



**EBARA**



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**SPECIFICATION**

**50Hz**

Rev. 0

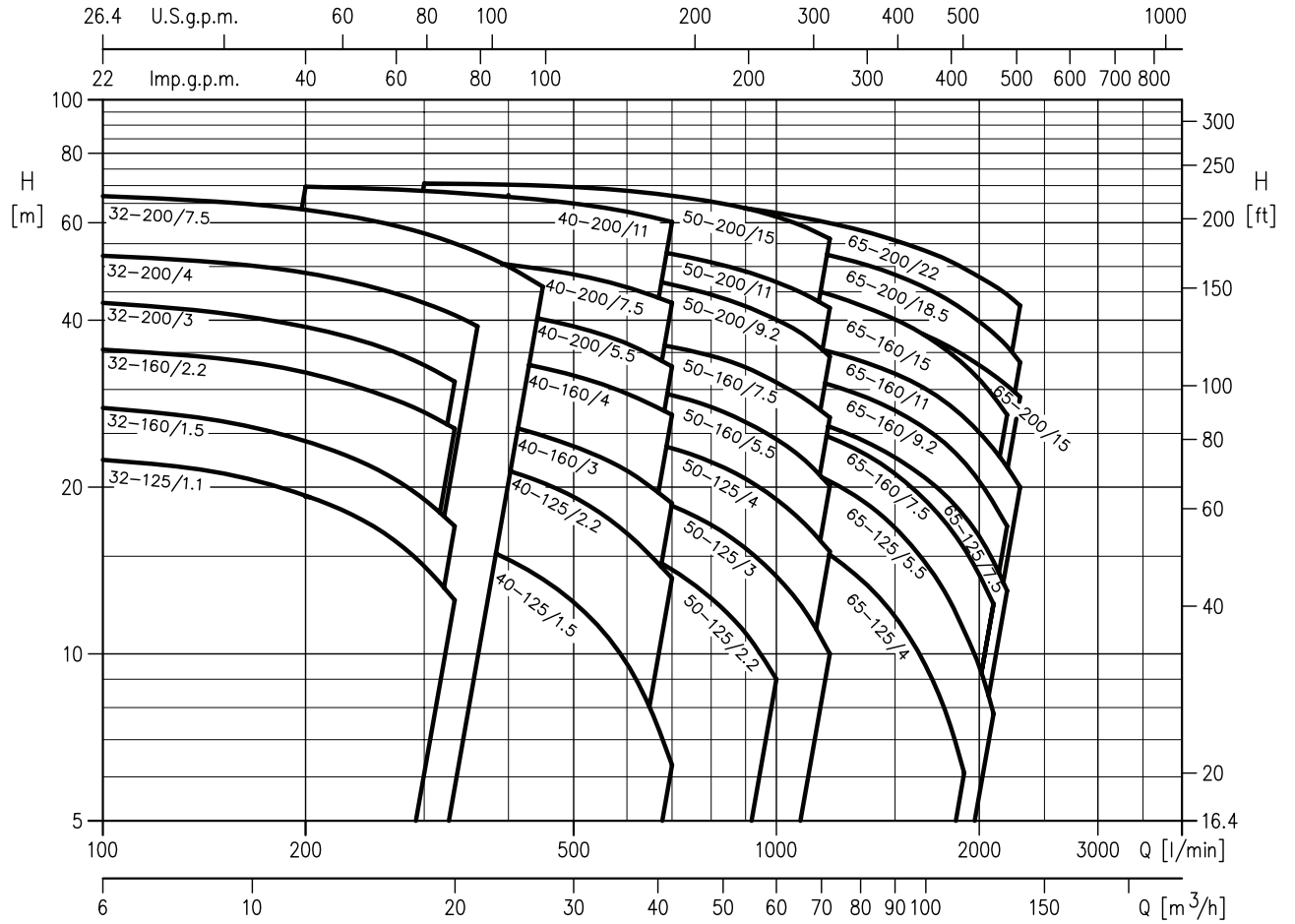
PUMP		
Liquid Handled	Type of liquid	Clean water
	Working temperature [°C]	min. -5 max. +90 max. +110 (H, HS, HW, HSW version) max. +120 (E version)
Maximum working pressure [MPa]		1
Construction	Impeller	Closed centrifugal type for 32, 40, 50 series Reinforced laser welding for 40-200/11, 50-200/15 Closed centrifugal three dimensional blades for 65 series
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction	Flange DN 50, 65 according to EN 1092-2 Flange DN 80 according to UNI 2236-67 (4 holes)
	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 Optionals on pag. 307-310)
	Shaft	AISI 304 (wet extension)
	Bracket	Aluminium/Cast iron
Accessory	Counterflange	DN 32, 40, 50, 65, 80 (see pag. 315)
Applicable standard of test		ISO 9906 - Annex A

MOTOR				
Type	3D		3DS	3DP
	Electric - TEFC			
	Single Phase	Three Phase		
Efficiency (Reg. 640/2009)	-	IE2 from 1.1 kW to 22 kW IE3 from 7.5 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	M20x1.5, M25x1.5, M32x1.5, M40x1.5	
		PG 16 PG 21		
Flange mount (IEC motor)	/	IM B5 (up to 2.2 kW) IM B35 (3.0 kW and above)	IM B3	

## SELECTION CHART

50Hz

Rev. 0



## SELECTION CHART

50Hz

Rev. 0

## 3D SERIES 32 SIZE

Pump type	kW	HP	l/min	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	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	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	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

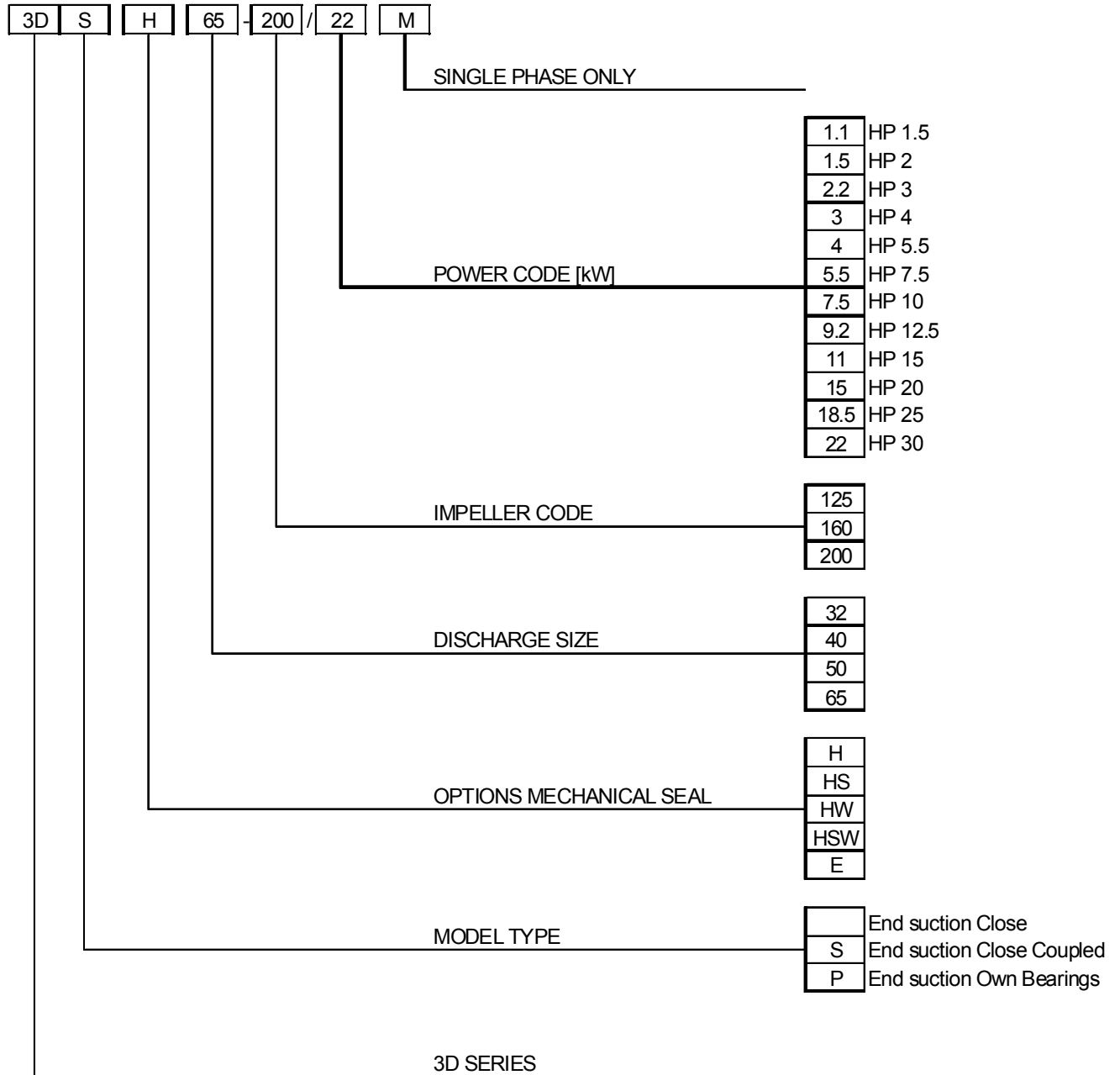
\* Single phase version only for 3D type

## TYPE KEY AND CURVE SPECIFICATIONS

50Hz

Rev. 0

### TYPE KEY



**PERFORMANCE CURVE SPECIFICATIONS**

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

Tolerances according to ISO 9906 Annex A

The curves refer to effective speed of asynchronous motors at 50 Hz

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

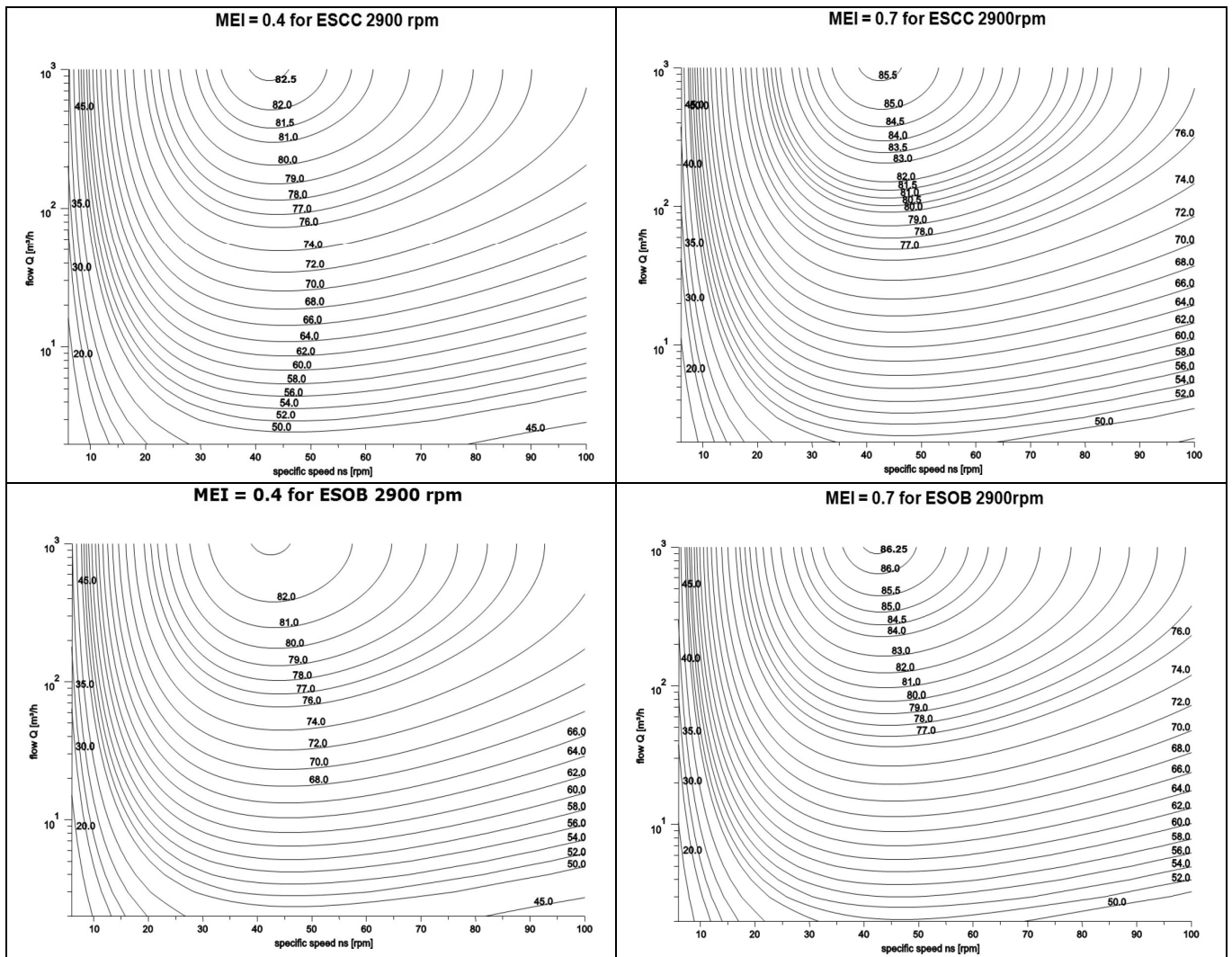


MEI INDEX SPECIFICATION

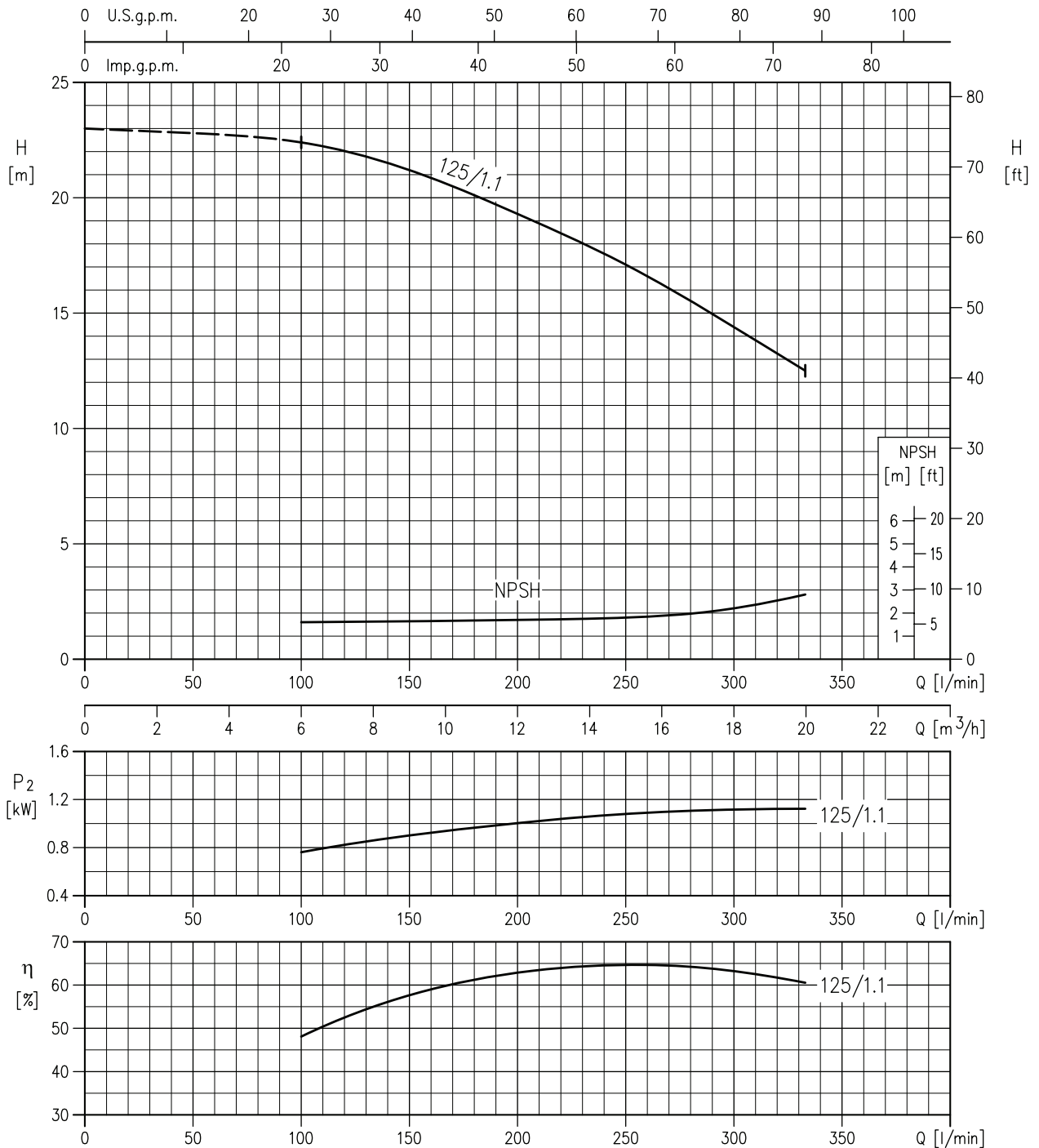
The minimum efficiency index (MEI) is a measure of the quality of a pump size in respect to its mean efficiency. The minimum efficiency index is based on the hydraulic efficiency and on the head at the best efficiency point.

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

The operation of these water pumps with variable duty points may be more efficient and economical when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

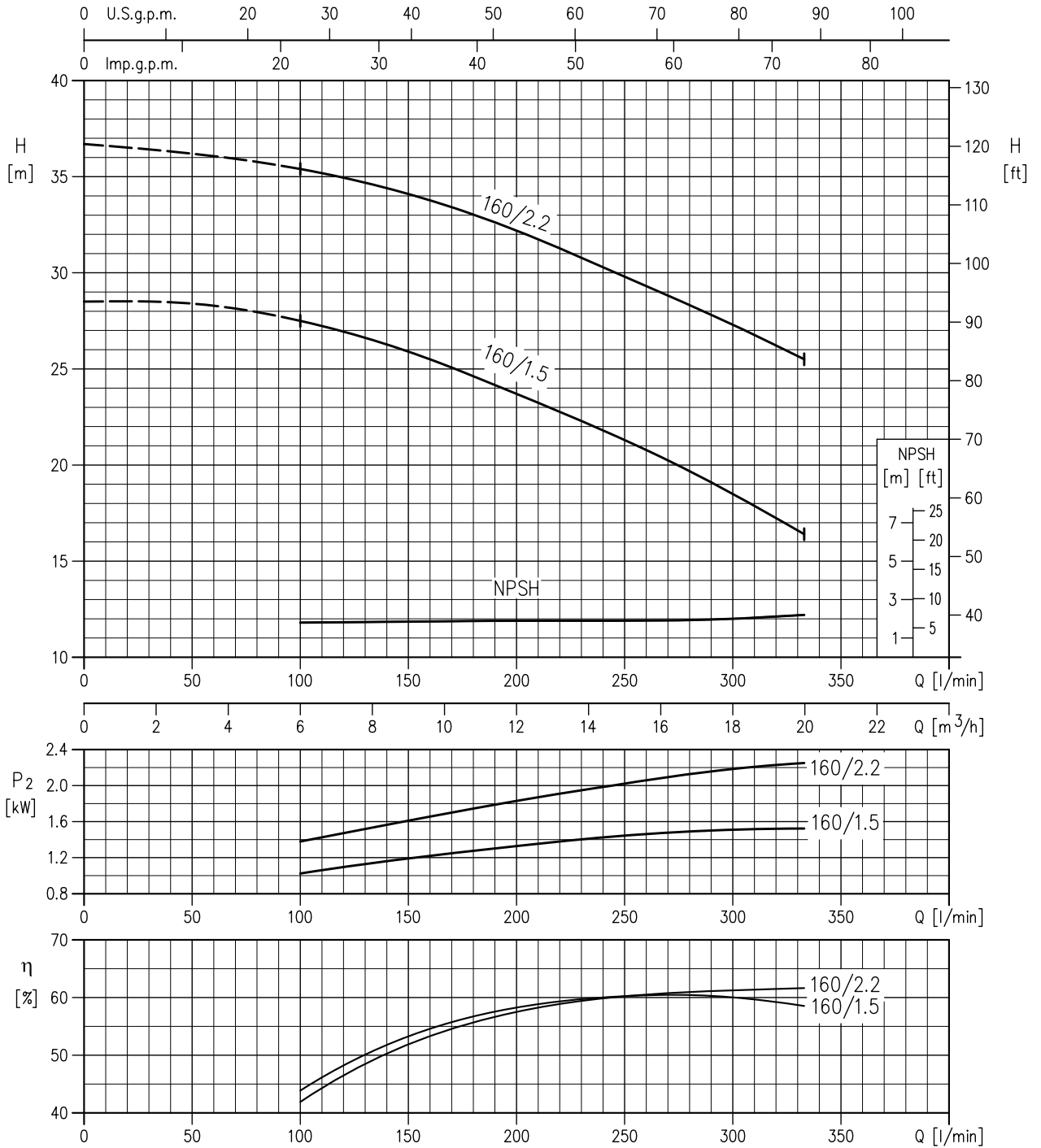


32-125/1.1 (1.1kW) MEI > 0.70 – impeller diameter = 133 mm



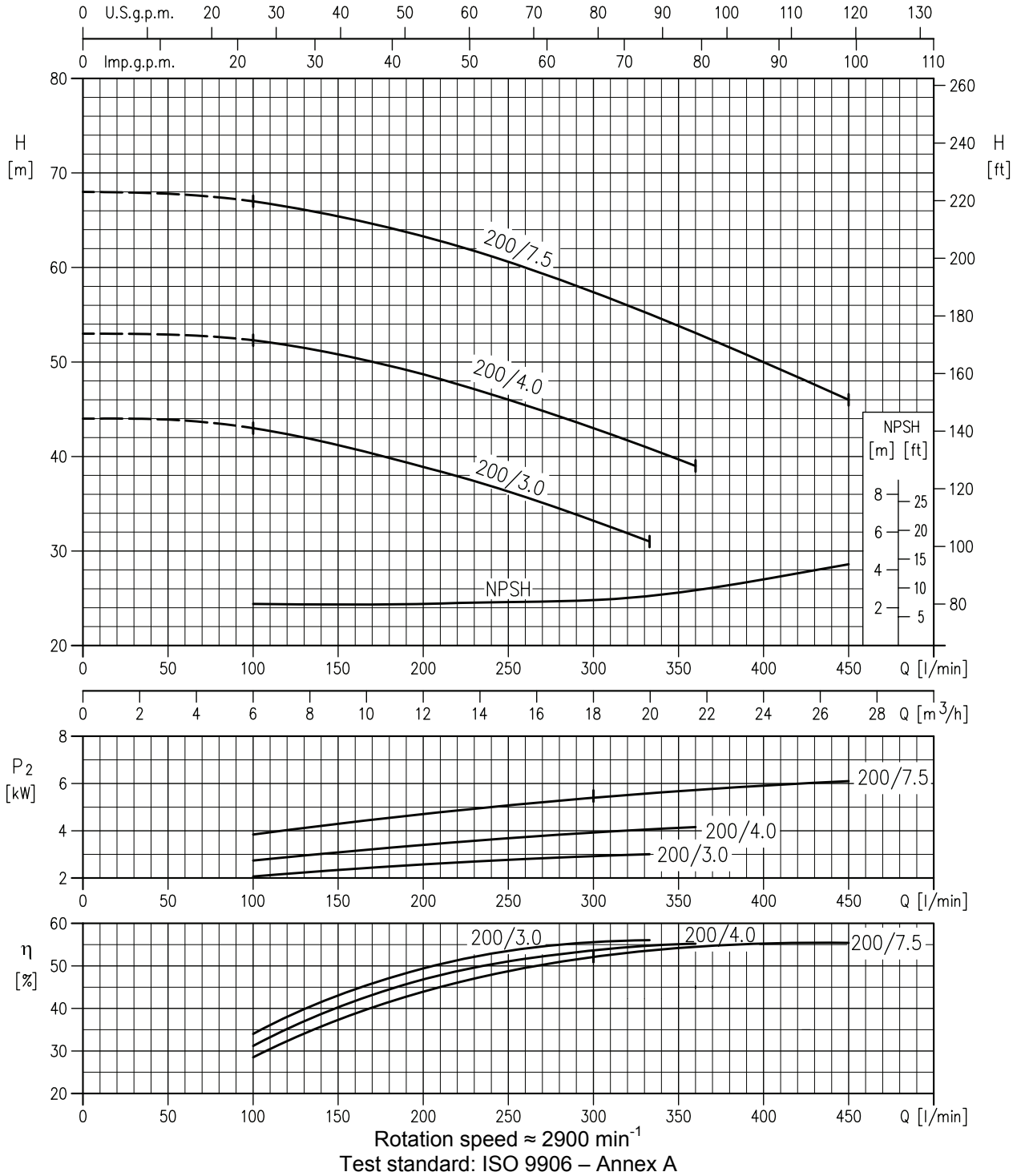
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

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

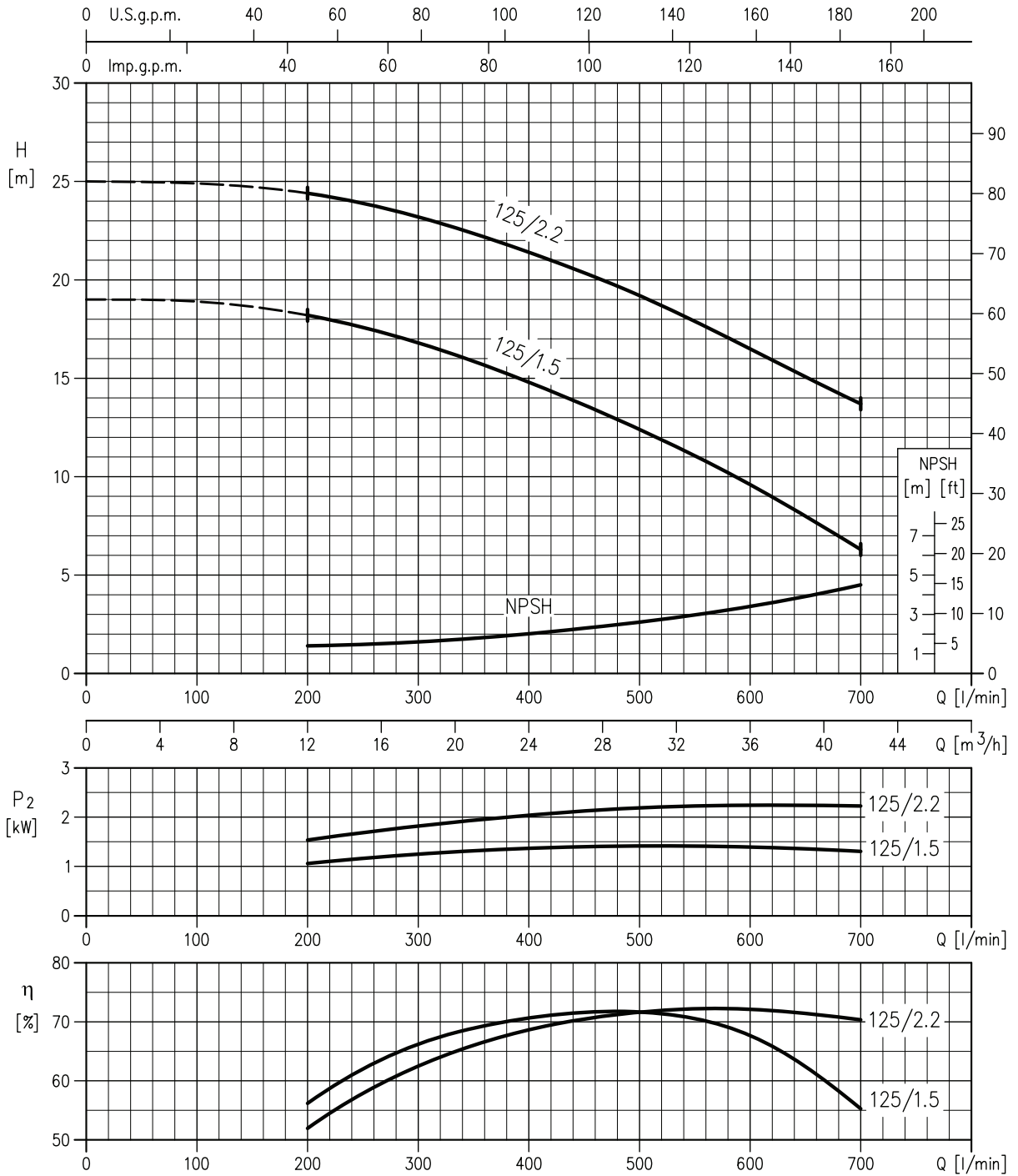


Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

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

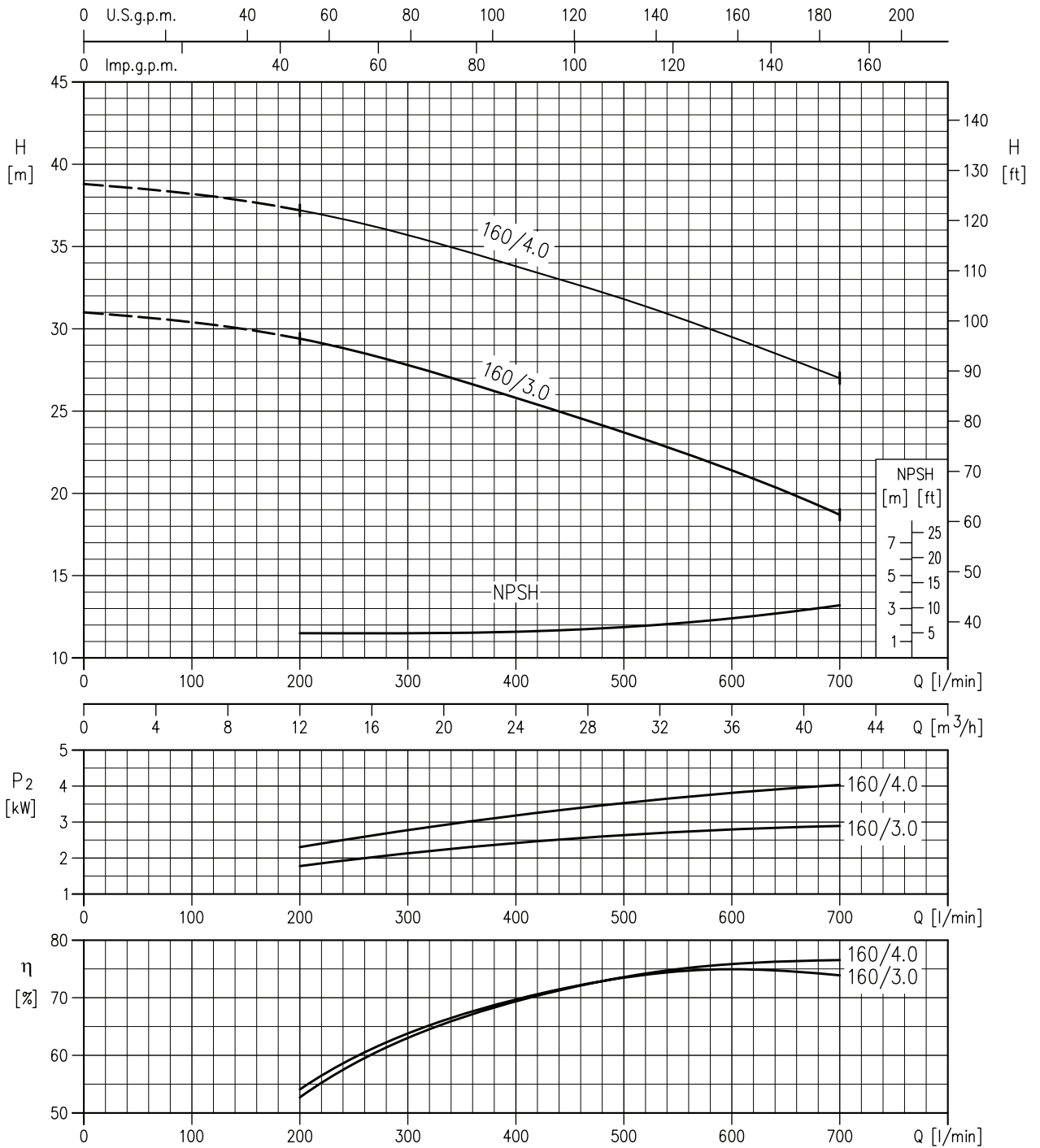


40-125/1.5 (1.5kW) MEI > 0.50 – impeller diameter = 125 mm  
 40-125/2.2 (2.2kW) MEI > 0.50 – impeller diameter = 140 mm



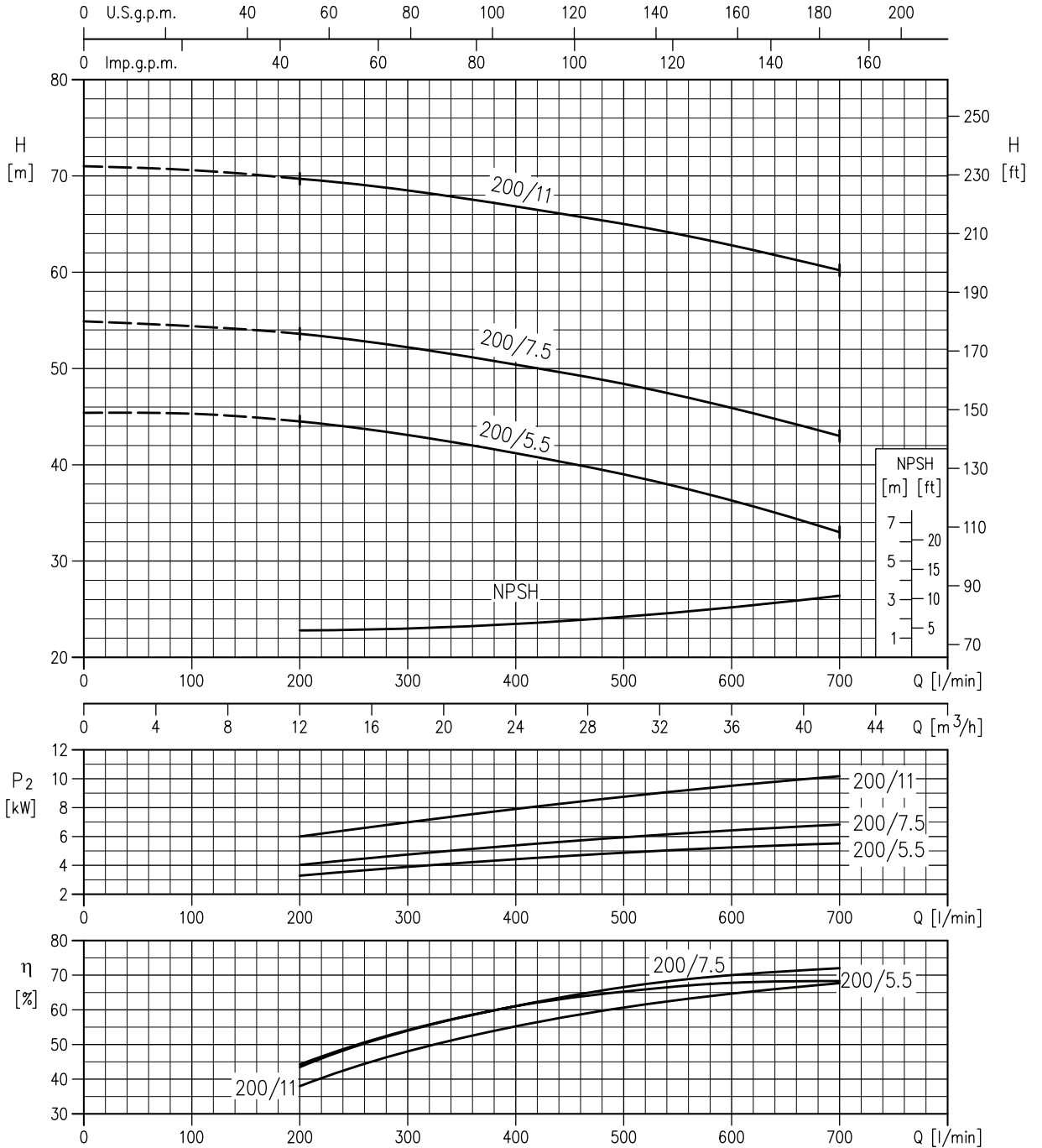
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

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



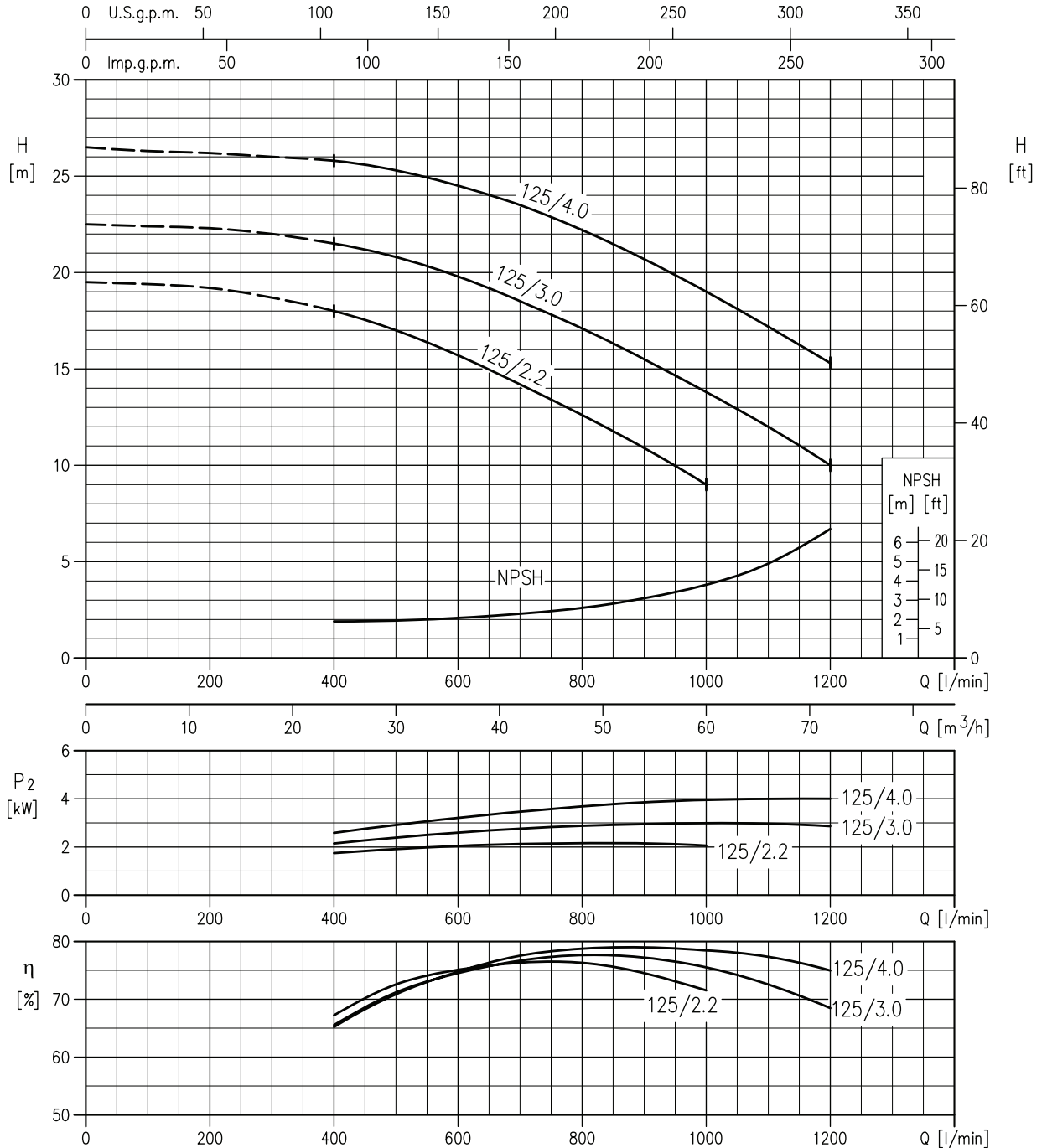
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

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  $\approx 2900 \text{ min}^{-1}$   
 Test standard: ISO 9906 – Annex A

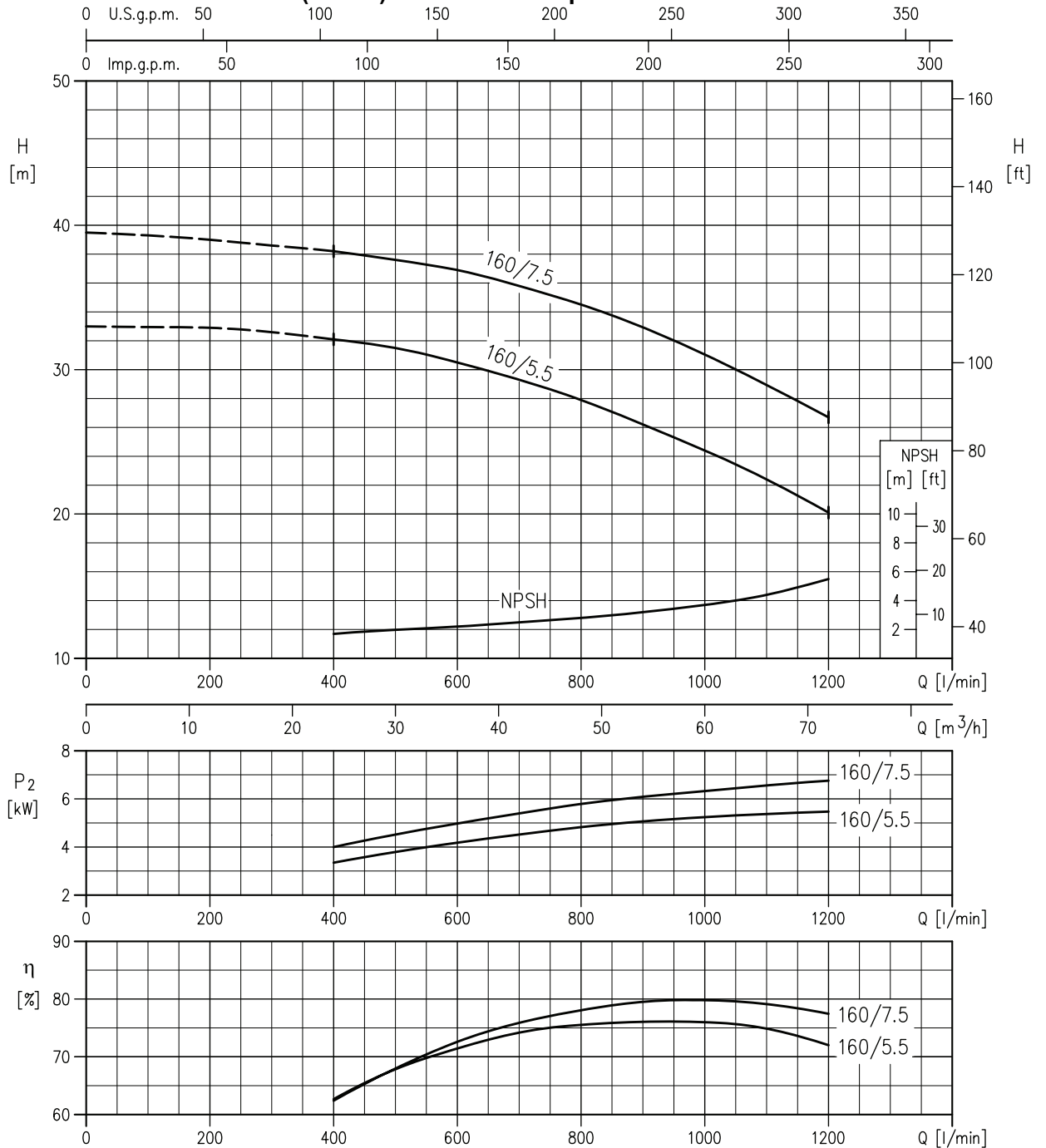
50-125/2.2 (2.2kW) MEI > 0.60 – impeller diameter = 126 mm  
 50-125/3.0 (3.0kW) MEI > 0.60 – impeller diameter = 131 mm  
 50-125/4.0 (4.0kW) MEI > 0.60 – impeller diameter = 140 mm



Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

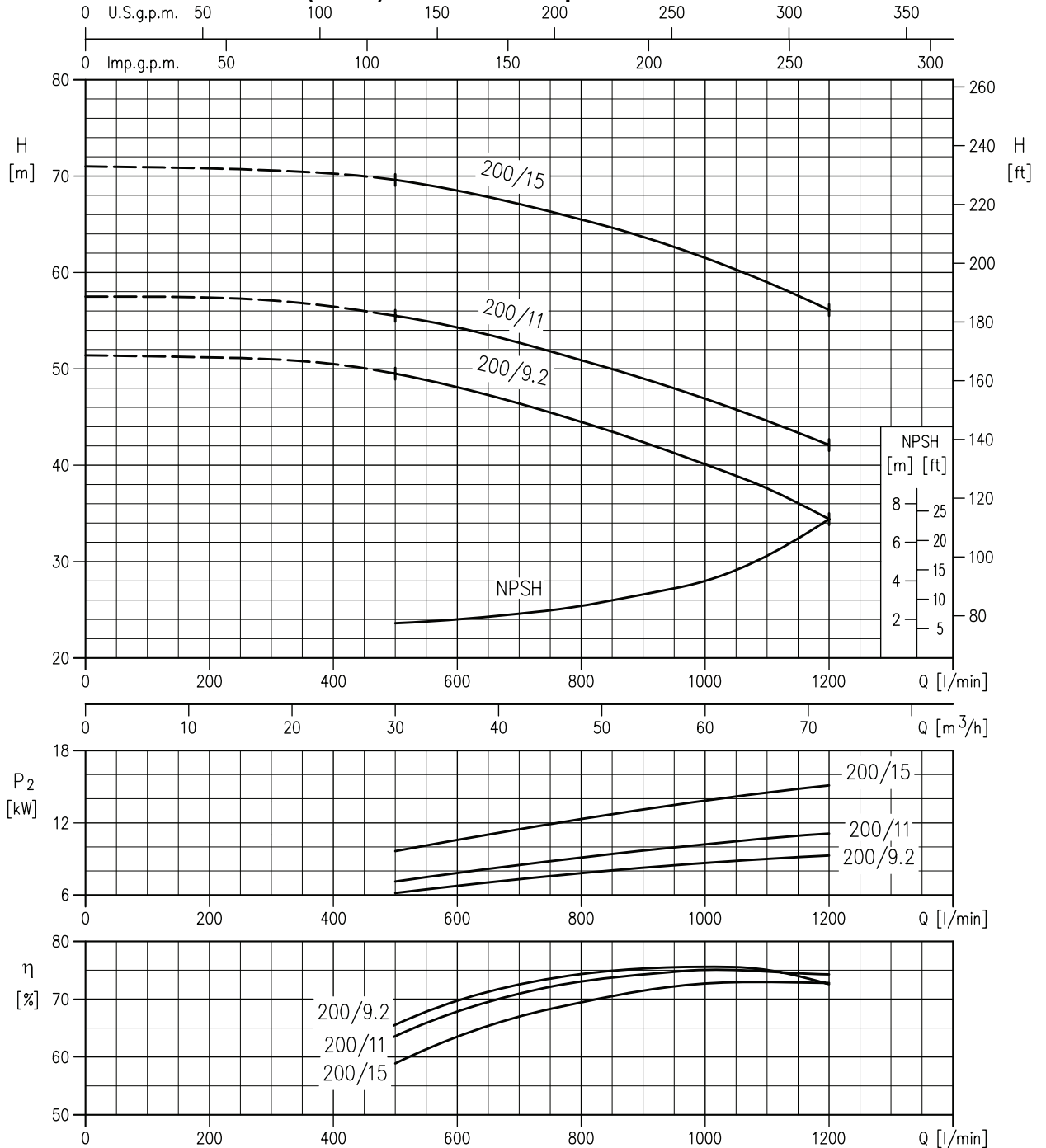


50-160/5.5 (5.5kW) MEI > 0.70 – impeller diameter = 154 mm  
 50-160/7.5 (7.5kW) MEI > 0.70 – impeller diameter = 166 mm



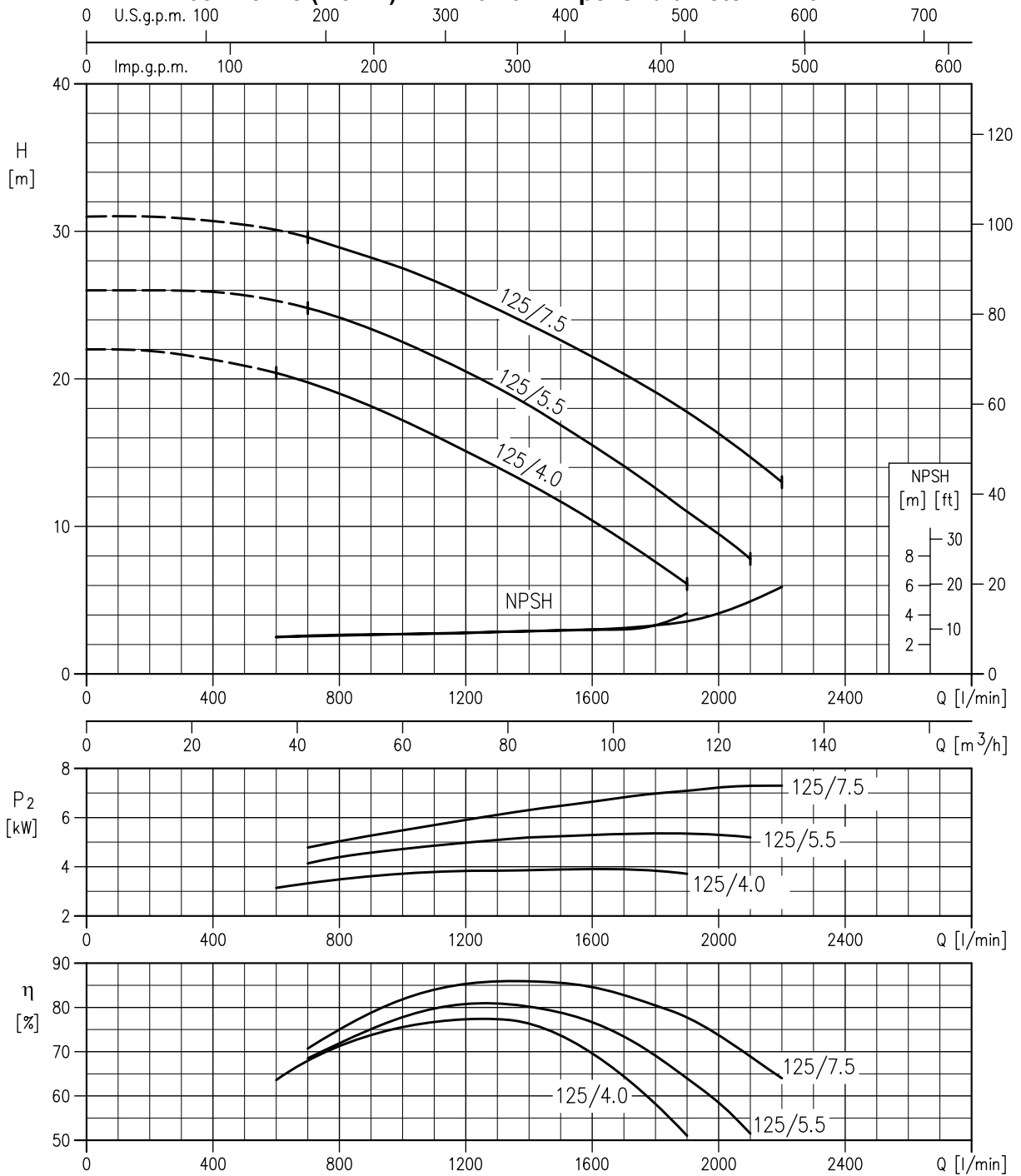
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

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



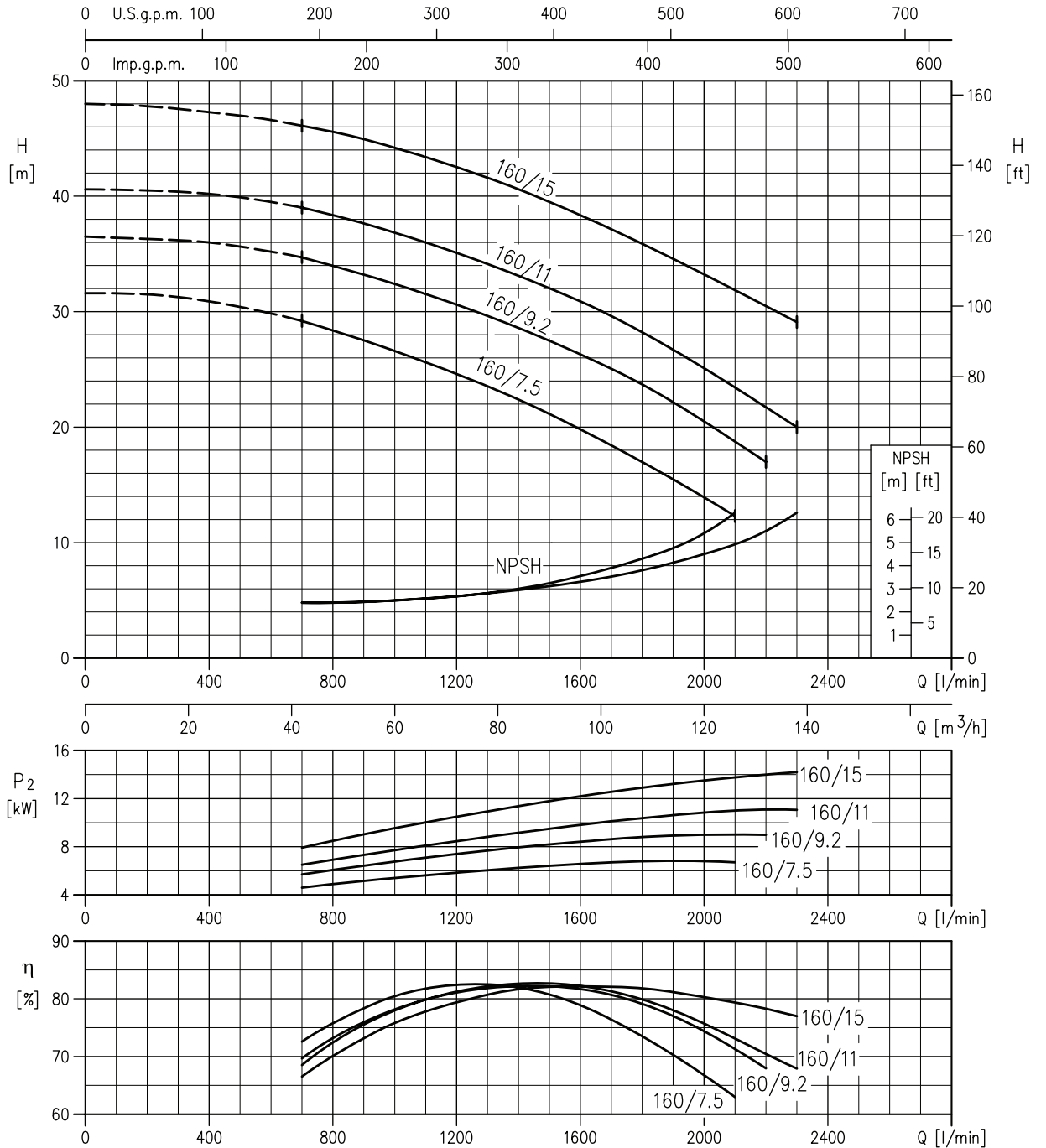
Rotation speed  $\approx 2900 \text{ min}^{-1}$   
 Test standard: ISO 9906 – Annex A

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



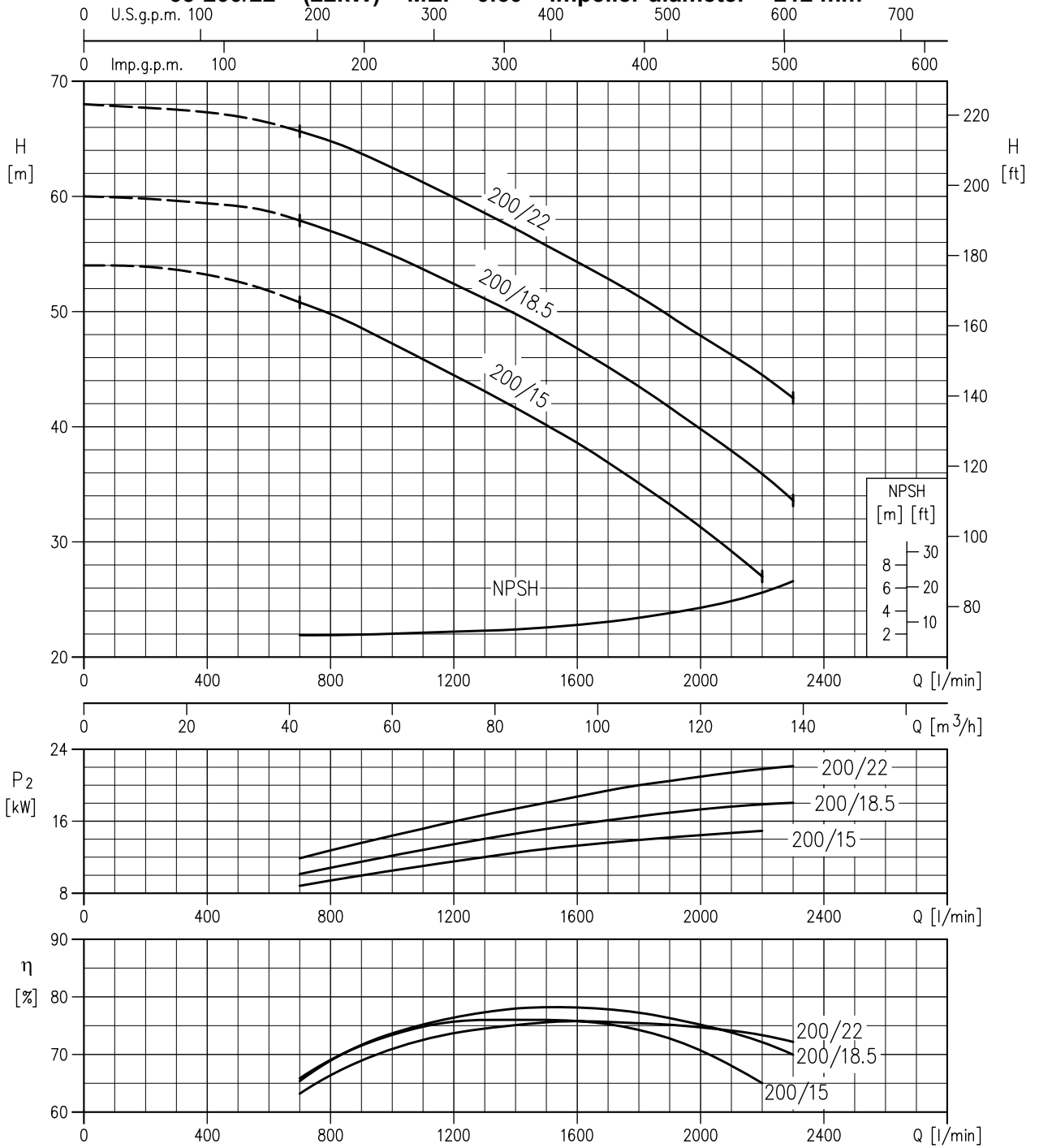
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

65-160/7.5 (7.5kW) MEI > 0.70 – impeller diameter = 153 mm  
 65-160/9.2 (9.2kW) MEI > 0.70 – impeller diameter = 161 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  $\approx 2900 \text{ min}^{-1}$   
 Test standard: ISO 9906 – Annex A

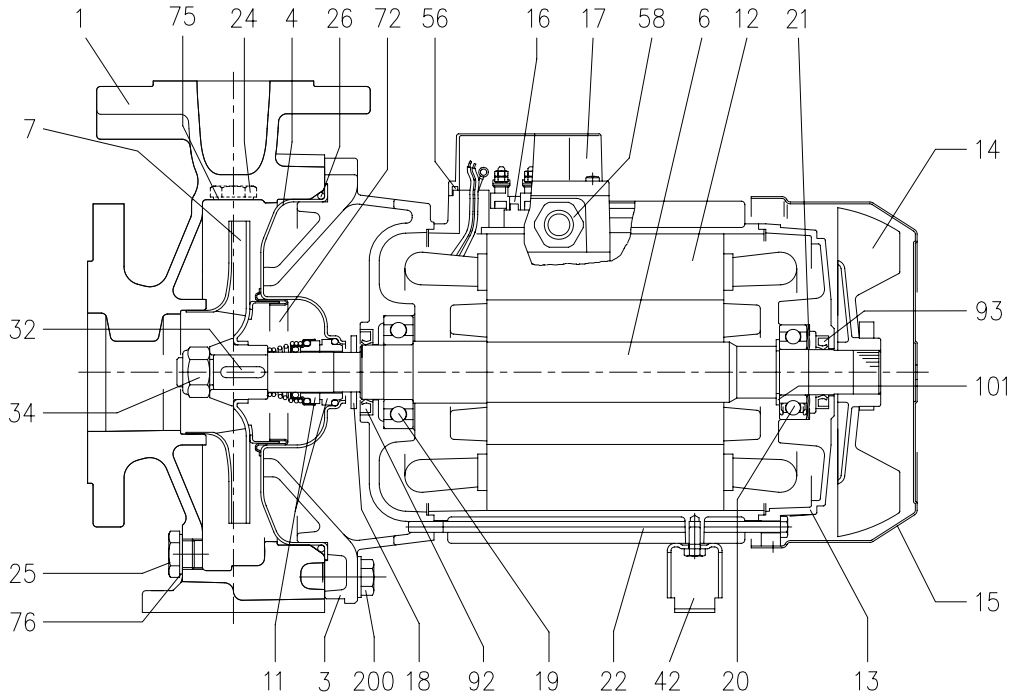
65-200/15 (15kW) MEI > 0.60 – impeller diameter = 190 mm  
 65-200/18.5 (18.5kW) MEI > 0.60 – impeller diameter = 201 mm  
 65-200/22 (22kW) MEI > 0.60 – impeller diameter = 212 mm



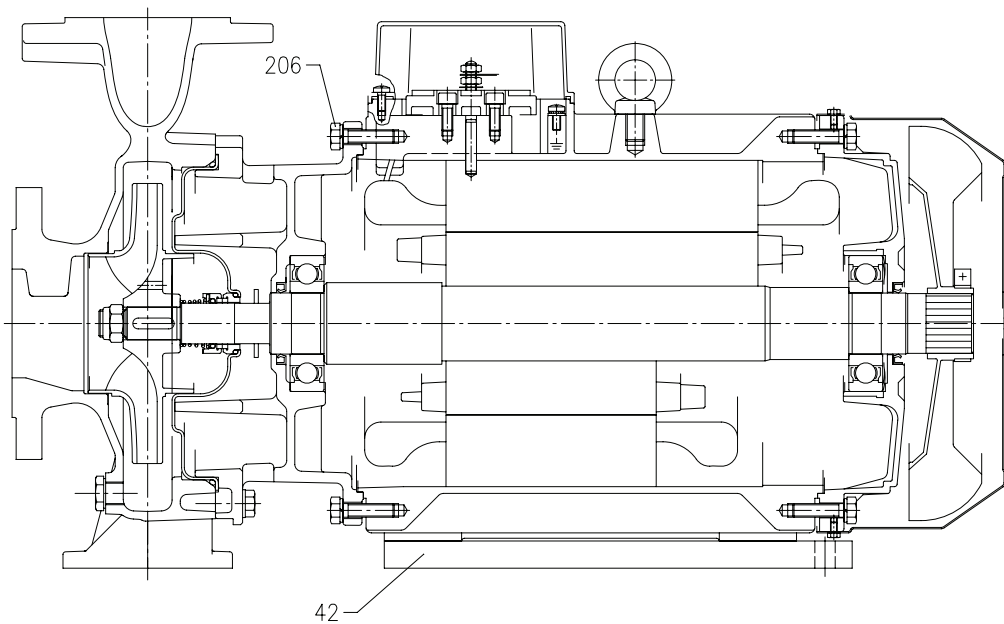
Rotation speed ≈ 2900 min<sup>-1</sup>  
 Test standard: ISO 9906 – Annex A

SECTIONAL VIEW DRAWING 3D 32, 40, 50, 65

UP TO 11 kW



15 kW AND ABOVE



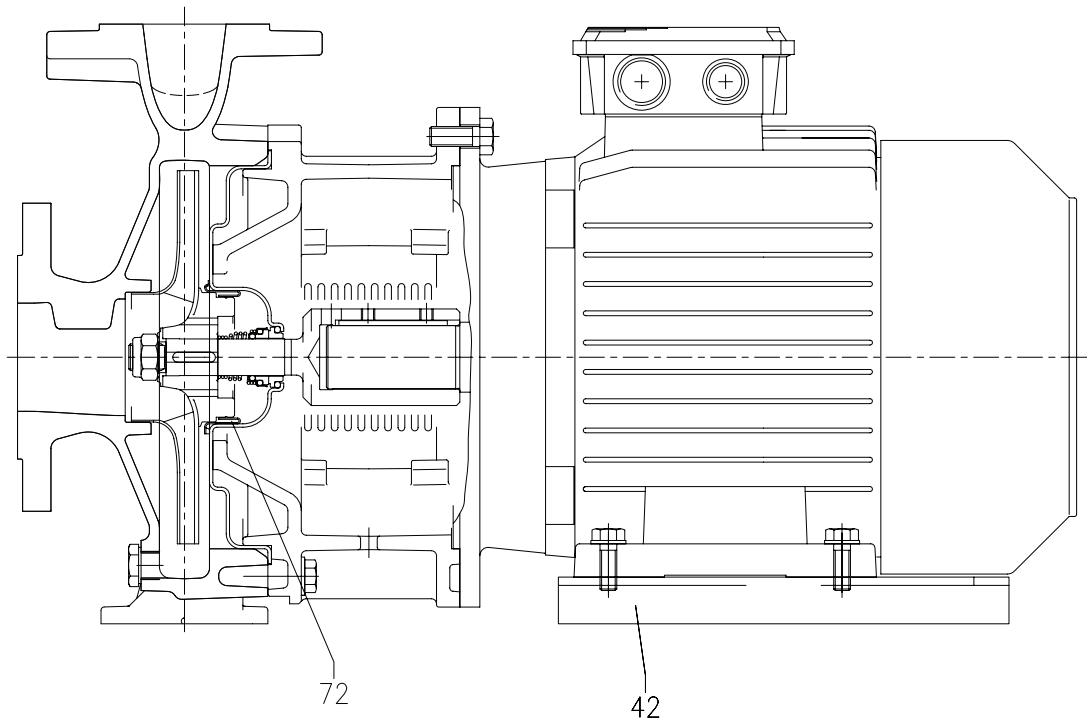
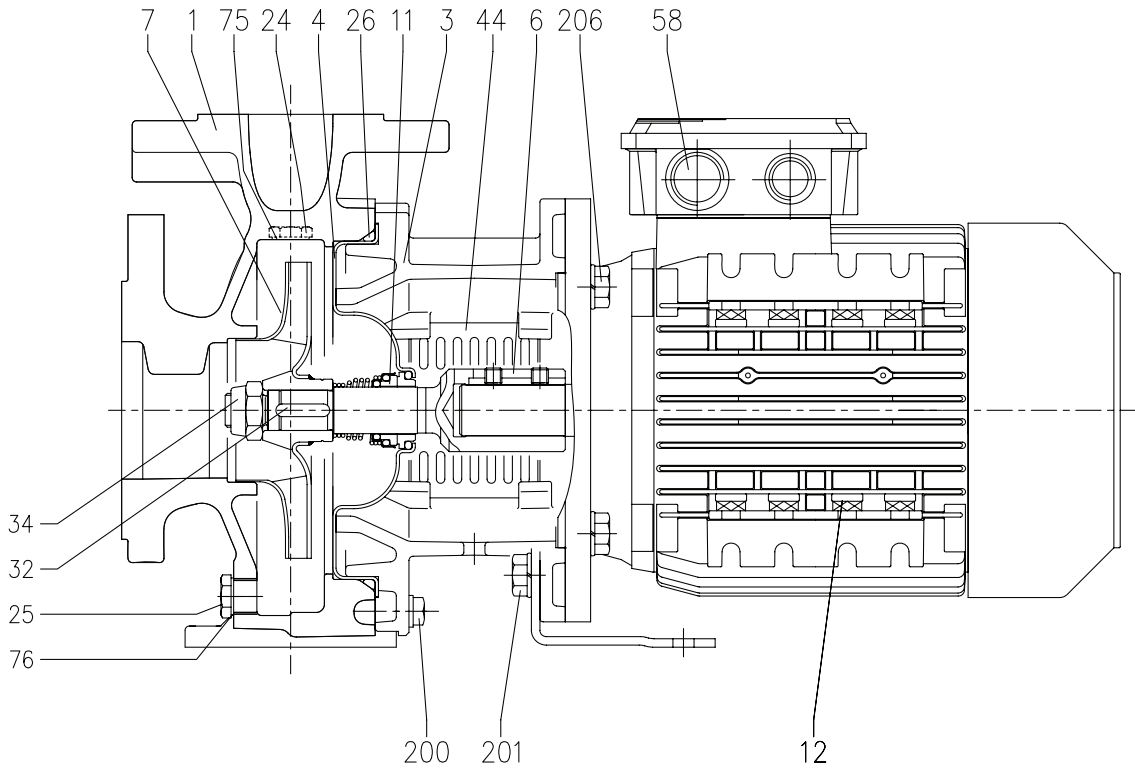
3D SECTIONAL VIEW TABLE

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
001	Casing	Cast iron EN-GJL-250-EN 1561			1
003	Motor bracket	[1]			1
004	Casing cover	EN 1.4301 (AISI 304)			1
006	Shaft with rotor - Wet extension	EN 1.4301 (AISI 304)			1
007	Impeller	[2]			1
011	Mechanical seal	[3]	[3]		1
012	Motor frame with stator	-			1
013	Motor cover	Aluminium			1
014	Fan	PA			1
015	Fan cover	Fe P04 Galvanized			1
016	Terminal	-			1
017	Terminal box cover	Aluminium (three phase version)			1
018	Splash ring	NBR	Up to 11 kW 40x21.5x2	EBARA DRAWING	1
	15 kW and above		50x29.5x3		
019	Bearing	-	[4]		1
020	Bearing	-	[4]		1
021	Adjusting ring	Steel C70			1
022	Tie rod	Fe 42 Galvanized	Up to 3 kW	EBARA DRAWING	4
			For 4 - 5.5 - 7.5 kW		
			9.2 e 11kW		
24	Screw	Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739	1
25	Priming plug	Brass	G 3/8" L=8		1
	Draining plug	Brass	G 3/8" L=8		1
026	"O" ring	NBR [5]	32-125, 40-125	158.11x5.34	OR 6625
			32-160, 40-160, 50-125, 65-125	183.52x5.34	OR 6720
			32-200, 40-200, 50-160, 50-200, 65-160, 65-200	227.96x5.34	OR 6895
032	Key	EN 1.4401 (AISI 316)	Up to 11 kW	A 6x6x25	UNI 6604
			50-200/15	A 8x7x30	
034	Impeller nut	EN 1.4301 (AISI 304)	15 kW and above	M16x1.5	UNI 7474
			Up to 11kW	M18x1.5	
			50-200/15	M20x1.5	
042	Foot	Aluminium / Galvanized steel		EBARA DRAWING	[6]
056	Box gasket	NBR			1
058	Cable gland	-			[7]
072	Casing ring [8]	EN 1.4301 (AISI 304)			1
075	Washer	Aluminium	22x17x1.5	EBARA DRAWING	1
076	Washer	Aluminium			1
092	Lip seal	-	Up to 3kW	25x40x7	DIN 3760 without spring
			From 4 to 7.5 kW	30x47x7	
			From 9.2 kW to 11 kW	40x55x7	
			From 15 kW to 22 kW	45x60x7	
093	Lip seal	-	Up to 4 kW	25x40x7	DIN 3760 without spring
			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 [9]	Carbon tool steels TC 80	Ø 40	UNI 7435	1
200	Screw	Gv. Steel 8.8 strenght class ISO 898-1	32-125	M 8x30	UNI 5739
			40-125		
			32-160		
			40-160		
			50-125	M 10x35	
			65-125		
235	Washer	Galvanized Steel	32-125	8.4x17	UNI 6592
			40-125		
			32-160		
			40-160		
			50-125	10.5x21	
			65-125		
206	Screw for bracket [10]	Gv. Steel 8.8 strenght class ISO 898-1	32-200, 40-200		UNI 5739
			50-160, 50-200		
			65-160, 65-200		
				M 10x40	

Counterflange kit on request see p. 315

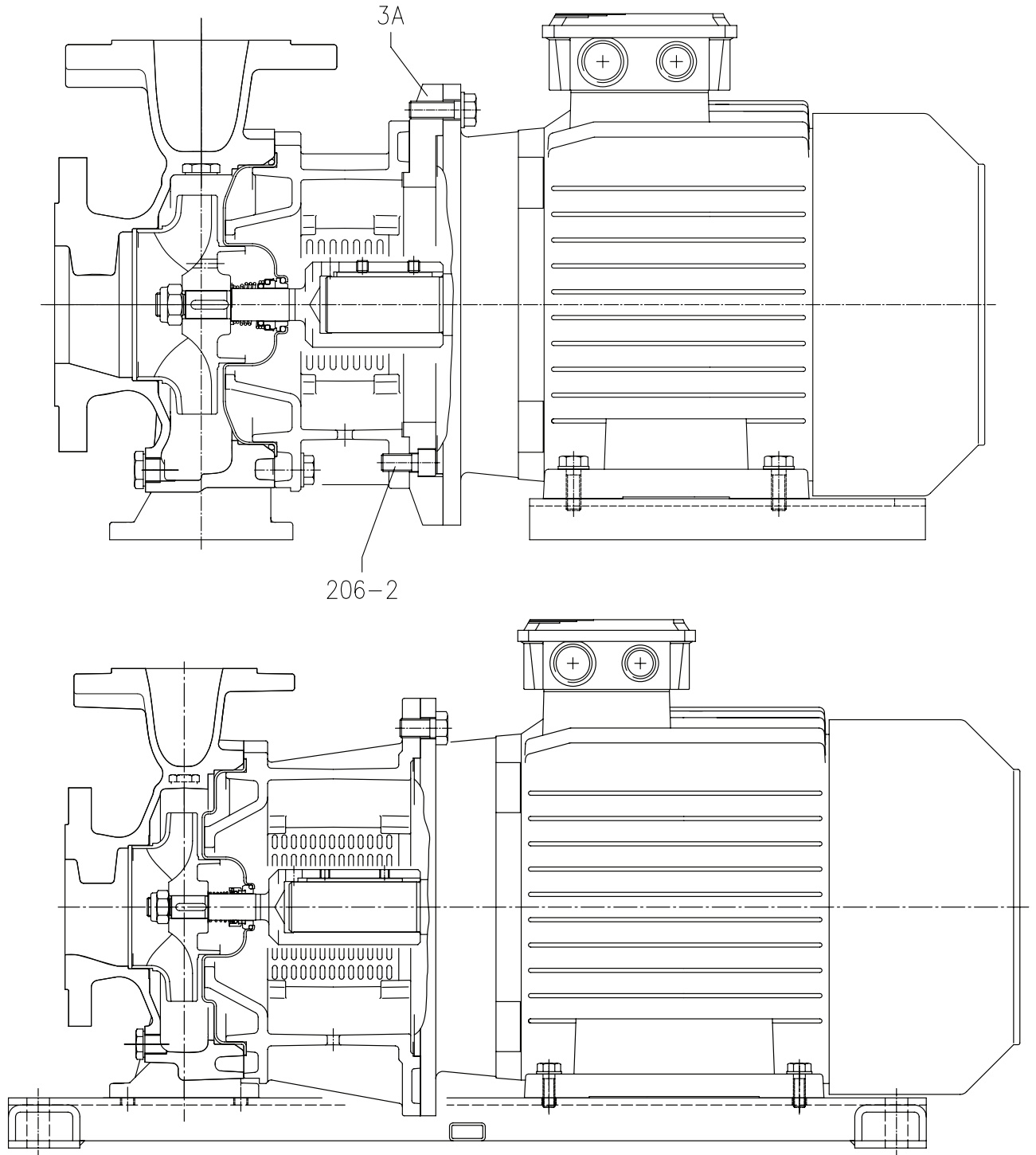
- [1] Cast iron EN-GJL-200-EN 1561 for 3D 32-200/3 and models with 15, 18.5, 22 kW motor
- [2] Aluminum AL-EN-1706-AC-46000-D for all the others;
- [3] EN 1.4301 (AISI 304) for 32, 40, 50 series; EN 1.4401 (AISI 316) for 65 series
- [4] For special version and dimensions see pag. 307+310
- [5] See pag. 311
- [6] FPM for H, HS, HW, HSW version; EPDM for E version
- [7] 0 for 65-160/15 kW; 1 for pumps up to 11 kW 2 for 65-200/15, 18.5, 22 kW
- [8] 1 for pumps with motor up to 11 kW 2 for pumps with 15 kW motor and above
- [9] Only for: 32-200, 40-200, 50-160, 50-200
- [10] Only for pumps with 9.2 and 11 kW motor

3DS 32, 40, 50 SECTIONAL VIEW DRAWING





3DS 65 SECTIONAL VIEW DRAWING



3DS 32, 40, 50, 65 SECTIONAL VIEW TABLE

N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	Q.TY
001	Casing		Cast iron EN-GJL-200-EN 1561			1
003	Motor bracket		Cast iron EN-GJL-200-EN 1561			1
003A	Adapter ring [1]		Cast iron EN-GJL-200-EN 1561			1
004	Casing cover		EN 1.4301 (AISI 304)			1
006	Coupling - Wet extensions		EN 1.4301 (AISI 304)	[2]		1
007	Impeller		[3]			1
011	Mechanical seal		[4]	[4]		1
012	Motor		-			1
024	Priming plug		Brass	G 3/8" L=8		1
025	Draining plug		Brass	G 3/8" L=8		1
026	"O" ring	32-12540-125	NBR [5]	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	
032	Key	Up to 11 kW	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
		50-200/15		8x7x30		
		15 kW and above				
034	Impeller nut	Up to 11kW	EN 1.4301 (AISI 304)	M16x1.5	UNI 7474	1
		50-200/15		M18x1.5		
		15 kW and above		M20x1.5		
042	Foot		Galvanized Steel			[6]
044	Protection		EN 1.4301 (AISI 304)		EBARA DRAWING	1
058	Cable gland		-			
072	Casing ring [7]		EN 1.4301 (AISI 304)			1
075	Washer		Aluminum	22x17x1.5	EBARA DRAWING	1
076	Washer		Aluminum			1
200	Screw	32-125	Gv. Steel 8.8 strenght class ISO 898-1	M8x30	UNI 5739	8
		40-125		M10x35		10
		32-160				
		40-160				
		50-125				
		65-125		12		
32-200, 40-200						
50-160, 50-200						
65-160, 65-200						
201	Screw [8]		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	32-125	Galvanized Steel	8.4x17	UNI 6592	8
		40-125		10.5x21		10
		32-160				
		40-160				
		50-125				
		65-125		12		
32-200, 40-200						
50-160, 50-200						
65-160, 65-200						

Counterflange kit on request see p. 315

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

[2] See pag. 313

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

[4] See pag. 307+301

[5] FPM for H, HS, HW, HSW version;  
EPDM for E version

[6] 0 for version 65-200/22

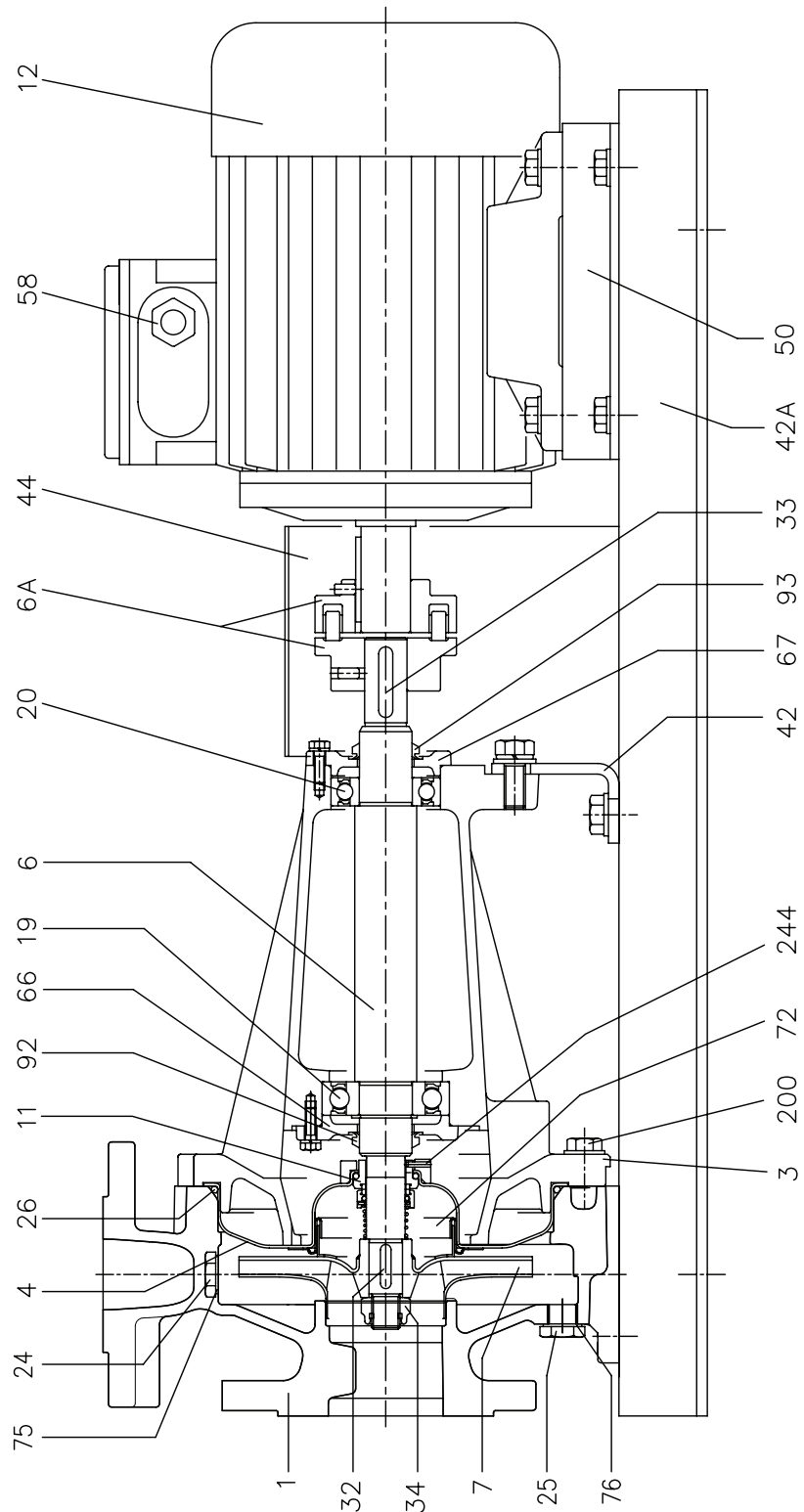
1 for version for 32, 40, 50, 65-125/5.5, 65-125/7.5, 65-160/11,  
65-160/15, 65-200/15, 65-200/18.5

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

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

[8] 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

SECTIONAL VIEW DRAWING 3DP 32, 40, 50, 65



## SECTIONAL VIEW TABLE 3DP 32, 40, 50, 65

N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	Q.TY
001	Casing		Cast iron EN-GJL-200-EN 1561			1
003	Support		Cast iron EN-GJL-200-EN 1561			1
004	Casing cover		EN 1.4301 (AISI 304)			1
006	Shaft - Wet extension		EN 1.4301 (AISI 304)			1
006A	Flexible coupling		Cast iron EN-GJL-250-EN 1561	[1]		1
007	Impeller		[2]			1
011	Mechanical seal		[3]	[3]		1
012	Motor		-			1
019	Bearing		-	[4]		1
020	Bearing		-	[4]		1
024	Priming plug		Brass	G 3/8" L=8	DIN 906	1
025	Drain plug		Brass	G 3/8" L=8	DIN 906	1
026	"O" ring	32-125, 40-125	NBR [5]	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	
032	Key	Up to 11 kW	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
		50-200/15		8x7x30		
		15 kW and above				
033	Key		C 40	8x7x40	UNI 6604	1
034	Impeller nut	Up to 11kW	EN 1.4301 (AISI 304)	M16x1.5	UNI 7474	1
		50-200/15		M18x1.5		
		15 kW and above		M20x1.5		
042	Pump support		Fe 37 Galvanized		EBARA DRAWING	1
042A	Base		Fe 37 Galvanized			1
044	Protection		Fe 37 Galvanized			1
050	Foot		Aluminium / Galvanized steel			1
058	Cable gland		-			1
066	Impeller side bearing cover		Cast iron EN-GJL-200-EN 1561			1
067	Motor side bearing cover		Cast iron EN-GJL-200-EN 1561			1
072	Casing ring [6]		EN 1.4301 (AISI 304)			1
075	Washer		Aluminum	22x17x1.5	EBARA DRAWING	1
076	Washer		Aluminum	22x17x1.5	EBARA DRAWING	1
092	"V" ring		-	VS - 0030		1
093	"V" ring		-	VS - 0030		1
200	Screw	32-125	Gv. Steel 8.8 strenght class ISO 898-1	M 8x30	UNI 5739	8
		40-125		M 10x35		10
		32-160				12
		40-160				
		50-125				12
		65-125				
32-200, 40-200						
50-160, 50-200						
65-160, 65-200						
235	Washer	32-125	Galvanized Steel	8.4x17	UNI 6592	8
		40-125		10.5x21		10
		32-160				12
		40-160				
		50-125				12
		65-125				
32-200, 40-200						
50-160, 50-200						
65-160, 65-200						

Counterflange kit on request see p. 315

[1] See pag. 314

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

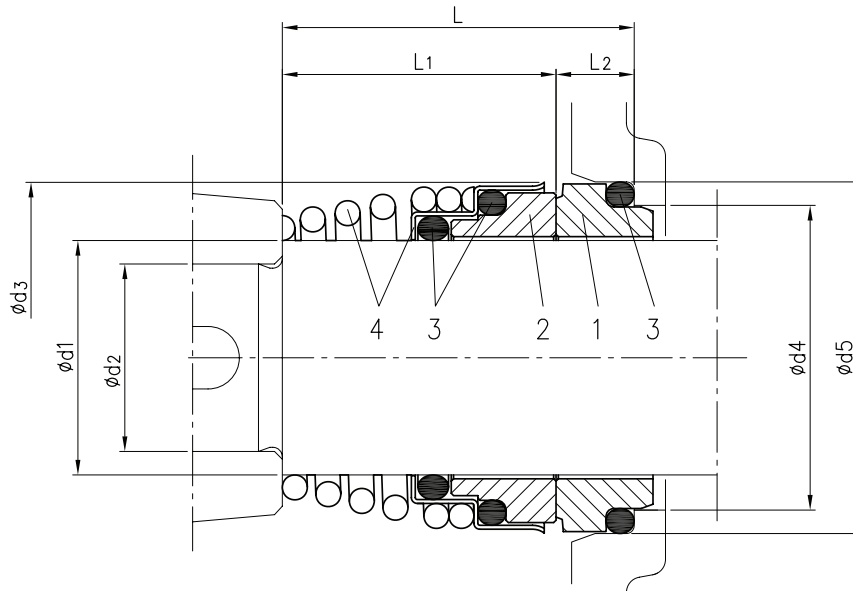
[3] See pag. 307+310

[4] See pag. 312

[5] FPM for H, HS, HW, HSW version;  
EPDM for E version

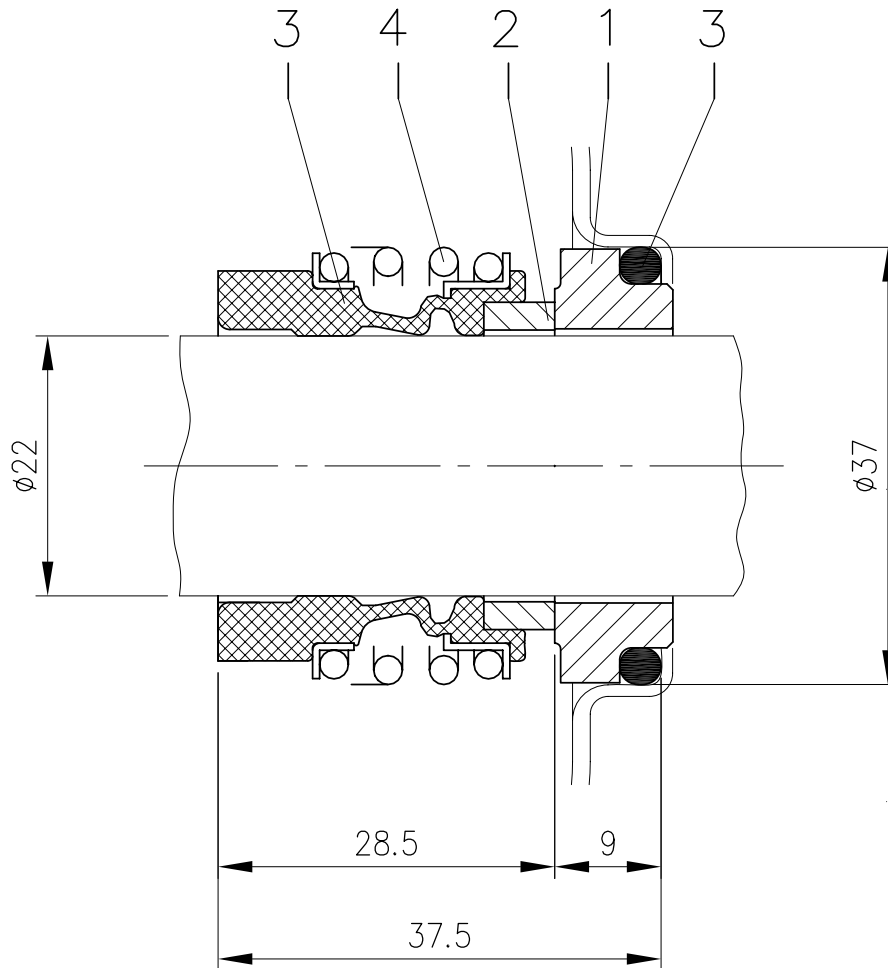
[6] Only for: 32-200, 40-200, 50-160, 50-200

MECHANICAL SEAL (standard, H, and E version)



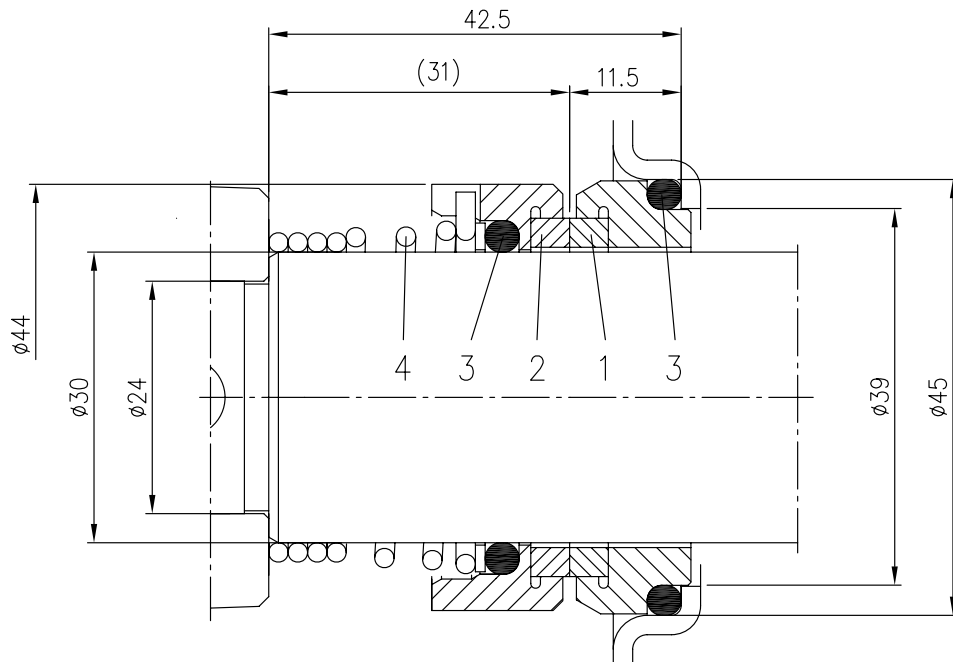
Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + Spring
Standard	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5 65-160/9.2 65-160/11	22	19	38	31	37	37.5	27.5	10	Carbon	Ceramic	NBR	EN 1.4401 (AISI 316)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

**MECHANICAL SEAL (HS version ø22)**



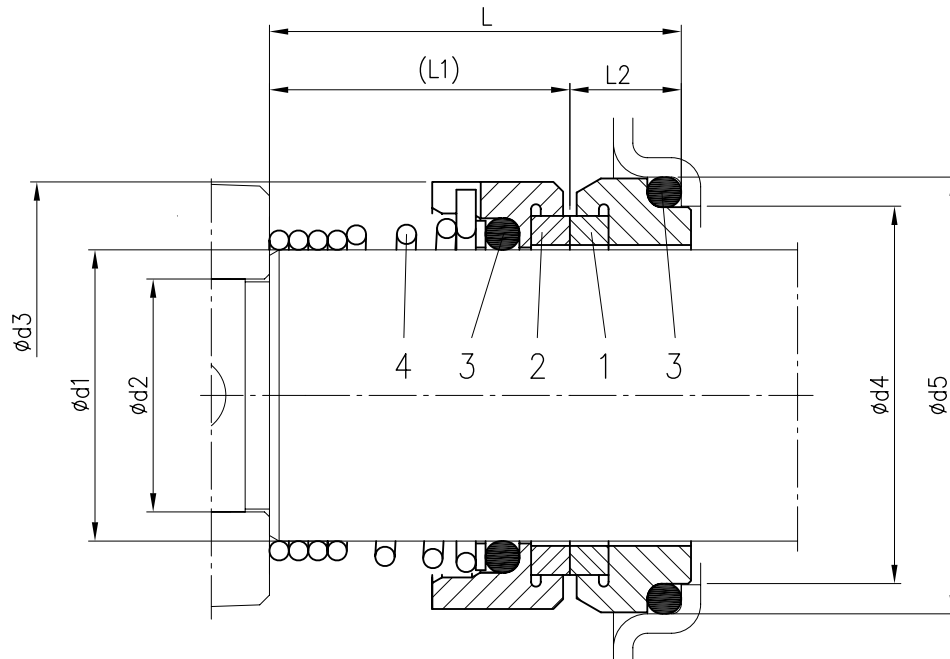
Pump type	Material			
	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5 65-160/9.2 65-160/11	SiC	SiC	FPM	EN 1.4571 (AISI 316Ti)

MECHANICAL SEAL (HS version ø30)



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

MECHANICAL SEAL (HW and HSW version)



Version	Pump type	Dimensions								Material			
		d1	d2	d3	d4	d5	L	L1	L2	1 Stationary seal ring	2 Rotary seal ring	3 Rubber	4 Frame + spring
HW	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5 65-160/9.2 65-160/11	22	19	38	31	37	37.5	27.5	10	Tungsten Carbide	Tungsten Carbide	FPM	EN 1.4401 (AISI 316)
	65-160/15 65-200	30	24	46	39	45	42.5	32.5	10				
HSW	32-125/160/200 40-125/160/200 50-125/160/200 65-125 65-160/7.5 65-160/9.2 65-160/11	22	19	38	31	37	37.5	27.5	10	Tungsten Carbide	SiC	FPM	EN 1.4401 (AISI 316)
	65-160/15 65-200	30	24	46	39	45	42.5	32.5	10				



**3D BEARINGS**

Pump type	Ball bearing	
	Pump side	Fan side
3D 32-125/1.1	6205-SRSH	6205-SRSH
3D 32-160/1.5		
3D 32-160/2.2		
3D 32-200/3.0		
3D 32-200/4.0	6206-2RS1	
3D 32-200/7.5	6306-2RS1	6206-2RS1
3D 40-125/1.5	6205-SRSH	6205-SRSH
3D 40-125/2.2		
3D 40-160/3.0		
3D 40-160/4.0	6206-2RS1	
3D 40-200/5.5	6306 2RS1	6206-2RS1
3D 40-200/7.5		
3D 40-200/11	6308-2RS1	6208-2RS1
3D 50-125/2.2	6205-SRSH	6205-SRSH
3D 50-125/3.0		
3D 50-125/4.0	6206-2RS1	
3D 50-160/5.5	6306-2RS1	6206-2RS1
3D 50-160/7.5		
3D 50-200/9.2	6308-2RS1	6208-2RS1
3D 50-200/11		
3D 50-200/15	6309-2RS1	6309-2RS1
3D 65-125/4.0	6206-2RS1	6205-SRSH
3D 65-125/5.5	6306-2RS1	6206-2RS1
3D 65-160/7.5		
3D 65-160/9.2	6308-2RS1	6208-2RS1
3D 65-160/11		
3D 65-160/15	6309-2RS1	6309-2RS1
3D 65-200/15		
3D 65-200/18.5		
3D 65-200/22		

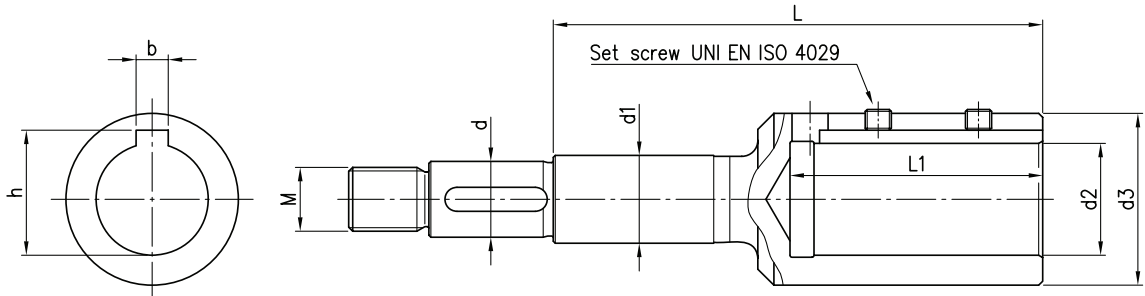
3DS-3DP BEARINGS

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		
3DS 65-200/15	6311 C3	6311 C3
3DS 65-200/18.5		
3DS 65-200/22		

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				
3DP 32-200/3.0	6308-2RS1	6306-2RS1	6206-2Z C3	6206-2Z C3
3DP 32-200/4.0			6306-2Z C3	6306-2Z 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			6306-2Z C3	6306-2Z 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			6306-2Z C3	6306-2Z C3
3DP 50-200/9.2	6308-2RS1	6306-2RS1	6208-2Z C3	6208-2Z C3
3DP 50-200/11			6309-2Z C3	6309-2Z C3
3DP 50-200/15			6306-2Z C3	6306-2Z C3
3DP 65-125/4.0			6208-2Z C3	6208-2Z C3
3DP 65-125/5.5	6306-2RS1	6206-2RS1	6208-2Z C3	6208-2Z C3
3DP 65-125/7.5				
3DP 65-160/7.5	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DP 65-160/9.2				
3DP 65-160/11				
3DP 65-160/15			6311 C3	6311 C3
3DP 65-200/15			6311 C3	6311 C3
3DP 65-200/18.5				
3DP 65-200/22	6311 C3	6311 C3		

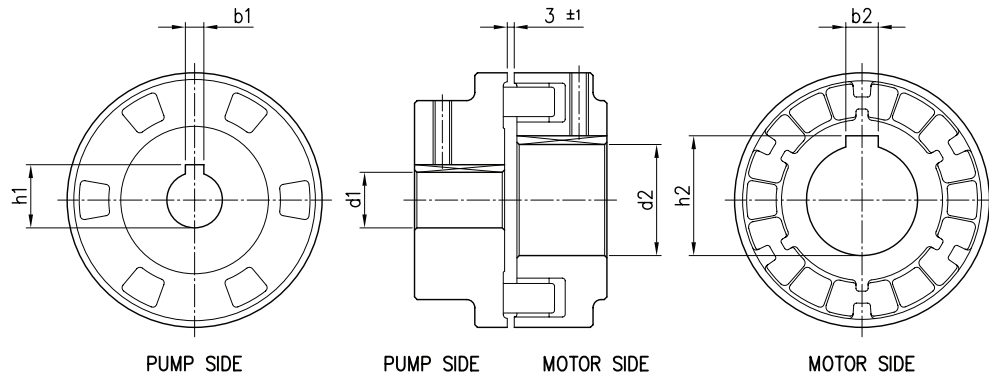
1) Motor available with lubricator for regular re-greasing of bearing.

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

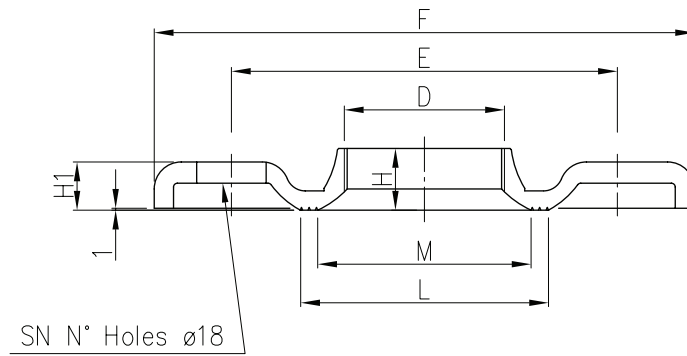
3DP FLEXIBLE COUPLING



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
65-200/22	22	30	180	24	8	27.3	48	14	51.8

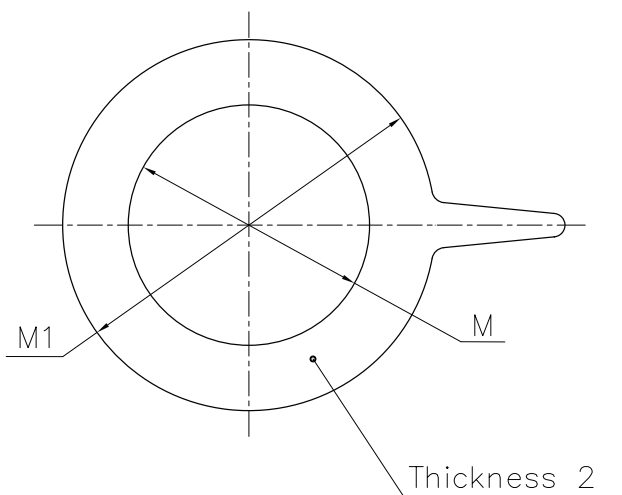
FITTINGS

COUNTERFLANGES GALVANIZED STEEL



DN	D	E	F	Dimensions					Screws	
				H	H1	L	M	SN	DIMENSION	MATERIAL
32	G 1 ¼	100	140	15	11.5	67	50	4	M16x55	Gv. Steel 8.8 Strenght 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		

GASKETS

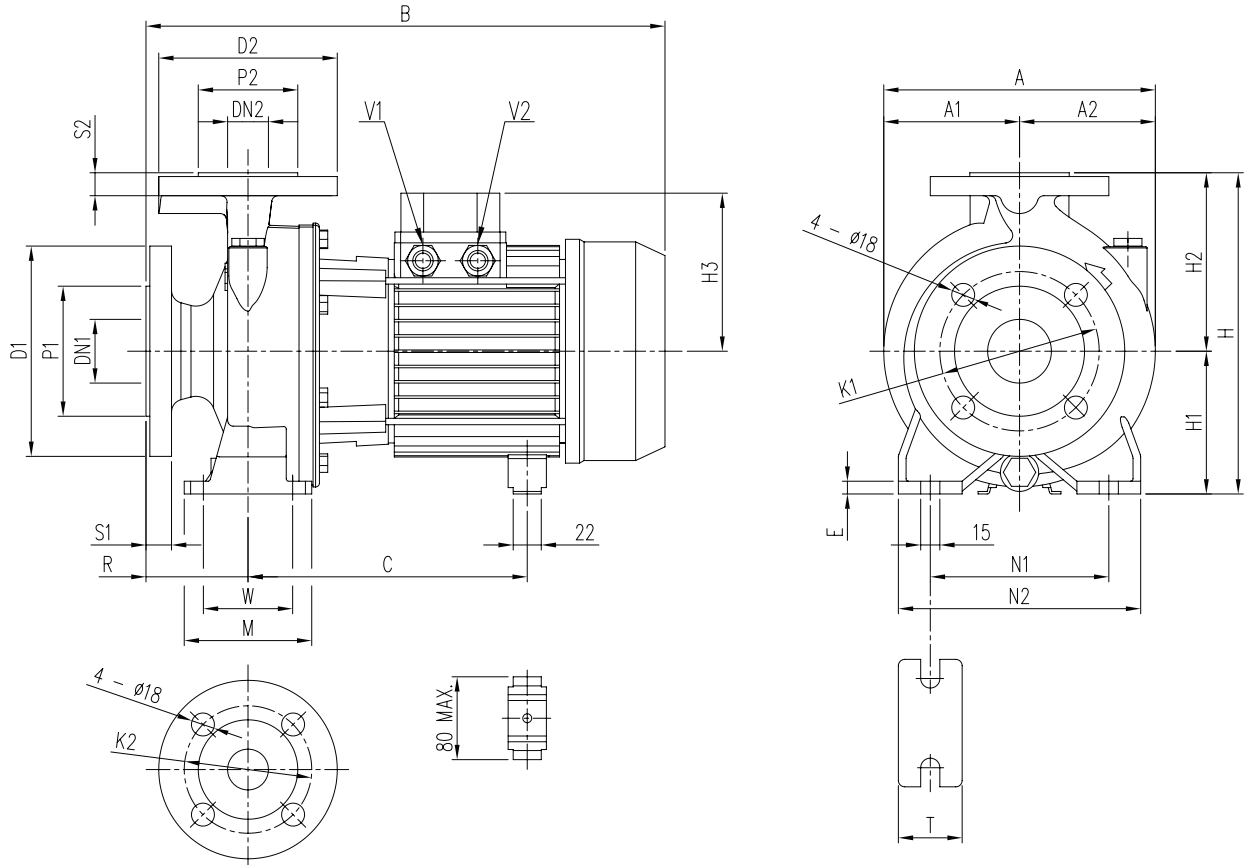


DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140

Material: EPDM for standard version  
FPM for hot water version

## PUMP 3D

UP TO 11 kW

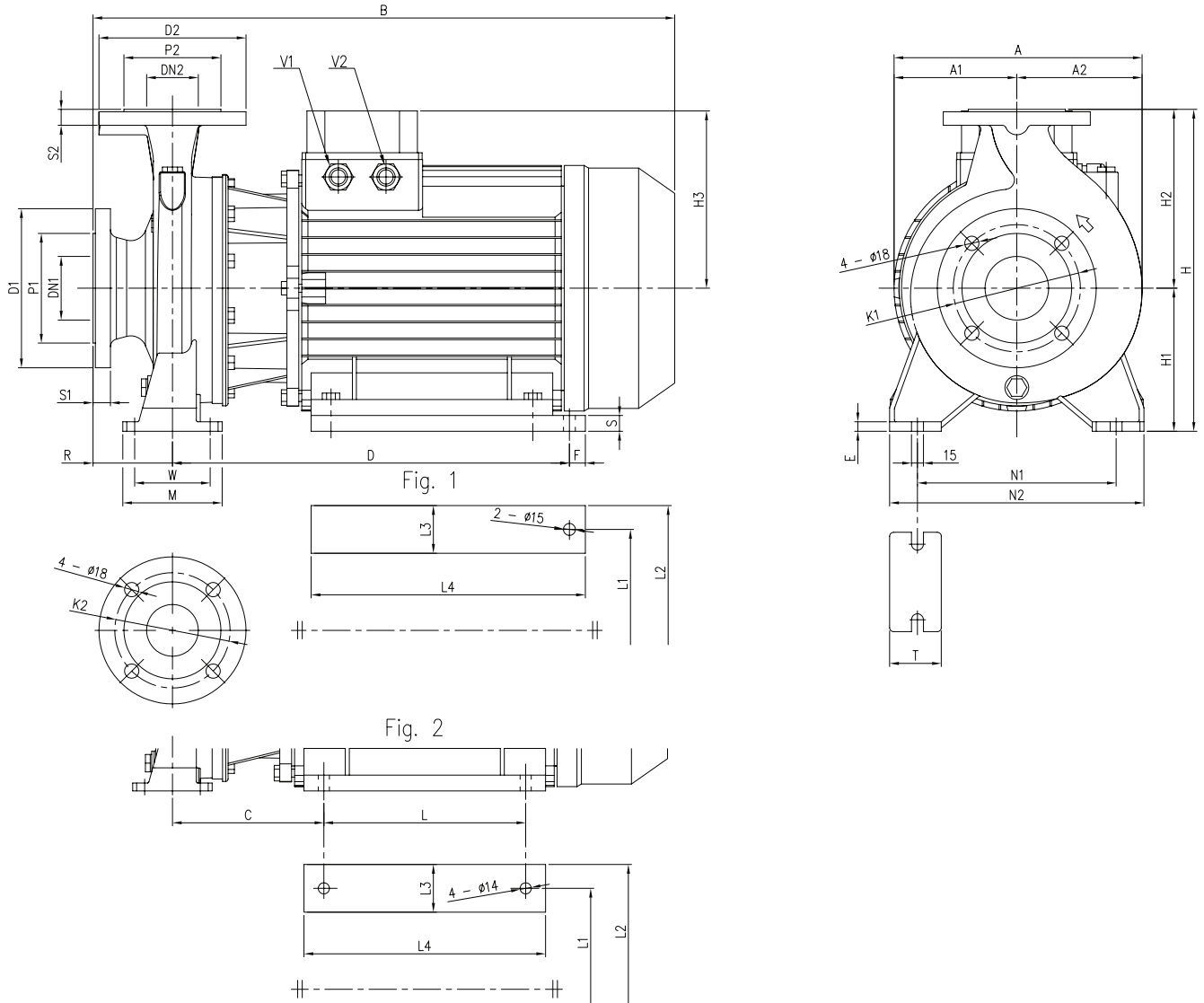


Model	Dimensions [ mm ]																												Weight [ kgf ]							
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	[1-]	[3-]	R	W	M	N1	N2	T	E	A	A1	A2	B	C	V1	V2	[1-]	[3-]	[1-]	[3-]		
32-125/1.1 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	141	124	80	70	100	140	190	50	10	213	106.5	106.5	408	407	-	219+230	219+230	-	M20x1.5	PG 13.5	25	29.5	-
32-160/1.5 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	124	80	70	100	190	240	50	10	254	127	127	408	432	-	219+230	219+230	-	M20x1.5	PG 13.5	29	33.5	-
32-160/2.2 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	141	124	80	70	100	190	240	50	10	254	127	127	408	432	-	219+230	244+255	-	M20x1.5	PG 13.5	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	-	-	PG 13.5	-	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	-	-	PG 16	-	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	-	519	539	-	275	PG 13.5	-	PG 16	-	62	65.1
40-125/1.5 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	141	124	80	70	100	160	210	50	10	220	108	112	408	407	-	219+230	219+230	-	M20x1.5	PG 13.5	25.5	30	-
40-125/2.2 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	141	124	80	70	100	160	210	50	10	220	108	112	408	432	-	219+230	244+255	-	M20x1.5	PG 13.5	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	12	254	127	127	-	471	-	-	244+255	-	-	PG 13.5	-	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	12	254	127	127	-	494	-	-	253	-	-	PG 16	-	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	12	296	148	148	-	539	-	-	275	PG 13.5	-	PG 16	-	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	12	296	148	148	-	539	559	-	275	PG 13.5	-	PG 16	-	63	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	12	296	148	148	-	595	-	-	359	PG 13.5	-	PG 21	-	80	82.4
50-125/2.2 (M)	65	122	145	185	20	50	102	125	165	20	292	132	160	141	124	100	70	100	190	240	50	10	254	127	127	428	452	-	219+230	244+255	-	M20x1.5	PG 13.5	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	-	-	PG 13.5	-	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	-	-	PG 16	-	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	-	PG 16	-	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	-	539	559	-	275	PG 13.5	-	PG 16	-	64	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	-	-	359	PG 13.5	-	PG 21	-	77	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	-	-	359	PG 13.5	-	PG 21	-	80	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	-	-	PG 16	-	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	-	PG 16	-	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	-	539	559	-	275	PG 13.5	-	PG 16	-	69.5	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	-	539	559	-	275	PG 13.5	-	PG 16	-	70	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	-	-	359	PG 13.5	-	PG 21	-	85	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	-	-	359	PG 13.5	-	PG 21	-	85	87.4

(\*) Only for IE3 Motors

## PUMP 3D

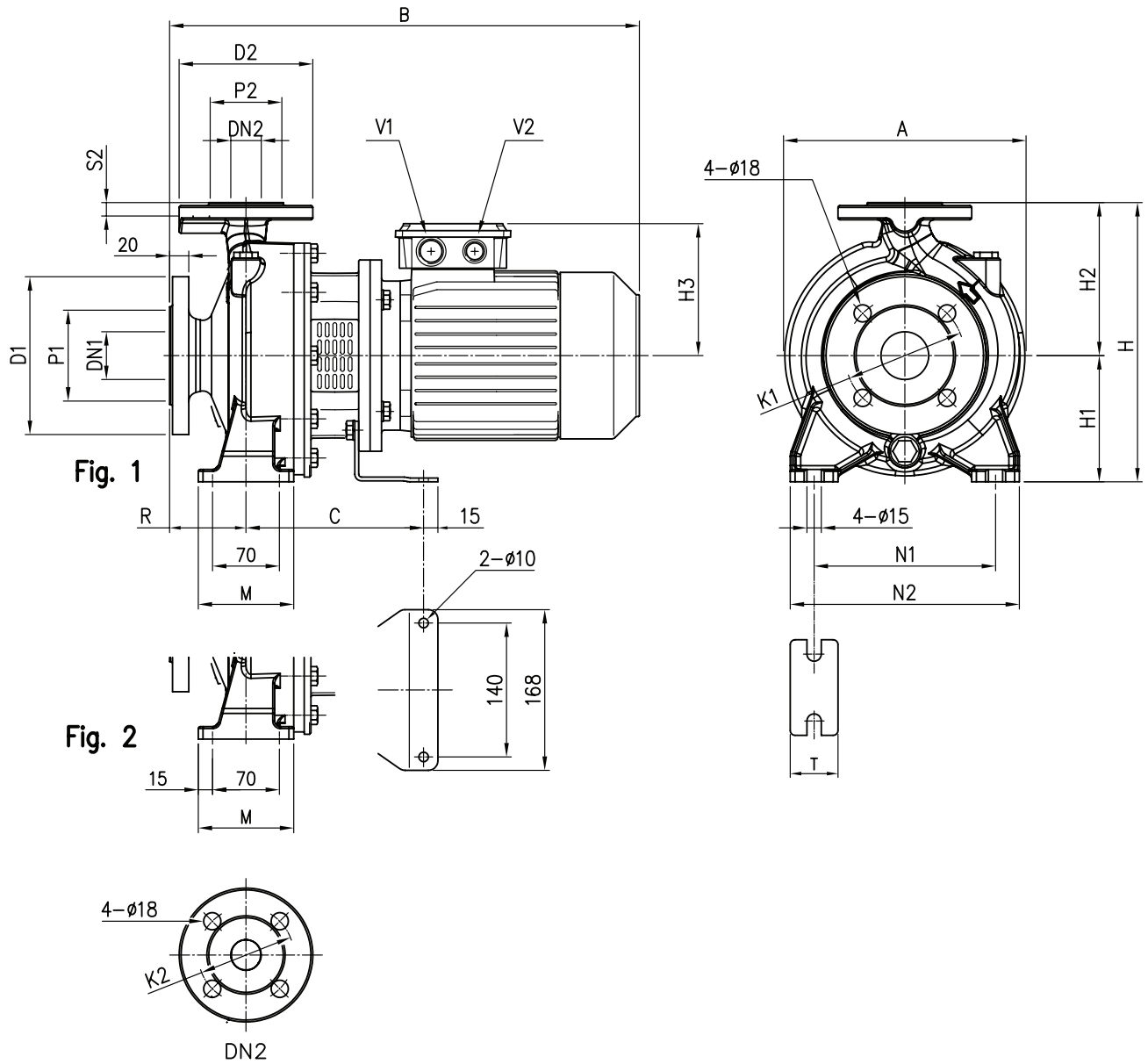
15 kW AND ABOVE



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	121	124.1
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	121	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	126	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	126	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	140	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	152	158.1

(\*) Only for IE3 Motors

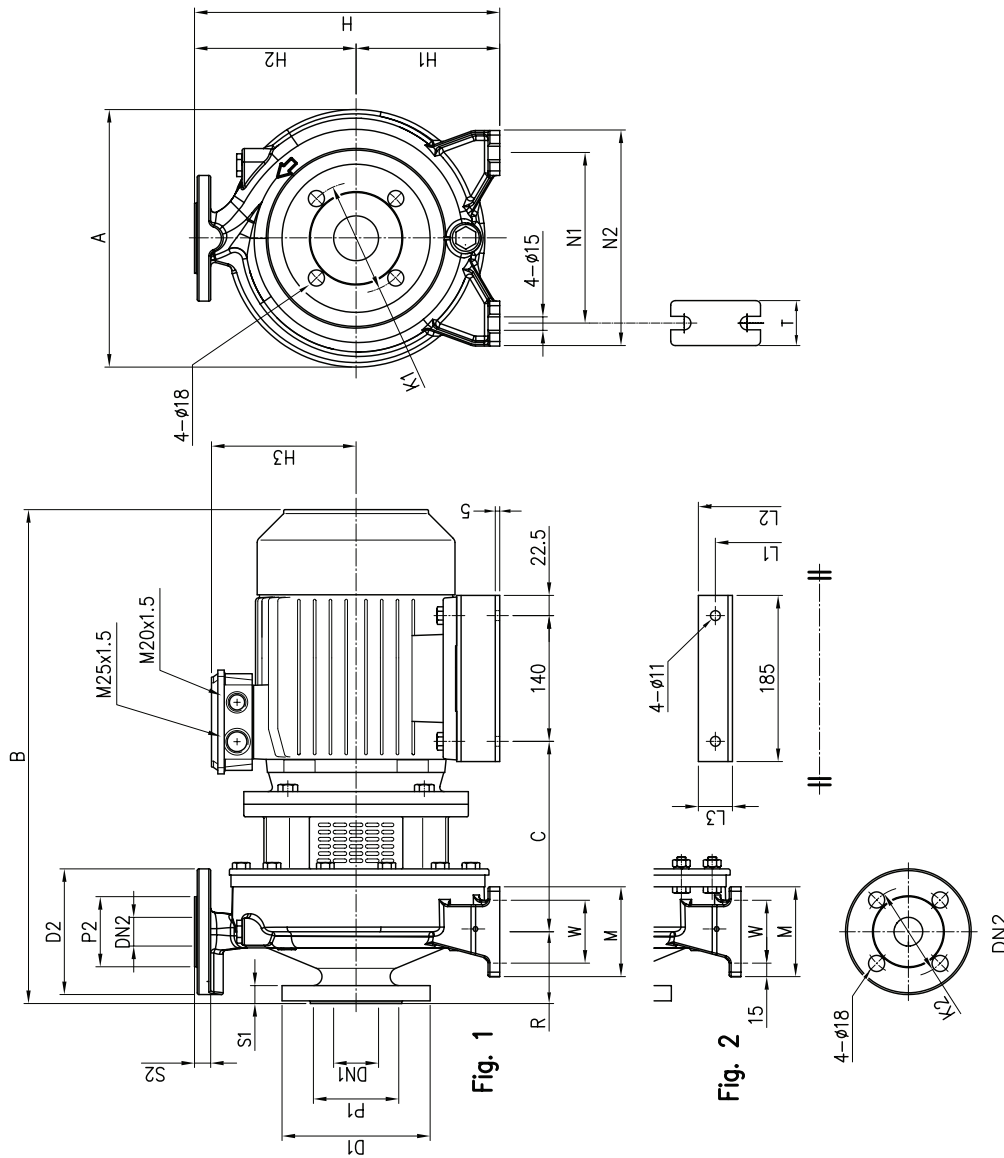
PUMP 3DS 32, 40, 50



Model	Dimensions [ mm ]																				Weight [ kgf ]				
	∅ DN1	∅ P1	∅ K1	∅ D1	∅ DN2	∅ P2	∅ K2	∅ D2	S2	Fig.	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	1	252	112	140	139	80	100	140	190	50	213	430	174	M25x1.5	M20x1.5	30.5
32-160/1.5	50	102	125	165	32	75	100	140	18	1	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	1	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	1	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	1	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	2	292	132	160	148	100	114	190	240	50	254	497	186	M25x1.5	M20x1.5	37.9

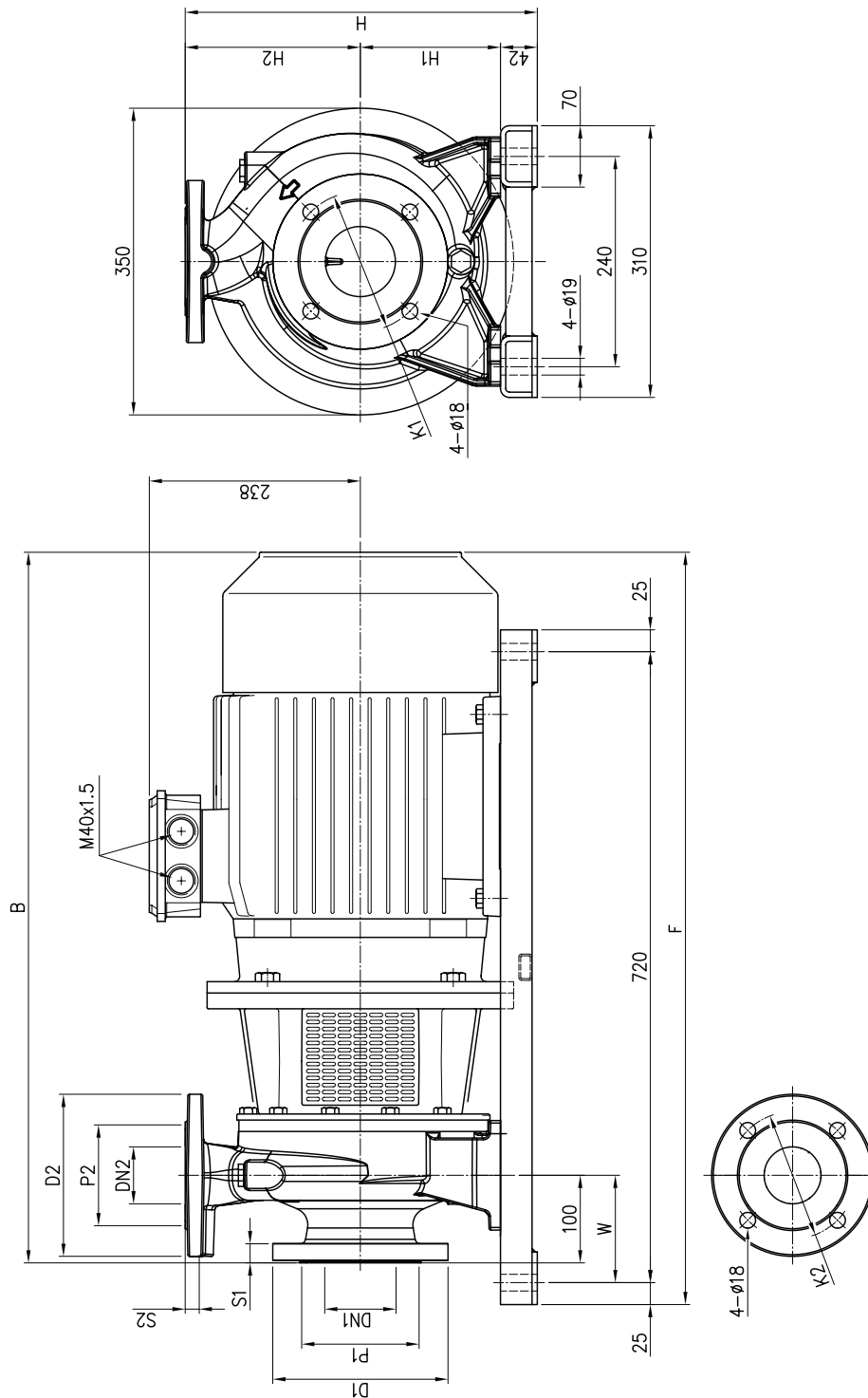


PUMP 3DS 32, 65



Model	Dimensions [ mm ]																Weight [ kgf ]											
	∅ DN1	∅ P1	∅ K1	∅ D1	∅ S1	∅ DN2	∅ P2	∅ K2	∅ D2	∅ S2	Fig.	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	1	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	1	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	2	340	160	180	171	100	95	125	212	280	65	180	570	212	190	228	38	65.4

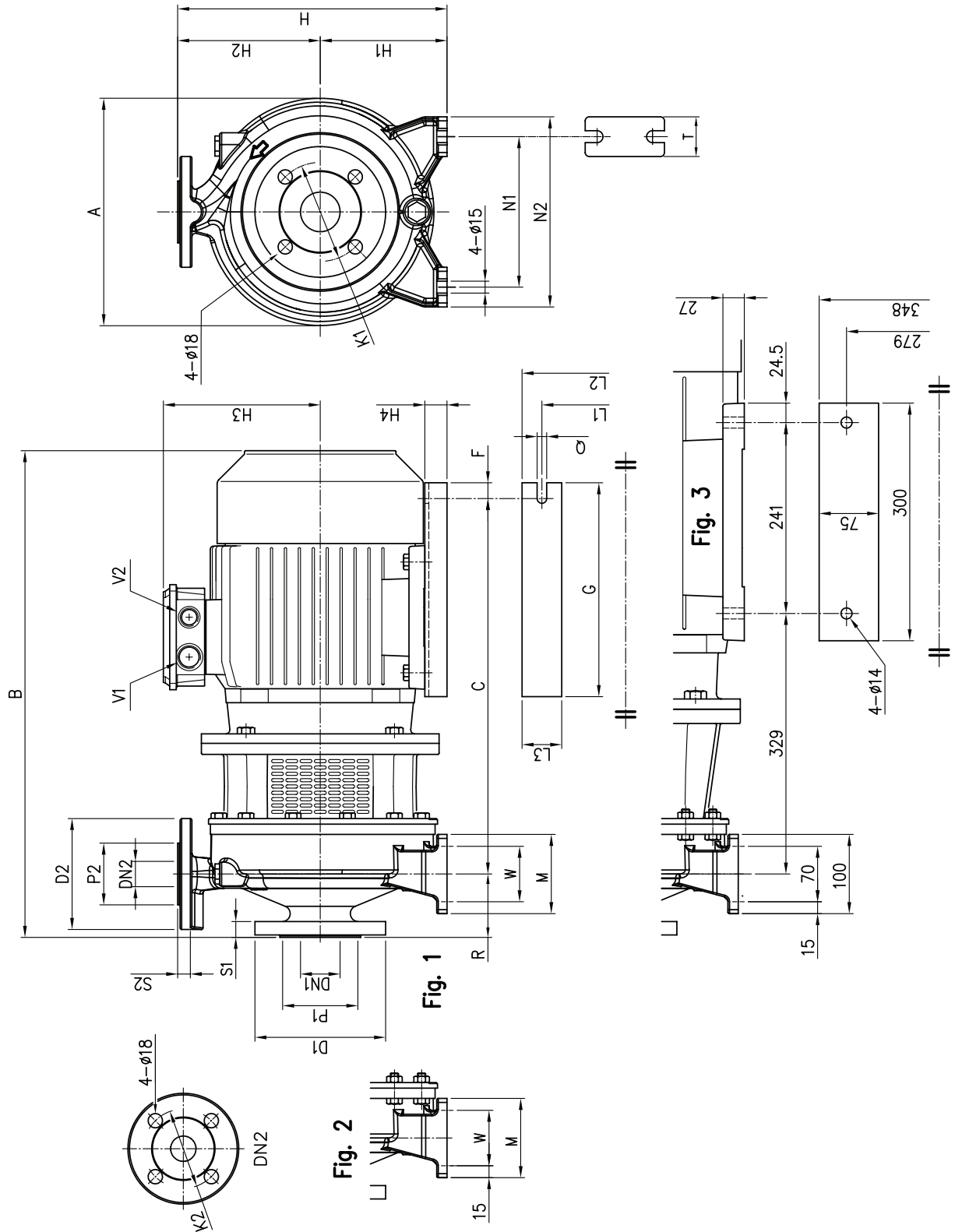
PUMP 3DS 40, 50, 65



Model	Dimensions [ mm ]														Weight [ kgf ]												
	DN1	∅	P1	∅	K1	∅	D1	∅	S1	DN2	∅	P2	∅	K2	∅	D2	∅	S2	H	H1	H2	W	B	F	Weight [ kgf ]	(*)	
40-200/11	65	122	145	185	20	40	88	110	150	180	180	180	180	180	180	180	180	180	180	160	160	180	110	796	833	120	130.8
50-200/11	65	122	145	185	20	50	102	125	165	200	200	200	200	200	200	200	200	200	200	160	160	200	110	796	833	120	130.8
50-200/15	65	122	145	185	20	50	102	125	165	200	200	200	200	200	200	200	200	200	200	160	160	200	110	796	833	150	166.9
65-160/11	80	138	160	200	22	65	115	145	185	200	200	200	200	200	200	200	200	200	200	160	160	200	123	806	846	96	106.8
65-160/15	80	138	160	200	22	65	115	145	185	200	200	200	200	200	200	200	200	200	200	160	160	200	123	806	856	126	142.9

(\*) Only for IE3 Motors

PUMP 3DS 32, 40, 50, 65



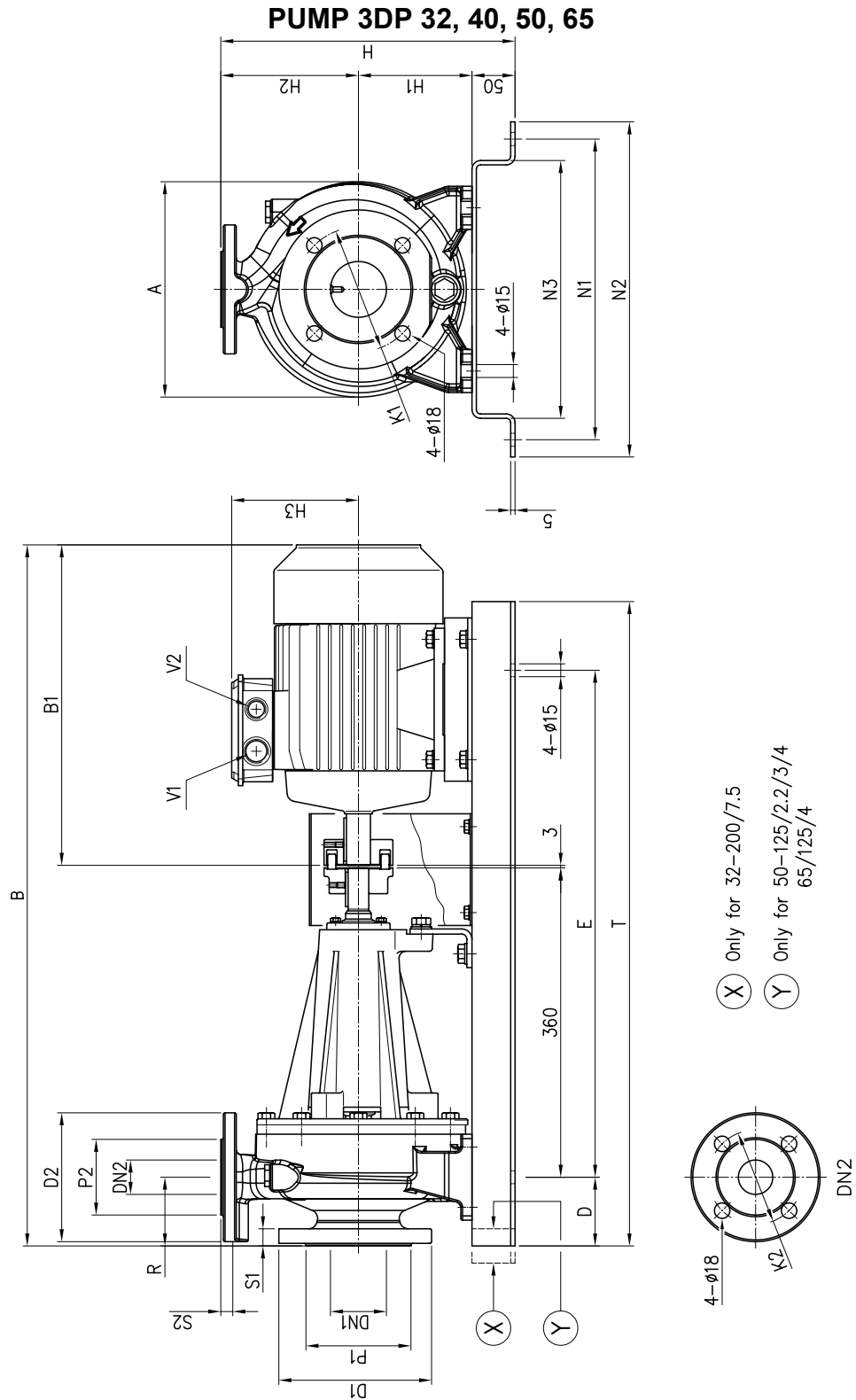
DIMENSIONS AND WEIGHT

50Hz

Rev. 0

Model	Dimensions [ mm ]																				Weight [kgf]														
	DN1	Ø P1	Ø K1	Ø D1	S1	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	Weight [kgf]	(*)
32-200/7.5	50	102	125	165	20	32	78	100	140	18	1	340	160	180	198	28	80	70	100	190	240	50	296	607	479	15	270	12	216	266	50	M32X1.5	M32X1.5	90	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	2	340	160	180	198	28	100	70	100	212	265	50	296	627	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	2	340	160	180	198	28	100	70	100	212	265	50	296	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	86.8	88.8
50-125/3.0	65	122	145	185	20	50	102	125	165	20	2	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	2	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	2	340	160	180	198	28	100	70	100	212	265	50	296	627	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	2	340	160	180	198	28	100	70	100	212	265	50	296	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	97.5	99.5
50-200/9.2	65	122	145	185	20	50	102	125	165	20	2	360	160	200	198	28	100	70	100	212	265	50	296	667	479	15	270	12	216	266	50	M32X1.5	M32X1.5	102.8	104
65-125/5.5	80	138	160	200	22	65	122	145	185	20	2	340	160	180	198	28	100	95	125	212	280	65	263	627	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	2	340	160	180	198	28	100	95	125	212	280	65	263	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	97.9	99.9
65-160/7.5	80	138	160	200	22	65	122	145	185	20	2	360	160	200	198	28	100	95	125	212	280	65	296	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	98.2	99.2
65-160/9.2	80	138	160	200	22	65	122	145	185	20	2	360	160	200	198	28	100	95	125	212	280	65	296	667	479	15	270	12	216	266	50	M32X1.5	M32X1.5	107	108
65-200/15	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	312	806	621	20	350	14	254	314	60	M40X1.5	M40X1.5	140.1	156.9
65-200/18.5	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	312	850	621	20	350	14	254	314	60	M40X1.5	M40X1.5	151.7	158.5
65-200/22	80	138	160	200	22	65	122	145	185	20	3	405	180	225	268	-	100	-	-	250	320	65	312	885	-	-	-	-	-	-	-	M40X1.5	M40X1.5	190	197

(\*) Only for IE3 Motors



DIMENSIONS AND WEIGHT

50Hz

Rev. 0

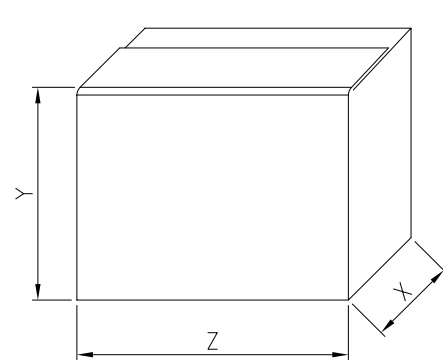
Model	Dimensions [ mm ]																				Weight [ kgf ]	(*)						
	DN1	Ø P1	Ø K1	Ø D1	Ø S1	DN2	Ø P2	Ø K2	Ø D2	Ø S2	H	H1	H2	H3	R	A	B	B1	D	E			N1	N2	N3	T	V1	V2
32-125/1.1	50	102	125	165	20	32	78	100	140	18	302	112	140	139	80	213	715	272	80	550	300	340	250	710	M25x1.5	M20x1.5	50.5	-
32-160/1.5	50	102	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	885	442	100	650	350	390	300	850	M32x1.5	M32x1.5	115.2	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	905	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	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	111.7	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	129.8	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	905	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	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	113.4	115.4
50-200/9.2	65	122	145	185	20	50	102	125	165	20	410	160	200	198	100	296	945	482	100	650	350	390	300	850	M32x1.5	M32x1.5	123.1	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	133.6	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	137.5	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	905	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	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	127.9	129.9
65-160/7.5	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	905	442	100	650	350	390	300	850	M32x1.5	M32x1.5	131.2	133.2
65-160/9.2	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	945	482	100	650	350	390	300	850	M32x1.5	M32x1.5	137	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	134	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	134.1	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	139.1	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	149.7	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	204	211

(\*) Only for IE3 Motors

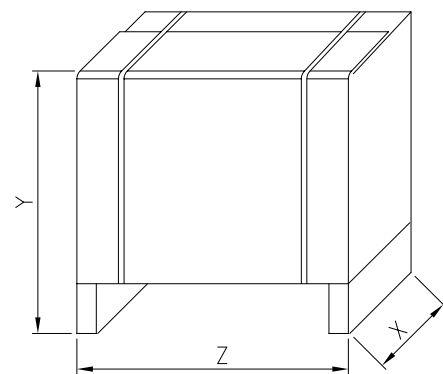
PACKING 3D

Pump type	Packing [ mm ]			Weight [ kgf ] (*)			Pack type
	X	Y	Z	[1~]	[3~]	[3~]	
32-125/1.1 (M)	250	300	450	30.4	31.5	-	1
32-160/1.5 (M)	280	330	430	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	-	66.3	-	1
40-125/1.5 (M)	250	300	450	29.9	39.12	-	
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	-	68.4	-	1
40-200/11	350	488	700	-	91	-	
50-125/2.2 (M)	280	340	490	36.1	39	-	
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	-	68.6	71.7	1
50-200/9.2	350	488	700	-	81.1	81.1	
50-200/11	350	488	700	-	85	87.4	
50-200/15	390	532	880	-	130	133.1	2
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	-	78.7	81.8	
65-160/7.5	350	488	700	-	74.8	77.9	
65-160/9.2	350	488	700	-	93	93	
65-160/11	350	488	700	-	87	89.4	
65-160/15	390	532	880	-	135.5	138.6	
65-200/15	390	532	880	-	135	138.1	
65-200/18.5	390	532	880	-	149.5	155.8	
65-200/22	390	532	880	-	164.5	170.6	

(\*) Only for IE3 Motors



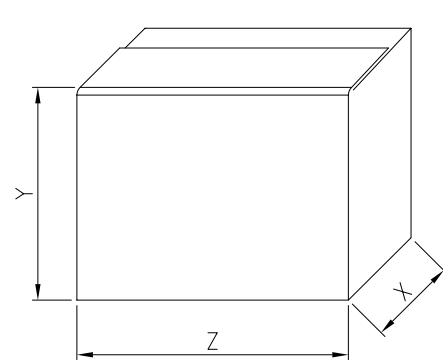
TYPE 1



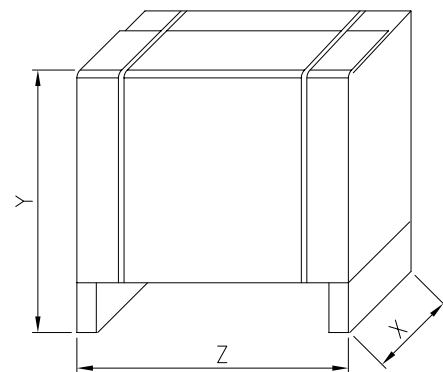
TYPE 2

PACKING 3DS

Pump type	Packing [ mm ]			Weight [ kgf ]		Pack Type
	X	Y	Z		(*)	
32-125/1.1	450	250	300	32.2	-	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	95	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	99	101	
40-200/11	390	598	970	148.5	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	109.8	111.8	
50-200/9.2	390	598	880	107	108	
50-200/11	390	598	880	128	138.8	
50-200/15	390	598	880	175	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	103.6	105.6	
65-160/7.5	350	498	700	102.8	104.8	
65-160/9.2	390	598	880	108	109	
65-160/11	390	598	970	98	108.8	
65-160/15	390	598	970	134	150.9	
65-200/15	390	598	880	146	162.9	
65-200/18.5	390	598	970	159	165.5	
65-200/22	500	727	1100	212	219	



TYPE 1



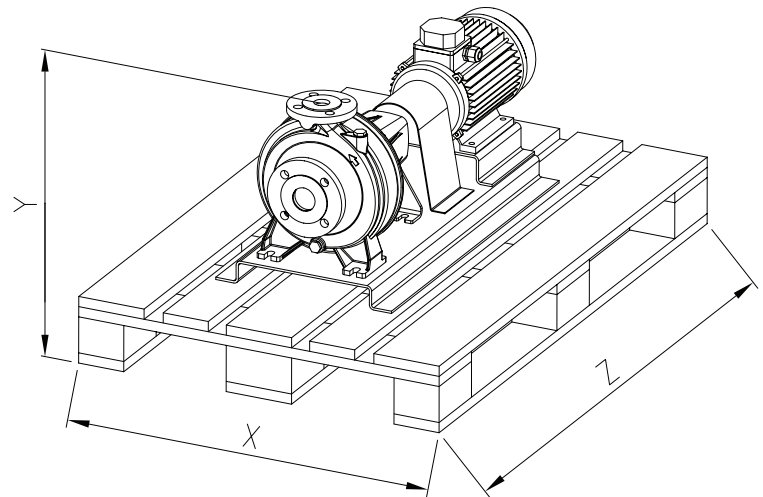
TYPE 2

(\*) Only for IE3 Motors



PACKING 3DP

Pump type	Packing [ mm ]			Weight [ kgf ]	
	X	Y	Z		(*)
32-125/1.1	800	394	1200	64.0	-
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				128.7	130.7
40-125/1.5		394		89.7	-
40-125/2.2				70.5	-
40-160/3.0		434		107.0	-
40-160/4.0				88.3	-
40-200/5.5				118.5	-
40-200/7.5		482		125.2	127.2
40-200/11				143.3	154.1
50-125/2.2		434		93.5	-
50-125/3.0				104.5	-
50-125/4.0				105.2	-
50-160/5.5		482		125.0	-
50-160/7.5				127.0	129.0
50-200/9.2				136.6	137.6
50-200/11		502		147.1	157.9
50-200/15				151.0	167.9
65-125/4.0				84.4	-
65-125/5.5		482		128.8	-
65-125/7.5				141.5	143.5
65-160/7.5				144.7	146.7
65-160/9.2		502		150.5	151.5
65-160/11				147.5	158.3
65-160/15				147.6	164.5
65-200/15	547	152.6	169.5		
65-200/18.5		163.2	169.7		
65-200/22		217.5	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	Three Phase				Three Phase			
						[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 32-160/1.5 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 32-160/2.2 M	3D 32-200/2.2	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 32-200/3.0	3.0	4.0	-	IE2	-	-	85.0	86.7	86.3	-	3.48	-	10.6	6.1	-	-	100.0	57.7	-
-	3D 32-200/4.0	4.0	5.5	-	IE2	-	-	84.3	87.2	87.8	-	4.56	-	15.1	8.7	-	-	151.0	87.0	-
-	3D 32-200/7.5	7.5	10.0	-	IE2	-	-	86.1	88.2	88.8	-	8.45	-	-	13.7	7.9	-	-	140.0	81.0
-	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 40-125/2.2 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 40-160/3.0	3.0	4.0	-	IE2	-	-	85.0	86.7	86.3	-	3.48	-	10.6	6.1	-	-	100.0	57.7	-
-	3D 40-160/4.0	4.0	5.5	-	IE2	-	-	84.3	87.2	87.8	-	4.56	-	15.1	8.7	-	-	151.0	87.0	-
-	3D 40-200/5.5	5.5	7.5	-	IE2	-	-	82.9	86.0	87.4	-	6.29	-	-	10.4	6.0	-	-	116.0	67.0
-	3D 40-200/7.5	7.5	10.0	-	IE2	-	-	86.1	88.2	88.8	-	8.45	-	-	13.7	7.9	-	-	140.0	81.0
-	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	-	IE2	-	-	88.9	90.3	90.2	-	12.20	-	-	21.9	12.7	-	-	186.0	108.0
-	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 50-125/3.0	3.0	4.0	-	IE2	-	-	85.0	86.7	86.3	-	3.48	-	10.6	6.1	-	-	100.0	57.7	-
-	3D 50-125/4.0	4.0	5.5	-	IE2	-	-	84.3	87.2	87.8	-	4.56	-	15.1	8.7	-	-	151.0	87.0	-
-	3D 50-160/5.5	5.5	7.5	-	IE2	-	-	82.9	86.0	87.4	-	6.29	-	-	10.4	6.0	-	-	116.0	67.0
-	3D 50-160/7.5	7.5	10.0	-	IE2	-	-	86.1	88.2	88.8	-	8.45	-	-	13.7	7.9	-	-	140.0	81.0
-	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	-	IE2	-	-	88.6	90.0	89.9	-	10.23	-	-	16.8	9.7	-	-	166.0	96.0
-	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	-	IE2	-	-	88.9	90.3	90.2	-	12.20	-	-	21.9	12.7	-	-	186.0	108.0
-	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	-	IE2	-	-	89.3	91.0	91.1	-	18.00	-	-	30.0	17.3	-	-	246.0	143.0
-	3D 50-200/15	15.0	20.0	-	IE3	-	-	91.2	92.0	91.9	-	16.32	-	-	27.7	17.3	-	-	225.0	130.0
-	3D 65-125/4.0	4.0	5.5	-	IE2	-	-	84.3	87.2	87.8	-	4.56	-	15.1	8.7	-	-	151.0	87.0	-
-	3D 65-125/5.5	5.5	7.5	-	IE2	-	-	82.9	86.0	87.4	-	6.29	-	-	10.4	6.0	-	-	116.0	67.0
-	3D 65-125/7.5	7.5	10.0	-	IE2	-	-	86.1	88.2	88.8	-	8.45	-	-	13.7	7.9	-	-	140.0	81.0
-	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	-	IE2	-	-	86.1	88.2	88.8	-	8.45	-	-	13.7	7.9	-	-	140.0	81.0
-	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	-	IE2	-	-	88.6	90.0	89.9	-	10.23	-	-	16.8	9.7	-	-	166.0	96.0
-	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	-	IE2	-	-	88.9	90.3	90.2	-	12.20	-	-	21.9	12.7	-	-	186.0	108.0
-	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	-	IE2	-	-	89.3	91.0	91.1	-	18.00	-	-	30.0	17.3	-	-	246.0	143.0
-	3D 65-160/15	15.0	20.0	-	IE3	-	-	91.2	92.0	91.9	-	16.32	-	-	27.7	17.3	-	-	225.0	130.0
-	3D 65-200/15	15.0	20.0	-	IE2	-	-	89.3	91.0	91.1	-	18.00	-	-	30.0	17.3	-	-	246.0	143.0
-	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	-	IE2	-	-	89.8	91.2	91.7	-	20.17	-	-	36.3	21.0	-	-	325.0	188.0
-	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	-	IE2	-	-	89.9	91.9	92.4	-	23.80	-	-	40.8	23.6	-	-	383.0	222.0
-	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			Efficiency	Efficiency (% load) and power-factor				Full load current [A]			Locked rotor current [A]		
		Motor size	Power [kW]	[HP]		50%	75%	100%	cos-φ	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	IE2	79.5	81.2	81.5	0.78	4.3	2.5	-	29.4	17.0	-
3DS 32-160/1.5	3DP 32-160/1.5	90S	1.5	2	IE2	81	82.8	82.8	0.8	5.5	3.2	-	44.9	25.9	-
3DS 32-160/2.2	3DP 32-160/2.2	90L	2.2	3	IE2	82.5	84	84	0.85	7.6	4.4	-	64.8	37.4	-
3DS 32-200/3.0	3DP 32-200/3.0	100L	3	4	IE2	84.1	85.8	85.5	0.84	10.2	5.9	-	81.8	47.2	-
3DS 32-200/4.0	3DP 32-200/4.0	112M	4	5.5	IE2	85.2	86.4	86.1	0.86	13.5	7.8	-	110.9	64.0	-
3DS 32-200/7.5	3DP 32-200/7.5	132S	7.5	10	IE2	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
					IE3	89.4	91	91.1	0.88	-	13.5	7.8	-	104.0	60.0
3DS 40-125/1.5	3DP 40-125/1.5	90S	1.5	2	IE2	81	82.8	82.8	0.8	5.5	3.2	-	44.9	25.9	-
3DS 40-125/2.2	3DP 40-125/2.2	90L	2.2	3	IE2	82.5	84	84	0.85	7.6	4.4	-	64.8	37.4	-
3DS 40-160/3.0	3DP 40-160/3.0	100L	3	4	IE2	84.1	85.8	85.5	0.84	10.2	5.9	-	81.8	47.2	-
3DS 40-160/4.0	3DP 40-160/4.0	112M	4	5.5	IE2	85.2	86.4	86.1	0.86	13.5	7.8	-	110.9	64.0	-
3DS 40-200/5.5	3DP 40-200/5.5	132S	5.5	7.5	IE2	85.8	87.4	87.3	0.88	-	10.4	6.0	-	83.2	48.0
3DS 40-200/7.5	3DP 40-200/7.5	132S	7.5	10	IE2	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
					IE3	89.4	91	91.1	0.88	-	13.5	7.8	-	104.0	60.0
3DS 40-200/11	3DP 40-200/11	160M	11	15	IE2	88.1	90	89.7	0.9	-	19.8	11.4	-	148.5	85.7
					IE3	88.7	90.5	91.2	0.89	-	19.5	11.2	-	216.4	125.0
3DS 50-125/2.2	3DP 50-125/2.2	90L	2.2	3	IE2	82.5	84	84	0.85	7.6	4.4	-	64.8	37.4	-
3DS 50-125/3.0	3DP 50-125/3.0	100L	3	4	IE2	84.1	85.8	85.5	0.84	10.2	5.9	-	81.8	47.2	-
3DS 50-125/4.0	3DP 50-125/4.0	112M	4	5.5	IE2	85.2	86.4	86.1	0.86	13.5	7.8	-	110.9	64.0	-
3DS 50-160/5.5	3DP 50-160/5.5	132S	5.5	7.5	IE2	85.8	87.4	87.3	0.88	-	10.4	6.0	-	83.2	48.0
3DS 50-160/7.5	3DP 50-160/7.5	132S	7.5	10	IE2	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
					IE3	89.4	91	91.1	0.88	-	13.5	7.8	-	104.0	60.0
3DS 50-200/9.2	3DP 50-200/9.2	132M	9.2	12.5	IE2	88.4	89.9	90	0.87	-	16.9	9.8	-	135.0	78.0
					IE3	89.4	91	91.2	0.85	-	17.0	9.8	-	165.0	95.2
3DS 50-200/11	3DP 50-200/11	160M	11	15	IE2	88.1	90	89.7	0.9	-	19.8	11.4	-	148.5	85.7
					IE3	88.7	90.5	91.2	0.89	-	19.5	11.2	-	216.4	125.0
3DS 50-200/15	3DP 50-200/15	160M	15	20	IE2	90.0	91	90.8	0.88	-	27.2	15.7	-	206.7	119.3
					IE3	89.5	91.4	92	0.88	-	26.7	15.4	-	333.7	192.6
3DS 65-125/4	3DP 65-125/4	112M	4	5.5	IE2	85.2	86.4	86.1	0.86	13.5	7.8	-	110.9	64.0	-
3DS 65-125/5.5	3DP 65-125/5.5	132S	5.5	7.5	IE2	85.8	87.4	87.3	0.88	-	10.4	6.0	-	83.2	48.0
					IE3	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
3DS 65-125/7.5	3DP 65-125/7.5	132S	7.5	10	IE2	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
					IE3	89.4	91	91.1	0.88	-	13.5	7.8	-	104.0	60.0
3DS 65-160/7.5	3DP 65-160/7.5	132S	7.5	10	IE2	86.5	88.3	88.3	0.87	-	14.2	8.2	-	115.0	66.4
					IE3	89.4	91	91.1	0.88	-	13.5	7.8	-	104.0	60.0
3DS 65-160/9.2	3DP 65-160/9.2	132M	9.2	12.5	IE2	88.4	89.9	90	0.87	-	16.9	9.8	-	135.0	78.0
					IE3	89.4	91	91.2	0.85	-	17.0	9.8	-	165.0	95.2
3DS 65-160/11	3DP 65-160/11	160M	11	15	IE2	88.1	90	89.7	0.9	-	19.8	11.4	-	148.5	85.7
					IE3	88.7	90.5	91.2	0.89	-	19.5	11.2	-	216.4	125.0
3DS 65-160/15	3DP 65-160/15	160M	15	20	IE2	90.0	91	90.8	0.88	-	27.2	15.7	-	206.7	119.3
					IE3	89.5	91.4	92	0.88	-	26.7	15.4	-	333.7	192.6
3DS 65-200/15	3DP 65-200/15	160M	15	20	IE2	90.0	91	90.8	0.88	-	27.2	15.7	-	206.7	119.3
					IE3	89.5	91.4	92	0.88	-	26.7	15.4	-	333.7	192.6
3DS 65-200/18.5	3DP 65-200/18.5	160L	18.5	25	IE2	90.3	91.6	91.2	0.88	-	33.3	19.2	-	263.1	152.0
					IE3	89.7	91.7	92.4	0.82	-	35.3	20.4	-	451.8	260.8
3DS 65-200/22	3DP 65-200/22	180M	22	30	IE2	90.9	91.8	91.4	0.89	-	39.0	22.5	-	292.5	168.9
					IE3	92.5	93.1	92.9	0.9	-	38.0	22.0	-	364.8	210.6

**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
3DM 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		Power		L <sub>pA</sub> - dB(A) *
		[kW]	[HP]	
3DS 32-125/1.1	3DP 32-125/1.1	1.1	1.5	<70
3DS 32-160/1.5	3DP 32-160/1.5	1.5	2	
3DS 32-160/2.2	3DP 32-160/2.2	2.2	3	
3DS 32-200/3.0	3DP 32-200/3.0	3	4	
3DS 32-200/4.0	3DP 32-200/4.0	4	5.5	73
3DS 32-200/7.5	3DP 32-200/7.5	7.5	10	77
3DS 40-125/1.5	3DP 40-125/1.5	1.5	2	<70
3DS 40-125/2.2	3DP 40-125/2.2	2.2	3	
3DS 40-160/3.0	3DP 40-160/3.0	3	4	
3DS 40-160/4.0	3DP 40-160/4.0	4	5.5	73
3DS 40-200/5.5	3DP 40-200/5.5	5.5	7.5	77
3DS 40-200/7.5	3DP 40-200/7.5	7.5	10	
3DS 40-200/11	3DP 40-200/11	11	15	79
3DS 50-125/2.2	3DP 50-125/2.2	2.2	3	<70
3DS 50-125/3.0	3DP 50-125/3.0	3	4	
3DS 50-125/4.0	3DP 50-125/4.0	4	5.5	73
3DS 50-160/5.5	3DP 50-160/5.5	5.5	7.5	77
3DS 50-160/7.5	3DP 50-160/7.5	7.5	10	
3DS 50-200/9.2	3DP 50-200/9.2	9.2	12.5	
3DS 50-200/11	3DP 50-200/11	11	15	79
3DS 50-200/15	3DP 50-200/15	15	20	
3DS 65-125/4.0	3DP 65-125/4.0	4	5.5	73
3DS 65-125/5.5	3DP 65-125/5.5	5.5	7.5	77
3DS 65-125/7.5	3DP 65-125/7.5	7.5	10	
3DS 65-160/7.5	3DP 65-160/7.5	9.2	12.5	
3DS 65-160/9.2	3DP 65-160/9.2	9.2	12.5	79
3DS 65-160/11	3DP 65-160/11	11	15	
3DS 65-160/15	3DP 65-160/15	15	20	
3DS 65-200/15	3DP 65-200/15	18.5	25	
3DS 65-200/18.5	3DP 65-200/18.5	18.5	25	80
3DS 65-200/22	3DP 65-200/22	22	30	

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

Tolerance  $\pm 2.5$  dB.

Sound pressure level of motor pumps with AEG