

The electropumps N, B-N, N4, B-N4 series comply with the European Regulation no. 547/2012 in force starting from 01.01.2013.

## Materials

Components	N, N4 Mechanical seal	N, N4 Stuffing box	B-N, B-N4 Mechanical seal
Pump casing	Cast iron		Bronze
Casing cover	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		

## 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 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 70.

## 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

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

IP 55 protection.

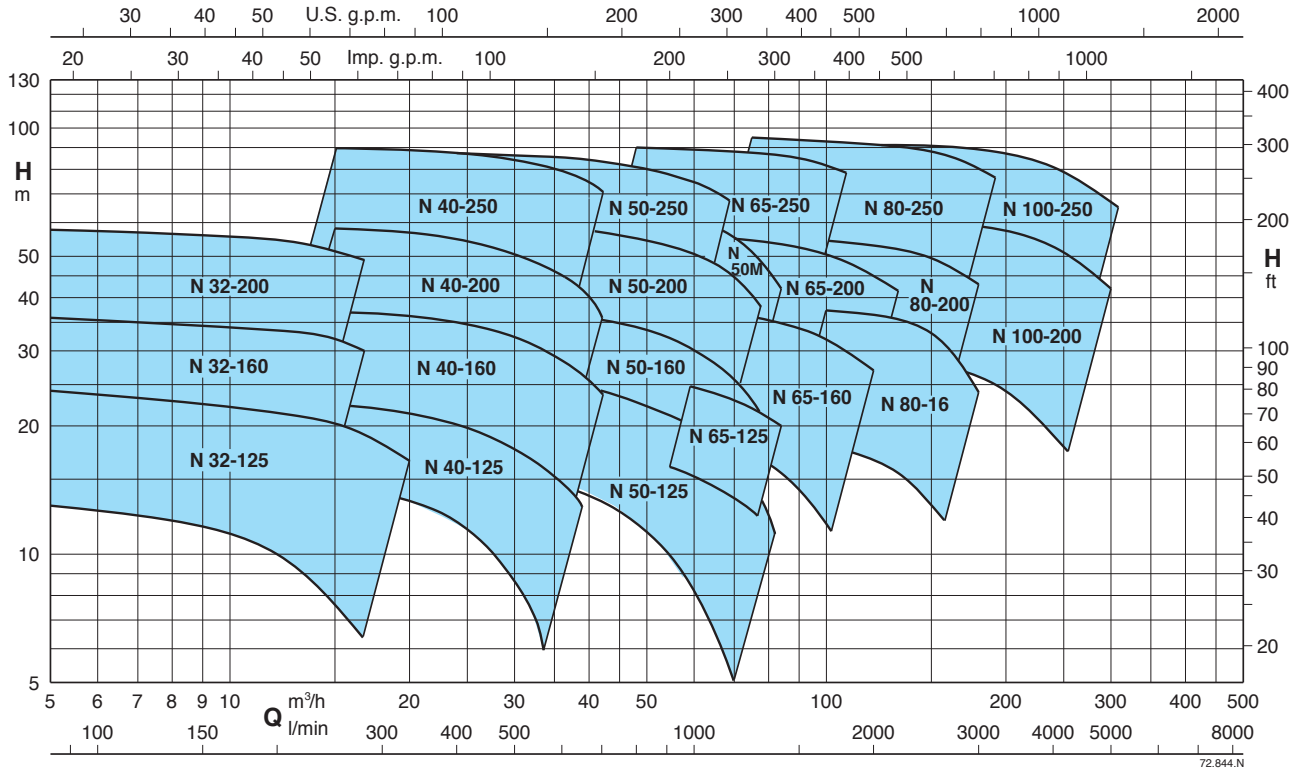
Motor suitable for operation with frequency converter.

## Special features on request

- Special mechanical seal.
- Chrome-nickel steel AISI 316 pump-shaft.
- Higher or lower liquid or ambient temperatures.
- Other motor protection.
- Explosion proof construction in accordance with Directive 94/9 EEC (ATEX).
- Motor for other voltage.
- Frequency 60 Hz (as per 60 Hz data sheet).



**Coverage chart  $n \approx 2900$  rpm**



72.844.N

Tolerances according to UNI EN ISO 9906:2012

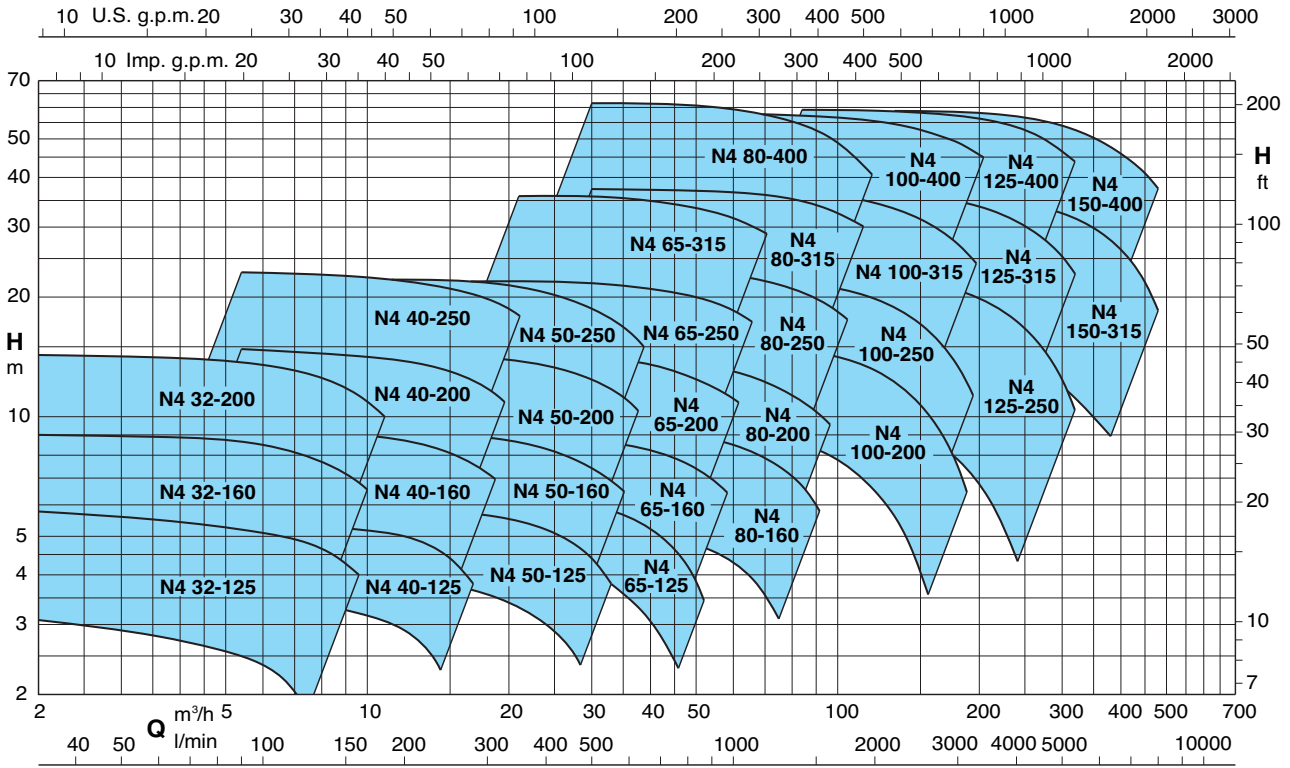
**Performance  $n \approx 2900$  rpm**

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	30	33	37,8	39	42	45	48
				Q l/min																			
				110	125	140	160	180	200	220	250	280	315	350	400	450	500	550	630	650	700	750	800
B-N 32-125F/A	N 32-125F/A	71 B2	0,55	12,5 0,4	12,5 0,43	12 0,46	11,5 0,48	11 0,5	10,5 0,52	9,5 0,54	8 0,55	6 0,56											
B-N 32-125D/A	N 32-125D/A	80 A2 80 B2	0,75 1,1	18 0,63	18 0,67	17,5 0,7	17 0,75	16,5 0,79	16 0,83	15,5 0,86	14 0,9	12,5 0,93	11 0,95	8,5 0,97									
B-N 32-125A/A	N 32-125A/A	80 B2 90 S2	1,1 1,5	23 0,83	23 0,87	22,5 0,91	22 0,96	21,5 1,01	21 1,06	20,5 1,1	19,5 1,19	18 1,26	16 1,31	14 1,35	10 1,38								
B-N 32-125S/A	N 32-125S/A	90 S2	1,5	23,5 0,86	23,5 0,9	23 0,94	22,5 1	22 1,06	21,5 1,12	21 1,17	20,5 1,25	19 1,3	18,5 1,36	16,5 1,42	13 1,49								
B-N 32-160B/A	N 32-160B/A	90 S2 90 L2	1,5 2,2	29,5 1,1	29,5 1,17	29 1,23	28,5 1,30	27,5 1,37	27 1,43	26 1,48	25* 1,55	22,5* 1,63	20* 1,7	17,5* 1,75	12,5* 1,79								
B-N 32-160A/A	N 32-160A/A	90 L2 100 L2	2,2 3	35,5 1,56	35,5 1,64	35 1,71	34,5 1,81	34 1,9	33,5 1,98	33 2,05	32* 2,16	30* 2,24	28* 2,33	25* 2,4	21* 2,47	15* 2,5							
B-N 32-200D/A	N 32-200D/A	90 L2 100 L2	2,2 3	37,5 1,92	37 2	36 2,06	35 2,17	34 2,24	33 2,3	32 2,35	30 2,4	27 2,45	22 2,5										
B-N 32-200C/A	N 32-200C/A	100 L2	3	44,5 2,17	44 2,28	43,5 2,36	43 2,5	42 2,63	41 2,74	40 2,83	38,5 2,97	36 3,1	32 3,2										
B-N 32-200A/A	N 32-200A/A	112 M2 132 SA2	4 5,5	57 2,9	56,5 3,1	56 3,18	55,5 3,35	54,5 3,51	53,5 3,67	52,5 3,8	51 4	49 4,2	46 4,4										
B-N 40-125F/A	N 40-125F/A	80 B2	1,1								14 0,96	13,5 1,00	13 1,04	12 1,07	11 1,10	9,5 1,13	8 1,13	6 1,13					
B-N 40-125C/A	N 40-125C/A	90 S2	1,5								17,5 1,21	17 1,26	16,5 1,32	16 1,38	15 1,44	13,5 1,49	12 1,53	10,5 1,56	7,5 1,57	6,5 1,57			
B-N 40-125A/A	N 40-125A/A	90 L2	2,2								22 1,50	22 1,57	21,5 1,65	21 1,72	20 1,82	19 1,98	18 2,04	16,5 2,10	14 2,11	13 2,13	11,5 2,13		
B-N 40-160C/A	N 40-160C/A	90 L2	2,2								23 1,55	22,5 1,63	22 1,72	21,5 1,80	20 1,90	18,5 1,99	16,5 2,06	14,5 2,12	11 2,17	10 2,17			
B-N 40-160B/A	N 40-160B/A	100 L2	3								29 2,08	28,8 2,18	28 2,30	27,5 2,41	26,5 2,55	25 2,78	23,5 2,87	21,5 2,97	18 2,99	17 3,02	14 3,02		
B-N 40-160A/A	N 40-160A/A	112 M2 132 SA2	4 5,5								37 2,70	36,5 2,84	36 3,01	35 3,18	33,5 3,35	32 3,72	30,5 3,84	27 4,01	26 4,05	23,5 4,12	20 4,20	17 4,22	
B-N 40-200D/A	N 40-200D/A	112 M2 132 SA2	4 5,5								39 3,20	38 3,35	37 3,51	35,5 3,66	33,5 3,86	30,5 4,03	27 4,18	24 4,30	22,5 4,43				
B-N 40-200C/A	N 40-200C/A	112 M2 132 SA2	4 5,5								41,5 3,44	40,5 3,59	39,5 3,78	38 3,95	36 4,15	33,5 4,32							
B-N 40-200B/A	N 40-200B/A	132 SA2	5,5								50 3,96	49,5 4,18	48,5 4,41	47,5 4,64	45,5 4,92	43,5 5,17	41,5 5,39	37,5 5,60	30,5 5,87				
B-N 40-200AR/A	N 40-200AR/A	132 SA2 132 SB2	5,5 7,5								55 4,50	54,5 4,70	54 5,07	53 5,30	51 5,65	49 5,95							
B-N 40-200A/A	N 40-200A/A	132 SB2	7,5								57,5 4,78	57 5,04	56,5 5,34	55,5 5,63	54,5 6,03	52,5 6,40	50,5 6,70	48 7,01	42,5 7,34	40,5 7,43	35 7,62		
B-N 40-250C/A	N 40-250C/A	160 MA2	11								61 5,86	61 6,16	60,5 6,49	59,5 6,82	58,5 7,28	56,5 7,72	53,5 8,07	49,5 8,48	41,5 9,02	40 9,15	33,5 9,35		
B-N 40-250B/A	N 40-250B/A	160 MA2	11								69,5 6,87	69,5 7,19	69 7,56	68,5 7,91	67 8,47	65,5 8,91	63,5 9,35	60,5 9,75	53,5 10,40	51 10,54	45 10,93		
B-N 40-250A/A	N 40-250A/A	160 MB2	15								90 9,31	90 9,73	89,5 10,21	89 10,68	88,5 11,34	87 11,98	85 12,60	83 13,19	77,5 14,00	76 14,21	70,5 14,65		

**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.



**Coverage chart n ≈ 1450 rpm**



72.842.C

Tolerances according to UNI EN ISO 9906:2012

**Performance n ≈ 1450 rpm**

PUMP	PUMP	MOTOR	P <sub>2</sub> kW	Q m³/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 l/min	40	50	60	70	80	90	100	110	125	140	160	180	200	220			
B-N4 32-125F/A	N4 32-125F/A	71 A4	0,25	H m P <sub>3</sub> kW	3 0,04	2,9 0,047	2,8 0,051	2,7 0,055	2,6 0,059	2,5 0,063	2,4 0,067	2,2 0,07	1,8 0,075	1,5 0,08							
B-N4 32-125D/A	N4 32-125D/A	71 A4	0,25		4,6 0,07	4,5 0,075	4,4 0,08	4,3 0,085	4,2 0,09	4,1 0,095	4 0,1	3,8 0,105	3,5 0,115	3,2 0,12	2,6 0,13	2 0,13					
B-N4 32-125A/A	N4 32-125A/A	71 A4	0,25		5,7 0,09	5,6 0,1	5,5 0,11	5,4 0,115	5,3 0,12	5,2 0,125	5,1 0,13	5 0,135	4,8 0,145	4,5 0,15	4 0,16	3,3 0,17					
B-N4 32-160B/A	N4 32-160B/A	71 B4	0,37		7,6 0,13	7,5 0,14	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 B4	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 A4	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 B4	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 m³/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 l/min	90	100	110	125	140	160	180	200	220	250	280	315	350	400	450	500	
B-N4 40-125F/A	N4 40-125F/A	71 A4	0,25	H m P <sub>3</sub> kW	3,8 0,108	3,8 0,113	3,7 0,117	3,7 0,124	3,6 0,129	3,5 0,136	3,3 0,142	3,0 0,146	2,8 0,150	2,3 0,152	1,8 0,152						
B-N4 40-125C/A	N4 40-125C/A	71 B4	0,37		4,6 0,132	4,6 0,138	4,5 0,146	4,5 0,154	4,4 0,162	4,3 0,171	4,2 0,179	4,0 0,187	3,8 0,193	3,4 0,200	3,0 0,205	2,4 0,207					
B-N4 40-125A/A	N4 40-125A/A	71 B4	0,37		5,7 0,163	5,7 0,171	5,6 0,179	5,6 0,188	5,6 0,199	5,5 0,211	5,4 0,224	5,3 0,235	5,1 0,245	4,8 0,259	4,4 0,270	3,9 0,278	3,2 0,285				
B-N4 40-160C/A	N4 40-160C/A	71 B4	0,37		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 A4	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 0,4	4,4 0,41	2,7 0,41			
B-N4 40-160A/A	N4 40-160A/A	80 B4	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 0,55	12,7 0,54	12,6 0,57	12,4 0,60	12,2 0,63	12 0,66	11,5 0,68	10,8 0,71	10 0,75	8,6 0,78	7 0,81	5,8 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 0,64	14,2 0,67	14,2 0,71	14 0,74	13,8 0,77	13,6 0,8	13 0,85	11,3 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 1,887	
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.



### Performance n ≈ 1450 rpm

PUMP B-N4	PUMP N4	MOTOR	P <sub>2</sub> kW	Q m³/h	48	54	60	66	75	84	96	108	120	132	150	168	180	192	210
					Q l/min	800	900	1000	1100	1250	1400	1600	1800	2000	2200	2500	2800	3000	3200
B-N4 100-200C	N4 100-200C	100 LB4	3	9,4	9,3	9,2	9,1	8,9	8,5	8	7,3	6,5	5,6	4					
B-N4 100-200B	N4 100-200B	112 M4	4	12	11,9	11,8	11,7	11,5	11,2	10,7	10	9,3	8,4	6,7	4,5				
B-N4 100-200A	N4 100-200A	132 S4	5,5	15,2	15,2	15,1	15	14,9	14,7	14,3	13,8	13,1	12,2	10,7	9	7,5*	6*		
B-N4 100-250B	N4 100-250B	132 MA4	7,5	19,5	19,5	19,4	19,3	19	18,7	18,2	17,5	16,6	15,6	13,8	11,7	10	8,4	5,5	
B-N4 100-250A	N4 100-250A	160 M4	11	22,3	22,3	22,2	22,1	21,9	21,7	21,2	20,5	19,8	18,8	17,1	15	13,4	11,7	8,9	
B-N4 100-315C	N4 100-315C	160 M4	11	26,9	26,9	26,8	26,6	26,2	25,7	24,9	23,8	22,7	21,3	18,9	15,9	13,7	11,3*		
B-N4 100-315B	N4 100-315B	160 L4	15	31,5	31,5	31,4	31,3	31,2	30,8	30,2	29,3	28,2	26,9	24,6	21,8	19,8	17,6*	14*	
B-N4 100-315A	N4 100-315A	180 M4	18,5	36,9	36,9	36,8	36,7	36,6	36	35,3	34,5	33,4	31,4	29	27,2	25,3*	22,2*		
B-N4 100-400C	N4 100-400C	180 L4	22	41,3	41,2	41,1	41	40,7	40,4	39,8	39	38	36,5	34	31	28,7	26,3		
B-N4 100-400B	N4 100-400B	200 L4	30	50,2	50,1	50	49,9	49,7	49,4	48,8	48	47,1	46	44	41,3	39,5	37	33,5*	
B-N4 100-400A	N4 100-400A	225 S4	37	58,2	58,1	58	57,9	57,8	57,6	57,2	56,3	55,7	54,5	52,7	50,5	49	47	44*	

PUMP B-N4	PUMP N4	MOTOR	P <sub>2</sub> kW	Q m³/h	84	96	108	120	132	150	168	180	192	210	240	270	300	330
					Q l/min	1400	1600	1800	2000	2200	2500	2800	3000	3200	3500	4000	4500	5000
B-N4 125-250E	N4 125-250E	132 S4	5,5	11	10,8	10,5	10,1	9,7	9,1	8,3	7,8	7,2	6,2	4,4				
B-N4 125-250D	N4 125-250D	132 MA4	7,5	14	13,9	13,7	13,4	13	12,4	11,6	11	10,4	9,4	7,4	5,1			
B-N4 125-250C	N4 125-250C	160 M4	11	16,7	16,6	16,4	16,2	15,9	15,4	14,6	14,1	13,5	12,5	10,4	8,2	5,8		
B-N4 125-250B	N4 125-250B	160 M4	11	19,3	19,2	19,1	18,9	18,7	18,2	17,5	17	16,3	15,3	13,3	10,9	8,2		
B-N4 125-250A	N4 125-250A	160 L4	15	22,7	22,7	22,6	22,4	22,2	21,8	21,2	20,8	20,1	19,33	17,4	15	12,4	9,3	
B-N4 125-315C	N4 125-315C	180 M4	18,5	27,9	27,8	27,7	27,6	27,2	26,5	25,6	24,9	24	22,8	20,2	17	13,5	9,5*	
B-N4 125-315B	N4 125-315B	180 L4	22	31,8	31,7	31,6	31,5	31,1	30,6	29,7	29,1	28,5	27,3	24,9	22	18,5	14,3*	
B-N4 125-315A	N4 125-315A	200 L4	30	36,8	36,8	36,7	36,6	36,4	35,9	35,2	34,7	34,2	33,2	31	28,4	25,3	21,6*	
B-N4 125-400C	N4 125-400C	225 S4	37	45,4	45,3	45,2	45,1	44,9	44,4	43,7	43	42	40	37	33	28,5*	23,5*	
B-N4 125-400B	N4 125-400B	225 M4	45	51,4	51,3	51,2	51,1	50,9	50,4	49,7	49	48,2	46,8	44	40,5	36*	31,5*	
B-N4 125-400A	N4 125-400A	250 M4	55	59,2	59,1	59	58,9	58,7	58,2	57,7	57,2	56,7	55,7	53,5	50,5	46,5*	42,5*	

PUMP B-N4	PUMP N4	MOTOR	P <sub>2</sub> kW	Q m³/h	132	150	168	180	192	210	240	270	300	330	360	390	420	450	480
					Q l/min	2200	2500	2800	3000	3200	3500	4000	4500	5000	5500	6000	6500	7000	7500
B-N4 150-315D	N4 150-315D	180 M4	18,5	22,8	22,6	22,3	22	21,7	21,1	20	18,6	17	15,1	13	10,6	8*			
B-N4 150-315C	N4 150-315C	180 L4	22	25,6	25,4	25,1	24,9	24,7	24,2	23,3	22	20,4	18,5	16,5	14,1	11,6*	8,9*		
B-N4 150-315B	N4 150-315B	200 L4	30	30,6	30,6	30,5	30,3	30,1	29,7	29	27,9	26,5	24,9	23	20,8	18,3*	15,4*		
B-N4 150-315A	N4 150-315A	225 S4	37	35,6	35,6	35,5	35,4	35,3	35,2	34,6	33,7	32,5	31	29,2	27,1	24,7*	21,8*	18,5*	
B-N4 150-400C	N4 150-400C	225 M4	45	45	44,9	44,7	44,5	44	43,5	42,5	40,5	38,5	36	33,5	30,5	27*	23,5*	19,5*	
B-N4 150-400B	N4 150-400B	250 M4	55	50,8	50,7	50,5	50,3	50	49,5	48,5	47	45	43	40,5	38	35*	32*	28,5*	
B-N4 150-400A	N4 150-400A	280 S4	75	58,8	58,7	58,6	58,5	58,3	57,9	57	55,5	54	52	49,5	47	44*	41*	37,5*	

**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.

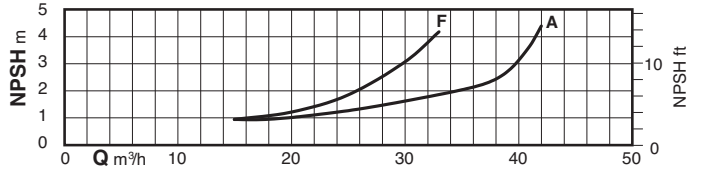
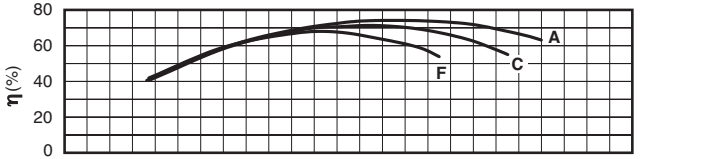
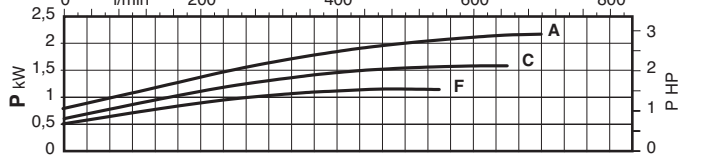
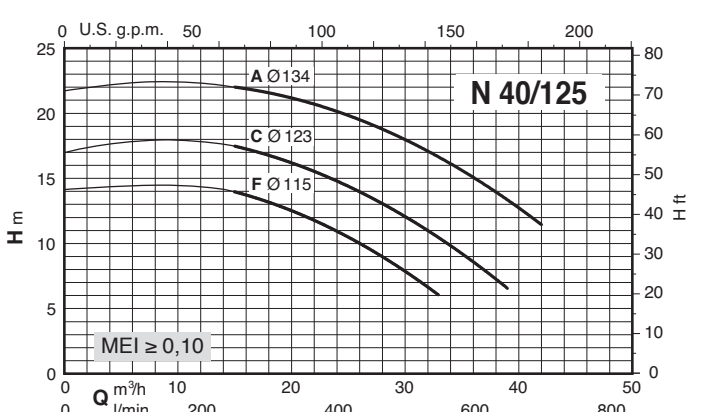
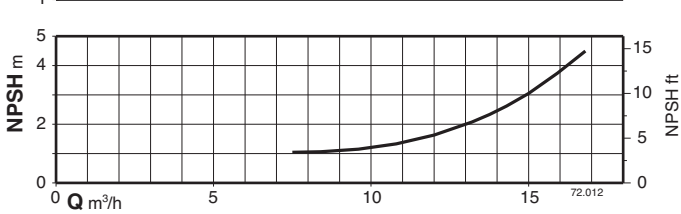
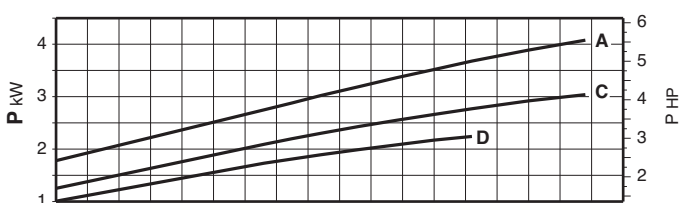
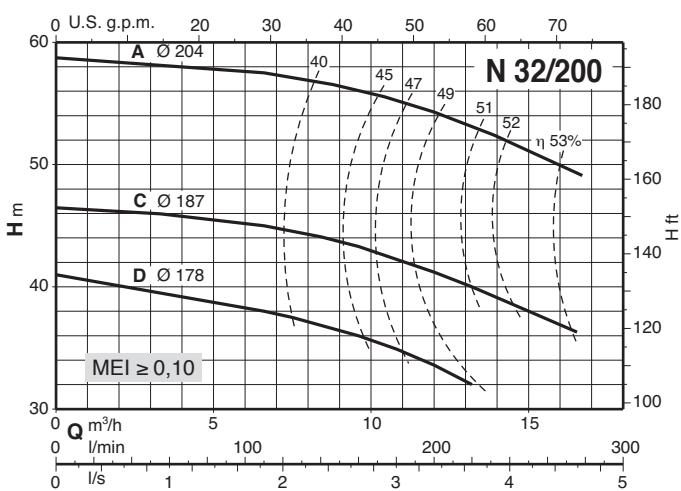
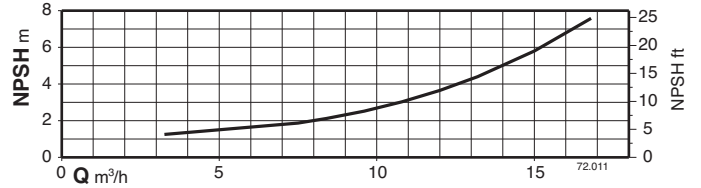
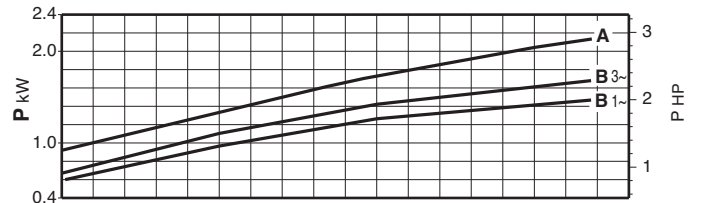
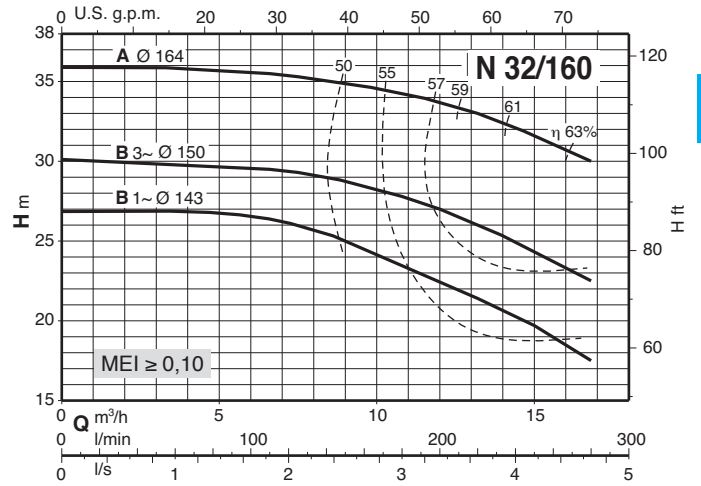
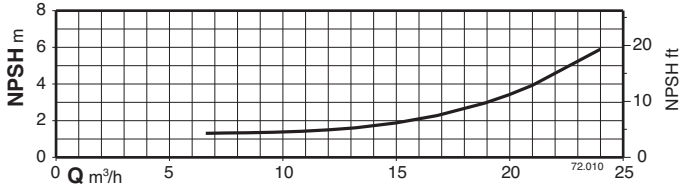
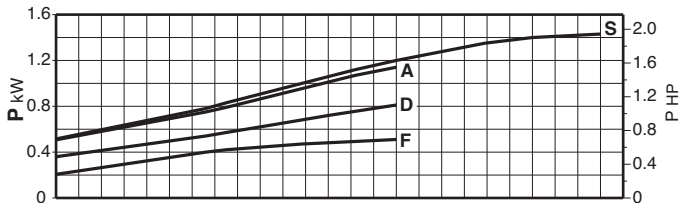
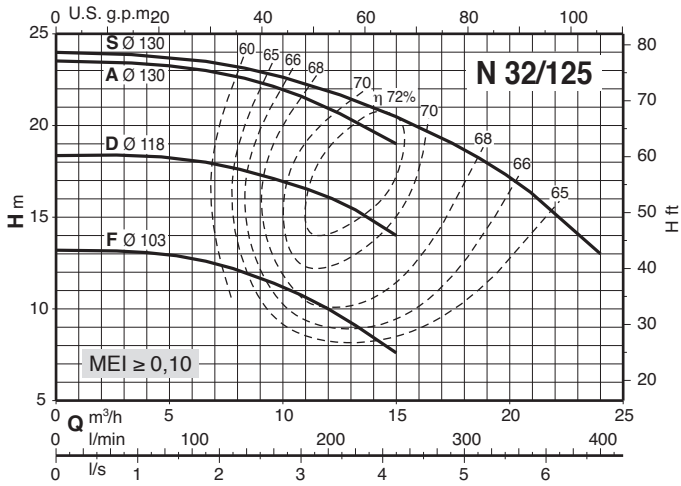
\* Maximum suction lift 1-2 m.

### Regulation (EU) No 547/2012

- The benchmark for most efficient water pumps is MEI ≥ 0,70.
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

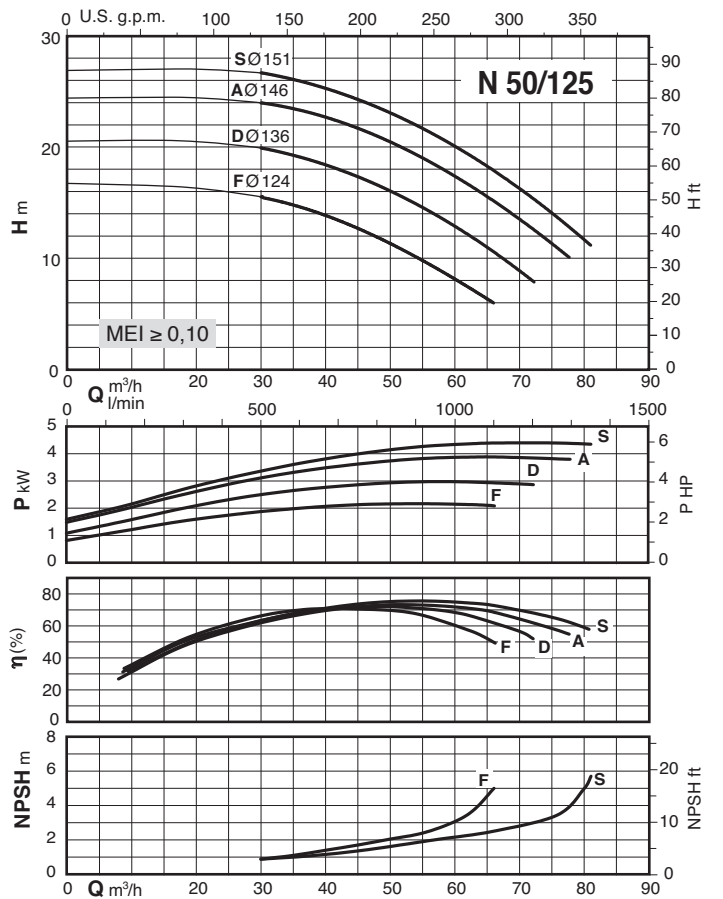
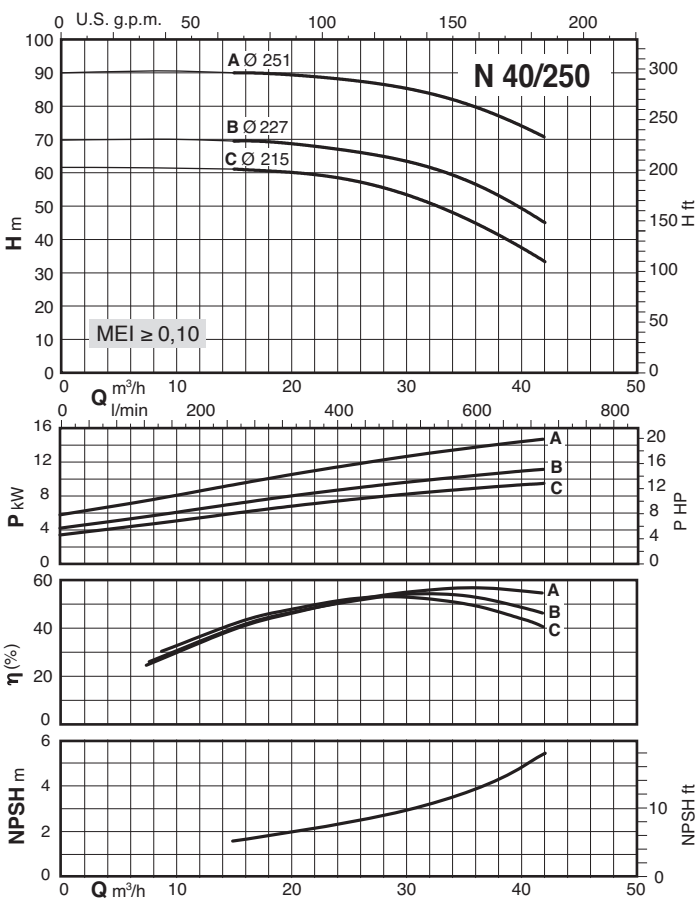
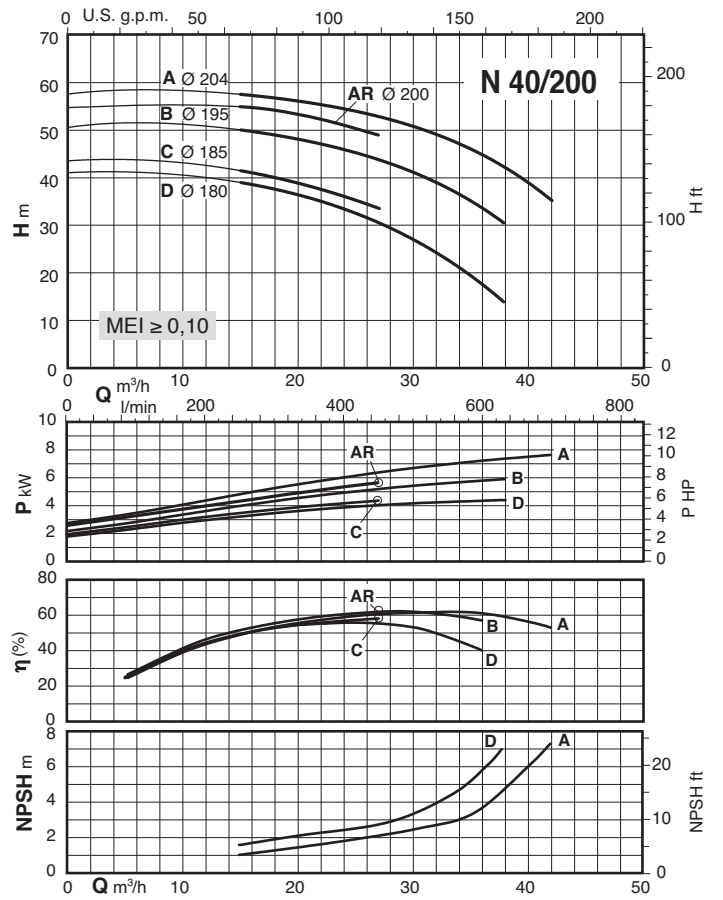
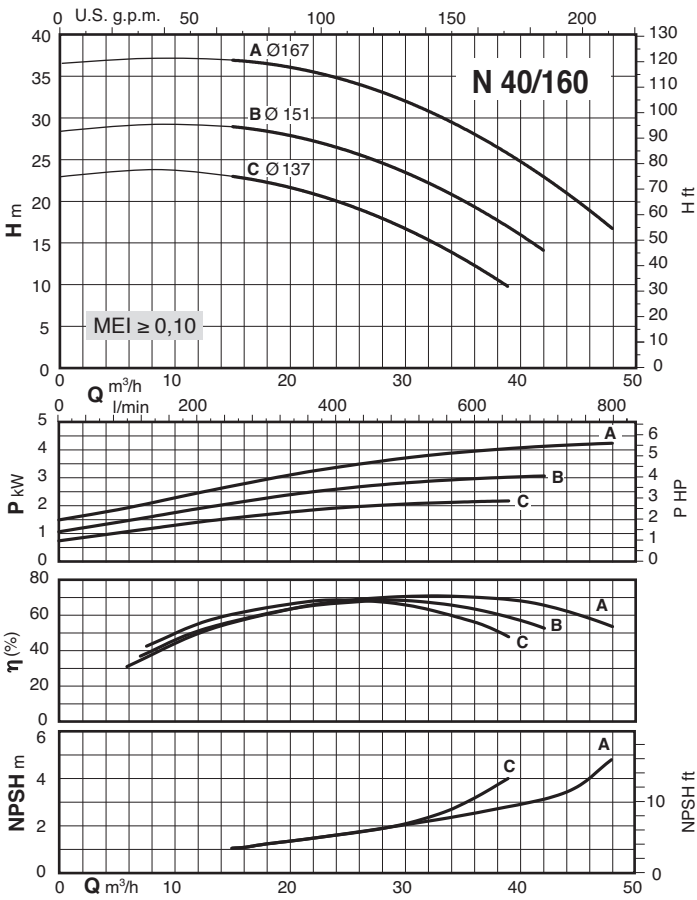


Characteristic curves  $n \approx 2900$  rpm





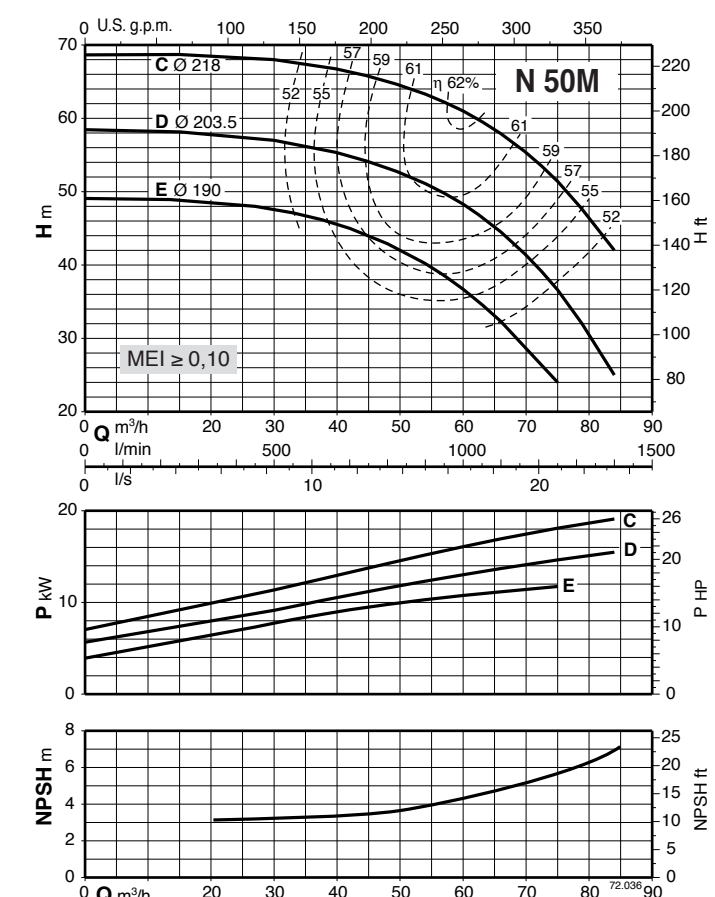
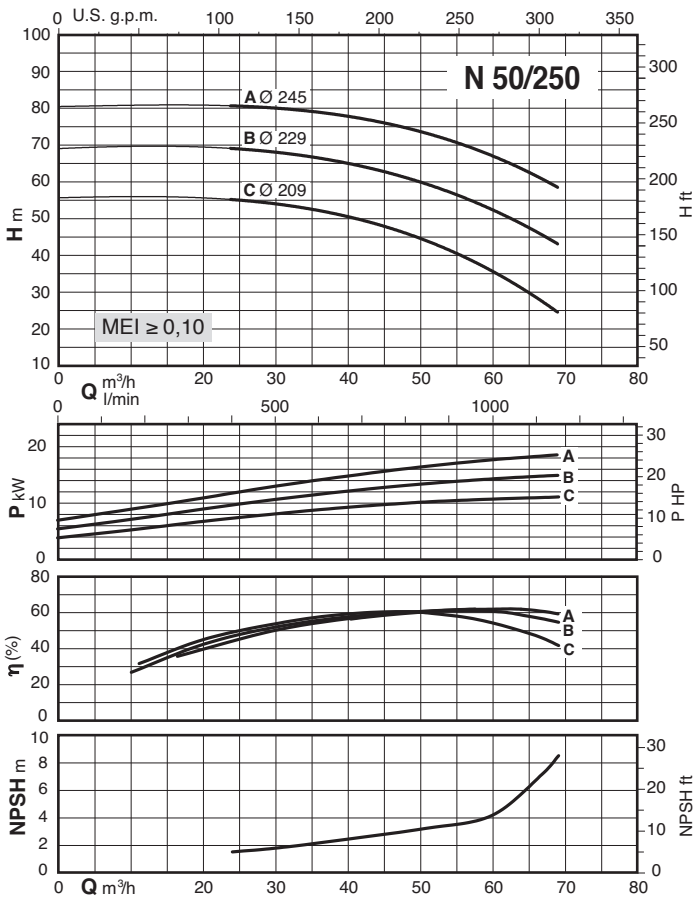
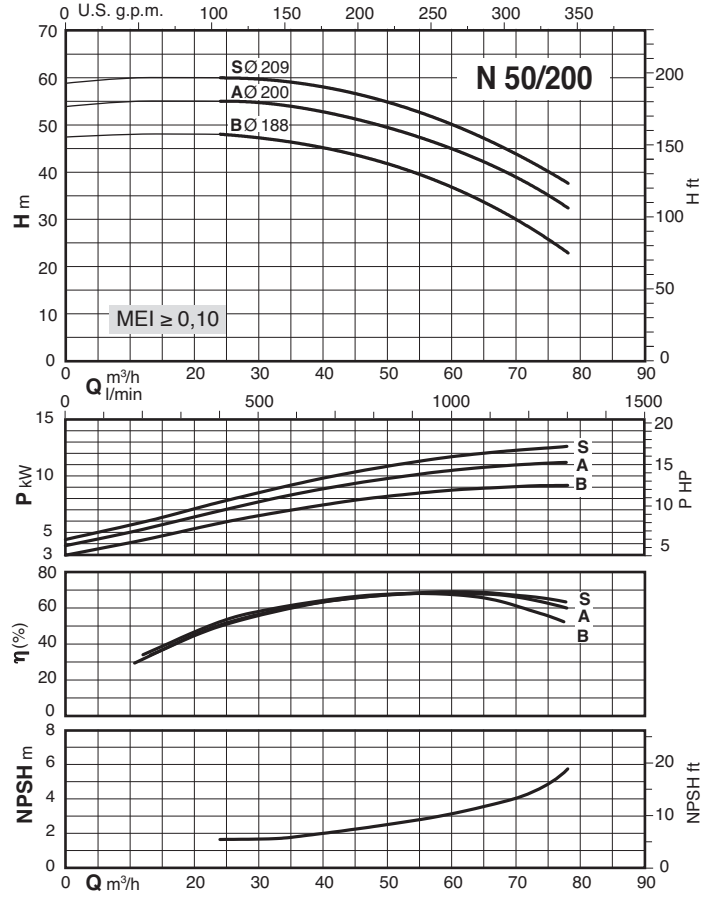
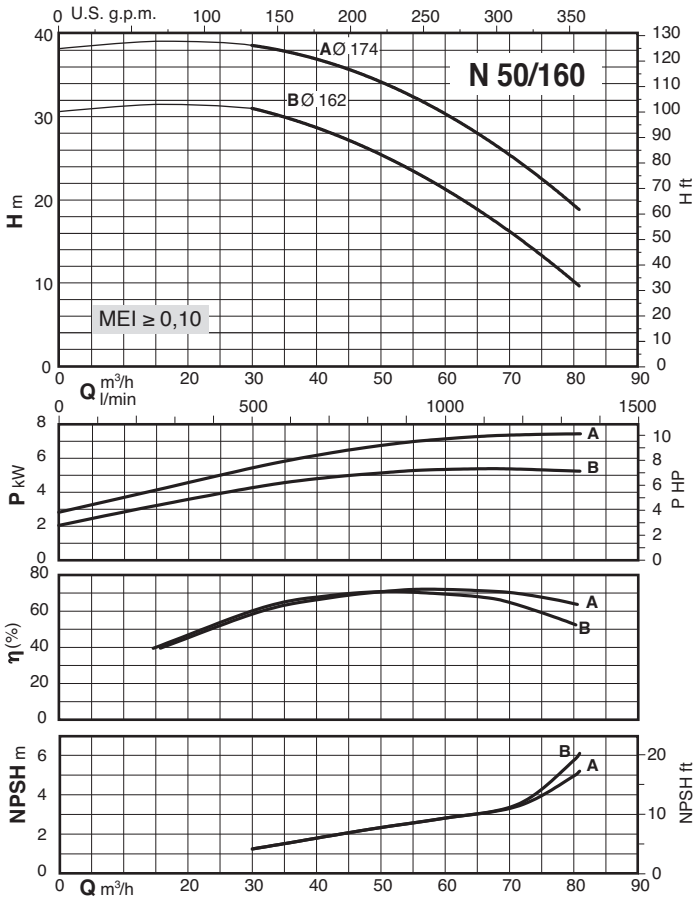
Characteristic curves  $n \approx 2900$  rpm







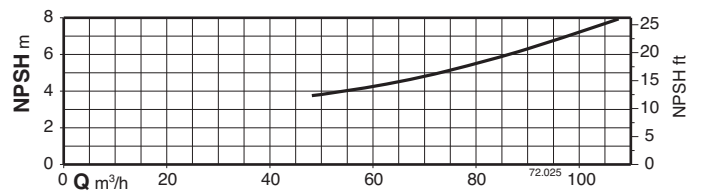
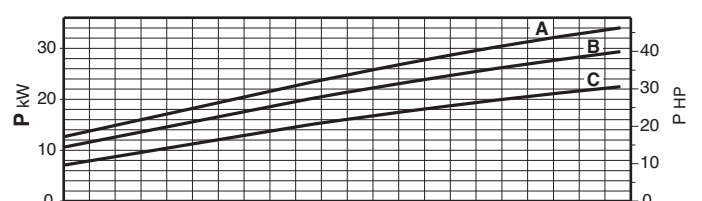
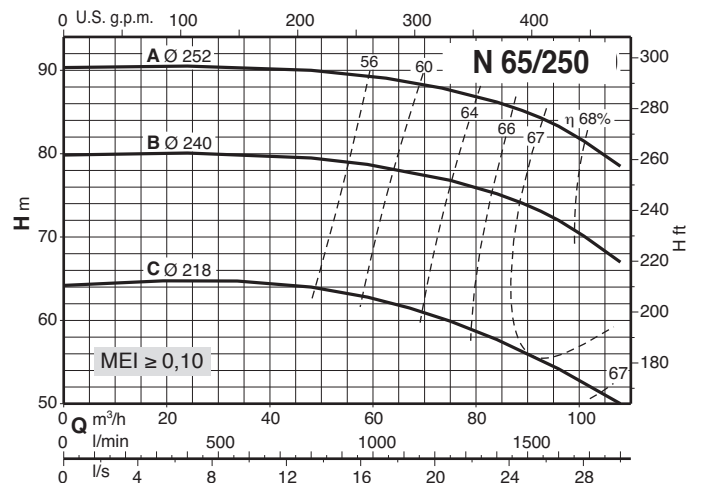
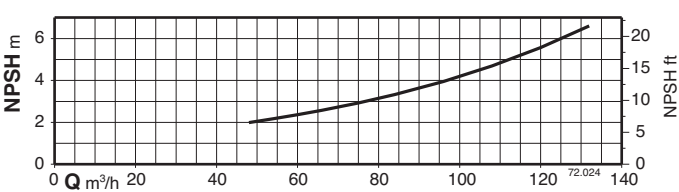
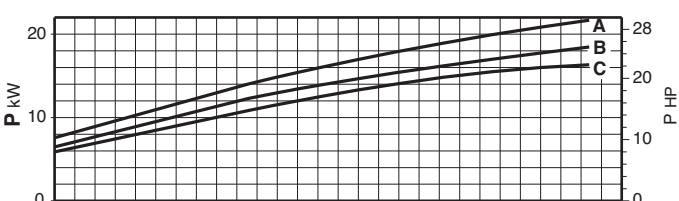
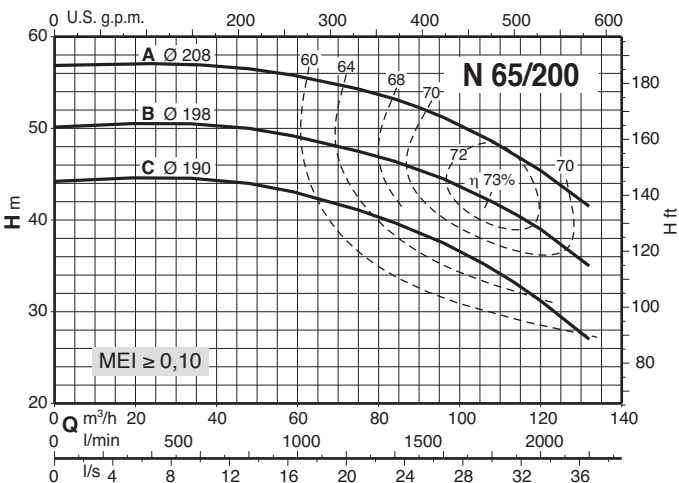
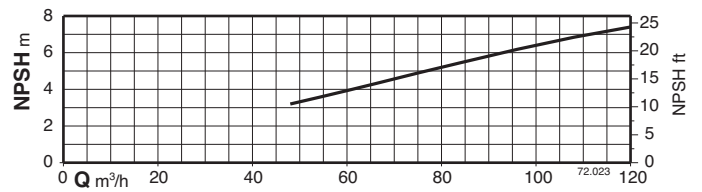
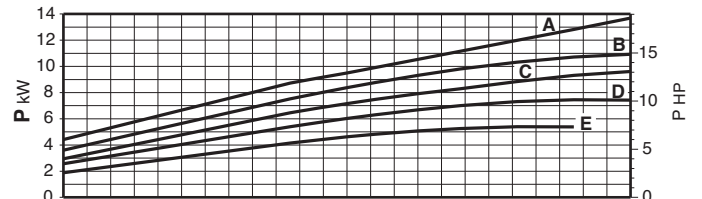
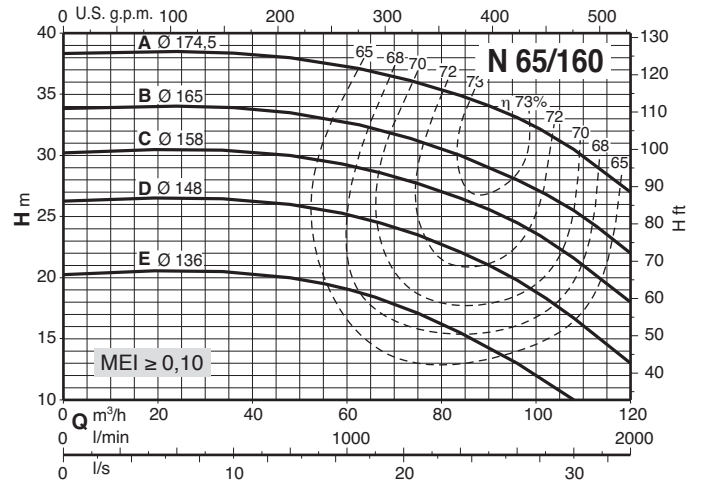
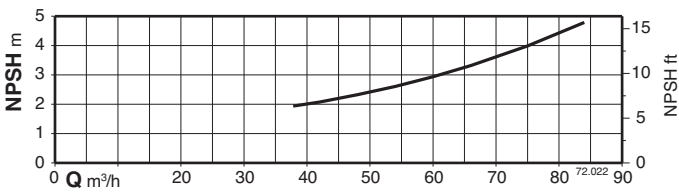
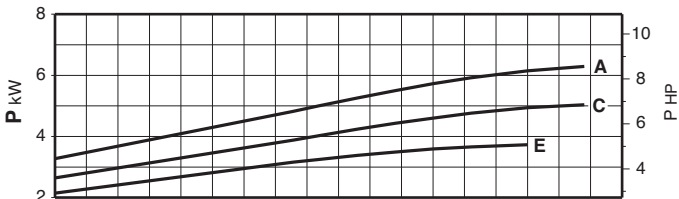
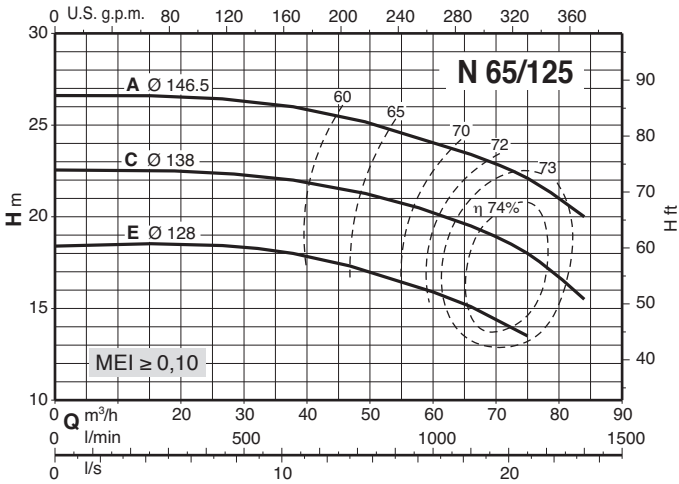
Characteristic curves  $n \approx 2900$  rpm



4

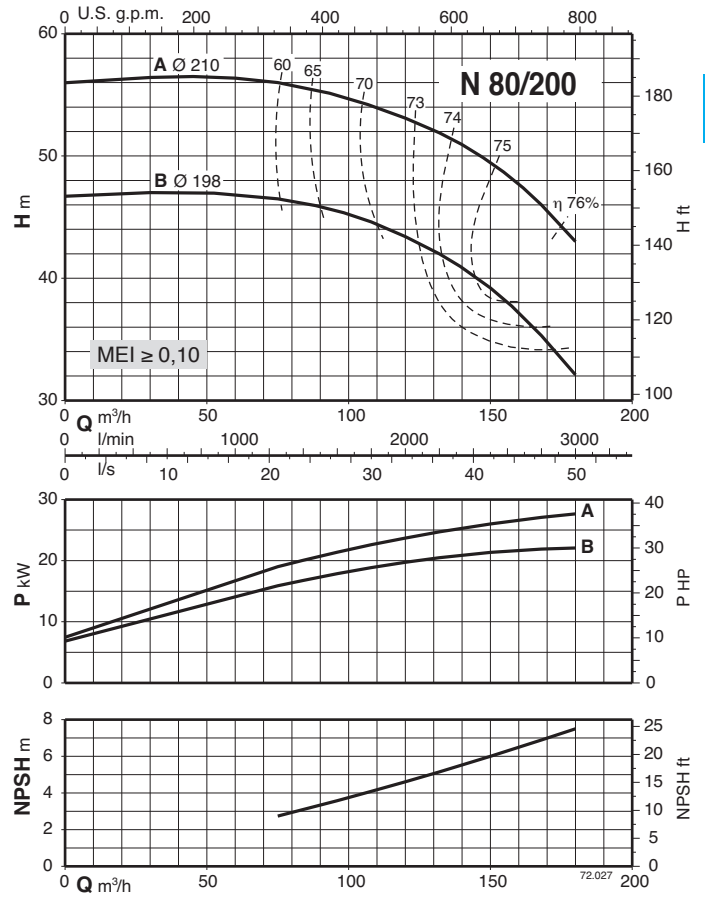
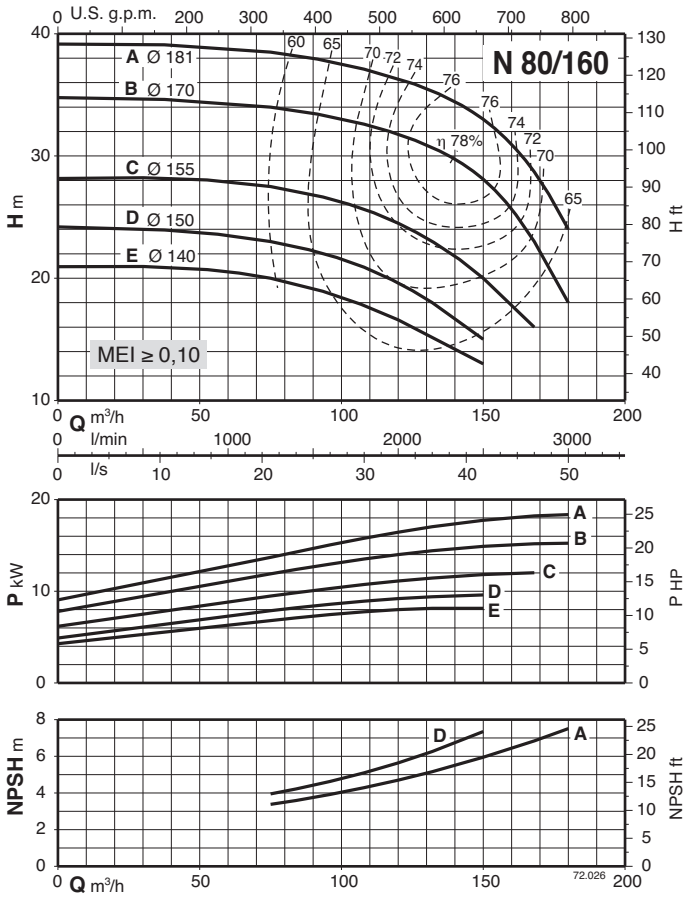


Characteristic curves  $n \approx 2900$  rpm

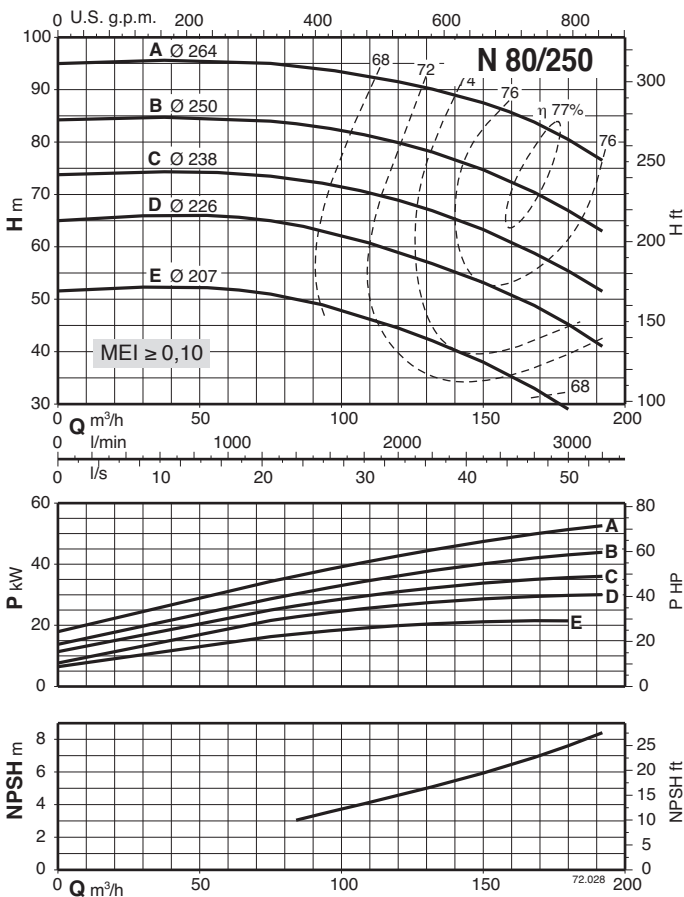




Characteristic curves  $n \approx 2900$  rpm

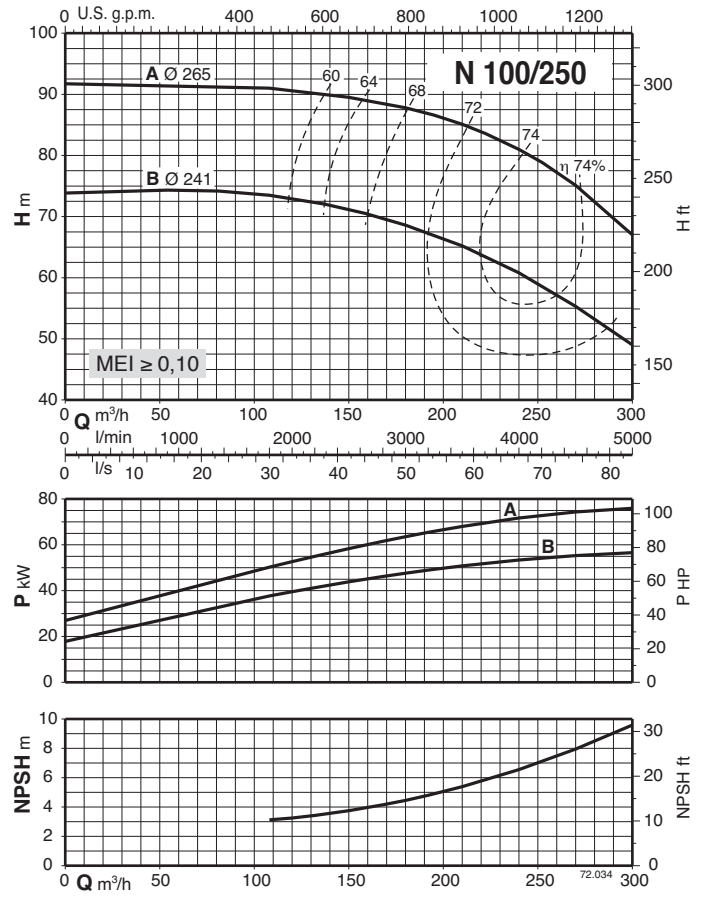
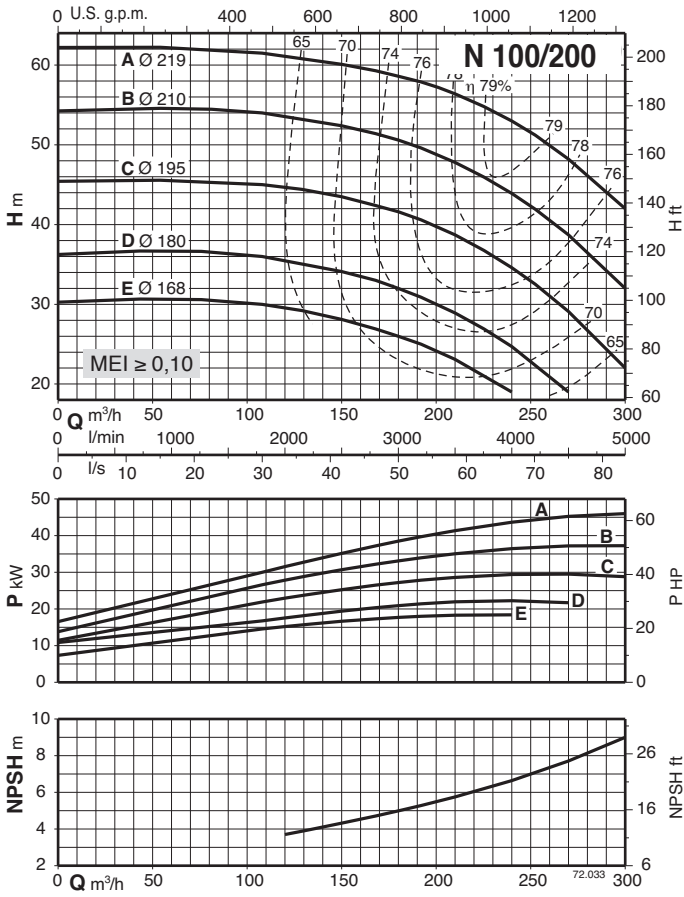


4

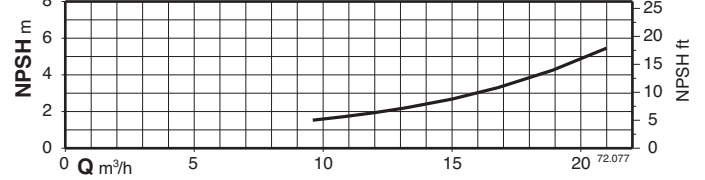
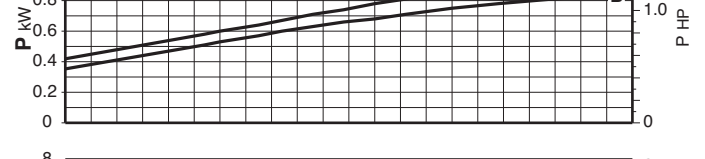
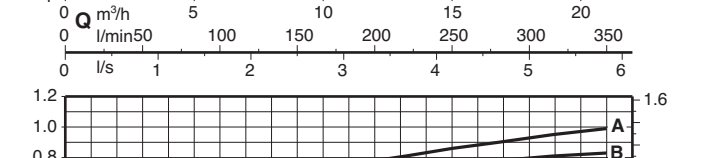
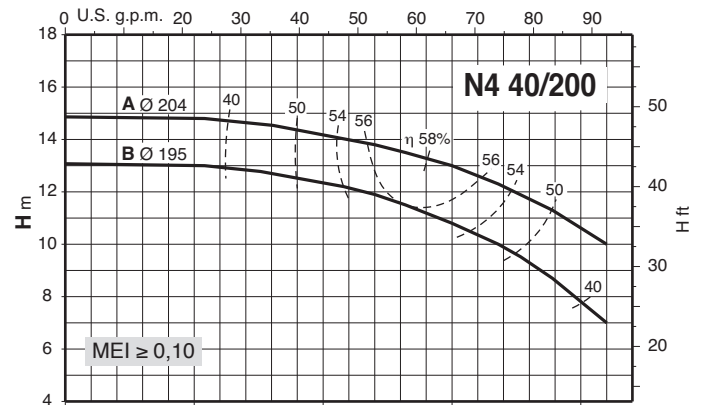
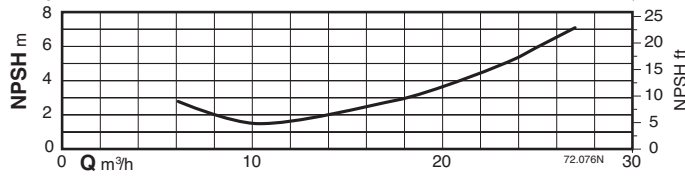
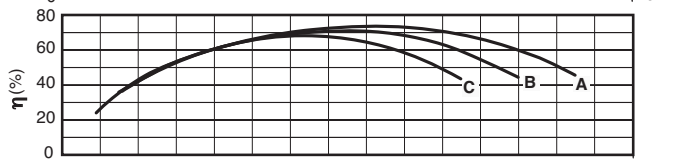
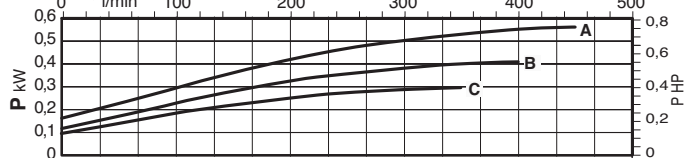
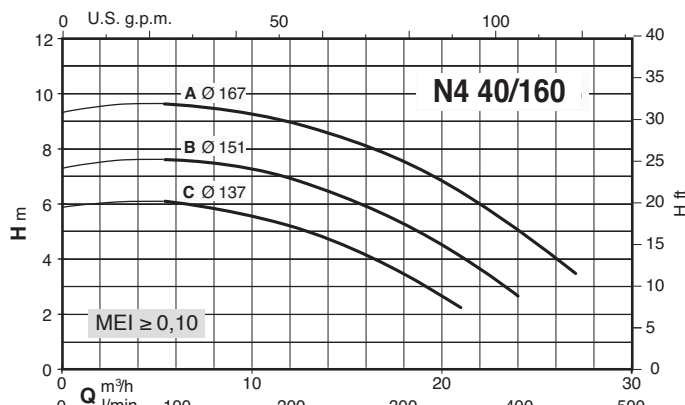
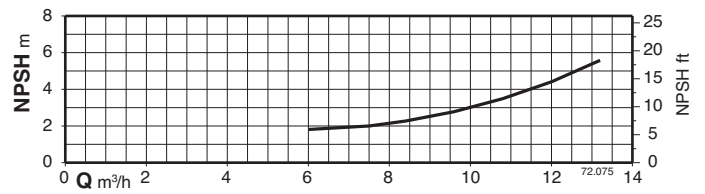
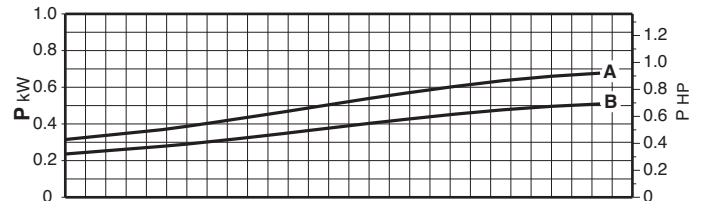
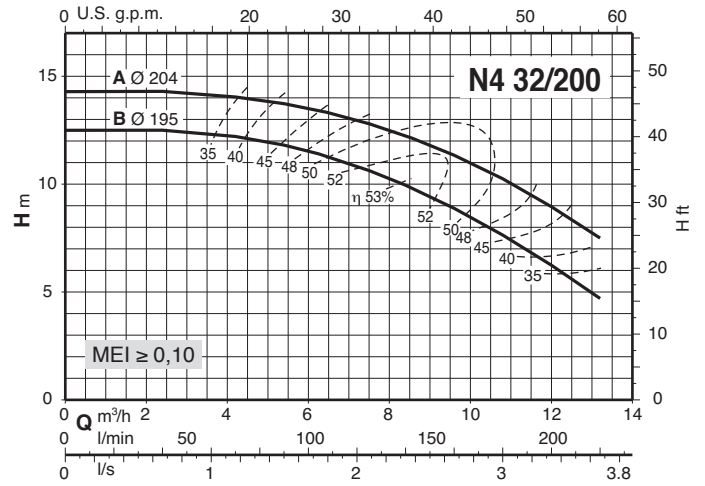
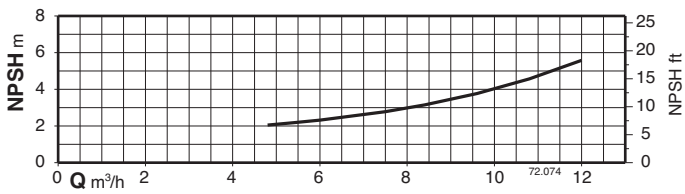
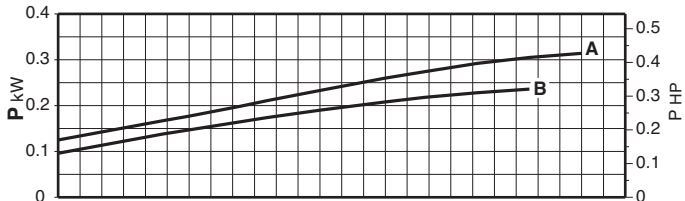
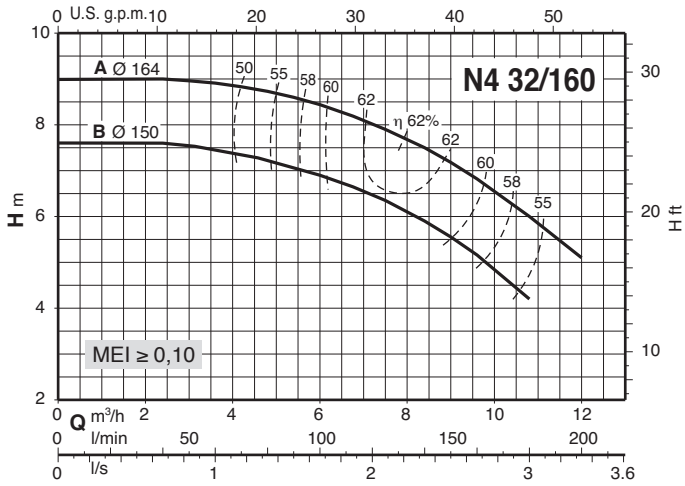




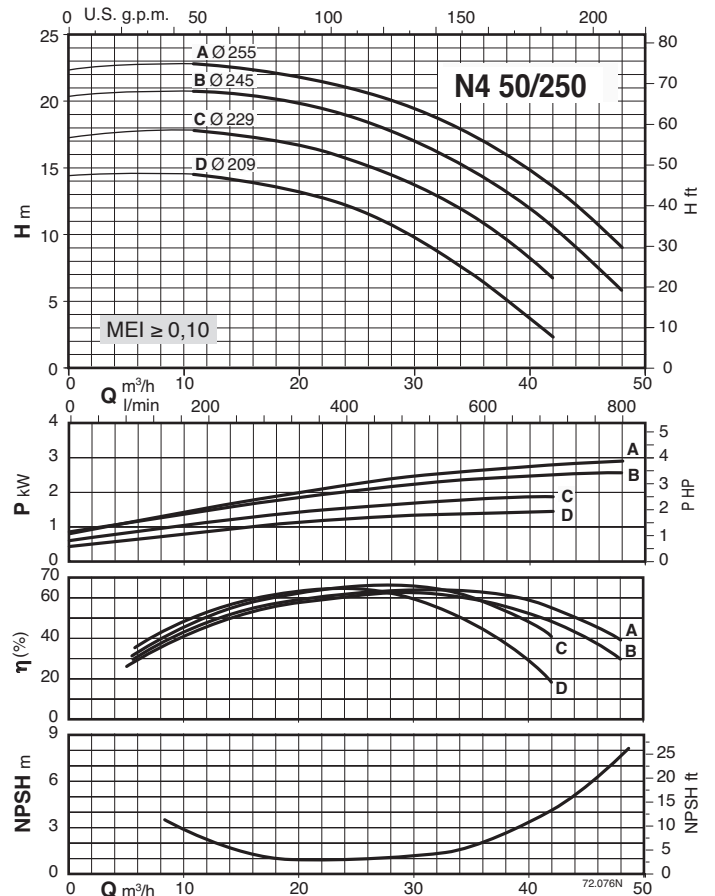
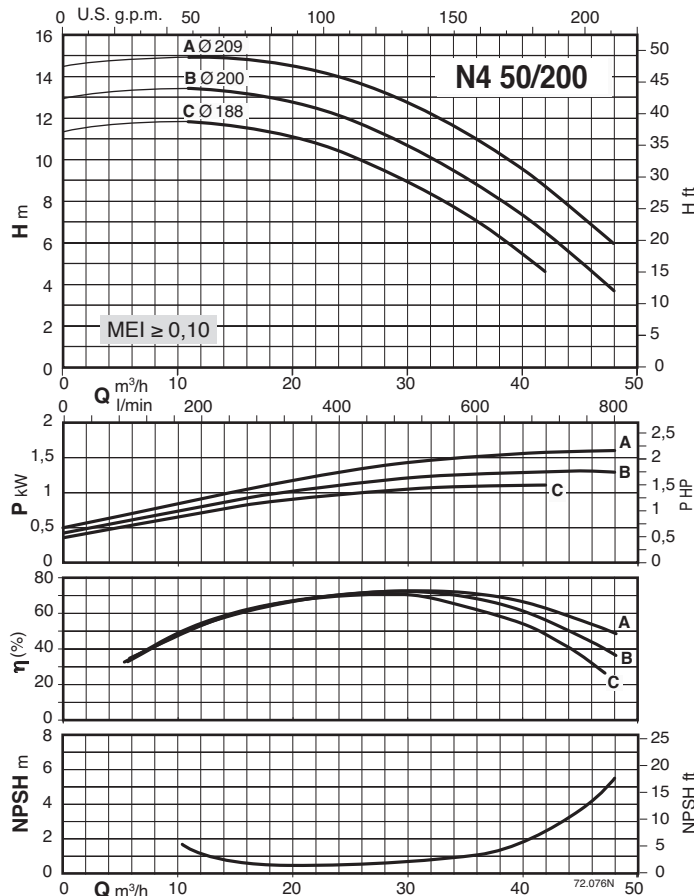
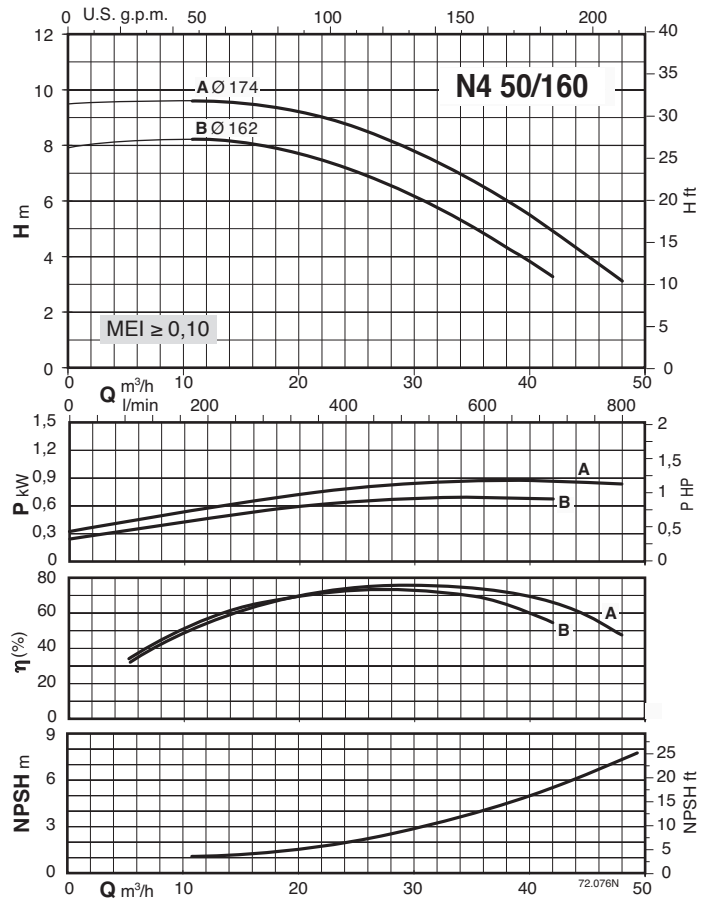
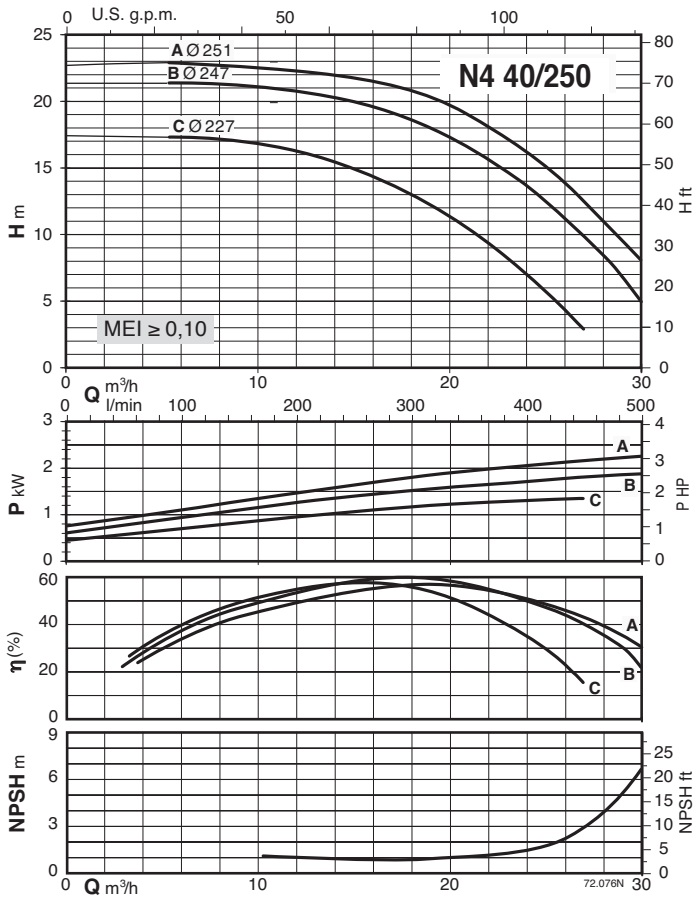
Characteristic curves  $n \approx 2900$  rpm



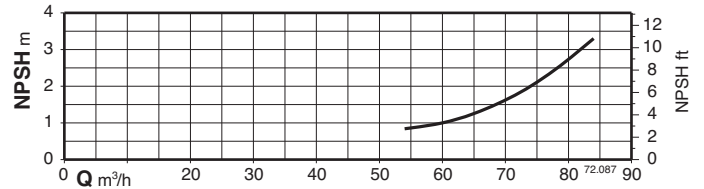
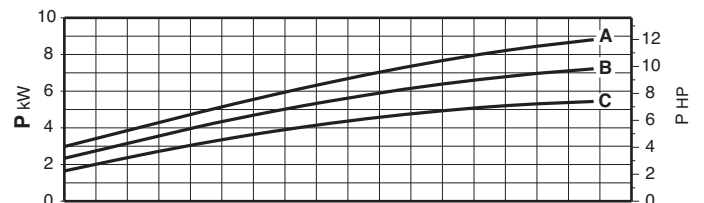
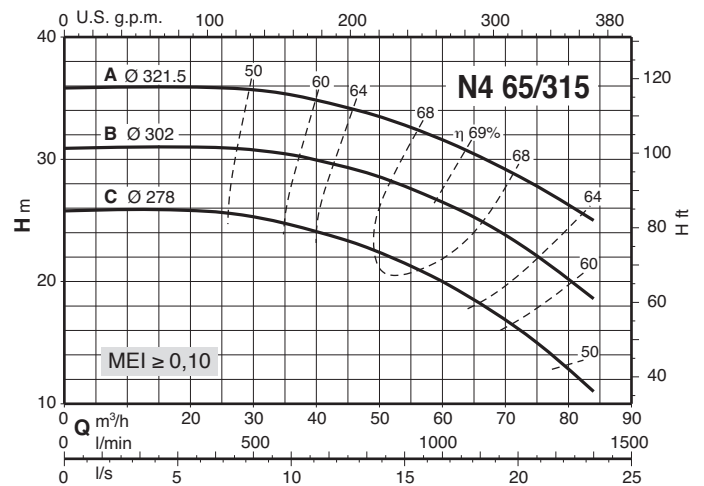
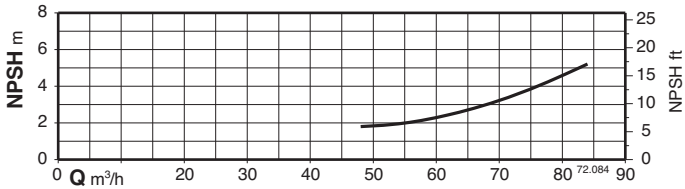
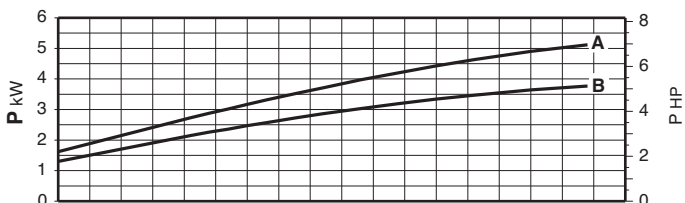
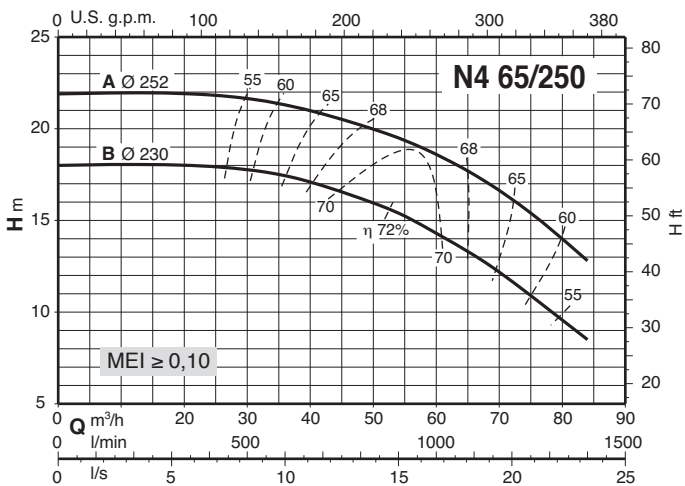
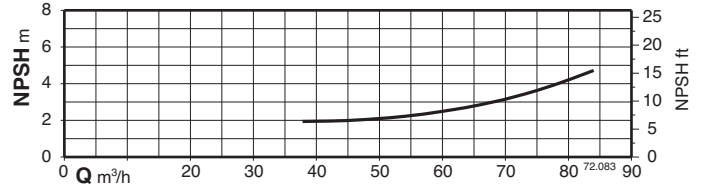
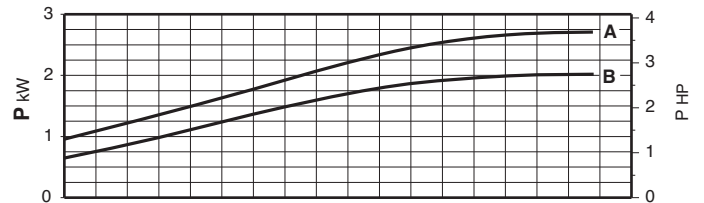
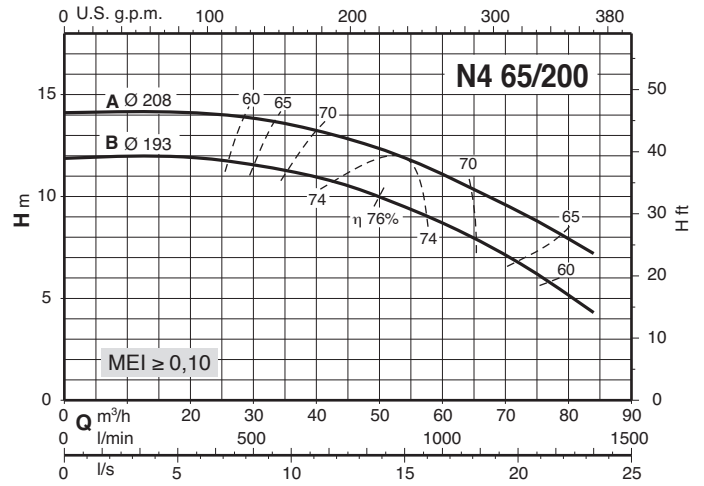
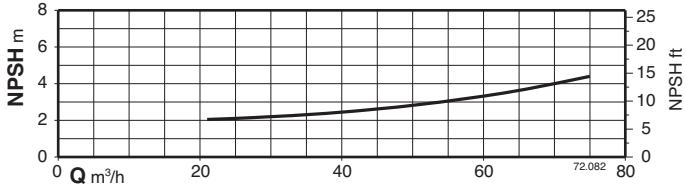
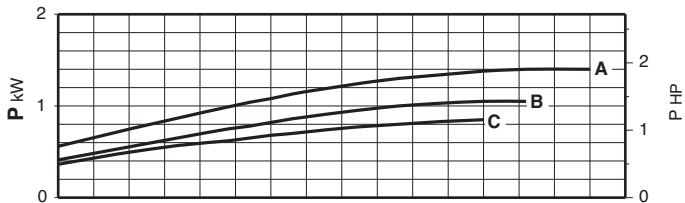
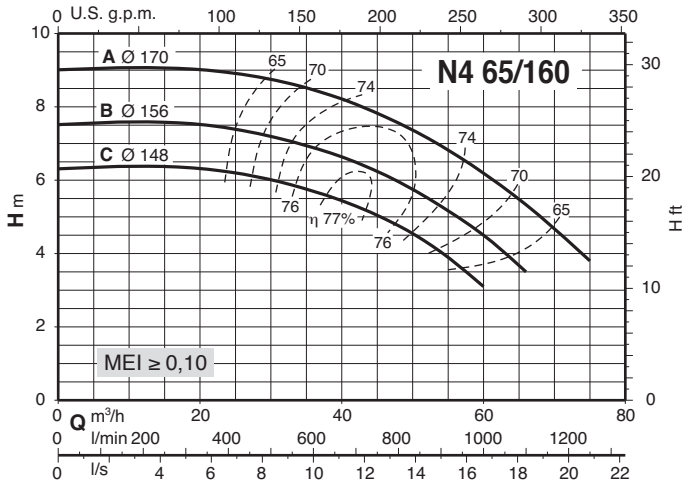
### Characteristic curves $n \approx 1450$ rpm



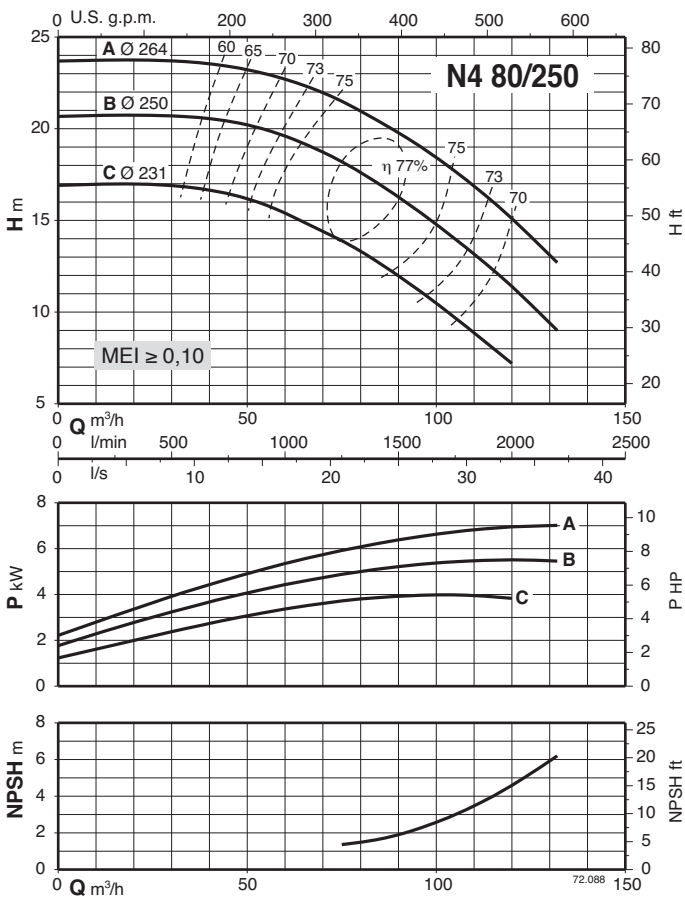
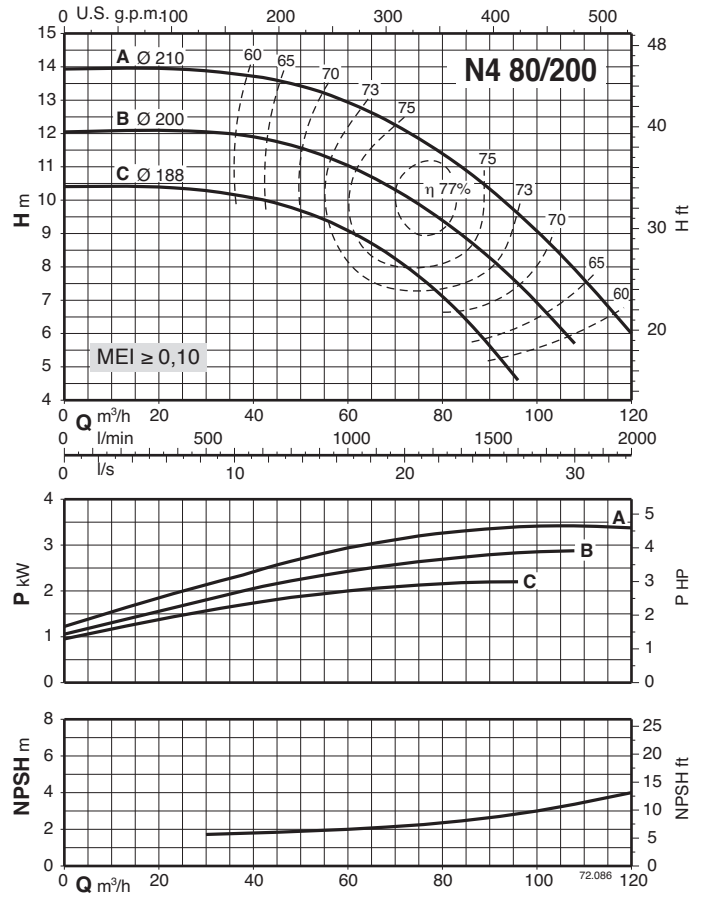
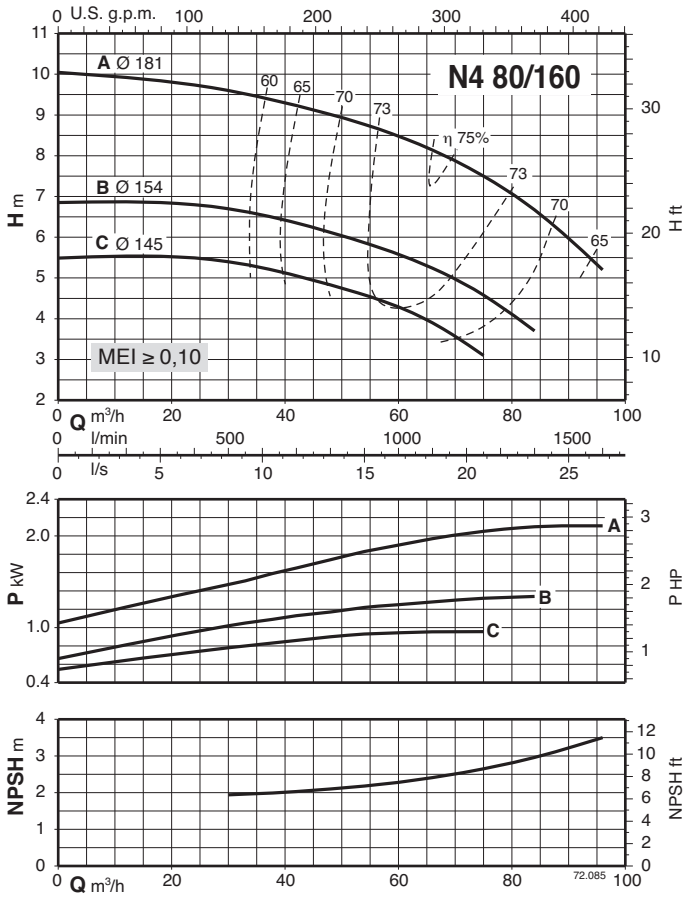
### Characteristic curves $n \approx 1450$ rpm



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

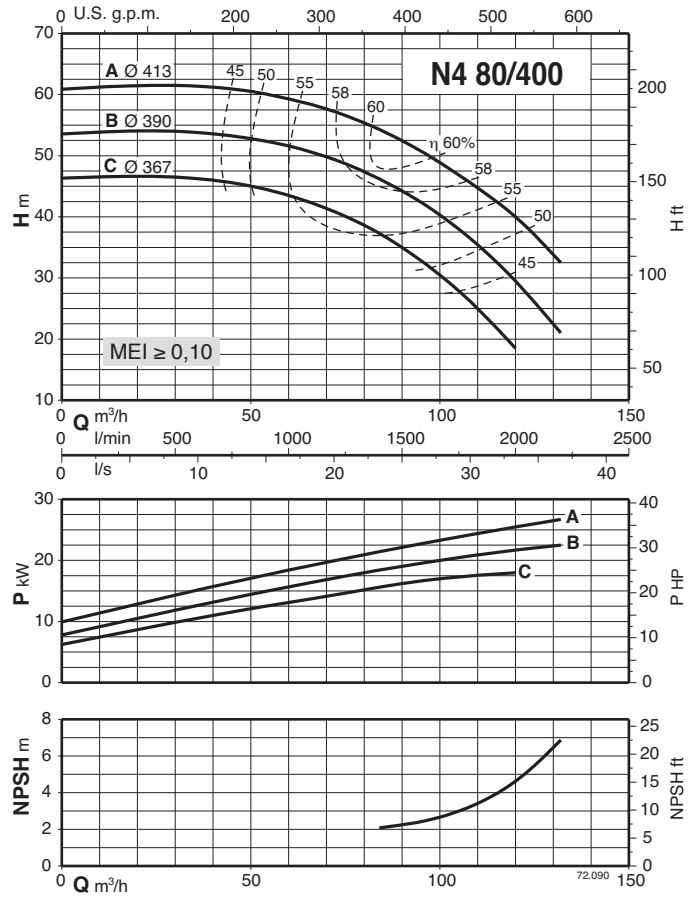
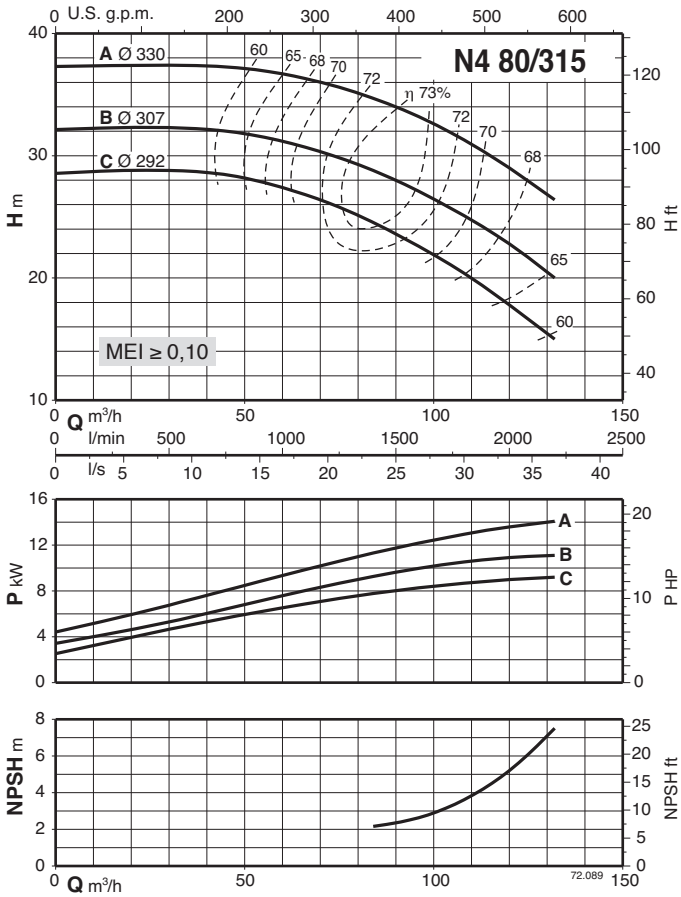


### Characteristic curves $n \approx 1450$ rpm



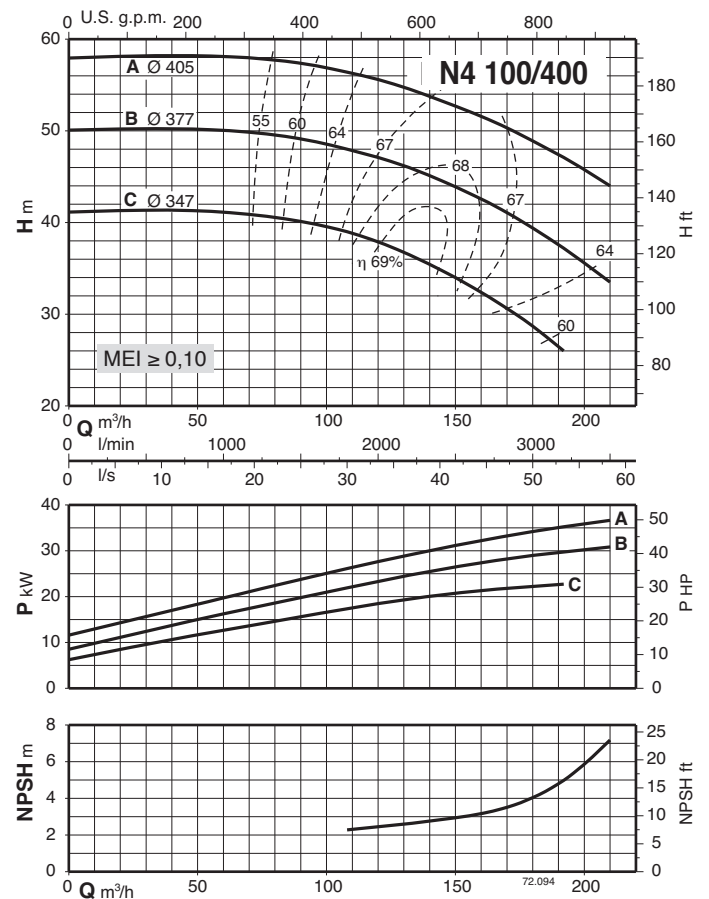
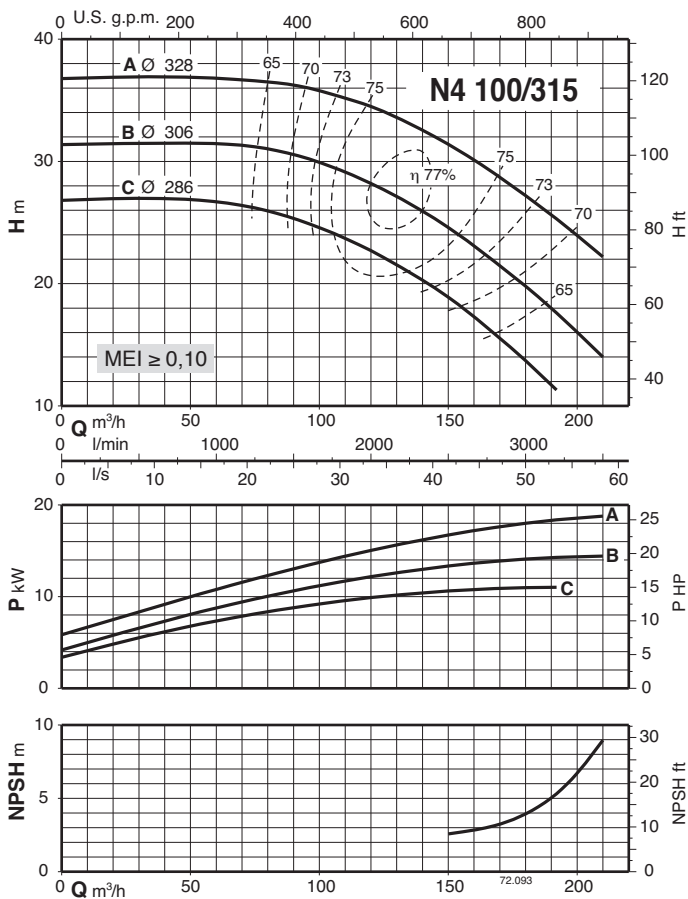
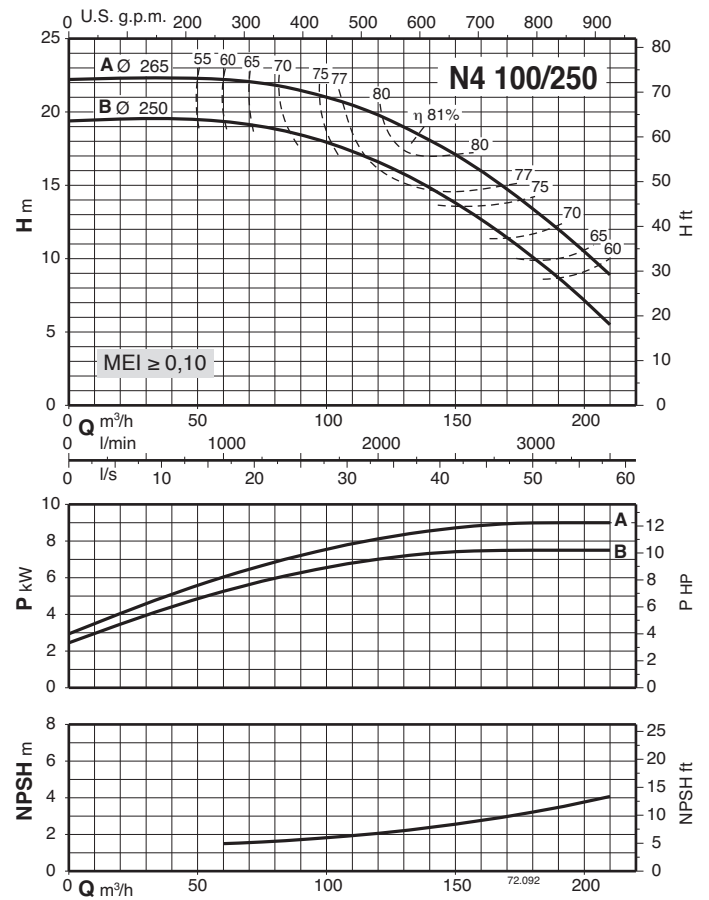
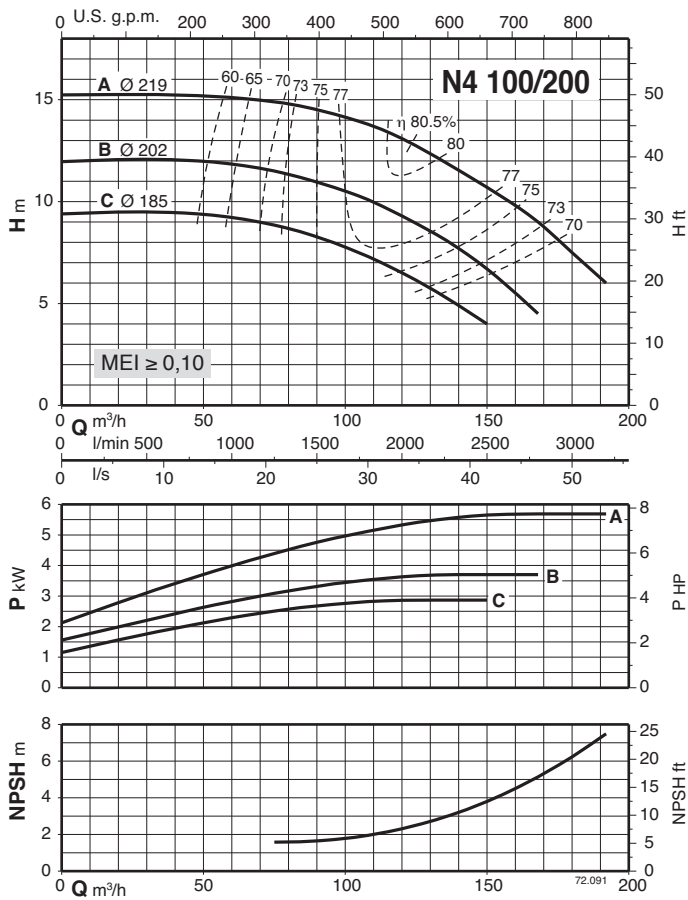


### Characteristic curves $n \approx 1450$ rpm

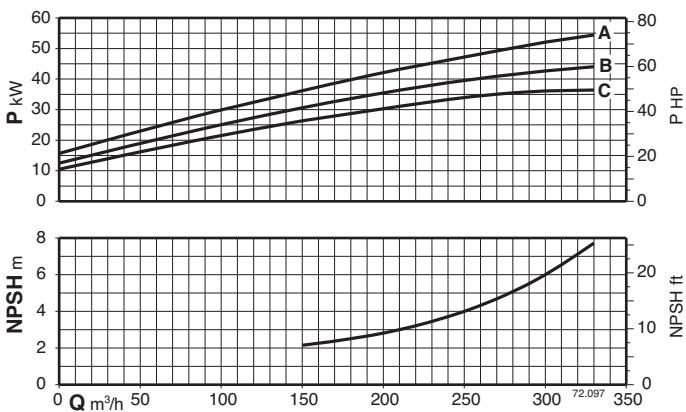
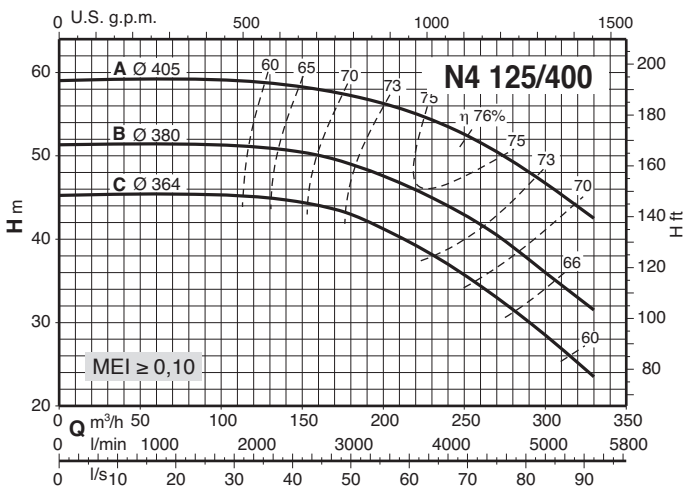
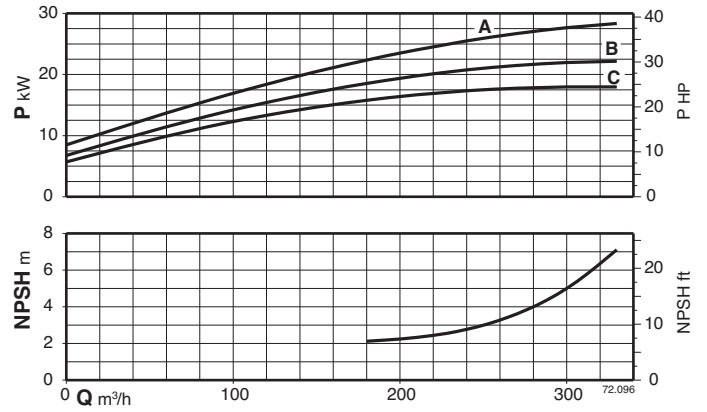
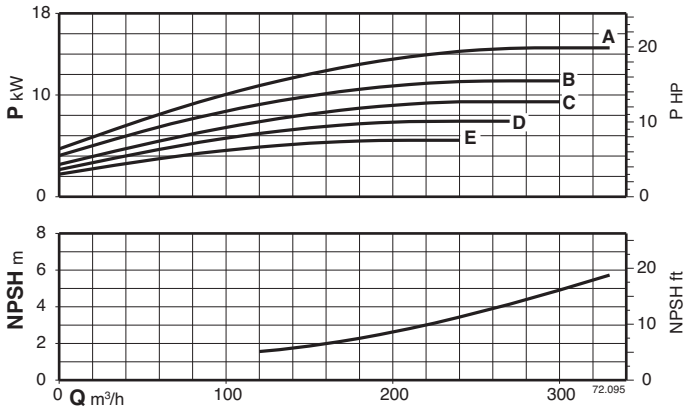
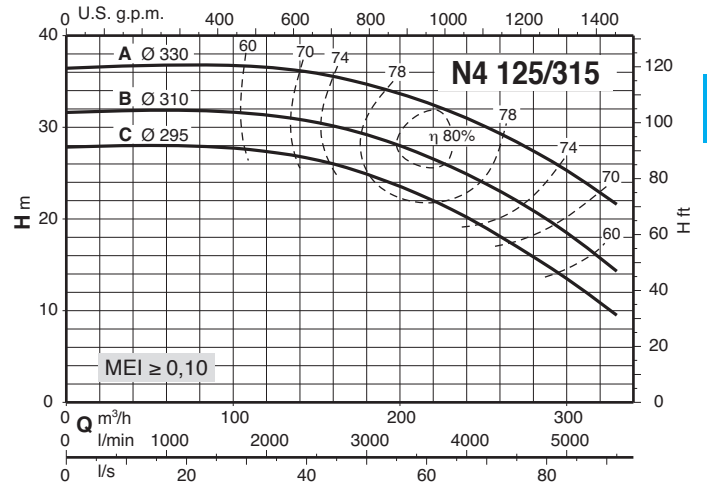
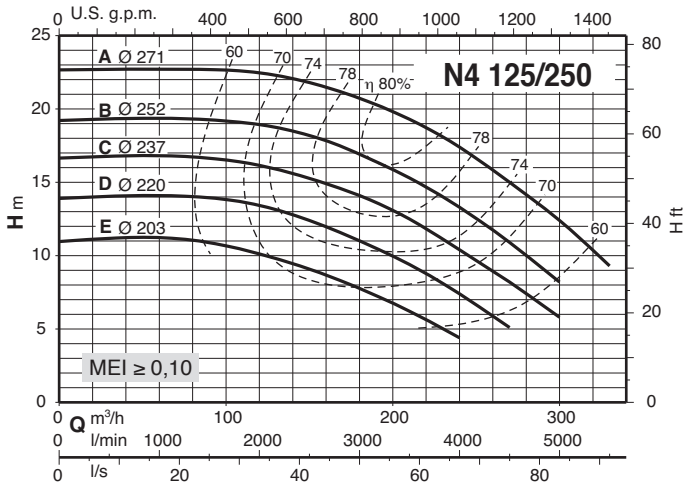


4

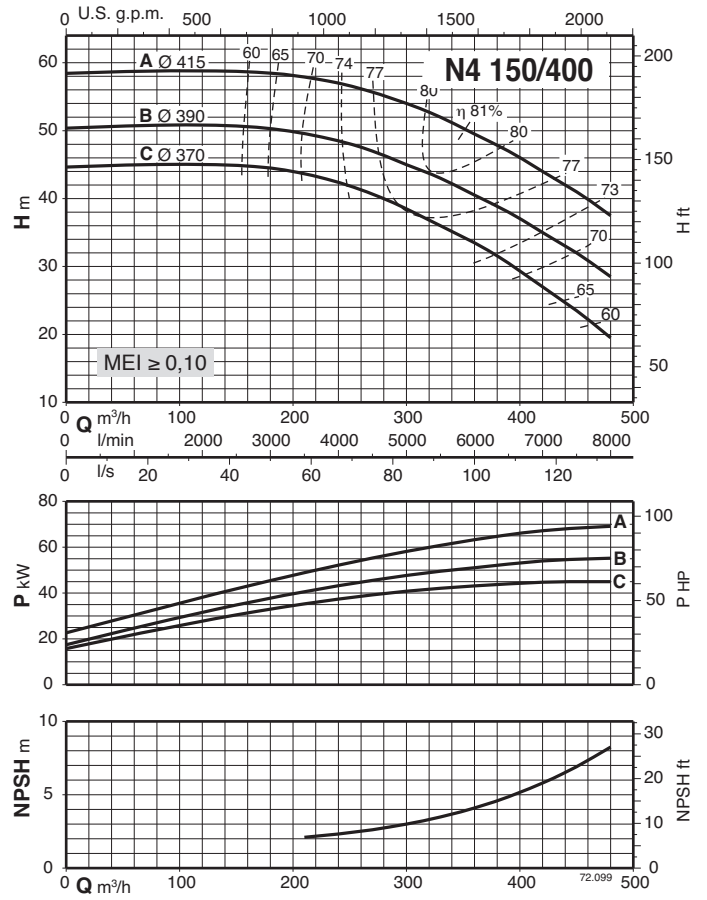
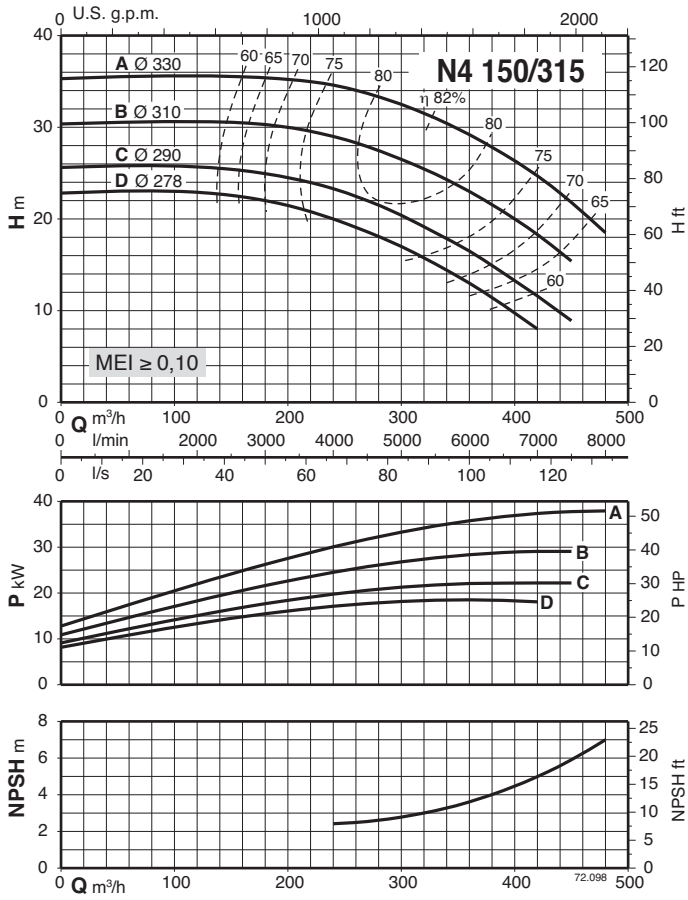
### Characteristic curves $n \approx 1450$ rpm



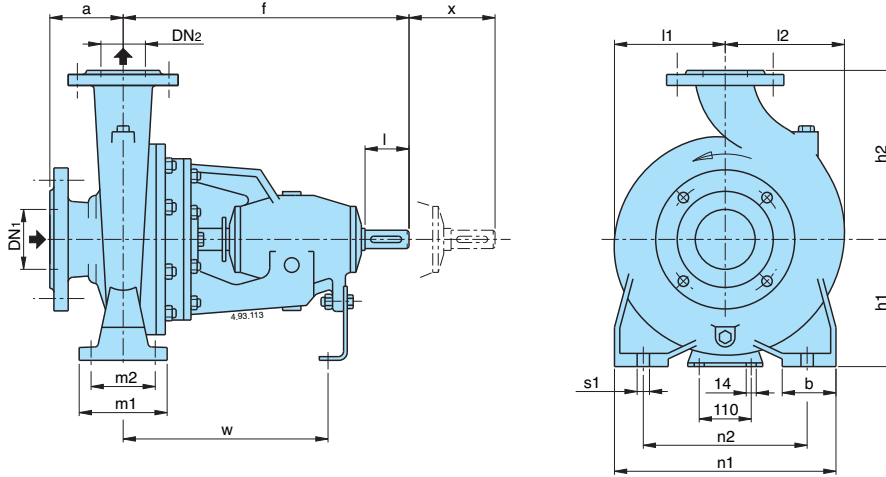
### Characteristic curves $n \approx 1450$ rpm



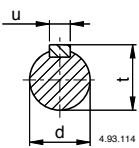
### Characteristic curves $n \approx 1450$ rpm



### Dimensions and weights

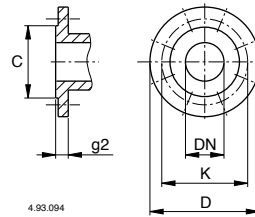


Shaft extension ISO 775 Parallel key UNI 6604



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

Flanges PN 10, EN 1092-2



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

**N** n ≈ 2900 rpm  
**N4** n ≈ 1450 rpm

TYPE	mm																	kg		
	DN1	DN2	a	f	h1	h2	l1	l2	m1	m2	n1	n2	b	s1	d	w	x	B-N B-N4	N N4	
B-N, B-N4 - N, N4 32-125					112	140	93	97			190	140							30,7	
B-N, B-N4 - N, N4 32-160	50	32	80	360	132	160	120	120	100	70	240	190	50	14	24	260	100		38,2	
B-N, B-N4 - N, N4 32-200					160	180	140	140											44,8	
B-N, B-N4 - N, N4 40-125			80	360	112	140	100	113			210	160							34,1	
B-N, B-N4 - N, N4 40-160	65	40			132	160	119	119	100	70	240	190	50	14	24	260	100		40	
B-N, B-N4 - N, N4 40-200			100		160	180	140	140			265	212							48,5	
B-N, B-N4 - N, N4 40-250					180	225	175	175	125	95	320	250	65						62,3	
B-N, B-N4 - N, N4 50-125				360	132	160	121	137			240	190							44	
B-N, B-N4 - N, N4 50-160	65	50	100		160	180	127	141	100	70	265	212	50	14	24	260	100		45,8	
B-N, B-N4 - N, N4 50-200					200	140	153												52,3	
B-N, B-N4 - N, N4 50-250					180	225	175	175	125	95	320	250	65						64,4	
B-N, N 50M																			66	
B-N, B-N4 - N, N4 65-125				100	160	180	134	155			280	212							51,6	
B-N, B-N4 - N, N4 65-160	80	65			200	150	172		125	95	320	250	65	14	24	260	100		52,5	
B-N, B-N4 - N, N4 65-200					180	225	155	175			360	280							60	
B-N, B-N4 - N, N4 65-250				470	200	250	175	190	160	120	360	280	80	18	32	340	140		95,5	
B-N4 - N4 65-315			125		225	280	220	220			400	315							136	
B-N, B-N4 - N, N4 80-160				125	360	225	165	193			320	250			24	260			63	
B-N, B-N4 - N, N4 80-200	100	80	125		180	250	170	194	125	95	345	280	65	14					90,5	
B-N, B-N4 - N, N4 80-250					470	200	280	191	210	160	120	400	315	80	18	32	340	140		112
B-N4 - N4 80-315					250	315	220	232											139,5	
B-N4 - N4 80-400 <sup>1)</sup>	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				140	200	280	180	212			360	280							102	
B-N, B-N4 - N, N4 100-250	125	100	140		470	225	205	233	160	120	400	315	80	18	32	340	140		121,5	
B-N4 - N4 100-315					530	250	315	230	250											151,5
B-N4 - N4 100-400					530	280	355	268	200	150	500	400	100	22	42	370			211,5	
B-N4 - N4 125-250				150	470	250	235	268	160	120	400	315	80	18	32	340			140	
B-N4 - N4 125-315	125	125	140		530	280	355	247	278	200	150	500	400	100	22	42	370	140		198
B-N4 - N4 125-400						315	400	280	305											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





### 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	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 50 M	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

### 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			
					50 M			
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

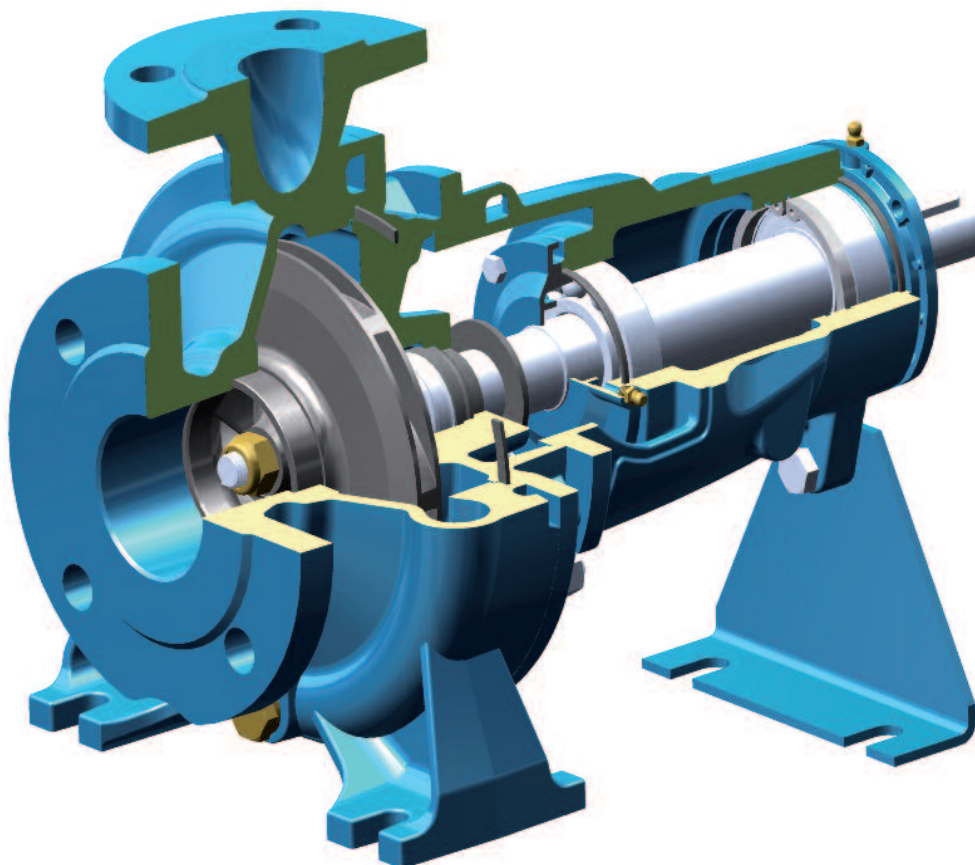
### Suction pipe: recommended minimum inside diameter (DN) for different capacities (Q)

Threaded pipe	DN	G 2		G 2 1/2						
		mm	mm	mm	mm	mm	mm	mm	mm	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



## Features

4



### **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.

