

LENNTECH
WATER TREATMENT SOLUTIONS



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SPECIFICATIONS

50Hz

Rev. H

Pump sizes				Version	3SF	3PF	3LSF	3LPF
				32-125	■	■	●	●
				32-160	■	■	●	●
				32-200	■	■	●	●
				40-125	■	■	●	●
				40-160	■	■	●	●
				40-200	■	■	●	●
				50-125	■	■	●	●
				50-160	■	■	●	●
				50-200	■	■	●	●
				65-125	■	■	●	●
				65-160	■	■	●	●
				65-200	■	■	●	●
				65-250	-	-	●	●
				80-160	-	-	●	●
				80-200	-	-	●	●
				80-250	-	-	▲	▲
Liquid Handled	Type of liquid			Clean water and moderately aggressive fluids				
				/			Clean water, drinking water, water contains glycol for E version	
	Temperature	min.	[°C]	- 10		-10 -20 for E version, Q1AEGG, U3U3EGG, Q1U3EGG, Q1Q1EGG, U3CEGG		
		max.						90 (Standard, E, U3CEGG,Q1AEGG, Q1Q1EGG,Q1U3EGG,U3U3EGG) 110 for (H-HS-HW-HSW)
Maximum working pressure				[MPa]	1			

- Available also with H-HS-HSW-HW-E option for 32, 40, 50, 65-125/160/200, Q1U3EGG, U3CEGG, Q1AEGG, Q1Q1EGG, U3U3EGG (U3U3EGG not available for models 65-160/15 and 65-200).
- Available also with H-HSW-HW-E option for 32, 40, 50, 65, 80-160/200, Q1AEGG, Q1Q1EGG, Q1U3EGG, U3CEGG, U3U3EGG.
- ▲ Available also with H-HW-HSW-ES version only for model 80-250
- Not Available

SPECIFICATIONS

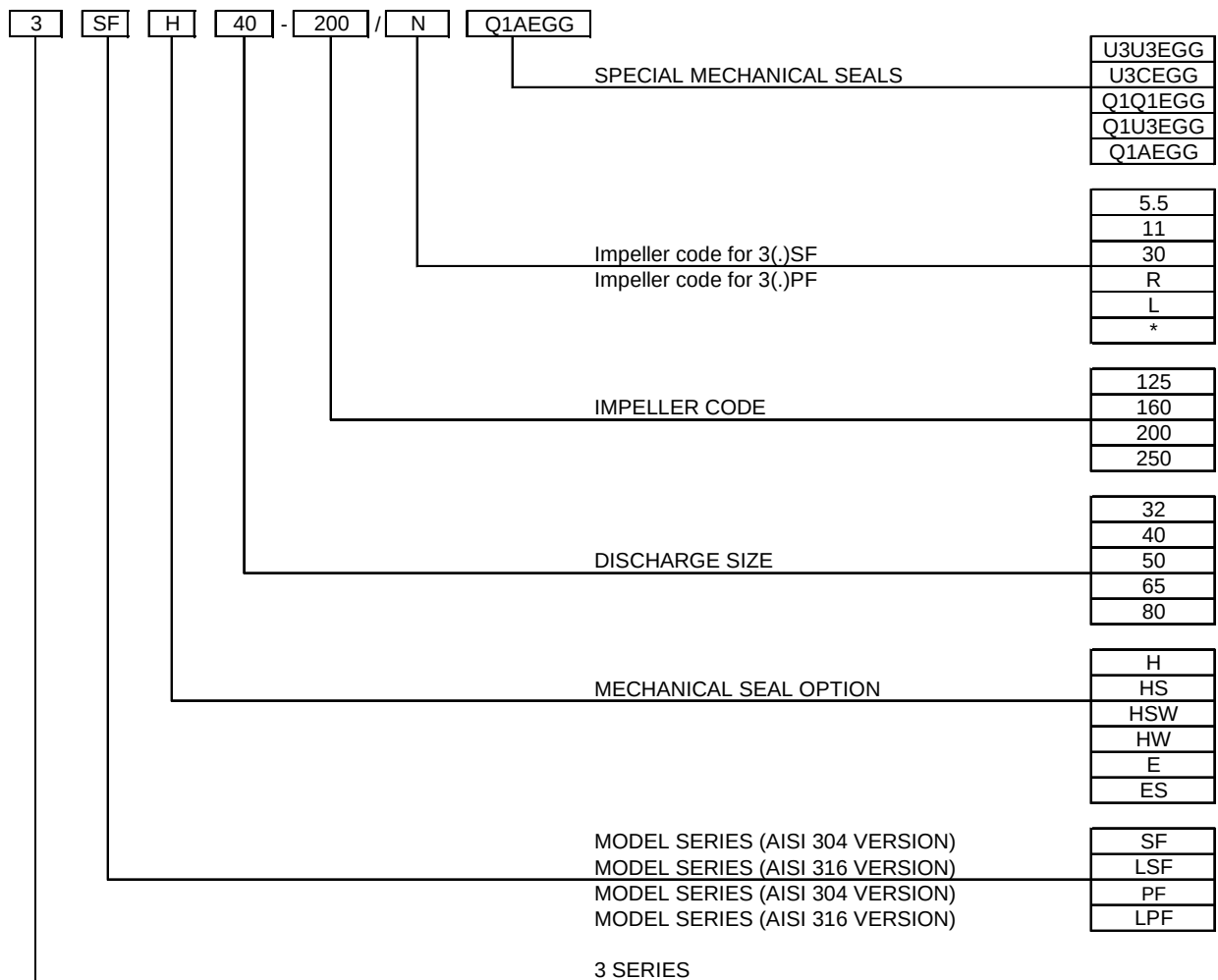
50Hz

Rev. H

Version				3SF	3PF	3LSF	3 LPF			
Construction	Impeller			Closed centrifugal type for [32, 40, 50 version]						
				Reinforced laser welding for [40-200/11, 50-200/15]						
				Closed centrifugal three dimensional blades for [65 and 80 version]						
	Shaft seal type			Mechanical seal		Mechanical seal with stationary ring secured against rotation. Mechanical seal for [H-E option]				
	Bearing			Sealed ball bearing						
Pipe Connection	Suction	32-125/160/200		Flange DN50 according DIN 2532 standard						
		40-125/160/200		Flange DN65 according DIN 2532 standard						
		50-125/160/200		Flange DN65 according DIN 2532 standard						
		65-125/160/200/250		Flange DN80 according DIN 2532 standard						
		80-160/200/250		Flange DN100 according DIN 2532 standard						
	Discharge	32-125/160/200		Flange DN32 according DIN 2532 standard						
		40-125/160/200		Flange DN40 according DIN 2532 standard						
		50-125/160/200		Flange DN50 according DIN 2532 standard						
		65-125/160/200/250		Flange DN65 according DIN 2532 standard						
		80-160/200/250		Flange DN80 according DIN 2532 standard						
Material	Casing	32-125/160/200		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)				
		40-125/160/200								
		50-125/160/200								
		65-125/160/200								
		65-250								
		80-160/200/250		/		EN 1.4401 (AISI 316) Made by precision casting				
		32-125/160/200								
		40-125/160/200								
		50-125/160/200								
		65-125/160/200								
	Impeller	65-250		EN 1.4301 (AISI 304)		EN 1.4401 (AISI 316) Made by precision casting				
		80-160/200/250								
		32-125/160/200								
		40-125/160/200								
		50-125/160/200								
		65-125/160/200		EN 1.440 1 (AISI 316) Made by pre cision casting						
		65-250		/		EN 1.4401 (AISI 316) Made by precision casting				
		80-160/200/250								
		32-125/160/200								
		40-125/160/200								
	50-125/160/200									
	Casing cover	65-125/160/200		EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)				
		65-250								
		80-160/200/250								
		32-125/160/200								
		40-125/160/200								
	Mechanical seal	50-125/160/200		Ceramic/Carbon/NBR (For version see page 313÷327)		SiC/SiC/FPM [L version] (For version see page 313÷327)				
		65-125/160/200								
		65-250								
		80-160/200								
		80-250								
	O-ring			NBR FPM for [H-HS-HW-HSW option] EPDM for [E, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG]		FPM for [L, H-HW-HSW] EPDM for [E, ES, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG]				
Shaft	32 , 40, 50	d=19	EN 1.4301 (AISI 304)		EN 1.4404 (AISI 316L)					
	65-125									
	65-160/11									
	50-200/15	d=22								
	65-160/15	d=24								
	65-200									
	65-250	d=24					/		EN 1.4462 (Duplex stainless steel)	
	80-160	d=24					/		EN 1.4404 (AISI 316L)	
	80-200/22	d=24					/		EN 1.4404 (AISI 316L)	
80-200 30-37kW	d=24	/		EN 1.4462 (Duplex stainless steel)						
	80-250	d=29	/		EN 1.4462 (Duplex stainless steel)					
Bracket			Cast iron - aluminium							

SELECTION CHART**50Hz**

Rev. H

TYPE KEY

* = No indication

SELECTION CHART

50Hz

Rev. H

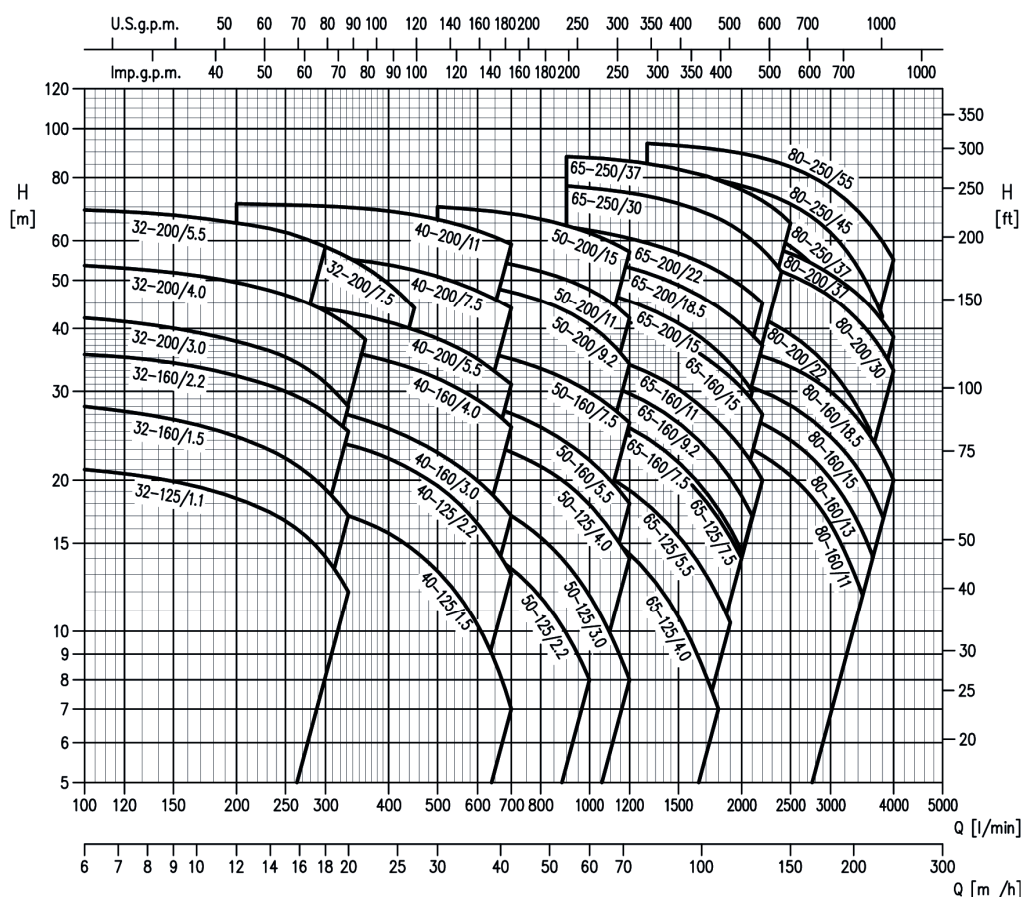
SELECTION CHART**3 SERIES SF and PF version: 32, 40, 50**

Pump type		kW	HP	l/min m³/h	0	100	150	200	300	333	360	400	450	500	600	700	800	1000	1200
3(.)SF	3(.) PF				0	6	9	12	18	20	22	24	27	30	36	42	48	60	72
32-125/1.1	32-125	1.1	1.5	22.5	21	19.9	18.4	14.1	12	-	-	-	-	-	-	-	-	-	-
32-160/1.5	32-160/R	1.5	2	29.5	28	26.5	24.5	19.2	17	-	-	-	-	-	-	-	-	-	-
32-160/2.2	32-160	2.2	3	37	35.5	34	32	27	25	-	-	-	-	-	-	-	-	-	-
32-200/3	32-200/R	3	4	44	42	40	37.5	31	28	-	-	-	-	-	-	-	-	-	-
32-200/4	32-200	4	5.5	55	53.5	52	49.5	43.5	40.5	38	-	-	-	-	-	-	-	-	-
32-200/5.5	32-200/L	5.5	7.5	70.5	69	67.5	65	58.5	-	-	-	-	-	-	-	-	-	-	-
32-200/7.5		7.5	10	70.5	69	67.5	65	58.5	55.5	53	49	44	-	-	-	-	-	-	-
40-125/1.5	40-125/R	1.5	2	20	-	-	19	17.6	17	16.5	15.7	14.5	13.2	10.3	7	-	-	-	-
40-125/2.2	40-125	2.2	3	26.5	-	-	25.5	24	23.5	23	22	21	19.5	16.4	13	-	-	-	-
40-160/3	40-160/R	3	4	31	-	-	29.5	27.5	27	26.5	25.5	24	22.5	20	17	-	-	-	-
40-160/4	40-160	4	5.5	40	-	-	38.5	37	36	35.5	34.5	33	32	29	25.5	-	-	-	-
40-200/5.5	40-200/R	5.5	7.5	47	-	-	45.5	44	43	42.5	41	39.5	38	35	31	-	-	-	-
40-200/7.5	40-200	7.5	10	58	-	-	57	55.5	55	54.5	53.5	52.5	51	47.5	44	-	-	-	-
40-200/11	40-200/L	11	15	72	-	-	71	70	70	69.5	68.5	67.5	66	63	59	-	-	-	-
50-125/2.2	50-125/S	2.2	3	19	-	-	-	-	-	-	17.5	17	16.3	14.9	13.4	11.7	8	-	-
50-125/3	50-125/R	3	4	22	-	-	-	-	-	-	20.5	20	19.6	18.4	17	15.4	11.8	8	-
50-125/4	50-125	4	5.5	26.5	-	-	-	-	-	-	26	25.5	25	24	22.5	21.5	17.9	14	-
50-160/5.5	50-160/R	5.5	7.5	33	-	-	-	-	-	-	31	30.5	30	28.5	27	25.5	22	18	-
50-160/7.5	50-160	7.5	10	40	-	-	-	-	-	-	38.5	38	37.5	36	35	33.5	30	26	-
50-200/9.2	50-200/R	9.2	12.5	53	-	-	-	-	-	-	-	-	50	49	47.5	45.5	40.5	34	-
50-200/11	50-200	11	15	59	-	-	-	-	-	-	-	-	56	55	54	52	48	42	-
50-200/15	50-200/L	15	20	72	-	-	-	-	-	-	-	-	70	69	68	66	62	57	-

3 SERIES SF and PF version: 65, 80

Pump type		kW	HP	l/min m³/h	0	600	700	900	1300	1500	1700	1900	2100	2200	2300	2400	2500	3000	3400	3600	3800
3(.)SF	3(.) PF				0	36	42	54	78	90	102	114	126	132	138	144	150	180	204	216	228
65-125/4	65-125/R	4	5.5	22	20	19	17	13.3	11	8.6	6.3	-	-	-	-	-	-	-	-	-	-
65-125/5.5	65-125	5.5	7.5	27	-	24	22	18	15.7	13.3	10.8	8	-	-	-	-	-	-	-	-	-
65-125/7.5	65-125/L	7.5	10	32	-	30	28	23.5	21.1	18.7	16.1	13.4	12	-	-	-	-	-	-	-	-
65-160/7.5	65-160/S	7.5	10	32	-	30	29	24.8	22.5	19.9	17.1	14.2	-	-	-	-	-	-	-	-	-
65-160/9.2	65-160/R	9.2	13	37	-	35	33	28.8	26.5	23.9	21.1	18.3	16.8	-	-	-	-	-	-	-	-
65-160/11	65-160	11	15	41	-	39	37	33.1	30.9	28.4	25.8	23	21.5	20	-	-	-	-	-	-	-
65-160/15	65-160/L	15	20	48	-	46	44	40	37.8	35.3	32.6	29.6	28	26.5	-	-	-	-	-	-	-
65-200/15	65-200/R	15	20	54	-	51	49	44	41.5	38.4	35.3	31.8	30	-	-	-	-	-	-	-	-
65-200/18.5	65-200	19	25	61	-	59	57	51.5	49	46	43	39.7	38	36.3	-	-	-	-	-	-	-
65-200/22	65-200/L	22	30	67	-	66	64	59.5	57	54	51	48	46.5	45	-	-	-	-	-	-	-
65-250/30	65-250	30	40	78	-	-	77	73.5	71	68	64.5	60	57.5	55	52	-	-	-	-	-	-
65-250/37	65-250/L	37	50	89	-	-	88	85.5	83	80.5	77.5	74	72	70	67.5	65	-	-	-	-	-
80-160/11	80-160/S	11	15	29	-	-	-	27.3	26.4	25.4	24.2	23	22.4	21.8	21.1	20.4	16.4	12.5	-	-	-
80-160/15R	80-160/R	15	20	32	-	-	-	30.5	29.7	28.8	27.7	26.5	25.9	25.3	24.6	24	20.1	16.5	14.5	-	-
80-160/15	80-160	15	20	35	-	-	-	34	33.3	32.5	31.5	30.5	30	29.4	28.8	28.1	24.4	21	19.1	17	-
80-160/18.5	80-160/L	19	25	40	-	-	-	39	38.4	37.6	36.7	35.7	35.2	34.7	34.1	33.5	30	26.4	24.4	22.3	-
80-200/22	80-200/R	22	30	50	-	-	-	48	47	45.5	44.5	43	42	41	40	39	33.2	27.8	25	-	-
80-200/30	80-200	30	40	60	-	-	-	58.5	58	57	56	54.5	54	53	52	51	46.5	41.5	39	36.1	-
80-200/37	80-200/L	37	50	66	-	-	-	64	63	62	61	59.5	59	58	57.5	56.5	51.5	47	44.5	41.5	-
80-250/37	80-250/R	37	50	73	-	-	-	71.5	70.5	68.5	66.5	64	63	61.5	60	58.5	48.5	38	-	-	-
80-250/45	80-250	45	60	84	-	-	-	82.5	81.5	80	78	76	75	73.5	72.5	71	62	53	48	42.5	-
80-250/55	80-250/L	55	75	95	-	-	-	93.5	92.5	91.5	90	88.5	87.5	86.5	85.5	84	76.5	68.5	64.5	60	-

PERFORMANCE RANGE



PERFORMANCE CURVE SPECIFICATIONS

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

Tolerances according to ISO 9906:2012 - Grade 3B

The curves refer to effective speed of asynchronous motors at 50 Hz, 2 poles.

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 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

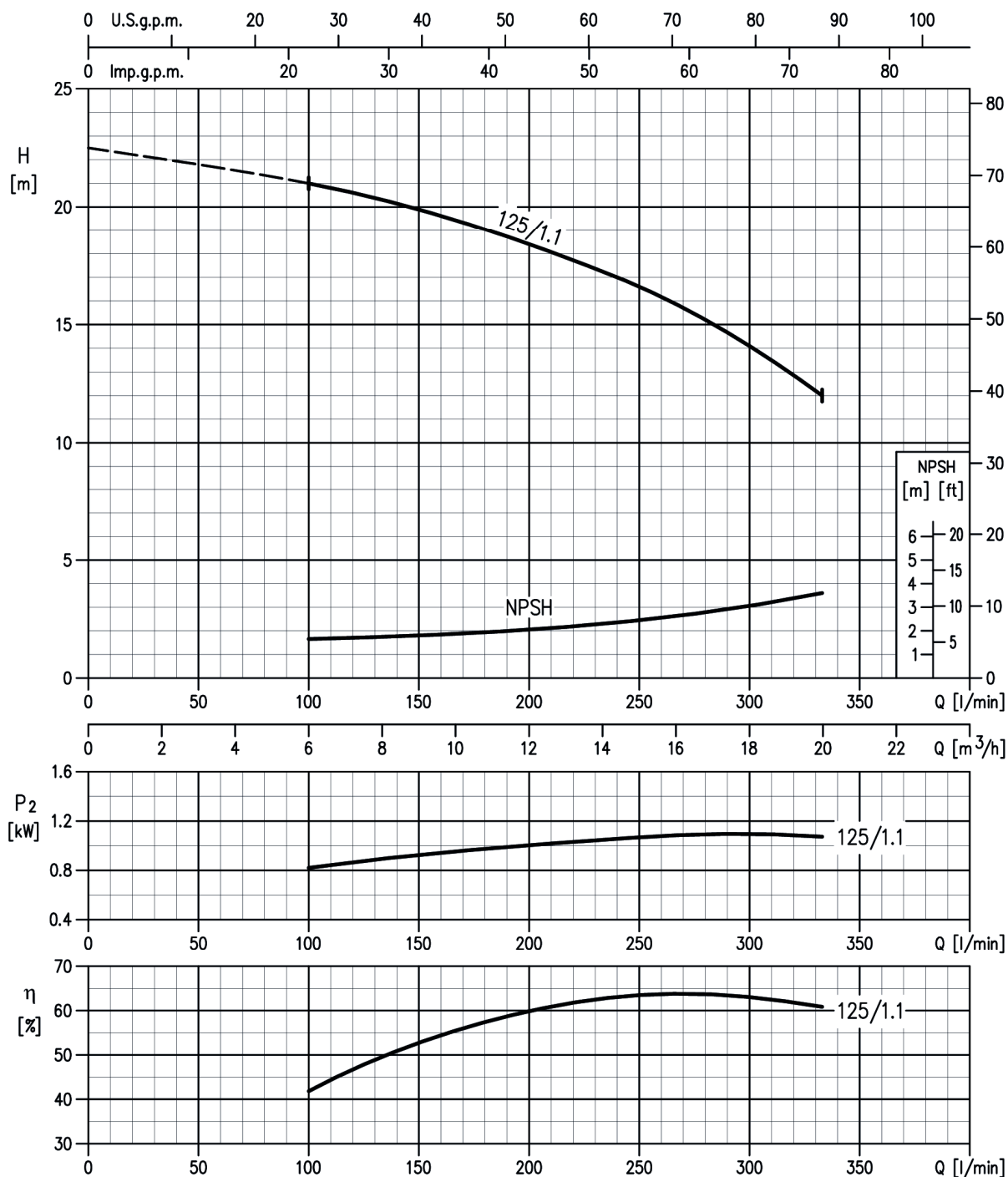
H = total head

P_2 = pump power input (shaft power)

K = pump efficiency

NPSH = net positive suction head required by the pump

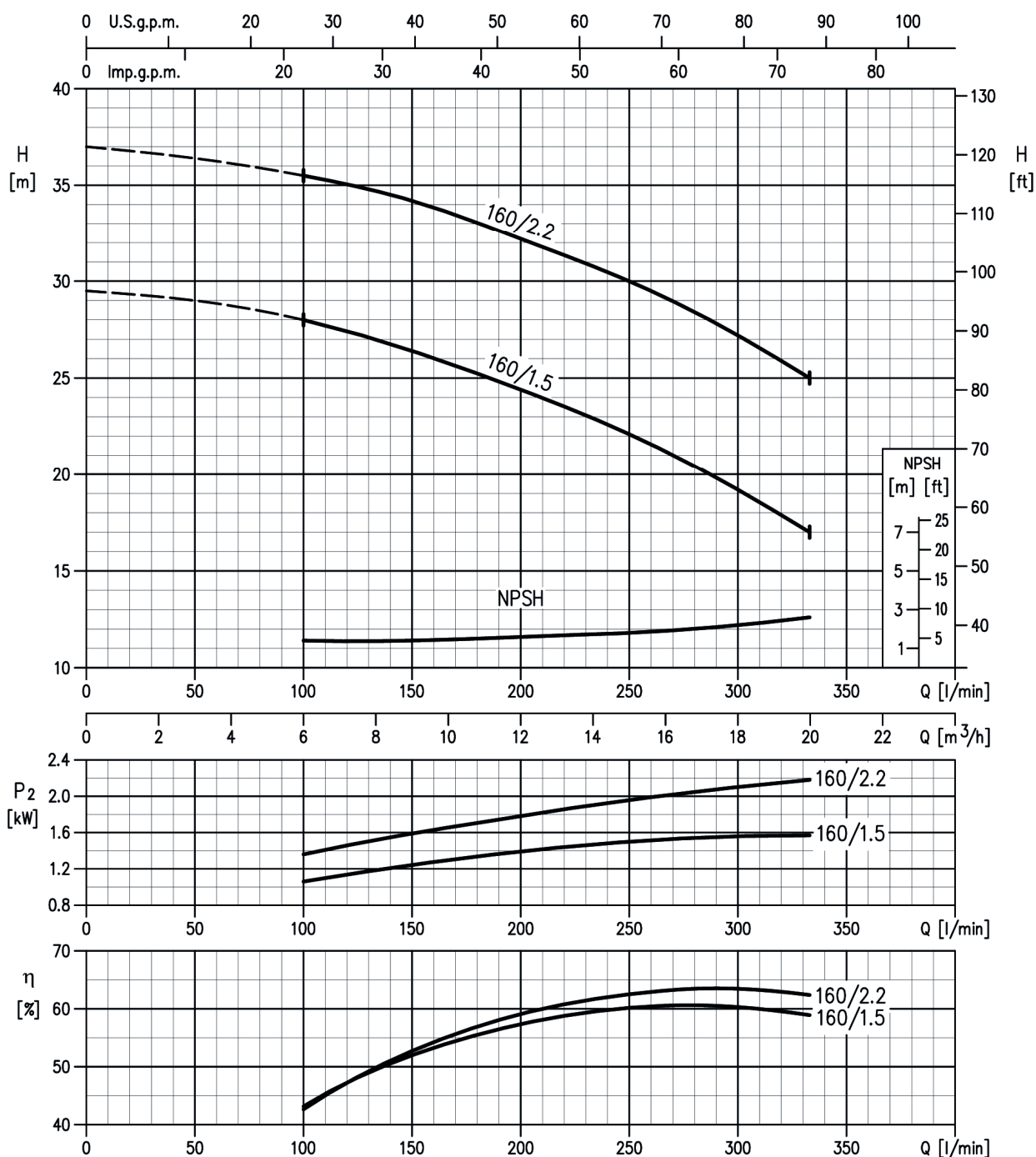
3(.)SF 32-125/1.1 and 3(.)PF 32-125 (1.1kW) – impeller diameter = 133 mm



Rotation speed ≈ 2900 min⁻¹
 Test standard: ISO 9906:2012 - Grade 3B

3(.)SF 32-160/1.5 and 3(.)PF 32-160/R (1.5kW) – impeller diameter = 151 mm

3(.)SF 32-160/2.2 and 3(.)PF 32-160 (2.2kW) – impeller diameter = 166 mm

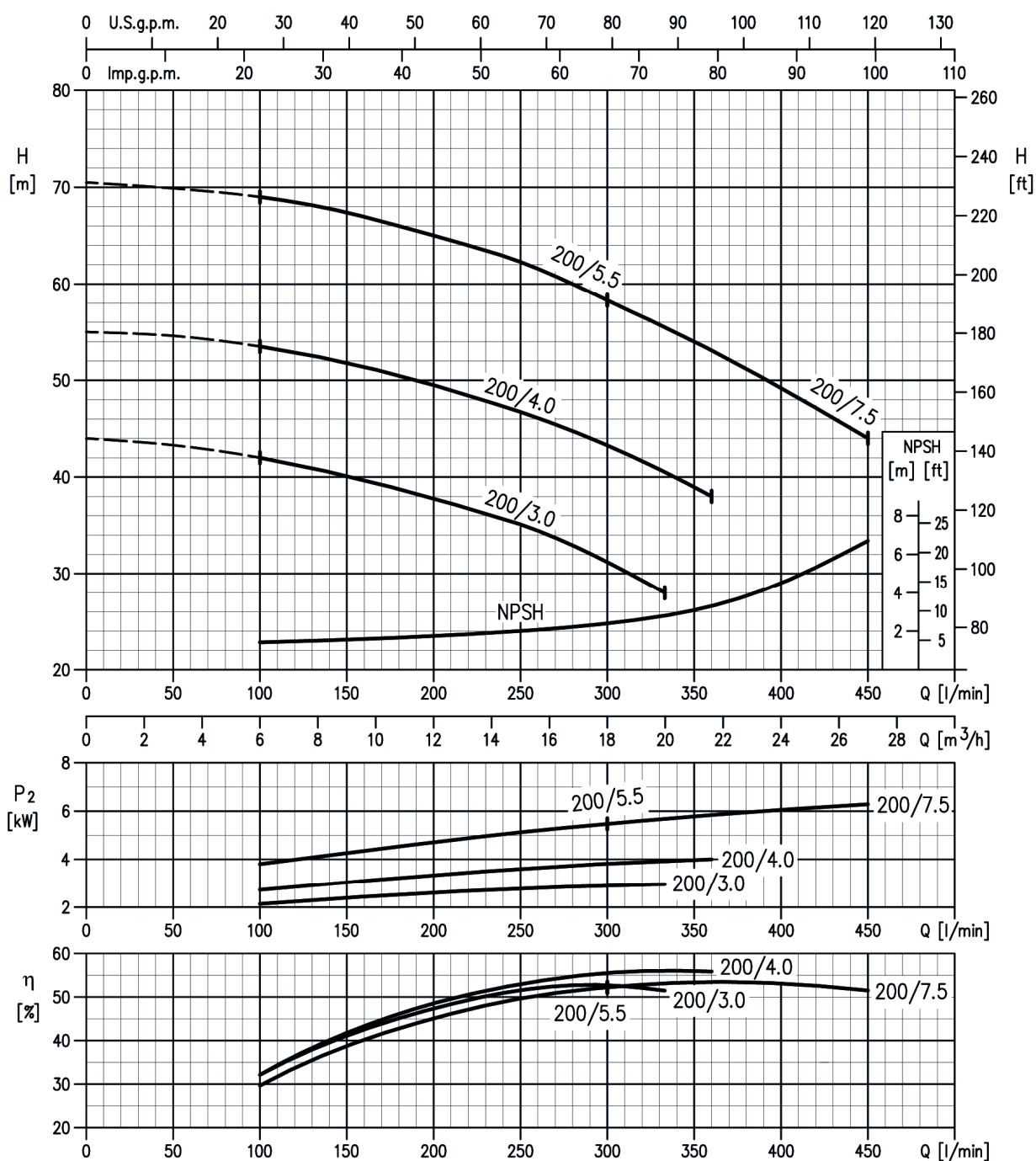


Rotation speed ≈ 2900 min⁻¹

Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

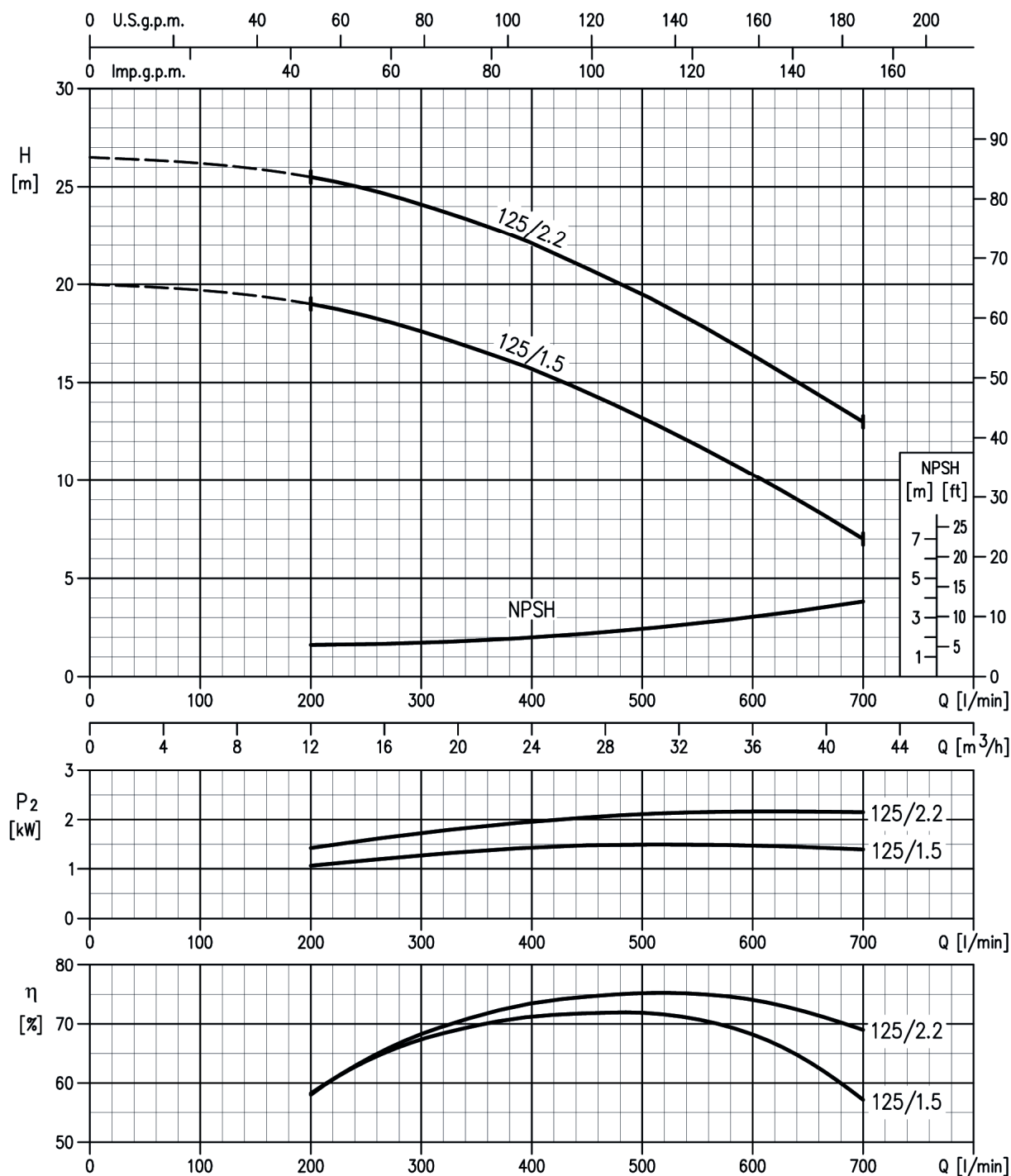
Rev. H

3(.)SF 32-200/3 and 3(.)PF 32-200/R (3.0kW) – impeller diameter = 186 mm**3(.)SF 32-200/4 and 3(.)PF 32-200 (4.0kW)** – impeller diameter = 200 mm**3(.)SF 32-200/5.5 and 3(.)PF 32-200/L (5.5kW)** – impeller diameter = 224 mm**3(.)SF 32-200/7.5 and 3(.)PF 32-200/L (7.5kW)** – impeller diameter = 224 mmRotation speed $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

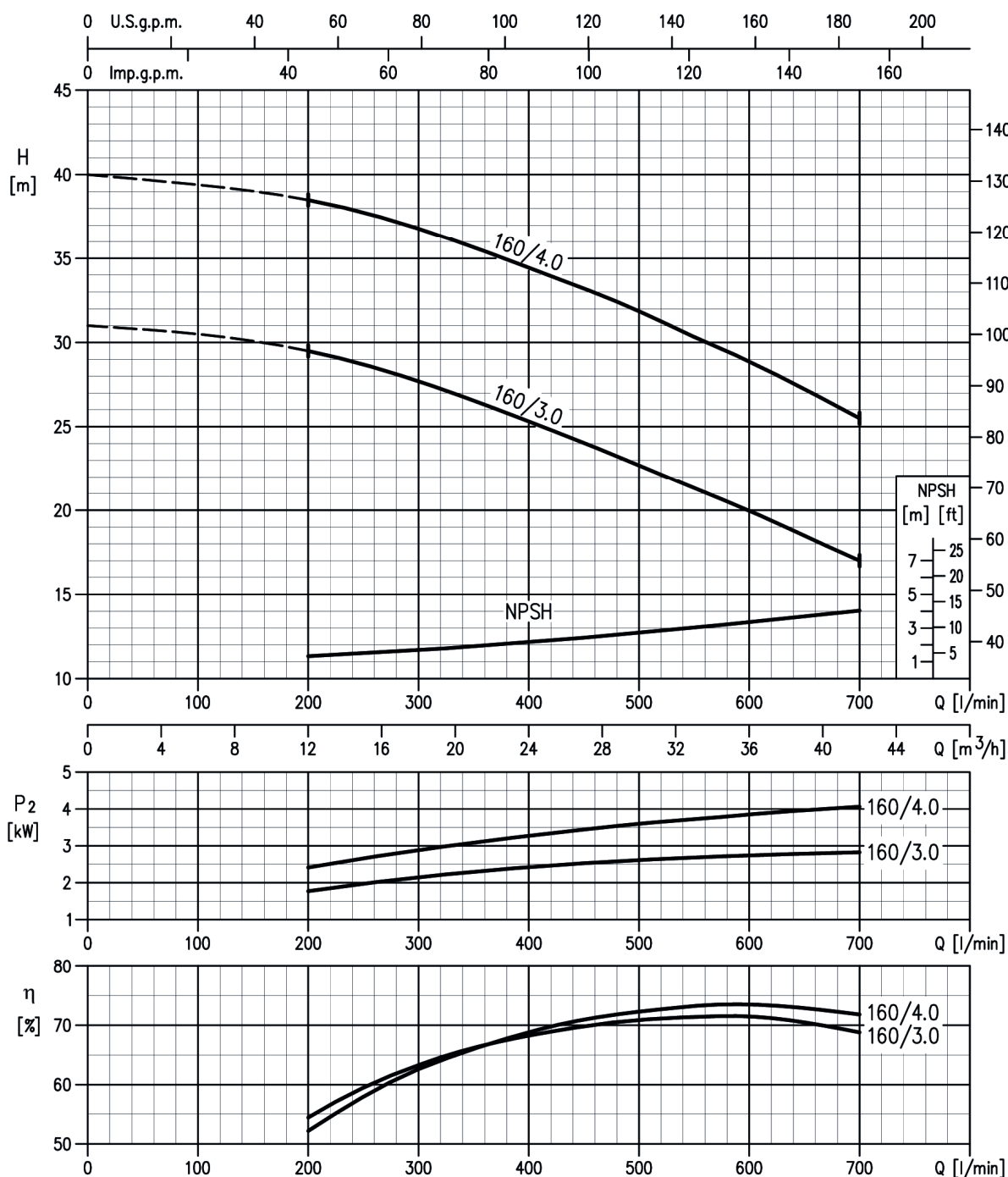
Rev. H

3(.)SF 40-125/1.5 and 3(.)PF 40-125/R (1.5kW) – impeller diameter = 125 mm**3(.)SF 40-125/2.2 and 3(.)PF 40-125 (2.2kW) – impeller diameter = 140 mm**Rotation speed ≈ 2900 min⁻¹

Test standard: ISO 9906:2012 - Grade 3B

3(.)SF 40-160/3 and 3(.)PF 40-160/R (3.0kW) – impeller diameter = 151 mm

3(.)SF 40-160/4 and 3(.)PF 40-160 (4.0kW) – impeller diameter = 166 mm

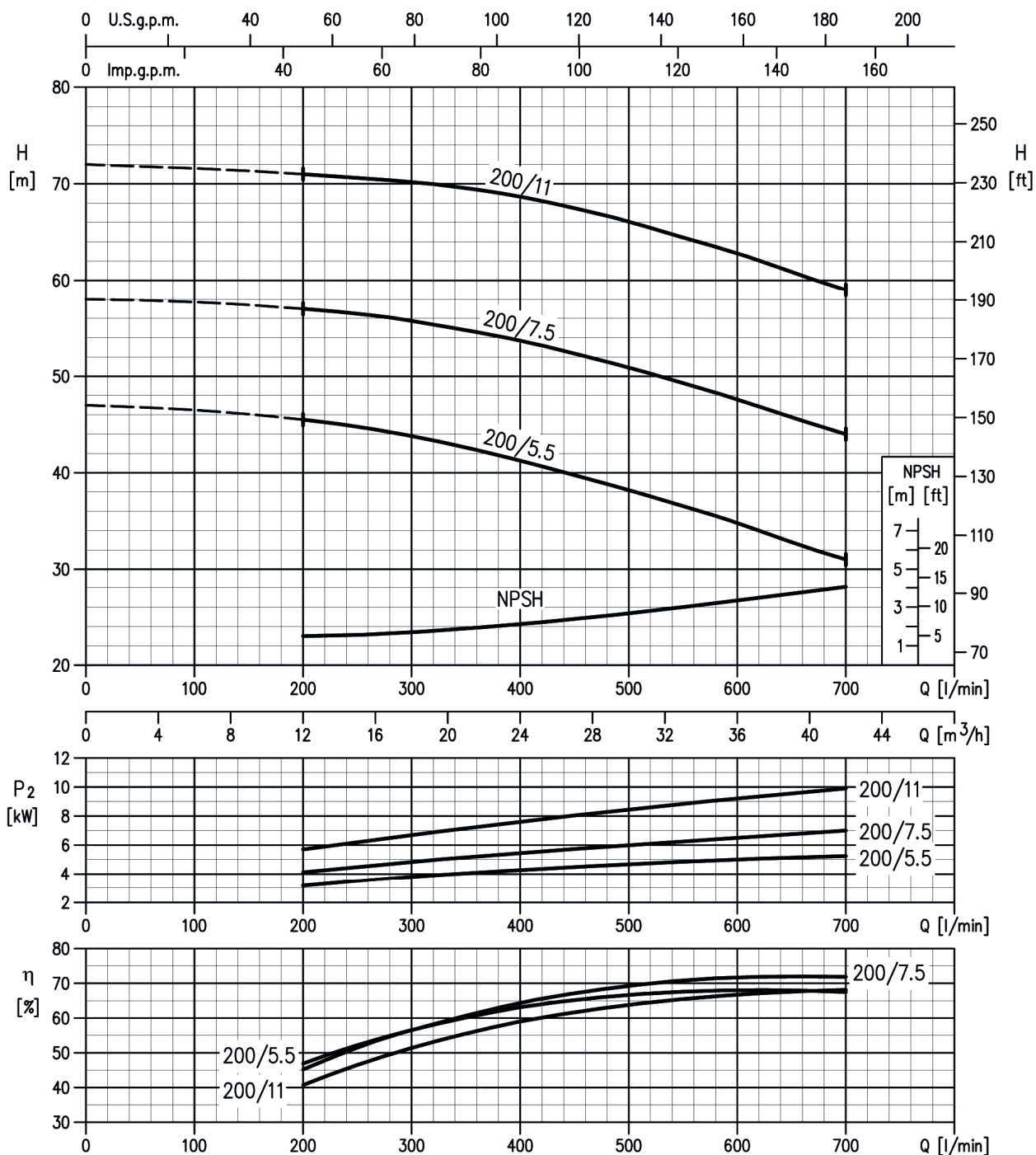


Rotation speed ≈ 2900 min⁻¹

Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

Rev. H

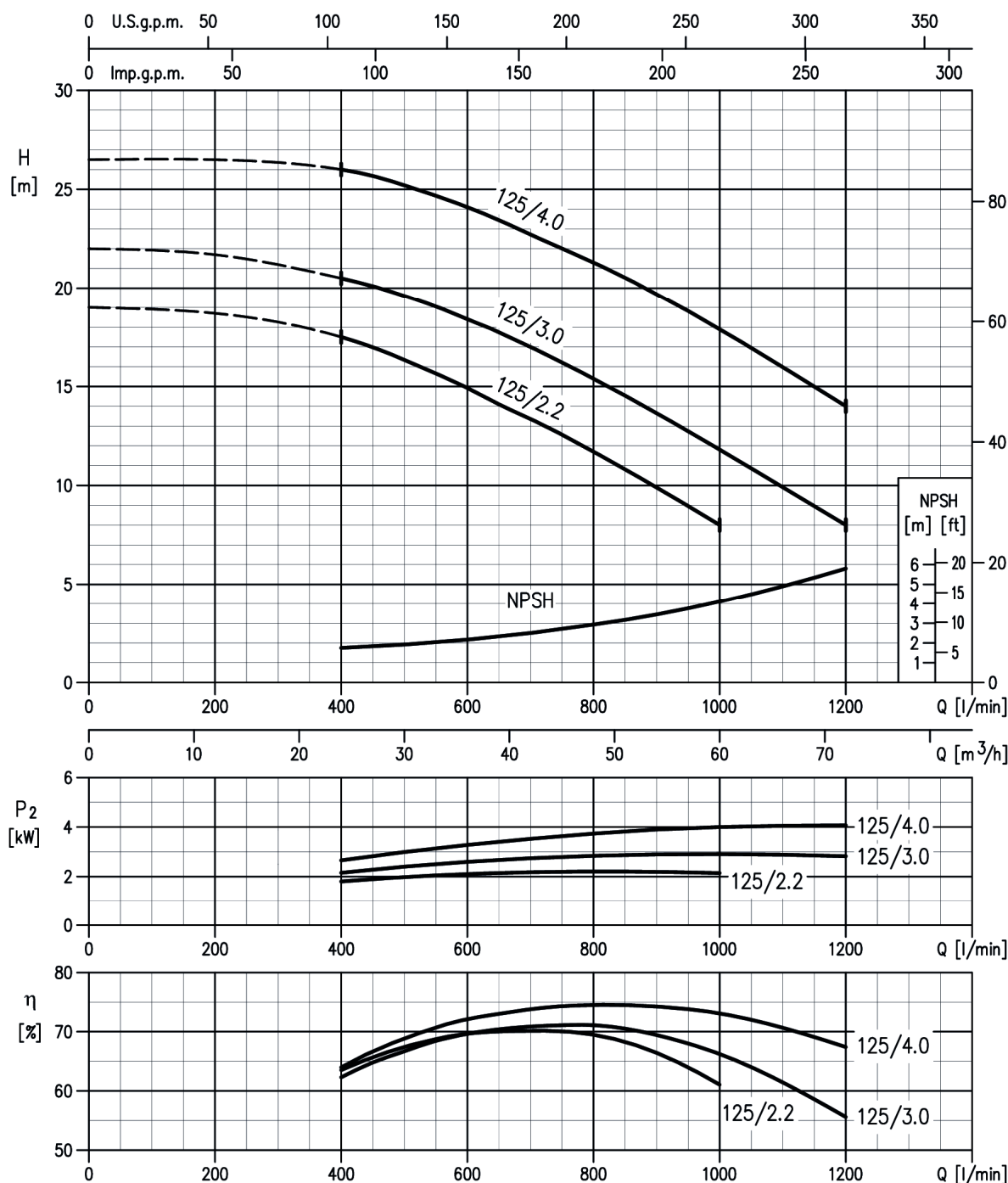
3(.)SF 40-200/5.5 and 3(.)PF 40-200/R (5.5kW) – impeller diameter = 183 mm**3(.)SF 40-200/7.5 and 3(.)PF 40-200 (7.5kW) – impeller diameter = 200 mm****3(.)SF 40-200/11 and 3(.)PF 40-200/L (11kW) – impeller diameter = 224 mm**

Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

Rev. H

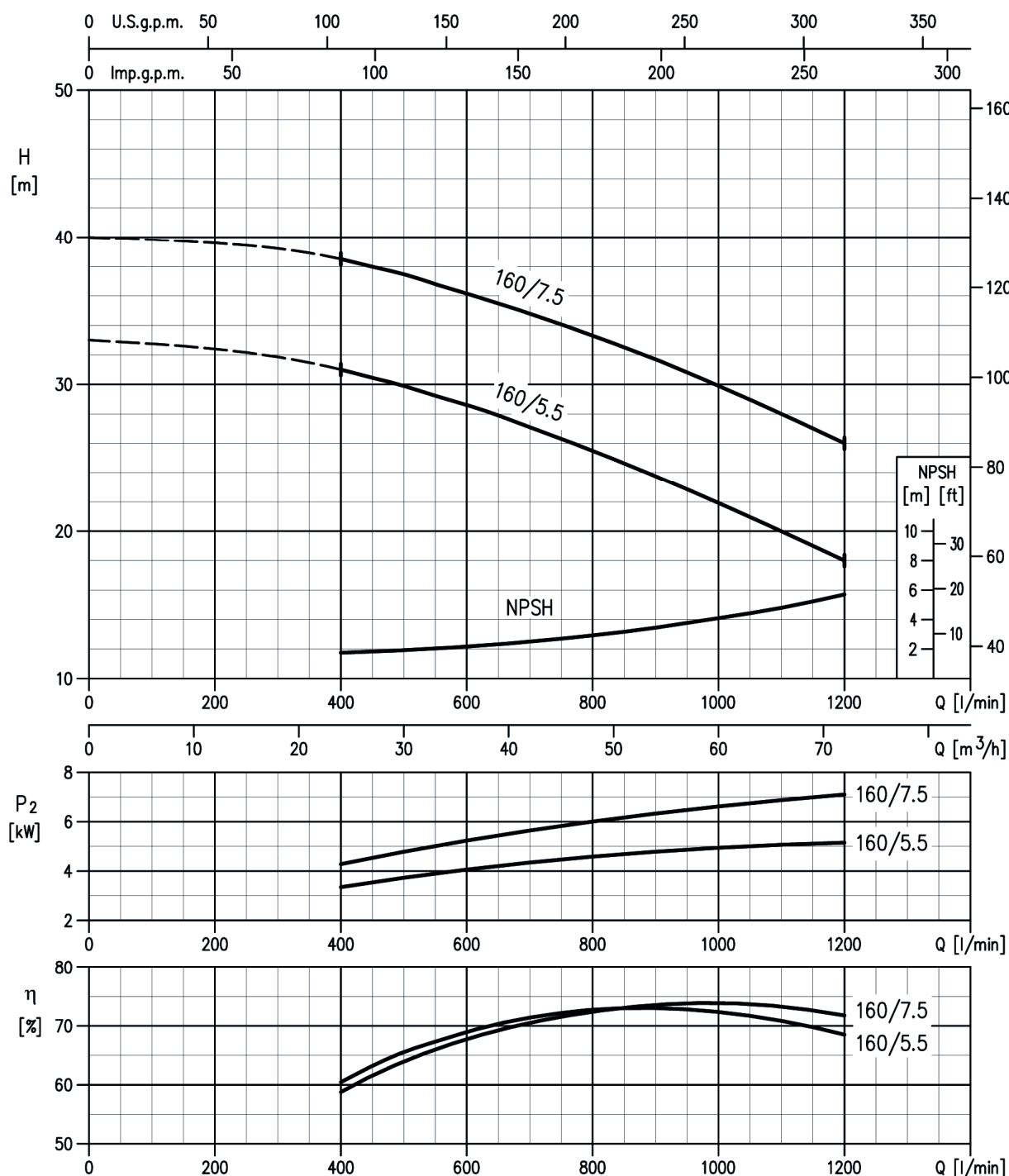
3(.)SF 50-125/2.23(.)PF 50-125/S (2.2kW) – impeller diameter = 126 mm
3(.)SF 50-125/3 and 3(.)PF 50-125/R (3.0kW) – impeller diameter = 131 mm
3(.)SF 50-125/4 and 3(.)PF 50-125 (4.0kW) – impeller diameter = 140 mm



Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

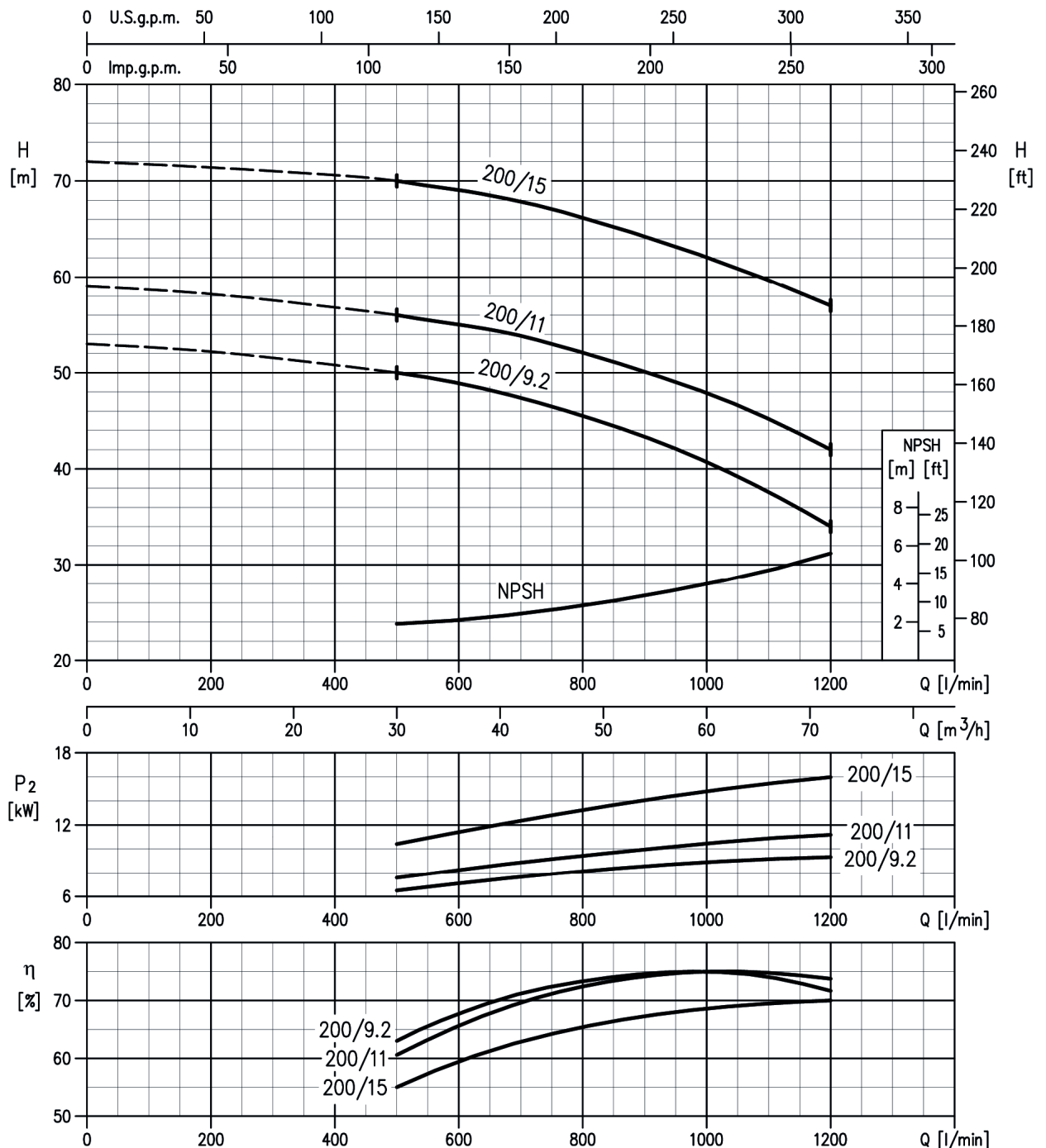
3(.)SF 50-160/5.5 and 3(.)PF 50-160/R (5.5kW) – impeller diameter = 154 mm

3(.)SF 50-160/7.5 and 3(.)PF 50-160 (7.5kW) – impeller diameter = 166 mm



Rotation speed ≈ 2900 min⁻¹
 Test standard: ISO 9906:2012 - Grade 3B

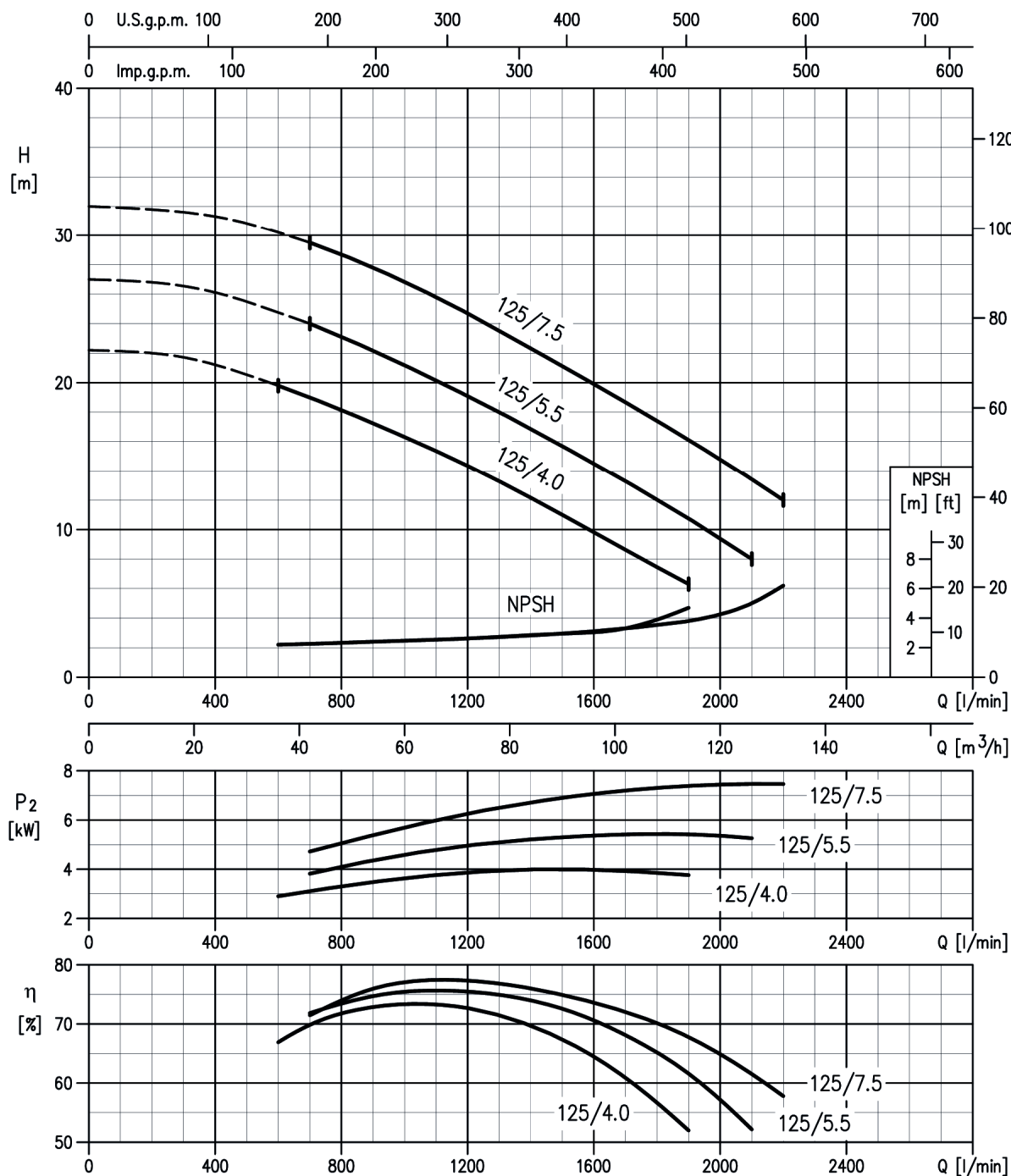
3(.)SF 50-200/9.23(.)PF 50-200/R (9.2kW) – impeller diameter = 191 mm
 3(.)SF 50-200/11 and 3(.)PF 50-200 (11kW) – impeller diameter = 200 mm
 3(.)SF 50-200/15 and 3(.)PF 50-200/L (15kW) – impeller diameter = 224 mm



Rotation speed ≈ 2900 min⁻¹
 Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

Rev. H

3(.)SF 65-125/4 and 3(.)PF 65-125/R (4.0kW) – impeller diameter = 128 mm**3(.)SF 65-125/5.5 and 3(.)PF 65-125 (5.5kW) – impeller diameter = 138 mm****3(.)SF 65-125/7.5 and 3(.)PF 65-125/L (7.5kW) – impeller diameter = 149 mm**

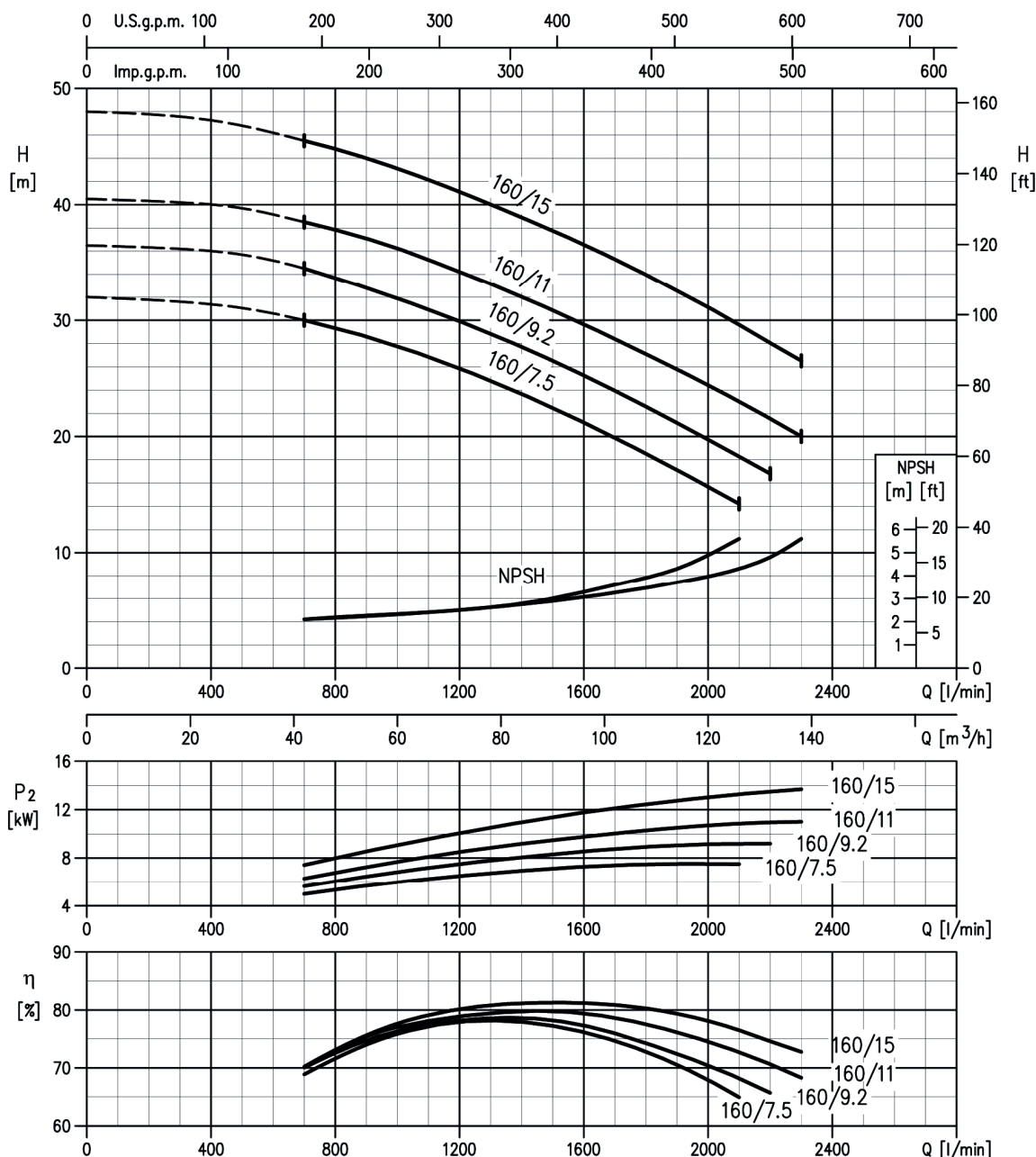
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

3(.)SF 65-160/7.5 and 3(.)PF 65-160/S (7.5kW) – impeller diameter = 153 mm

3(.)SF 65-160/9.2 and 3(.)PF 65-160/R (9.2kW) – impeller diameter = 161 mm

3(.)SF 65-160/11 and 3(.)PF 65-160 (11kW) – impeller diameter = 168 mm

3(.)SF 65-160/15 and 3(.)PF 65-160/L (15kW) – impeller diameter = 178 mm



Rotation speed $\approx 2900 \text{ min}^{-1}$

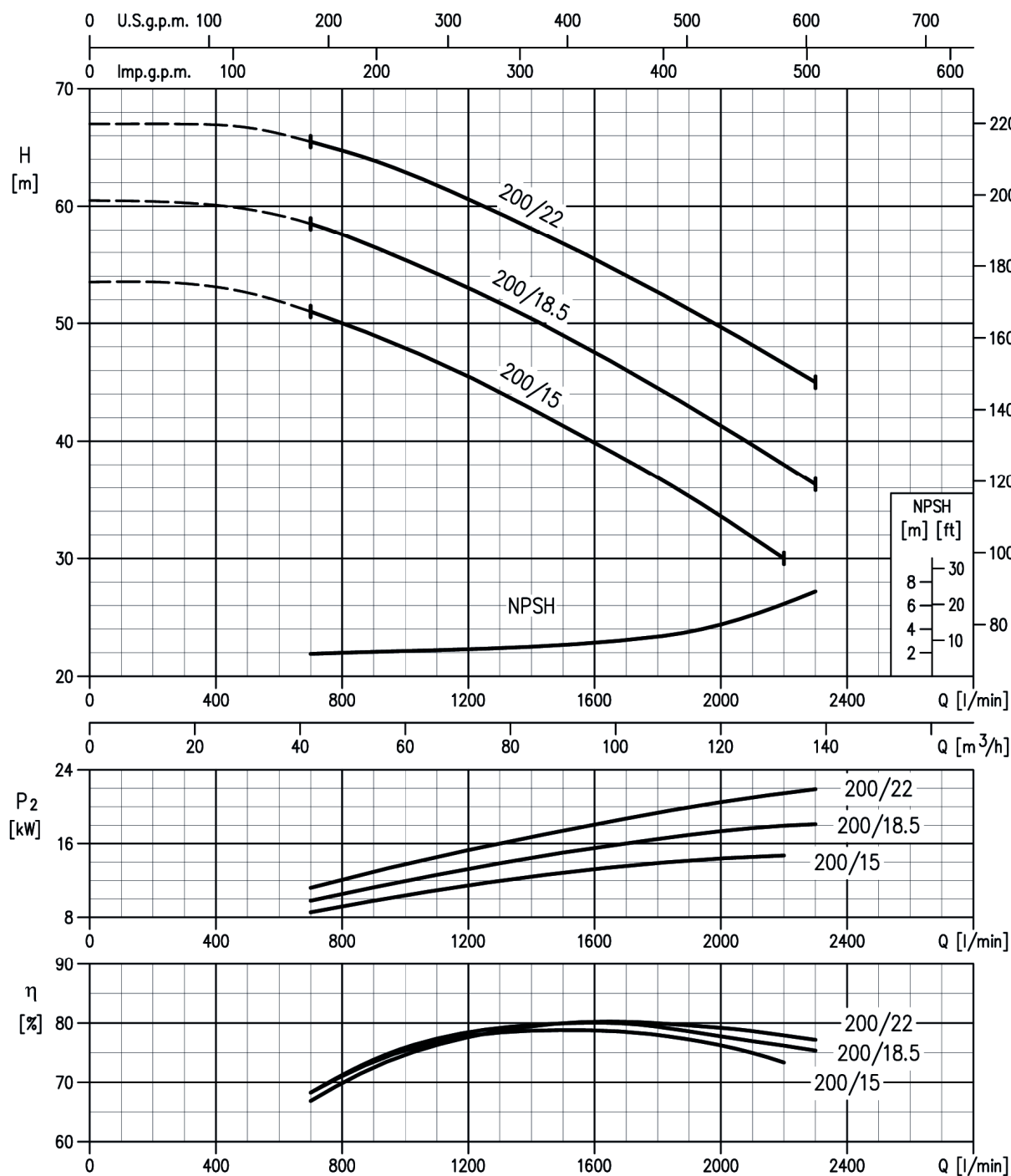
Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE

50Hz

Rev. H

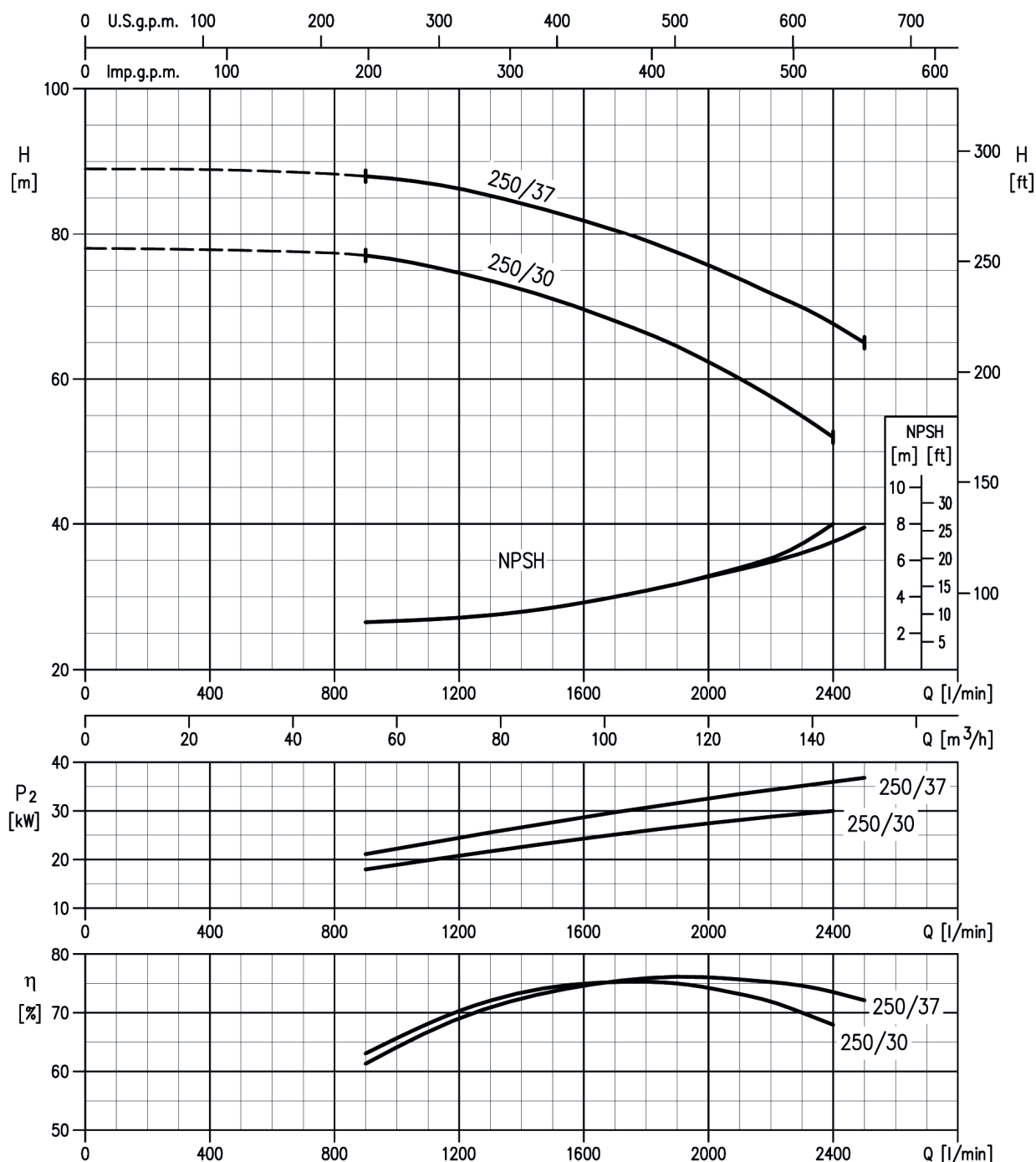
3(.)SF 65-200/15 and 3(.)PF 65-200/R (15kW) – impeller diameter = 190 mm
 3(.)SF 65-200/18.5 and 3(.)PF 65-200 (18.5kW) – impeller diameter = 201 mm
 3(.)SF 65-200/22 and 3(.)PF 65-200/L (22kW) – impeller diameter = 212 mm



PERFORMANCE CURVE**50Hz**

Rev. H

3LSF 65-250/30 and 3LPF 65-250 (30kW) – impeller diameter = 235 mm
3LSF 65-250/37 and 3LPF 65-250/L (37kW) – impeller diameter = 250 mm

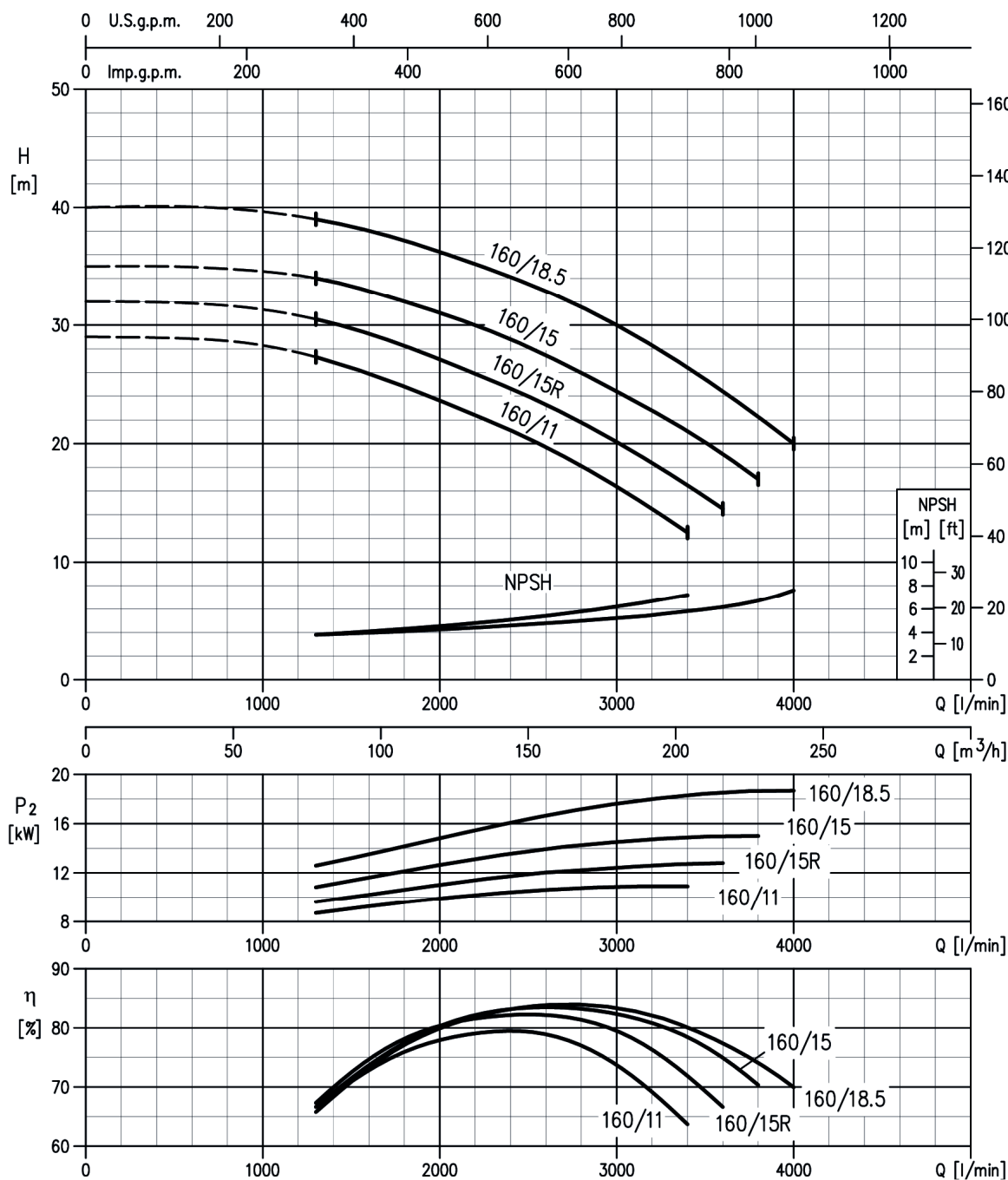


Rotation speed ≈ 2900 min⁻¹
 Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

Rev. H

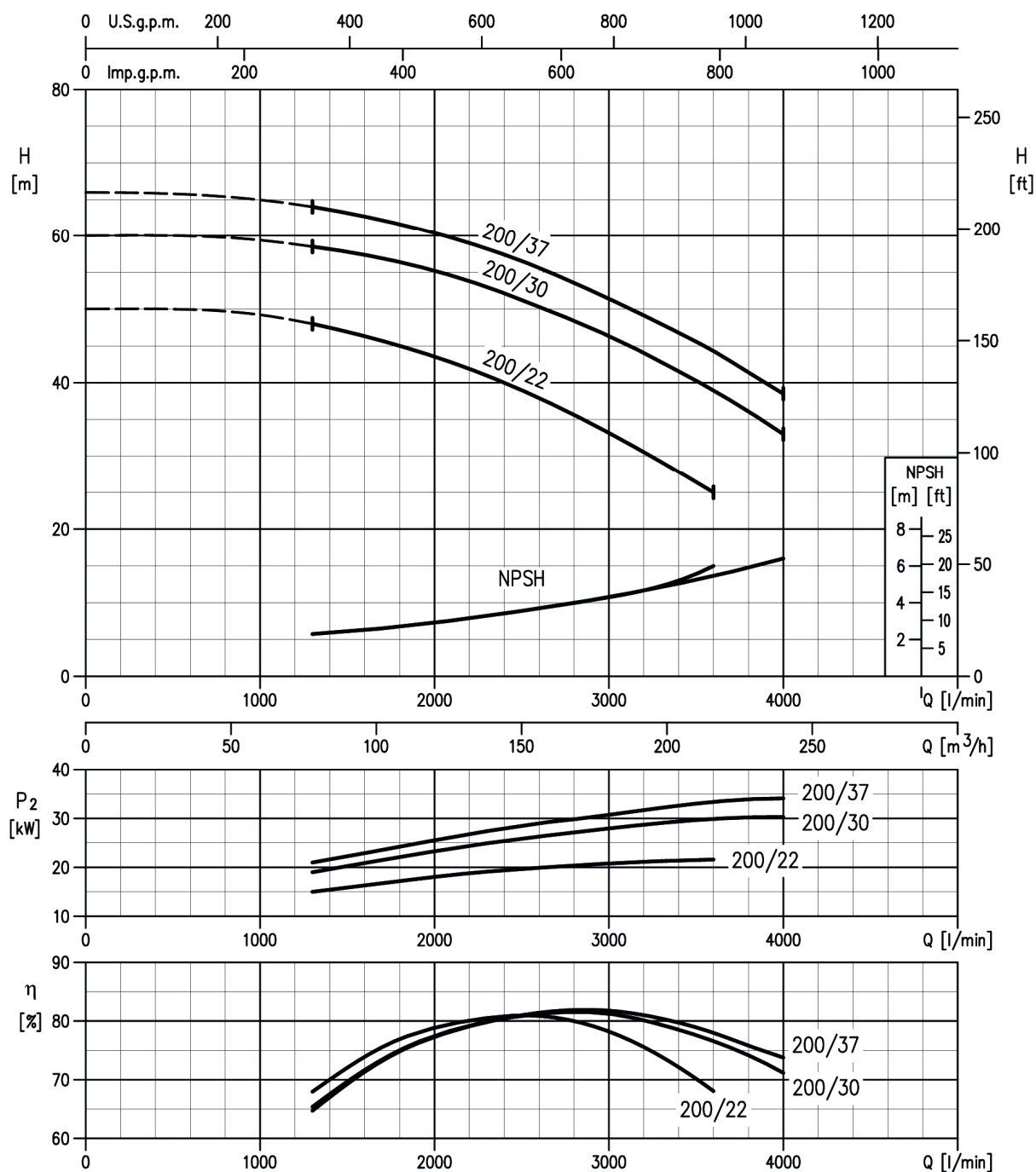
3LSF 80-160/11 and 3LPF 80-160/S (11kW) – impeller diameter = 154 mm
3LSF 80-160/15R and 3LPF 80-160/R (15kW) – impeller diameter = 160 mm
3LSF 80-160/15 and 3LPF 80-160 (15kW) – impeller diameter = 165 mm
3LSF 80-160/18.5 and 3LPF 80-160/L (18.5kW) – impeller diameter = 174 mm



Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

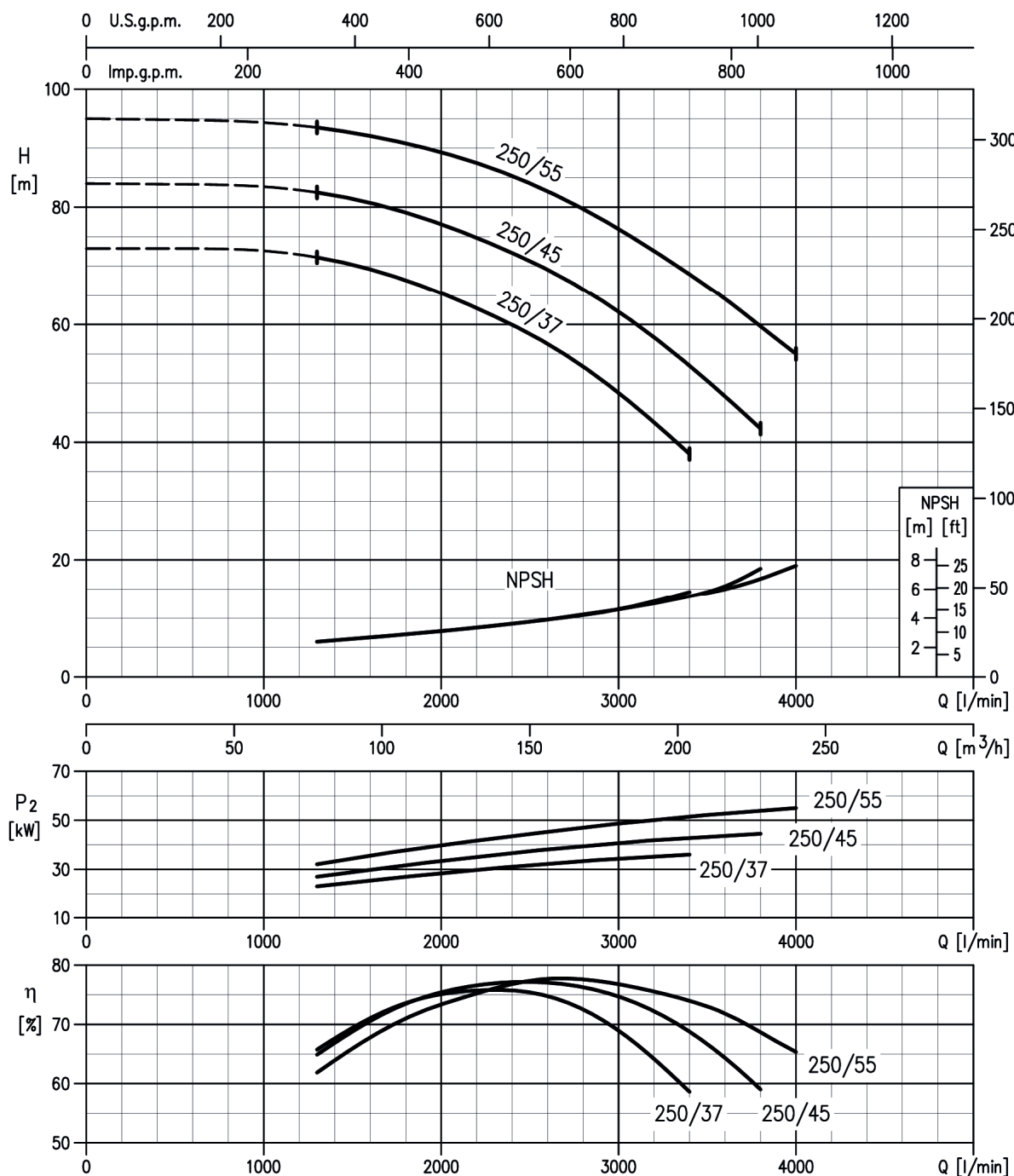
Rev. H

3LSF 80-200/22 and 3LPF 80-200/R (22kW) – impeller diameter = 196 mm**3LSF 80-200/30 and 3LPF 80-200 (30kW) – impeller diameter = 211 mm****3LSF 80-200/37 and 3LPF 80-200/L (37kW) – impeller diameter = 219 mm**

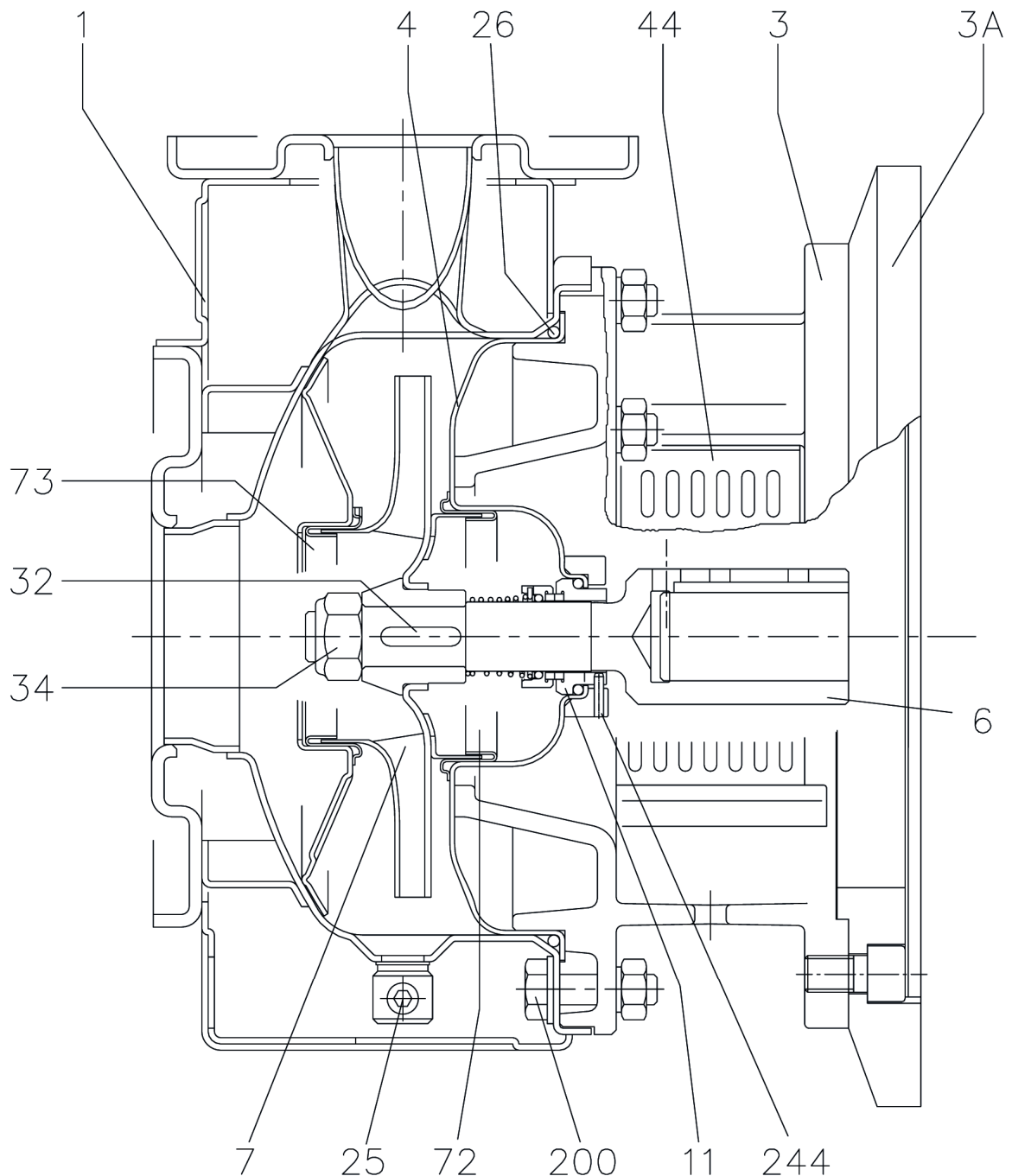
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE**50Hz**

Rev. H

3LSF 80-250/37 and 3LPF 80-250/R (37kW) – impeller diameter = 230 mm**3LSF 80-250/45 and 3LPF 80-250 (45kW) – impeller diameter = 245 mm****3LSF 80-250/55 and 3LPF 80-250/L (55kW) – impeller diameter = 259 mm**Rotation speed ≈2900 min⁻¹

Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW DRAWING**3(.)SF 32, 40, 50, 65**

SECTIONAL VIEW TABLE

3(.)SF 32, 40, 50, 65

N°	PART NAME	MATERIAL		DIMENSIONS	STANDARD	Q.TY	
		3SF	3LSF				
1	Casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
3	Motor bracket	Cast iron EN-G JL-200-EN 1561				1	
3A	Adapter ring [1]	Cast iron EN-G JL-200-EN 1561				1	
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
6	Coupling - Part in contact with liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	See table p. 318		1	
7	Impeller	32,40,50	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		1	
		65-125/160/200	EN 1.4401 (AISI 316)				
11	Mechanical seal	Carbon/Ceramic/NBR	SiC/SiC/FPM	See p. 313-317		1	
25	Draing plug	EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8	DIN 906	1	
26	"O" ring	32-125, 40-125	NBR [5]	FPM	158.11x5.34	OR 6625	1
		32-160, 40-160 , 50-125, 65-125			183.52x5.34	OR 6720	
		32-200, 40-200, 50-160, 50-200, 65-160, 65-200			227.96x5.34	OR 6895	
32	Key	Up to 11 kW 15 kW and above	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
					8 x7x 30		
34	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		
44	Protection	EN 1.4301 (AISI 304)			EBARA DRAWING	1	
72	Casing ring [2]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
73	Casing ring (not for 65 version)	EN 1.4301 (AISI 304)	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]	
244	Pin [4]	/	EN 1.4301 (AISI 304)	4x15		1	

Counterflange kit on request, see table p.319-320

[1] Only for 65-125/5.5 and 65-125/7.5

[2] 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

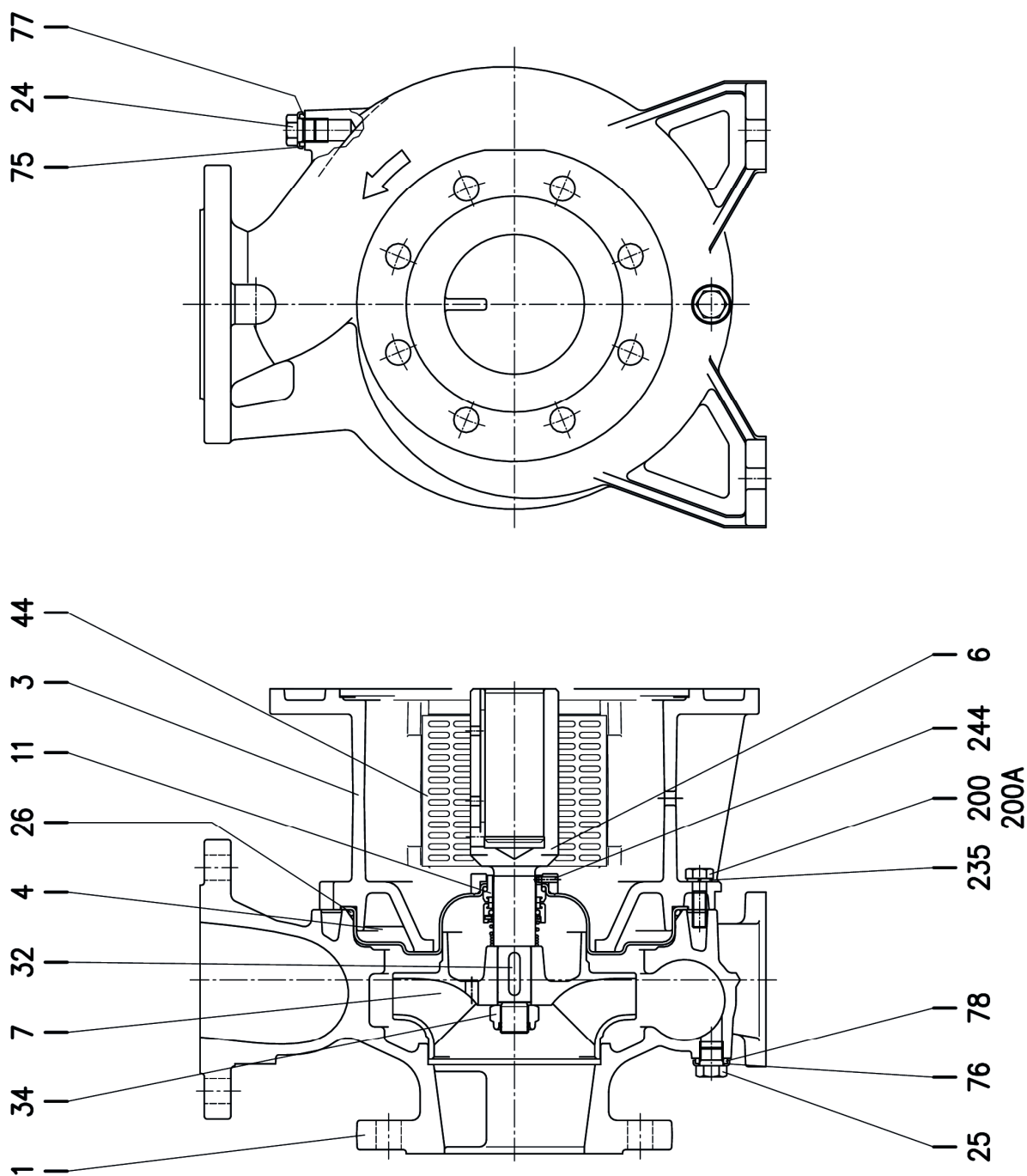
N° for 1 unit=12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200

[4] Only for 65-160/15 and 65-200

[5] FPM for H-HS-HW-HSW version

EPDM for E version, Q1AEGG, Q1U3EGG, U3CEGG, Q1Q1EGG, U3U3EGG

U3U3EGG not available for models 65-160/15 and 65-200

**SECTIONAL VIEW DRAWING
3LSF 80-160**

SECTIONAL VIEW TABLE**3LSF 80-160**

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	EN 1.4401 (AISI 316)			1
3	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4404 (AISI 316L)			1
6	Coupling	EN 1.4404 (AISI 316L)	See table p. 318		1
7	Impeller	EN 1.4401 (AISI 316)			1
11	Mechanical seal	SiC/SiC/FPM	See p. 313-317		1
24	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
25	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
26	"O" ring	FPM [2]	227.96x5.34	OR 6895	1
32	Key	EN 1.4401 (AISI 316)	8x7x30	UNI 6604	1
34	Impeller nut	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
44	Protection	EN 1.4301 (AISI 304)		EPE DRAWING	2
75	Washer (plug)	EN 1.4404 (AISI 316L)			1
76	Washer (plug)				1
77	O-ring (plug)	FPM [2]			1
78	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 8842	12
244	Pin [1]	EN 1.4301(AISI 304)	4x15		1

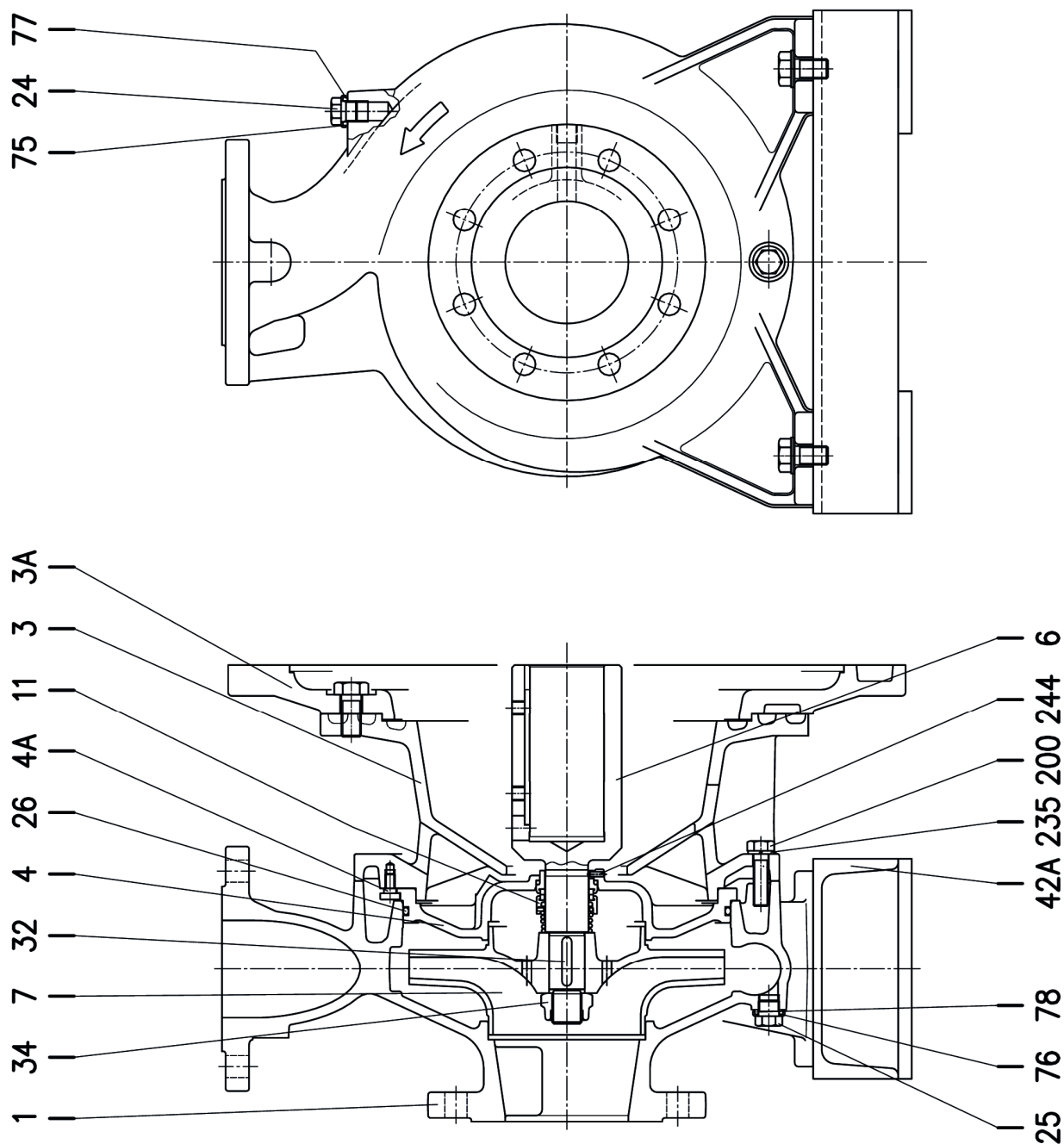
Counterflange kit on request see p. 319-320

[1] Not for H and E option

[2] FPM for H-HW-HSW version

EPDM for E version, Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG

SECTIONAL VIEW DRAWING
3LSF4 65-250, 80



SECTIONAL VIEW TABLE
3LSF4 65-250, 80

N°	PART NAME			MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing			EN 1.4401 (AISI 316)			1
3	Motor bracket			Cast iron EN-GJL-200-EN 1561			1
3A	Adapter ring			Cast iron EN-GJL-200-EN 1561			[1]
4	Casing cover			EN 1.4401 (AISI 316)			1
4A	Screw for casing cover			EN 1.4301(AISI 304)			2
6	Coupling	65-250	d=24 mm	EN 1.4462 (Duplex stainless steel)			1
		80-200	d=24 mm	EN 1.4404 (AISI 316L) for 22 kW			
				EN 1.4462 (Duplex stainless steel) for 30-37 kW			
				80-250			
7	Impeller			EN 1.4401 (AISI 316)			1
11	Mechanical seal			SiC/SiC/FPM	See p. 313-317		1
24	Plug			EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
25	Plug			EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
26	"O" ring			FPM [4]	253.36x5.34	OR 6995	1
32	Key	65-250	d=24 mm	EN 1.4401 (AISI 316)	8 x7x 30	UNI 6604	1
		80-200			8x7x40		1
		80-250	d=29 mm				
34	impeller nut	65-250	d=24 mm	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
		80-200			M24x2		1
		80-250	d=29 mm				
042A	Foot for pump			Aluminium/zincked steel (only for 80-250/55)			[2]
75	Washer (plug)			EN 1.4404 (AISI 316L)			1
76	Washer (plug)						1
77	O-ring (plug)						1
78	O-ring (plug)			FPM [4]			1
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 [3]			EN 1.4301(AISI 304)	4x12		1

Counterflange kit on request, see table p. 319-320

[1] Only for 65-250/37, 80-200/37, 80-250/37, 80-250/45 and 80-250/55

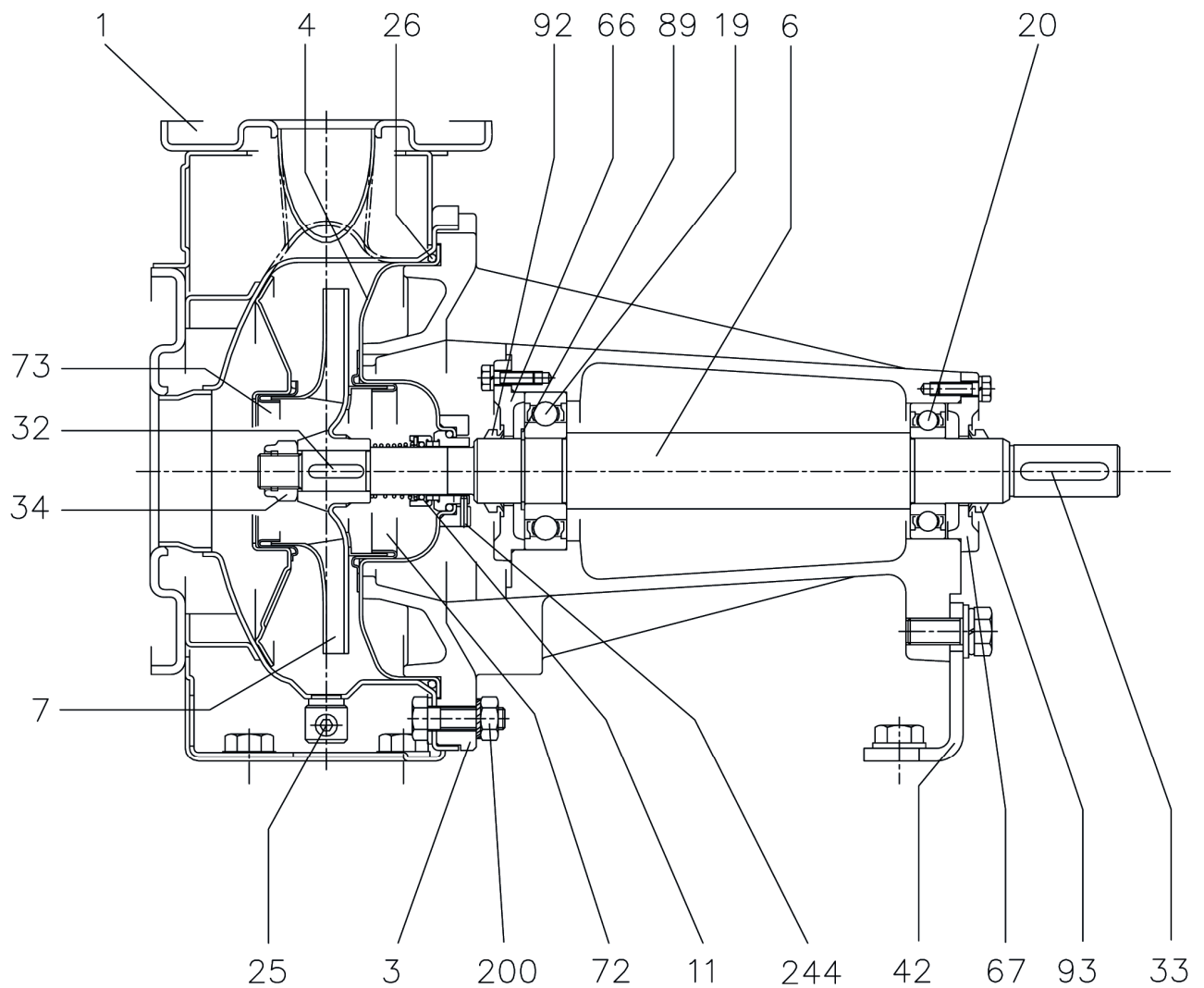
[2] Q.TY=2 for 80-200/30 , 80-200/37 , 80-250/45
 Q.TY=1 for 80-250/55

[3] Not for H and E version.

[4] FPM for H-HS-HW-HSW version

EPDM for E version 65-250 and 80-200: Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG

EPDM for ES only for 80-250 version

SECTIONAL VIEW DRAWING**3(.)PF 32, 40, 50, 65**

SECTIONAL VIEW TABLE

3(.)PF 32, 40, 50, 65

N°	PART NAME		MATERIAL		DIMENSIONS	STANDARD	Q.TY
			3P	3LP			
1	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
3	Support		Cast iron EN-G JL-200-EN 1561				1
4	Casing cover		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
6	Shaft - Part in contact with liquid		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
7	Impeller	32,40,50	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
		65-125/160/200	EN 1.4401 (AISI 316)				
11	Mechanical seal		Carbon/Ceramic/NBR	SiC/SiC/FPM	See p. 313-317		1
19	Bearing		-		See table p. 312		1
20	Bearing		-		See table p. 312		1
25	Draing plug		EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8	DIN 906	1
26	O ring	32-125, 40-125	NBR [4]	FPM	158.11x5.34	OR 6625	1
		32-160, 40-160, 50-125, 65-125			183.52x5.34	OR 6720	
		32-200, 40-200, 50-160 , 50-200, 65-160, 65-200			227.96x5.34	OR 6895	
32	Key	Up to 11 Kw	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)	6 x6x 25	UNI 6604	1
		15 kW and above			8 x7x 30		
33	Key		C 40		8x7x40	UNI 6604	1
34	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		
42	Pump support		Fe 37 Zi nc-coated			EBARA DRAWING	1
66	Impeller side bearing cover		Cast iron EN-G JL-200-EN 1561				1
67	Motor side bearing cover		Cast iron EN-G JL-200-EN 1561				1
72	Casing ring [1]		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
73	Casing ring (not for 65 version)		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
89	Snap ring		Carbon tool steels TC 80		Ø 40	UNI 7435	1
92	"V" ring		-		VS - 0030		1
93	"V" ring		-		VS - 0030		1
200	Screw	32-125, 40-125	Stainless steel A2 70 class ISO 3506/ 1		M 8x30	UNI 5739	8
		40-160, 40-200, 50-125, 50-160, 50-200, 65-125, 65-160, 65-200			M 10x35	UNI 5739	[2]
244	Pin [3]		-	EN 1.4301 (AISI 304)	4x15		1

Counterflange kit on request see p. 319-320

[1] For version 32-200, 40-200, 50-160, 50-200

[2] Q.TY=10 for 32-160, 40-160, 50-125, 65-125

Q.TY=12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200

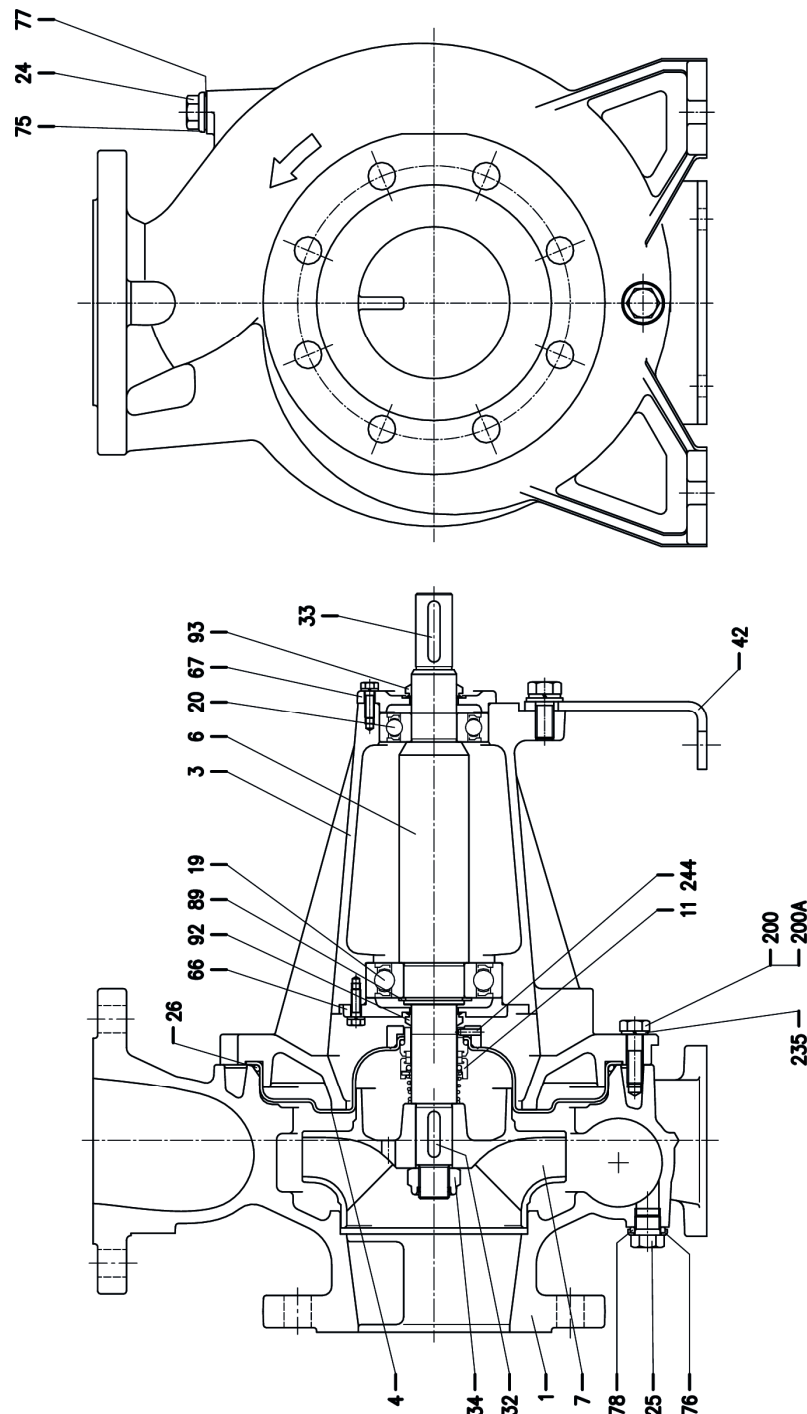
[3] Only for 65-160/15 and 65-200 -200

[4] FPM for H-HS-HW-HSW version

EPDM for E version, Q1AEGG, Q1U3EGG, U3CEGG, Q1Q1EGG, U3U3EGG

U3CU3EGG not available for models 65-160/15 and 65-200

**SECTIONAL VIEW DRAWING
3LPF 80-160**



SECTIONAL VIEW TABLE

3LPF 80-160

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	EN 1.4401 (AISI 316)			1
3	Support	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4404 (AISI 316L)			1
6	Shaft	EN 1.4404 (AISI316L)-Part in contact with liquid			1
7	Impeller	EN 1.4401 (AISI 316)			1
11	Mechanical seal	SiC/SiC/FPM	See p. 313-317		1
19	Bearing	-	See table p. 312		1
20	Bearing	-	See table p. 312		1
24	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
25	Plug	EN 1.4404 (AISI 316L)	G3/8	EPE DRAWING	1
26	"O" ring	FPM [2]	227.96x5.34	OR 6895	1
32	Key	EN 1.4401 (AISI 316)	8x7x30	UNI 6604	1
33	Key	C 40	8x7x40		1
34	Impeller nut	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
42	Pump support	Zincked steel		EPE DRAWING	1
66	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561			1
67	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561			1
75	Washer (plug)	EN 1.4404 (AISI 316L)			1
76	Washer (plug)				1
77	O-ring (plug)	FPM [2]			1
78	O-ring (plug)				1
89	Snap ring	Carbon tool steels TC 80	Ø 40	UNI 7435	1
92	"V" ring	-	VS-0030		1
93	"V" ring				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 8842	12
244	Pin [1]	EN 1.4301(AISI 304)	4x15		1

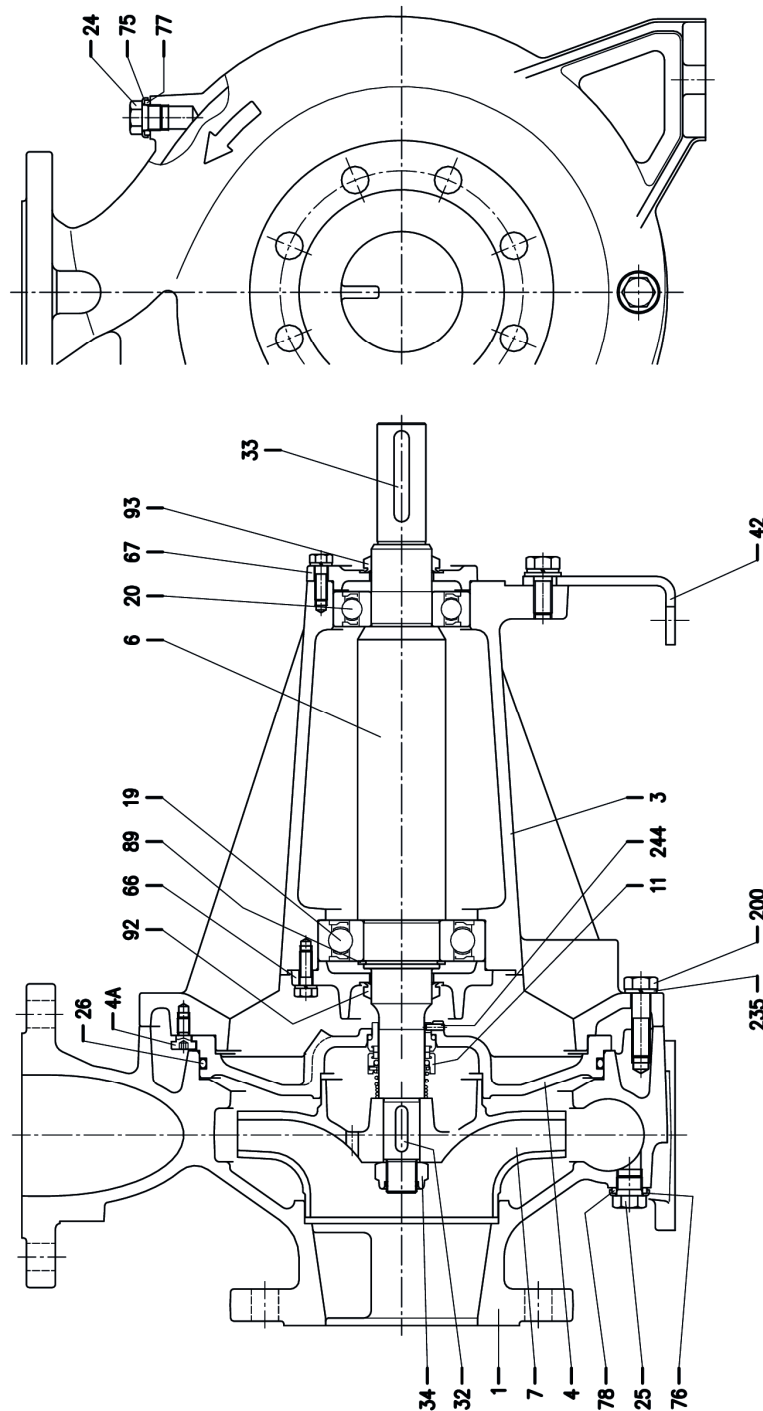
Counterflange kit on request, see table p. 319-320

[1] Not for H and E option.

[2] FPM for H-HW-HSW version

EPDM for E version, Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG

SECTIONAL VIEW DRAWING
3LPF 65-250, 80



SECTIONAL VIEW TABLE**3LPF 65-250, 80**

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	EN 1.4401 (AISI 316)			1
3	Support	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4401 (AISI 316)			1
4A	Screw for casing cover	EN 1.4301 (AISI 304)			2
6	Shaft	EN 1.4462 (Duplex stainless steel) Part in contact with liquid			1
7	Impeller	EN 1.4401 (AISI 316)			1
11	Mechanical seal	SiC/SiC/FPM	See p. 313-317		1
19	Bearing	-	See table p. 312		1
20	Bearing	-	See table p. 312		1
24	Plug	EN 1.4404 (AISI 316L)	G3/8		1
25	Plug	EN 1.4404 (AISI 316L)	G3/8		1
26	"O" ring	FPM [2]	253.36x5.34	OR 6995	1
32	Key	EN 1.4401 (AISI 316)	d=24 mm	UNI 6604	1
			80-200		1
			80-250 d=29 mm		1
33	Key	C 40	10x8x60	UNI 6604	1
34	impeller nut	EN 1.4404 (AISI 316L)	d=24 mm	UNI 7474	1
			80-200		1
			80-250 d=29 mm		1
42	Pump support	Zincked steel			1
66	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561			1
67	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561			1
75	Washer (plug)	EN 1.4404 (AISI 316L)			1
76	Washer (plug)				1
77	O-ring (plug)	FPM [2]			1
78	O-ring (plug)				1
89	Snap ring	Carbon tool steels TC 80	Ø 50	UNI 7435	1
92	"V" ring	-	VS-0040		1
93	"V" ring				1
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 [1]	EN 1.4301 (AISI 304)	4x12	UNI 6873	1

Counterflange kit on request, see table p. 319-320

[1] Not for H and E option.

[2] FPM for H-HW-HSW version

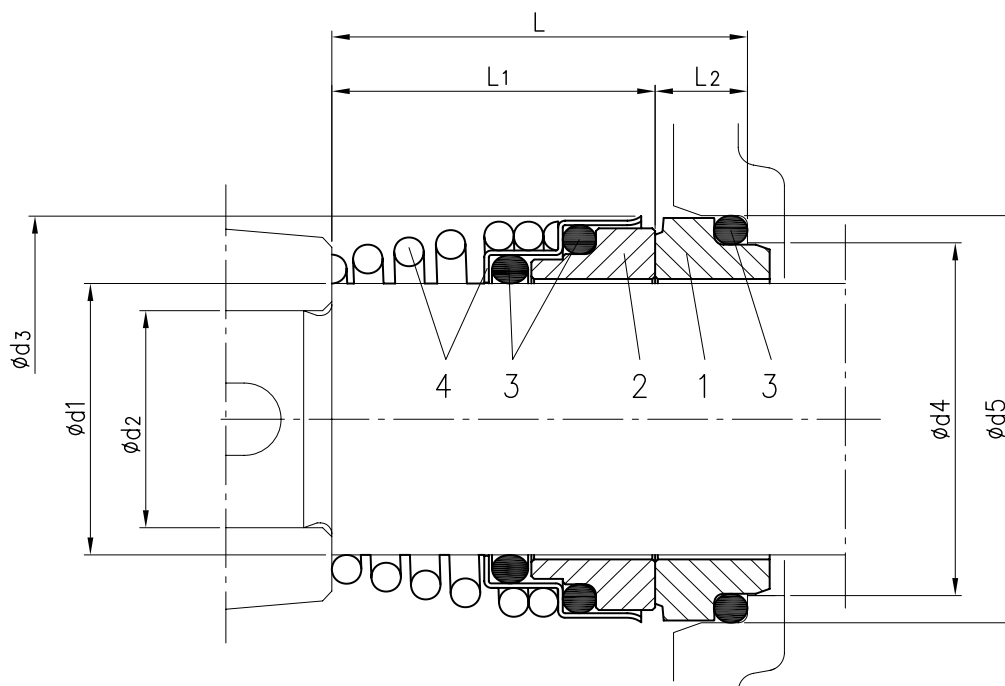
EPDM for E version, 65-250 and 80-200: Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG

EPDM for ES only for 80-250 version

3(.)PF BALL BEARING

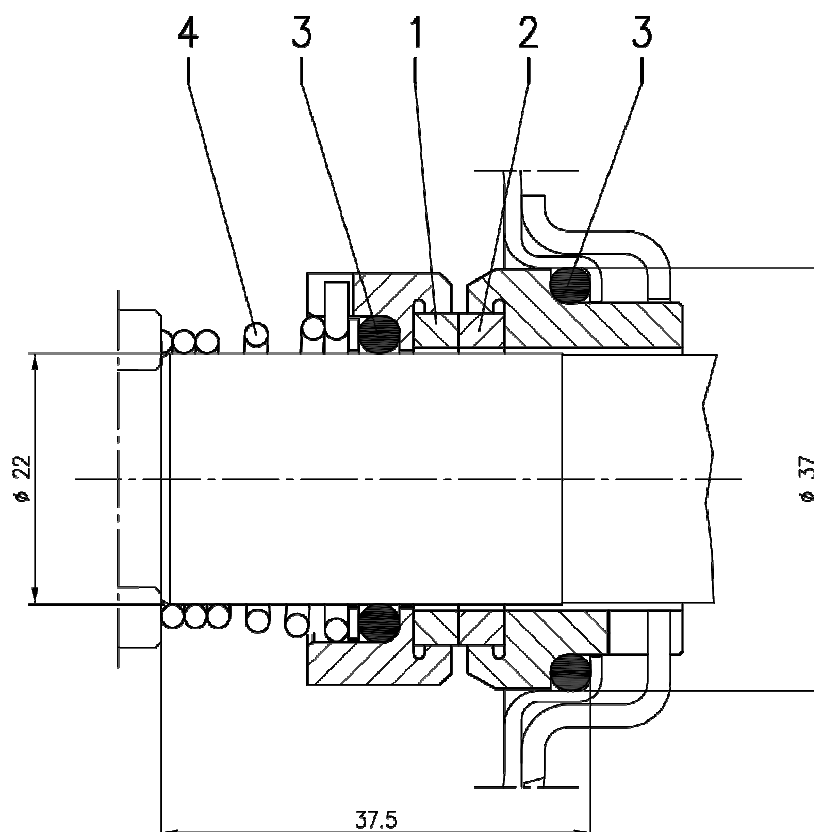
Type pumps 50 Hz	Ball bearing	
	Pump side	Motor side
32-125	6306-2RS1 C3	6206-2RS1 C3
32-160/R		
32-160		
32-200/R	6308-2RS1 C3	6306-2RS1 C3
32-200		
32-200/L		
40-125/R	6306-2RS1 C3	6206-2RS1 C3
40-125		
40-160/R		
40-160	6308-2RS1 C3	6306-2RS1 C3
40-200/R		
40-200		
40-200/L	6306-2RS1 C3	6206-2RS1 C3
50-125/S		
50-125/R		
50-125	6308-2RS1 C3	6306-2RS1 C3
50-160/R		
50-160		
50-200/R	6308-2RS1 C3	6306-2RS1 C3
50-200		
50-200/L		
65-125/R	6306-2RS1 C3	6206-2RS1 C3
65-125		
65-125/L		
65-160/S	6308-2RS1 C3	6306-2RS1 C3
65-160/R		
65-160		
65-160/L		
65-200/R		
65-200		
65-200/L	6310-2RS1 C3	6308-2RS1 C3
65-250		
65-250/L	6308-2RS1 C3	6306-2RS1 C3
80-160/S		
80-160/R		
80-160		
80-160/L	6310-2RS1 C3	6308-2RS1 C3
80-200/R		
80-200		
80-200/L		
80-250/R		
80-250		
80-250/L		

MECHANICAL SEAL (Standard, H, E and Special version)

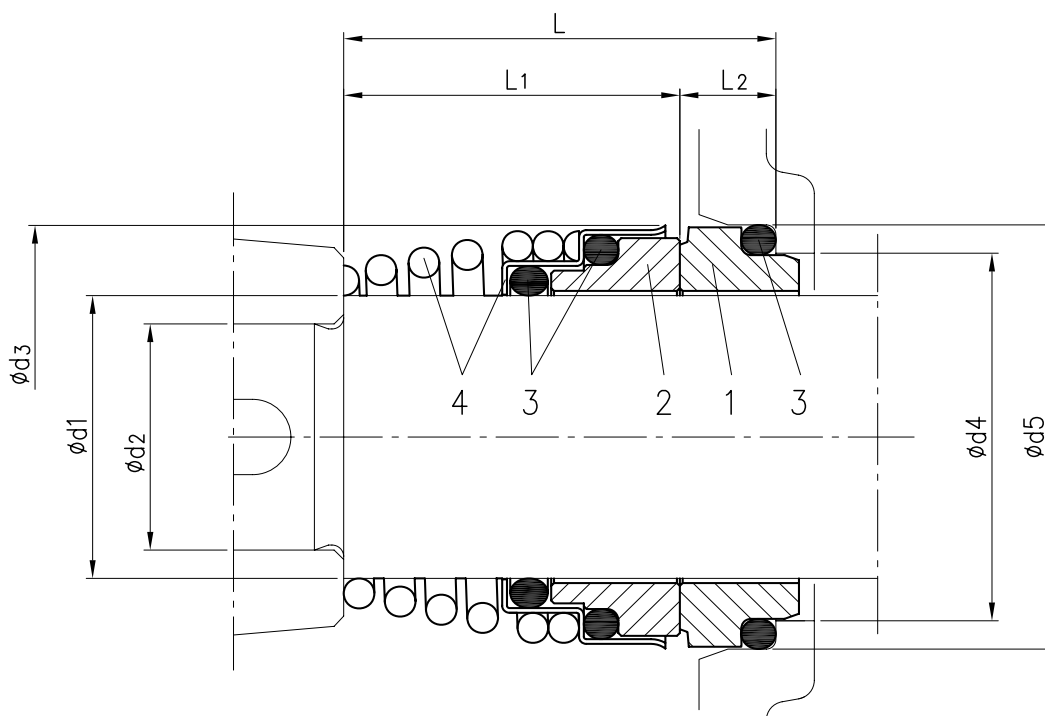


Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
Standard	32-125/160/200									Carbon	Ceramic	NBR	EN 1.4401 (AISI 316)
	40-125/160/200												
	50-125/160/200	22	19	38	31	37	37.5	27.5	10				
	65-125												
	65-160/7.5-9.2-11												
H	65-160/15	30	24	46	39	45	42.5	32.5	10	Carbon	Ceramic	FPM	EN 1.4401 (AISI 316)
	65-200												
	32-125/160/200												
	40-125/160/200												
	50-125/160/200	22	19	38	31	37	37.5	27.5	10				
E	65-125									Carbon	Ceramin	EPDM	EN 1.4401 (AISI 316)
	65-160/7.5-9.2-11												
	65-160/15	30	24	46	39	45	42.5	32.5	10				
	65-200/250												
	80-160/200												
Q1AEGG*	65-160/15	30	24	46	39	45	42.5	32.5	10	Silicon Carbide	Metallised Carbon	EPDM	EN 1.4401 (AISI 316)
	65-200/250												
	80-160/200												

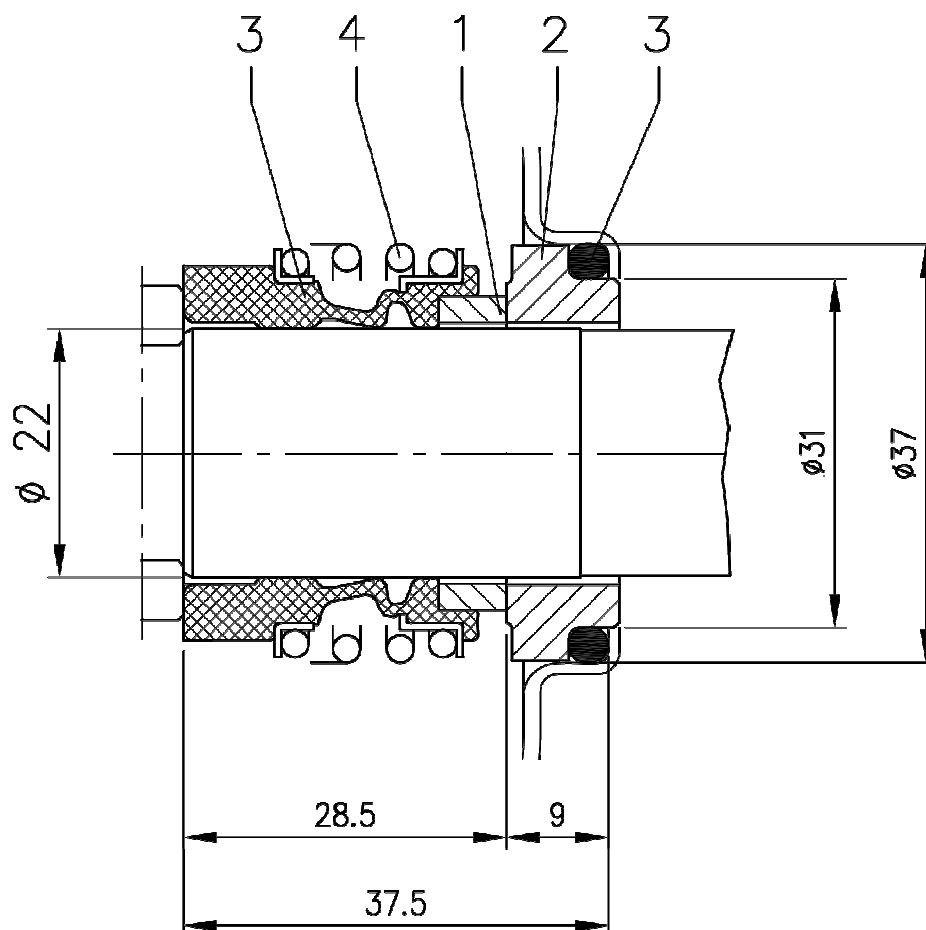
* The drawing is only indicative

MECHANICAL SEAL (L version Ø 22)

Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
L Ø22	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)

MECHANICAL SEAL (L version Ø 30-35)

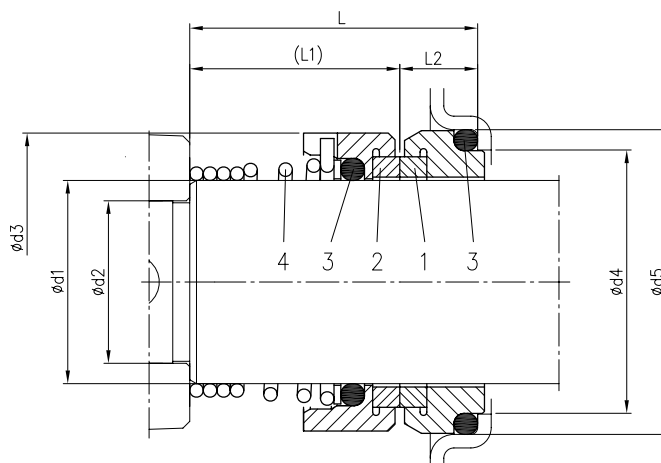
Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
L Ø30	65-160/15 65-200/250 80-160/200	30	24	44	39	45	42.5	31	11.5	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
L Ø35	80-250	35	29	49	44	50	42.5	31	11.5	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)

MECHANICAL SEAL (HS version and Special version Ø22)

Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
HS Ø22	32-125/160/200	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
	40-125/160/200				
	50-125/160/200				
	65-125				
	65-160/7.5-9.2-11				
Q1AEGG*	32-125/160/200	Silicon Carbide	Metallised Carbon	EPDM	EN 1.4401 (AISI 316)
	40-125/160/200				
	50-125/160/200				
	65-125				
	65-160/7.5-9.2-11				

* The drawing is only indicative

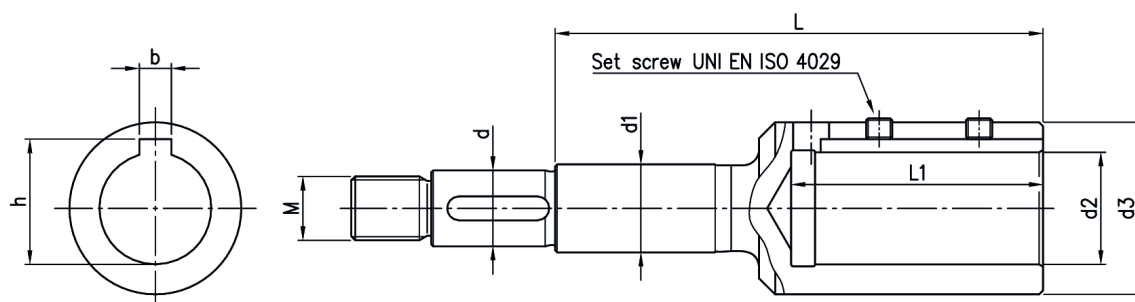
MECHANICAL SEAL (HS Ø30, HW, HSW, ES and Special version)



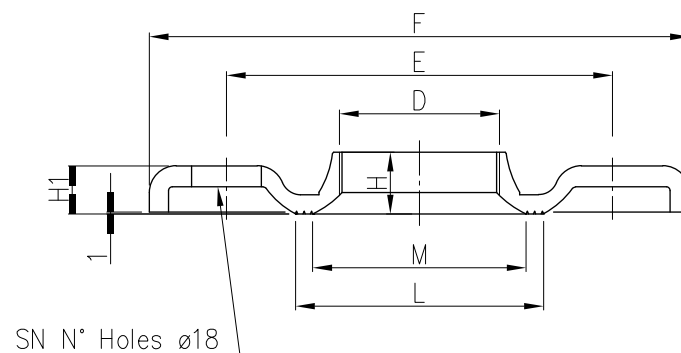
Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + Spring
HS Ø30	65-160/15 65-200	30	24	46	39	45	42.5	31	11.5	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
HW	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Tungsten Carbide	Tungsten Carbide	FPM	EN 1.4401 (AISI 316)
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
	80-250	35	29	50	44	50	42.5	32.5	10				
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
HSW	80-250	35	29	50	44	50	42.5	32.5	10	Tungsten Carbide	SiC	FPM	EN 1.4401 (AISI 316)
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
	80-250	35	29	50	44	50	42.5	32.5	10				
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
ES	80-250	35	29	50	44	50	42.5	32.5	10	Carbon	SiC	EPDM	EN 1.4401 (AISI 316)
U3U3EGG*	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Tungsten Carbide	Tungsten Carbide	EPDM	EN 1.4401 (AISI 316)
Q1Q1EGG*	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Silicon Carbide	Silicon Carbide	EPDM	EN 1.4401 (AISI 316)
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
Q1U3EGG*	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Silicon Carbide	Tungsten Carbide	EPDM	EN 1.4401 (AISI 316)
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
U3CEGG*	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Tungsten Carbide	Silicon Carbide	EPDM	EN 1.4401 (AISI 316)
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10				
	65-160/15 65-200/250 80-160/200	30	24	46	39	45	42.5	32.5	10				

* The drawing is only indicative

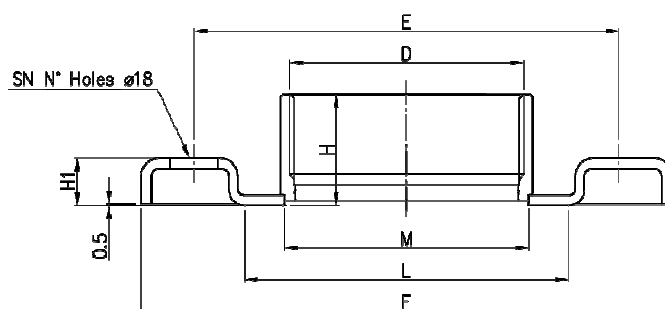
COUPLING



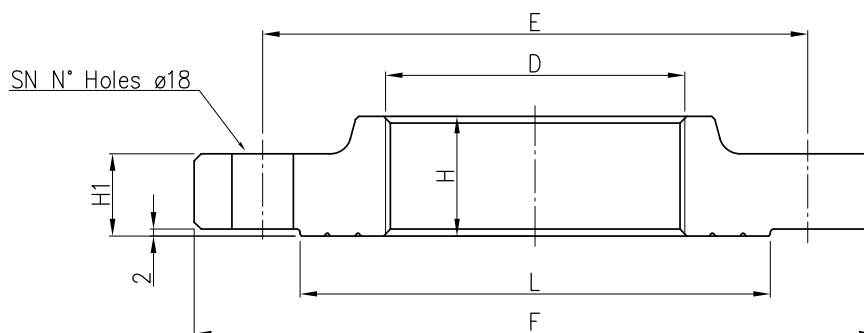
Type pumps	kW	HP	Motor Size	Dimensions mm										Set screw
				d	d1	d2	d3	M	L	L1	b	h		
3(.SF 32-125/1.1	1.1	1.5	80	19	22	19	33	M16x1.5	98	43	6	21.8	M6x6	
3(.SF 32-160/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8	
3(.SF 32-160/2.2	2.2	3	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8	
3(.SF 32-200/3.0	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 32-200/4.0	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 32-200/5.5	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 32-200/7.5	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 40-125/1.5	1.5	2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8	
3(.SF 40-125/2.2	2.2	3	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8	
3(.SF 40-160/3.0	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 40-160/4.0	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 40-200/5.5	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 40-200/7.5	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 40-200/11	11	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8	
3(.SF 50-125/2.2	2.2	3	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8	
3(.SF 50-125/3.0	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 50-125/4.0	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 50-160/5.5	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 50-160/7.5	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 50-200/9.2	9.2	12.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 50-200/11	11	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8	
3(.SF 50-200/15	15	20	160	22	22	42	63	M18x1.5	209	114	12	45.3	M8x8	
3(.SF 65-125/4.0	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8	
3(.SF 65-125/5.5	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 65-125/7.5	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 65-160/7.5	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 65-160/9.2	9.2	12.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8	
3(.SF 65-160/11	11	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8	
3(.SF 65-160/15	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 65-200/15	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 65-200/18.5	18.5	25	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 65-200/22	22	30	180	24	30	48	72	M20x1.5	184	114	14	51.8	M10x10	
3(.SF 65-250/30	30	40	200	24	30	55	85	M20x1.5	184	114	16	59.3	M12x12	
3(.SF 65-250/37	37	50	200	24	30	55	85	M20x1.5	184	114	16	59.3	M12x12	
3(.SF 80-160/11	11	15	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 80-160/15R	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 80-160/15	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 80-160/18.5	18.5	25	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8	
3(.SF 80-200/22	22	30	180	24	30	48	72	M20x1.5	184	114	14	51.8	M10x10	
3(.SF 80-200/30	30	40	200	24	30	55	85	M20x1.5	184	114	16	59.3	M12x12	
3(.SF 80-200/37	37	50	200	24	30	55	85	M20x1.5	184	114	16	59.3	M12x12	
3(.SF 80-250/37	37	50	200	29	35	55	85	M24x2	206	114	16	59.3	M12x12	
3(.SF 80-250/45	45	60	225	29	35	55	85	M24x2	206	114	16	59.3	M12x12	
3(.SF 80-250/55	55	75	250	29	35	60	89	M24x2	218	144	18	64.4	M12x12	

COUNTERFLANGE ZINCKED STEEL

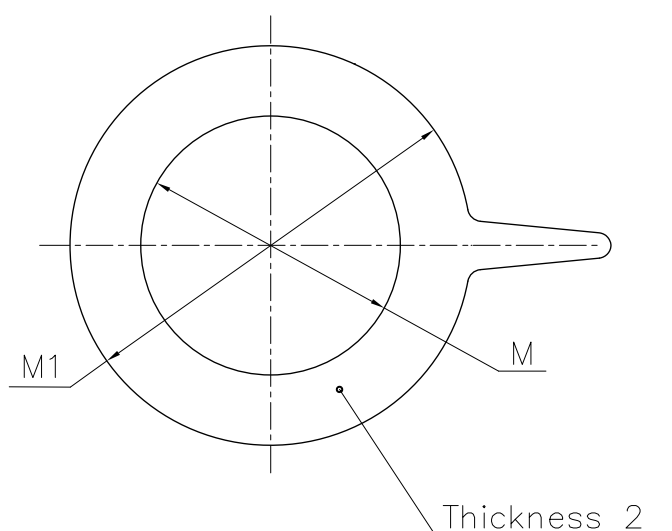
Counterflange									Screw	
DN	D	E	F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	100	15	11.5	67	50	4	M16x55	Zn. Steel 8.8 strenght class ISO 898-1
40	G 1 1/2	110	110	17.5	11.5	72	58	4		
50	G2	125	125	19	15	89	70	4		
65	G 2 1/2	145	185	23	14	104	88	4		
80	G3	160	200	24	16	117.5	100	8	M16x60	
100	G4	180	220	29	16	144	125	8		

COUNTERFLANGE EN 1.4404 (AISI 316L)

DN	Counterflange								Screw	
	D	E	F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	140	29.5	14	66	44	4	M16x55	A2-70 class ISO 3506-1
40	G 1 1/2	110	150	29.5	14	71	50.5			
50	G 2	125	165	34	16	83	63			
65	G 2 1/2	145	185	40	16	103	80			
80	G3	160	200	42	18	122	92	8	M16x60	

COUNTERFLANGE EN 1.4404 (AISI 316L) DN100

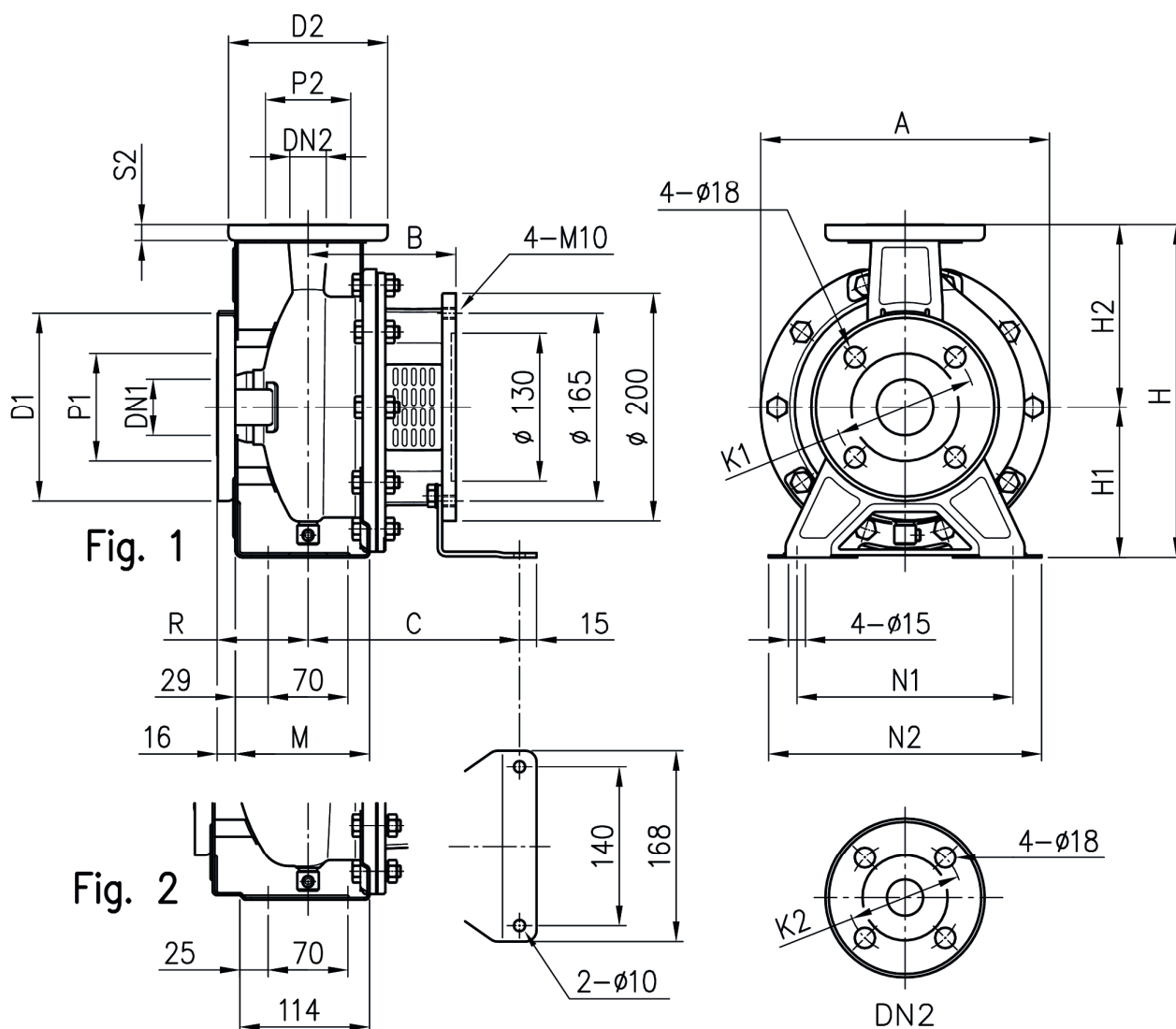
Counterflange								Screw	
DN	D	E	F	H	H1	L	SN	DIMENSIONS	MATERIAL
100	G4	180	220	35	20	150	8	M16x70	A2-70 class ISO 3506-1

GASKET

DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140
100	115	160

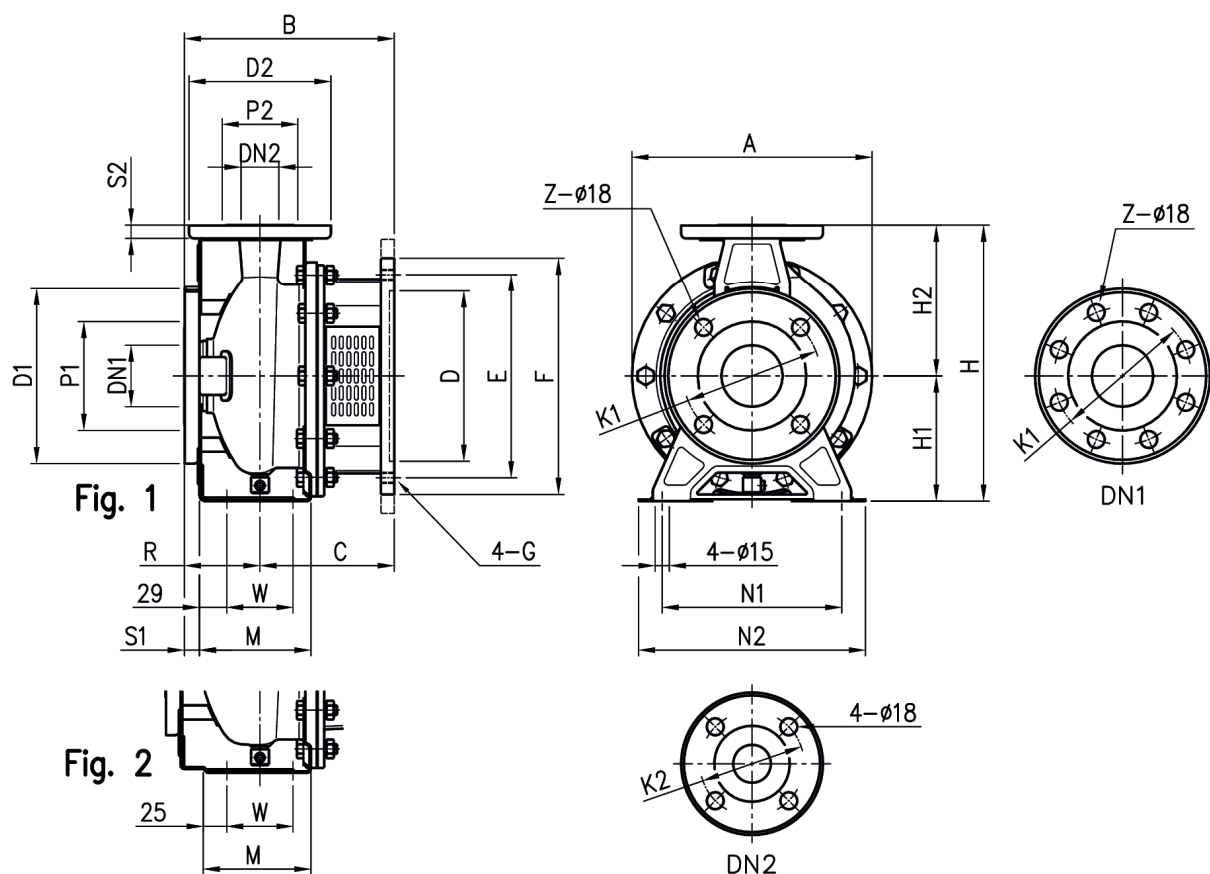
Material: EPDM for standard version
FPM for L version

PUMP 3(.)SF 32, 40, 50



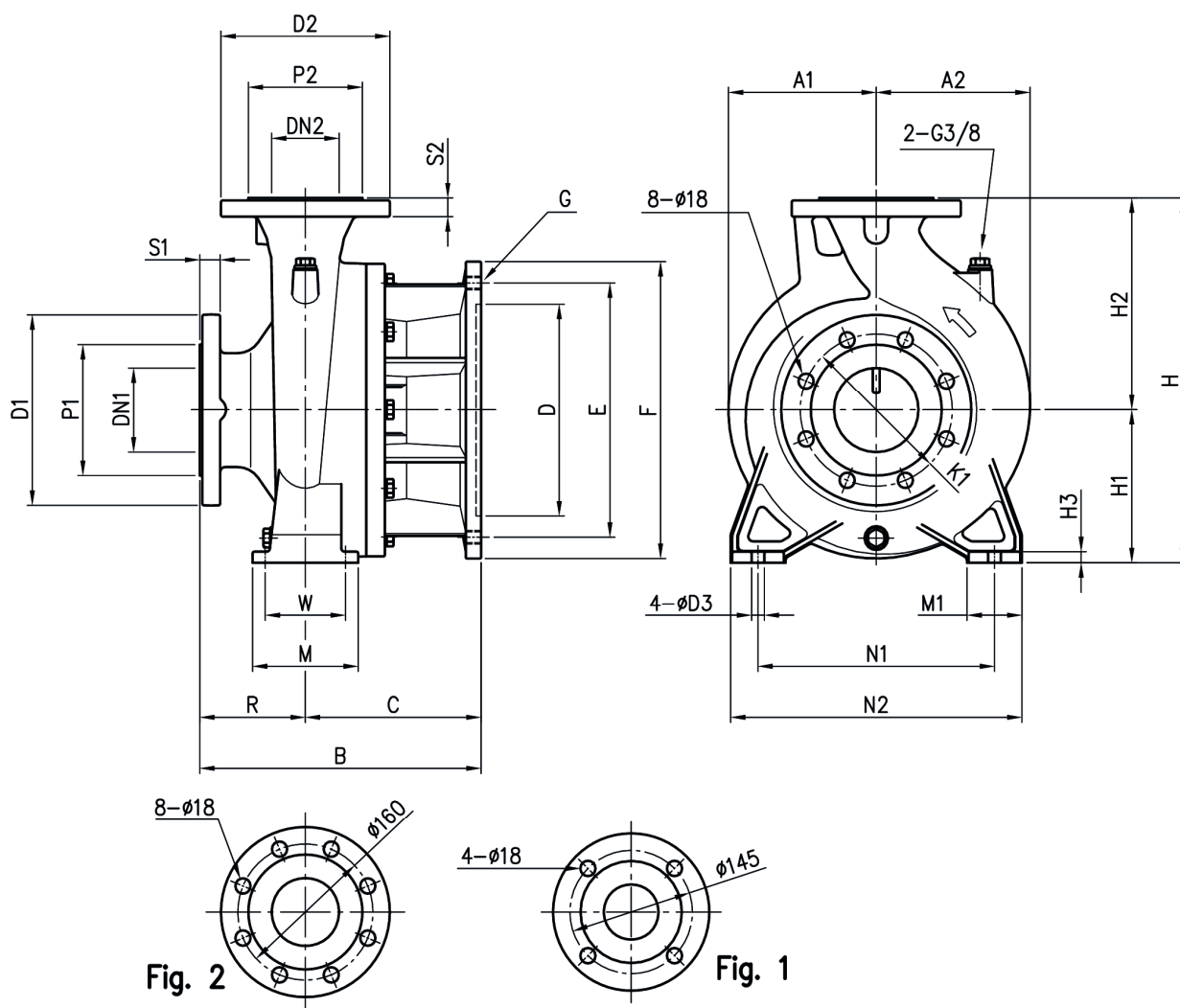
Pump type	Dimensions [mm]																				Weight [kgf]
	Fig.	DN1	P1	K1	D1	DN2	P2	K2	D2	S2	H	H1	H2	M	N1	N2	R	A	B	C	
32-125/1.1	1	50	95	125	165	32	75	100	140	14	252	112	140	114	140	190	80	213	118	174	13.1
32-160/1.5	1	50	95	125	165	32	75	100	140	14	292	132	160	118	190	240	80	254	130	186	17
32-160/2.2	1	50	95	125	165	32	75	100	140	14	292	132	160	118	190	240	80	254	130	186	17
40-125/1.5	1	65	115	145	185	40	80	110	150	14	252	112	140	114	160	210	80	213	130	186	14.4
40-125/2.2	1	65	115	145	185	40	80	110	150	14	252	112	140	114	160	210	80	213	130	186	14.5
50-125/2.2	2	65	115	145	185	50	95	125	165	16	292	132	160	-	190	240	100	254	130	186	20

PUMP 3(.)SF 32, 40, 50, 65



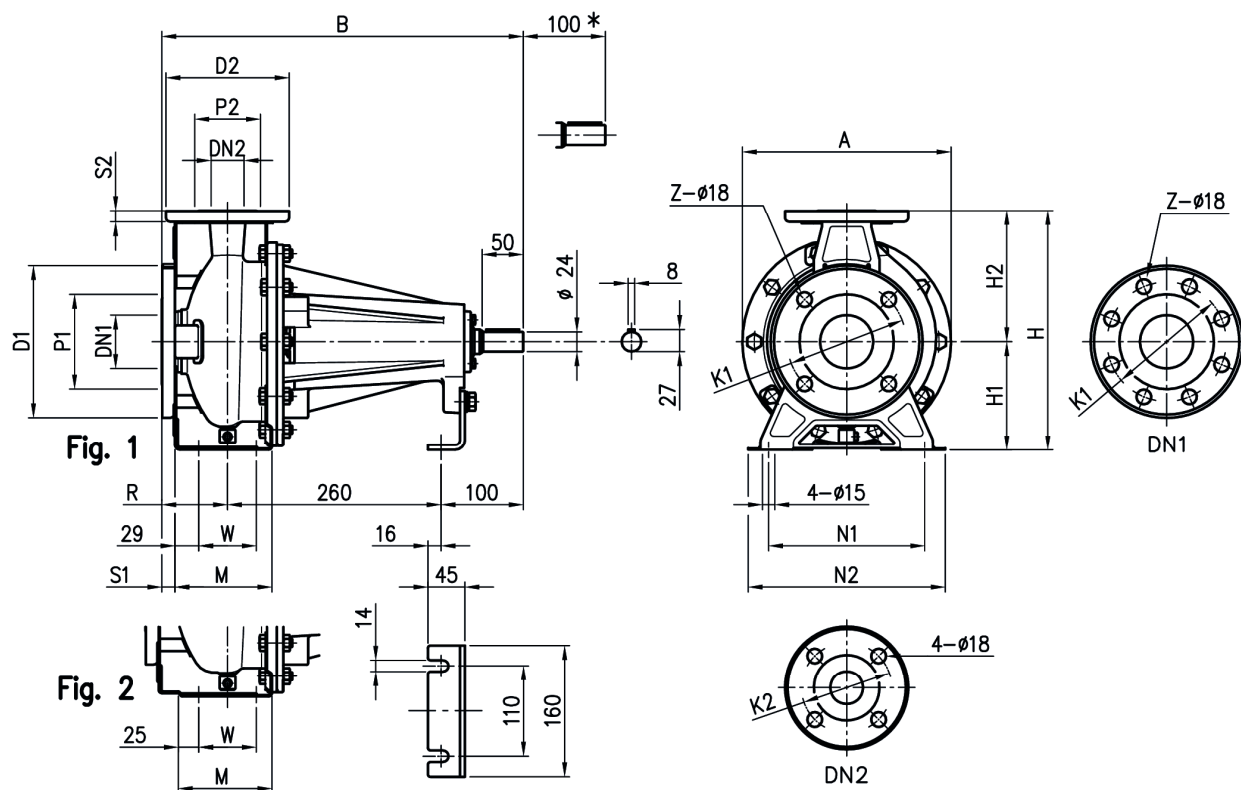
Pump type	Fig.	Dimensions [mm]																										Weight [kgf]	
		DN1	P1	K1	D1	S1	Z		DN2	P2	K2	D2	S2	H	H1	H2	M	N1	N2	R	W	A	B	C	D	E	F		G
		[1]	[2]																										
32-200/3	1	50	95	125	165	16	4	-	32	75	100	140	14	340	160	180	119	190	240	80	70	296	222	142	180	215	250	M12	24
32-200/4	1	50	95	125	165	16	4	-	32	75	100	140	14	340	160	180	119	190	240	80	70	296	222	142	180	215	250	M12	24
32-200/5.5	1	50	95	125	165	16	4	-	32	75	100	140	14	340	160	180	119	190	240	80	70	296	245	165	230	265	300	M12	28
32-200/7.5	1	50	95	125	165	16	4	-	32	75	100	140	14	340	160	180	119	190	240	80	70	296	245	165	230	265	300	M12	28
40-160/3	1	65	115	145	185	16	4	-	40	80	110	150	14	292	132	160	118	190	240	80	70	254	222	142	180	215	250	M12	19.5
40-160/4	1	65	115	145	185	16	4	-	40	80	110	150	14	292	132	160	118	190	240	80	70	254	222	142	180	215	250	M12	20
40-200/5.5	2	65	115	145	185	16	4	-	40	80	110	150	14	340	160	180	115	212	265	100	70	296	265	165	230	265	300	M12	28
40-200/7.5	2	65	115	145	185	16	4	-	40	80	110	150	14	340	160	180	115	212	265	100	70	296	265	165	230	265	300	M12	28
40-200/11	2	65	115	145	185	16	4	-	40	80	110	150	14	340	160	180	115	212	265	100	70	296	298	198	250	300	350	M16	41.5
50-125/3	2	65	115	145	185	16	4	-	50	95	125	165	16	292	132	160	114	190	240	100	70	254	242	142	180	215	250	M12	20
50-125/4	2	65	115	145	185	16	4	-	50	95	125	165	16	292	132	160	114	190	240	100	70	254	242	142	180	215	250	M12	20
50-160/5.5	2	65	115	145	185	16	4	-	50	95	125	165	16	340	160	180	115	212	265	100	70	296	265	165	230	265	300	M12	28.5
50-160/7.5	2	65	115	145	185	16	4	-	50	95	125	165	16	340	160	180	115	212	265	100	70	296	265	165	230	265	300	M12	28.5
50-200/9.2	2	65	115	145	185	16	4	-	50	95	125	165	16	360	160	200	115	212	265	100	70	296	265	165	230	265	300	M12	29
50-200/11	2	65	115	145	185	16	4	-	50	95	125	165	16	360	160	200	115	212	265	100	70	296	298	198	250	300	350	M16	41.5
50-200/15	2	65	115	145	185	16	4	-	50	95	125	165	16	360	160	200	115	212	265	100	70	296	298	198	250	300	350	M16	42.5
65-125/4	2	80	134	160	200	18	8	4	65	115	145	185	16	340	160	180	140	212	280	100	95	254	242	142	180	215	250	M12	26
65-125/5.5	2	80	134	160	200	18	8	4	65	115	145	185	16	340	160	180	140	212	280	100	95	254	265	165	230	265	300	M12	27.5
65-125/7.5	2	80	134	160	200	18	8	4	65	115	145	185	16	340	160	180	140	212	280	100	95	254	265	165	230	265	300	M12	28.5
65-160/7.5	2	80	134	160	200	18	8	4	65	115	145	185	16	360	160	200	140	212	280	100	95	296	265	165	230	265	300	M12	27
65-160/9.2	2	80	134	160	200	18	8	4	65	115	145	185	16	360	160	200	140	212	280	100	95	296	265	165	230	265	300	M12	30
65-160/11	2	80	134	160	200	18	8	4	65	115	145	185	16	360	160	200	140	212	280	100	95	296	298	198	250	300	350	M16	40
65-160/15	2	80	134	160	200	18	8	4	65	115	145	185	16	360	160	200	140	212	280	100	95	296	308	208	250	300	350	M16	42
65-200/15	2	80	134	160	200	18	8	4	65	115	145	185	16	405	180	225	140	250	320	100	95	296	308	208	250	300	350	M16	29.5
65-200/18.5	2	80	134	160	200	18	8	4	65	115	145	185	16	405	180	225	140	250	320	100	95	296	308	208	250	300	350	M16	29.5
65-200/22	2	80	134	160	200	18	8	4	65	115	145	185	16	405	180	225	140	250	320	100	95	296	308	208	250	300	350	M16	30

PUMP 3LSF 65-250, 80



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	G	A1		A2
65-250/30	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	15	100	120	280	360	160	80	19	308	208	300	350	400	4 - M16	200	200	70
65-250/37	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	15	100	120	280	360	160	80	19	308	208	300	350	400	4 - M16	200	200	71
80-160/11	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	15	333	208	250	300	350	4 - M16	175	175	52
80-160/15R	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	15	333	208	250	300	350	4 - M16	175	175	52
80-160/15	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	15	333	208	250	300	350	4 - M16	175	175	52
80-160/18.5	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	15	333	208	250	300	350	4 - M16	175	175	53
80-200/22	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	15	333	208	250	300	350	4 - M16	175	182	68
80-200/30	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	15	333	208	300	350	400	4 - M16	200	200	72
80-200/37	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	15	333	208	300	350	400	4 - M16	200	200	73
80-250/37	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	19	361	236	300	350	400	4 - M16	200	200	83
80-250/45	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	19	361	236	350	400	450	8 - M16	225	225	88
80-250/55	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	19	373	248	450	500	550	8 - M16	275	275	100

PUMP 3(.)PF 32, 40, 50, 65



* Space for disassembly.

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	
							[1]	[2]																
32-125	1	50	95	125	165	16	4	-	32	75	100	140	14	252	112	140	114	140	190	80	70	213	440	17
32-160	1	50	95	125	165	16	4	-	32	75	100	140	14	292	132	160	118	190	240	80	70	254	440	19
32-200	1	50	95	125	165	16	4	-	32	75	100	140	14	340	160	180	119	190	240	80	70	296	440	27
40-125	1	65	115	145	185	16	4	-	40	80	110	150	14	252	112	140	114	160	210	80	70	213	440	17
40-160	1	65	115	145	185	16	4	-	40	80	110	150	14	292	132	160	118	190	240	80	70	254	440	19
40-200	2	65	115	145	185	16	4	-	40	80	110	150	14	340	160	180	115	212	265	100	70	296	460	27
50-125	2	65	115	145	185	16	4	-	50	95	125	165	16	292	132	160	114	190	240	100	70	254	460	19
50-160	2	65	115	145	185	16	4	-	50	95	125	165	16	340	160	180	115	212	265	100	70	296	460	28
50-200	2	65	115	145	185	16	4	-	50	95	125	165	16	360	160	200	115	212	265	100	70	296	460	27
65-125	2	80	134	160	200	18	8	4	65	115	145	185	16	340	160	180	140	212	280	100	95	254	460	28
65-160	2	80	134	160	200	18	8	4	65	115	145	185	16	360	160	200	140	212	280	100	95	296	460	29
65-200	2	80	134	160	200	18	8	4	65	115	145	185	16	405	180	225	140	250	320	100	95	296	460	30

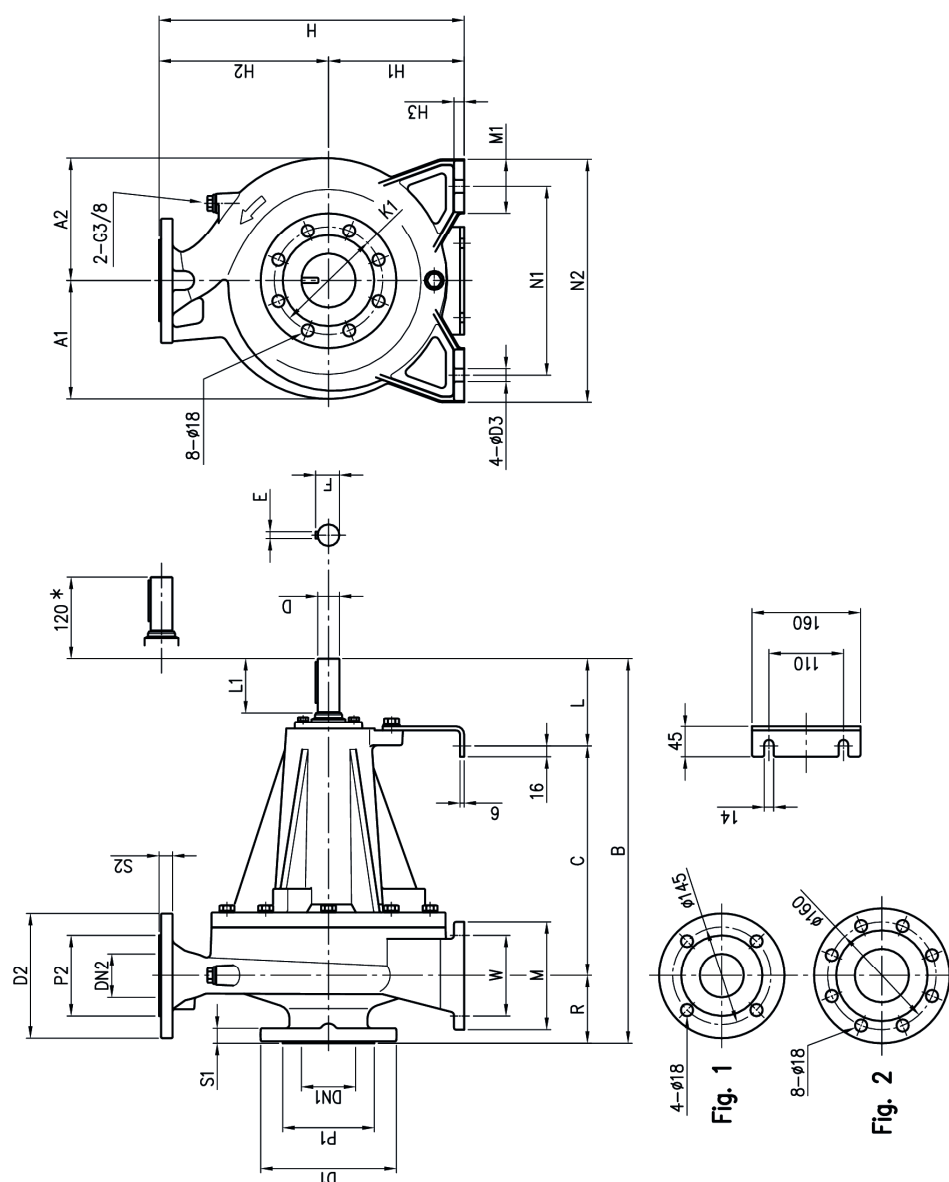
[1] Standard [2] On request

DIMENSIONS

50Hz

Rev. H

PUMP 3LP 65-250, 80



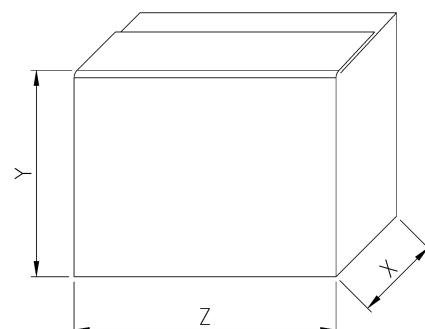
Pump type	Dimensions [mm]																							Weight [kg]						
	DN1	P1	K1	D1	S1	DN2	P2	D2	S2	H	H1	H2	H3	R	W	N1	N2	M	M1	L	L1	D	D3	E	F	A1	A2	B	C	
3LPF 65-250	80	135	160	200	22	65 Fig. 1	120	185	20	450	200	250	15	100	120	280	360	160	80	130	80	32	19	10	35	175	182	570	340	82
3LPF4 80-160	100	155	180	225	24	80 Fig. 2	135	200	22	405	180	225	13	125	95	250	320	125	65	100	50	24	15	8	27	147	173	485	280	56
3LPF 80-200	100	155	180	225	24	80 Fig. 2	135	200	22	430	180	250	13	125	95	280	345	125	65	130	80	32	15	10	35	175	182	595	340	83
3LPF4 80-250	100	155	180	225	24	80 Fig. 2	135	200	22	480	200	280	15	125	120	315	400	160	80	130	80	32	19	10	35	175	192	595	340	84

* Space for disassembly

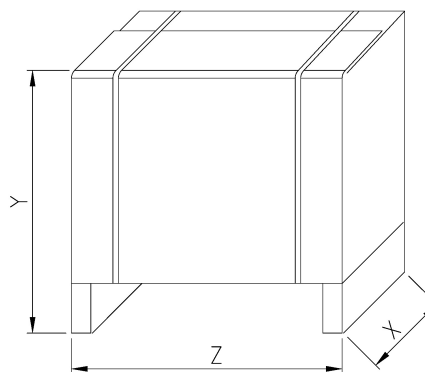
PACKING 3(.).SF

Type pumps	PACKING [mm]			WEIGHT [Kg]	PACK TYPE
	X	Y	Z		
32-125/1.1	424	405	374	16	1
32-160/1.5				19	
32-160/2.2				27	
32-200/3				30	
32-200/4				17	
32-200/5.5				23	
32-200/7.5				30.5	
40-125/1.5				44.5	
40-125/2.2				22.5	
40-160/3				31.5	
40-160/4				32	
40-200/5.5				45	
40-200/7.5	375	440	860	46	
40-200/11	424	405	374	29	
50-125/2.2				30.5	
50-125/3				31.5	
50-125/4				30	
50-160/5.5	424	405	374	33	
50-160/7.5				44	
50-200/9.2				46	
50-200/11				37	
50-200/15	375	440	860	33.5	
65-125/4	424	405	374	34	
65-125/5.5				75	
65-125/7.5				76	
65-160/7.5				58	
65-160/9.2	424	405	374	58	
65-160/11				58	
65-160/15				58	
65-200/15				58	
65-200/18.5	375	440	860	75	
65-200/22				80	
65-250/30				81	
65-250/37				90	
80-160/11	390	533	580	95	2
80-160/15R				108	
80-160/15					
80-160/18.5					
80-200/22	475	610	780		
80-200/30					
80-200/37					
80-250/37					
80-250/45	762	690	894		
80-250/55					

TYPE 1



TYPE 2



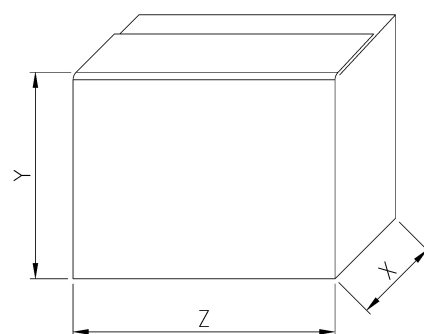
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PACKING 3(.).PF

Type pumps	PACKING [mm]			WEIGHT [Kg]	PACK TYPE
	X	Y	Z		
32-125	280	340	490	18	1
32-160/R				20	
32-160					
32-200/R	330	390	500	28.5	
32-200					
32-200/L					
40-125/R	280	340	490	18	
40-125				20	
40-160/R					
40-160	330	390	500	28.5	
40-200/R					
40-200					
40-200/L	280	340	490	20	
50-125/S				20	
50-125/R					
50-125	330	390	500	29	
50-160/R				29.5	
50-160					
50-200/R				29	
50-200				30.5	
50-200/L	330	390	500		
65-125/R					
65-125					
65-125/L					
65-160/S					
65-160/R	390	533	580	32	2
65-160					
65-160/L					
65-200/R	475	608	780	86	
65-200					
65-200/L	390	533	580	64	
65-250					
65-250/L					
80-160/S	475	610	780	87	
80-160/R				93	
80-160					
80-160/L	475	610	780		
80-200/R					
80-200					
80-200/L					
80-250/R	475	610	780		
80-250					
80-250/L					

TYPE 1



TYPE 2

