

# N, N4

## End-Suction Centrifugal Pumps standardized EN 733



### Construction

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

Nominal duty points and main dimensions in accordance with EN 733. Back Pull-Out construction, for simple and quick dismantling and reassembly.

N, N4: version with pump casing and lantern bracket in cast iron.  
B-N, B-N4: version with pump casing and lantern bracket in bronze.  
(the pumps are supplied fully painted).

Rated speed of rotation (50 Hz): **N** ≈ 2900 rpm.  
**N4** ≈ 1450 rpm.

**Connections:** PN 10-16 flanges EN 1092-2 (PN 10 for DN 200).

**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 10-16 EN 1092-1 (PN 10 for DN 200)
for 200-400	Flanges for welding PN 16 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.

16 bar for N 32L-160,200; N,N4 40-160,200; N,N4 50-125,160;

N,N4 65-125,160,200,250; N,N4 80-160,250,315,400; N,N4 100-200;

N4 125-315; N4 150-315,400 (Flanges PN10); N4 200-400.

(10 bar bronze version)

Maximum permissible rotation speed: see table on page 90.

### Pump-Motor unit

N,N4 pump connected to a standard electric motor in B3 construction form (EN 60072-1), by means of a baseplate, driven by a flexible coupling and with coupling protection.

Three-phase 400 V, 50 Hz

**IE3 efficiency class for three-phase motors (IE2 up to 0,65 kW).**

IP 55 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.
- Motor for other voltage.
- Frequency 60 Hz (as per 60 Hz data sheet).

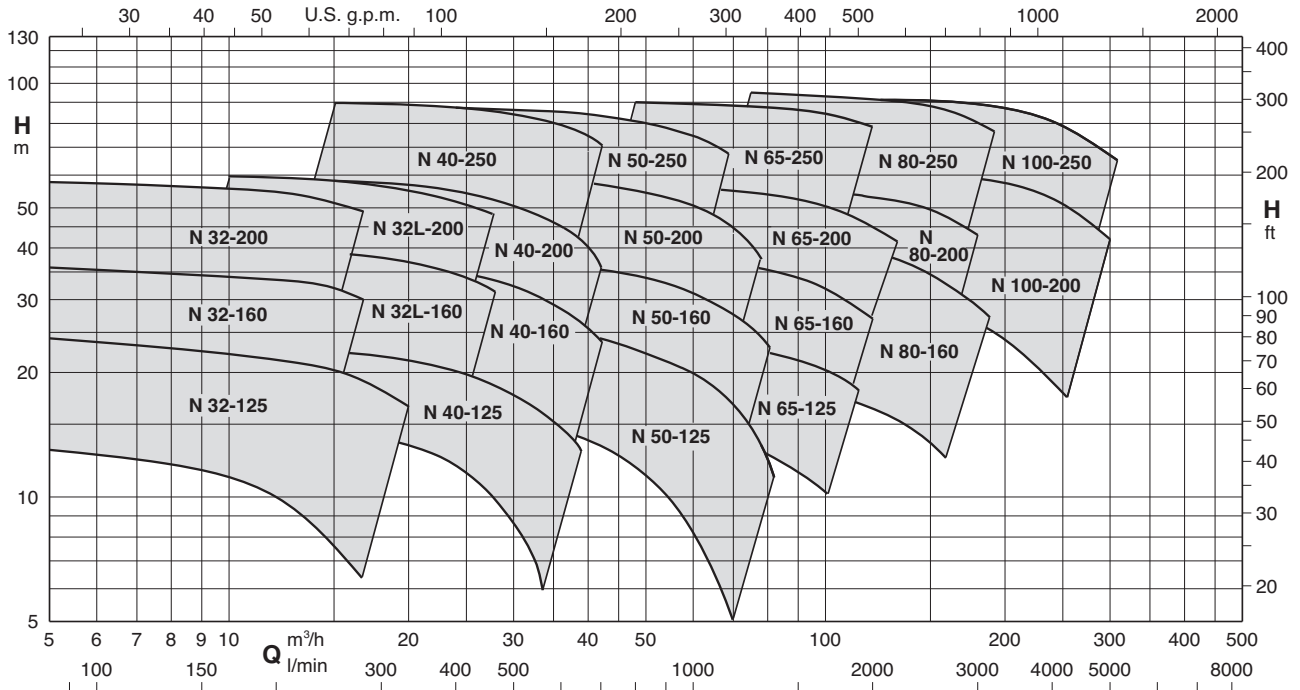


The electropumps N, B-N, N4, B-N4 series comply with the European Regulation no. 547/2012.

### Materials

Components	N, N4	B-N, B-N4	N, N4
	Mechanical seal	Mechanical seal	Stuffing box
Pump casing	Cast iron	Bronze	Cast iron
Casing cover	GJL 200 EN 1561	CC480K EN 1982	GJL 200 EN 1561
Impeller	Cast iron	Bronze	Cast iron
	GJL 200 EN 1561	CC480K EN 1982	GJL 200 EN 1561
	Brass CW617N EN 12165 For 32-125, 32-160, 32-200, 32L-200, 40-200		
Shaft	Chrome steel 1.4104 EN 10088 (AISI 430)	Cr-Ni-Mo steel 1.4401 EN 10088 (AISI 316)	Carbon steel C 40 UNI 7845
Shaft sleeve	–	–	Bronze CC480K EN 1982 with chromate surface
Mechanical seal	Carbon - Ceramic - NBR		–
Counter-flanges	Steel 1.0044 EN 10025-2 (Fe 430B)		

### Coverage chart n ≈ 2900 rpm



Tolerances according to UNI EN ISO 9906:2012 72.844.N

### Prestazioni n = 2900 1/min

PUMP	PUMP	MOTOR	P <sub>2</sub> kW	Q																		
				m³/h	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	29	32	37,8	39	
B-N 32-125F/A	N 32-125F/A	71 M2	0,55	12,5	12,5	12	11,5	11	10,5	9,5	8	6										
B-N 32-125D/A	N 32-125D/A	80 M2	0,75	18	18	17,5	17	16,5	16	15,5	14	12,5	11	8,5								
B-N 32-125A/A	N 32-125A/A	80 M2 90 S2	1,1 1,5	23	23	22,5	22	21,5	21	20,5	19,5	18	16	14	10							
B-N 32-125S/A	N 32-125S/A	90 S2	1,5	23,5	23,5	23	22,5	22	21,5	21	20,5	19	18,5	16,5	13							
B-N 32-160B/A	N 32-160B/A	90 S2 90 L2	1,5 2,2	29,5	29,5	29	28,5	27,5	27	26	25*	20*	17,5*	12,5*								
B-N 32-160A/A	N 32-160A/A	90 L2 100 L2	2,2 3	35,5	35,5	35	34,5	34	33,5	33	32*	30*	28*	25*	21*	15*						
B-N 32-200D/A	N 32-200D/A	90 L2 100 L2	2,2 3	37,5	37	36	35	34	33	32	30	27	22									
B-N 32-200C/A	N 32-200C/A	100 L2	3	44,5	44	43,5	43	42	41	40	38,5	36	32									
B-N 32-200A/A	N 32-200A/A	112 M2 132 S2	4 5,5	57	56,5	56	55,5	54,5	53,5	52,5	51	49	46									
B-N 32L-160C	N 32L-160C	90 L2	2,2				25,1	24,9	24,7	24,4	23,8	23	21,8	20,3	17,3	13,4						
B-N 32L-160B	N 32L-160B	100 L2	3				1,25	1,35	1,4	1,45	1,55	1,65	1,75	1,85	1,95	2,05						
B-N 32L-160A	N 32L-160A	112 M2	4				30,4	30,3	30,2	30	29,6	29	28,1	26,8	24,2	20,8	17,9					
B-N 32L-200C	N 32L-200C	112 M2	4				39,9	39,9	39,8	39,6	39,3	38,8	37,9	36,8	34,7	31,9	29,7	25,6				
B-N 32L-200B	N 32L-200B	132 S2	5,5				42,1	41,8	41,5	41	40,2	38,9	37	34,5	29,7	23,8						
B-N 32L-200A	N 32L-200A	132 S2	7,5				51,7	51,6	51,4	51,2	50,7	50	48,8	47	43,2	37,8	33,5					

PUMP	PUMP	MOTOR	P <sub>2</sub> kW	Q																		
				m³/h	15	16,8	18,9	21	24	27	30	33	37,8	39	42	45	48	54	60	66	69	
B-N 40-125F/A	N 40-125F/A	80 M2	1,1	14	13,5	13	12	11	9,5	8	6											
B-N 40-125C/A	N 40-125C/A	90 S2	1,5	17,5	17	16,5	16	15	13,5	12	10,5	7,5	6,5									
B-N 40-125A/A	N 40-125A/A	90 L2	2,2	22	22	21,5	21	20	19	18	16,5	14	13	11,5								
B-N 40-160C/A	N 40-160C/A	90 L2	2,2	23	22,5	22	21,5	20	18,5	16,5	14,5	11	10									
B-N 40-160B/A	N 40-160B/A	100 L2	3	29	28,8	28	27,5	26,5	25	23,5	21,5	18	17	14								
B-N 40-160A/A	N 40-160A/A	112 M2 132 S2	4 5,5	37	36,5	36,5	36	35	33,5	32	30,5	27	26	23,5	20	17						
B-N 40-200D/A	N 40-200D/A	112 M2 132 S2	4 5,5	39	38	37	35,5	33,5	30,5	27	22,5	14										
B-N 40-200C/A	N 40-200C/A	112 M2 132 S2	4 5,5	41,5	40,5	39,5	38	36	33,5													
B-N 40-200B/A	N 40-200B/A	132 S2	5,5	50	49,5	48,5	47,5	45,5	43,5	41,5	37,5	30,5										
B-N 40-200A/A	N 40-200A/A	132 S2	7,5	55	54,5	54	53	51	49													
B-N 40-250C/A	N 40-250C/A	160 M2	11	61	61	60,5	59,5	58,5	56,5	53,5	49,5	41,5	40	33,5								
B-N 40-250B/A	N 40-250B/A	160 M2	11	69,5	69,5	69	68,5	67	65,5	63,5	60,5	53,5	51	45								
B-N 40-250A/A	N 40-250A/A	160 M2	15	90	90	89,5	89	88,5	87	85	83	77,5	76	70,5								

N Standard construction. P<sub>2</sub> Rated motor power output. P<sub>3</sub> Pump power input. H Total head in m. \* Maximum suction lift 1-2 m.  
B-N Bronze construction.



### Performance n ≈ 2900 rpm

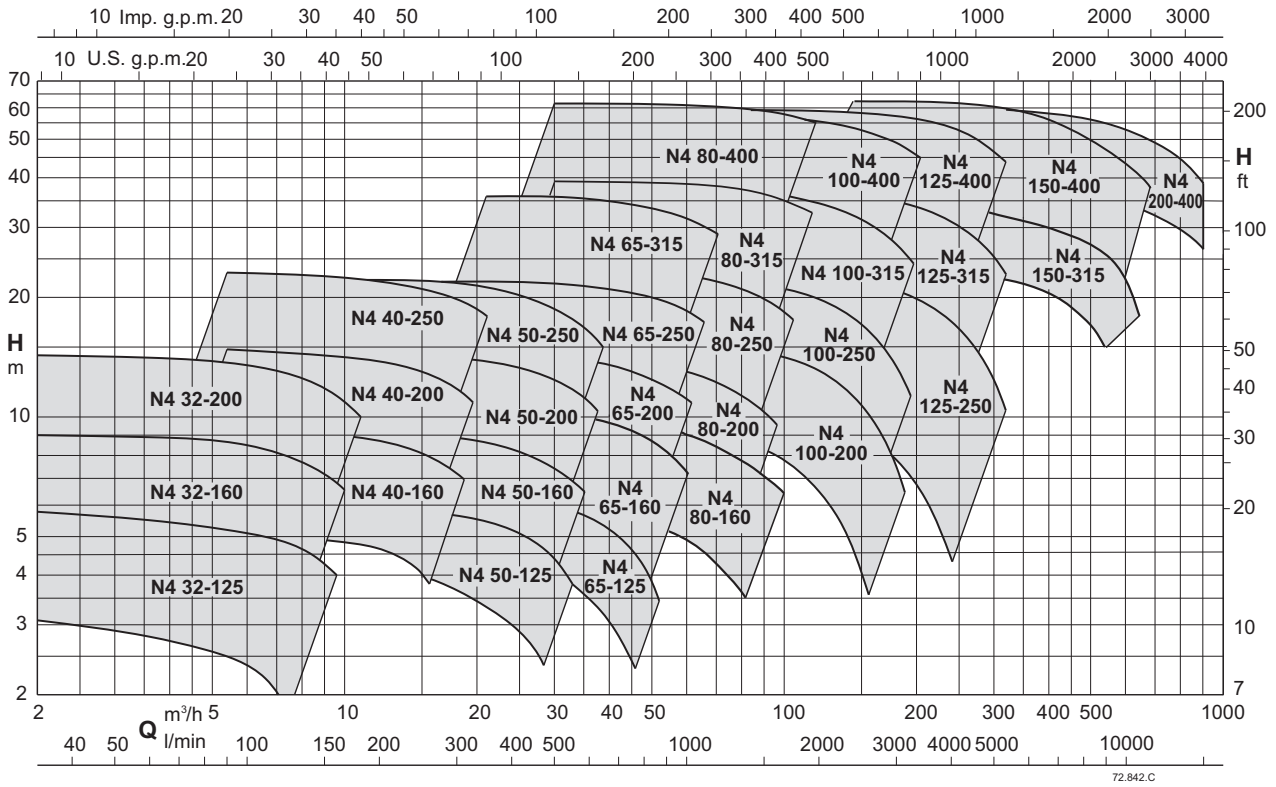
PUMP B-N	PUMP N	MOTOR	P <sub>2</sub> kW	Q m <sup>3</sup> /h	H m																
				Q l/min	24	27	30	33	37,8	42	48	54	60	66	69	72	75	78	81	84	96
B-N 50-125F/A	N 50-125F/A	90 L2	2,2																		
B-N 50-125D/A	N 50-125D/A	100 L2	3																		
B-N 50-125A/A	N 50-125A/A	112 M2	4																		
B-N 50-125S/A	N 50-125S/A	112 M2 132 S2	4 5,5																		
B-N 50-160B/A	N 50-160B/A	132 S2	5,5																		
B-N 50-160A/A	N 50-160A/A	132 S2	7,5																		
B-N 50-200B/A	N 50-200B/A	160 M2	11	48	47,5	47,5	47	45,5	44,5	42,5	40	37	33	30,5	28	25,5	23				
B-N 50-200A/A	N 50-200A/A	160 M2	11	55	55	54,5	54	53,5	52	50	48	45	41,5	39,5	37	35	32,5				
B-N 50-200S/A	N 50-200S/A	160 M2	15	60	60	59,5	59	58,5	57,5	55,5	53,5	50,5	47	45	43	40,5	37				
B-N 50-250C/A	N 50-250C/A	160 M2	11	55	54,5	54	53	51,5	49,5	46,0	41,5	37	33	30,5	28	25,5	23				
B-N 50-250B/A	N 50-250B/A	160 M2	15	69	68,5	68	67,5	66	64	61	57	52,5	46,5	43							
B-N 50-250A/A	N 50-250A/A	160 L2	18,5	80,5	80,5	80	79,5	78,5	77	74,5	71,5	67	61,5	58,5							
B-N 50-250S/A	N 50-250S/A	180 M2	22	88,5	88,5	88	87	86	84	81,5	78,5	75	71	68,5							

PUMP B-N	PUMP N	MOTOR	P <sub>2</sub> kW	Q m <sup>3</sup> /h	H m																		
				Q l/min	24	27	30	33	37,8	42	48	54	60	66	75	84	96	108	120	132	141		
B-N 65-125E/B	N 65-125E/B	112 M2	4						16,5	16,4	16,2	15,9	15,5	15,1	14,3	13,2	11,4	9,2					
B-N 65-125C/B	N 65-125C/B	132 S2	5,5						21,1	21	20,8	20,6	20,3	19,9	19,1	18,2	16,5	14,4	11,8				
B-N 65-125A/B	N 65-125A/B	132 S2	7,5						25,9	25,8	25,6	25,4	25,1	24,8	24,1	23,3	21,9	20	17,6				
B-N 65-160D/B	N 65-160D/B	132 S2	7,5									24,3	24,1	23,9	23,6	23,1	22,3	20,8	18,8	16,3			
B-N 65-160C/B	N 65-160C/B	160 M2	11									28,1	28	27,8	27,6	27,1	26,3	24,9	23,1	20,7			
B-N 65-160B/B	N 65-160B/B	160 M2	11									32,6	32,5	32,3	32	31,5	30,8	29,5	27,9	25,7			
B-N 65-160A/B	N 65-160A/B	160 M2	15									36,4	36,3	36,2	35,9	35,5	34,8	33,7	32,1	30,0			
B-N 65-200C/B	N 65-200C/B	160 M2	15									40,5	40,4	40,2	40	39,5	38,8	37,6	36,1	34,2			
B-N 65-200B/B	N 65-200B/B	160 L2	18,5									44	43,8	43,5	43,1	42,3	41,2	39,4	37,1	34,4			
B-N 65-200A/B	N 65-200A/B	180 M2	22									50,5	50,4	50,2	49,9	49,2	48,3	46,8	44,8	42,5			
B-N 65-250C/B	N 65-250C/B	180 M2	22									61	61	60,5	60	58,5	57	54,5	51,5	47,5			
B-N 65-250B/B	N 65-250B/B	200 L2	30									73,5	73,5	73,5	73,5	73	71,5	69,5	66,5	63			
B-N 65-250A/B	N 65-250A/B	200 L2	37									86,5	86,5	87	86,5	86	85,5	83,5	81	78			

PUMP B-N	PUMP N	MOTOR	P <sub>2</sub> kW	Q m <sup>3</sup> /h	H m																				
				Q l/min	60	66	75	84	96	108	120	132	150	168	180	192	210	240	270	300					
B-N 80-160E/B	N 80-160E/B	132 S2	7,5																						
B-N 80-160D/B	N 80-160D/B	160 M2	11																						
B-N 80-160C/B	N 80-160C/B	160 M2	11																						
B-N 80-160B/B	N 80-160B/B	160 M2	15																						
B-N 80-160A/B	N 80-160A/B	160 L2	18,5																						
B-N 80-200B/B	N 80-200B/B	180 M2	22																						
B-N 80-200A/B	N 80-200A/B	200 L2	30																						
B-N 80-250E/A	N 80-250E/A	180 M2	22																						
B-N 80-250D/A	N 80-250D/A	200 L2	30																						
B-N 80-250C/A	N 80-250C/A	200 L2	37																						
B-N 80-250B/A	N 80-250B/A	225 M2	45																						
B-N 80-250A/A	N 80-250A/A	250 M2	55																						
B-N 100-200E/A	N 100-200E/A	160 L2	18,5																						
B-N 100-200D/A	N 100-200D/A	180 M2	22																						
B-N 100-200C/A	N 100-200C/A	200 L2	30																						
B-N 100-200B/A	N 100-200B/A	200 L2	37																						
B-N 100-200A/A	N 100-200A/A	225 M2	45																						
B-N 100-250B/A	N 100-250B/A	250 M2	55																						
B-N 100-250A/A	N 100-250A/A	280 S2	75																						

N Standard construction. P<sub>2</sub> Rated motor power output. H Total head in m. \* Maximum suction lift 1-2 m. ° Minimum positive suction head 1 m.  
 B-N Bronze construction. P<sub>3</sub> Pump power input.

### Coverage chart $n \approx 1450$ rpm



72.842.C

Tolerances according to UNI EN ISO 9906:2012

### Performance $n \approx 1450$ rpm

PUMP	PUMP	MOTOR	P <sub>2</sub> kW	Q																	
				m <sup>3</sup> /h	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			
				Q	40	50	60	70	80	90	100	110	125	140	160	180	200	220			
B-N4 32-125F/A	N4 32-125F/A	71 M4	0,25	H m P <sub>3</sub> kW	3,6 0,07	3,6 0,075	3,5 0,08	3,5 0,09	3,4 0,095	3,2 0,1	3 0,1	2,8 0,105	2,4 0,11	1,9 0,115	1,1 0,115						
B-N4 32-125D/A	N4 32-125D/A	71 M4	0,25		4,7 0,095	4,7 0,075	4,7 0,11	4,7 0,115	4,6 0,125	4,6 0,13	4,5 0,135	4,3 0,145	4,1 0,15	3,8 0,155	3,3 0,165	2,6 0,17					
B-N4 32-125A/A	N4 32-125A/A	71 M4	0,25		5,7 0,12	5,8 0,1	5,8 0,135	5,7 0,145	5,7 0,15	5,7 0,16	5,6 0,165	5,5 0,175	5,4 0,185	5,2 0,195	4,8 0,205	4,3 0,215					
B-N4 32-160B/A	N4 32-160B/A	71 M4	0,37		7,6 0,13	7,5 0,125	7,4 0,15	7,3 0,16	7,2 0,17	7,1 0,18	6,9 0,19	6,7 0,2	6,3 0,21	5,9 0,215	5,2 0,23	4,2 0,235					
B-N4 32-160A/A	N4 32-160A/A	71 M4	0,37		9 0,17	8,95 0,18	8,9 0,19	8,8 0,2	8,7 0,21	8,6 0,22	8,5 0,23	8,3 0,24	7,9 0,26	7,5 0,275	6,8 0,29	6 0,305	5,1 0,315				
B-N4 32-200B/A	N4 32-200B/A	80 M4	0,55		12,5 0,28	12,4 0,3	12,3 0,315	12,2 0,33	12 0,345	11,8 0,36	11,6 0,375	11,2 0,39	10,6 0,41	10 0,43	8,9 0,455	7,6 0,48	6,2 0,5	4,7 0,515			
B-N4 32-200A/A	N4 32-200A/A	80 M4	0,75		14,3 0,35	14,2 0,375	14,1 0,4	14 0,42	13,9 0,44	13,7 0,46	13,5 0,48	13,3 0,5	12,9 0,525	12,3 0,55	11,3 0,585	10,2 0,61	8,9 0,635	7,5 0,655			

PUMP	PUMP	MOTOR	P <sub>2</sub> kW	Q																	
				m <sup>3</sup> /h	5,4	6	6,6	7,5	8,4	9,6	10,8	12	13,2	15	16,8	18,9	21	24	27	30	
				Q	90	100	110	125	140	160	180	200	220	250	280	315	350	400	450	500	
B-N4 40-160C/A	N4 40-160C/A	71 M4	0,37	H m P <sub>3</sub> kW	6,1 0,17	6 0,18	5,9 0,19	5,9 0,2	5,8 0,21	5,6 0,23	5,4 0,24	5,2 0,25	5 0,26	4,5 0,27	3,9 0,28	3,1 0,29	2,3 0,3				
B-N4 40-160B/A	N4 40-160B/A	80 M4	0,55		7,6 0,22	7,6 0,23	7,6 0,24	7,6 0,26	7,6 0,27	7,3 0,29	7,1 0,31	6,9 0,32	6,6 0,34	6,3 0,36	5,7 0,38	5 0,39	4 0,4	2,7 0,41			
B-N4 40-160A/A	N4 40-160A/A	80 M4	0,75		9,6 0,28	9,6 0,3	9,6 0,31	9,6 0,33	9,4 0,35	9,3 0,37	9,1 0,4	9 0,42	8,8 0,44	8,4 0,47	7,9 0,49	7,2 0,51	6,4 0,53	5,1 0,55	3,5 0,56		
B-N4 40-200B/A	N4 40-200B/A	90 S4	1,1		13 0,51	12,9 0,53	12,8 0,54	12,7 0,57	12,6 0,60	12,4 0,63	12,2 0,66	12 0,68	11,5 0,71	10,8 0,75	10 0,78	8,6 0,81	7 0,83				
B-N4 40-200A/A	N4 40-200A/A	90 S4	1,1		14,8 0,59	14,7 0,6	14,6 0,61	14,5 0,64	14,4 0,67	14,2 0,71	14 0,74	13,8 0,77	13,6 0,8	13 0,85	12,2 0,9	11,3 0,94	10 0,97				
B-N4 40-250C/A	N4 40-250C/A	90 L4	1,5		17,4 0,689	17,3 0,715	17,2 0,74	17,2 0,779	17 0,817	16,8 0,865	16,6 0,912	16,3 0,967	16 1,018	15,1 1,092	13,8 1,134	12,1 1,178	10,4 1,248	7,2 1,301	2,8 1,348		
B-N4 40-250B/A	N4 40-250B/A	100 LA4	2,2		21,4 0,908	21,5 0,942	21,4 0,99	21,3 1,025	21,2 1,075	21 1,140	20,9 1,203	20,8 1,266	20,5 1,327	20 1,405	19,5 1,482	18,3 1,567	16,4 1,645	13,3 1,752	10 1,815	5 1,867	
B-N4 40-250A/A	N4 40-250A/A	100 LB4	3		22,9 1,068	22,8 1,104	22,9 1,15	22,9 1,193	22,8 1,246	22,5 1,316	22,5 1,385	22,2 1,454	22 1,521	21,8 1,638	21,4 1,733	20,4 1,817	18,9 1,933	16 2,068	12,6 2,168	8 2,267	

**N4** Standard construction.  
**B-N4** Bronze construction.

P<sub>2</sub> Rated motor power output.  
P<sub>3</sub> Pump power input.

H Total head in m.

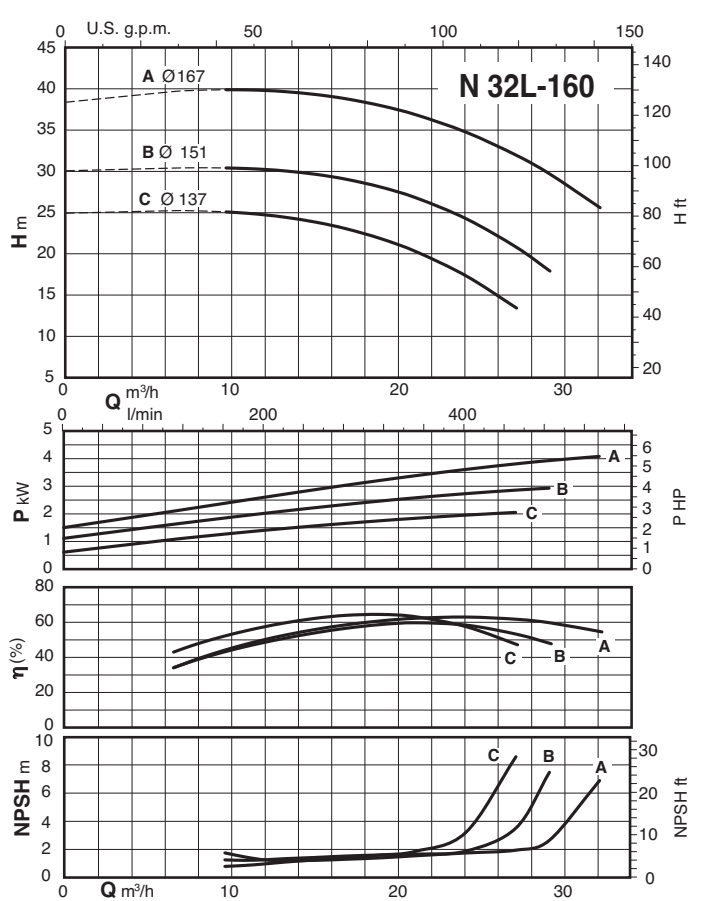
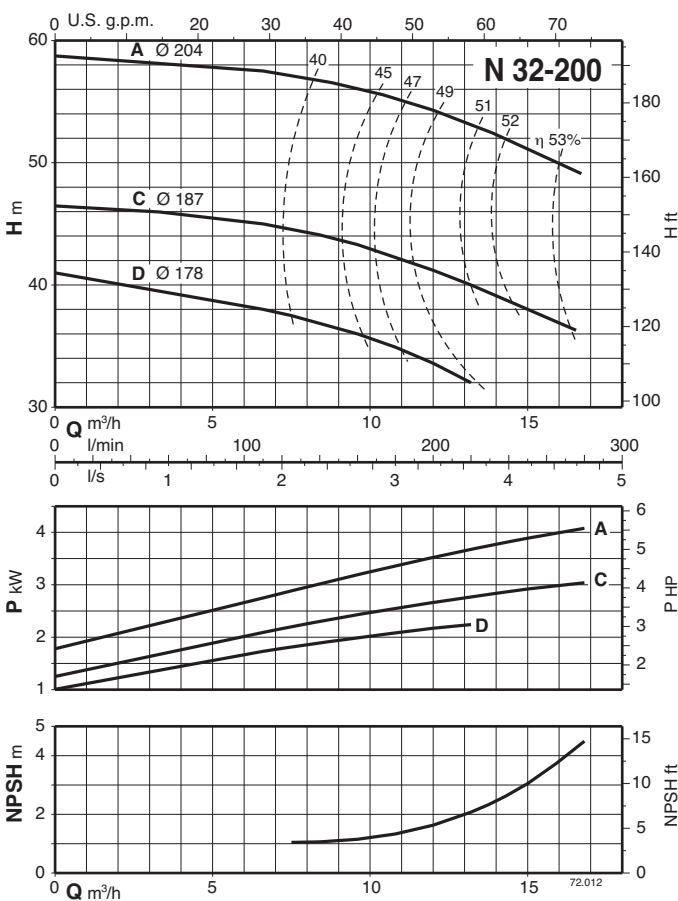
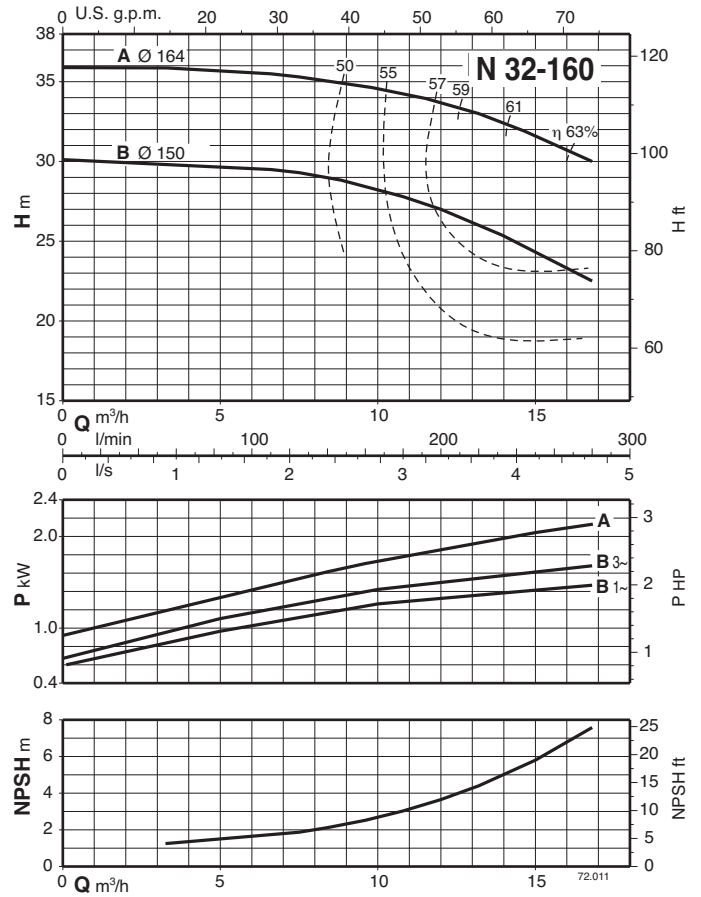
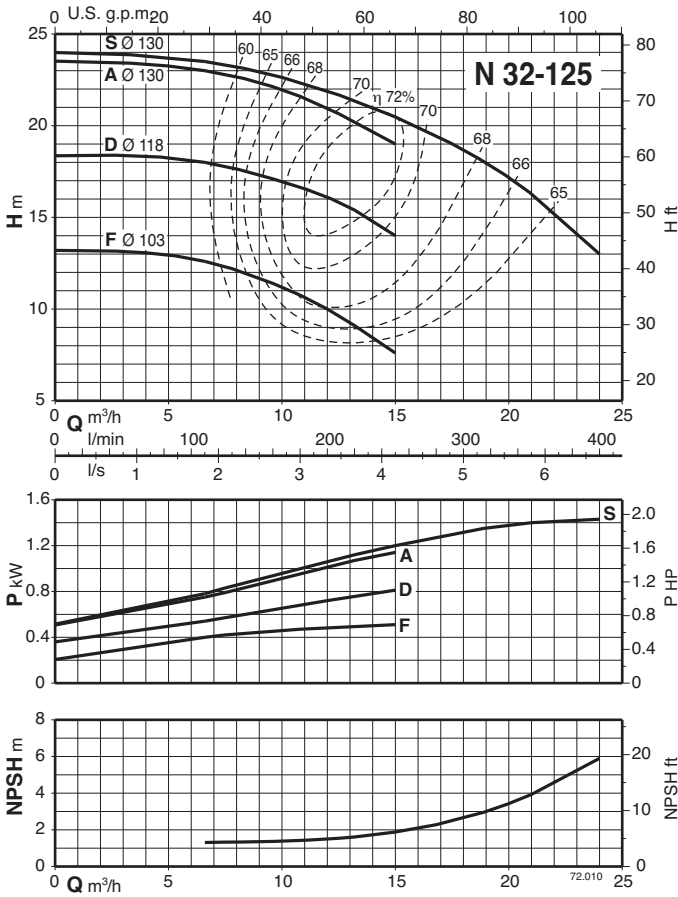
\* Maximum suction lift 1-2 m.





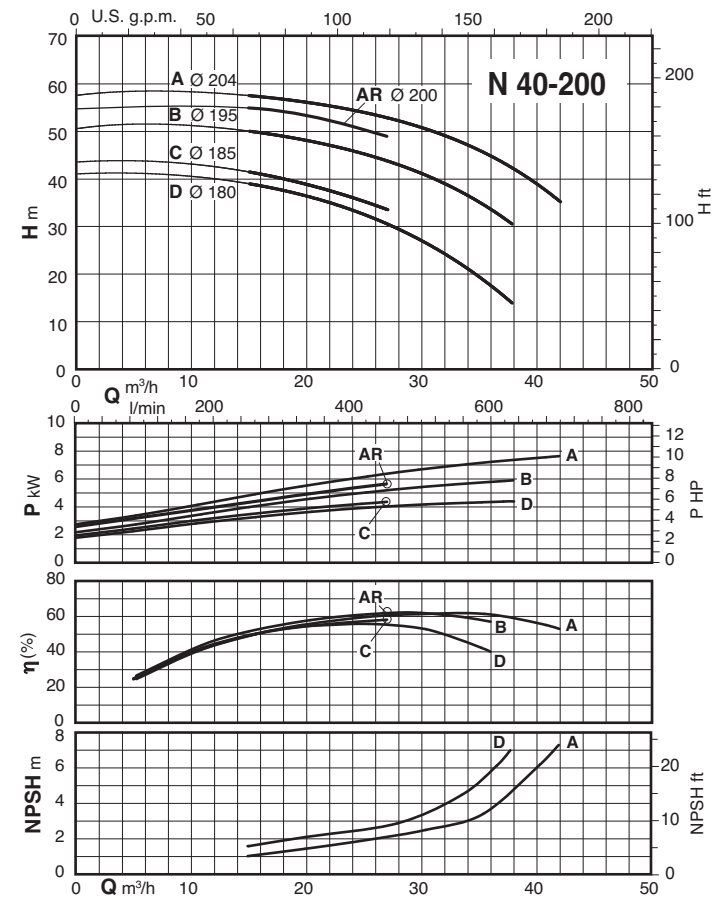
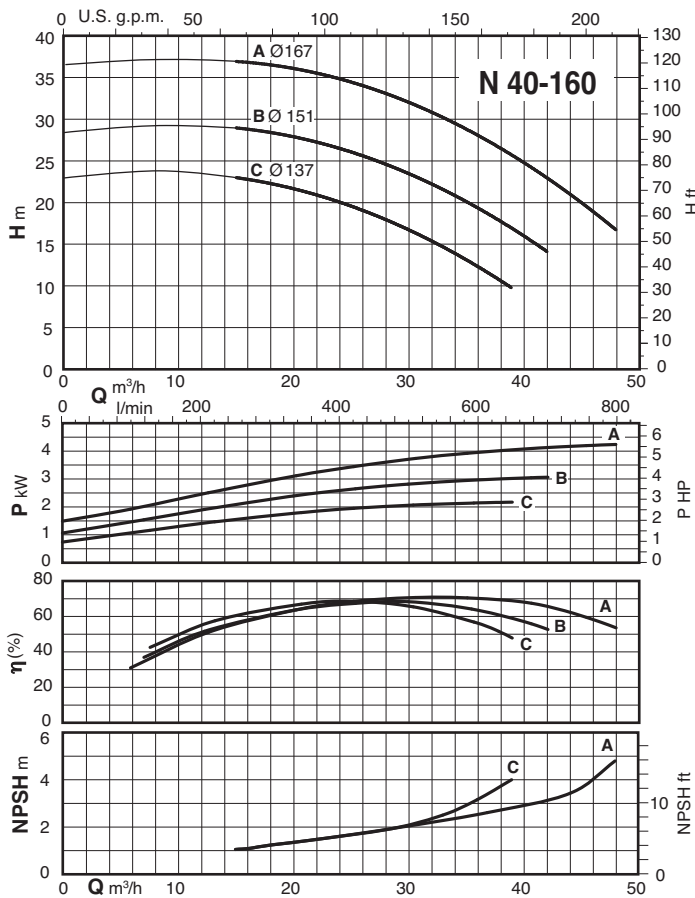
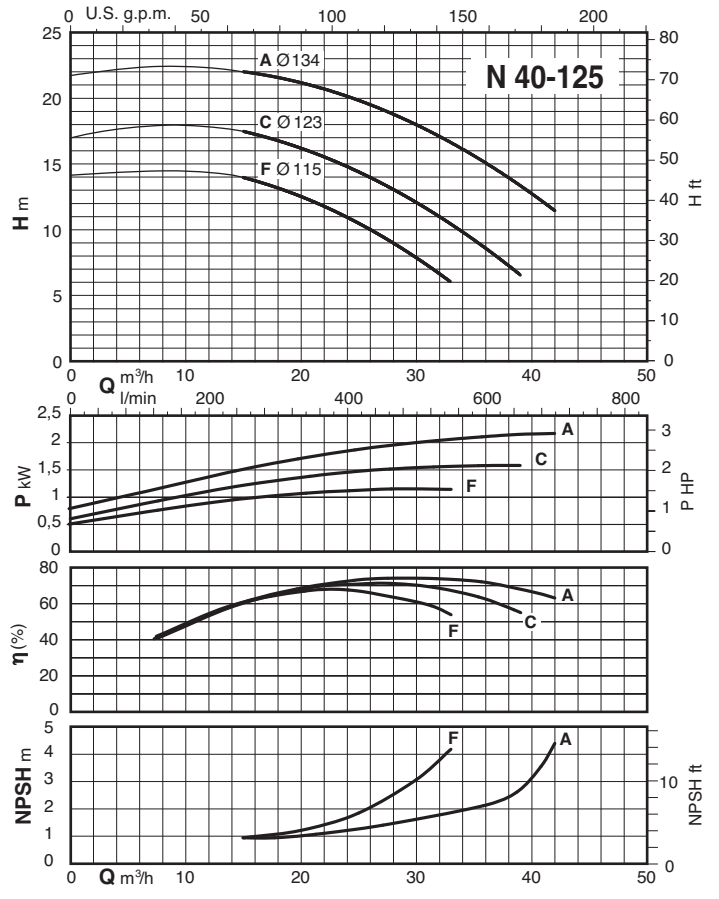
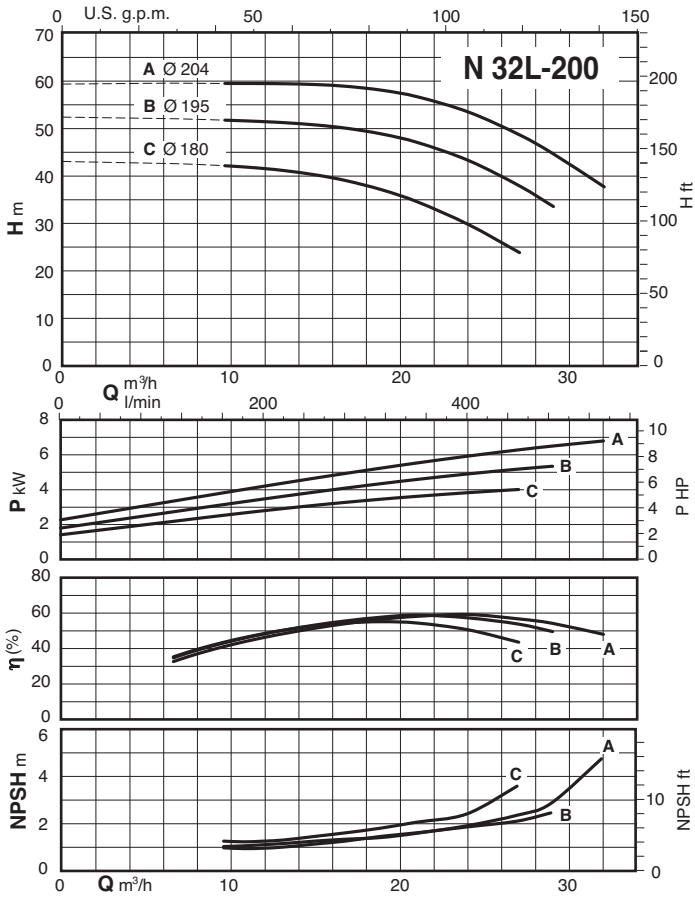


Characteristic curves  $n \approx 2900$  rpm





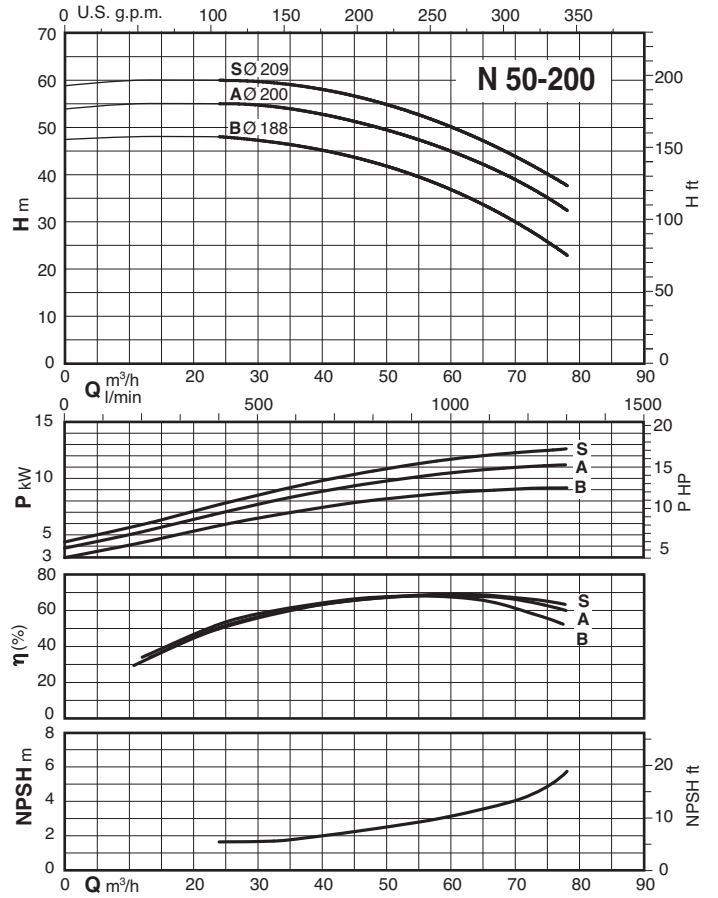
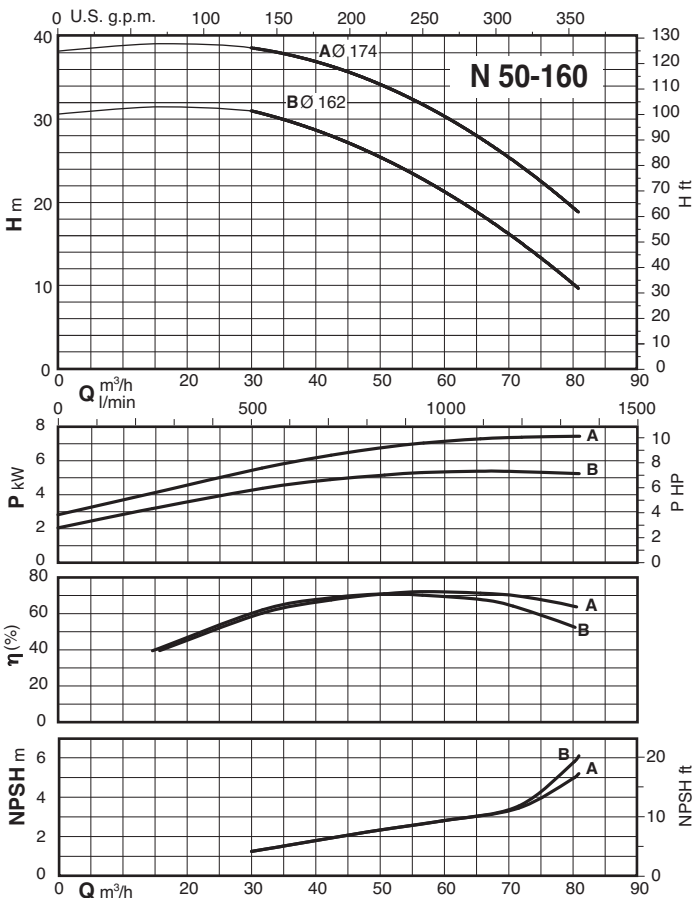
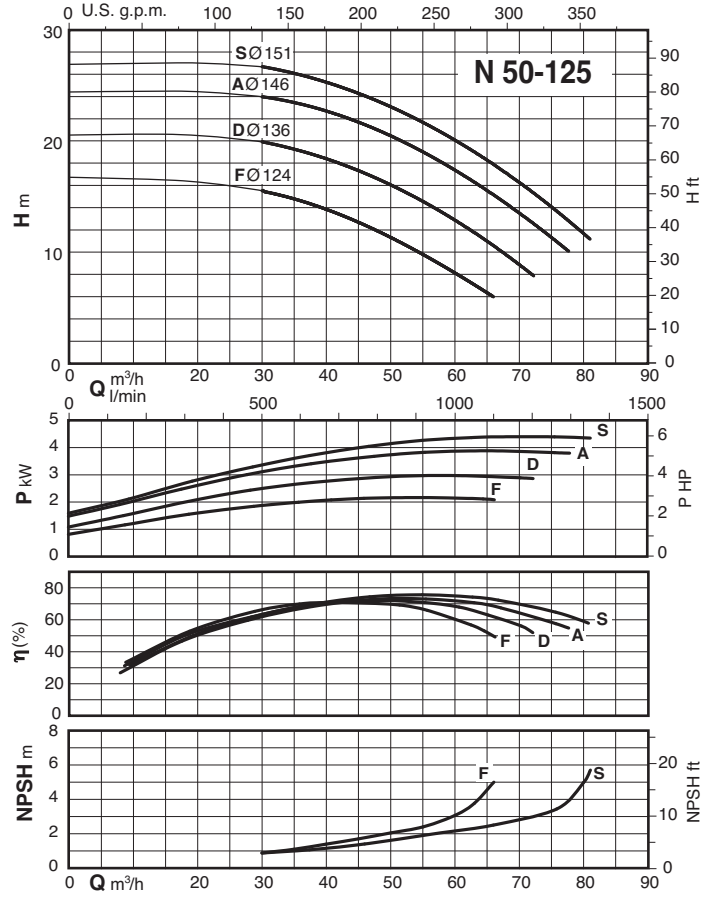
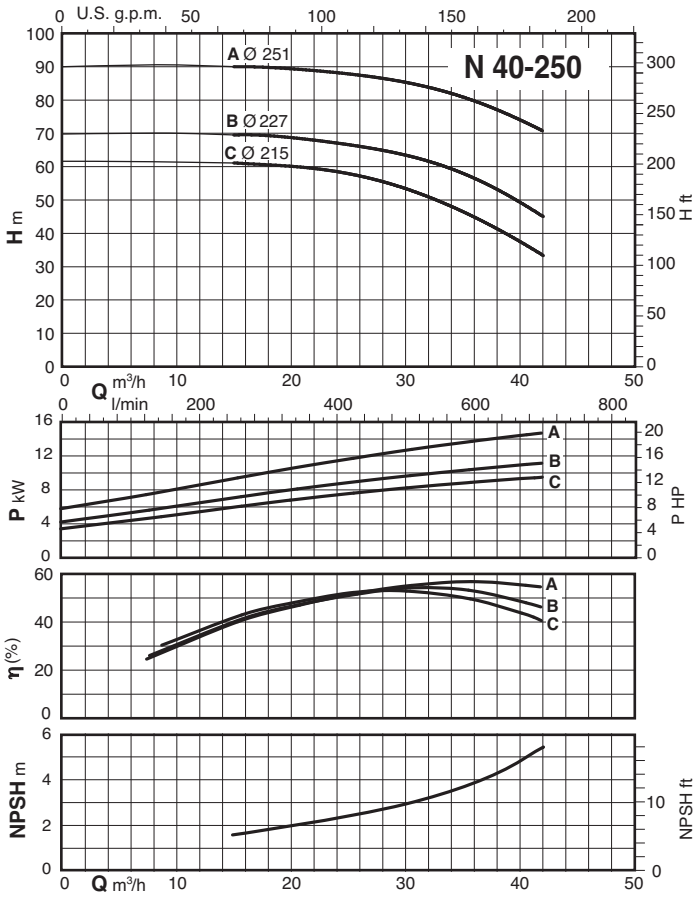
Characteristic curves  $n \approx 2900$  rpm





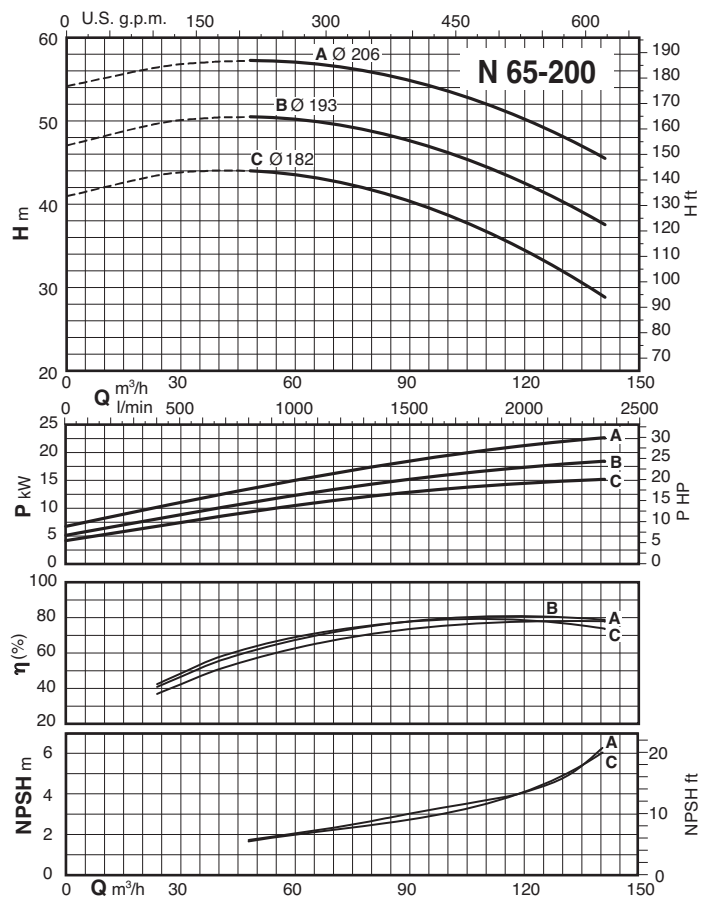
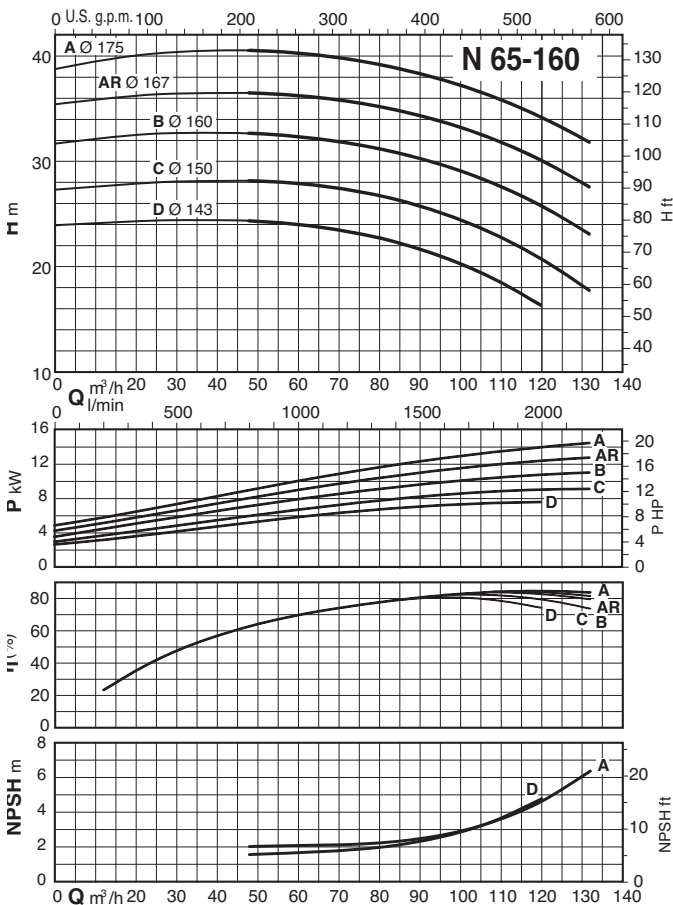
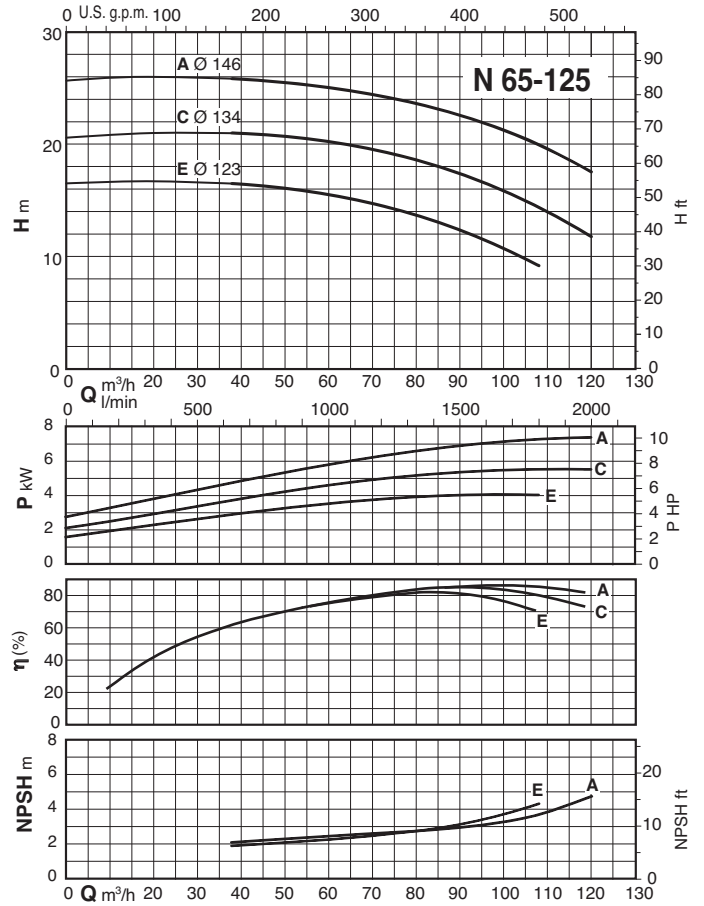
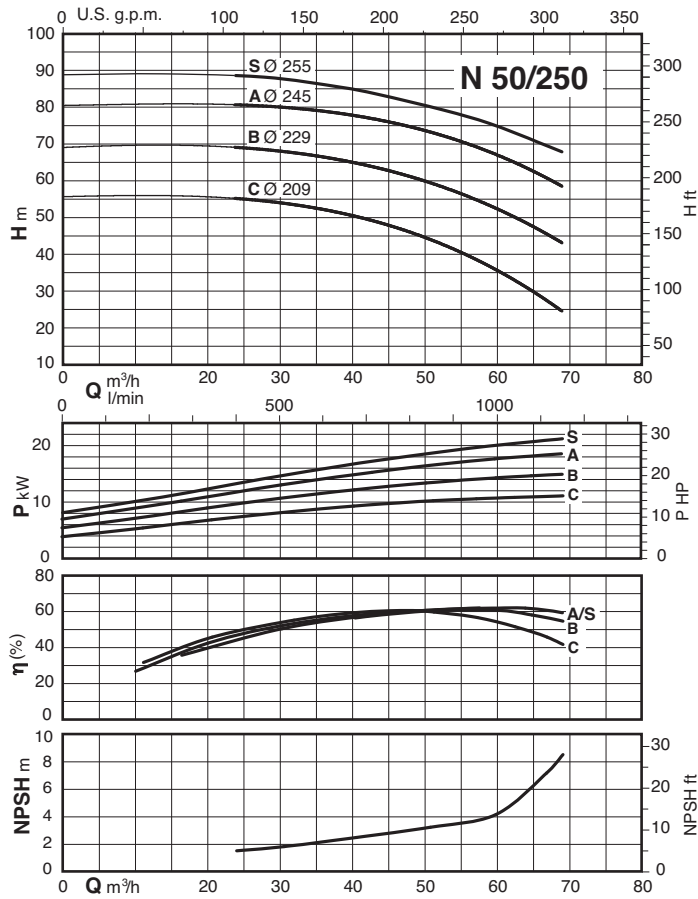


Characteristic curves  $n \approx 2900$  rpm



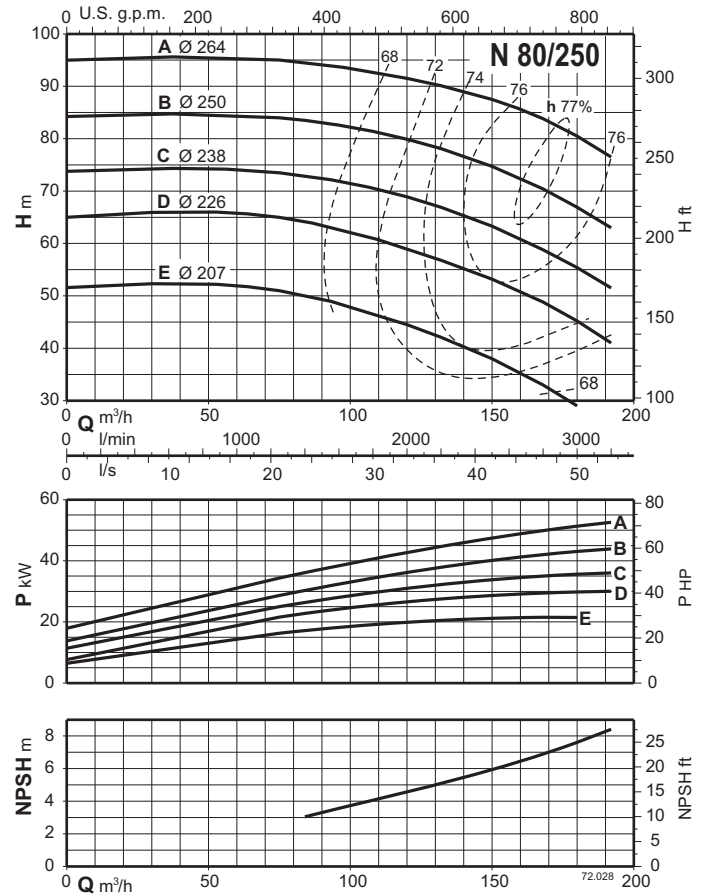
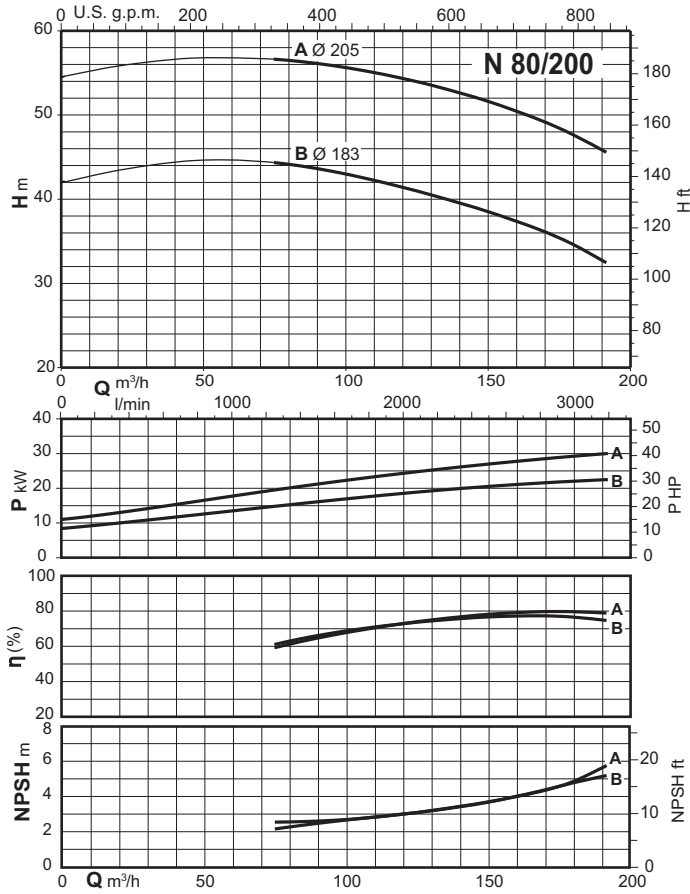
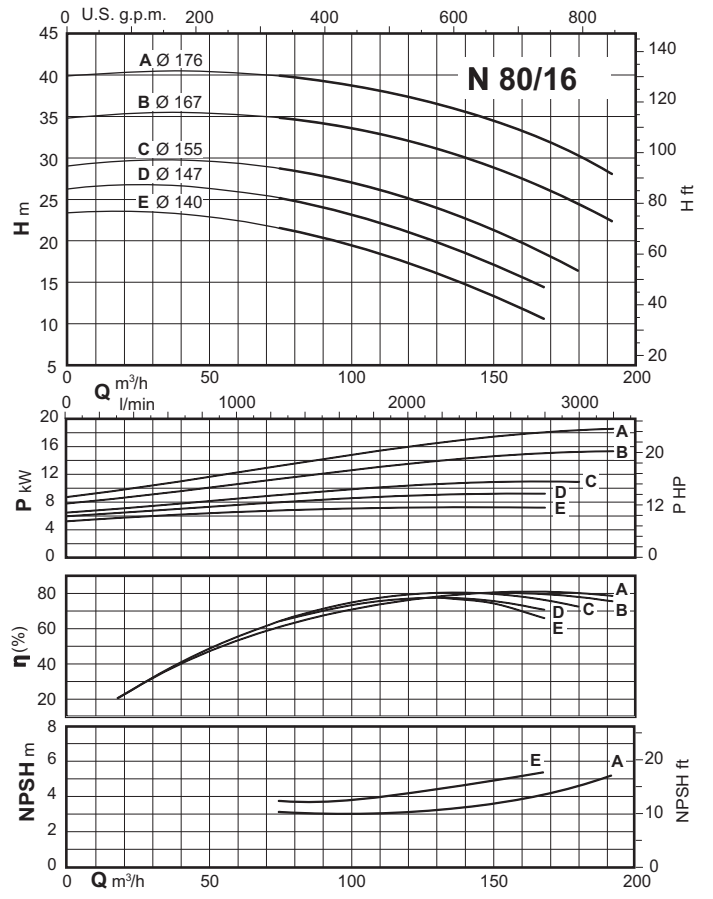
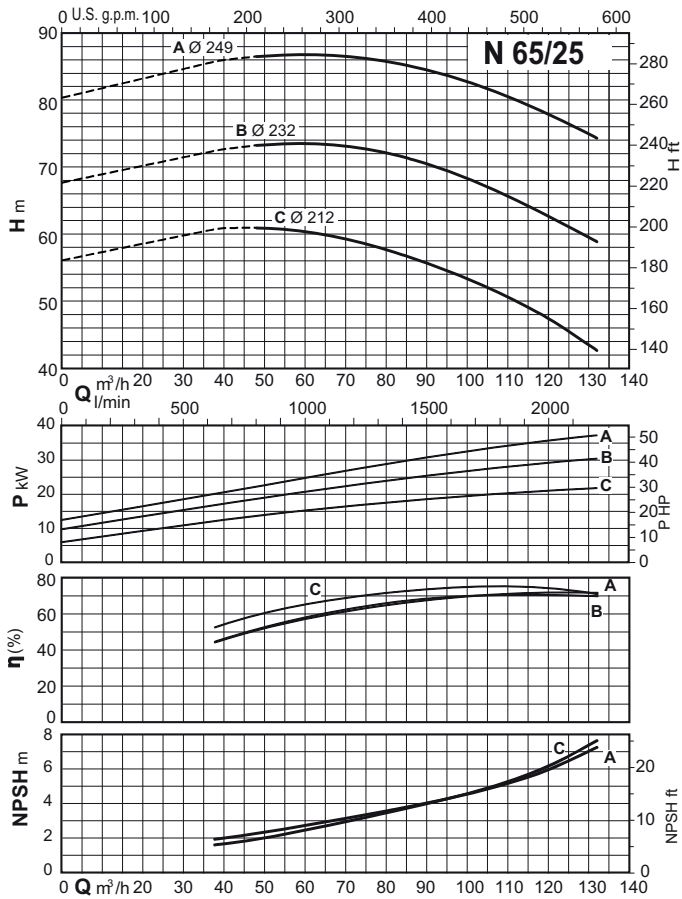


Characteristic curves  $n \approx 2900$  rpm



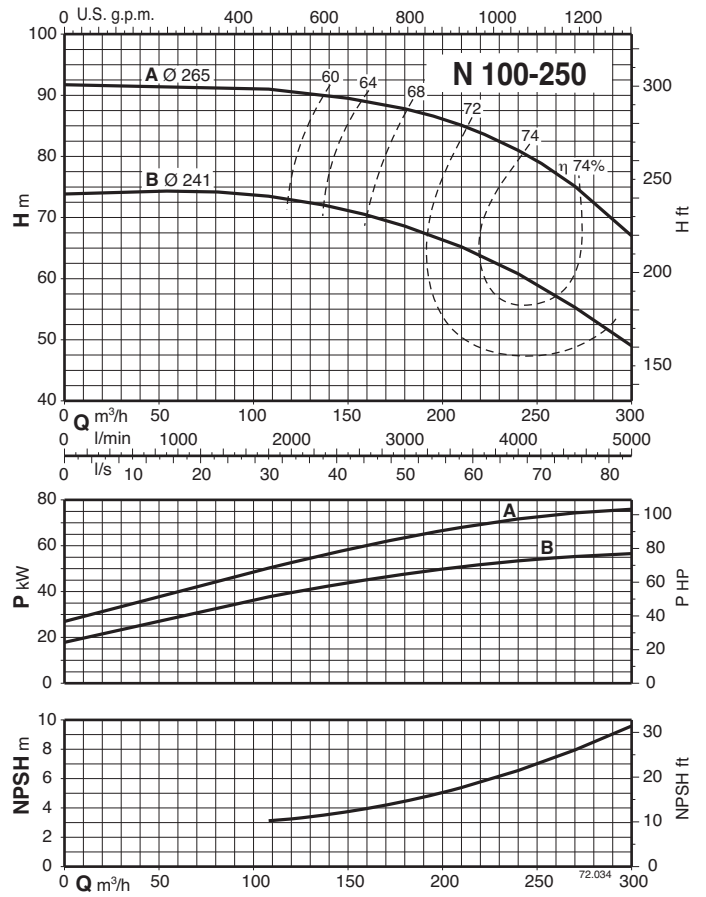
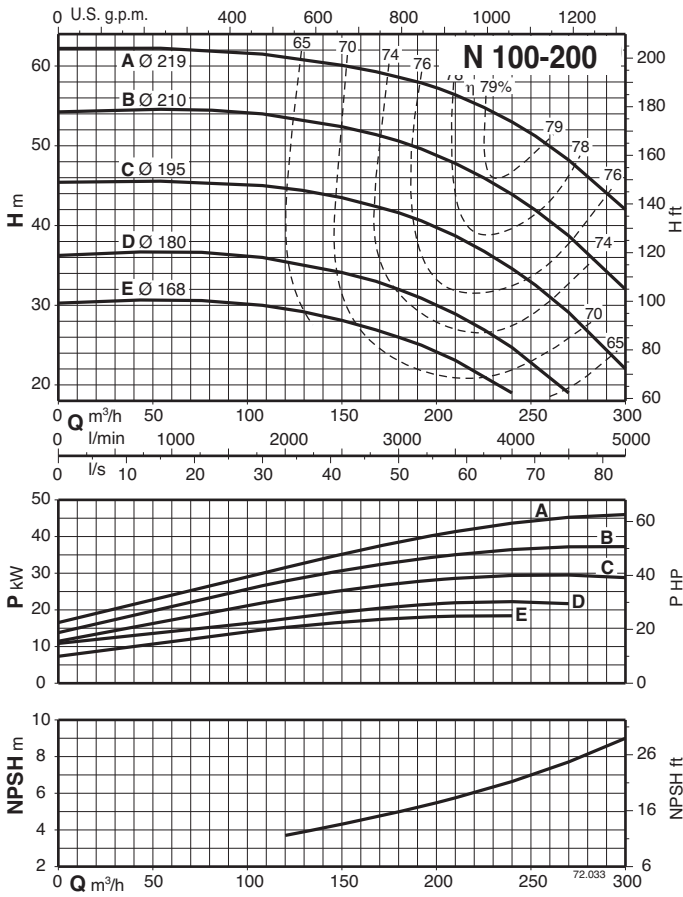


Characteristic curves  $n \approx 2900$  rpm

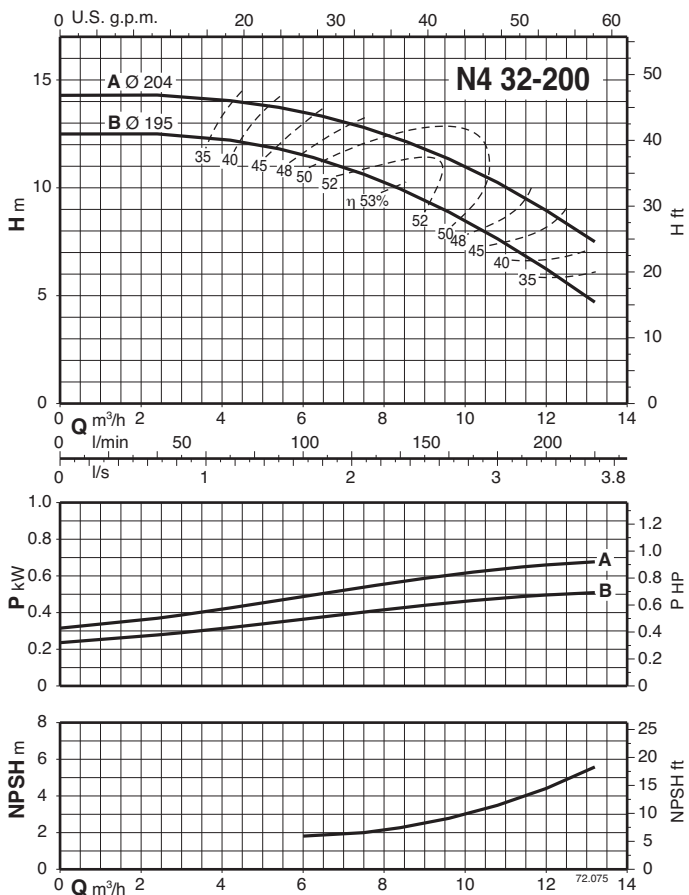
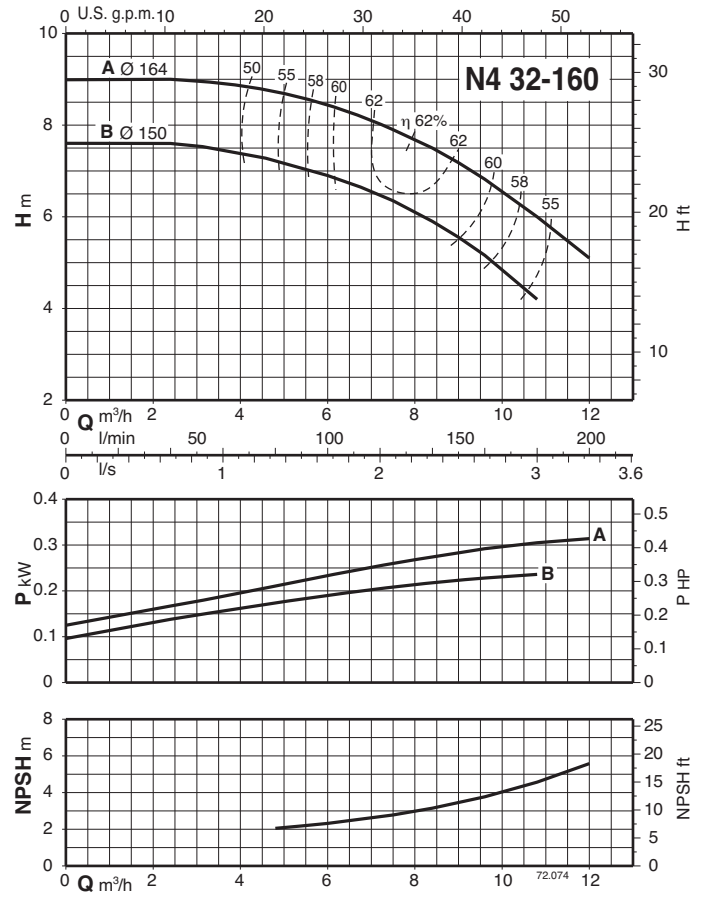
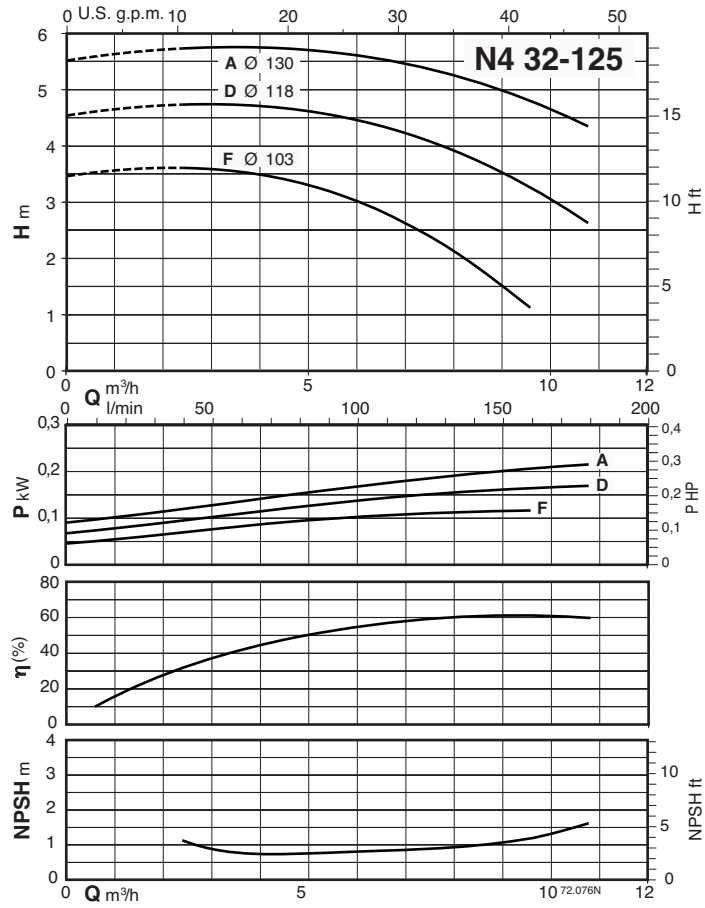




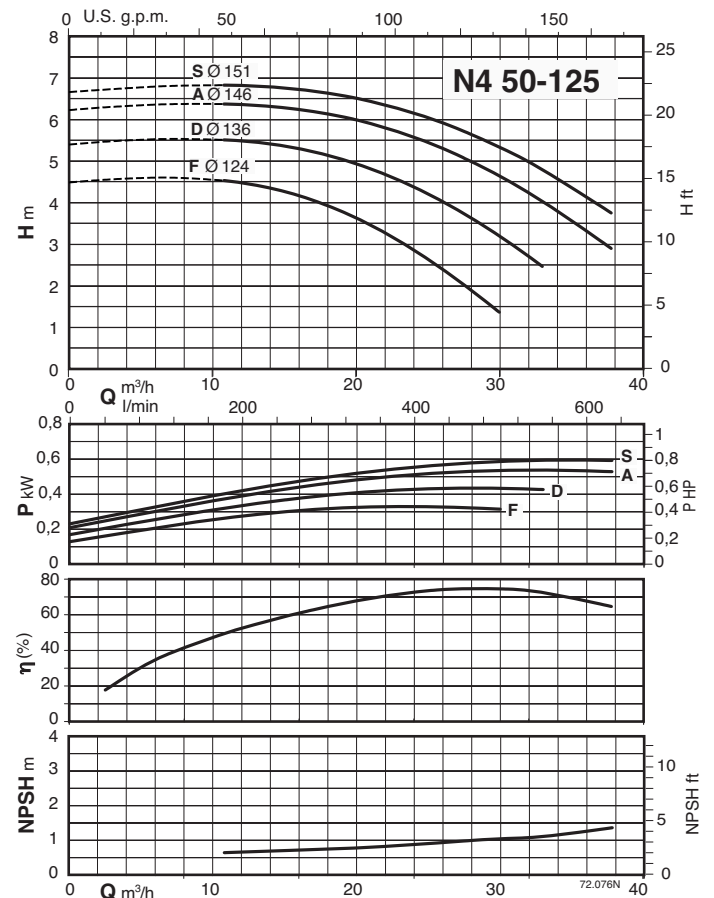
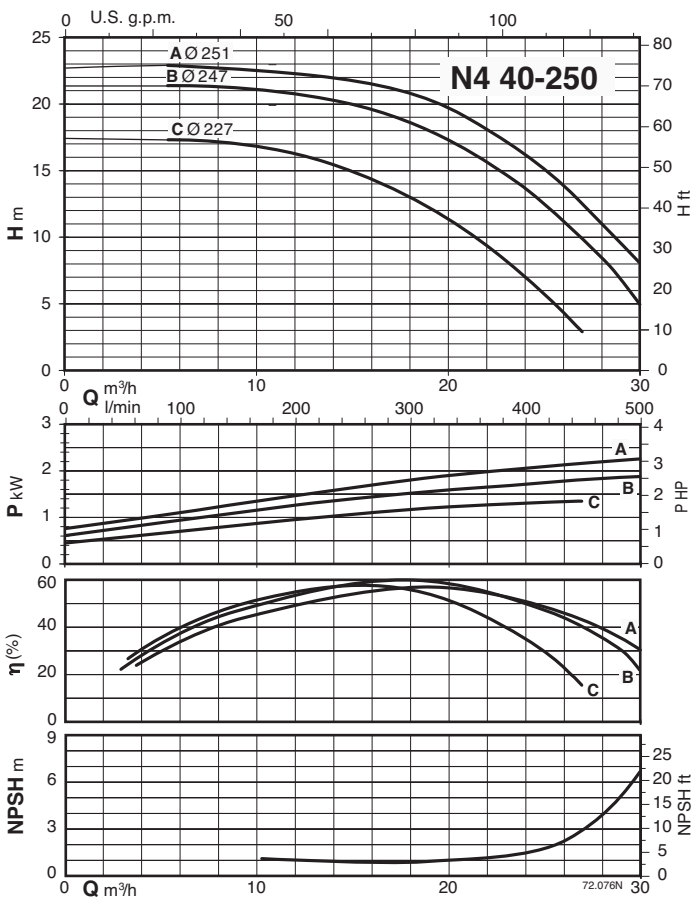
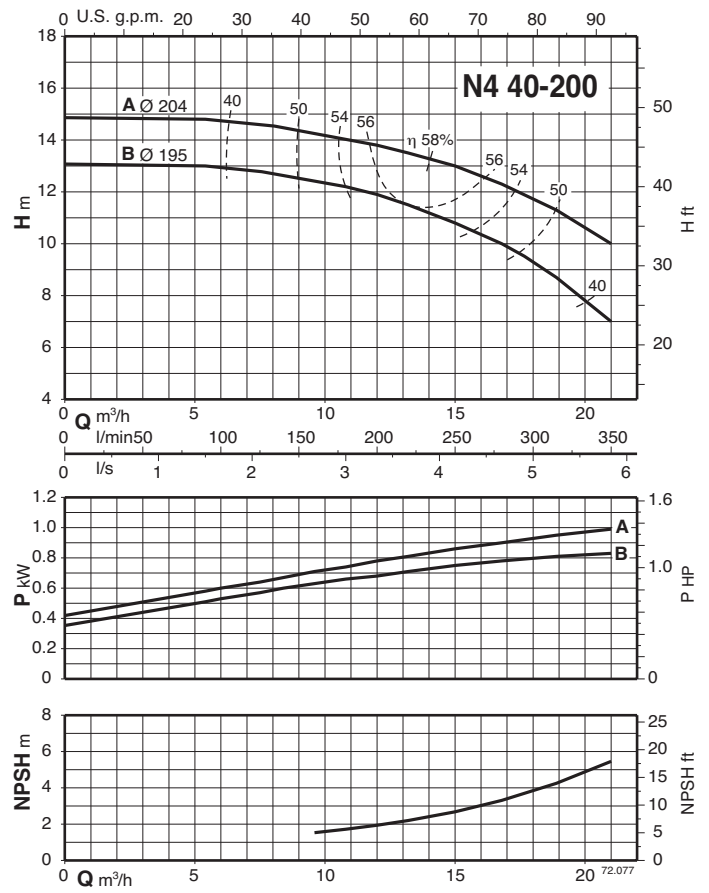
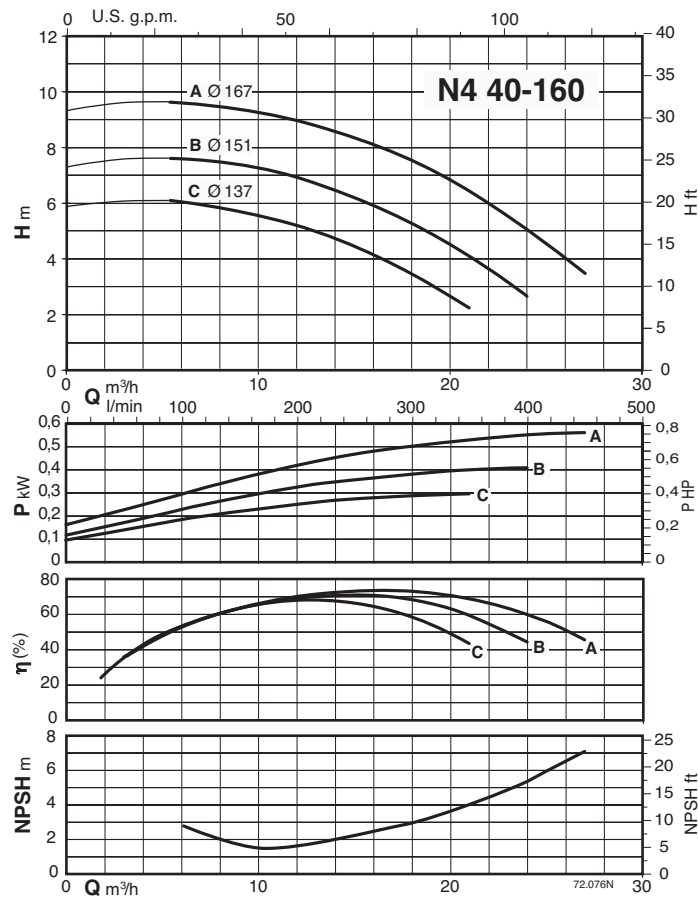
Characteristic curves  $n \approx 2900$  rpm



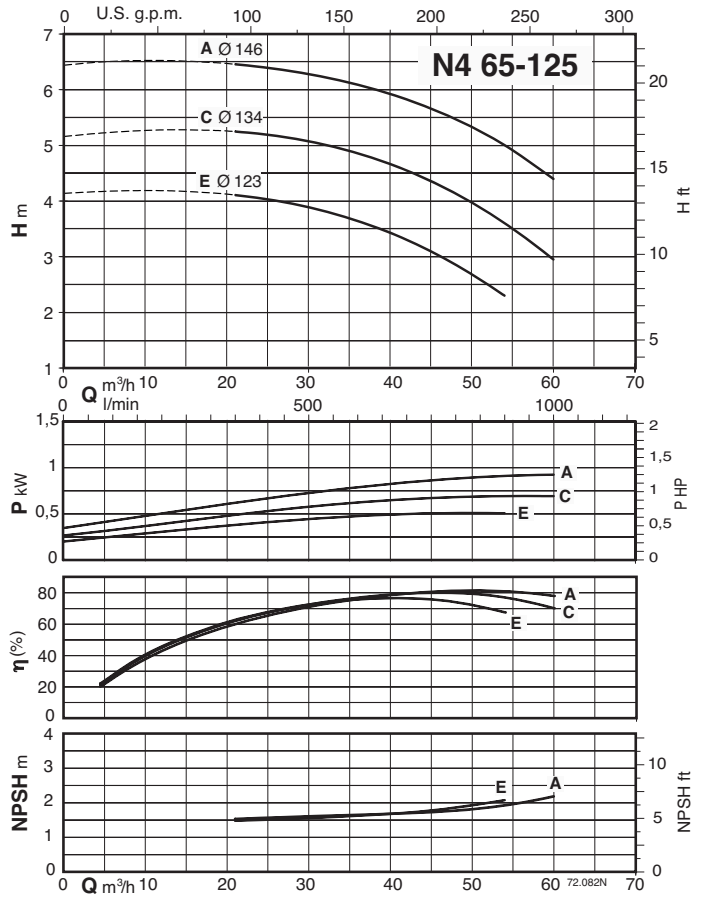
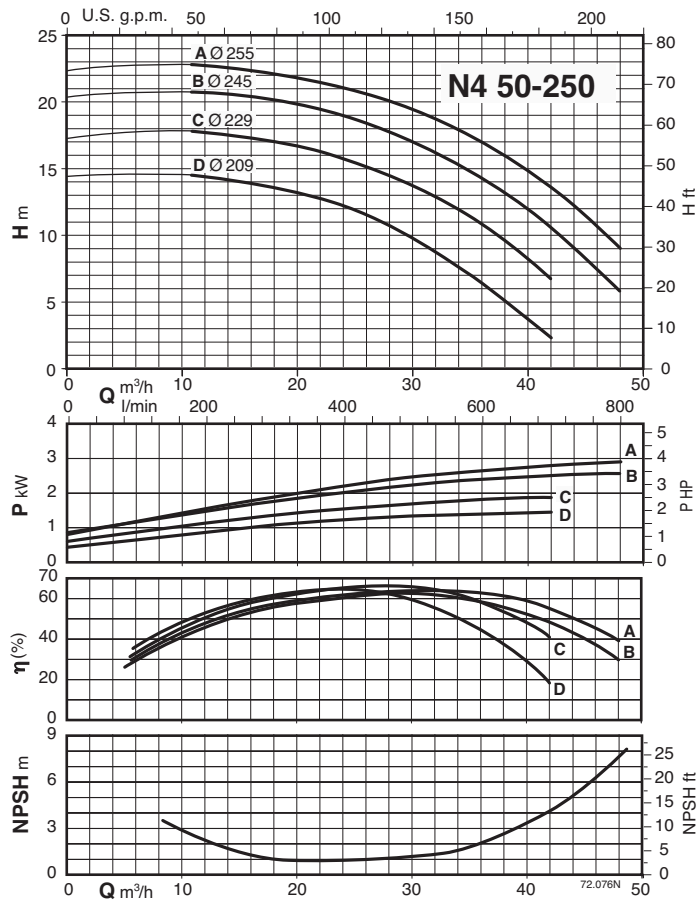
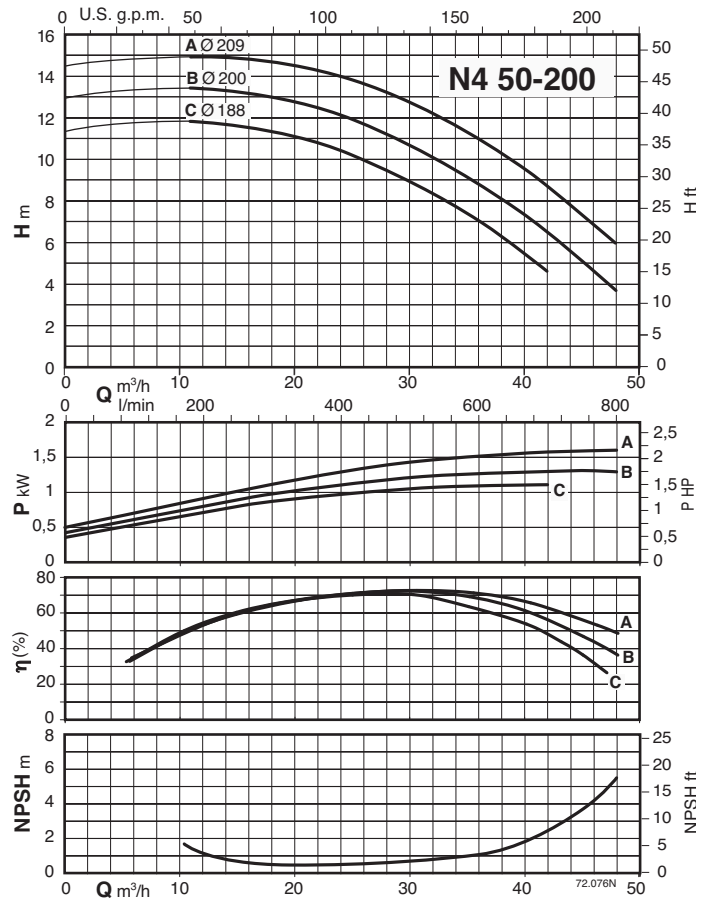
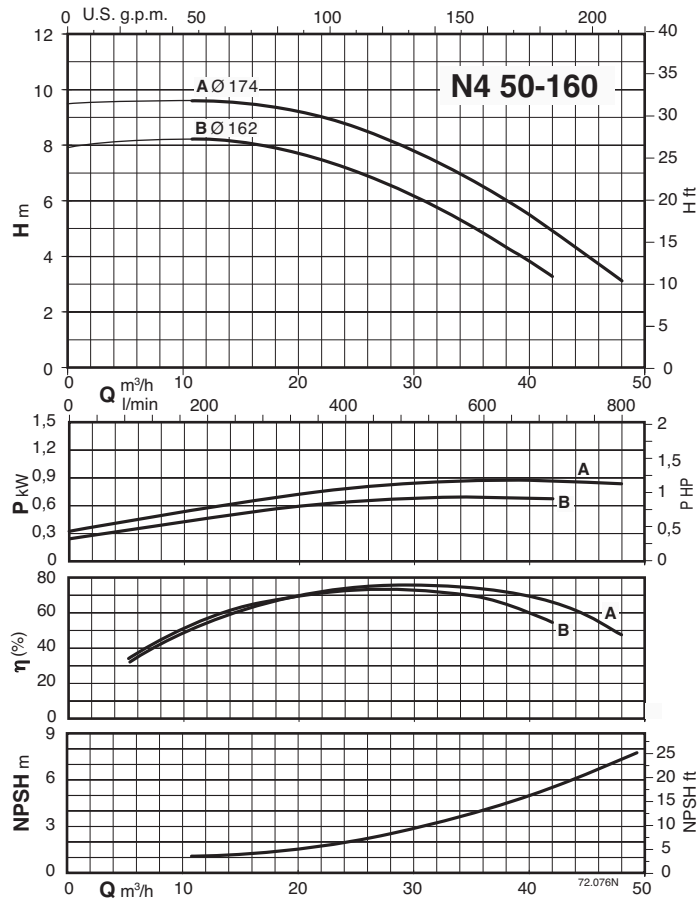
### Characteristic curves $n \approx 1450$ rpm



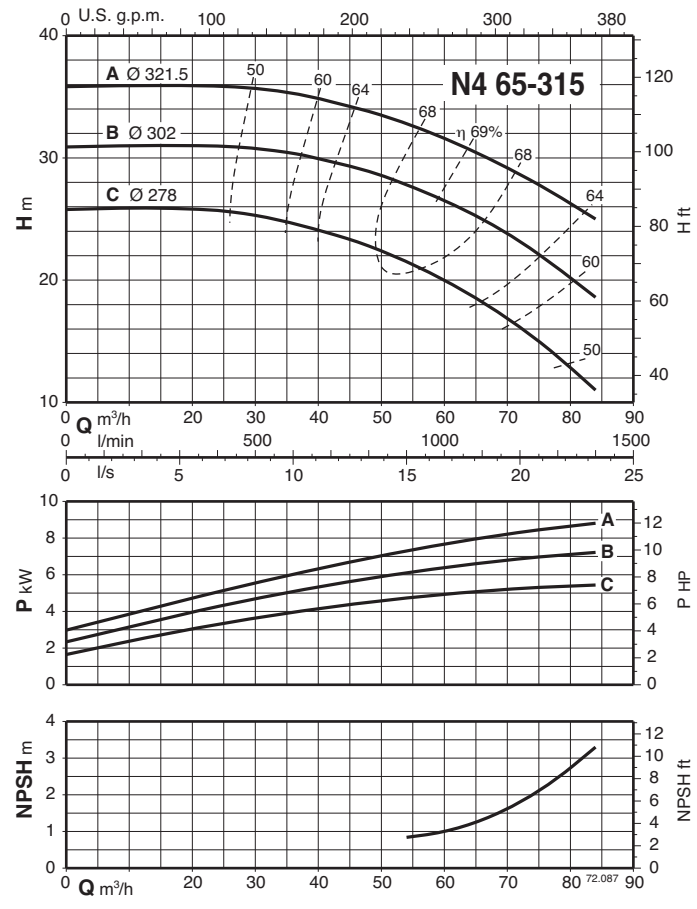
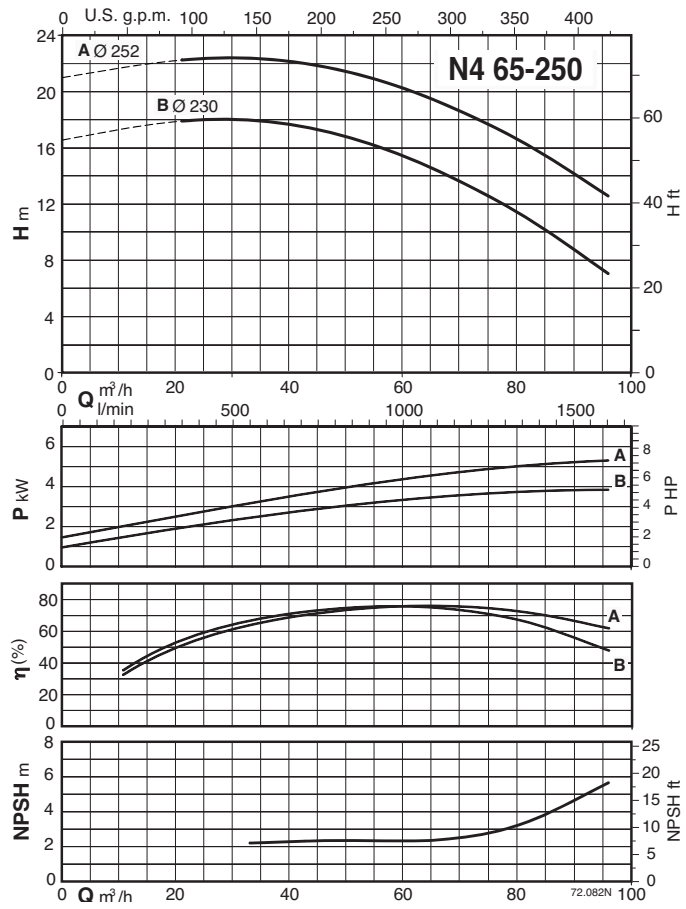
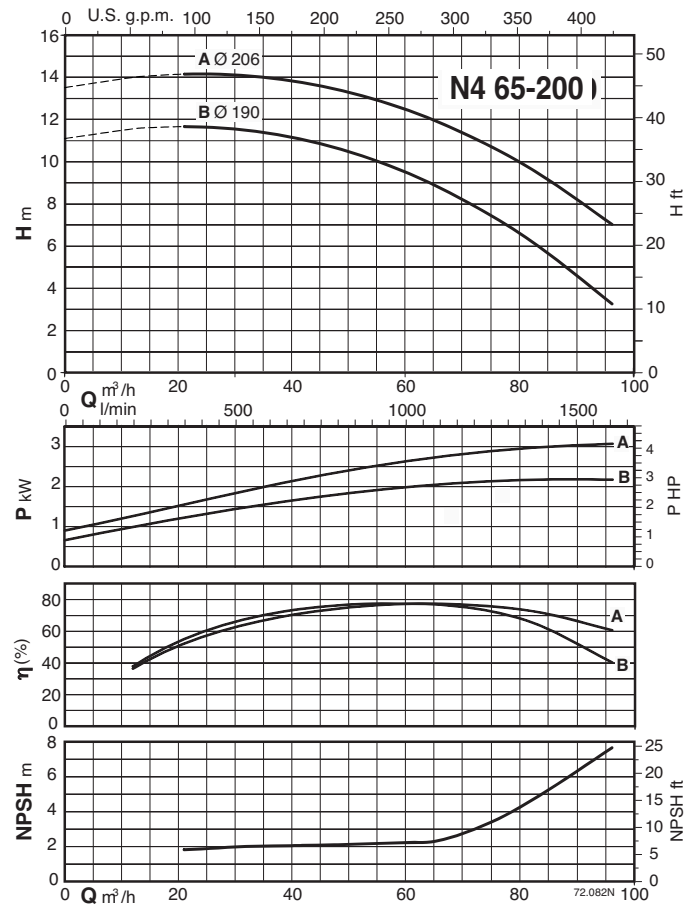
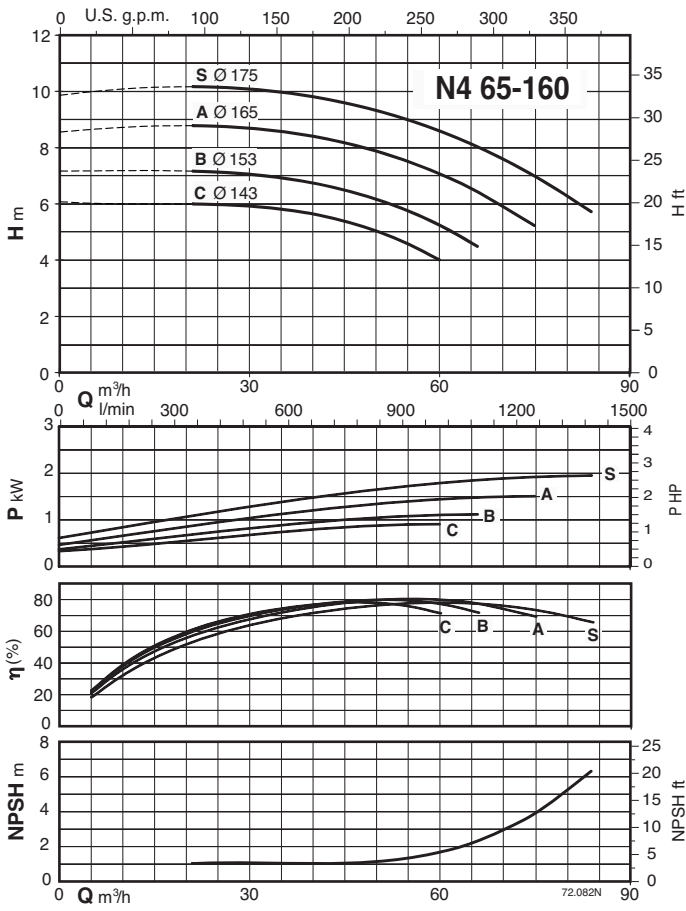
### Characteristic curves $n \approx 1450$ rpm



### Characteristic curves $n \approx 1450$ rpm

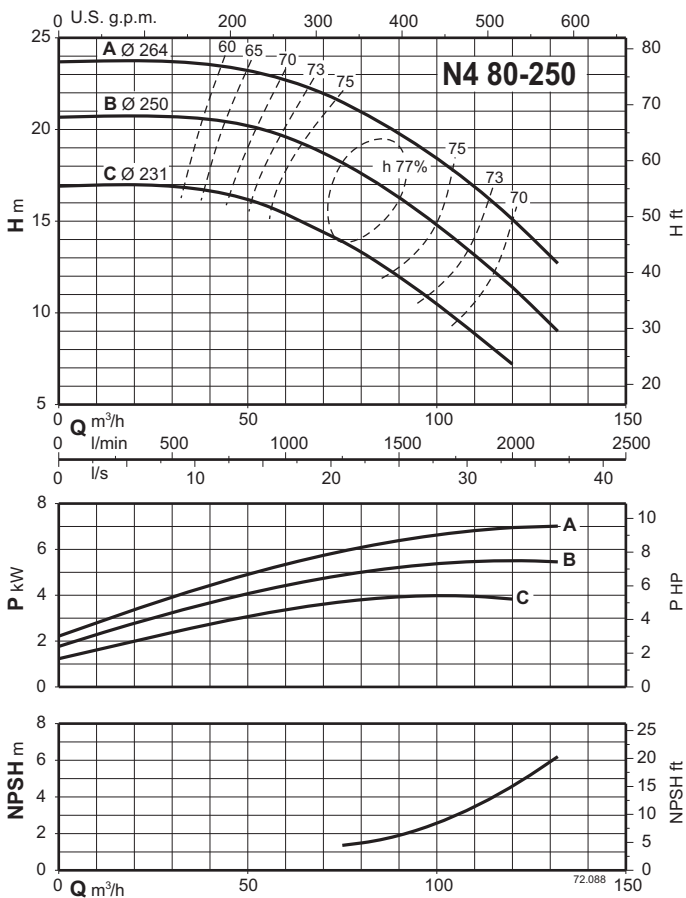
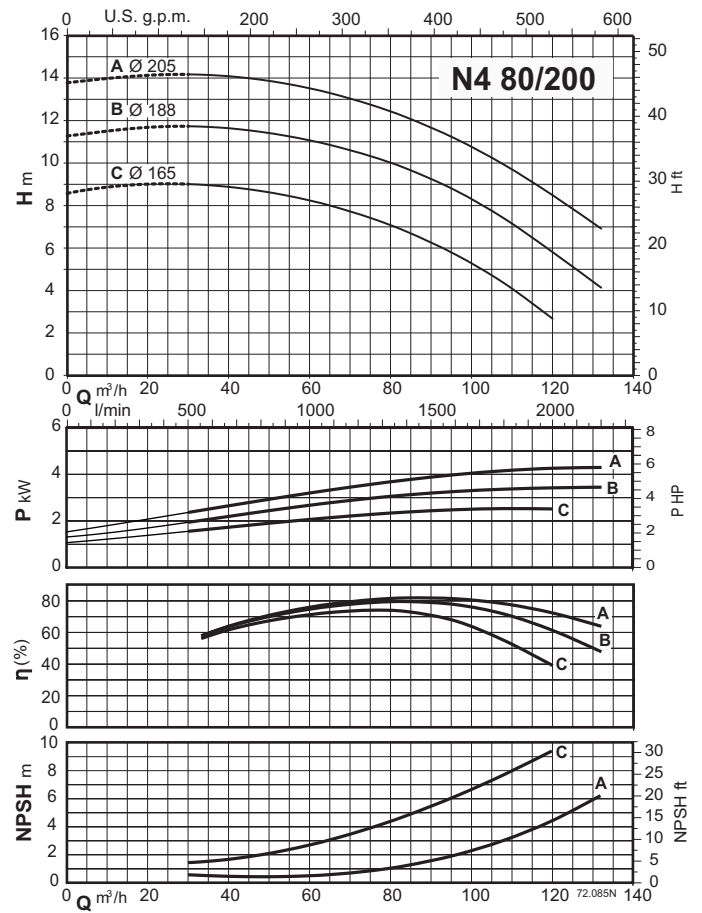
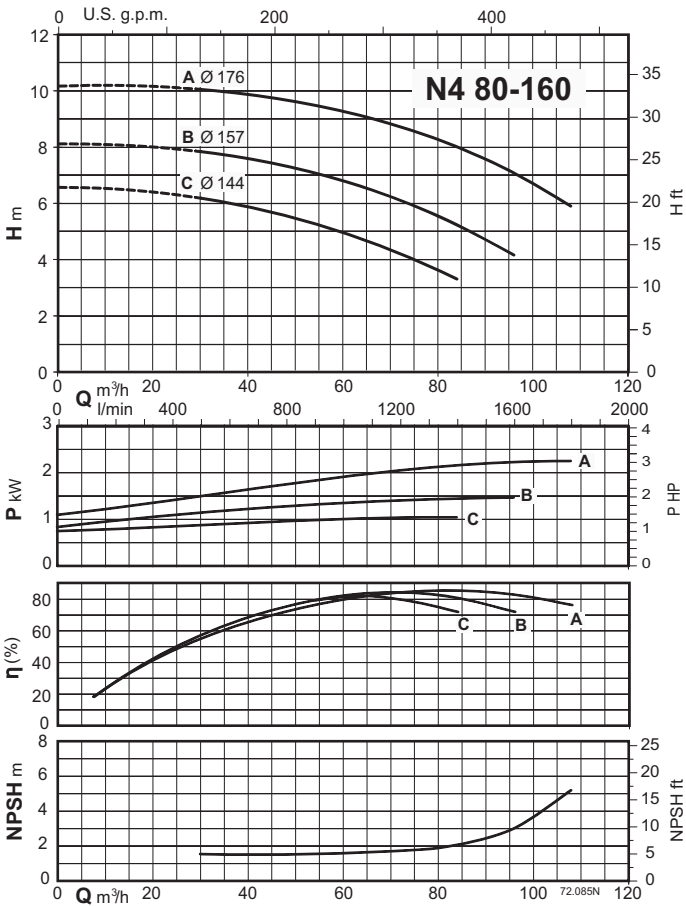


### Characteristic curves $n \approx 1450$ rpm

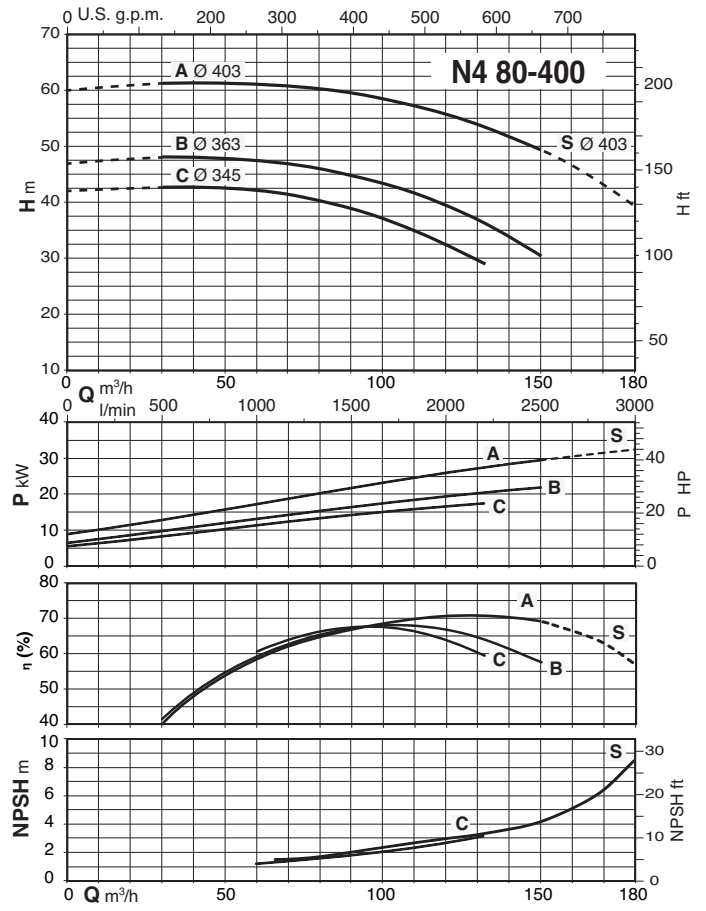
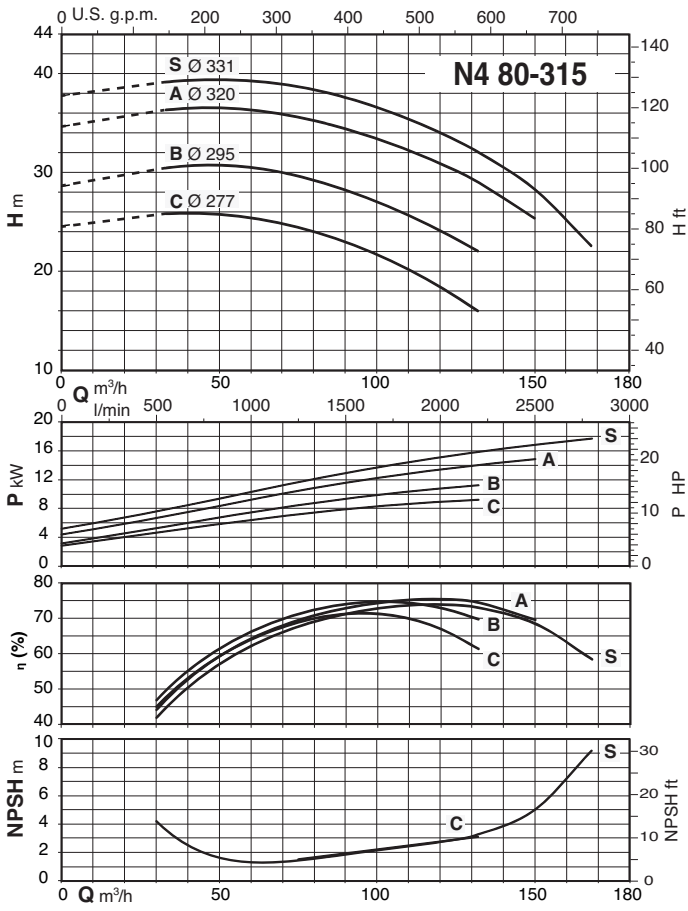




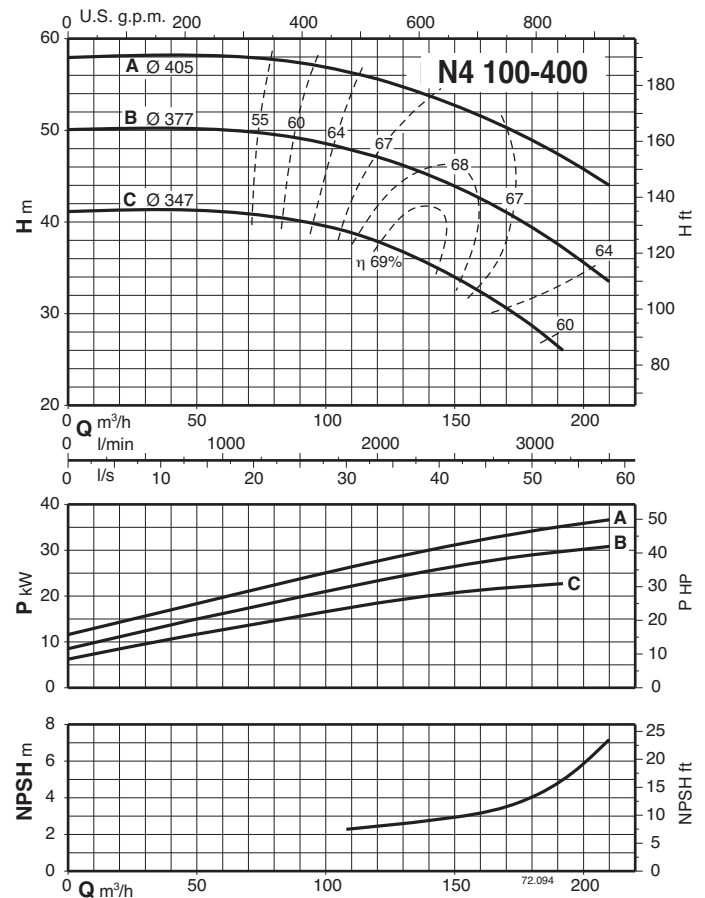
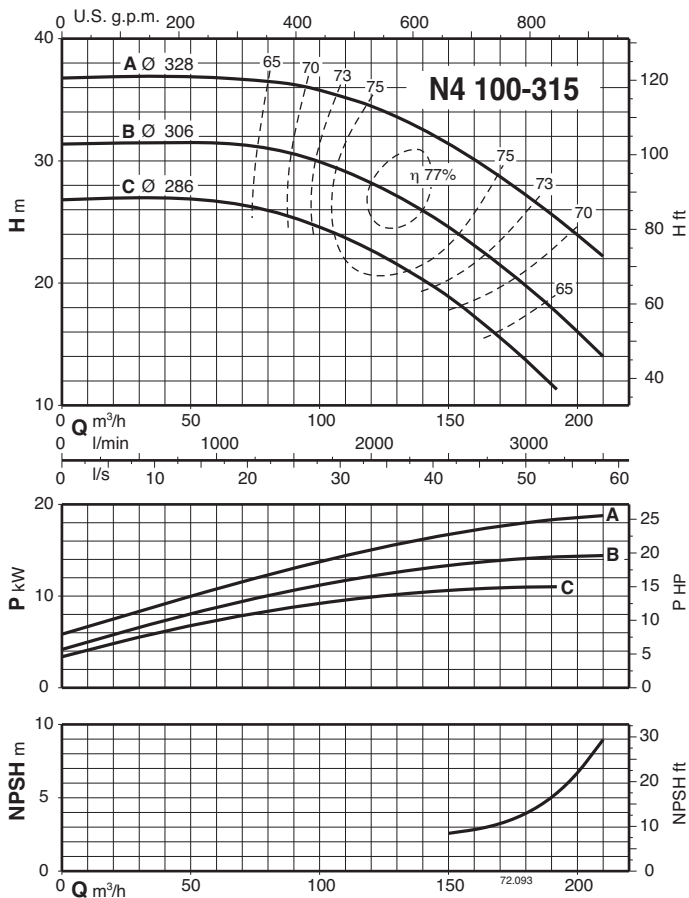
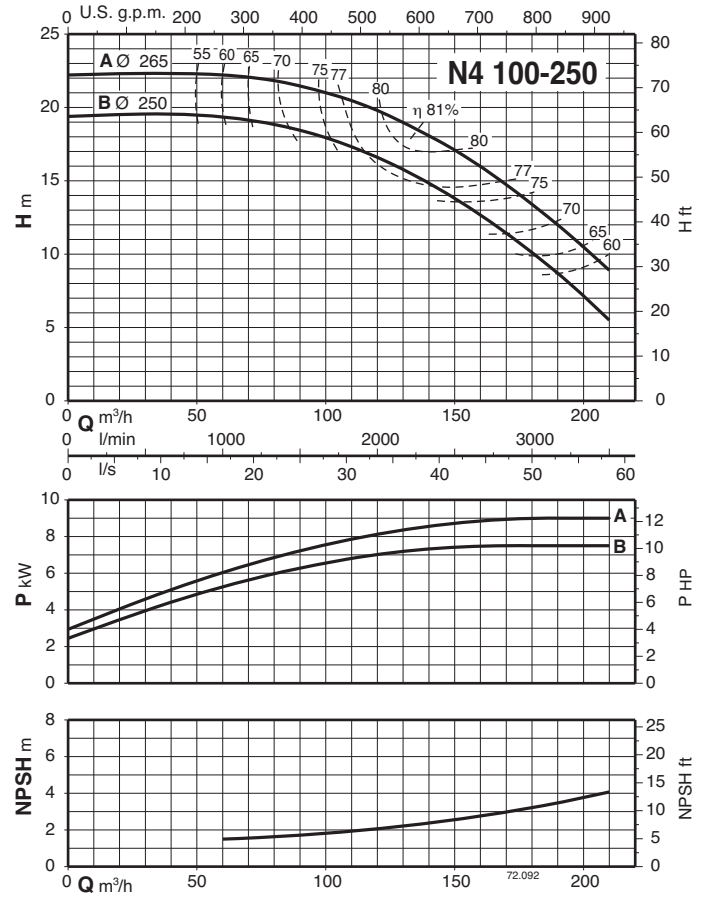
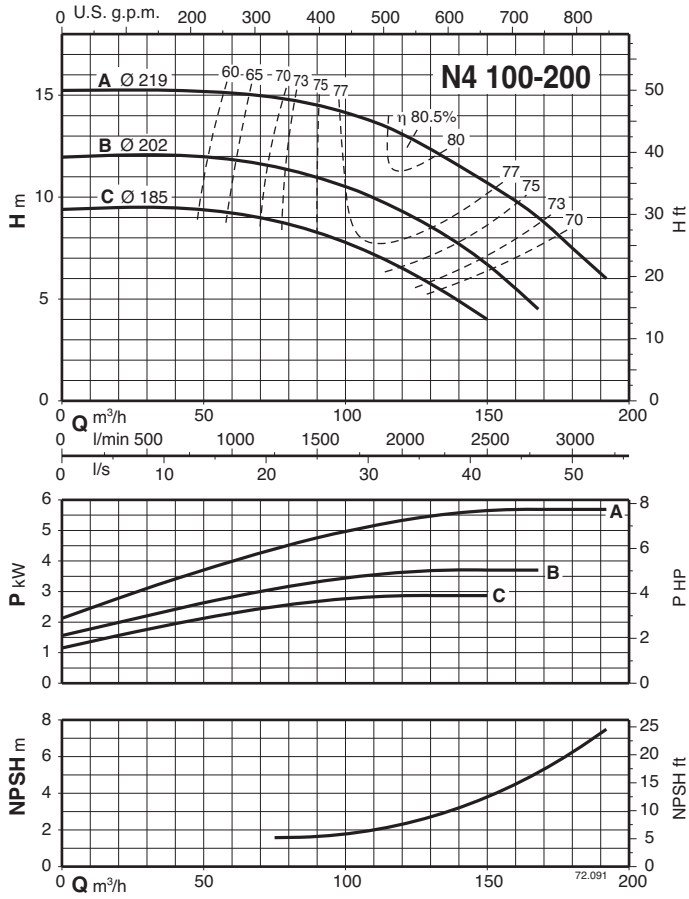
### Characteristic curves $n \approx 1450$ rpm



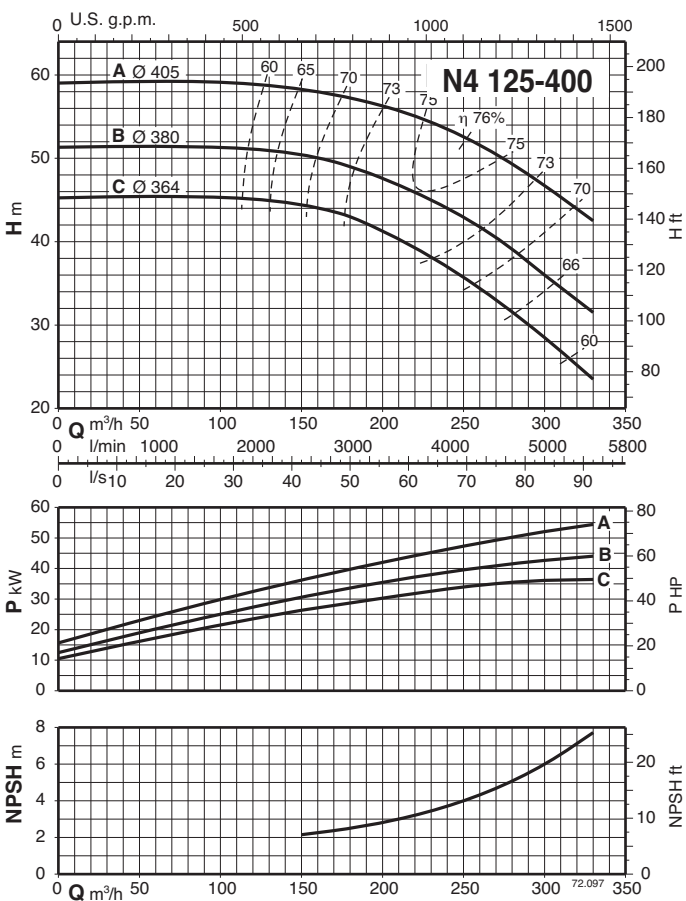
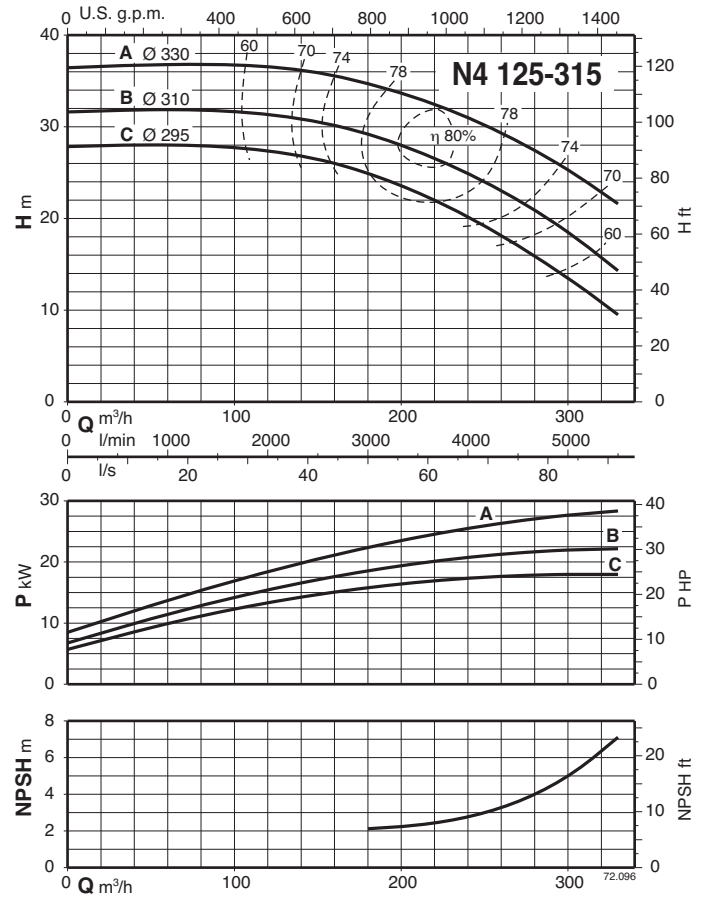
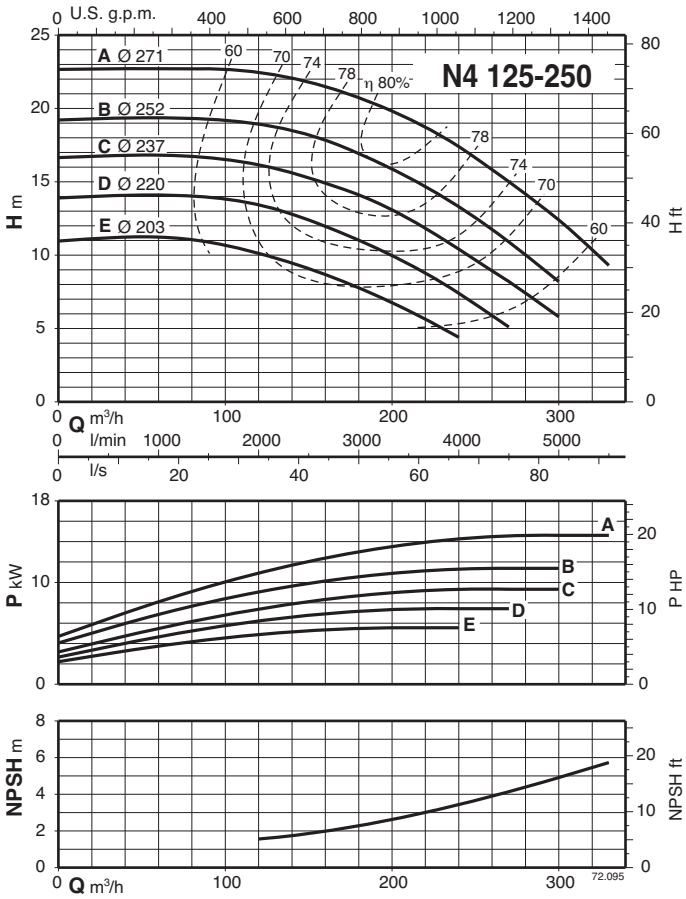
### Characteristic curves $n \approx 1450$ rpm



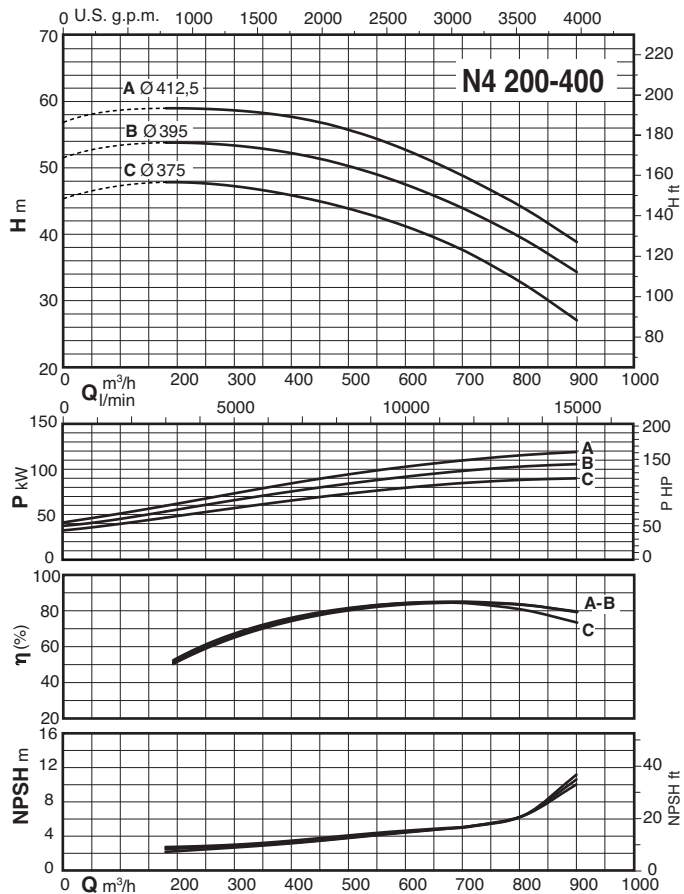
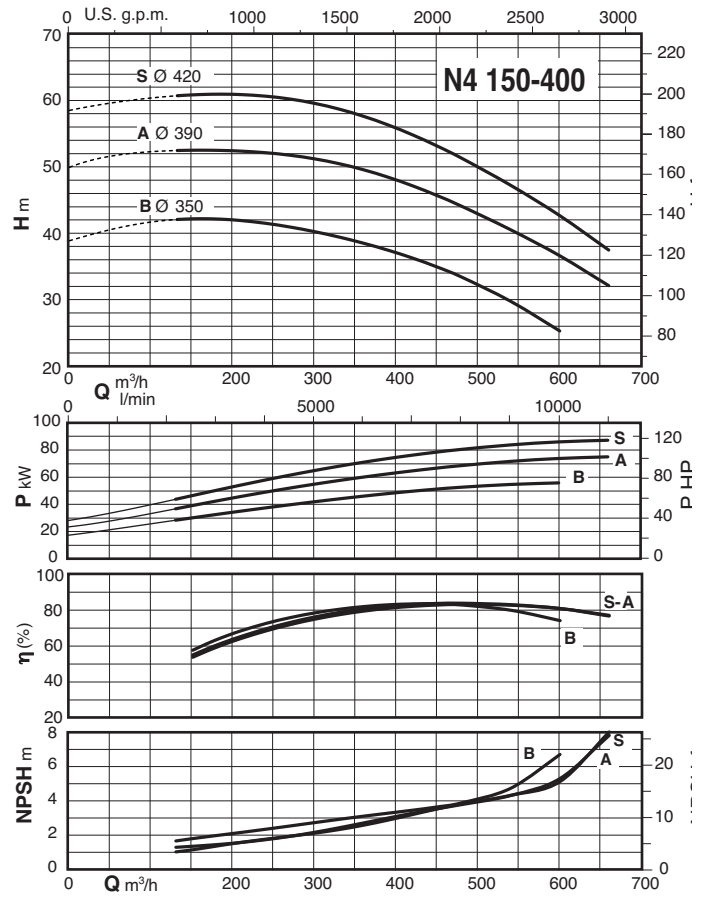
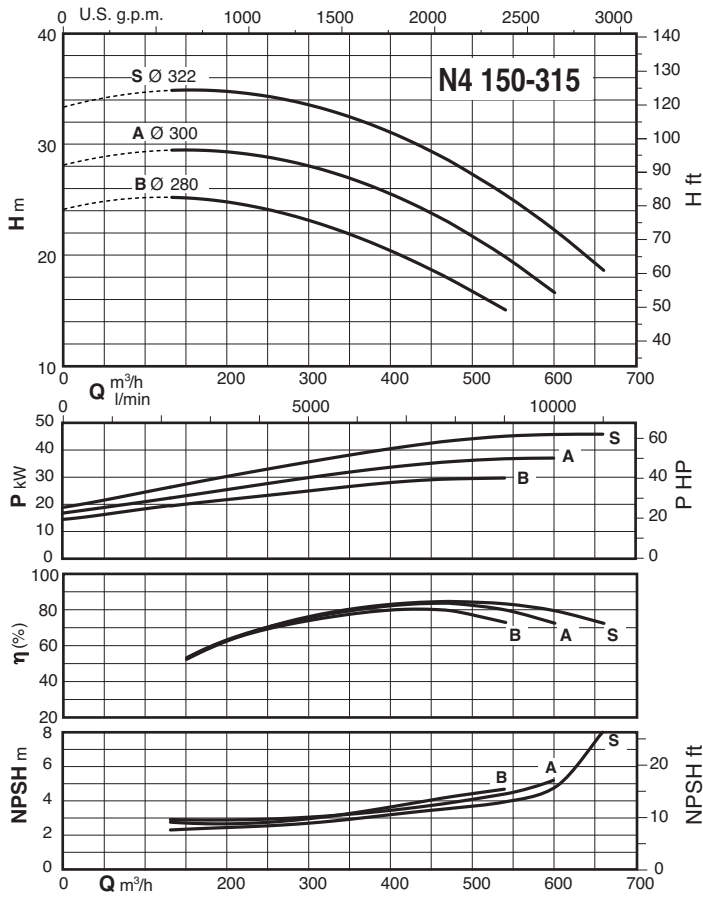
### Characteristic curves $n \approx 1450$ rpm



### Characteristic curves $n \approx 1450$ rpm



### Characteristic curves $n \approx 1450$ rpm



### Interchangeability of parts

TYPE	Bearing housing					Pump shaft							Ball bearings						Shaft sealing			
	1	2	3	4	5	I	II	III	IV	V	VI	VII	6207 Z 6306 Z	6207 Z 3306	6309 Z 3309	6311 Z 3311	NU 311 7311x2	NU 213 7313x2	Ø 32	Ø 40	Ø 50	Ø 60
N,N4 32-125	x					x							x						x			
N,N4 32-160	x						x						x						x			
N,N4 32-200	x						x						x						x			
N,N4 40-125	x						x						x						x			
N,N4 40-160	x						x						x						x			
N,N4 40-200C	x						x						x						x			
N,N4 40-200A-AR-B	x							x						x					x			
N,N4 40-250	x							x						x					x			
N,N4 50-125	x						x						x						x			
N,N4 50-160	x							x						x					x			
N,N4 50-200	x							x						x					x			
N,N4 50-250	x							x						x					x			
N,N4 65-125E	x						x						x						x			
N,N4 65-125A-C	x							x						x					x			
N,N4 65-160	x							x						x					x			
N,N4 65-200	x							x						x					x			
N,N4 65-250		x							x						x					x		
N4 65-315		x							x						x					x		
N,N4 80-160	x							x						x					x			
N,N4 80-200		x							x						x					x		
N,N4 80-250		x							x						x					x		
N4 80-315		x							x						x					x		
N4 80-400			x							x						x					x	
N,N4 100-200		x							x						x					x		
N,N4 100-250		x							x						x					x		
N4 100-315		x							x						x					x		
N4 100-400			x							x						x					x	
N4 125-250		x								x					x					x		
N4 125-315			x							x						x					x	
N4 125-400			x							x						x					x	
N4 150-315			x							x						x					x	
N4 150-400			x							x						x					x	
N4 150-400S				x							x						x					x
N4 200-400					x							x						x				x

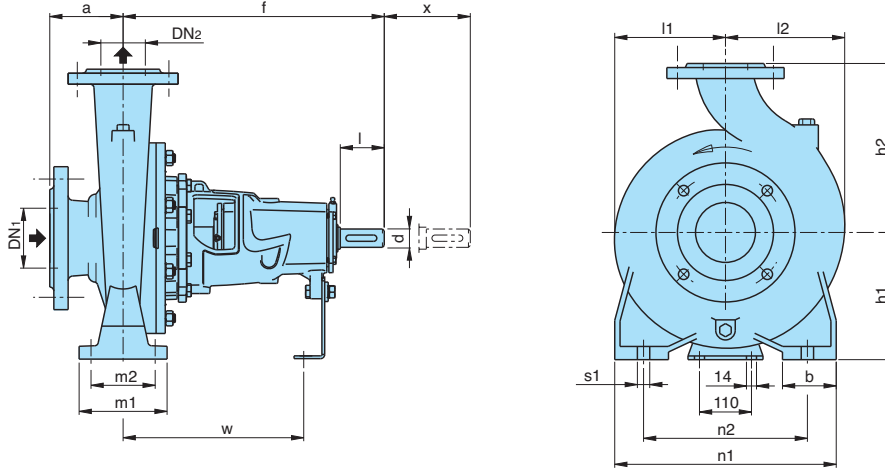
### Maximum permissible rotation speed

3600 rpm			3000 rpm			1800 rpm		
32-125	32-160	32-200						
40-125	40-160	40-200			40-250			
50-125	50-160	50-200			50-250			
65-125	65-160				65-250			
		80-200		80-160	80-250		65-315	
		100-200			100-250		80-315	80-400
							100-315	100-400
							125-250	125-315
							125-400	125-400
							150-315	150-400
							200-400	200-400

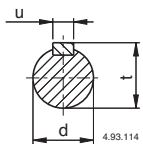
### Suction pipe: recommended minimum inside diameter (DN) for different capacities (Q)

Threaded pipe		G 2		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

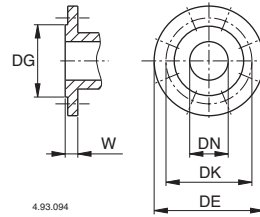


Shaft extension ISO 775 Parallel key UNI 6604



mm			
d	l	u	t
24 j6	50	8	27
32 k6	80	10	35
42 k6	110	12	45
55 k6	110	16	59

Flanges PN 10, EN 1092-2



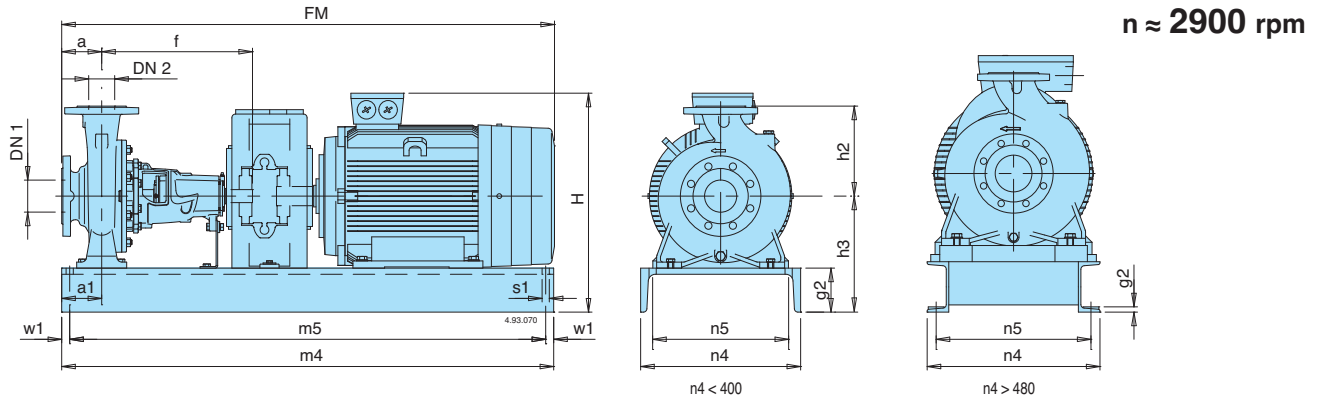
mm						
DN	DG	DK	DE	Holes		W
				N°	Ø	
32	76	100	140	4	19	18
40	84	110	150	4	19	18
50	99	125	165	4	19	20
65	118	145	185	4	19	20
80	132	160	200	8	19	22
100	156	180	220	8	19	24
125	184	210	250	8	19	24
150	211	240	285	8	23	26
200	266	295	340	8	23	30

**N** n = 2900 1/min  
**N4** n = 1450 1/min

TYPE	mm																	kg		
	DN <sub>1</sub>	DN <sub>2</sub>	a	f	h <sub>1</sub>	h <sub>2</sub>	l <sub>1</sub>	l <sub>2</sub>	m <sub>1</sub>	m <sub>2</sub>	n <sub>1</sub>	n <sub>2</sub>	b	s <sub>1</sub>	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	26,5	
B-N, B-N4 - N, N4 32-160					132	160	120	120										37	33	
B-N, B-N4 - N, N4 32-200					160	180	140	140										44	38,4	
B-N, - N, 32L-160					132	160	120	120										35,8	33,2	
B-N, - N, 32L-200					160	180	140	140										43,8	40	
B-N, - N, 40-125	65	40	80	360	112	140	100	113	100	70	210	160	50	14	24	260	100	32	28,4	
B-N, B-N4 - N, N4 40-160					132	160	119	119										38	33,6	
B-N, B-N4 - N, N4 40-200					160	180	140	140										47,1	40,4	
B-N, B-N4 - N, N4 40-250					180	225	175	175										63	55	
B-N, B-N4 - N, N4 40-250					132	160	121	137										42,4	36,5	
B-N, B-N4 - N, N4 50-125	65	50	100	360	160	180	127	141	100	70	265	212	50	14	24	260	100	45	39,2	
B-N, B-N4 - N, N4 50-160					200	200	140	153										54	47	
B-N, B-N4 - N, N4 50-200					180	225	175	175										66	57,5	
B-N, B-N4 - N, N4 50-250					132	160	121	137										42,4	36,5	
B-N, B-N4 - N, N4 50-250					160	180	134	155										45	39,2	
B-N, B-N4 - N, N4 65-125	80	65	100	360	160	200	150	172	125	95	280	212	65	14	24	260	100	48	38,7	
B-N, B-N4 - N, N4 65-160					200	250	175	190										50,6	44,5	
B-N, B-N4 - N, N4 65-200					180	225	155	175										55,5	50	
B-N, B-N4 - N, N4 65-250					200	250	175	190										103	90	
B-N4 - N4 65-315					225	280	220	220										149	130	
B-N, B-N4 - N, N4 80-160	100	80	125	470	360	225	165	193	125	95	320	250	65	14	24	260	140	61	53	
B-N, B-N4 - N, N4 80-200					180	250	170	194										93	80,5	
B-N, B-N4 - N, N4 80-250					200	280	191	210										110	95	
B-N4 - N4 80-315					250	315	220	232										154	134	
B-N4 - N4 80-400 (1)					280	355	268	268										220	192	
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	103	89	
B-N, B-N4 - N, N4 100-250					225	280	205	233										123	104	
B-N4 - N4 100-315					250	315	230	250										158	138	
B-N4 - N4 100-400					530	280	355	268										280	230	200
B-N4 - N4 125-250					470	250	355	235										268	150	129
B-N4 - N4 125-315	150	125	140	530	280	247	278	160	120	400	315	80	18	32	340	140	217	189		
B-N4 - N4 125-400					315	400	280	305	200	150	500	400	100	22	42		370	255	222	
B-N4 - N4 150-315					280	400	256	307	200	150	550	450	100	22	42		370	140	211	192
B-N4 - N4 150-400	200	150	160	530	315	450	295	328	200	150	550	450	100	22	42	370	140	284	247	
B-N4 - N4 200-400					250	200	180	630										355	500	322

1) Additional size

### Dimensions



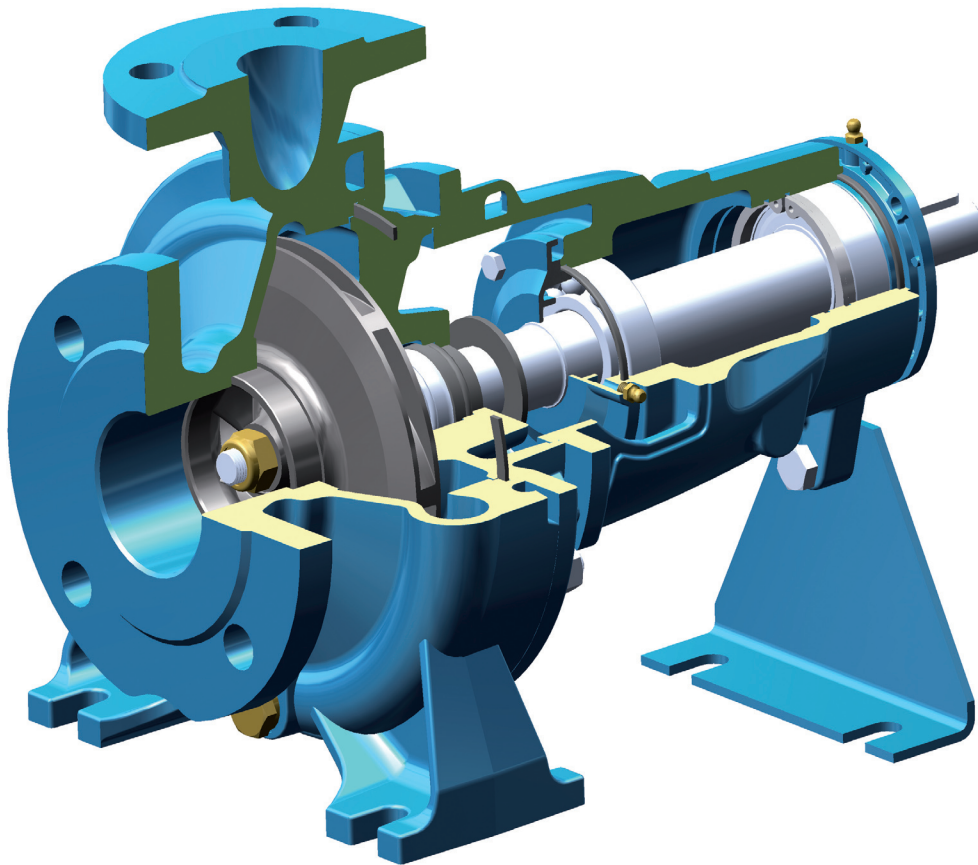
TYPE	MOTOR	kW	mm														FM $\approx$	H $\approx$
			DN <sub>1</sub>	DN <sub>2</sub>	a	f	h <sub>3</sub>	h <sub>2</sub>	m <sub>4</sub>	m <sub>5</sub>	w <sub>1</sub>	n <sub>4</sub>	n <sub>5</sub>	a <sub>1</sub>	g <sub>2</sub>	s <sub>1</sub>		
B-N, N 32-125	71 M2	0,55	50	32	80	360	197	140	780	750	15	240	180	90	85	14	718	308
	80 M2	0,75	50	32	80	360	197	140	780	750	15	240	180	90	85	14	770	319
	80 M2	1,1	50	32	80	360	197	140	780	750	15	240	180	90	85	14	770	319
	90 S2	1,5	50	32	80	360	197	140	780	750	15	240	180	90	85	14	825	323
B-N, N 32-160	90 S2	1,5	50	32	80	360	217	160	780	750	15	240	180	90	85	14	825	343
	90 L2	2,2	50	32	80	360	217	160	780	750	15	240	180	90	85	14	865	343
	100 L2	3	50	32	80	360	232	160	880	850	15	300	240	90	100	14	920	398
B-N, N 32-200	90 L2	2,2	50	32	80	360	245	180	780	750	15	240	180	90	85	14	865	371
	100 L2	3	50	32	80	360	260	180	880	850	15	300	240	90	100	14	920	426
	112 M2	4	50	32	80	360	260	180	880	850	15	300	240	90	100	14	903	437
	132 S2	5,5	50	32	80	360	260	180	1020	990	15	350	290	100	100	14	954	462
B-N, N 32L-160	90 L2	2,2	50	32	80	360	217	160	780	750	15	240	180	90	85	14	865	343
	100 L2	3	50	32	80	360	232	160	880	850	15	300	240	90	100	14	920	398
	112 M2	4	50	32	80	360	232	160	880	850	15	300	240	90	100	14	903	409
B-N, N 32L-200	112 M2	4	50	32	80	360	260	180	880	850	15	300	240	90	100	14	903	437
	132 S2	5,5	50	32	80	360	260	180	1020	990	15	350	290	100	100	14	953	462
	132 S2	7,5	50	32	80	360	260	180	1020	990	15	350	290	100	100	14	953	462
B-N, N 40-125	80 M2	1,1	65	40	80	360	197	140	780	750	15	240	180	90	85	14	770	319
	90 S2	1,5	65	40	80	360	197	140	780	750	15	240	180	90	85	14	825	323
	90 L2	2,2	65	40	80	360	197	140	780	750	15	240	180	90	85	14	865	323
B-N, N 40-160	90 L2	2,2	65	40	80	360	217	160	780	750	15	240	180	90	85	14	865	343
	100 L2	3	65	40	80	360	232	160	880	850	15	300	240	90	100	14	920	398
	112 M2	4	65	40	80	360	232	160	880	850	15	300	240	90	100	14	903	409
	132 S2	5,5	65	40	80	360	232	160	1020	990	15	350	290	90	100	14	953	434
B-N, N 40-200	112 M2	4	65	40	100	360	260	180	880	850	15	300	240	100	100	14	923	437
	132 S2	5,5	65	40	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
	132 S2	7,5	65	40	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
B-N, N 40-250	160 M2	11	65	40	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517
	160 M2	15	65	40	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517
B-N, N 50-125	90 L2	2,2	65	50	100	360	217	160	780	750	15	240	180	90	85	14	885	343
	100 L2	3	65	50	100	360	232	160	880	850	15	300	240	90	100	14	940	398
	112 M2	4	65	50	100	360	232	160	880	850	15	300	240	90	100	14	923	409
	132 S2	5,5	65	50	100	360	232	160	1020	990	15	350	290	90	100	14	973	434
B-N, N 50-160	132 S2	5,5	65	50	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
	132 S2	7,5	65	50	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
B-N, N 50-200	160 M2	11	65	50	100	360	260	200	1020	990	15	350	290	100	100	14	1082	497
	160 M2	15	65	50	100	360	260	200	1020	990	15	350	290	100	100	14	1082	497
B-N, N 50-250	160 M2	11	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517
	160 M2	15	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1082	517
	160 L2	18,5	65	50	100	360	280	225	1020	990	15	350	290	100	100	14	1142	517
	180 M2	22	65	50	100	360	280	225	1140	1110	15	350	290	100	100	14	1218	566
B-N, N 65-125	112 M2	4	80	65	100	360	260	180	880	850	15	300	240	100	100	14	923	437
	132 S2	5,5	80	65	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
	132 S2	7,5	80	65	100	360	260	180	1020	990	15	350	290	100	100	14	973	462
B-N, N 65-160	132 S2	5,5	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	973	462
	132 S2	7,5	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	973	462
	160 M2	11	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	1112	497
	160 M2	15	80	65	100	360	260	200	1020	990	15	350	290	100	100	14	1082	497
B-N, N 65-200	160 M2	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	1142	517
	180 M2	22	80	65	100	360	280	225	1140	1110	15	350	290	100	100	14	1218	566
B-N, N 65-250	180 M2	22	80	65	100	470	310	250	1360	1320	20	400	340	130	110	18	1328	596
	200 L2	30	80	65	100	470	310	250	1360	1320	20	400	340	130	110	18	1348	625
	200 L2	37	80	65	100	470	310	250	1360	1320	20	400	340	130	110	18	1348	625
	132 S2	7,5	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	998	482
B-N, N 80-160	160 M2	11	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517
	160 M2	15	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1107	517
	160 L2	18,5	100	80	125	360	280	225	1020	990	15	350	290	100	100	14	1167	517
	180 M2	22	100	80	125	470	290	250	1230	1190	20	400	340	100	110	18	1353	576
B-N, N 80-200	200 L2	30	100	80	125	470	310	250	1360	1320	20	400	340	130	110	18	1373	625
	180 M2	22	100	80	125	470	310	280	1360	1320	20	400	340	130	110	18	1353	596
	200 L2	37	100	80	125	470	310	280	1360	1320	20	400	340	130	110	18	1373	625
B-N, N 80-250	225 M2	45	100	80	125	470	385	280	1250	840	205	480	430	95	16	24	1470	723
	250 M2	55	100	80	125	470	415	280	1250	840	205	480	430	95	16	24	1509	825
B-N, N 100-200	160 L2	18,5	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1263	547
	180 M2	22	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1353	596
	200 L2	30	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1373	625
	200 L2	37	125	100	125	470	310	280	1360	1320	20	400	340	130	110	18	1373	625
B-N, N 100-200	225 M2	45	125	100	125	470	385	280	1250	840	205	480	430	95	16	24	1470	723
B-N, N 100-250	250 M2	55	125	100	140	470	415	280	1250	840	205	480	430	95	16	24	1524	825
	280 S2	75	125	100	140	470	505	280	1400	940	230	510	450	95	17,5	24	1597	938



### Dimensions

n ≈ 1450 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 M4	0,25	50	32	80	360	197	140	780	750	15	240	180	90	85	14	718	308
B-N4, N4 32-160	71 M4	0,37	50	32	80	360	217	160	780	750	15	240	180	90	85	14	718	328
B-N4, N4 32-200	80 M4	0,55	50	32	80	360	245	180	780	750	15	240	180	90	85	14	770	367
	80 M4	0,75	50	32	80	360	245	180	780	750	15	240	180	90	85	14	770	367
B-N4, N4 40-160	71 M4	0,37	65	40	80	360	217	160	780	750	15	240	180	90	85	14	718	328
	80 M4	0,55	65	40	80	360	217	160	780	750	15	240	180	90	85	14	770	339
	80 M4	0,75	65	40	80	360	217	160	780	750	15	240	180	90	85	14	770	339
B-N4, N4 40-200	90 S4	1,1	65	40	100	360	260	180	880	850	15	300	240	100	100	14	845	386
B-N4, N4 40-250	90 L4	1,5	65	40	100	360	280	225	880	850	15	350	290	100	100	14	885	406
	100 L4	2,2	65	40	100	360	280	225	880	850	15	350	290	100	100	14	929	446
	100 L4	3	65	40	100	360	280	225	880	850	15	350	290	100	100	14	929	446
B-N4, N4 50-125	71 M4	0,37	65	50	100	360	217	160	780	750	15	240	180	90	85	14	738	328
	80 M4	0,55	65	50	100	360	217	160	780	750	15	240	180	90	85	14	790	339
	80 M4	0,75	65	50	100	360	217	160	780	750	15	240	180	90	85	14	790	339
B-N4, N4 50-160	90 S4	1,1	65	50	100	360	260	180	880	850	15	300	240	100	100	14	845	386
B-N4, N4 50-200	90 S4	1,1	65	50	100	360	260	200	880	850	15	300	240	100	100	14	845	386
	90 L4	1,5	65	50	100	360	260	200	880	850	15	300	240	100	100	14	885	386
	100 L4	2,2	65	50	100	360	260	200	880	850	15	300	240	100	100	14	929	426
B-N4, N4 50-250	100 L4	2,2	65	50	100	360	280	225	880	850	15	350	290	100	100	14	929	446
	100 L4	3	65	50	100	360	280	225	880	850	15	350	290	100	100	14	929	446
	112 M4	4	65	50	100	360	280	225	880	850	15	350	290	100	100	14	912	457
B-N4, N4 65-125	80 M4	0,75	80	65	100	360	260	180	880	850	15	300	240	100	100	14	790	382
	90 S4	1,1	80	65	100	360	260	180	880	850	15	300	240	100	100	14	845	386
B-N4, N4 65-160	90 S4	1,1	80	65	100	360	260	200	880	850	15	300	240	100	100	14	845	386
	90 L4	1,5	80	65	100	360	260	200	880	850	15	300	240	100	100	14	885	386
	100 L4	2,2	80	65	100	360	260	200	880	850	15	350	290	100	100	14	929	426
B-N4, N4 65-200	100 L4	2,2	80	65	100	360	280	225	880	850	15	350	290	100	100	14	929	446
	100 L4	3	80	65	100	360	280	225	880	850	15	350	290	100	100	14	929	446
	112 M4	4	80	65	100	470	310	250	1030	990	20	400	340	130	110	18	1022	487
B-N4, N4 65-250	132 S4	5,5	80	65	100	470	310	250	1030	990	20	400	340	130	110	18	1123	512
	132 S4	5,5	80	65	125	470	335	280	1030	990	20	400	340	130	110	18	1148	537
B-N4, N4 65-315	132 M4	7,5	80	65	125	470	335	280	1030	990	20	400	340	130	110	18	1148	537
	160 M4	11	80	65	125	470	335	280	1230	1190	20	400	340	130	110	18	1237	572
	90 S4	1,1	100	80	125	360	280	225	880	850	15	350	290	100	100	14	870	406
B-N4, N4 80-160	90 L4	1,5	100	80	125	360	280	225	880	850	15	350	290	100	100	14	910	406
	100 L4	2,2	100	80	125	360	280	225	880	850	15	350	290	100	100	14	954	446
	100 L4	2,2	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1064	446
B-N4, N4 80-200	100 L4	3	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1064	446
	112 M4	4	100	80	125	470	280	250	1020	990	15	350	290	100	100	14	1047	457
	112 M4	4	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1047	487
B-N4, N4 80-250	132 S4	5,5	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1148	512
	132 M4	7,5	100	80	125	470	310	280	1030	990	20	400	340	130	110	18	1148	512
	160 M4	11	100	80	125	470	360	315	1230	1190	20	400	340	130	110	18	1237	597
B-N4, N4 80-315	160 L4	15	100	80	125	470	360	315	1230	1190	20	400	340	130	110	18	1297	597
	180 M4	18,5	100	80	125	470	360	315	1360	1320	20	400	340	130	110	18	1301	646
	180 M4	18,5	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1361	731
B-N4, N4 80-400	180 L4	22	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1391	760
	200 L4	30	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1439	760
	225 S4	37	125	80	125	530	445	355	1250	840	205	480	430	115	16	24	1481	783
	100 L4	3	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1064	476
B-N4, N4 100-200	112 M4	4	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1047	487
	132 S4	5,5	125	100	125	470	310	280	1030	990	20	400	340	130	110	18	1148	512
	132 M4	7,5	125	100	140	470	335	280	1030	990	20	400	340	130	110	18	1163	537
B-N4, N4 100-250	160 M4	11	125	100	140	470	335	280	1230	1190	20	400	340	130	110	18	1252	572
	160 M4	11	125	100	140	470	360	315	1230	1190	20	400	340	130	110	18	1252	597
B-N4, N4 100-315	160 L4	15	125	100	140	470	360	315	1230	1190	20	400	340	130	110	18	1312	597
	180 M4	18,5	125	100	140	470	360	315	1360	1320	20	400	340	130	110	18	1316	646
	180 L4	22	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1406	760
B-N4, N4 100-400	200 L4	30	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1454	760
	225 S4	37	125	100	140	530	445	355	1250	840	205	480	430	115	16	24	1496	783
	132 S4	5,5	150	125	140	470	360	355	1030	990	20	400	340	130	110	18	1163	562
B-N4, N4 125-250	132 M4	7,5	150	125	140	470	360	355	1030	990	20	400	340	130	110	18	1163	562
	160 M4	11	150	125	140	470	360	355	1230	1190	20	400	340	130	110	18	1252	597
	160 L4	15	150	125	140	470	360	355	1230	1190	20	400	340	130	110	18	1312	597
B-N4, N4 125-315	180 M4	18,5	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1376	731
	180 L4	22	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1406	760
	200 L4	30	150	125	140	530	445	355	1250	840	205	480	430	115	16	24	1454	760
B-N4, N4 125-400	225 S4	37	150	125	140	530	480	400	1250	840	205	4						

**Features****Cutting edge hydraulics**

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

**Flexible**

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.

**Robust**

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.

**Reliable**

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