



Japanese Technology since 1912

3 SERIES

Data Book 50Hz



	Page
- SPECIFICATION	
SPECIFICATION	200
SPECIFICATION	201
SPECIFICATION	202
PERFORMANCE RANGE	203
SELECTION CHART	204
TYPE KEY	205
PERFORMANCE CURVE SPECIFICATIONS	206
MEI INDEX SPECIFICATIONS	207
MEI INDEX VALUE	208
PERFORMANCE CURVE 32-125	209
PERFORMANCE CURVE 32-160	210
PERFORMANCE CURVE 32-200	211
PERFORMANCE CURVE 40-125	212
PERFORMANCE CURVE 40-160	213
PERFORMANCE CURVE 40-200	214
PERFORMANCE CURVE 50-125	215
PERFORMANCE CURVE 50-160	216
PERFORMANCE CURVE 50-200	217
PERFORMANCE CURVE 65-125	218
PERFORMANCE CURVE 65-160	219
PERFORMANCE CURVE 65-200	220
PERFORMANCE CURVE 65-250	221
PERFORMANCE CURVE 80-160	222
PERFORMANCE CURVE 80-200	223
PERFORMANCE CURVE 80-250	224
- CONSTRUCTION	
SECTIONAL VIEW DRAWING 3(.)M 32, 40, 50, 65-125/160/200	300
SECTIONAL VIEW TABLE 3(.)M 32, 40, 50, 65-125/160/200	301
SECTIONAL VIEW DRAWING 3LMZ 32, 40, 50, 65-125/160/200	302
SECTIONAL VIEW TABLE 3LMZ 32, 40, 50, 65-125/160/200	303
SECTIONAL VIEW DRAWING 3LM 80-160/11	304
SECTIONAL VIEW DRAWING 3LM 80-160/15R/15/18.5	305
SECTIONAL VIEW TABLE 3LM 80-160	306
SECTIONAL VIEW DRAWING 3(.)S 32, 40, 50	307
SECTIONAL VIEW DRAWING 3(.)S 65-125/160/200	308
SECTIONAL VIEW TABLE 3(.)S 32, 40, 50, 65-125/160/200	309
SECTIONAL VIEW DRAWING 3LSZ 32, 40-125/160, 40-200/5.5/7.5 50-125/160, 50-200/9.2, 65-125, 65-160/7.5/9.2	310
SECTIONAL VIEW DRAWING 3LSZ 40-200/11, 50-200/11/15, 65-160/11/15, 62-200	311
SECTIONAL VIEW TABLE 3LSZ 32, 40, 50, 65-125/160/200	312
SECTIONAL VIEW DRAWING 3LS 80-160	313
SECTIONAL VIEW TABLE 3LS 80-160	314

CONTENTS**50Hz**

Rev. AI

SECTIONAL VIEW DRAWING 3LS 65-250, 80-200/250	315
SECTIONAL VIEW TABLE 3LS 65-250, 80-200/250	316
SECTIONAL VIEW DRAWING 3(.)P 32, 40, 50, 65-125/160/200	317
SECTIONAL VIEW TABLE 3(.)P 32, 40, 50, 65-125/160/200	318
SECTIONAL VIEW DRAWING 3LP 80-160	319
SECTIONAL VIEW DRAWING 3LP 65-250, 80-200/250	320
SECTIONAL VIEW DRAWING 3LP 65-250, 80-160/200/250	321
SECTIONAL VIEW TABLE 3LP 80-160	322
SECTIONAL VIEW TABLE 3LP 65-250, 80-200/250	323
BEARINGS 3(.)M	324
BEARINGS 3(.)S-3(.)P	325
MECHANICAL SEAL (standard, H and special version)	326
MECHANICAL SEAL (L version ø 22)	327
MECHANICAL SEAL (L version ø 30-35)	328
MECHANICAL SEAL (HS version and special version ø 22)	329
MECHANICAL SEAL (HS version ø 30)	330
MECHANICAL SEAL (HW, HSW, E and special version)	331
MECHANICAL SEAL (ES version)	332
FLUID TEMPERATURE RANGE	333
COUPLING	334
FLEXIBLE COUPLING	335
FITTINGS	336
FITTINGS	337

- DIMENSIONS

DIMENSIONS 3(.)M 32, 40, 50, 65-125/160	400
DIMENSIONS 3(.)M 50-200, 65-160/15, 65-200	401
DIMENSIONS 3LMZ 32, 40, 50-125/160/200/9.2/11, 65-125/160/7.5/9.2/11	402
DIMENSIONS 3LMZ 50-200/15, 65-160/15, 65-200	403
DIMENSIONS 3LM 80-160/11	404
DIMENSIONS 3LM 80-160/15R/15/18.5	405
DIMENSIONS 3(.)S 32, 40, 50	406
DIMENSIONS 3(.)S 32, 65	407
DIMENSIONS 3(.)S 40, 50, 65	408
DIMENSIONS 3(.)S 32, 40, 50, 65	409
DIMENSIONS 3LSZ 32-125/160, 32-200/3/4, 50-125/2.2, 65-125/4	410
DIMENSIONS 3LSZ 32-200/5.5/7.5, 40-125/160, 40-200/5.5/7.5, 50-125/3/4, 50-160 50-200/9.2, 65-125/5.5/7.5, 65-160/7.5/9.2	411
DIMENSIONS 3LSZ 40-200/11, 50-200/11/15, 65-160/11/15, 65-200	412
DIMENSIONS 3LS 80-160	413
DIMENSIONS 3LS 65-250, 80-200/250	414
DIMENSIONS 3LS 80-200/30/37, 80-250/45	415
DIMENSIONS 3LS 80-250/55	416
DIMENSIONS 3(.)P 32, 40, 50, 65	417

CONTENTS**50Hz**

Rev. AI

DIMENSIONS TABLE 3(.)P 32, 40, 50, 65	418
DIMENSIONS 3LP 65-250,80	419
DIMENSIONS 3LP 80-200/30/37, 80-250/45	420
DIMENSIONS 3LP 80-250/55	421
PACKING 3(.)M	422
PACKING 3(.)S	423
PACKING 3(.)P	424

- TECHNICAL DATA

MOTOR DATA 3(.)M	500
MOTOR DATA 3(.)S-3(.)P	501
NOISE DATA 3(.)M	502
NOISE DATA 3(.)S-3(.)P	503

SPECIFICATION

50Hz

Rev. AI

Version		3M	3S	3P	3LM	3LMZ	3LS	3LSZ	3LP
Pump sizes	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	-	-	-	-	-	▲	-	▲

■ Available also with H, HS, HW, HSW, E, Q1Q1EGG, Q1U3EGG, Q1AEGG, U3CEGG, U3U3CEGG version.
U3U3EGG not available for model 65-160/15 and 65-200

● Available also with H, HW, HSW, E, Q1Q1EGG, Q1U3EGG, Q1AEGG, U3CEGG, U3U3EGG version.
U3U3EGG available for model 32, 40, 50, 65-125 and 65-160/7.5/9.2/11

▲ Available also with H, HW, HSW, ES, Q1Q1EGG, Q1U3EGG, Q1AEGG, U3CEGG version.

— Not available.

◇ Available only standard version.

SPECIFICATION

50Hz

Rev. AI

PUMP																
Version			3M	3S	3P	3LM(Z)	3LS(Z)	3LP								
Liquid Handled	Type of liquid		Clean water and moderately aggressive fluids													
			/			Drinking water and water contains glycol for E and ES version										
	Temperature [°C]		min. -10 max. +120 For full details see section "FLUID TEMPERATURE RANGE" on pag.333													
Maximum working pressure [MPa]			1													
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										
	Bearing		Sealed ball bearing													
Pipe Connection	Suction	32-125/160/200		Flange DN50 according EN1092-1 Standard												
		40-125/160/200		Flange DN65 according EN1092-1 Standard												
		50-125/160/200		Flange DN80 according EN1092-1 Standard												
		65-125/160/200/250		Flange DN100 according EN1092-1 Standard												
	Discharge	32-125/160/200		Flange DN32 according EN1092-1 Standard												
		40-125/160/200		Flange DN40 according EN1092-1 Standard												
		50-125/160/200		Flange DN50 according EN1092-1 Standard												
		65-125/160/200/250		Flange DN65 according EN1092-1 Standard												
		80-160/200/250		Flange DN80 according EN1092-1 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		/			CF8M - EN 1.4408 (AISI 316)									
		65-125/160/200														
		65-250														
	Impeller	80-160/200/250		EN 1.4301 (AISI 304)			EN 1.4404 (AISI 316L)									
		32-125/160/200														
		40-125/160/200		CF8M - EN 1.4408 (AISI 316)			EN 1.4404 (AISI 316L)									
		50-125/160/200														
		65-125/160/200														
	Casing cover	65-250		/			CF8M - EN 1.4408 (AISI 316)									
		80-160/200/250														
		32-125/160/200		EN 1.4301 (AISI 304)			EN 1.4404 (AISI 316L)									
		40-125/160/200														
		50-125/160/200		/			CF8M - EN 1.4408 (AISI 316)									
	65-125/160/200															
	Mechanical seal	65-250		Ceramic/Carbon/NBR (For version see page 327+333)			SiC/SiC/FPM (L version) (For version see page 327+333)									
		80-160/200														
		80-250		/			SiC/Carbon/EPDM (ES version) [2]									
		O-ring		NBR [1]			FPM [3]									
	Shaft	32, 40, 50, 65-125 65-160/11	d=19	EN 1.4301 (AISI 304)			EN 1.4404 (AISI 316L)									
										50-200/15						
			65-160/15 65-200 65-250 80-160 80-200/22 80-200/30-37 80-250								d=22	/			EN 1.4462 (Duplex stainless steel) EN 1.4404 (AISI 316L) EN 1.4462 (Duplex stainless steel)	
										d=24						
		d=24														
				d=24												
		d=24														
d=24																
		d=29														
Bracket			Cast iron - Aluminium													
Applicable standard of test			ISO 9906:2012 – Grade 3B													

[1] FPM for H-HS-HW-HSW version / EPDM for Q1AEGG, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3EGG

[2] ES option only for 80-250 2 poles Ø35

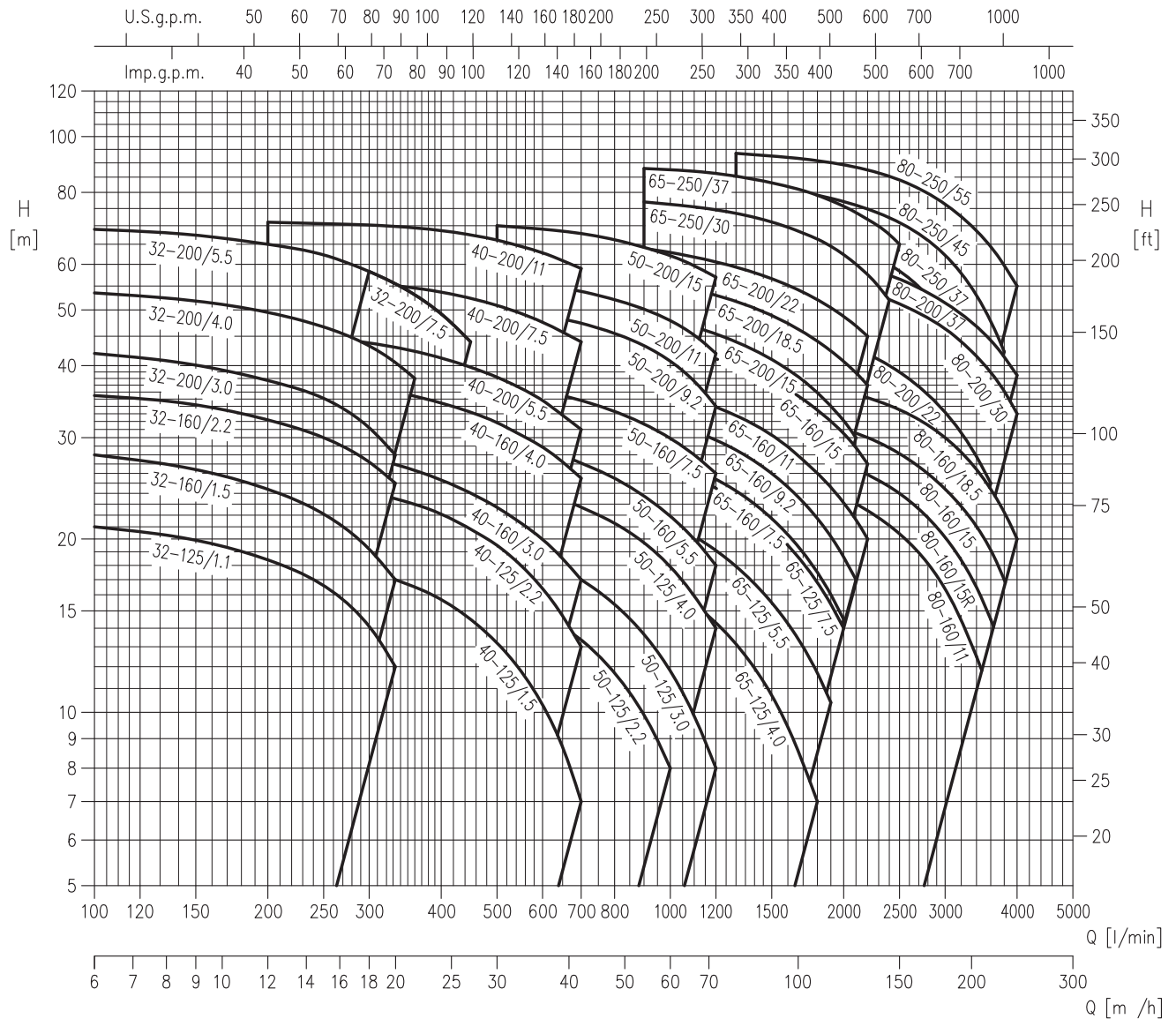
[3] EPDM for E-ES version and for Q1AEGG, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3CEGG

SPECIFICATION

50Hz

Rev. AI

MOTOR					
Type	3(.)M(Z)		3(.)S(Z)		3(.)P
	Electric - TEFC				
	Single Phase	Three Phase			
Efficiency level (Reg. 1781/2019)	IE2		IE3		
No. of Poles	2				
Rotation speed [min ⁻¹]	≈ 2900				
Insulation Class	F		F (temperature rise class B)		
Protection degree (CEI EN 60034-5)	IP 55				
Power rating [kW]	1.1 ÷ 2.2	1.1 ÷ 22	1.1 ÷ 55		
[HP]	1.5 ÷ 3.0	1.5 ÷ 30	1.5 ÷ 7.5		
Frequency [Hz]	50				
Voltage [V]	230 ±10%	230/400 ±10% (up to 4.0 kW) 400/690 ±10% (5.5 kW and above)			
Over load protection	Provided by the user				
Casing material	Aluminium				
Motor support	Cast iron - Alluminium				
Dimensions of cable entry	M20x1.5	PG13.5	M32x1.5		
		PG16	M40x1.5		
		PG21	M50x1.5		
		M20x1.5, M25x1.5			
Flange mount (IEC motor)	/		3(.)S IMB5 (up to 2.2 kW) IMB35 (3 kW and above) 3LSZ IM B35		IM B3

PERFORMANCE RANGE

SELECTION CHART

50Hz

Rev. AI

SELECTION CHART

3 SERIES: 32, 40, 50 Version

Pump type	l/min m³/h	0	100	150	200	300	333	360	400	450	500	600	700	800	1000	1200
		0	6	9	12	18	20	22	24	27	30	36	42	48	60	72
32-125/1.1(M) *	22.5	21	19.9	18.4	14.1	12	-	-	-	-	-	-	-	-	-	-
32-160/1.5(M) *	29.5	28	26.5	24.5	19.2	17	-	-	-	-	-	-	-	-	-	-
32-160/2.2(M) *	37	35.5	34	32	27	25	-	-	-	-	-	-	-	-	-	-
32-200/3.0	44	42	40	37.5	31	28	-	-	-	-	-	-	-	-	-	-
32-200/4.0	55	53.5	52	49.5	43.5	40.5	38	-	-	-	-	-	-	-	-	-
32-200/5.5	70.5	69	67.5	65	58.5	-	-	-	-	-	-	-	-	-	-	-
32-200/7.5	70.5	69	67.5	65	58.5	55.5	53	49	44	-	-	-	-	-	-	-
40-125/1.5(M) *	20	-	-	19	17.6	17	16.5	15.7	14.5	13.2	10.3	7	-	-	-	-
40-125/2.2(M) *	26.5	-	-	25.5	24	23.5	23	22	21	19.5	16.4	13	-	-	-	-
40-160/3.0	31	-	-	29.5	27.5	27	26.5	25.5	24	22.5	20	17	-	-	-	-
40-160/4.0	40	-	-	38.5	37	36	35.5	34.5	33	32	29	25.5	-	-	-	-
40-200/5.5	47	-	-	45.5	44	43	42.5	41	39.5	38	35	31	-	-	-	-
40-200/7.5	58	-	-	57	55.5	55	54.5	53.5	52.5	51	47.5	44	-	-	-	-
40-200/11	72	-	-	71	70	70	69.5	68.5	67.5	66	63	59	-	-	-	-
50-125/2.2(M) *	19	-	-	-	-	-	-	17.5	17	16.3	14.9	13.4	11.7	8	-	-
50-125/3.0	22.7	-	-	-	-	-	-	21.7	21.4	21	19.9	18.5	16.9	13.3	9.5	-
50-125/4.0	26.5	-	-	-	-	-	-	26	25.5	25	24	22.5	21.5	17.9	14	-
50-160/5.5	33	-	-	-	-	-	-	31	30.5	30	28.5	27	25.5	22	18	-
50-160/7.5	40	-	-	-	-	-	-	38.5	38	37.5	36	35	33.5	30	26	-
50-200/9.2	53	-	-	-	-	-	-	-	-	50	49	47.5	45.5	40.5	34	-
50-200/11	59	-	-	-	-	-	-	-	-	56	55	54	52	48	42	-
50-200/15	72	-	-	-	-	-	-	-	-	70	69	68	66	62	57	-

* Single phase version only for 3M type

3 SERIES: 65, 80 Version

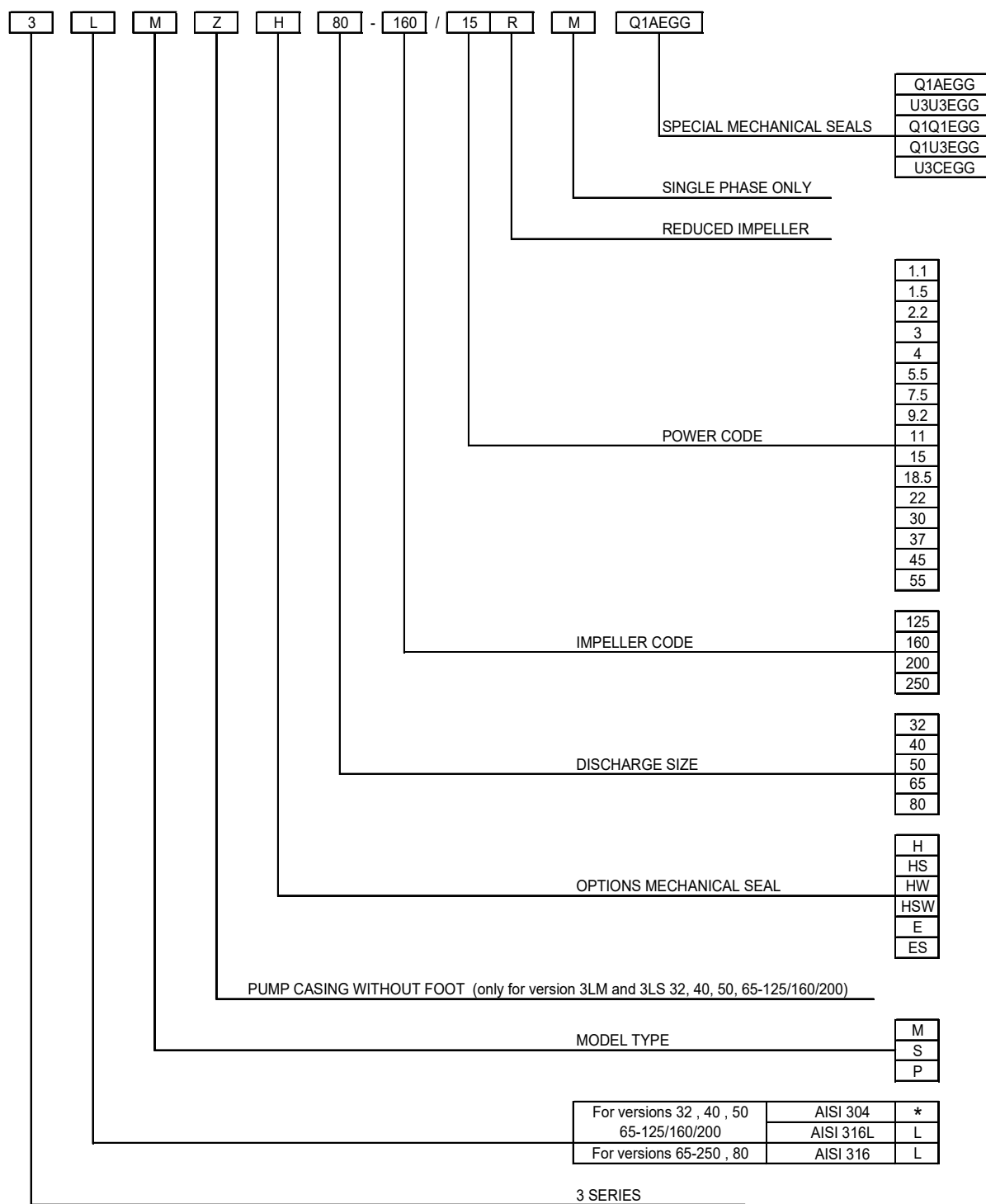
Pump type	l/min m³/h	0	600	700	900	1300	1500	1700	1900	2100	2200	2300	2400	2500	3000	3400	3600	3800	4000
		0	36	42	54	78	90	102	114	126	132	138	144	150	180	204	216	228	240
65-125/4.0	22.2	19.8	19	17.3	13.3	11	8.6	6.3	-	-	-	-	-	-	-	-	-	-	-
65-125/5.5	27	-	24	22.2	18	15.7	13.3	10.8	8	-	-	-	-	-	-	-	-	-	-
65-125/7.5	32	-	29.5	27.8	23.5	21.1	18.7	16.1	13.4	12	-	-	-	-	-	-	-	-	-
65-160/7.5	32	-	30	28.6	24.8	22.5	19.9	17.1	14.2	-	-	-	-	-	-	-	-	-	-
65-160/9.2	36.5	-	34.5	32.8	28.8	26.5	23.9	21.1	18.3	16.8	-	-	-	-	-	-	-	-	-
65-160/11	40.5	-	38.5	37.1	33.1	30.9	28.4	25.8	23	21.5	20	-	-	-	-	-	-	-	-
65-160/15	48	-	45.5	44	40	37.8	35.3	32.6	29.6	28	26.5	-	-	-	-	-	-	-	-
65-200/15	53.5	-	51	49	44	41.5	38.4	35.3	31.8	30	-	-	-	-	-	-	-	-	-
65-200/18.5	60.5	-	58.5	56.5	51.5	49	46	43	39.7	38	36.3	-	-	-	-	-	-	-	-
65-200/22	67	-	65.5	64	59.5	57	54	51	48	46.5	45	-	-	-	-	-	-	-	-
65-250/30	78	-	-	77	73.5	71	68	64.5	60	57.5	55	52	-	-	-	-	-	-	-
65-250/37	89	-	-	88	85.5	83	80.5	77.5	74	72	70	67.5	65	-	-	-	-	-	-
80-160/11	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	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	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	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	20	-
80-200/22	50	-	-	-	48	47	45.5	44.5	43	42	41	40	39	33.2	27.8	25	-	-	-
80-200/30	60	-	-	-	58.5	58	57	56	54.5	54	53	52	51	46.5	41.5	39	36.1	33	-
80-200/37	66	-	-	-	64	63	62	61	59.5	59	58	57.5	56.5	51.5	47	44.5	41.5	38.5	-
80-250/37	73	-	-	-	71.5	70.5	68.5	66.5	64	63	61.5	60	58.5	48.5	38	-	-	-	-
80-250/45	84	-	-	-	82.5	81.5	80	78	76	75	73.5	72.5	71	62	53	48	42.5	-	-
80-250/55	95	-	-	-	93.5	92.5	91.5	90	88.5	87.5	86.5	85.5	84	76.5	68.5	64.5	60	55	-

TYPE KEY AND CURVE SPECIFICATIONS

50Hz

Rev. AI

TYPE KEY



*-) No indication

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.

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
- P₂ = pump power input (shaft power)
- η = pump efficiency
- NPSH = net positive suction head required by the pump
- MEI = minimum efficiency index

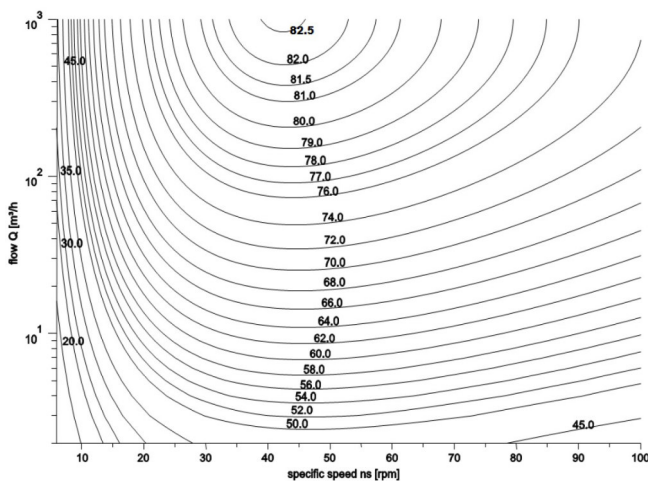
MEI INDEX SPECIFICATION

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.

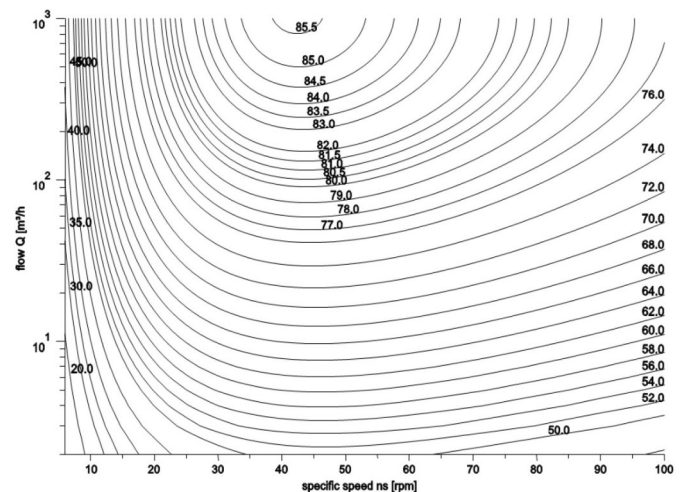
The efficiency of a pump with trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to a reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.

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.

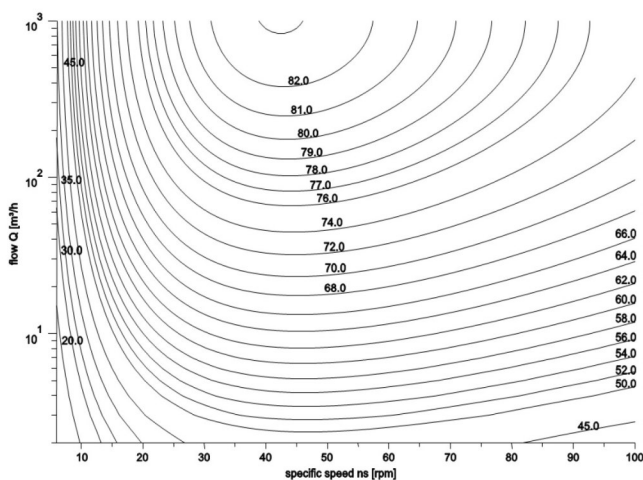
MEI = 0.4 for ESCC 2900 rpm



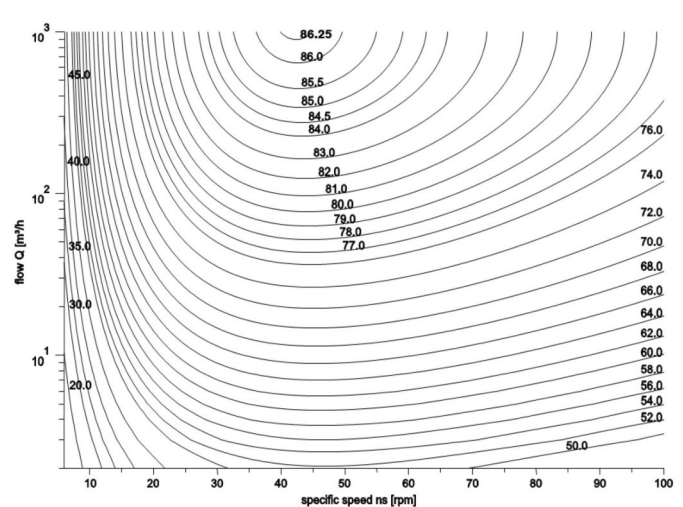
MEI = 0.7 for ESCC 2900rpm



MEI = 0.4 for ESOB 2900 rpm

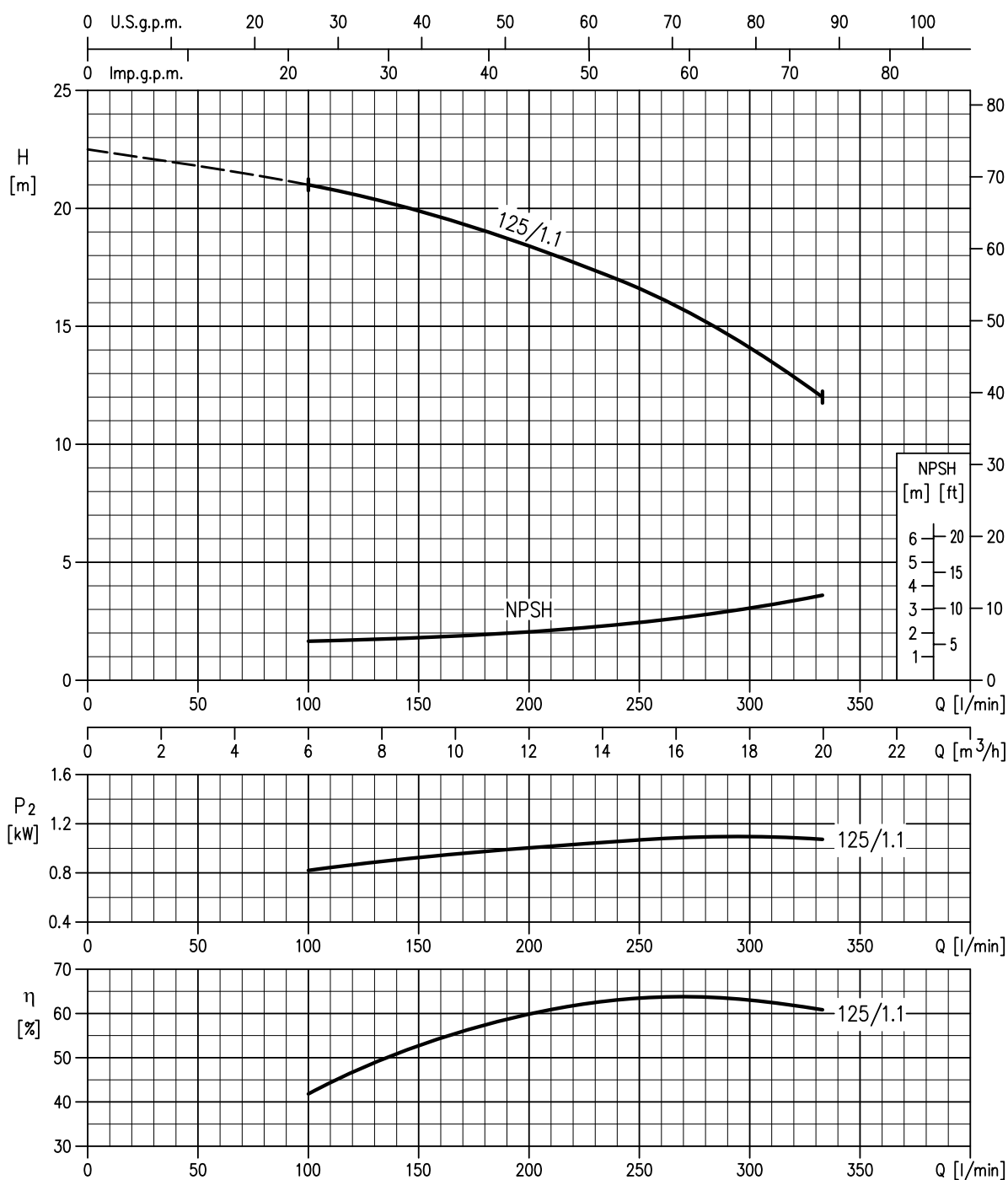


MEI = 0.7 for ESOB 2900rpm

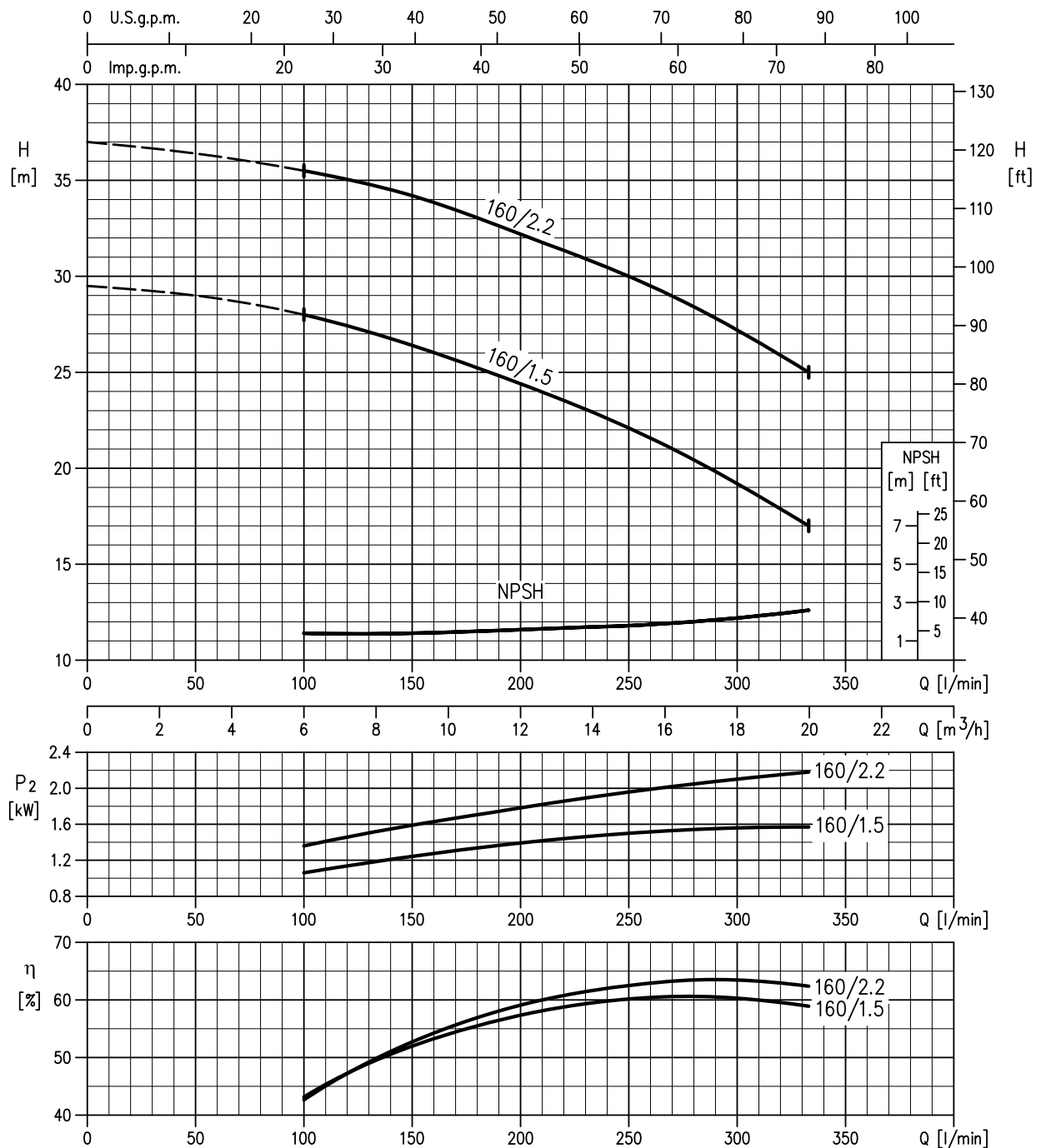


MEI INDEX VALUE

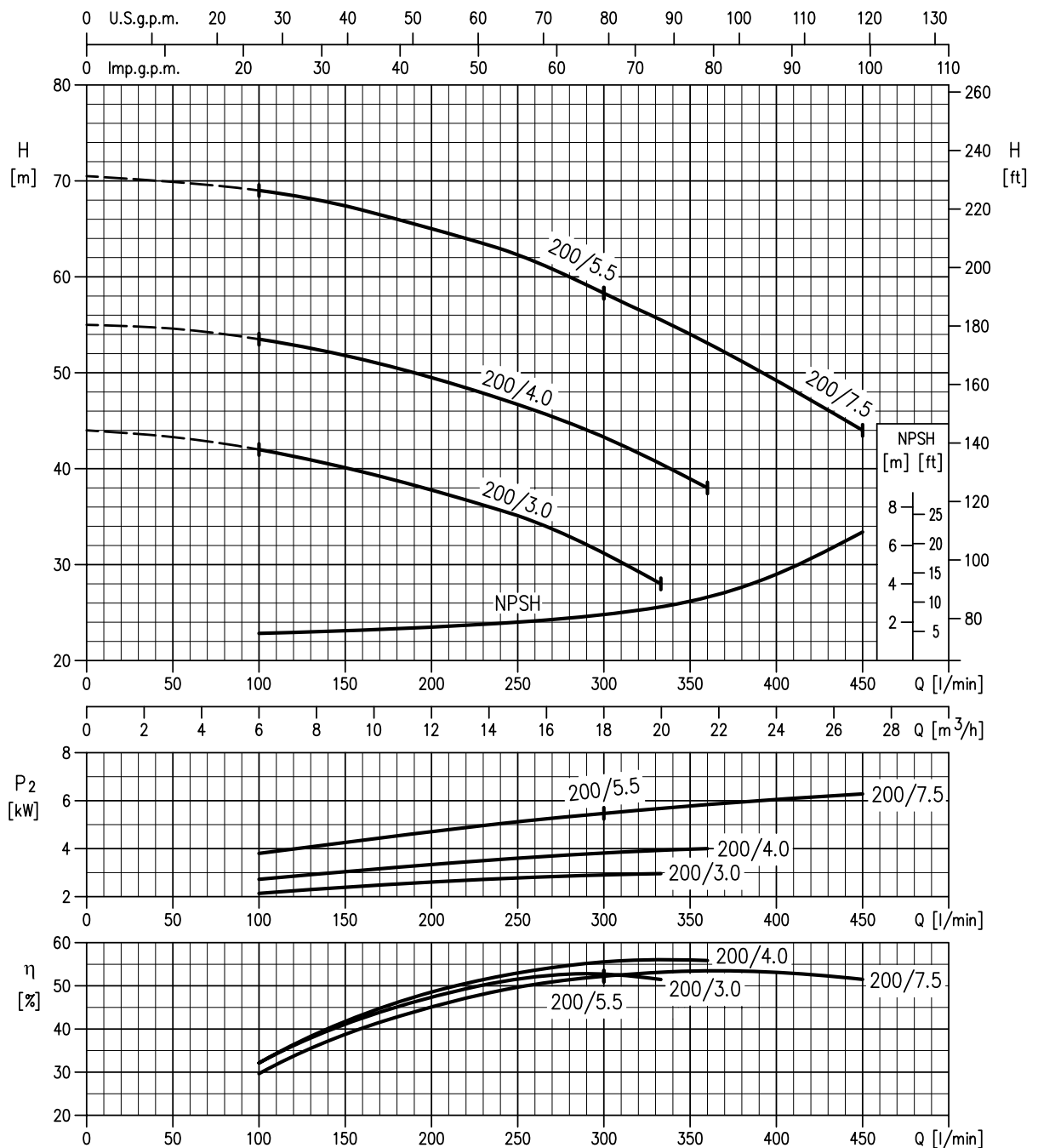
SIZE	MEI VALUE		
	3M	3S	3P
32-125	≥ 0.4	≥ 0.4	≥ 0.4
32-160	≥ 0.7	≥ 0.7	≥ 0.7
32-200	≥ 0.6	≥ 0.6	≥ 0.5
40-125	≥ 0.7	≥ 0.7	≥ 0.6
40-160	≥ 0.7	≥ 0.7	≥ 0.7
40-200	≥ 0.7	≥ 0.7	≥ 0.7
50-125	≥ 0.4	≥ 0.4	≥ 0.4
50-160	≥ 0.7	≥ 0.7	≥ 0.6
50-200	≥ 0.7	≥ 0.7	≥ 0.7
65-125	≥ 0.7	≥ 0.7	≥ 0.7
65-160	≥ 0.7	≥ 0.7	≥ 0.6
65-200	≥ 0.7	≥ 0.7	≥ 0.6
65-250	≥ 0.5	≥ 0.5	≥ 0.4
80-160	≥ 0.7	≥ 0.7	≥ 0.7
80-200	≥ 0.5	≥ 0.5	≥ 0.4
80-250	≥ 0.7	≥ 0.7	≥ 0.7

32-125/1.1 – impeller diameter = 133 mm

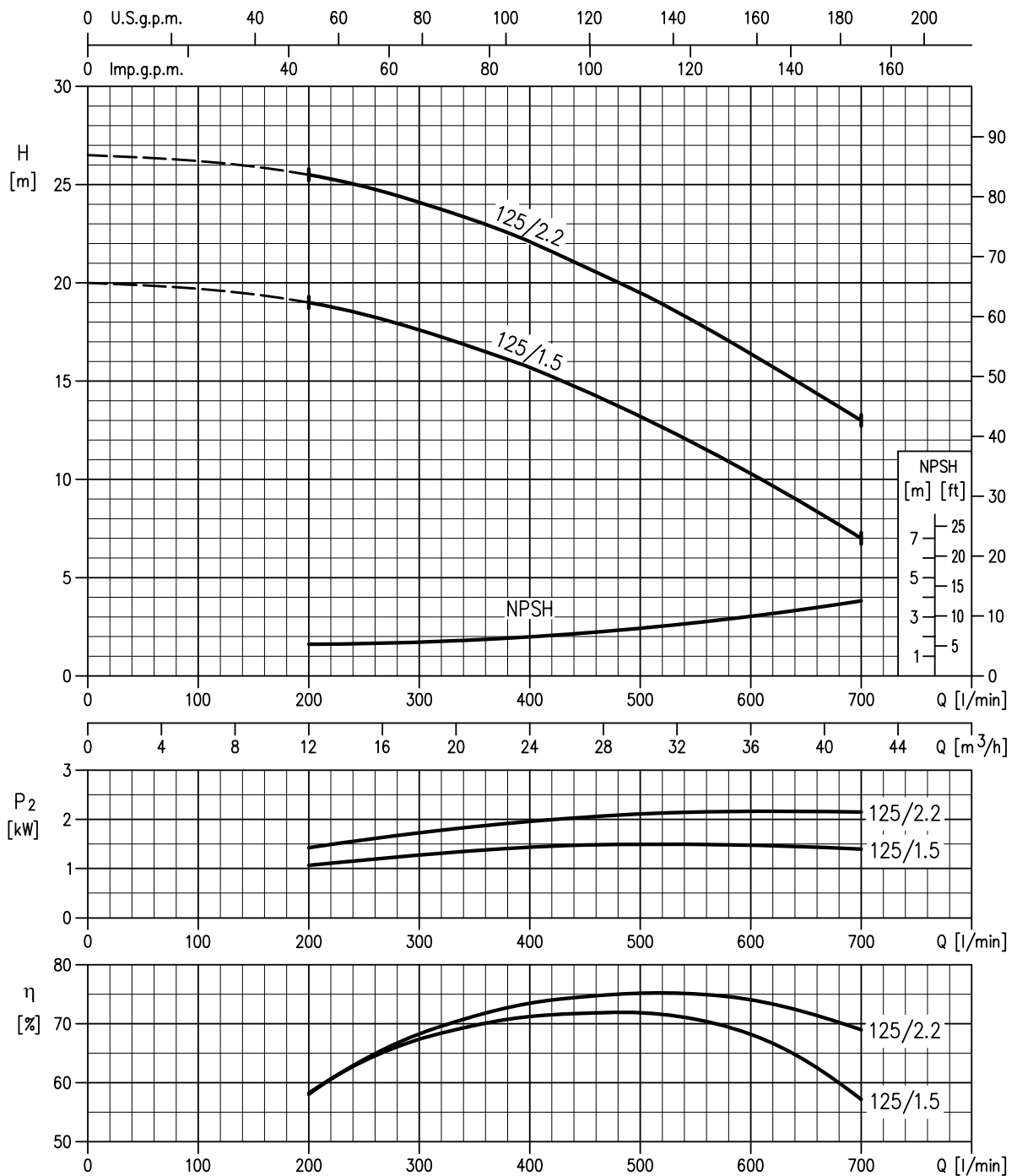
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

32-160/1.5 - impeller diameter = 151 mm**32-160/2.2 - impeller diameter = 166 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

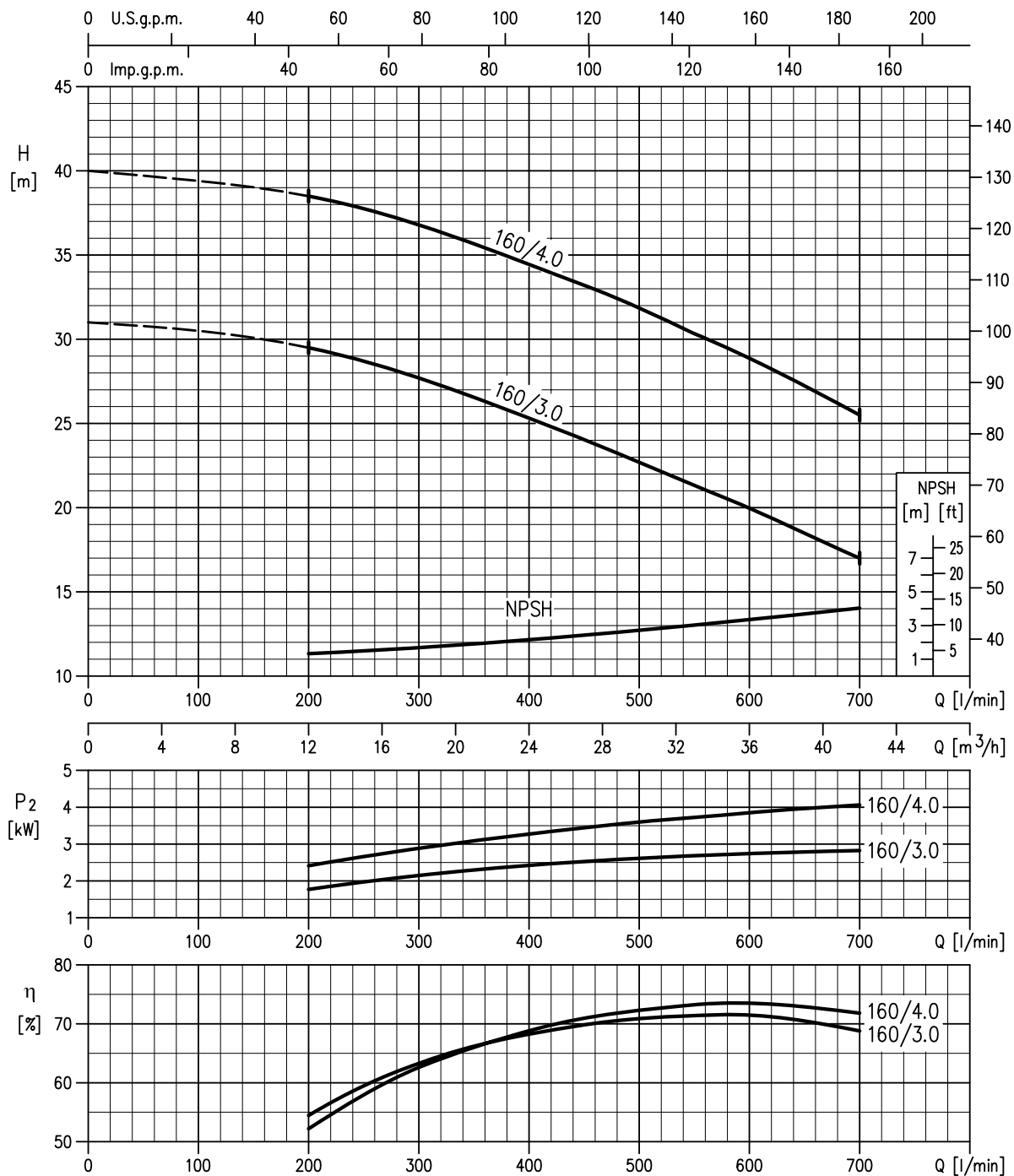
Test standard: ISO 9906:2012 - Grade 3B

32-200/3 – impeller diameter = 186 mm**32-200/4 – impeller diameter = 200 mm****32-200/5.5 – impeller diameter = 224 mm****32-200/7.5 – impeller diameter = 224 mm**

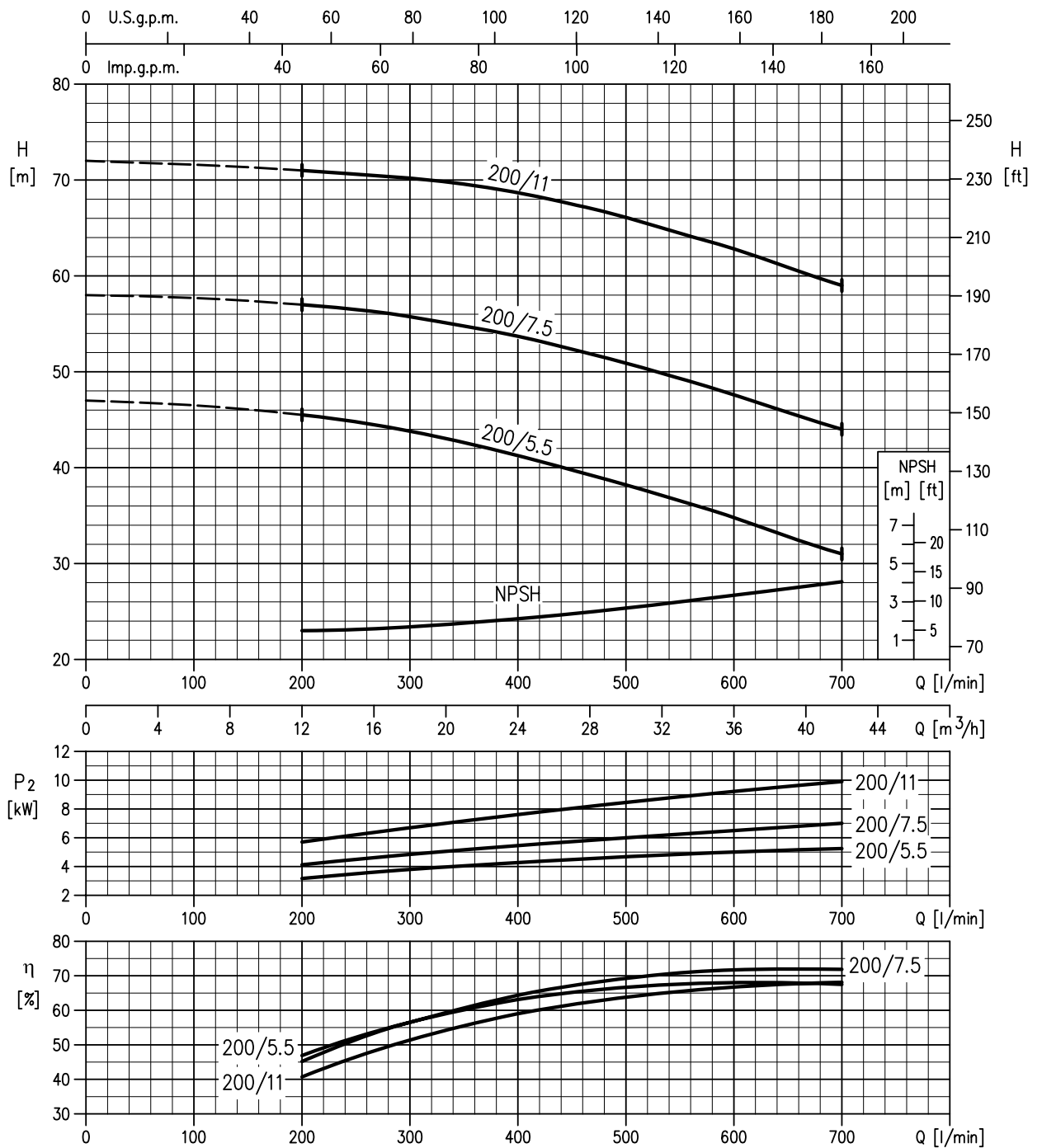
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

40-125/1.5 - impeller diameter = 125 mm**40-125/2.2 - impeller diameter = 140 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

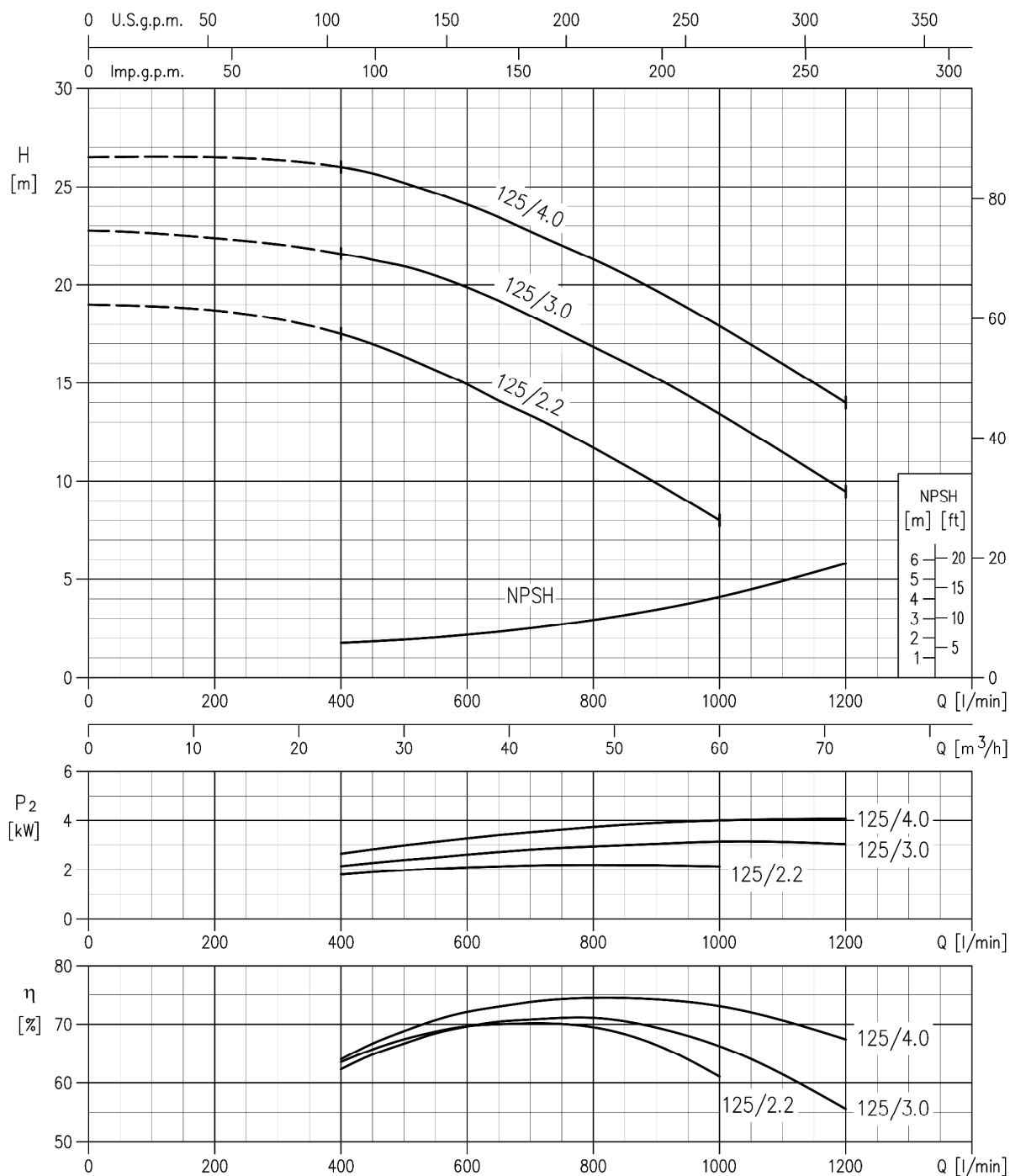
Test standard: ISO 9906:2012 - Grade 3B

40-160/3 – impeller diameter = 151 mm**40-160/4 – impeller diameter = 166 mm**

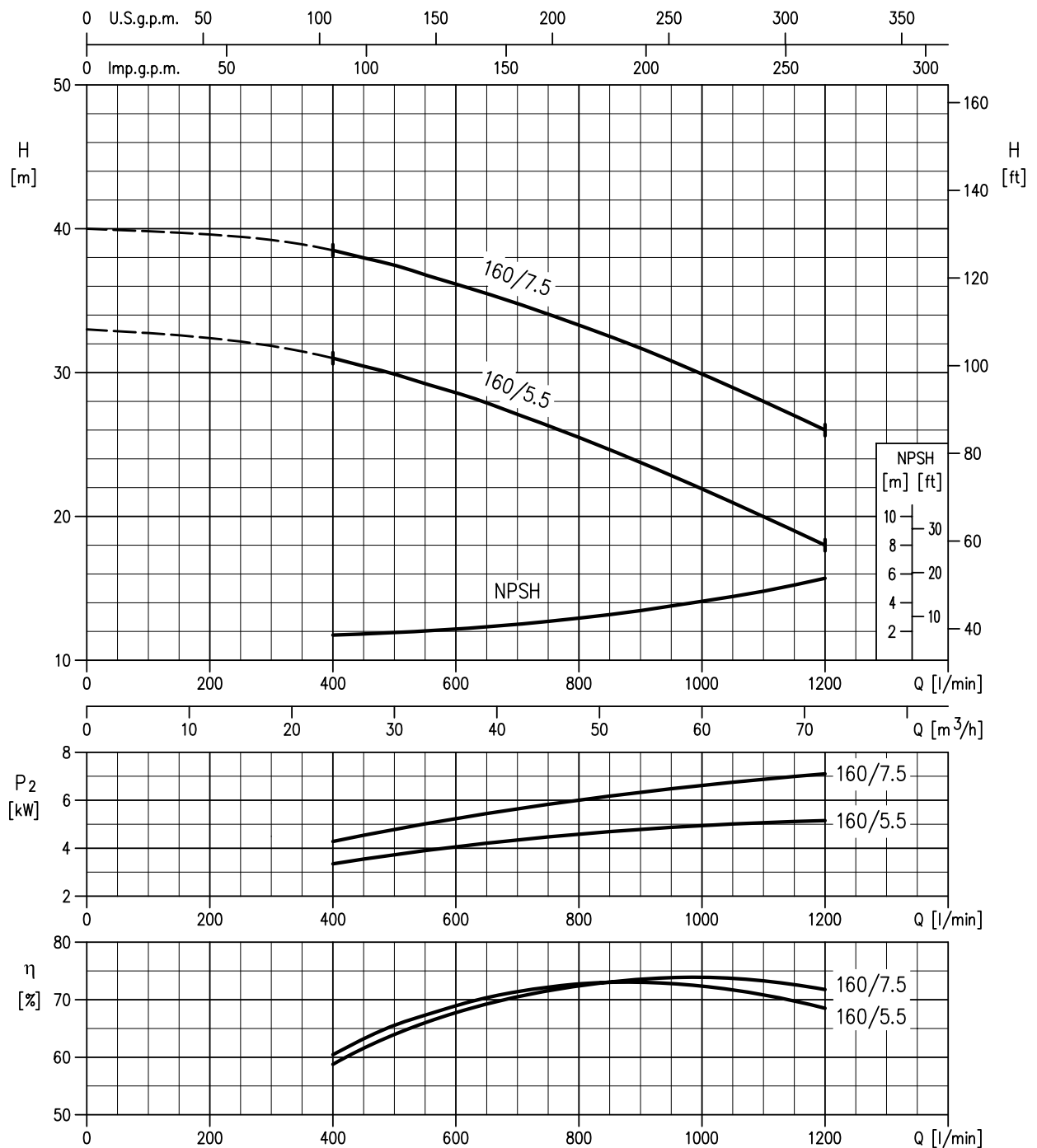
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

40-200/5.5 – impeller diameter = 183 mm**40-200/7.5 – impeller diameter = 200 mm****40-200/11 – impeller diameter = 224 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

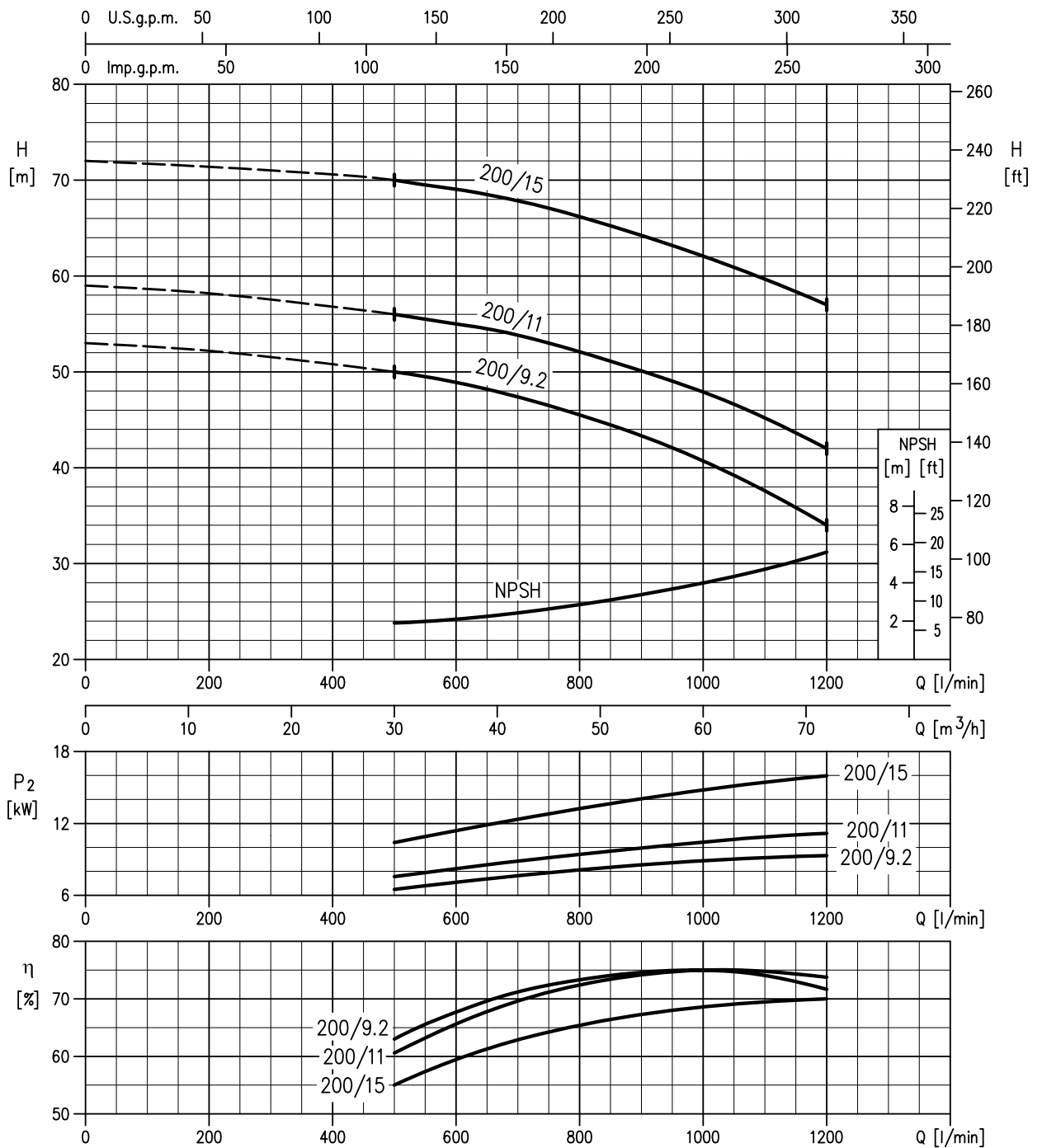
Test standard: ISO 9906:2012 - Grade 3B

50-125/2.2 – impeller diameter = 126 mm**50-125/3 – impeller diameter = 131 mm****50-125/4 – impeller diameter = 140 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

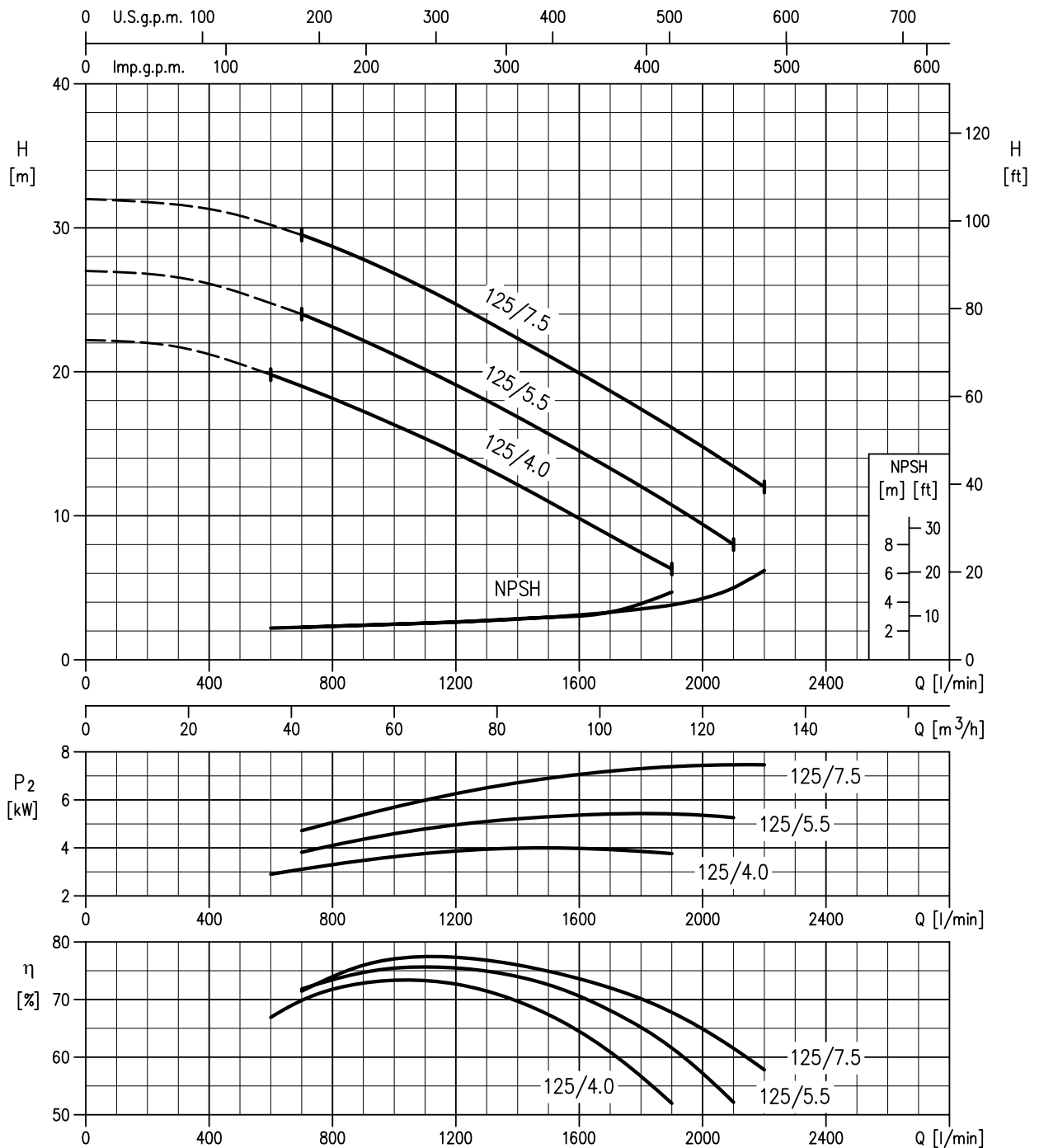
Test standard: ISO 9906:2012 - Grade 3B

50-160/5.5 – impeller diameter = 154 mm**50-160/7.5 – impeller diameter = 166 mm**

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

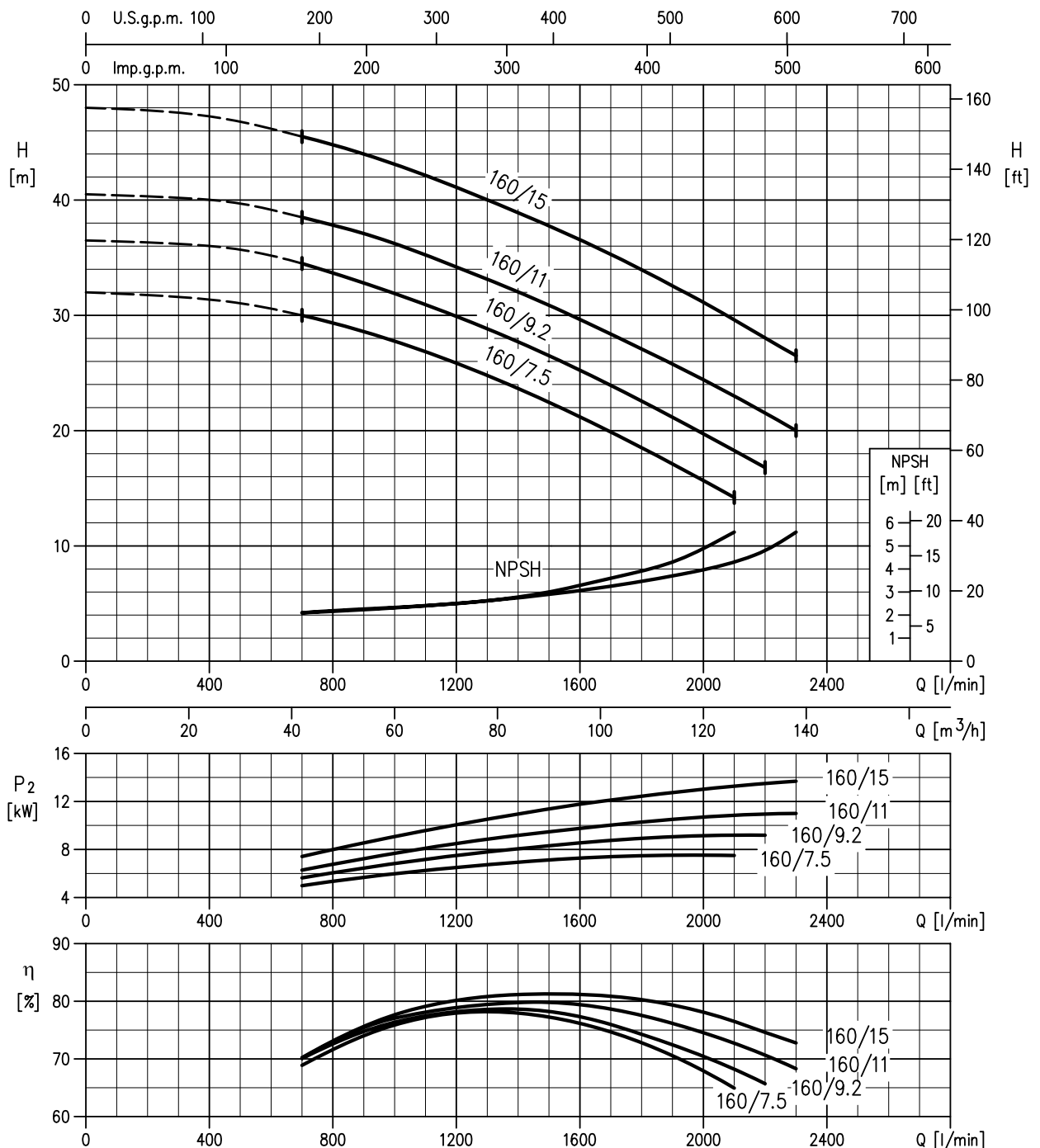
50-200/9.2 – impeller diameter = 191 mm**50-200/11 – impeller diameter = 200 mm****50-200/15 – impeller diameter = 224 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

65-125/4 – impeller diameter = 128 mm**65-125/5.5 – impeller diameter = 138 mm****65-125/7.5 – impeller diameter = 149 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

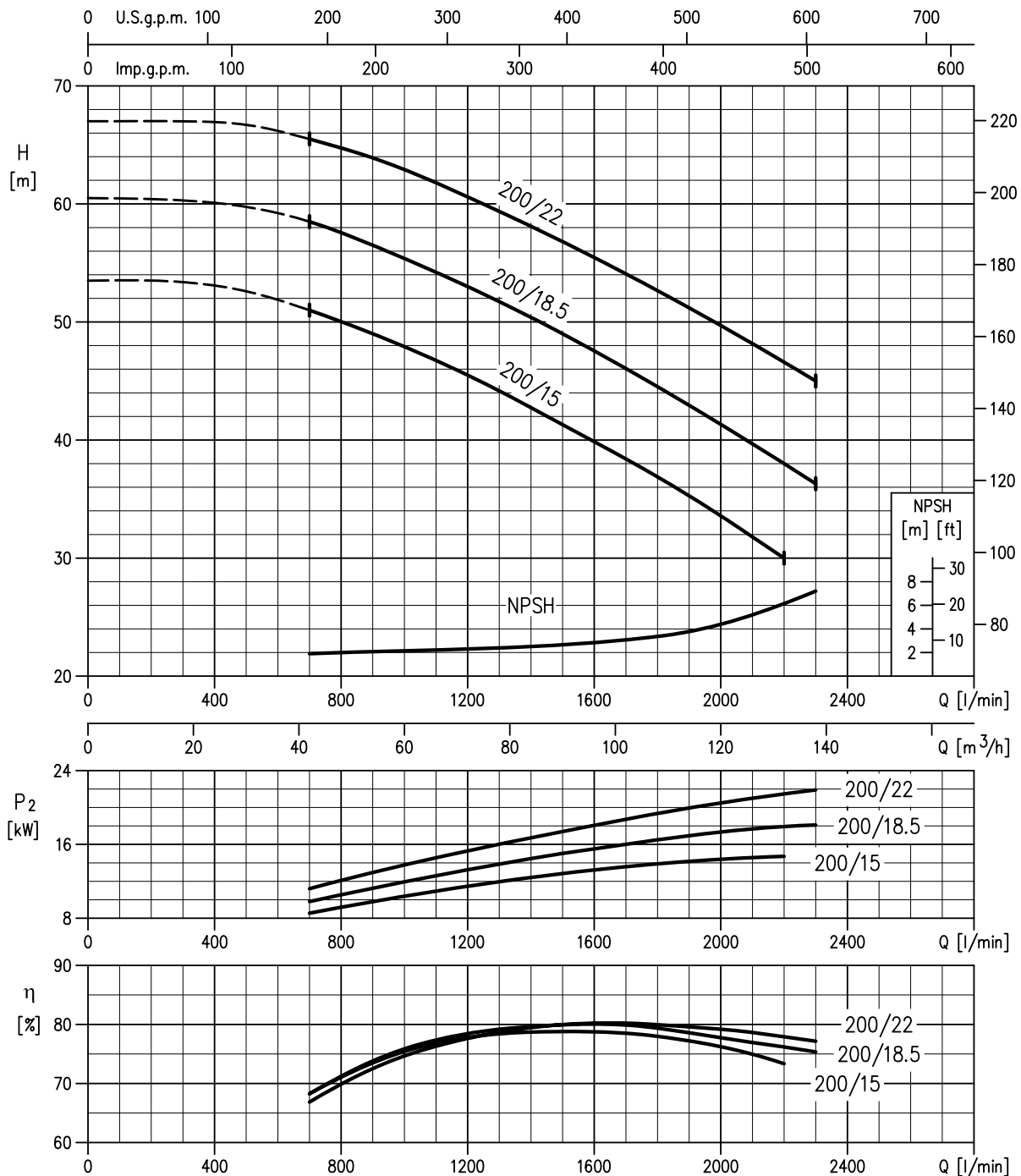
Test standard: ISO 9906:2012 - Grade 3B

65-160/7.5 – impeller diameter = 153 mm
65-160/9.2 – impeller diameter = 161 mm
65-160/11 – impeller diameter = 168 mm
65-160/15 – impeller diameter = 178 mm

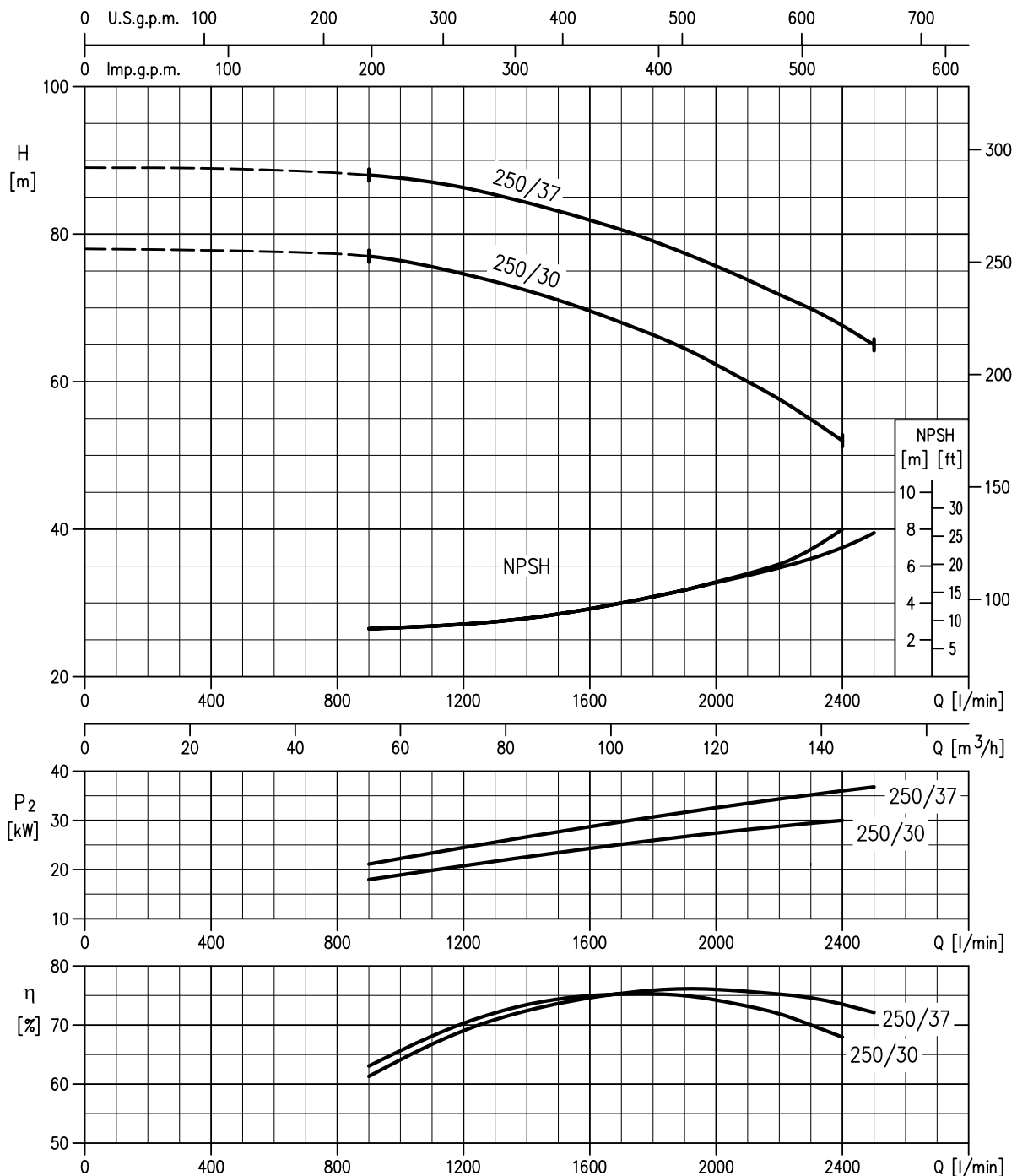
Rotation speed $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

65-200/15 – impeller diameter = 190 mm
65-200/18.5 – impeller diameter = 201 mm
65-200/22 – impeller diameter = 212 mm

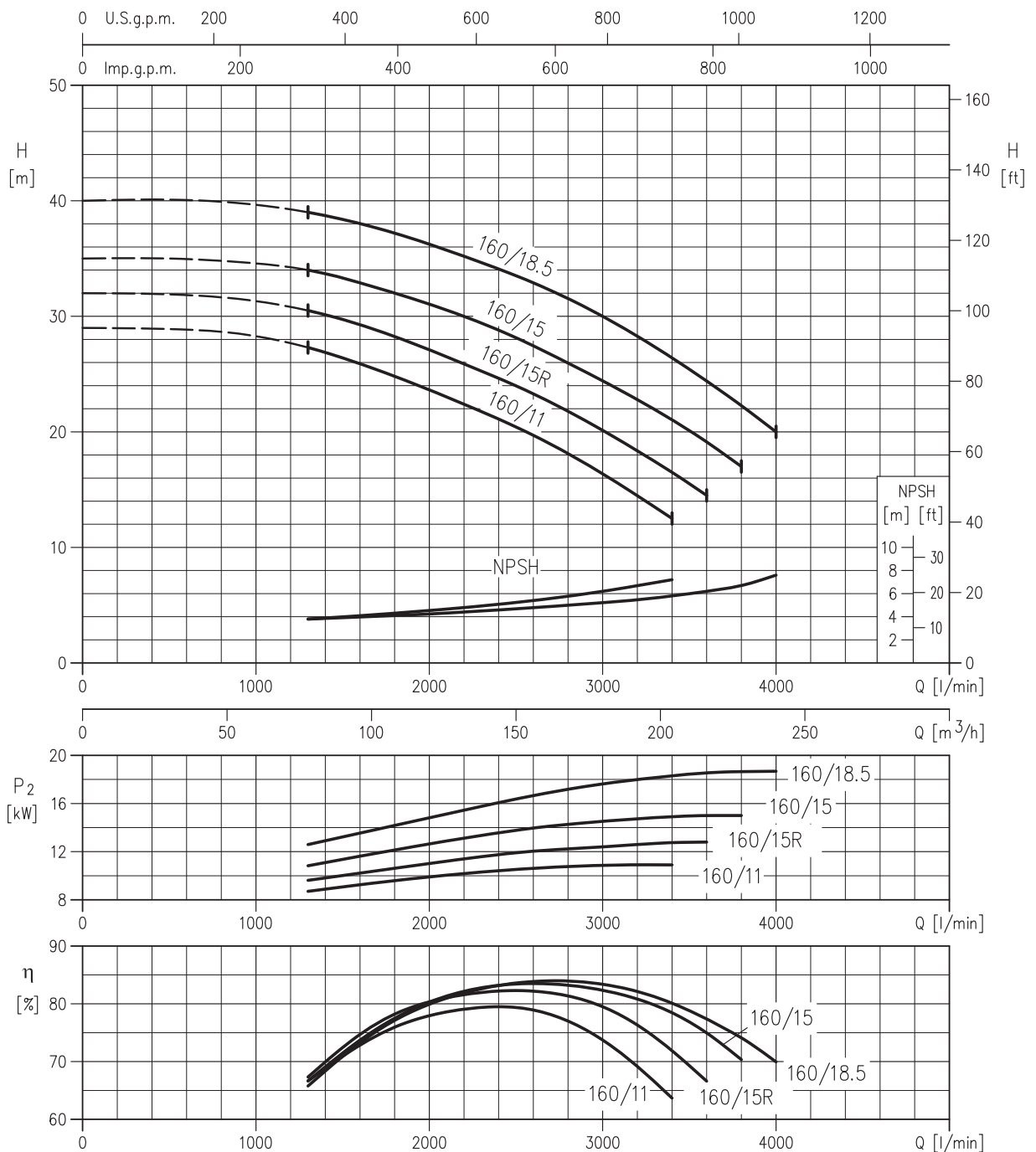


Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

65-250/30 – impeller diameter = 235 mm**65-250/37 – impeller diameter = 250 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

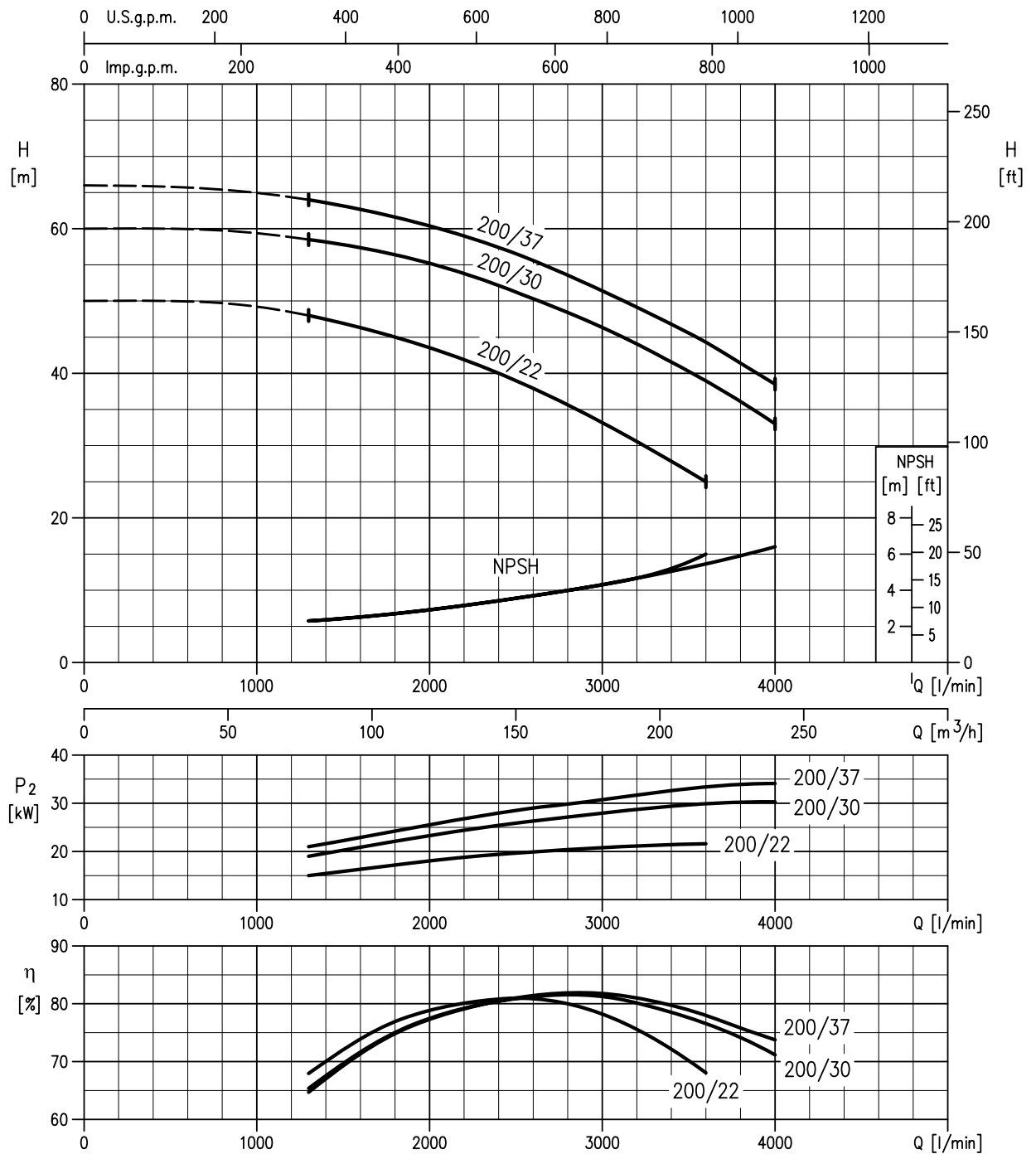
80-160/11 – impeller diameter = 154 mm
80-160/15R – impeller diameter = 160 mm
80-160/15 – impeller diameter = 165 mm
80-160/18.5 – impeller diameter = 174 mm



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

PERFORMANCE CURVE**50Hz**

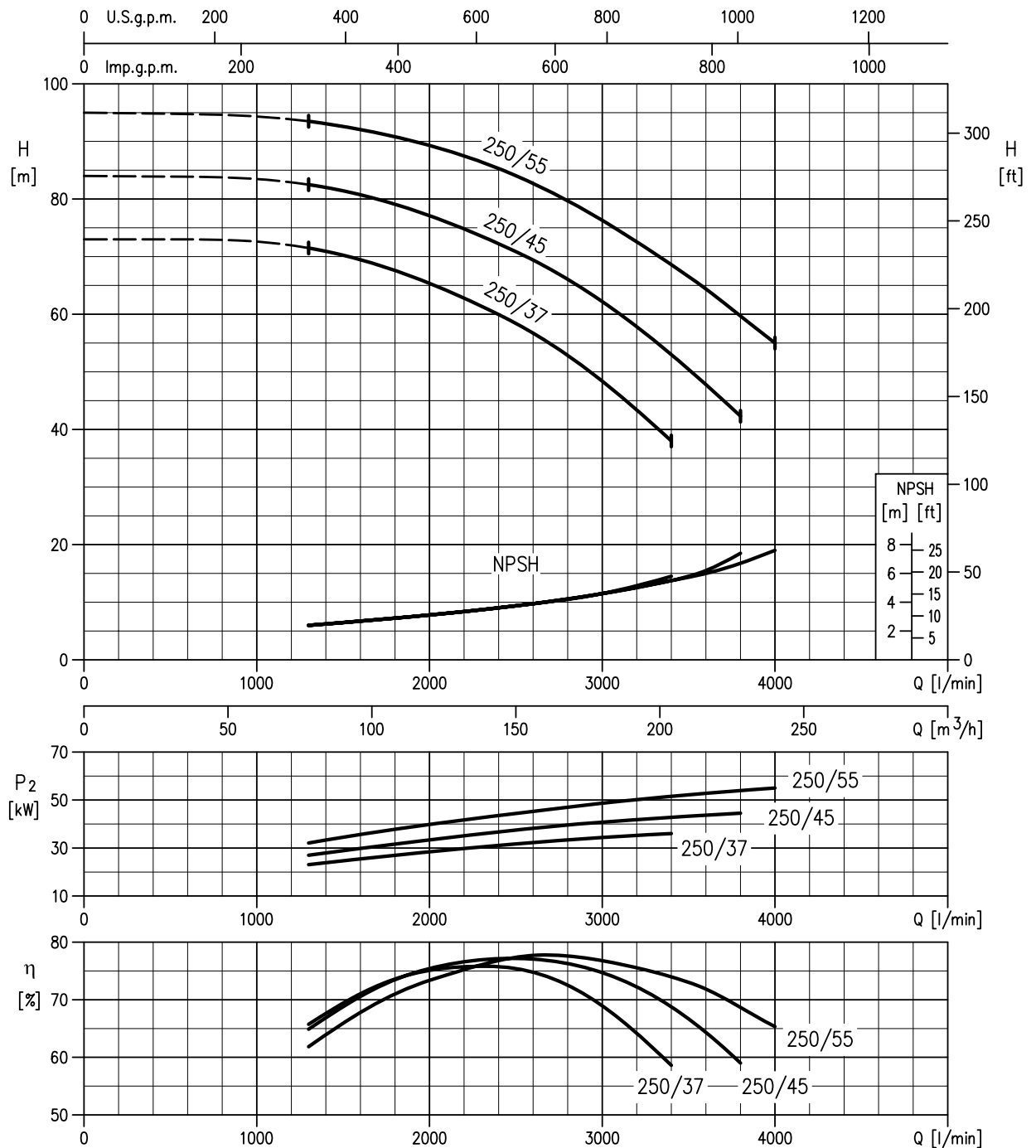
Rev. AI

80-200/22 – impeller diameter = 196 mm**80-200/30 – impeller diameter = 211 mm****80-200/37 – impeller diameter = 219 mm**

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

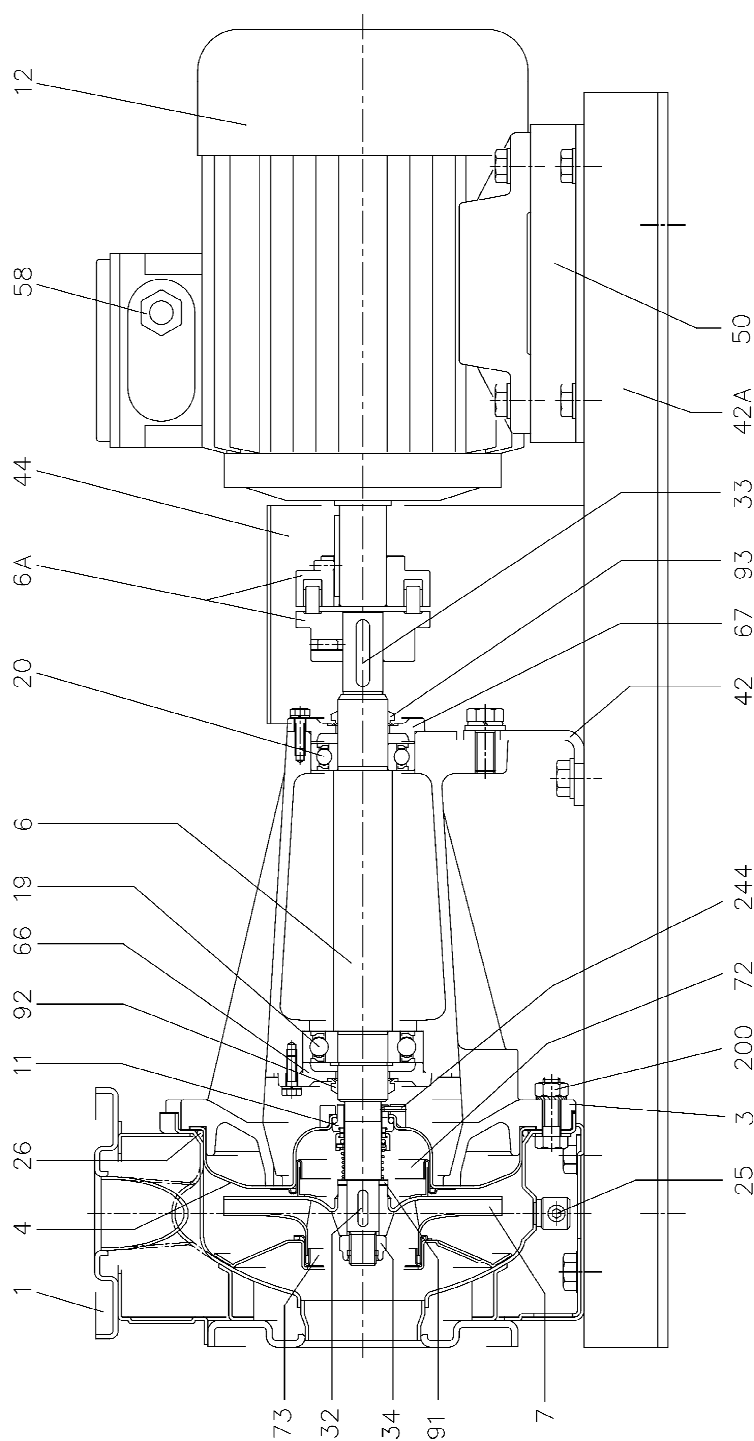
PERFORMANCE CURVE**50Hz**

Rev. AI

80-250/37 – impeller diameter = 230 mm**80-250/45 – impeller diameter = 245 mm****80-250/55 – impeller diameter = 259 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW DRAWING 3(.)P 32, 40, 50, 65-125/160/200

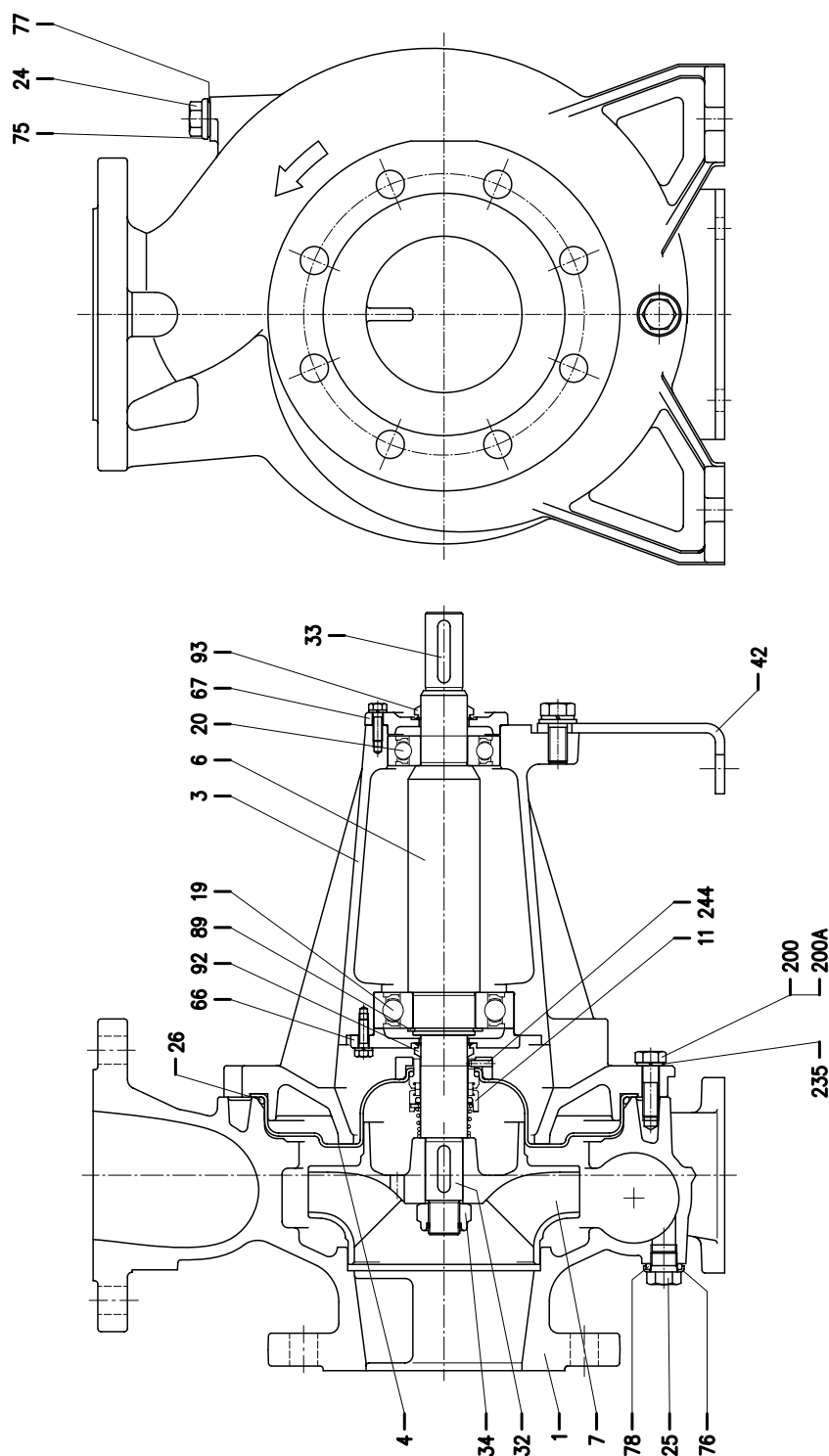


SECTIONAL VIEW TABLE 3(.)P 32, 40, 50, 65-125/160/200

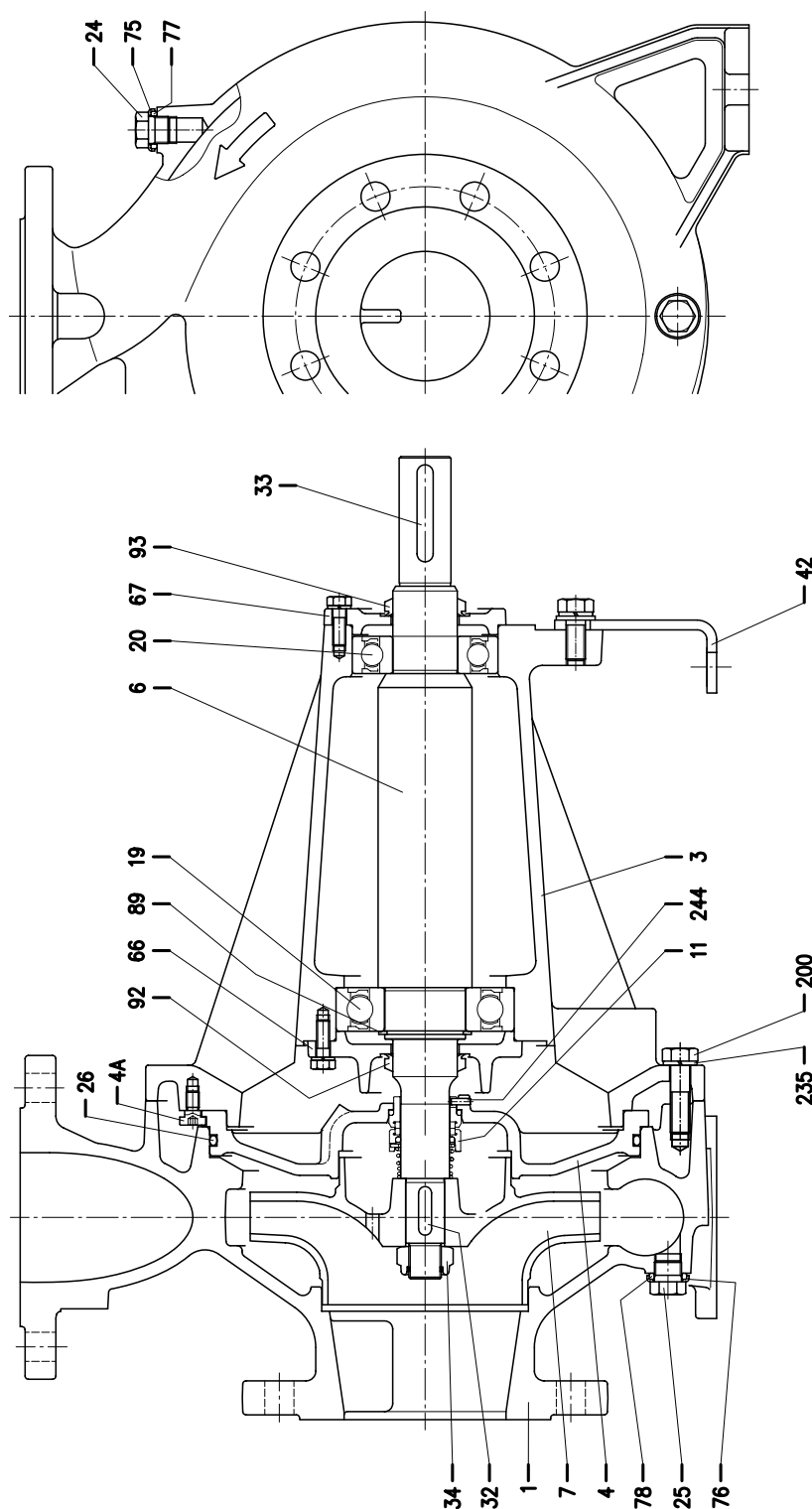
N°	PART NAME		MATERIAL		DIMENSIONS	STANDARD
			3P	3LP		
1	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
3	Support		Cast iron EN-GJL-200-EN 1561			
4	Casing cover		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
6	Shaft - Part in contact with liquid		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
6 A	Flexible coupling		Cast iron EN-GJL-250-EN 1561		See table pag. 334	
7	Impeller		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L) [6]		
11	Mechanical seal		Carbon/Ceramic/NBR	SiC/SiC/FPM	[5]	
12	Motor		-			
19	Bearing		-		See table p. 325	
20	Bearing		-		See table p. 325	
25	Draining plug		EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8	DIN 906
26	"O" ring	32-125, 40-125	NBR [4]	FPM	158.11x5.34	OR 6625
		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 1.4401 (AISI 316)		6x6x25 8x7x30	UNI 6604
33	Key		C 40		8x7x40	UNI 6604
34	Impeller nut	Up to 11kW	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)	M16x1.5	UNI 7474
		50-200/15			M18x1.5	
		15 kW and above			M20x1.5	
42	Pump support		Fe 37 Galvanized			EBARA DRAWING
42 A	Base		Fe 37 Galvanized			
44	Protection		Fe 37 Galvanized			
50	Foot		Aluminium / Galvanized steel			
58	Fastening nut		-			
66	Impeller side bearing cover		Cast iron EN-GJL-200-EN 1561			
67	Motor side bearing cover		Cast iron EN-GJL-200-EN 1561			
72	Casing ring	[1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
73	Casing ring (not for 65 version)		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		
91	Impeller spacer	[7]	EN 1.4404 (AISI 316L)			
92	"V" ring		-		VS - 0030	
93	"V" ring		-		VS - 0030	
200	Screw	32-125, 40-125	Stainless steel A2 70 class ISO 3506/1		M 8x30	UNI 5739
		40-160, 40-200, 50-125, 50-160, 50-200, 65-125, 65-160, 65-200			M 10x35	UNI 5739
244	Pin	[3]	/	EN 1.4301 (AISI 304)	4x15	

Counterflange kit on request see p. 335-336

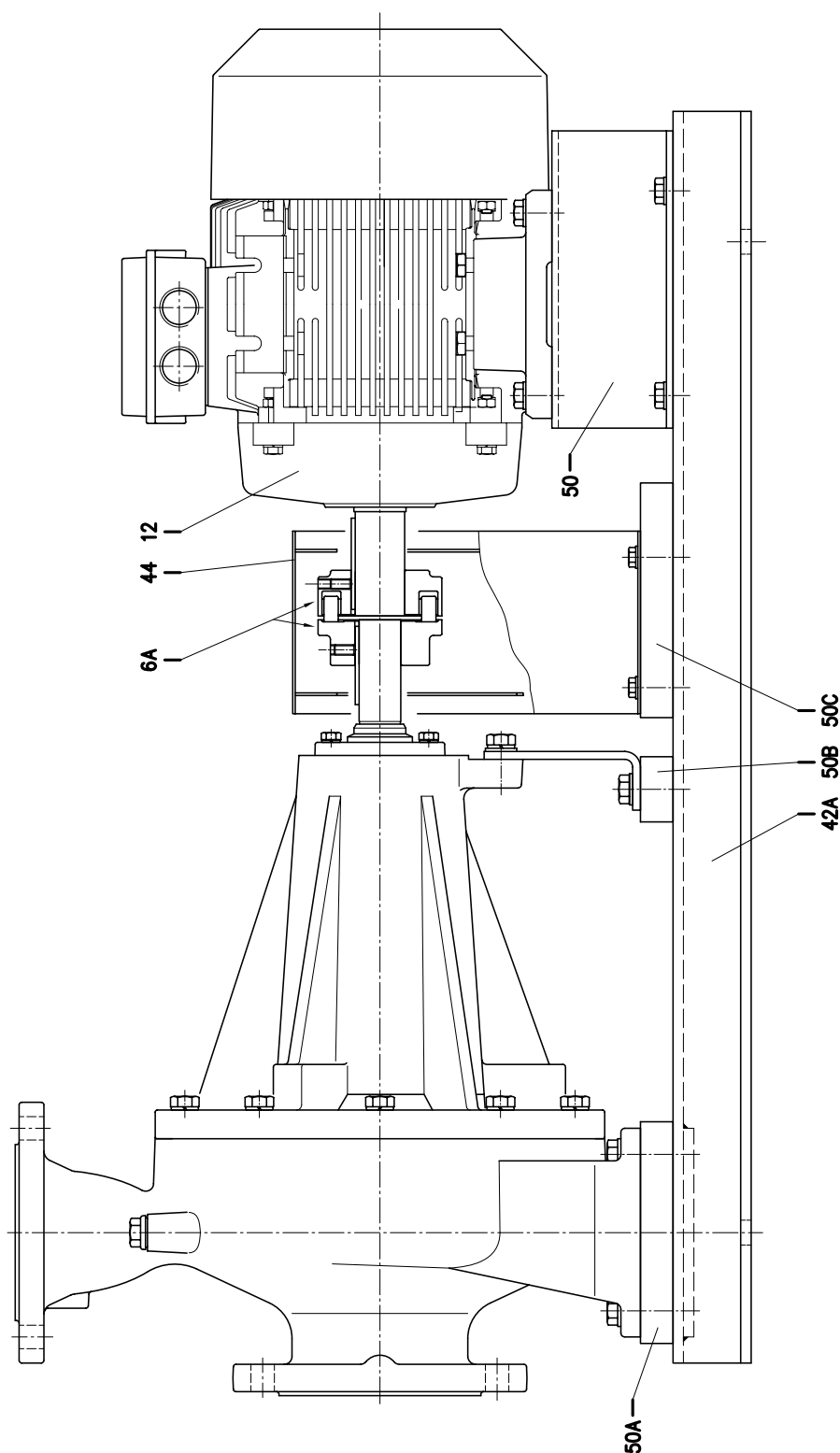
- [1] For version: 32-200/3, 32-200/4, 32-200/5.5, 40-200/5.5, 40-200/5.5, 40-200/7.5, 40-200/11, 50-160/5.5, 50-160/7.5, 50-200/9.2, 50-200/11, 50-200/15
- [2] Quantity =10 for 32-160, 40-160, 50-125, 65-125
Quantity =12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200
- [3] Only for 65-160/15 and 65-200
- [4] FPM for H-HS-HW-HSW version
EPDM for E version and Special Seals Q1Q1EGG, Q1U3EGG, U3CEGG, Q1AEGG, U3U3EGG
U3U3EGG is not available for model 65-160/15 and model 65-200
- [5] Special version: see page 326 and following
- [6] CF8M – EN 1.4408 (AISI316) material for 65-125 up to 65-200
- [7] Only for 32-125/1.1

SECTIONAL VIEW DRAWING 3LP 80-160

SECTIONAL VIEW DRAWING 3LP 65-250, 80-200/250



SECTIONAL VIEW DRAWING 3LP 65-250, 80-160/200/250



SECTIONAL VIEW TABLE 3LP 80-160

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	CF8M-EN 1.4408 (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 (AISI 316L) - Wet extension			1
6 A	Flexible coupling	Cast iron EN-GJL-250-EN 1561	See table p. 334		1
7	Impeller	CF8M-EN 1.4408 (AISI 316)			1
11	Mechanical seal	SiC/SiC/FPM	[3]		1
12	Motor	-			1
19	Bearing	-	See table p. 325		1
20	Bearing	-	See table p. 325		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	Galvanized steel		EPE DRAWING	1
42 A	Base	Galvanized steel		EPE DRAWING	1
44	Protection	Galvanized steel		EPE DRAWING	1
50	Foot	Aluminium		EPE DRAWING	2
50 A	Spacer for pump	/			/
50 B	Spacer for pump	/			/
50 C	spacer for protection	/			/
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
200 A	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	UNI 6873	1

Counterflange kit on request, see table p. 335-336

[1] Not for H and E option.

[2] FPM for H, HW, HSW version

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

[3] Special version: see page 326 and following

For drawing see p.319

SECTIONAL VIEW TABLE 3LP 65-250, 80-200/250

N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing		CF8M-EN 1.4408 (AISI 316)			1
3	Support		Cast iron EN-GJL-200-EN 1561			1
4	Casing cover		EN 1.4401 (AISI 316)			1
4 A	Screw for casing cover		EN 1.4301 (AISI 304)			2
6	Shaft		EN 1.4462 (Duplex stainless steel) - Wet extension			1
6 A	Flexible coupling		Cast iron EN-GJL-250-EN 1561	See table p. 334		1
7	Impeller		CF8M-EN 1.4408 (AISI 316)			1
11	Mechanical seal		SiC/SiC/FPM	[5]		1
12	Motor		-			1
19	Bearing		-	See table p. 325		1
20	Bearing		-	See table p. 325		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 [4]	253.36x5.34	OR 6995	1
32	Key	65-250	EN 1.4401 (AISI 316)	8x7x30	UNI 6604	1
		80-200				1
		80-250		d=29 mm		8x7x40
33	Key		C 40	10x8x60	UNI 6604	1
34	impeller nut	65-250	EN 1.4404 (AISI 316L)	M20x1.5	UNI 7474	1
		80-200				1
		80-250		d=29 mm		M24x2
42	Pump support		Galvanized steel			1
42 A	Base		Galvanized steel			1
44	Protection		Galvanized steel			1
50	Foot (only for 65-250/22kW)		Aluminium			2
50 A	Spacer		Aluminium			[1]
50 B	Spacer		Aluminium			[2]
50 C	Spacer for protection		Aluminium			[3]
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 [4]		
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					
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	UNI 6873	1

Counterflange kit on request, see table p. 335-336

[1] Quantity =0 for 65-250, 80-200/22 and 80-250/55

Quantity =2 for 80-200/30, 80-200/37 and 80-250/45

[2] Quantity =0 for 65-250, 80-200/22 and 80-250/55

Quantity =2 for 80-200/30, 80-200/37 and 80-250/45

[3] Not for H and E option.

[4] FPM for H, HW, HSW version

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

EPDM for ES version only model 80-250

[5] Special version: see page 326 and following

For drawing see p.320-321

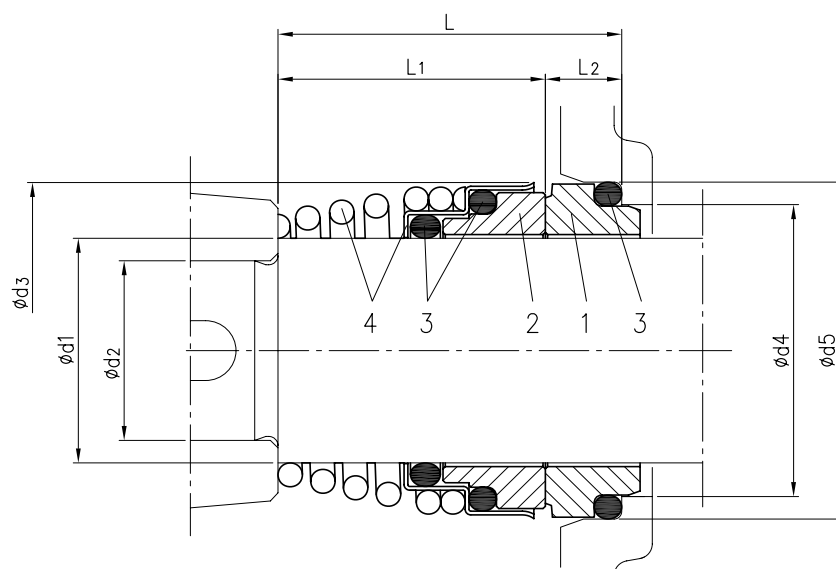
BEARINGS 3(.)S-3(.)P

Pump type	Ball bearing	
	Pump side	Fan side
3(.)S(Z) 32-125/1.1	6204-2Z C3	6204-2Z C3
3(.)S(Z) 32-160/1.5	6205-2Z C3	6205-2Z C3
3(.)S(Z) 32-160/2.2		
3(.)S(Z) 32-200/3	6206-2Z C3	6206-2Z C3
3(.)S(Z) 32-200/4	6306-2Z C3	6306-2Z C3
3(.)S(Z) 32-200/5.5	6208-2Z C3	6208-2Z C3
3(.)S(Z) 32-200/7.5		
3(.)S(Z) 40-125/1.5	6205-2Z C3	6205-2Z C3
3(.)S(Z) 40-125/2.2		
3(.)S(Z) 40-160/3	6206-2Z C3	6206-2Z C3
3(.)S(Z) 40-160/4	6306-2Z C3	6306-2Z C3
3(.)S(Z) 40-200/5.5	6208-2Z C3	6208-2Z C3
3(.)S(Z) 40-200/7.5		
3(.)S(Z) 40-200/11	6309-2Z C3	6309-2Z C3
3(.)S(Z) 50-125/2.2	6205-2Z C3	6205-2Z C3
3(.)S(Z) 50-125/3	6206-2Z C3	6206-2Z C3
3(.)S(Z) 50-125/4	6306-2Z C3	6306-2Z C3
3(.)S(Z) 50-160/5.5	6208-2Z C3	6208-2Z C3
3(.)S(Z) 50-160/7.5		
3(.)S(Z) 50-200/9.2	6309-2Z C3	6309-2Z C3
3(.)S(Z) 50-200/11		
3(.)S(Z) 50-200/15	6306-2Z C3	6306-2Z C3
3(.)S(Z) 65-125/4		
3(.)S(Z) 65-125/5.5	6208-2Z C3	6208-2Z C3
3(.)S(Z) 65-125/7.5		
3(.)S(Z) 65-160/7.5	6309-2Z C3	6309-2Z C3
3(.)S(Z) 65-160/9.2		
3(.)S(Z) 65-160/11	6309-2Z C3	6309-2Z C3
3(.)S(Z) 65-160/15		
3(.)S(Z) 65-200/15	6311 C3	6311 C3
3(.)S(Z) 65-200/18.5		
3(.)S(Z) 65-200/22	6312 C3	6312 C3
3LS 65-250/30	6309-2Z C3	6309-2Z C3
3LS 65-250/37		
3LS 80-160/11	6311 C3	6311 C3
3LS 80-160/15R		
3LS 80-160/15	6312 C3	6312 C3
3LS 80-160/18.5		
3LS 80-200/22	6313 C3	6313 C3
3LS 80-200/30	6314 C3	6314 C3
3LS 80-200/37		
3LS 80-250/37	6311 C3	6311 C3
3LS 80-250/45		
3LS 80-250/55	6312 C3	6312 C3

Pump type	Pump		Motor	
	Pump side	Motorside	Pump side	Fan side
3(.)P 32-125/1.1	6306-2RS 1	6206-2RS1	6204-2Z C3	6204-2Z C3
3(.)P 32-160/1.5			6205-2Z C3	6205-2Z C3
3(.)P 32-160/2.2	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 32-200/3			6306-2Z C3	6306-2Z C3
3(.)P 32-200/4	6306-2RS 1	6206-2RS1	6208-2Z C3	6208-2Z C3
3(.)P 32-200/5.5			6205-2Z C3	6205-2Z C3
3(.)P 32-200/7.5	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 40-125/1.5			6205-2Z C3	6205-2Z C3
3(.)P 40-125/2.2	6306-2RS 1	6206-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 40-160/3			6306-2Z C3	6306-2Z C3
3(.)P 40-160/4	6308-2RS 1	6306-2RS1	6208-2Z C3	6208-2Z C3
3(.)P 40-200/5.5			6309-2Z C3	6309-2Z C3
3(.)P 40-200/7.5	6306-2RS 1	6206-2RS1	6205-2Z C3	6205-2Z C3
3(.)P 40-200/11			6206-2Z C3	6206-2Z C3
3(.)P 50-125/2.2	6308-2RS 1	6306-2RS1	6306-2Z C3	6306-2Z C3
3(.)P 50-125/3			6208-2Z C3	6208-2Z C3
3(.)P 50-125/4	6306-2RS 1	6206-2RS1	6309-2Z C3	6309-2Z C3
3(.)P 50-160/5.5			6205-2Z C3	6205-2Z C3
3(.)P 50-160/7.5	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 50-200/9.2			6208-2Z C3	6208-2Z C3
3(.)P 50-200/11	6306-2RS 1	6206-2RS1	6309-2Z C3	6309-2Z C3
3(.)P 50-200/15			6205-2Z C3	6205-2Z C3
3(.)P 65-125/4	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 65-125/5.5			6208-2Z C3	6208-2Z C3
3(.)P 65-125/7.5	6310-2RS 1	6308-2RS1	6309-2Z C3	6309-2Z C3
3(.)P 65-160/7.5			6205-2Z C3	6205-2Z C3
3(.)P 65-160/9.2	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 65-160/11			6208-2Z C3	6208-2Z C3
3(.)P 65-160/15	6310-2RS 1	6308-2RS1	6309-2Z C3	6309-2Z C3
3(.)P 65-200/15			6205-2Z C3	6205-2Z C3
3(.)P 65-200/18.5	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3(.)P 65-200/22			6208-2Z C3	6208-2Z C3
3LP 65-250/30	6310-2RS 1	6308-2RS1	6309-2Z C3	6309-2Z C3
3LP 65-250/37			6205-2Z C3	6205-2Z C3
3LP 80-160/11	6308-2RS 1 C3	6306-2RS1 C3	6206-2Z C3	6206-2Z C3
3LP 80-160/15R			6208-2Z C3	6208-2Z C3
3LP 80-160/15	6310-2RS 1 C3	6308-2RS1 C3	6309-2Z C3	6309-2Z C3
3LP 80-160/18.5			6205-2Z C3	6205-2Z C3
3LP 80-200/22	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3LP 80-200/30			6208-2Z C3	6208-2Z C3
3LP 80-200/37	6310-2RS 1 C3	6308-2RS1 C3	6309-2Z C3	6309-2Z C3
3LP 80-250/37			6205-2Z C3	6205-2Z C3
3LP 80-250/45	6308-2RS 1	6306-2RS1	6206-2Z C3	6206-2Z C3
3LP 80-250/55			6208-2Z C3	6208-2Z C3

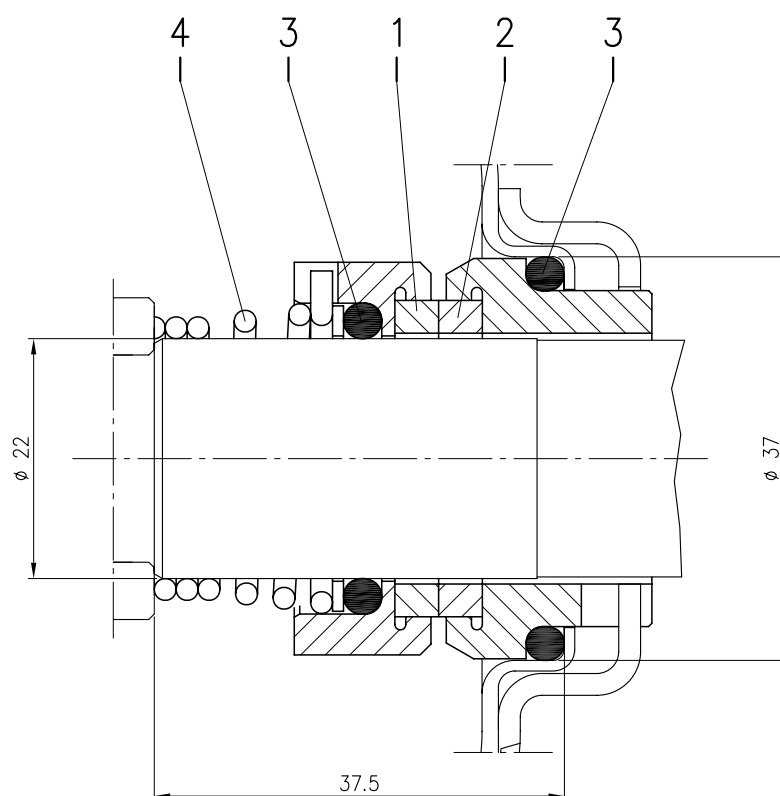
1) Motor available with lubricator for regular re-greasing of bearing.

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

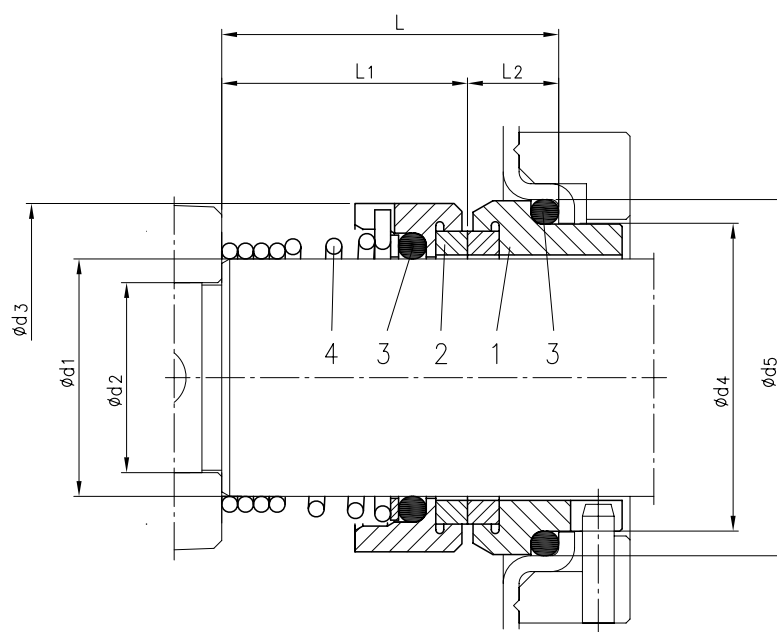


Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + Spring
Standard	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Carbon	Ceramic	NBR	EN 1.4401 (AISI 316)
	65-160/15 65-200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

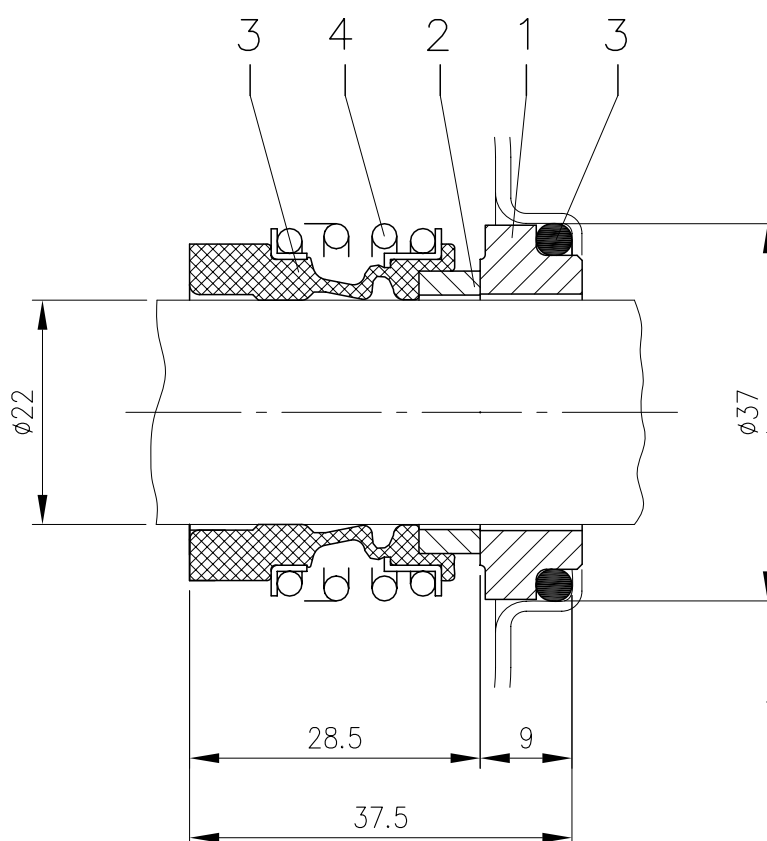
* The drawing is only indicative

MECHANICAL SEAL (L version ø22)

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)

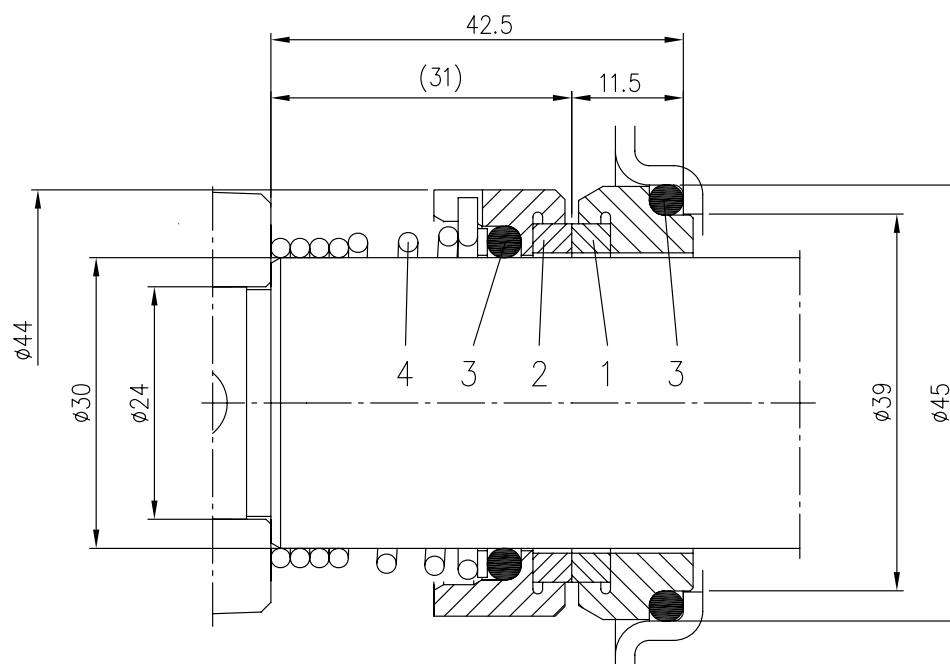
MECHANICAL SEAL (L version ø30-35)

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				

MECHANICAL SEAL (HS version and Special version ø22)

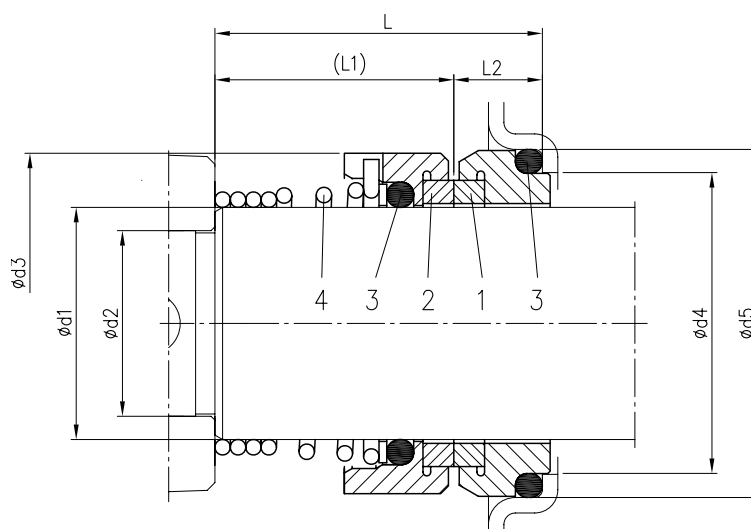
Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
HS ø22	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)
Q1AEGG*	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	SiC	Metallised Carbon	EPDM	EN 1.4401 (AISI 316)

* The drawing is only indicative

MECHANICAL SEAL (HS version ø30)

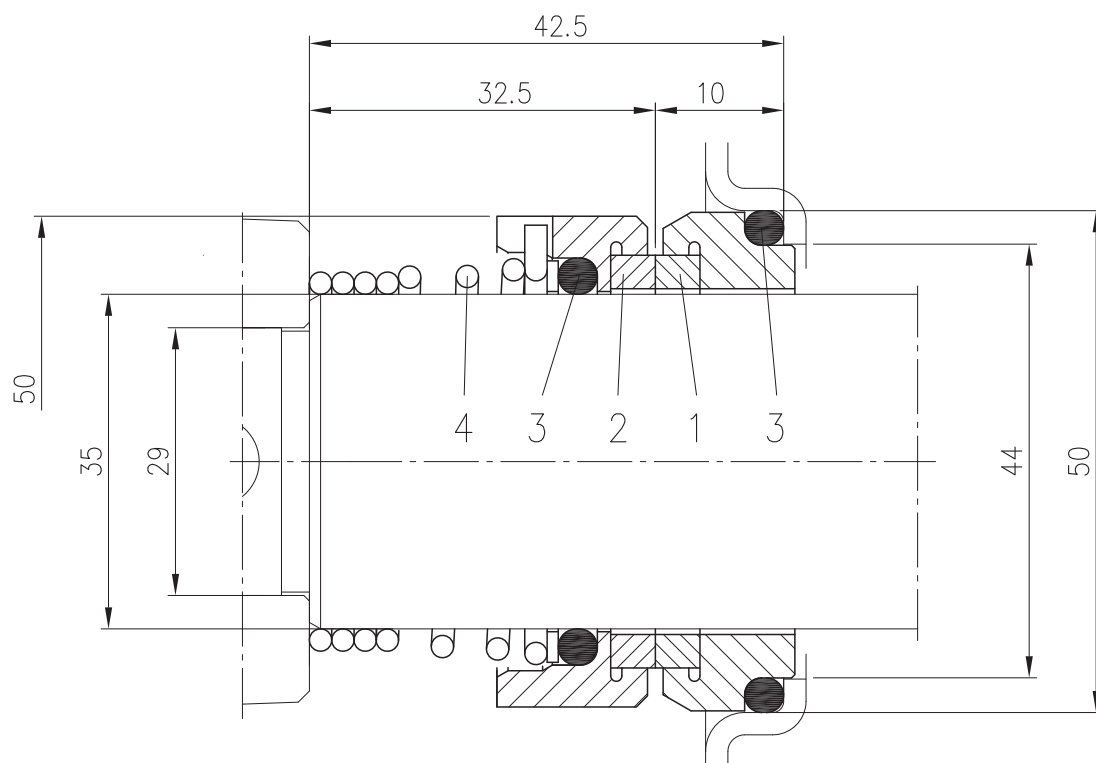
Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
HS ø 30	65-160/15 65-200	SiC	SiC	FPM	EN 1.4571 (AISI 316 Ti)

MECHANICAL SEAL (HW, HSW 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
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				
HSW	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	SiC	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				
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				
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				
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				

* The drawing is only indicative

MECHANICAL SEAL (ES version)

Pump type	Material			
	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + Spring
80-250	Carbon	SiC	EPDM	EN 1.4401 (AISI 316)

FLUID TEMPERATURE RANGE

The fluid temperature range depends on:

- Material of the elastomers
- Type of fluid pumped
- Material of the sealing faces

for each combination of these parameters the fluid temperature range may be different.

		SEALING FACES MATERIAL			
ELASTOMER		CERAMIC-CARBON		ALL (except ceramic-carbon)	
	NBR	-10 °C	90°C	-10 °C	90°C
	EPDM	-10 °C	90°C	-10 °C	120°C
	FPM	-10 °C	75°C	-10 °C	75°C ¹
		MIN	MAX	MIN	MAX
FLUID TEMPERATURE RANGE					

¹In case of fluids not containing water, the temperature limit could be increased to 110°C

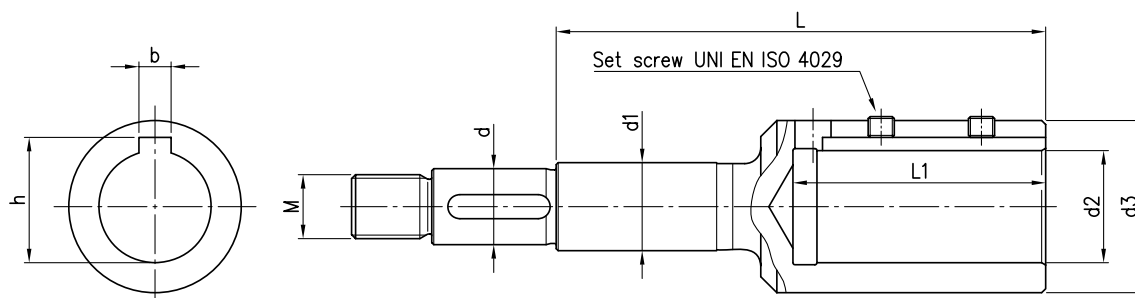
Therefore, the fluid temperature range is related to the choice of the mechanical seal and its materials.

STANDARD mechanical seal	TEMPERATURE	
	MIN	MAX
	STANDARD	-10 °C 90 °C
STANDARD (L VERSION)	-10 °C	75 °C

OPTIONAL mechanical seal	TEMPERATURE	
	MIN	MAX
	H	-10 °C 75 °C
HS	-10 °C	75 °C
HW	-10 °C	75 °C
HSW	-10 °C	75 °C
E	-20 °C	90 °C
ES	-20 °C	120 °C

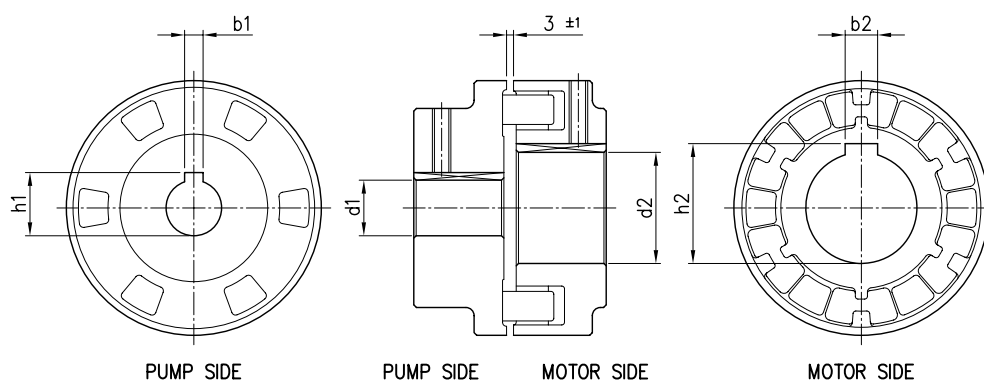
SPECIAL mechanical seal	TEMPERATURE	
	MIN	MAX
	Q1AEGG	-10 °C 120 °C
U3U3EGG	-10 °C	120 °C
Q1Q1EGG	-10 °C	120 °C
Q1U3EGG	-10 °C	120 °C
U3CEGG	-10 °C	120 °C

COUPLING



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

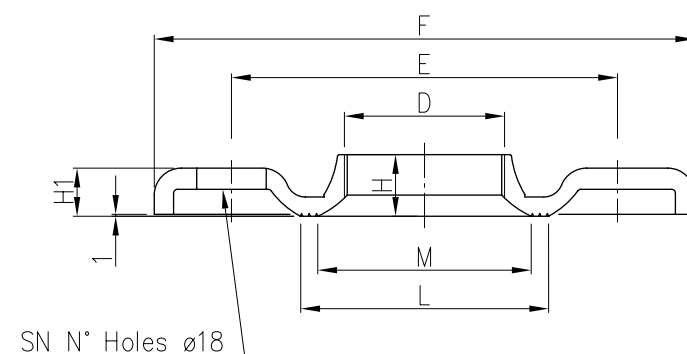
FLEXIBLE COUPLING



Pump type	Power		Motor Size	Dimensions mm					
	[KW]	[HP]		d1	b1	h1	d2	b2	h2
32-125/1.1	1.1	1.5	80	24	8	27.3	19	6	21.8
32-160/1.5	1.5	2	90	24	8	27.3	24	8	27.3
32-160/2.2	2.2	3	90	24	8	27.3	24	8	27.3
32-200/3.0	3	4	100	24	8	27.3	28	8	31.3
32-200/4.0	4	5.5	112	24	8	27.3	28	8	31.3
32-200/5.5	5.5	7.5	132	24	8	27.3	38	10	41.3
32-200/7.5	7.5	10	132	24	8	27.3	38	10	41.3
40-125/1.5	1.5	2	90	24	8	27.3	24	8	27.3
40-125/2.2	2.2	3	90	24	8	27.3	24	8	27.3
40-160/3.0	3	4	100	24	8	27.3	28	8	31.3
40-160/4.0	4	5.5	112	24	8	27.3	28	8	31.3
40-200/5.5	5.5	7.5	132	24	8	27.3	38	10	41.3
40-200/7.5	7.5	10	132	24	8	27.3	38	10	41.3
40-200/11	11	15	160	24	8	27.3	42	12	45.3
50-125/2.2	2.2	3	90	24	8	27.3	24	8	27.3
50-125/3.0	3	4	100	24	8	27.3	28	8	31.3
50-125/4.0	4	5.5	112	24	8	27.3	28	8	31.3
50-160/5.5	5.5	7.5	132	24	8	27.3	38	10	41.3
50-160/7.5	7.5	10	132	24	8	27.3	38	10	41.3
50-200/9.2	9.2	12.5	132	24	8	27.3	38	10	41.3
50-200/11	11	15	160	24	8	27.3	42	12	45.3
50-200/15	15	20	160	24	8	27.3	42	12	45.3
65-125/4.0	4	5.5	112	24	8	27.3	28	8	31.3
65-125/5.5	5.5	7.5	132	24	8	27.3	38	10	41.3
65-125/7.5	7.5	10	132	24	8	27.3	38	10	41.3
65-160/7.5	7.5	10	132	24	8	27.3	38	10	41.3
65-160/9.2	9.2	12.5	132	24	8	27.3	38	10	41.3
65-160/11	11	15	160	24	8	27.3	42	12	45.3
65-160/15	15	20	160	24	8	27.3	42	12	45.3
65-200/15	15	20	160	24	8	27.3	42	12	45.3
65-200/18.5	18.5	25	160	24	8	27.3	42	12	45.3
65-200/22	22	30	180	24	8	27.3	48	14	51.8
65-250/30	30	40	200	32	10	35.3	55	16	59.3
65-250/37	37	50	200	32	10	35.3	55	16	59.3
80-160/11	11	15	160	24	8	27.3	42	12	45.3
80-160/15R	15	20	160	24	8	27.3	42	12	45.3
80-160/15	15	20	160	24	8	27.3	42	12	45.3
80-160/18.5	18.5	25	160	24	8	27.3	42	12	45.3
80-200/22	22	30	180	32	10	35.3	48	14	51.8
80-200/30	30	40	200	32	10	35.3	55	16	59.3
80-200/37	37	50	200	32	10	35.3	55	16	59.3
80-250/37	37	50	200	32	10	35.3	55	16	59.3
80-250/45	45	60	225	32	10	35.3	55	16	59.3
80-250/55	55	75	250	32	10	35.3	60	18	64.4

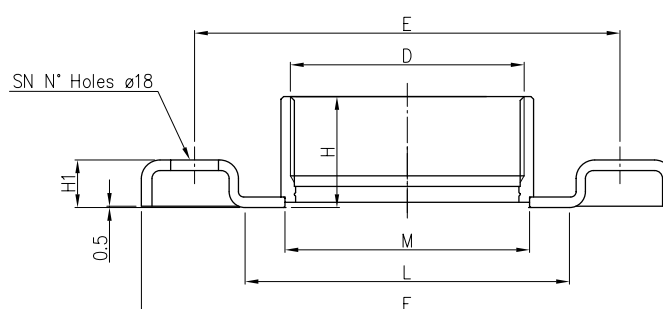
FITTINGS

COUNTERFLANGE ZINCKED STEEL



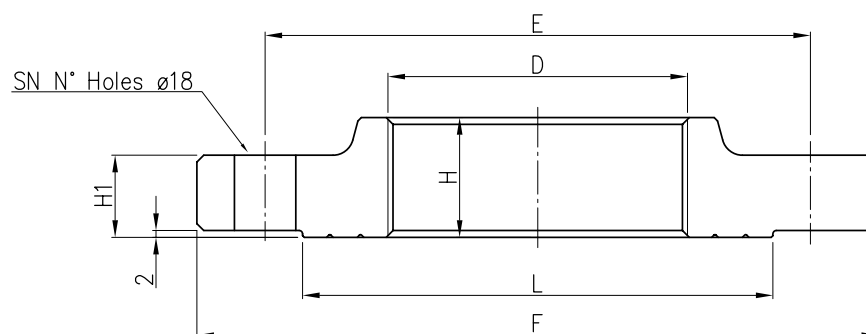
DN	D	E	Counterflange						Screw	
			F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	140	15	11.5	67	50	4	M16x55	Gv. Steel 8.8 strenght class ISO 898-1
40	G 1 1/2	110	150	17.5	11.5	72	58	4		
50	G2	125	165	19	15	89	70	4		
65	G 2 1/2	145	185	23	14	104	88	4		
80	G3	160	200	24	16	117.5	100	8	M16x60	
100	G4	180	220	29	16	144	125	8		

COUNTERFLANGE EN 1.4404 (AISI 316L)



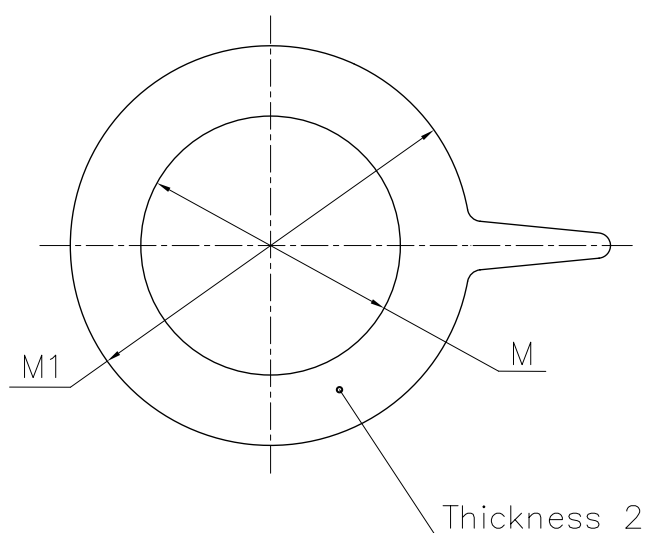
DN	D	E	Counterflange						Screw	
			F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	140	29.5	14	66	44	4	M16x55	A2-70 class ISO 3506-1
40	G 1 1/2	110	150	29.5	14	71	50.5			
50	G 2	125	165	34	16	83	63			
65	G 2 1/2	145	185	40	16	103	80			
80	G3	160	200	42	18	122	92	8	M16x60	

COUNTERFLANGE EN 1.4404 (AISI 316L) DN100



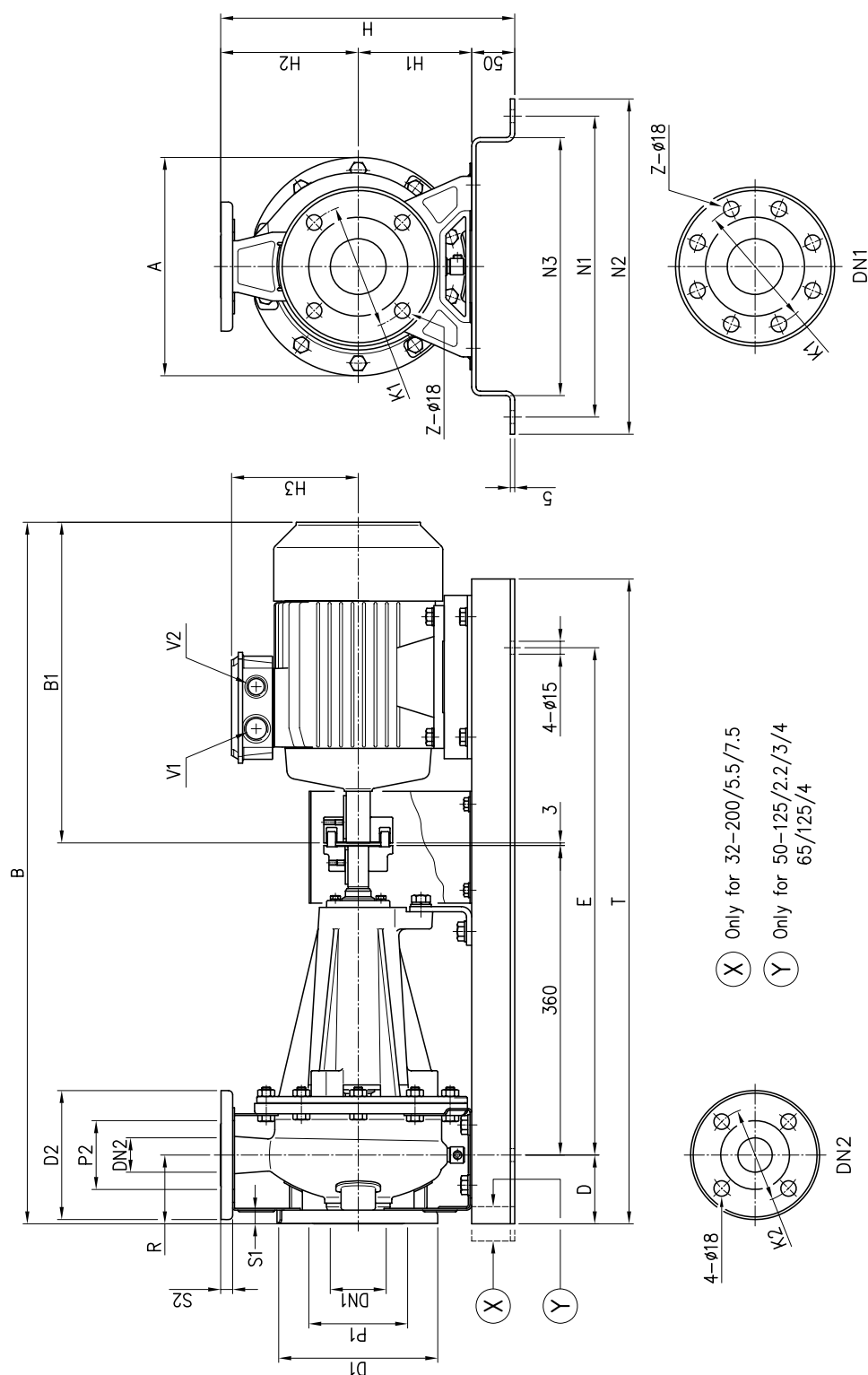
DN	D	Counterflange						Screw	
		E	F	H	H1	L	SN	DIMENSIONS	MATERIAL
100	G4	180	220	35	20	150	8	M16x70	A2-70 class ISO 3506-1

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(.)P 32, 40, 50, 65

For dimensions see table pag. 418

DIMENSIONS AND WEIGHT

50Hz

Rev. AI

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

Model	Dimensions [mm]																									Weight Kgf			
	Ø DN	Ø P1	Ø K1	Ø D1	Ø S1	Z [1]	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	R	A	B	B1	D	E	N1	N2	N3	T		V1	V2	
32-125/1.1	50	95	125	165	16	4	-	32	75	100	140	14	302	112	140	139	80	213	715	272	80	550	300	340	250	710	M25x1.5	M20x1.5	45.1
32-160/1.5	50	95	125	165	16	4	-	32	75	100	140	14	342	132	160	148	80	254	760	317	80	590	350	390	300	750	M25x1.5	M20x1.5	52.3
32-160/2.2	50	95	125	165	16	4	-	32	75	100	140	14	342	132	160	148	80	254	760	317	80	590	350	390	300	750	M25x1.5	M20x1.5	53.5
32-200/3	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	155	80	296	809	366	80	590	350	390	300	750	M25x1.5	M20x1.5	71.5
32-200/4	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	171	80	296	831	388	80	590	350	390	300	750	M25x1.5	M20x1.5	75.1
32-200/5.5	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	198	80	296	885	442	100	650	350	390	300	850	M32x1.5	M32x1.5	97
32-200/7.5	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	198	80	296	885	442	100	650	350	390	300	850	M32x1.5	M32x1.5	-
40-125/1.5	65	115	145	185	16	4	-	40	80	110	150	14	302	112	140	148	80	213	760	317	80	550	300	340	250	710	M25x1.5	M20x1.5	49.8
40-125/2.2	65	115	145	185	16	4	-	40	80	110	150	14	302	112	140	148	80	213	760	317	80	550	300	340	250	710	M25x1.5	M20x1.5	51
40-160/3	65	115	145	185	16	4	-	40	80	110	150	14	342	132	160	155	80	254	809	366	80	590	350	390	300	750	M25x1.5	M20x1.5	81
40-160/4	65	115	145	185	16	4	-	40	80	110	150	14	342	132	160	171	80	254	831	388	80	590	350	390	300	750	M25x1.5	M20x1.5	67.6
40-200/5.5	65	115	145	185	16	4	-	40	80	110	150	14	390	160	180	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	98
40-200/7.5	65	115	145	185	16	4	-	40	80	110	150	14	390	160	180	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	-
40-200/11	65	115	145	185	16	4	-	40	80	110	150	14	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
50-125/2.2	65	115	145	185	16	4	-	50	95	125	165	16	342	132	160	148	100	254	780	317	80	550	350	390	300	710	M25x1.5	M20x1.5	75
50-125/3	65	115	145	185	16	4	-	50	95	125	165	16	342	132	160	155	100	254	829	366	80	590	350	390	300	750	M25x1.5	M20x1.5	82.5
50-125/4	65	115	145	185	16	4	-	50	95	125	165	16	342	132	160	171	100	254	851	388	80	590	350	390	300	750	M25x1.5	M20x1.5	84.6
50-160/5.5	65	115	145	185	16	4	-	50	95	125	165	16	390	160	180	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	98
50-160/7.5	65	115	145	185	16	4	-	50	95	125	165	16	390	160	180	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	-
50-200/9.2	65	115	145	185	16	4	-	50	95	125	165	16	410	160	200	198	100	296	945	482	100	650	350	390	300	850	M32x1.5	M32x1.5	-
50-200/11	65	115	145	185	16	4	-	50	95	125	165	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
50-200/15	65	115	145	185	16	4	-	50	95	125	165	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
65-125/4	80	134	160	200	18	8	4	65	115	145	185	16	390	160	180	171	100	254	851	388	80	590	350	390	300	750	M25x1.5	M20x1.5	85.1
65-125/5.5	80	134	160	200	18	8	4	65	115	145	185	16	390	160	180	198	100	254	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	99
65-125/7.5	80	134	160	200	18	8	4	65	115	145	185	16	390	160	180	198	100	254	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	-
65-160/7.5	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	-
65-160/9.2	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	198	100	296	945	482	100	650	350	390	300	850	M32x1.5	M32x1.5	-
65-160/11	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
65-160/15	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
65-200/15	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	238	100	296	1071	608	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
65-200/18.5	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	238	100	296	1115	652	100	800	380	420	330	1000	M40x1.5	M40x1.5	-
65-200/22	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	268	100	296	1124	687	100	800	410	450	360	1000	M32x1.5	M32x1.5	-

[1] Standard [2] On request

PUMP 3LP 65-250, 80-160/200/250

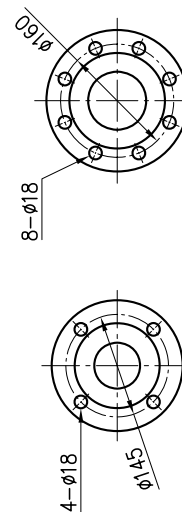
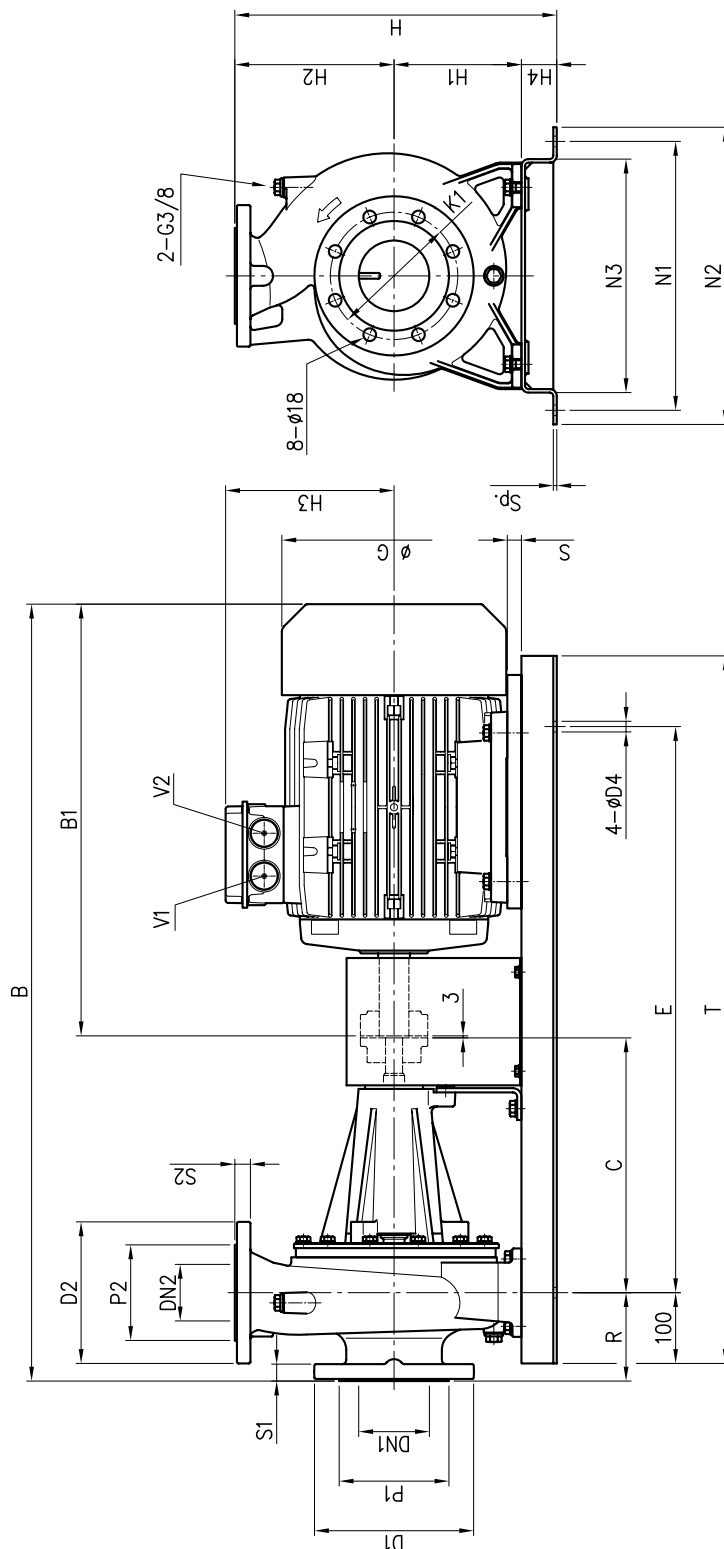


Fig. 1

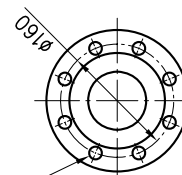
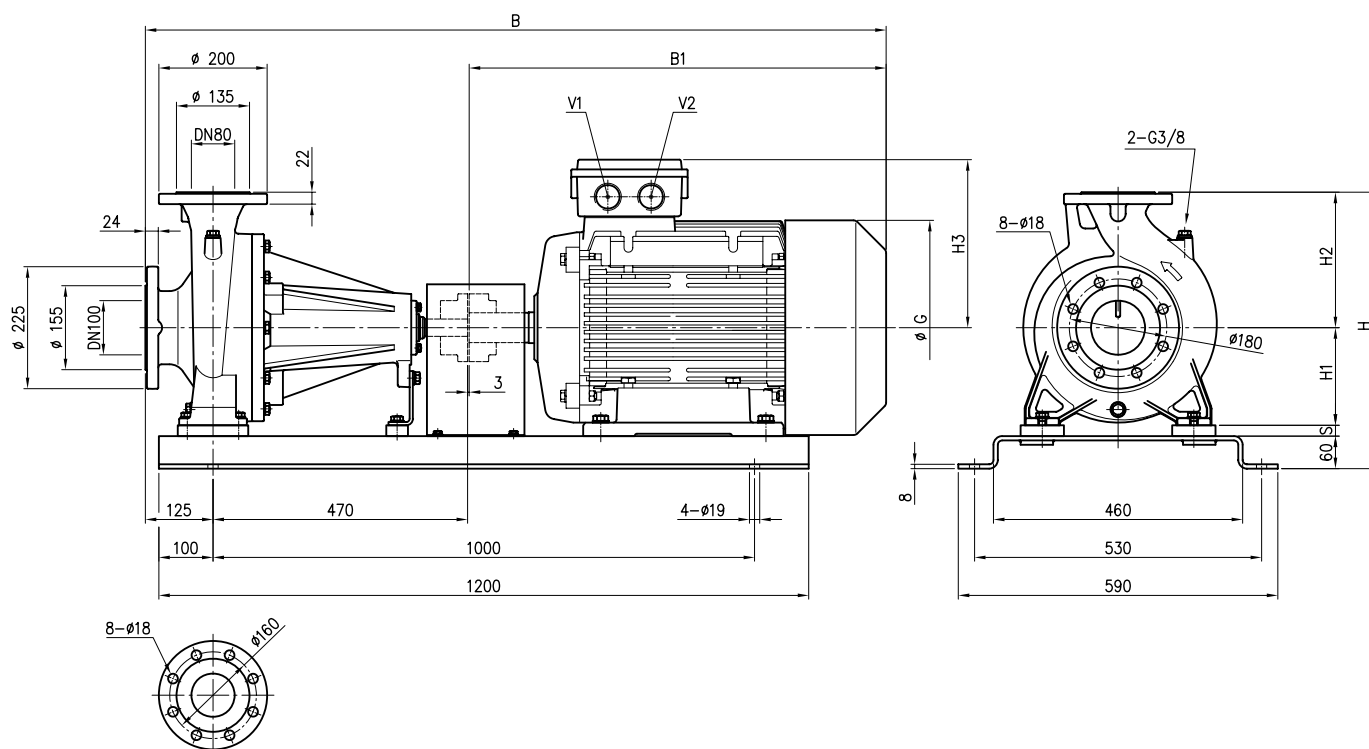


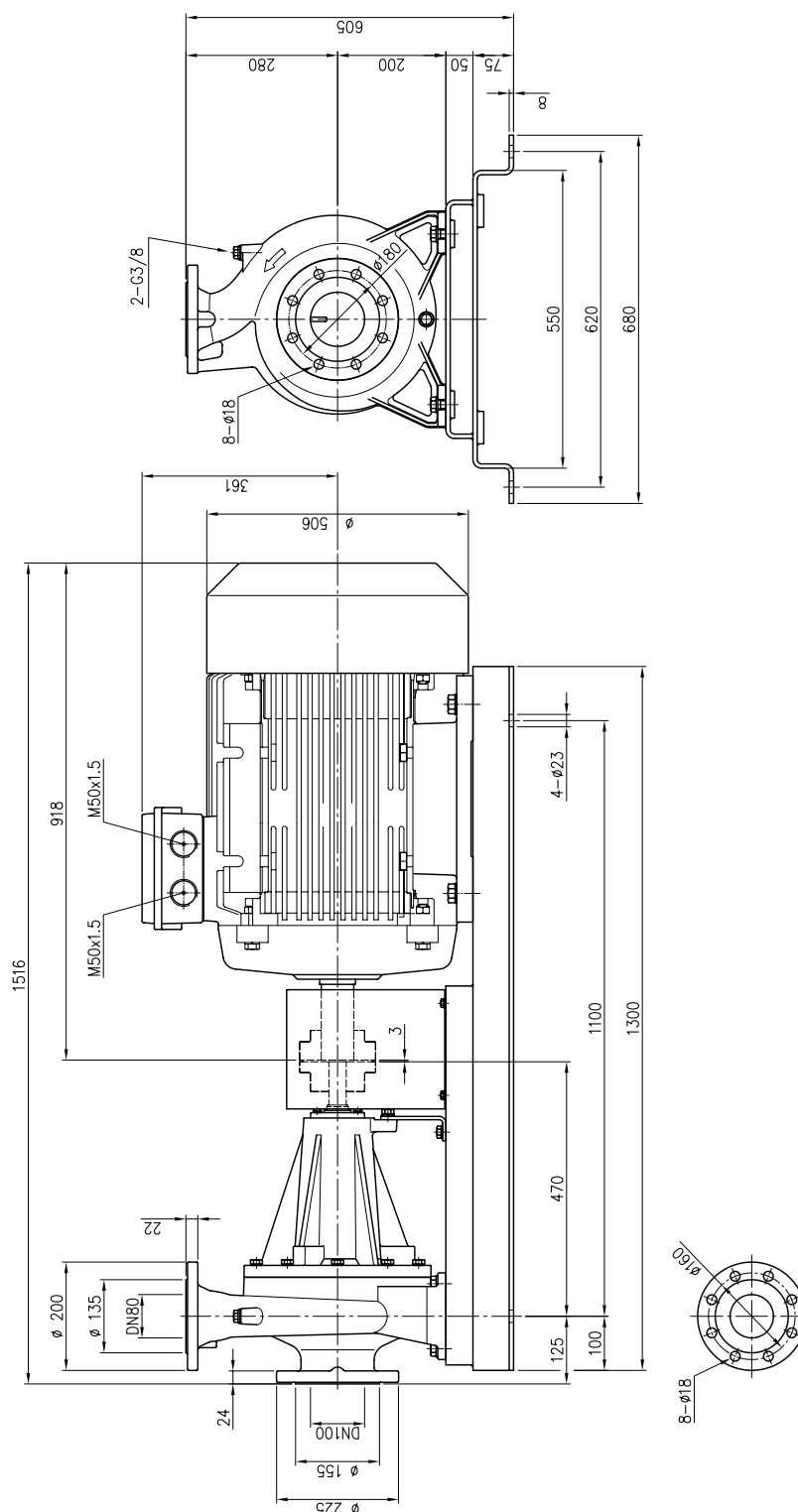
Fig. 2

Pump type	Dimensions [mm]																										Weight [kgf]			
	DN1	P1	k1	D1	S1	DN2	P2	D2	S2	H	H1	H2	H3	H4	R	N1	N2	N3	B	B1	C	G	E	T	S	D4		Sp.	V1	V2
65-250/30	80	135	160	200	22	65 Fig. 1	120	185	20	510	200	250	300	60	100	530	590	460	1330	768	470	399	1000	1200	-	19	8	M40x1.5	M40x1.5	373
	80	135	160	200	22	65 Fig. 1	120	185	20	510	200	250	300	60	100	530	590	460	1330	768	470	399	1000	1200	-	19	8	M40x1.5	M40x1.5	391
80-160/11	100	155	180	225	24	80 Fig. 2	135	200	22	455	180	225	238	50	125	380	420	330	1096	608	360	317	800	1000	20	15	5	M40x1.5	M40x1.5	174.8
	100	155	180	225	24	80 Fig. 2	135	200	22	455	180	225	238	50	125	380	420	330	1096	608	360	317	800	1000	20	15	5	M40x1.5	M40x1.5	186
80-160/15	100	155	180	225	24	80 Fig. 2	135	200	22	455	180	225	238	50	125	380	420	330	1096	608	360	317	800	1000	20	15	5	M40x1.5	M40x1.5	186
	100	155	180	225	24	80 Fig. 2	135	200	22	455	180	225	238	50	125	380	420	330	1140	652	360	317	800	1000	20	15	5	M40x1.5	M40x1.5	181.2
80-200/22	100	155	180	225	24	80 Fig. 2	135	200	22	490	180	250	268	60	125	530	590	460	1240	687	470	360	1000	1200	-	19	8	M32x1.5	M32x1.5	278
	100	155	180	225	24	80 Fig. 2	135	200	22	540	200	280	300	60	125	530	590	460	1355	768	470	399	1000	1200	-	19	8	M40x1.5	M40x1.5	400

PUMP 3LP 80-200/30/37, 80-250/45

Pump type	Dimensions [mm]										Weight [kgf]
	H	H1	H2	H3	B	B1	G	S	V1	V2	
80-200/30	510	180	250	300	1355	768	399	20	M40x1.5	M40x1.5	374
80-200/37	510	180	250	300	1355	768	399	20	M40x1.5	M40x1.5	388
80-250/45	565	200	280	335	1391	809	465	25	M50x1.5	M50x1.5	455

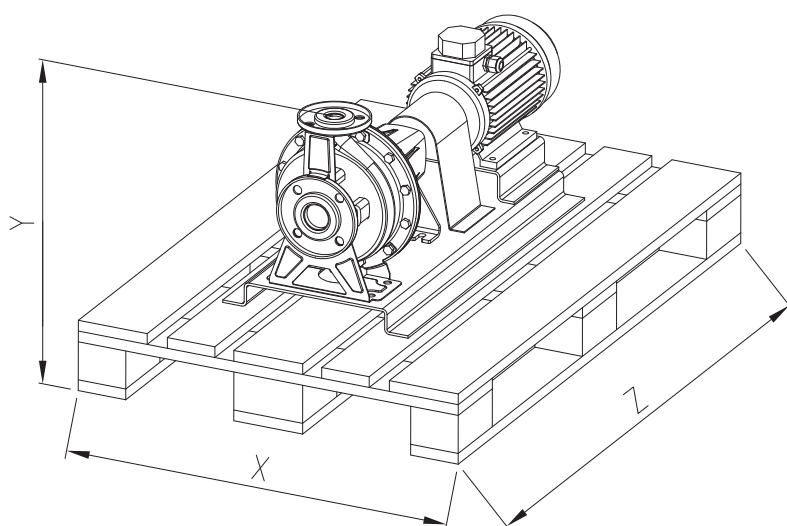
PUMP 3LP 80-250/55



Weigh: 528 kgf

PACKING 3(.)P

Pump type	Packing [mm]			Weight Kgf
	Z	X	Y	
32-125/1.1	1200	800	394	46.7
32-160/1.5			434	52.3
32-160/2.2				53.5
32-200/3.0				71.5
32-200/4.0				75.1
32-200/5.5			482	97
32-200/7.5				112.2
40-125/1.5			394	49.8
40-125/2.2				51
40-160/3.0			434	81
40-160/4.0				67.6
40-200/5.5				98
40-200/7.5			482	106.9
40-200/11				127.8
50-125/2.2				75
50-125/3.0			434	82.5
50-125/4.0				84.6
50-160/5.5			482	98
50-160/7.5				106.9
50-200/9.2				111
50-200/11			502	128.3
50-200/15				135.4
65-125/4.0				85.1
65-125/5.5			482	99
65-125/7.5				109.4
65-160/7.5				115.4
65-160/9.2			502	118
65-160/11				124.8
65-160/15				129
65-200/15				137
65-200/18.5			547	135.2
65-200/22				189
65-250/30				354
65-250/37			685	373
80-160/11				174.8
80-160/15R				186
80-160/15			593	186
80-160/18.5				181.2
80-200/22			633	259
80-200/30				356
80-200/37			685	365
80-250/37				377
80-250/45			745	440
80-250/55			811	528



MOTOR DATA 3(.)S-3(.)P

Pump type		Motor Size	Motor Power		Efficiency	Input [kW]	Efficiency (% load) and power-factor				Full load current			Locked rotor current		
			[kW]	[HP]			η %	cos-φ	230 V	[A] 400 V	690 V	230 V	[A] 400 V	690 V		
															50%	75%
3(J)S(Z) 32-125/1.1	3(J)P 32-125/1.1	80	1.1	1.5	IE3	1,26	78,7	81,7	82,7	0,76	4,2	2,4	-	38,7	22,3	-
3(J)S(Z) 32-160/1.5	3(J)P 32-160/1.5	90S	1.5	2	IE3	1,77	83,2	84,8	84,2	0,85	5,2	3,0	-	43,6	25,2	-
3(J)S(Z) 32-160/2.2	3(J)P 32-160/2.2	90L	2.2	3	IE3	2,61	85,0	86,2	86,5	0,82	8,0	4,6	-	73,3	42,3	-
3(J)S(Z) 32-200/3.0	3(J)P 32-200/3.0	100L	3	4	IE3	3,45	82,3	85,8	87,1	0,89	9,7	5,6	-	85,4	49,3	-
3(J)S(Z) 32-200/4.0	3(J)P 32-200/4.0	112M	4	5.5	IE3	4,51	86,8	87,8	88,1	0,93	12,1	7,0	-	116,4	67,2	-
3(J)S(Z) 32-200/5.5	3(J)P 32-200/5.5	132S	5.5	7.5	IE3	6,24	88,0	88,5	89,2	0,90	-	10,0	5,8	-	89,0	51,4
3(J)S(Z) 32-200/7.5	3(J)P 32-200/7.5		7.5	10	IE3	8,35	88,6	89,2	90,1	0,92	-	13,1	7,6	-	116,6	67,3
3(J)S(Z) 40-125/1.5	3(J)P 40-125/1.5	90S	1.5	2	IE3	1,77	83,2	84,8	84,2	0,85	5,2	3,0	-	43,6	25,2	-
3(J)S(Z) 40-125/2.2	3(J)P 40-125/2.2	90L	2.2	3	IE3	2,61	85,0	86,2	86,5	0,82	8,0	4,6	-	73,3	42,3	-
3(J)S(Z) 40-160/3.0	3(J)P 40-160/3.0	100L	3	4	IE3	3,45	82,3	85,8	87,1	0,89	9,7	5,6	-	85,4	49,3	-
3(J)S(Z) 40-160/4.0	3(J)P 40-160/4.0	112M	4	5.5	IE3	4,51	86,8	87,8	88,1	0,93	12,1	7,0	-	116,4	67,2	-
3(J)S(Z) 40-200/5.5	3(J)P 40-200/5.5	132M	5.5	7.5	IE3	6,24	88,0	88,5	89,2	0,90	-	10,0	5,8	-	89,0	51,4
3(J)S(Z) 40-200/7.5	3(J)P 40-200/7.5		7.5	10	IE3	8,35	88,6	89,2	90,1	0,92	-	13,1	7,6	-	116,6	67,3
3(J)S(Z) 40-200/11	3(J)P 40-200/11	160M	11	15	IE3	12,15	87,4	89,8	91,2	0,89	-	19,7	11,4	-	179,3	103,5
3(J)S(Z) 50-125/2.2	3(J)P 50-125/2.2	90L	2.2	3	IE3	2,61	85,0	86,2	86,5	0,82	8,0	4,6	-	73,3	42,3	-
3(J)S(Z) 50-125/3.0	3(J)P 50-125/3.0	100L	3	4	IE3	3,45	82,3	85,8	87,1	0,89	9,7	5,6	-	85,4	49,3	-
3(J)S(Z) 50-125/4.0	3(J)P 50-125/4.0	112M	4	5.5	IE3	4,51	86,8	87,8	88,1	0,93	12,1	7,0	-	116,4	67,2	-
3(J)S(Z) 50-160/5.5	3(J)P 50-160/5.5	132S	5.5	7.5	IE3	6,24	88,0	88,5	89,2	0,90	-	10,0	5,8	-	89,0	51,4
3(J)S(Z) 50-160/7.5	3(J)P 50-160/7.5	132M	7.5	10	IE3	8,35	88,6	89,2	90,1	0,92	-	13,1	7,6	-	116,6	67,3
3(J)S(Z) 50-200/9.2	3(J)P 50-200/9.2		9.2	12.5	IE3	10,17	88,6	89,8	90,7	0,89	-	16,5	9,5	-	166,7	96,2
3(J)S(Z) 50-200/11	3(J)P 50-200/11	160M	11	15	IE3	12,15	87,4	89,8	91,2	0,89	-	19,7	11,4	-	179,3	103,5
3(J)S(Z) 50-200/15	3(J)P 50-200/15		15	20	IE3	16,46	91,0	91,3	91,9	0,89	-	26,7	15,4	-	259,0	149,5
3(J)S(Z) 65-125/4	3(J)P 65-125/4	112M	4	5.5	IE3	4,51	86,8	87,8	88,1	0,93	12,1	7,0	-	116,4	67,2	-
3(J)S(Z) 65-125/5.5	3(J)P 65-125/5.5	132S	5.5	7.5	IE3	6,24	88,0	88,5	89,2	0,90	-	10,0	5,8	-	89,0	51,4
3(J)S(Z) 65-125/7.5	3(J)P 65-125/7.5		7.5	10	IE3	8,35	88,6	89,2	90,1	0,92	-	13,1	7,6	-	116,6	67,3
3(J)S(Z) 65-160/7.5	3(J)P 65-160/7.5	132M	7.5	10	IE3	8,35	88,6	89,2	90,1	0,92	-	13,1	7,6	-	116,6	67,3
3(J)S(Z) 65-160/9.2	3(J)P 65-160/9.2		9.2	12.5	IE3	10,17	88,6	89,8	90,7	0,89	-	16,5	9,5	-	166,7	96,2
3(J)S(Z) 65-160/11	3(J)P 65-160/11	160M	11	15	IE3	12,15	87,4	89,8	91,2	0,89	-	19,7	11,4	-	179,3	103,5
3(J)S(Z) 65-160/15	3(J)P 65-160/15		15	20	IE3	16,46	91,0	91,3	91,9	0,89	-	26,7	15,4	-	259,0	149,5
3(J)S(Z) 65-200/15	3(J)P 65-200/15	160L	15	20	IE3	16,46	91,0	91,3	91,9	0,89	-	26,7	15,4	-	259,0	149,5
3(J)S(Z) 65-200/18.5	3(J)P 65-200/18.5	180L	18.5	25	IE3	20,12	91,6	92,8	92,4	0,88	-	33,0	19,1	-	353,1	203,9
3(J)S(Z) 65-200/22	3(J)P 65-200/22	180	22	30	IE3	23,73	90,5	92,7	92,7	0,89	-	37,5	21,7	-	307,5	178,0
3LS 65-250/30	3LP 65-250/30	200	30	40	IE3	32,15	91,7	93,3	93,3	0,89	-	52,1	30,2	-	380,0	220,5
3LS 65-250/37	3LP 65-250/37		37	50	IE3	39,49	91,9	93,7	93,7	0,89	-	64,0	36,9	-	467,0	269,5
3LS 80-160/11	3LP 80-160/11	160M	11	15	IE3	12,15	87,4	89,8	91,2	0,89	-	19,7	11,4	-	179,3	103,5
3LS 80-160/15R	3LP 80-160/15R		15	20	IE3	16,46	91,0	91,3	91,9	0,89	-	26,7	15,4	-	259,0	149,5
3LS 80-160/15	3LP 80-160/15	200	15	20	IE3	16,46	91,0	91,3	91,9	0,89	-	26,7	15,4	-	259,0	149,5
3LS 80-160/18.5	3LP 80-160/18.5		160L	18.5	25	IE3	20,12	91,6	92,8	92,4	0,88	-	33,0	19,1	-	353,1
3LS 80-200/22	3LP 80-200/22	180	22	30	IE3	23,73	90,5	92,7	92,7	0,89	-	37,5	21,7	-	307,5	178,0
3LS 80-200/30	3LP 80-200/30	200	30	40	IE3	32,15	91,7	93,3	93,3	0,89	-	52,1	30,2	-	380,0	220,5
3LS 80-200/37	3LP 80-200/37		37	50	IE3	39,49	91,9	93,7	93,7	0,89	-	64,0	36,9	-	467,0	269,5
3LS 80-250/37	3LP 80-250/37	225	45	60	IE3	47,87	92,3	94,2	94,0	0,90	-	76,8	44,3	-	591,0	341,0
3LS 80-250/55	3LP 80-250/55	250	55	75	IE3	58,32	93,0	94,3	94,3	0,90	-	93,5	54,0	-	720,0	416,0

NOISE DATA 3(.)S-3(.)P

Pump type		Motor Size	Power		L _{pA} - dB(A) *
			[kW]	[HP]	
3(.)S(Z) 32-125/1.1	3(.)P 32-125/1.1	80	1.1	1.5	<70
3(.)S(Z) 32-160/1.5	3(.)P 32-160/1.5	90S	1.5	2	
3(.)S(Z) 32-160/2.2	3(.)P 32-160/2.2	90L	2.2	3	
3(.)S(Z) 32-200/3.0	3(.)P 32-200/3.0	100L	3	4	
3(.)S(Z) 32-200/4.0	3(.)P 32-200/4.0	112M	4	5.5	<70
3(.)S(Z) 32-200/5.5	3(.)P 32-200/5.5	132S	5.5	7.5	72
3(.)S(Z) 32-200/7.5	3(.)P 32-200/7.5	132S	7.5	10	
3(.)S(Z) 40-125/1.5	3(.)P 40-125/1.5	90S	1.5	2	<70
3(.)S(Z) 40-125/2.2	3(.)P 40-125/2.2	90L	2.2	3	
3(.)S(Z) 40-160/3.0	3(.)P 40-160/3.0	100L	3	4	
3(.)S(Z) 40-160/4.0	3(.)P 40-160/4.0	112M	4	5.5	<70
3(.)S(Z) 40-200/5.5	3(.)P 40-200/5.5	132S	5.5	7.5	72
3(.)S(Z) 40-200/7.5	3(.)P 40-200/7.5	132S	7.5	10	
3(.)S(Z) 40-200/11	3(.)P 40-200/11	160M	11	15	74
3(.)S(Z) 50-125/2.2	3(.)P 50-125/2.2	90L	2.2	3	<70
3(.)S(Z) 50-125/3.0	3(.)P 50-125/3.0	100L	3	4	
3(.)S(Z) 50-125/4.0	3(.)P 50-125/4.0	112M	4	5.5	<70
3(.)S(Z) 50-160/5.5	3(.)P 50-160/5.5	132S	5.5	7.5	72
3(.)S(Z) 50-160/7.5	3(.)P 50-160/7.5	132S	7.5	10	
3(.)S(Z) 50-200/9.2	3(.)P 50-200/9.2	132M	9.2	12.5	
3(.)S(Z) 50-200/11	3(.)P 50-200/11	160M	11	15	74
3(.)S(Z) 50-200/15	3(.)P 50-200/15	160M	15	20	
3(.)S(Z) 65-125/4	3(.)P 65-125/4	112M	4	5,5	<70
3(.)S(Z) 65-125/5.5	3(.)P 65-125/5.5	132S	5.5	7.5	72
3(.)S(Z) 65-125/7.5	3(.)P 65-125/7.5	132S	7.5	10	
3(.)S(Z) 65-160/7.5	3(.)P 65-160/7.5	132S			
3(.)S(Z) 65-160/9.2	3(.)P 65-160/9.2	132M	9.2	12.5	74
3(.)S(Z) 65-160/11	3(.)P 65-160/11	160M	11	15	
3(.)S(Z) 65-160/15	3(.)P 65-160/15	160M	15	20	
3(.)S(Z) 65-200/15	3(.)P 65-200/15	160M			
3(.)S(Z) 65-200/18.5	3(.)P 65-200/18.5	160L	18,5	25	77
3(.)S(Z) 65-200/22	3(.)P 65-200/22	180	22	30	
3LS 65-250/30	3LP 65-250/30	200	30	40	78
3LS 65-250/37	3LP 65-250/37	200	37	50	
3LS 80-160/11	3LP 80-160/11	160M	11	15	74
3LS 80-160/15R	3LP 80-160/15R	160M	15	20	
3LS 80-160/15	3LP 80-160/15	160M	15	20	
3LS 80-160/18.5	3LP 80-160/18.5	160L	18,5	25	
3LS 80-200/22	3LP 80-200/22	180	22	30	77
3LS 80-200/30	3LP 80-200/30	200	30	40	78
3LS 80-200/37	3LP 80-200/37	200	37	50	
3LS 80-250/37	3LP 80-250/37	200	37	50	
3LS 80-250/45	3LP 80-250/45	225	45	60	80
3LS 80-250/55	3LP 80-250/55	250	55	75	81

* Mean value of several measures at 1m distance around the pump.

Tolerance ± 2.5 dB.

Sound pressure level of motor pumps with AEG