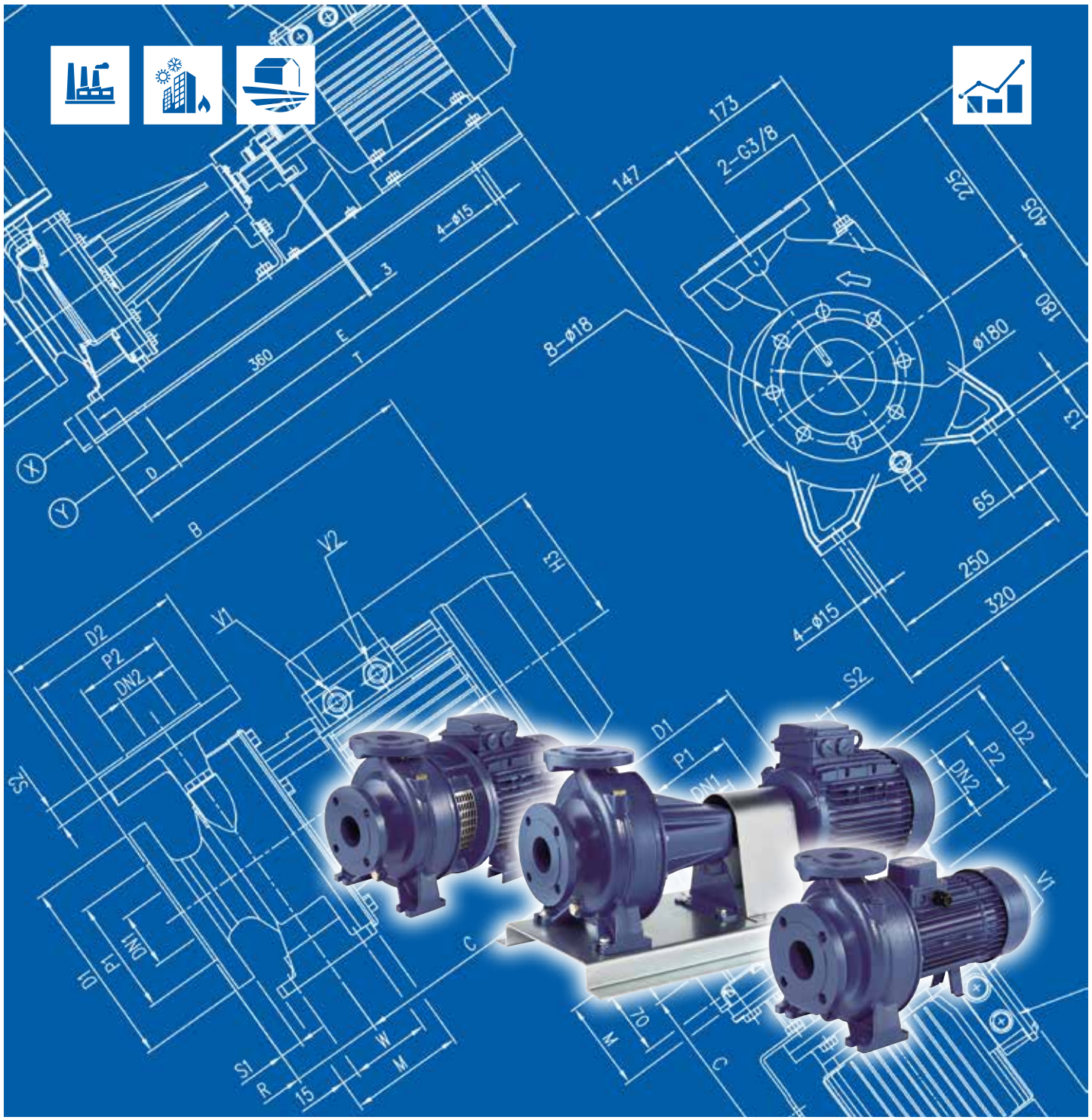




Japanese Technology since 1912

## 3D SERIES

Data Book 50Hz



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**SPECIFICATIONS**

50Hz

Rev. M

	Type of liquid	Clean water
Liquid Handled	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	ISO 9906:2012 – Grade 3B

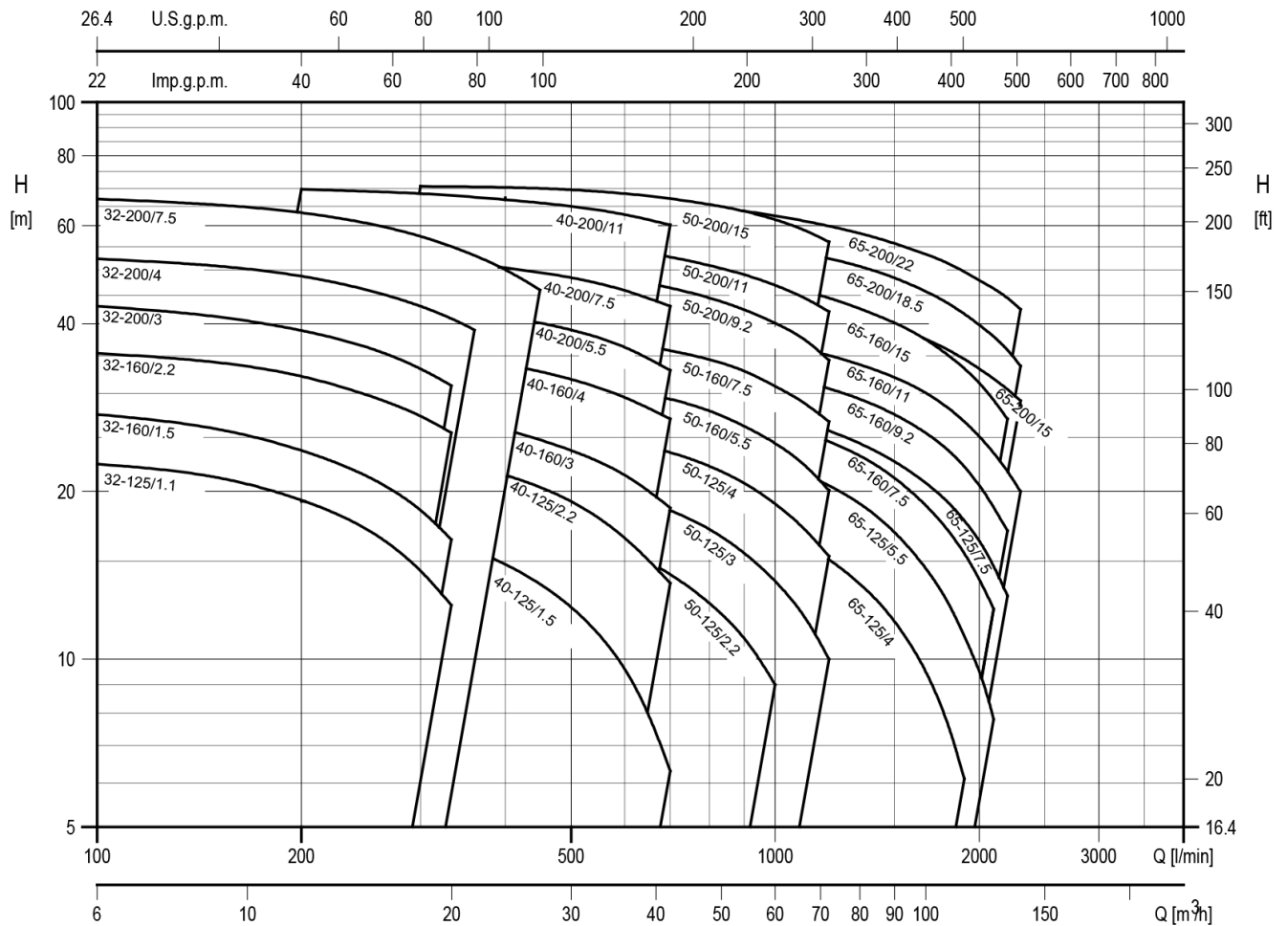
**SPECIFICATIONS**

50Hz

Rev. M

<b>MOTOR</b>			
Type	3D	3DS	3DP
		Electric - TEFC	
	Single Phase	Three Phase	
Efficiency (Reg. 640/2009)	-	IE2 from 1.1 kW to 5.5 kW IE3 from 1.1 kW to 22 kW	
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 ÷ 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
			m <sup>3</sup> /h									
			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
			m <sup>3</sup> /h									
			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
			m <sup>3</sup> /h									
			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
			m <sup>3</sup> /h									
			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

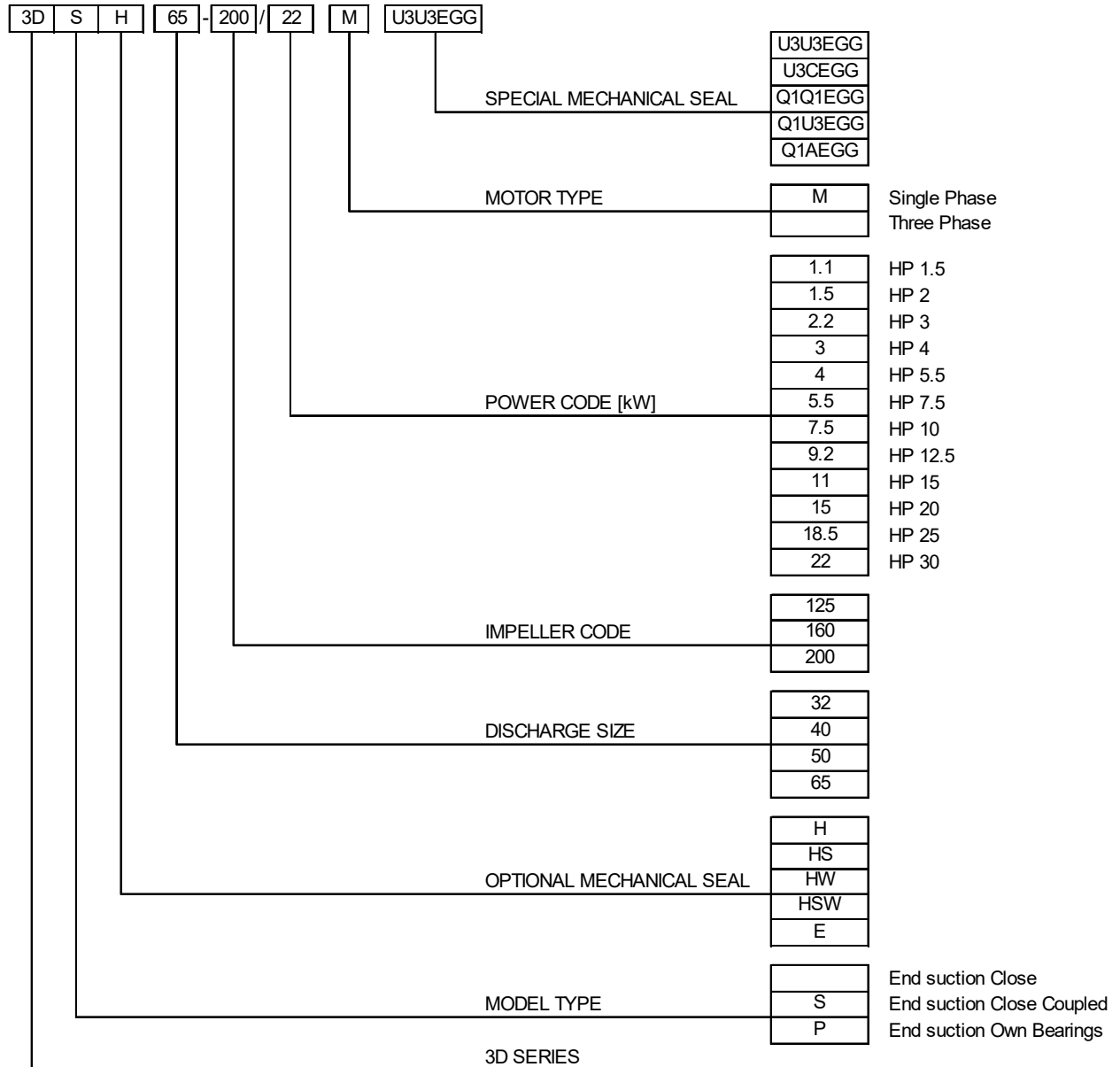
\* Single phase version only for 3D type

## TYPE KEY

50Hz

Rev. M

### 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

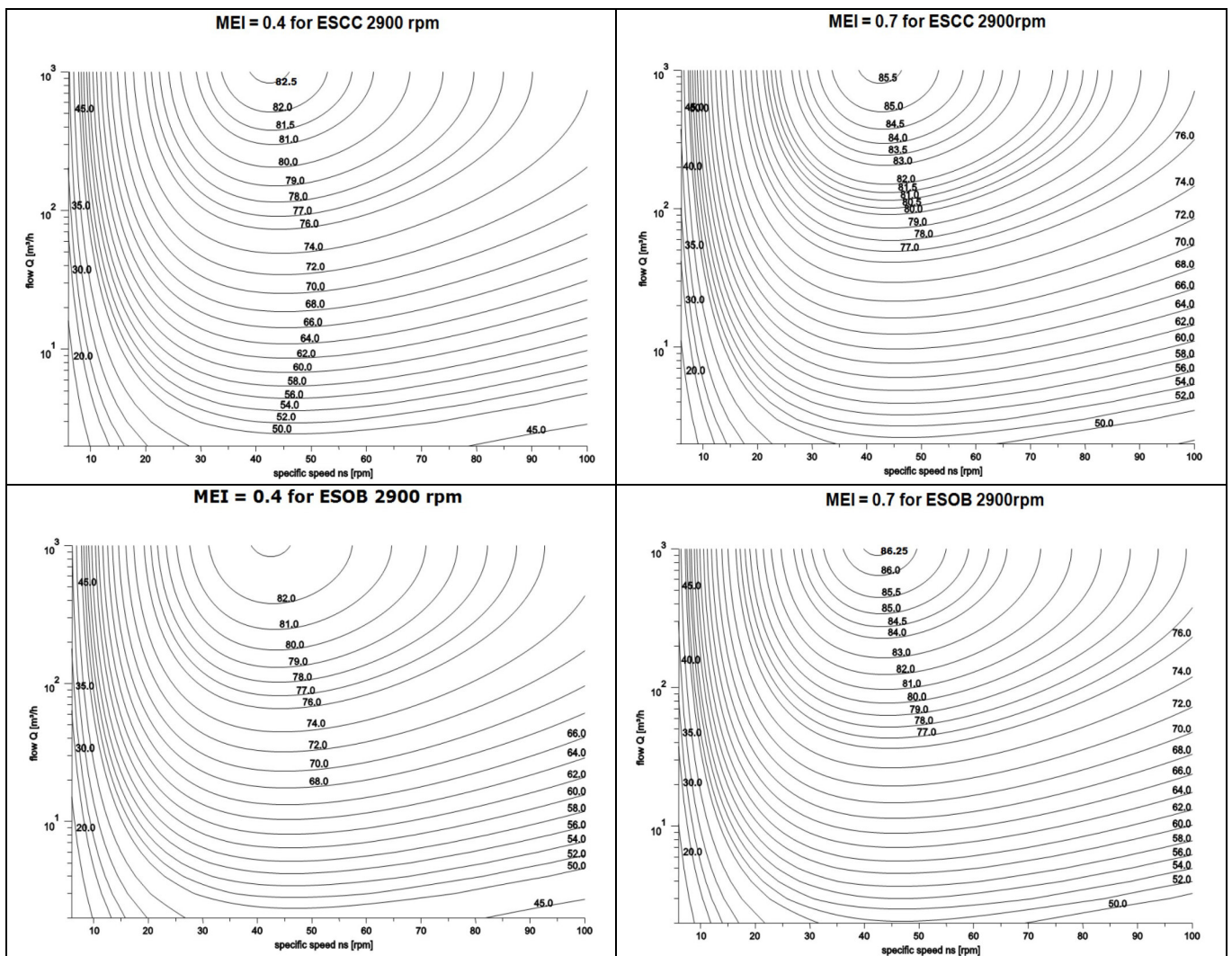


MEI INDEX SPECIFICATIONS

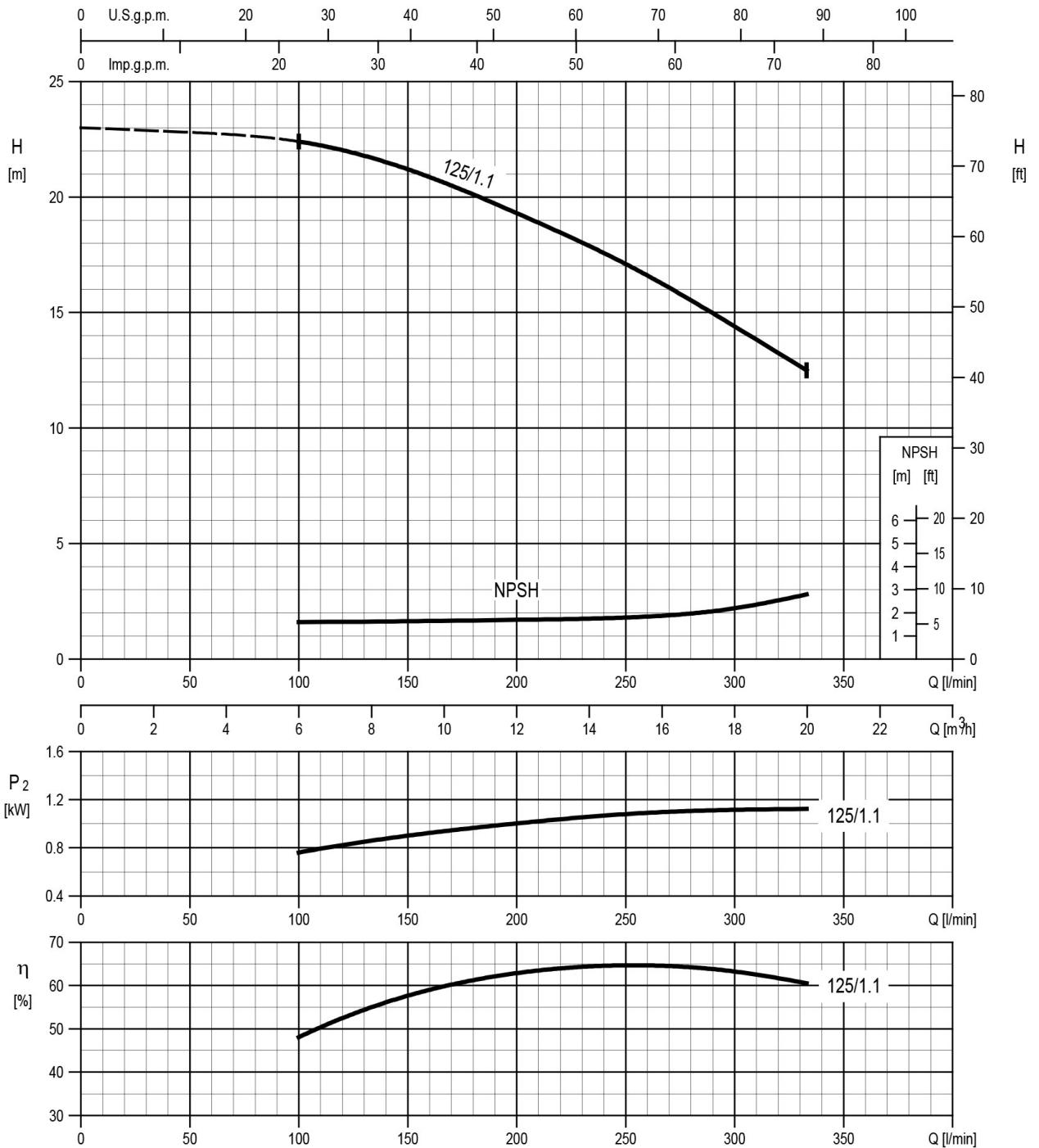
The minimum efficiency index (MEI) is a measure of the quality of a pump size in respect to its mean efficiency. The minimum efficiency index is based on the hydraulic efficiency and on the head at the best efficiency point.

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.

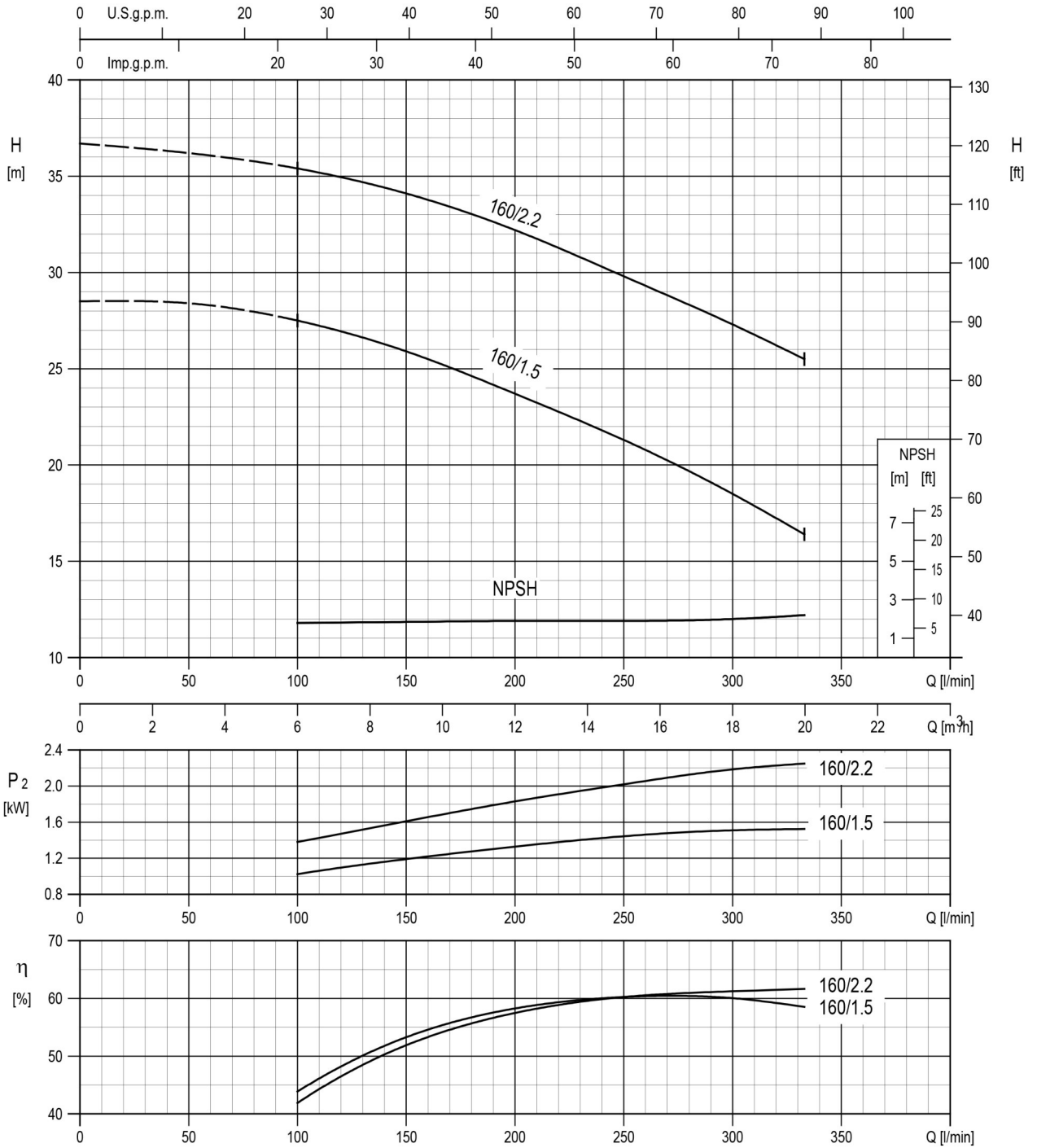


32-125/1.1 (1.1kW) MEI > 0.70 – Impeller diameter = 133 mm



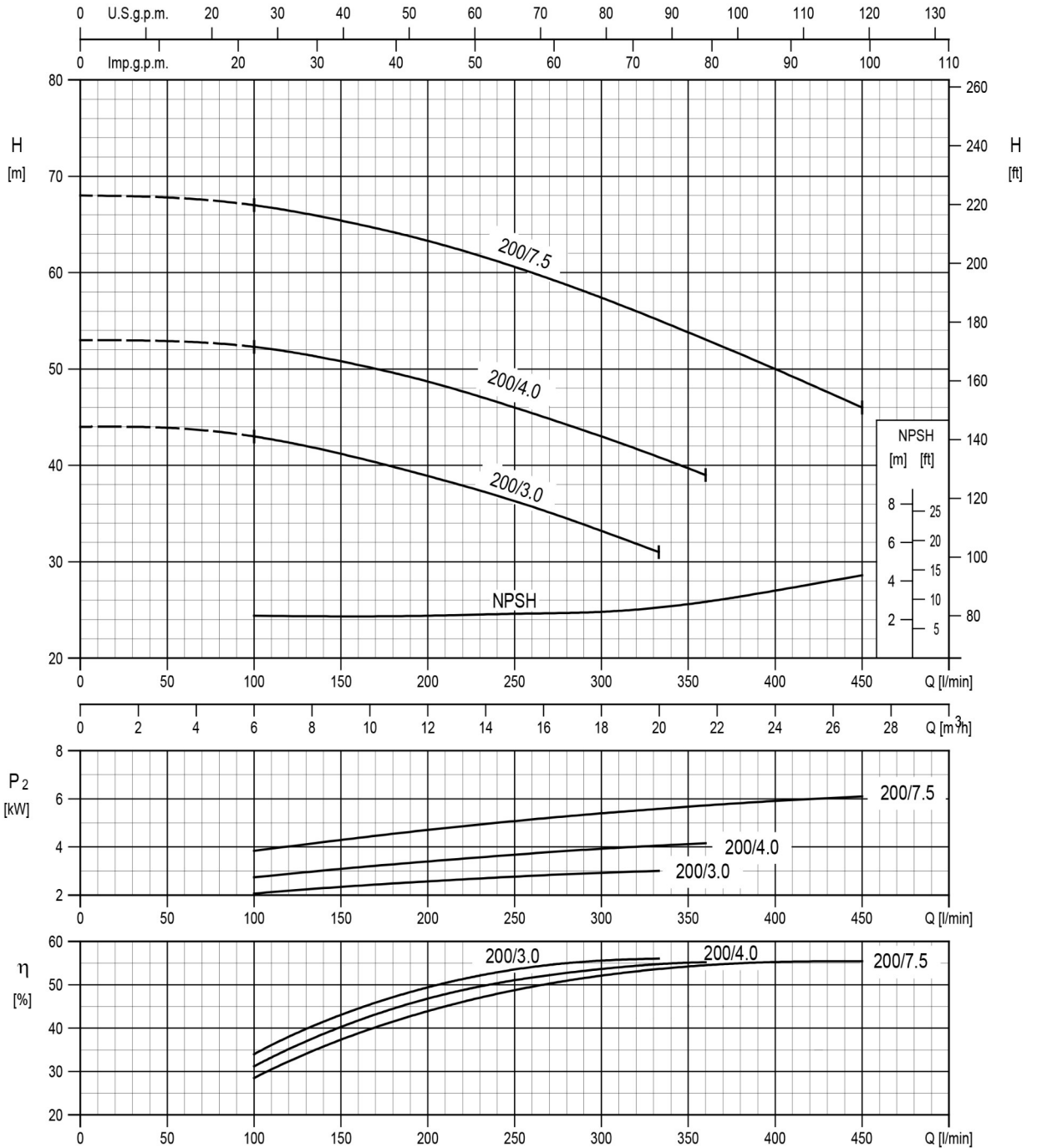
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

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



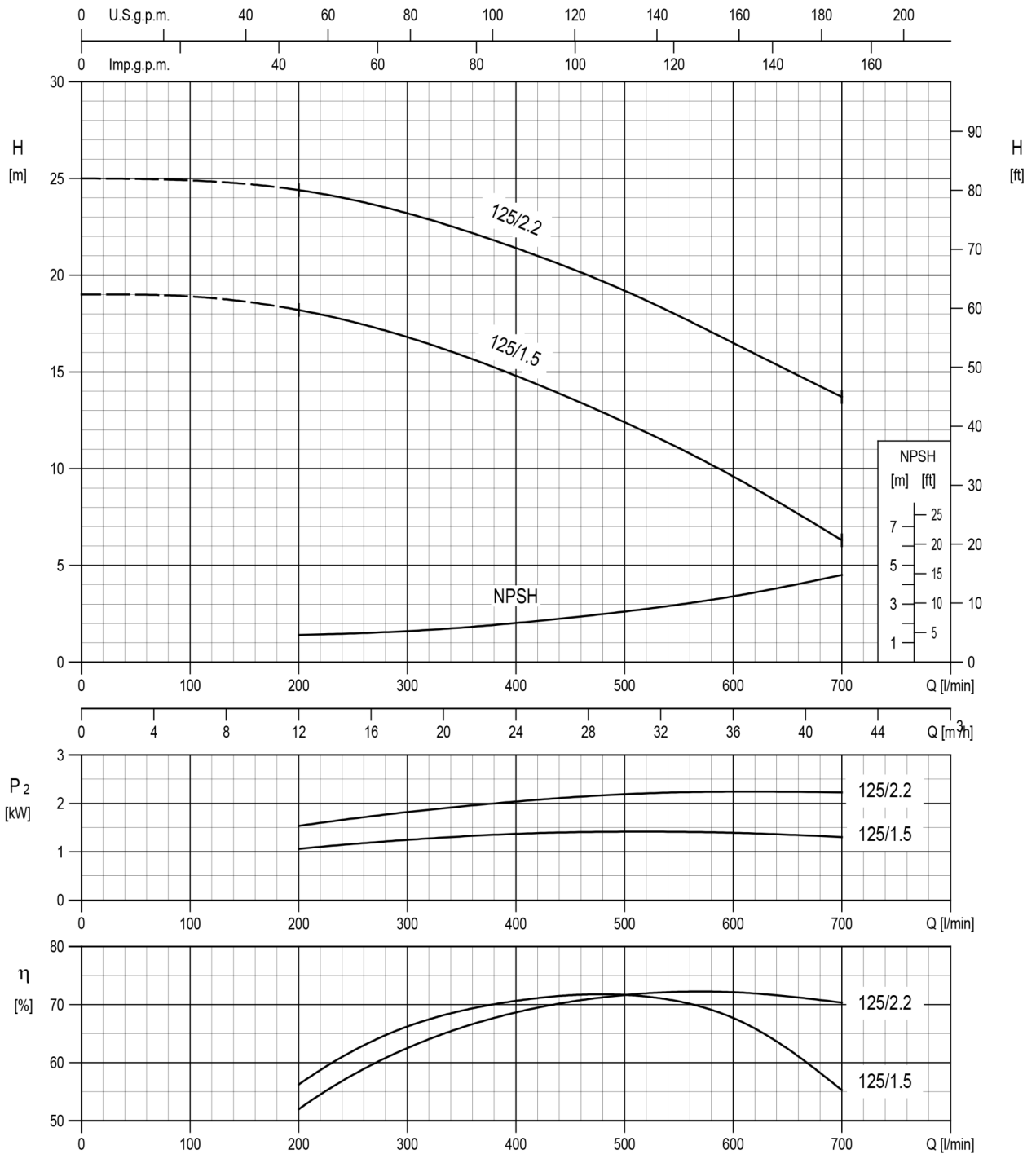
Rotation speed  $\approx 2900 \text{ min}^{-1}$   
 Test standard: ISO 9906:2012 – Grade 3B

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



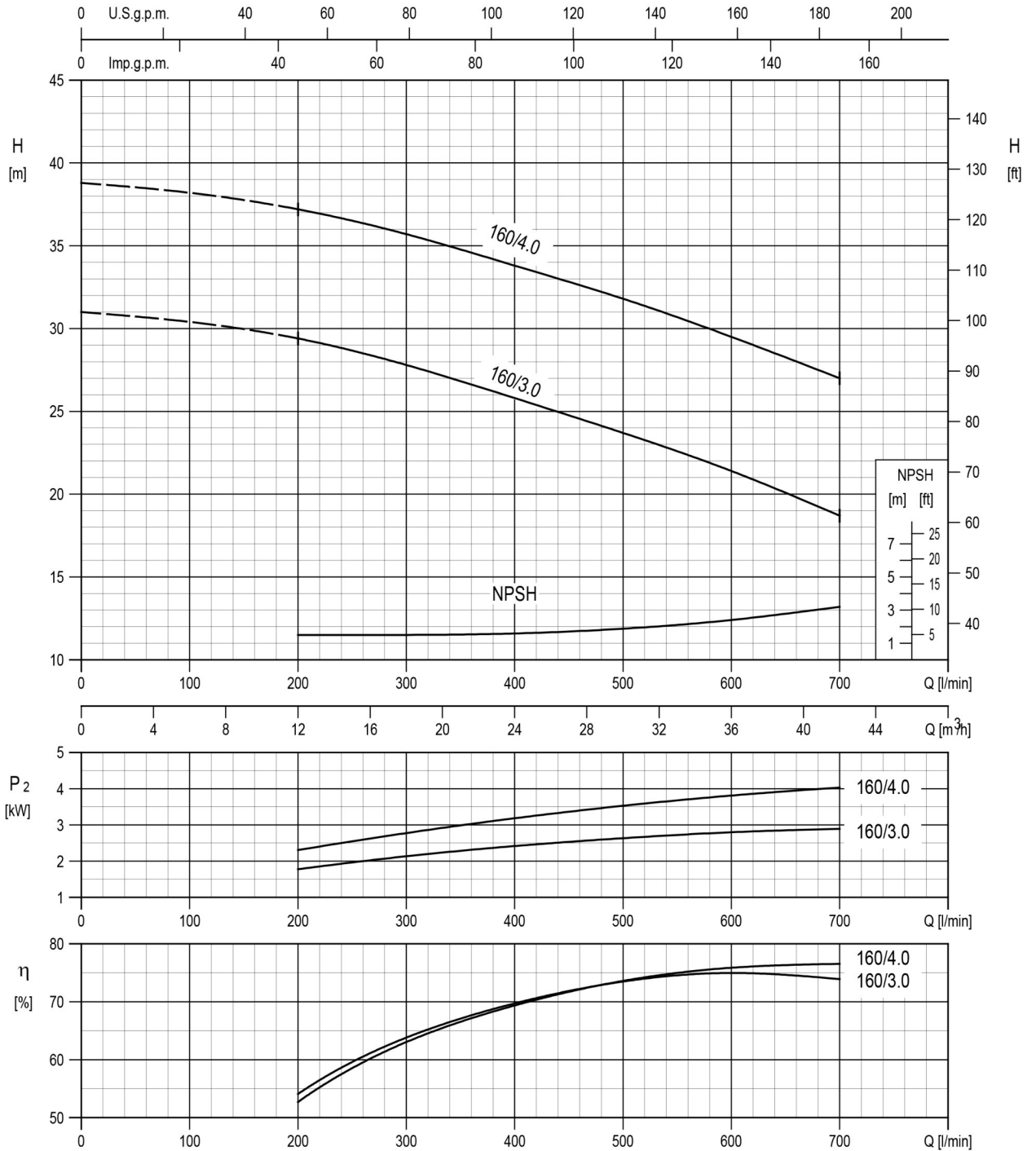
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

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



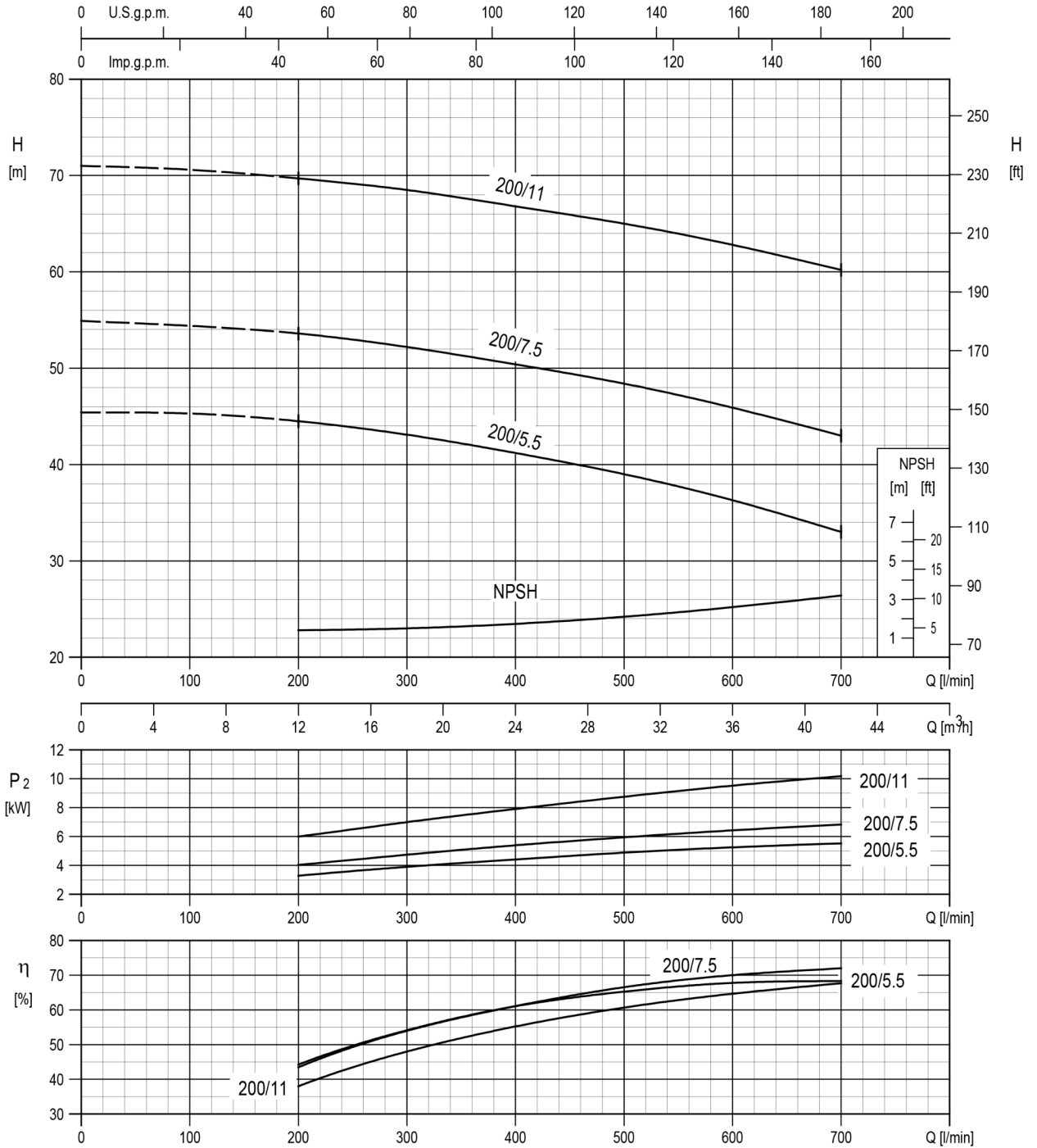
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

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 ≈ 2900 min<sup>-1</sup>  
 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



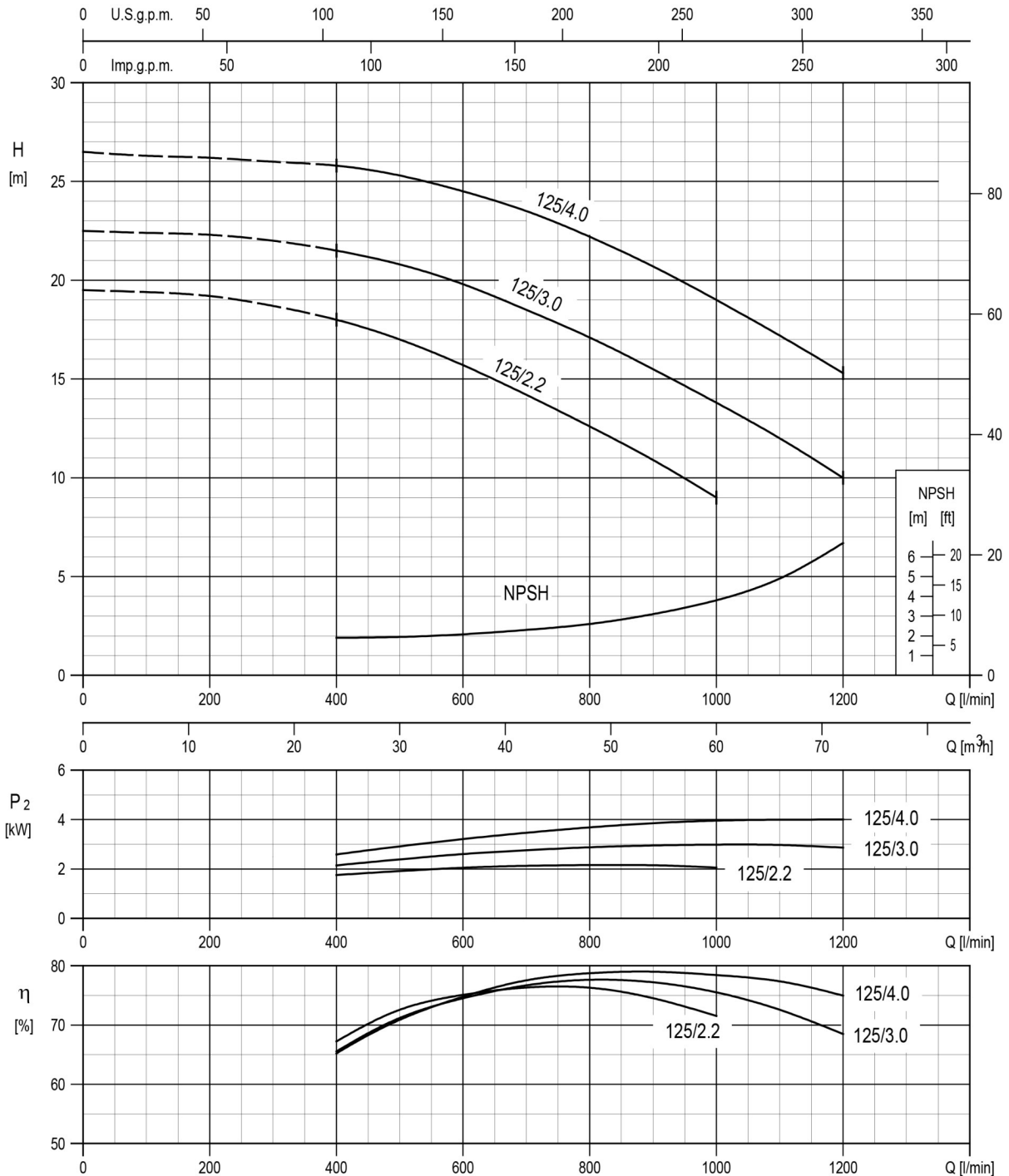
Rotation speed ≈ 2900 min<sup>-1</sup>

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

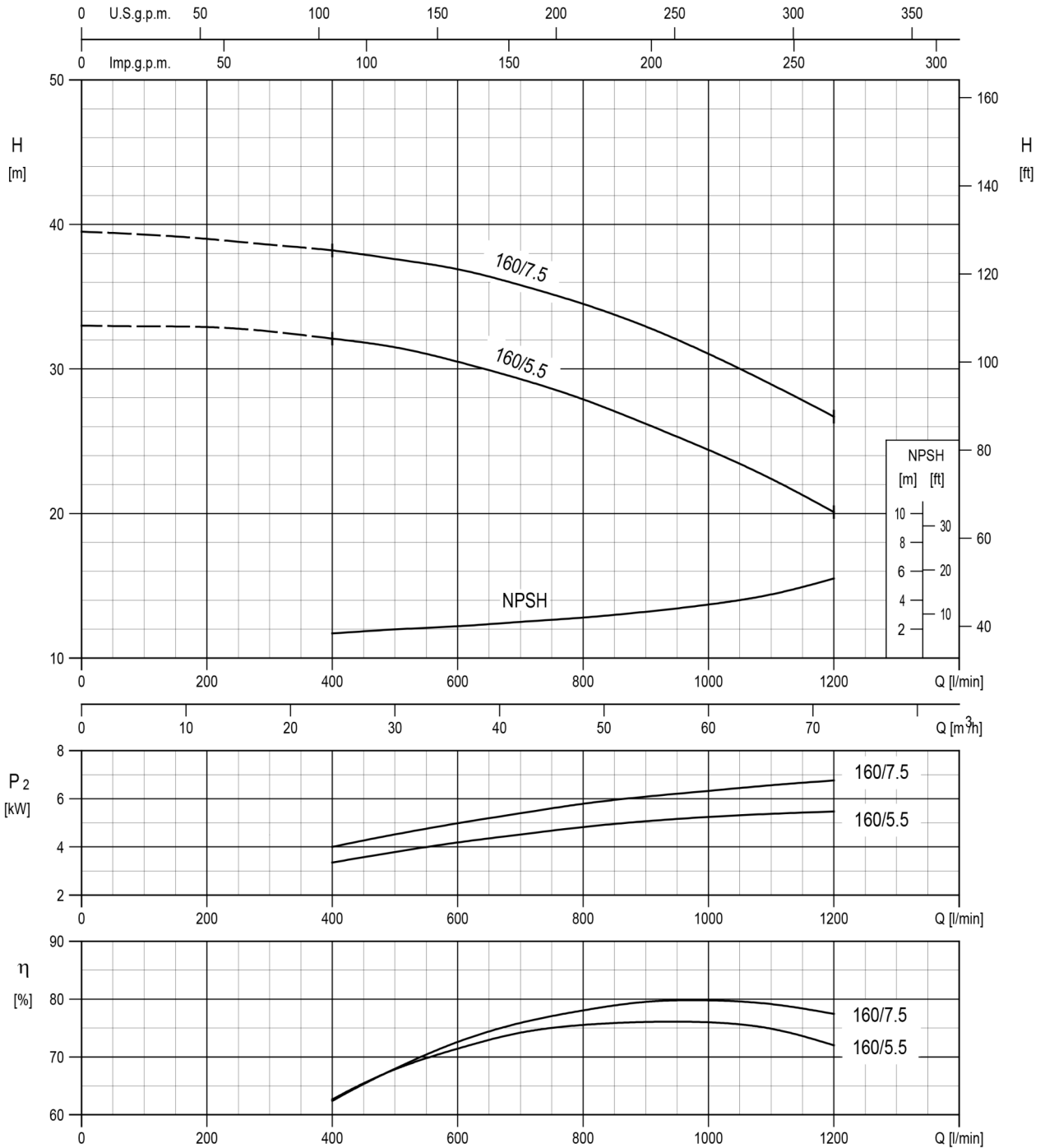
50-125/4.0 (4.0kW) MEI > 0.60 – Impeller diameter = 140 mm



Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

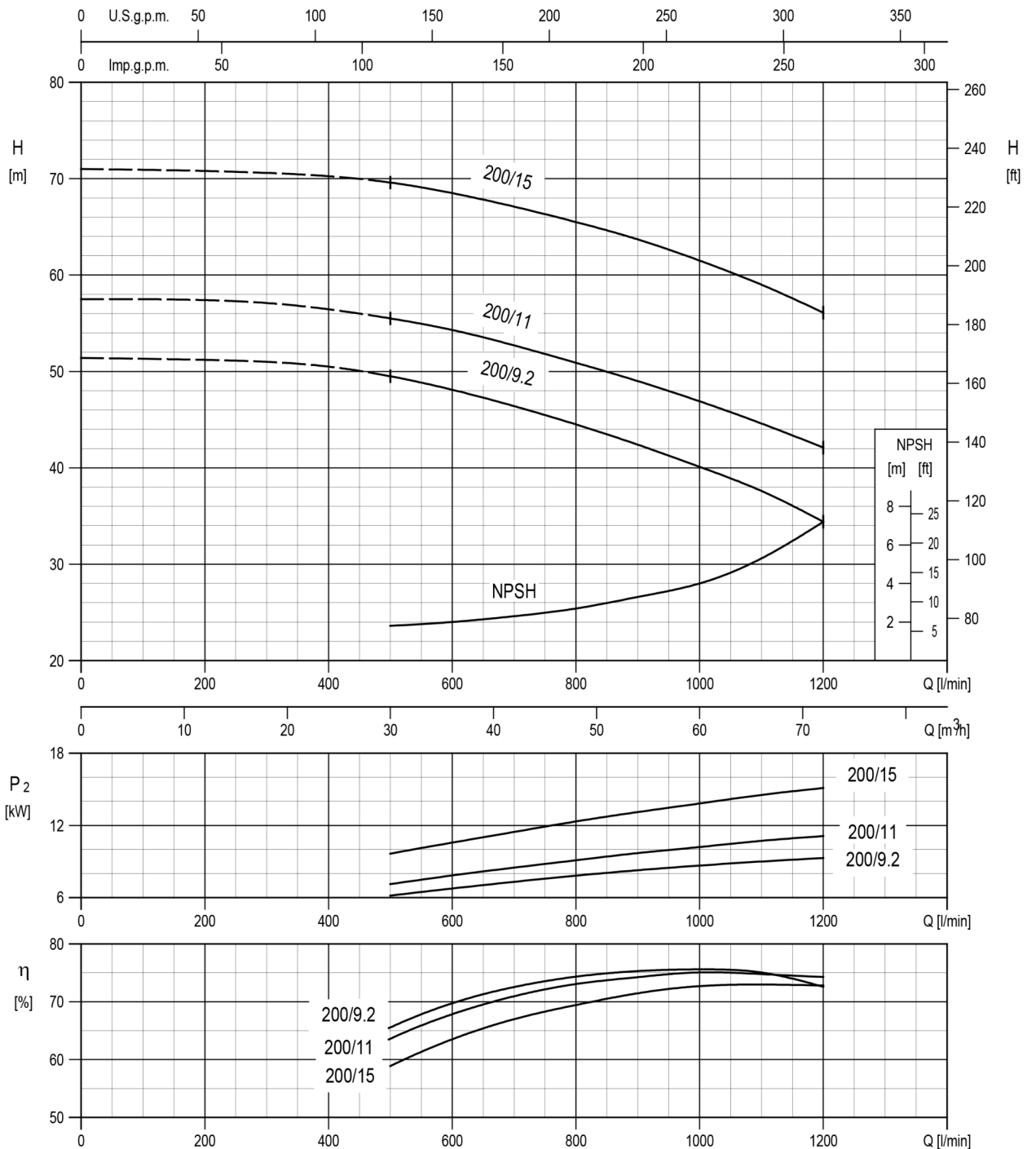


**50-160/5.5 (5.5kW) MEI > 0.70 – Impeller diameter = 154 mm**  
**50-160/7.5 (7.5kW) MEI > 0.70 – Impeller diameter = 166 mm**



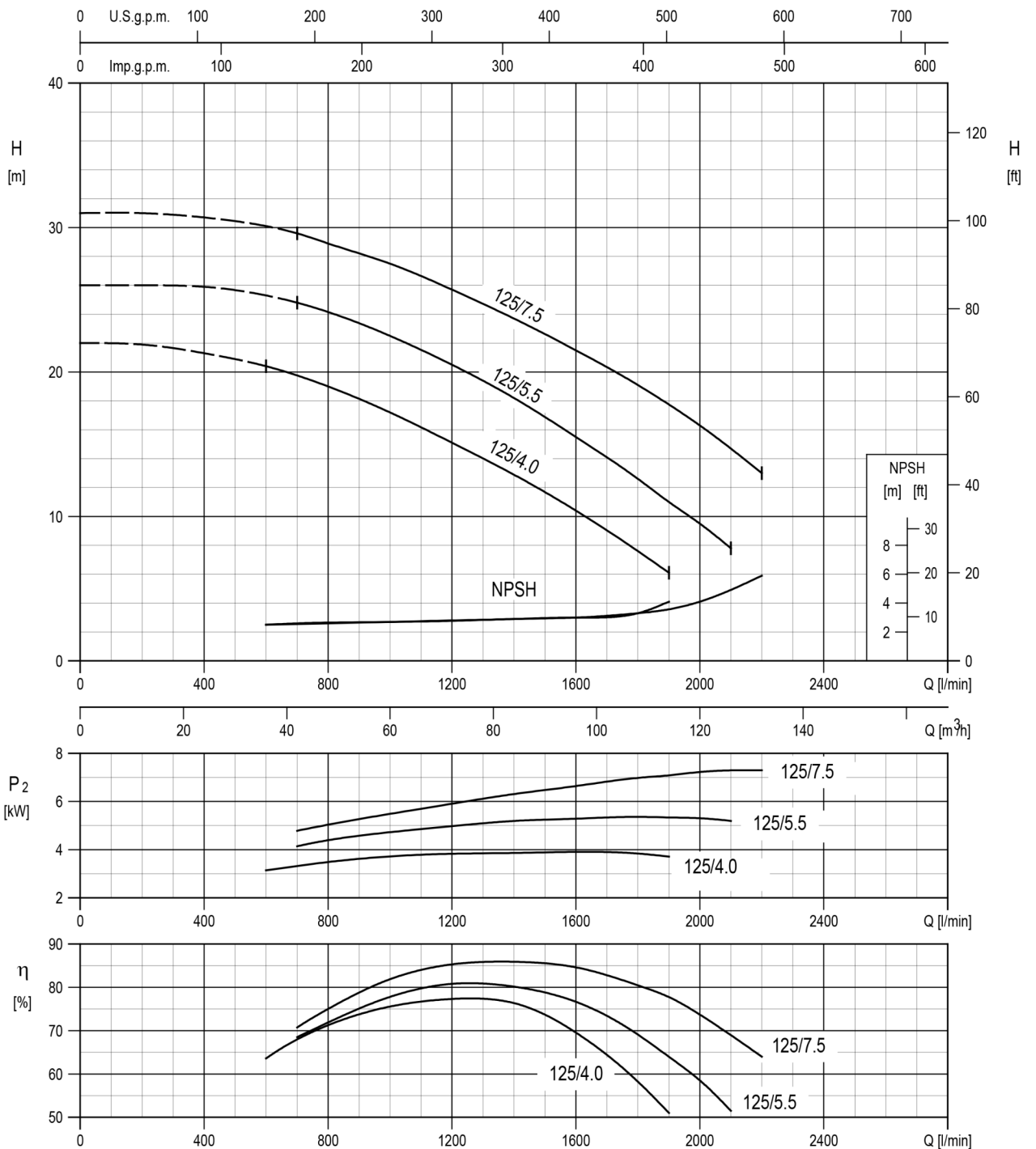
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

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



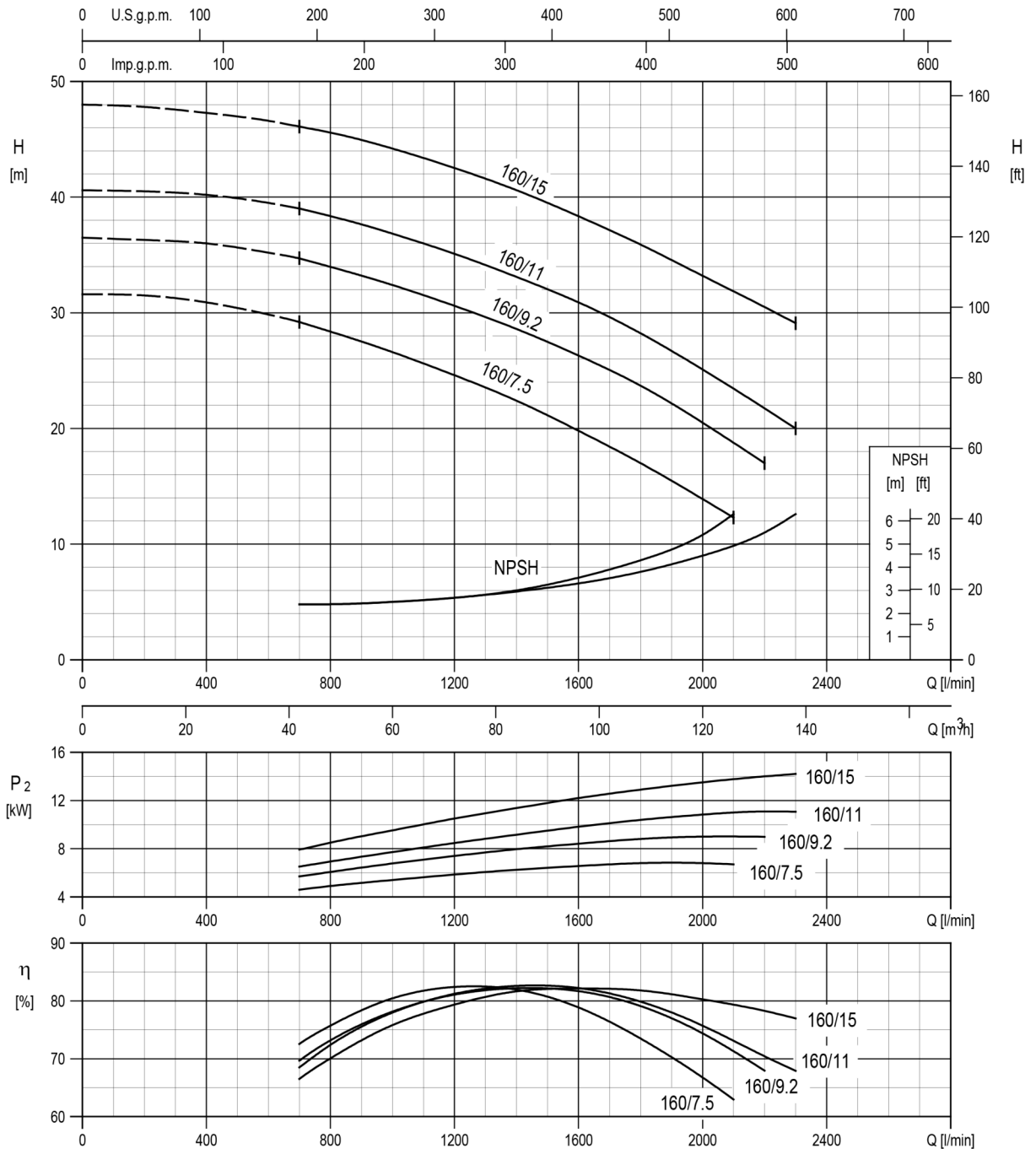
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

**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**



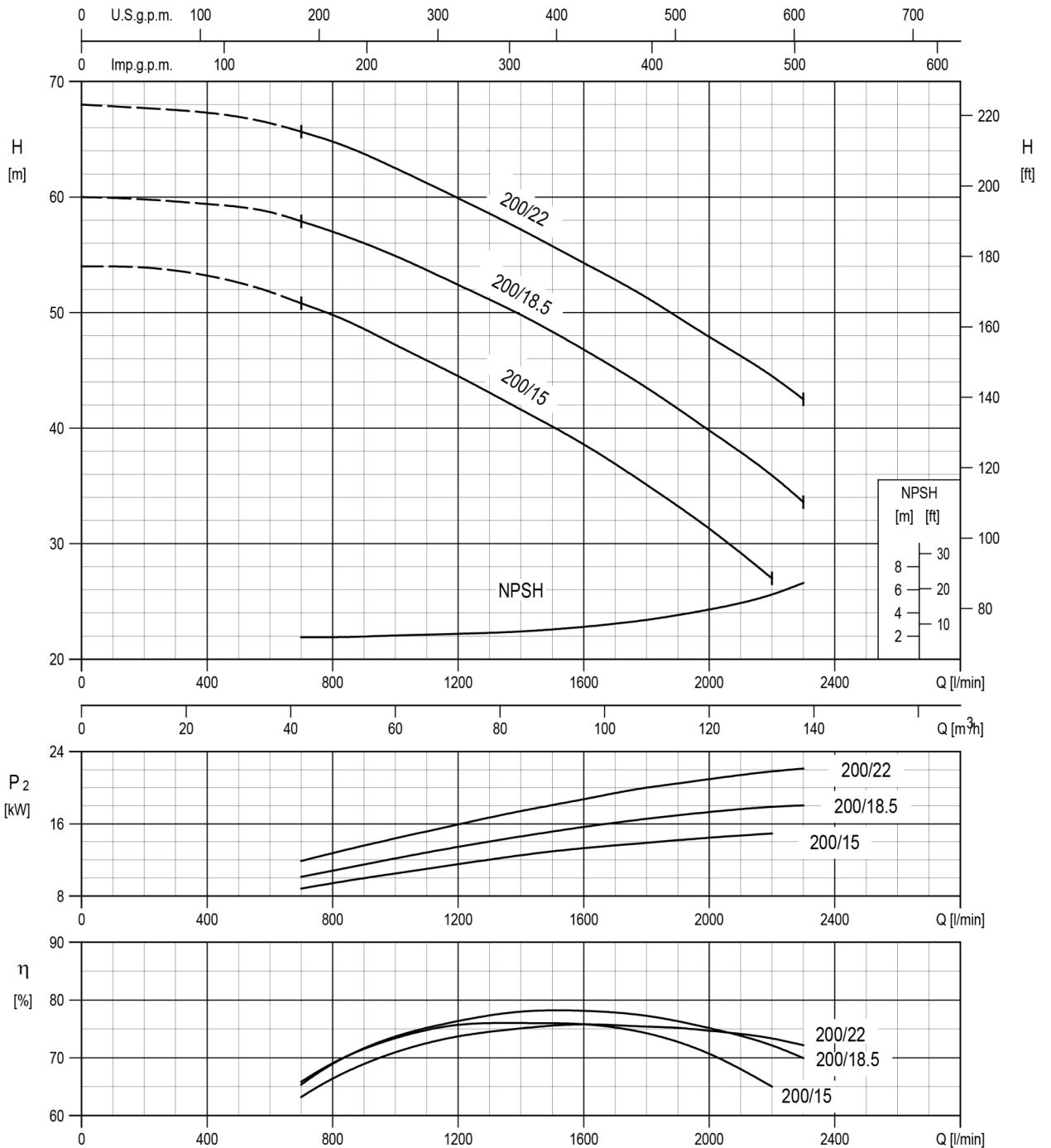
Rotation speed  $\approx 2900 \text{ min}^{-1}$   
 Test standard: ISO 9906:2012 – Grade 3B

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

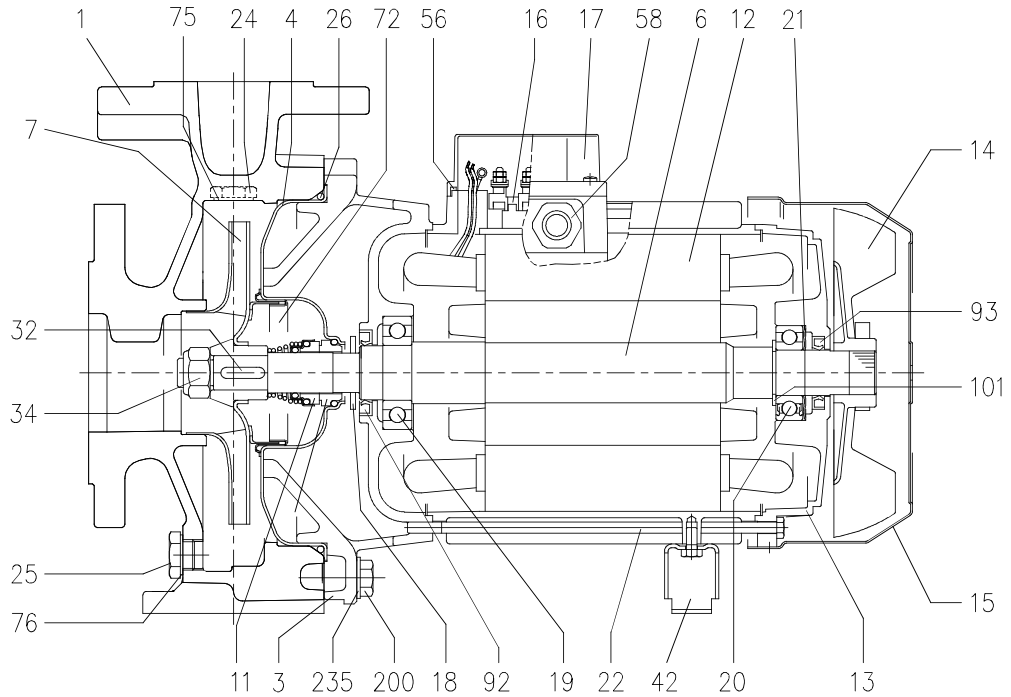
65-200/15 (15kW) MEI > 0.60 – Impeller diameter = 190 mm  
 65-200/18.5 (18.5kW) MEI > 0.60 – Impeller diameter = 201 mm  
 65-200/22 (22kW) MEI > 0.60 – Impeller diameter = 212 mm



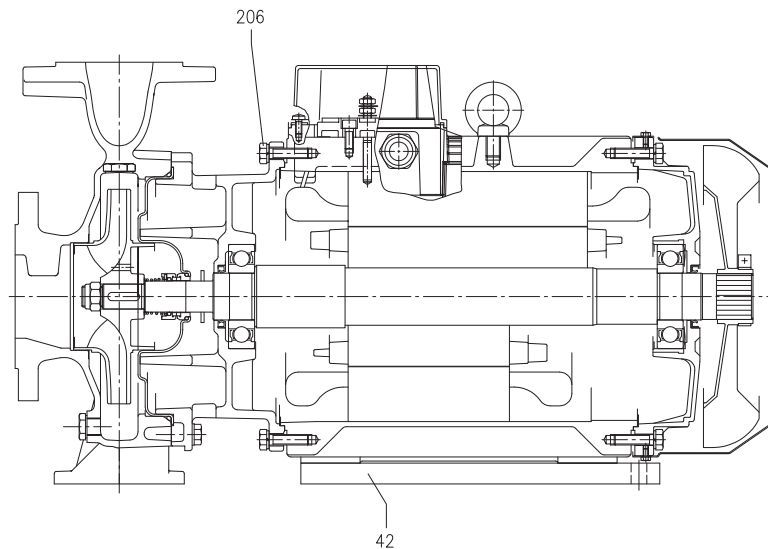
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906:2012 – Grade 3B

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	NBR	40x21.5x2	EBARA DRAWING	1	
	Up to 11 kW 15 kW and above		50x29.5x3			
19	Bearing [10]	-			1	
20	Bearing [10]	-			1	
21	Adjusting ring	Steel C70			1	
22	Tie rod	Fe 42 Galvanized	Up to 3 kW	M5	EBARA DRAWING	4
			For 4 - 5.5 - 7.5 kW	M6		
			9.2 e 11kW	M8		
	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	Draing plug	Brass	G 3/8" L=8		1	
26	O-ring [4]	NBR/FPM/EPDM	32-125, 40-125	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	EN 1.4401 (AISI 316)	Up to 11 kW	A 6x6x25	UNI 6604	1
			50-200/15	A 8x7x30		
			15 kW and above			
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	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	1	
76	Washer	Aluminium			1	
92	Lip seal	-	Up to 3kW	25x40x7	DIN 3760 without spring	1
			From 4 to 7.5 kW	30x47x7		
			From 9.2 kW to 11 kW	40x55x7		
			From 15 kW to 22 kW	45x60x7		
				45x60x7		
93	Lip seal	-	Up to 4 kW	25x40x7	DIN 3760 without spring	1
			From 5.5 kW to 7.5 kW	30x47x7		
			From 9.2 kW to 11 kW	40x55x7		
			From 15 kW to 22 kW	45x60x7		
101	Snap ring [8]	Carbon tool steels TC 80	Ø 40	UNI 7435	1	
200	Screw	Gv. Steel 8.8 strenght class ISO 898-1	32-125, 40-125	M 8x30	UNI 5739	8
			32-160, 40-160, 50-125, 65-125			10
			32-200, 40-200, 50-160	M 10x35		12
			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	10.5x21		12
			50-200, 65-160, 65-200			
206	Screw for bracket [9]	Gv. Steel 8.8 strenght class ISO 898-1	M 10x40	UNI 5739	4	

[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

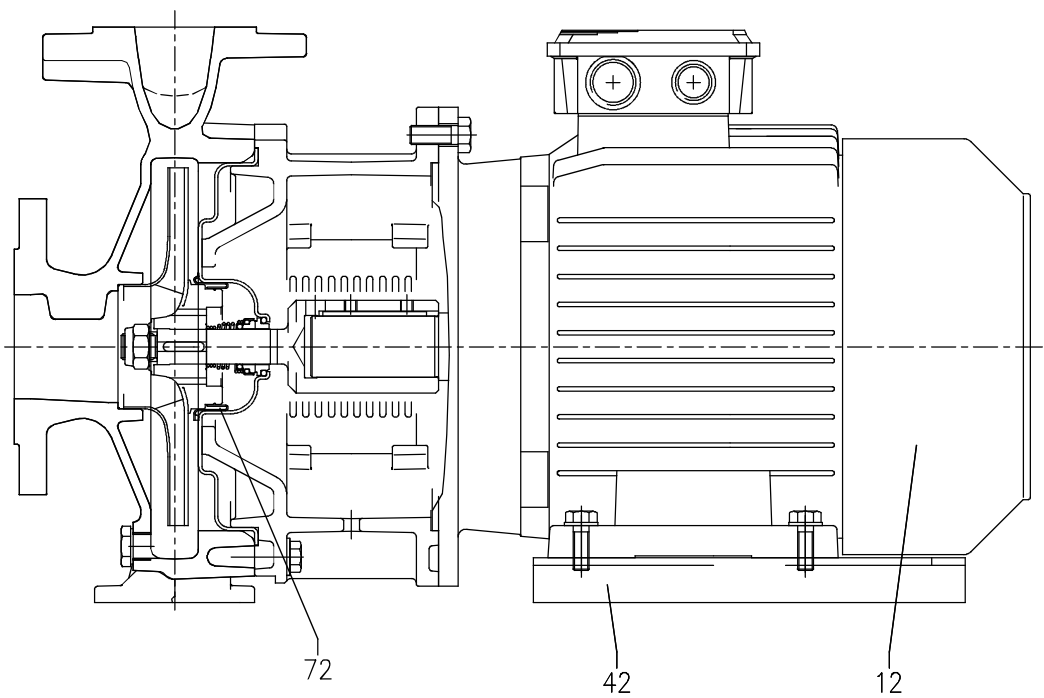
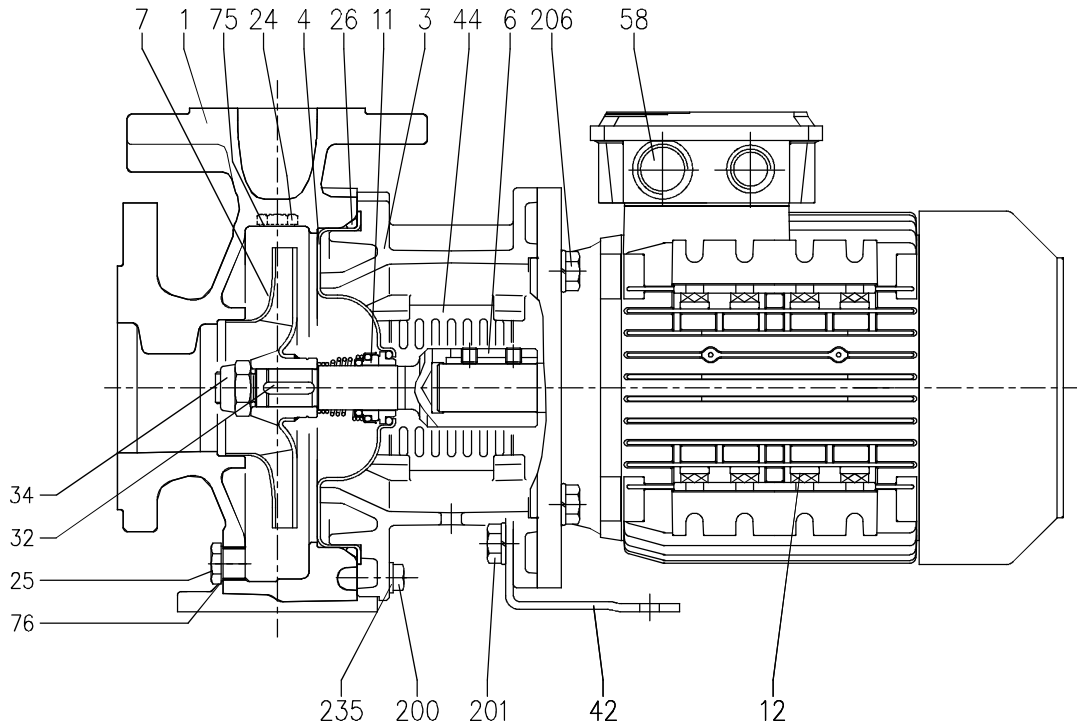
[7] Only for: 32-200, 40-200, 50-160, 50-200/9.2, 50-200/11

[8] Only for pumps with 9.2 and 11 kW motor

[9] Only for pumps with 15 kW motor and above

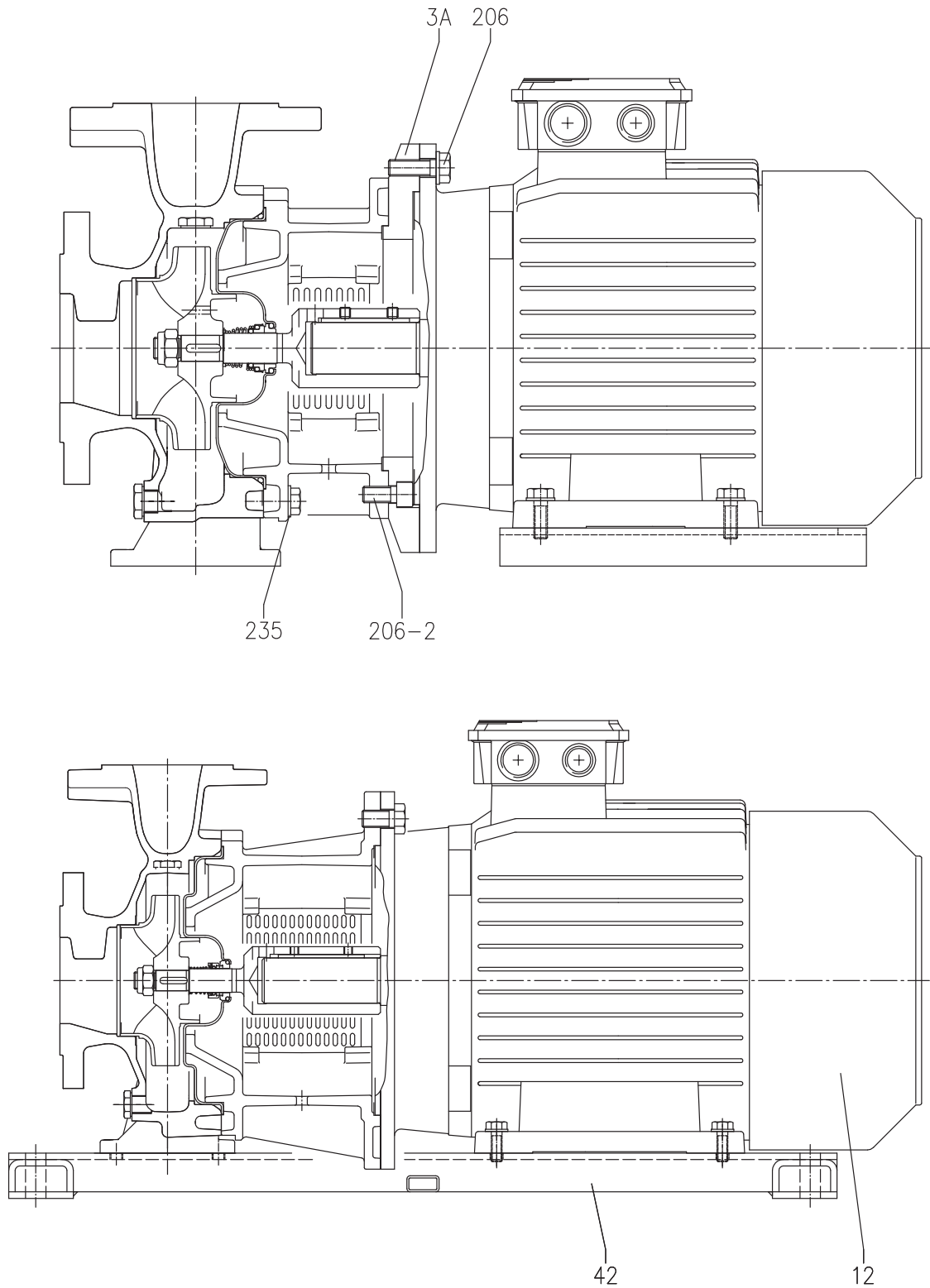
[10] See **3D BEARINGS** page 311

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	32-125/40-125	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		
			M20x1.5		
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		10
			32-200, 40-200, 50-160,		12
			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		10
			32-200, 40-200, 50-160,		12
			50-200, 65-160, 65-200		

[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

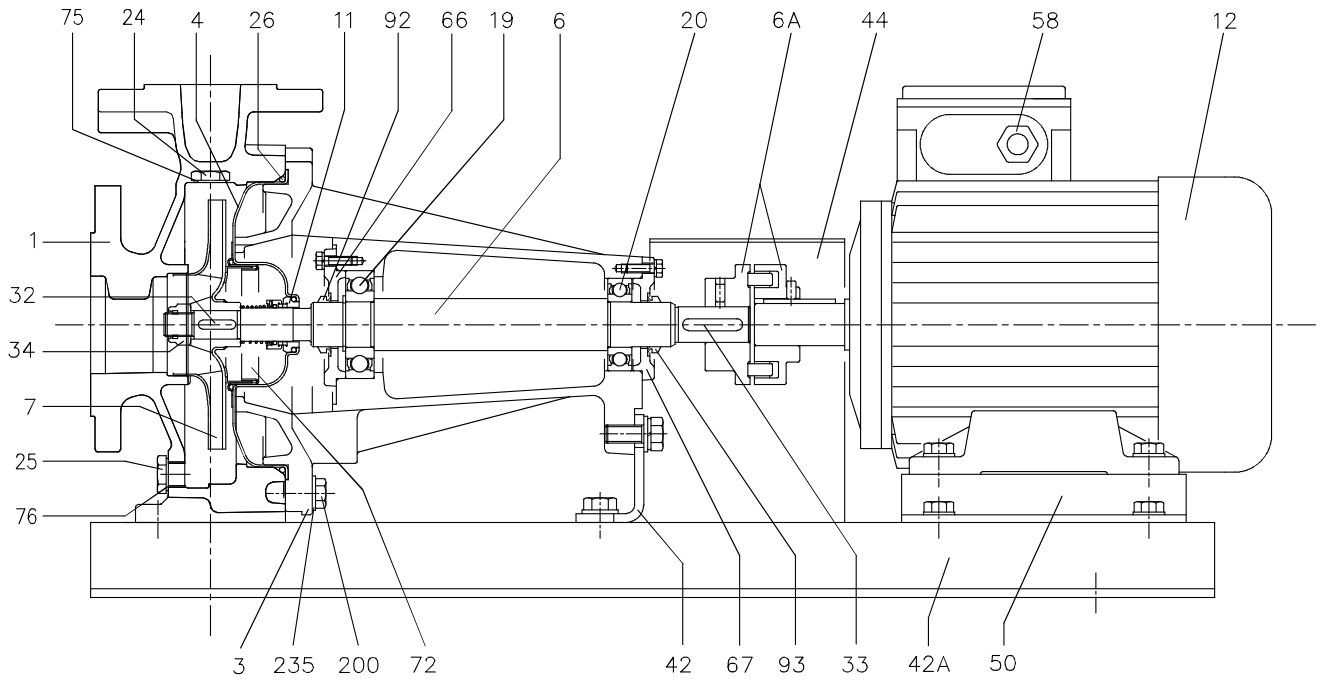
2 for version for 65-125/4, 65-160/7.5, 65-160/9.2

[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	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	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 15 kW and above	M18x1.5 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		12	
			32-160, 40-160, 50-125, 65-125		10	
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200		8	
235	Washer	Galvanized Steel	32-125, 40-125	8.4x17	8	
			32-160, 40-160, 50-125, 65-125		10	
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200	10.5x21	UNI 6592	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

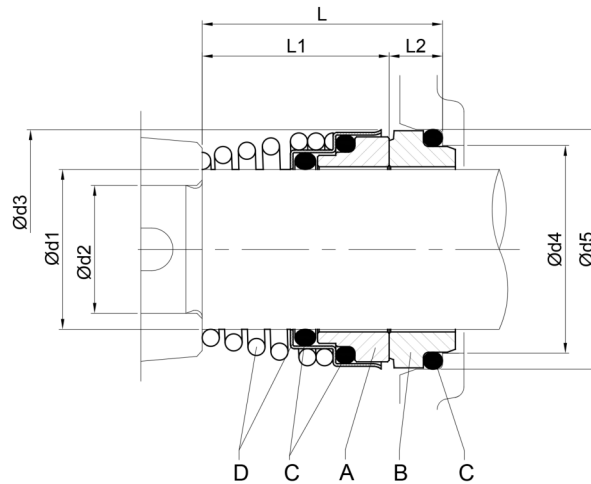
[3] See **MECHANICAL SEAL**, "O-ring" column, pages from 307 to 310

[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

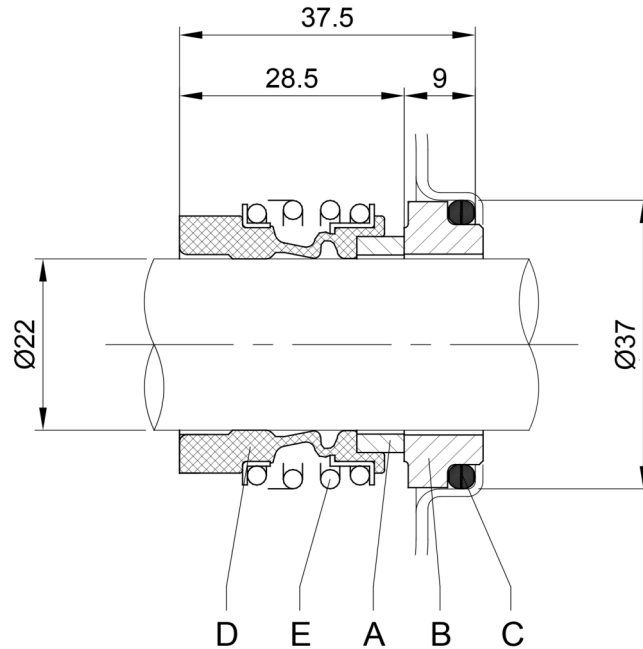


Pump type	Dimensions [ mm ]							Material							
	d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring			
<b>STANDARD</b>	32-125/160/200								Ceramic	Carbon	NBR	EN 1.4301 (AISI 304)			
	40-125/160/200	22	19	38	31	37	37.5	27.5					10		
	50-125/160/200														
	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				
Q1U3EGG	65-160/15														
65-200															
Q1AEGG	65-160/15									Ceramic	Carbon metalized	EPDM	EN 1.4401 (AISI 316)		
	65-200														
	32-125/160/200	22	19	38	31	37	37.5	27.5	10						
	40-125/160/200														
	50-125/160/200														
65-125															
65-160/7.5-9.2-11															

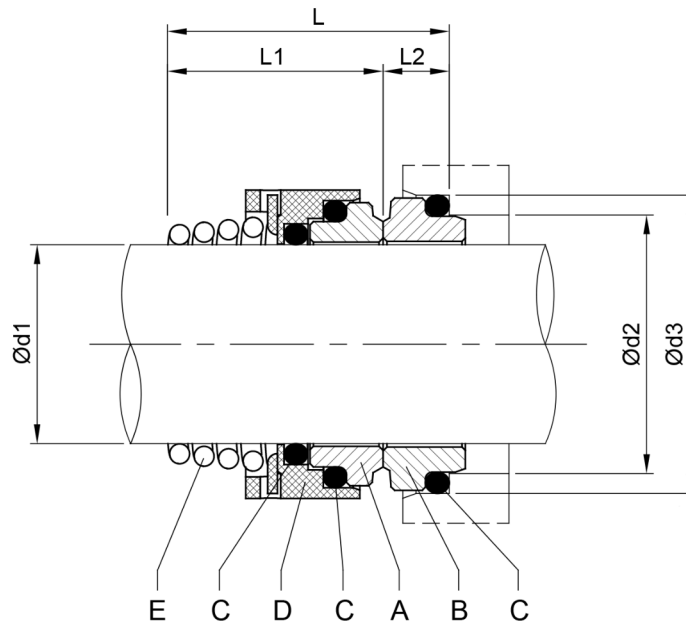
MECHANICAL SEAL



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 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
HW	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5-9.2-11	Tungsten Carbide	Tungsten Carbide	FPM	FPM	EN 1.4401 (AISI 316)

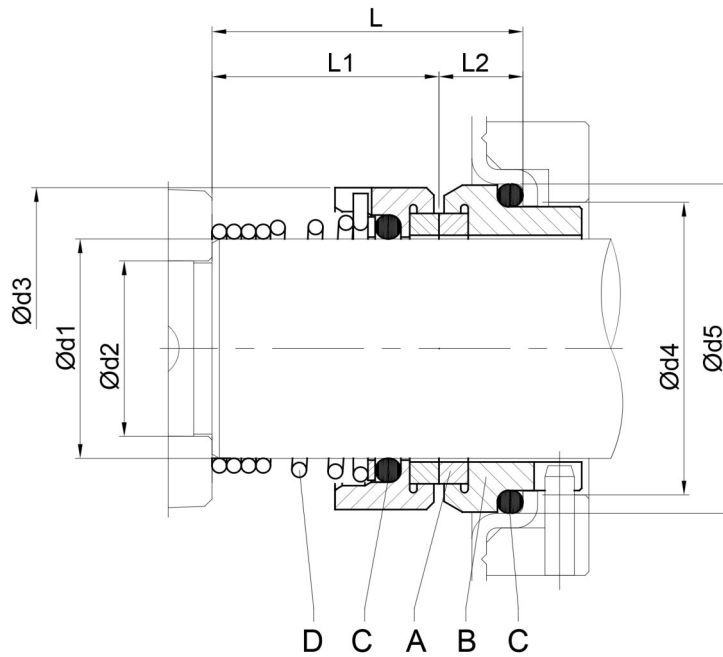
MECHANICAL SEAL



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	HS 65-160/15 65-200	30	39	45	42.5	31	11.5	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
	HW 65-160/15 65-200	30	39	45	42.5	32.5	10	Tungsten Carbide	Tungsten Carbide			
	HSW 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				

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	U3U3EGG 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)
	U3CEGG 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			
	Q1U3EGG 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	22	19	38	31	37	37.5	27.5	10	SiC	SiC	EPDM	EN 1.4401 (AISI 316)
	40-125/160/200												
	50-125/160/200												
	65-125												
	65-160/7.5-9.2-11												



**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	6206-ZZ C3	6205-ZZ C3
3D 40-160/4.0		
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		
3D 50-125/4.0	6206-ZZ C3	6205-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		

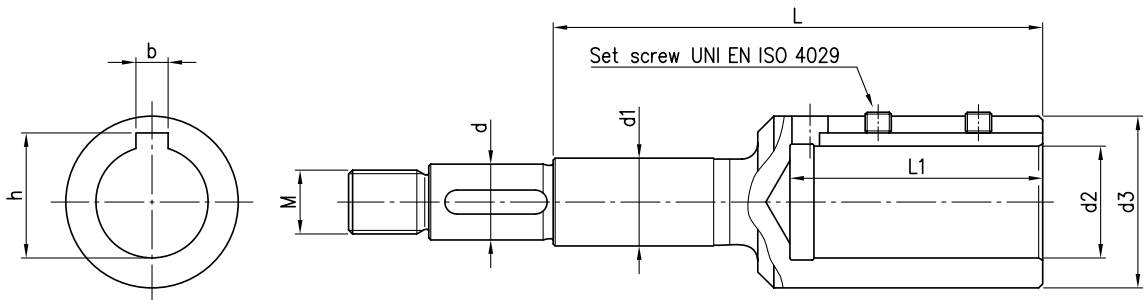
**3DS-3DP BEARINGS**

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		
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		
3DS 65-160/15	6309-2Z C3	6309-2Z C3
3DS 65-200/15		
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	6208-2Z C3	6208-2Z C3
3DP 50-160/5.5			6309-2Z C3	6309-2Z C3
3DP 50-160/7.5			6208-2Z C3	6208-2Z C3
3DP 50-200/9.2	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DP 50-200/11			6306-2Z C3	6306-2Z C3
3DP 50-200/15			6208-2Z C3	6208-2Z C3
3DP 65-125/4.0	6306-2RS1	6206-2RS1	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
3DP 65-200/18.5	6308-2RS1	6306-2RS1	6311 C3	6311 C3
3DP 65-200/22 [1]			6311 C3	6311 C3

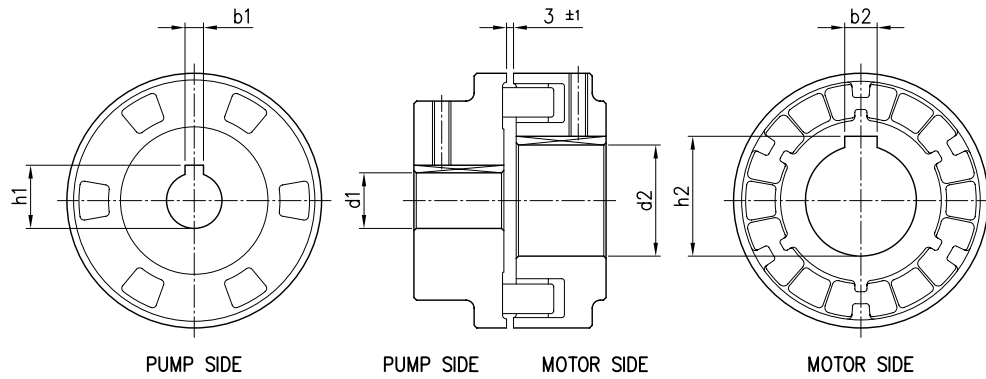
[1] Motor available with lubricator for regular re-greasing of bearing.

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

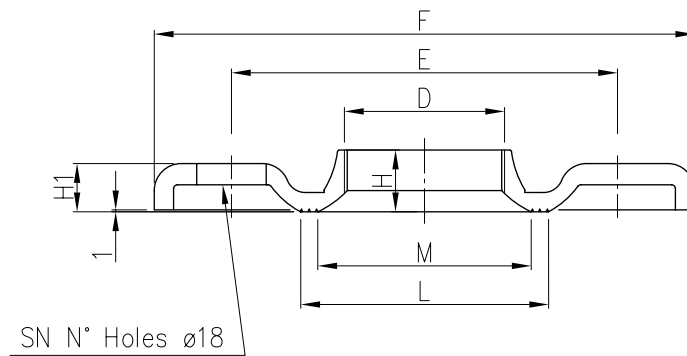
**3DP FLEXIBLE COUPLING**



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

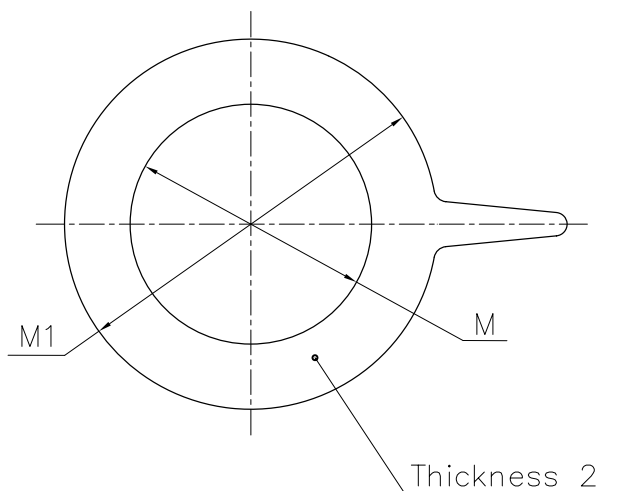
FITTINGS

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

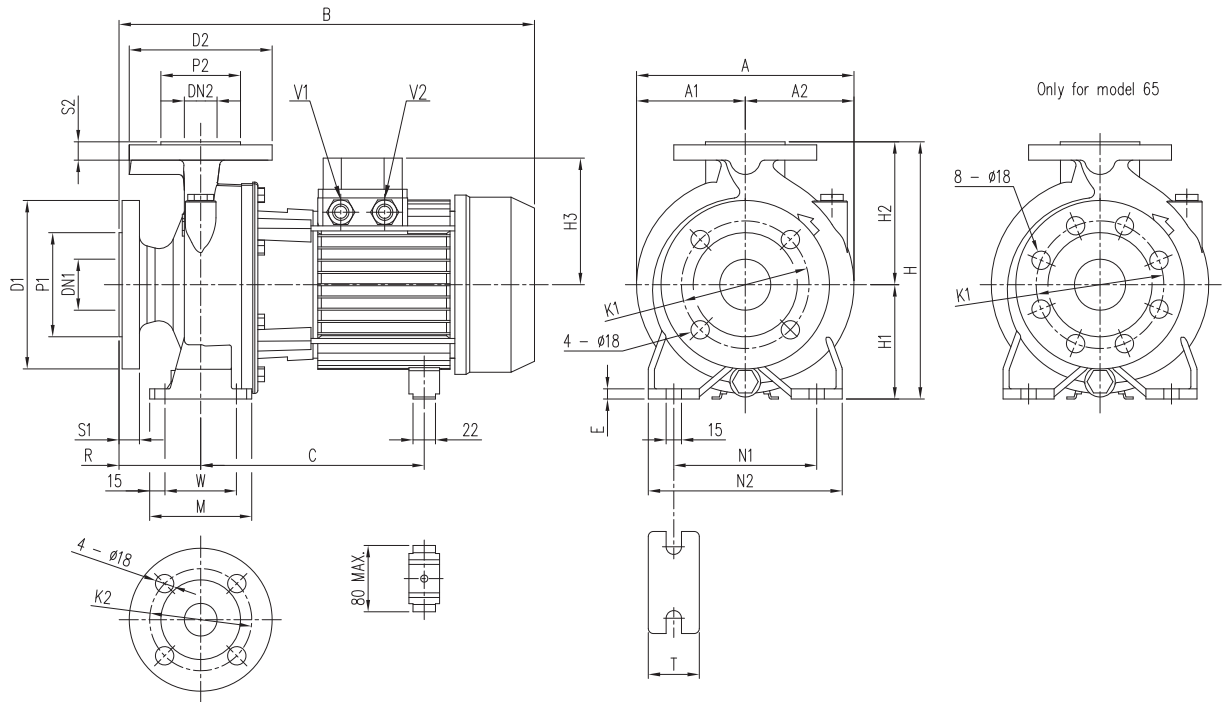


DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140

Material: EPDM for standard version  
FPM for hot water version

PUMP 3D

UP TO 11 kW

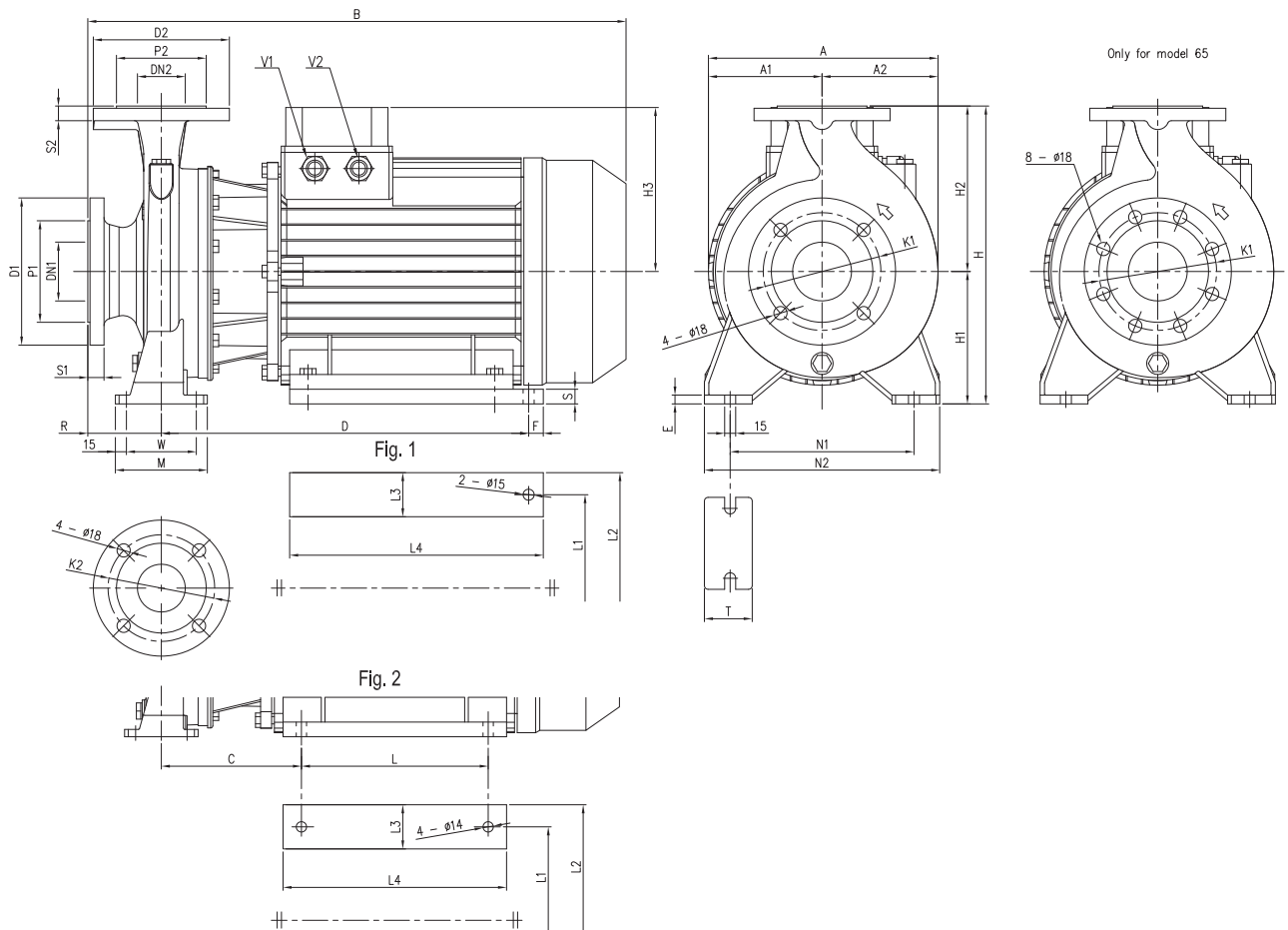


Model	Dimensions [ mm ]																												Weight [ kgf ]														
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	[1-]	[3-]	H3 (*)	R	W	M	N1	N2	T	E	A	A1	A2	[1-]	[3-]	C [1-]	C [3-]	V1 [3-]	[1-]	[3-]	V2 [1-]	V2 [3-]	[1-]	[3-]						
32-125/1.1 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	141	124	119	80	70	100	140	190	50	10	213	106.5	106.5	408	407	431	219+230	219+230	232	-	-	-	-	-	M20x1.5	PG 13.5	M16x1.5	25	29.5	29.5
32-160/1.5 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	124	119	80	70	100	190	240	50	10	254	127	127	408	407	431	219+230	219+230	232	-	-	-	-	-	M20x1.5	PG 13.5	M20x1.5	29	33.5	33.5
32-160/2.2 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	124	119	80	70	100	190	240	50	10	254	127	127	408	432	431	219+230	244+255	232	-	-	-	-	-	M20x1.5	PG 13.5	M20x1.5	35.7	36	36
32-200/3.0	50	102	125	165	20	32	78	100	140	18	340	160	180	-	124	124	80	70	100	190	240	50	10	296	148	148	-	471	471	-	244+255	244+255	-	-	-	-	-	-	PG 13.5	M20x1.5	-	47.5	47.5
32-200/4.0	50	102	125	165	20	32	78	100	140	18	340	160	180	-	141	141	80	70	100	190	240	50	10	296	148	148	-	494	494	-	253	253	-	-	-	-	-	-	PG 16	M20x1.5	-	50	50
32-200/7.5	50	102	125	165	20	32	78	100	140	18	340	160	180	-	150	150	80	70	100	190	240	50	10	296	148	148	-	539	-	275	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	124	119	80	70	100	160	210	50	10	220	108	112	408	407	431	219+230	219+230	232	-	-	-	-	-	M20x1.5	PG 13.5	M20x1.5	25.5	30	30
40-125/2.2 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	141	124	119	80	70	100	160	210	50	10	220	108	112	408	432	431	219+230	244+255	232	-	-	-	-	-	M20x1.5	PG 13.5	M20x1.5	31.7	32	32
40-160/3.0	65	122	145	185	20	40	88	110	150	18	292	132	160	-	124	124	80	70	100	190	240	50	10	254	127	127	-	471	471	-	244+255	244+255	-	-	-	-	-	-	PG 16	M20x1.5	-	39	39
40-160/4.0	65	122	145	185	20	40	88	110	150	18	292	132	160	-	141	141	80	70	100	190	240	50	10	254	127	127	-	494	494	-	253	253	-	-	-	-	-	-	PG 16	M20x1.5	-	48	48
40-200/5.5	65	122	145	185	20	40	88	110	150	18	340	160	180	-	150	150	100	70	100	212	265	50	10	296	148	148	-	539	539	-	275	275	-	-	-	-	-	-	PG 13.5	M20x1.5	-	60	60
40-200/7.5	65	122	145	185	20	40	88	110	150	18	340	160	180	-	150	150	100	70	100	212	265	50	10	296	148	148	-	559	-	275	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	178	100	70	100	212	265	50	10	296	148	148	-	595	-	359	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	124	119	100	70	100	190	240	50	10	254	127	127	428	452	451	219+230	244+255	232	-	-	-	-	-	M20x1.5	PG 13.5	M20x1.5	34.4	37	37
50-125/3.0	65	122	145	185	20	50	102	125	165	20	292	132	160	-	124	124	100	70	100	190	240	50	10	254	127	127	-	491	491	-	244+255	244+255	-	-	-	-	-	-	PG 13.5	M20x1.5	-	39.5	39.5
50-125/4.0	65	122	145	185	20	50	102	125	165	20	292	132	160	-	141	141	100	70	100	190	240	50	10	254	127	127	-	514	514	-	253	253	-	-	-	-	-	-	PG 16	M20x1.5	-	48	48
50-160/5.5	65	122	145	185	20	50	102	125	165	20	340	160	180	-	150	150	100	70	100	212	265	50	10	296	148	148	-	539	539	-	275	275	-	-	-	-	-	-	PG 13.5	M20x1.5	-	60	60
50-160/7.5	65	122	145	185	20	50	102	125	165	20	340	160	180	-	150	150	100	70	100	212	265	50	10	296	148	148	-	559	-	275	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	178	100	70	100	212	265	50	10	296	148	148	-	595	-	359	329	-	-	-	-	-	-	PG 13.5	-	PG 21	-	-	77
50-200/11	65	122	145	185	20	50	102	125	165	20	360	160	200	-	178	178	100	70	100	212	265	50	10	296	148	148	-	595	-	359	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	141	100	95	125	212	280	65	12	263	127	136	-	514	514	-	253	253	-	-	-	-	-	-	PG 16	M20x1.5	-	53	53
65-125/5.5	80	138	160	200	22	65	122	145	185	20	340	160	180	-	150	150	100	95	125	212	280	65	12	263	127	136	-	539	539	-	275	275	-	-	-	-	-	-	PG 13.5	M20x1.5	-	65	65
65-125/7.5	80	138	160	200	22	65	122	145	185	20	340	160	180	-	150	150	100	95	125	212	280	65	12	263	127	136	-	559	-	275	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	150	100	95	125	212	280	65	12	296	148	148	-	559	-	275	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	178	100	95	125	212	280	65	12	296	148	148	-	595	-	359	329	-	-	-	-	-	-	PG 13.5	-	PG 21	-	-	85
65-160/11	80	138	160	200	22	65	122	145	185	20	360	160	200	-	178	178	100	95	125	212	280	65	12	296	148	148	-	595	-	359	329	-	-	-	-	-	-	PG 13.5	-	PG 21	-	-	87.4

(\*) Only for IE3 Motors

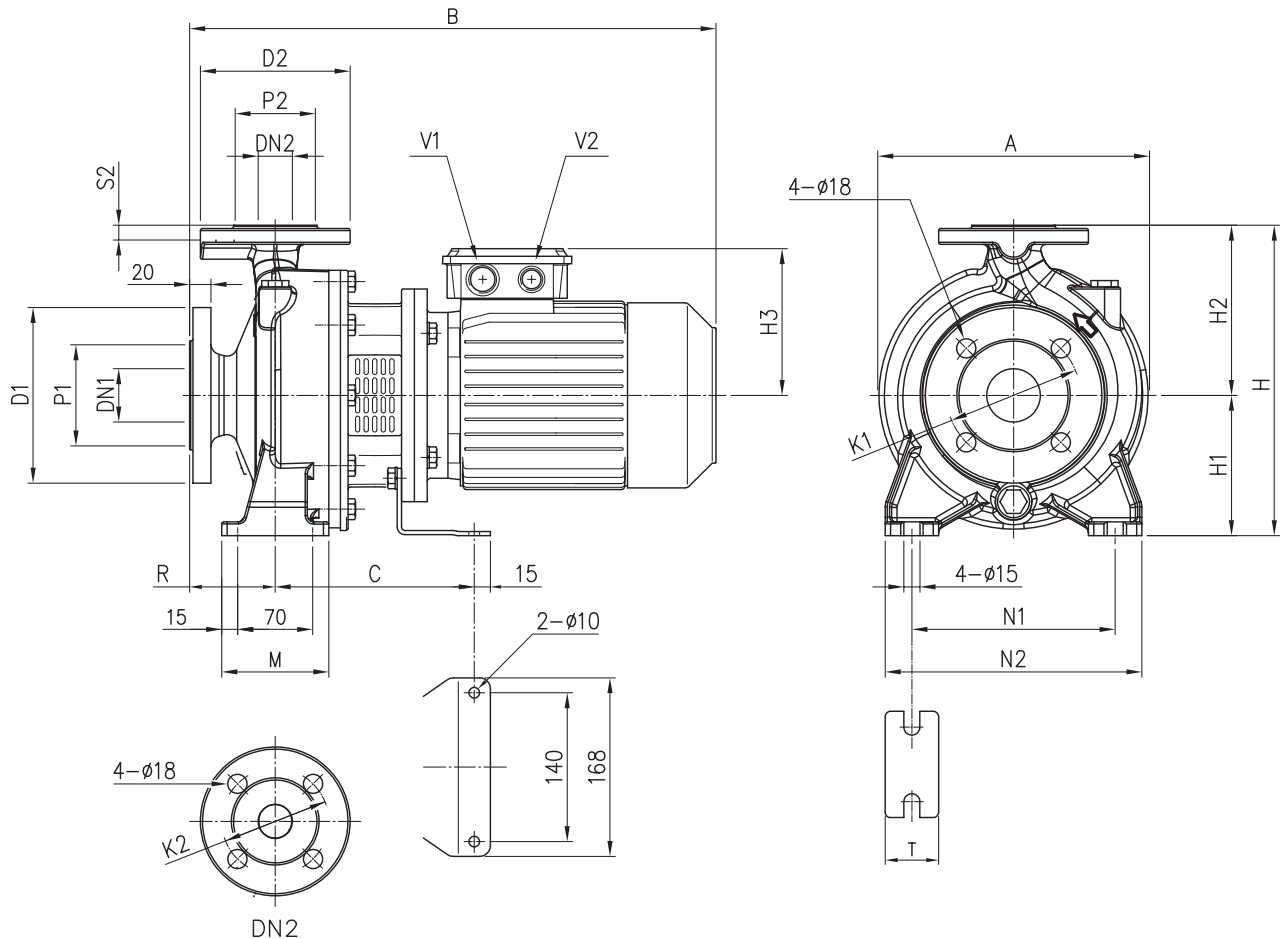
PUMP 3D

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

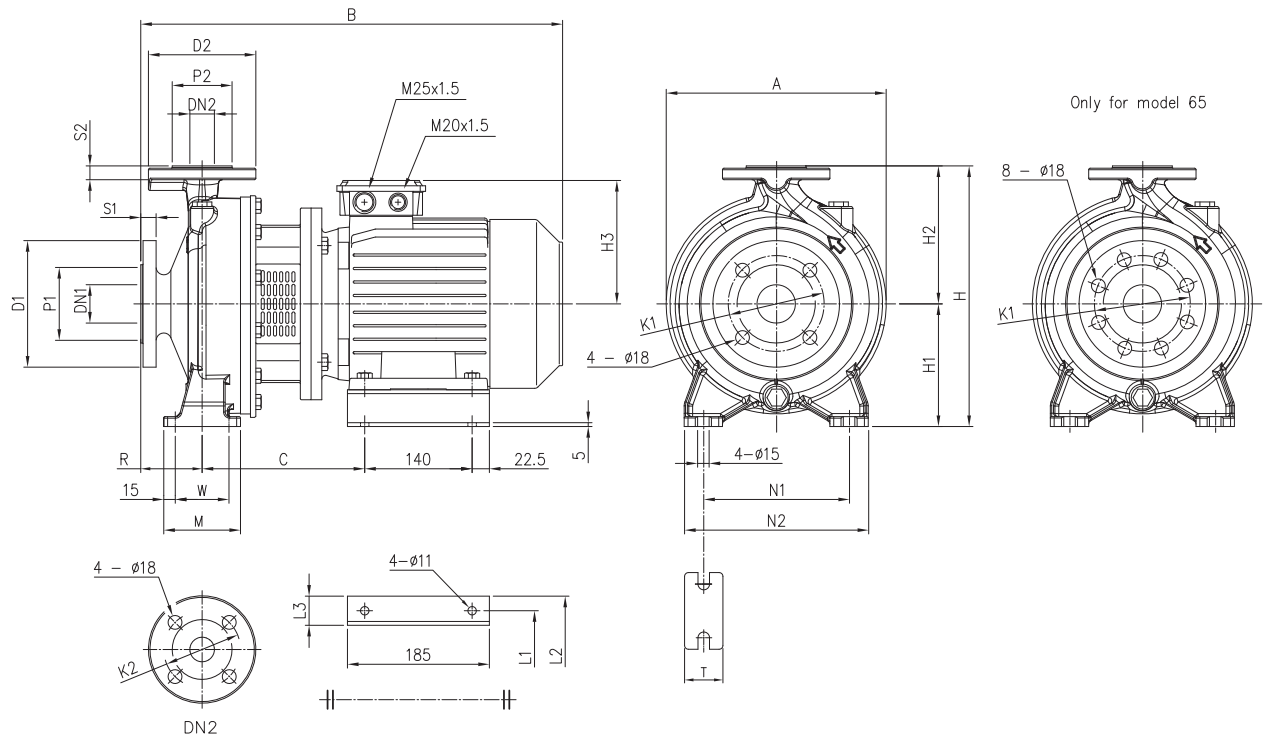


Model	Dimensions [ mm ]																				Weight [ kgf ]				
	∅ DN1	∅ P1	∅ K1	∅ D1	∅ DN2	∅ P2	∅ K2	∅ D2	S2	H	H1	H2	H3	R	M	N1	N2	T	A	B	C	V1	V2	(*)	
32-125/1.1	50	102	125	165	32	78	100	140	18	252	112	140	139	80	100	140	190	50	213	430	174	M25x1.5	M20x1.5	30.5	32.1
32-160/1.5	50	102	125	165	32	75	100	140	18	292	132	160	148	80	100	190	240	50	254	477	186	M25x1.5	M20x1.5	36.3	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	40.4
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	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	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	37.9

(\*) Only for IE3 Motors



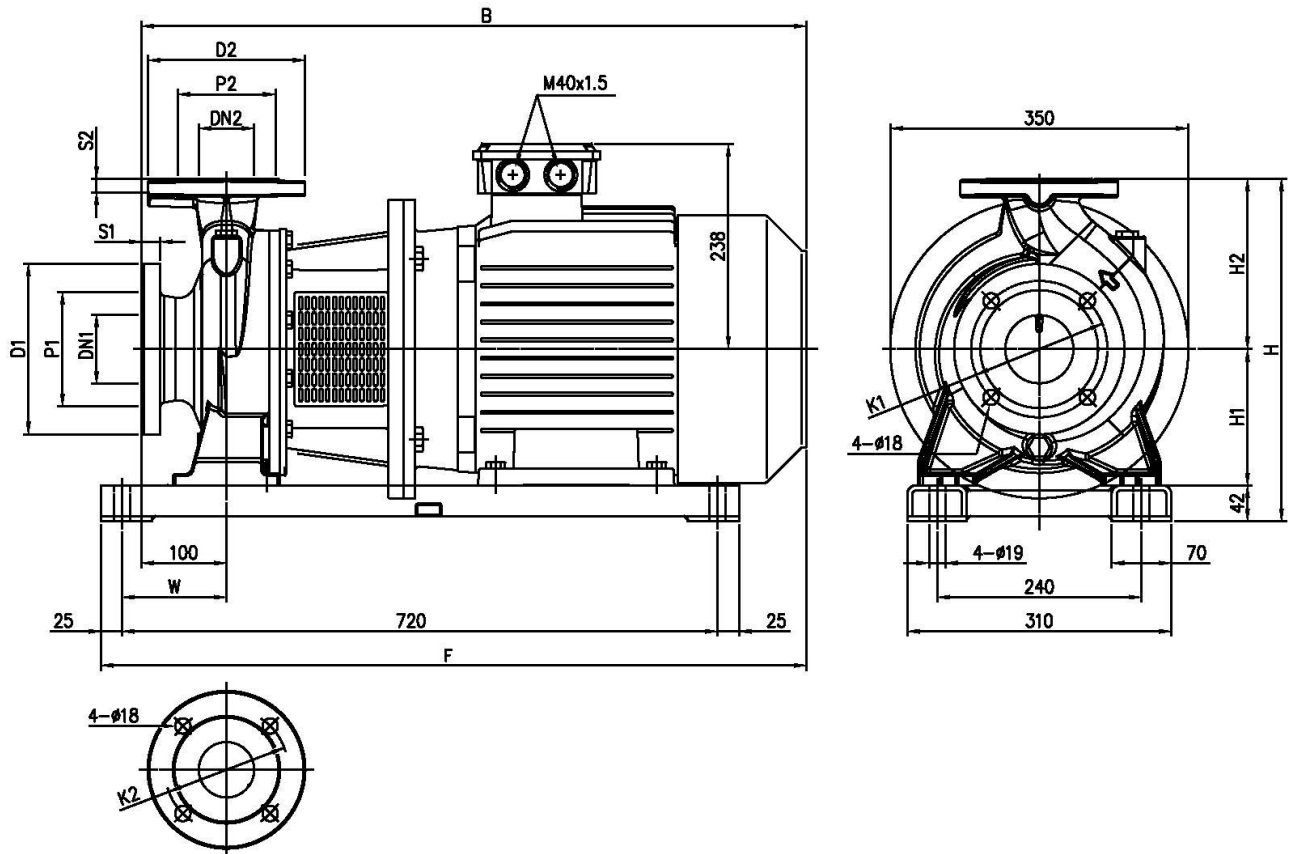
PUMP 3DS 32, 65



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	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	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	180	570	212	190	228	38	65,4	65,4

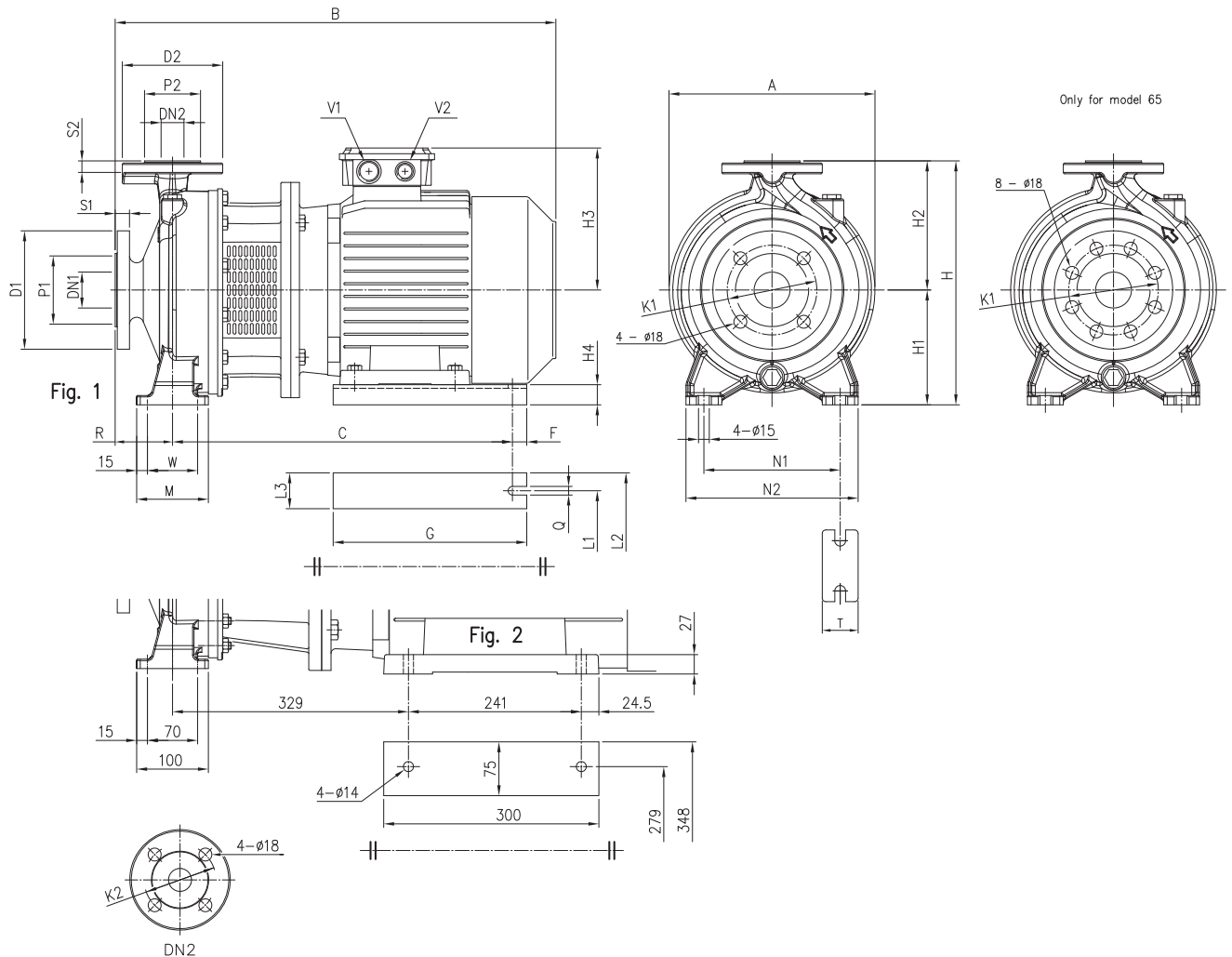
(\*) Only for IE3 Motors

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

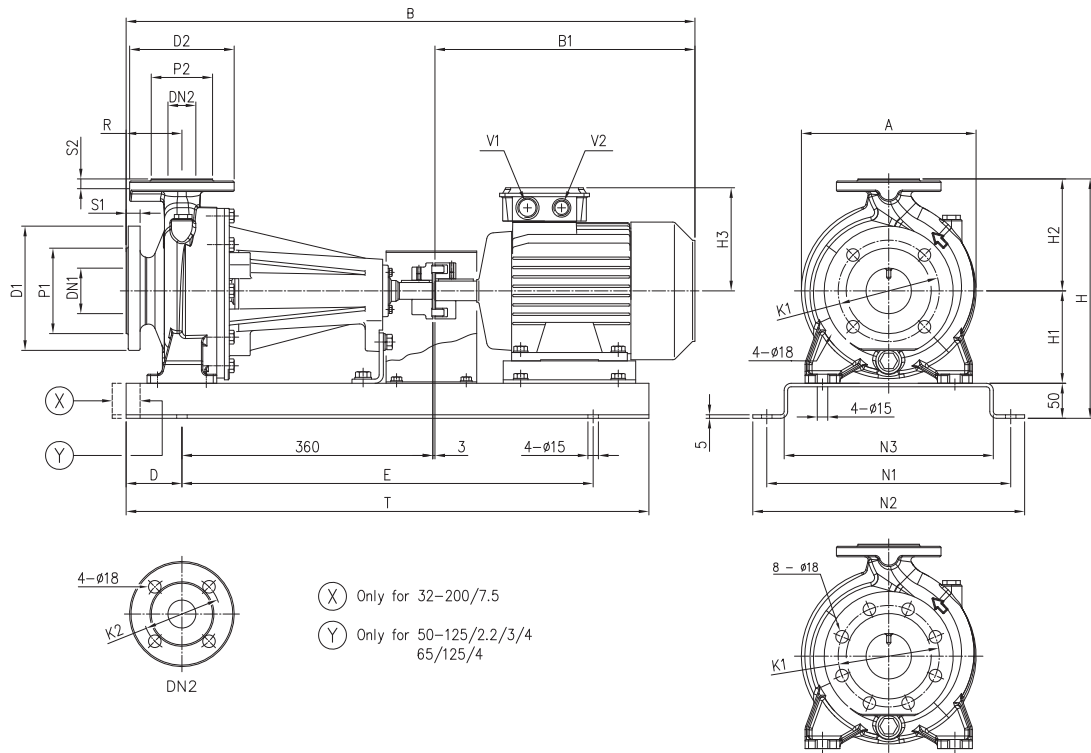
PUMP 3DS 32, 40, 50, 65



Model	Dimensions [ mm ]																											Weight [kg]									
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	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	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	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	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	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	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	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	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

(\*) Only for IE3 Motors

PUMP 3DP 32, 40, 50, 65



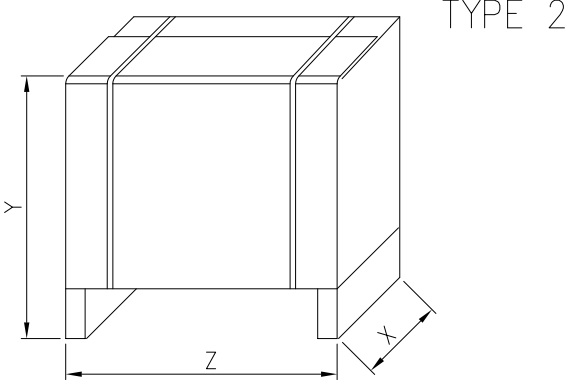
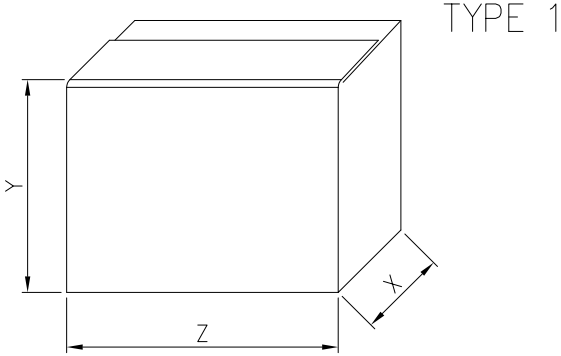
(X) Only for 32-200/7.5  
 (Y) Only for 50-125/2.2/3/4  
 65/125/4

Only for model 65

Model	Dimensions [ mm ]																				Weight [ kgf ] (*)							
	∅ DN1	∅ P1	∅ K1	∅ D1	S1	∅ DN2	∅ P2	∅ K2	∅ 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	50.5	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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
65-200/22	80	138	160	200	22	65	122	145	185	20	455	180	225	268	100	312	1150	690	100	800	410	450	360	1000	M40x1.5	M40x1.5	-	211

(\*) Only for IE3 Motors

PACKING 3D



**DIMENSIONS and WEIGHT**

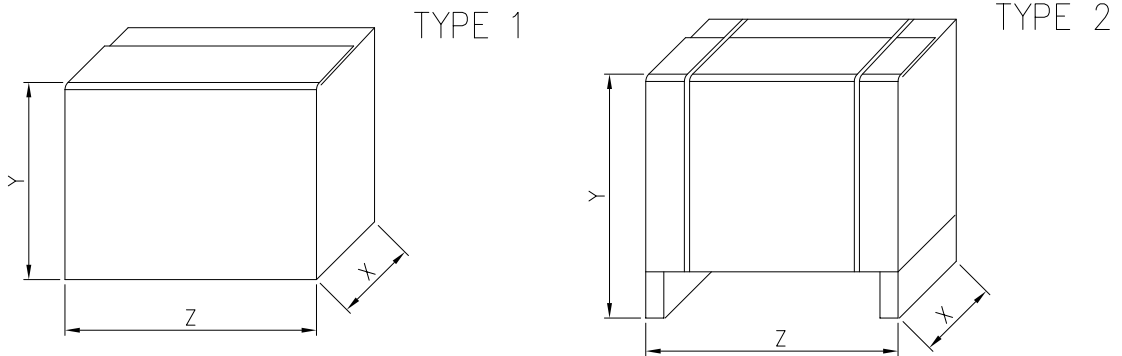
50Hz

Rev. M

Pump type	Packing [ mm ]				Weight [ kgf ]			Pack type
	X	Y	Z	(*)	[1~]	[3~]	(*)	
32-125/1.1 (M)	250	300	450	450	30,4	31,5	31,5	1
32-160/1.5 (M)	280	330	430	460	30,7	35,5	35,5	
32-160/2.2 (M)	280	340	490	490	38,67	44,87	44,87	
32-200/3.0	350	488	550	550	-	52,4	52,4	2
32-200/4.0	350	488	550	550	-	53,8	53,8	
32-200/7.5	350	488	-	700	-	-	69,4	
40-125/1.5 (M)	250	300	450	450	29,9	39,12	39,12	1
40-125/2.2 (M)	280	340	490	490	33,82	34	34	
40-160/3.0	350	488	550	550	-	39,8	39,8	
40-160/4.0	350	488	550	550	-	52,6	52,6	2
40-200/5.5	350	488	550	550	-	64,4	64,4	
40-200/7.5	350	488	-	700	-	68,4	71,5	
40-200/11	350	488	-	700	-	91	93,4	
50-125/2.2 (M)	280	340	490	490	36,1	39	39	
50-125/3.0	350	488	550	550	-	40,1	40,1	2
50-125/4.0	350	488	550	550	-	52,6	52,6	
50-160/5.5	350	488	550	550	-	64,2	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	550	-	57,9	57,9	
65-125/5.5	350	488	550	550	-	70,8	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	

(\*) Only for IE3 Motors

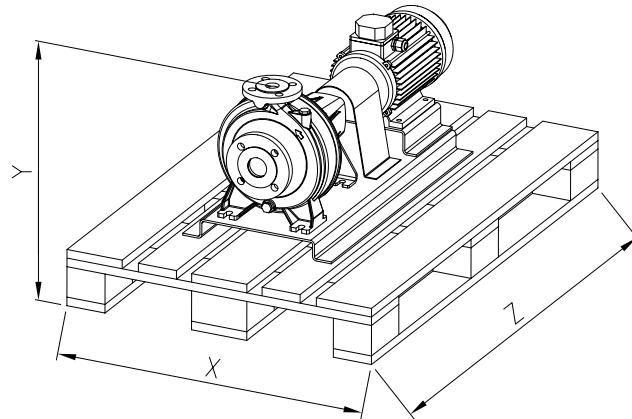
**PACKING 3DS**



Pump type	Packing [ mm ]			Weight [ kgf ]		Pack Type
	X	Y	Z		(*)	
32-125/1.1	450	250	300	32,2	33,8	1
32-160/1.5	350	488	580	41,2	41,2	
32-160/2.2	350	488	580	43,9	43,9	
32-200/3.0	350	498	700	63,4	63,4	
32-200/4.0	350	498	700	63,7	63,7	
32-200/7.5	350	498	700	-	97	
40-125/1.5	350	488	580	36	36	
40-125/2.2	350	488	580	39,7	39,7	
40-160/3.0	350	498	700	68,5	68,5	
40-160/4.0	350	498	700	56,2	56,2	
40-200/5.5	350	498	700	83,9	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	42,9	
50-125/3.0	350	498	700	45,1	45,1	
50-125/4.0	350	498	700	57,8	57,8	
50-160/5.5	350	498	700	81,3	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	72,6	
65-125/5.5	350	498	700	81,7	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	

(\*) Only for IE3 Motors

**PACKING 3DP**



Pump type	Packing [ mm ]			Weight [ kgf ]		
	X	Y	Z		(*)	
32-125/1.1	800	394	1200	64,0	65,6	
32-160/1.5		434		72,0	72,0	
32-160/2.2				75,0	75,0	
32-200/3.0					97,5	97,5
32-200/4.0				482	100,5	100,5
32-200/7.5					-	130,7
40-125/1.5				394	89,7	89,7
40-125/2.2					70,5	70,5
40-160/3.0				434	107,0	107,0
40-160/4.0					88,3	88,3
40-200/5.5					118,5	118,5
40-200/7.5				482	-	127,2
40-200/11					-	154,1
50-125/2.2					93,5	93,5
50-125/3.0				434	104,5	104,5
50-125/4.0					105,2	105,2
50-160/5.5				482	125,0	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	84,4
65-125/5.5				482	128,8	128,8
65-125/7.5					-	143,5
65-160/7.5					-	146,7
65-160/9.2				502	-	151,5
65-160/11					-	158,3
65-160/15					-	164,5
65-200/15				547	-	169,5
65-200/18.5					-	169,7
65-200/22					-	224,5

(\*) Only for IE3 Motors



MOTOR DATA 3D

Pump type		Power		Efficiency		Capacitor		Efficiency (% load)			Input [kW]		Full load current [A]				Locked rotor current [A]			
Single Phase	Three Phase	[kW]	[HP]	Single Phase	Three Phase	Single Phase		Three phase			Single Phase	Three Phase	[A]				[A]			
						[µF]	[V]	50%	75%	100%			230 V	230 V	400 V	690 V	230 V	230 V	400 V	690 V
3D 32-125/1.1 M	3D 32-125/1.1	1,1	1,5	-	IE2	31,5	450	79,5	82,0	82,5	1,51	1,82	6,7	5,6	3,2	-	23,5	57,0	33,0	-
-	3D 32-125/1.1	1,1	1,5	-	IE3	-	-	83,5	84,3	84,6	-	1,77	-	5,8	3,3	-	-	47,4	27,4	-
3D 32-160/1.5 M	3D 32-160/1.5	1,5	2,0	-	IE2	40	450	79,5	82,0	82,5	2,10	1,82	9,6	5,6	3,2	-	47	57,0	33,0	-
-	3D 32-160/1.5	1,5	2,0	-	IE3	-	-	83,5	84,3	84,6	-	1,77	-	5,8	3,3	-	-	47,4	27,4	-
3D 32-160/2.2 M	3D 32-160/2.2	2,2	3,0	-	IE2	50	450	83,1	85,7	86,2	2,95	2,55	13,3	7,8	4,5	-	63,8	75,0	43,5	-
-	3D 32-160/2.2	2,2	3,0	-	IE3	-	-	86,2	87,0	86,0	-	2,55	-	8,2	4,7	-	-	66,6	38,4	-
-	3D 32-200/3.0	3,0	4,0	-	IE2	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1	-	-	100,0	57,7	-
-	3D 32-200/3.0	3,0	4,0	-	IE3	-	-	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	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7	-	-	151,0	87,0	-
-	3D 32-200/4.0	4,0	5,5	-	IE3	-	-	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	-	IE3	-	-	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	-	IE2	40	450	79,5	82,0	82,5	2,10	1,82	9,6	5,6	3,2	-	47	57,0	33,0	-
-	3D 40-125/1.5	1,5	2,0	-	IE3	-	-	83,5	84,3	84,6	-	1,77	-	5,8	3,3	-	-	47,4	27,4	-
3D 40-125/2.2 M	3D 40-125/2.2	2,2	3,0	-	IE2	50	450	83,1	85,7	86,2	2,95	2,55	13,3	7,8	4,5	-	63,8	75,0	43,5	-
-	3D 40-125/2.2	2,2	3,0	-	IE3	-	-	86,2	87,0	86,0	-	2,55	-	8,2	4,7	-	-	66,6	38,4	-
-	3D 40-160/3.0	3,0	4,0	-	IE2	-	-	85,0	86,7	86,3	-	3,48	-	10,6	6,1	-	-	100,0	57,7	-
-	3D 40-160/3.0	3,0	4,0	-	IE3	-	-	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	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7	-	-	151,0	87,0	-
-	3D 40-160/4.0	4,0	5,5	-	IE3	-	-	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	-	IE2	-	-	82,9	86,0	87,4	-	6,29	-	-	10,4	6,0	-	-	116,0	67,0
-	3D 40-200/5.5	5,5	7,5	-	IE3	-	-	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	-	IE3	-	-	89,0	90,7	90,8	-	8,26	-	-	13,6	7,9	-	-	144,0	83,0
-	3D 40-200/11	11,0	15,0	-	IE3	-	-	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	-	IE2	50	450	83,1	85,7	86,2	2,95	2,55	13,3	7,8	4,5	-	63,8	75,0	43,5	-
-	3D 50-125/2.2	2,2	3,0	-	IE3	-	-	86,2	87,0	86,0	-	2,55	-	8,2	4,7	-	-	66,6	38,4	-
-	3D 50-125/3.0	3,0	4,0	-	IE2	-	-	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	-	IE3	-	-	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	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7	-	-	151,0	87,0	-
-	3D 50-125/4.0	4,0	5,5	-	IE3	-	-	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	-	IE2	-	-	82,9	86,0	87,4	-	6,29	-	-	10,4	6,0	-	-	116,0	67,0
-	3D 50-160/5.5	5,5	7,5	-	IE3	-	-	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	-	IE3	-	-	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	-	IE3	-	-	90,1	90,8	90,9	-	10,12	-	-	17,2	10,0	-	-	166,0	96,0
-	3D 50-200/11	11,0	15,0	-	IE3	-	-	90,4	91,2	91,8	-	11,98	-	-	21,3	12,3	-	-	184,0	107,0
-	3D 50-200/15	15,0	20,0	-	IE3	-	-	91,2	92,0	91,9	-	16,32	-	-	30,0	17,3	-	-	225,0	130,0
-	3D 65-125/4.0	4,0	5,5	-	IE2	-	-	84,3	87,2	87,8	-	4,56	-	15,1	8,7	-	-	151,0	87,0	-
-	3D 65-125/4	4,0	5,5	-	IE3	-	-	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	-	IE2	-	-	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	-	IE3	-	-	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	-	IE3	-	-	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	-	IE3	-	-	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	-	IE3	-	-	90,1	90,8	90,9	-	10,12	-	-	17,2	10,0	-	-	166,0	96,0
-	3D 65-160/11	11,0	15,0	-	IE3	-	-	90,4	91,2	91,8	-	11,98	-	-	21,3	12,3	-	-	184,0	107,0
-	3D 65-160/15	15,0	20,0	-	IE3	-	-	91,2	92,0	91,9	-	16,32	-	-	30,0	17,3	-	-	225,0	130,0
-	3D 65-200/15	15,0	20,0	-	IE3	-	-	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	-	IE3	-	-	91,6	93,0	92,6	-	19,98	-	-	35,0	20,3	-	-	328,0	190,0
-	3D 65-200/22	22,0	30,0	-	IE3	-	-	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		Efficiency	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%							
3DS 32-125/1.1	3DP 32-125/1.1	80	1,1	1,5	IE2	1,35	79,5	81,2	81,5	0,8	4,3	2,5	-	29,4	17,0	-
			1,1	1,5	IE3	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	IE2	1,77	81,0	82,8	82,8	0,8	5,5	3,2	-	44,9	25,9	-
			1,5	2	IE3	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	IE2	2,59	82,5	84,0	84,0	0,9	7,6	4,4	-	64,8	37,4	-
			2,2	3	IE3	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	IE2	3,43	84,1	85,8	85,5	0,8	10,2	5,9	-	81,8	47,2	-
			3	4	IE3	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	IE2	4,64	85,2	86,4	86,1	0,9	13,5	7,8	-	110,9	64,0	-
			4	5,5	IE3	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	IE3	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	IE2	1,77	81,0	82,8	82,8	0,8	5,5	3,2	-	44,9	25,9	-
			1,5	2	IE3	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	IE2	2,59	82,5	84,0	84,0	0,9	7,6	4,4	-	64,8	37,4	-
			2,2	3	IE3	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	IE2	3,43	84,1	85,8	85,5	0,8	10,2	5,9	-	81,8	47,2	-
			3	4	IE3	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	IE2	4,64	85,2	86,4	86,1	0,9	13,5	7,8	-	110,9	64,0	-
			4	5,5	IE3	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	IE2	6,34	85,8	87,4	87,3	0,9	-	10,4	6,0	-	83,2	48,0
			5,5	7,5	IE3	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	IE3	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	IE3	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	IE2	2,59	82,5	84,0	84,0	0,9	7,6	4,4	-	64,8	37,4	-
			2,2	3	IE3	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	IE2	3,43	84,1	85,8	85,5	0,8	10,2	5,9	-	81,8	47,2	-
			3	4	IE3	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	IE2	4,64	85,2	86,4	86,1	0,9	13,5	7,8	-	110,9	64,0	-
			4	5,5	IE3	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	IE2	6,34	85,8	87,4	87,3	0,9	-	10,4	6,0	-	83,2	48,0
			5,5	7,5	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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	IE2	4,64	85,2	86,4	86,1	0,9	13,5	7,8	-	110,9	64,0	-
			4	5,5	IE3	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	IE2	6,34	85,8	87,4	87,3	0,9	-	10,4	6,0	-	83,2	48,0
			5,5	7,5	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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	IE3	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