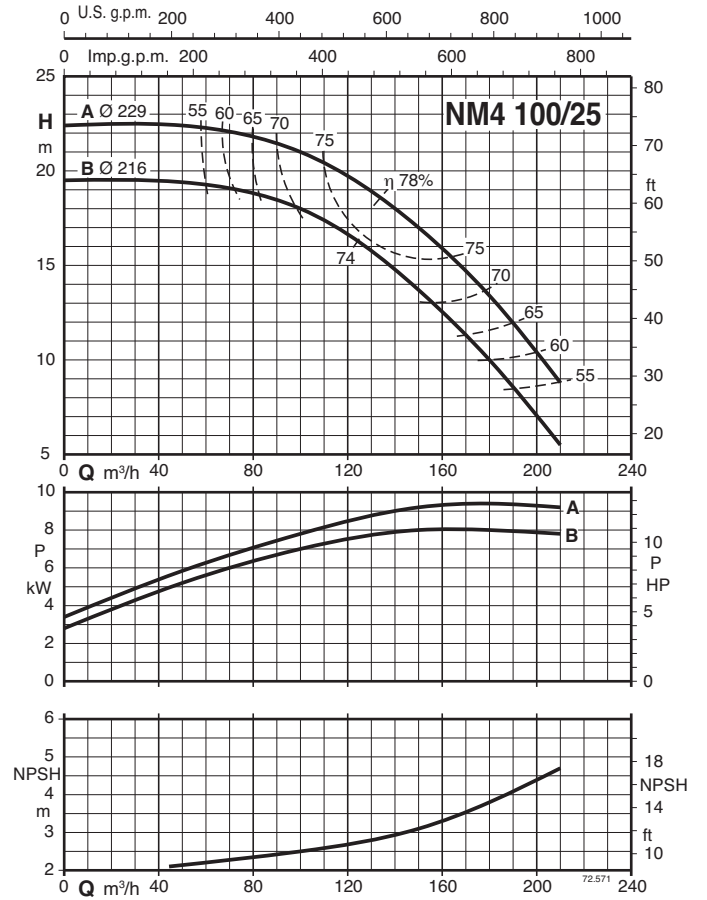
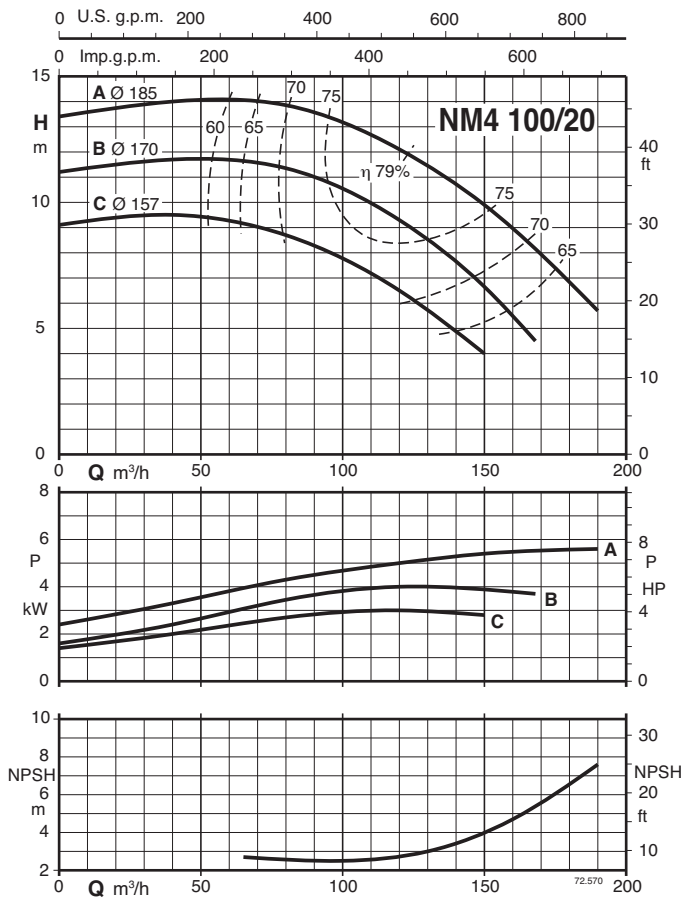
Characteristic curves n = 1750 rpm



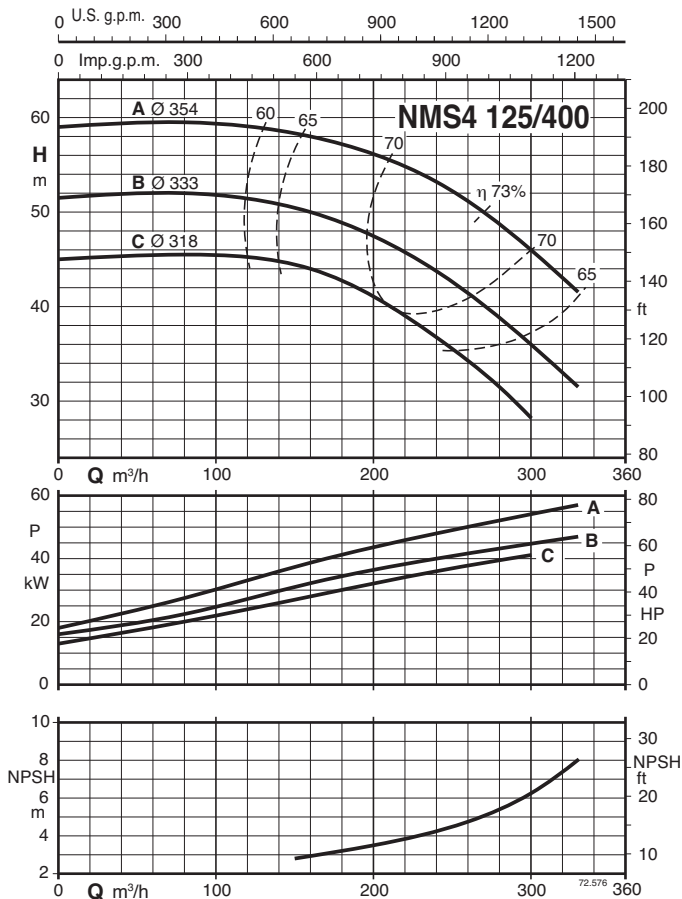
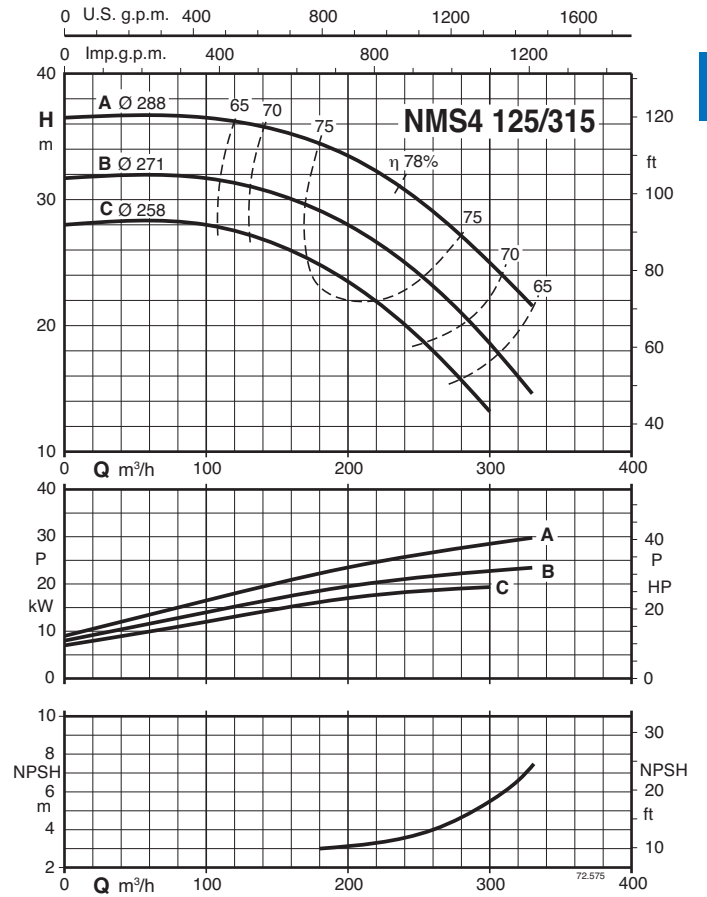
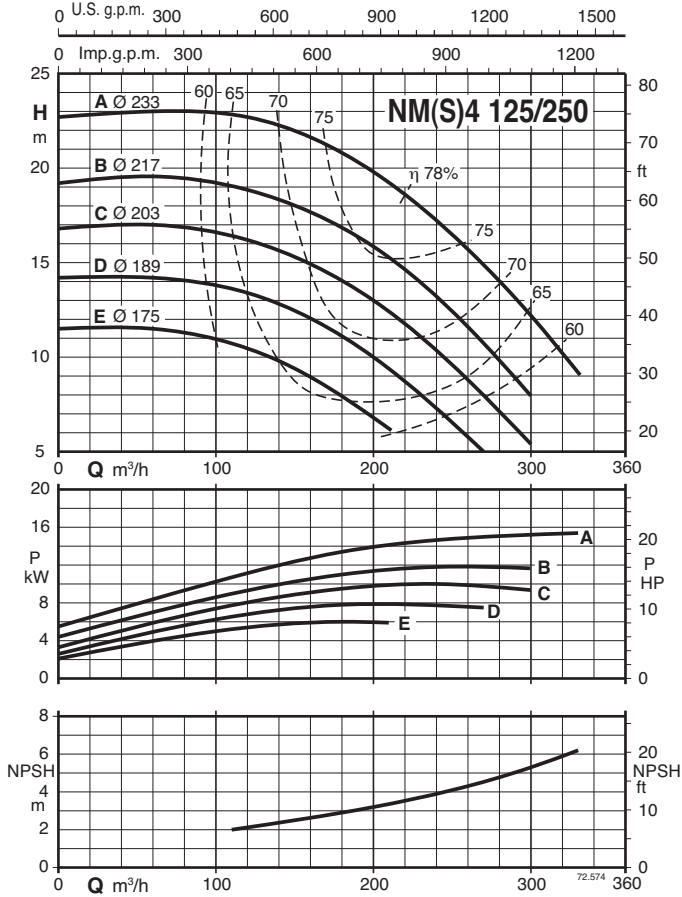
Characteristic curves n = 1750 rpm



Characteristic curves n = 1750 rpm



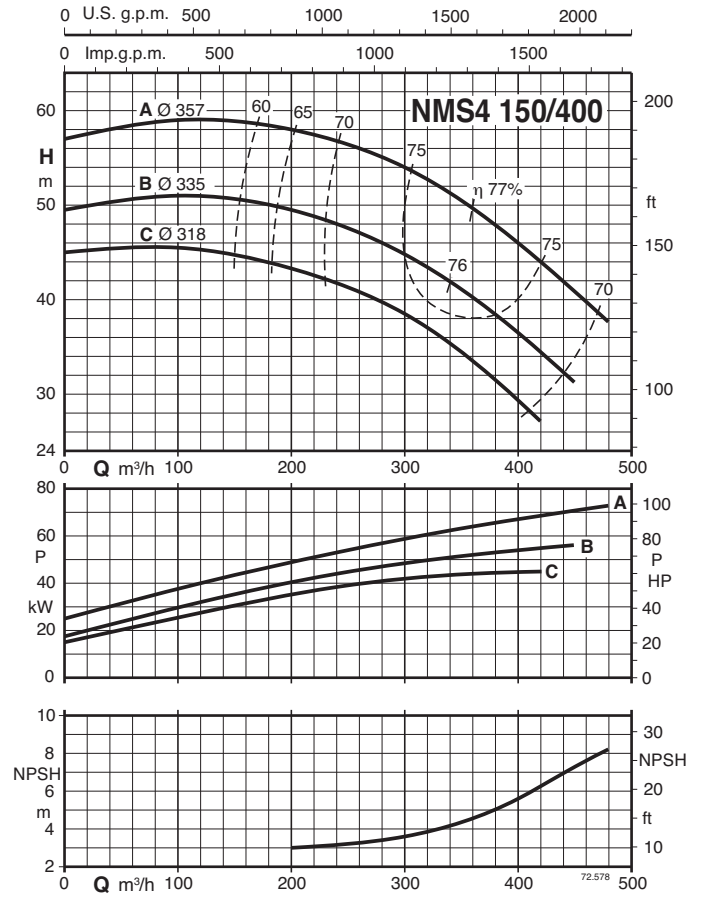
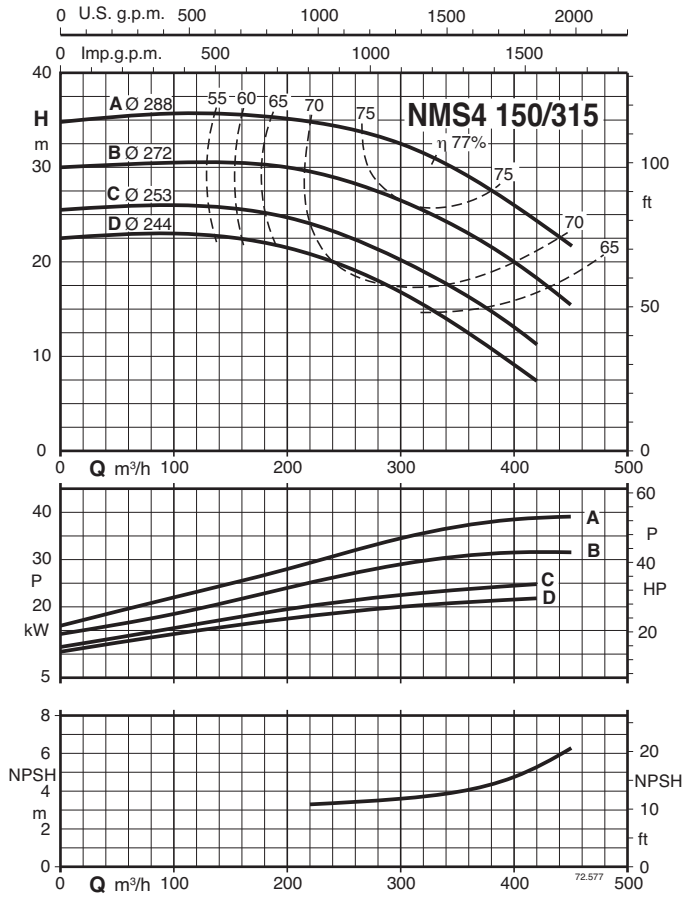
Characteristic curves n = 1750 rpm



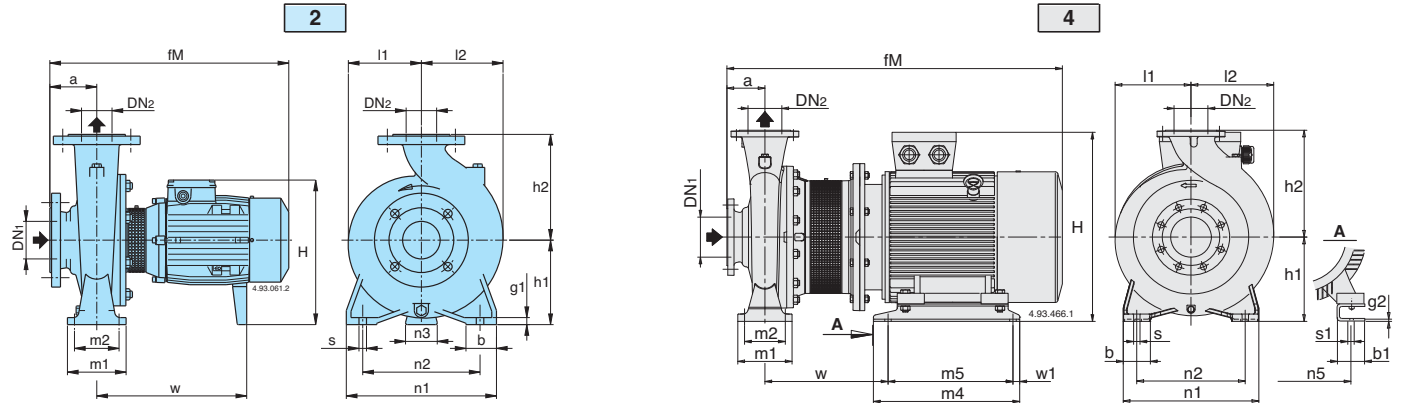
NM4, NMS4 60 Hz Close Coupled Centrifugal Pumps with flanged connections



Characteristic curves n = 1750 rpm



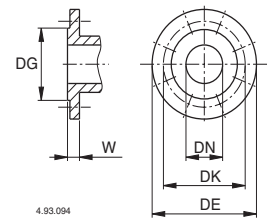
Dimensions and weights



Standard construction

Flanges EN 1092-2

Picture	NM4	mm																				kg						
		DN1	DN2	a	fm	h1	h2	H	h4	m1	m2	n1	n2	n3	n5	w1	b	b1	s	s1	l1		l2	w	m4	m5	g1	g2
2	NM4 32/16AE-60-BE-60	50	32	80	410	132	160	260	-	100	70	240	190	47	-	50	-	14	-	120	120	255	-	-	12	-	30,5-30	
	NM4 32/20A-60/A-BE-60	50	32	80	410	160	180	288	-	100	70	240	190	62	-	50	-	14	-	140	140	255	-	-	12	-	38-34,5	
	NM4 40/16A-60/B-B-60/A-C-60/A	65	40	80	410	132	160	268	-	100	70	240	190	47	-	50	-	14	-	119	119	255	-	-	12	-	37-33-31	
	NM4 40/20A-60/A-B-60/A	65	40	100	470	160	180	288	-	100	70	265	212	62	-	50	-	14	-	140	140	255	-	-	12	-	41-40,5	
	NM4 40/25B-60/B-C-60/B	65	40	100	495	180	225	308	-	125	95	320	250	60	-	65	-	14	-	175	175	300	330	-	-	15	-	66,5-62
	NM4 40/25A-60/B				525	340	78																					
	NM4 50/16A-60/B-B-60/B	65	50	100	470	160	180	288	-	100	70	265	212	62	-	50	-	14	-	127	141	255	-	-	12	-	40-39,5	
	NM4 50/20C-60/B	65	50	100	480	160	200	288	-	100	70	265	212	62	-	50	-	14	-	140	153	265	310	-	-	14	-	44,5
	NM4 50/20A-60/B-B-60/B				505																							60
	NM4 50/25C-60/B-D-60/A	65	50	100	490	180	225	308	-	125	95	320	250	60	-	65	-	14	-	175	175	300	330	-	-	15	-	68
	NM4 50/25A-60/B-B-60/B				525																							340
	NM4 65/16B-60/A-C-60/A	80	65	100	470	160	200	288	-	125	95	280	212	62	-	65	-	14	-	150	172	255	300	-	-	15	-	48-48
	NM4 65/16A-60/A				495																							60
	NM4 65/20B-60/A	80	65	100	505	180	225	308	-	125	95	320	250	60	-	65	-	14	-	155	175	310	330	-	-	15	-	61
	NM4 65/20A-60/A				525																							340
	NM4 65/25B-60/A	80	65	100	540	200	250	360	-	160	120	360	280	60	-	80	-	18	-	175	190	345	415	-	-	18	-	97
	NM4 65/25A-60/A				645																							385
	NM4 65/31B-60/A-C-60/A	80	65	125	670	225	280	410	-	160	120	400	315	75	-	80	-	18	-	220	220	415	465	-	-	20	-	164-153
	NM4 65/31A-60/A				720																							176
	NM4 80/16C-60/A	100	80	125	495	180	225	288	-	125	95	320	250	62	-	65	-	14	-	165	193	255	300	-	-	15	-	53
NM4 80/16A-60/A-B-60/A	520				308																							65,5-6,1
NM4 80/20C-60/A	100	80	125	540	180	250	308	-	125	95	345	280	60	-	65	-	14	-	170	194	320	340	-	-	15	-	74,5	
NM4 80/20A-60/A-B-60/A				560																							340	91-8,2
NM4 80/25C-60/A	100	80	125	565	200	280	360	-	160	120	400	315	60	-	80	-	18	-	191	210	335	415	-	-	20	-	102	
NM4 80/25A-60/A-B-60/A				670																							385	135-12,4
NM4 80/31C-60/A	100	80	125	720	250	315	435	-	160	120	400	315	90	-	80	-	18	-	220	232	465	-	-	20	-	181		
3	NM4 80/31A-60/A-B-60/A	100	80	125	850	260	315	466	10	160	120	400	315	-	254	20	80	74	18	14	220	232	210	435	395	-	6	269-248
	NM4 100/20B-60/A-C-60/A	125	100	125	565	200	280	360	-	160	120	360	280	60	-	80	-	18	-	180	212	360	410	-	-	20	-	99-90
	NM4 100/20A-60/A				665																							385
2	NM4 100/25B-60/A	125	100	140	685	225	280	410	-	160	120	400	315	75	-	80	-	18	-	205	233	415	465	-	-	20	-	143
	NM4 100/25A-60/A				735																							152
3	NM4 100/315B-60/A-C-60/A	125	100	140	865	260	315	466	10	160	120	400	315	-	254	20	80	74	18	14	230	250	210	435	395	-	6	280-261
2	NM4 125/25D-60/A-E-60/A	150	125	140	685	250	355	435	-	160	120	400	315	90	-	80	-	18	-	235	268	415	465	-	-	20	-	161-149
	NM4 125/25C-60/A				735																							173
3	NM4 125/25A-60/A-B-60/A	150	125	140	865	260	355	466	10	160	120	400	315	-	254	20	80	74	18	14	235	268	210	435	395	-	6	261-243



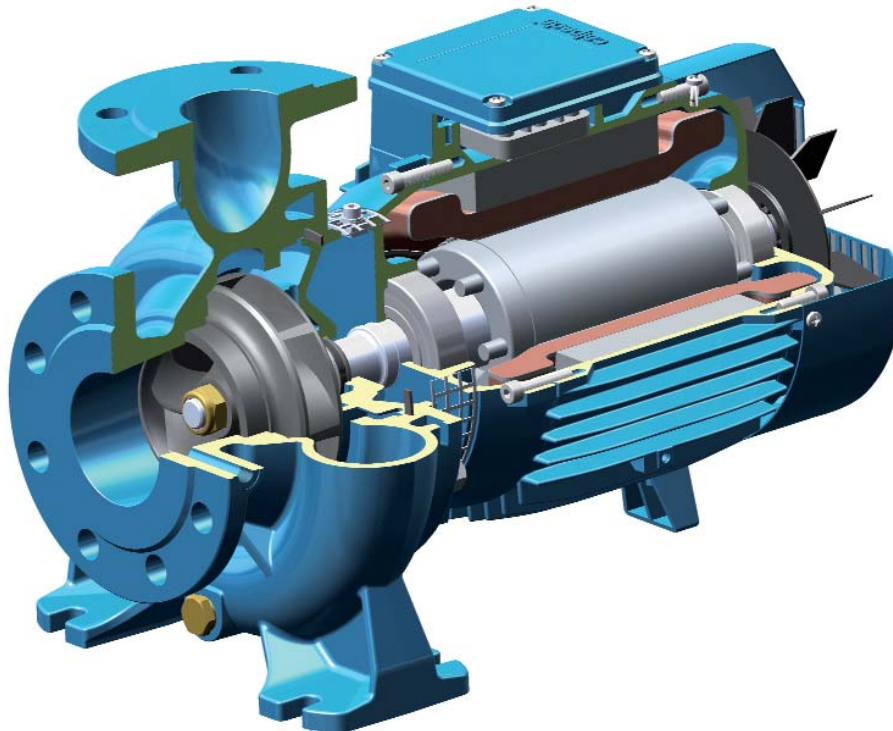
mm						
DN	DG	DK	DE	Holes		W
				N°	Ø	
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22
100	156	180	220	8	19	24
125	184	210	250	8	19	24
150	211	240	285	8	23	26
200	266	295	340	8	23	30

Picture	NMS4	mm																				kg			
		DN1	DN2	a	fm	h1	h2	H	m1	m2	n1	n2	n5	w1	b	b1	s	s1	l1	l2	w		m4	m5	g2
4	NMS4 80/400C-60	125	80	125	974	280	355	542	160	120	435	355	279	25	80	70	18	15	268	268	318	520	435	6	-
	NMS4 80/400B-60	125	80	125	1025	280	355	542	160	120	435	355	279	25	80	70	18	15	268	268	318	520	435	6	-
	NMS4 80/400A-60	125	80	125	1025	280	355	580	160	120	435	355	318	25	80	83	18	19	268	268	334	540	455	6	413
	NMS4 100/315A-60	125	100	140	984	250	315	512	160	120	400	315	279	25	80	70	18	15	230	250	312	432	382	6	308
	NMS4 100/400C-60	125	100	140	1040	280	355	542	200	150	500	400	279	25	100	70	22	15	268	280	318	520	435	6	366
	NMS4 100/400B-60	125	100	140	1040	280	355	580	200	150	500	400	318	25	100	83	22	19	268	280	334	540	455	6	419
	NMS4 100/400A-60	125	100	140	1139	280	355	605	200	150	500	400	356	55	100	103	22	19	268	280	384	540	460	8	506
	NMS4 125/315C-60	150	125	140	989	280	355	542	200	150	500	400	279	25	100	70	22	15	247	278	318	520	435	6	331
	NMS4 125/315B-60	150	125	140	1040	280	355	542	200	150	500	400	279	25	100	70	22	15	247	278	318	520	435	6	356
	NMS4 125/315A-60	150	125	140	1040	280	355	580	200	150	500	400	318	25	100	83	22	19	247	278	334	540	455	6	-
	NMS4 125/400C-60	150	125	140	1139	315	400	640	200	150	500	400	356	25	100	103	22	19	280	305	409	540	461	8	-
	NMS4 125/400B-60	150	125	140	1199	315	400	640	200	150	500	400	356	25	100	103	22	19	280	305	409	540	461	8	524
	NMS4 125/400A-60	150	125	140	1307	315	400	707	200	150	500	400	406	25	100	100	22	24	280	305	454	540	461	8	-
	NMS4 150/315D-60	200	150	160	1009	280	400	542	200	150	550	450	279	25	100	70	22	15	260	298	318	520	435	6	349
	NMS4 150/315C-60	200	150	160	1060	280	400	542	200	150	550	450	279	25	100	70	22	15	260	298	318	520	435	6	374
	NMS4 150/315B-60	200	150	160	1060	280	400	580	200	150	550	450	318	25	100	83	22	19	260	298	334	540	455	6	421
	NMS4 150/315A-60	200	150	160	1159	280	400	605	200	150	550	450	356	55	100	103	22	19	260	298	384	540	460	8	-
	NMS4 150/400C-60	200	150	160	1219	315	450	640	200	150	550	450	356	25	100	103	22	19	295	328	409	540	461	8	594
	NMS4 150/400B-60	200	150	160	1277	315	450	707	200	150	550	450	406	25	100	100	22	24	295	328	404	540	461	8	715
	NMS4 150/400A-60	200	150	160	1280	315	450	747	200	150	550	450	457	45	100	100	22	24	295	328	432	625	535	6	-

Features

NM4

3



Cutting edge hydraulics

The geometry of the impeller and the pump casing are optimized to achieve maximum efficiency and the best suction capability.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NM and NM4 series pumps to be selected for use with different types of liquids.

Compact Design

The compact design allows for easy installation even in confined spaces.

Exclusive design

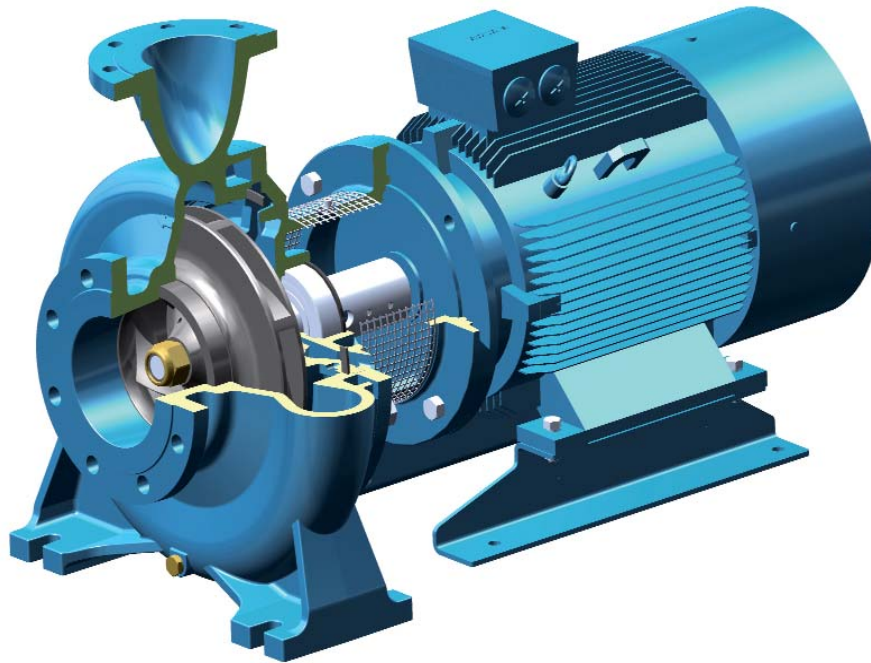
An innovative, patented guard prevents contact with rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Features

NMS4



Cutting edge hydraulics

The geometry of the impeller and the pump casing are optimized to achieve maximum efficiency and the best suction capability.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NMS and NMS4 series pumps to be selected for use with different types of liquids.

New lantern bracket construction

The lantern brackets incorporate a thrust bearing on the hydraulic side which guarantees the elimination of additional loads on the motor bearings. The flange is sized to be used with standard motors B35.

Exclusive design

An innovative, patented guard prevents contact with rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Simplified motor maintenance

The presence of the thrust bearing on the hydraulic side makes it easier to remove the motor, facilitating maintenance operations and eliminating the risks of damage to the hydraulic parts.



Windsor Pump Co.

Head Office

3057 Marentette Ave
Windsor, On N8X 4G1

Phone: 1-(519) 969-2190
Fax: 1-(519) 969-2047

Email: sales@windsorpump.com

Sales and Engineering

Dan Kurtz
Phone: 1-(226) 377-4100
Fax: 1-(905) 847-2425

Email: dan@windsorpump.com
www.windsorpump.com

Peter Kurtz
Phone: 1-(905) 302-3933
Fax: 1-(905) 847-2425

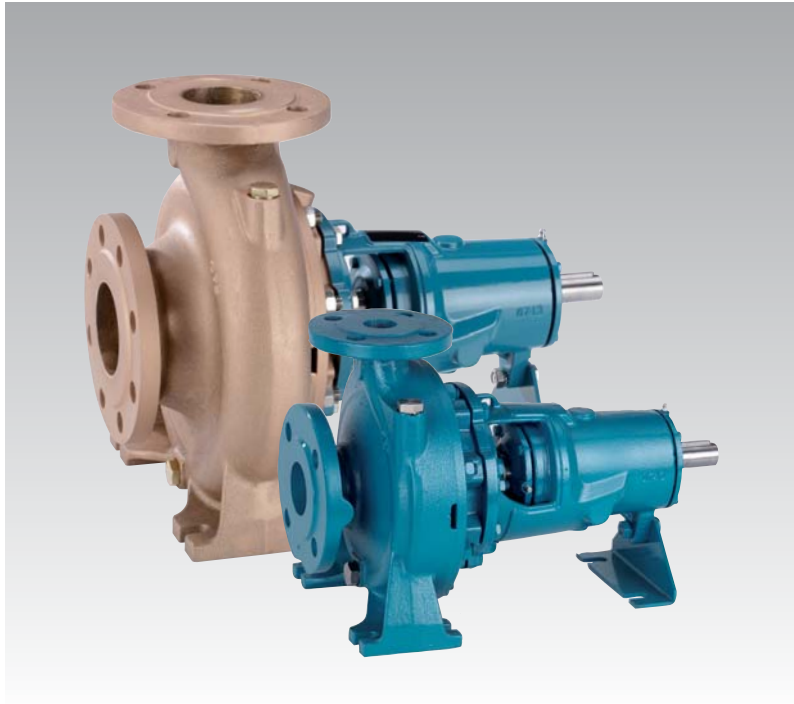
E-mail: peter@windsorpump.com
www.windsorpump.com



N, N4

60 Hz

End-Suction Centrifugal Pumps



Construction

Single-stage end-suction centrifugal pumps, with bearing bracket.

Nominal duty points and main dimensions in accordance with EN 733 (DIN 24255).

Back Pull-Out construction, for simple and quick dismantling and reassembly.

The pumps in bronze are supplied fully painted.

Rated speed of rotation (60 Hz): **N** = 3450 rpm
N4 = 1750 rpm

Connections: PN 10 flanges EN 1092-2.

Counter-flanges (on request)

Sizes	Flanges
from 32-160 to 50-250	Screwed flanges PN 16 EN 1092-1
from 65-125 to 150-400	Flanges for welding PN 10 EN 1092-1

Shaft sealing

- Standardized mechanical seal in accordance with ISO 3069.
- Stuffing box seal (on request).

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 and for agriculture.
- 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.

Maximum permissible rotation speed: see table on page 52.

Pump-Motor unit

N,N4 pump connected to a standard electric motor in B3 construction form (EN 60072-1).

Classification scheme IE2 for three-phase motor from 0,75 kW.

IP 55 protection,

Three-phase 380-415 V , 60 Hz by means of a baseplate, driven by a flexible coupling and with coupling protection.

Motor suitable for operation with frequency converter.

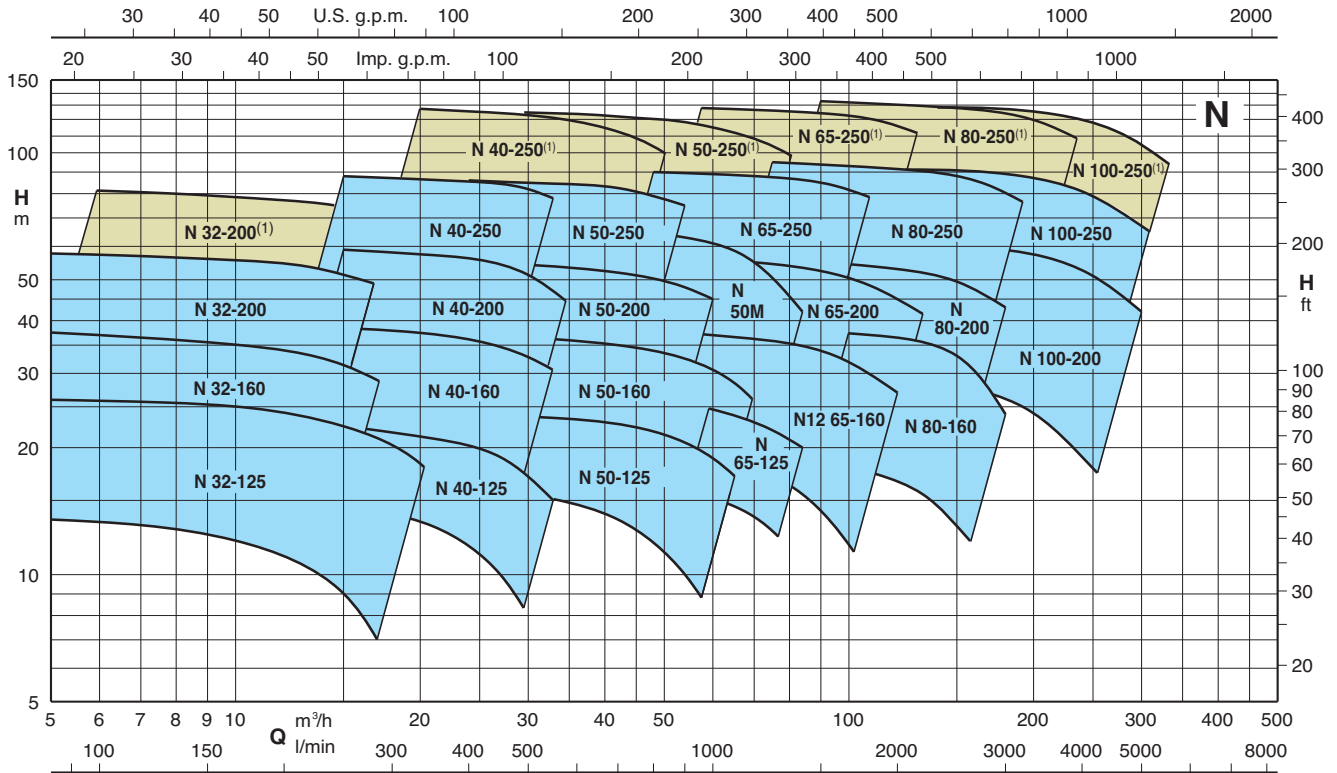
Special features on request

- Special mechanical seal.
- Chrome-nickel steel AISI 316 pump-shaft.
- Higher or lower liquid or ambient temperatures.
- Other motor protection.
- Explosion proof construction in accordance with Directive 94/9 EEC (ATEX).
- Motor for other voltage.

Materials

Components	N, N4 Mechanical seal	N, N4 Stuffing box	B-N, B-N4 Mechanical seal
Pump casing	Cast iron		Bronze
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 32-125, 32-160, 32-200, 40-200		
Shaft	Chrome steel 1.4104 EN 10088 (AISI 430)	Carbon steel C 40 UNI 7845	Cr-Ni-Mo steel 1.4401 EN 10088 (AISI 316)
Shaft sleeve	–	Bronze G-Cu Sn5 Zn5 Pb5 EN 1982 with chromate surface	–
Mechanical seal	Carbon - Ceramic - NBR	–	Carbon - Ceramic - NBR
Counter-flanges	Steel Fe 430B UNI 7070		

Coverage chart n = 3450 rpm



(1) Special execution

72.843.C

Performance n ≈ 3450 rpm

B-N	N	P ₂		Q m³/h	Q															
		kW	HP		l/min	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30	
B-N 32-125F-60/A	N 32-125F-60/A	0,55	0,75	H m	14	13,5	13	12,5	12	11,5	10,5	9								
B-N 32-125D-60/A	N 32-125D-60/A	0,75	1		19,5	19	19	18,5	18											
B-N 32-125D-60/A	N 32-125D-60/A	1,1	1,5		19,5	19	19	18,5	18	17,5	16,5	15,5								
B-N 32-125A-60/A	N 32-125A-60/A	1,1	1,5		24,5	24	24	23,5	23											
B-N 32-125A-60/A	N 32-125A-60/A	1,5	2		24,5	24	24	23,5	23	22	21,5	20								
B-N 32-125S-60/A	N 32-125S-60/A	1,5	2		26	26	25,5	25,5	25	24,5	24	22,5	21*	19*	16,5*	12,5*				
B-N 32-160B-60/A	N 32-160B-60/A	1,5	2		31	30,5	30	29,5	29											
B-N 32-160B-60/A	N 32-160B-60/A	2,2	3		31	30,5	30	29,5	29	28	27	25*	23*							
B-N 32-160A-60/A	N 32-160A-60/A	2,2	3		36,5	36	35,5	35	34	33										
B-N 32-160A-60/A	N 32-160A-60/A	3	4		36,5	36	35,5	35	34	33	32,5	31*	29*							
B-N 32-200D-60/A	N 32-200D-60/A	2,2	3		39	38	37,5	36,9	35											
B-N 32-200D-60/A	N 32-200D-60/A	3	4		39	38	37,5	36,9	35	34	32									
B-N 32-200C-60/A	N 32-200C-60/A	3	4		45	44,5	44	43	42	41	40	37	34*							
B-N 32-200A-60/A	N 32-200A-60/A	4	5,5		57	56,5	56	55,5	55	54	53									
B-N 32-200A-60/A	N 32-200A-60/A	5,5	7,5		57	56,5	56	55,5	55	54	53	51	49*							

N	N	P ₂		Q m³/h	Q															
		kW	HP		l/min	15	16,8	18,9	21	24	27	30	33	37,8	39	42	45	48	54	
B-N 40-125F-60/A	N 40-125F-60/A	1,1	1,5	H m	15,4	14,9	14,3	13,4	11,8	10	7,8	5,6								
B-N 40-125C-60/A	N 40-125C-60/A	1,5	2		18,5	18,1	17,6	17	15,8	14,2	12,4	10,5	6,9							
B-N 40-125A-60/A	N 40-125A-60/A	2,2	3		22,5	22,3	21,9	21,4	20,6	19,6	18,3	16,7	13,7	12,9						
B-N 40-160C-60/A	N 40-160C-60/A	2,2	3		25,5	25,1	24,4	23,6	22,1											
B-N 40-160C-60/A	N 40-160C-60/A	3	4		25,5	25,1	24,4	23,6	22,1	20,1	17,8	15,4	10,6							
B-N 40-160B-60/A	N 40-160B-60/A	2,2	3		31	30,6	30,3	29,6	28,5	27,1										
B-N 40-160B-60/A	N 40-160B-60/A	3	4		31	30,6	30,3	29,6	28,5	27,1	25,4	23,2	19,2	18,1						
B-N 40-160A-60/A	N 40-160A-60/A	4	5,5		37,1	36,9	36,5	36,1	35,2	34,3	33,2	31,8								
B-N 40-160A-60/A	N 40-160A-60/A	5,5	7,5		37,1	36,9	36,5	36,1	35,2	34,3	33,2	31,8	28,8	27,9	25,6	23				
B-N 40-200C-60/A	N 40-200C-60/A	4	5,5		44	43	42	41												
B-N 40-200C-60/A	N 40-200C-60/A	5,5	7,5		44	43	42	41	39	36										
B-N 40-200B-60/A	N 40-200B-60/A	5,5	7,5		52	51,5	50,5	49,5	47,5	44,5	40	35								
B-N 40-200AR-60/A	N 40-200AR-60/A	5,5	7,5		56,5	56	55	54	52											
B-N 40-200AR-60/A	N 40-200AR-60/A	7,5	10		56,5	56	55	54	52	49										
B-N 40-200A-60/A	N 40-200A-60/A	7,5	10		59,5	59	58,5	58	56	53,5	50,5	47	38,5							
B-N 40-250C-60/A	N 40-250C-60/A	11	15		65,4	65	64,4	63,5	61,5	58,6	54,2	49								
B-N 40-250B-60/A	N 40-250B-60/A	11	15	71,5	71,3	70,8	70,3	68,9	66,4	63,3	59,2	50								
B-N 40-250A-60/A	N 40-250A-60/A	15	20	90,4	90,2	89,7	89,1	88,5	87,3	86,1	83,8	78	76							

Performance n ≈ 3450 rpm

B-N	N	P ₂		Q m ³ /h l/min	H m															
		kW	HP		24	27	30	33	37,8	42	48	54	60	66	69	72	75	84		
					400	450	500	550	630	700	800	900	1000	1100	1150	1200	1250	1400		
B-N 50-125F-60/A	N 50-125F-60/A	2,2	3				16,1	15,4	14,2	13	11,1	8,6	5,8							
B-N 50-125D-60/A	N 50-125D-60/A	3	4				19,4	19	18	17	15,5	13,5	11,1	8,4						
B-N 50-125A-60/A	N 50-125A-60/A	4	5,5				24,8	24,6	24	23,4	22,3									
B-N 50-125A-60/A	N 50-125A-60/A	5,5	7,5				24,8	24,6	24	23,4	22,3	20,8	19	17	16	14,8	13,6			
B-N 50-160B-60/A	N 50-160B-60/A	5,5	7,5				35,3	34,9	33,6											
B-N 50-160B-60/A	N 50-160B-60/A	7,5	10				35,3	34,9	33,6	32,4	30,1	27,5	24,5	20,9	19	17,1	15,1			
B-N 50-160A-60/A	N 50-160A-60/A	7,5	10				41,7	41,6	41,2	40,3	38,5	36,3	33,8	30,9	29,4	27,8	26,1	20,4		
B-N 50-200B-60/A	N 50-200B-60/A	11	15			51	50,6	50,4	49,8	48,5	47,1	44	40,5	36	30,2	27,3				
B-N 50-200A-60/A	N 50-200A-60/A	11	15			57,6	57,7	57,3	56,9	55,7	54,6	52,2	49,5	46	41,8	39	36,2	33,2		
B-N 50-250C-60/A	N 50-250C-60/A	11	15			61,9	61,2	60,3	59,3	57,2	55	50	44	36,5						
B-N 50-250B-60/A	N 50-250B-60/A	15	20			74,6	73,9	73,2	72	70,1	68,1	64,3	59,3	52,8	43,8					
B-N 50-250A-60/A	N 50-250A-60/A	18,5	25			87,6	87,3	86,9	86,2	84,7	83	79,8	76	72	66,9					
B-N 50M/E-60/A	N 50M/E-60/A	11	15					47,5	47	46	45	42	38,5	34	29	26	24	20		
B-N 50M/D-60/A	N 50M/D-60/A	15	20					58	57,5	56	55	53	50,5	47,5	44	42	40	36,5	25*	
B-N 50M/C-60/A	N 50M/C-60/A	18,5	25					69	68,5	67,5	66,5	64,5	62,5	60,5	57,5	56	54	51	42*	

4

B-N	N	P ₂		Q m ³ /h l/min	H m															
		kW	HP		37,8	42	48	54	60	66	75	84	96	108	120	132	150	168		
					630	700	800	900	1000	1100	1250	1400	1600	1800	2000	2200	2500	2800		
B-N 65-125E-60/A	N 65-125E-60/A	4	5,5		19	18,5	18	17	16	15	13*									
B-N 65-125C-60/A	N 65-125C-60/A	5,5	7,5		23	22,5	22	21,5	21	19,5	17,5	15*								
B-N 65-125A-60/A	N 65-125A-60/A	7,5	10		27	26,5	26	25,5	25	24	22	19,5*								
B-N 65-160E-60/A	N 65-160E-60/A	5,5	7,5				20	19,5	19	18	17	15	13*	10*						
B-N 65-160D-60/A	N 65-160D-60/A	7,5	10				26	25,5	25	24,5	23,5	22	19,5*	16,5*	13*					
B-N 65-160C-60/A	N 65-160C-60/A	11	15				30	29,5	29	28,5	27,5	26,5	24*	21*	18*					
B-N 65-160B-60/A	N 65-160B-60/A	11	15				33,5	33	32,5	32	31	29,5	28*	25*	22,5*					
B-N 65-160A-60/A	N 65-160A-60/A	15	20				37,5	37	37	36,5	36	34,5	33*	30*	27*					
B-N 65-200C-60/A	N 65-200C-60/A	15	20				44	43,5	43	42,5	41	40	37,5*	35*	31*	27*				
B-N 65-200B-60/A	N 65-200B-60/A	18,5	25				49,5	49	48,5	48	47,5	46,5	44,5*	42*	38,5*	35*				
B-N 65-200A-60/A	N 65-200A-60/A	22	30				56	55,5	55	54,5	54	53,5	51*	48*	45*	41*				
B-N 65-250C-60	N 65-250C-60	22	30				64	63	62,5	61,5*	60*	57,5*	54,5*	50*						
B-N 65-250B-60	N 65-250B-60	30	40				79,5	79	78,5	78*	77*	75*	71*	66,5*						
B-N 65-250A-60	N 65-250A-60	37	50				90	89,5	89	88,5*	87*	86*	83*	78,5*						

B-N	N	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		
					1250	1400	1600	1800	2000	2200	2500	2800	3000	3200	3500	4000	4500	5000		
B-N 80-160E-60/A	N 80-160E-60/A	7,5	10		19,5	19														
B-N 80-160E-60/A	N 80-160E-60/A	11	15		19,5	19	18	17,5*	16,5*	15*	13*									
B-N 80-160D-60/A	N 80-160D-60/A	11	15		23	22,5	22	21*	19,5*	18*	15*									
B-N 80-160C-60/A	N 80-160C-60/A	11	15		27,5	27	25,5	25*	24,5*	23*	20*	16*								
B-N 80-160B-60/A	N 80-160B-60/A	15	20		34	33,5	33	32,5*	31,5*	31*	28*	22,5*	18*							
B-N 80-160A-60/A	N 80-160A-60/A	18,5	25		38,5	38	37,5	37*	36,5*	36*	33*	28,5*	24*							
B-N 80-200B-60	N 80-200B-60	22	30		46,5	46	45,5	44,5	43,5*	42*	39*	35*	32*							
B-N 80-200A-60	N 80-200A-60	30	40		56	55,5	55	54	53,5*	52*	49*	46*	43*							
B-N 80-250E-60	N 80-250E-60	22	30		51	50	48,5	46,5	44,5*	42*	38*	33*	29*							
B-N 80-250D-60	N 80-250D-60	30	40		65	64	62,5	61	59*	56,5*	53*	49*	45*	41*						
B-N 80-250C-60	N 80-250C-60	37	50		73,5	73	72	70,5	69*	67*	63*	59*	55*	51*						
B-N 80-250B-60	N 80-250B-60	45	60		84	83,5	82,5	81	80*	78*	74*	70*	67*	62,5*						
B-N 80-250A-60	N 80-250A-60	55	75		94,5	94	93	92,5	91,5*	90*	87,5*	84*	80*	76,5*						
B-N 100-200E-60	N 100-200E-60	18,5	25				30	29,5	29	28	27	26*	24,5*	22,5*	19*					
B-N 100-200D-60	N 100-200D-60	22	30				36	35,5	35	34	33	32*	31*	29*	24*					
B-N 100-200C-60	N 100-200C-60	30	40				45	44,5	44	43	42,5	41*	40*	39*	34*	28*				
B-N 100-200B-60	N 100-200B-60	37	50				54	53,5	53	52,5	51,5	50*	49*	47,5*	43*	38*				
B-N 100-200A-60	N 100-200A-60	45	60				61,5	61	60,5	60	59,5	59*	58*	56*	52,5*	48*	42*			
B-N 100-250B-60	N 100-250B-60	55	75				73,5	73	72,5	71,5	70	69*	67*	65*	60*	55*	48*	42*		
B-N 100-250A-60	N 100-250A-60	75	100				90,5	90	90	89	88,5	87,5*	87*	85*	81*	75*	67*	61*		

N Standard construction.
B-N Bronze 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 UNI EN ISO 9906:2012.

Performance $n \approx 1750$ rpm

B-N4	N4	P ₂		Q m ³ /h l/min	H m																			
		kW	HP		30	33	37,8	42	48	54	60	66	75	84	96	108	120	132	150	168	180	192	210	
B-N4 80-160C-60/A	N4 80-160C-60/A	1,1	1,5	5,3	5,2	5,1	5	4,9	4,5	4,1	3,8	3												
B-N4 80-160B-60/A	N4 80-160B-60/A	1,5	2	6,6	6,5	6,4	6,3	6,1	5,9	5,5	5,2	4,6	3,7											
B-N4 80-160A-60/A	N4 80-160A-60/A	2,2	3	8,6	8,5	8,4	8,3	8,1	7,9	7,6	7,3	6,9	6,1	4,5										
B-N4 80-200C-60	N4 80-200C-60	2,2	3	10,9	10,8	10,7	10,6	10,5	10,3	10	9,7	9,1	8,2	6,7										
B-N4 80-200B-60	N4 80-200B-60	3	4	12,5	12,5	12,4	12,3	12,1	12	11,7	11,4	10,6	9,8	8,5	6,5*									
B-N4 80-200A-60	N4 80-200A-60	4	5,5	14,2	14,1	14	14	13,9	13,8	13,5	13,4	12,8	12	11	9,2*	7,4*								
B-N4 80-250C-60	N4 80-250C-60	4	5,5	17,4	17,3	17,1	17	16,6	16,1	15,8	15,2	14,1	13	11,3	9,5*									
B-N4 80-250B-60	N4 80-250B-60	5,5	7,5	20,8	20,8	20,7	20,7	20,5	20,1	19,8	19,4	18,3	17,3	15,7	13,8*	11,5*								
B-N4 80-250A-60	N4 80-250A-60	7,5	10	24,2	24,2	24,1	24	24	23,9	23,4	23	22	21,1	19,4	17,5*	15,2*	12,7*							
B-N4 80-315C-60	N4 80-315C-60	11	15	28,5	28,5	28,5	28	27,5	27,5	27	27	26	25	23	21*	18*								
B-N4 80-315B-60	N4 80-315B-60	11	15	32,5	32,5	32,5	32	32	31,5	31,5	31	30,5	29,5	28	25,5*	23*	21*							
B-N4 80-315A-60	N4 80-315A-60	15	20	37,5	37,5	37,5	37	37	36,5	36,5	36	35,5	35	33	31,5*	29,5*	27*							
B-N4 80-400C-60	N4 80-400C-60	18,5	25	49,5	49,5	49	49	48	47	46	44	41	37,5	32	25*									
B-N4 80-400B-60	N4 80-400B-60	22	30	56,5	56,5	56	55,5	55	54,5	53	52	49,5	47	41	35*	27*								
B-N4 80-400A-60	N4 80-400A-60	30	40	63,5	63,5	63	63	62,5	62	61	60	58	55,5	52	46*	40*	33,5*							

4

B-N4	N4	P ₂		Q m ³ /h l/min	H m																			
		kW	HP		48	54	60	66	75	84	96	108	120	132	150	168	180	192	210	240	270	300	330	
B-N4 100-200C-60	N4 100-200C-60	3	4	9,4	9,4	9,2	9,1	8,9	8,5	8	7,2	6,4	5,5	4*										
B-N4 100-200B-60	N4 100-200B-60	4	5,5	11,7	11,7	11,6	11,5	11,4	11,2	10,8	10	9,2	8,3	6,5*	4,6*									
B-N4 100-200A-60	N4 100-200A-60	5,5	7,5	14	14	13,9	13,9	13,8	13,7	13,3	12,7	12	11,3	9,8*	8,2*	7*	5,5*							
B-N4 100-250B-60	N4 100-250B-60	7,5	10	19,4	19,4	19,3	19,2	19	18,6	18	17,4	16,5	15,5	13,8*	11,5*	10*	8,2*	5,5*						
B-N4 100-250A-60	N4 100-250A-60	11	15	22,4	22,4	22,2	22,1	21,9	21,4	21	20,4	19,6	18,8	17*	15*	13,3*	11,6*	8,8*						
B-N4 100-315C-60	N4 100-315C-60	11	15	28	28	27,9	27,9	27,5	27	26	25	23,5	22	19,5*	15,5*	13*	10*							
B-N4 100-315B-60	N4 100-315B-60	15	20	32,5	32,5	32,4	32,3	32	31,5	31	30,5	29,5	28,5	26*	22,5*	20*	17,5*	13,5*						
B-N4 100-315A-60	N4 100-315A-60	18,5	25	38,5	38,5	38,3	38,3	38	37,9	37,5	37	36	35	32,5*	30*	28*	26*	21*						
B-N4 100-400C-60	N4 100-400C-60	22	30	43	42,8	42,5	42,5	42	42	41	40	38,5	37	34*	30,5*	28*								
B-N4 100-400B-60	N4 100-400B-60	30	40	51,5	51,3	51	50,8	50,5	50,3	50	49	48	46	44*	41*	39*	37*	33*						
B-N4 100-400A-60	N4 100-400A-60	37	50	59,5	59,3	59	58,8	58,5	58,3	58	57,7	57	56	53,5*	51*	49*	47*	44*						

B-N4	N4	P ₂		Q m ³ /h l/min	H m																			
		kW	HP		84	96	108	120	132	150	168	180	192	210	240	270	300	330	360	390	420	450	480	
B-N4 125-250E-60	N4 125-250E-60	5,5	7,5	11,2	11	10,7	10,4	10	9,4	8,5	8	7,3	6,2											
B-N4 125-250D-60	N4 125-250D-60	7,5	10	14	13,9	13,7	13,4	13	12,4	11,6	11	10,4	9,3	7,3*	5*									
B-N4 125-250C-60	N4 125-250C-60	11	15	16,8	16,6	16,4	16,1	15,8	15,2	14,6	14	13,3	12,3	10,3*	8*	5,4*								
B-N4 125-250B-60	N4 125-250B-60	11	15	19,4	19,2	19	18,8	18,6	18	17,4	17	16,3	15,2	13,2*	10,8*	8*								
B-N4 125-250A-60	N4 125-250A-60	15	20	23	22,9	22,8	22,7	22,5	22	21,5	20,9	20,3	19,2	17,2*	14,9*	12,2*	9*							
B-N4 125-315C-60	N4 125-315C-60	18,5	25	28	27,8	27,5	27,3	27	26,5	25,5	25	24	23	20*	17*	13*								
B-N4 125-315B-60	N4 125-315B-60	22	30	32	31,7	31,5	31	30,8	30,5	29,5	29	28,5	27	25*	22*	18,5*	14,5*							
B-N4 125-315A-60	N4 125-315A-60	30	40	37	36,7	36,5	36	35,8	35,5	35	34,5	34	32,5	30,5*	28*	25*	21,5*							
B-N4 125-400C-60	N4 125-400C-60	37	50	45,5	45	44,8	44,6	44,5	44,3	43,5	43	42	40	36,5*	32,5*	28*								
B-N4 125-400B-60	N4 125-400B-60	45	60	51,7	51,5	51,3	51	50,7	50	49,5	49	48	46,5	43,5*	40*	35,5*	31*							
B-N4 125-400A-60	N4 125-400A-60	55	75	59,5	59,3	59	58,8	58,7	58	57,5	57	56,5	55,5	53*	50*	46*	41,5*							
B-N4 150-315D-60	N4 150-315D-60	18,5	25					22,8	22,6	22,3	22	21,8	21,2	20	18,5	16,7	14,7	12,4	10*	7,4*				
B-N4 150-315C-60	N4 150-315C-60	22	30					25,8	25,6	25,4	25,2	24,9	24,4	23,2	21,9	20,2	18,4	16,2	14*	11,4*				
B-N4 150-315B-60	N4 150-315B-60	30	40					30,5	30,4	30,2	30,1	30	29,8	29	27,9	26,5	24,8	22,8	20,7*	18,2*	15,4*			
B-N4 150-315A-60	N4 150-315A-60	37	50					35,6	35,5	35,4	35,3	35,2	35	34,4	33,7	32,5	30,9	29	26,8*	24,4*	21,8*			
B-N4 150-400C-60	N4 150-400C-60	45	60					45,5	45	44,5	44	43,8	43,5	42	40,5	38,5	36	33	30*	27*				
B-N4 150-400B-60	N4 150-400B-60	55	75					51	50,5	50	49,5	49,3	49	48	46,5	44,5	42,5	40	37,5*	34,5*	31,5*			
B-N4 150-400A-60	N4 150-400A-60	75	100					59	58,5	58,3	58	57,8	57,5	57	55,5	54	52	49,5	47*	44*	41*	37,5*		

N4 Standard construction.

B-N4 Bronze construction.

P₂ Rated motor power output.

H Total head in m.

* Maximum suction lift 1-2 m.

Tolerances according to UNI EN ISO 9906:2012.

Interchangeability of parts

TYPE	Bearing housing			Pump shaft					Ball bearings				Shaft sealing		
	1	2	3	I	II	III	IV	V	6207 Z 6306 Z	6207 Z 3306	6309 Z 3309	6311 Z 3311	Ø 32	Ø 40	Ø 50
N, N4 32-125	●			●					●				●		
N, N4 32-160	●				●				●				●		
N, N4 32-200	●				●				●				●		
N, N4 40-125	●				●				●				●		
N, N4 40-160	●				●				●				●		
N, N4 40-200C	●				●				●				●		
N, N4 40-200A-AR-B	●					●				●			●		
N, N4 40-250	●					●				●			●		
N, N4 50-125	●				●				●				●		
N, N4 50-160	●					●				●			●		
N, N4 50-200	●					●				●			●		
N, N4 50-250	●					●				●			●		
N 50M	●					●				●			●		
N, N4 65-125E	●				●				●				●		
N, N4 65-125A-C	●					●				●			●		
N, N4 65-160	●					●				●			●		
N, N4 65-200	●					●				●			●		
N, N4 65-250		●					●				●			●	
N4 65-315		●					●				●			●	
N, N4 80-160	●					●			●				●		
N, N4 80-200		●					●				●			●	
N, N4 80-250		●					●				●			●	
N4 80-315		●					●				●			●	
N4 80-400			●					●				●			●
N, N4 100-200		●					●				●			●	
N, N4 100-250		●					●				●			●	
N4 100-315		●					●				●			●	
N4 100-400			●					●				●			●
N4 125-250		●					●				●			●	
N4 125-315			●					●				●			●
N4 125-400			●					●				●			●
N4 150-315			●					●				●			●
N4 150-400			●					●				●			●

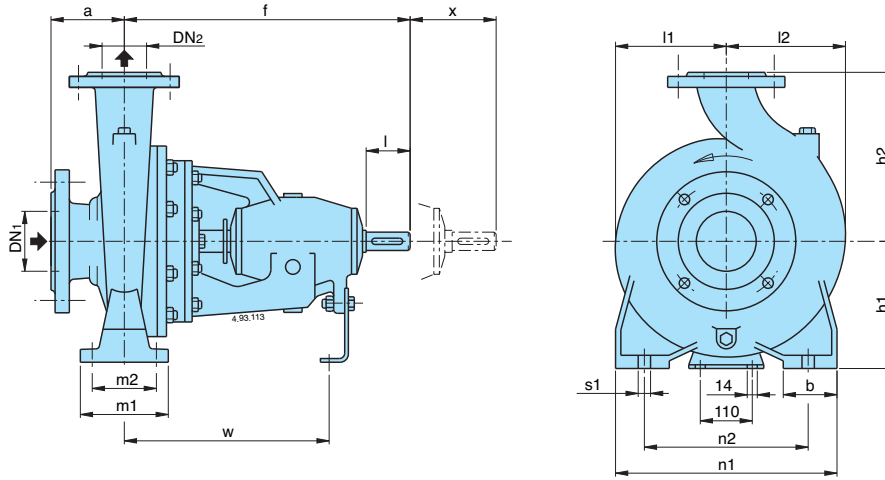
Maximum permissible rotation speed

3600 rpm			3450 rpm			2000 rpm		
32-125	32-160	32-200						
40-125	40-160	40-200			40-250			
50-125	50-160	50-200			50-25			
					50M			
65-125	65-160			65-200	65-250		65-315	
		80-200	80-160		80-250		80-315	80-400
		100-200			100-250		100-315	100-400
						125-250	125-315	125-400
							150-315	150-400

Suction pipe: recommended minimum inside diameter (DN) for different capacities (Q)

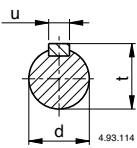
Threaded pipe		G2		G 2 1/2							
DN	mm	50	65	80	100	125	150	200	250	300	
Q max	m³/h	10.5	19	28.8	45	75	108	215	350	508	

Dimensions and weights

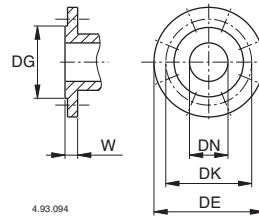


Shaft extension ISO 775 Parallel key UNI 6604

Flanges PN 10, EN 1092-2



mm			
d	l	u	t
24 j6	50	8	27
32 k6	80	10	35
42 k6	110	12	45



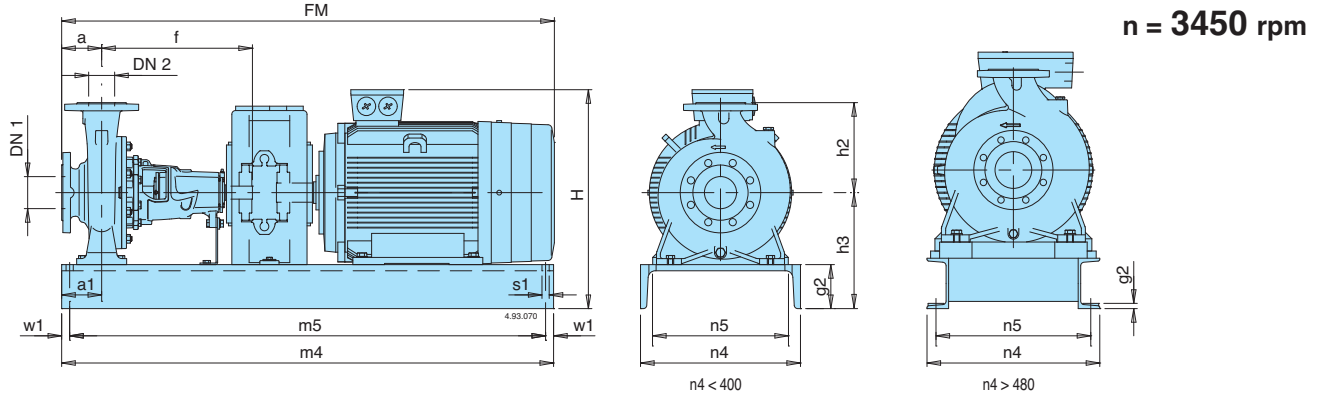
mm						
DN	DG	DK	DE	Holes		W
				N°	Ø	
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22
100	156	180	220	8	19	24
125	184	210	250	8	19	24
150	211	240	285	8	23	26
200	266	295	340	8	23	30

N n = 3450 rpm
N4 n = 1750 rpm

TYPE	mm																kg											
	DN ₁	DN ₂	a	f	h ₁	h ₂	l ₁	l ₂	m ₁	m ₂	n ₁	n ₂	b	s ₁	d	w	x	B-N B-N4	N N4									
B-N, B-N4 - N, N4 32-125	50	32	80	360	112	140	93	97	100	70	190	140	50	14	24	260	100			30,7								
B-N, B-N4 - N, N4 32-160					132	160	120	120			240	190								44,8								
B-N, B-N4 - N, N4 32-200					160	180	140	140																				
B-N, B-N4 - N, N4 40-125	65	40	80	360	112	140	100	113	100	70	210	160	50	14	24	260	100			34,1								
B-N, B-N4 - N, N4 40-160					132	160	119	119			240	190								40								
B-N, B-N4 - N, N4 40-200					160	180	140	140			265	212								48,5								
B-N, B-N4 - N, N4 40-250					180	225	175	175			320	250								62,3								
B-N, B-N4 - N, N4 50-125	65	50	100	360	132	160	121	137	100	70	240	190	50	14	24	260	100			44								
B-N, B-N4 - N, N4 50-160					160	180	127	141			265	212								45,8								
B-N, B-N4 - N, N4 50-200					160	200	140	153												52,3								
B-N, B-N4 - N, N4 50-250					180	225	175	175			320	250								64,4								
B-N, B-N4 - N, N4 50M																				66								
B-N, B-N4 - N, N4 65-125	80	65	100	360	160	180	134	155	125	95	280	212	65	14	24	260	100			51,6								
B-N, B-N4 - N, N4 65-160					180	200	150	172			320	250								52,5								
B-N, B-N4 - N, N4 65-200					180	225	155	175												60								
B-N, B-N4 - N, N4 65-250					200	250	175	190			360	280								95,5								
B-N4 - N4 65-315			125		225	280	220	220	160	120	400	315	80	18	32	340	140			136								
B-N, B-N4 - N, N4 80-160	100	80	125	360	180	225	165	193	125	95	320	250	65	14	24	260	140			63								
B-N, B-N4 - N, N4 80-200					180	250	170	194			345	280								90,5								
B-N, B-N4 - N, N4 80-250					200	280	191	210												112								
B-N4 - N4 80-315					250	315	220	232			160	120								400	315	80	18	32	340	140		
B-N4 - N4 80-400 (1)	125	80	125	530	280	355	268	268	160	120	435	355	80	18	42	370	140			202								
B-N, B-N4 - N, N4 100-200	125	100	140	470	200	280	180	212	160	120	360	280	80	18	32	340	140			102								
B-N, B-N4 - N, N4 100-250					225	280	205	233			400	315								121,5								
B-N4 - N4 100-315					250	315	230	250												151,5								
B-N4 - N4 100-400					530	280	355	268			280	200								150	500	400	100	22	42	370		
B-N4 - N4 125-250	150	125	140	470	250	355	235	268	160	120	400	315	80	18	32	340	140			140								
B-N4 - N4 125-315					280	355	247	278												198								
B-N4 - N4 125-400					315	400	280	305			200	150								500	400	100	22	42	370			232
B-N4 - N4 150-315	200	150	160	530	280	400	260	298	200	150	550	450	100	22	42	370	140			213								
B-N4 - N4 150-400					315	450	295	328												262								

1) Additional size

Dimensions



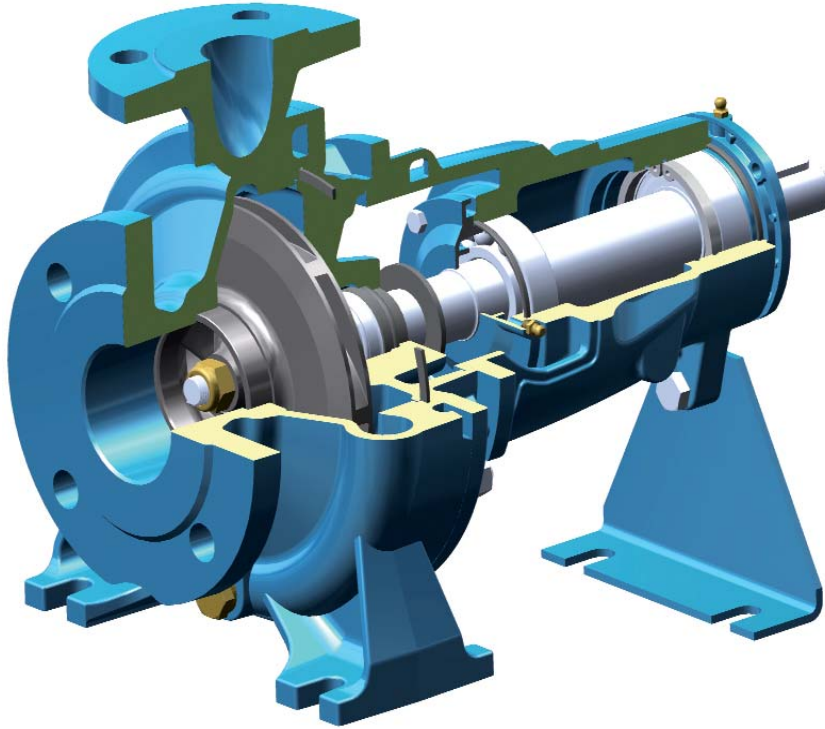
TYPE	MOTOR	kW	mm															FM≈	H≈
			DN1	DN2	a	f	h3	h2	m4	m5	w1	n4	n5	a1	g2	s1			
B-N, N 32-125	71 B2	0,55	50	32	80	360	197	140	780	750	15	240	180	90	85	14	718	308	
	80 A2	0,75	50	32	80	360	197	140	780	750	15	240	180	90	85	14	752	317	
	80 B2	1,1	50	32	80	360	197	140	780	750	15	240	180	90	85	14	752	317	
B-N, N 32-160	90 S2	1,5	50	32	80	360	197	140	780	750	15	240	180	90	85	14	809	325	
	90 S2	1,5	50	32	80	360	217	160	780	750	15	240	180	90	85	14	809	345	
	90 L2	2,2	50	32	80	360	217	160	780	750	15	240	180	90	85	14	809	345	
B-N, N 32-200	100 L2	3	50	32	80	360	232	160	880	850	15	300	240	90	100	14	885	398	
	90 L2	2,2	50	32	80	360	245	180	780	750	15	240	180	90	85	14	809	373	
	100 L2	3	50	32	80	360	260	180	880	850	15	300	240	90	100	14	885	426	
	112 M2	4	50	32	80	360	260	180	880	850	15	300	240	90	100	14	882	437	
B-N, N 40-125	132 SA2	5,5	50	32	80	360	260	180	1020	990	15	350	290	100	100	14	953	462	
	80 B2	1,1	65	40	80	360	197	140	780	750	15	240	180	90	85	14	752	317	
	90 S2	1,5	65	40	80	360	197	140	780	750	15	240	180	90	85	14	809	325	
B-N, N 40-160	90 L2	2,2	65	40	80	360	197	140	780	750	15	240	180	90	85	14	809	325	
	90 L2	2,2	65	40	80	360	197	140	780	750	15	240	180	90	85	14	809	325	
	112 M2	4	65	40	80	360	232	160	880	850	15	300	240	90	100	14	882	409	
B-N, N 40-200	132 SA2	5,5	65	40	80	360	232	160	1020	990	15	350	290	90	100	14	953	434	
	90 L2	2,2	65	40	80	360	217	160	780	750	15	240	180	90	85	14	809	345	
	100 L2	3	65	40	80	360	232	160	880	850	15	300	240	90	100	14	885	398	
B-N, N 40-250	112 M2	4	65	40	80	360	232	160	880	850	15	300	240	90	100	14	882	409	
	132 SA2	5,5	65	40	80	360	232	160	1020	990	15	350	290	90	100	14	953	434	
	132 SB2	7,5	65	40	100	360	260	180	1020	990	15	350	290	100	100	14	973	462	
B-N, N 50-125	160 MA2	11	65	40	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	160 MB2	15	65	40	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	90 L2	2,2	65	50	100	360	217	160	780	750	15	240	180	90	85	14	829	345	
B-N, N 50-160	100 L2	3	65	50	100	360	232	160	880	850	15	300	240	90	100	14	905	398	
	112 M2	4	65	50	100	360	232	160	880	850	15	300	240	90	100	14	902	409	
	132 SA2	5,5	65	50	100	360	232	160	1020	990	15	350	290	90	100	14	973	434	
B-N, N 50-200	132 SA2	5,5	65	50	100	360	260	180	1020	990	15	350	290	100	100	14	973	462	
	132 SB2	7,5	65	50	100	360	260	180	1020	990	15	350	290	100	100	14	973	462	
	160 MA2	11	65	50	100	360	280	200	1020	990	15	350	290	100	100	14	1082	497	
B-N, N 50-250	160 MB2	15	65	50	100	360	280	200	1020	990	15	350	290	100	100	14	1082	497	
	160 MA2	11	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	160 MB2	15	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
B-N, N 50M	160 L2	18,5	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	180 M2	22	65	50	100	360	280	225	1140	1110	15	350	290	100	100	14	1189	542	
	160 MA2	11	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
B-N, N 65-125	160 MB2	15	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	112 M2	4	80	65	100	360	260	180	880	850	15	300	240	100	100	14	902	437	
	132 SA2	5,5	80	65	100	360	260	180	1020	990	15	350	290	100	100	14	973	462	
B-N, N 65-160	132 SB2	7,5	80	65	100	360	260	180	1020	990	15	350	290	100	100	14	973	462	
	132 SA2	5,5	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	973	462	
	160 MA2	11	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	1082	497	
B-N, N 65-200	160 MB2	15	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	1082	497	
	160 MB2	15	80	65	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
	160 L2	18,5	80	65	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517	
B-N, N 65-250	180 M2	22	80	65	100	360	280	225	1140	1110	15	350	290	100	100	14	1189	542	
	200 LA2	30	80	65	100	470	310	250	1360	1320	20	400	340	130	110	18	1299	572	
	200 LB2	37	80	65	100	470	310	250	1360	1320	20	400	340	130	110	18	1347	610	
B-N, N 80-160	160 MB2	15	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517	
	132 SB2	7,5	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517	
	160 MA2	11	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517	
B-N, N 80-200	160 L2	18,5	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517	
	180 M2	22	100	80	125	470	290	250	1230	1190	20	400	340	130	110	18	1324	572	
	200 LA2	30	100	80	125	470	310	250	1360	1320	20	400	340	130	110	18	1372	610	
B-N, N 80-250	200 LB2	37	100	80	125	470	310	280	1360	1320	20	400	340	130	110	18	1372	610	
	225 M2	45	100	80	125	470	385	280	1250	840	205	480	430	95	16	24	1411	710	
	250 M2	55	100	80	125	470	415	280	1250	840	205	480	430	95	16	24	1509	807	
B-N, N 100-200	160 L2	18,5	125	100	125	470	310	280	1230	1190	20	400	340	130	110	18	1203	547	
	180 M2	22	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1324	572	
	200 LA2	30	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1372	610	
	200 LB2	37	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1372	610	
B-N, N 100-200	225 M2	45	125	100	125	470	385	280	1250	840	205	480	430	95	16	24	1411	710	
B-N, N 100-250	250 M2	55	125	100	140	470	415	280	1250	840	205	480	430	95	16	24	1524	807	
	280 S2	75	125	100	140	470	505	280	1400	940	230	510	450	95	17,5	24	1597	937	

Dimensions

n = 1750 rpm

TYPE	MOTOR	kW	mm															
			DN1	DN2	a	f	h3	h2	m4	m5	w1	n4	n5	a1	g2	s1	fM≈	H≈
B-N4, N4 32-125	71 A4	0,25	50	32	80	360	197	140	780	750	15	240	180	90	85	14	718	308
B-N4, N4 32-160	71 B4	0,37	50	32	80	360	217	160	780	750	15	240	180	90	85	14	718	328
B-N4, N4 32-200	80 A4	0,55	50	32	80	360	245	180	780	750	15	240	180	90	85	14	752	365
	80 B4	0,75	50	32	80	360	245	180	780	750	15	240	180	90	85	14	752	365
B-N4, N4 40-125	71 A4	0,25	65	40	80	360	197	140	780	750	15	240	180	90	85	14	718	308
	71 B4	0,37	65	40	80	360	197	140	780	750	15	240	180	90	85	14	718	308
B-N4, N4 40-160	71 B4	0,37	65	40	80	360	217	160	780	750	15	240	180	90	85	14	718	328
	80 A4	0,55	65	40	80	360	217	160	780	750	15	240	180	90	85	14	752	337
	80 B4	0,75	65	40	80	360	217	160	780	750	15	240	180	90	85	14	752	337
B-N4, N4 40-200	90 S4	1,1	65	40	100	360	260	180	880	850	15	300	240	100	100	14	829	388
B-N4, N4 40-250	90 L4	1,5	65	40	100	360	280	225	880	850	15	350	290	100	100	14	829	408
	100 LA4	2,2	65	40	100	360	280	225	880	850	15	350	290	100	100	14	905	446
	100 LB4	3	65	40	100	360	280	225	880	850	15	350	290	100	100	14	905	446
B-N4, N4 50-125	71 B4	0,37	65	50	100	360	217	160	780	750	15	240	180	90	85	14	738	328
	80 A4	0,55	65	50	100	360	217	160	780	750	15	240	180	90	85	14	772	337
	80 B4	0,75	65	50	100	360	217	160	780	750	15	240	180	90	85	14	772	337
B-N4, N4 50-160	90 S4	1,1	65	50	100	360	260	180	880	850	15	300	240	100	100	14	829	388
B-N4, N4 50-200	90 S4	1,1	65	50	100	360	260	200	880	850	15	300	240	100	100	14	829	388
	90 L4	1,5	65	50	100	360	260	200	880	850	15	300	240	100	100	14	829	388
	100 LA4	2,2	65	50	100	360	260	200	880	850	15	300	240	100	100	14	905	426
B-N4, N4 50-250	100 LA4	2,2	65	50	100	360	280	225	880	850	15	350	290	100	100	14	905	446
	100 LB4	3	65	50	100	360	280	225	880	850	15	350	290	100	100	14	905	446
	112 M4	4	65	50	100	360	280	225	880	850	15	350	290	100	100	14	905	446
B-N4, N4 65-125	80 B4	0,75	80	65	100	360	260	180	880	850	15	300	240	100	100	14	772	380
	90 S4	1,1	80	65	100	360	260	180	880	850	15	300	240	100	100	14	829	388
B-N4, N4 65-160	90 S4	1,1	80	65	100	360	260	200	880	850	15	300	240	100	100	14	829	388
	90 L4	1,5	80	65	100	360	260	200	880	850	15	300	240	100	100	14	829	388
B-N4, N4 65-200	100 LA4	2,2	80	65	100	360	280	225	880	850	15	350	290	100	100	14	905	446
	100 LB4	3	80	65	100	360	280	225	880	850	15	350	290	100	100	14	905	446
B-N4, N4 65-250	112 M4	4	80	65	100	470	310	250	1030	990	20	400	340	130	110	18	1012	487
	132 S4	5,5	80	65	100	470	310	250	1030	990	20	400	340	130	110	18	1055	512
B-N4, N4 65-315	132 S4	5,5	80	65	125	470	335	280	1030	990	20	400	340	130	110	18	1080	537
	132 MA4	7,5	80	65	125	470	335	280	1030	990	20	400	340	130	110	18	1080	537
	160 M4	11	80	65	125	470	335	280	1230	1190	20	400	340	130	110	18	1203	572
B-N4, N4 80-160	90 S4	1,1	100	80	125	360	280	225	880	850	15	350	290	100	100	14	854	408
	90 L4	1,5	100	80	125	360	280	225	880	850	15	350	290	100	100	14	854	408
	100 LA4	2,2	100	80	125	360	280	225	880	850	15	350	290	100	100	14	930	446
B-N4, N4 80-200	100 LA4	2,2	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1040	446
	100 LB4	3	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1040	446
	112 M4	4	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1037	457
B-N4, N4 80-250	112 M4	4	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1037	487
	132 S4	5,5	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1080	512
	132 MA4	7,5	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1080	512
B-N4, N4 80-315	160 M4	11	100	80	125	470	360	315	1230	1190	20	400	340	130	110	18	1203	597
	160 L4	15	100	80	125	470	360	315	1230	1190	20	400	340	130	110	18	1203	597
B-N4, N4 80-400	180 M4	18,5	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1352	707
	180 L4	22	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1352	707
	200 L4	30	125	80	125	530	445	355	1250	840	205	480	430	110	16	24	1402	745
B-N4, N4 100-200	100 LB4	3	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1040	476
	112 M4	4	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1037	487
	132 S4	5,5	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1080	512
B-N4, N4 100-250	132 MA4	7,5	125	100	140	470	335	280	1030	990	20	400	340	130	110	18	1095	537
	160 M4	11	125	100	140	470	335	280	1230	1190	20	400	340	130	110	18	1218	572
B-N4, N4 100-315	160 M4	11	125	100	140	470	360	315	1230	1190	20	400	340	130	110	18	1218	597
	160 L4	15	125	100	140	470	360	315	1230	1190	20	400	340	130	110	18	1218	597
	180 M4	18,5	125	100	140	470	360	315	1360	1320	20	400	340	130	110	18	1339	622
B-N4, N4 100-400	180 L4	22	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1367	707
	200 L4	30	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1417	745
	225 S4	37	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1463	770
B-N4, N4 125-250	132 S4	5,5	150	125	140	470	360	355	1030	990	20	400	340	130	110	18	1095	562
	132 MA4	7,5	150	125	140	470	360	355	1030	990	20	400	340	130	110	18	1095	562
	160 M4	11	150	125	140	470	360	355	1230	1190	20	400	340	130	110	18	1218	597
B-N4, N4 125-315	160 L4	15	150	125	140	470	360	355	1230	1190	20	400	340	130	110	18	1218	597
	180 M4	18,5	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1367	707
B-N4, N4 125-400	180 L4	22	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1367	707
	200 L4	30	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1417	745
	225 S4	37	150	125	140	530	480	400	1250	840	205	480	430	115	16	24	1463	805
B-N4, N4 125-400	225 M4	45	150	125	140	530	480	400	1250	840	205	480	430	115	16	24	1463	805
	250 M4	55	150	125	140	530	540	400	1400	940	230	510	450	115	17,5	24	1561	932
	280 S4	75	200	150	160	530	540	400	1400	940	230	510	450	115	17,5	24	1654	972
B-N4, N4 150-315	180 M4	18,5	200	150	160	530	445	400	1250	840	205	480	430	115	16	24	1387	707
	180 L4	22	200	150	160	530	445	400	1250	840	205	480	430	115	16	24	1387	707
	200 L4	30	200	150	160	530	445	400	1250	840	205	480	430	115	16	24	1437	745
	225 S4	37	200	150	160	530	445	400	1250	840	205	480	430	115	16	24	1483	770
B-N4, N4 150-400	225 M4	45	200	150	160	530	480	450	1250	840	205	480	430	115	16	24	1483	805
	250 M4	55	200	150	160	530	540	450	1400	940	230	510	450	115	17,5	24	1581	932
	280 S4	75	200	150														

Features



Cutting edge hydraulics

The geometry of the impeller and the pump casing are optimized to achieve maximum efficiency and the best suction capability.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows N-N4 series pumps to be selected for use with different types of liquids.

Robustness

The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistance to mechanical stress. Also the casing cover is provided with wings that prevent turbulence in the area of the mechanical seal, increasing the reliability.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.



Windsor Pump Co.

Head Office

3057 Marentette Ave
Windsor, On N8X 4G1

Phone: 1-(519) 969-2190

Fax: 1-(519) 969-2047

Email: sales@windsorpump.com

Sales and Engineering

Dan Kurtz

Phone: 1-(226) 377-4100

Fax: 1-(905) 847-2425

Email: dan@windsorpump.com

www.windsorpump.com

Peter Kurtz

Phone: 1-(905) 302-3933

Fax: 1-(905) 847-2425

E-mail: peter@windsorpump.com

www.windsorpump.com



C 60 Hz

Centrifugal Pumps
with open impeller



Construction

Close-coupled centrifugal pumps with open impeller.
Free-flow impeller (vortex or recessed impeller) for type C 16/1E.
C: version with pump casing and lantern bracket in cast iron.
B-C: version with pump casing and lantern bracket in bronze (the pumps are supplied fully painted).

Applications

For moderately dirty liquids or emulsions.
For industry and agriculture.

Operating conditions

Liquid temperature from -10 °C to +90 °C.
Ambient temperature up to 40 °C.
Total suction lift up to 8 m.
Maximum permissible working pressure: 6 bar.
Maximum size of solids: 4 mm.
Continuous duty.

Motor

2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
C: three-phase 220/380 V.
CM: single-phase 220 V, with thermal protector.
Capacitor inside the terminal box.

Insulation class F.
Protection IP 54.

Classification scheme IE2 for three-phase motors from 0,75 kW.
Constructed in accordance with: EN 60034-1; EN 60034-30.
EN 60335-1, EN 60335-2-41.

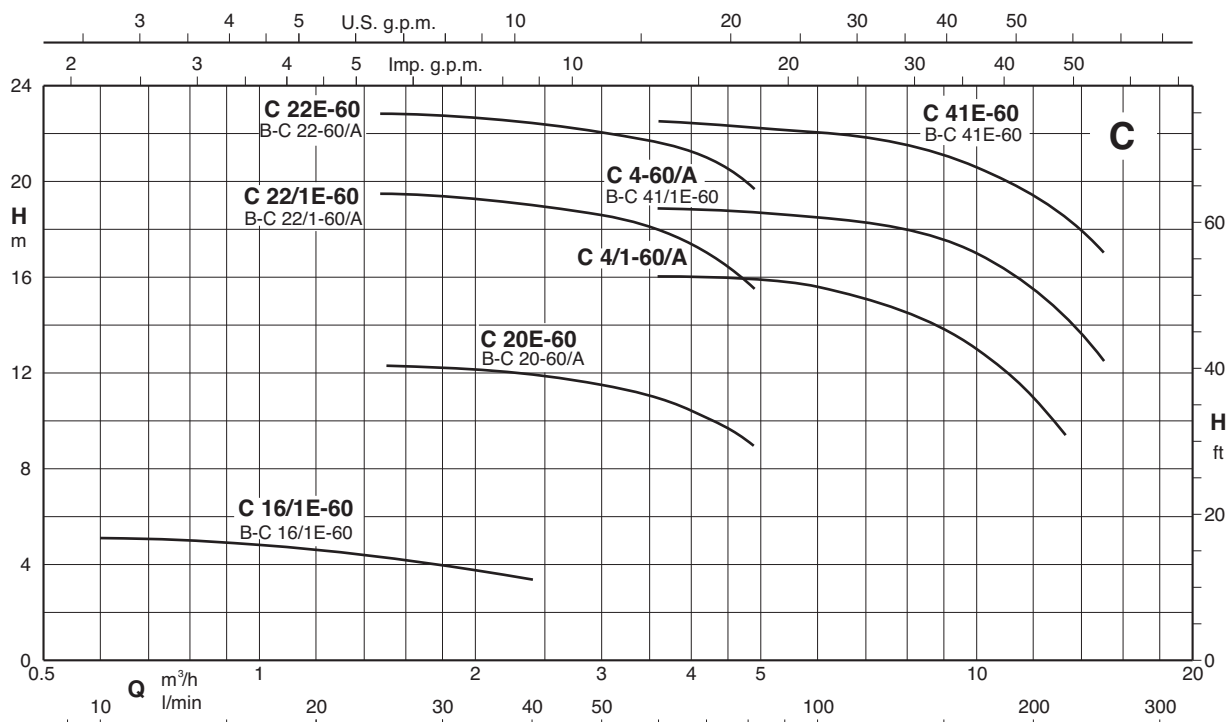
Materials

Component	C	B-C
Pump casing	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Lantern bracket	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705	
Shaft	Chrome steel AISI 430	Cr-Ni-Mo steel AISI 316
	Cr-Ni steel AISI 303 for C 41E	
Mechanical seal	Carbon - Ceramic - NBR	

Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.
- Motor suitable for operation with frequency converter.

Coverage chart n ≈ 3450 rpm

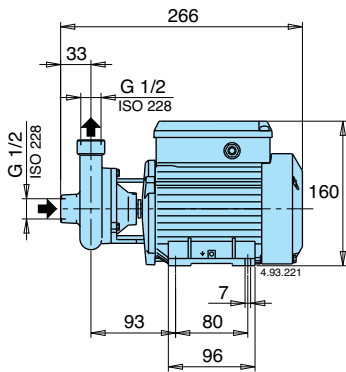


Performance n ≈ 3450 rpm

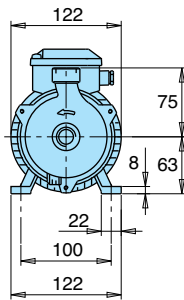
3 ~ 220V 380V	A A IA/IN			1 ~ 220V	A IA/IN kW HP			P ₂	Q m ³ /h l/min																		
	A	A	IA/IN		A	IA/IN	kW			HP	0,6	0,9	1,2	1,5	1,8	2,4	3	3,6	4,8	6	6,6	8,4	9,6	10,8	12	13,2	15
C 16/E-60 B-C 16/1E-60	2	1,2	4	CM 16/E-60 B-CM 16/1E-60	1,5	2,7	0,15	0,2	H m	5	4,7	4,4	4,2	4	3,3												
C 20E-60 B-C 20-60/A	2,3	1,3	3,5	CM 20E-60 B-CM 20-60/A	3,1	2,5	0,37	0,5					12,3	12,2	12	11,5	10,8	9									
C 22/1E-60 B-C 22/1-60/A	3	1,7	3,8	CM 22/1E-60 B-CM 22/1-60/A	3,4	2,7	0,45	0,6					19,5	19,4	19,1	18,7	17,9	15,3									
C 22E-60 B-C 22-60/A	3,5	2	4,5	CM 22E-60 B-CM 22-60/A	4,3	2,6	0,55	0,75					22,5	22,5	22,4	22	21,5	19,5									
C 4/1-60/A	3,6	2,1	3,7	CM 4/1-60/A	5,2	3,1	0,55	0,75									16	15,8	15,5	15,1	14,3	13,5	12,2	11	9,5		
C 4-60/A B-C 41/1E-60	4,5	2,6	6,8	CM 4-60/A B-CM 41/1E-60	6,9	3,1	0,75	1									19	18,8	18,5	18,3	17,7	17,2	16,5	15,5	14,4	12,5	
C 41E-60 B-C 41E-60	5,7	3,3	5,5	CM 41E-60 B-CM 41E-60	8,5	3	1,1	1,5									22,6	22,3	22,1	22	21,5	21	20,3	19,5	18,5	17	

P₂ Rated motor power output. B-C, B-CM = Bronze construction. ρ = Density 1000 kg/m³. Tolerances according to UNI EN ISO 9906:2012.
IA/IN = D.O.L. starting current / Rated current. **H** Total head in m. υ = Kinematic viscosity max 20 mm²/sec.

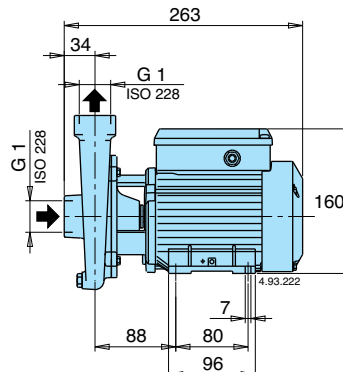
Dimensions and weights



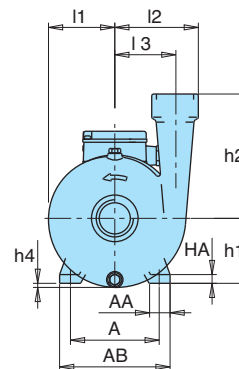
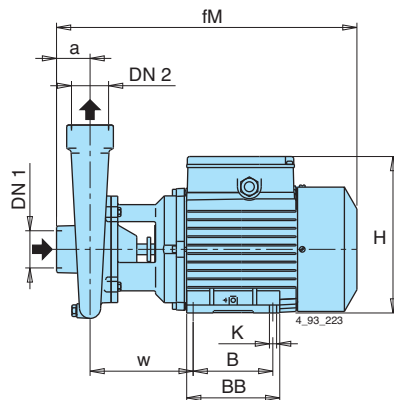
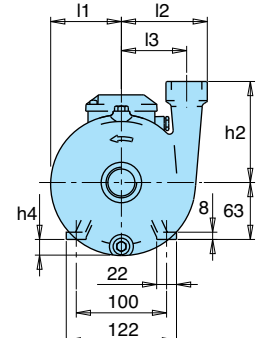
TYPE	kg
C 16/E-60	5,2
CM 16/E-60	5,2



TYPE	kg
B-C 16/E-60	5,6
B-CM 16/E-60	5,6

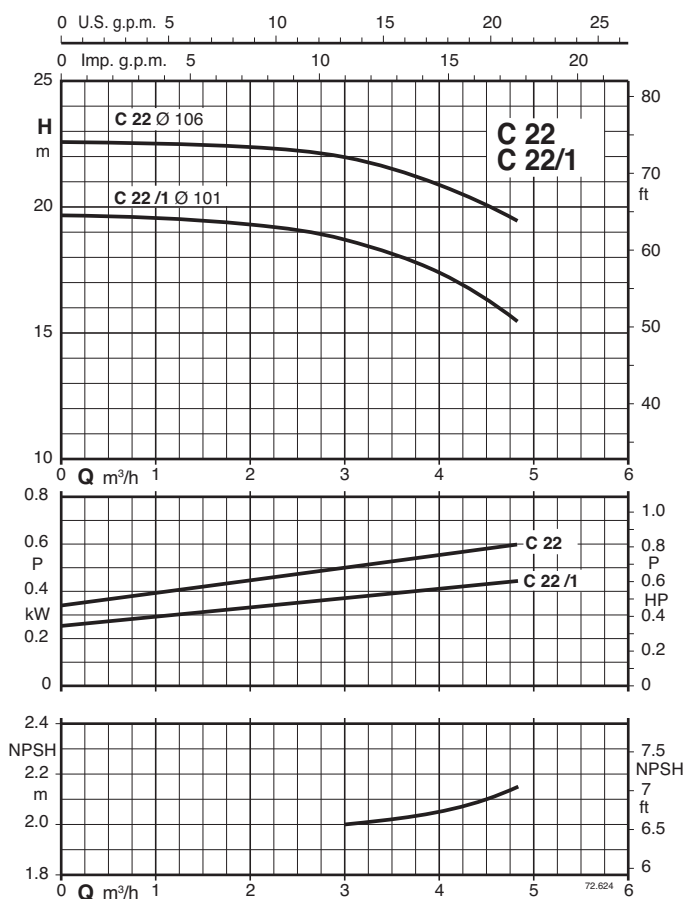
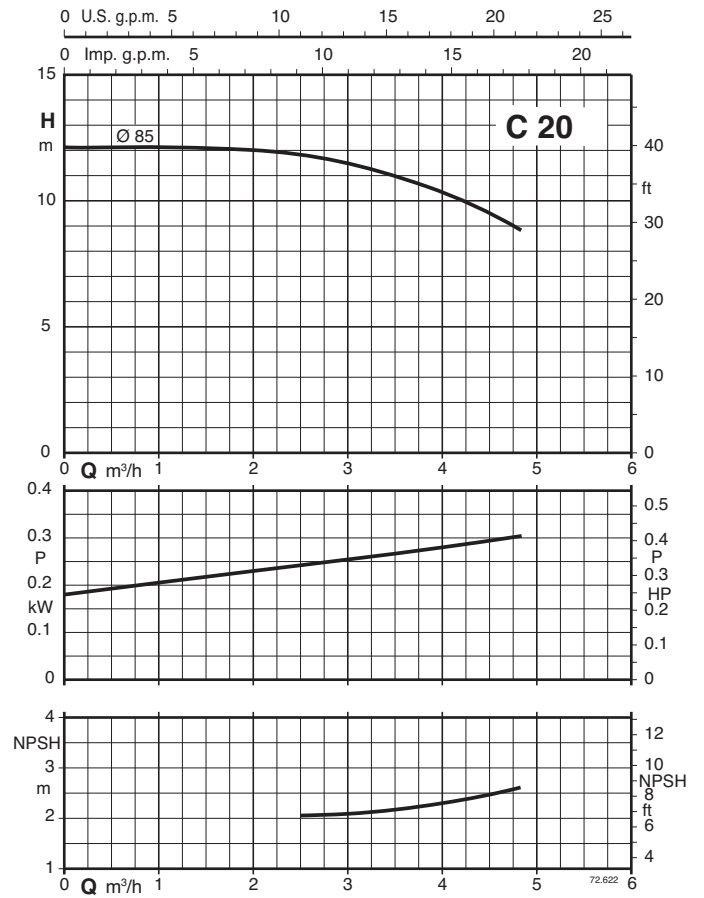
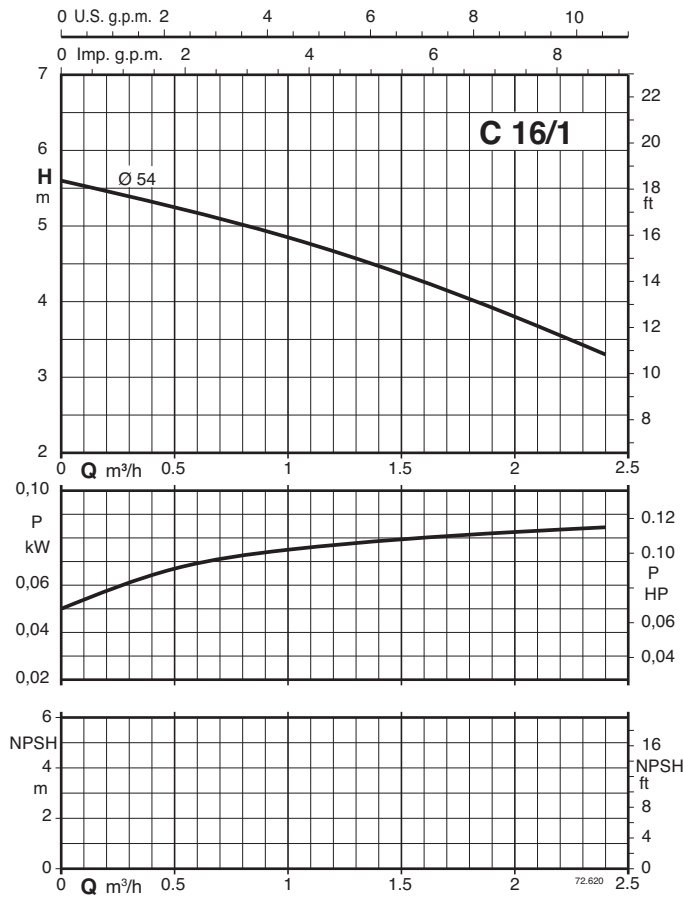


TYPE	mm					kg	
	h2	h4	l1	l2	l3	C	CM
C 20E-60	90	5	67	82	60	6,8	6,8
C 22/1E-60 - C 22E-60	110	17	77	94	71	8 - 8,3	8 - 8,3

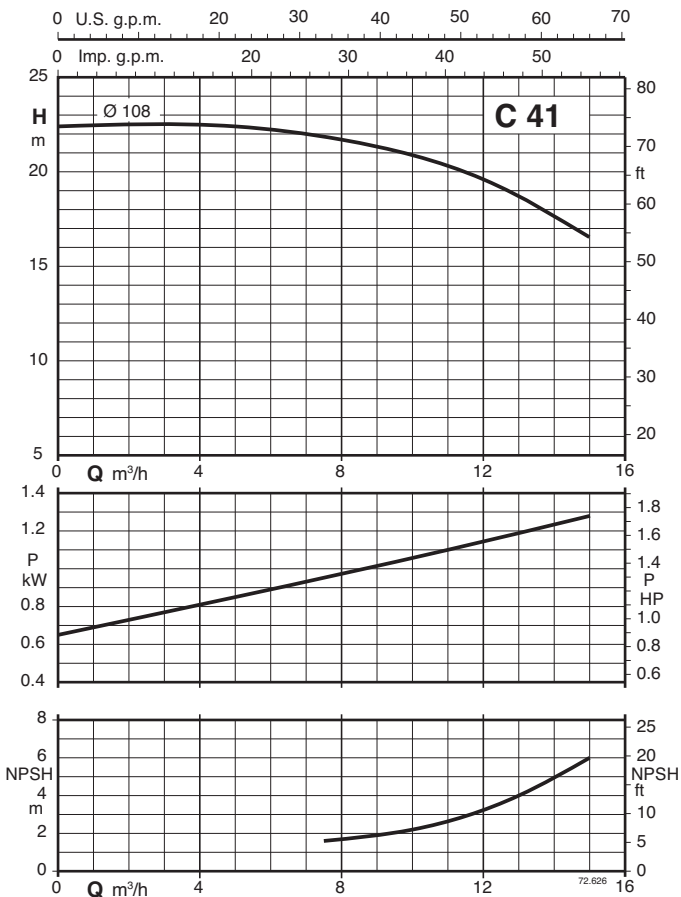
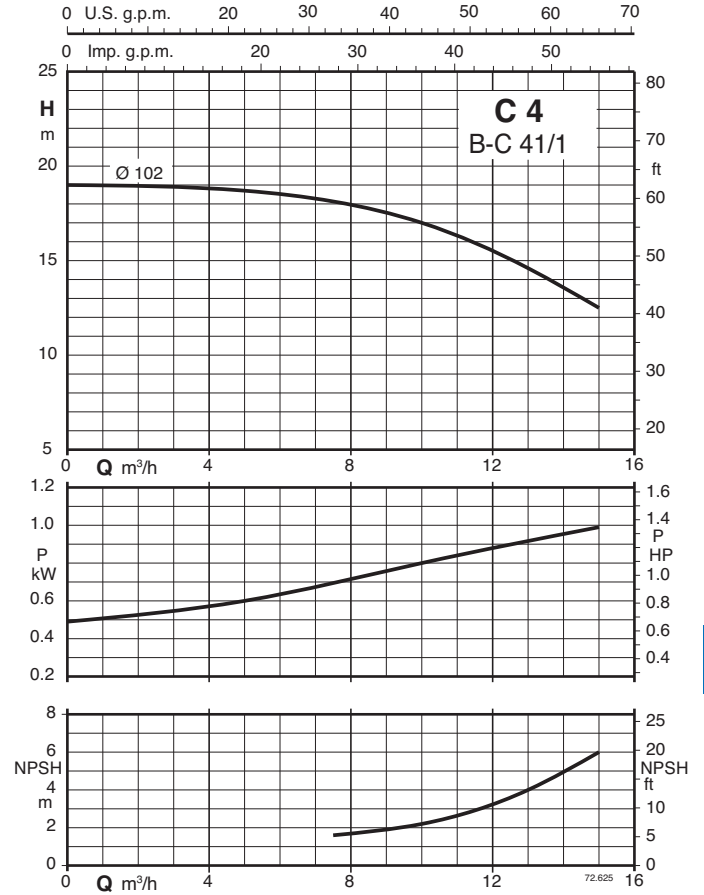
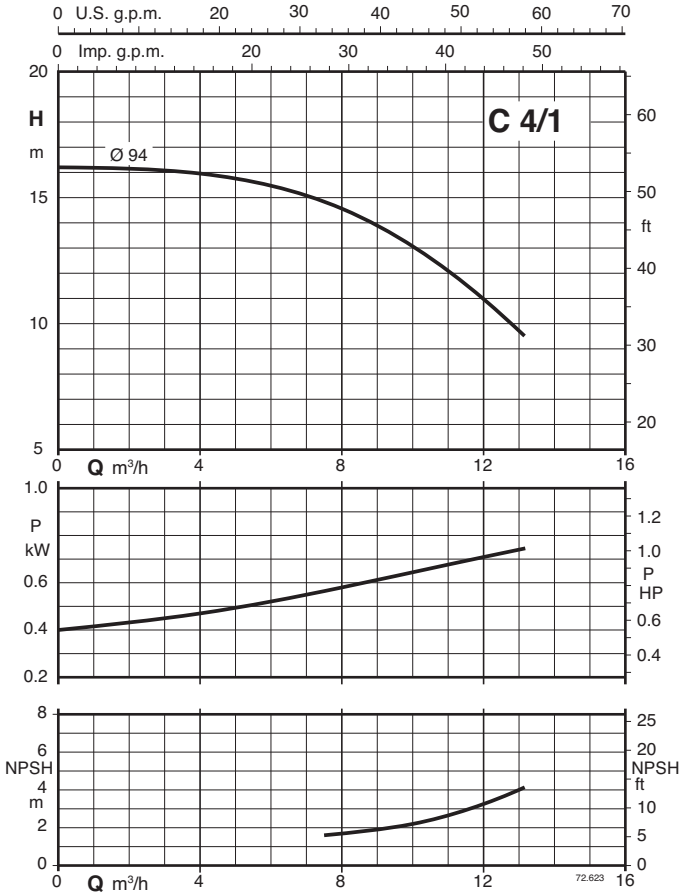


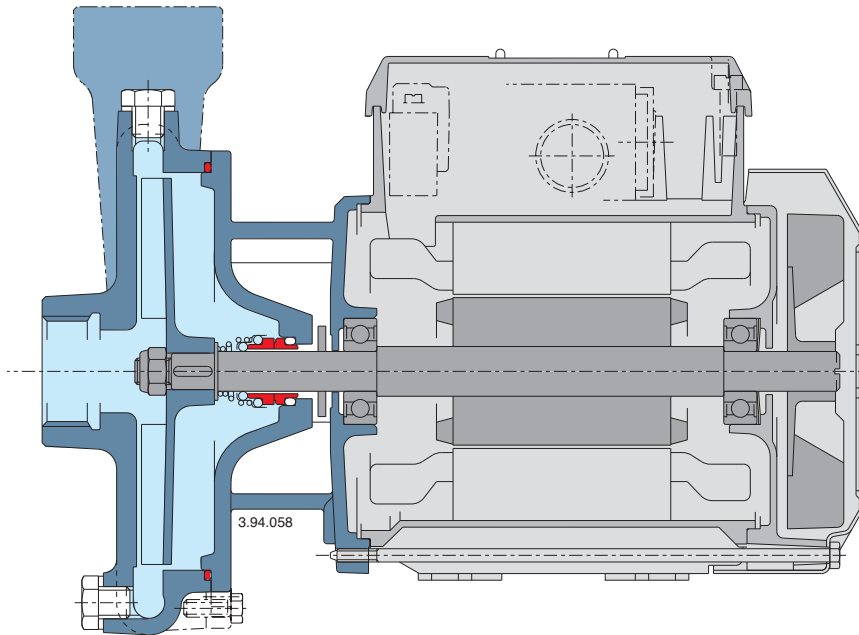
TYPE	DN1	DN2	mm																	kg			
			ISO 228	a	fM	h1	h2	H	h4	BB	B	AB	A	AA	K	l1	l2	l3	w	HA	C	CM	B-C
- B-C 20-60/A	G 1	G 1	35	303	71	90	182	-	106	90	134	112	22	7	70	84	60	105	10	-	-	9,1	9,1
- B-C 22/1-60/A - B-C 22-60/A	G 1	G 1	35	303	71	110	182	9	106	90	134	112	22	7	81	93	71	106	10	-	-	9,3 9,6	10,3 10,6
C 4/1-60/A - C 4-60/A	G 1 1/2	G 1 1/2	43	304	71	160	182	18	106	90	134	112	22	7	85	108	78	100	10	10,8 11,8	11,8 12,8	-	-
- B-C 41/1E-60 C 41E-60 - B-C 41E-60	G 1 1/2	G 1 1/2	43	380	80	160	208	9	125	100	155	125	30	9,5	85	108	78	132	10	-	-	16,3 18,5	17,9 20,1

Characteristic curves n ≈ 3450 rpm



Characteristic curves $n \approx 3450$ rpm



Features**Flexibility**

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows C series pumps to be selected for use with different types of liquids.

Solid parts

The open impeller allows for the passage of suspended solids in pumped liquid.

Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.



Windsor Pump Co.

Head Office

3057 Marentette Ave
Windsor, On N8X 4G1

Phone: 1-(519) 969-2190
Fax: 1-(519) 969-2047

Email: sales@windsorpump.com

Sales and Engineering

Dan Kurtz

Phone: 1-(226) 377-4100

Fax: 1-(905) 847-2425

Email: dan@windsorpump.com

www.windsorpump.com

Peter Kurtz

Phone: 1-(905) 302-3933

Fax: 1-(905) 847-2425

E-mail: peter@windsorpump.com

www.windsorpump.com