



EBARA

Technical Data

3LS4

4 Pole Models
1450 RPM

Stainless Steel End Suction Pumps

(DIN 24255)



**Stub Shaft Design
316 Stainless Steel**



EBARA

EBARA PUMPS AUSTRALIA PTY. LTD.

3LS4_Techdata_SS_V09

CONTENTS

4 POLE 50 Hz

V09

-SPECIFICATIONS	Page
Features & Applications	100
Typical Cross Sectional View	101
Pump Specifications	102
Motor Specifications	103
Selection Charts	104
 -PERFORMANCE CURVES	
Performance Curve – 3LS4 32-125/0.25	200
Performance Curve – 3LS4 32-160/0.37R/0.37	201
Performance Curve – 3LS4 32-200/0.55R/0.55/0.75	202
Performance Curve – 3LS4 40-125/0.37R/0.37	203
Performance Curve – 3LS4 40-160/0.55R/0.55	204
Performance Curve – 3LS4 40-200/1.1R/1.1/1.5	205
Performance Curve – 3LS4 50-125/0.55R/0.55	206
Performance Curve – 3LS4 50-160/1.1R/1.1	207
Performance Curve – 3LS4 50-200/1.5R/1.5/2.2	208
Performance Curve – 3LS4 65-125/0.55/0.75/1.1	209
Performance Curve – 3LS4 65-160/1.5/2.2	210
Performance Curve – 3LS4 65-200/2.2/3	211
Performance Curve – 3LS4 65-250/4/5.5	212
Performance Curve – 3LS4 80-160/1.5/2.2	213
Performance Curve – 3LS4 80-200/3/4	214
Performance Curve – 3LS4 80-250/5.5/7.5	215
 -CONSTRUCTIONS	
Constructions – 3LS4 32, 40, 50, 65	300
Constructions – 3LS4 80-160	301
Constructions – 3LS4 65-20, 80	302
Constructions – Mechanical Seal	303
Constructions – Coupling	304
 -DIMENSIONS	
Dimensions Index	400
Dimensions – 3LS4 32, 40, 50, 65	401
Dimensions – 3LS4 50, 65	402
Dimensions – 3LS4 80-160	403
Dimensions – 3LS4 65-250, 80-200/250	404
Dimensions – 3LSF4 32, 40, 50, 65	(Pump End Kit) 405
Dimensions – 3LSF4 50, 65	(Pump End Kit) 406
Dimensions – 3LSF4 80-160	(Pump End Kit) 407
Dimensions – 3LSF4 65-250, 80	(Pump End Kit) 408
Packing and Weight	(Complete With Motor) 409
Packing and Weight	(Pump End Kit) 410
 -TECHNICAL DATA	
Technical Data – Motor Data	500



Note: 65-250 & 80mm models have precision cast 316 s/s casings.

These series of stainless steel pumps feature a unique one piece volute casing that are produced using an advanced computer controlled plasma stamping system that ensures total quality control during manufacture (up to 65-200/22). With the smooth surfaces of stamped stainless steel, this results in consistent high standard products, of superior quality and high efficiency.

Features

- Stainless steel liquid end components
 - High quality; corrosion resistance.
 - Manufactured in Stamped 316L and Cast 316 in larger models.
- High quality mechanical shaft seals and o-rings
 - Fitted standard with SiC/SiC/Viton mechanical seal.
- Standard IEC motors used
 - Allowing for single phase, special enclosure, or specific brand motors to be fitted.
- Close coupled design
 - Saves space; simplifies maintenance and installation.
- Back pullout construction
 - Assembly and overhaul of the impeller and seal without disturbing suction and discharge connections.
- High operating efficiency
 - Lowers operating costs.
- Top centerline discharge and foot support under casing
 - Ensures self-venting and reduces misalignment from pipe loads.
- Available in "Kit" form
 - "Kit" consists of complete pump wet end, cast iron motor bracket, stub shaft, motor support and all fasteners.

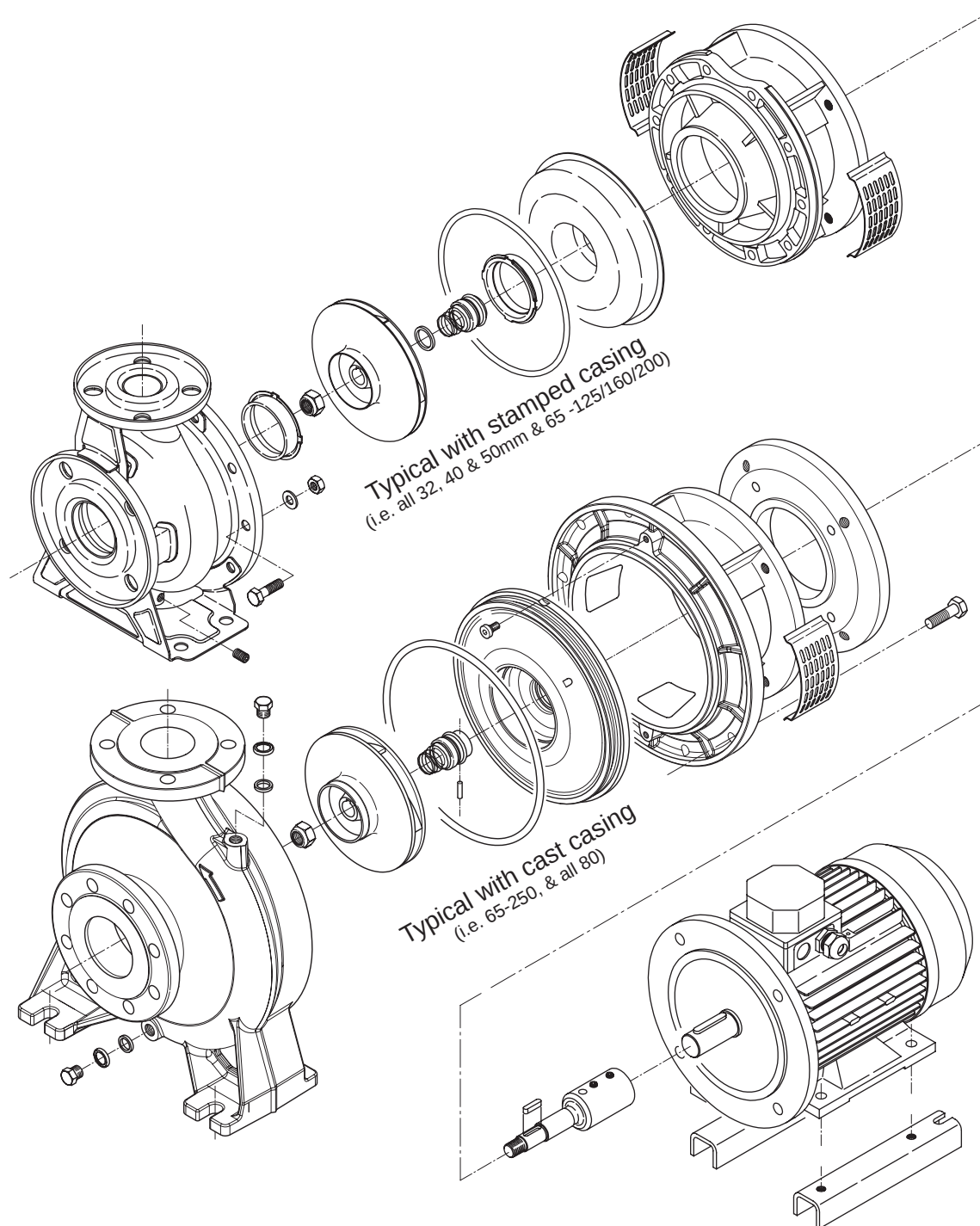


Applications

- Plant services
- Water supply systems
- Washing plants
- Cooling water
- Ultrapure water systems
- Air conditioning
- Sprinkler/flow irrigation
- OEM equipment application
- Pressure boosting
- Liquid transfer
- Heat exchanger
- Spray systems
- Heating
- Beverage processing
- Pharmaceutical services
- Water reclamation and treatment

SPECIFICATIONS- TYPICAL CROSS SECTIONAL VIEW 4 POLE 50 Hz

V09



PUMP SPECIFICATIONS

4 POLE 50 Hz

V09

Liquid Handled	Type of Liquid		Clean water & moderately aggressive fluids				
	Liquid Temperature		Minimum -10°C to Maximum 110°C				
Maximum Working Pressure			1 MPa				
Construction	Impeller	32,40,50 mm models	Closed centrifugal type (welded)				
		65,80 mm models	[Reinforced laser welding for 40-200/1.5 & 50-200/2.2]				
	Bearings	Closed 3 dimensional centrifugal Type (cast)					
Pipe Connections	Discharge X Suction	32-160/200	32 mm	x	50 mm	All flanged to EN1092-1 standard	
		40-125/160/200	40 mm	x	65 mm		
		50-125/160/200	50 mm	x	65 mm		
		65-125/160/200/250	65 mm	x	80 mm		
		80-160/200/250	80 mm	x	100 mm		
	Materials	Casing	All 32, 40 & 50 65-125/160/200	AISI 316 L Stainless Steel (stamped) [EN 1.4404]			
65-250 All 80			AISI 316 Stainless Steel (precision cast) [CF8M - EN 1.4408]				
Impeller		All 32, 40 & 50	AISI 316 L Stainless Steel (stamped) [EN 1.4404]				
		All 65 & 80	AISI 316 Stainless Steel (precision cast) [CF8M - EN 1.4408]				
Casing Cover		All 32, 40 & 50 65-125/160/200 80-160	AISI 316 L Stainless Steel (stamped) [EN 1.4404]				
		65-250 80-200/250	AISI 316 Stainless Steel (precision cast) [CF8M - EN 1.4408]				
O-ring (casing)		FPM [Viton]					
Mechanical Seal (& Shaft diameter)		All 32, 40 & 50 65 up to 11 kW	1.1~15 kW 4.0~11 kW	22mmØ	SiC/SiC/FPM [Viton] with anti rotation device for stationary seat.		
		65 -160/200/250 80-160/200/250	15~37 kW 11~37 kW	30mmØ			
		Stub Shaft (& diameter at impeller)	All 32, 40, 50 up to 1.5 kW 65-160/200	0.25~1.5 kW 0.55~3.0 kW	19mmØ	AISI 316 Stainless Steel [EN 1.4404]	
			50-200/2.2 80-160	2.2 kW 1.5~2.2 kW	22mmØ		
65 -250 80-200/250			3~5.5 kW 3~7.5 kW	24mmØ			
Bracket			Cast Iron [& Aluminum depending on motor used]				

CASING

Stamped
Stainless Steel (316L)
All 32, 40 & 50
65-125/160/200



Precision Cast
Stainless Steel (316)
65-250, All 80



IMPELLER

Stamped
Stainless Steel (316L)
All 32,40 & 50



Precision Cast
Stainless Steel
All 65 & 80



CASING COVER

Stamped
Stainless Steel (316L)
All 32, 40 & 50
65-125/160/200, 80-160



Precision Cast
Stainless Steel (316)
65-250, 80-200/250



MOTOR SPECIFICATIONS

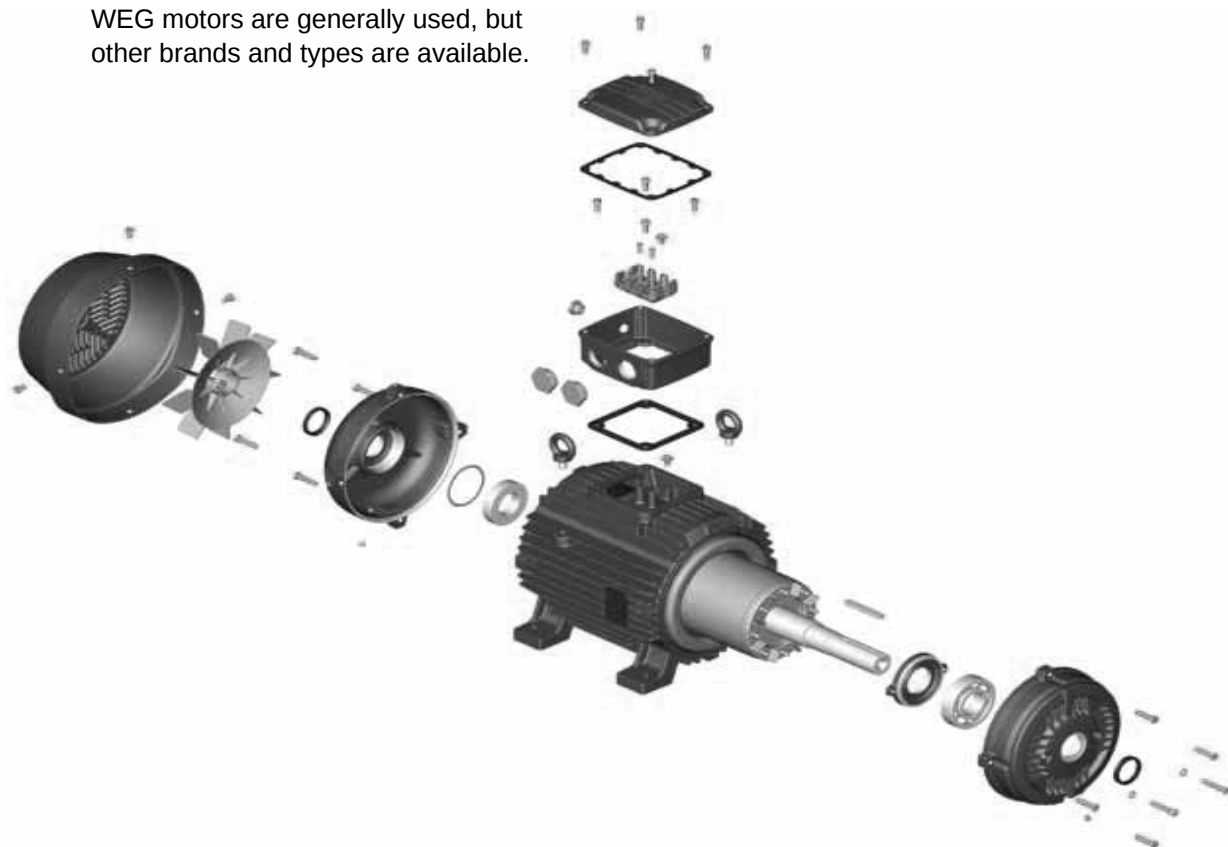
4 POLE 50 Hz

V09

Version	3LS4
Type	Electric-TEFC Three phase
No. of Poles	4
Rotation speed [min ⁻¹]	~1400
Insulation class	F (class B for temperature rise)
Protection degree	IP 55
Power rating [kW]	0.25 ÷ 7.5
[HP]	0.33 ÷ 10
Frequency [HZ]	50
Voltage [V]	220÷240 / 380÷415 ±5% (up to 4.0 kW) 380÷415 / 660÷720 ±5% (5.5 kW and above)
Casing material	Cast Iron)
Dimensions of cable entry	- M20x1.5 - M25x1.5 - M32x1.5
Flange mount (IEC motor)	IM B5 (up to 1.5 kW) IM B35 (2.2 kW and above)

Note : Specifications refer to Standard WEG 21 IE3 motors.

WEG motors are generally used, but
other brands and types are available.



SELECTION CHART

4 POLE 50 Hz

3 SERIES 4 version: 32, 40, 50

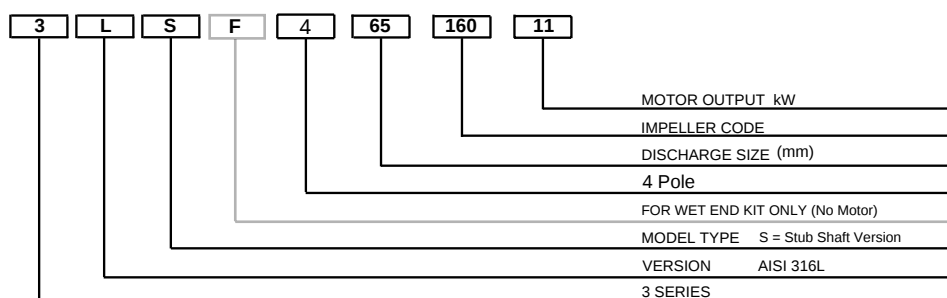
V09

Pump type	Motor		Q=Capacity													
	kW	HP	l/min	0	50	100	150	175	200	250	300	350	400	500	600	650
			m³/h	0	3	6	9	10,5	12	15	18	21	24	30	36	39
H=Total manometric head in meters																
32-125/0.25	0.25	0.33	5.7	5.5	4.7	3.5	2.8	-	-	-	-	-	-	-	-	-
32-160/0.37R	0.37	0.5	7.3	7	6.2	5	4.2	-	-	-	-	-	-	-	-	-
32-160/0.37	0.37	0.5	9	8.7	8.1	7	6.3	-	-	-	-	-	-	-	-	-
32-200/0.55R	0.55	0.75	10.8	10.3	9.2	7.3	6.2	-	-	-	-	-	-	-	-	-
32-200/0.55	0.55	0.75	12.5	12	11	9.2	8	-	-	-	-	-	-	-	-	-
32-200/0.75	0.75	1	17.5	17.1	16.1	14.3	13.2	-	-	-	-	-	-	-	-	-
40-125/0.37R	0.37	0.5	5.1	-	4.8	4.5	4.3	4	3.4	2.6	1.8	-	-	-	-	-
40-125/0.37	0.37	0.5	6.5	-	6.3	6	5.8	5.5	4.9	4.2	3.4	-	-	-	-	-
40-160/0.55R	0.55	0.75	7.7	-	7.3	6.9	6.6	6.3	5.7	5	4.3	-	-	-	-	-
40-160/0.55	0.55	0.75	9.1	-	8.6	8.1	7.8	7.5	6.9	6.2	5.4	-	-	-	-	-
40-200/1.1R	1.1	1.5	11.6	-	11.2	10.8	10.5	10.1	9.4	8.6	7.8	-	-	-	-	-
40-200/1.1	1.1	1.5	13.6	-	13.2	12.7	12.4	12.1	11.4	10.6	9.6	-	-	-	-	-
40-200/1.5	1.5	2	18	-	17.7	17.3	17.1	16.8	16.1	15.2	14.2	-	-	-	-	-
50-125/0.55R	0.55	0.75	5.4	-	-	-	-	5.2	5	4.7	4.4	4	3.2	2.3	-	-
50-125/0.55	0.55	0.75	6.4	-	-	-	-	6.2	6	5.7	5.4	5	4.2	3.3	-	-
50-160/1.1R	1.1	1.5	8.2	-	-	-	-	7.8	7.6	7.2	6.9	6.4	5.5	4.5	4	-
50-160/1.1	1.1	1.5	9.5	-	-	-	-	9.1	8.9	8.6	8.3	7.9	7	6	5.5	-
50-200/1.5R	1.5	2	12.7	-	-	-	-	12.1	11.8	11.4	11	10.5	9.3	8	7.2	-
50-200/1.5	1.5	2	14	-	-	-	-	13.3	13	12.7	12.2	11.8	10.6	9.2	8.4	-
50-200/2.2	2.2	3	17.8	-	-	-	-	17.5	17.3	17	16.6	16.2	15.1	13.8	13.1	-

3 SERIES 4 version: 65, 80

Pump type	Motor		Q=Capacity																		
	kW	HP	l/min	0	300	350	500	600	800	950	1000	1050	1100	1200	1300	1400	1600	1800	2000	2200	
			m³/h	0	18	21	30	36	48	57	60	63	66	72	78	84	96	108	120	132	
H=Total manometric head in meters																					
65-125/0.55	0.55	0.75	5.3	4.8	4.6	4	3.5	2.3	1.4	-	-	-	-	-	-	-	-	-	-	-	
65-125/0.75	0.75	1	6.4	6	5.8	5.2	4.6	3.5	2.5	2.2	-	-	-	-	-	-	-	-	-	-	
65-125/1.1	1.1	1.5	7.7	7.2	7	6.3	5.7	4.5	3.5	3.2	2.8	-	-	-	-	-	-	-	-	-	
65-160/1.5	1.5	2	9.7	-	9.2	8.5	8	6.7	5.7	5.3	4.9	4.5	-	-	-	-	-	-	-	-	
65-160/2.2	2.2	3	11.8	-	11.3	10.6	10.1	8.8	7.6	7.2	6.8	6.4	5.5	-	-	-	-	-	-	-	
65-200/2.2	2.2	3	14.5	-	13.9	13	12.4	10.8	9.3	8.8	8.3	7.8	-	-	-	-	-	-	-	-	
65-200/3	3	4	16.3	-	15.8	15.1	14.4	12.9	11.6	11.1	10.6	10.1	9	-	-	-	-	-	-	-	
65-250/4	4	5.5	18.8	-	-	18.1	17.6	16.1	14.7	14.2	13.7	13	11.6	9.8	-	-	-	-	-	-	
65-250/5.5	5.5	7.5	21.8	-	-	21.2	20.8	19.6	18.4	17.9	17.5	17	15.8	14.4	12.8	-	-	-	-	-	
80-160/1.5	1.5	2	7.3	-	-	-	6.8	6.3	5.9	5.7	5.6	5.4	5	4.6	4.2	3.4	2.4	-	-	-	
80-160/2.2	2.2	3	9.5	-	-	-	9.1	8.8	8.4	8.3	8.2	8	7.8	7.4	7.1	6.2	5.2	4.1	-	-	
80-200/3	3	4	12.4	-	-	-	12	11.5	10.9	10.7	10.4	10.2	9.7	9.2	8.6	7.3	5.9	4.2	-	-	
80-200/4	4	5.5	16.0	-	-	-	15.4	14.9	14.3	14.1	13.9	13.7	13.2	12.8	12.3	11.1	9.9	8.4	6.7	-	
80-250/5.5	5.5	7.5	21.2	-	-	-	20.5	19.9	19.1	18.9	18.6	18.2	17.6	16.8	15.9	13.8	11.7	9.3	-	-	
80-250/7.5	7.5	10	24.5	-	-	-	24	23.4	22.8	22.5	22.2	21.9	21.3	20.6	19.8	18	15.9	13.5	10.8	-	

TYPE KEY



MEI INDEX SPECIFICATION

4 POLE 50 Hz

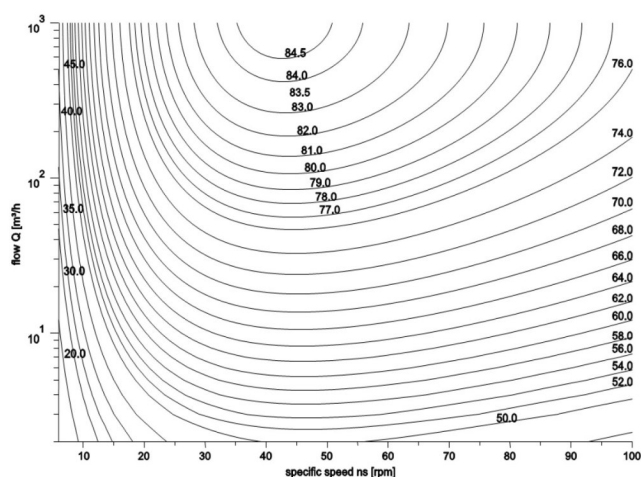
V09

The minimum efficiency index (MEI) is a measure of the quality of a pump size in respect to its mean efficiency. The minimum efficiency index is based on the hydraulic efficiency and on the head at the best efficiency point.

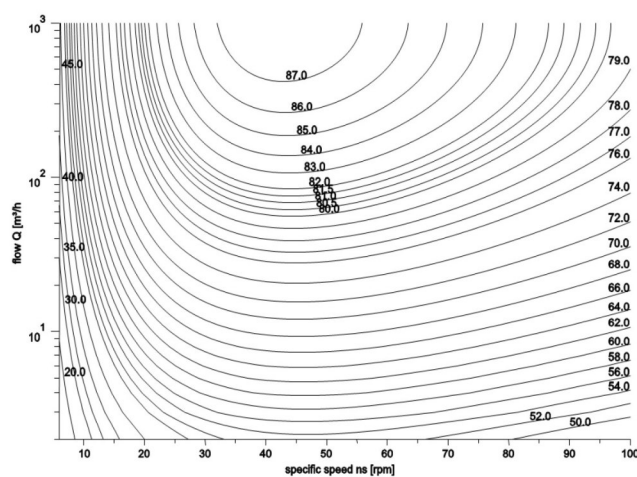
The efficiency of a pump with trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to a reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.

The operation of these water pumps with variable duty points may be more efficient and economical when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system

MEI=0.4 for ESCC 1450rpm



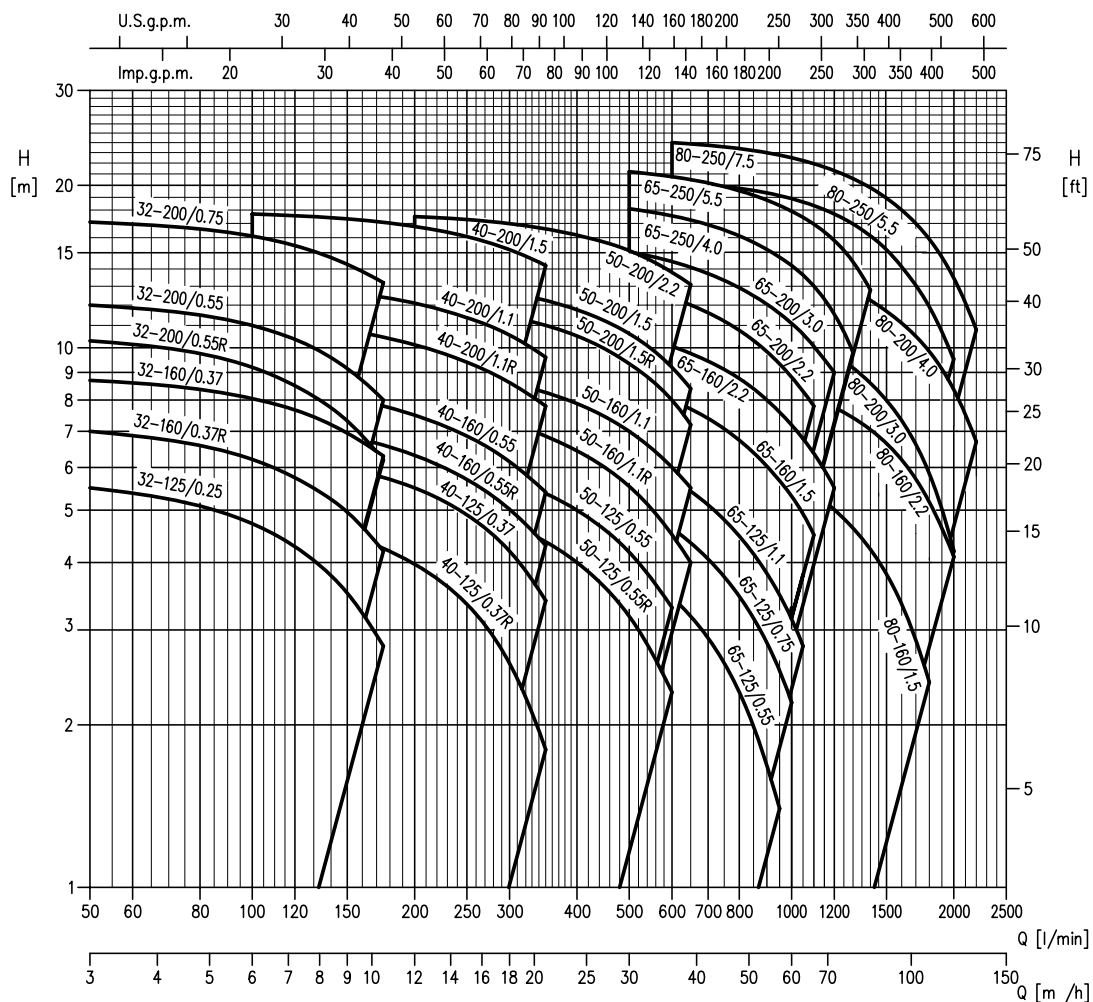
MEI = 0.7 for ESCC 1450rpm



SELECTION CHART

4 POLE 50 Hz

V09



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 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 1 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)

η = pump efficiency

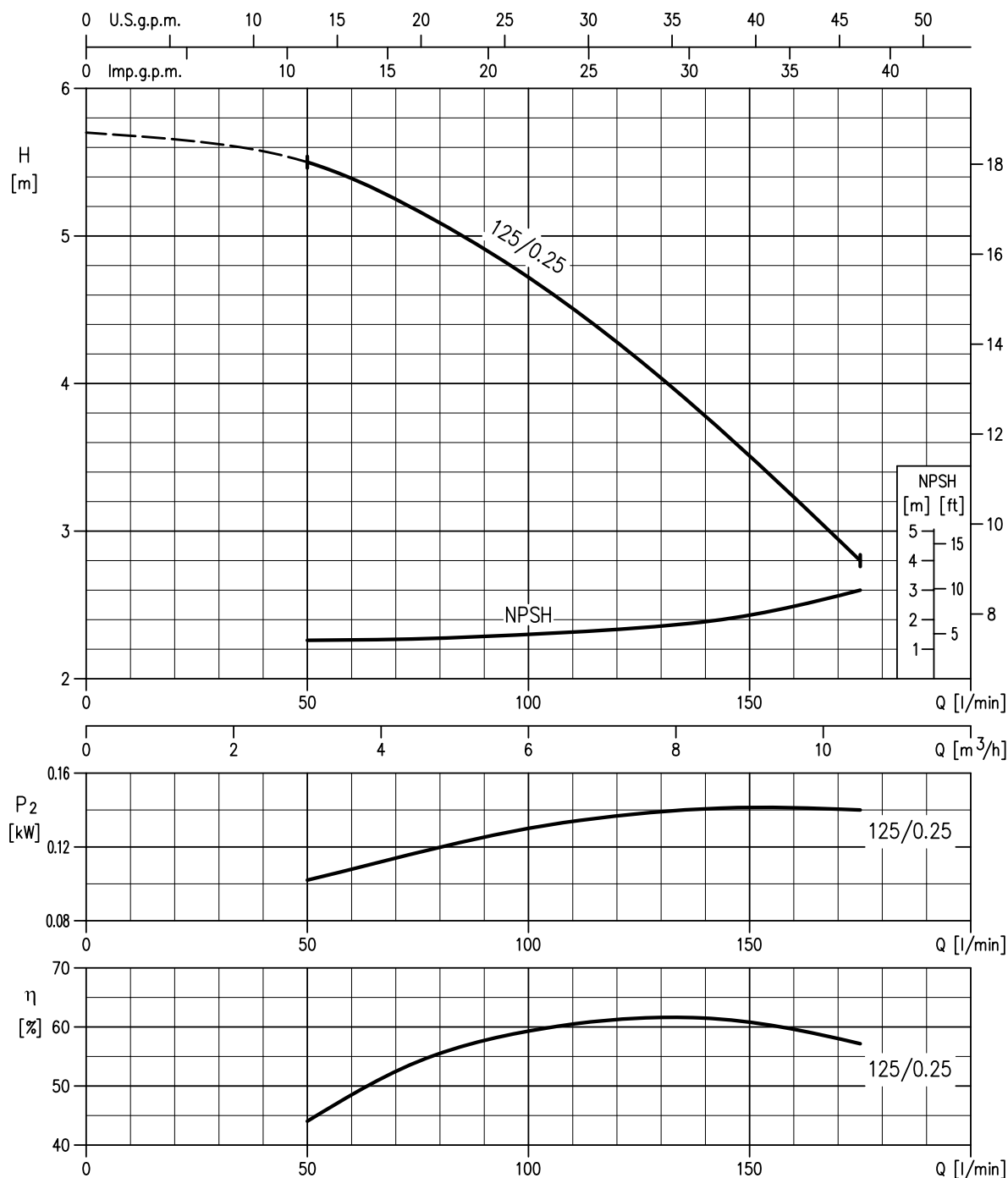
NPSH = net positive suction head required by the pump

PERFORMANCE CURVE

4 POLE 50 Hz

V09

32-125/0.25 (0.25 kW) MEI > 0.50 – impeller diameter = 133 mm



Rotation speed $\approx 1400 \text{ min}^{-1}$
Test standard: ISO 9906:2012 – Grade 3B

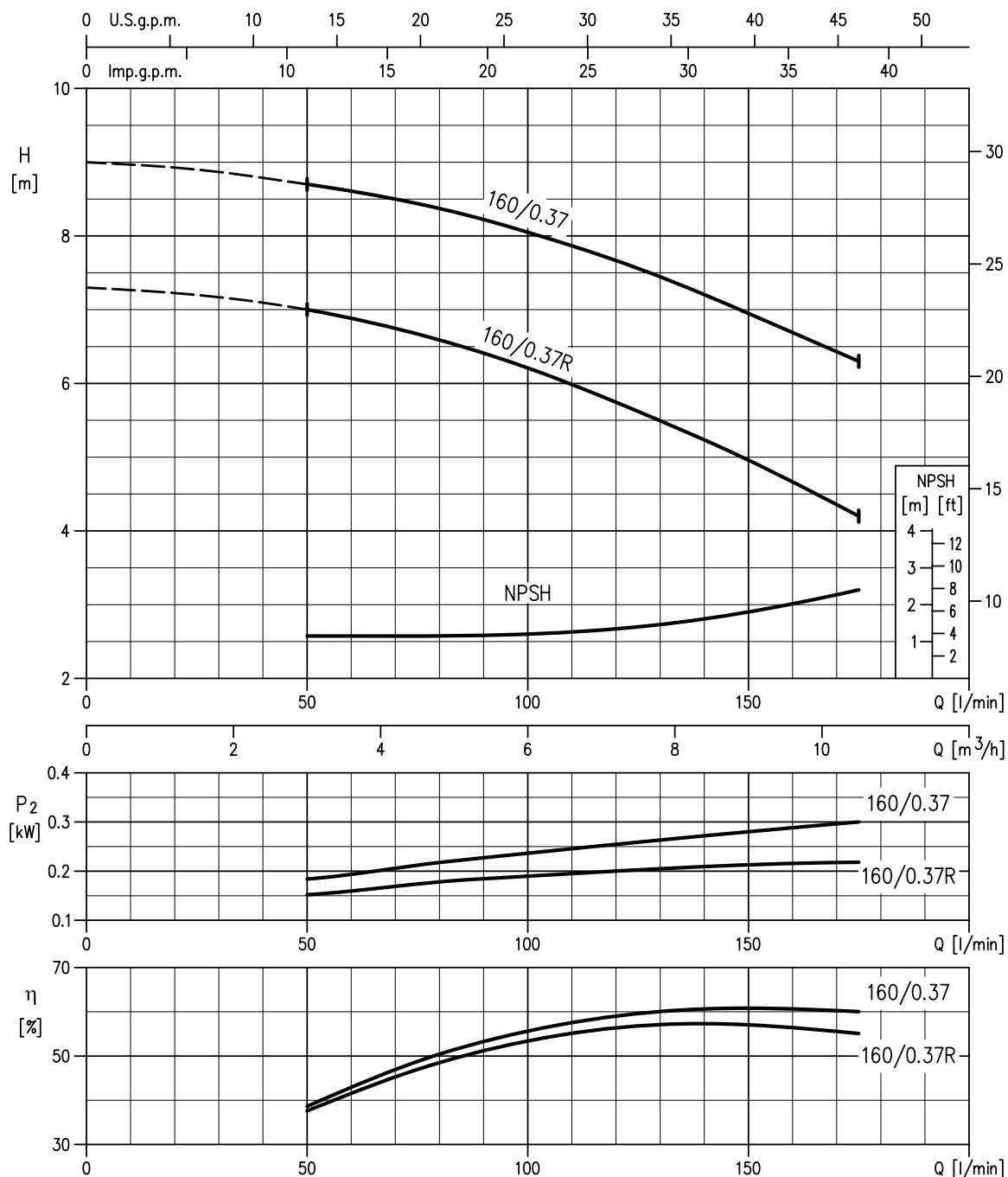
PERFORMANCE CURVE

4 POLE 50 Hz

V09

32-160/0.37R (0.37kW) MEI > 0.70 – impeller diameter = 151 mm

32-160/0.37 (0.37kW) MEI > 0.70 – impeller diameter = 166 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

PERFORMANCE CURVE

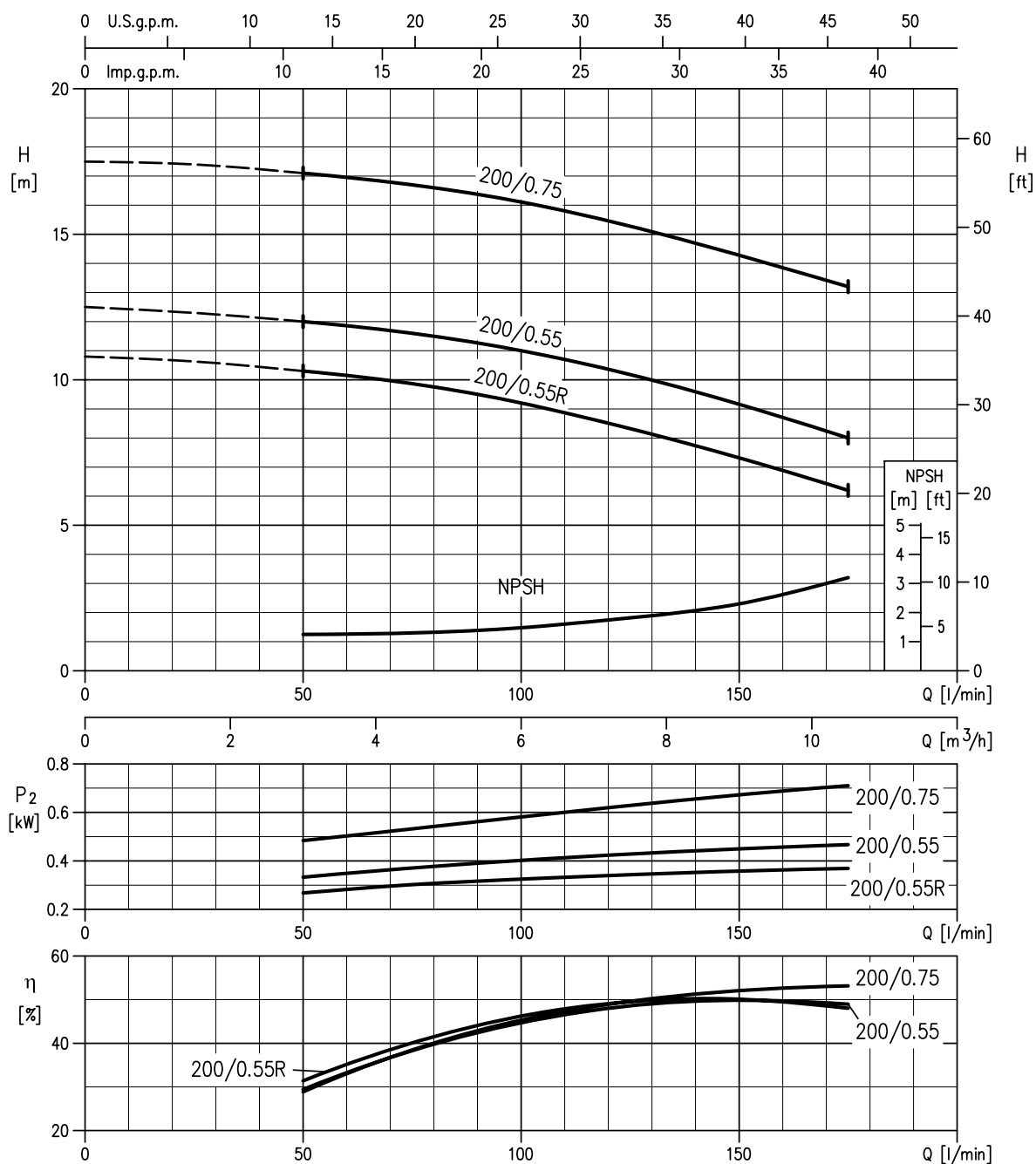
4 POLE 50 Hz

V09

32-200/0.55R (0.55 kW) MEI > 0.70 – impeller diameter = 186 mm

32-200/0.55 (0.55kW) MEI > 0.70 – impeller diameter = 200 mm

32-200/0.75 (0.55kW) MEI > 0.70 – impeller diameter = 224 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

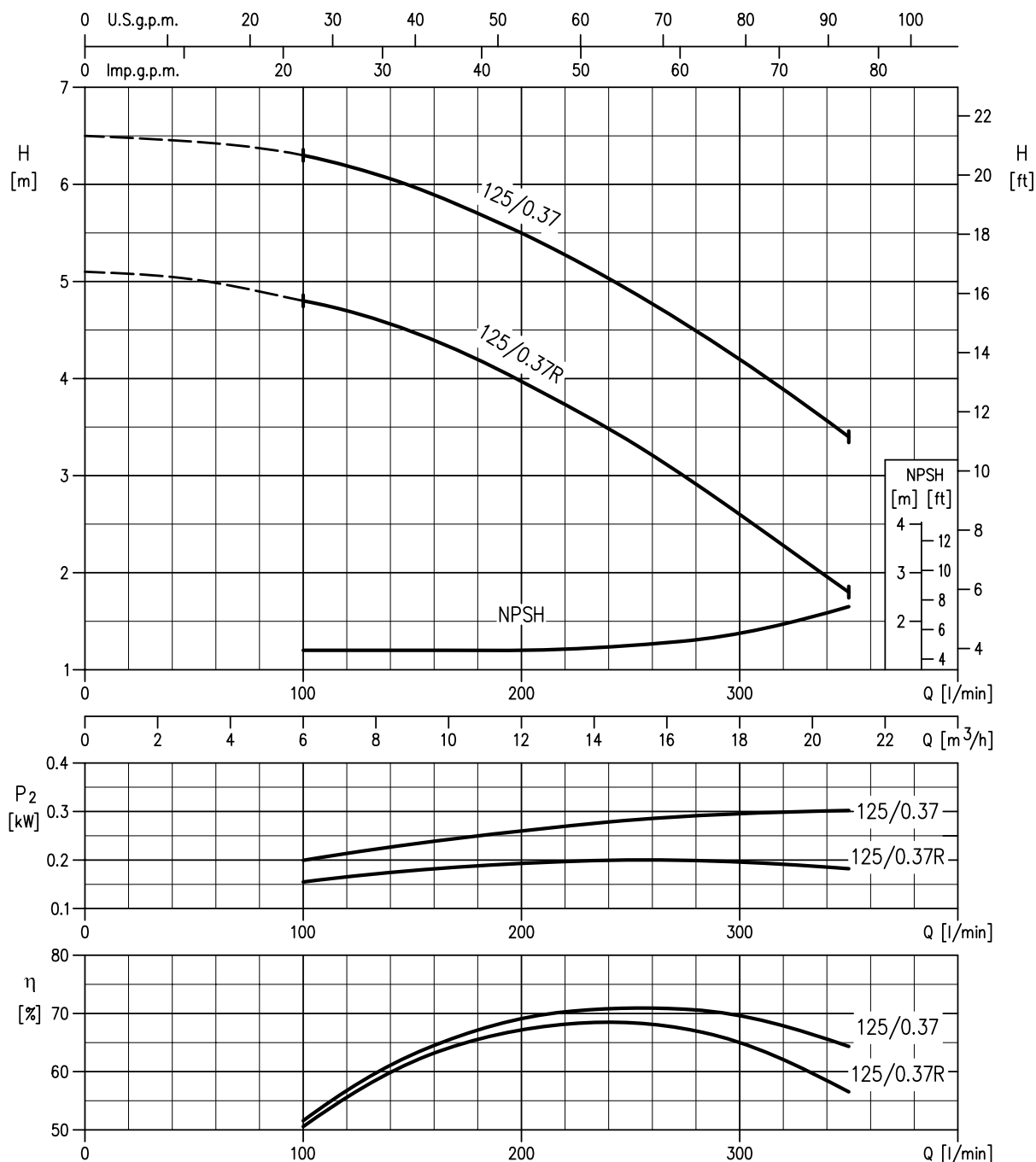
PERFORMANCE CURVE

4 POLE 50 Hz

V09

40-125/0.37R (0.37 kW) MEI > 0.70 – impeller diameter = 125 mm

40-125/0.37 (0.37 kW) MEI > 0.70 – impeller diameter = 140 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

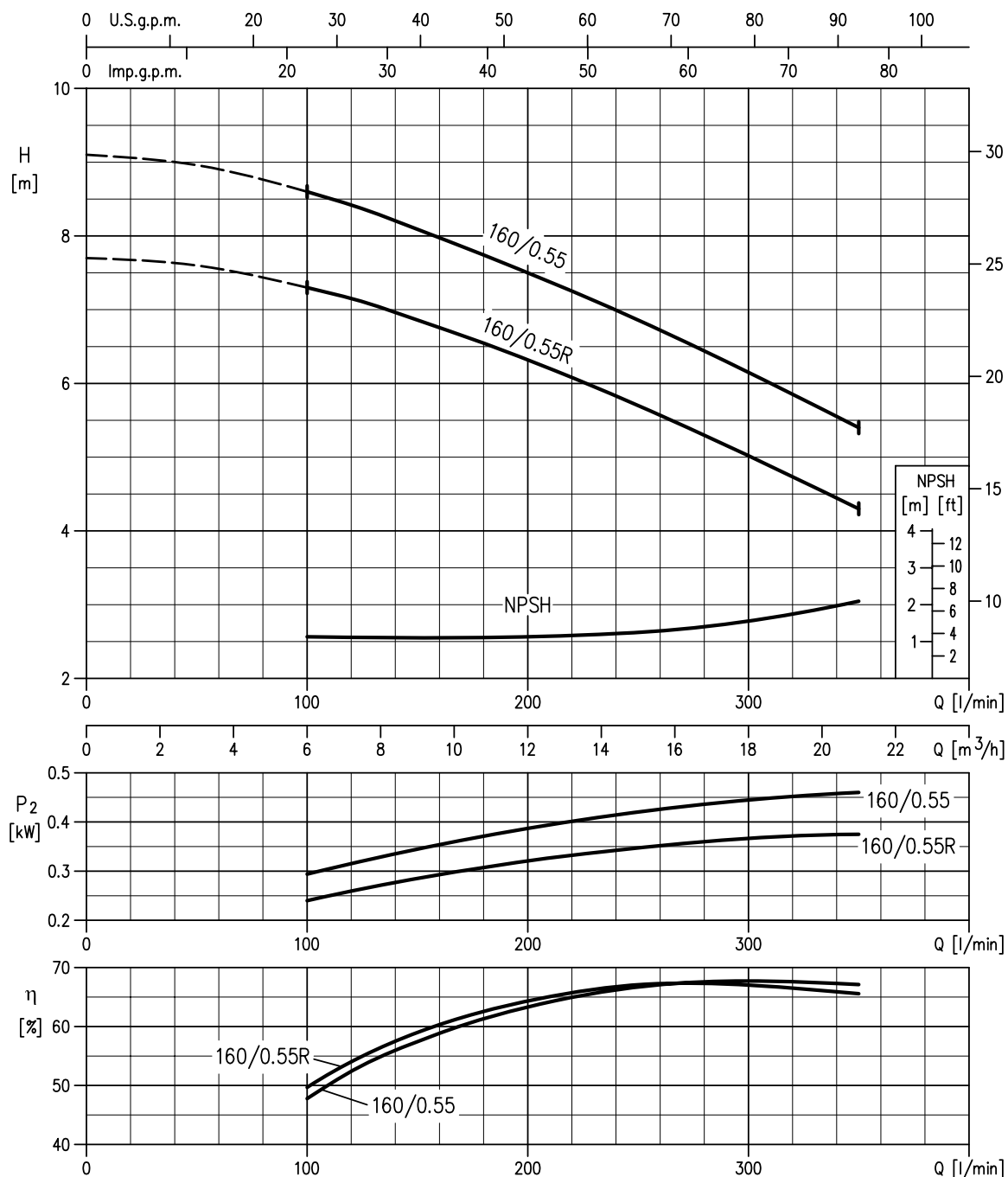
PERFORMANCE CURVE

4 POLE 50 Hz

V09

40-160/0.55R (0.55 kW) MEI > 0.40 – impeller diameter = 151 mm

40-160/0.55 (0.55 kW) MEI > 0.40 – impeller diameter = 166 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

PERFORMANCE CURVE

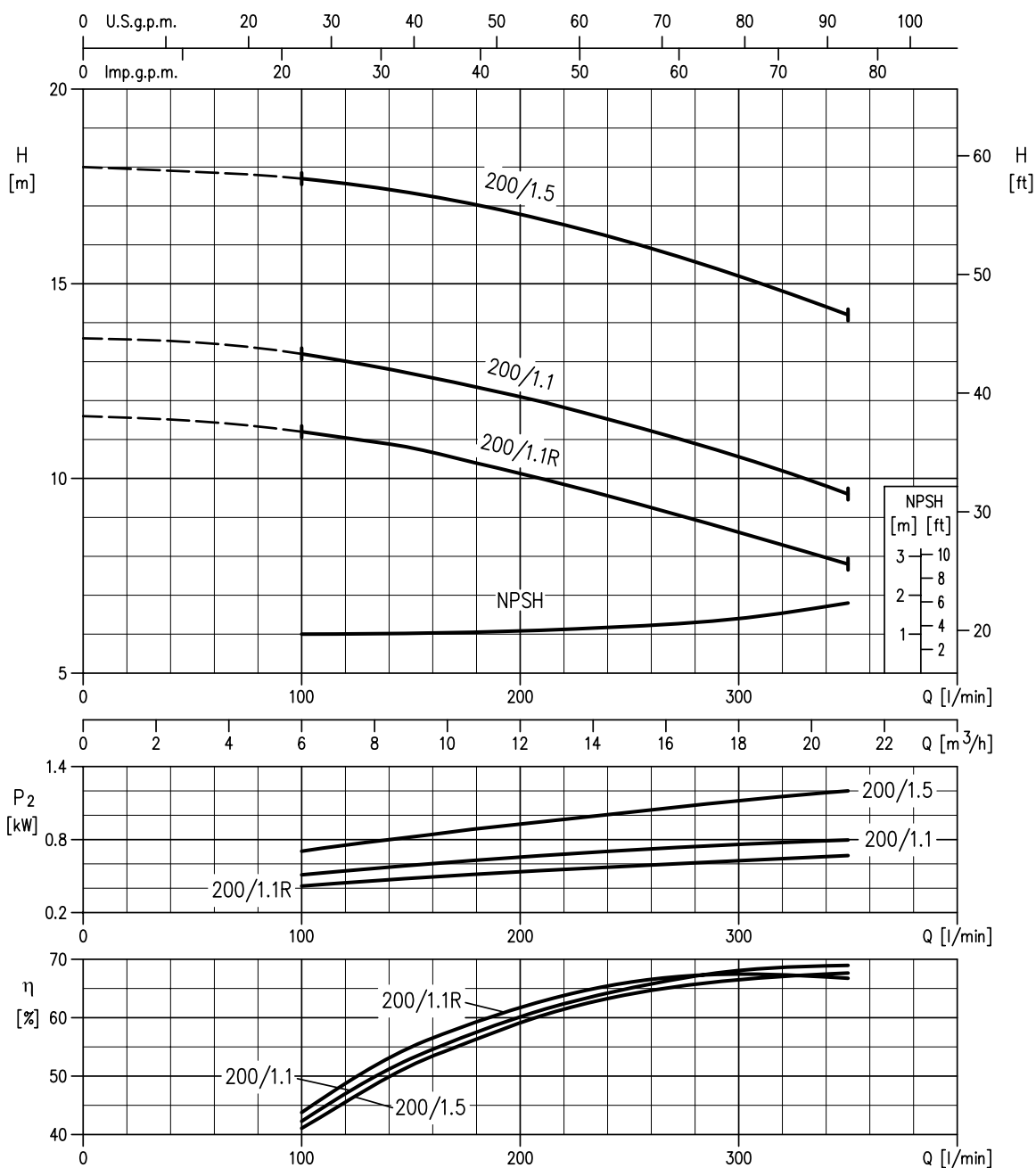
4 POLE 50 Hz

V09

40-200/1.1R (1.1 kW) MEI > 0.70 – impeller diameter = 183 mm

40-200/1.1 (1.1 kW) MEI > 0.70 – impeller diameter = 200 mm

40-200/1.5 (1.5 kW) MEI > 0.70 – impeller diameter = 224 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

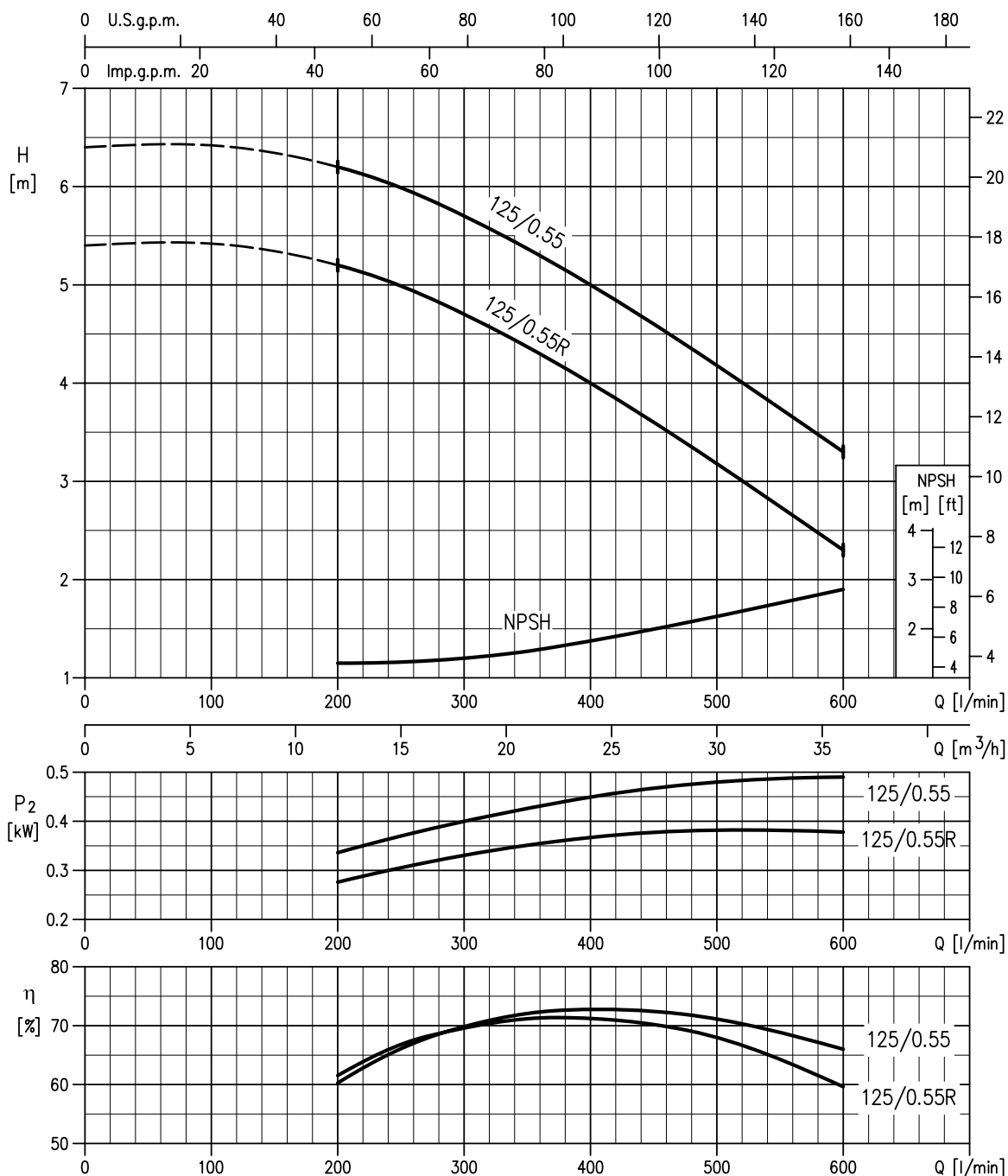
PERFORMANCE CURVE

4 POLE 50 Hz

V09

50-125/0.55R (0.55 kW) MEI > 0.40 – impeller diameter = 131 mm

50-125/0.55 (0.55 kW) MEI > 0.40 – impeller diameter = 140 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

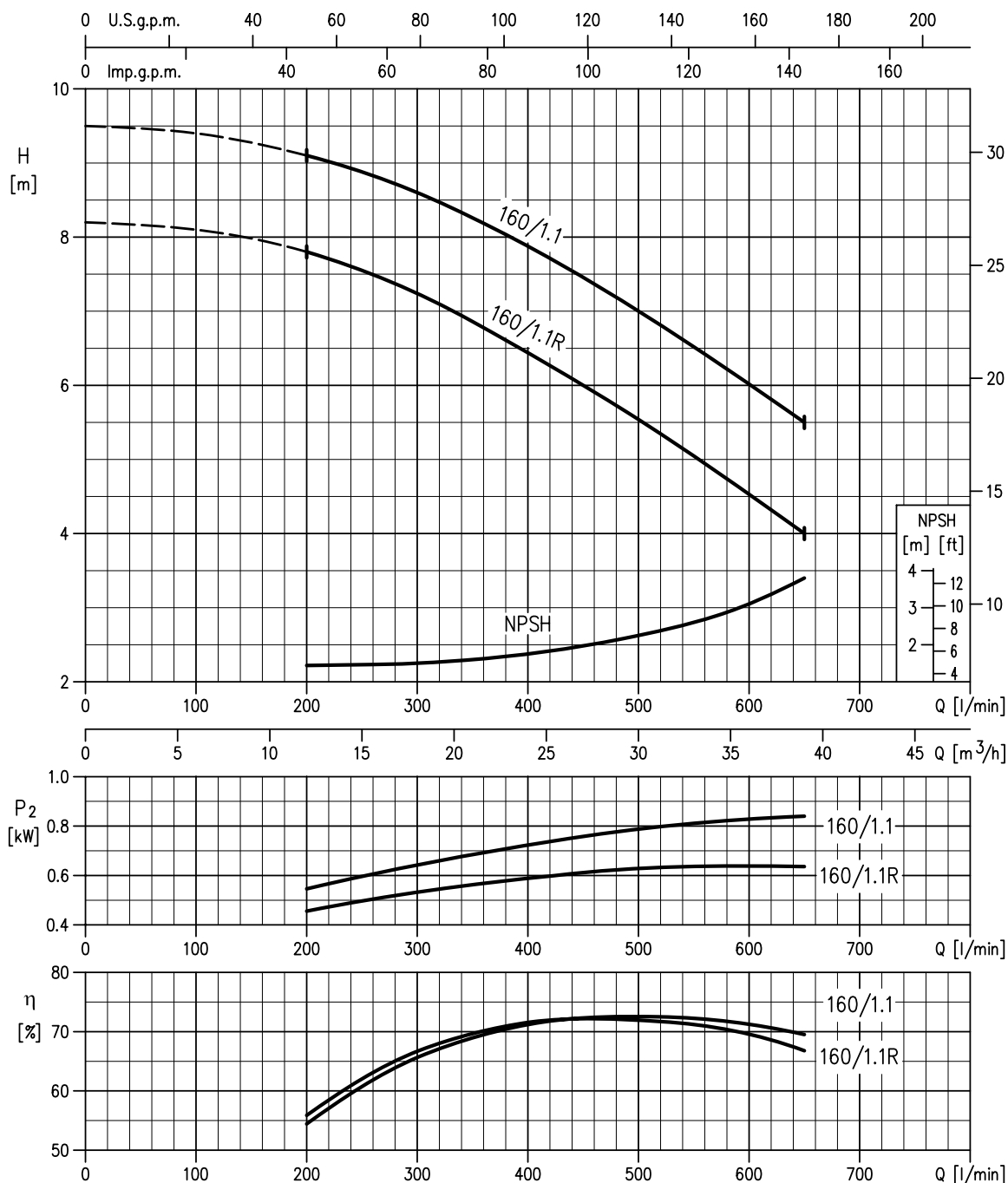
PERFORMANCE CURVE

4 POLE 50 Hz

V09

50-160/1.1R (1.1 kW) MEI > 0.60 – impeller diameter = 154 mm

50-160/1.1 (1.1 kW) MEI > 0.60 – impeller diameter = 166 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

PERFORMANCE CURVE

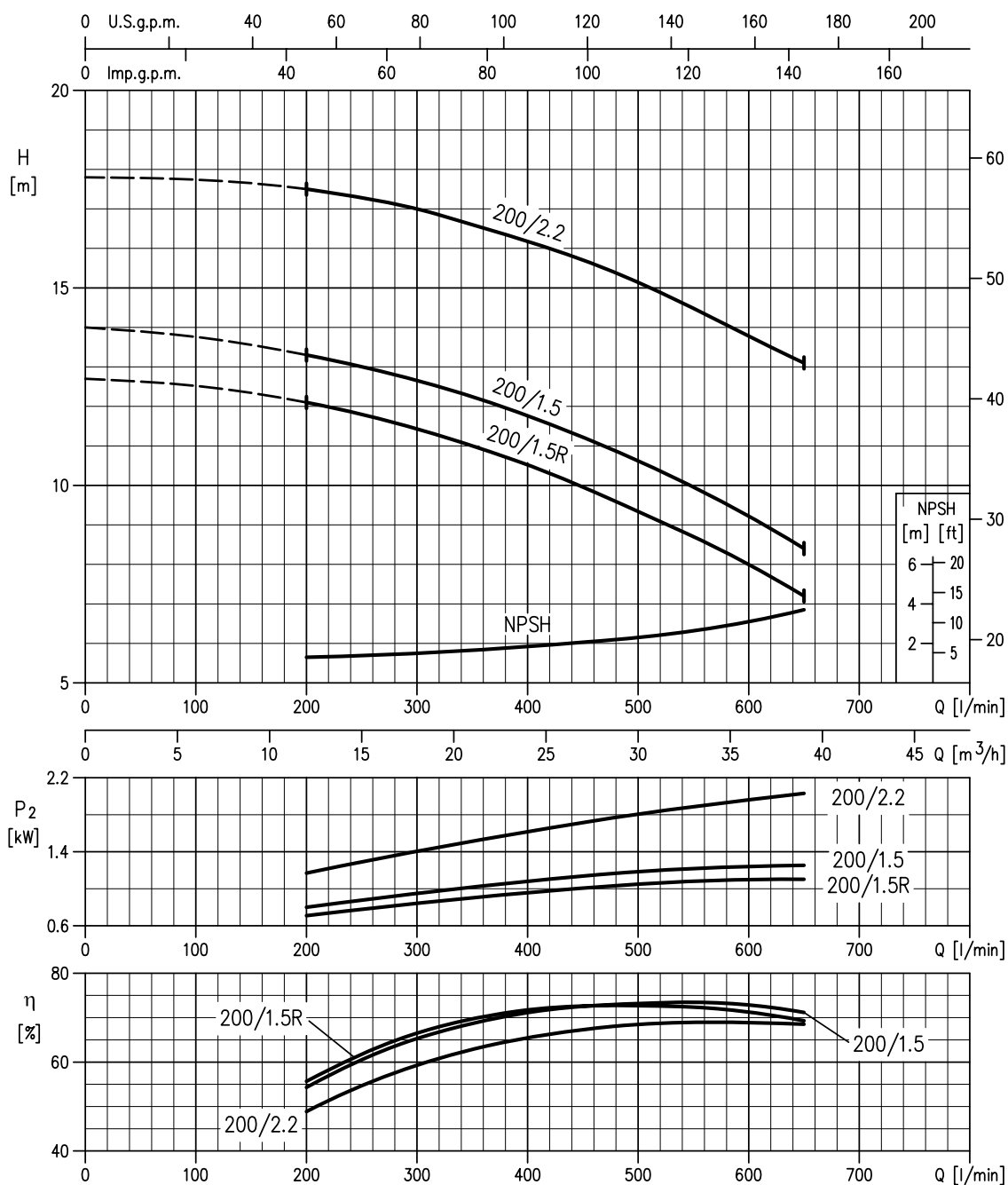
4 POLE 50 Hz

V09

50-200/1.5R (1.5 kW) MEI > 0.60 – impeller diameter = 191 mm

50-200/1.5 (1.5 kW) MEI > 0.60 – impeller diameter = 200 mm

50-200/2.2 (2.2 kW) MEI > 0.60 – impeller diameter = 224 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

PERFORMANCE CURVE

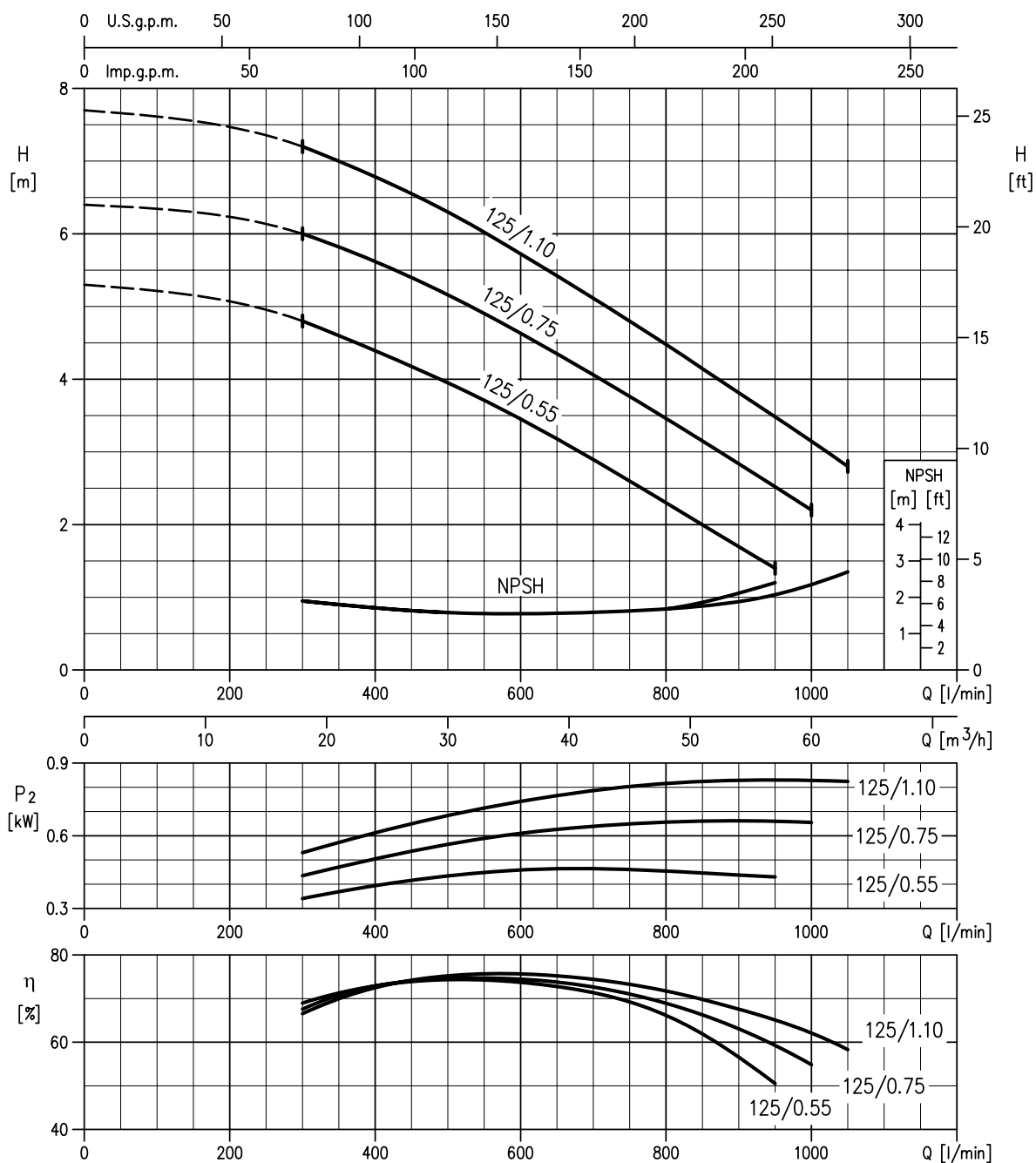
4 POLE 50 Hz

V09

65-125/0.55 (0.55 kW) MEI > 0.50 – impeller diameter = 128 mm

65-125/0.75 (0.75 kW) MEI > 0.50 – impeller diameter = 138 mm

65-125/1.1 (1.1 kW) MEI > 0.50 – impeller diameter = 149 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

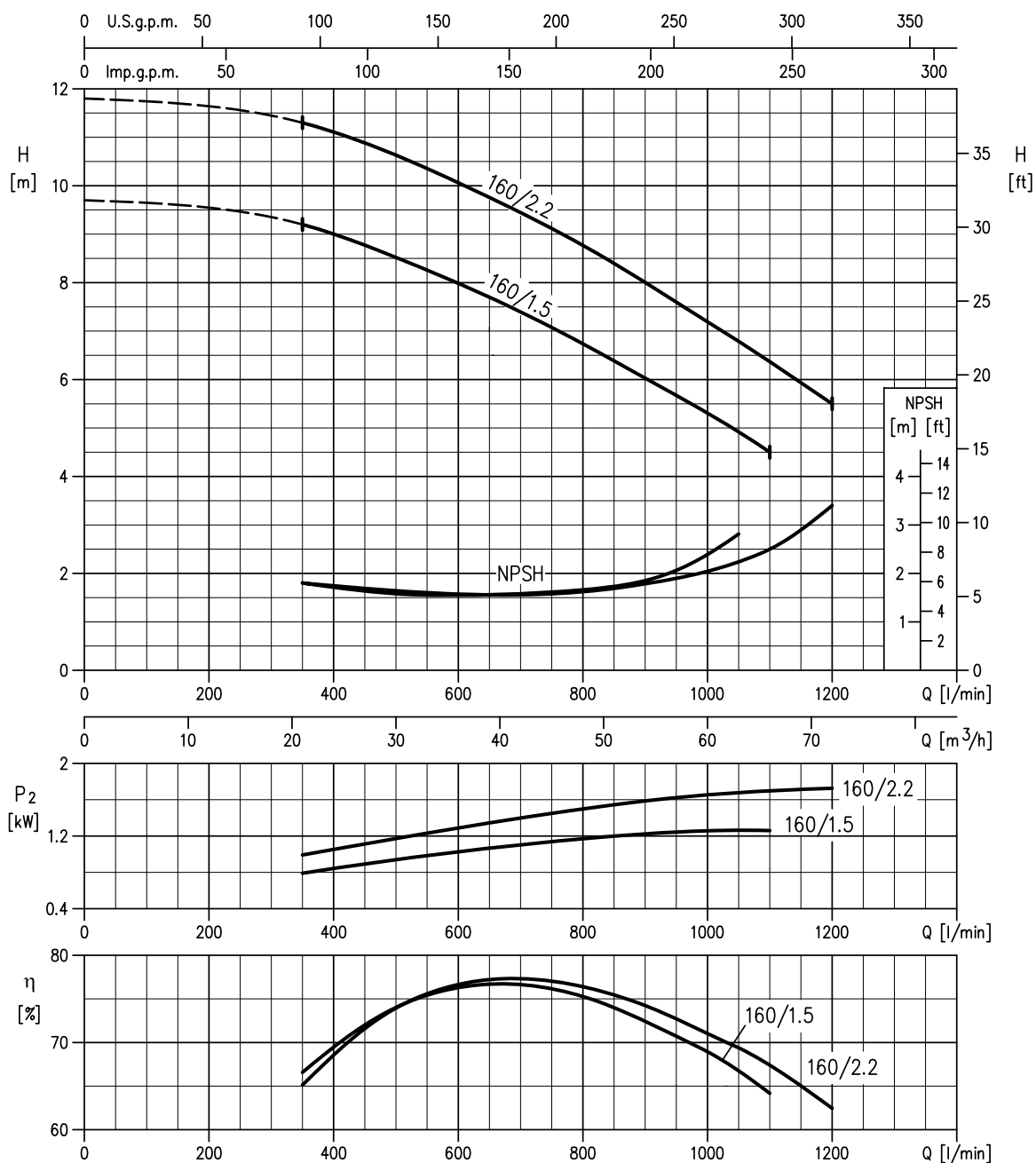
PERFORMANCE CURVE

4 POLE 50 Hz

V09

65-160/1.5 (1.5 kW) MEI > 0.70 – impeller diameter = 168 mm

65-160/2.2 (2.2 kW) MEI > 0.70 – impeller diameter = 178 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

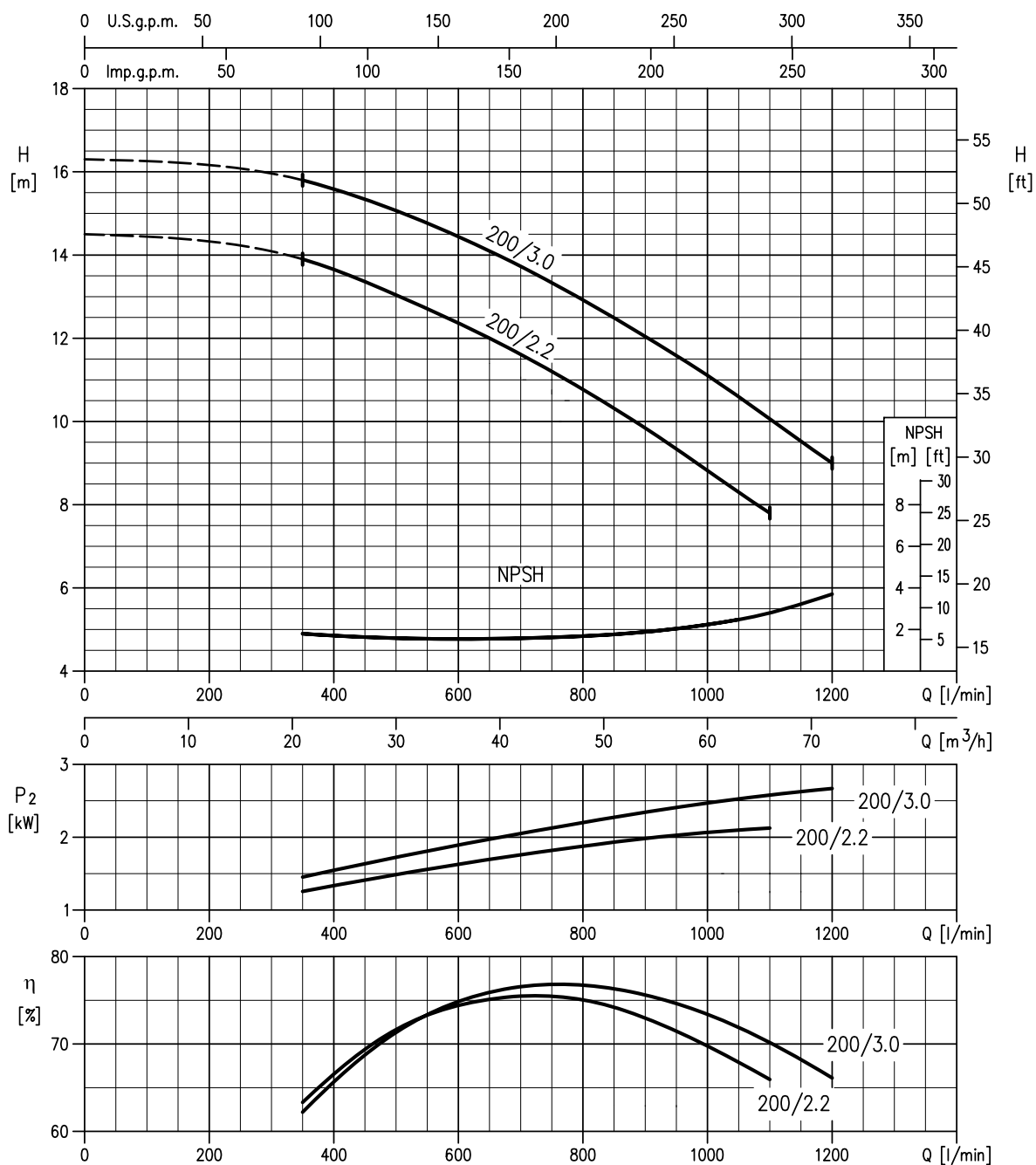
PERFORMANCE CURVE

4 POLE 50 Hz

V09

65-200/2.2 (2.2 kW) MEI > 0.70 – impeller diameter = 201 mm

65-200/3 (3.0 kW) MEI > 0.70 – impeller diameter = 212 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

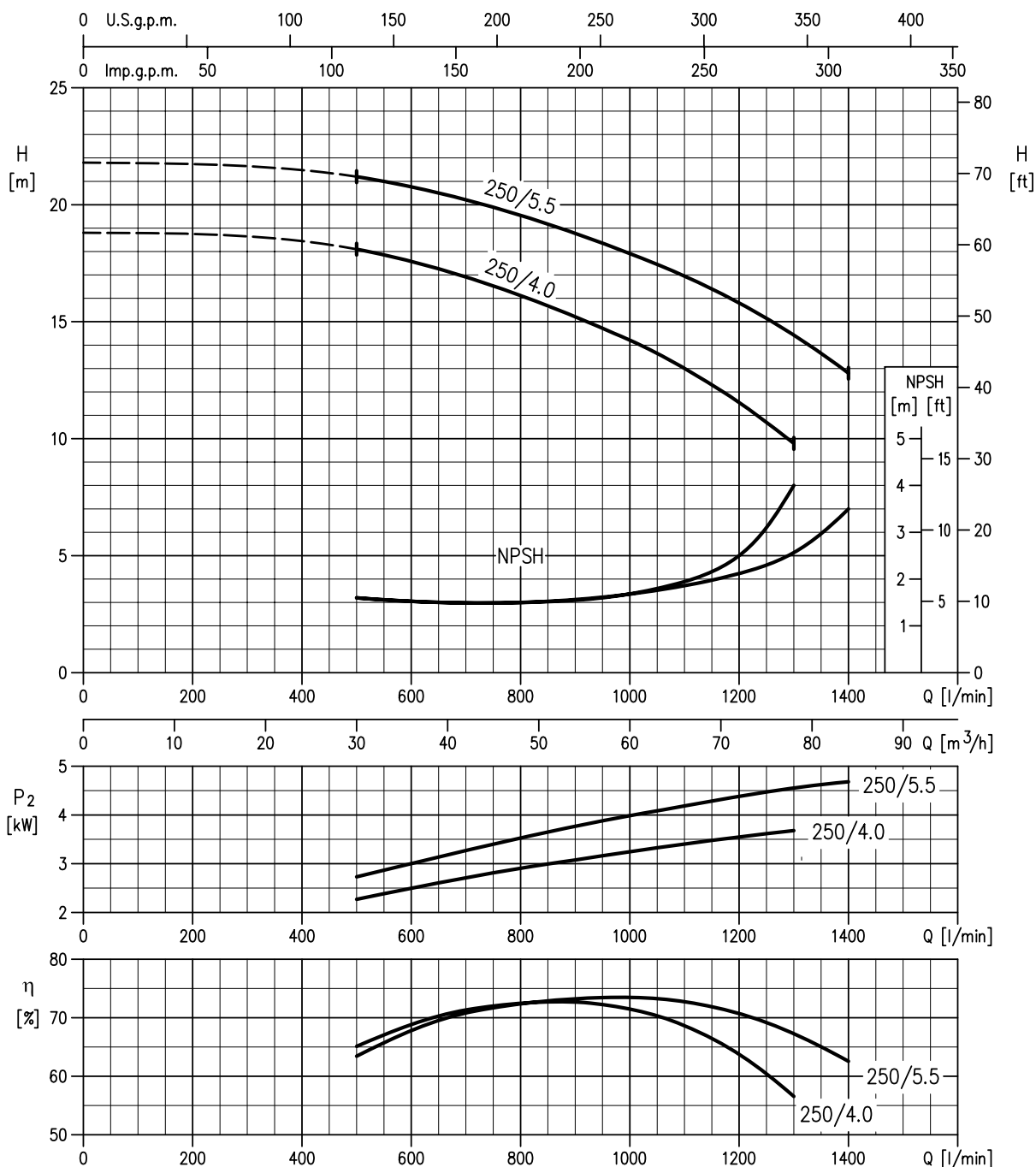
PERFORMANCE CURVE

4 POLE 50 Hz

V09

65-250/4 (4.0 kW) MEI > 0.50 – impeller diameter = 235 mm

65-250/5.5 (5.5 kW) MEI > 0.50 – impeller diameter = 250 mm

Rotation speed $\approx 1400 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

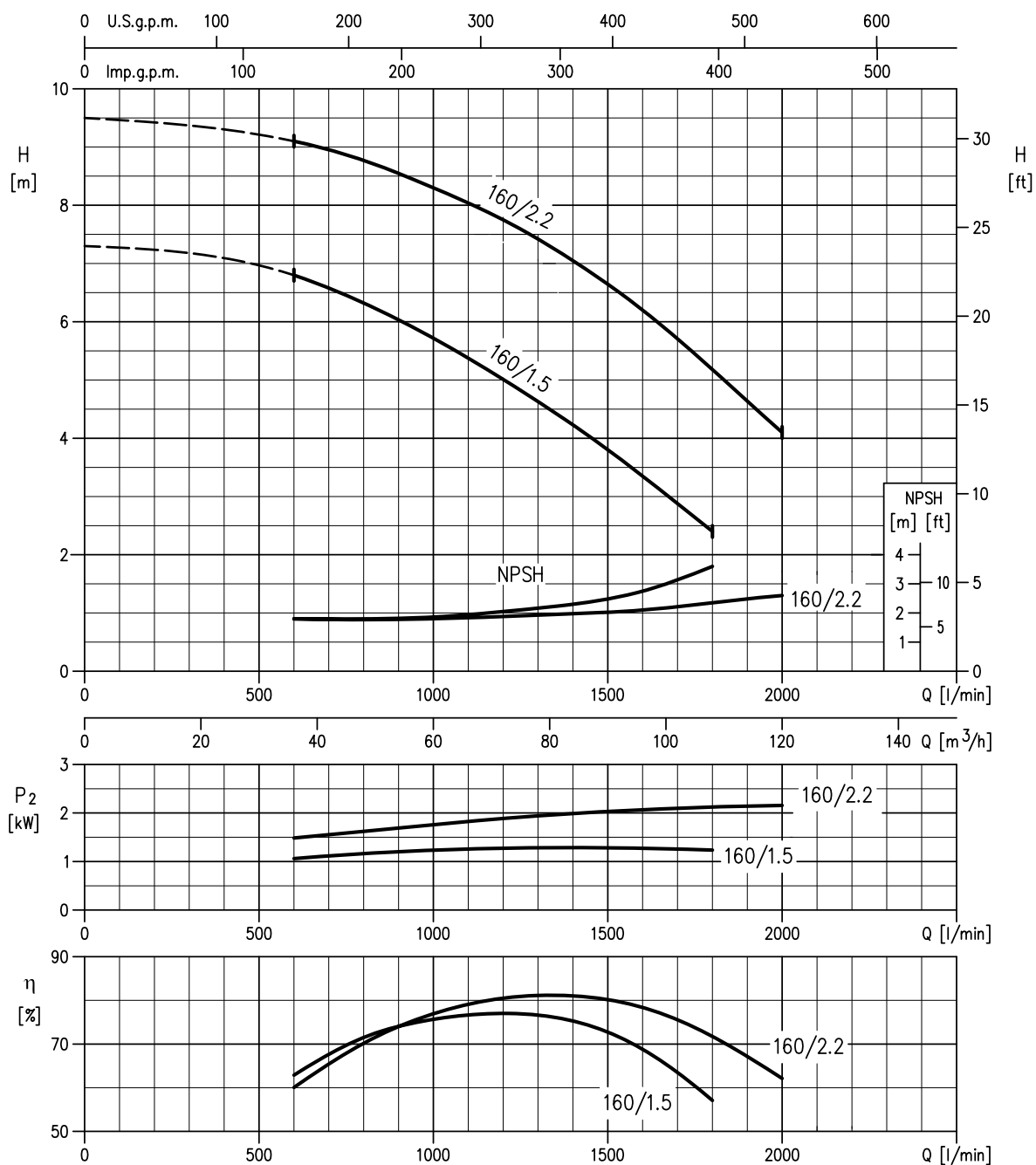
PERFORMANCE CURVE

4 POLE 50 Hz

V09

80-160/1.5 (1.5 kW) MEI > 0.60 – impeller diameter = 156 mm

80-160/2.2 (2.2 kW) MEI > 0.60 – impeller diameter = 174 mm



Rotation speed $\approx 1400 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 – Grade 3B

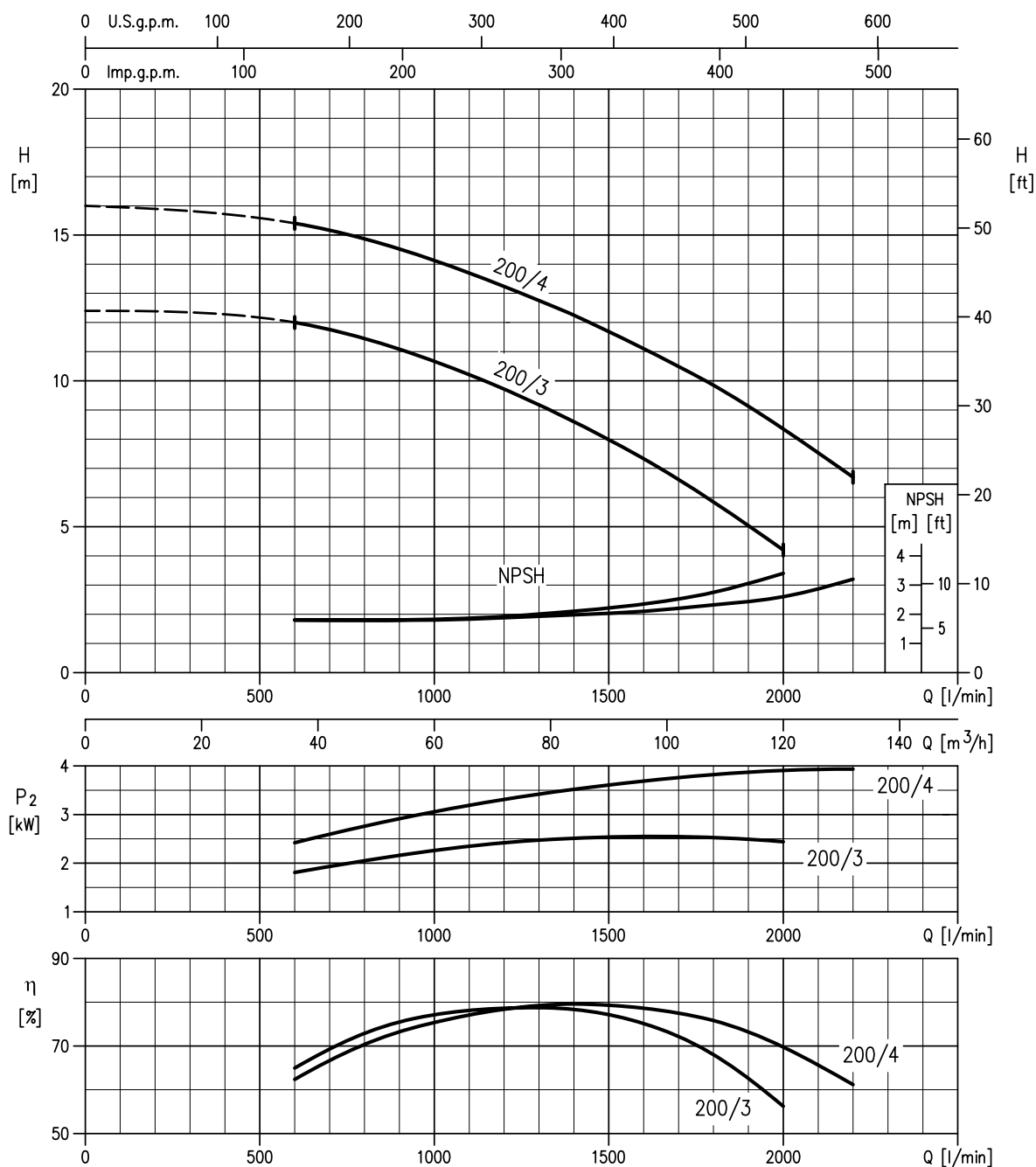
PERFORMANCE CURVE

4 POLE 50 Hz

V09

80-200/3 (3.0 kW) MEI > 0.40 – impeller diameter = 196 mm

80-200/4 (4.0 kW) MEI > 0.40 – impeller diameter = 219 mm

Rotation speed ≈ 1400 min⁻¹

Test standard: ISO 9906:2012 – Grade 3B

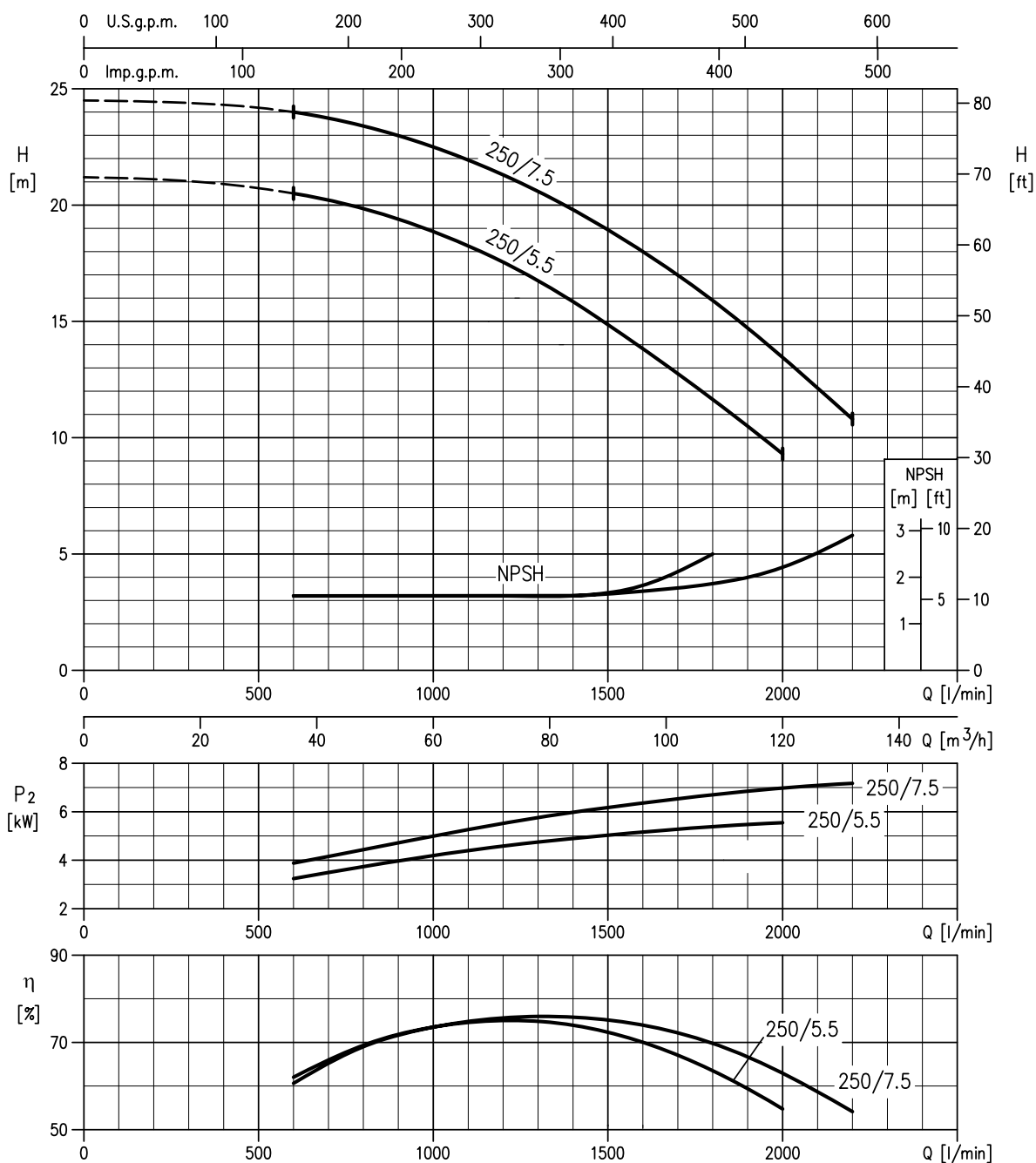
PERFORMANCE CURVE

4 POLE 50 Hz

V09

80-250/5.5 (5.5 kW) MEI > 0.60 – impeller diameter = 246 mm

80-250/7.5 (7.5 kW) MEI > 0.60 – impeller diameter = 263 mm



Rotation speed $\approx 1400 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 – Grade 3B

CONSTRUCTIONS 3LS4 32, 40, 50, 65

4 POLE 50 Hz

V09

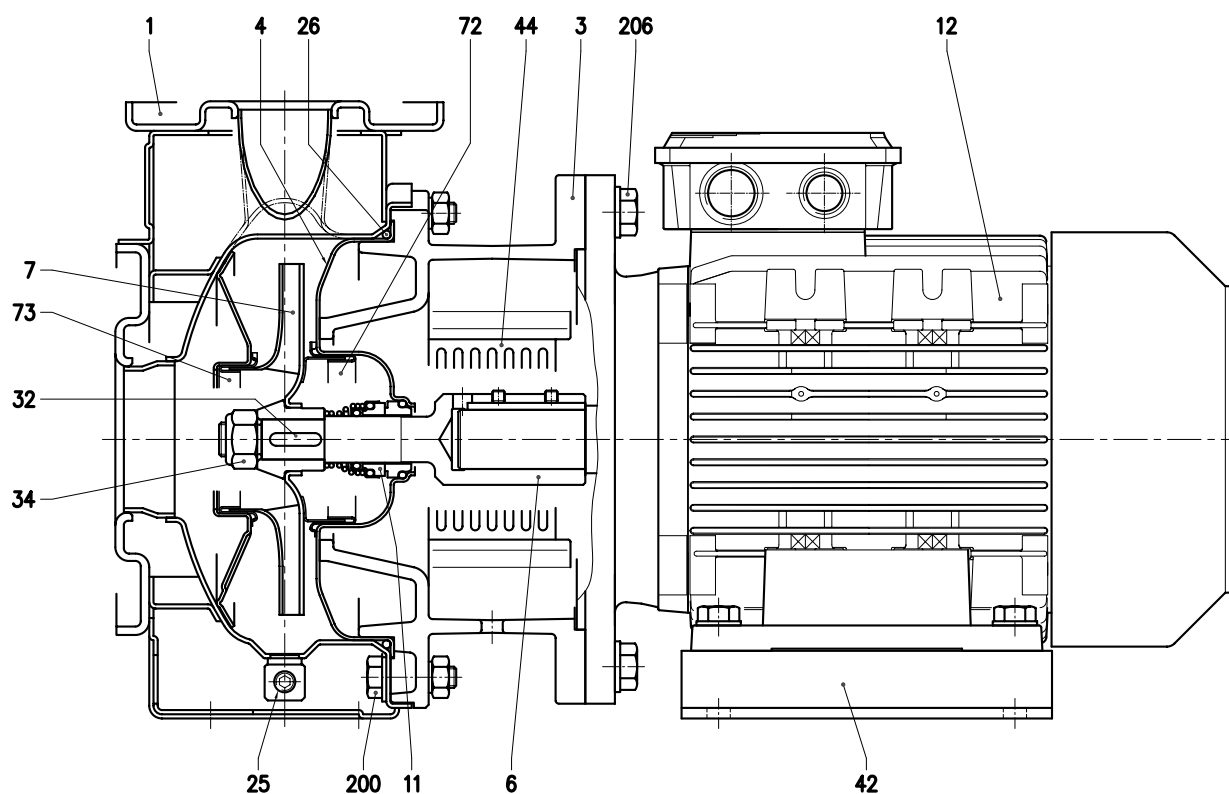
N°	PART NAME	MATERIAL 3LS4	DIMENSIONS	STANDARD	N. FOR 1 UNIT
001	Casing	EN 1.4404 (AISI 316L)			1
003	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
004	Casing cover	EN 1.4404 (AISI 316L)			1
006	Coupling - Part in contact with liquid	EN 1.4404 (AISI 316L)	See table p. 326		1
007	Impeller 32, 40, 50 65-125/160/200	EN 1.4404 (AISI 316L) EN 1.4401 (AISI 316)			1
011	Mechanical seal	SIC/SIC/FPM	See p. 321÷325		1
012	Motor	-			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 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 50-200, 65-160, 65-200	FPM	158.11x5.34	OR 6625	1
			183.52x5.34	OR 6720	
			227.96x5.34	OR 6895	
032	Key	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
034	Impeller nut Other model 50-200/2.2	EN 1.4404 (AISI 316L)	M16x1.5 M18x1.5	UNI 7474	1
042	Foot	Zinc-coated steel			[1]
044	Protection	EN 1.4301 (AISI 304)		EBARA DRAWING	2
072	Casing ring (not for 65 version) [2]	EN 1.4404 (AISI 316L)			1
073	Casing ring (not for 65 version)	EN 1.4404 (AISI 316L)			1
200	Screw 32-125, 40-125 40-160, 40-200, 50-125, 50-160, 50-200, 65-125, 65-160, 65-200	Stainless steel A2 70 class ISO 3506/1	M 8x30	UNI 5739	8
			M 10x35	UNI 5739	[3]
206	Screw up to 0.37kW from 0.55 to 1.5kW for 2.2 and 3kW	Zn. Steel 8.8 strength class ISO 898/1	M 8x20	UNI 5739	4
			M 10x25		
			M 12x30		

[1] N° for 1 unit=1 up to 1.5kW N° for 1 unit=2 for 2.2 and 3kW

[2] Only for version 32-200, 40-200, 50-160, 50-200

[3] N° for 1 unit=10 for 32-160, 40-160, 50-125, 65-125

N° for 1 unit=12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200

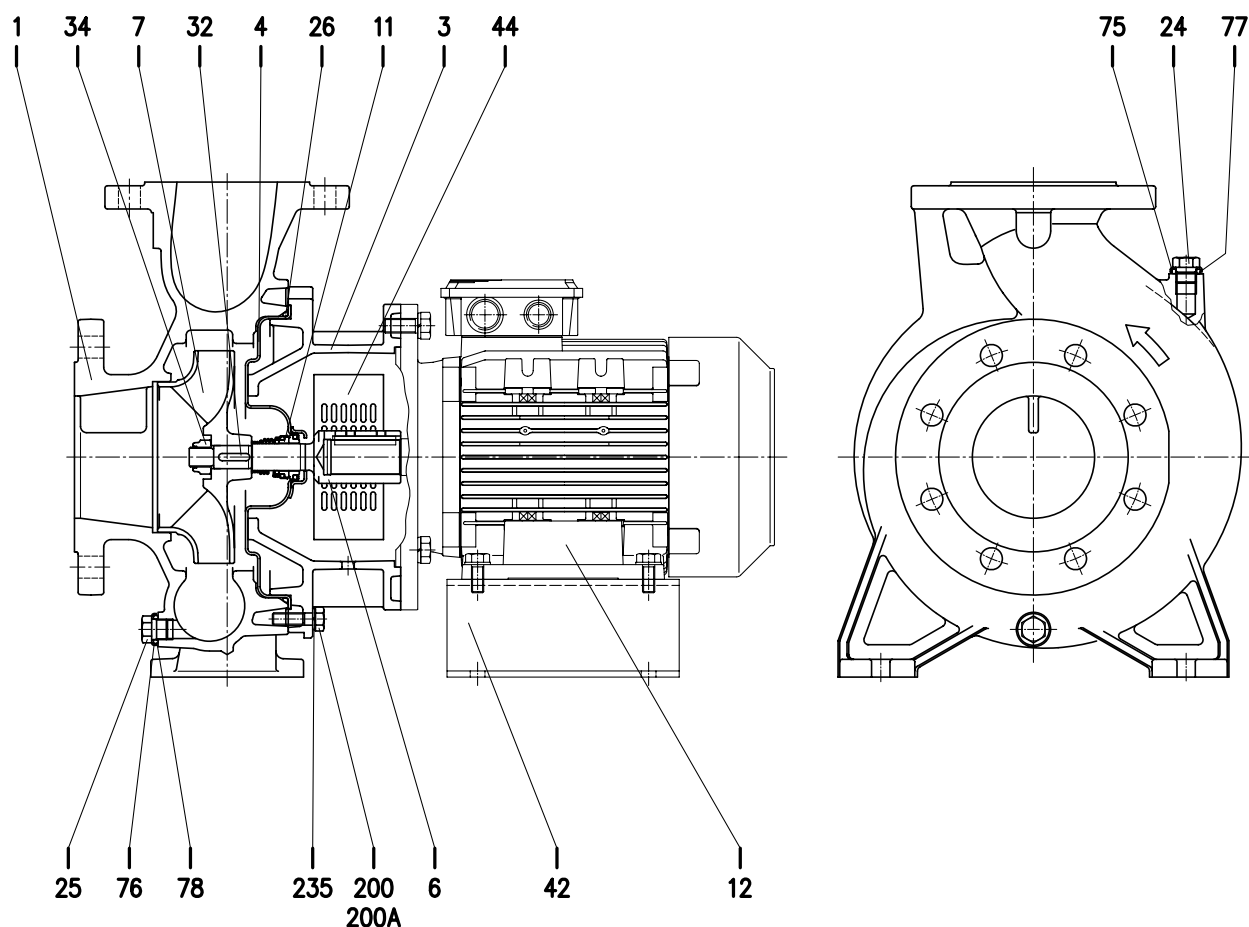


CONSTRUCTIONS 3LS4 80-160

4 POLE 50 Hz

V09

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	N. FOR 1 UNIT
001	Casing	CF8M - EN 1.4401 (AISI 316)			1
003	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
004	Casing cover	EN 1.4404 (AISI 316L)			1
006	Coupling	EN 1.4404 (AISI 316L)	See table p. 326		1
007	Impeller	CF8N - EN 1.4401 (AISI 316)			1
011	Mechanical seal	SiC/SiC/FPM	See p. 321+325		1
012	Motor	-			1
024	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
025	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
026	"O" ring	FPM	227.96x5.34	OR 6895	1
032	Key	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
034	Impeller nut	EN 1.4404 (AISI 316L)	M16x1.5	UNI 7474	1
042	Foot	Zinc-coated steel		EPE DRAWING	1
044	Protection	EN 1.4301 (AISI 304)		EPE DRAWING	2
075	Washer (plug)	EN 1.4404 (AISI 316L)			1
076	Washer (plug)				1
077	O-ring (plug)				1
078	O-ring (plug)				1
200	Screw	Stainless steel A2-70 class ISO 3506/1	M 10x35	UNI 5739	10
200A	Screw		M 10x30		2
235	Washer	EN 1.4301(AISI 304)	10.5	UNI 6592	12



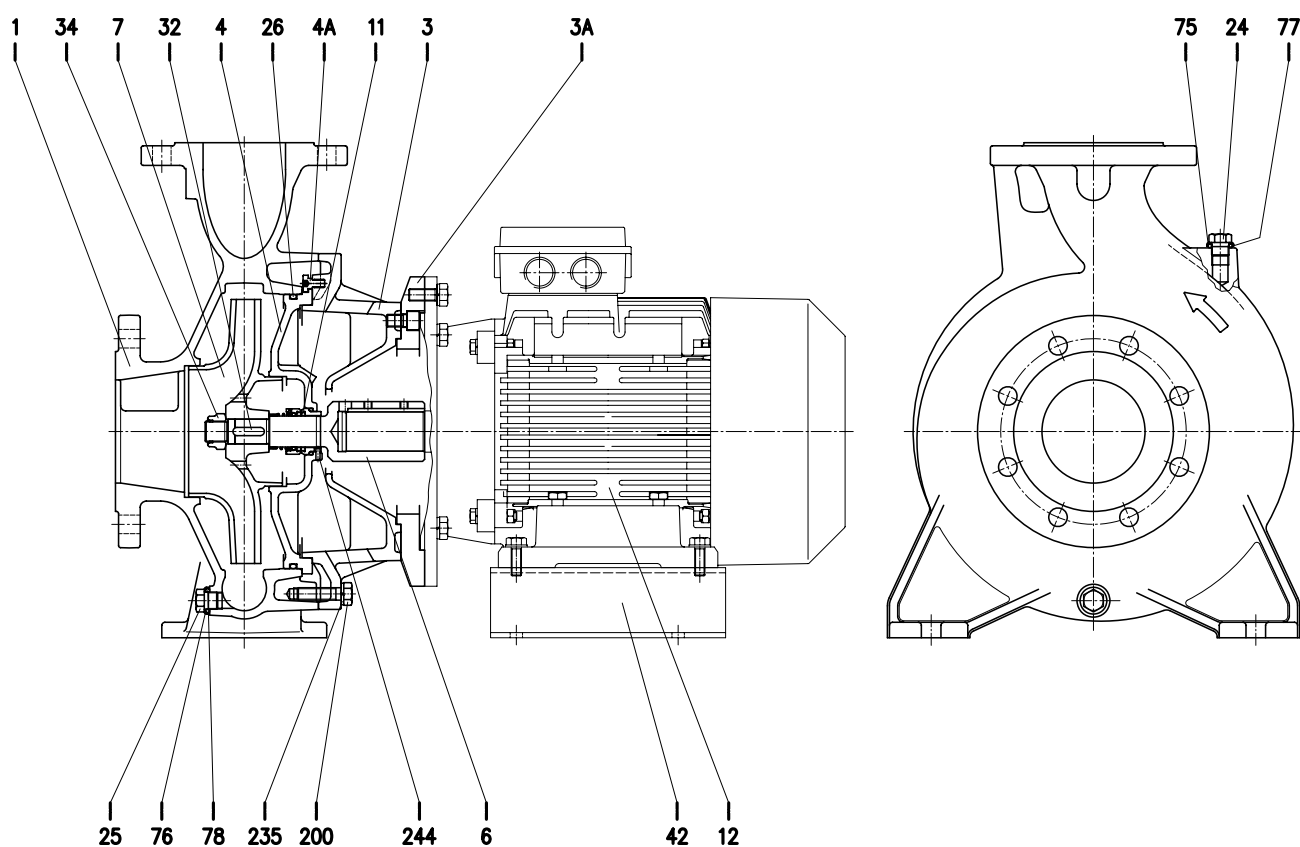
CONSTRUCTIONS 3LS4 65-250, 80

4 POLE 50 Hz

V09

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	N. FOR 1 UNIT
001	Casing	CF8M - EN 1.4401 (AISI 316)			1
003	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
003A	Adapter ring [1]	Cast iron EN-GJL-200-EN 1561			1
004	Casing cover	EN 1.4401 (AISI 316)			1
004A	Screw for casing cover	EN 1.4301(AISI 304)			2
006	Coupling	EN 1.4404 (AISI 316L)	See table p. 326		1
007	Impeller	CF8M - EN 1.4401 (AISI 316)			1
011	Mechanical seal	SiC/SiC/FPM	See p. 321+325		1
012	Motor	-			1
024	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
025	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
026	"O" ring	FPM	253.36x5.34	OR 6995	1
032	Key	EN 1.4401 (AISI 316)	8x7x30	UNI 6604	1
034	Impeller nut	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
042	Foot for motor	Zincked steel		EPE DRAWING	1
075	Washer (plug)	EN 1.4404 (AISI 316L)			1
076	Washer (plug)				
077	O-ring (plug)	FPM			1
078	O-ring (plug)				
200	Screw	Stainless steel A2-70 class ISO 3506/1	M 12x45	UNI 5739	10
235	Washer	EN 1.4301(AISI 304)	13	UNI 8842	10
244	Pin [2]	EN 1.4301(AISI 304)	4x12		1

[1] Only for 65-250/5.5kW



MECHANICAL FOR SEAL L VERSION Ø22

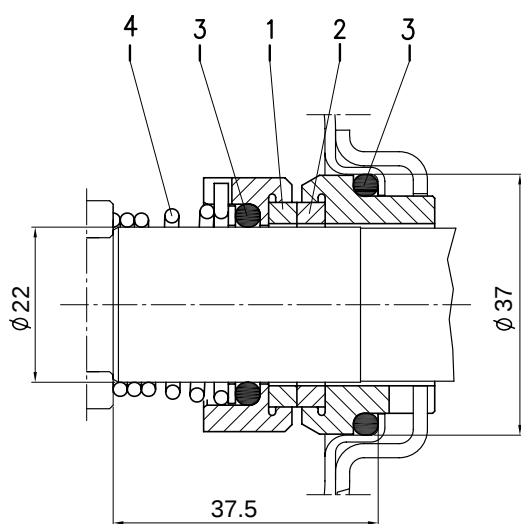


Fig. A

MECHANICAL SEAL FOR L VERSION Ø30

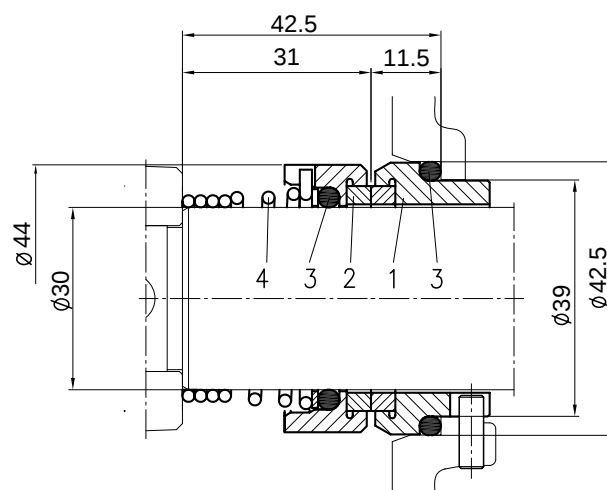


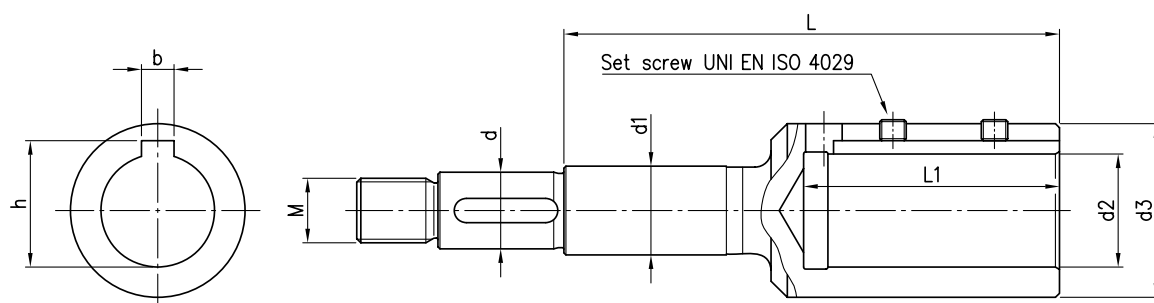
Fig. B

Fig.	Manufacturer Reference			Pump type	Material			
	Manuf.	Description	Material Description		1 Stationary seal ring	2 Rotary seal ring	3 rubber	4 Frame + spring
A	Burgmann	M377GN85/22-00-R	Q1Q1VGG	32-125/160/200 40-125/160/200 50-125/160/200 65-125/160/200 80-160	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
B		M377GN85-R		65-250 80-200/250				

CONSTRUCTIONS - COUPLING

4 POLE 50 Hz

V09



Type pumps	kW	HP	Motor Size	Dimensions mm									
				d	d1	d2	d3	M	L	L1	b	h	Set screw
32-125/0.25	0.25	0.33	71	19	22	14	28	M16x1.5	88	33	5	16.3	M5x6
32-160/0.37R	0.37	0.5	71	19	22	14	28	M16x1.5	88	33	5	16.3	M5x6
32-160/0.37	0.37	0.5	71	19	22	14	28	M16x1.5	88	33	5	16.3	M5x6
32-200/0.55R	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
32-200/0.55	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
32-200/0.75	0.75	1	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
40-125/0.37R	0.37	0.5	71	19	22	14	28	M16x1.5	88	33	5	16.3	M5x6
40-125/0.37	0.37	0.5	71	19	22	14	28	M16x1.5	88	33	5	16.3	M5x6
40-160/0.55R	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
40-160/0.55	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
40-200/1.1R	1.1	1.5	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
40-200/1.1	1.1	1.5	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
40-200/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
50-125/0.55R	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
50-125/0.55	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
50-160/1.1R	1.1	1.5	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
50-160/1.1	1.1	1.5	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
50-200/1.5R	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
50-200/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
50-200/2.2	2.2	3	100	22	22	28	43	M18x1.5	153	63	8	31.3	M8x8
65-125/0.55	0.55	0.75	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
65-125/0.75	0.75	1	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6
65-125/1.1	1.1	1.5	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
65-160/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
65-160/2.2	2.2	3	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
65-200/2.2	2.2	3	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
65-200/3	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
65-250/4	4	5.5	112	24	30	28	43	M20x1.5	128	63	8	31.3	M8x8
65-250/5.5	5.5	7.5	132	24	30	38	58	M20x1.5	151	84	10	41.3	M8x8
80-160/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
80-160/2.2	2.2	3	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
80-200/3	3	4	100	24	30	28	43	M20x1.5	128	63	8	31.3	M8x8
80-200/4	4	5.5	112	24	30	28	43	M20x1.5	128	63	8	31.3	M8x8
80-250/5.5	5.5	7.5	132	24	30	38	58	M20x1.5	151	84	10	41.3	M8x8
80-250/7.5	7.5	10	132	24	30	38	58	M20x1.5	151	84	10	41.3	M8x8

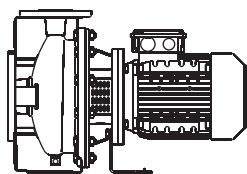


Fig 1

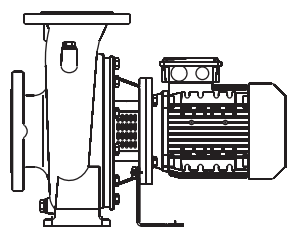


Fig 1A

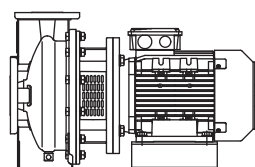


Fig 2

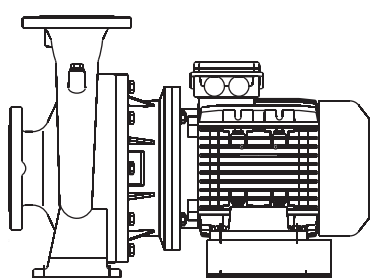
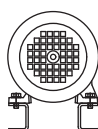
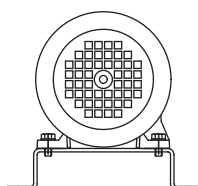


Fig 3



	Pump Model	Frame	Mount	Type	Page
32 mm	3LS4 32-125/0.25	71	B5	Fig 1	401
	3LS4 32-160/0.37R	71	B5	Fig 1	401
	3LS4 32-160/0.37	71	B5	Fig 1	401
	3LS4 32-200/0.55R	80	B5	Fig 1	401
	3LS4 32-200/0.55	80	B5	Fig 1	401
	3LS4 32-200/0.75	80	B5	Fig 1	401
40 mm	3LS4 40-125/0.37R	71	B5	Fig 1	401
	3LS4 40-125/0.37	71	B5	Fig 1	401
	3LS4 40-160/0.55R	80	B5	Fig 1	401
	3LS4 40-160/0.55	80	B5	Fig 1	401
	3LS4 40-200/1.1R	90	B5	Fig 1	401
	3LS4 40-200/1.1	90	B5	Fig 1	401
	3LS4 40-200/1.5	90	B5	Fig 1	401
50 mm	3LS4 50-125/0.55R	80	B5	Fig 1	401
	3LS4 50-125/0.55	80	B5	Fig 1	401
	3LS4 50-160/1.1R	90	B5	Fig 1	401
	3LS4 50-160/1.1	90	B5	Fig 1	401
	3LS4 50-200/1.5R	90	B5	Fig 1	401
	3LS4 50-200/1.5	90	B5	Fig 1	401
65 mm	3LS4 50-200/2.2	100	B35	Fig 2	402
	3LS4 65-125/0.55	80	B5	Fig 1	401
	3LS4 65-125/0.75	80	B5	Fig 1	401
	3LS4 65-125/1.1	90	B5	Fig 1	401
	3LS4 65-160/1.5	90	B5	Fig 1	401
	3LS4 65-160/2.2	100	B35	Fig 2	402
	3LS4 65-200/2.2	100	B35	Fig 2	402
	3LS4 65-200/3	100	B35	Fig 2	402
	3LS4 65-250/4	112	B35	Fig 2	404
	3LS4 65-250/5.5	132	B35	Fig 3	404
80 mm	3LS4 80-160/1.5	90	B5	Fig 1A	403
	3LS4 80-160/2.2	100	B35	Fig 3	404
	3LS4 80-200/3	100	B35	Fig 3	404
	3LS4 80-200/4	112	B35	Fig 3	404
	3LS4 80-250/5.5	132	B35	Fig 3	404
	3LS4 80-250/7.5	132	B35	Fig 3	404

Motor requirements

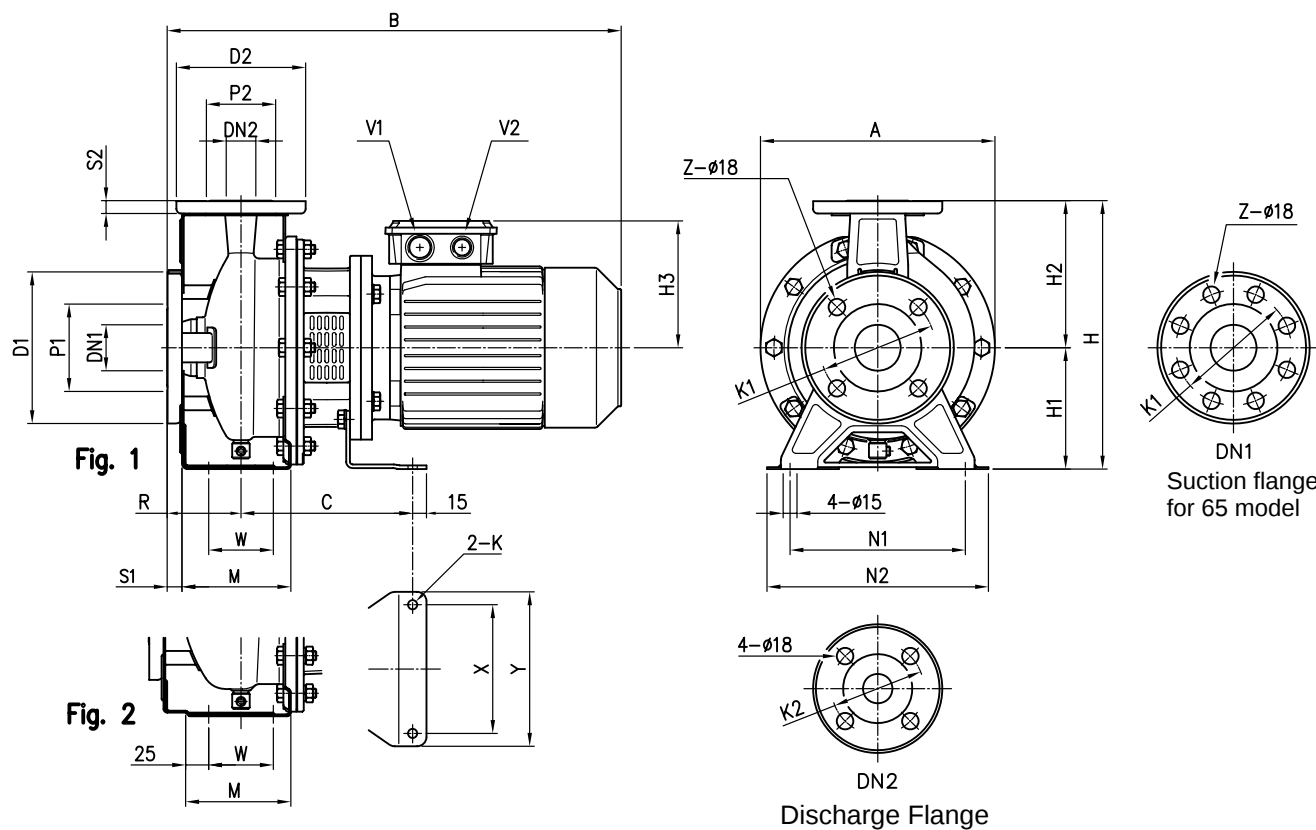
B3 = Flange Mount

B35 = Foot & Flange Mount

DIMENSIONS 3LS4 32,40,50,65

4 POLE 50 Hz

V09



Note : Weight and some Motor dimensions may vary depending on motor fitted

Model	Dimensions (mm)																												Weight [kgf]	
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Z	DN2	Ø P2	Ø K2	Ø D2	S2	Fig.	H	H1	H2	H3	R	W	M	N1	N2	A	B	C	X	Y	K	V1		V2
32-125/0.25	50	95	125	165	16	4	32	75	100	140	14	1	252	112	140	112	80	70	114	140	190	213	403	153	112	140	8	M20x1.5	M16x1.5	15.5
32-160/0.37R	50	95	125	165	16	4	32	75	100	140	14	1	292	132	160	112	80	70	118	190	240	254	403	153	112	140	8	M20x1.5	M16x1.5	18.5
32-160/0.37	50	95	125	165	16	4	32	75	100	140	14	1	292	132	160	112	80	70	118	190	240	254	403	153	112	140	8	M20x1.5	M16x1.5	18.5
32-200/0.55R	50	95	125	165	16	4	32	75	100	140	14	1	340	160	180	129	80	70	119	190	240	296	430	174	140	168	10	M25x1.5	M20x1.5	28
32-200/0.55	50	95	125	165	16	4	32	75	100	140	14	1	340	160	180	129	80	70	119	190	240	296	430	174	140	168	10	M25x1.5	M20x1.5	28
32-200/0.75	50	95	125	165	16	4	32	75	100	140	14	1	340	160	180	129	80	70	119	190	240	296	430	174	140	168	10	M25x1.5	M20x1.5	29.5
40-125/0.37R	65	115	145	185	16	4	40	80	110	150	14	1	252	112	140	112	80	70	114	160	210	213	403	153	112	140	8	M20x1.5	M16x1.5	16
40-125/0.37	65	115	145	185	16	4	40	80	110	150	14	1	252	112	140	112	80	70	114	160	210	213	403	153	112	140	8	M20x1.5	M16x1.5	16
40-160/0.55R	65	115	145	185	16	4	40	80	110	150	14	1	292	132	160	129	80	70	118	190	240	254	430	174	140	168	10	M25x1.5	M20x1.5	23.5
40-160/0.55	65	115	145	185	16	4	40	80	110	150	14	1	292	132	160	129	80	70	118	190	240	254	430	174	140	168	10	M25x1.5	M20x1.5	23.5
40-200/1.1R	65	115	145	185	16	4	40	80	110	150	14	2	340	160	180	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	34.5
40-200/1.1	65	115	145	185	16	4	40	80	110	150	14	2	340	160	180	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	34.5
40-200/1.5	65	115	145	185	16	4	40	80	110	150	14	2	340	160	180	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	35.5
50-125/0.55R	65	115	145	185	16	4	50	95	125	165	16	2	292	132	160	129	100	70	114	190	240	254	450	174	140	168	10	M25x1.5	M20x1.5	23.5
50-125/0.55	65	115	145	185	16	4	50	95	125	165	16	2	292	132	160	129	100	70	114	190	240	254	450	174	140	168	10	M25x1.5	M20x1.5	23.5
50-160/1.1R	65	115	145	185	16	4	50	95	125	165	16	2	340	160	180	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	34
50-160/1.1	65	115	145	185	16	4	50	95	125	165	16	2	340	160	180	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	34
50-200/1.5R	65	115	145	185	16	4	50	95	125	165	16	2	360	160	200	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	37
50-200/1.5	65	115	145	185	16	4	50	95	125	165	16	2	360	160	200	138	100	70	115	212	265	296	497	186	140	168	10	M25x1.5	M20x1.5	37
65-125/0.55	80	134	160	200	18	8	65	115	145	185	16	2	340	160	180	129	100	95	140	212	280	254	450	174	140	168	10	M25x1.5	M20x1.5	21.5
65-125/0.75	80	134	160	200	18	8	65	115	145	185	16	2	340	160	180	129	100	95	140	212	280	254	450	174	140	168	10	M25x1.5	M20x1.5	23
65-125/1.1	80	134	160	200	18	8	65	115	145	185	16	2	340	160	180	138	100	95	140	212	280	254	497	186	140	168	10	M25x1.5	M20x1.5	32
65-160/1.5	80	134	160	200	18	8	65	115	145	185	16	2	360	160	200	138	100	95	140	212	280	296	497	186	140	168	10	M25x1.5	M20x1.5	37

4 POLE 50 Hz

Technical drawing of a centrifugal pump assembly, showing front, side, and detail views with dimensions and labels.

Front View (Left):

- Overall width: 548
- Motor mounting holes: M25x1.5, M20x1.5
- Motor dimensions: 145 (height), 22.5 (width), 140 (base width)
- Flange dimensions: D2, P2, DN2, D1, P1, DN1, S1, 16
- Base dimensions: 100, 25, W, M, 205

Side View (Right):

- Overall width: 296
- Mounting holes: Z-Ø18
- Flange dimensions: K1, 4-Ø15, N1, N2
- Height dimensions: H2, H, H1

Detail Views:

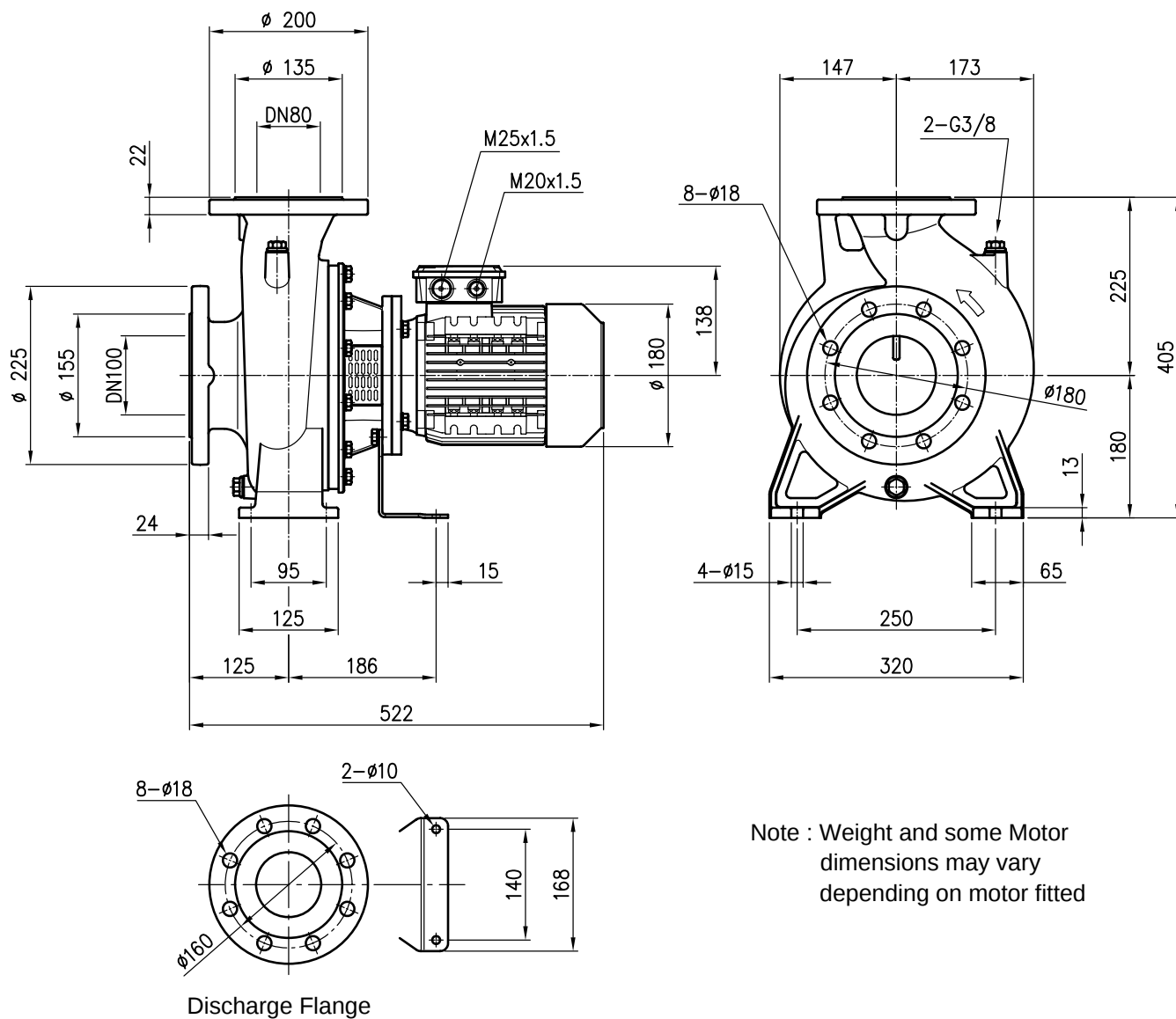
- Discharge Flange:** 4-Ø18, K2
- Motor Mounting Flange:** 4-Ø11, 42, 185, 160, 202
- Suction flange for 65 model:** Z-Ø18, K1

Model	Dimensions (mm)																	Weight [kgf]
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Z	Ø DN2	Ø P2	Ø K2	Ø D2	H	H1	H2	W	M	N1	N2	
50-200/2.2	65	115	145	185	16	4	50	95	125	165	360	160	200	70	115	212	265	43
65-160/2.2	80	134	160	200	18	8	65	115	145	185	360	160	200	95	140	212	280	46
65-200/2.2	80	134	160	200	18	8	65	115	145	185	405	180	225	95	140	250	320	43
65-200/3	80	134	160	200	18	8	65	115	145	185	405	180	225	95	140	250	320	48.5

DIMENSIONS 3LS4 80

4 POLE 50 Hz

V09



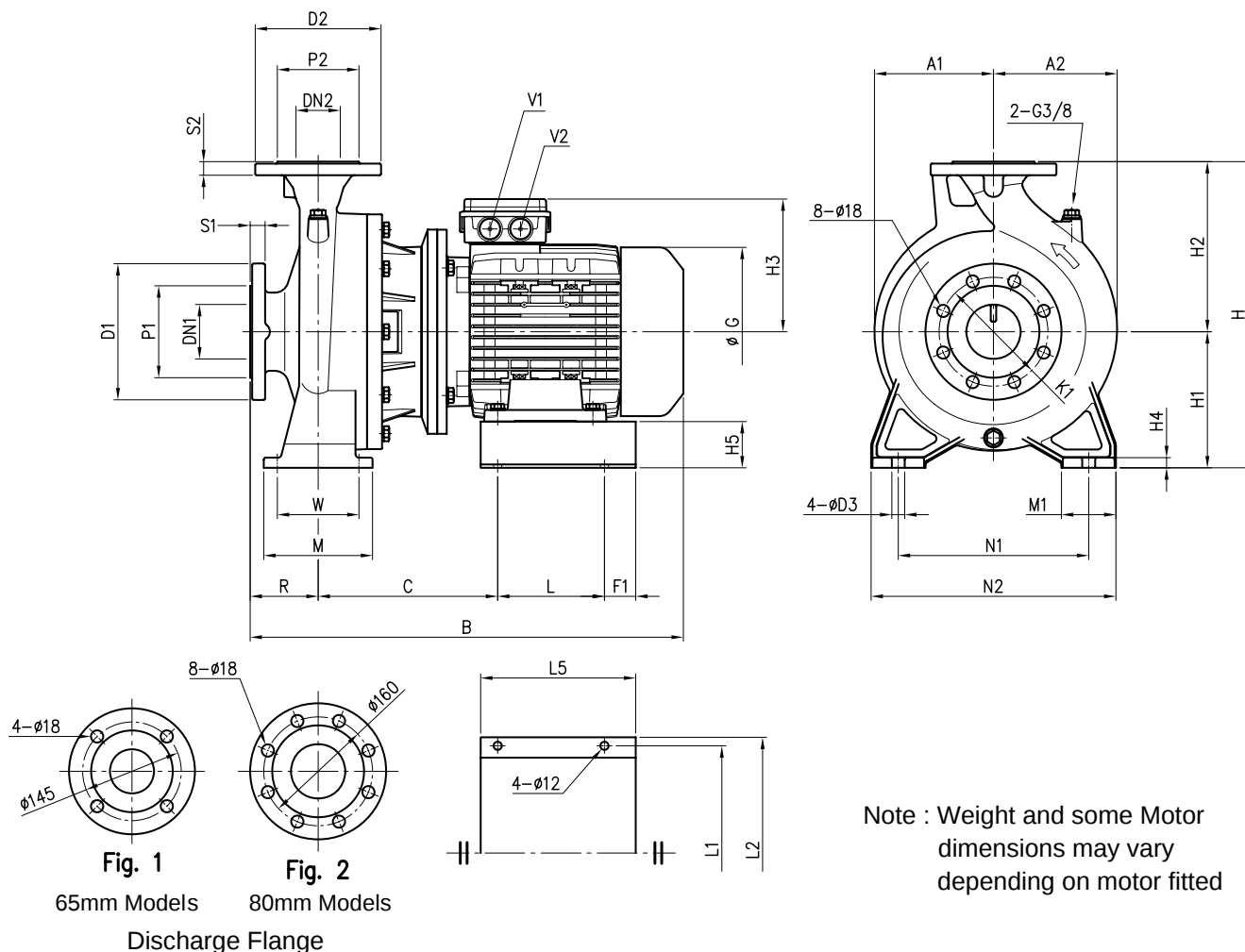
Note : Weight and some Motor dimensions may vary depending on motor fitted

3LS4 80-160/1.5
Pumps weight : 60.5kg

DIMENSIONS 3LS4 65-250, 80

4 POLE 50 Hz

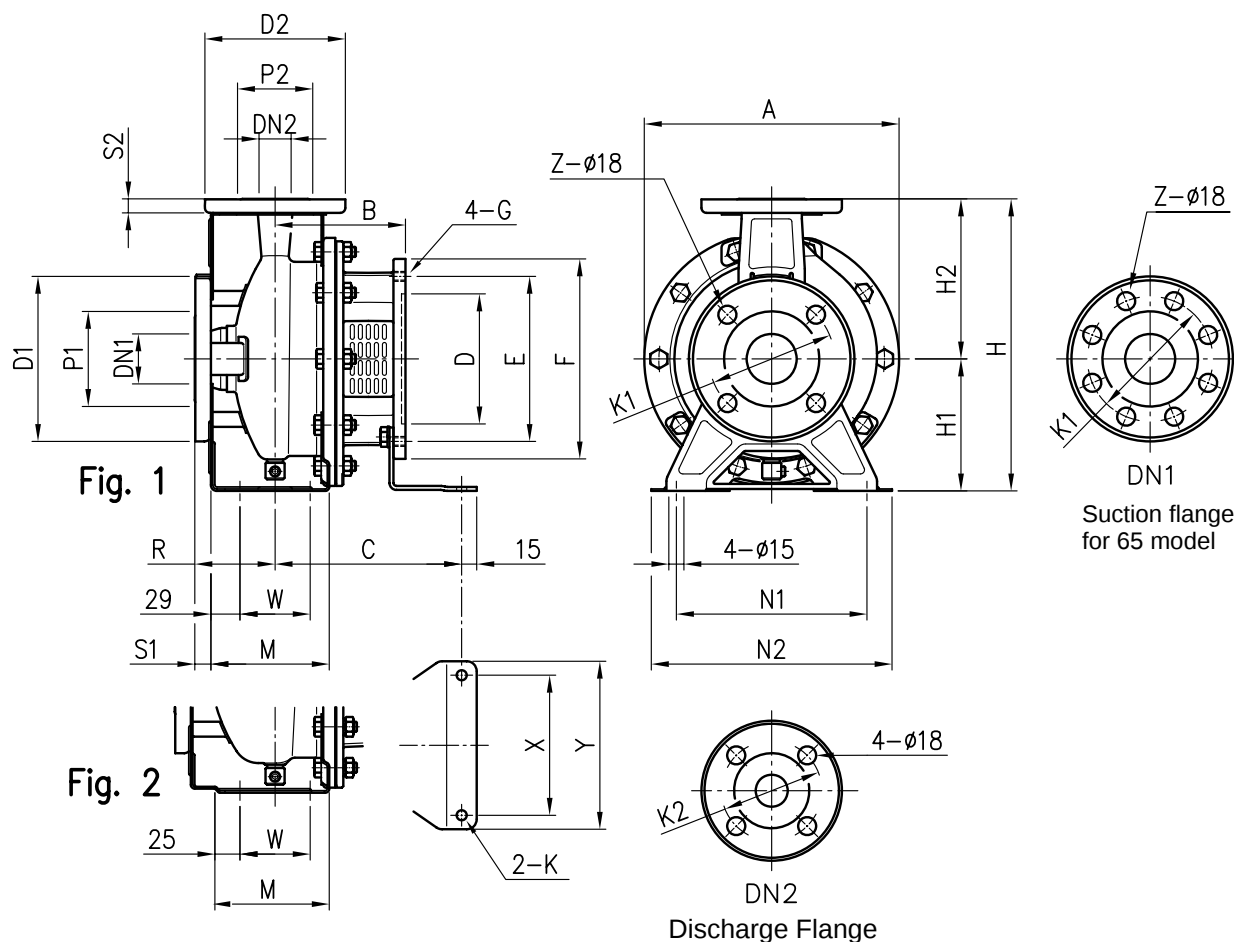
V09



Pump type	Dimensions [mm]																					
	DN1	P1	K1	D1	S1	DN2	P2	D2	S2	H	H1	H2	H3	H4	H5	R	W	N1	N2	M	M2	
65-250/4	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	161	15	88	100	120	280	360	160	80	
65-250/5.5	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	195	15	68	100	120	280	360	160	80	
80-160/2.2	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	145	13	80	125	95	250	320	125	65	
80-200/3	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	145	13	80	125	95	280	345	125	65	
80-200/4	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	161	13	68	125	95	280	345	125	65	
80-250/5.5	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	195	15	68	125	120	315	400	160	80	
80-250/7.5	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	195	15	68	125	120	315	400	160	80	
	L	L1	L2	L5	A1	A2	B	C	F1	G	D3	V1	V2	Weight [kgf]								
65-250/4	147	265	290	187	175	182	580	215	20	225	19	M25x1.5	M20x1.5	86								
65-250/5.5	157	315	340	228	175	182	637	264	46	248	19	M32x1.5	M32x1.5	99.5								
80-160/2.2	140	250	275	190	147	173	573	205	25	196	15	M25x1.5	M20x1.5	70								
80-200/3	140	250	275	190	175	182	583	215	25	196	15	M25x1.5	M20x1.5	81.5								
80-200/4	157	315	340	228	175	182	605	198	46	225	15	M25x1.5	M20x1.5	90								
80-250/5.5	157	315	340	228	175	192	662	264	46	248	19	M32x1.5	M32x1.5	104.5								
80-250/7.5	157	315	340	228	175	192	702	264	46	248	19	M32x1.5	M32x1.5	109.5								

DIMENSIONS 3LSF4 32, 40, 50, 65- PUMP END KIT 4 POLE 50 Hz

V09

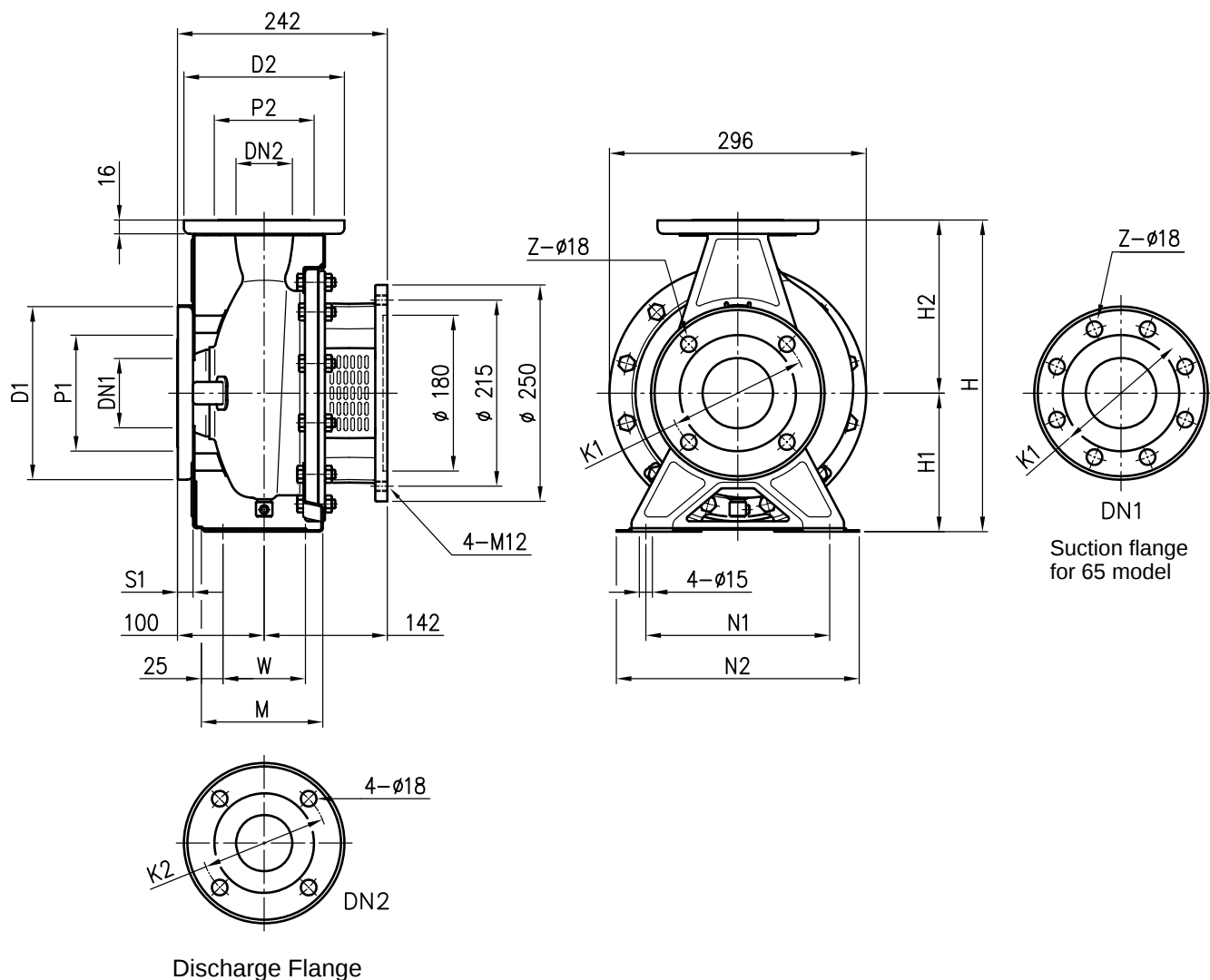


Pump type	Fig.	Dimensions [mm]																										Weight [kgf]			
		DN1	P1	K1	D1	S1	Z	DN2	P2	K2	D2	S2	H	H1	H2	M	N1	N2	R	W	A	B	C	D	E	F	G		X	Y	K
32-125/0.25	1	50	95	125	165	16	4	32	75	100	140	14	252	112	140	114	140	190	80	70	213	108	153	110	130	160	M8	112	140	8	15
32-160/0.37R	1	50	95	125	165	16	4	32	75	100	140	14	292	132	160	118	190	240	80	70	254	108	153	110	130	160	M8	112	140	8	19.5
32-160/0.37	1	50	95	125	165	16	4	32	75	100	140	14	292	132	160	118	190	240	80	70	254	108	153	110	130	160	M8	112	140	8	19.5
32-200/0.55R	1	50	95	125	165	16	4	32	75	100	140	14	340	160	180	119	190	240	80	70	296	118	174	130	165	200	M10	140	168	10	24
32-200/0.55	1	50	95	125	165	16	4	32	75	100	140	14	340	160	180	119	190	240	80	70	296	118	174	130	165	200	M10	140	168	10	24
32-200/0.75	1	50	95	125	165	16	4	32	75	100	140	14	340	160	180	119	190	240	80	70	296	118	174	130	165	200	M10	140	168	10	24
40-125/0.37R	1	65	115	145	185	16	4	40	80	110	150	14	252	112	140	114	160	210	80	70	213	108	153	110	130	160	M8	112	140	8	16.5
40-125/0.37	1	65	115	145	185	16	4	40	80	110	150	14	252	112	140	114	160	210	80	70	213	108	153	110	130	160	M8	112	140	8	16.5
40-160/0.55R	1	65	115	145	185	16	4	40	80	110	150	14	292	132	160	118	190	240	80	70	254	118	174	130	165	200	M10	140	168	10	20
40-160/0.55	1	65	115	145	185	16	4	40	80	110	150	14	292	132	160	118	190	240	80	70	254	118	174	130	165	200	M10	140	168	10	20
40-200/1.1R	2	65	115	145	185	16	4	40	80	110	150	14	340	160	180	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	27
40-200/1.1	2	65	115	145	185	16	4	40	80	110	150	14	340	160	180	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	27
40-200/1.5	2	65	115	145	185	16	4	40	80	110	150	14	340	160	180	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	27
50-125/0.55R	2	65	115	145	185	16	4	50	95	125	165	16	292	132	160	114	190	240	100	70	254	118	174	130	165	200	M10	140	168	10	21
50-125/0.55	2	65	115	145	185	16	4	50	95	125	165	16	292	132	160	114	190	240	100	70	254	118	174	130	165	200	M10	140	168	10	21
50-160/1.1R	2	65	115	145	185	16	4	50	95	125	165	16	340	160	180	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	26
50-160/1.1	2	65	115	145	185	16	4	50	95	125	165	16	340	160	180	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	26
50-200/1.5R	2	65	115	145	185	16	4	50	95	125	165	16	360	160	200	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	29.5
50-200/1.5	2	65	115	145	185	16	4	50	95	125	165	16	360	160	200	115	212	265	100	70	296	130	186	130	165	200	M10	140	168	10	29.5
65-125/0.55	2	80	134	160	200	18	8	65	115	145	185	16	340	160	180	140	212	280	100	95	254	118	174	130	165	200	M10	140	168	10	26
65-125/0.75	2	80	134	160	200	18	8	65	115	145	185	16	340	160	180	140	212	280	100	95	254	118	174	130	165	200	M10	140	168	10	27.5
65-125/1.1	2	80	134	160	200	18	8	65	115	145	185	16	340	160	180	140	212	280	100	95	254	118	174	130	165	200	M10	140	168	10	28.5
65-160/1.5	2	80	134	160	200	18	8	65	115	145	185	16	360	160	200	140	212	280	100	95	296	130	186	130	165	200	M10	140	168	10	30

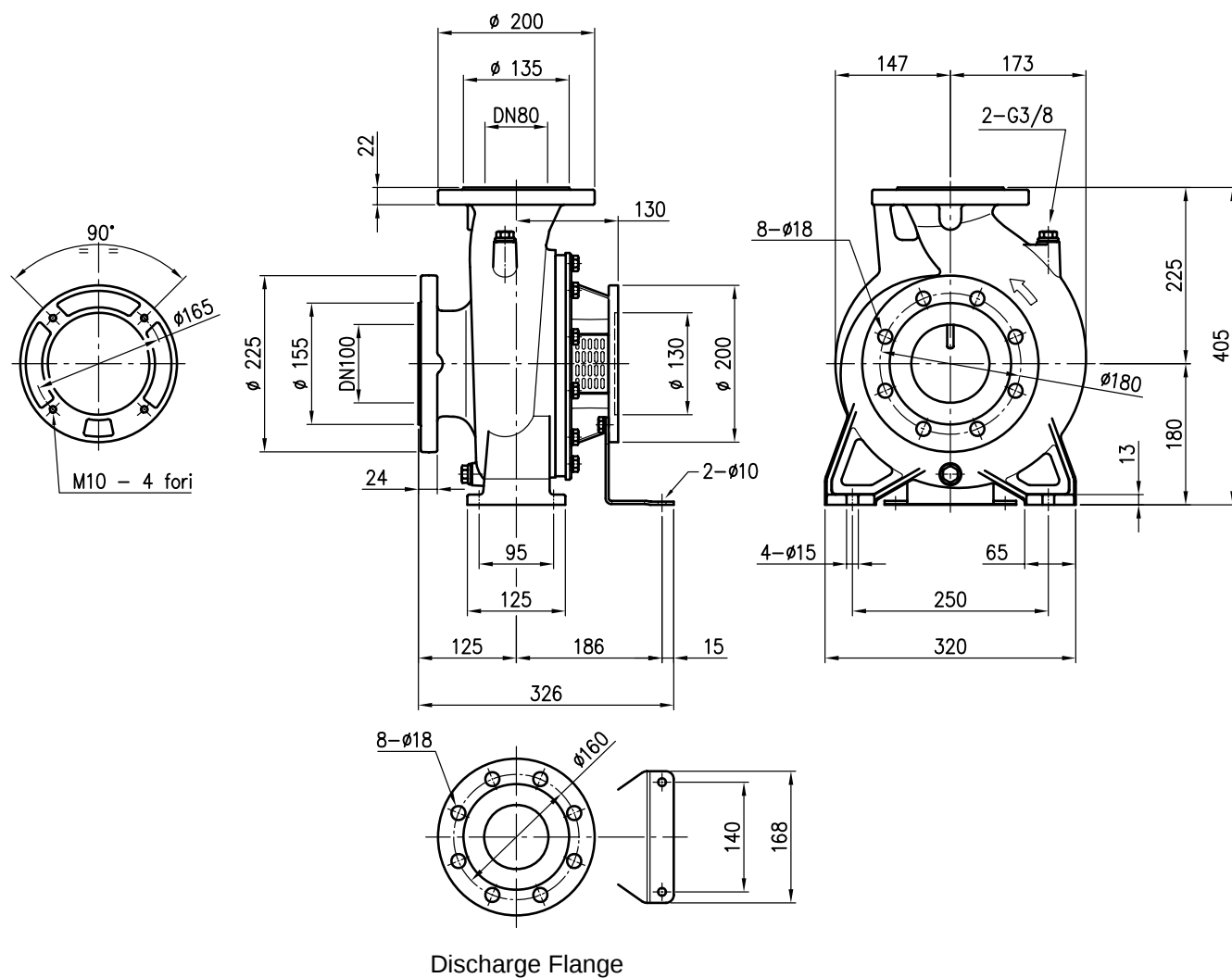
DIMENSIONS 3LSF4 50, 65 - PUMP END KIT

4 POLE 50 Hz

V09



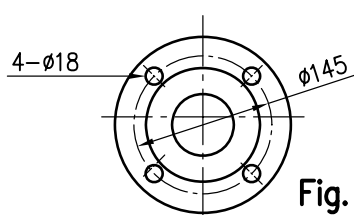
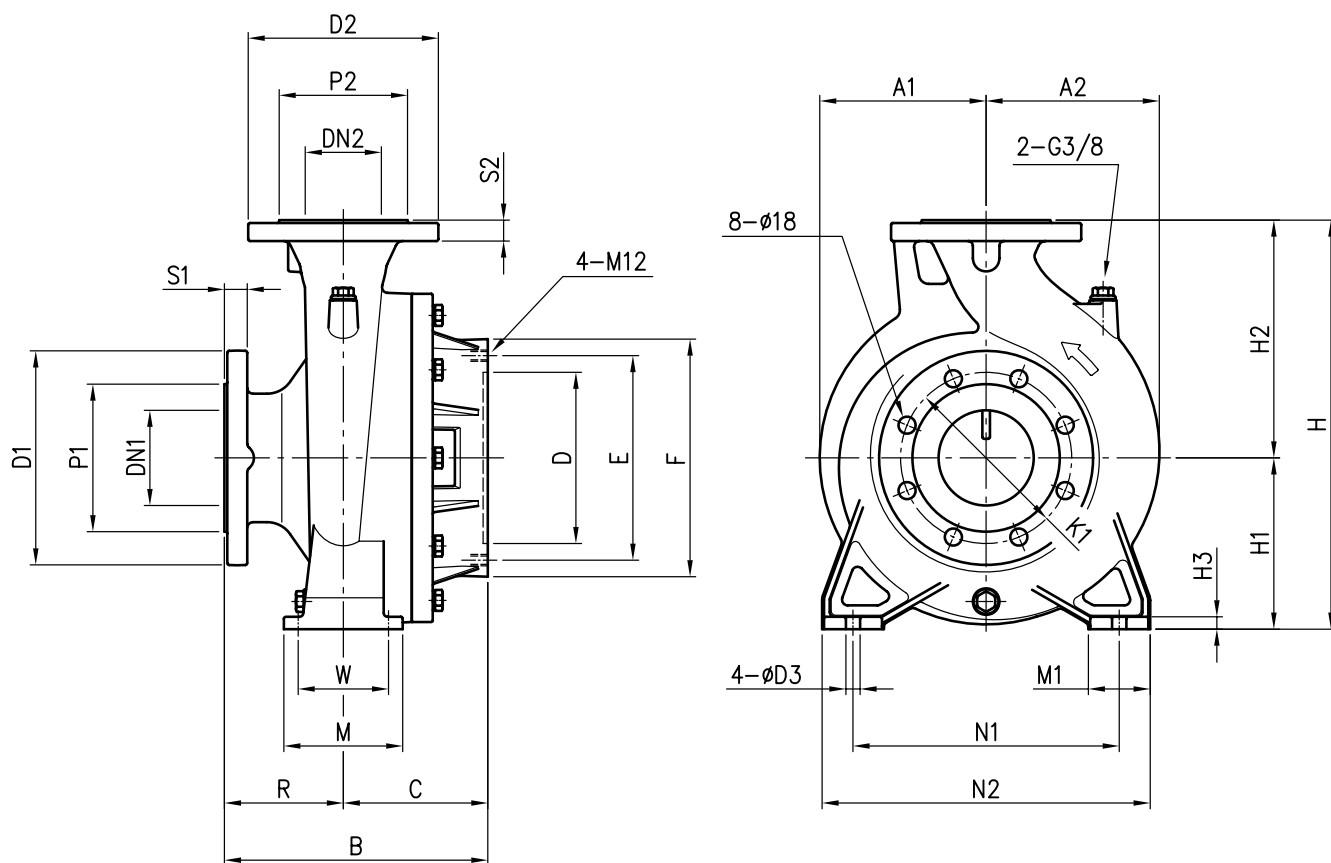
Pump type	Dimensions [mm]																	Weight [kgf]
	DN1	P1	K1	D1	S1	Z	DN2	P2	K2	D2	H	H1	H2	M	N1	N2	W	
50-200/2.2	65	115	145	185	16	4	50	95	125	165	360	160	200	115	212	265	70	29.5
65-160/2.2	80	134	160	200	18	8	65	115	145	185	360	160	200	140	212	280	95	30
65-200/2.2	80	134	160	200	18	8	65	115	145	185	405	180	225	140	250	320	95	29.5
65-200/3	80	134	160	200	18	8	65	115	145	185	405	180	225	140	250	320	95	30

**80-160/1.5**

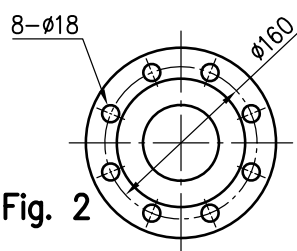
Pump weight: 50.2Kg

DIMENSIONS 3LSF4 65-250, 80 - PUMP END KIT 4 POLE 50 Hz

V09



65mm Models



80mm Models

Fig. 1

Fig. 2

Discharge Flange

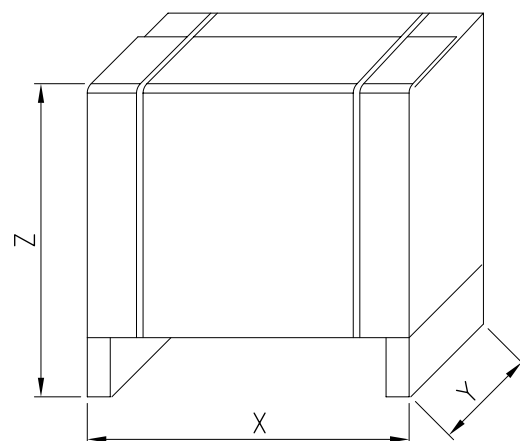
Pump type	Dimensions [mm]																										Weight [kgf]	
	DN1	P1	K1	D1	S1	DN2	P2	D2	S2	H	H1	H2	H3	R	W	N1	N2	M	M1	D3	B	C	D	E	F	A1		A2
65-250/4	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	15	100	120	280	360	160	80	19	252	152	180	215	250	175	182	56.5
65-250/5.5	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	15	100	120	280	360	160	80	19	252	152	230	265	300	175	182	53.5
80-160/2.2	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	15	267	142	180	215	250	147	173	50.5
80-200/3	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	15	277	152	180	215	250	175	182	59
80-200/4	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	15	277	152	180	215	250	175	182	60.5
80-250/5.5	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	19	300	175	230	265	300	175	192	58
80-250/7.5	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	19	300	175	230	265	300	175	192	59

PACKING AND WEIGHT 3LS4

4 POLE 50 Hz

V09

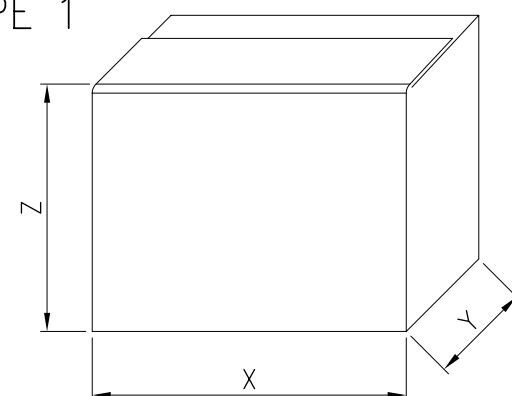
Pump Type	PACKING [mm]			WEIGHT [Kg]
	X	Y	Z	
32-125/0.25	580	350	510	17.5
32-160/0.37R				21.5
32-160/0.37				21.5
32-200/0.55R				26.5
32-200/0.55				26.5
32-200/0.75				32
40-125/0.37R				18.5
40-125/0.37				18.5
40-160/0.55R				25.5
40-160/0.55				25.5
40-200/1.1R				35.5
40-200/1.1				35.5
40-200/1.5				37.5
50-125/0.55R				26
50-125/0.55				26
50-160/1.1R				36.5
50-160/1.1				36.5
50-200/1.5R				38.5
50-200/1.5				38.5
50-200/2.2	730	420	510	45
65-125/0.55	580	350	510	28
65-125/0.75				30
65-125/1.1				38
65-160/1.5				43
65-160/2.2	730	420	510	54
65-200/2.2				53
65-200/3				56
65-250/4	1000	500	470	93
65-250/5.5				106.5
80-160/1.5	730	420	510	76
80-160/2,2				
80-200/3	1000	500	470	88.5
80-200/4				97
80-250/5.5				111.5
80-250/7.5				116.5



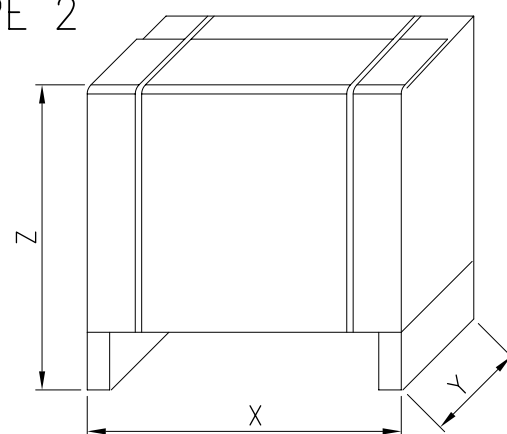
* Weights & Dimensions are Approximate.
Based on WEG cast iron motors.

Type pumps	PACKING [mm]			WEIGHT [Kg]	PACK TYPE
	x	y	z		
32-125/0.25	374	424	405	17	1
32-160/0.37R				21	
32-160/0.37					
32-200/0.55R				26	
32-200/0.55					
32-200/0.75					
40-125/0.37R				18.5	
40-125/0.37					
40-160/0.55R				22	
40-160/0.55					
40-200/1.1R				29	
40-200/1.1					
40-200/1.5					
50-125/0.55R				23	
50-125/0.55					
50-160/1.1R				28	
50-160/1.1					
50-200/1.5R				31.5	
50-200/1.5					
50-200/2.2					
65-125/0.55	780	475	620	28	2
65-125/0.75				29.5	
65-125/1.1				30.5	
65-160/1.5				31.5	
65-160/2.2				32	
65-200/2.2				31.5	
65-200/3				32	
65-250/4				63.5	
65-250/5.5				60.5	
80-160/1.5	580	390	545	56.5	
80-160/2.2					
80-200/3	780	475	620	66	
80-200/4				67.5	
80-250/5.5				65	
80-250/7.5				66	

TYPE 1



TYPE 2



MOTOR DATA (For WEG Motors)

4 POLE 50 Hz

V09

IV Pole - 1500 rpm

Output	IEC Frame	Locked rotor current IL/Ir (%)	Full load torque Tr Nm	Locked rotor torque TI/Tr (%)	Break-down torque Tb/Tr (%)	Moment of Inertia J kgm²	Max. Locked rotor time(s)		Approx Weight (kg)	Noise level dB (A) sound pressure level	Rated speed (rpm)	400 V						
							Cold	Hot				% of full load						Full load current Ir (A)
												Efficiency η			Power Factor Cos φ			
kW												50	75	100	50	75	100	
0.25	71	500	1.66	300	310	0.00079	106	48	10.5	43	1400	69	73	75	0.5	0.61	0.69	0.70
0.37	71	500	2.52	270	280	0.00079	81	37	11	43	1395	69	74	75.5	0.47	0.59	0.69	1.03
0.55	80	600	3.68	260	280	0.00242	37	17	14	44	1430	72	77	78	0.56	0.69	0.78	1.30
0.75	80	570	4.95	260	260	0.00328	35	16	16	44	1420	76	78.6	82.2	0.62	0.75	0.82	1.61
1.1	90S	700	7.29	260	300	0.0056	31	14	25	49	1445	80	83.8	83.8	0.59	0.72	0.8	2.37
1.5	90L	750	9.69	280	330	0.00672	22	10	24	49	1450	81.1	85.2	85.8	0.54	0.68	0.77	3.28
2.2	100L	740	14.79	300	300	0.01072	37	17	35	53	1425	85.4	86.5	86.5	0.65	0.77	0.83	4.42
3	100L	780	19.65	290	330	0.01225	24	11	45	53	1430	84.6	86.6	87.6	0.64	0.76	0.83	5.96
4	112M	660	26.73	210	260	0.01875	26	12	45.7	56	1445	87.1	88.3	88.6	0.66	0.77	0.83	7.85
5.5	132S/M	850	35.96	240	310	0.05427	26	12	65	56	1465	88.2	89.8	90.3	0.69	0.79	0.85	10.34
7.5	132S/M	820	47.95	250	300	0.05815	20	9	80	56	1465	88.5	90	90.2	0.7	0.81	0.86	14.00

Above is technical motor data based on Cast iron WEG Electric motors