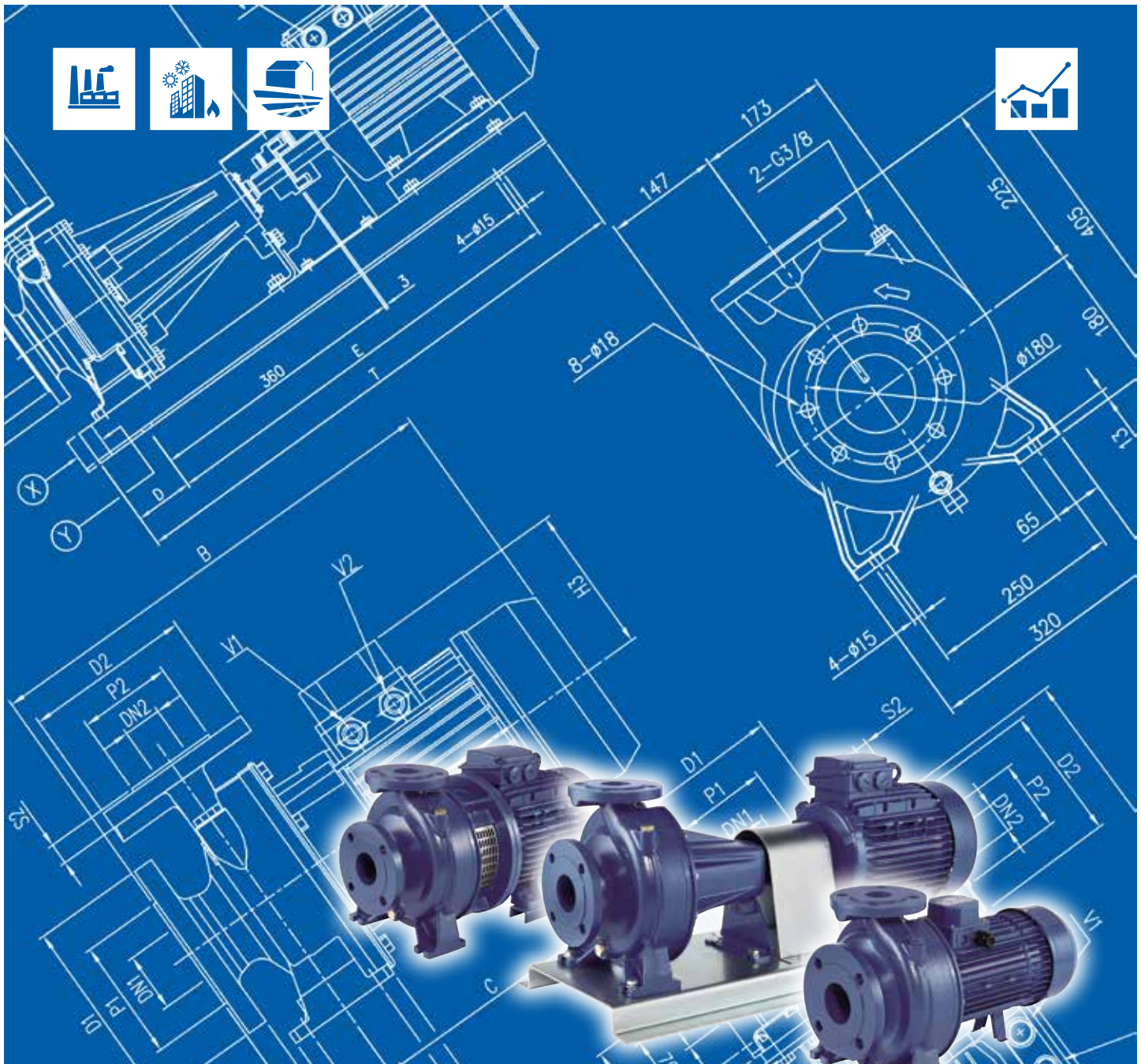







## 3D SERIES

Data Book 50Hz



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تهران، کیلومتر ۲۱ بزرگراه لشگری (جاده مخصوص کرج)  
روبروی پالایشگاه نفت پارس، پلاک ۱۲

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**SPECIFICATIONS**

50Hz

Rev. 0

Liquid Handled	Type of liquid	Clean water
	Working temperature [°C]	min. -5 max. +90 max. +110 (H, HS, HW, HSW version) max. +120 (E, U3U3EGG, U3CEGG, Q1Q1EGG, Q1U3EGG, Q1AEGG version)
Maximum working pressure [MPa]		1
Construction	Impeller	Closed centrifugal type for 32, 40, 50 series Reinforced laser welding for 40-200/11, 50-200/15 Closed centrifugal three dimensional blades for 65 series
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction	Flange DN 50, 65, 80 according to EN 1092-2
	Discharge	Flange DN 32, 40, 50, 65 according to EN 1092-2
Material	Casing	Cast iron EN-GJL-250-EN 1561
	Impeller	AISI 304 (32, 40, 50 series) AISI 316 made by precision casting (65 series)
	Shaft seal	Ceramic/Carbon/NBR (see MECHANICAL SEAL pages 307-310)
	Shaft	AISI 304 (wet extension)
	Bracket	Aluminium/Cast iron
Accessory	Counterflange	DN 32, 40, 50, 65, 80 (see FITTINGS TABLE page 315)
Applicable standard of test		IS O 9906:2012 – Grade 3B

**SPECIFICATIONS**

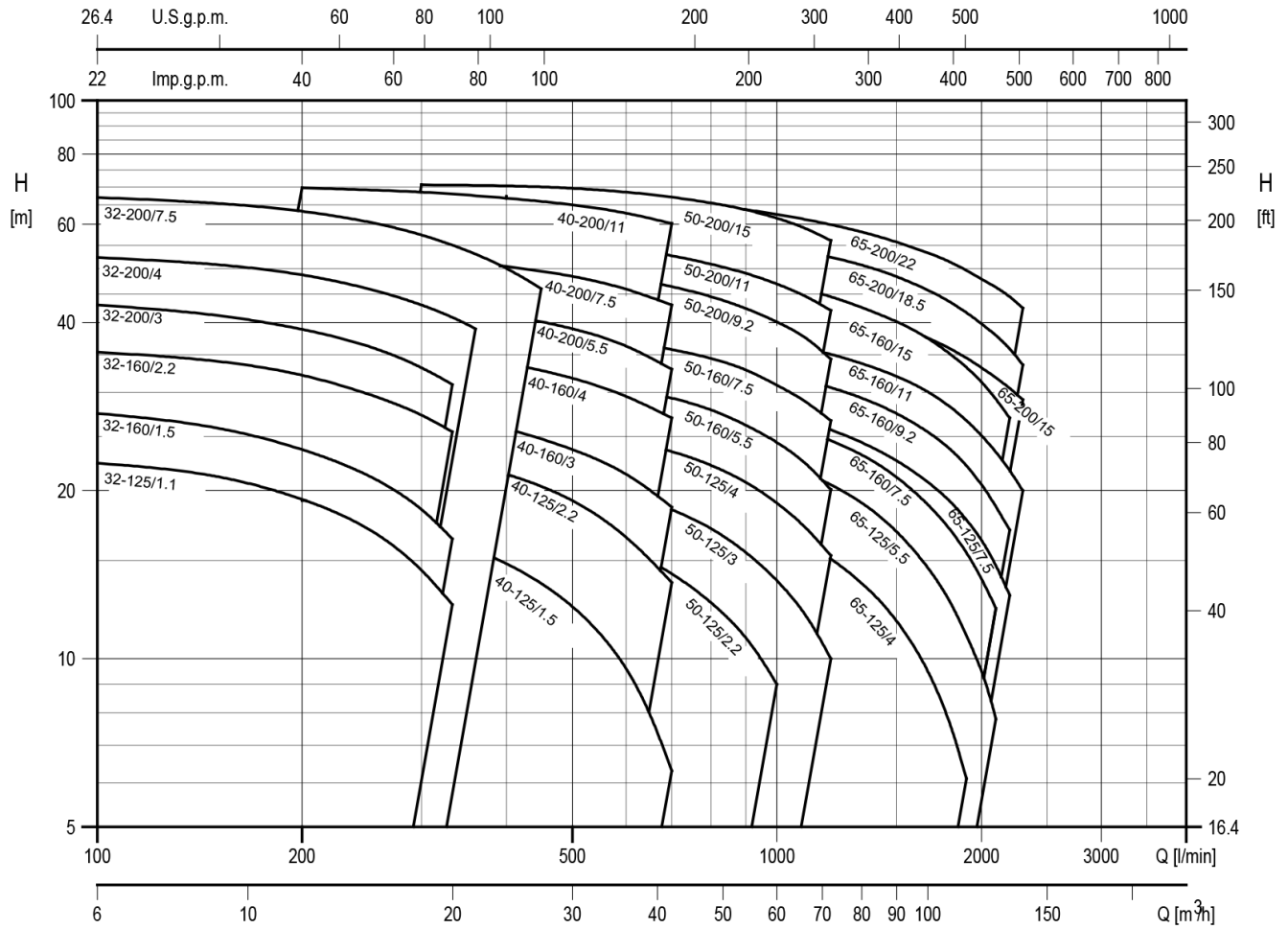
50Hz

Rev. 0

MOTOR			
Type	3D	3DS	3DP
		Electric - TEFC	
	Single Phase	Three Phase	
Efficiency (Reg. 640/2009)	-	IE3	
No. of Poles	2		
Rotation speed [min <sup>-1</sup> ]	≈2900		
Insulation Class	F	F (temperature rise class B)	
Protection degree	IP 55		
Power rating [kW]	1.1 ÷ 2.2	1.1 ÷ 22	
	[HP]	1.5 ÷ 3	1.5 ÷ 30
Frequency [Hz]	50		
Voltage [V]	230 ±10%	230/400 ±10% (up to 4 kW) 400/690 ±10% (5.5 kW and above)	
Capacitor	Built in	-	
Over load protection	Provided by the user		
Casing material	Aluminium		
Motor support	Cast iron / Aluminium		
Dimensions of cable entry	M20x1.5	PG 13.5, PG 16, PG 21,	M32x1.5, M40x1.5
		M20x1.5, M25x1.5	
Flange mount (IEC motor)	/	IM B5 (up to 2.2 kW) IM B35 (3.0 kW and above)	IM B3



**PERFORMANCE RANGE**



**SELECTION CHART**

**3D SERIES 32 SIZE**

Pump type	kW	HP	l/min									
			0	100	150	200	250	300	333	360	400	450
			0	6	9	12	15	18	20	21,6	24	27
32-125/1.1(M) *	1,1	1,5	23	22,4	21,2	19,3	17,1	14,4	12,5	-	-	-
32-160/1.5(M) *	1,5	2	28,5	27,5	25,9	23,7	21,3	18,5	16,4	-	-	-
32-160/2.2(M) *	2,2	3	36,7	35,4	34,1	32,2	29,8	27,3	25,5	-	-	-
32-200/3.0	3	4	44	43	41	39	36,5	33	31	-	-	-
32-200/4.0	4	5,5	53	52,5	51	49	46	43	41	39	-	-
32-200/7.5	7,5	10	68	67	65	63	61	57	55	53	50	46

**3D SERIES 40 SIZE**

Pump type	kW	HP	l/min									
			0	200	250	300	350	400	450	500	600	700
			0	12	15	18	21	24	27	30	36	42
40-125/1.5(M) *	1,5	2	19	18,2	17,6	16,8	15,9	14,8	13,7	12,4	9,6	6,3
40-125/2.2(M) *	2,2	3	25	24,4	23,9	23,2	22,4	21,4	20,4	19,2	16,5	13,7
40-160/3.0	3	4	31	29,4	28,7	27,8	26,8	25,8	24,8	23,7	21,4	18,7
40-160/4.0	4	5,5	38,8	37,2	36,5	35,7	34,8	33,8	32,8	31,8	29,5	27
40-200/5.5	5,5	7,5	45,5	44,5	44	43	42	41	40	39	36,3	33
40-200/7.5	7,5	10	55	53,5	53	52	51,5	50,5	49,5	48,5	46	43
40-200/11	11	15	71	70	69	68,5	67,5	67	66	65	63	60

**3D SERIES 50 SIZE**

Pump type	kW	HP	l/min									
			0	400	500	600	700	800	900	1000	1100	1200
			0	24	30	36	42	48	54	60	66	72
50-125/2.2(M) *	2,2	3	19,5	18	17	15,7	14,2	12,6	10,9	9	-	-
50-125/3.0	3	4	22,5	21,5	20,8	19,8	18,5	17,1	15,5	13,8	12	10
50-125/4.0	4	5,5	26,5	25,8	25,3	24,5	23,5	22,2	20,7	19	17,2	15,3
50-160/5.5	5,5	7,5	33	32	31,5	30,5	29,3	27,9	26,2	24,4	22,4	20
50-160/7.5	7,5	10	39,5	38,2	37,6	36,9	35,8	34,5	32,9	30,9	28,9	26,7
50-200/9.2	9,2	12,5	51,5	-	49,5	48	46,5	44,5	42,5	40	37,6	34,4
50-200/11	11	15	57,5	-	55,5	54,5	52,5	51	49	47	44,5	42
50-200/15	15	20	71	-	69,5	68,5	67	65,5	63,5	61,5	59	56

**3D SERIES 65 SIZE**

Pump type	kW	HP	l/min									
			0	600	700	1000	1300	1600	1900	2100	2200	2300
			0	36	42	60	78	96	114	126	132	138
65-125/4.0	4	5,5	22	20,4	19,8	17,2	14	10,4	6	-	-	-
65-125/5.5	5,5	7,5	26	-	25	22,5	19,4	15,5	11	8	-	-
65-125/7.5	7,5	10	31	-	29,6	27,5	24,7	21,5	17,8	14,7	13	-
65-160/7.5	7,5	10	31,6	-	29	26,6	23,5	19,8	15,5	12,3	-	-
65-160/9.2	9,2	12,5	36,5	-	34,7	32,4	29,6	26,3	22,2	18,8	17	-
65-160/11	11	15	40,5	-	39	37	34	31	27	23	22	20
65-160/15	15	20	48	-	46	44	41,5	38,4	34,6	31,9	30,5	29
65-200/15	15	20	54	-	51	47	43	38,6	33,3	29,2	27	-
65-200/18.5	18,5	25	60	-	58	55	51	47	41,5	37,9	35,9	33,6
65-200/22	22	30	68	-	65,5	62,5	58,5	54,5	49,5	46	44,5	42,5

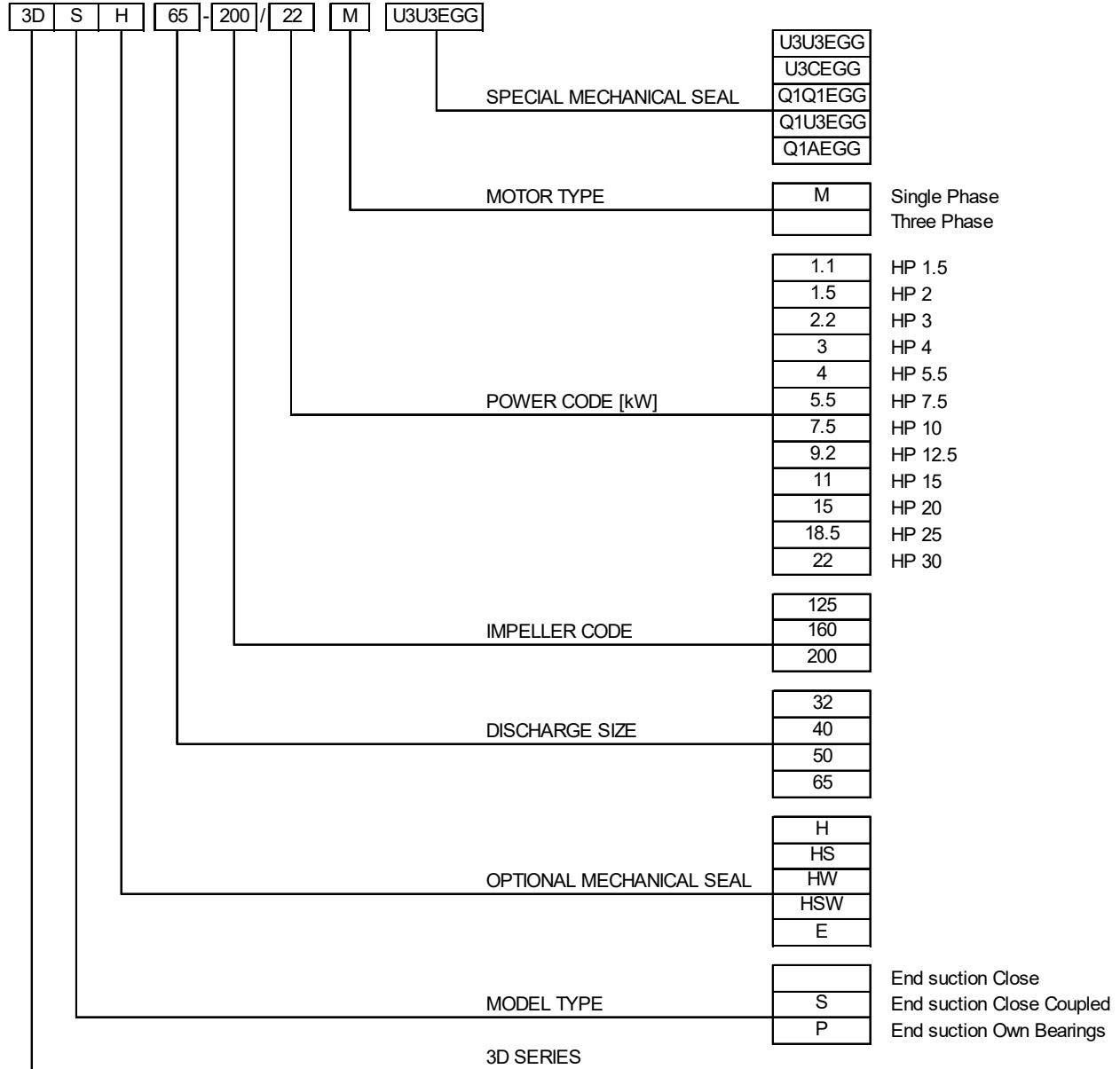
\* Single phase version only for 3D type

**TYPE KEY**

50Hz

Rev.0

**TYPE KEY**



**CURVES SPECIFICATIONS**

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

Tolerances according to Test standard: 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)
- $\eta$  = pump efficiency
- NPSH = net positive suction head required by the pump
- MEI = minimum efficiency index

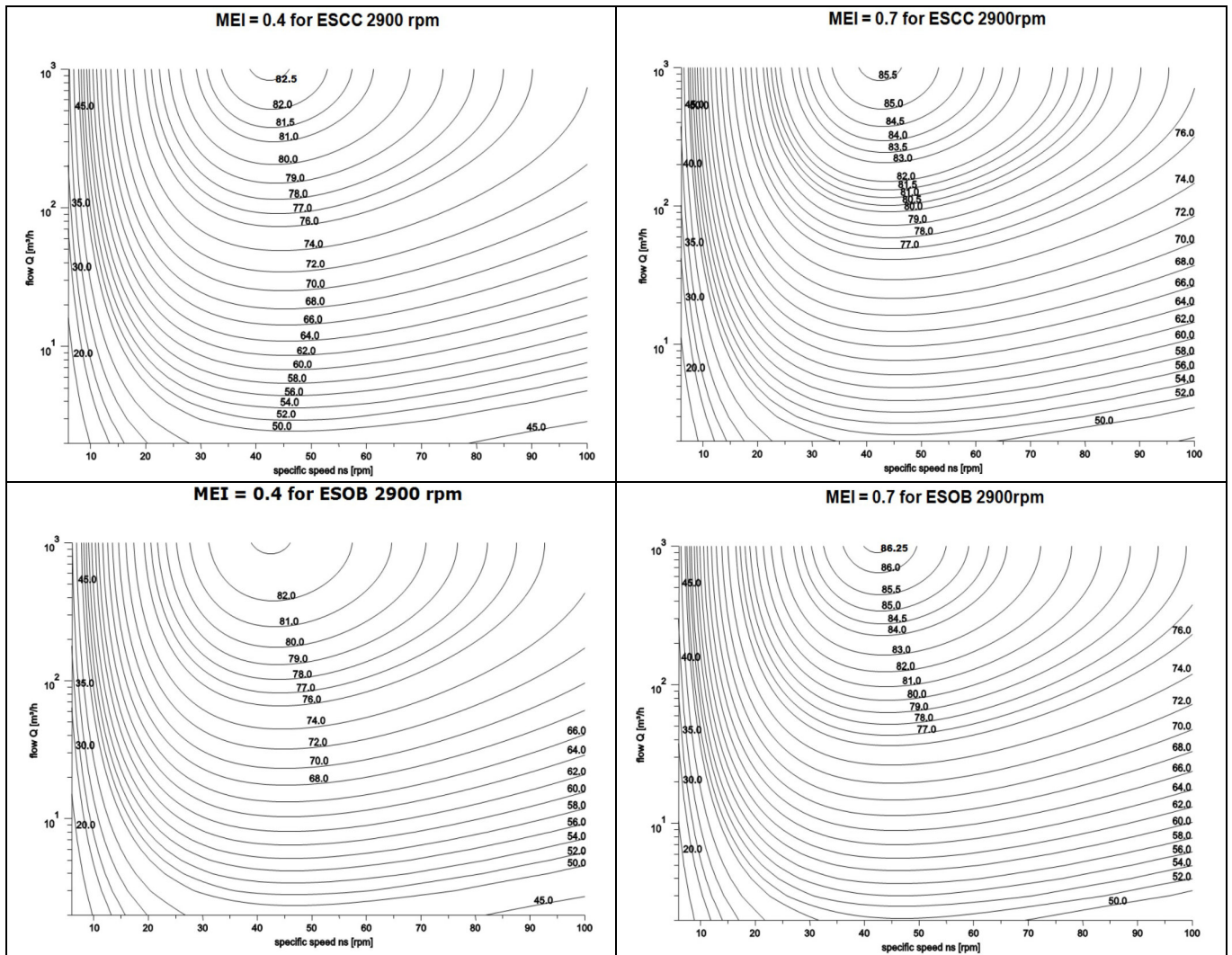


**MEI INDEX SPECIFICATIONS**

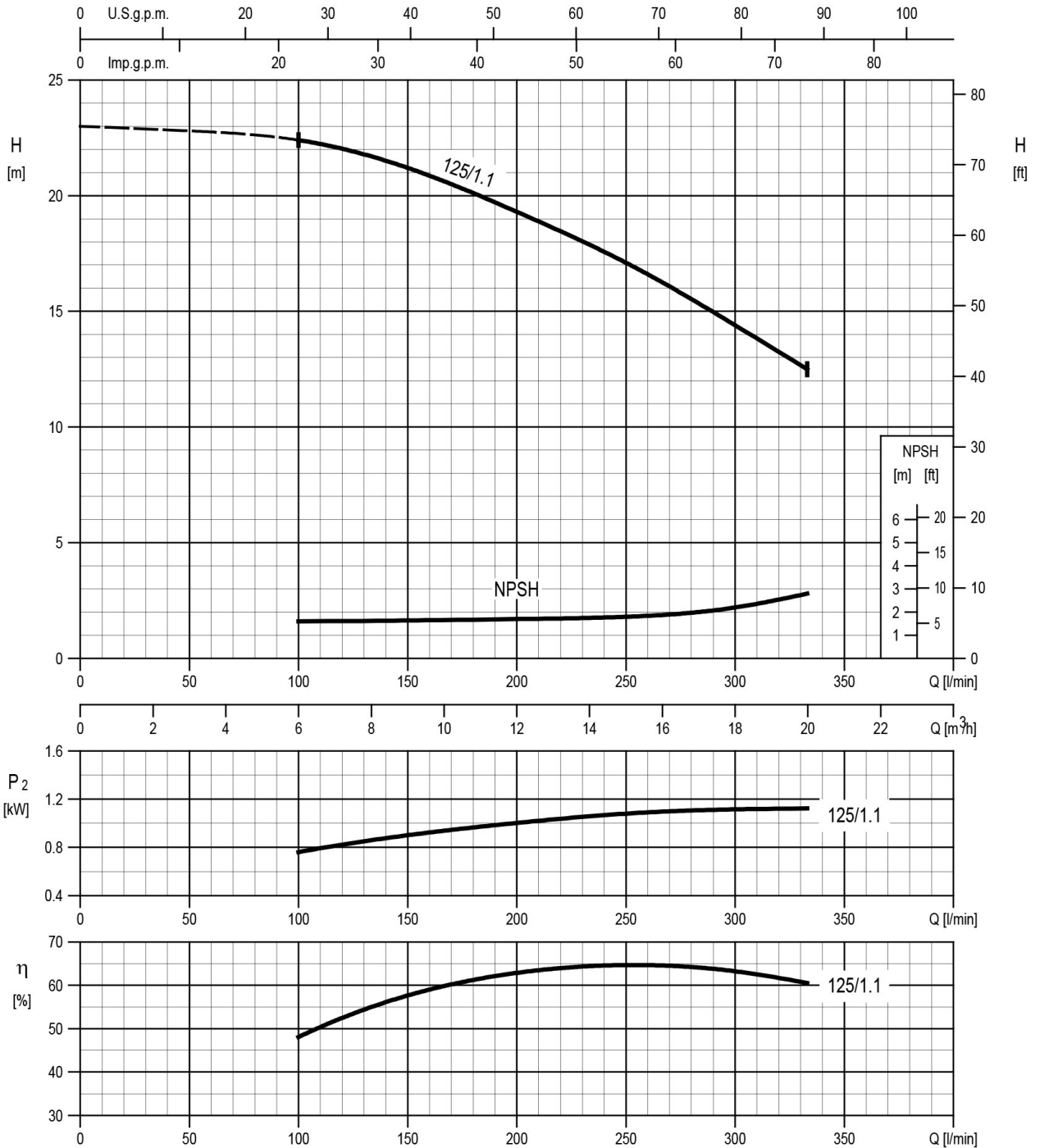
The minimum efficiency index (MEI) is a measure of the quality of a pump size in respect to its mean efficiency. The minimum efficiency index is based on the hydraulic efficiency and on the head at the best efficiency point.

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.



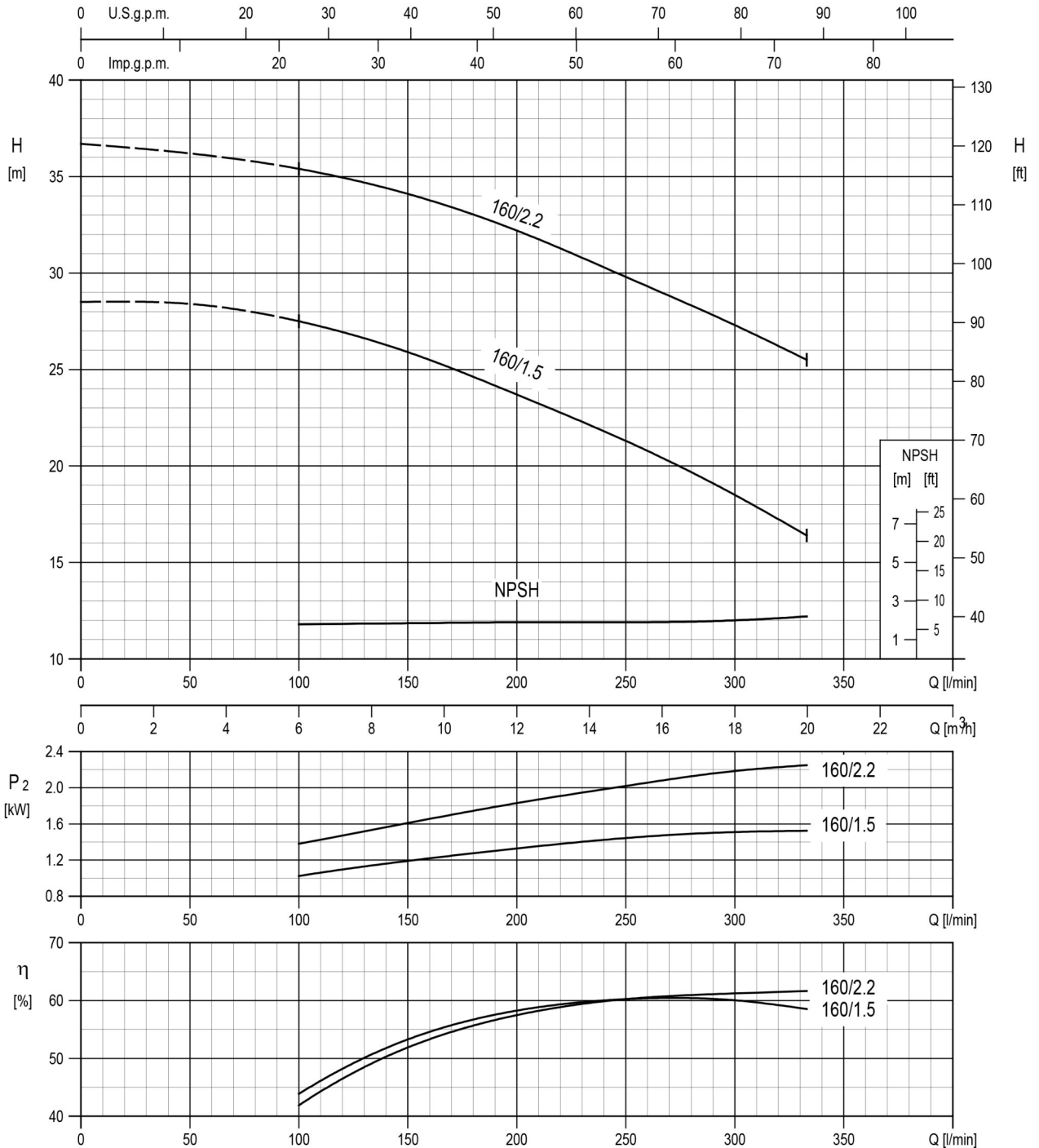
**32-125/1.1 (1.1kW) MEI > 0.70 – Impeller diameter = 133 mm**



Rotation speed ≈ 2900 min<sup>-1</sup>

Test standard: ISO 9906:2012 – Grade 3B

**32-160/1.5 (1.5kW) MEI > 0.70 – Impeller diameter = 151 mm**  
**32-160/2.2 (2.2kW) MEI > 0.70 – Impeller diameter = 166 mm**



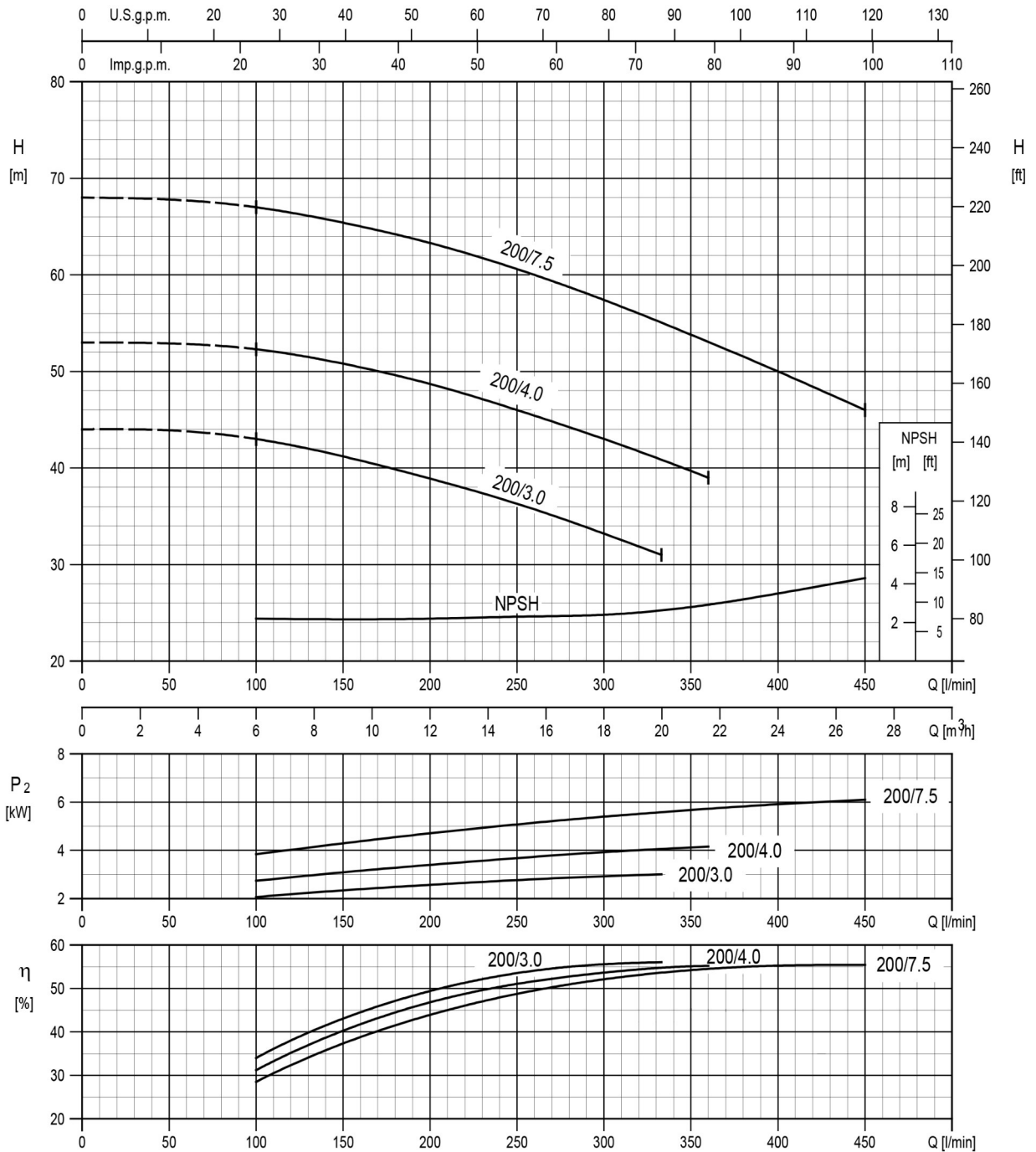
Rotation speed  $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

**32-200/3.0 (3.0kW) MEI > 0.40 – Impeller diameter = 186 mm**

**32-200/4.0 (4.0kW) MEI > 0.40 – Impeller diameter = 200 mm**

**32-200/7.5 (7.5kW) MEI > 0.50 – Impeller diameter = 224 mm**

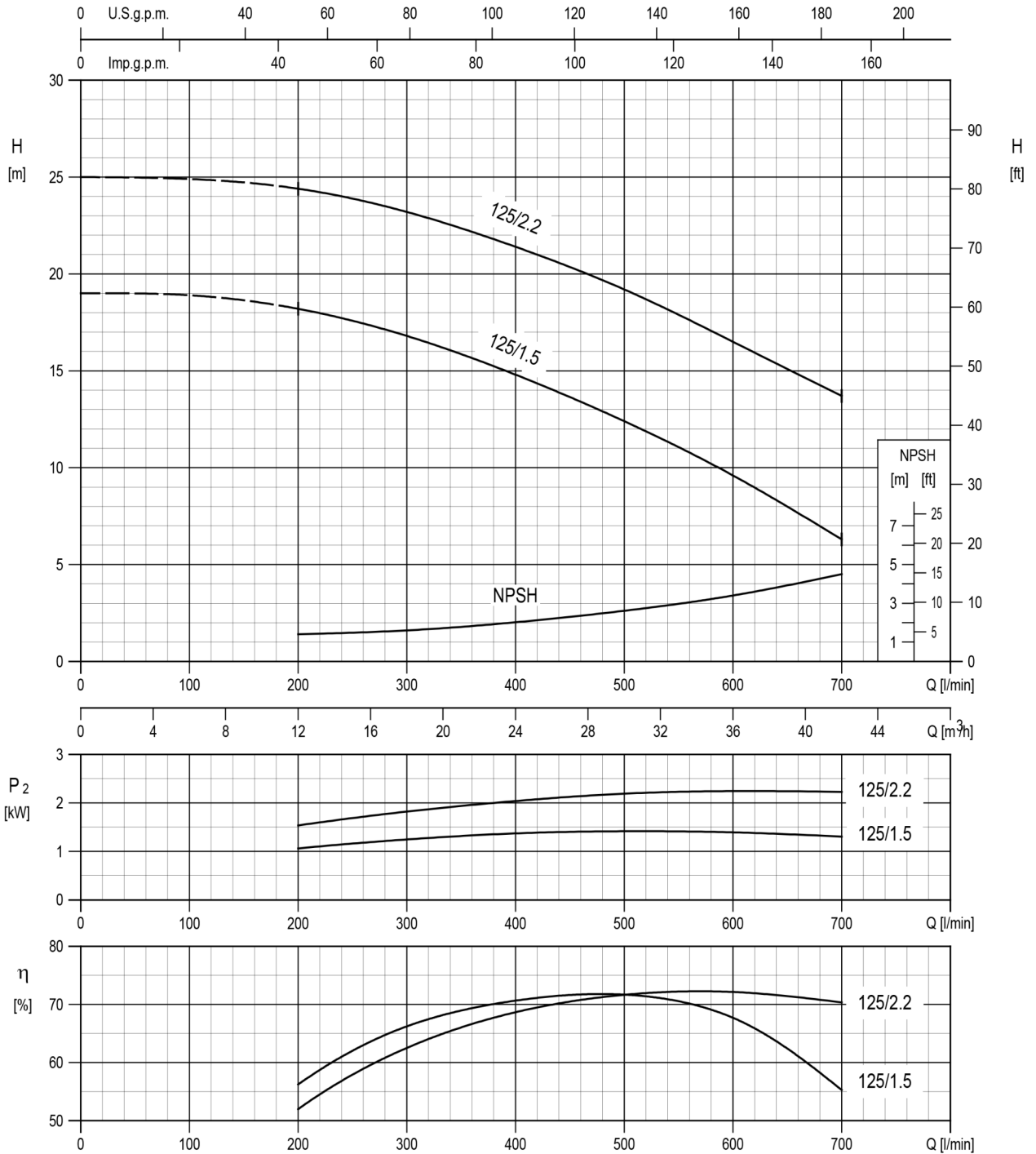


Rotation speed  $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B

**40-125/1.5 (1.5kW) MEI > 0.50 – Impeller diameter = 125 mm**

**40-125/2.2 (2.2kW) MEI > 0.50 – Impeller diameter = 140 mm**



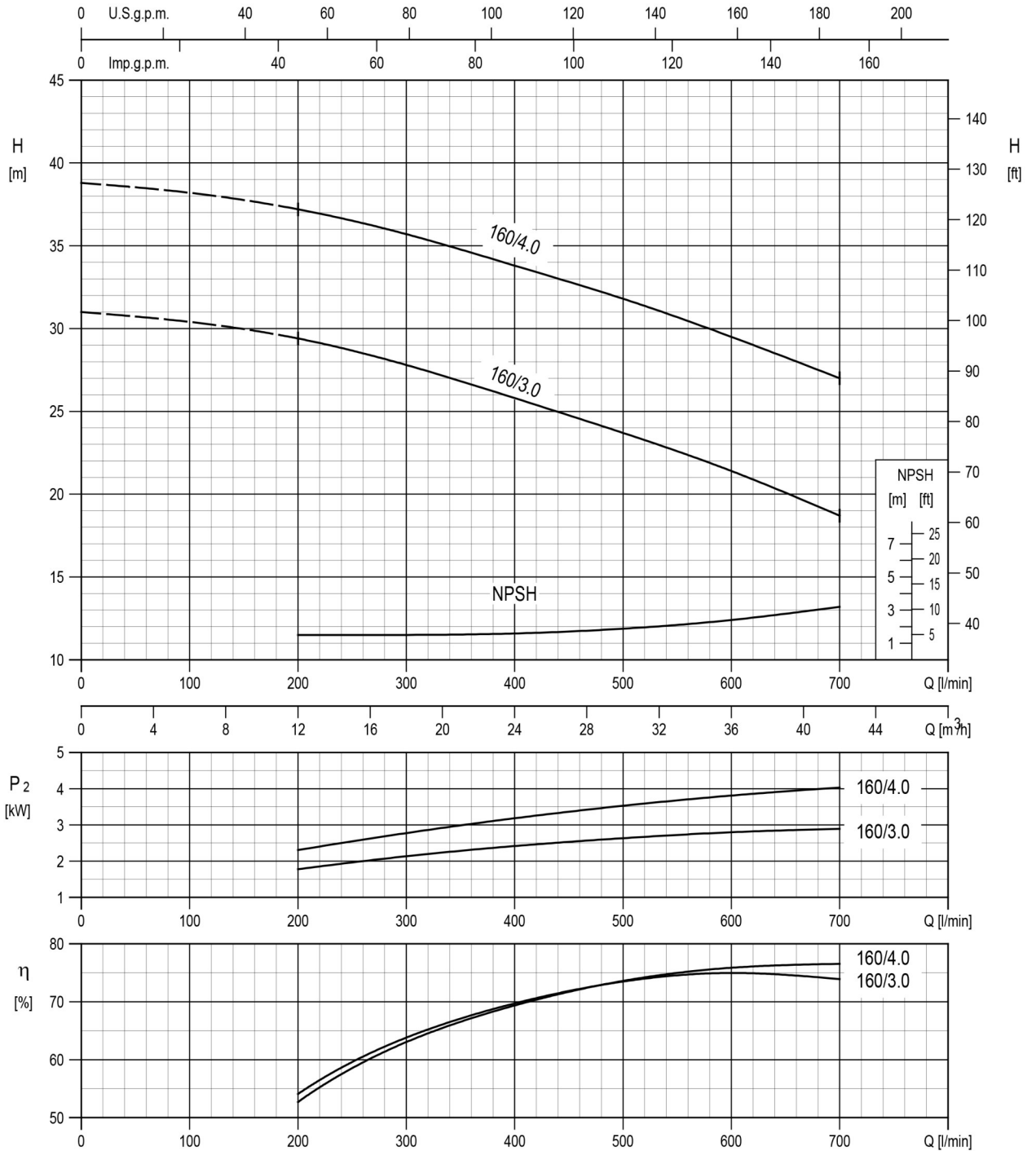
Rotation speed  $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B



**40-160/3.0 (3.0kW) MEI > 0.70 – Impeller diameter = 151 mm**

**40-160/4.0 (4.0kW) MEI > 0.70 – Impeller diameter = 166 mm**

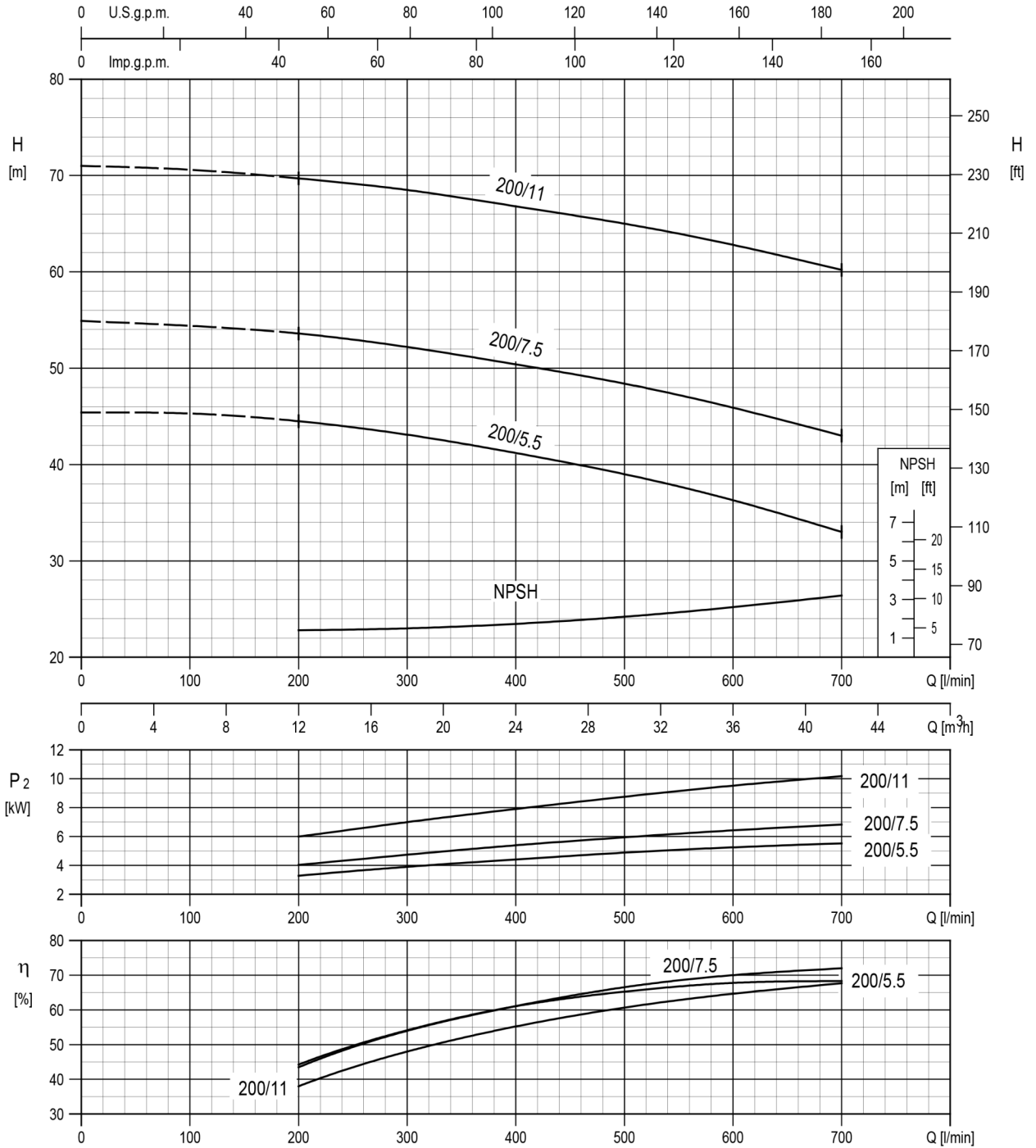


Rotation speed  $\approx 2900 \text{ min}^{-1}$

Test standard: ISO 9906:2012 – Grade 3B



**40-200/5.5 (5.5kW) MEI > 0.70 – Impeller diameter = 183 mm**  
**40-200/7.5 (7.5kW) MEI > 0.70 – Impeller diameter = 200 mm**  
**40-200/11 (11kW) MEI > 0.70 – Impeller diameter = 224 mm**



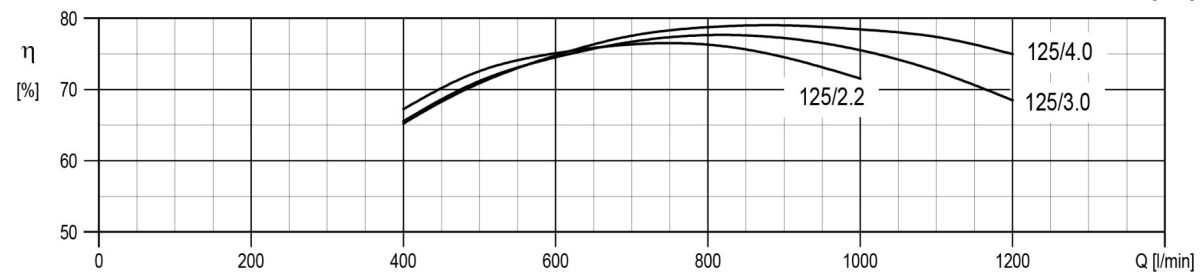
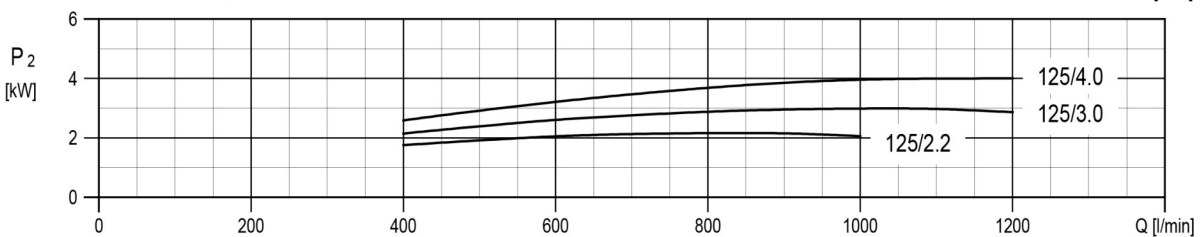
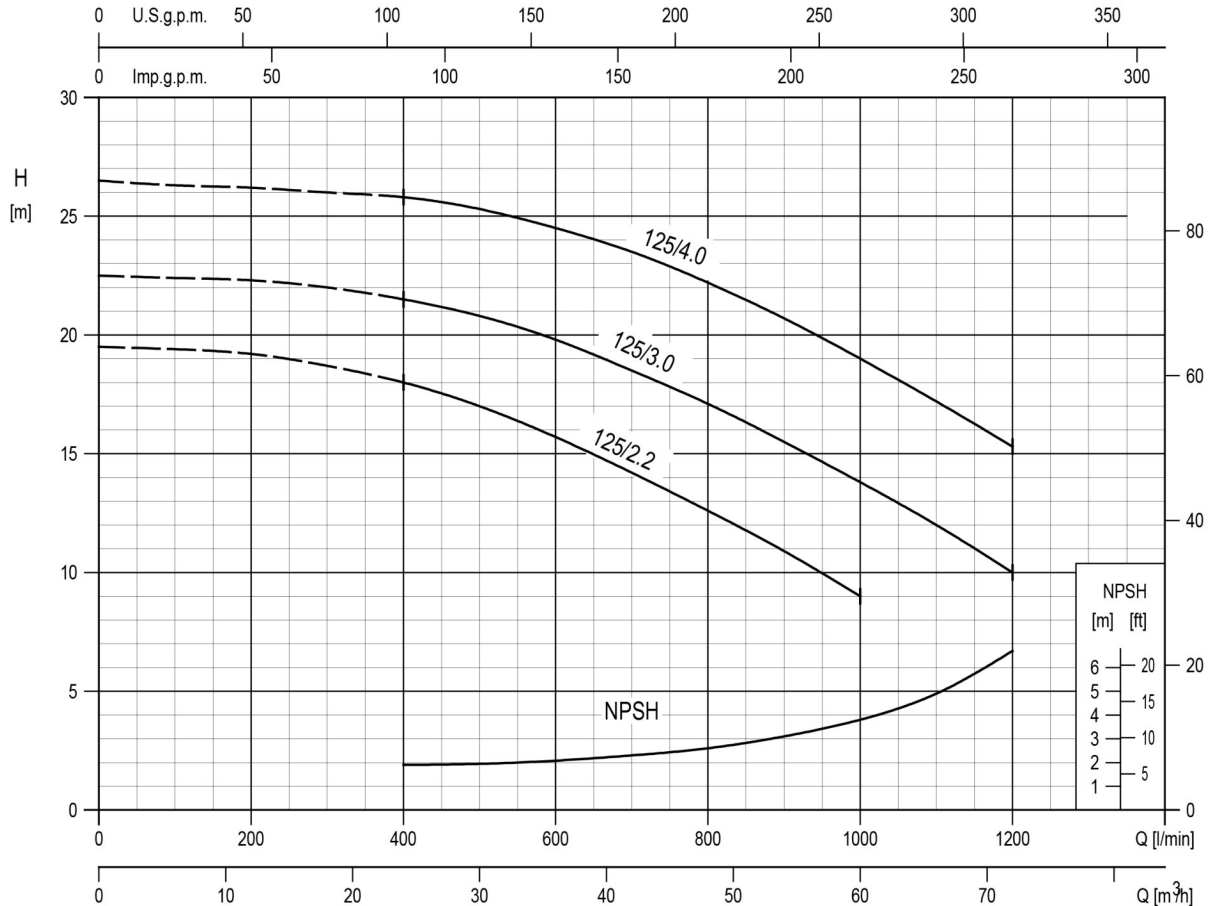
Rotation speed ≈ 2900 min<sup>-1</sup>

Test standard: ISO 9906:2012 – Grade 3B

**50-125/2.2 (2.2kW) MEI > 0.60 – Impeller diameter = 126 mm**

**50-125/3.0 (3.0kW) MEI > 0.60 – Impeller diameter = 131 mm**

**50-125/4.0 (4.0kW) MEI > 0.60 – Impeller diameter = 140 mm**

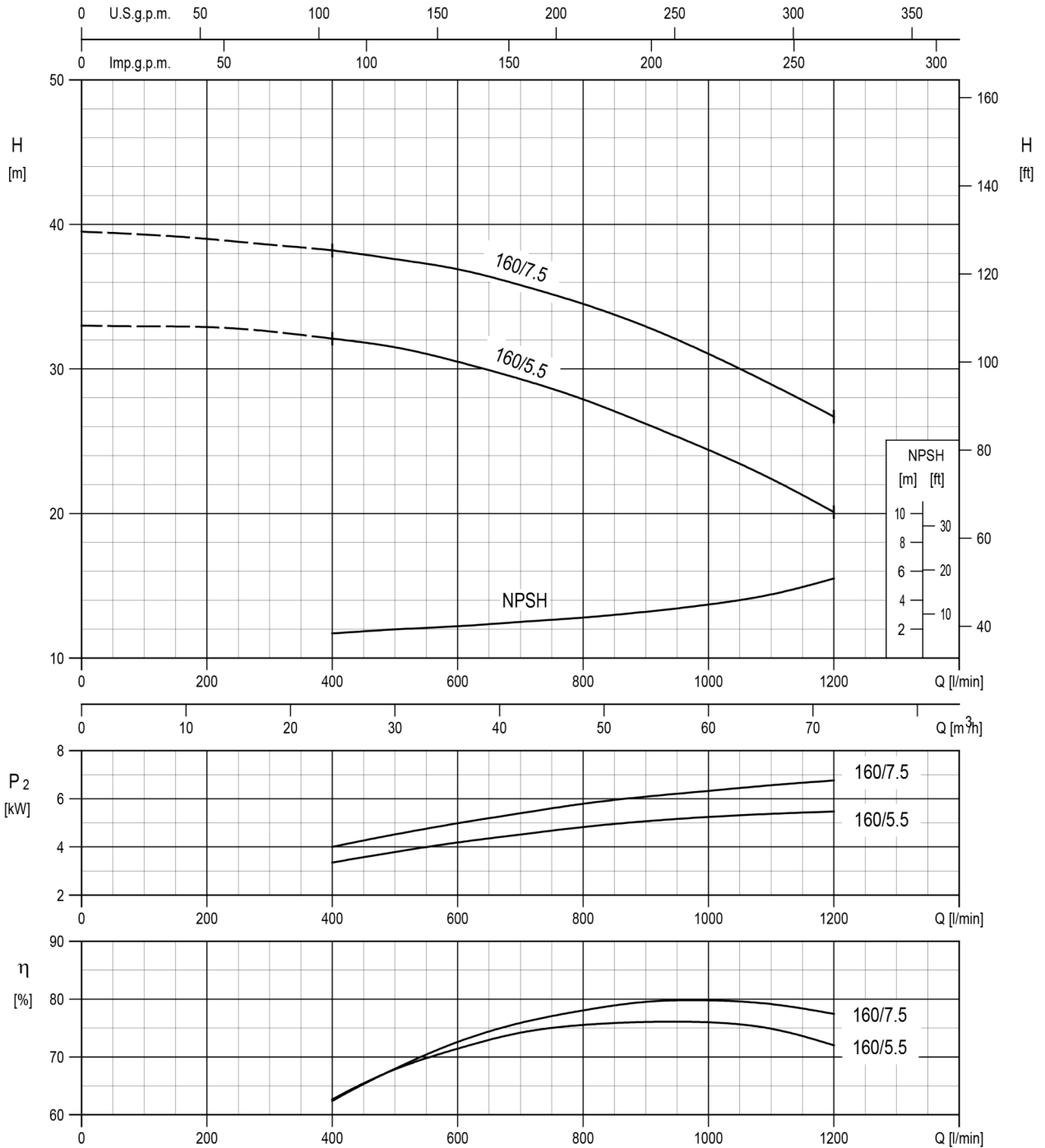


Rotation speed ≈ 2900 min<sup>-1</sup>

Test standard: ISO 9906:2012 – Grade 3B

**50-160/5.5 (5.5kW) MEI > 0.70 – Impeller diameter = 154 mm**

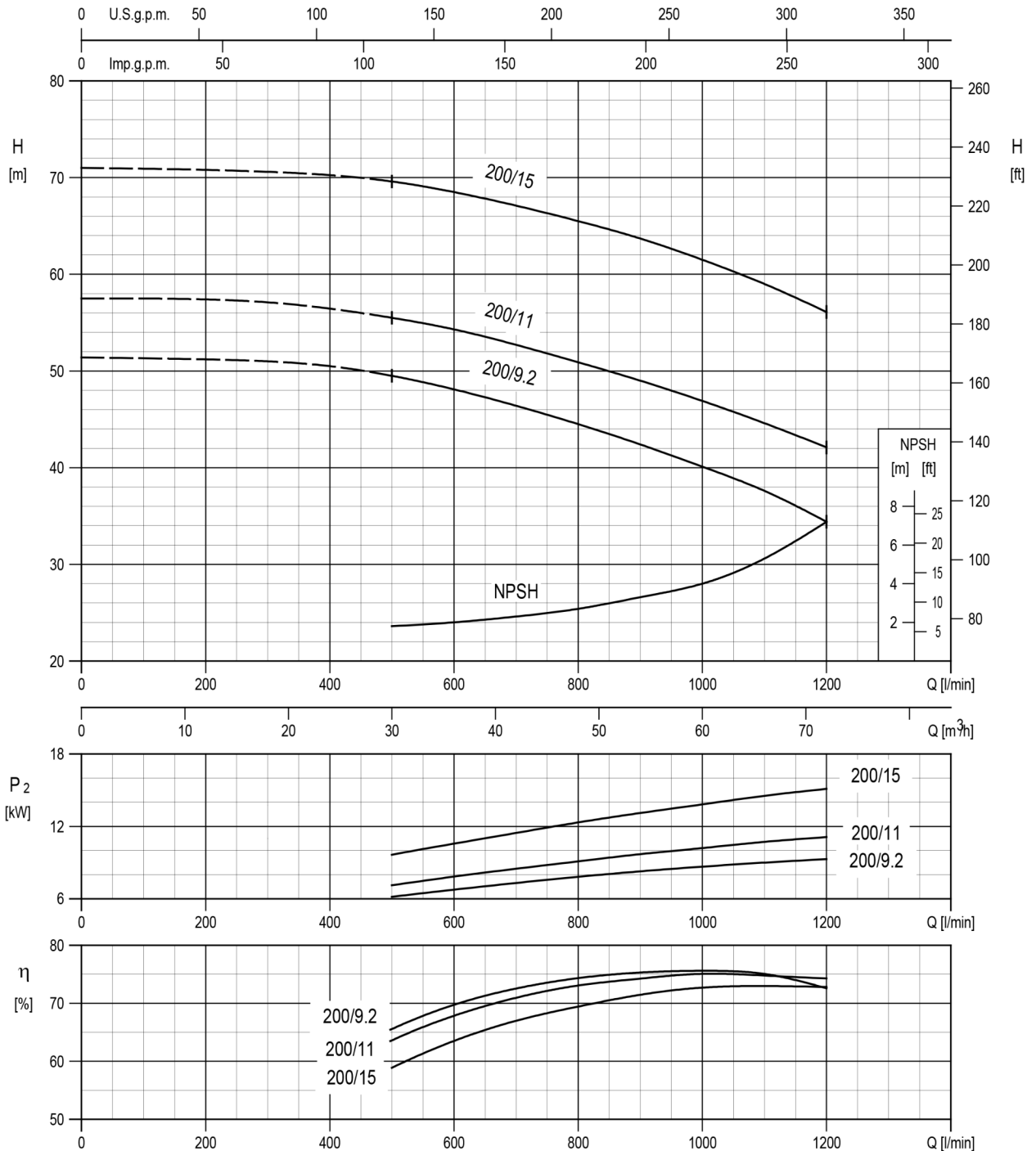
**50-160/7.5 (7.5kW) MEI > 0.70 – Impeller diameter = 166 mm**



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

Test standard: ISO 9906:2012 – Grade 3B

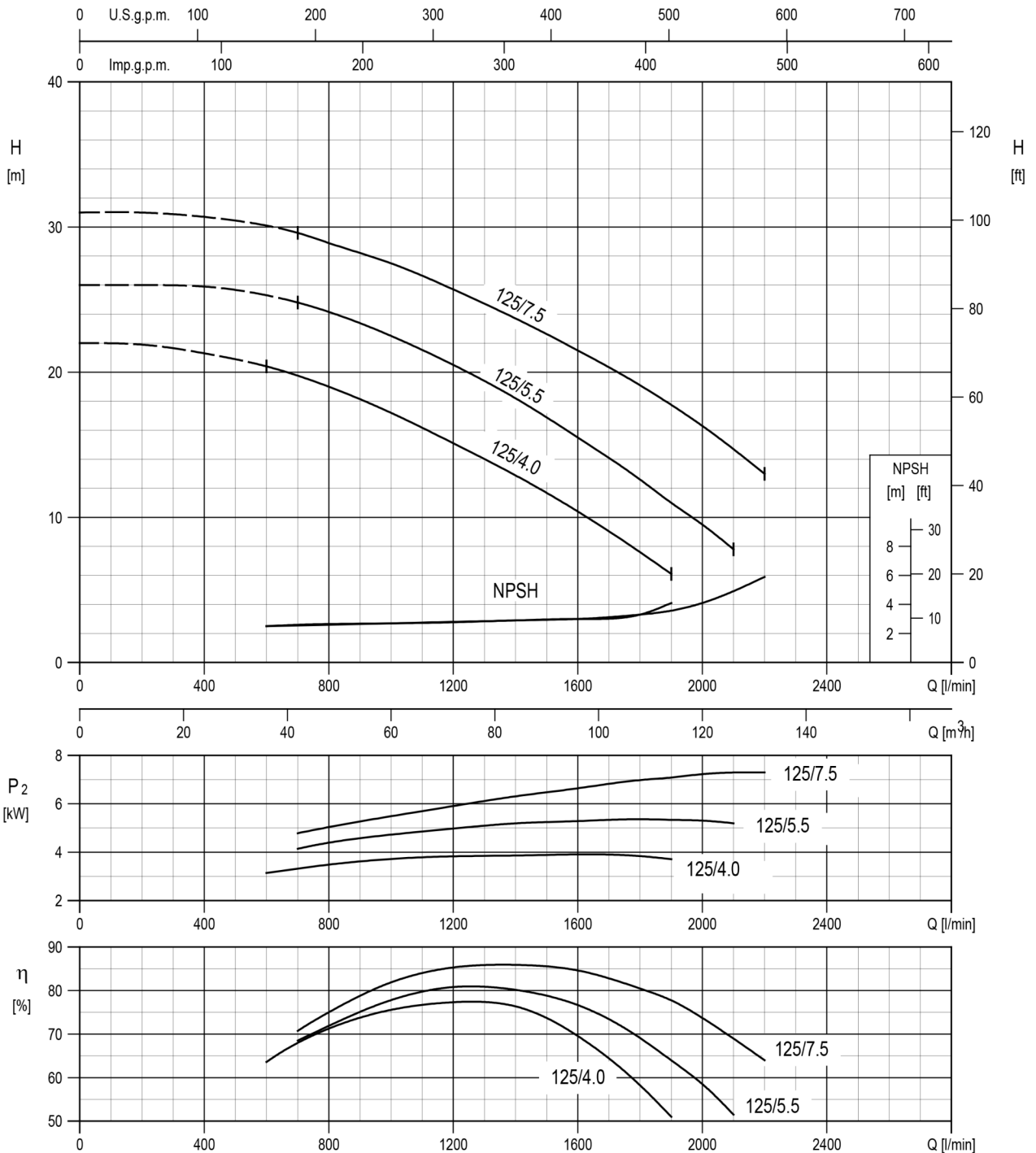
**50-200/9.2 (9.2kW) MEI > 0.70 – Impeller diameter = 191 mm**  
**50-200/11 (11kW) MEI > 0.70 – Impeller diameter = 200 mm**  
**50-200/15 (15kW) MEI > 0.70 – Impeller diameter = 224 mm**



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

Test standard: ISO 9906:2012 – Grade 3B

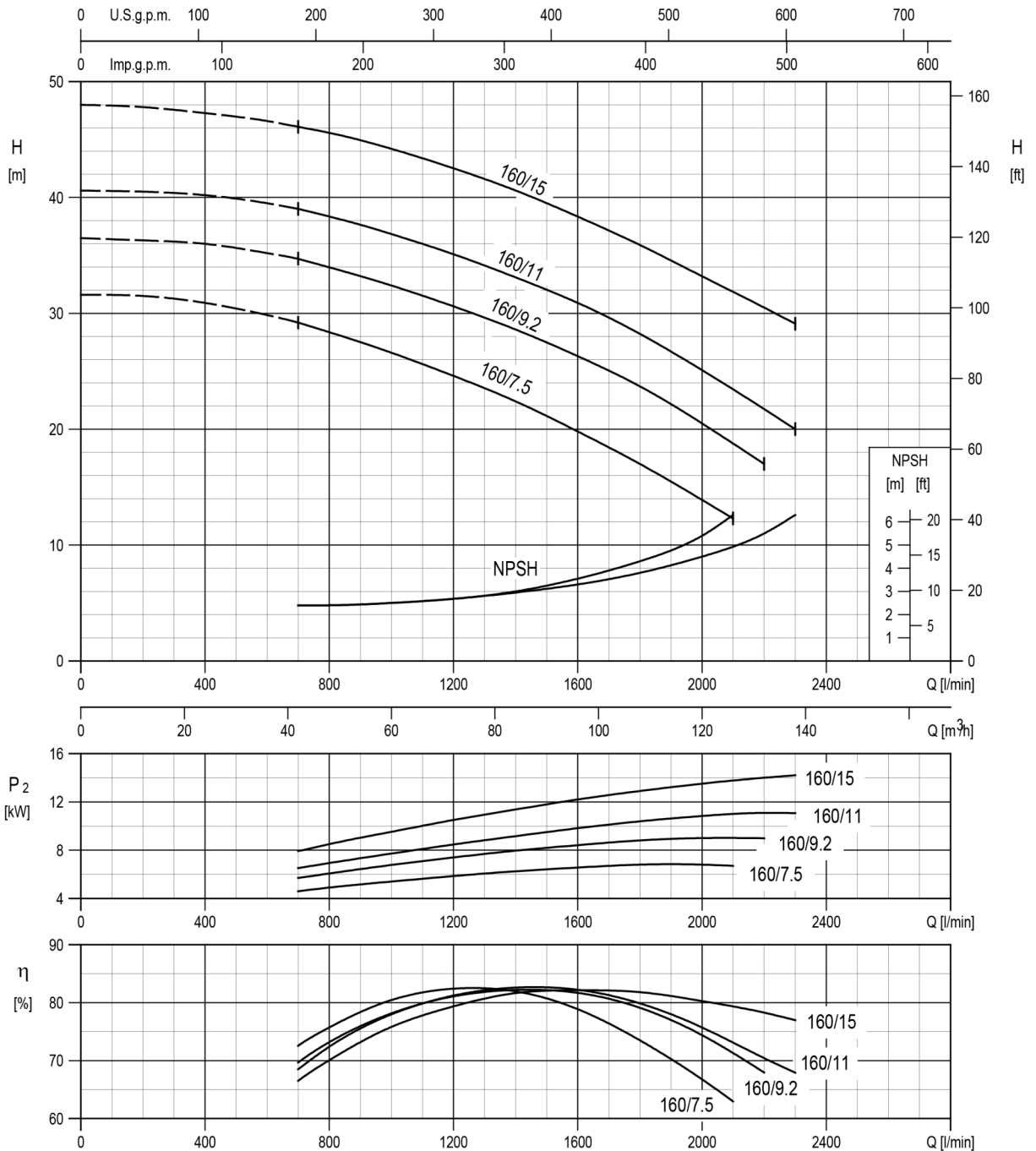
**65-125/4.0 (4.0kW) MEI > 0.70 – Impeller diameter = 128 mm**  
**65-125/5.5 (5.5kW) MEI > 0.70 – Impeller diameter = 138 mm**  
**65-125/7.5 (7.5kW) MEI > 0.70 – Impeller diameter = 149 mm**



Rotation speed ≈ 2900 min<sup>-1</sup>

Test standard: ISO 9906:2012 – Grade 3B

**65-160/7.5 (7.5kW) MEI > 0.70 – Impeller diameter = 153 mm**  
**65-160/9.2 (9.2kW) MEI > 0.70 – Impeller diameter = 160 mm**  
**65-160/11 (11kW) MEI > 0.70 – Impeller diameter = 168 mm**  
**65-160/15 (15kW) MEI > 0.70 – Impeller diameter = 178 mm**

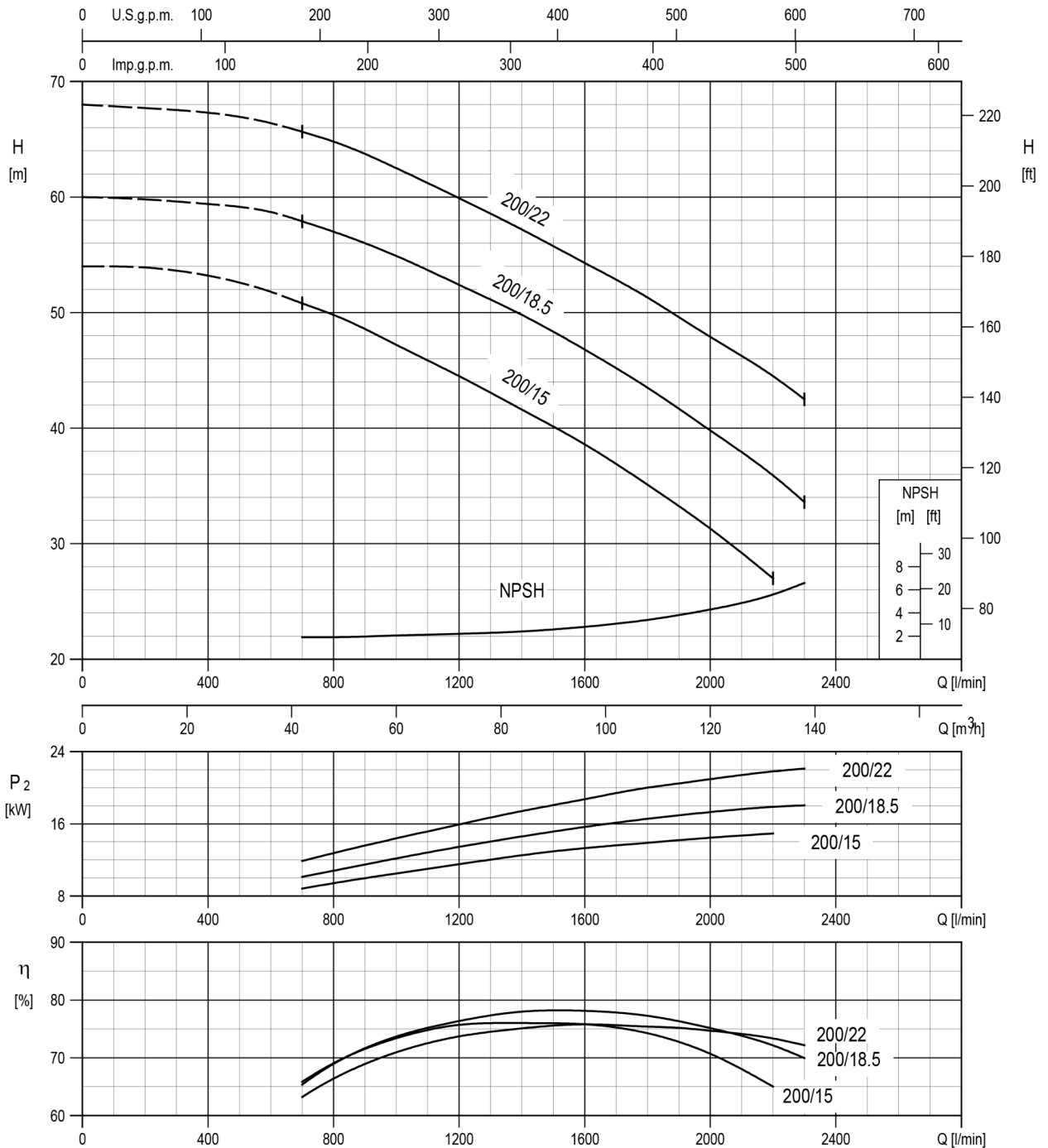


Rotation speed ≈ 2900 min<sup>-1</sup>

Test standard: ISO 9906:2012 – Grade 3B



**65-200/15 (15kW) MEI > 0.60 – Impeller diameter = 190 mm**  
**65-200/18.5 (18.5kW) MEI > 0.60 – Impeller diameter = 201 mm**  
**65-200/22 (22kW) MEI > 0.60 – Impeller diameter = 212 mm**

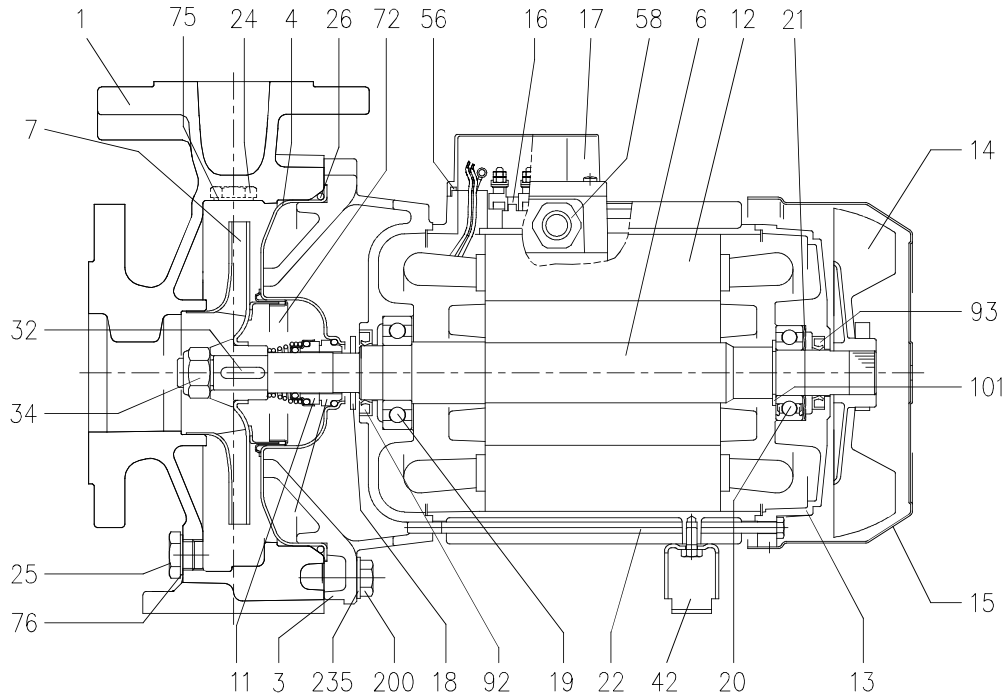


Rotation speed ≈ 2900 min<sup>-1</sup>

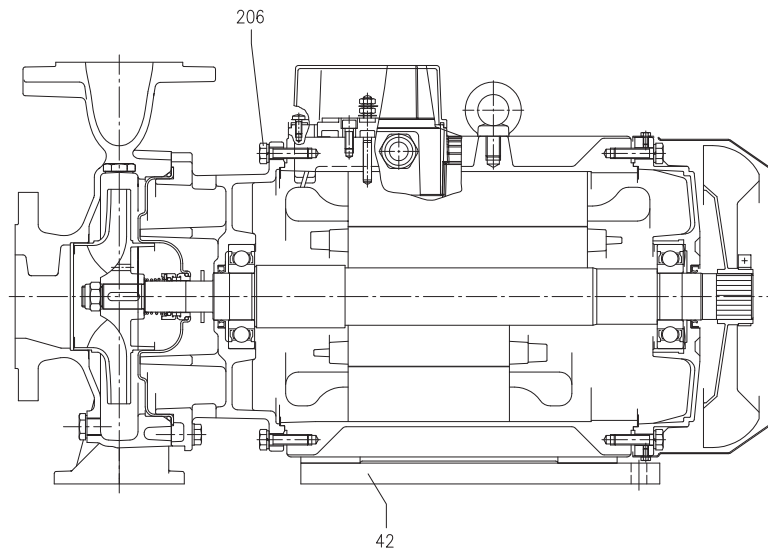
Test standard: ISO 9906:2012 – Grade 3B

**3D SECTIONAL VIEW DRAWING**

UP TO 11 kW



15 kW AND ABOVE

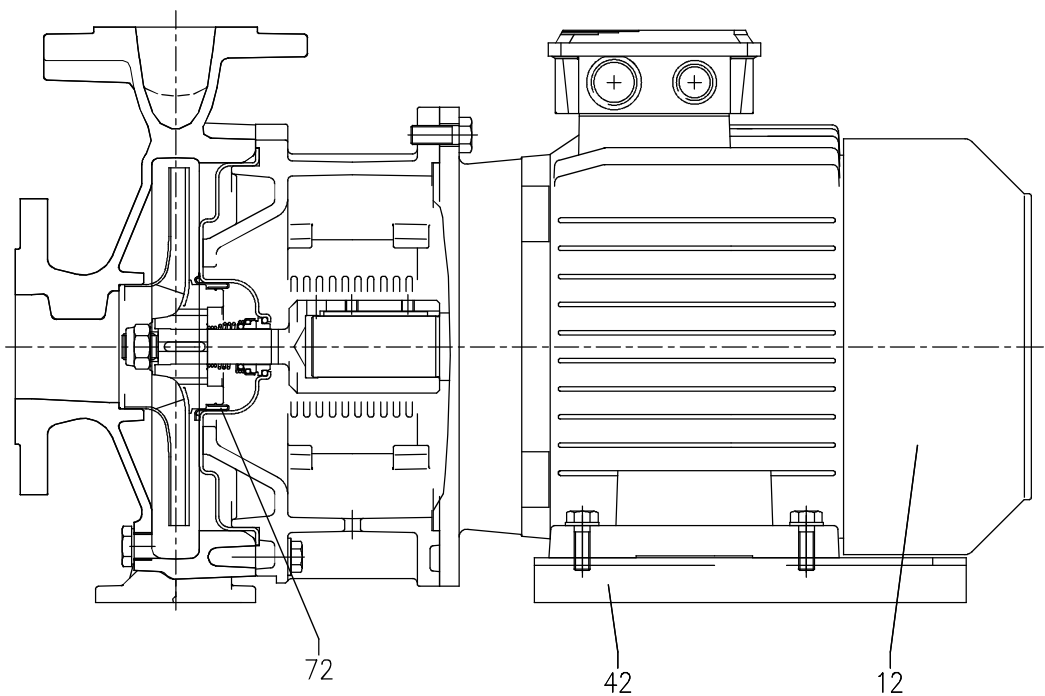
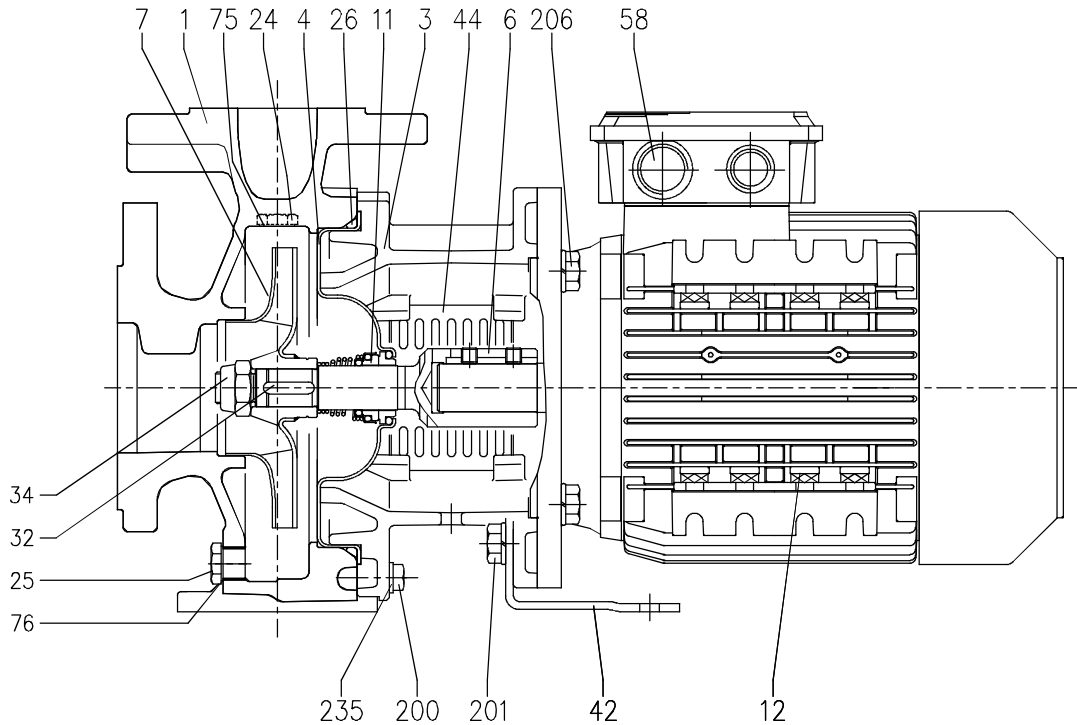


**3D SECTIONAL VIEW TABLE**

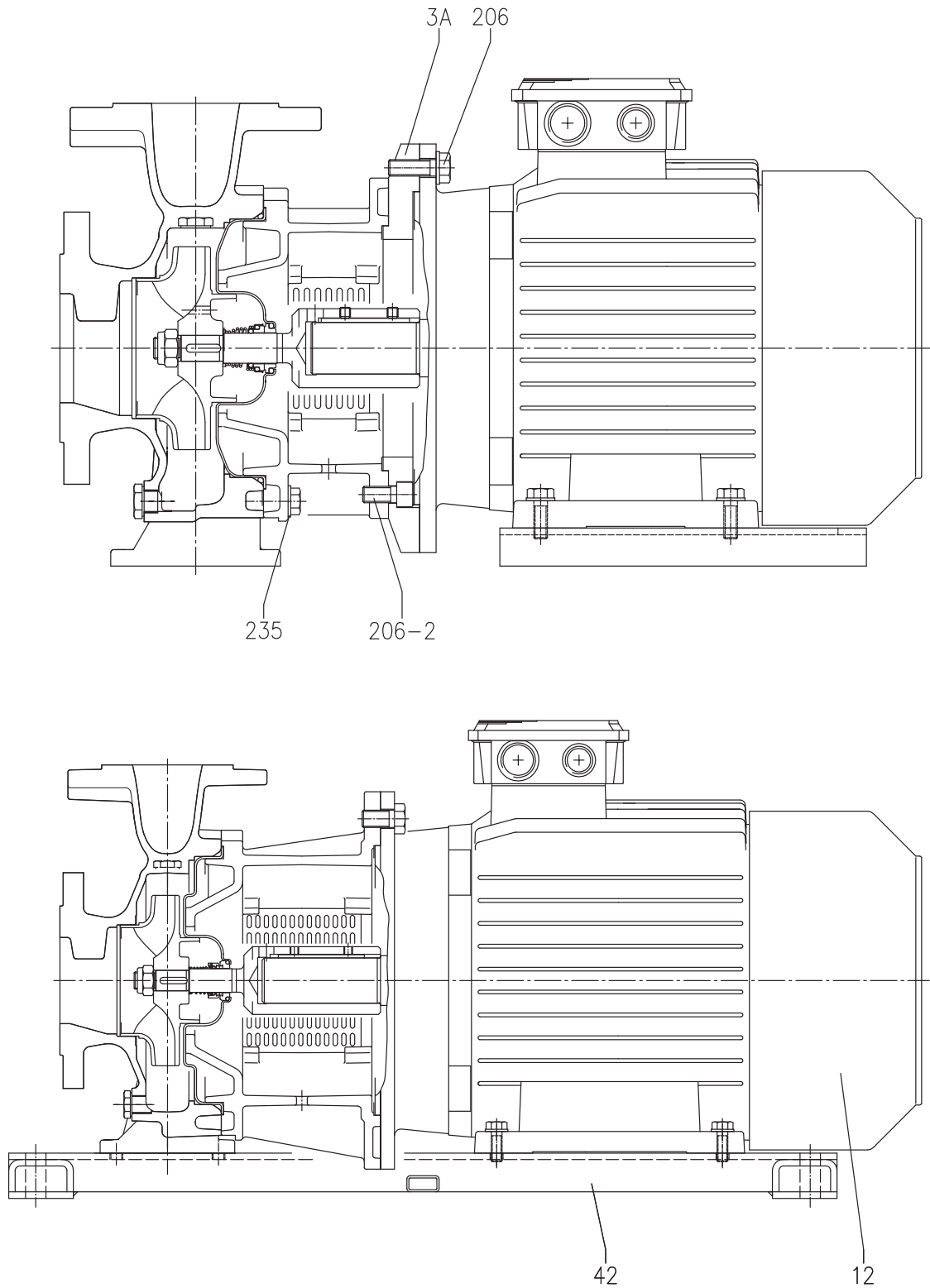
N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	Cast iron EN-GJL-250-EN 1561			1
3	Motor bracket [1]	-			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Shaft with rotor - Wet extension	EN 1.4301 (AISI 304)			1
7	Impeller [2]	-			1
11	Mechanical seal [3]	-			1
12	Motor frame with stator	-			1
13	Motor cover	Aluminium			1
14	Fan	PA			1
15	Fan cover	Fe P04 Galvanized			1
16	Terminal	-			1
17	Terminal box cover	Aluminium (three phase version)			1
18	Splash ring	Up to 11 kW 15 kW and above	NBR 40x21.5x2 50x29.5x3	EBARA DRAWING	1
19	Bearing [10]	-			1
20	Bearing [10]	-			1
21	Adjusting ring	Steel C70			1
22	Tie rod	Up to 3 kW For 4 - 5.5 - 7.5 kW 9.2 e 11kW	Fe 42 Galvanized	M5 M6 M8	EBARA DRAWING
	Screw	15 kW and above	Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739
24	Priming plug		Brass	G 3/8" L=8	1
25	Draining plug		Brass	G 3/8" L=8	1
26	O-ring	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 50-200, 65-160, 65-200	NBR/FPM/EPDM	158.11x5.34 OR 6625 183.52x5.34 OR 6720 227.96x5.34 OR 6895	1
32	Key	Up to 11 kW 50-200/15 15 kW and above	EN 1.4401 (AISI 316)	A 6x6x25 A 8x7x30	UNI 6604
34	Impeller nut	Up to 11kW 50-200/15 15 kW and above	EN 1.4301 (AISI 304)	M16x1.5 M18x1.5 M20x1.5	UNI 7474
42	Foot		Aluminium / Galvanized steel		EBARA DRAWING [5]
56	Box gasket		NBR		1
58	Cable gland		-		[6]
72	Casing ring [7]		EN 1.4301 (AISI 304)		1
75	Washer		Aluminium	22x17x1.5	EBARA DRAWING
76	Washer		Aluminium		1
92	Lip seal	Up to 3kW From 4 to 7.5 kW From 9.2 kW to 11 kW From 15 kW to 22 kW	-	25x40x7 30x47x7 40x55x7 45x60x7	DIN 3760 without spring
93	Lip seal	Up to 4 kW From 5.5 kW to 7.5 kW From 9.2 kW to 11 kW From 15 kW to 22 kW	-	25x40x7 30x47x7 40x55x7 45x60x7	DIN 3760 without spring
101	Snap ring [8]		Carbon tool steels TC 80	Ø 40	UNI 7435
200	Screw	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160 50-200, 65-160, 65-200	Gv. Steel 8.8 strenght class ISO 898-1	M 8x30 M 10x35	UNI 5739
235	Washer	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160 50-200, 65-160, 65-200	Galvanized Steel	8.4x17 10.5x21	UNI 6592
206	Screw for bracket [9]		Gv. Steel 8.8 strenght class ISO 898-1	M 10x40	UNI 5739

- [1] Cast iron EN-GJL-200-EN 1561 for 3D 32-200/3 and models with 15, 18.5, 22 kW motor  
Aluminum AL-EN-1706-AC-46000-D for all the others;
- [2] EN 1.4301 (AISI 304) for 32, 40, 50 series  
EN 1.4401 (AISI 316) for 65 series;
- [3] See **MECHANICAL SEAL** pages from 307 to 310
- [4] See **MECHANICAL SEAL**, "O-ring" column, pages from 307 to 310
- [5] 0 for 65-160/15 kW;  
1 for pumps up to 11 kW  
2 for 65-200/15, 18.5, 22 kW
- [6] 1 for pumps with motor up to 11 kW  
2 for pumps with 15 kW motor and above
- [7] Only for: 32-200, 40-200, 50-160, 50-200/9.2, 50-200/11
- [8] Only for pumps with 9.2 and 11 kW motor
- [9] Only for pumps with 15 kW motor and above
- [10] See **3D BEARINGS** page 311

**3DS 32, 40, 50 SECTIONAL VIEW DRAWING**



**3DS 65 SECTIONAL VIEW DRAWING**



**3DS SECTIONAL VIEW TABLE**

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	Cast iron EN-GJL-250-EN 1561			1
3	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
3A	Adapter ring [1]	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Coupling - Wet extensions [8]	EN 1.4301 (AISI 304)			1
7	Impeller [2]	-			1
11	Mechanical seal [3]	-			1
12	Motor	-			1
24	Priming plug	Brass	G 3/8" L=8		1
25	Draining plug	Brass	G 3/8" L=8		1
26	O-ring [4]	NBR/FPM/EPDM	32-12540-125	OR 6625	1
			32-160, 40-160, 50-125, 65-125	OR 6720	
			32-200, 40-200, 50-160,		
			50-200, 65-160, 65-200	OR 6895	
32	Key	EN 1.4401 (AISI 316)	Up to 11 kW	UNI 6604	1
			50-200/15		
			15 kW and above		
34	Impeller nut	EN 1.4301 (AISI 304)	Up to 11kW	UNI 7474	1
			50-200/15		
			15 kW and above		
42	Foot	Galvanized Steel			[5]
44	Protection	EN 1.4301 (AISI 304)		EBARA DRAWING	1
58	Cable gland	-			
72	Casing ring [6]	EN 1.4301 (AISI 304)			1
75	Washer	Aluminum	22x17x1.5	EBARA DRAWING	1
76	Washer	Aluminum			1
200	Screw	Gv. Steel 8.8 strenght class ISO 898-1	32-125, 40-125	UNI 5739	8
			32-160, 40-160, 50-125, 65-125		
			32-200, 40-200, 50-160,		
			50-200, 65-160, 65-200		
201	Screw [7]	Gv. Steel 8.8 strenght class ISO 898-1	M10x16	UNI 5739	2
206	Screw for bracket	Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739	4
206-2	Screw adapter ring [1]	Gv. Steel 8.8 strenght class ISO 898-1	M12x20	UNI 5931	4
235	Washer	Galvanized Steel	32-125, 40-125	UNI 6592	8
			32-160, 40-160, 50-125, 65-125		
			32-200, 40-200, 50-160,		
			50-200, 65-160, 65-200		
			8.4x17		10
			10.5x21		12

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

[2] EN 1.4301 (AISI 304) for 32, 40, 50 series;  
EN 1.4401 (AISI 316) for 65 series

[3] See **MECHANICAL SEAL** pages from 307 to 310

[4] See **MECHANICAL SEAL**, "O-ring" column, pages from 307 to 310

[5] 0 for version 65-200/22

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

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

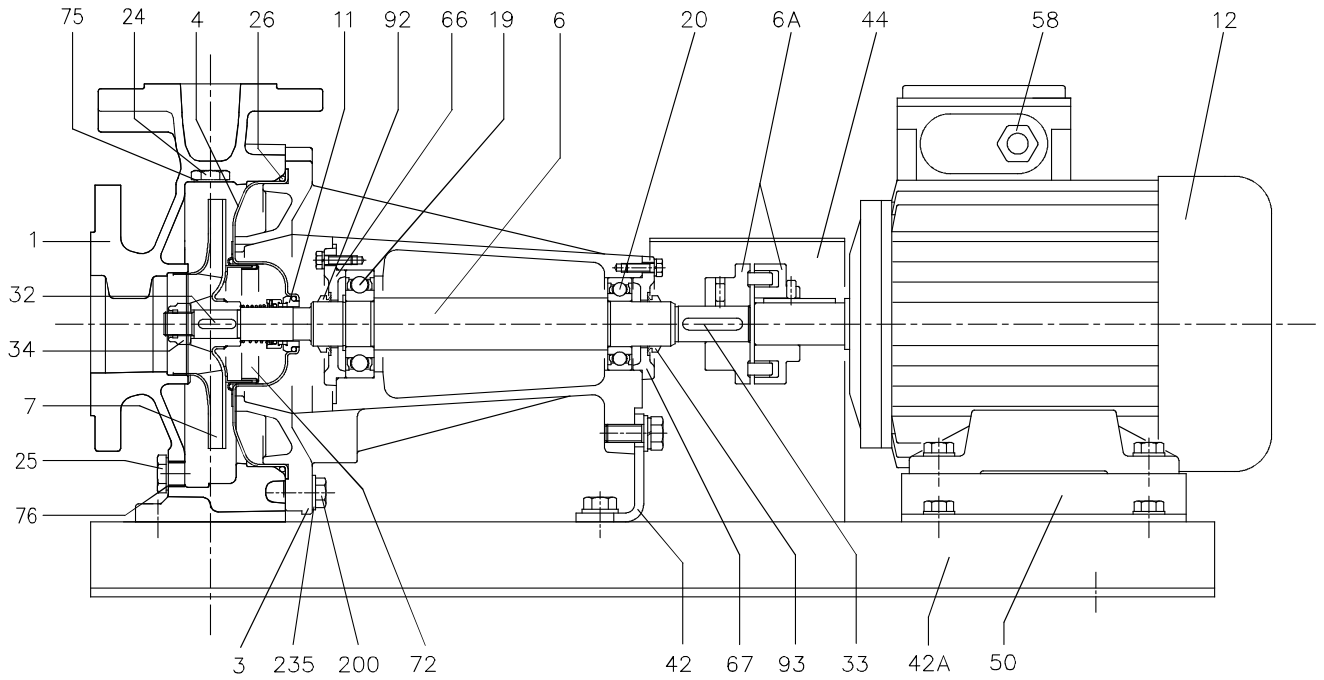
[6] Only for: 32-200, 40-200, 50-160, 50-200

[7] 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

[8] See **3DS COUPLING** page 313



**3DP SECTIONAL VIEW DRAWING**

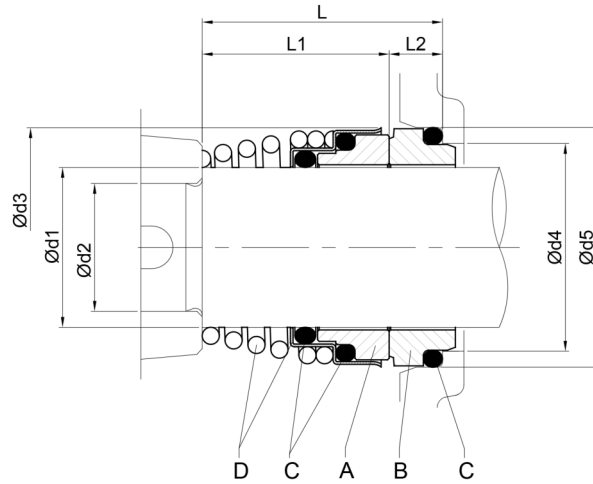


**3DP SECTIONAL VIEW TABLE**

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY		
1	Casing	Cast iron EN-GJL-250-EN 1561			1		
3	Support	Cast iron EN-GJL-200-EN 1561			1		
4	Casing cover	EN 1.4301 (AISI 304)			1		
6	Shaft - Wet extension	EN 1.4301 (AISI 304)			1		
6A	Flexible coupling [5]	Cast iron EN-GJL-250-EN 1561			1		
7	Impeller [1]	-			1		
11	Mechanical seal [2]	-			1		
12	Motor	-			1		
19	Bearing [6]	-			1		
20	Bearing [6]	-			1		
24	Priming plug	Brass	G 3/8" L=8	DIN 906	1		
25	Draining plug	Brass	G 3/8" L=8	DIN 906	1		
26	O-ring [3]	NBR/FPM/EPDM	32-125, 40-125 32-160, 40-160, 50-125, 65-125	158.11x5.34	OR 6625	1	
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200	183.52x5.34	OR 6720		
				227.96x5.34	OR 6895		
32	Key	EN 1.4401 (AISI 316)	Up to 11 kW	6x6x25	UNI 6604	1	
			50-200/15 15 kW and above	8x7x30			
33	Key	C 40	8x7x40	UNI 6604	1		
34	Impeller nut	EN 1.4301 (AISI 304)	Up to 11kW	M16x1.5	UNI 7474	1	
			50-200/15	M18x1.5			
			15 kW and above	M20x1.5			
42	Pump support	Fe 37 Galvanized		EBARA DRAWING	1		
42A	Base	Fe 37 Galvanized			1		
44	Protection	Fe 37 Galvanized			1		
50	Foot	Aluminium / Galvanized steel			1		
58	Cable gland	-			1		
66	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561			1		
67	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561			1		
72	Casing ring [4]	EN 1.4301 (AISI 304)			1		
75	Washer	Aluminum	22x17x1.5	EBARA DRAWING	1		
76	Washer	Aluminum	22x17x1.5	EBARA DRAWING	1		
92	"V" ring	-	VS - 0030		1		
93	"V" ring	-	VS - 0030		1		
			M 8x30		8		
			M 10x35	UNI 5739	10		
200	Screw	Gv. Steel 8.8 strenght class ISO 898-1	32-125, 40-125 32-160, 40-160, 50-125, 65-125			12	
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200				
235	Washer	Galvanized Steel	32-125, 40-125	8.4x17	UNI 6592	8	
			32-160, 40-160, 50-125, 65-125				10
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200	10.5x21			12

- [1] EN 1.4301 (AISI 304) for 32, 40, 50 series;  
EN 1.4401 (AISI 316) for 65 series  
[2] See **MECHANICAL SEAL**, pages from 307 to 310  
[3] See **MECHANICAL SEAL**, "O-ring" column, pages from 307 to 310  
[4] Only for: 32-200, 40-200, 50-160, 50-200  
[5] See **3DP FLEXIBLE COUPLING** page 314  
[6] See **3DP BEARINGS** page 312

**MECHANICAL SEAL**

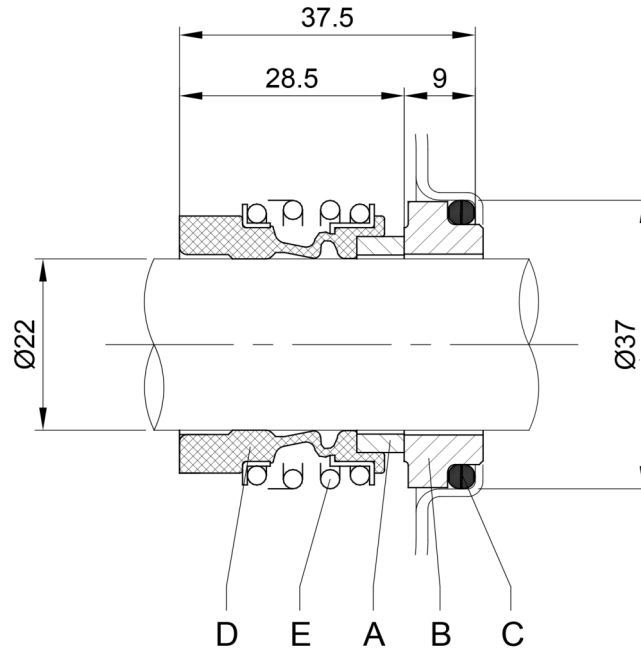


Pump type	Dimensions [ mm ]								Material							
	d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring				
<b>STANDARD</b>	32-125/160/200								Ceramic	Carbon	NBR	EN 1.4301 (AISI 304)				
	40-125/160/200	22	19	38	31	37	37.5	27.5					10			
	50-125/160/200															
	65-125															
65-160/7.5-9.2-11																
65-160/15	30	24	46	39	45	42.5	32.5	10				EN 1.4401 (AISI 316)				
65-200																

Version	Pump type	Dimensions [ mm ]								Material							
		d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring				
<b>OPTIONAL</b>	H	32-125/160/200								Ceramic	Carbon	FPM	EN 1.4401 (AISI 316)				
		40-125/160/200	22	19	38	31	37	37.5	27.5					10			
		50-125/160/200															
		65-125															
65-160/7.5-9.2-11																	
65-160/15	30	24	46	39	45	42.5	32.5	10									
65-200																	
E	32-125/160/200										EPDM	EN 1.4401 (AISI 316)					
	40-125/160/200	22	19	38	31	37	37.5	27.5	10								
	50-125/160/200																
	65-125																
65-160/7.5-9.2-11																	
65-160/15	30	24	46	39	45	42.5	32.5	10									
65-200																	

Version	Pump type	Dimensions [ mm ]								Material				
		d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring	
<b>SPECIAL</b>	U3U3EGG	65-160/15								Tungsten carbide	Tungsten carbide	EPDM	EN 1.4401 (AISI 316)	
		65-200									Carbon			
	U3CEGG	65-160/15								SiC				
	65-200													
Q1Q1EGG	65-160/15	30	24	46	39	45	42.5	32.5	10	SiC	Tungsten carbide			
Q1U3EGG	65-160/15													
65-200														
Q1AEGG	65-160/15													
	65-200													
	32-125/160/200									Ceramic	Carbon metalized			
	40-125/160/200	22	19	38	31	37	37.5	27.5	10					
	50-125/160/200													
65-125														
65-160/7.5-9.2-11														

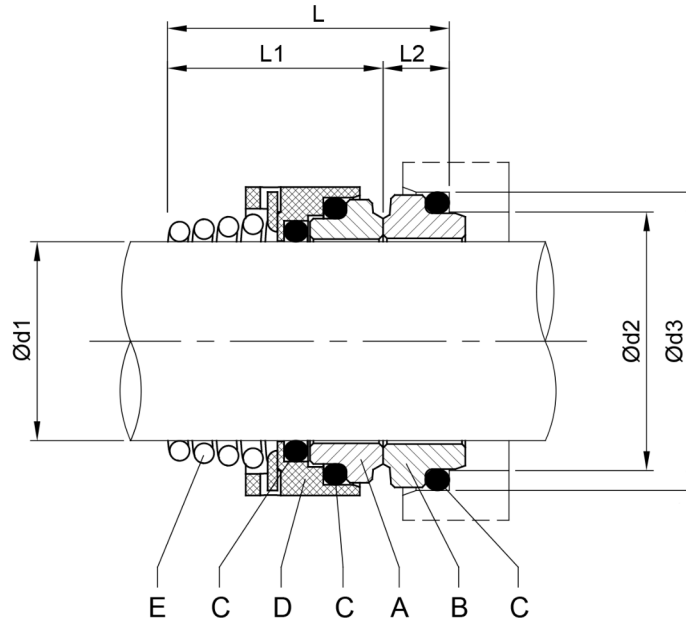
**MECHANICAL SEAL**



OPTIONAL

Version	Pump type	Material				
		A Rotary seal ring	B Stationary seal ring	C O-ring	D Bellows	E Frame + Spring
HS	32-125/160/200	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
	40-125/160/200					
	50-125/160/200					
	65-125					
HW	65-160/7.5-9.2-11	Tungsten Carbide	Tungsten Carbide	FPM	FPM	EN 1.4401 (AISI 316)
	32-125/160/200					
	40-125/160/200					
	50-125/160/200					

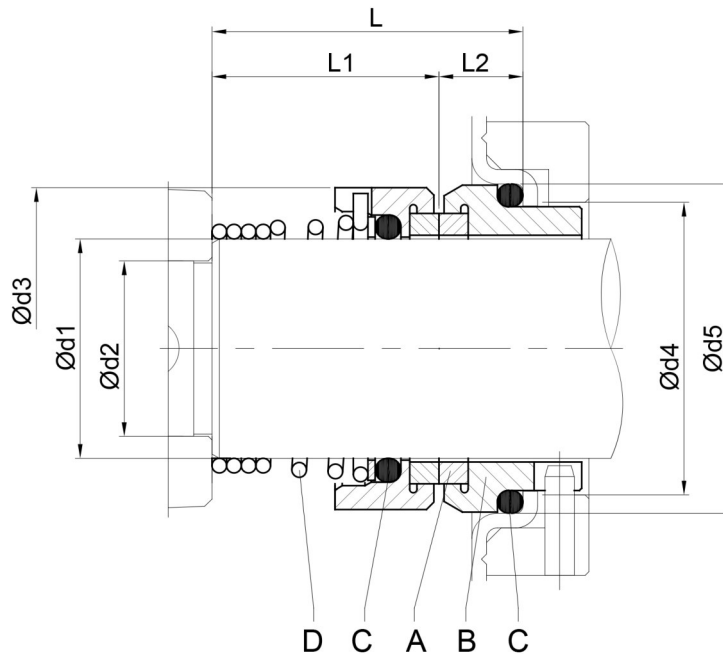
**MECHANICAL SEAL**



Version	Pump type	Dimensions [ mm ]						Material				
		d1	d2	d3	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Bellows	E Frame + Spring
OPTIONAL	65-160/15 65-200	30	39	45	42.5	31	11.5	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
	65-160/15 65-200	30	39	45	42.5	32.5	10	Tungsten Carbide	Tungsten Carbide			
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	31	37	37.5	27.5	10	SiC	Tungsten Carbide			

Version	Pump type	Dimensions [ mm ]						Material				
		d1	d2	d3	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Bellows	E Frame + Spring
SPECIAL	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	39	45	42.5	31	11.5	Tungsten Carbide	Tungsten Carbide	EPDM	EPDM	EN 1.4401 (AISI 316)
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	22	31	37	37.5	27.5	10		Carbon			
	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11							SiC	Tungsten Carbide			

**MECHANICAL SEAL**



Version	Pump type	Dimensions [ mm ]								Material			
		d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring
<b>SPECIAL</b> 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	SiC	SiC	EPDM	EN 1.4401 (AISI 316)



**3D BEARINGS**

Pump type	Ball bearing	
	Pump side	Fan side
3D 32-125/1.1	6205-ZZ C3	6203-ZZ C3
3D 32-160/1.5		
3D 32-160/2.2		6205-ZZ C3
3D 32-200/3.0		
3D 32-200/4.0	6206-ZZ C3	6206-ZZ C3
3D 32-200/7.5	6306-ZZ C3	6206-ZZ C3
3D 40-125/1.5	6205-ZZ C3	6203-ZZ C3
3D 40-125/2.2		
3D 40-160/3.0		6205-ZZ C3
3D 40-160/4.0	6206-ZZ C3	6206-ZZ C3
3D 40-200/5.5	6306-ZZ C3	6206-ZZ C3
3D 40-200/7.5		
3D 40-200/11	6308-ZZ C3	6208-ZZ C3
3D 50-125/2.2	6205-ZZ C3	6203-ZZ C3
3D 50-125/3.0		6205-ZZ C3
3D 50-125/4.0	6206-ZZ C3	6206-ZZ C3
3D 50-160/5.5	6306-ZZ C3	6206-ZZ C3
3D 50-160/7.5		
3D 50-200/9.2	6308-ZZ C3	6208-ZZ C3
3D 50-200/11		
3D 50-200/15	6309-ZZ C3	6309-ZZ C3
3D 65-125/4.0	6206-ZZ C3	6205-ZZ C3
3D 65-125/5.5	6306-ZZ C3	6206-ZZ C3
3D 65-160/7.5		
3D 65-160/9.2	6308-ZZ C3	6208-ZZ C3
3D 65-160/11		
3D 65-160/15	6309-ZZ C3	6309-ZZ C3
3D 65-200/15		
3D 65-200/18.5		
3D 65-200/22		

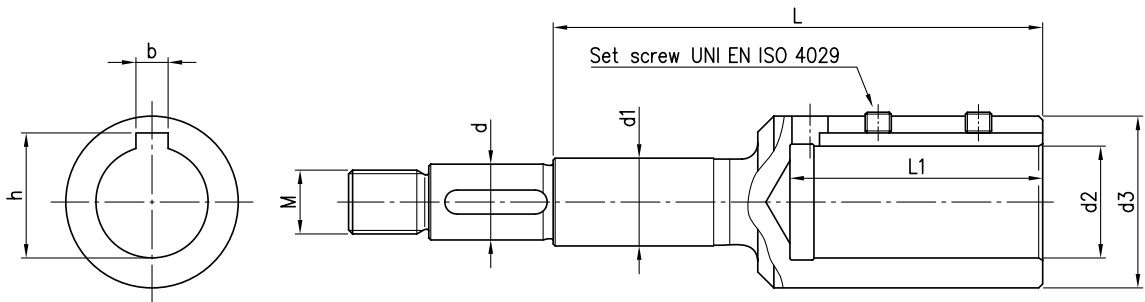
**3DS-3DP BEARINGS**

Pump type	Ball bearing	
	Pump side	Fan side
3DS 32-125/1.1	6204-2Z C3	6204-2Z C3
3DS 32-160/1.5	6205-2Z C3	6205-2Z C3
3DS 32-160/2.2		
3DS 32-200/3.0	6206-2Z C3	6206-2Z C3
3DS 32-200/4.0	6306-2Z C3	6306-2Z C3
3DS 32-200/7.5	6208-2Z C3	6208-2Z C3
3DS 40-125/1.5	6205-2Z C3	6205-2Z C3
3DS 40-125/2.2		
3DS 40-160/3.0	6206-2Z C3	6206-2Z C3
3DS 40-160/4.0	6306-2Z C3	6306-2Z C3
3DS 40-200/5.5	6208-2Z C3	6208-2Z C3
3DS 40-200/7.5		
3DS 40-200/11	6309-2Z C3	6309-2Z C3
3DS 50-125/2.2	6205-2Z C3	6205-2Z C3
3DS 50-125/3.0	6206-2Z C3	6206-2Z C3
3DS 50-125/4.0	6306-2Z C3	6306-2Z C3
3DS 50-160/5.5	6208-2Z C3	6208-2Z C3
3DS 50-160/7.5		
3DS 50-200/9.2	6309-2Z C3	6309-2Z C3
3DS 50-200/11		
3DS 50-200/15	6309-2Z C3	6309-2Z C3
3DS 65-125/4.0	6306-2Z C3	6306-2Z C3
3DS 65-125/5.5	6208-2Z C3	6208-2Z C3
3DS 65-125/7.5		
3DS 65-160/7.5	6309-2Z C3	6309-2Z C3
3DS 65-160/9.2		
3DS 65-160/11	6309-2Z C3	6309-2Z C3
3DS 65-160/15		
3DS 65-200/15	6311 C3	6311 C3
3DS 65-200/18.5		
3DS 65-200/22 [1]	6311 C3	6311 C3

Pump type	Ball bearing			
	Pump		Motor	
	Pump side	Motor side	Pump side	Fan side
3DP 32-125/1.1	6306-2RS1	6206-2RS1	6204-2Z C3	6204-2Z C3
3DP 32-160/1.5			6205-2Z C3	6205-2Z C3
3DP 32-160/2.2			6206-2Z C3	6206-2Z C3
3DP 32-200/3.0	6308-2RS1	6306-2RS1	6306-2Z C3	6306-2Z C3
3DP 32-200/4.0			6208-2Z C3	6208-2Z C3
3DP 32-200/7.5			6208-2Z C3	6208-2Z C3
3DP 40-125/1.5	6306-2RS1	6206-2RS1	6205-2Z C3	6205-2Z C3
3DP 40-125/2.2			6206-2Z C3	6206-2Z C3
3DP 40-160/3.0			6306-2Z C3	6306-2Z C3
3DP 40-160/4.0	6308-2RS1	6306-2RS1	6208-2Z C3	6208-2Z C3
3DP 40-200/5.5			6309-2Z C3	6309-2Z C3
3DP 40-200/7.5			6205-2Z C3	6205-2Z C3
3DP 40-200/11	6306-2RS1	6206-2RS1	6206-2Z C3	6206-2Z C3
3DP 50-125/2.2			6306-2Z C3	6306-2Z C3
3DP 50-125/3.0			6208-2Z C3	6208-2Z C3
3DP 50-125/4.0	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DP 50-160/5.5			6208-2Z C3	6208-2Z C3
3DP 50-160/7.5			6309-2Z C3	6309-2Z C3
3DP 50-200/9.2	6306-2RS1	6206-2RS1	6206-2Z C3	6206-2Z C3
3DP 50-200/11			6306-2Z C3	6306-2Z C3
3DP 50-200/15	6306-2RS1	6206-2RS1	6208-2Z C3	6208-2Z C3
3DP 65-125/4.0			6306-2Z C3	6306-2Z C3
3DP 65-125/5.5			6208-2Z C3	6208-2Z C3
3DP 65-125/7.5	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DP 65-160/7.5			6309-2Z C3	6309-2Z C3
3DP 65-160/9.2			6311 C3	6311 C3
3DP 65-160/11	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DP 65-160/15			6309-2Z C3	6309-2Z C3
3DP 65-200/15	6311 C3	6311 C3	6311 C3	6311 C3
3DP 65-200/18.5			6311 C3	6311 C3
3DP 65-200/22 [1]	6311 C3	6311 C3	6311 C3	6311 C3

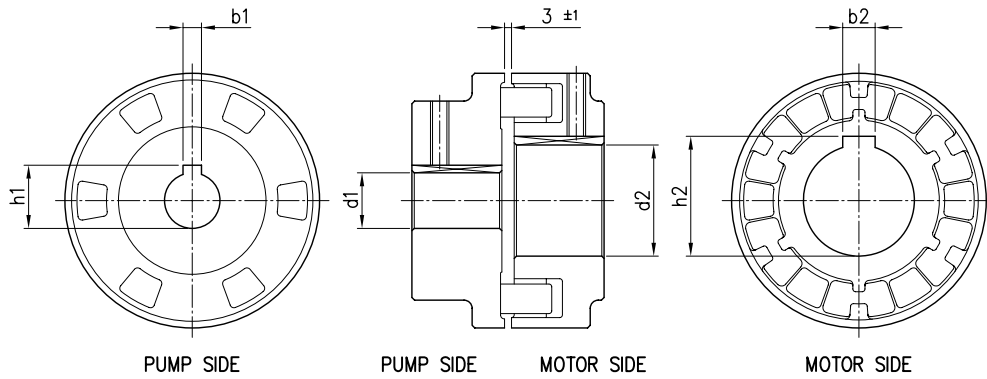
[1] Motor available with lubricator for regular re-greasing of bearing.

**3DS 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
32-200/7.5	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	24	30	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

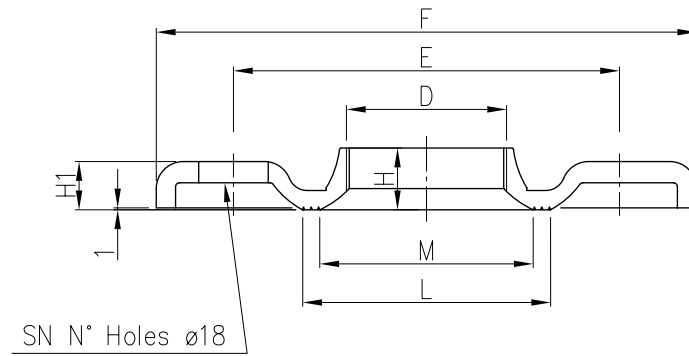
**3DP FLEXIBLE COUPLING**



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
32-200/7.5	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
65-160/7.5	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

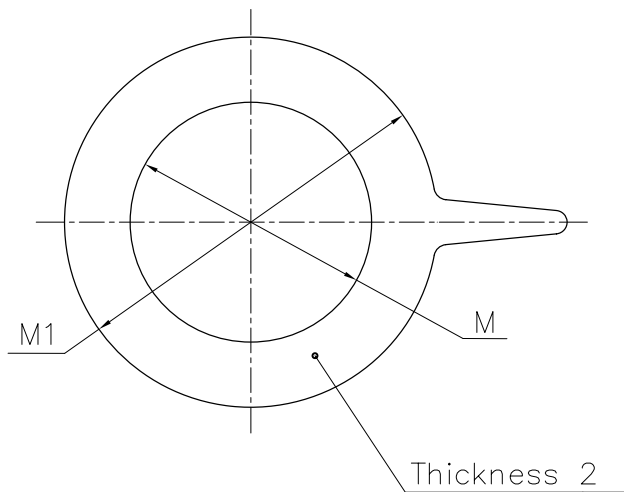
**FITTINGS**

**COUNTERFLANGES GALVANIZED STEEL**



DN	D	PN	Dimensions							Screws	
			E	F	H	H1	L	M	SN	DIMENSION	MATERIAL
32	G 1 ¼	10	100	140	15	11.5	67	50	4	M16x55	Gv. Steel 8.8 Streight class ISO 898-1
40	G 1 ½		110	150	17.5	11.5	72	58	4		
50	G 2		125	165	19	15	89	70	4		
65	G 2 ½		145	185	23	14	104	88	4		
80	G 3		160	200	24	14.5	117.5	100	4		
80	G 3	16	160	200	24	16	120	98	8		

**GASKETS**

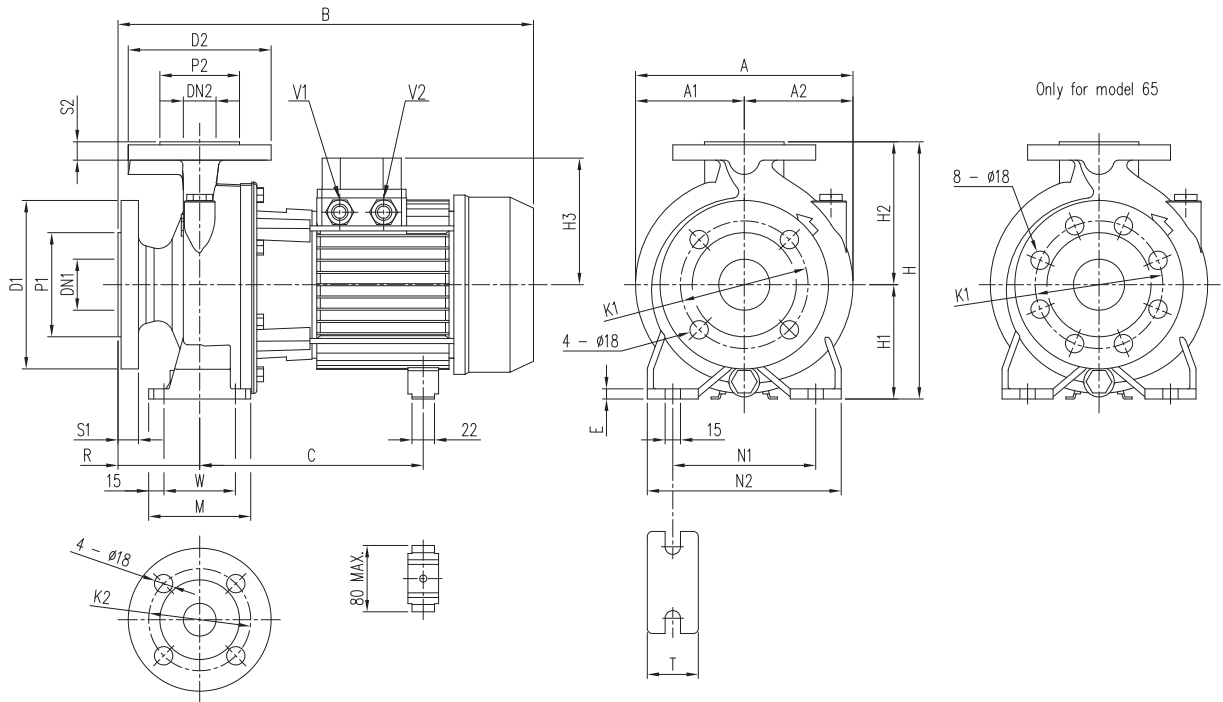


DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140

Material: EPDM for standard version  
FPM for hot water version

**PUMP 3D**

UP TO 11 kW

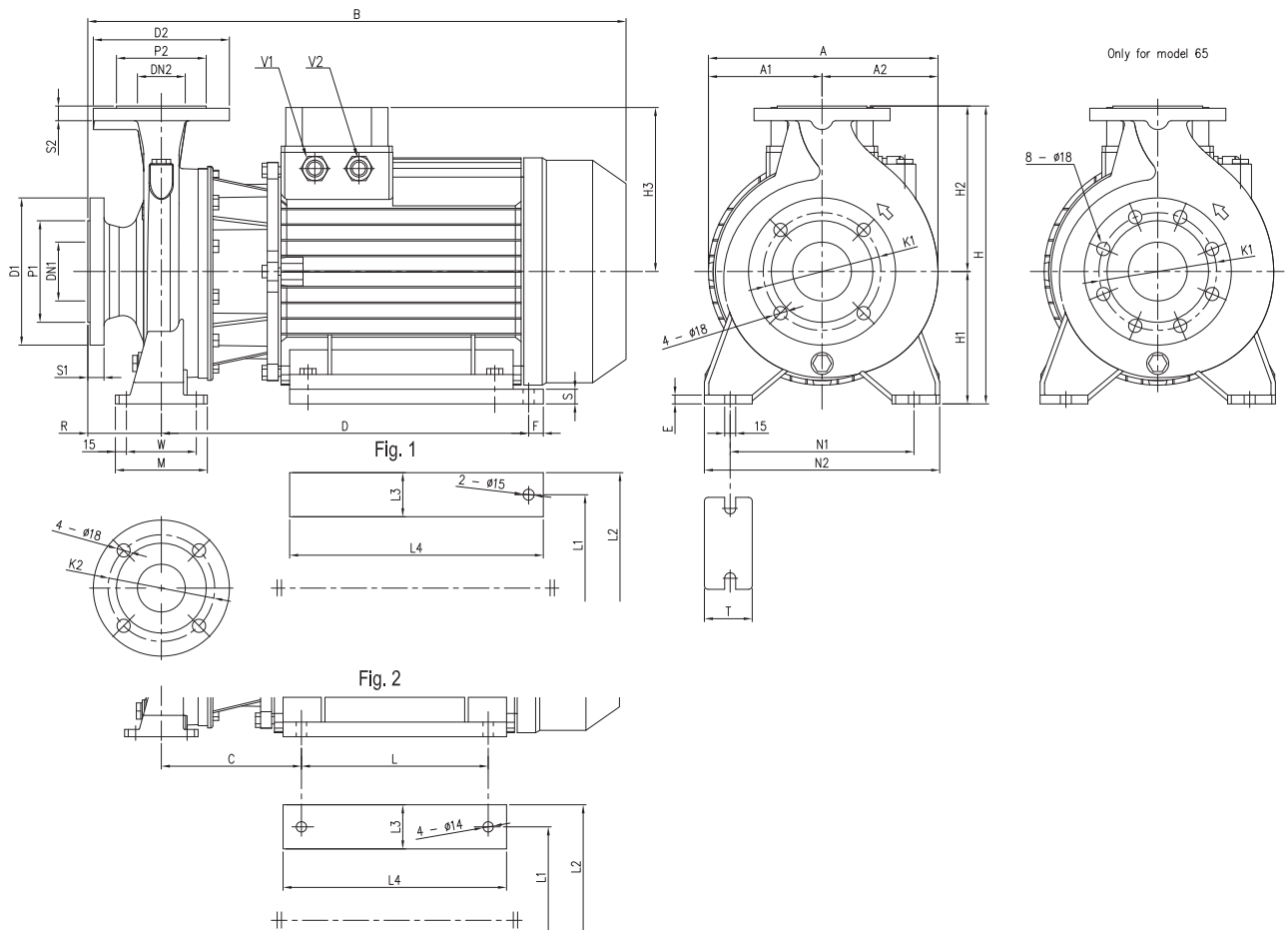


Model	Dimensions [ mm ]																												Weight [ kgf ]									
	Ø DN1	Ø P1	Ø K1	Ø D1	Ø DN2	Ø P2	Ø K2	Ø D2	Ø S2	H	H1	H2	H3 [1-] [3-]	R	W	M	N1	N2	T	E	A	A1	A2	B [1-] [3-]	C [1-] [3-]	V1 [3-] (°)	V2 [1-] [3-]	[1-] [3-]	[1-] [3-]									
32-125/1.1 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	141	119	80	70	100	140	190	50	10	213	106.5	106.5	408	431	219+230	232	-	-	M20x1.5	M16x1.5	25	29.5			
32-160/1.5 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	119	80	70	100	190	240	50	10	254	127	127	408	431	219+230	232	-	-	M20x1.5	M20x1.5	29	33.5			
32-160/2.2 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	119	80	70	100	190	240	50	10	254	127	127	408	431	219+230	232	-	-	M20x1.5	M20x1.5	35.7	36			
32-200/3.0	50	102	125	165	20	32	78	100	140	18	340	160	180	-	124	80	70	100	190	240	50	10	296	148	148	-	471	-	244+255	-	-	-	M20x1.5	-	47.5	-		
32-200/4.0	50	102	125	165	20	32	78	100	140	18	340	160	180	-	141	80	70	100	190	240	50	10	296	148	148	-	494	-	253	-	-	-	M20x1.5	-	50	-		
32-200/7.5	50	102	125	165	20	32	78	100	140	18	340	160	180	-	150	80	70	100	190	240	50	10	296	148	148	-	539	-	275	-	-	PG 13.5	-	PG 16	-	65.1	-	
40-125/1.5 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	141	119	80	70	100	160	210	50	10	220	108	112	408	431	219+230	232	-	-	M20x1.5	M20x1.5	25.5	30			
40-125/2.2 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	141	119	80	70	100	160	210	50	10	220	108	112	408	431	219+230	232	-	-	M20x1.5	M20x1.5	31.7	32			
40-160/3.0	65	122	145	185	20	40	88	110	150	18	292	132	160	-	124	80	70	100	190	240	50	10	254	127	127	-	471	-	244+255	-	-	-	M20x1.5	-	39	-		
40-160/4.0	65	122	145	185	20	40	88	110	150	18	292	132	160	-	141	80	70	100	190	240	50	10	254	127	127	-	494	-	253	-	-	-	M20x1.5	-	48	-		
40-200/5.5	65	122	145	185	20	40	88	110	150	18	340	160	180	-	150	100	70	100	212	265	50	10	296	148	148	-	539	-	275	-	-	PG 13.5	M20x1.5	-	M25x1.5	-	60	-
40-200/7.5	65	122	145	185	20	40	88	110	150	18	340	160	180	-	150	100	70	100	212	265	50	10	296	148	148	-	559	-	275	-	-	PG 13.5	-	PG 16	-	66.1	-	
40-200/11	65	122	145	185	20	40	88	110	150	18	340	160	180	-	178	100	70	100	212	265	50	10	296	148	148	-	595	-	329	-	-	PG 13.5	-	PG 21	-	82.4	-	
50-125/2.2 (M)	65	122	145	185	20	50	102	125	165	20	292	132	160	141	119	100	70	100	190	240	50	10	254	127	127	428	451	219+230	232	-	-	M20x1.5	M20x1.5	34.4	37			
50-125/3.0	65	122	145	185	20	50	102	125	165	20	292	132	160	-	124	100	70	100	190	240	50	10	254	127	127	-	491	-	244+255	-	-	-	M20x1.5	-	39.5	-		
50-125/4.0	65	122	145	185	20	50	102	125	165	20	292	132	160	-	141	100	70	100	190	240	50	10	254	127	127	-	514	-	253	-	-	-	M20x1.5	-	48	-		
50-160/5.5	65	122	145	185	20	50	102	125	165	20	340	160	180	-	150	100	70	100	212	265	50	10	296	148	148	-	539	-	275	-	-	PG 13.5	M20x1.5	-	M25x1.5	-	60	-
50-160/7.5	65	122	145	185	20	50	102	125	165	20	340	160	180	-	150	100	70	100	212	265	50	10	296	148	148	-	559	-	275	-	-	PG 13.5	-	PG 16	-	67.1	-	
50-200/9.2	65	122	145	185	20	50	102	125	165	20	360	160	200	-	178	100	70	100	212	265	50	10	296	148	148	-	595	-	329	-	-	PG 13.5	-	PG 21	-	77	-	
50-200/11	65	122	145	185	20	50	102	125	165	20	360	160	200	-	178	100	70	100	212	265	50	10	296	148	148	-	595	-	329	-	-	PG 13.5	-	PG 21	-	82.4	-	
65-125/4.0	80	138	160	200	22	65	122	145	185	20	340	160	180	-	141	100	95	125	212	280	65	12	263	127	136	-	514	-	253	-	-	-	M20x1.5	-	53	-		
65-125/5.5	80	138	160	200	22	65	122	145	185	20	340	160	180	-	150	100	95	125	212	280	65	12	263	127	136	-	539	-	275	-	-	PG 13.5	M20x1.5	-	M25x1.5	-	65	-
65-125/7.5	80	138	160	200	22	65	122	145	185	20	340	160	180	-	150	100	95	125	212	280	65	12	263	127	136	-	559	-	275	-	-	PG 13.5	-	PG 16	-	72.6	-	
65-160/7.5	80	138	160	200	22	65	122	145	185	20	360	160	200	-	150	100	95	125	212	280	65	12	296	148	148	-	559	-	275	-	-	PG 13.5	-	PG 16	-	73.1	-	
65-160/9.2	80	138	160	200	22	65	122	145	185	20	360	160	200	-	178	100	95	125	212	280	65	12	296	148	148	-	595	-	329	-	-	PG 13.5	-	PG 21	-	85	-	
65-160/11	80	138	160	200	22	65	122	145	185	20	360	160	200	-	178	100	95	125	212	280	65	12	296	148	148	-	595	-	329	-	-	PG 13.5	-	PG 21	-	87.4	-	



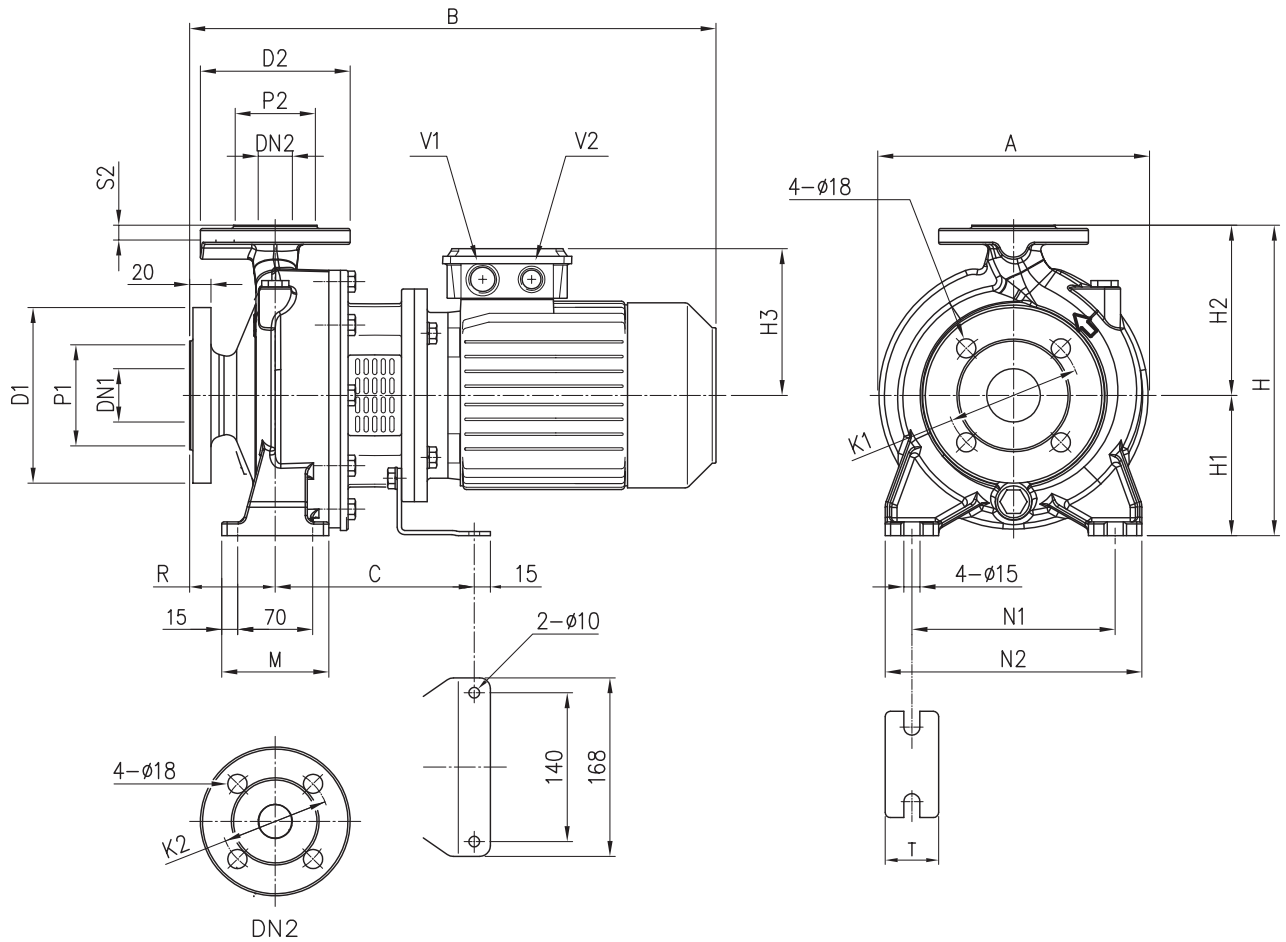
**PUMP 3D**

15 kW AND ABOVE



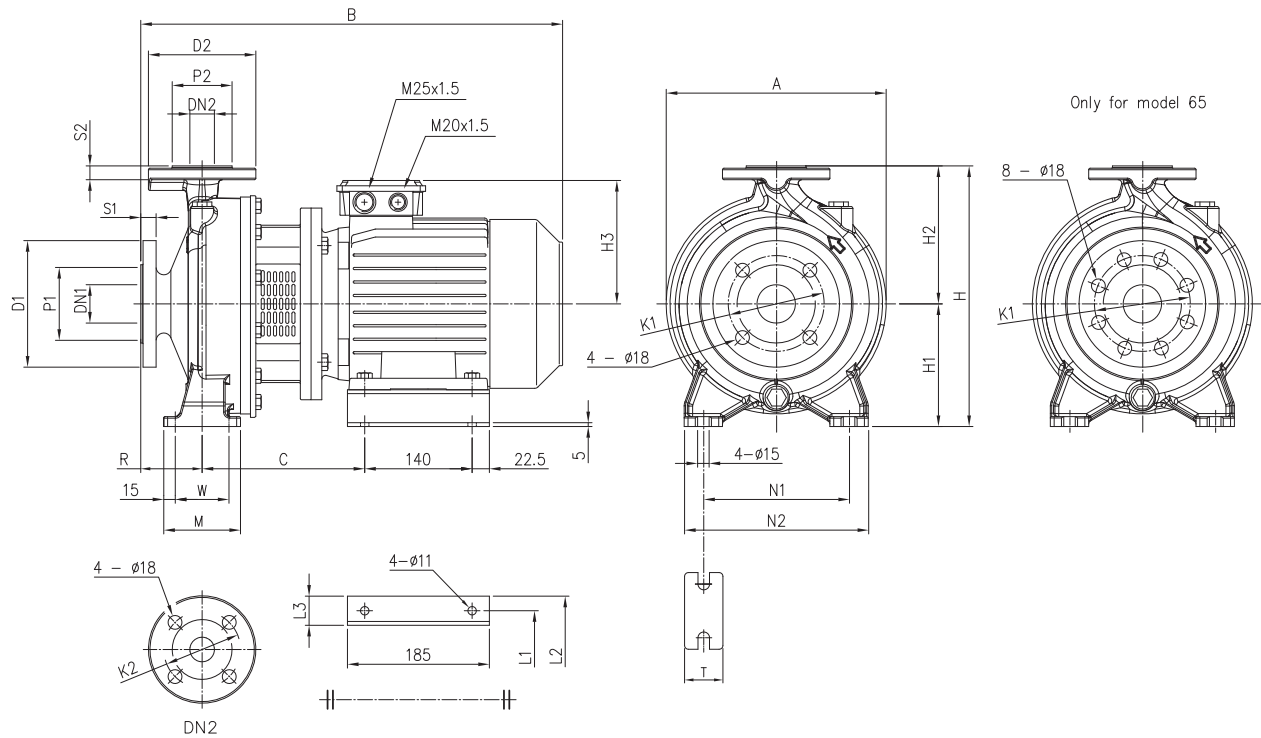
Model	Dimensions [ mm ]																										Weight [ kgf ]											
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	Fig.	R	W	M	N1	N2	T	E	A	A1	A2	B		C	L	L1	L2	L3	L4	D	F	S	V1	V2
50-200/15	65	122	145	185	20	50	102	125	165	20	360	160	200	223	2	100	70	100	212	265	50	10	296	154,5	141,5	723	190,5	254	254	318	64	304	-	-	-	PG 21	PG 21	124,1
65-160/15	80	138	160	200	22	65	122	145	185	20	360	160	200	223	2	100	95	125	212	280	65	12	296	154,5	141,5	732	199,5	254	254	318	64	304	-	-	-	PG 21	PG 21	129,1
65-200/15	80	138	160	200	22	65	122	145	185	20	405	180	225	223	1	100	95	125	250	320	65	12	312	154,5	157,5	732	-	-	254	314	60	345	499,5	20	20	PG 21	PG 21	129,1
65-200/18.5	80	138	160	200	22	65	122	145	185	20	405	180	225	223	1	100	95	125	250	320	65	12	312	154,5	157,5	732	-	-	254	314	60	345	499,5	20	20	PG 21	PG 21	146,3
65-200/22	80	138	160	200	22	65	122	145	185	20	405	180	225	223	1	100	95	125	250	320	65	12	312	154,5	157,5	732	-	-	254	314	60	345	499,5	20	20	PG 21	PG 21	158,1

**PUMP 3DS 32, 40, 50**



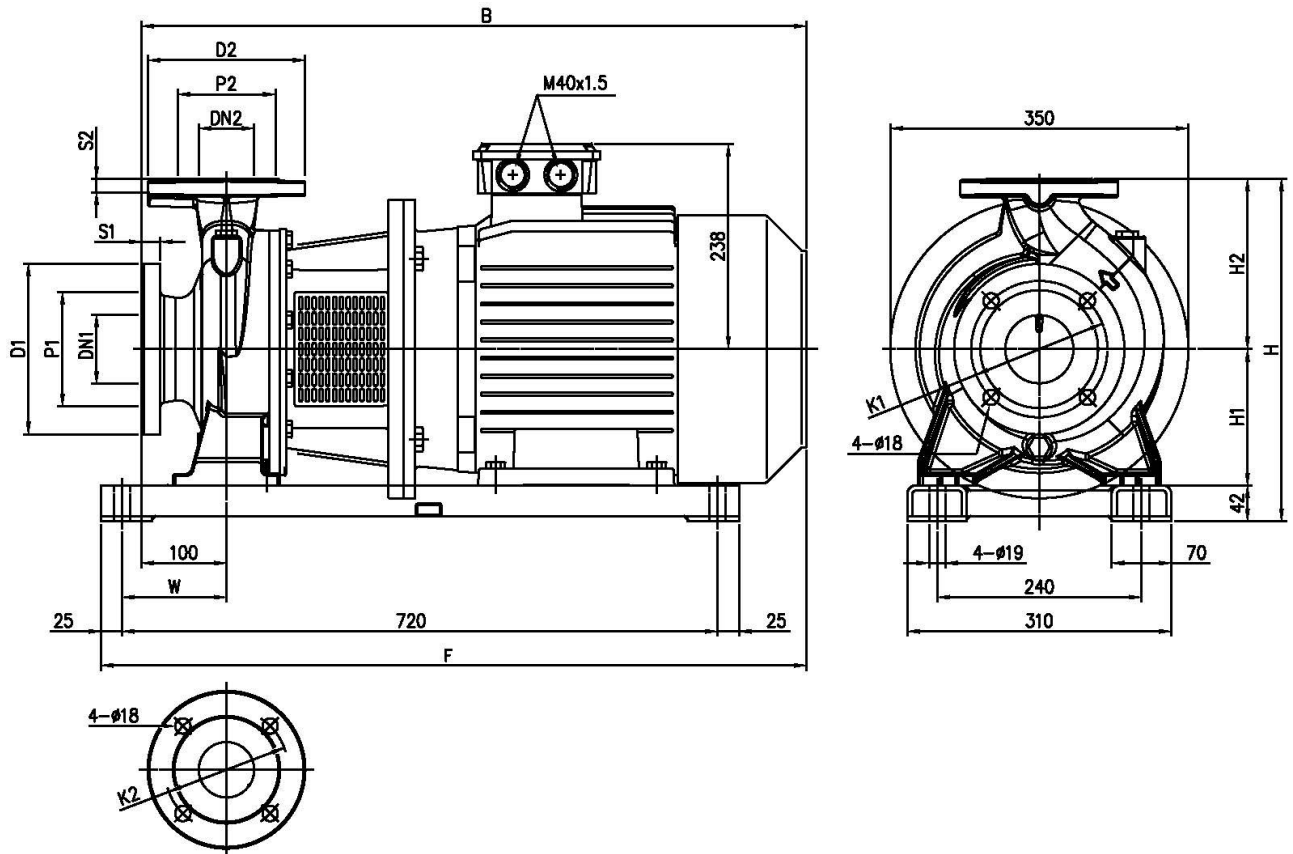
Model	Dimensions [ mm ]																				V1	V2	Weight Kgf	
	ø DN1	ø P1	ø K1	ø D1	ø DN2	ø P2	ø K2	ø D2	S2	H	H1	H2	H3	R	M	N1	N2	T	A	B				C
32-125/1.1	50	102	125	165	32	78	100	140	18	252	112	140	139	80	100	140	190	50	213	430	174	M25x1.5	M20x1.5	32.1
32-160/1.5	50	102	125	165	32	75	100	140	18	292	132	160	148	80	100	190	240	50	254	477	186	M25x1.5	M20x1.5	36.3
32-160/2.2	50	102	125	165	32	75	100	140	18	292	132	160	148	80	100	190	240	50	254	477	186	M25x1.5	M20x1.5	40.4
40-125/1.5	65	115	145	185	40	80	110	150	14	252	112	140	148	80	114	160	210	50	213	477	186	M25x1.5	M20x1.5	31.9
40-125/2.2	65	115	145	185	40	80	110	150	14	252	112	140	148	80	114	160	210	50	213	477	186	M25x1.5	M20x1.5	35.5
50-125/2.2	65	115	145	185	50	95	125	165	16	292	132	160	148	100	114	190	240	50	254	497	186	M25x1.5	M20x1.5	37.9

**PUMP 3DS 32, 65**



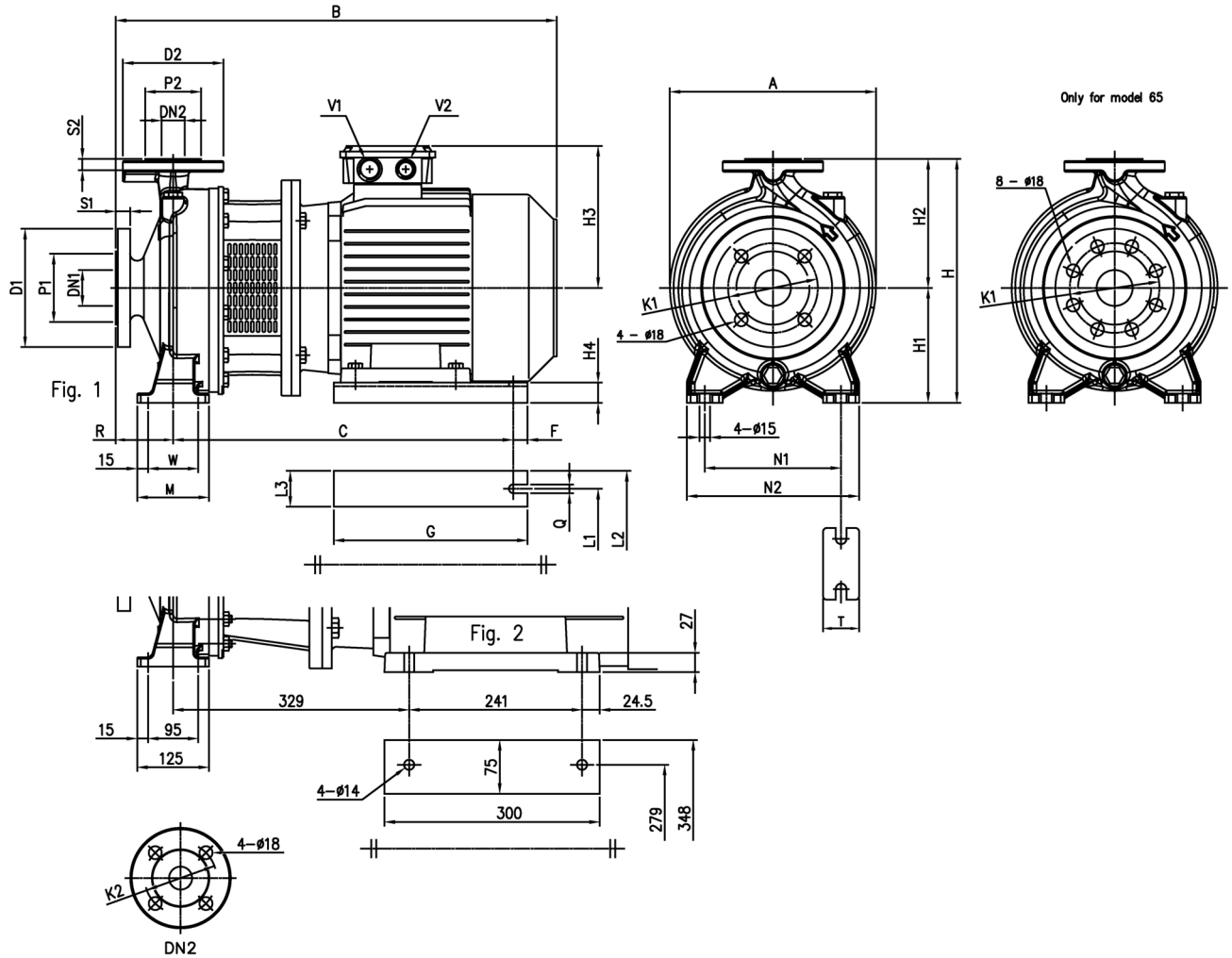
Model	Dimensions [ mm ]																							Weight Kgf			
	∅ DN1	∅ P1	∅ K1	∅ D1	S1	∅ DN2	∅ P2	∅ K2	∅ D2	S2	H	H1	H2	H3	R	W	M	N1	N2	T	A	B	C		L1	L2	L3
32-200/3.0	50	102	125	165	20	32	78	100	140	18	340	160	180	155	80	70	100	190	240	50	296	528	205	160	202	42	59,3
32-200/4.0	50	102	125	165	20	32	78	100	140	18	340	160	180	171	80	70	100	190	240	50	296	550	212	190	228	38	60,8
65-125/4.0	80	138	160	200	22	65	122	145	185	20	340	160	180	171	100	95	125	212	280	65	263	570	212	190	228	38	65,4

**PUMP 3DS 40, 50, 65**



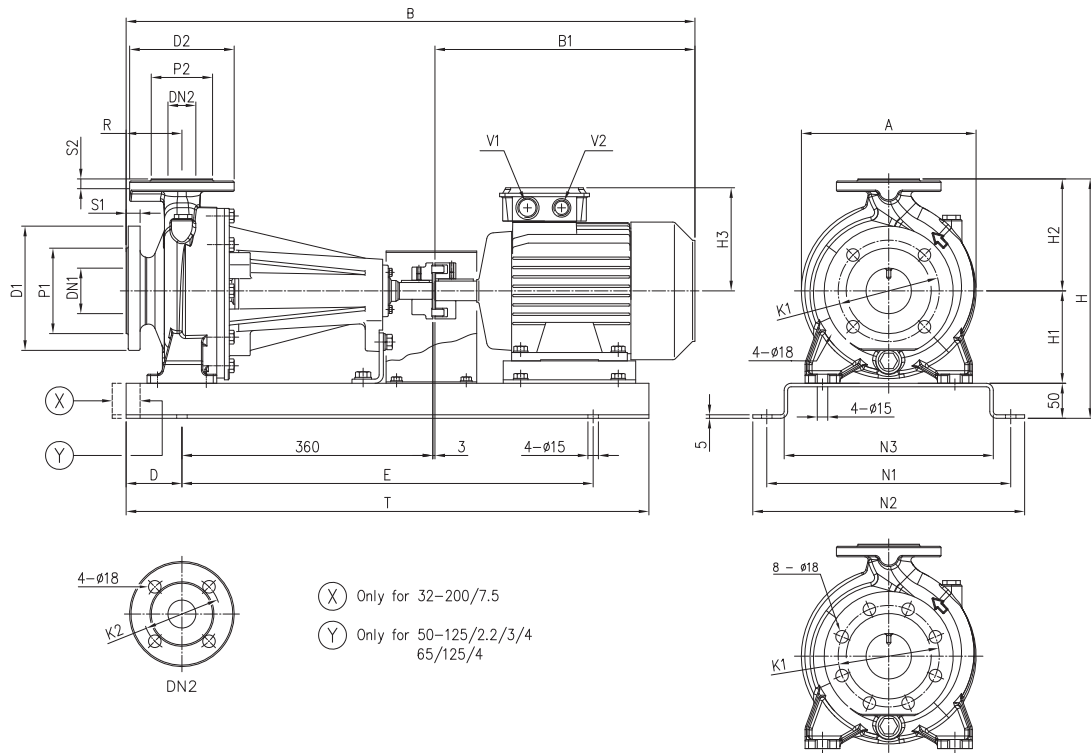
Model	Dimensions [ mm ]																Weight [ kgf ]
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	W	B	F	
40-200/11	65	122	145	185	20	40	88	110	150	18	382	160	180	110	796	833	130,8
50-200/11	65	122	145	185	20	50	102	125	165	20	402	160	200	110	796	833	130,8
50-200/15	65	122	145	185	20	50	102	125	165	20	402	160	200	110	796	833	166,9
65-160/11	80	138	160	200	22	65	115	145	185	20	402	160	200	123	796	844	106,8
65-160/15	80	138	160	200	22	65	115	145	185	20	402	160	200	123	806	856	142,9

**PUMP 3DS 32, 40, 50, 65**



Model	Dimensions [ mm ]																				Weight Kgf													
	Ø DN1	Ø P1	Ø K1	Ø D1	Ø S1	Ø DN2	Ø P2	Ø K2	Ø D2	Ø Fig.	H	H1	H2	H3	H4	R	W	M	N1	N2		T	A	B	C	F	G	Q	L1	L2	L3	V1	V2	
32-200/7.5	50	102	125	165	20	32	78	100	140	18	1	340	160	180	184	28	80	70	100	190	240	50	300	630	479	15	270	12	216	266	50	M32X1.5	M32X1.5	92
40-160/3.0	65	122	145	185	20	40	88	110	150	18	1	292	132	160	155	32	80	70	100	190	240	50	254	528	388	15	220	12	160	200	40	M25X1.5	M20X1.5	65.6
40-160/4.0	65	122	145	185	20	40	88	110	150	18	1	292	132	160	171	20	80	70	100	190	240	50	254	550	395	15	220	12	190	240	50	M25X1.5	M20X1.5	51.8
40-200/5.5	65	122	145	185	20	40	88	110	150	18	1	340	160	180	198	28	100	70	100	212	265	50	296	630	479	15	270	12	216	266	50	M32X1.5	M32X1.5	79.7
40-200/7.5	65	122	145	185	20	40	88	110	150	18	1	340	160	180	198	28	100	70	100	212	265	50	296	650	479	15	270	12	216	266	50	M32X1.5	M32X1.5	88.8
50-125/3.0	65	122	145	185	20	50	102	125	165	20	1	292	132	160	155	32	100	70	100	190	240	50	254	548	388	15	220	12	160	200	40	M25X1.5	M20X1.5	44.1
50-125/4.0	65	122	145	185	20	50	102	125	165	20	1	292	132	160	171	20	100	70	100	190	240	50	254	570	395	15	220	12	190	240	50	M25X1.5	M20X1.5	52.7
50-160/5.5	65	122	145	185	20	50	102	125	165	20	1	340	160	180	198	28	100	70	100	212	265	50	296	630	479	15	270	12	216	266	50	M32X1.5	M32X1.5	77.3
50-160/7.5	65	122	145	185	20	50	102	125	165	20	1	340	160	180	198	28	100	70	100	212	265	50	296	650	479	15	270	12	216	266	50	M32X1.5	M32X1.5	99.5
50-200/9.2	65	122	145	185	20	50	102	125	165	20	1	360	160	200	198	28	100	70	100	212	265	50	296	690	479	15	270	12	216	266	50	M32X1.5	M32X1.5	104
65-125/5.5	80	138	160	200	22	65	122	145	185	20	1	340	160	180	198	28	100	95	125	212	280	65	263	630	479	15	270	12	216	266	50	M32X1.5	M32X1.5	76.3
65-125/7.5	80	138	160	200	22	65	122	145	185	20	1	340	160	180	198	28	100	95	125	212	280	65	263	650	479	15	270	12	216	266	50	M32X1.5	M32X1.5	99.9
65-160/7.5	80	138	160	200	22	65	122	145	185	20	1	360	160	200	198	28	100	95	125	212	280	65	296	650	479	15	270	12	216	266	50	M32X1.5	M32X1.5	99.2
65-160/9.2	80	138	160	200	22	65	122	145	185	20	1	360	160	200	198	28	100	95	125	212	280	65	296	690	479	15	270	12	216	266	50	M32X1.5	M32X1.5	108
65-200/15	80	138	160	200	22	65	122	145	185	20	1	405	180	225	238	20	100	95	125	250	320	65	312	806	621	20	350	14	254	314	60	M40X1.5	M40X1.5	156.9
65-200/18.5	80	138	160	200	22	65	122	145	185	20	1	405	180	225	238	20	100	95	125	250	320	65	312	850	621	20	350	14	254	314	60	M40X1.5	M40X1.5	158.5
65-200/22	80	138	160	200	22	65	122	145	185	20	2	405	180	225	268	-	100	-	-	250	320	65	312	885	-	-	-	-	-	-	-	M40X1.5	M40X1.5	197

**PUMP 3DP 32, 40, 50, 65**

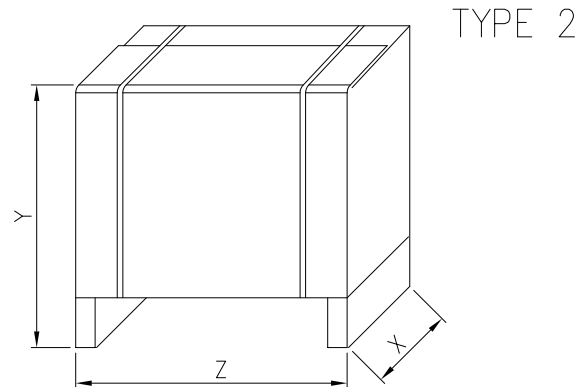
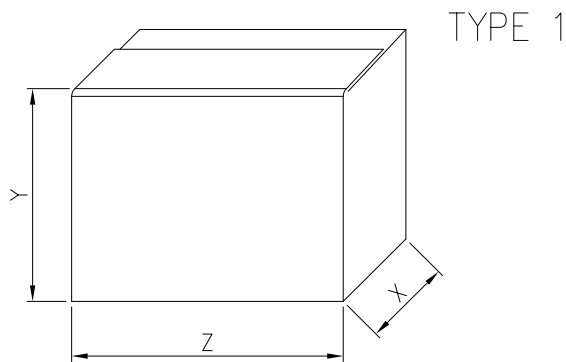


Model	Dimensions [ mm ]																							Weight Kgf			
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	R	A	B	B1	D	E	N1	N2	N3		T	V1	V2
32-125/1.1	50	102	125	165	20	32	78	100	140	18	302	112	140	139	80	213	715	272	80	550	300	340	250	710	M25x1.5	M20x1.5	62.1
32-160/1.5	50	102	125	165	20	32	78	100	140	18	342	132	160	148	80	254	760	317	80	590	350	390	300	750	M25x1.5	M20x1.5	58.5
32-160/2.2	50	102	125	165	20	32	78	100	140	18	342	132	160	148	80	254	760	317	80	590	350	390	300	750	M25x1.5	M20x1.5	61.5
32-200/3.0	50	102	125	165	20	32	78	100	140	18	390	160	180	155	80	296	809	366	80	590	350	390	300	750	M25x1.5	M20x1.5	83.9
32-200/4.0	50	102	125	165	20	32	78	100	140	18	390	160	180	171	80	296	831	388	80	590	350	390	300	750	M25x1.5	M20x1.5	86.9
32-200/7.5	50	102	125	165	20	32	78	100	140	18	390	160	180	198	80	296	908	442	100	650	350	390	300	850	M32x1.5	M32x1.5	117.2
40-125/1.5	65	122	145	185	20	40	88	110	150	18	302	112	140	148	80	220	760	317	80	550	300	340	250	710	M25x1.5	M20x1.5	76.2
40-125/2.2	65	122	145	185	20	40	88	110	150	18	302	112	140	148	80	220	760	317	80	550	300	340	250	710	M25x1.5	M20x1.5	56.9
40-160/3.0	65	122	145	185	20	40	88	110	150	18	342	132	160	155	80	254	809	366	80	590	350	390	300	750	M25x1.5	M20x1.5	93.4
40-160/4.0	65	122	145	185	20	40	88	110	150	18	342	132	160	171	80	254	831	388	80	590	350	390	300	750	M25x1.5	M20x1.5	74.8
40-200/5.5	65	122	145	185	20	40	88	110	150	18	390	160	180	198	100	296	908	442	100	650	350	390	300	850	M32x1.5	M20x1.5	105
40-200/7.5	65	122	145	185	20	40	88	110	150	18	390	160	180	198	100	296	928	442	100	650	350	390	300	850	M32x1.5	M32x1.5	113.7
40-200/11	65	122	145	185	20	40	88	110	150	18	390	160	180	238	100	296	1071	610	100	800	380	420	330	1000	M40x1.5	M40x1.5	140.6
50-125/2.2	65	122	145	185	20	50	102	125	165	20	342	132	160	148	100	254	780	317	80	550	350	390	300	710	M25x1.5	M20x1.5	80
50-125/3.0	65	122	145	185	20	50	102	125	165	20	342	132	160	155	100	254	829	366	80	590	350	390	300	750	M25x1.5	M20x1.5	91.1
50-125/4.0	65	122	145	185	20	50	102	125	165	20	342	132	160	171	100	254	851	388	80	590	350	390	300	750	M25x1.5	M20x1.5	91.7
50-160/5.5	65	122	145	185	20	50	102	125	165	20	390	160	180	198	100	296	908	442	100	650	350	390	300	850	M32x1.5	M32x1.5	111.5
50-160/7.5	65	122	145	185	20	50	102	125	165	20	390	160	180	198	100	296	928	442	100	650	350	390	300	850	M32x1.5	M32x1.5	115.4
50-200/9.2	65	122	145	185	20	50	102	125	165	20	410	160	200	198	100	296	968	482	100	650	350	390	300	850	M32x1.5	M32x1.5	124.1
50-200/11	65	122	145	185	20	50	102	125	165	20	410	160	200	238	100	296	1071	610	100	800	380	420	330	1000	M40x1.5	M32x1.5	144.4
50-200/15	65	122	145	185	20	50	102	125	165	20	410	160	200	238	100	296	1071	610	100	800	380	420	330	1000	M40x1.5	M40x1.5	154.4
65-125/4.0	80	138	160	200	22	65	122	145	185	20	390	160	180	171	100	263	851	388	80	590	350	390	300	750	M25x1.5	M20x1.5	70.9
65-125/5.5	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	263	908	442	100	650	350	390	300	850	M32x1.5	M32x1.5	115.3
65-125/7.5	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	263	928	442	100	650	350	390	300	850	M32x1.5	M32x1.5	129.9
65-160/7.5	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	928	442	100	650	350	390	300	850	M32x1.5	M32x1.5	133.2
65-160/9.2	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	968	482	100	650	350	390	300	850	M32x1.5	M32x1.5	138
65-160/11	80	138	160	200	22	65	122	145	185	20	410	160	200	238	100	296	1071	610	100	800	380	420	330	1000	M40x1.5	M40x1.5	144.8
65-160/15	80	138	160	200	22	65	122	145	185	20	455	160	200	238	100	296	1071	610	100	800	380	420	330	1000	M40x1.5	M40x1.5	151
65-200/15	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	312	1071	610	100	800	380	420	330	1000	M40x1.5	M40x1.5	156
65-200/18.5	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	312	1115	654	100	800	380	420	330	1000	M40x1.5	M40x1.5	156.2

Only for model 65

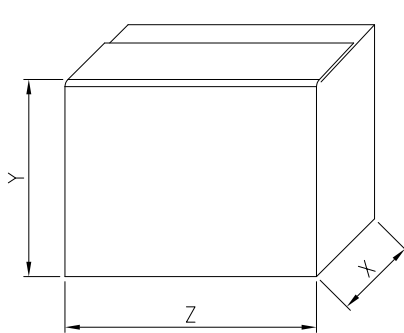


PACKING 3D

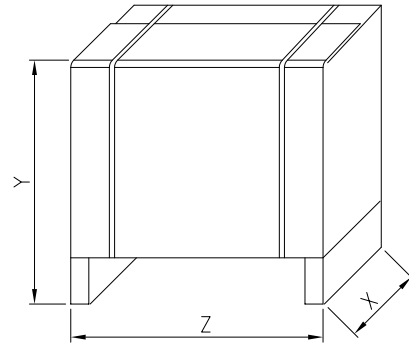


Pump type	Packing [ mm ]			Weight [ kgf ]		Pack type
	X	Y	Z	[1~]	[3~]	
32-125/1.1 (M)	250	300	450	30,4	31,5	1
32-160/1.5 (M)	280	330	460	30,7	35,5	
32-160/2.2 (M)	280	340	490	38,67	44,87	
32-200/3.0	350	488	550	-	52,4	2
32-200/4.0	350	488	550	-	53,8	
32-200/7.5	350	488	700	-	69,4	
40-125/1.5 (M)	250	300	450	29,9	39,12	1
40-125/2.2 (M)	280	340	490	33,82	34	
40-160/3.0	350	488	550	-	39,8	2
40-160/4.0	350	488	550	-	52,6	
40-200/5.5	350	488	550	-	64,4	
40-200/7.5	350	488	700	-	71,5	
40-200/11	350	488	700	-	93,4	
50-125/2.2 (M)	280	340	490	36,1	39	1
50-125/3.0	350	488	550	-	40,1	2
50-125/4.0	350	488	550	-	52,6	
50-160/5.5	350	488	550	-	64,2	
50-160/7.5	350	488	700	-	71,7	
50-200/9.2	350	488	700	-	81,1	
50-200/11	350	488	700	-	87,4	
50-200/15	390	532	880	-	133,1	
65-125/4.0	350	488	550	-	57,9	
65-125/5.5	350	488	550	-	70,8	
65-125/7.5	350	488	700	-	81,8	
65-160/7.5	350	488	700	-	77,9	
65-160/9.2	350	488	700	-	93	
65-160/11	350	488	700	-	89,4	
65-160/15	390	532	880	-	138,6	
65-200/15	390	532	880	-	138,1	
65-200/18.5	390	532	880	-	155,8	
65-200/22	390	532	880	-	170,6	

**PACKING 3DS**



TYPE 1

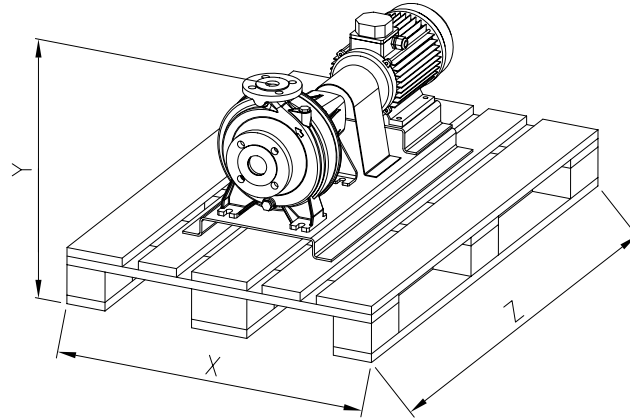


TYPE 2

Pump type	Packing [ mm ]			Weight Kgf	Pack Type
	X	Y	Z		
32-125/1.1	450	250	300	33,8	1
32-160/1.5	350	488	580	41,2	
32-160/2.2	350	488	580	43,9	
32-200/3.0	350	498	700	63,4	
32-200/4.0	350	498	700	63,7	
32-200/7.5	350	498	700	97	
40-125/1.5	350	488	580	36	
40-125/2.2	350	488	580	39,7	
40-160/3.0	350	498	700	68,5	
40-160/4.0	350	498	700	56,2	
40-200/5.5	350	498	700	83,9	
40-200/7.5	350	498	700	101	
40-200/11	390	598	970	159,3	
50-125/2.2	350	498	700	42,9	
50-125/3.0	350	498	700	45,1	
50-125/4.0	350	498	700	57,8	
50-160/5.5	350	498	700	81,3	
50-160/7.5	350	498	700	111,8	
50-200/9.2	390	598	880	108	
50-200/11	390	598	880	138,8	
50-200/15	390	598	880	191,9	
65-125/4.0	350	498	700	72,6	
65-125/5.5	350	498	700	81,7	
65-125/7.5	350	498	700	105,6	
65-160/7.5	350	498	700	104,8	
65-160/9.2	390	598	880	109	
65-160/11	390	598	970	108,8	
65-160/15	390	598	970	150,9	
65-200/15	390	598	880	162,9	
65-200/18.5	390	598	970	165,5	
65-200/22	500	727	1100	219	

2

**PACKING 3DP**



Pump type	Packing [ mm ]			Wweight Kgf
	X	Y	Z	
32-125/1.1	800	394	1200	65,6
32-160/1.5		434		72,0
32-160/2.2				75,0
32-200/3.0				97,5
32-200/4.0		482		100,5
32-200/7.5				130,7
40-125/1.5				89,7
40-125/2.2		394		70,5
40-160/3.0				107,0
40-160/4.0		434		88,3
40-200/5.5				118,5
40-200/7.5		482		127,2
40-200/11				154,1
50-125/2.2				93,5
50-125/3.0				104,5
50-125/4.0				105,2
50-160/5.5				125,0
50-160/7.5				129,0
50-200/9.2				137,6
50-200/11		502		157,9
50-200/15		167,9		
65-125/4.0		84,4		
65-125/5.5		128,8		
65-125/7.5	482	143,5		
65-160/7.5		146,7		
65-160/9.2		151,5		
65-160/11	502	158,3		
65-160/15		164,5		
65-200/15		169,5		
65-200/18.5	547	169,7		
65-200/22		224,5		

**MOTOR DATA 3D**

Pump type		Power		Capacitor		Efficiency (% load)			Input		Full load current				Locked rotor current			
Single Phase	Three Phase	[kW]	[HP]	Single Phase		Three phase			Single Phase	Three Phase	[A]				[A]			
				[μF]	[V]	η %	50%	75%			100%	230 V	230 V	400 V	690 V	230 V	230 V	400 V
3D 32-125/1.1 M	3D 32-125/1.1	1,1	1,5	31,5	450	83,5	84,3	84,6	1,51	1,77	6,7	5,8	3,3	-	23,5	47,4	27,4	-
3D 32-160/1.5 M	3D 32-160/1.5	1,5	2,0	40	450	83,5	84,3	84,6	2,10	1,77	9,6	5,8	3,3	-	47	47,4	27,4	-
3D 32-160/2.2 M	3D 32-160/2.2	2,2	3,0	50	450	86,2	87,0	86,0	2,95	2,55	13,3	8,2	4,7	-	63,8	66,6	38,4	-
-	3D 32-200/3.0	3,0	4,0	-	-	85,9	87,5	87,1	-	3,44	-	11,1	6,4	-	-	90,0	52,0	-
-	3D 32-200/4.0	4,0	5,5	-	-	85,8	88,3	88,4	-	4,52	-	15,1	8,7	-	-	131,8	76,1	-
-	3D 32-200/7.5	7,5	10,0	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
3D 40-125/1,5 M	3D 40-125/1.5	1,5	2,0	40	450	83,5	84,3	84,6	2,10	1,77	9,6	5,8	3,3	-	47	47,4	27,4	-
3D 40-125/2.2 M	3D 40-125/2.2	2,2	3,0	50	450	86,2	87,0	86,0	2,95	2,55	13,3	8,2	4,7	-	63,8	66,6	38,4	-
-	3D 40-160/3.0	3,0	4,0	-	-	85,9	87,5	87,1	-	3,44	-	11,1	6,4	-	-	90,0	52,0	-
-	3D 40-160/4.0	4,0	5,5	-	-	85,8	88,3	88,4	-	4,52	-	15,1	8,7	-	-	131,8	76,1	-
-	3D 40-200/5.5	5,5	7,5	-	-	89,2	90,6	90,4	-	6,09	-	-	10,6	6,1	-	-	115,3	67,0
-	3D 40-200/7.5	7,5	10,0	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
-	3D 40-200/11	11,0	15,0	-	-	90,4	91,2	91,8	-	11,98	-	-	21,3	12,3	-	-	184,0	107,0
3D 50-125/2.2 M	3D 50-125/2.2	2,2	3,0	50	450	86,2	87,0	86,0	2,95	2,55	13,3	8,2	4,7	-	63,8	66,6	38,4	-
-	3D 50-125/3.0	3,0	4,0	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1	-	-	100,0	57,7	-
-	3D 50-125/3.0	3,0	4,0	-	-	85,9	87,5	87,1	-	3,44	-	11,1	6,4	-	-	90,0	52,0	-
-	3D 50-125/4.0	4,0	5,5	-	-	85,8	88,3	88,4	-	4,52	-	15,1	8,7	-	-	131,8	76,1	-
-	3D 50-160/5.5	5,5	7,5	-	-	89,2	90,6	90,4	-	6,09	-	-	10,6	6,1	-	-	115,3	67,0
-	3D 50-160/7.5	7,5	10,0	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
-	3D 50-200/9.2	9,2	12,5	-	-	90,1	90,8	90,9	-	10,12	-	-	17,2	10,0	-	-	166,0	96,0
-	3D 50-200/11	11,0	15,0	-	-	90,4	91,2	91,8	-	11,98	-	-	21,3	12,3	-	-	184,0	107,0
-	3D 50-200/15	15,0	20,0	-	-	91,2	92,0	91,9	-	18,00	-	-	30,0	17,3	-	-	225,0	130,0
-	3D 65-125/4.0	4,0	5,5	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7	-	-	151,0	87,0	-
-	3D 65-125/4	4,0	5,5	-	-	85,8	88,3	88,4	-	4,52	-	15,1	8,7	-	-	131,8	76,1	-
-	3D 65-125/5.5	5,5	7,5	-	-	82,9	86,0	87,4	-	6,29	-	-	10,4	6,0	-	-	116,0	67,0
-	3D 65-125/5.5	5,5	7,5	-	-	89,2	90,6	90,4	-	6,09	-	-	10,6	6,1	-	-	115,3	67,0
-	3D 65-125/7.5	7,5	10,0	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
-	3D 65-160/7.5	7,5	10,0	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
-	3D 65-160/9.2	9,2	12,5	-	-	90,1	90,8	90,9	-	10,12	-	-	17,2	10,0	-	-	166,0	96,0
-	3D 65-160/11	11,0	15,0	-	-	90,4	91,2	91,8	-	11,98	-	-	21,3	12,3	-	-	184,0	107,0
-	3D 65-160/15	15,0	20,0	-	-	91,2	92,0	91,9	-	16,32	-	-	27,7	17,3	-	-	225,0	130,0
-	3D 65-200/15	15,0	20,0	-	-	91,2	92,0	91,9	-	16,32	-	-	27,7	17,3	-	-	225,0	130,0
-	3D 65-200/18.5	18,5	25,0	-	-	91,6	93,0	92,6	-	19,98	-	-	35,0	20,3	-	-	328,0	190,0
-	3D 65-200/22	22,0	30,0	-	-	92,0	93,1	93,2	-	23,58	-	-	39,7	23,6	-	-	391,0	227,0

**MOTOR DATA 3DS-3DP**

Pump Type		Motor Size	Motor Power		Input [kW]	Efficiency (% load)				Full load current [A]			Locked rotor current [A]		
			[kW]	[HP]		$\eta$ %			$\cos-\phi$	230 V	400 V	690 V	230 V	400 V	690 V
			50%	75%		100%	230 V	400 V	690 V	230 V	400 V	690 V			
3DS 32-125/1.1	3DP 32-125/1.1	80	1,1	1,5	1,26	78,7	81,7	82,7	0,8	4,2	2,4	-	38,7	22,3	-
3DS 32-160/1.5	3DP 32-160/1.5	90S	1,5	2	1,77	83,2	84,8	84,2	0,9	5,2	3,0	-	43,6	25,2	-
3DS 32-160/2.2	3DP 32-160/2.2	90L	2,2	3	2,61	85,0	86,2	86,5	0,8	8,0	4,6	-	73,3	42,3	-
3DS 32-200/3.0	3DP 32-200/3.0	100L	3	4	3,45	82,3	85,8	87,1	0,9	9,7	5,6	-	85,4	49,3	-
3DS 32-200/4.0	3DP 32-200/4.0	112M	4	5,5	4,51	86,8	87,8	88,1	0,9	12,1	7,0	-	116,4	67,2	-
3DS 32-200/7.5	3DP 32-200/7.5	132S	7,5	10	8,35	88,6	89,2	90,1	0,9	-	13,1	7,6	-	116,6	67,3
3DS 40-125/1.5	3DP 40-125/1.5	90S	1,5	2	1,77	83,2	84,8	84,2	0,9	5,2	3,0	-	43,6	25,2	-
3DS 40-125/2.2	3DP 40-125/2.2	90L	2,2	3	2,61	85,0	86,2	86,5	0,8	8,0	4,6	-	73,3	42,3	-
3DS 40-160/3.0	3DP 40-160/3.0	100L	3	4	3,45	82,3	85,8	87,1	0,9	9,7	5,6	-	85,4	49,3	-
3DS 40-160/4.0	3DP 40-160/4.0	112M	4	5,5	4,51	86,8	87,8	88,1	0,9	12,1	7,0	-	116,4	67,2	-
3DS 40-200/5.5	3DP 40-200/5.5	132S	5,5	7,5	6,24	88,0	88,5	89,2	0,9	-	10,0	5,8	-	89,0	51,4
3DS 40-200/7.5	3DP 40-200/7.5		7,5	10	8,35	88,6	89,2	90,1	0,9	-	13,1	7,6	-	116,6	67,3
3DS 40-200/11	3DP 40-200/11	160M	11	15	12,15	87,4	89,8	91,2	0,9	-	19,7	11,4	-	179,3	103,5
3DS 50-125/2.2	3DP 50-125/2.2	90L	2,2	3	2,61	85,0	86,2	86,5	0,8	8,0	4,6	-	73,3	42,3	-
3DS 50-125/3.0	3DP 50-125/3.0	100L	3	4	3,45	82,3	85,8	87,1	0,9	9,7	5,6	-	85,4	49,3	-
3DS 50-125/4.0	3DP 50-125/4.0	112M	4	5,5	4,51	86,8	87,8	88,1	0,9	12,1	7,0	-	116,4	67,2	-
3DS 50-160/5.5	3DP 50-160/5.5	132S	5,5	7,5	6,24	88,0	88,5	89,2	0,9	-	10,0	5,8	-	89,0	51,4
3DS 50-160/7.5	3DP 50-160/7.5		7,5	10	8,35	88,6	89,2	90,1	0,9	-	13,1	7,6	-	116,6	67,3
3DS 50-200/9.2	3DP 50-200/9.2	132M	9,2	12,5	10,17	88,6	89,8	90,7	0,9	-	16,5	9,5	-	166,7	96,2
3DS 50-200/11	3DP 50-200/11	160M	11	15	12,15	87,4	89,8	91,2	0,9	-	19,7	11,4	-	179,3	103,5
3DS 50-200/15	3DP 50-200/15		15	20	16,46	91,0	91,3	91,9	0,9	-	26,7	15,4	-	259,0	149,5
3DS 65-125/4	3DP 65-125/4	112M	4	5,5	4,51	86,8	87,8	88,1	0,9	12,1	7,0	-	116,4	67,2	-
3DS 65-125/5.5	3DP 65-125/5.5	132S	5,5	7,5	6,24	88,0	88,5	89,2	0,9	-	10,0	5,8	-	89,0	51,4
3DS 65-125/7.5	3DP 65-125/7.5		7,5	10	8,35	88,6	89,2	90,1	0,9	-	13,1	7,6	-	116,6	67,3
3DS 65-160/7.5	3DP 65-160/7.5		7,5	10	8,35	88,6	89,2	90,1	0,9	-	13,1	7,6	-	116,6	67,3
3DS 65-160/9.2	3DP 65-160/9.2	132M	9,2	12,5	10,17	88,6	89,8	90,7	0,9	-	16,5	9,5	-	166,7	96,2
3DS 65-160/11	3DP 65-160/11	160M	11	15	12,15	87,4	89,8	91,2	0,9	-	19,7	11,4	-	179,3	103,5
3DS 65-160/15	3DP 65-160/15		15	20	16,46	91,0	91,3	91,9	0,9	-	26,7	15,4	-	259,0	149,5
3DS 65-200/15	3DP 65-200/15		15	20	16,46	91,0	91,3	91,9	0,9	-	26,7	15,4	-	259,0	149,5
3DS 65-200/18.5	3DP 65-200/18.5	160L	18,5	25	20,12	91,6	92,8	92,4	0,9	-	33,0	19,1	-	353,1	203,9
3DS 65-200/22	3DP 65-200/22	180M	22	30	23,69	92,3	92,9	92,9	0,9	-	38,0	22,0	-	361,0	209,0

**3D NOISE DATA**

Pump type	Power		L <sub>pA</sub> - dB(A) *
	[kW]	[HP]	
3D 32-125/1.1 (M)	1,1	1,5	69
3D 32-160/1.5 (M)	1,5	2,0	
3D 32-160/2.2 (M)	2,2	3,0	
3D 32-200/3.0	3,0	4,0	76
3D 32-200/4.0	4,0	5,5	
3D 32-200/7.5	7,5	10,0	79
3D 40-125/1.5 (M)	1,5	2,0	69
3D 40-125/2.2 (M)	2,2	3,0	
3D 40-160/3.0	3,0	4,0	76
3D 40-160/4.0	4,0	5,5	
3D 40-200/5.5	5,5	7,5	79
3D 40-200/7.5	7,5	10,0	
3D 40-200/11	11,0	15,0	82
3D 50-125/2.2 (M)	2,2	3,0	69
3D 50-125/3.0	3,0	4,0	76
3D 50-125/4.0	4,0	5,5	
3D 50-160/5.5	5,5	7,5	79
3D 50-160/7.5	7,5	10,0	
3D 50-200/9.2	9,2	12,5	82
3D 50-200/11	11,0	15,0	
3D 50-200/15	15,0	20,0	86
3D 65-125/4.0	4,0	5,5	76
3D 65-125/5.5	5,5	7,5	79
3D 65-125/7.5	7,5	10,0	
3D 65-160/7.5	7,5	10,0	
3D 65-160/9.2	9,2	12,5	82
3D 65-160/11	11,0	15,0	
3D 65-160/15	15,0	20,0	86
3D 65-200/15	15,0	20,0	
3D 65-200/18.5	18,5	25,0	
3D 65-200/22	22,0	30,0	

\* Mean value of several measures at 1m distance around the pump  
Tolerance  $\pm 2.5$  dB.



**3DS-3DP NOISE DATA**

Pump Type		Motor Size	Motor Power		L <sub>pA</sub> - dB(A) *
			[kW]	[HP]	
3DS 32-125/1.1	3DP 32-125/1.1	80	1.1	1.5	<70
3DS 32-160/1.5	3DP 32-160/1.5	90S	1.5	2	
3DS 32-160/2.2	3DP 32-160/2.2	90L	2.2	3	
3DS 32-200/3.0	3DP 32-200/3.0	100L	3	4	
3DS 32-200/4.0	3DP 32-200/4.0	112M	4	5.5	
3DS 32-200/7.5	3DP 32-200/7.5	132S	7.5	10	72
3DS 40-125/1.5	3DP 40-125/1.5	90S	1.5	2	<70
3DS 40-125/2.2	3DP 40-125/2.2	90L	2.2	3	
3DS 40-160/3.0	3DP 40-160/3.0	100L	3	4	
3DS 40-160/4.0	3DP 40-160/4.0	112M	4	5.5	
3DS 40-200/5.5	3DP 40-200/5.5	132S	5.5	7.5	
3DS 40-200/7.5	3DP 40-200/7.5		7.5	10	72
3DS 40-200/11	3DP 40-200/11	160M	11	15	74
3DS 50-125/2.2	3DP 50-125/2.2	90L	2.2	3	<70
3DS 50-125/3.0	3DP 50-125/3.0	100L	3	4	
3DS 50-125/4.0	3DP 50-125/4.0	112M	4	5.5	
3DS 50-160/5.5	3DP 50-160/5.5	132S	5.5	7.5	72
3DS 50-160/7.5	3DP 50-160/7.5		7.5	10	
3DS 50-200/9.2	3DP 50-200/9.2	132M	9.2	12.5	74
3DS 50-200/11	3DP 50-200/11	160M	11	15	
3DS 50-200/15	3DP 50-200/15		15	20	
3DS 65-125/4	3DP 65-125/4	112M	4	5.5	<70
3DS 65-125/5.5	3DP 65-125/5.5	132S	5.5	7.5	72
3DS 65-125/7.5	3DP 65-125/7.5		7.5	10	
3DS 65-160/7.5	3DP 65-160/7.5		7.5	10	
3DS 65-160/9.2	3DP 65-160/9.2	132M	9.2	12.5	74
3DS 65-160/11	3DP 65-160/11	160M	11	15	
3DS 65-160/15	3DP 65-160/15		15	20	
3DS 65-200/15	3DP 65-200/15		15	20	
3DS 65-200/18.5	3DP 65-200/18.5	160L	18.5	25	
3DS 65-200/22	3DP 65-200/22	180M	22	30	77