



Japanese Technology since 1912

3 SERIES

Data Book 50Hz



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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	80-160/200/250		Flange DN100 according EN1092-1 Standard								
		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		/			CF8M - EN 1.4408 (AISI 316)					
	80-160/200/250											
	Impeller	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		/			CF8M - EN 1.4408 (AISI 316)					
	80-160/200/250											
	Casing cover	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		/			CF8M - EN 1.4408 (AISI 316)					
	80-160/200/250											
	Mechanical seal	32-125/160/200		Ceramic/Carbon/NBR (For version see page 327+333)			SiC/SiC/FPM (L version) (For version see page 327+333)					
		40-125/160/200										
		50-125/160/200		/						SiC/Carbon/EPDM (ES version) [2]		
65-125/160/200												
65-250		/			SiC/Carbon/EPDM (ES version) [2]							
80-160/200												
80-250		NBR [1]			FPM [3]							
O-ring												
Shaft	32, 40, 50, 65-125		d=19	EN 1.4301 (AISI 304)			EN 1.4404 (AISI 316L)					
	65-160/11											
	50-200/15		d=22									
	65-160/15											
	65-200		d=24	/			EN 1.4462 (Duplex stainless steel)					
	65-250											
	80-160		d=24							EN 1.4404 (AISI 316L)		
	80-200/22											
	80-200/30-37		d=24	EN 1.4462 (Duplex stainless steel)								
	80-250											
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

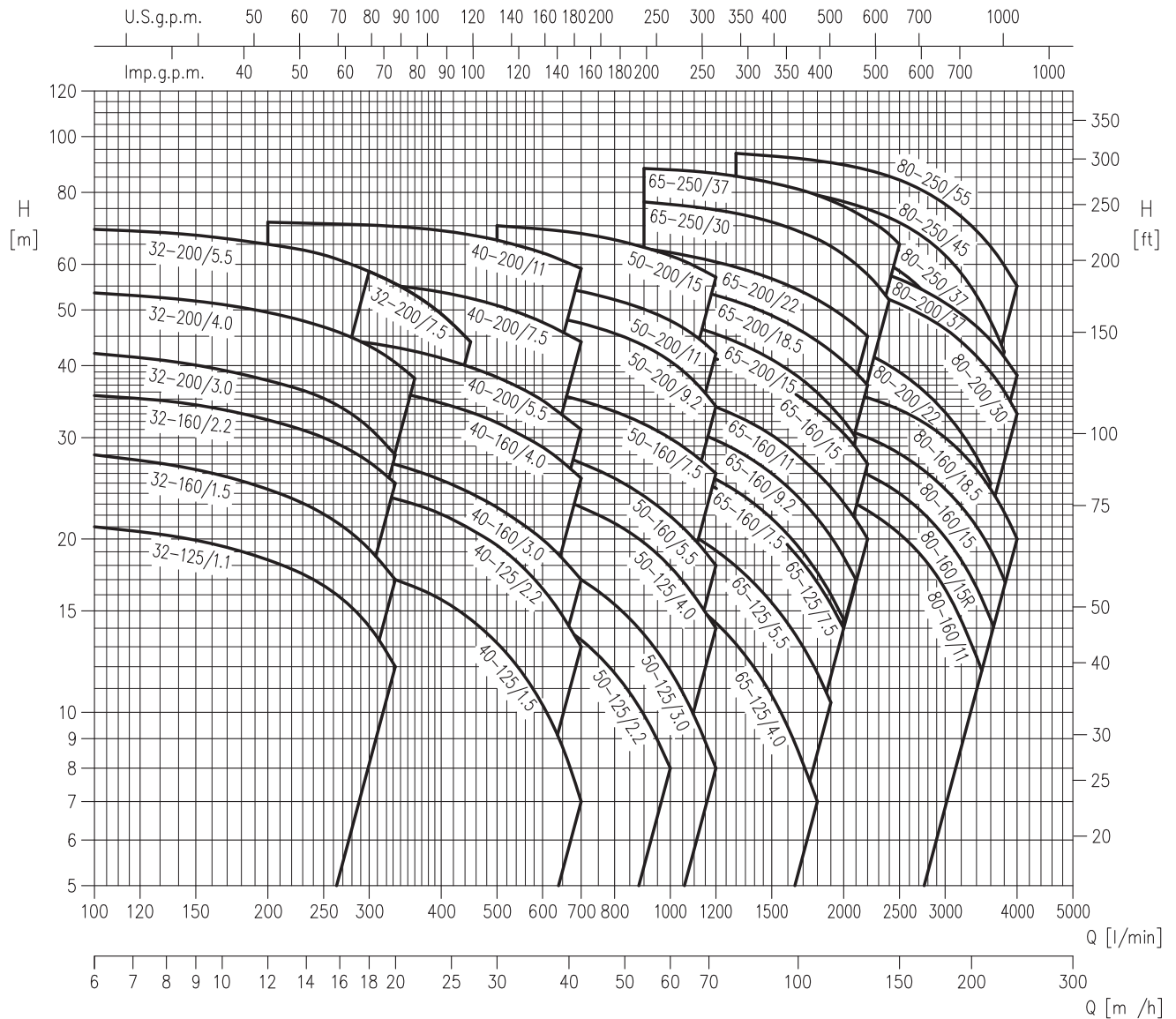
[3] EPDM for E-ES version and for Q1AEGG, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3CEGG

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 6	150 9	200 12	300 18	333 20	360 22	400 24	450 27	500 30	600 36	700 42	800 48	1000 60	1200 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

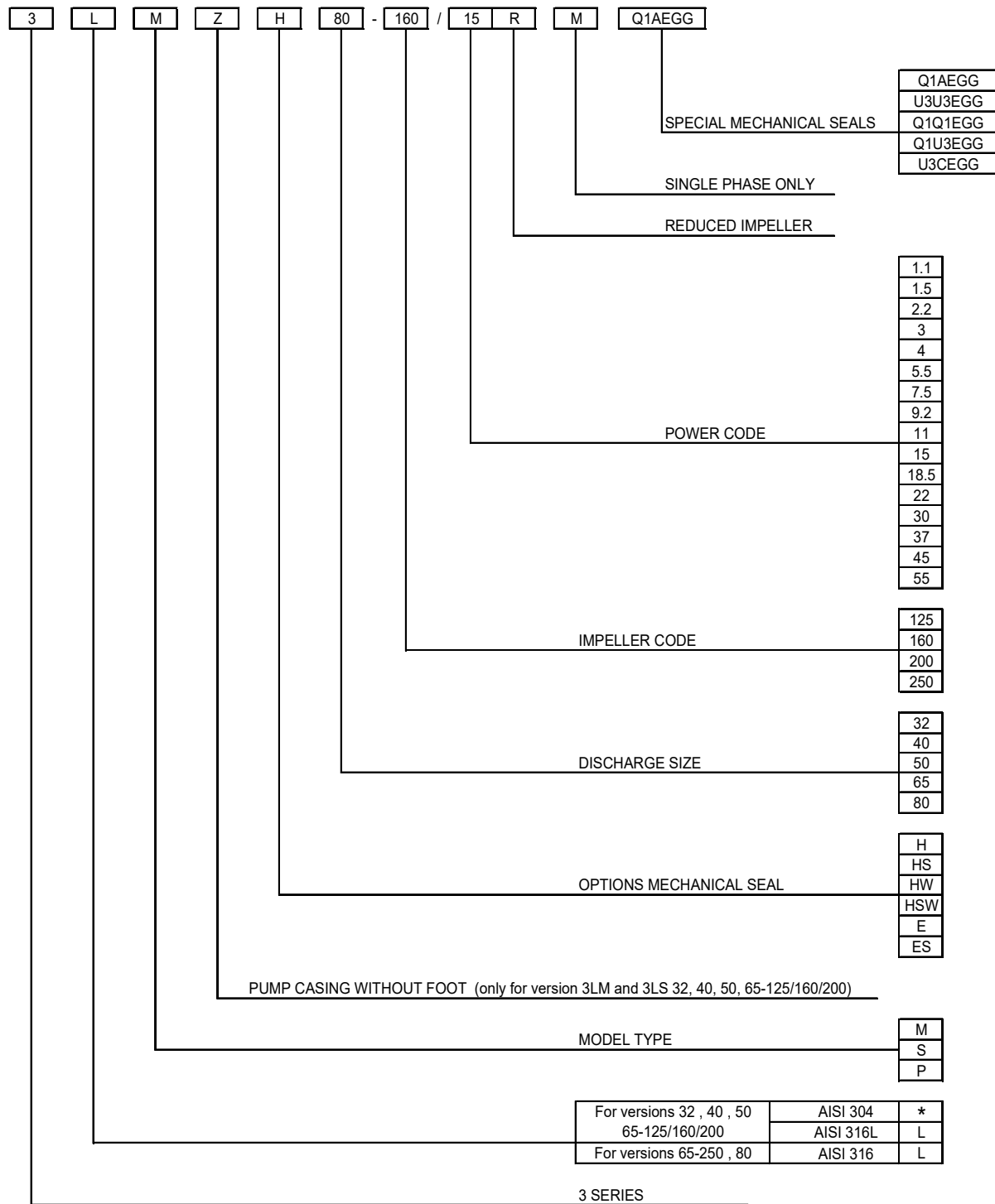
3 SERIES: 65, 80 Version

Pump type	l/min m³/h	0	600 36	700 42	900 54	1300 78	1500 90	1700 102	1900 114	2100 126	2200 132	2300 138	2400 144	2500 150	3000 180	3400 204	3600 216	3800 228	4000 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
- P_2 = pump power input (shaft power)
- η = pump efficiency
- NPSH = net positive suction head required by the pump
- MEI = minimum efficiency index

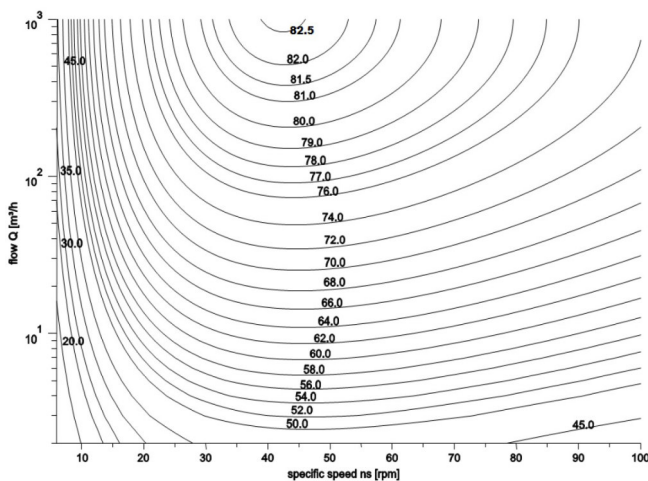
MEI INDEX SPECIFICATION

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.

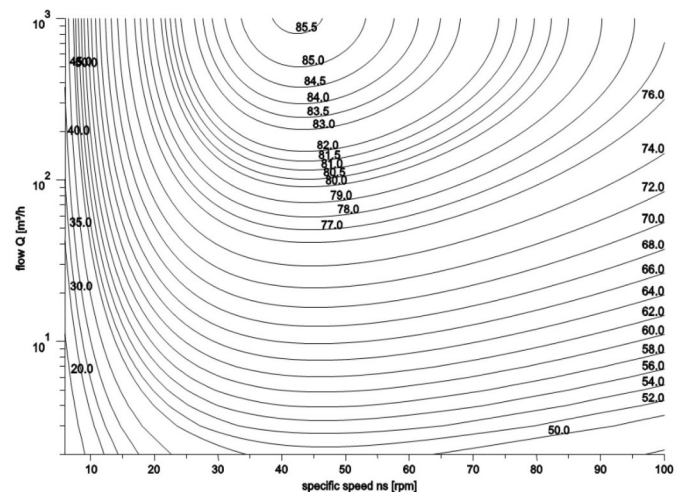
The efficiency of a pump with trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to a reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.

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.

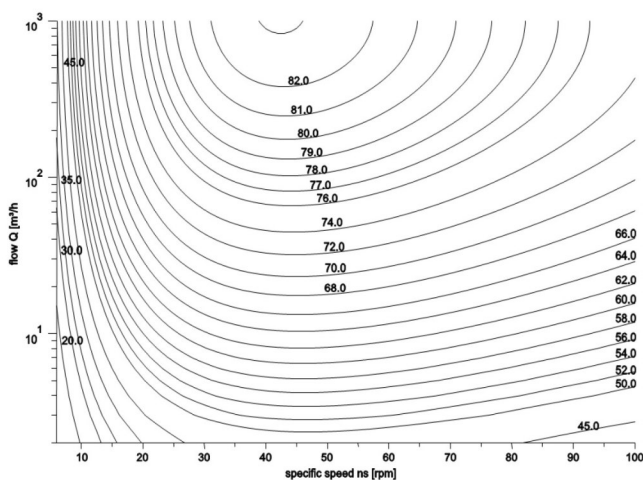
MEI = 0.4 for ESCC 2900 rpm



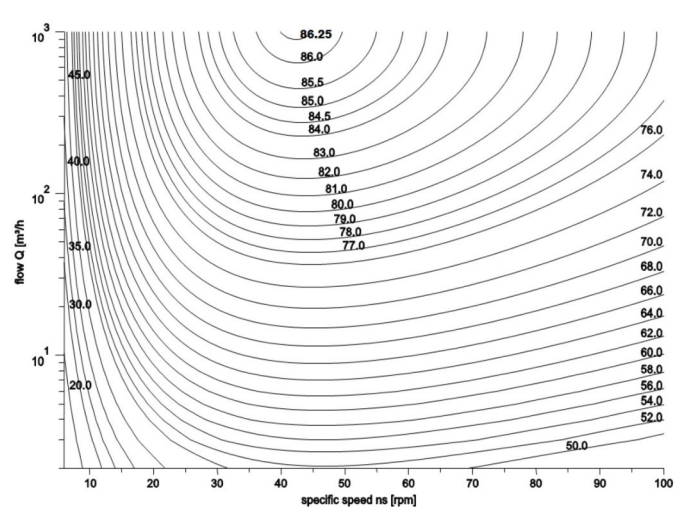
MEI = 0.7 for ESCC 2900rpm



MEI = 0.4 for ESOB 2900 rpm



MEI = 0.7 for ESOB 2900rpm

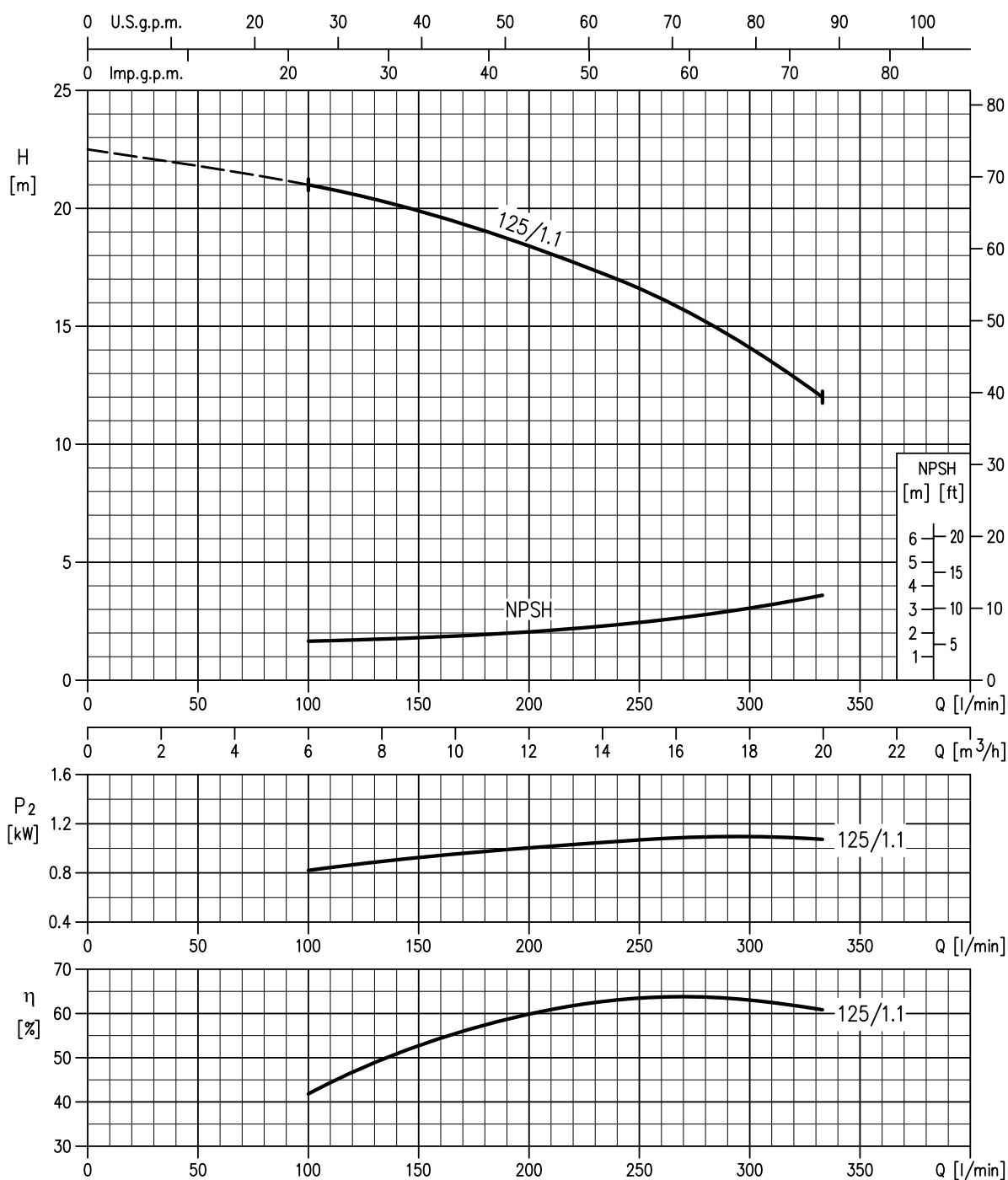


MEI INDEX VALUE

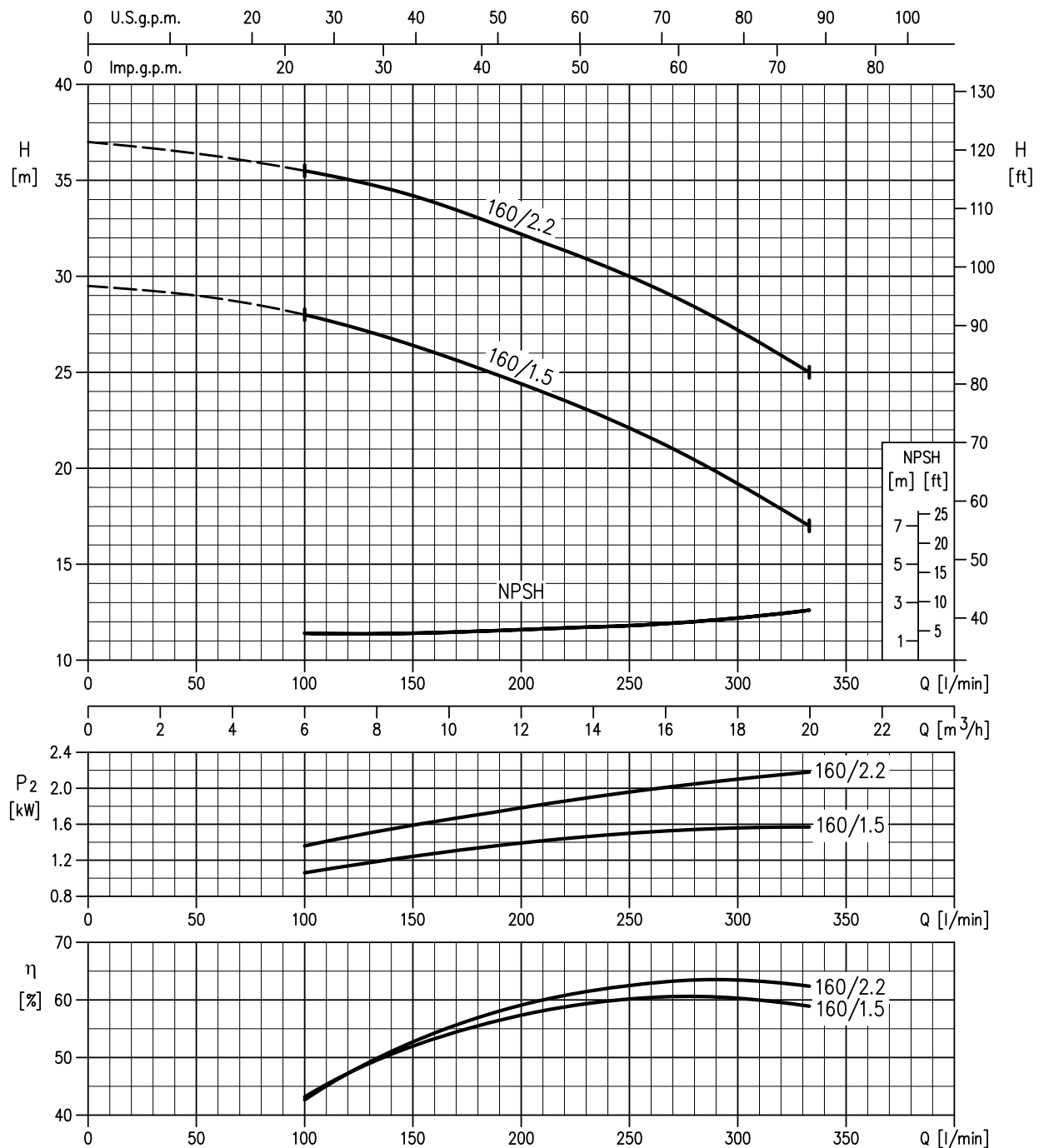
SIZE	MEI VALUE		
	3M	3S	3P
32-125	≥ 0.4	≥ 0.4	≥ 0.4
32-160	≥ 0.7	≥ 0.7	≥ 0.7
32-200	≥ 0.6	≥ 0.6	≥ 0.5
40-125	≥ 0.7	≥ 0.7	≥ 0.6
40-160	≥ 0.7	≥ 0.7	≥ 0.7
40-200	≥ 0.7	≥ 0.7	≥ 0.7
50-125	≥ 0.4	≥ 0.4	≥ 0.4
50-160	≥ 0.7	≥ 0.7	≥ 0.6
50-200	≥ 0.7	≥ 0.7	≥ 0.7
65-125	≥ 0.7	≥ 0.7	≥ 0.7
65-160	≥ 0.7	≥ 0.7	≥ 0.6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

PERFORMANCE CURVE**50Hz**

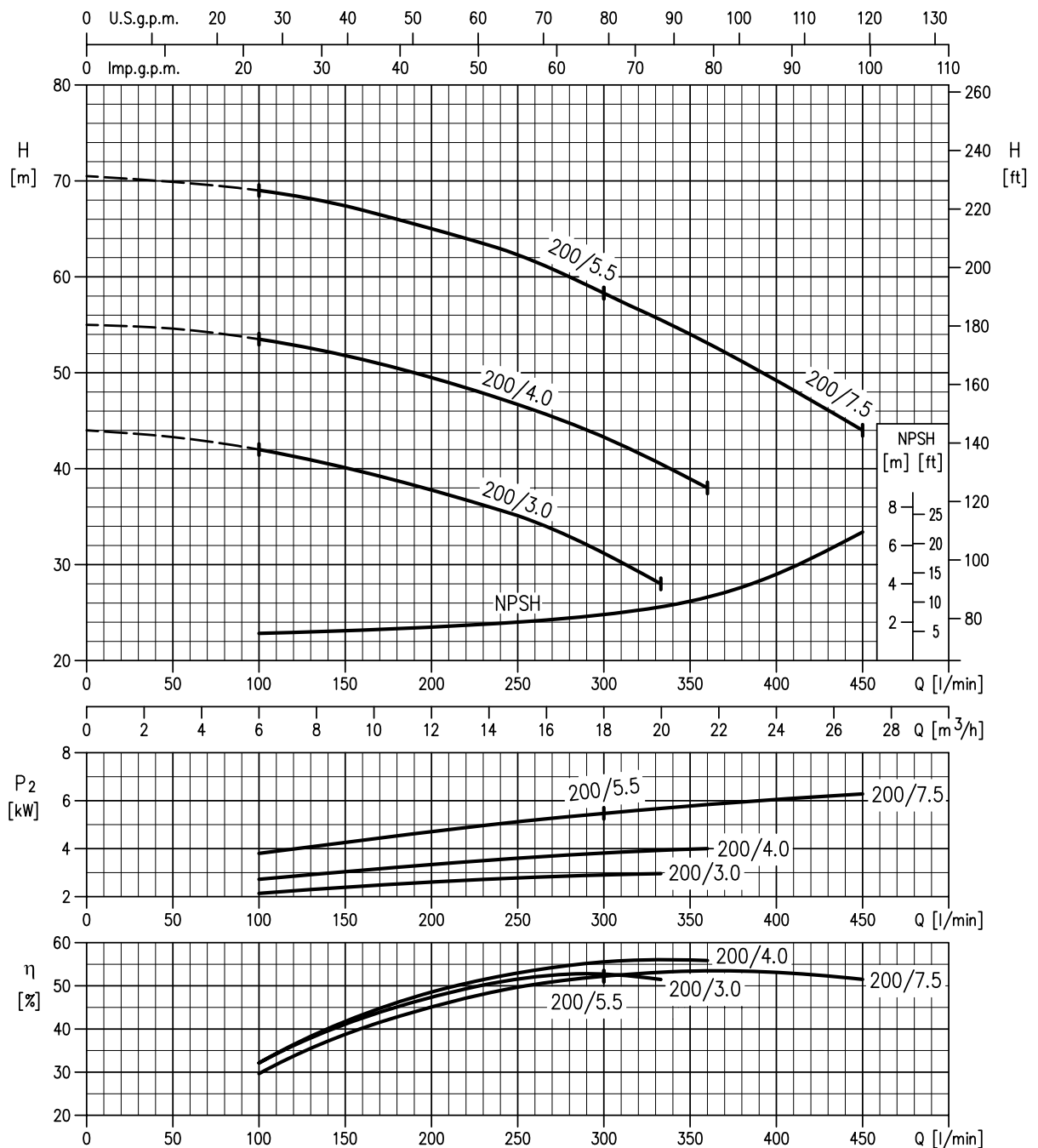
Rev. AI

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

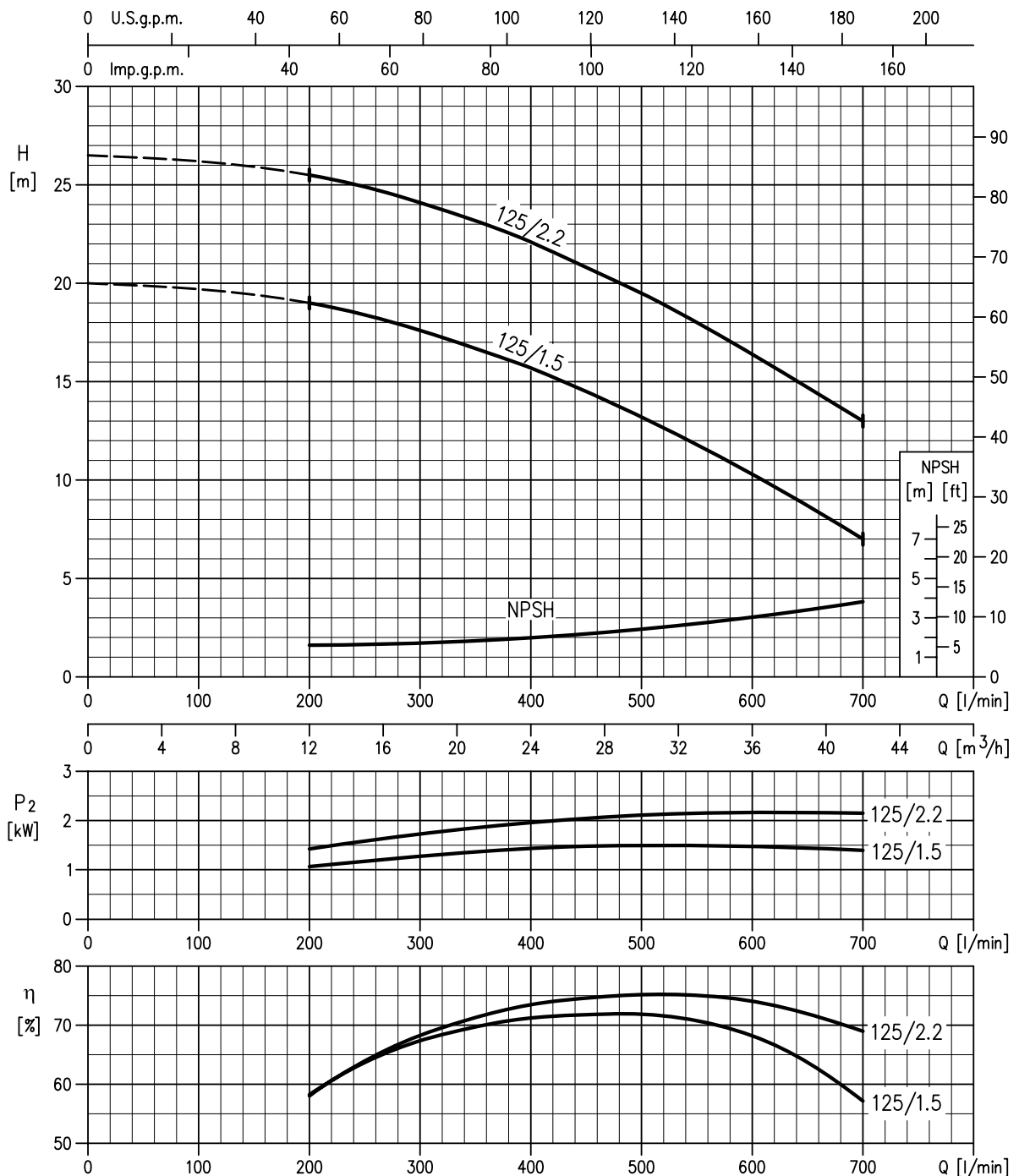
Test standard: ISO 9906:2012 - Grade 3B

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**

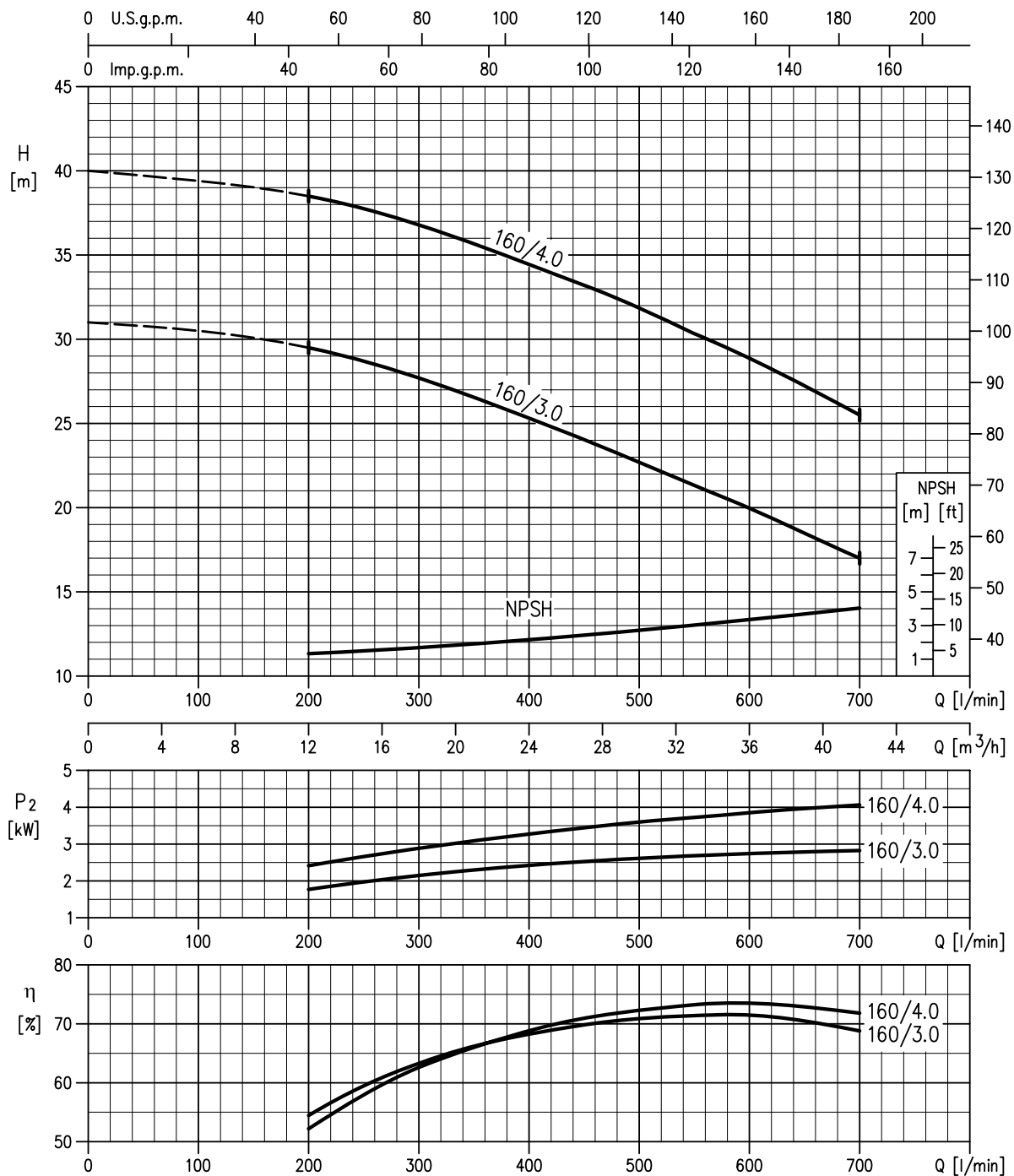
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

40-125/1.5 - impeller diameter = 125 mm

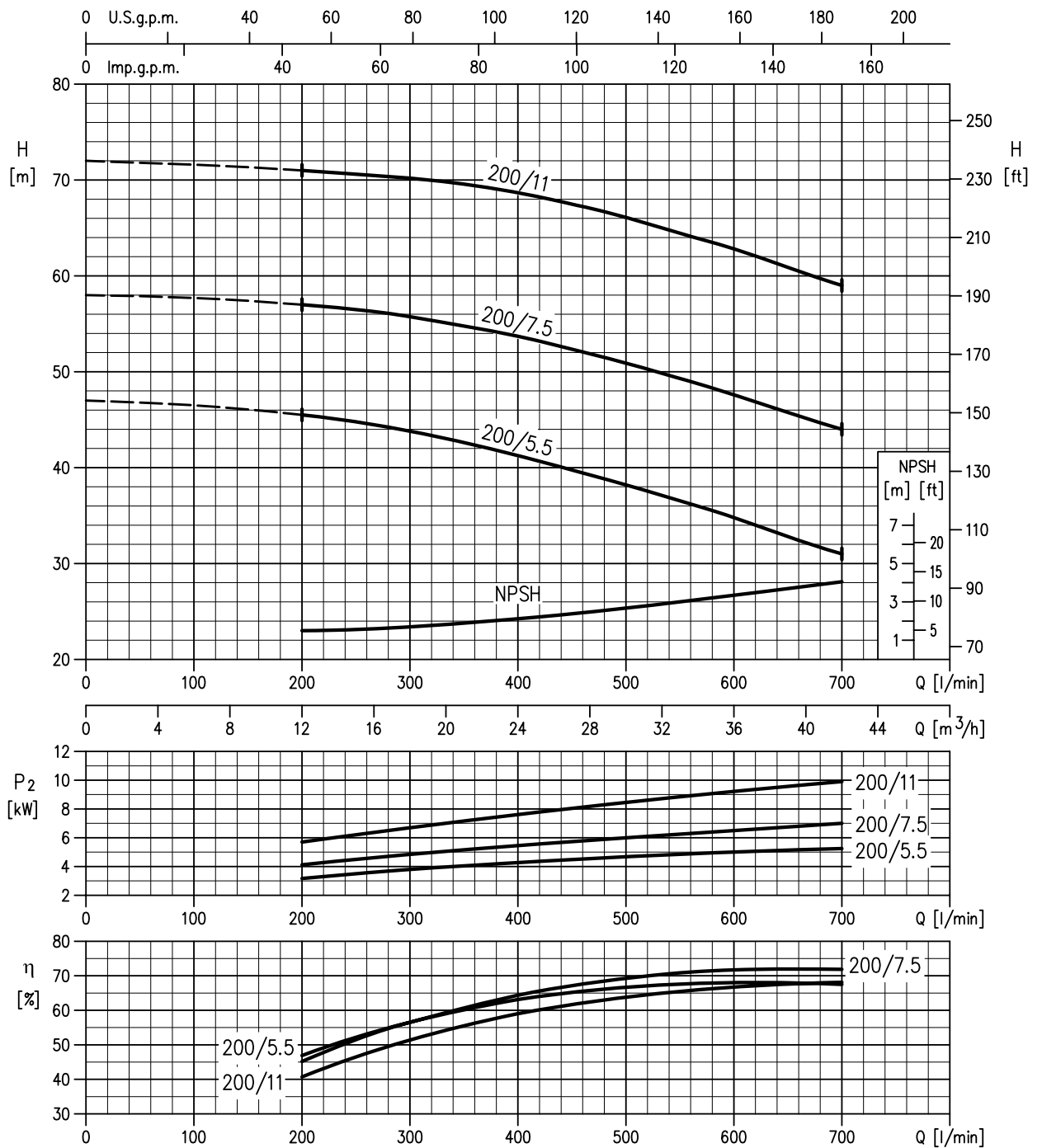
40-125/2.2 - impeller diameter = 140 mm

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

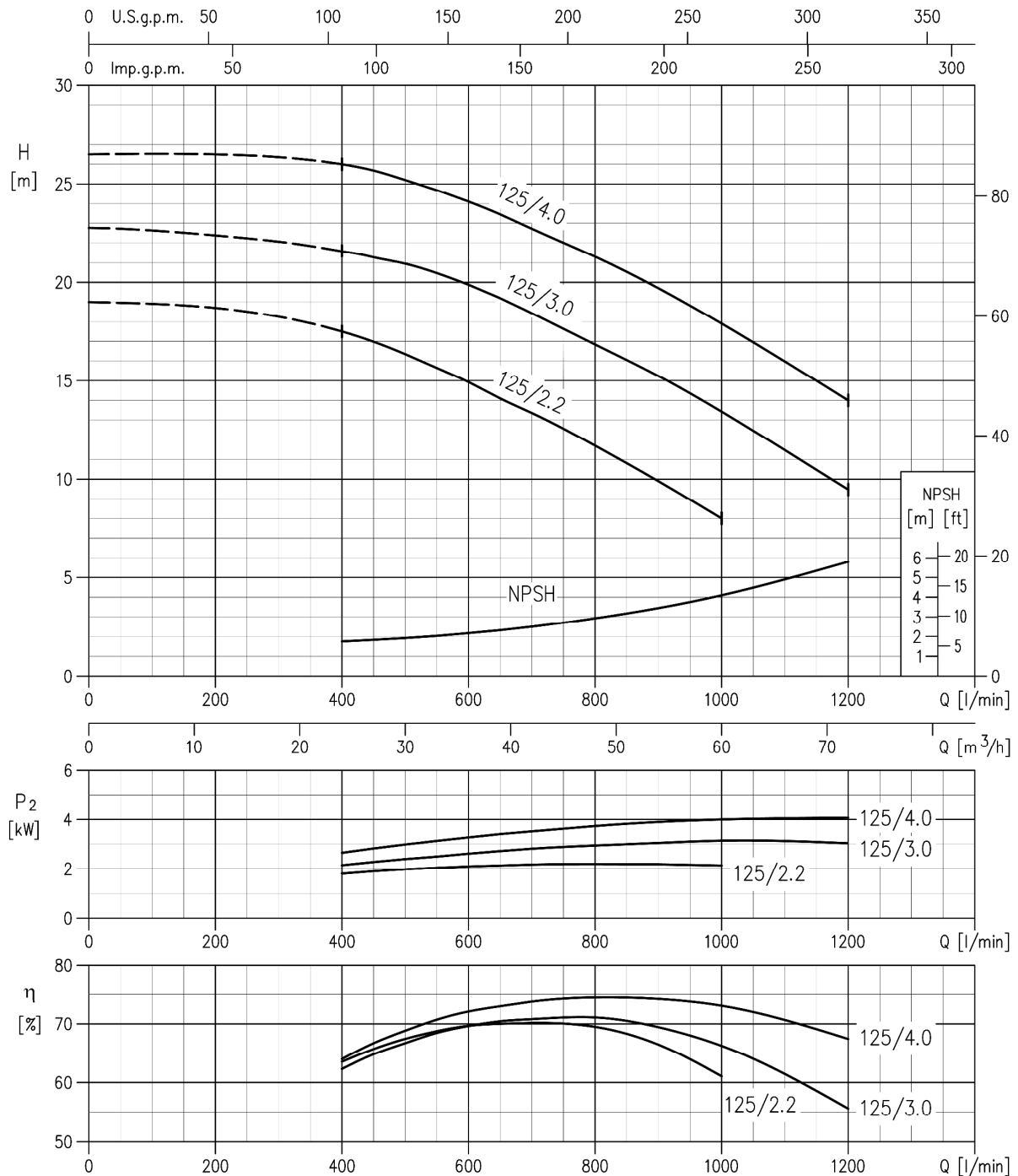
Test standard: ISO 9906:2012 - Grade 3B

40-160/3 – impeller diameter = 151 mm**40-160/4 – impeller diameter = 166 mm**Rotation speed $\approx 2900 \text{ min}^{-1}$

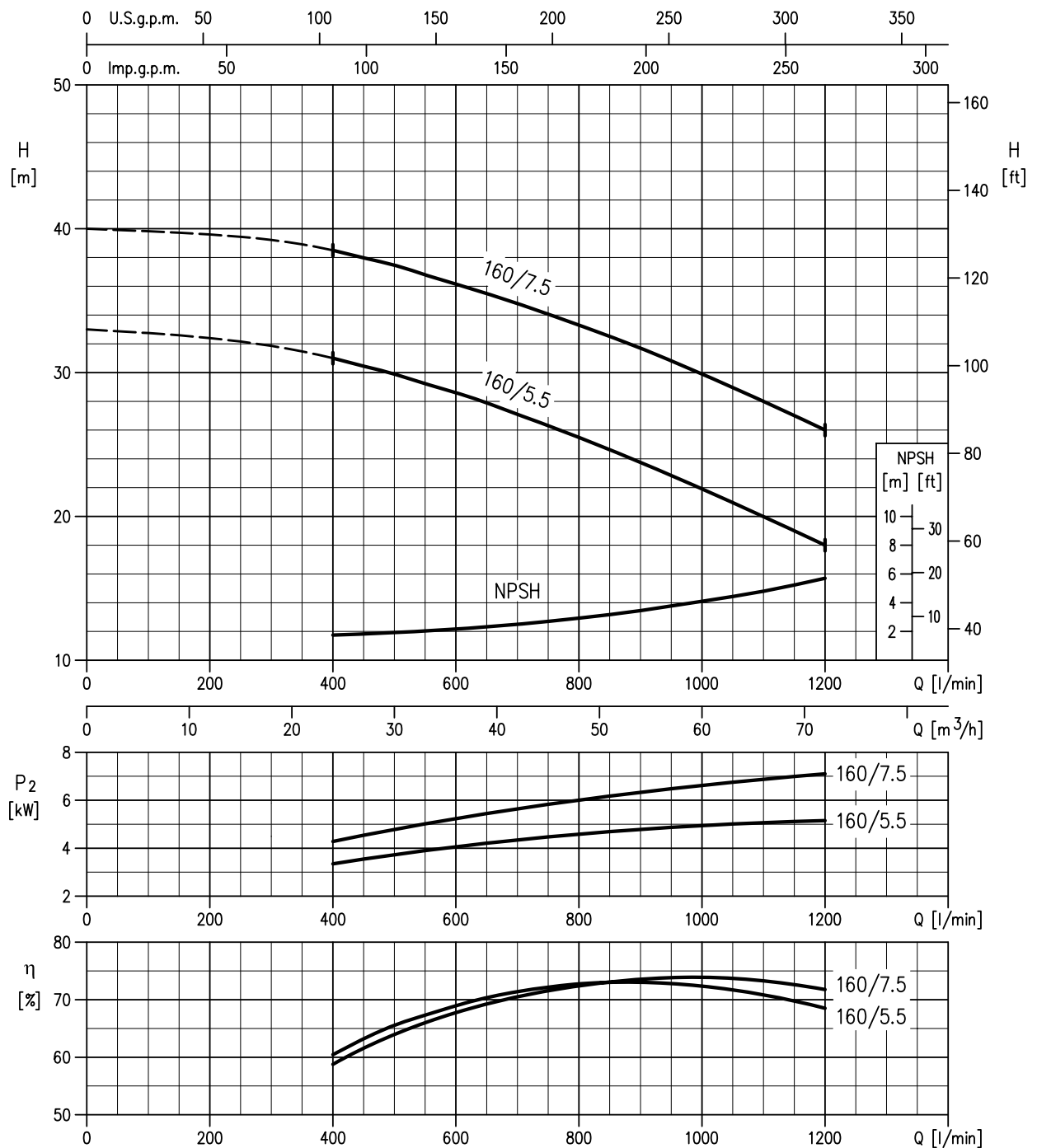
Test standard: ISO 9906:2012 - Grade 3B

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

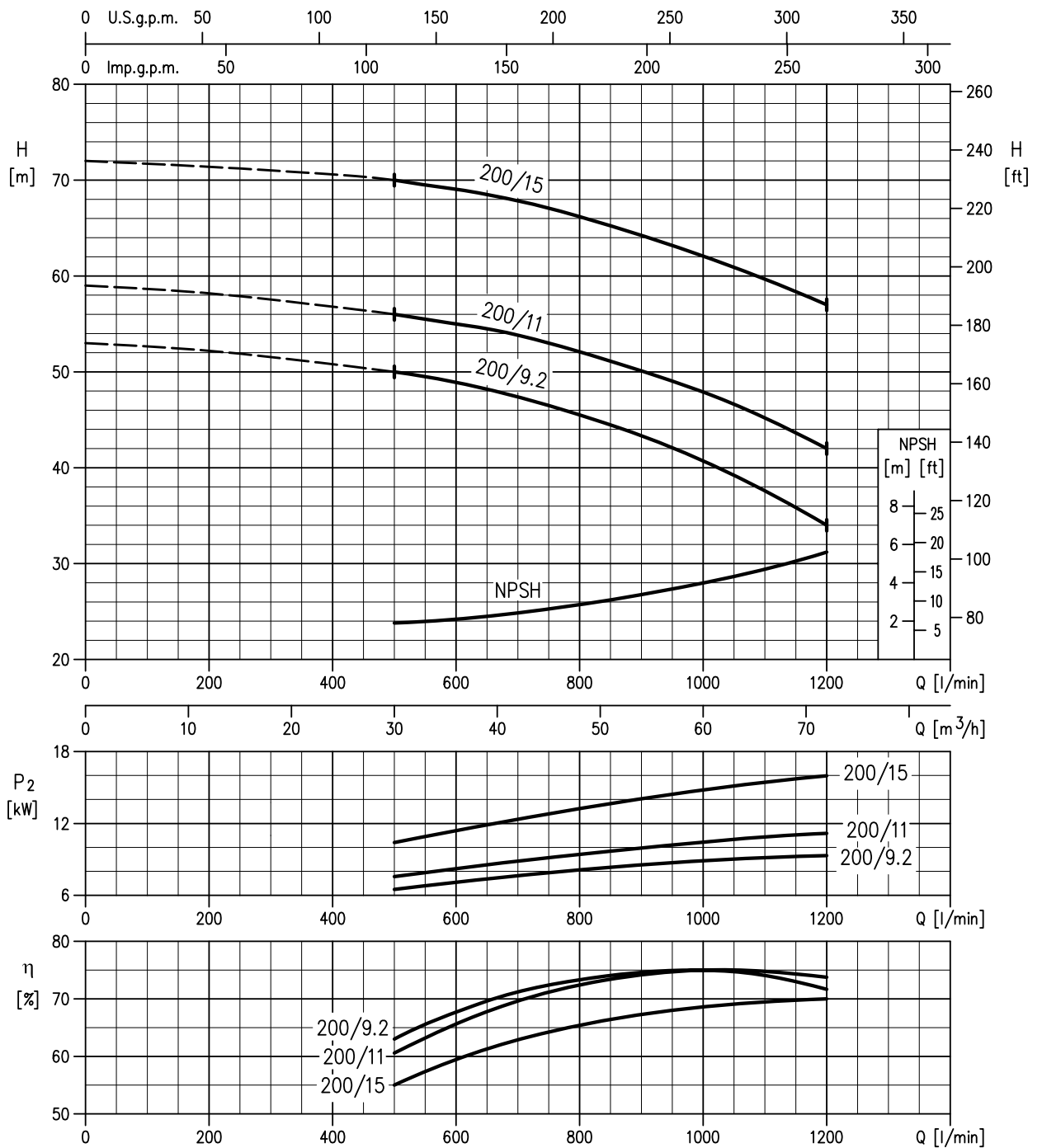
Test standard: ISO 9906:2012 - Grade 3B

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

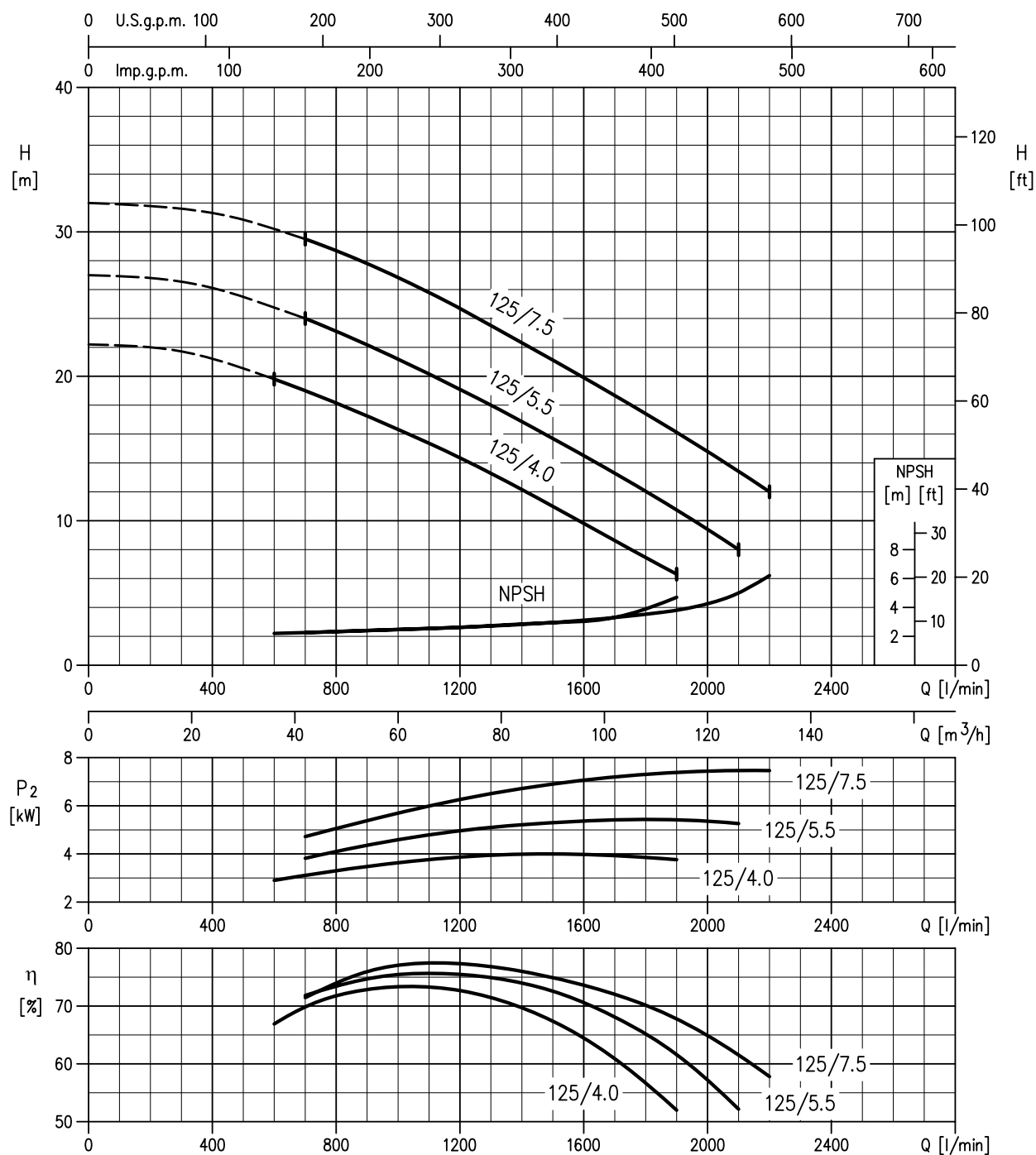
Test standard: ISO 9906:2012 - Grade 3B

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

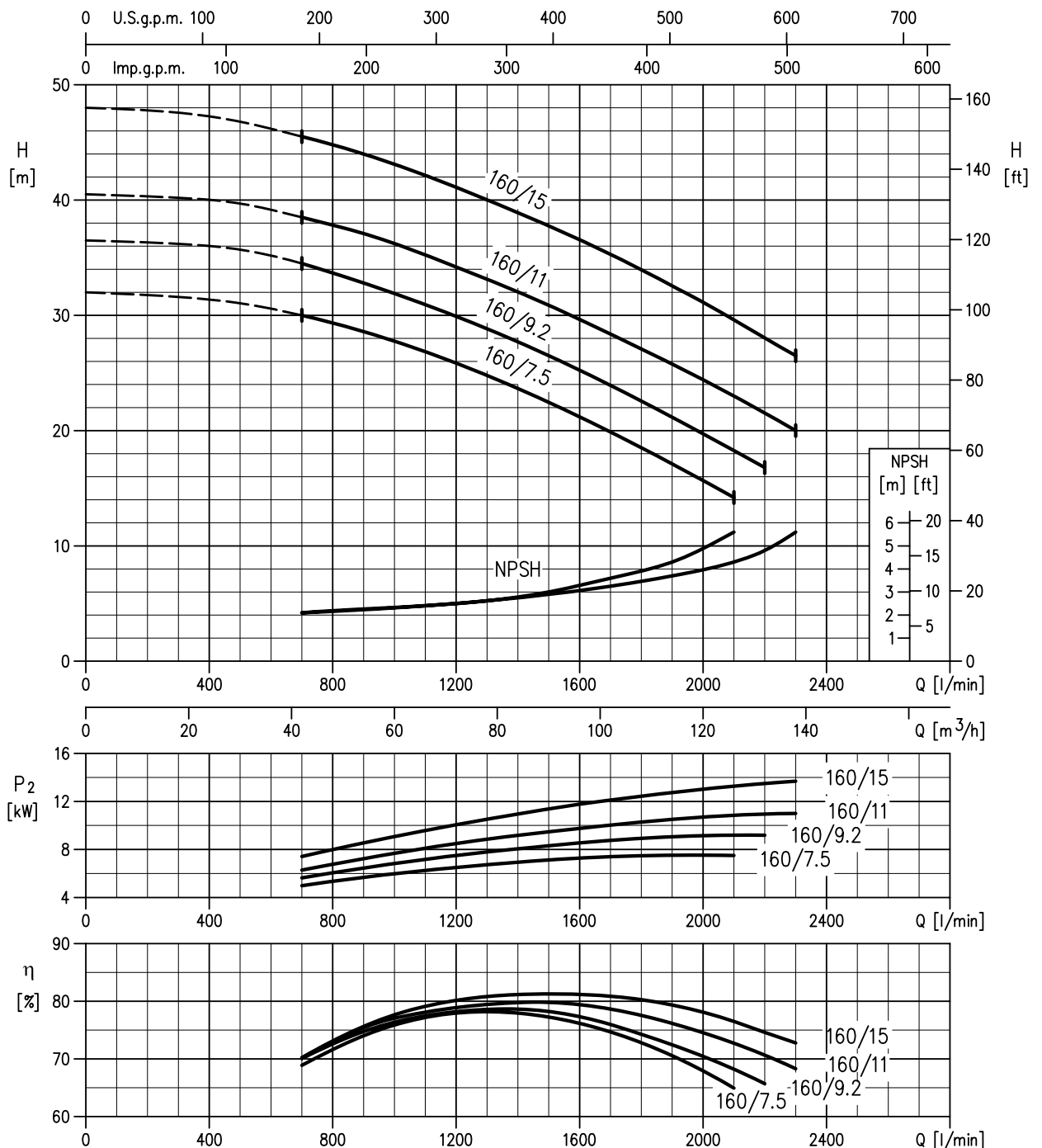
Test standard: ISO 9906:2012 - Grade 3B

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

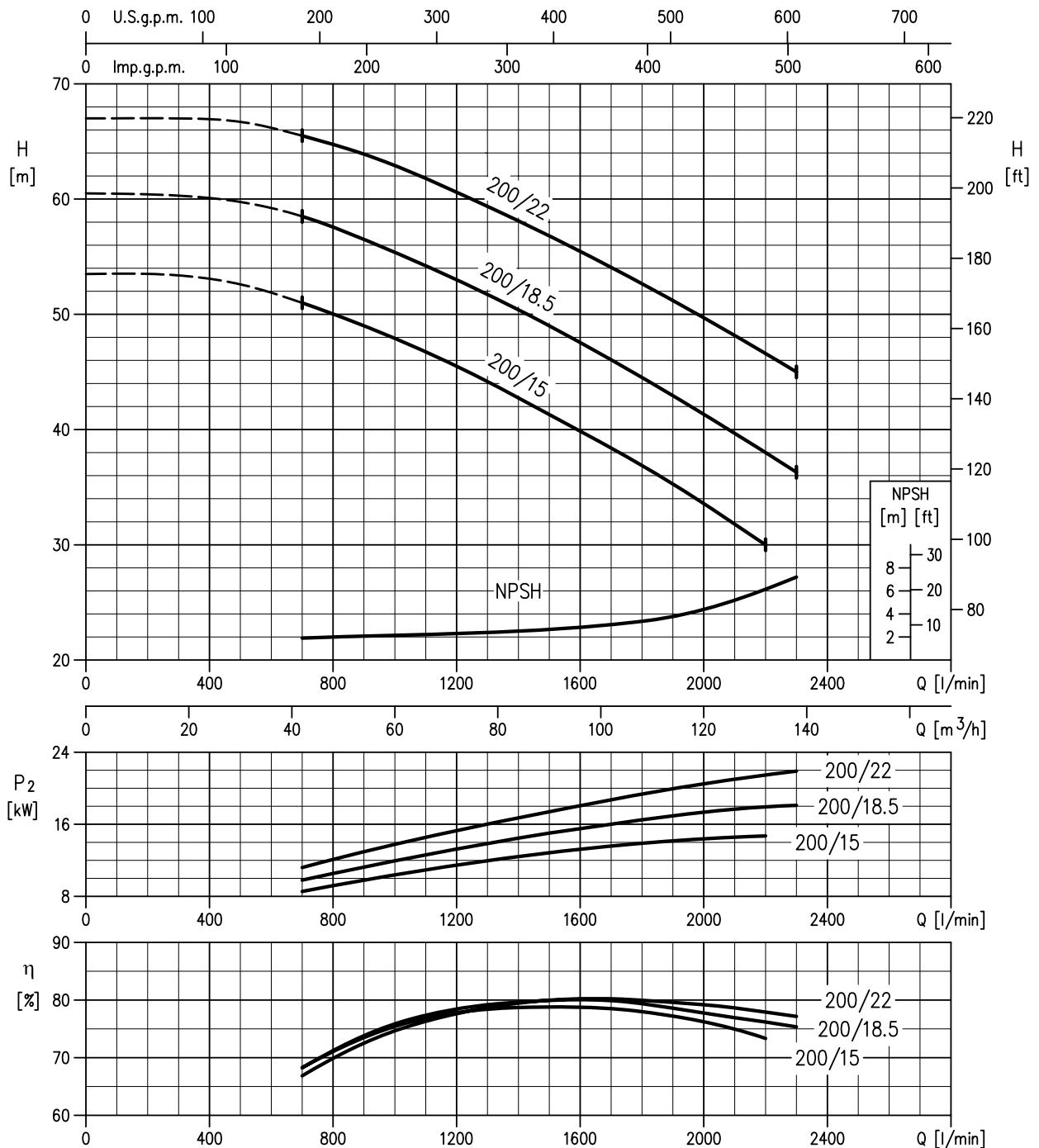
PERFORMANCE CURVE**50Hz**

Rev. AI

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**

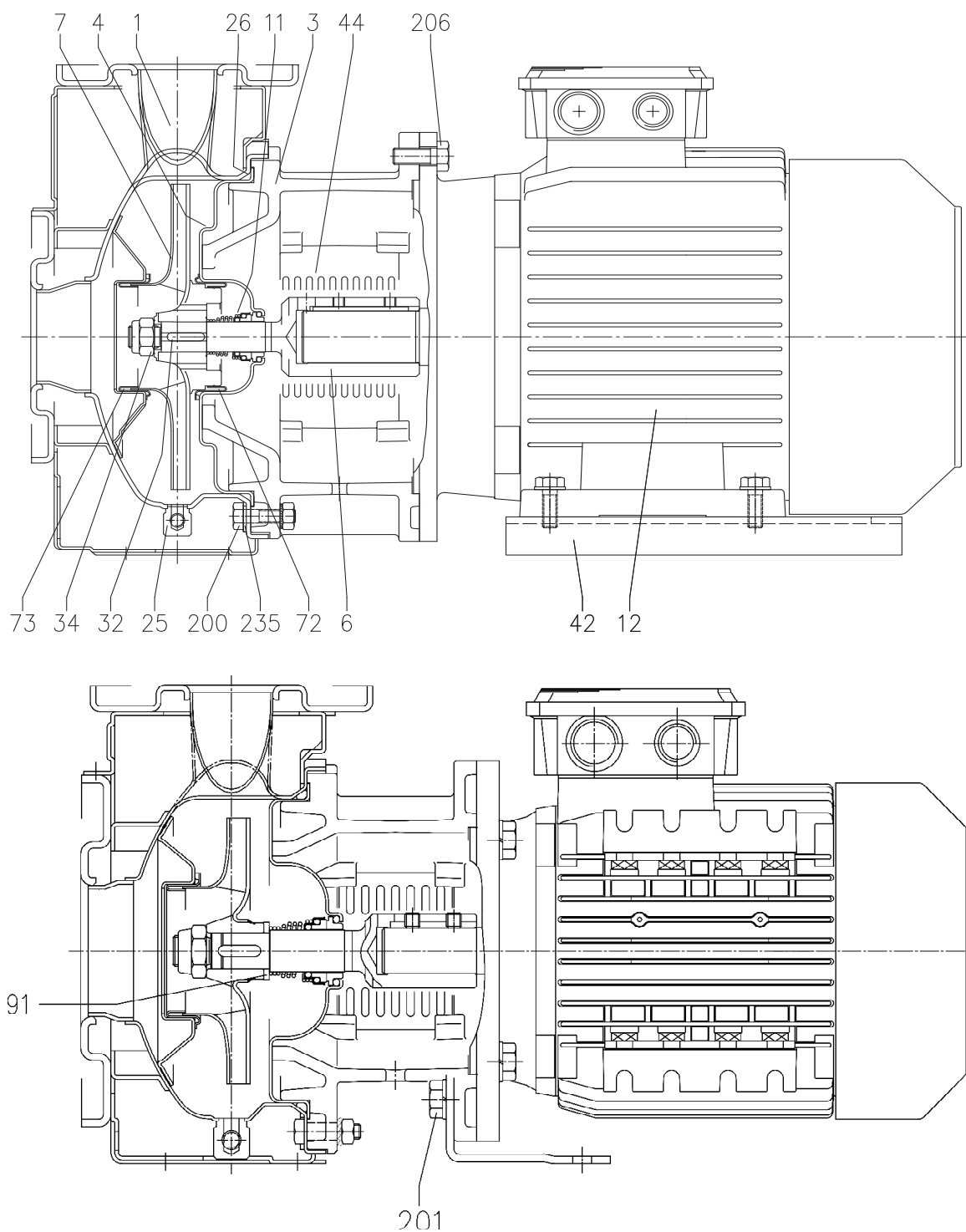
Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

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

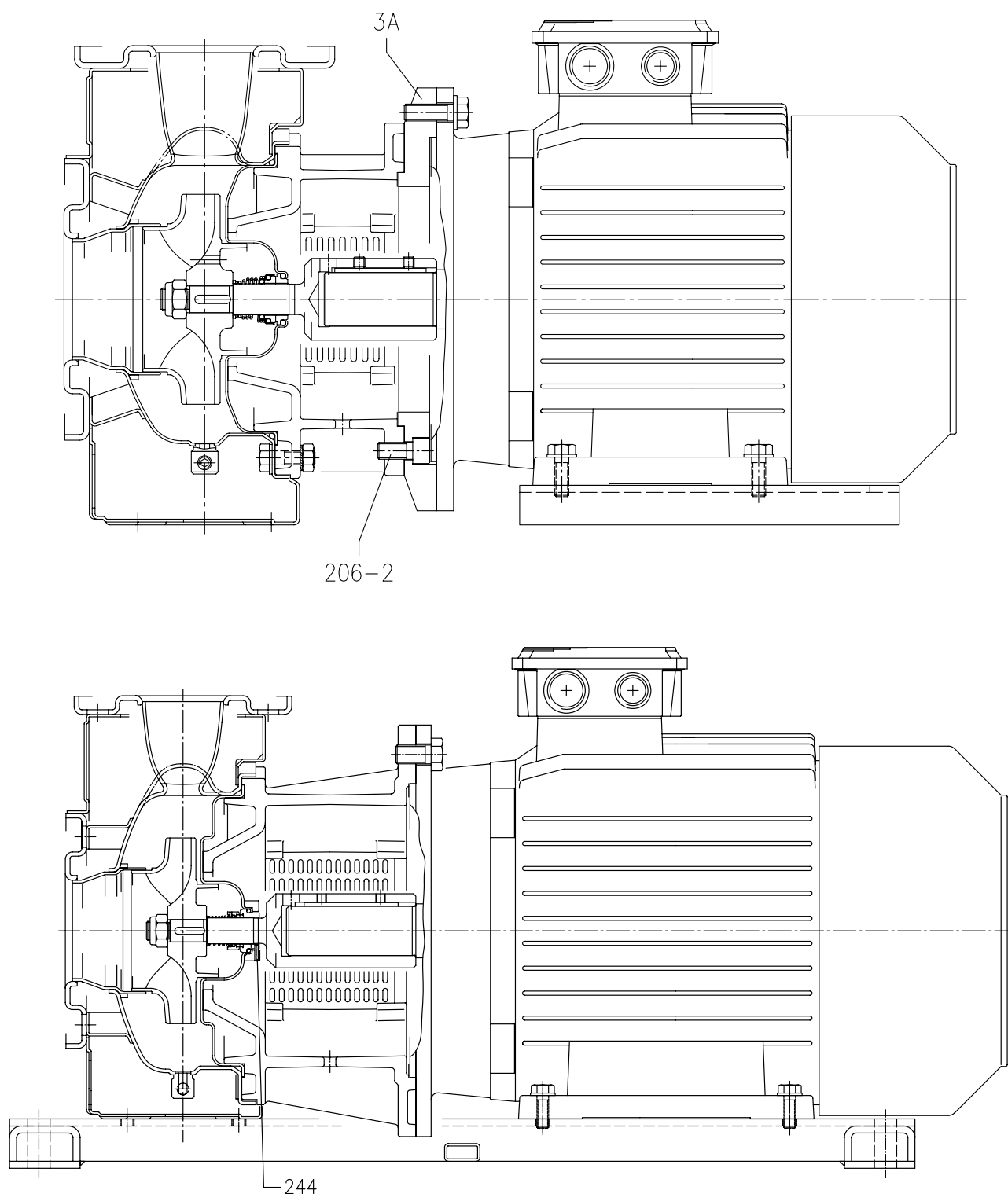


Rotation speed $\approx 2900 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW DRAWING 3(.)S 32, 40, 50



SECTIONAL VIEW DRAWING 3(.)S 65-125/160/200



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

N°	PART NAME		MATERIAL		DIMENSIONS	STANDARD	Q.TY
			3S	3LS			
1	Casing		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1
3	Motor bracket		Cast iron EN-GJL-200-EN 1561				1
3 A	Adapter ring [1]		Cast iron EN-GJL-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. 333		1
7	Impeller		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L) [9]			1
11	Mechanical seal		Carbon/Ceramic/NBR	SiC/SiC/FPM	[7]		1
12	Motor		-				1
25	Draining plug		EN 1.4401 (AISI 316) / PTFE		R 1/8" L=8	DIN 906	1
26	"O" ring	32-125, 40-125	NBR [8]	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 1.4401 (AISI 316)		6x6x25	UNI 6604	1
		15 kW and above			8x7x30		
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	Foot		Aluminium / Galvanized steel				[2]
44	Protection		EN 1.4301 (AISI 304)			EBARA DRAWING	1
72	Casing ring [3]		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
91	Impeller spacer [10]		EN 1.4404 (AISI 316L)				1
200	Screw	32-125, 40-125	Stainless steel A2 70 class ISO 3506/1		M 8x30	UNI 5739	8
		50-200, 65-125, 65-160, 65-200			M 10x35	UNI 5739	[4]
201	Screw		Galvanized Steel 8.8 strenght class ISO 898/1		M 10x16	UNI 5739	[5]
206	Screw for bracket		Galvanized Steel 8.8 strenght class ISO 898/1		M 10x40	UNI 5739	4
206-2	Screw adapter ring [1]		Galvanized Steel 8.8 strenght class ISO 898/1			UNI 5931	4
235	Washer	32-125, 40-125	Stainless steel A2 70 class ISO 3506/1		M 8.4x17	UNI 6592	8
		50-200, 65-125, 65-160, 65-200			M 10.5x21	UNI 6592	[4]
244	Pin [6]		-	EN 1.4301 (AISI 304)		UNI 5931	4

Counterflange kit on request see p. 335-336

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

[2] Quantity =0 for version 65-200/22

Quantity =1 for version for 32, 40, 50, 65-125/5.5, 65-125/7.5, 65-160/11, 65-160/15, 65-200/15, 65-200/18.5

Quantity =2 for version for 65-125/4, 65-160/7.5, 65-160/9.2

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

[4] 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

[5] Only for version 32-125/1.1, 32-160/1.5, 32-160/2.2, 40-125/1.5, 40-125/2.2, 50-125/2.2

[6] Only for 65-160/15, 65-200

[7] Special version: see page 326 and following

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

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

U3U3EGG not available for 65-150/15 and 65-200

[9] CF8M – EN 1.4408 (AISI316) material for 65-125 up to 65-200

[10] Only for 32-125/1.1

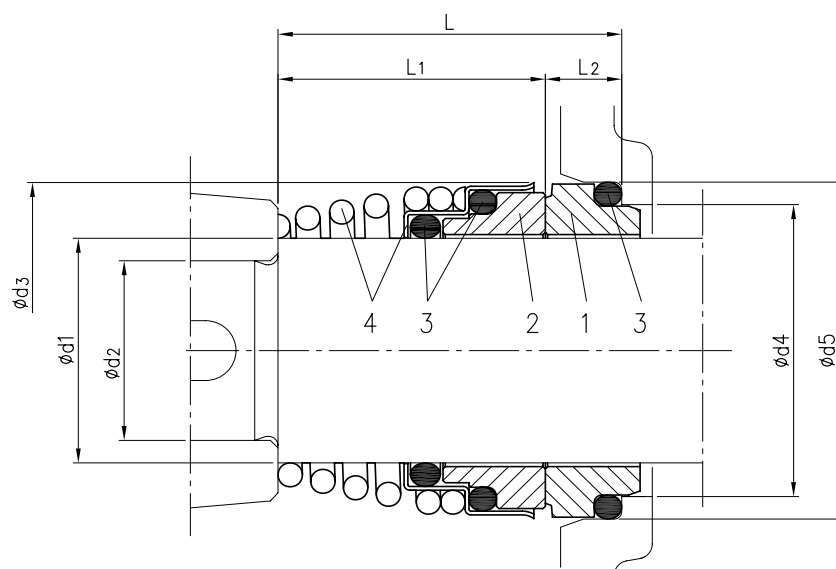
BEARINGS 3(.)S-3(.)P

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

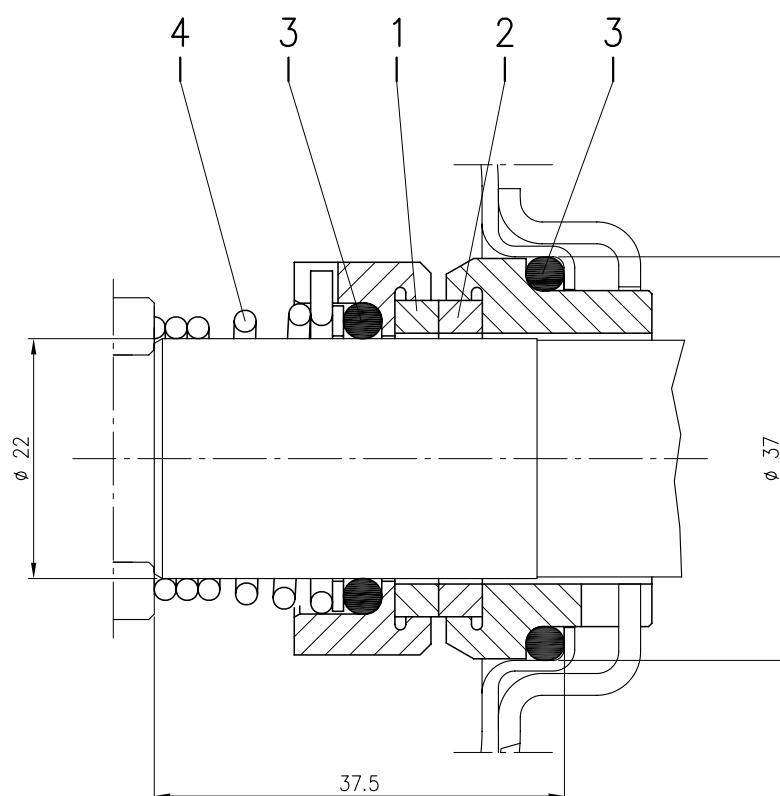
1) Motor available with lubricator for regular re-greasing of bearing.

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

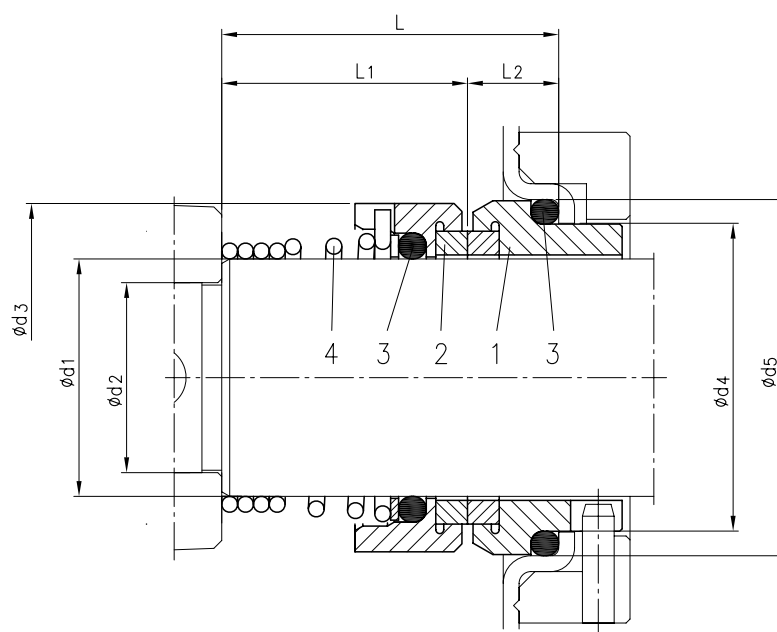


Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + Spring
Standard	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	19	38	31	37	37.5	27.5	10	Carbon	Ceramic	NBR	EN 1.4401 (AISI 316)
	65-160/15 65-200	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)

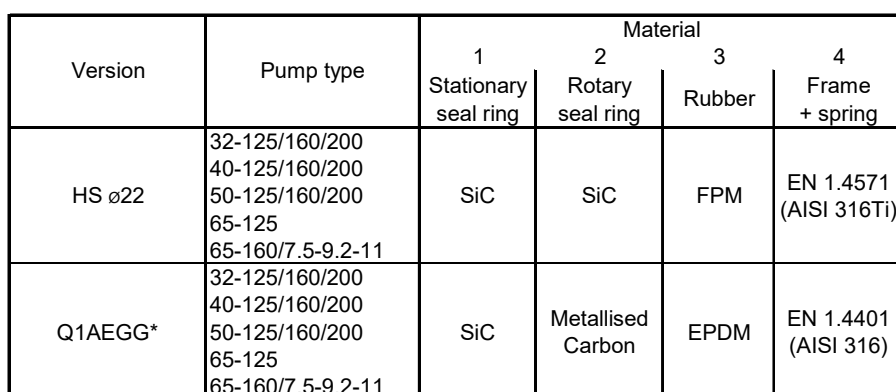
* The drawing is only indicative

MECHANICAL SEAL (L version ø22)

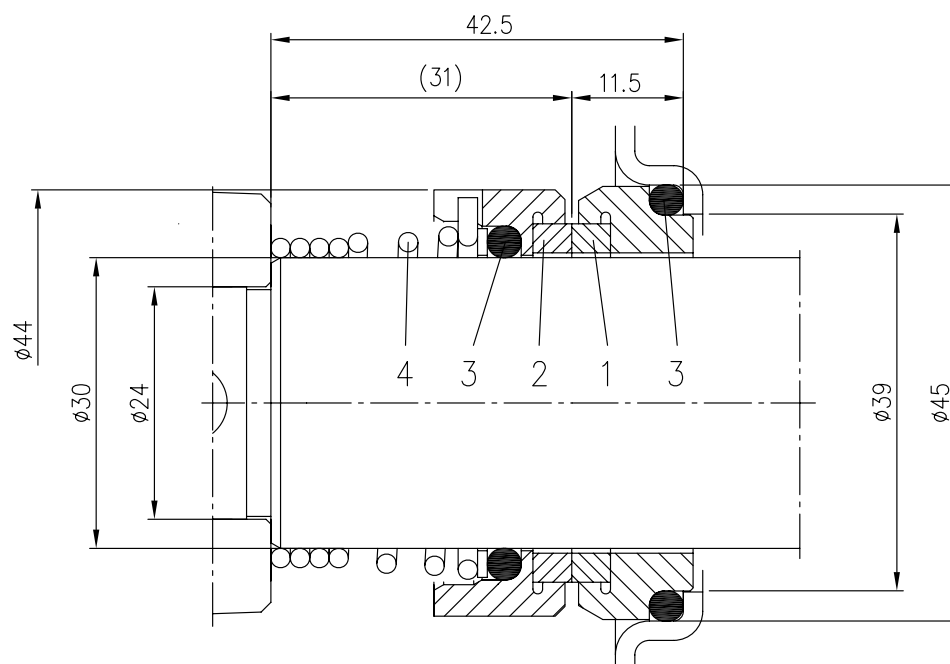
Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
L ø22	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)

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				

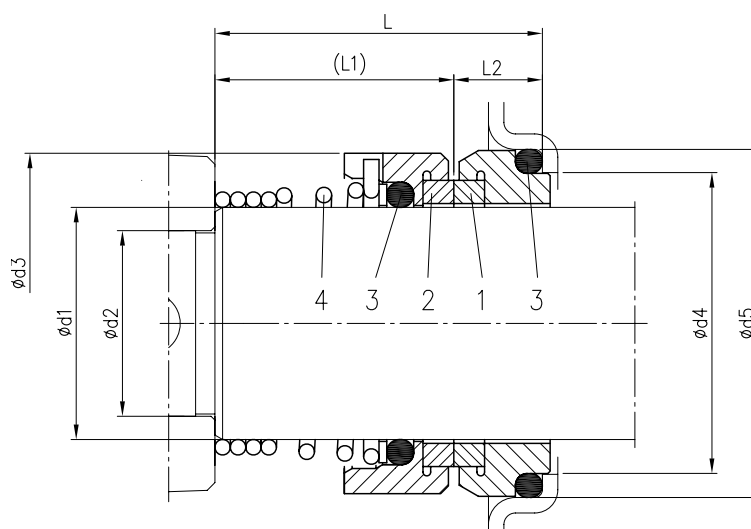


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MECHANICAL SEAL (HS version ø30)

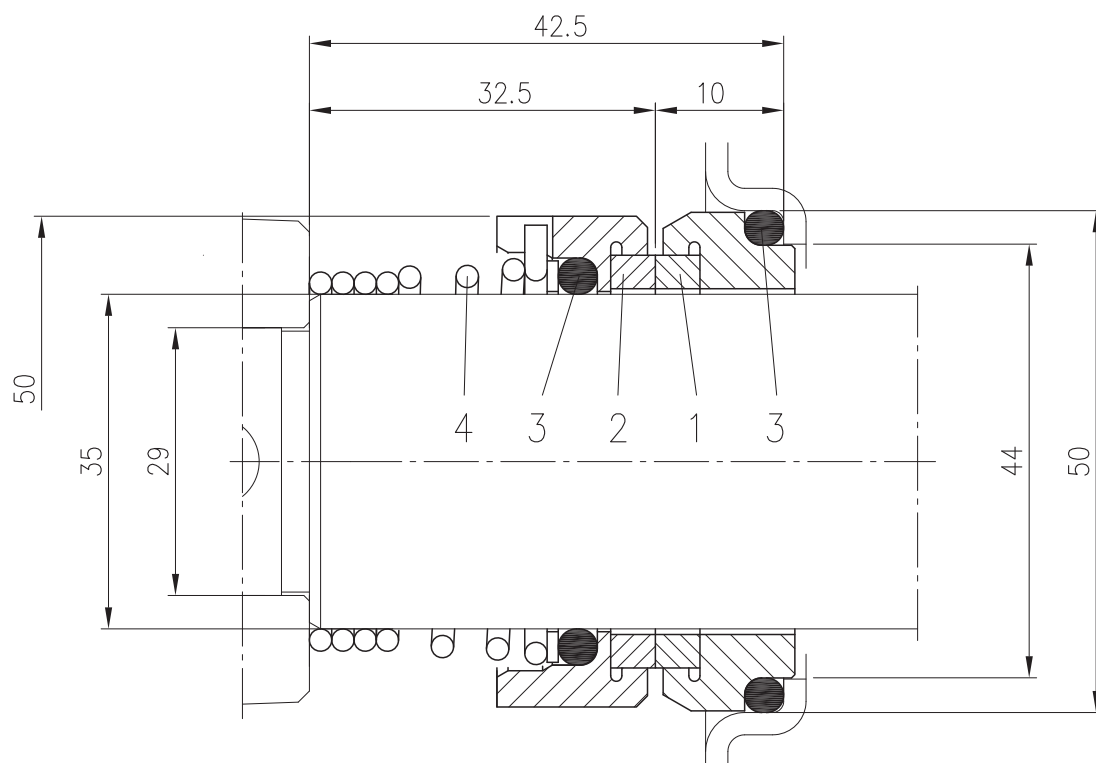
Version	Pump type	Material			
		1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
HS ø 30	65-160/15 65-200	SiC	SiC	FPM	EN 1.4571 (AISI 316 Ti)

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			
		CERAMIC-CARBON		ALL (except ceramic-carbon)	
ELASTOMER	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

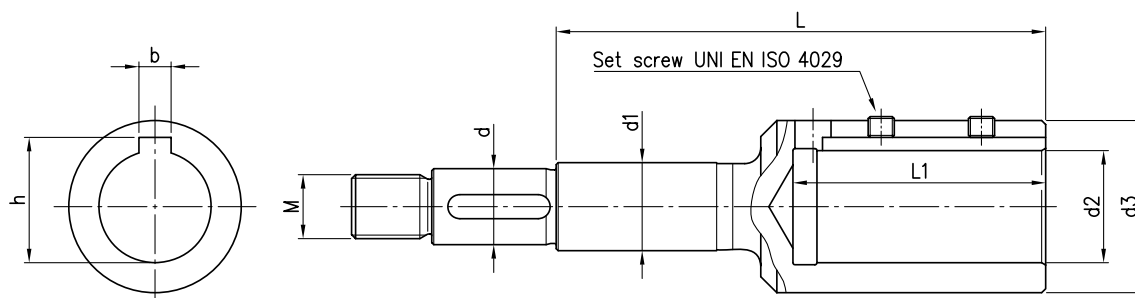
Therefore, the fluid temperature range is related to the choice of the mechanical seal and its materials.

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

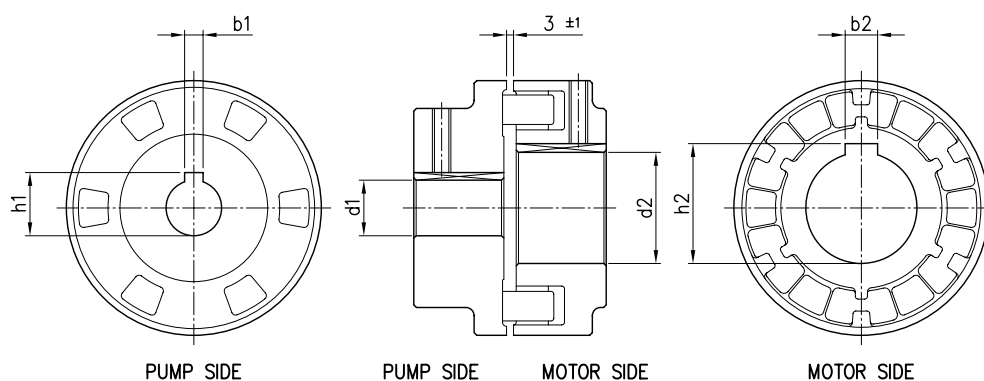
SPECIAL mechanical seal	TEMPERATURE	
	MIN	MAX
Q1AEGG	-10 °C	120 °C
U3U3EGG	-10 °C	120 °C
Q1Q1EGG	-10 °C	120 °C
Q1U3EGG	-10 °C	120 °C
U3CEGG	-10 °C	120 °C

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

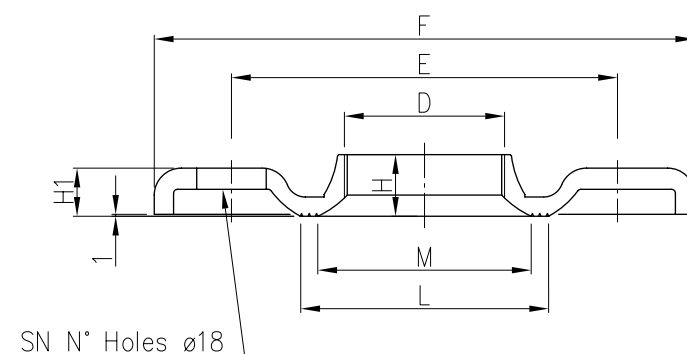
FLEXIBLE COUPLING



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

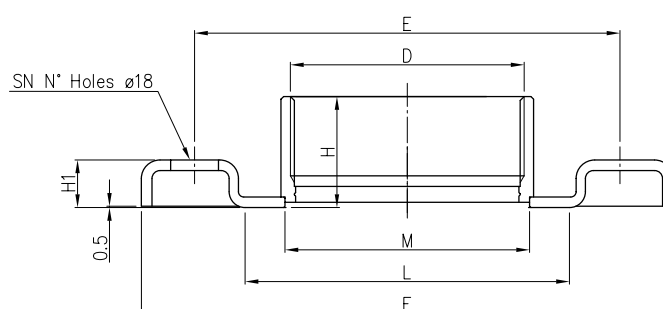
FITTINGS

COUNTERFLANGE ZINCKED STEEL



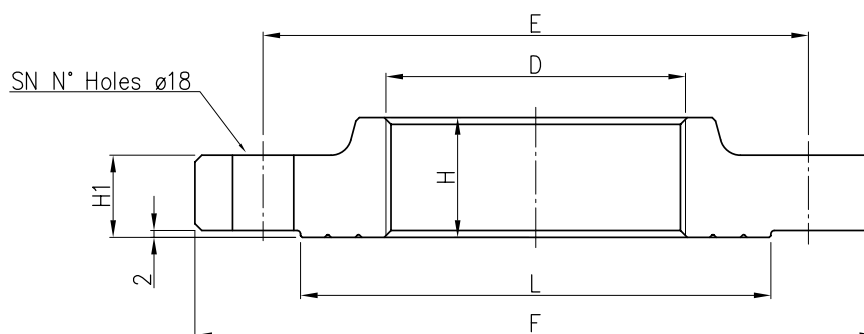
DN	D	E	Counterflange						Screw	
			F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	140	15	11.5	67	50	4	M16x55	Gv. Steel 8.8 strenght class ISO 898-1
40	G 1 1/2	110	150	17.5	11.5	72	58	4		
50	G2	125	165	19	15	89	70	4		
65	G 2 1/2	145	185	23	14	104	88	4		
80	G3	160	200	24	16	117.5	100	8	M16x60	
100	G4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

COUNTERFLANGE EN 1.4404 (AISI 316L)



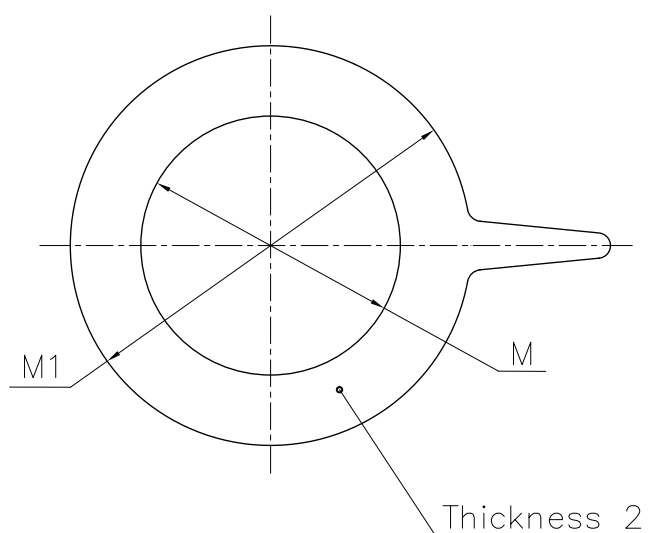
DN	D	E	Counterflange						Screw	
			F	H	H1	L	M	SN	DIMENSIONS	MATERIAL
32	G 1 1/4	100	140	29.5	14	66	44	4	M16x55	A2-70 class ISO 3506-1
40	G 1 1/2	110	150	29.5	14	71	50.5			
50	G 2	125	165	34	16	83	63			
65	G 2 1/2	145	185	40	16	103	80			
80	G3	160	200	42	18	122	92	8	M16x60	

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

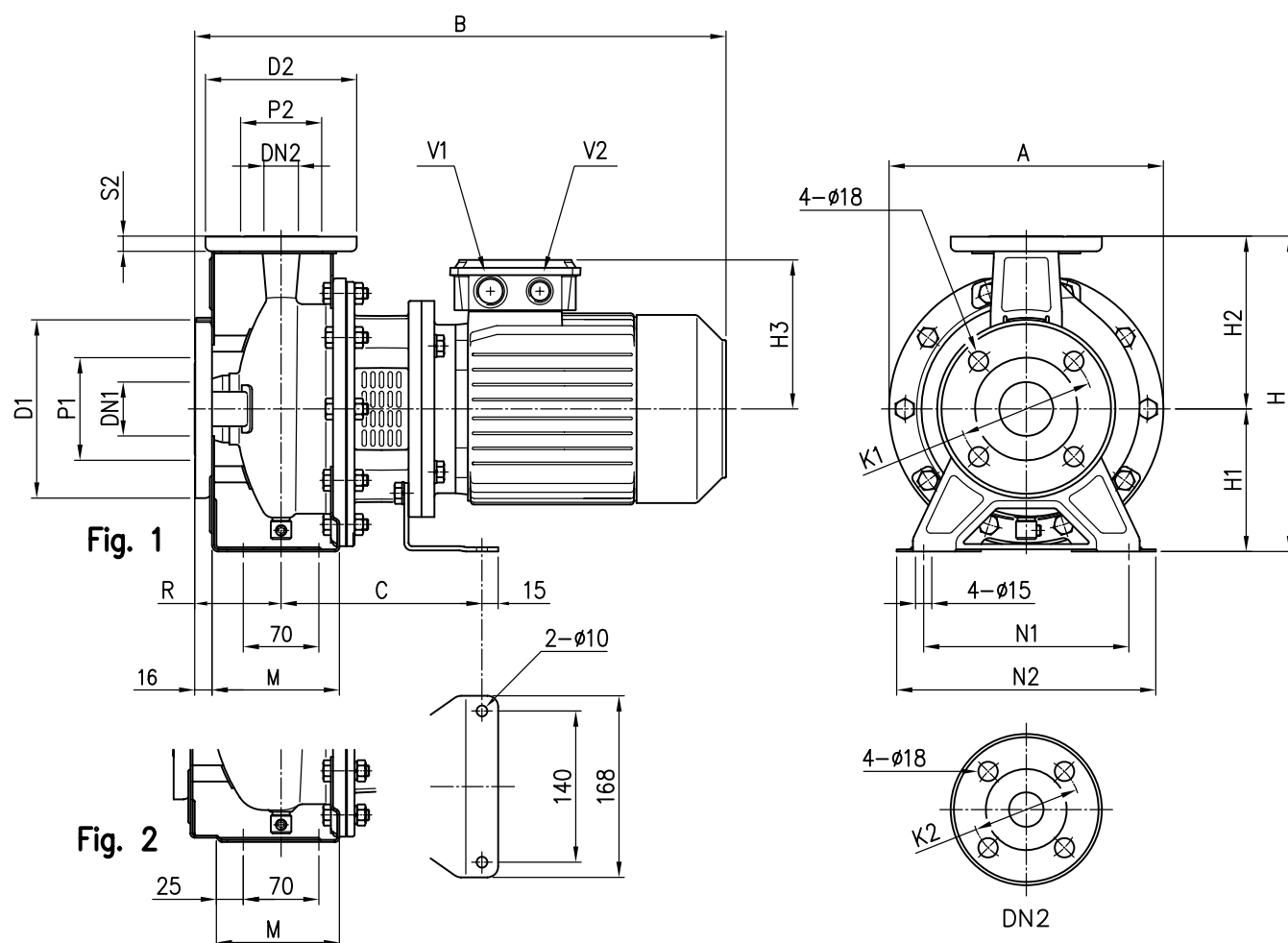
GASKET



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

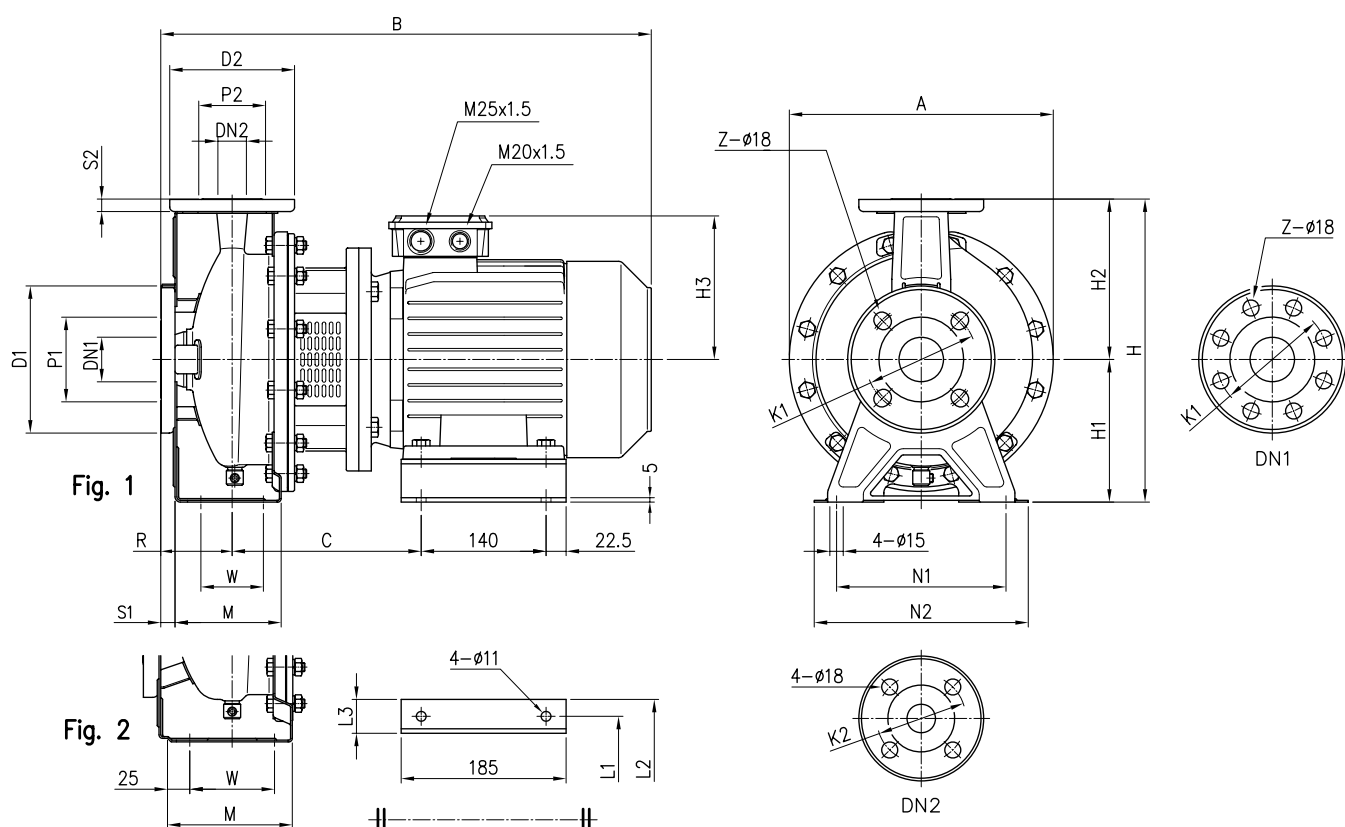
Material : EPDM for standard version
FPM for L version

PUMP 3(.)S 32, 40, 50



Model	Dimensions [mm]																						Weight	
	Ø DN1	Ø P1	Ø K1	Ø D1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	Fig.	H	H1	H2	H3	R	M	N1	N2	A	B	C	V1	V2	Kgf
32-125/1.1	50	95	125	165	32	75	100	140	14	1	252	112	140	139	80	114	140	190	213	430	174	M25x1.5	M20x1.5	24.7
32-160/1.5	50	95	125	165	32	75	100	140	14	1	292	132	160	148	80	118	190	240	254	477	186	M25x1.5	M20x1.5	29.8
32-160/2.2	50	95	125	165	32	75	100	140	14	1	292	132	160	148	80	118	190	240	254	477	186	M25x1.5	M20x1.5	32.4
40-125/1.5	65	115	145	185	40	80	110	150	14	1	252	112	140	148	80	114	160	210	213	477	186	M25x1.5	M20x1.5	26.5
40-125/2.2	65	115	145	185	40	80	110	150	14	1	252	112	140	148	80	114	160	210	213	477	186	M25x1.5	M20x1.5	29.6
50-125/2.2	65	115	145	185	50	95	125	165	16	2	292	132	160	148	100	114	190	240	254	497	186	M25x1.5	M20x1.5	32.9

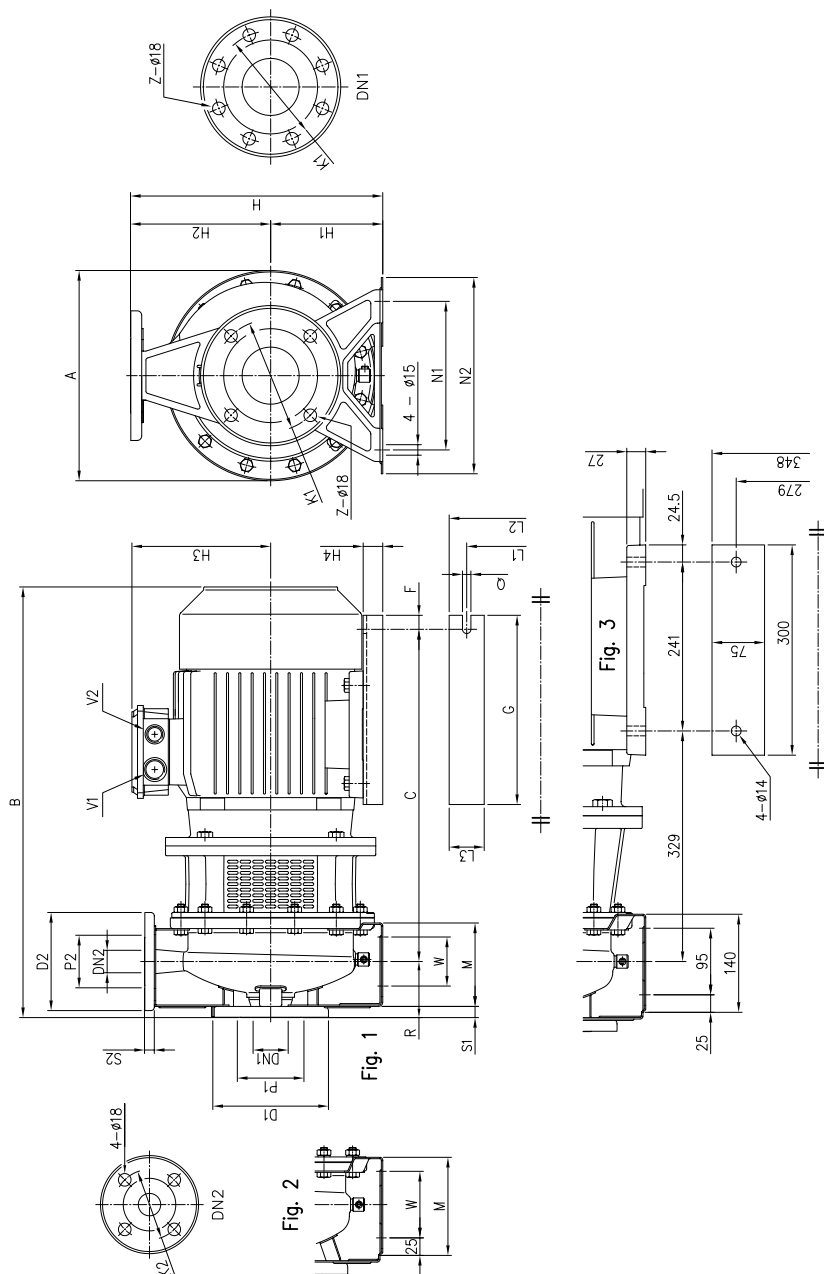
PUMP 3(.)S 32, 65



Model	Dimensions [mm]																											Weight Kgf	
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Z [1]	Z [2]	Ø DN2	Ø P2	Ø K2	Ø D2	S2	Fig.	H	H1	H2	H3	R	W	M	N1	N2	A	B	C	L1	L2		L3
32-200/3.0	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	155	80	70	119	190	240	296	528	205	160	202	42	46.9
32-200/4.0	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	171	80	70	119	190	240	296	550	212	190	228	38	49
65-125/4.0	80	134	160	200	18	8	4	65	115	145	185	16	2	340	160	180	171	100	95	140	212	280	254	570	212	190	228	38	50.1

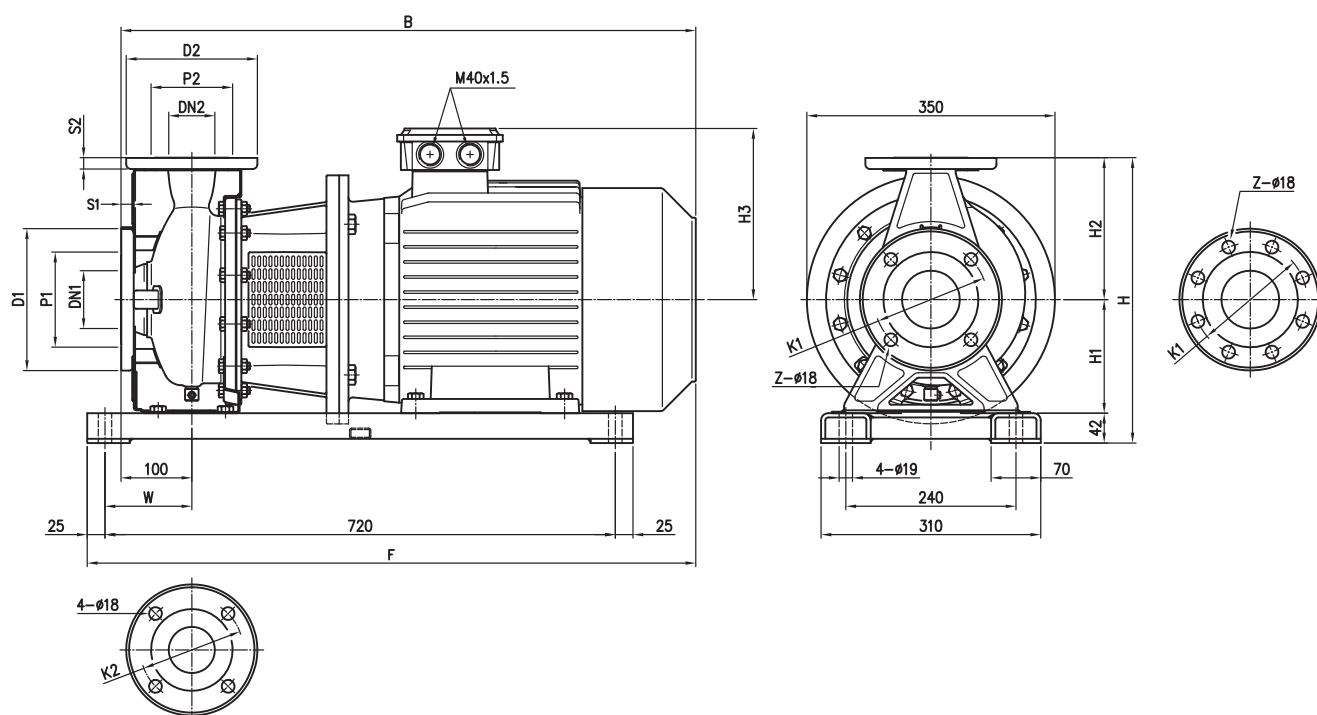
[1] Standard [2] On request

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



Model	Dimensions [mm]																Weight [kgf]	
	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	V1	V2
32-200/5.5	50	95	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
32-200/7.5	50	95	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
40-160/3.0	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M25x1.5	M20x1.5
40-160/4.0	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M25x1.5	M20x1.5
40-200/5.5	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
40-200/7.5	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
50-125/3.0	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M25x1.5	M20x1.5
50-125/4.0	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M25x1.5	M20x1.5
50-160/5.5	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
50-160/7.5	65	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
65-125/5.5	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
65-125/7.5	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
65-160/7.5	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5
65-200/15	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M40x1.5	M40x1.5
65-200/18	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M40x1.5	M40x1.5
65-200/22	80	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	M32x1.5	M32x1.5

[1] Standard [2] On request

PUMP 3(.)S 40, 50, 65

Pump type	Dimensions [mm]																			Weight [kgf]
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Z [1]	Z [2]	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	W	B	F	
40-200/11	65	115	145	185	16	4	-	40	80	110	150	14	382	160	180	238	110	796	831	117.8
50-200/11	65	115	145	185	16	4	-	50	95	125	165	16	402	160	200	238	110	796	831	117.8
50-200/15	65	115	145	185	16	4	-	50	95	125	165	16	402	160	200	238	110	796	831	147.9
65-160/11	80	134	160	200	18	8	4	65	115	145	185	16	402	160	200	238	122.5	796	844	86.8
65-160/15	80	134	160	200	18	8	4	65	115	145	185	16	402	160	200	238	122.5	806	854	120.9

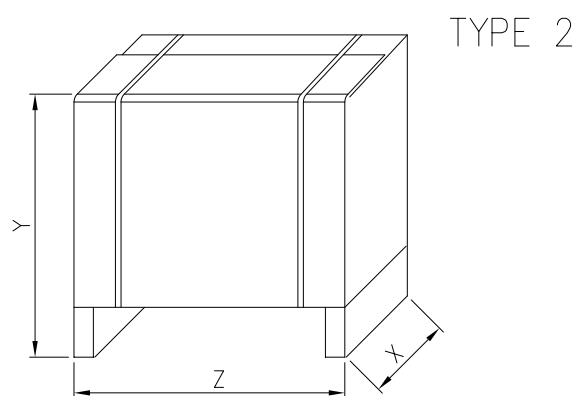
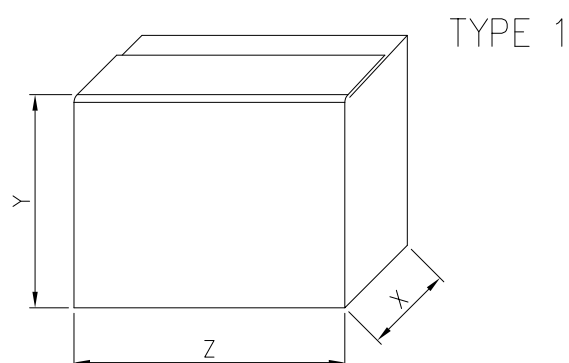
[1] Standard

[2] On request

PACKING 3(.).S

Pump type	Packing [mm]			Weight	Pack Type
	X	Y	Z	Kgf	
32-125/1.1	450	250	300	36,3	1
32-160/1.5	350	488	580	35.9	2
32-160/2.2				51	
(**) 32-200/3.0	370	538	680	51.9	
32-200/3.0	350	498	700	51.9	
32-200/4.0				74.3	
32-200/5.5				82.1	
32-200/7.5				67	
40-125/1.5	350	488	580	33.3	
40-125/2.2				45.4	
40-160/3.0	350	498	700	49	
40-160/4.0				76.4	
40-200/5.5				84.2	
40-200/7.5				116	
40-200/11	390	598	970	146.3	
50-125/2.2	330	493	680	37.8	
50-125/3.0	350	498	700	49.6	
50-125/4.0				47.6	
50-160/5.5				84	
50-160/7.5				95.7	
50-200/9.2	390	598	880	116	
50-200/11				139.9	
50-200/15				172.9	
65-125/4.0	350	498	700	69	
65-125/5.5				77.4	
65-125/7.5				85	
65-160/7.5				92	
65-160/9.2	390	598	880	103	
65-160/11			970	107.9	
65-160/15			880	138	
65-200/15			880	147.6	
65-200/18.5	500	727	1100	970	
65-200/22				166.5	
65-250/30				235	
65-250/37	480	722	1080	339	
80-160/11	370	597	860	141	
80-160/15R				156.9	
80-160/15				163	
80-160/18.5				168.6	
80-200/22	480	593	940	225.5	
80-200/30		722	1080	284	
80-200/37	344				
80-250/37	354				
80-250/45	429				
80-250/55	580	822	1380	517	

(**) Only for "Z" version



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