



**EBARA**

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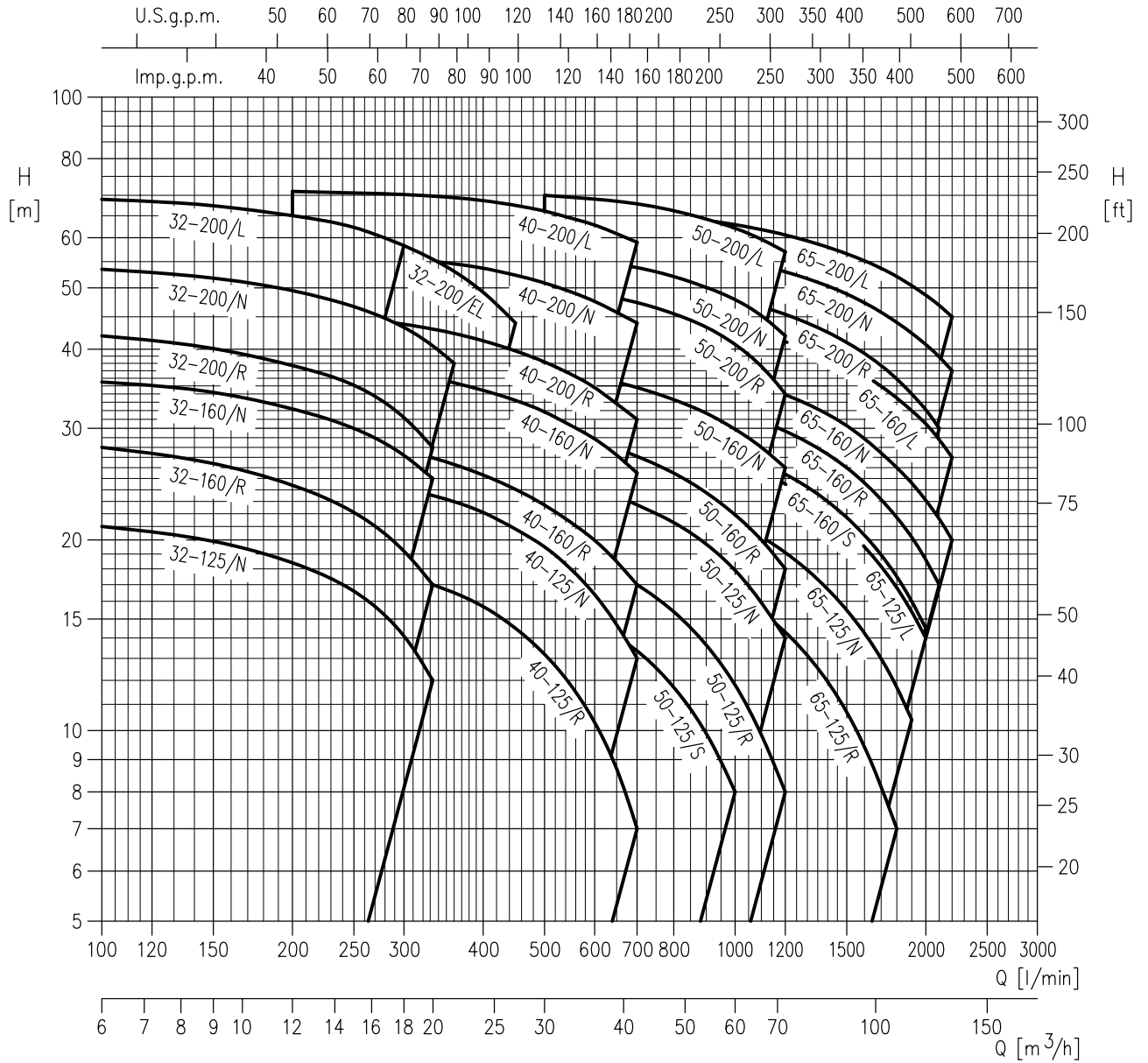
**PUMP SPECIFICATIONS**

50 Hz

PUMP						
Version		ONLY FOR 65 VERSION		FOR ALL MODELS		
		3BSF		3SF	3LSF	
		3BPF		3PF	3LPF	
Liquid Handled	Type of liquid		Clean water and moderately aggressive fluids			
	Temperature	[° C]	min. -10 max. +90 max. +110 (H-HS version)		min. -10 max. +110	
Maximum working pressure		[MPa]	1			
Construction	Impeller		Closed centrifugal type [for 3(.)F 32, 3(.)F 40, 3(.)F 50] Reinforced laser welding [for types 40-200/11, 50-200/15] Closed centrifugal three dimensional blades [for 65 version]			
	Shaft seal type		Mechanical seal		Mechanical seal with stationary ring secured against rotation	
	Bearing		Sealed ball bearing			
Pipe Connection	Suction-Flange		Flange to DIN 2532 (50mm – 65mm - 80mm)			
	Discharge-Flange		Flange to DIN 2532 (32mm – 40mm – 50mm - 65mm)			
Material	Casing		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)	
	Impeller	For all models (no 65 version)	/	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	
		Only for 65 Version	Bronze	EN 1.4401 (AISI 316) Made by precision casting		
	Casing cover		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)	
	Mechanical seal		<b>Ceramic/Carbon/NBR</b> (3BS-3BP /3S-3P) <b>Ceramic/Carbon/FPM</b> (3BSH-3BPH /3SH-3PH) <b>SiC/SiC/FPM</b> (3BSHS-3BPHS / 3SHS-3PHS)		<b>SiC/SiC/FPM</b>	
	"O"ring		NBR		FPM	
	Shaft		EN 1.4301 (AISI 304) (Part in contact with liquid)		EN 1.4404 (AISI 316L) (Part in contact with liquid)	
	Bracket		Cast iron - Aluminium			
Applicable standard of test		ISO 9906 Annex A				

SELECTION CHART

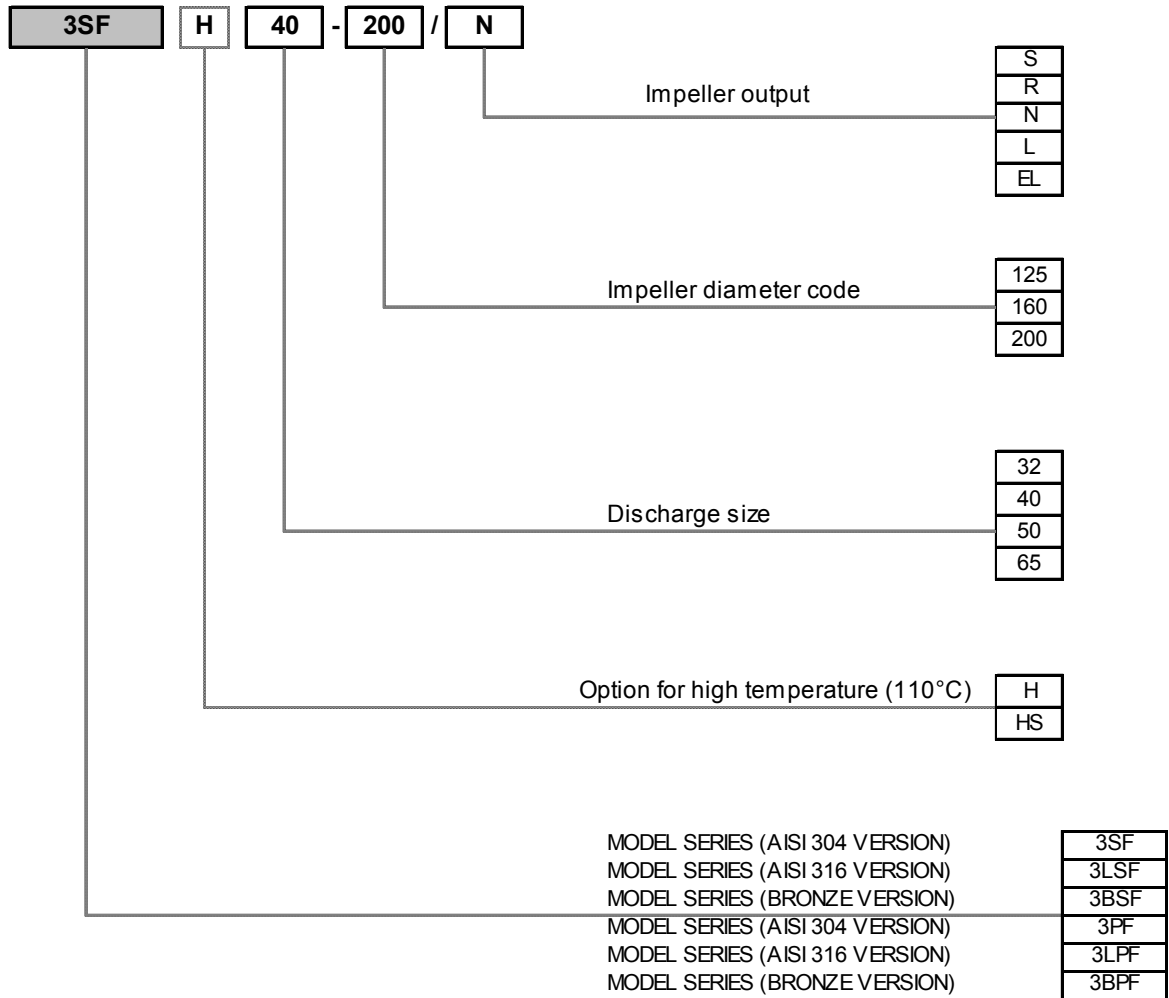
50 Hz



**SELECTION CHART**

50 Hz

**TYPE KEY:**



## SELECTION CHART

50 Hz

**3(L)SF-3(L)PF**

Pump type	kW	HP	Flow rate														
			l/min	0	100	150	200	300	333	360	400	450	500	600	700		
			m <sup>3</sup> /h	0	6	9	12	18	20	22	24	27	30	36	42		
32-125/N	1.1	1.5	22.5	21	19.9	18.4	14.1	12	-	-	-	-	-	-	-	-	-
32-160/R	1.5	2	29.5	28	26.5	24.5	19.2	17	-	-	-	-	-	-	-	-	-
32-160/N	2.2	3	37	35.5	34	32	27	25	-	-	-	-	-	-	-	-	-
32-200/R	3	4	44	42	40	37.5	31	28	-	-	-	-	-	-	-	-	-
32-200/N	4	5.5	55	53.5	52	49.5	43.5	40.5	38	-	-	-	-	-	-	-	-
32-200/L	5.5	7.5	70.5	69	67.5	65	58.5	-	-	-	-	-	-	-	-	-	-
32-200/EL	7.5	10	70.5	69	67.5	65	58.5	55.5	53	49	44	-	-	-	-	-	-
40-125/R	1.5	2	20	-	-	19	17.6	17	16.5	15.7	14.5	13.2	10.3	7	-	-	-
40-125/N	2.2	3	26.5	-	-	25.5	24	23.5	23	22	21	19.5	16.4	13	-	-	-
40-160/R	3	4	31	-	-	29.5	27.5	27	26.5	25.5	24	22.5	20	17	-	-	-
40-160/N	4	5.5	40	-	-	38.5	37	36	35.5	34.5	33	32	29	25.5	-	-	-
40-200/R	5.5	7.5	47	-	-	45.5	44	43	42.5	41	39.5	38	35	31	-	-	-
40-200/N	7.5	10	58	-	-	57	55.5	55	54.5	53.5	52.5	51	47.5	44	-	-	-
40-200/L	11	15	72	-	-	71	70	70	69.5	68.5	67.5	66	63	59	-	-	-

**3(L)SF-3(L)PF**

Pump type	kW	HP	Flow rate																
			l/min	0	400	450	500	600	700	800	1000	1200	1500	1800	1900	2000	2100	2200	
			m <sup>3</sup> /h	0	24	27	30	36	42	48	60	72	90	108	114	120	126	132	
50-125/S	2.2	3	19	17.5	17	16.3	14.9	13.4	11.7	8	-	-	-	-	-	-	-	-	
50-125/R	3	4	22	20.5	20	19.6	18.4	17	15.4	11.8	8	-	-	-	-	-	-	-	
50-125/N	4	5.5	26.5	26	25.5	25	24	22.5	21.5	17.9	14	-	-	-	-	-	-	-	
50-160/R	5.5	7.5	33	31	30.5	30	28.5	27	25.5	22	18	-	-	-	-	-	-	-	
50-160/N	7.5	10	40	38.5	38	37.5	36	35	33.5	30	26	-	-	-	-	-	-	-	
50-200/R	9.2	12.5	53	-	-	50	49	47.5	45.5	40.5	34	-	-	-	-	-	-	-	
50-200/N	11	15	59	-	-	56	55	54	52	48	42	-	-	-	-	-	-	-	
50-200/L	15	20	72	-	-	70	69	68	66	62	57	-	-	-	-	-	-	-	
65-125/R	4	5.5	22.5	-	-	-	20	19.4	18.5	16.5	14.3	10.7	7	-	-	-	-	-	
65-125/N	5.5	7.5	27	-	-	-	25	24.5	23.5	21.5	19.1	15.5	11.7	10.4	-	-	-	-	
65-125/L	7.5	10	32	-	-	-	30.5	29.5	29	27	24.5	21	16.8	15.4	14	-	-	-	
65-160/S	7.5	10	32	-	-	-	-	30	29	27	25.5	21.5	17.5	16	14.5	-	-	-	
65-160/R	9.2	12.5	36.5	-	-	-	-	34.5	34	32	29.5	26	21.5	20	18.6	17	-	-	
65-160/N	11	15	40.5	-	-	-	-	38.5	38	36	34	30.5	26	24.5	23	21.5	20	-	
65-160/L	15	20	48	-	-	-	-	45.5	45	43	41	37.5	33.5	32	30.5	29	27	-	
65-200/R	15	20	54	-	-	-	-	51	50	48	45.5	41	36	34	32	30	-	-	
65-200/N	18.5	25	60.5	-	-	-	-	58.5	57.5	55.5	53	49	44	42.5	40.5	39	37	-	
65-200/L	22	30	67	-	-	-	-	65.5	65	63	60.5	56.5	52	50.5	48.5	47	45	-	

## SELECTION CHART

50 Hz

**3BS-3BP**

Pump type 3BM 3BS 3BP	Motor		Q=Capacity											
	kW	HP	l/min	0	600	700	900	1200	1500	1800	1900	2000	2100	2200
			m <sup>3</sup> /h	0	36	42	54	72	90	108	114	120	126	132
H=Total manometric head in meters														
B(.)65-125/R	4	5.5	22.5	20.2	19.4	17.5	14.3	10.7	7	-	-	-	-	
B(.)65-125/N	5.5	7.5	27	25.5	24.4	22.4	19.1	15.5	11.7	10.4	-	-	-	
B(.)65-125/L	7.5	10	32	30.5	29.7	27.8	24.5	20.8	16.8	15.4	14	-	-	
B(.)65-160/S	7.5	10	32	-	30	28.3	25.4	21.7	17.5	16	14.5	-	-	
B(.)65-160/R	9.2	12.5	36.5	-	34.5	32.8	29.7	26	21.7	20.2	18.6	17	-	
B(.)65-160/N	11	15	40.5	-	38.5	37	33.9	30.3	26	24.6	23.1	21.6	20	
B(.)65-160/L	15	20	48	-	45.5	44	41.1	37.7	33.5	32	30.5	28.8	27	
B(.)65-200/R	15	20	54	-	51	49	45.4	41	35.9	34	32.1	30	-	
B(.)65-200/N	18.5	25	60.5	-	58.5	56.5	53	48.9	44.1	42.4	40.7	38.9	37	
B(.)65-200/L	22	30	67	-	65.5	63.9	60.6	56.6	52.1	50.4	48.7	46.9	45	

**PERFORMANCE CURVES**

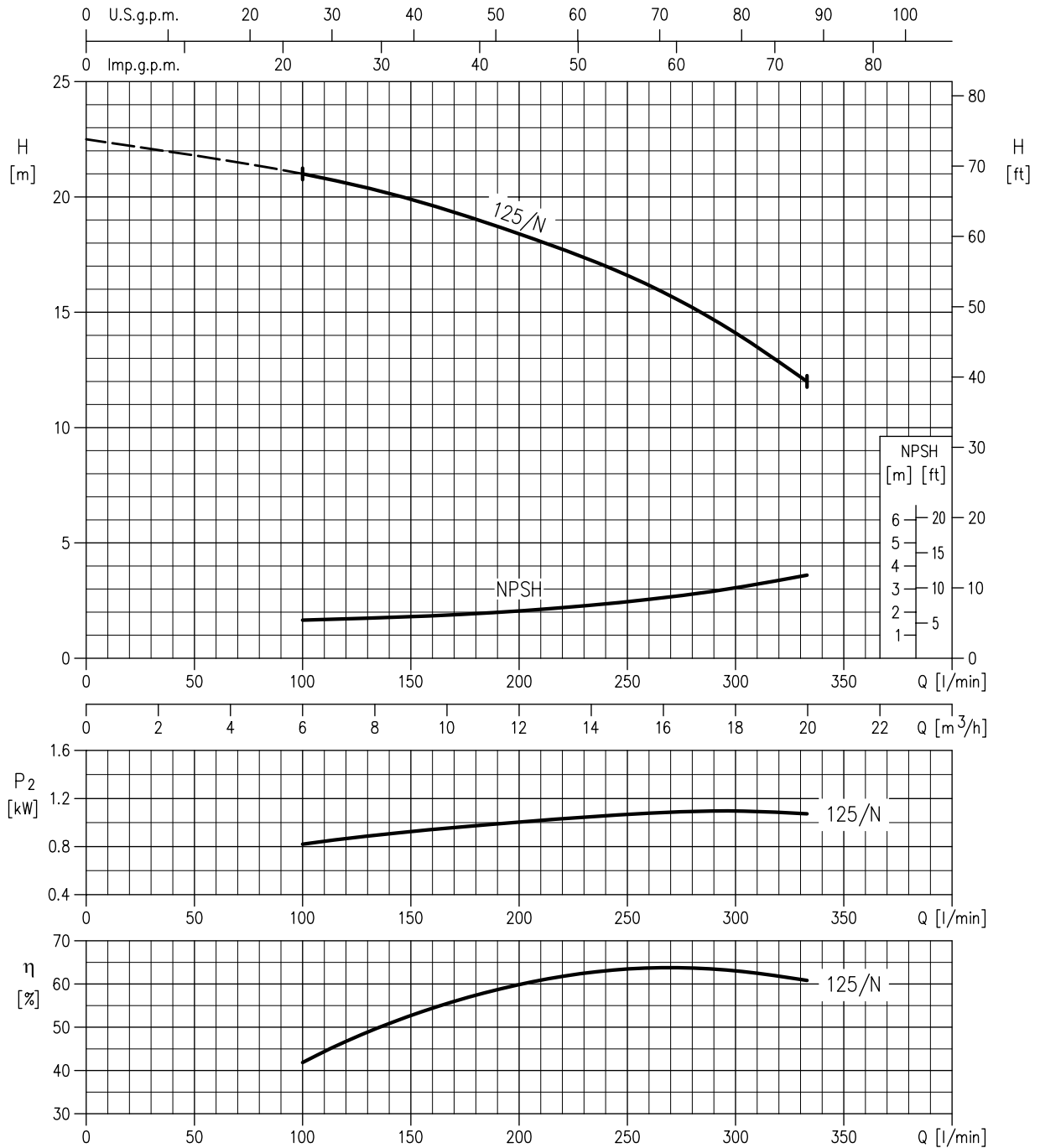
The specifications below qualify the curves shown on the following pages.

- ◆ Tolerances according to ISO 9906 Annex A
- ◆ The curves refer to effective speed of asynchronous motors at 50 Hz
- ◆ Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of  $\nu = 1 \text{ mm}^2/\text{s}$  (1 cSt)
- ◆ The NPSH curve is an average curve obtained in the same conditions of performance curves. During the pump selection, consider to get a safety margin of at least 0.5 m.
- ◆ The continuous curves indicate the recommended working range. The dotted curve is only a guide.
- ◆ In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.
- ◆ Symbols explanation:
  - Q = volume flow rate
  - H = total head
  - $P_2$  = pump power input (shaft power)
  - $\eta$  = pump efficiency
  - NPSH = net positive suction head required by the pump

PERFORMANCE CURVE

50 Hz

32-125/N – Impeller diameter = 133 mm



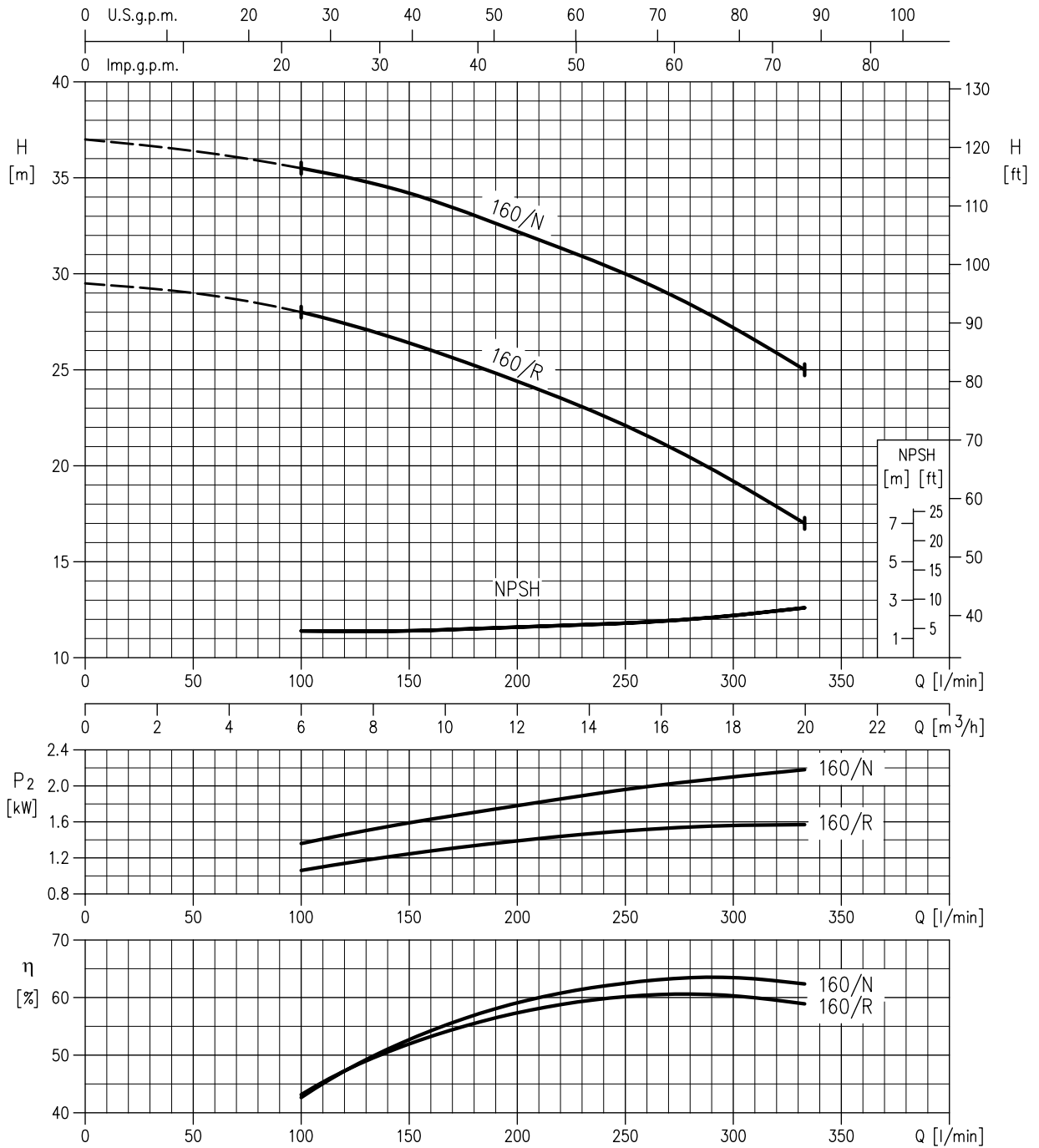
Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A



PERFORMANCE CURVE

50 Hz

**32-160/R** – Impeller diameter = 151 mm  
**32-160/N** – Impeller diameter = 166 mm

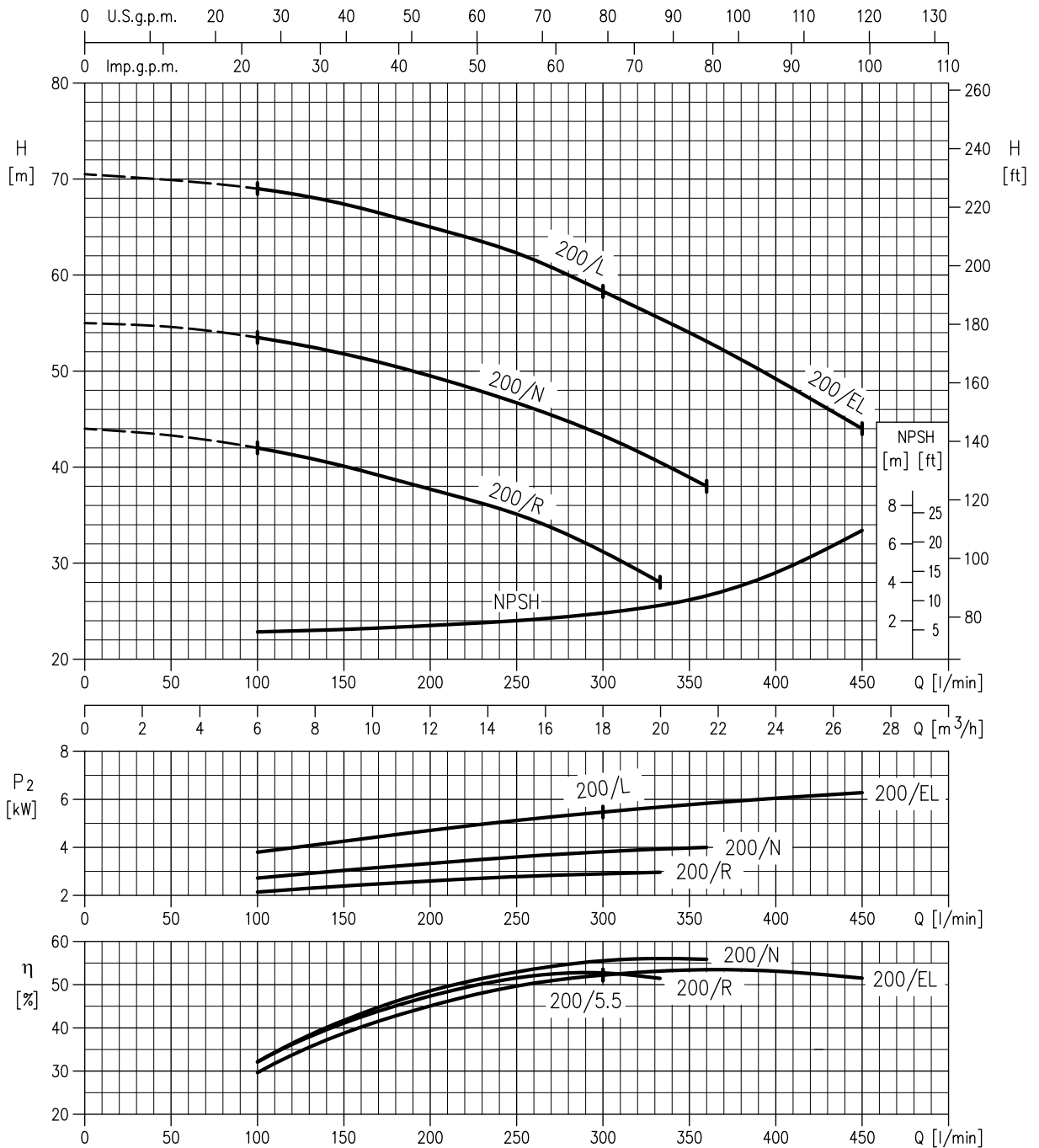


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

- 32-200/R – Impeller diameter = 186 mm
- 32-200/N – Impeller diameter = 200 mm
- 32-200/L – Impeller diameter = 224 mm
- 32-200/EL – Impeller diameter = 224 mm

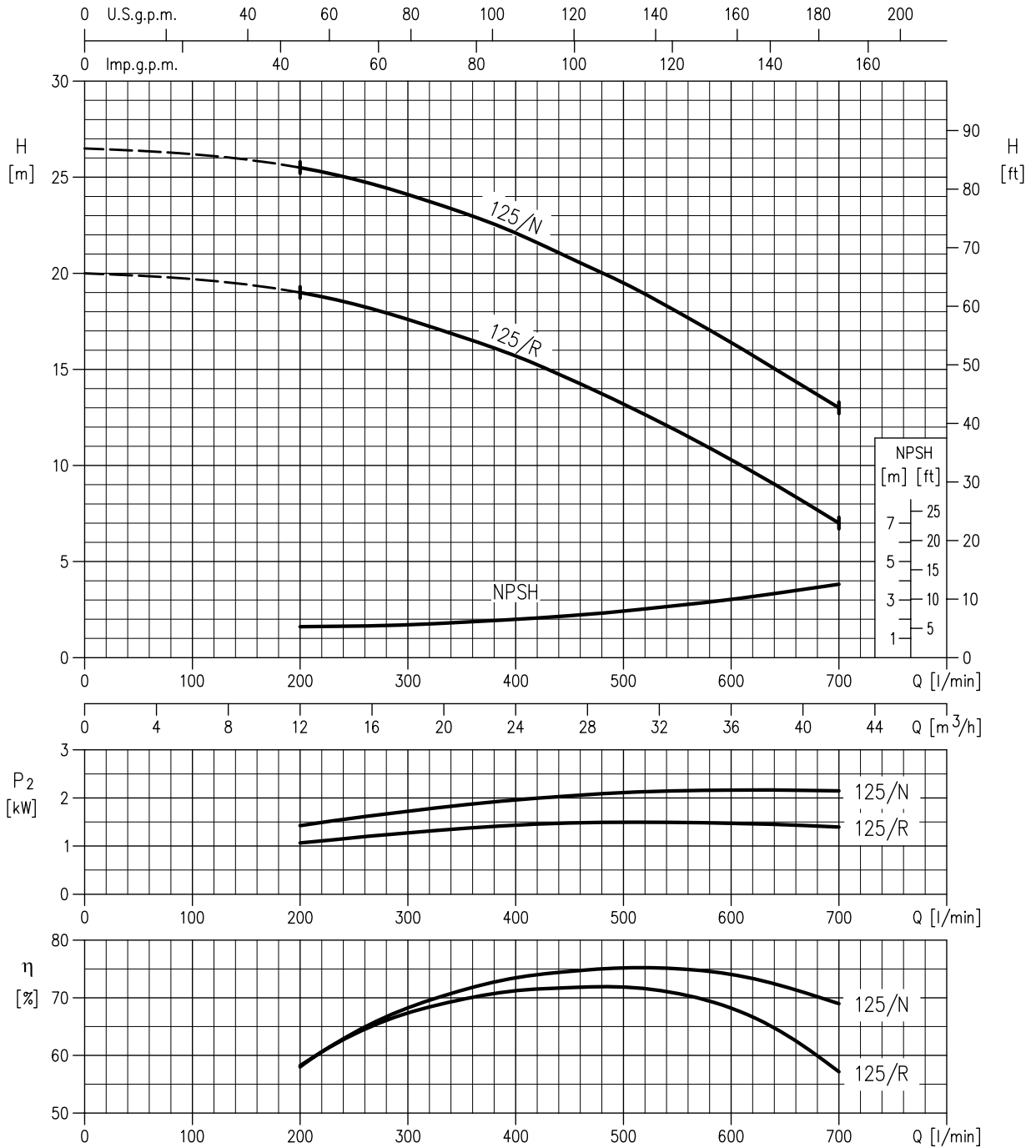


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

**40-125/R** – Impeller diameter = 125 mm  
**40-125/N** – Impeller diameter = 140 mm

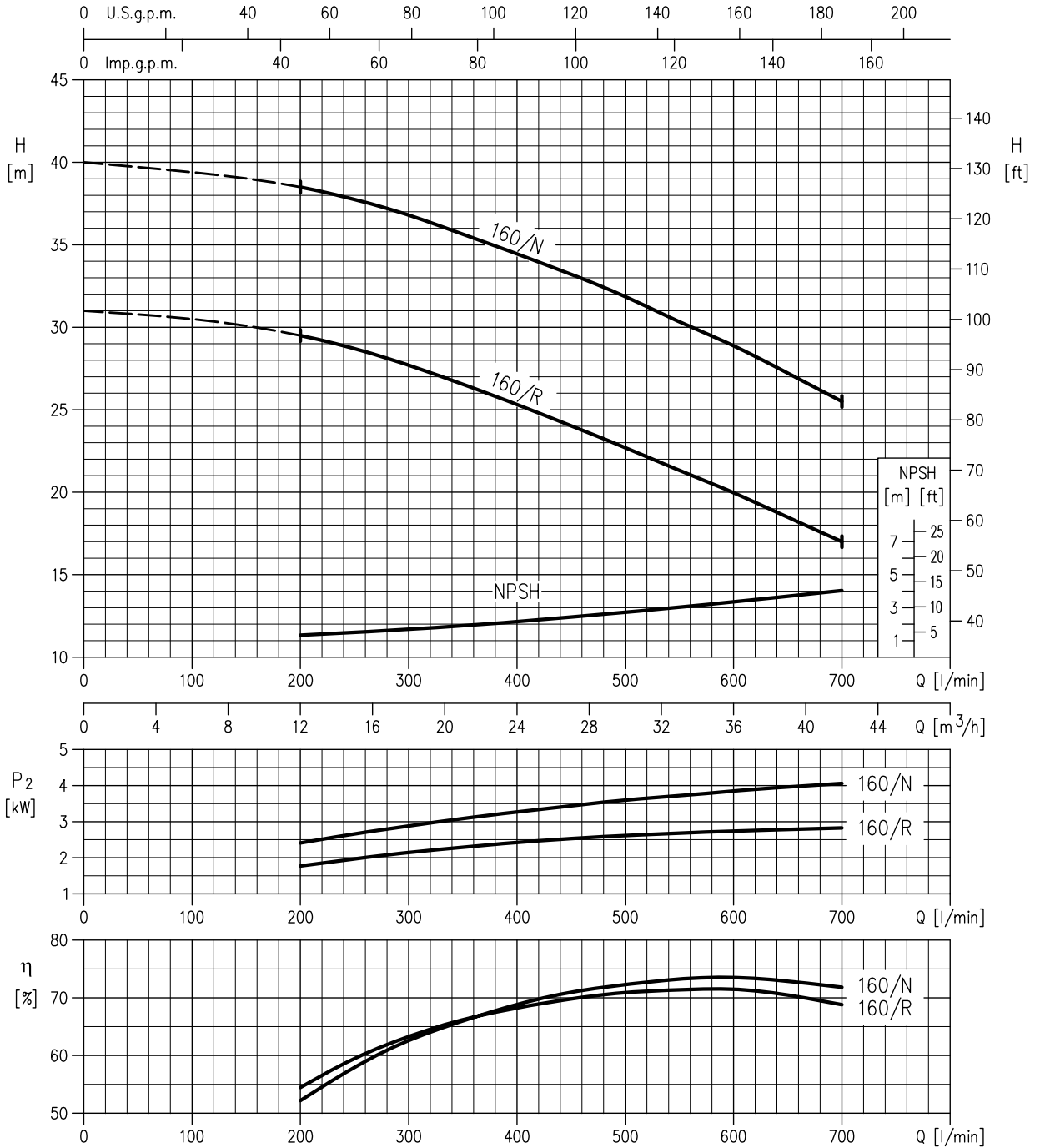


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

40-160/R – Impeller diameter = 151 mm  
 40-160/N – Impeller diameter = 166 mm

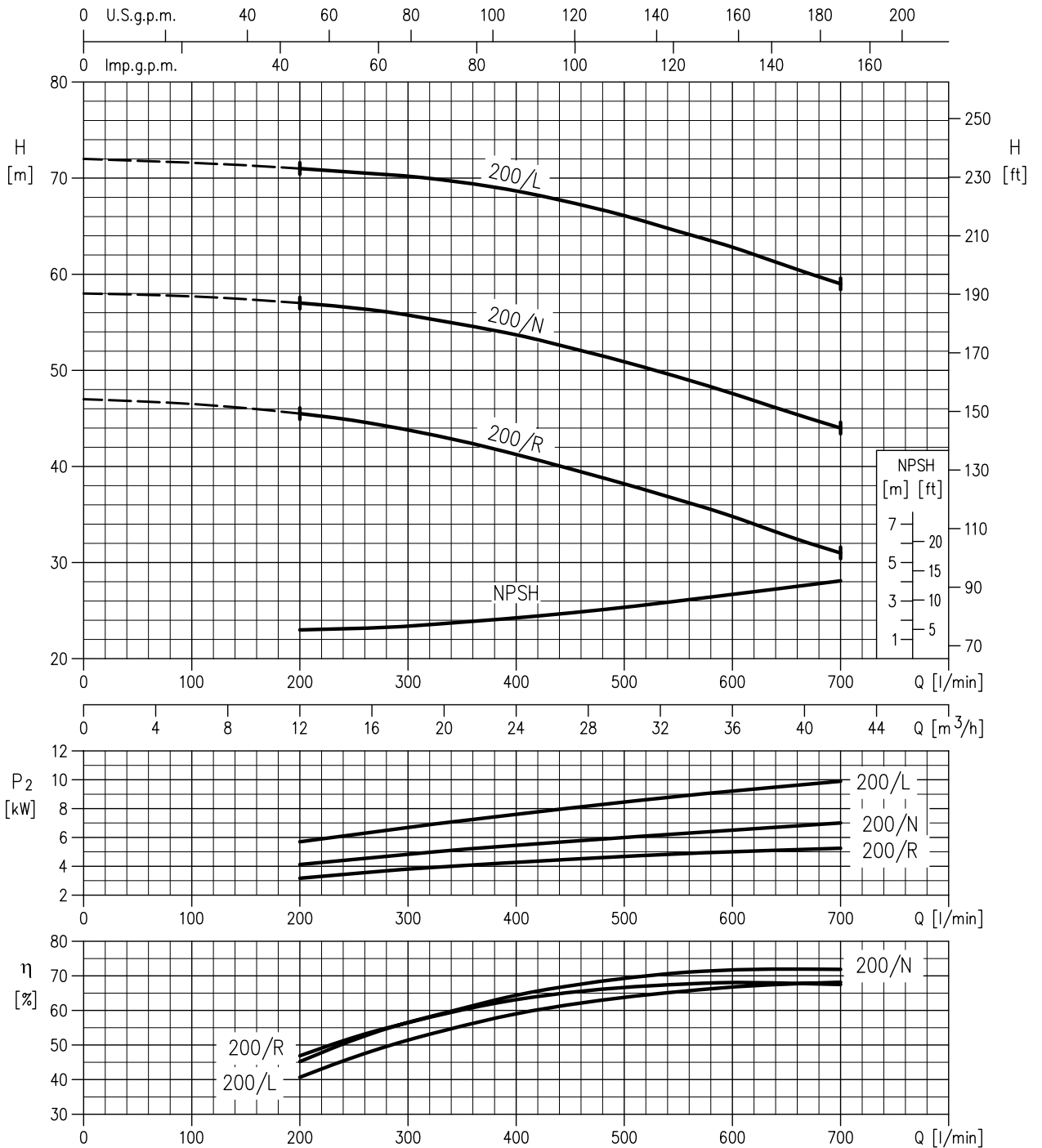


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

40-200/R – Impeller diameter = 183 mm  
 40-200/N – Impeller diameter = 200 mm  
 40-200/L – Impeller diameter = 224 mm

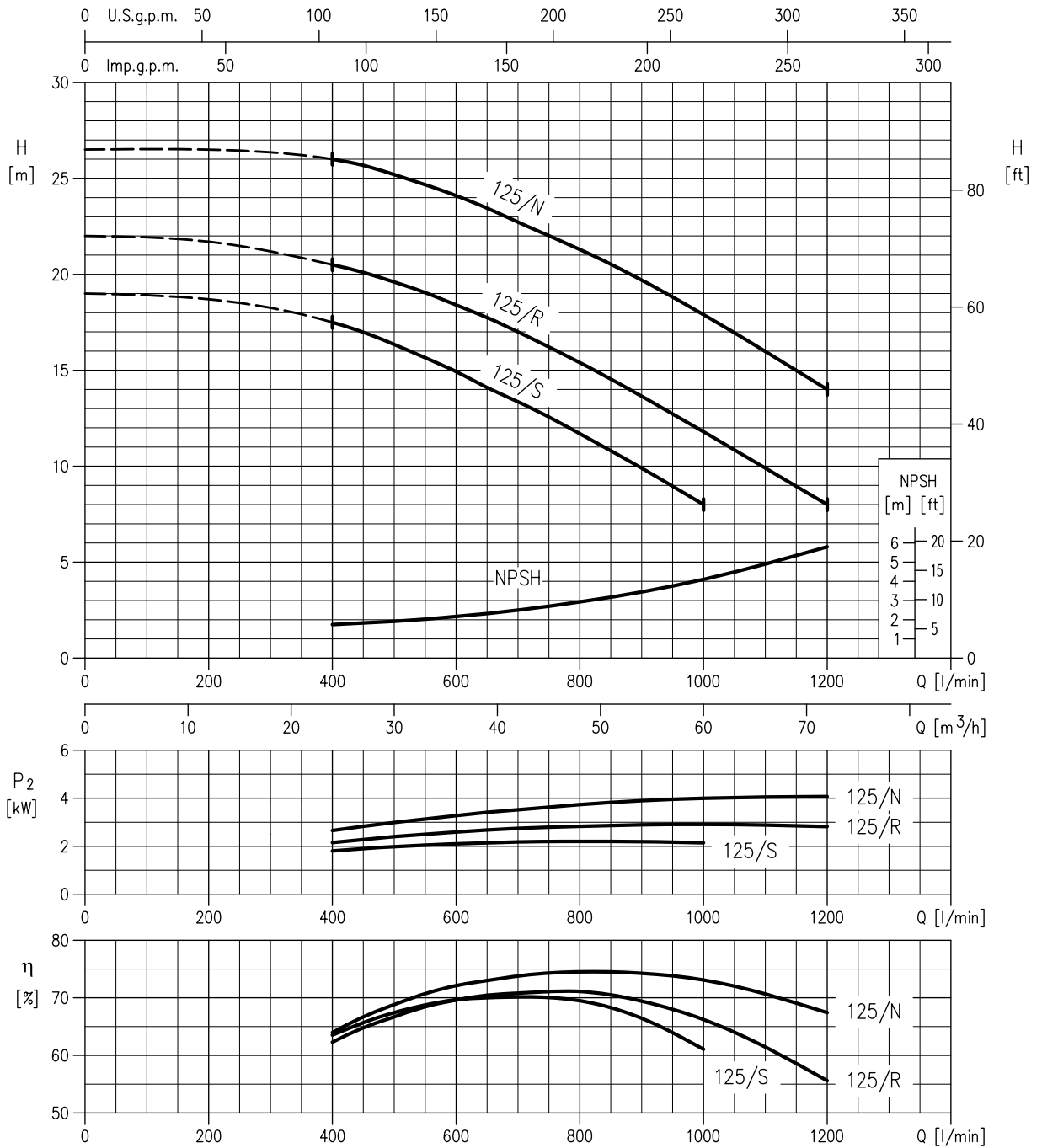


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

50-125/S – Impeller diameter = 125 mm  
 50-125/R – Impeller diameter = 131 mm  
 50-125/N – Impeller diameter = 140 mm

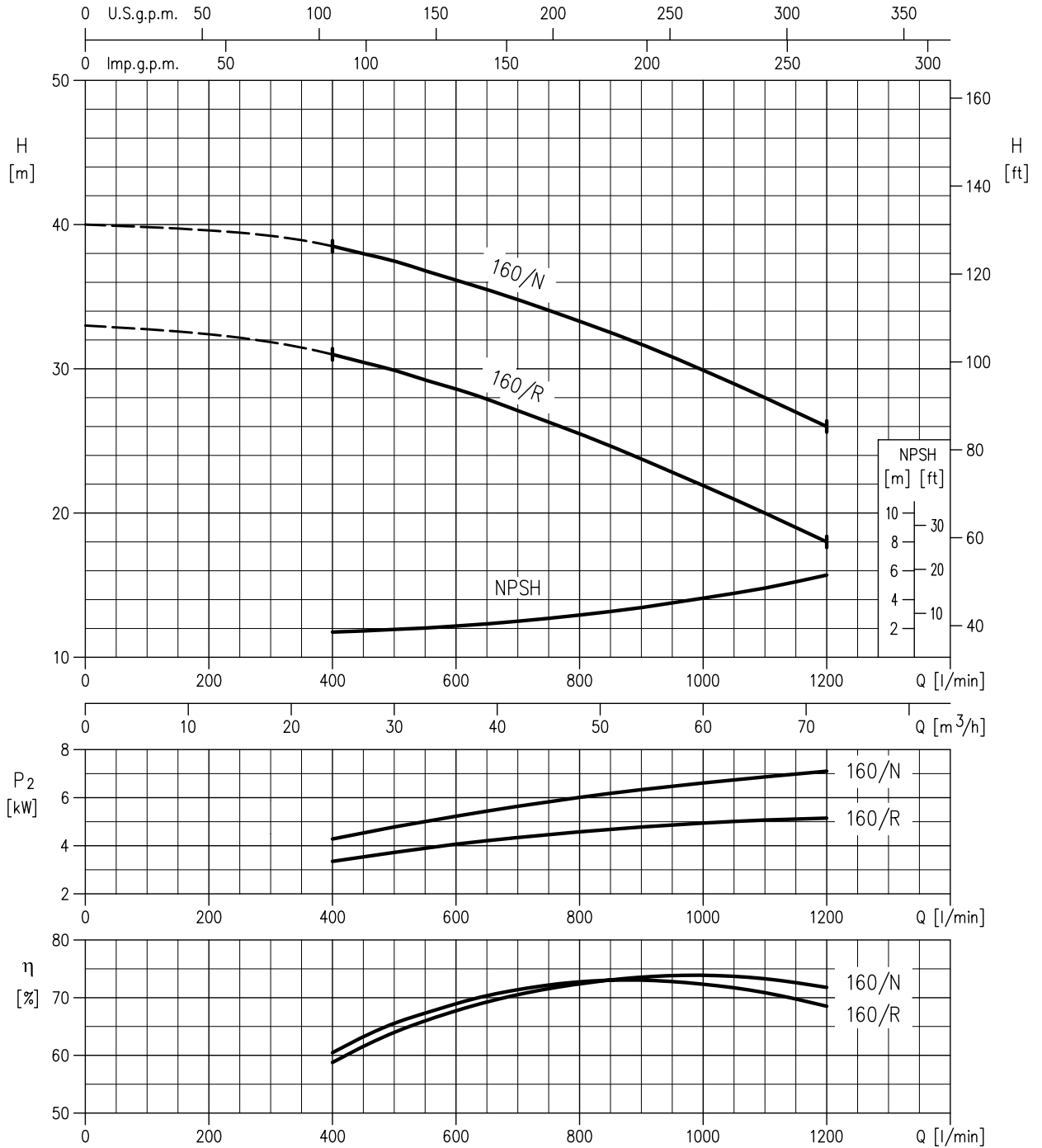


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

50-160/R – Impeller diameter = 154 mm  
 50-160/N – Impeller diameter = 166 mm

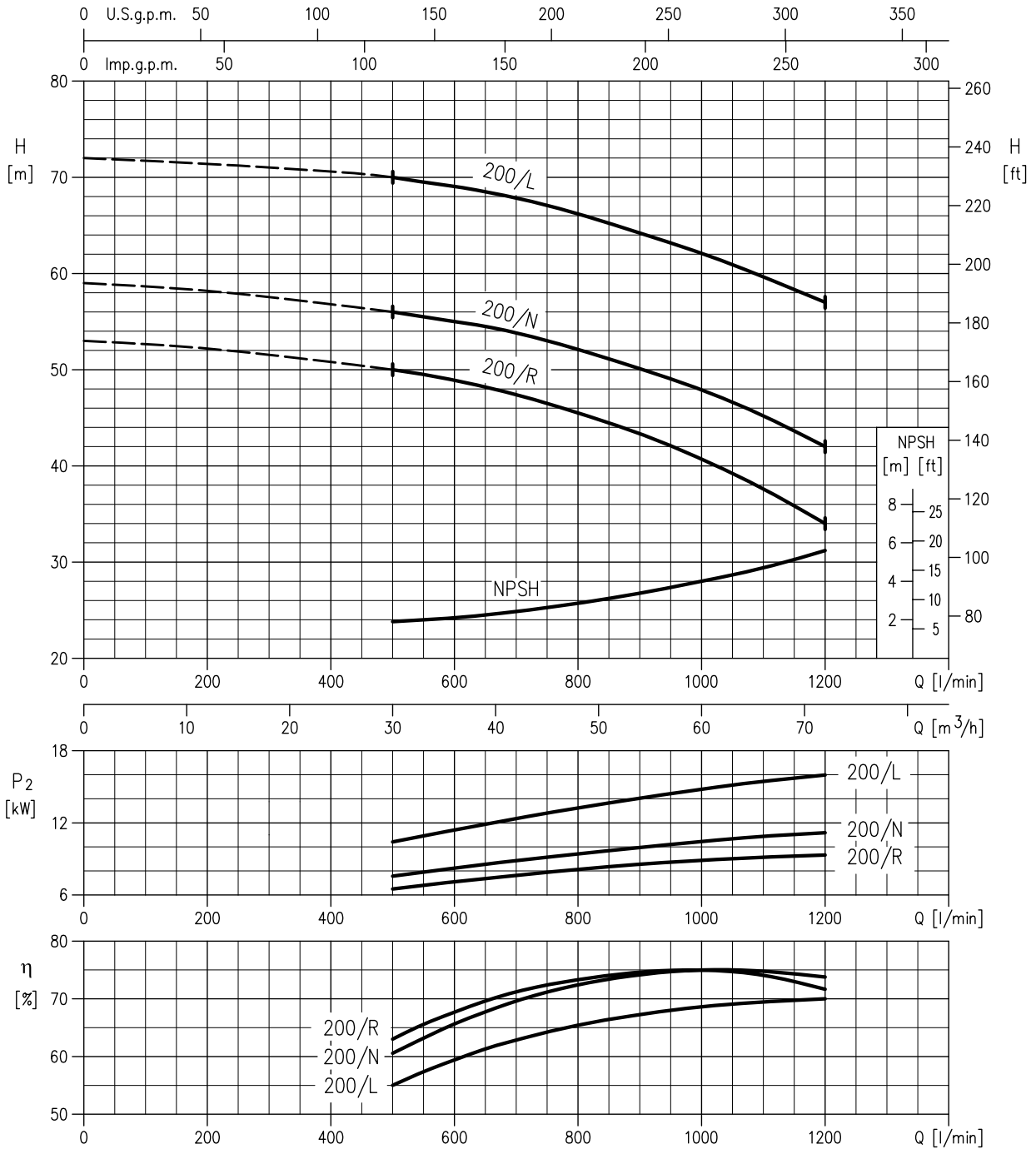


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

50-200/R – Impeller diameter = 191 mm  
 50-200/N – Impeller diameter = 200 mm  
 50-200/L – Impeller diameter = 224 mm



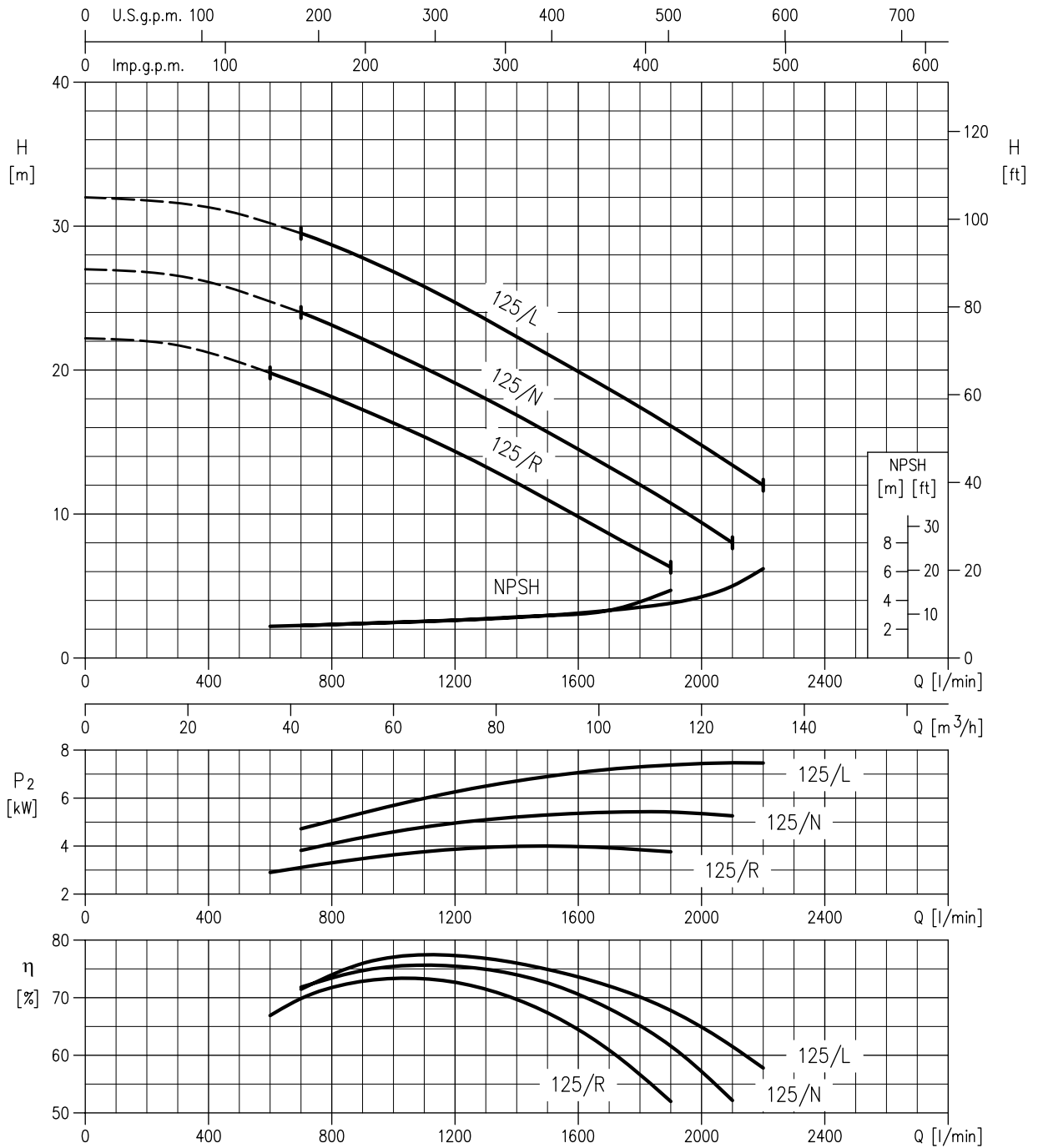
Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A



PERFORMANCE CURVE

50 Hz

3(L)S-3(L)P 65-125/R – Impeller diameter = 128 mm  
 3(L)S-3(L)P 65-125/N – Impeller diameter = 138 mm  
 3(L)S-3(L)P 65-125/L – Impeller diameter = 149 mm

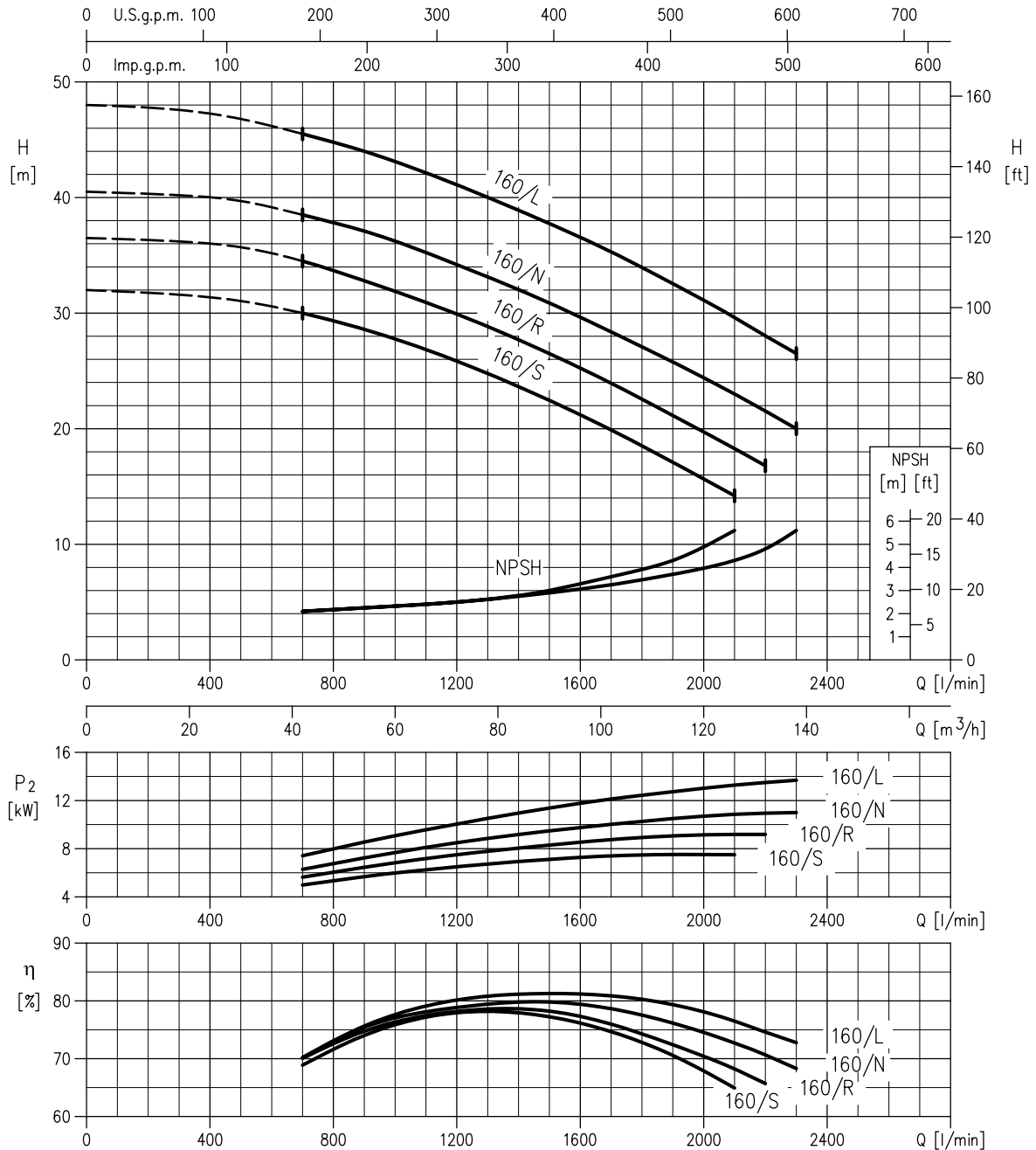


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

3(L)S-3(L)P 65-160/S – Impeller diameter = 153 mm  
 3(L)S-3(L)P 65-160/R – Impeller diameter = 161 mm  
 3(L)S-3(L)P 65-160/N – Impeller diameter = 168 mm  
 3(L)S-3(L)P 65-160/L – Impeller diameter = 178 mm

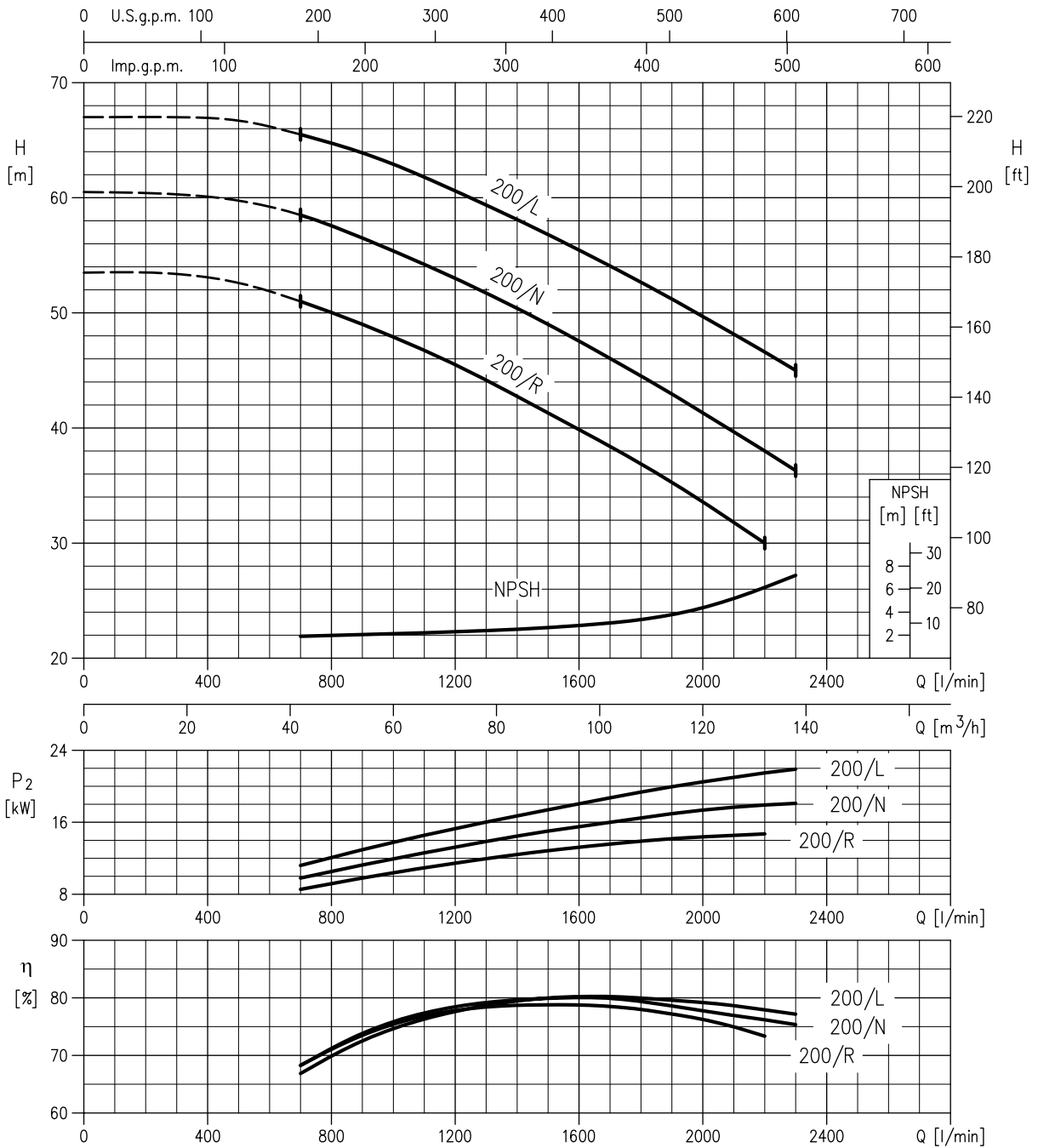


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

3(L)S-3(L)P 65-200/R – Impeller diameter = 190 mm  
 3(L)S-3(L)P 65-200/N – Impeller diameter = 201 mm  
 3(L)S-3(L)P 65-200/L – Impeller diameter = 212 mm

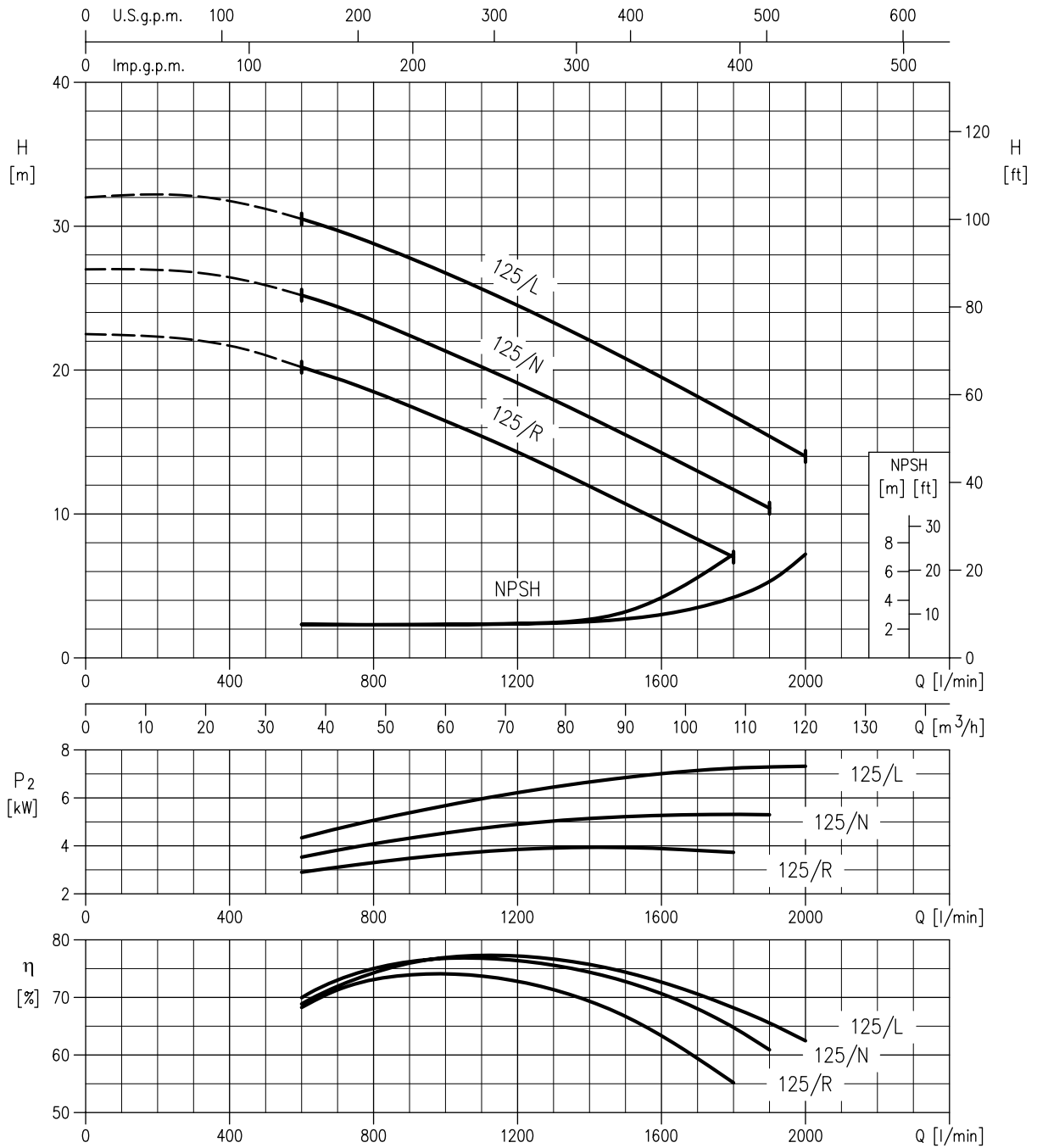


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

3BS-3BP 65-125/R – Impeller diameter = 128 mm  
 3BS-3BP 65-125/N – Impeller diameter = 138 mm  
 3BS-3BP 65-125/L – Impeller diameter = 149 mm

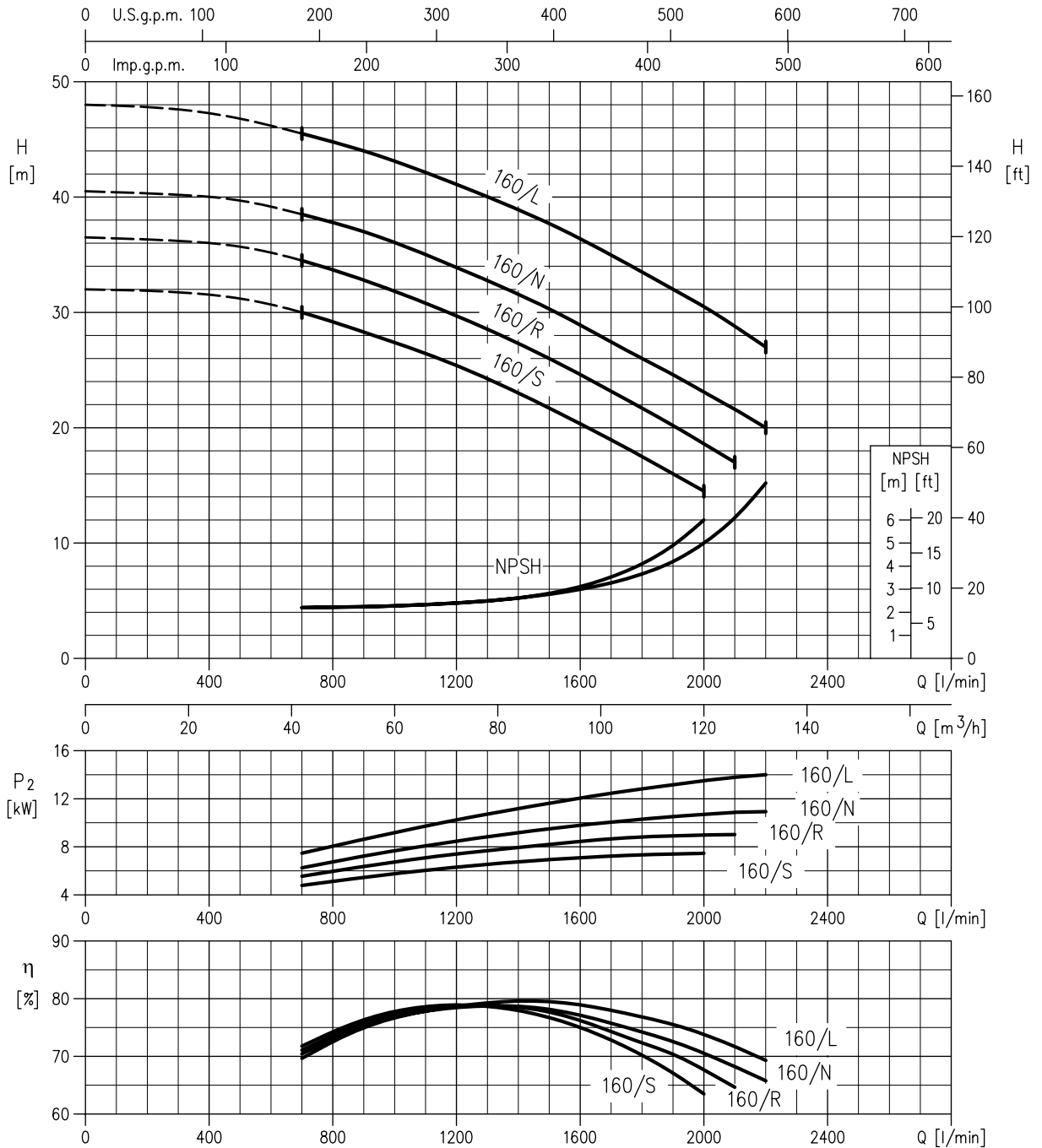


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

50 Hz

3BS-3BP 65-160/S – Impeller diameter = 153 mm  
 3BS-3BP 65-160/R – Impeller diameter = 161 mm  
 3BS-3BP 65-160/N – Impeller diameter = 168 mm  
 3BS-3BP 65-160/L – Impeller diameter = 178 mm

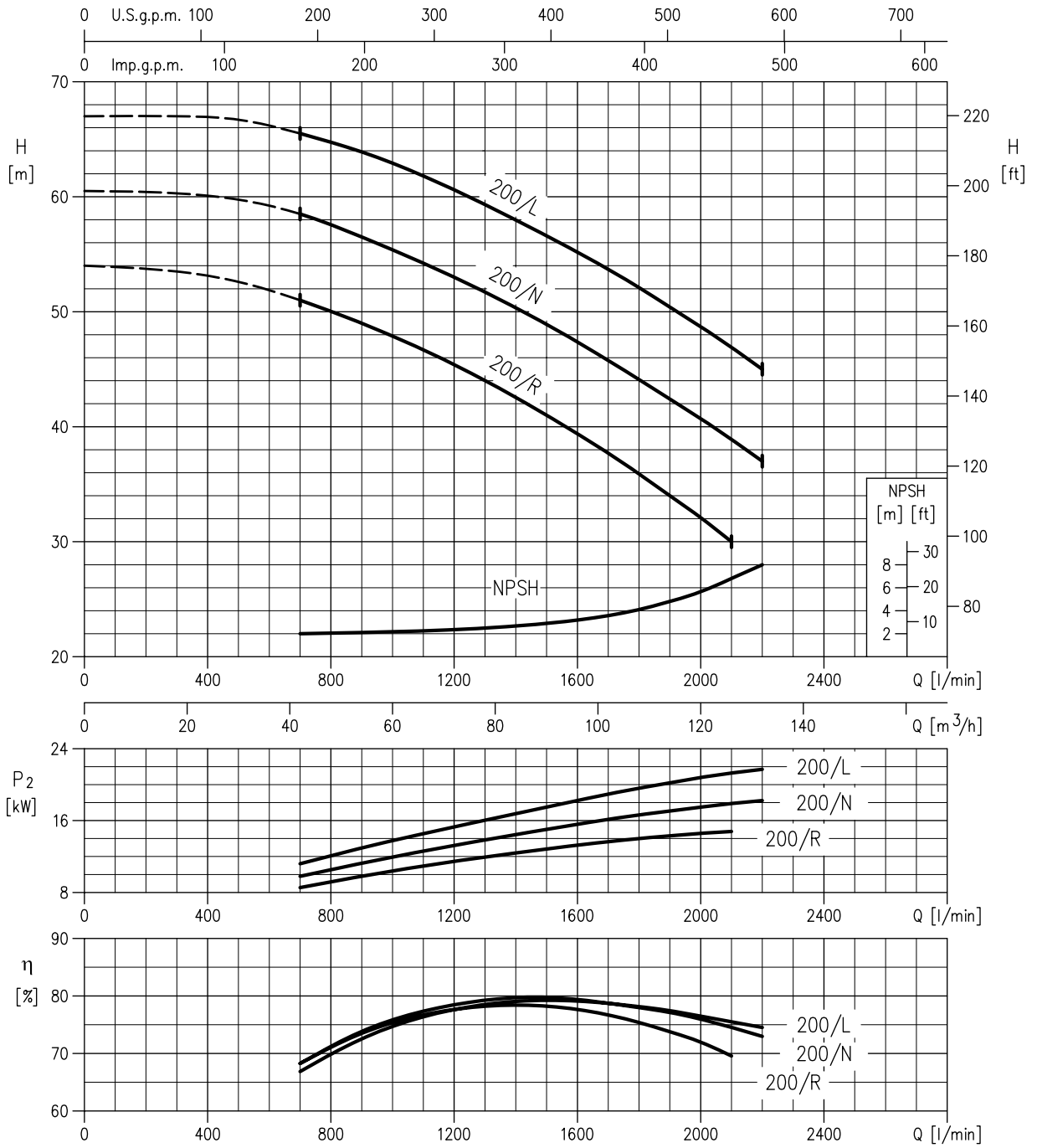


Rotation speed:  $\approx 2900 \text{ min}^{-1}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVE

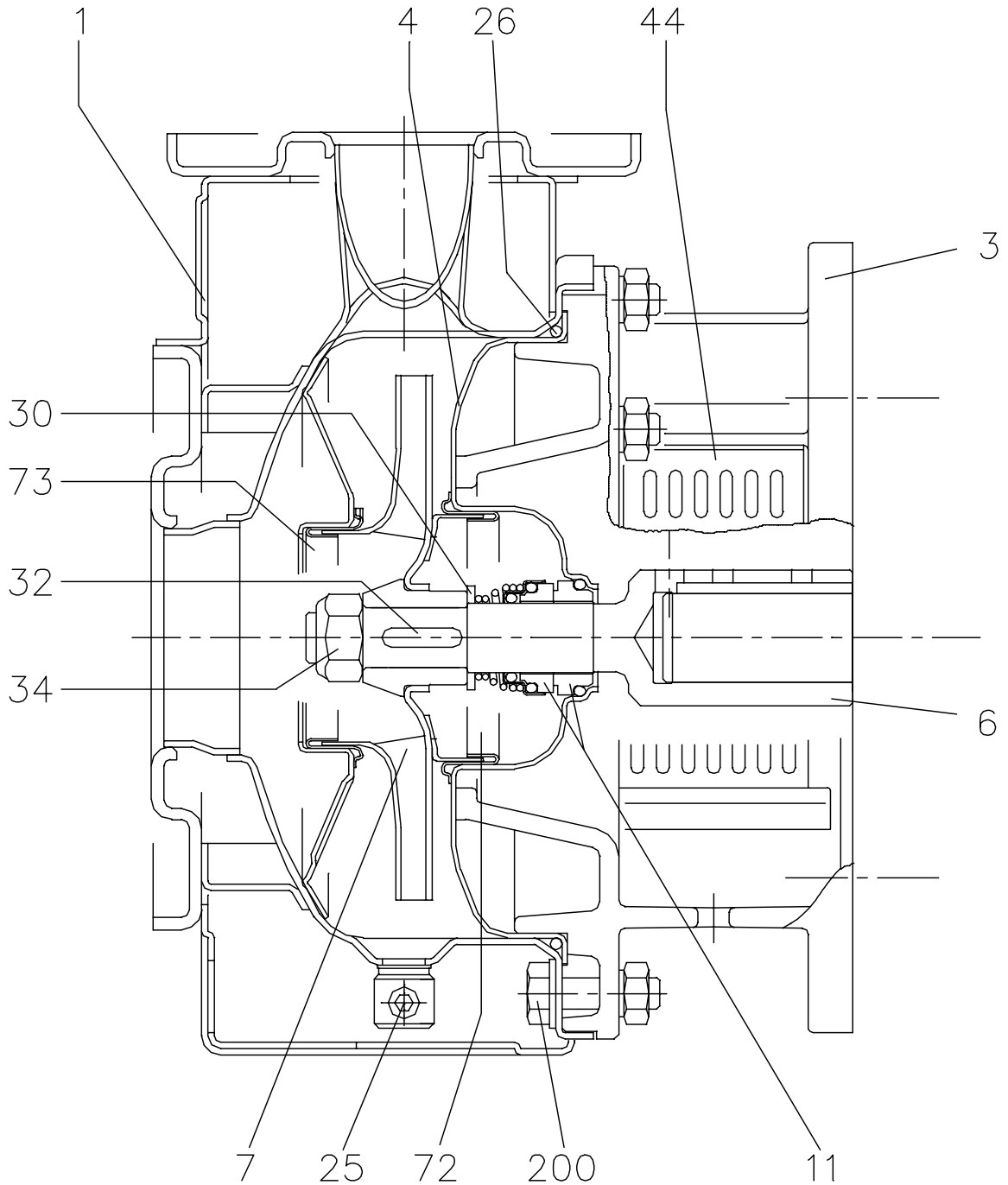
50 Hz

3BS-3BP 65-200/R – Impeller diameter = 190 mm  
 3BS-3BP 65-200/N – Impeller diameter = 201 mm  
 3BS-3BP 65-200/L – Impeller diameter = 212 mm



Rotation speed: ≈2900 min<sup>-1</sup>  
 Applicable standard of test: ISO 9906 - Annex A

SECTIONAL VIEW



**SPECIFICATIONS 3SF-3LSF (NO 65 VERSION)**

50 Hz

N°	PART NAME		MATERIAL		DIMENSIONS		STANDARD		N. FOR
			3SF	3LSF	3SF	3LSF	3SF	3LSF	
001	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1
003	Motor bracket		Cast iron EN-GJL-200-EN 1561						1
004	Casing cover		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1
006	Coupling - Part in contact with liquid		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	See table p. 311				1
007	Impeller		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1
011	Mechanical seal		Carbon / Ceramic / NBR	SiC/SiC/FPM	See p. 306 to 310				1
025	Draing plug		EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8		DIN 906		1
026	"O" ring	32-125, 40-125	NBR / FPM (version H and HS)		158.11x5.34		OR 6625		1
		32-160, 40-160, 50-125			189.86x5.34		OR 6745		
		32-200, 40-200, 50-160, 50-200			227.96x5.34		OR 6895		
030	Spacer (not for HS version)	Up to 15 kW	EN 1.4301 (AISI 304)	-	22.5x26.9x2.5	-	EBARA DRAWING	1	
		15 kW and above			30.5x40x2.5	-			
032	Key	Up to 11 kW	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	6x6x25		UNI 6604	1	
		15 kW and above			8x7x30				
034	Impeller nut	Up to 11kW	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	M16x1.5		UNI 7474	1	
		50-200/15			M18x1.5				
		15 kW and above			M20x1.5				
044	Protection		EN 1.4301 (AISI 304)				EBARA DRAWING	1	
072	Casing ring [3]		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)				1	
073	Casing ring (not for 65 version)		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)				1	
200	Screw		Stainless steel A2-70 class ISO 3506/1		M 10x35		UNI 5739		[4]

[3] For version 3S 32-200/R, 3S 32-200/N, 3S 32-200/L, 3S 40-200/R, 3S 40-200/N, 3S 40-200/L, 3S 50-160/R, 3S 50-160/N, 3S 50-200/R, 3S 50-200/N, 3S 50-200/L

[4] N° for 1 unit= 10 for 32-125, 32-160, 40-125

N° for 1 unit= 12 for 32-200, 40-160, 40-200, 50-125, 50-160

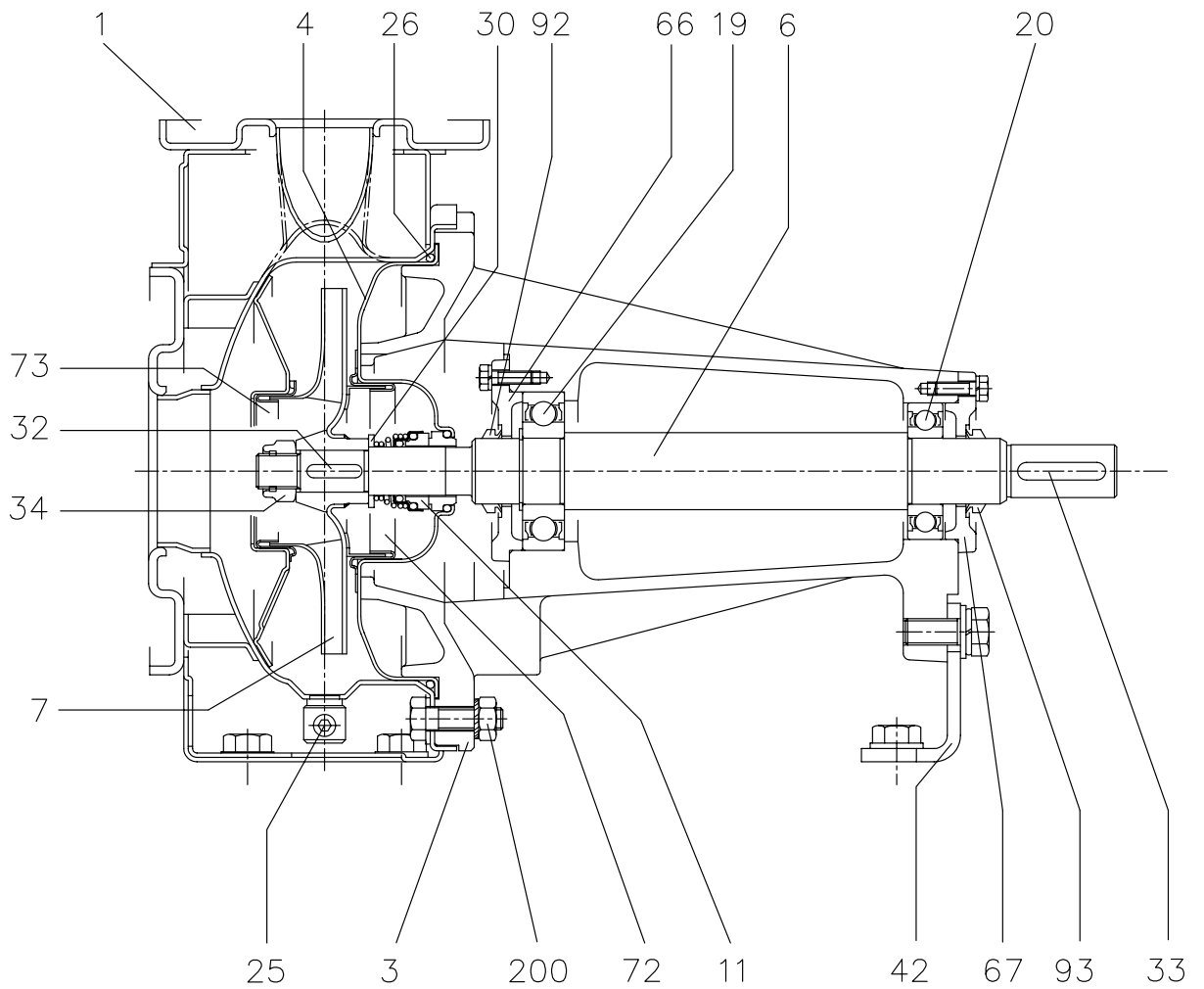


**CONSTRUCTIONS 3BSF-3(L)SF (65 VERSION) 50 Hz**

N°	PART NAME		MATERIAL			DIMENSIONS	STANDARD	N. FOR	
			3BSF	3SF	3LSF				
001	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)				1	
003	Motor bracket		Cast iron EN-GJL-200-EN 1561					1	
004	Casing cover		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)				1	
006	Coupling		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		See table p.311		1	
007	Impeller		Bronze	EN 1.4401 (AISI 316)				1	
011	Mechanical seal		Carbon / Ceramic / NBR	SiC / SiC / FPM		See p. 306 to 310		1	
025	Draing plug		EN 1.4401 (AISI 316) / PTFE			R 1/8" L=8	DIN 906	1	
026	"O" ring	3(..)S 65-125	NBR	NBR (FPM for H- HS version)	FPM	189.86x5.34	OR 6745	1	
		3(..)S 65-160 and 3(..)S 65-200				227.96x5.34	OR 6895		
030	Spacer (Not for HS version)		EN 1.4301 (AISI 304)		/	22.5x26.9x2.5 (up to 11kW)	EPE DRAWING	1	
						30.5x40x2.5 (15 kW and above)			
032	Key		EN 1.4401 (AISI 316)			6x6x25 (up to 11kW)	UNI 6604	1	
						8x7x30 (15 kW and above)			
034	Impeller nut		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)		M16x1.5 (Up to 11kW)	UNI 7474	1
							M20x1.5 (15 kW and above)		
044	Protection		EN 1.4301 (AISI 304)				EPE DRAWING	2	
200	Screw		Stainless steel A2-70 class ISO 3506/1			M 10x35	UNI 5739	[3]	

[3] N° for 1 unit =10 for version 3(..)S 65-125  
 N° for 1 unit =12 for version 3(..)S 65-160 and 3(..)S 65-200

SECTIONAL VIEW



N°	PART NAME	MATERIAL		DIMENSIONS		STANDARD		N. FOR		
		3P	3LP	3P	3LP	3P	3LP			
001	Casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
003	Support	Cast iron EN-GJL-200-EN 1561 [1]						1		
004	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
006	Shaft - Part in contact with liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
007	Impeller	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
011	Mechanical seal	Carbon / Ceramic / NBR	SIC/SIC/FPM	See p. 306 to 310				1		
019	Bearing	-		See table p. 313				1		
020	Bearing	-		See table p. 313				1		
025	Draing plug	EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8		DIN 906		1		
026	"O" ring	NBR / FPM (version H and HS)		32-125, 40-125		158.11x5.34		1		
				32-160, 40-160, 50-125		189.86x5.34				
				32-200, 40-200,50-160, 50-200		227.96x5.34				
030	Spacer (not present HS version)	EN 1.4301 (AISI 304)		Up to 15 kW (50-200/15)		22.5x26.9x2.5		EBARA DRAWING		
				15 kW and above		30.5x40x2.5				
032	Key	EN 1.4301 (AISI 304)		EN 1.4401 (AISI 316)		Up to 11 kW		UNI 6604		
						15 kW and above			8x7x30	
033	Key	C 40		8x7x40		UNI 6604		1		
034	Impeller nut	EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)		Up to 11kW		UNI 7474		
						50-200/15			M16x1.5	
						15 kW and above			M18x1.5	
042	Pump support	Fe 37 Zinc-coated				EBARA DRAWING		1		
066	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561						1		
067	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561						1		
072	Casing ring [1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
073	Casing ring (not for 65 version)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)					1		
092	"V" ring	-		VS - 0030				1		
093	"V" ring	-		VS - 0030				1		
200	Screw	Stainless steel A2 70 class ISO 3506/1		M 10x35		UNI 5739		[2]		

[1] For version 3P 32-200/R, 3P 32-200/N, 3P 32-200/L, 3P 40-200/R, 3P 40-200/N, 3P 40-200/L, 3P 50-160/R, 3P 50-160/N, 3P 50-200/R, 3P 50-200/N, 3P 50-200/L

[2] N° for 1 unit=8-12 for version 3P and 3LP

N°	PART NAME		MATERIAL			DIMENSIONS	STANDARD	N. FOR 1 UNIT
			3BP	3P	3LP			
001	Casing		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)			1
003	Support		Cast iron EN-GJL-200-EN 1561					1
004	Casing cover		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)			1
006	Shaft		EN 1.4301 (AISI 304) -Part in contact with liquid		EN 1.4404 (AISI 316L) -Part in contact with liquid			1
007	Impeller		Bronze	EN 1.4401 (AISI 316)				1
011	Mechanical seal		Carbon / Ceramic / NBR		SiC / SiC / FPM	See p 306 to 310		1
019	Bearing		-			See table p. 313		1
020	Bearing		-			See table p. 313		1
025	Draining plug		EN 1.4401 (AISI 316) / PTFE			R 1/8" L=8	DIN 906	1
026	"O" ring	3(..)P 65-125	NBR	NBR (FPM for H- HS version)	FPM	189.86x5.34	OR 6745	1
		3(..)P 65-160 and 3(..)P 65-200				227.96x5.34	OR 6895	
030	Spacer (Not HS version)		EN 1.4301 (AISI 304)		/	22.5x26.9x2.5 (up to 11kW)	EPE DRAWING	1
						30.5x40x2.5 (15 kW and above)		
032	Key		EN 1.4401 (AISI 316)			6x6x25 (up to 11kW)	UNI 6604	1
						8x7x30 (15 kW and above)		
033	Key		C 40			8x7x40	UNI 6604	1
034	Impeller nut		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)	M16x1.5 (Up to 11kW)	UNI 7474	1
						M20x1.5 (15 kW and above)		
042	Pump support		Fe 37 Zinc-coated				EPE DRAWING	1
066	Impeller side bearing cover		Cast iron EN-GJL-200-EN 1561					1
067	Motor side bearing cover		Cast iron EN-GJL-200-EN 1561					1
092	"V" ring	3(..)P 65-125	-			14x20x5.5		1
		3(..)P 65-160 and 3(..)P 65-200				18x26x7.5		
093	"V" ring	3(..)P 65-125	-			14x20x5.5		1
		3(..)P 65-160 and 3(..)P 65-200				18x26x7.5		
200	Screw		Stainless steel A2 70 class ISO 3506/1			M 10x35	UNI 5739	[2]

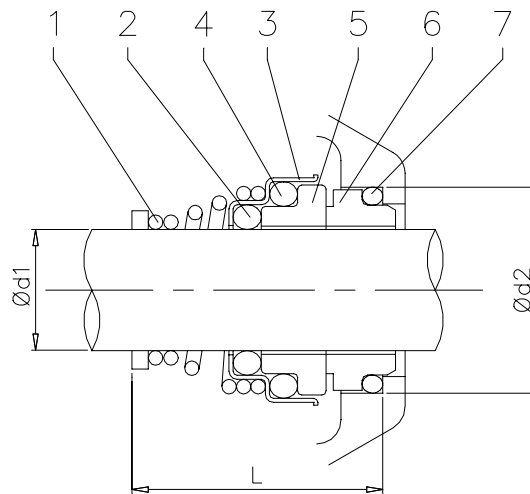
[2] N° for 1 unit=10 for version 3(..)P 65-125

N° for 1 unit =12 for version 3(..)P 65-160 and 3(..)P 65-200

CONSTRUCTIONS

50 Hz

MECHANICAL SEAL

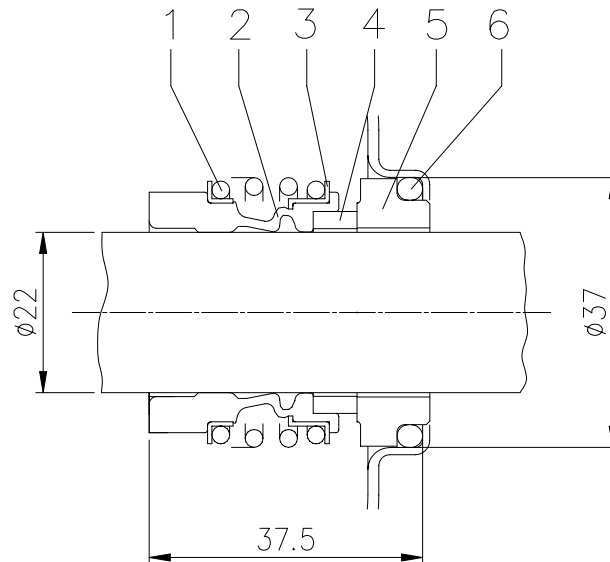


Pump type	Dimensions mm			Pump type	Dimensions mm		
	Ø d1	Ø d2	L		Ø d1	Ø d2	L
3(..) 32-125/N	22	37	37.5	3(..) 50-125/N	22	37	37.5
3(..) 32-160/R				3(..) 50-160/R			
3(..) 32-160/N				3(..) 50-160/N			
3(..) 32-200/R				3(..) 50-200/R			
3(..) 32-200/N				3(..) 50-200/N			
3(..) 32-200/L				3(..) 50-200/L			
3(..) 32-200/EL				3(..) 65-125/R			
3(..) 40-125/R				3(..) 65-125/N			
3(..) 40-125/N				3(..) 65-125/L			
3(..) 40-160/R				3(..) 65-160/S			
3(..) 40-160/N				3(..) 65-160/R			
3(..) 40-200/R				3(..) 65-160/N			
3(..) 40-200/N				3(..) 65-160/L			
3(..) 40-200/L				3(..) 65-200/R			
3(..) 50-125/S				3(..) 65-200/N			
3(..) 50-125/R				3(..) 65-200/L			
				30	45	42.5	

MANUFACTURER REFERENCE	MANUFACTURER	ROTEN		
	DESCRIPTION	UNITEN 3 X6H62V6	UNITEN 3 XYHY2VY	UNITEN 5 XYXYKKY
	PUMP VERSION	STANDARD	H VERSION	HS VERSION
	DIMENSIONS	Ø 22-30		Ø 30
MATERIAL	1 Self driving spring	EN 1.4401(AISI 316)	EN 1.4401(AISI 316)	EN 1.4401(AISI 316)
	2 O Ring	NBR	FPM	FPM
	3 Frame	EN 1.4301(AISI 304)	EN 1.4301(AISI 304) / EN 1.4401(AISI 316)*	EN 1.4401(AISI 316)
	4 O Ring	NBR	FPM	FPM
	5 Rotary seal ring	ceramic	ceramic	SiC
	6 Stationary seal ring	carbon graphite	carbon graphite	SiC
	7 O Ring	NBR	FPM	FPM

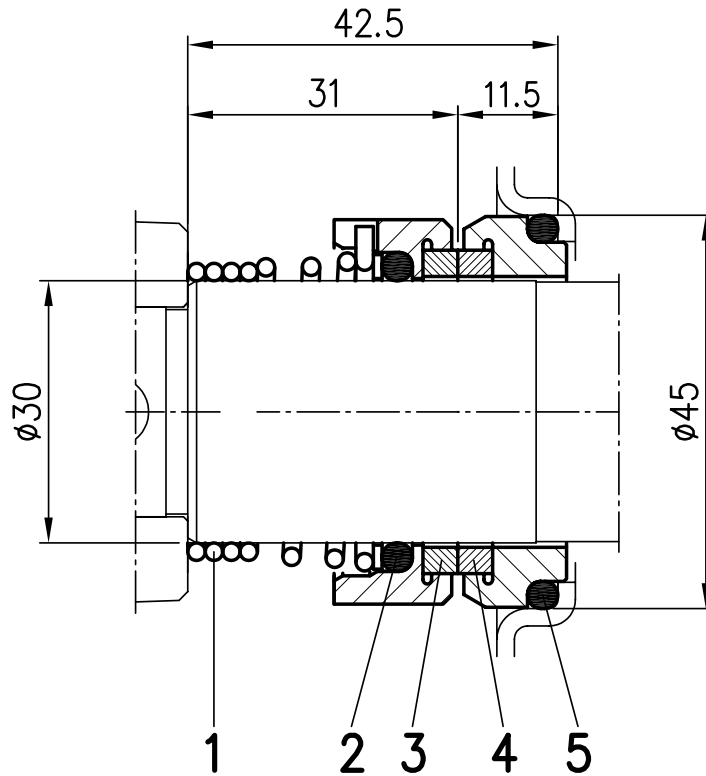
\*Only for Ø 30

**MECHANICAL SEAL (HS version)  
Ø22 SiC/SiC/FPM**



MANUFACTURER REFERANCE	MANUFACTURER		BURGMANN
	DESCRIPTION		MG1S6/22-G3
	PUMP VERSION		HS VERSION
	DIMENSIONS		Ø 22
MATERIAL	1	Self driving spring	EN 1.4571(AISI 316Ti)
	2	Bellows	FPM
	3	Frame	EN 1.4571(AISI 316Ti)
	4	Rotary seal ring	SiC
	5	Stationary seal ring	SiC
	6	O Ring	FPM

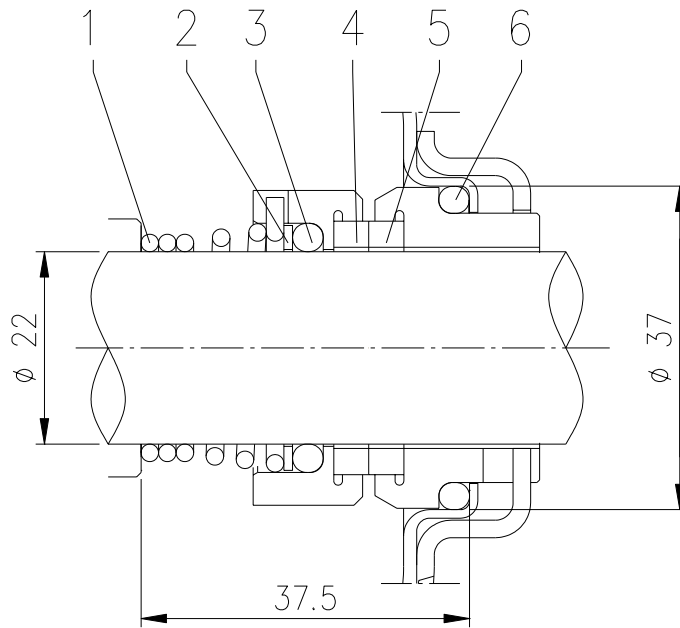
**Mechanical seal for HS version  
Ø30 SiC/SiC/FPM**



MANUFACTURER REFERANCE	MANUFACTURER		BURGMANN
	DESCRIPTION		M377GNX/30-00-R
	PUMP VERSION		HS VERSION
	DIMENSIONS		Ø 30
MATERIAL	1	Self driving spring	EN 1.4571(AISI 316Ti)
	2	O Ring	FPM
	3	Rotary part	SiC
	4	Stationary seal ring	SiC
	5	O Ring	FPM

Only for models 65-160/15, 65-200/15, 65-200/18.5, 65-200/22

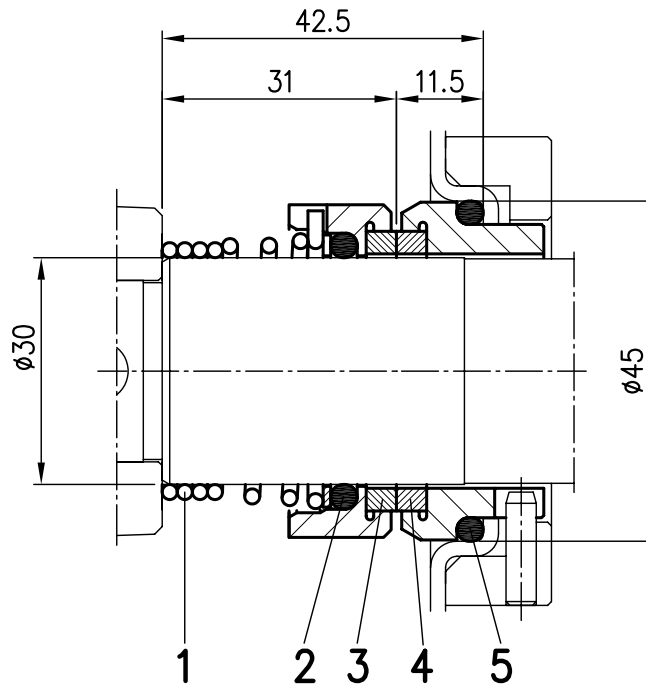
**MECHANICAL SEAL ( L version)  
Ø22 SiC/SiC/FPM**



MANUFACTURER REFERANCE	MANUFACTURER	BURGMANN	
	DESCRIPTION	M377GN85/22-00-R	
	PUMP VERSION	3L VERSION	
	DIMENSIONS	Ø 22	
MATERIAL	1	Self driving spring	EN 1.4571(AISI 316Ti)
	2	Thrust ring	EN 1.4571(AISI 316Ti)
	3	O Ring	FPM
	4	Rotary seal ring	SiC
	5	Stationary seal ring	SiC
	6	O Ring	FPM

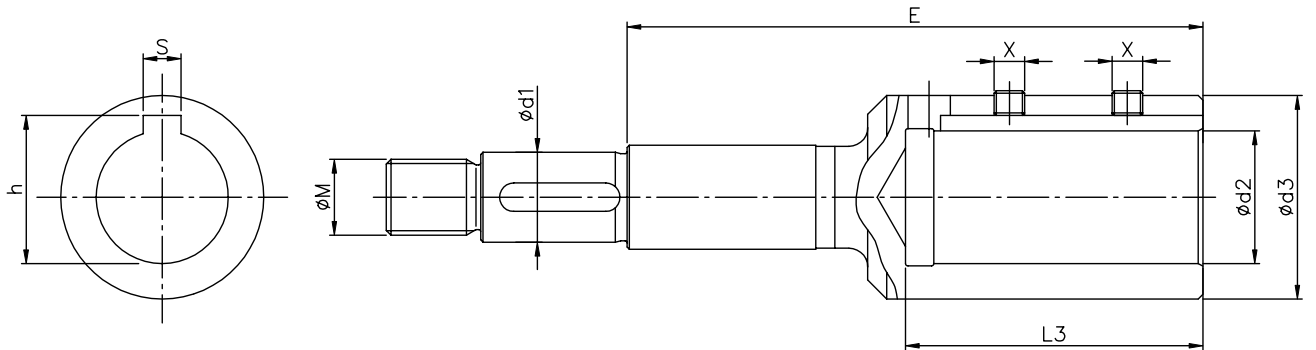


**Mechanical seal for L version  
Ø30 SiC/SiC/FPM**



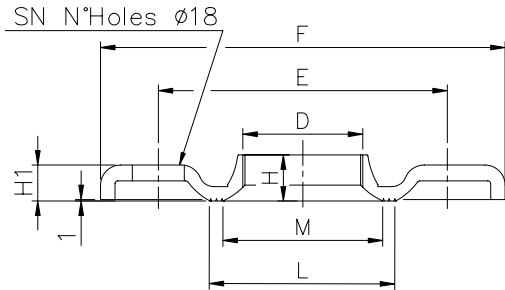
MANUFACTURER REFERANCE	MANUFACTURER		BURGMANN
	DESCRIPTION		M377GNX/30-00-R
	PUMP VERSION		HS VERSION
	DIMENSIONS		Ø 30
MATERIAL	1	Self driving spring	EN 1.4571(AISI 316Ti)
	2	O Ring	FPM
	3	Rotary part	SiC
	4	Stationary seal ring	SiC
	5	O Ring	FPM

CONSTRUCTIONS 3BSF-3SF-3LSF



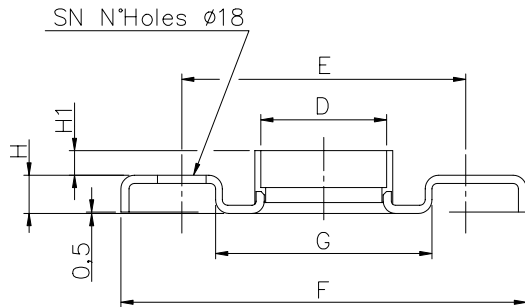
Type pumps	kW	HP	Motor		d1	d2	d3	L3	Dimensions mm			h	S	E																	
			Size	Type					M	Size	X				Standard																
32-125/N	1.1	1.5	80	B5	19	19	33	43	16x1.5	M6x6	UNI 5929	21.8	6	98																	
32-160/R	1.5	2	90			24	39	53				27.3	8	110																	
32-160/N	2.2	3	90			24	39	53				27.3		110																	
32-200/R	3	4	100	B35		28	43	63				31.3	10	145																	
32-200/N	4	5.5	112			132	38	58				84		41.3	178																
32-200/L	5.5	7.5	132				38	58				84		41.3	145																
32-200/EL	7.5	10	132	B5		19	24	39				53	16x1.5	M8x8	UNI 5929	27.3	8	110													
40-125/R	1.5	2	90				28	43				63				31.3		122													
40-125/N	2.2	3	90				24	39				53				27.3	110														
40-160/R	3	4	100	B35			28	43				63				31.3	10	145													
40-160/N	4	5.5	112				132	38				58				84		41.3	178												
40-200/R	5.5	7.5	132					38				58				84		41.3	145												
40-200/N	7.5	10	132	B5			19	42				63				114	M8x8	UNI 5929	UNI 5929	45.3	12	178									
40-200/L	11	15	160					22				24				39				53		27.3	110								
50-125/S	2.2	3	90									28				43				63		31.3	122								
50-125/R	3	4	100	B35	19			38	58	84	16x1.5	M8x8				UNI 5929				41.3	10	145									
50-125/N	4	5.5	112																	132		42	63	114	18x1.5	45.3	209				
50-160/R	5.5	7.5	132																							28	43	63	31.3	122	
50-160/N	7.5	10	132	160				24	42	63										114	20x1.5	M10x10	UNI 5929	41.3	10	145					
50-200/R	9.2	12.5	160																					48		72	114	20x1.5	M10x10	45.3	184
50-200/N	11	15	160																											48	72
50-200/L	15	20	160	B35		19		38	58	84			16x1.5	M8x8	UNI 5929					41.3	10	145									
65-125/R	4	5.5	112																	132		42	63	114	18x1.5	45.3	178				
65-125/N	5.5	7.5	112																							28	43	63	31.3	122	
65-125/L	7.5	10	132	160				24	42	63										114	20x1.5	M10x10	UNI 5929	41.3	10	145					
65-160/S	7.5	10	132																					48		72	114	20x1.5	M10x10	45.3	184
65-160/R	9.2	12.5	160																											48	72
65-160/N	11	15	160	B35			19	38	58	84							16x1.5	M8x8	UNI 5929	41.3	10	145									
65-160/L	15	20	160																	132		42	63	114	18x1.5	45.3	178				
65-200/R	15	20	160																							28	43	63	31.3	122	
65-200/N	18.5	25	180	180	24			42	63	114	20x1.5	M10x10				UNI 5929				41.3	10	145									
65-200/L	22	30	180																	48		72	114	20x1.5	M10x10	45.3	184				
			180																							48	72	114	20x1.5	M10x10	51.8

**COUNTER FLANGE  
ZINC-COATED STEEL**



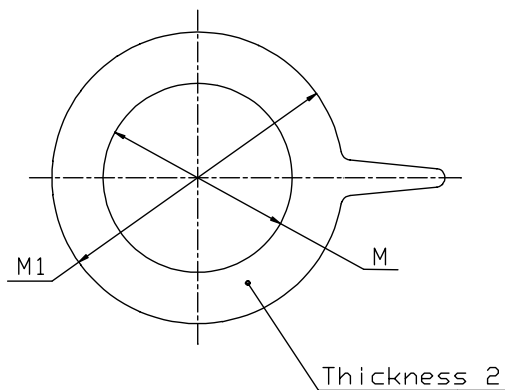
DN	D	E	F	H	H1	L	M	SN	
								Standard	On request
32	G 1 1/4	100	140	15	11.5	67	50	4	-
40	G 1 1/2	110	150	17.5		72	58		
50	G 2	125	165	19	15	89	70		
65	G 2 1/2	145	185	23	14	104	88		
80	G 3	160	200	24	16	117.5	100	8	4

**COUNTER FLANGE  
EN 1.4301 (AISI 304) / EN 1.4404 (AISI 316L)**



DN	D	E	F	G	H	H1	SN		
							Standard	On request	
32	G 1 1/4	100	140	76	14	15.5	4	-	
40	G 1 1/2	110	150	81					
50	G 2	125	165	96	16	18			-
65	G 2 1/2	145	185	116					
80	G 3	160	200	134	18	24	8	4	

**GASKET**



DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140

Material : EPDM version for standard  
FPM version for hot water maximum 110°C

**CONSTRUCTIONS**

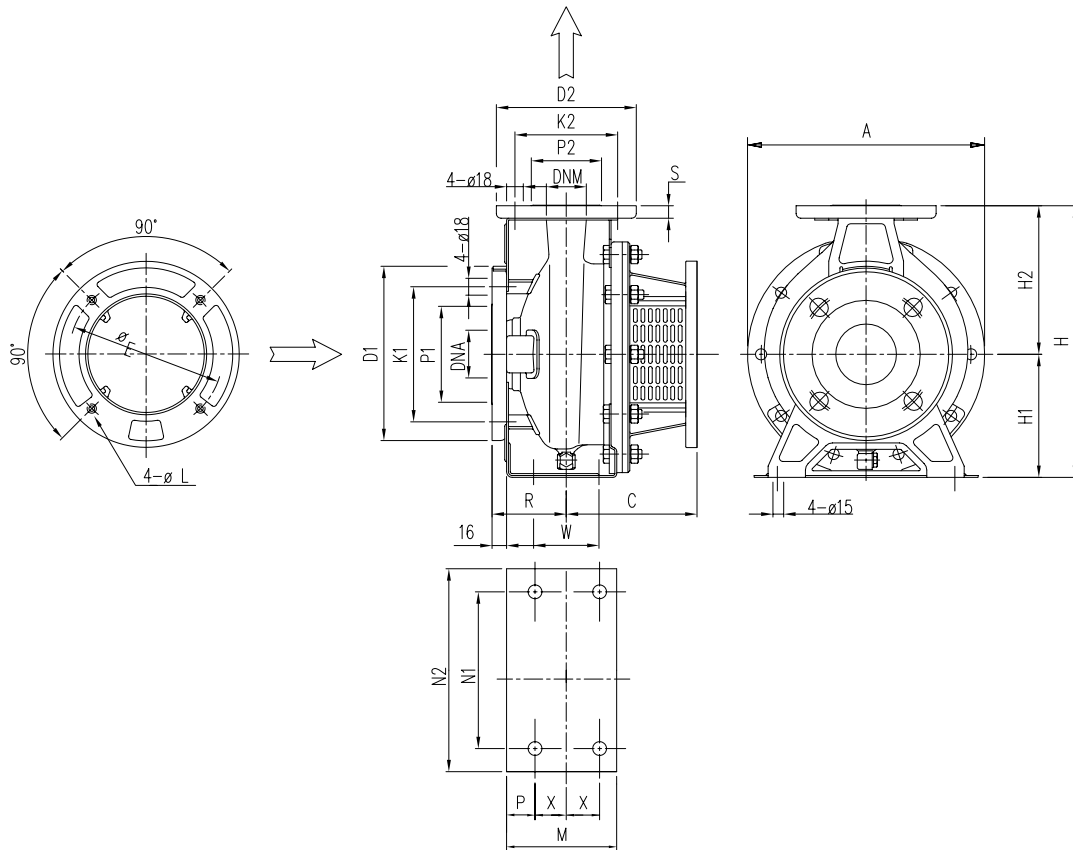
50 Hz

**BEARINGS**

Pump Type	Bearing type	
	Pump side	Motor side
3(..)P 32-125/N	6306 ZZ	6206 ZZ
3(..)P 32-160/R		
3(..)P 32-160/N		
3(..)P 32-200/R	6308 ZZ	6306 ZZ
3(..)P 32-200/N		
3(..)P 32-200/L		
3(..)P 32-200/EL		
3(..)P 40-125/R	6306 ZZ	6206 ZZ
3(..)P 40-125/N		
3(..)P 40-160/R		
3(..)P 40-160/N		
3(..)P 40-200/R	6308 ZZ	6306 ZZ
3(..)P 40-200/N		
3(..)P 40-200/L		
3(..)P 50-125/S	6306 ZZ	6206 ZZ
3(..)P 50-125/R		
3(..)P 50-125/N		
3(..)P 50-160/R	6308 ZZ	6306 ZZ
3(..)P 50-160/N		
3(..)P 50-200/R		
3(..)P 50-200/N		
3(..)P 50-200/L		
3(..)P 65-125/R	6306 ZZ	6206ZZ
3(..)P 65-125/N		
3(..)P 65-125/L		
3(..)P 65-160/S	6308 ZZ	6306ZZ
3(..)P 65-160/R		
3(..)P 65-160/N		
3(..)P 65-160/L		
3(..)P 65-200/R		
3(..)P 65-200/N		
3(..)P 65-200/L		

DIMENSIONS 3SF-3LSF

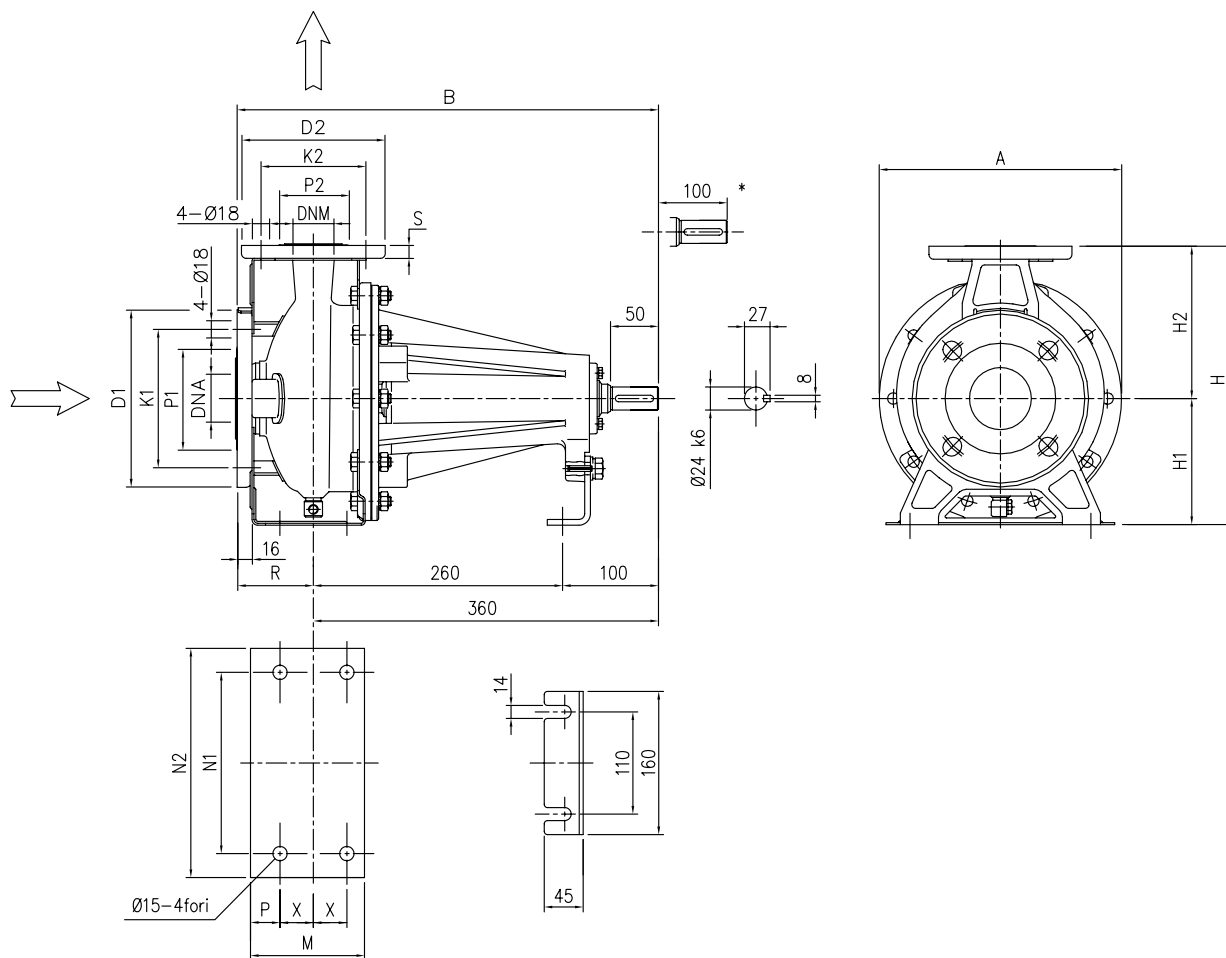
50 Hz



Pump type	Dimensions [mm]																						
	A	C	E	H	H1	H2	L	M	N1	N2	P	R	S	ØD1	ØK1	ØP1	ØD2	ØK2	ØP2	ØDNA	ØDNM	X	W
32-125/N	213	118	165	252	112	140	M10	114	140	190	29	80	14	165	125	96	140	100	76	50	32	35	70
32-160/R	254	130	165	292	132	160	M10	118	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
32-160/N	254	130	165	292	132	160	M10	118	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
32-200/R	294	142	215	340	160	180	M12	119	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
32-200/N	294	142	215	340	160	180	M12	119	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
32-200/L	294	165	265	340	160	180	M12	119	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
32-200/EL	294	165	265	340	160	180	M12	119	190	240	29	80	14	165	125	96	140	100	76	50	32	35	70
40-125/R	213	130	165	252	112	140	M10	114	160	210	29	80	14	185	145	116	150	110	81	65	40	35	70
40-125/N	213	130	165	252	112	140	M10	114	160	210	29	80	14	185	145	116	150	110	81	65	40	35	70
40-160/R	254	142	215	292	132	160	M12	118	190	240	29	80	14	185	145	116	150	110	81	65	40	35	70
40-160/N	254	142	215	292	132	160	M12	118	190	240	29	80	14	185	145	116	150	110	81	65	40	35	70
40-200/R	294	165	265	340	160	180	M12	115	212	265	25	80	14	185	145	116	150	110	81	65	40	35	70
40-200/N	294	165	265	340	160	180	M12	115	212	265	25	100	14	185	145	116	150	110	81	65	40	35	70
40-200/L	350	198	300	340	160	180	M16	115	212	265	25	100	14	185	145	116	150	110	81	65	40	35	70
50-125/S	254	142	215	292	132	160	M12	114	190	240	25	100	16	185	145	116	165	125	96	65	50	35	70
50-125/R	254	142	215	292	132	160	M12	114	190	240	25	100	16	185	145	116	165	125	96	65	50	35	70
50-125/N	254	142	215	292	132	160	M12	114	190	240	25	100	16	185	145	116	165	125	96	65	50	35	70
50-160/R	296	165	265	340	160	180	M12	115	115	212	25	100	16	185	145	116	165	125	96	65	50	35	70
50-160/N	296	165	265	340	160	180	M12	115	115	212	25	100	16	185	145	116	165	125	96	65	50	35	70
50-200/R	296	165	265	360	160	200	M12	115	212	265	25	390	16	185	145	116	165	125	96	65	50	35	70
50-200/N	350	198	300	360	160	200	M16	115	212	265	25	390	16	185	145	116	165	125	96	65	50	35	70
50-200/L	350	198	300	360	160	200	M16	115	212	265	25	390	16	185	145	116	165	125	96	65	50	35	70
65-125/R	254	142	215	340	160	180	M12	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-125/N	300	165	265	340	160	180	M12	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-125/L	300	165	265	340	160	180	M12	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-160/S	300	165	265	360	160	200	M12	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-160/R	300	165	265	360	160	200	M12	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-160/N	350	198	300	360	160	200	M16	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-160/L	350	208	300	360	160	200	M16	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-200/R	350	208	300	405	225	180	M16	150	212	320	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-200/N	350	208	300	405	225	180	M16	150	212	320	35	100	16	200	160	134	185	145	115	80	65	47.5	95
65-200/L	350	208	300	405	225	180	M16	150	212	320	35	100	16	200	160	134	185	145	115	80	65	47.5	95

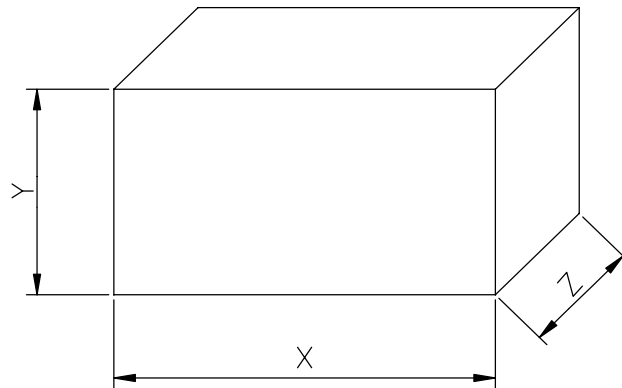
DIMENSIONS 3PF-3LPF

50 Hz

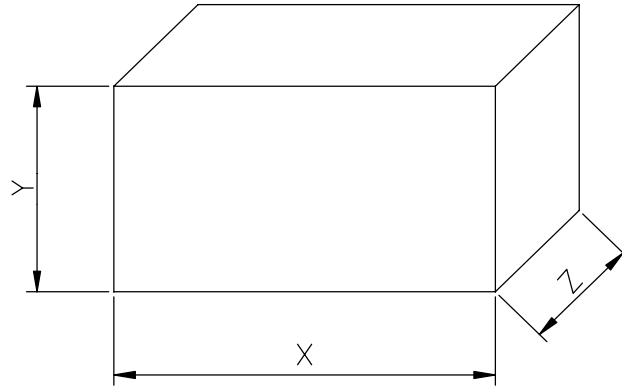


Pump type	Dimensions [mm]																			
	A	B	H	H1	H2	M	N1	N2	P	R	S	ØD1	ØK1	ØP1	ØD2	ØK2	ØP2	ØDNA	ØDNM	X
32-125	213	440	252	112	140	114	140	190	29	80	14	165	125	95	140	100	75	50	32	35
32-160	254	440	292	132	160	118	190	240	29	80	14	165	125	95	140	100	75	50	32	35
32-200	296	440	340	160	180	119	190	240	29	80	14	165	125	95	140	100	75	50	32	35
40-125	213	440	252	112	140	114	160	210	29	80	14	185	145	115	150	110	80	65	40	35
40-160	254	440	292	132	160	118	190	240	29	80	14	185	145	115	150	110	80	65	40	35
40-200	296	460	340	160	180	115	212	265	25	100	14	185	145	115	150	110	80	65	40	35
50-125	254	460	292	132	160	114	190	240	25	100	16	185	145	115	165	125	95	65	50	35
50-160	296	460	340	160	180	115	212	265	25	100	16	185	145	115	165	125	95	65	50	35
50-200	296	460	360	160	200	115	212	265	25	100	16	185	145	115	165	125	95	65	50	35
65-125	254	460	340	160	180	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5
65-160	296	460	360	160	200	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5
65-200	296	460	405	180	225	150	212	280	35	100	16	200	160	134	185	145	115	80	65	47.5

\* Space where it is possible to disassemble the pump with coupling spacer without disassembling the motor.



Type pumps Three Phase	PACKING [mm]			WEIGHT [Kg]
	X	Y	Z	
32-125				16
32-160				19.5
32-200				27
40-125	374	405	424	18
40-160				22.5
40-200/R				31
40-200/N				
40-200/L	860	440	375	44.6
50-125				22.5
50-160	374	405	424	32
50-200/R				32.5
50-200/N	860	440	375	45
50-200/L				46
65-125/R				26
65-125/N				27.5
65-125/L				28.5
65-160/S				27
65-160/R	374	405	424	30
65-160/N				40
65-160/L				42
65-200/R				33
65-200/N				29.5
65-200/L				30



Type pumps Three Phase	PACKING [mm]			WEIGHT [Kg]
	X	Y	Z	
32-125	490	320	280	18
32-160	490	320	280	20
32-200	500	380	330	28.5
40-125	490	320	280	18
40-160	490	320	280	20
40-200	500	380	330	29
50-125	490	320	280	20
50-160	500	380	330	29
50-200	500	380	330	29.5
65-125	500	390	330	29
65-160	500	390	330	30.5
65-200	550	370	320	31