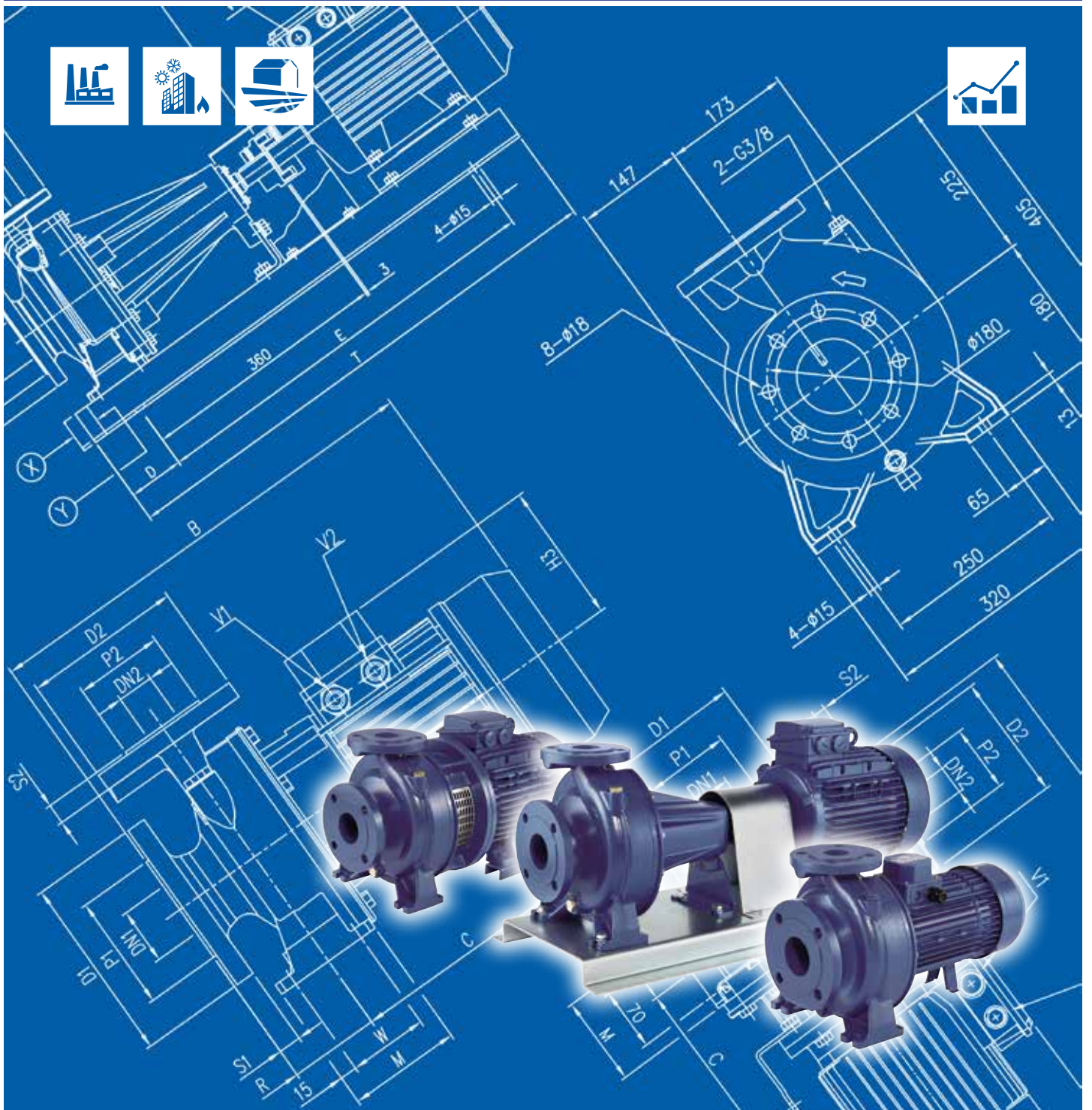




Japanese Technology since 1912


## 3D SERIES

Data Book 60Hz



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## SPECIFICATIONS

60Hz

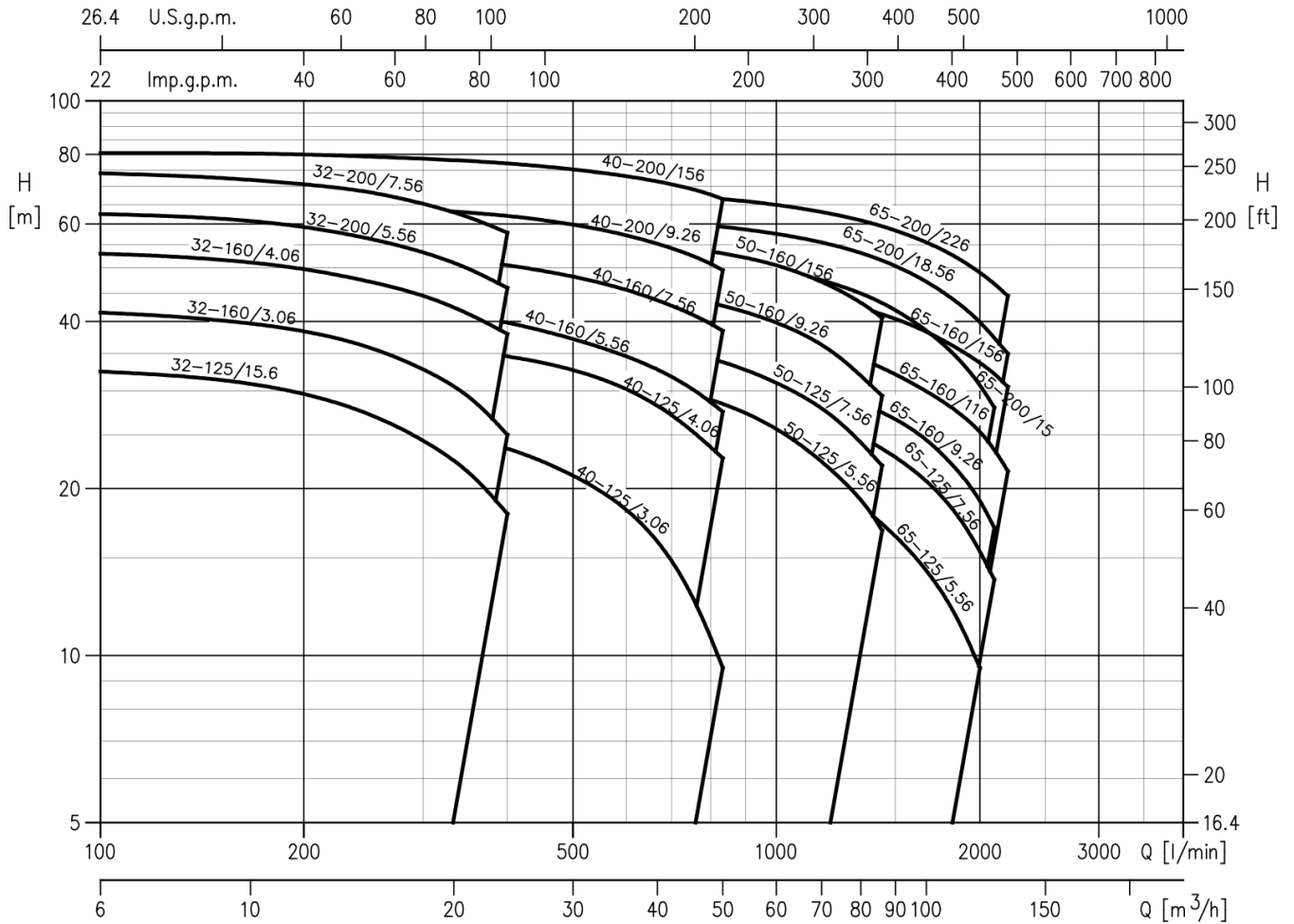
Rev. D

PUMP		
Liquid Handled	Type of liquid	Clean water
	Working temperature [°C]	min. -5 max. +90 max. +110 (H, HS, HW, HSW) 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 40-200/9.26, 50-200/156 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	Counter flange	DN 32, 40, 50, 65, 80 (see FITTINGS TABLE page 315)
Applicable standard of test		ISO 9006:2012 - Grade 3B

MOTOR			
	3D	3DS	3DP
Type	Electric - TEFC Three Phase		
Efficiency Level	- from 2.2 up to 22 kW		
	IE3* from 2.2 up to 22 kW (*only for 460V)		IE2 from 1.1 kW up to 22kW
No. of Poles	2		
Rotation speed [min <sup>-1</sup> ]	≈ 3500		
Insulation Class	F	F (class B for temperature rise)	
Protection degree (CEI EN 60034-5)	IP 55		
Power rating [kW]	2.2 ÷ 22		
[HP]	3.0 ÷ 30		
Frequency [Hz]	60		
Voltage [V]	220/380-460 ±10% (IE3* up to 4.0 kW) 380-460/660 ±10% (IE3* 5.5 kW and above)		265/460 ±10% (up to 4.0 kW) 460 ±10% (5.5 kW and above)
Over load protection	Provided by the user		
Casing material	Aluminium		
Motor support	Cast iron - Aluminium		
Dimensions of cable entry	PG13.5-PG16-PG21-M20x1.5-M25x1.5M		M40x1.5-M50x1.5,M63x1.5
Flange mount (IEC motor)	/		IM B35

\*only for 460V

PERFORMANCE RANGE



**SELECTION CHART**

60Hz

Rev. D

**SELECTION CHART****3D SERIES 32 SIZE**

Pump type	kW	HP	Flow rate							
			l/min	100	150	200	250	300	350	400
			0	6	9	12	15	18	21	24
			m <sup>3</sup> /h							
32-125/2.26	2,2	3	32,7	32,5	31,4	29,6	27,2	24,4	21,4	18
32-160/3.06	3	4	42	41,5	40	38,4	35,9	32,8	29,3	25
32-160/4.06	4	5,5	53,5	53	51,5	49,5	47	44,5	41,5	38
32-200/5.56	5,5	7,5	64	62,5	61,5	59	56,5	53,5	50	46
32-200/7.56	7,5	10	75,5	74	72,5	70,5	68,5	65	61,5	58

**3D SERIES 40 SIZE**

Pump type	kW	HP	Flow rate							
			l/min	200	300	400	500	600	700	833
			0	12	18	24	30	36	42	50
			m <sup>3</sup> /h							
40-125/3.06	3	4	27	26,7	25,5	23,6	21,1	18,3	14,8	9,5
40-125/4.06	4	5,5	37	36,5	35,8	34,6	32,7	30,2	27,1	22,7
40-160/5.56	5,5	7,5	44,5	43,5	42	39,8	37,2	34,6	31,8	27,5
40-160/7.56	7,5	10	56	54	52,5	50,5	48	45,5	42,5	38,5
40-200/9.26	9,2	12,5	66	65	63,5	62	60	57	54	49,5
40-200/156	15	20	81	80	78,5	77	75	73	70,5	66,5

**3D SERIES 50 SIZE**

Pump type	kW	HP	Flow rate							
			l/min	500	600	700	800	1000	1200	1433
			0	30	36	42	48	60	72	86
			m <sup>3</sup> /h							
50-125/5.56	5,5	7,5	32,6	31,8	31,2	30,2	28,9	25,6	21,7	16,8
50-125/7.56	7,5	10	38	37,1	36,5	35,6	34,3	31	27,2	22
50-160/9.26	9,2	12,5	47	46,5	45,5	44,5	43	39,8	35,5	29,4
50-160/156	15	20	56	56	55,5	54,5	53,5	50,5	46,5	40,5

**3D SERIES 65 SIZE**

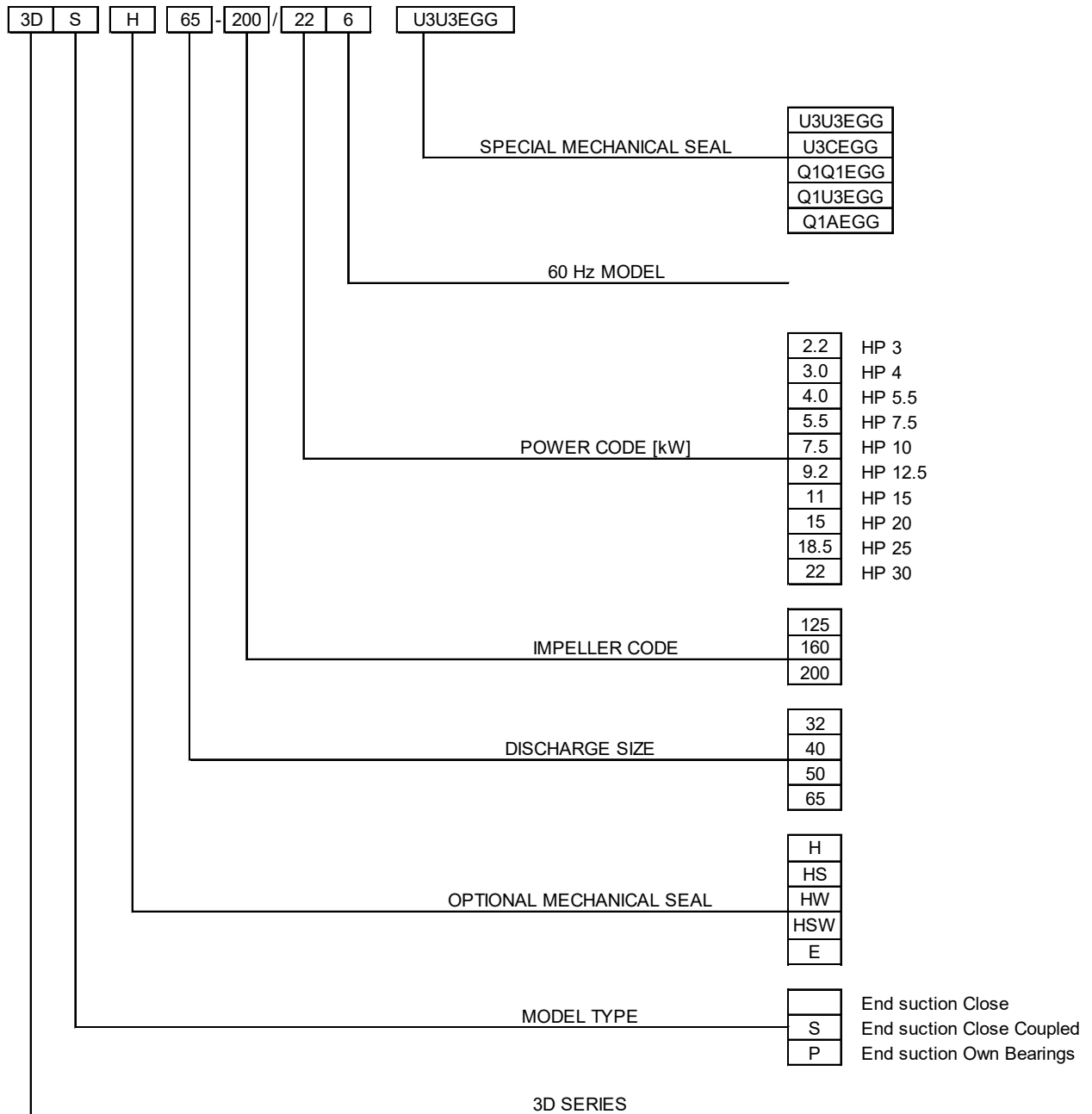
Pump type	kW	HP	Flow rate										Flow rate	
			l/min	600	700	900	1200	1500	1600	1800	2000	2100	2200	
			0	36	42	54	72	90	96	108	120	126	132	
			m <sup>3</sup> /h											
65-125/5.56	5,5	7,5	25,5	25,5	24,9	23,3	20,2	16,4	15,1	12,4	9,5	-	-	
65-125/7.56	7,5	10	32	31,3	30,8	29,2	26,4	22,8	21,5	18,7	15,4	13,7	-	
65-160/9.26	9,2	12,5	36,6	-	35,1	33,3	30,1	26,6	25,4	22,4	19	17	-	
65-160/116	11	15	41	-	40	38,3	35,6	32,1	30,8	28,2	25,3	23,5	21,5	
65-160/156	15	20	48,5	-	48	46,5	44	40,5	39,2	36,5	33,7	32,2	30,5	
65-200/156	15	20	55,5	-	53	51	47	42	39,9	35,6	30,7	28	-	
65-200/18.56	18,5	25	62,5	-	60,5	58,5	55	50,5	48,5	44,5	39,9	37,4	35	
65-200/226	22	30	69,5	-	67,5	66	62,5	58,5	56,5	53	49	47	44,5	

## TYPE KEY

60Hz

Rev. D

### TYPE KEY



**CURVES SPECIFICATIONS**

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

Tolerances according to ISO 9006:2012 - Grade 3B.

The curves refer to effective speed of asynchronous motors at 60 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.

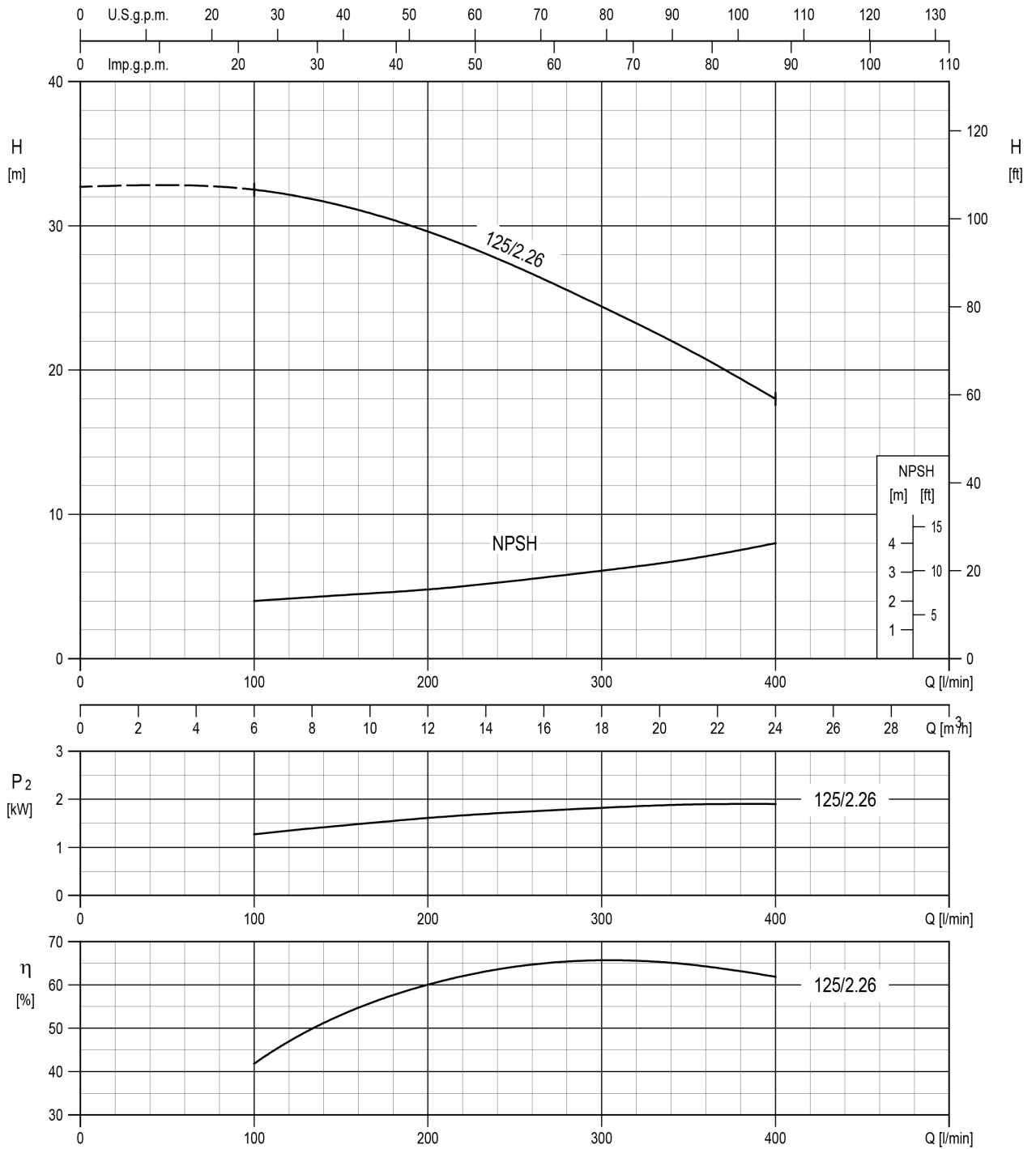
The continuous curves indicate the recommended working range. The dotted curve is only a guide.

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

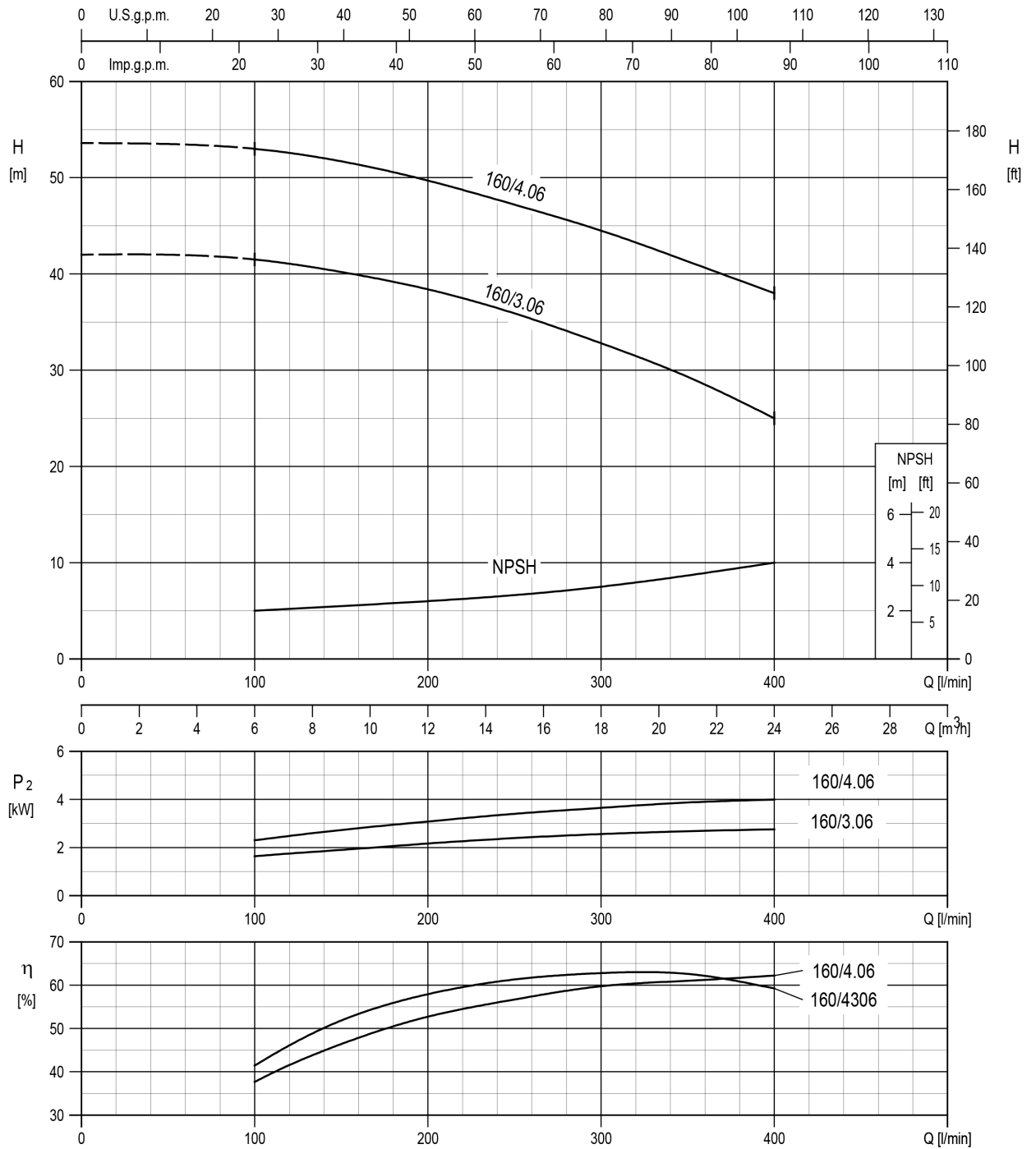
32-125/2.26 (2.2kW) – Impeller diameter = 133 mm



Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

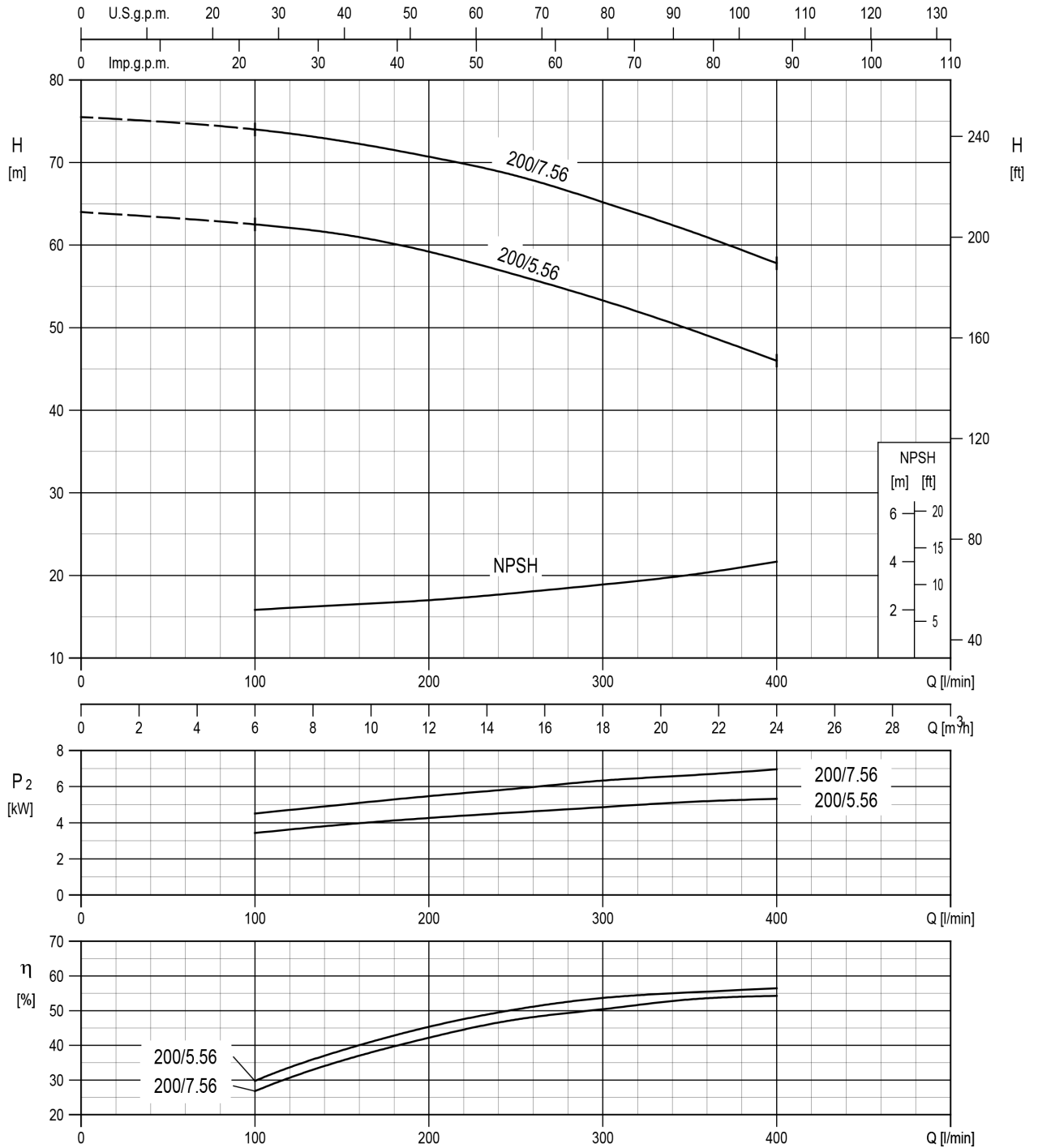


**32-160/3.06 (3.0kW) – Impeller diameter = 151 mm**  
**32-160/4.06 (4.0kW) – Impeller diameter = 166 mm**



Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

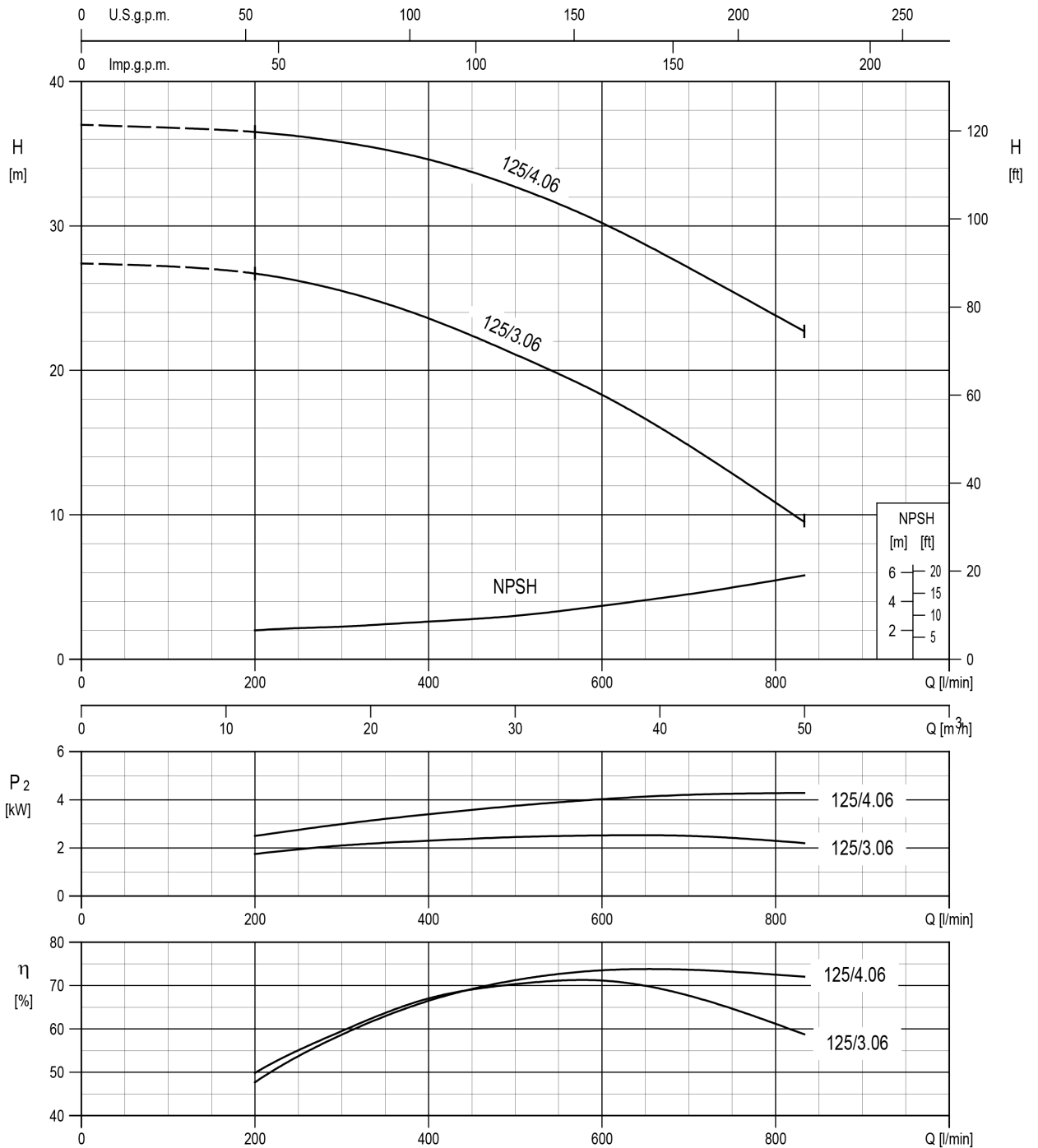
**32-200/5.56 (5.5kW) – Impeller diameter = 186 mm**  
**32-200/7.56 (7.5 kW) – Impeller diameter = 200 mm**



Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

40-125/3.06 (3.0 kW) – Impeller diameter = 125 mm

40-125/4.06 (4.0 kW) – Impeller diameter = 140 mm

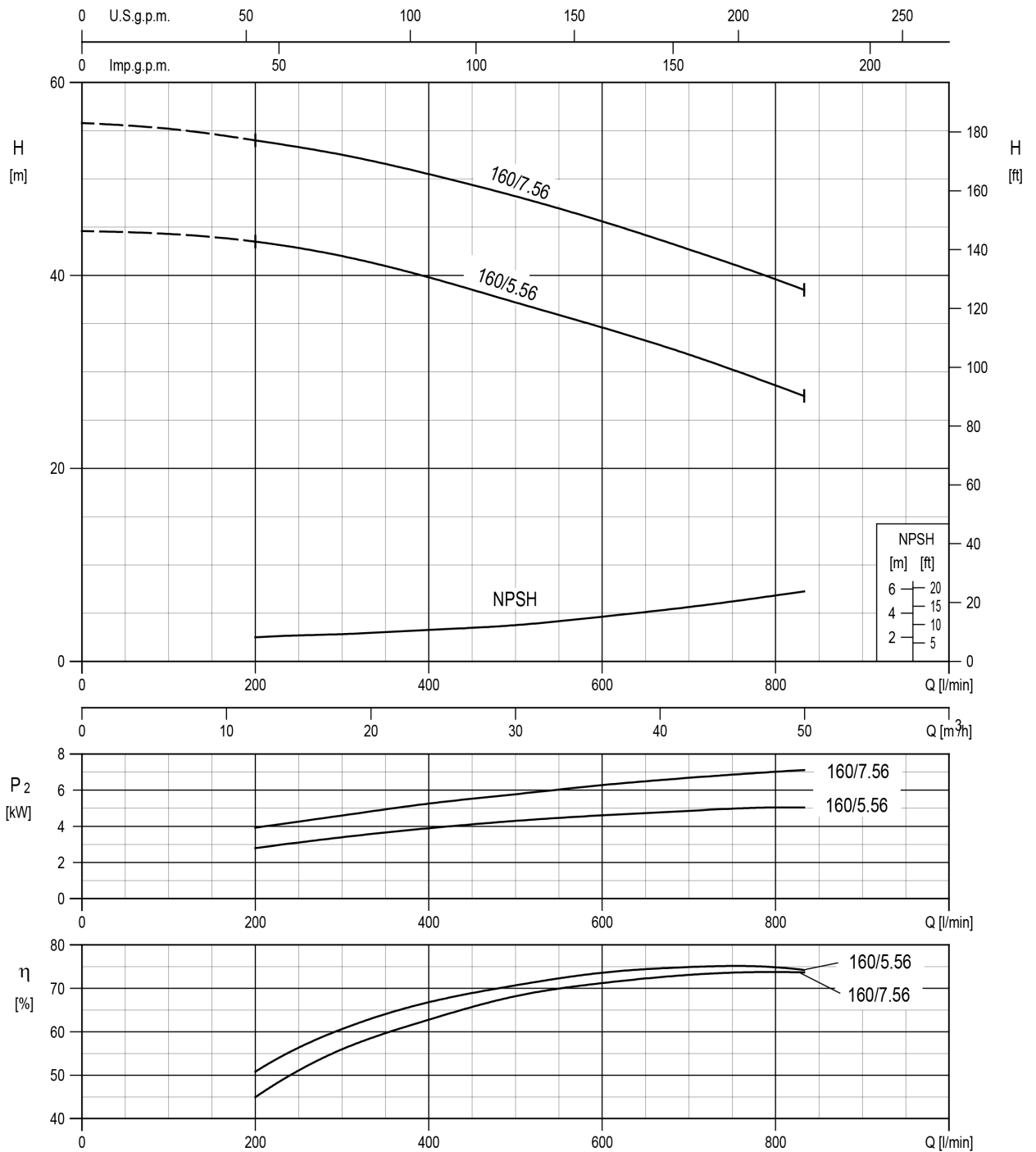


Rotation speed ≈ 3480 min<sup>-1</sup>

Test standard: ISO 9006:2012 - Grade 3B

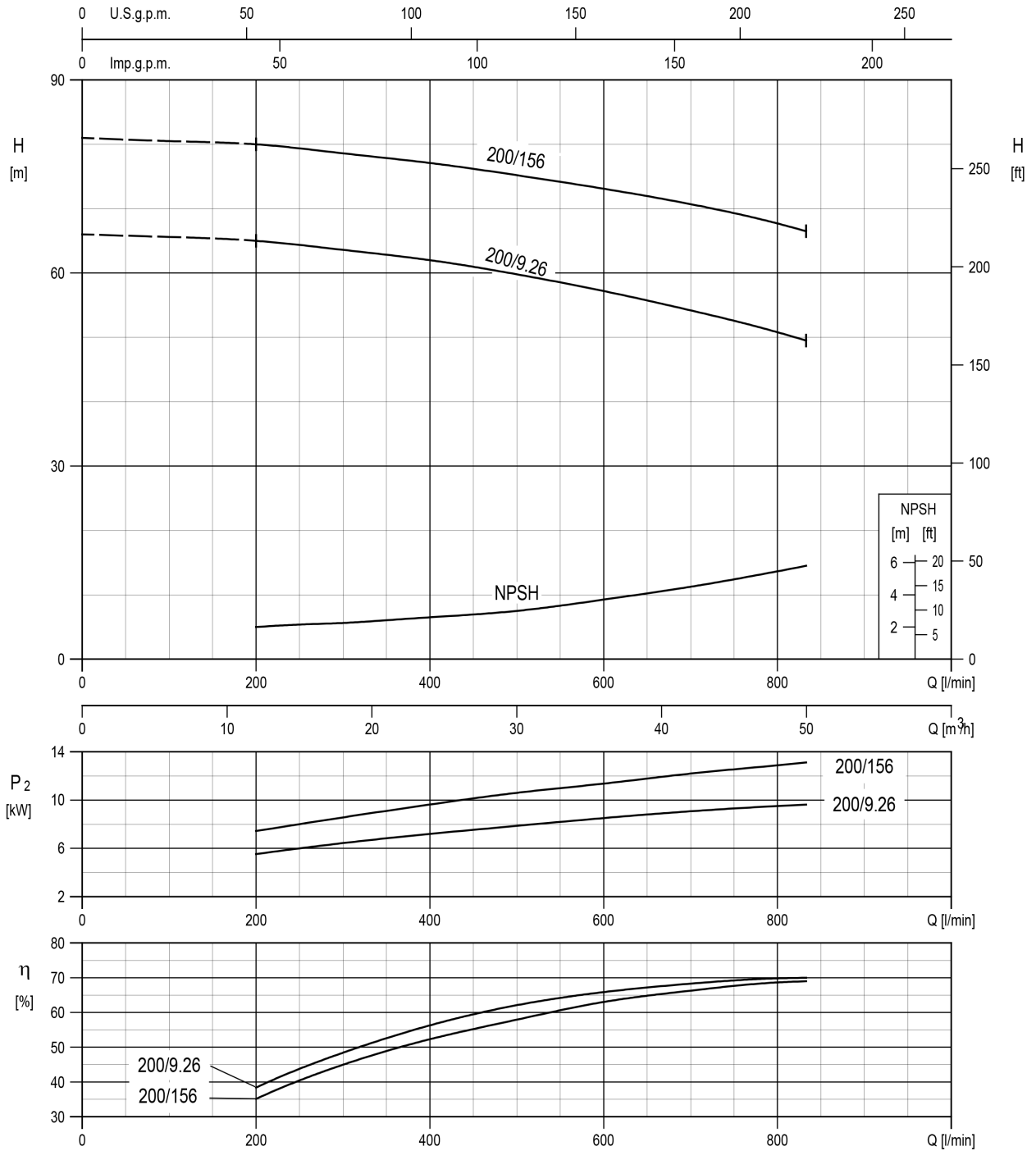
40-160/5.56 (5.5 kW) – Impeller diameter = 151 mm

40-160/7.56 (7.5 kW) – Impeller diameter = 166 mm



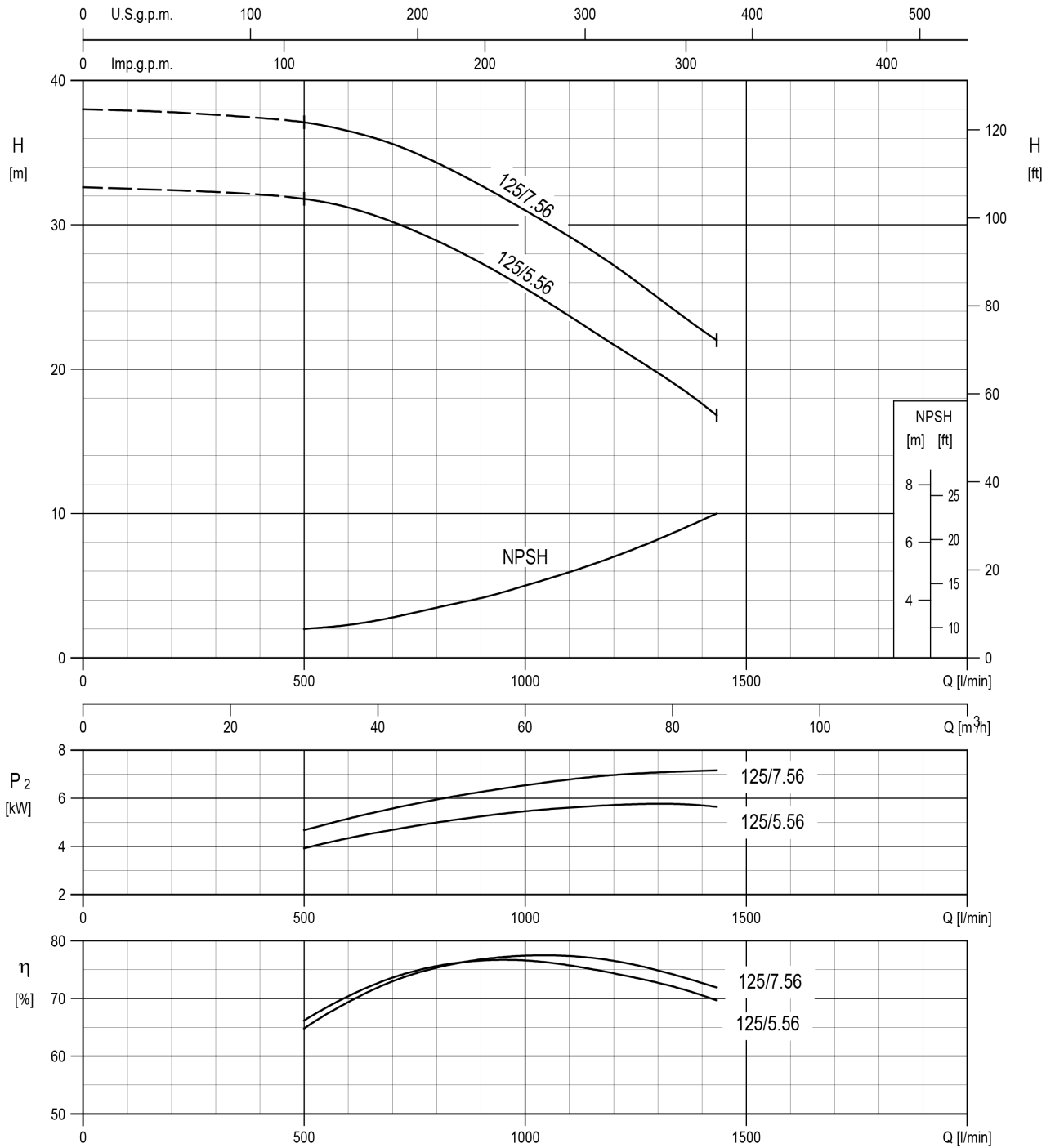
Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

**40-200/9.26 (9.2 kW) – Impeller diameter = 183 mm**  
**40-200/156 (15 kW) – Impeller diameter = 200 mm**



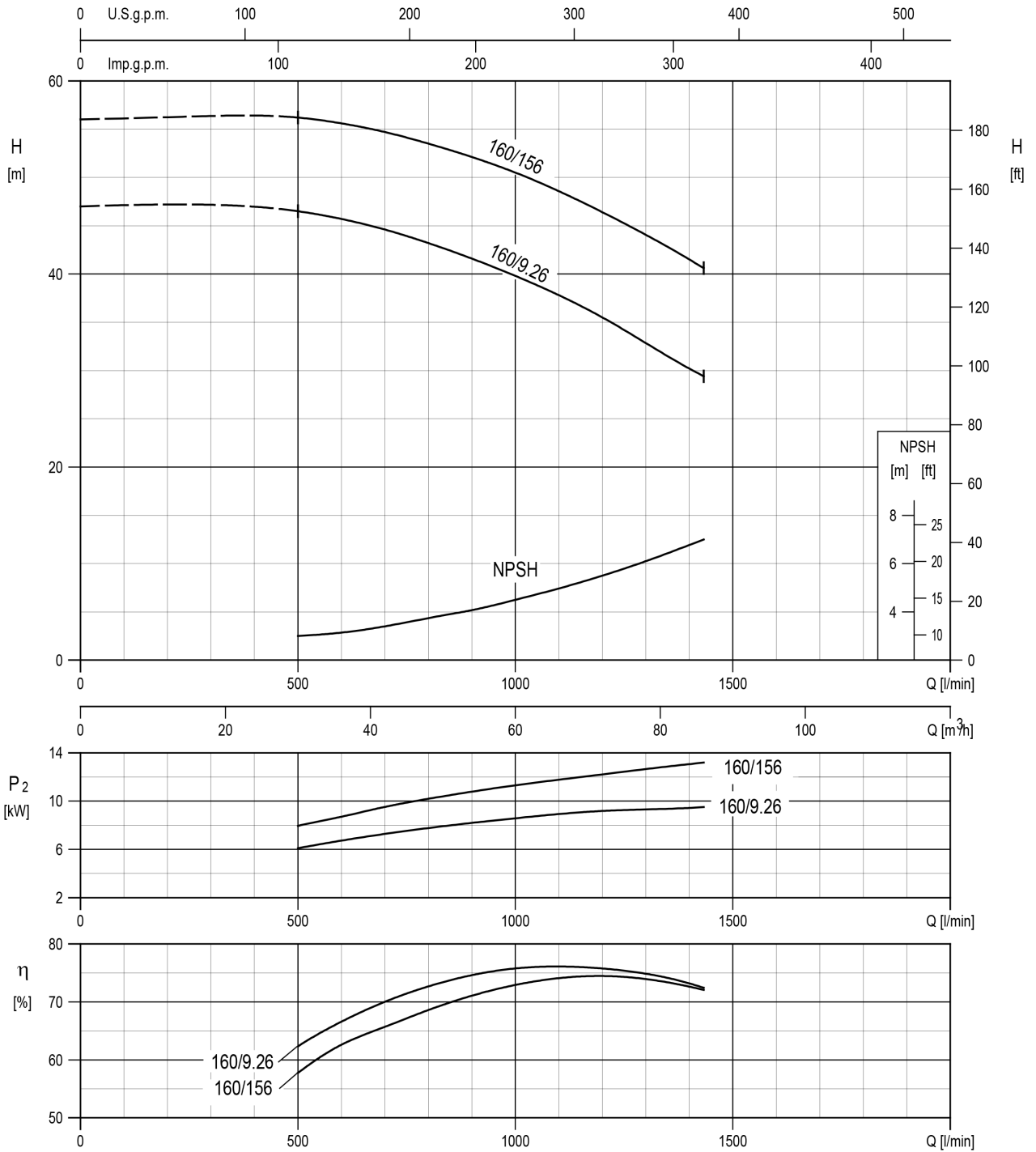
Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

50-125/5.56 (5.5 kW) – Impeller diameter = 131 mm  
 50-125/7.56 (7.5 kW) – Impeller diameter = 140 mm



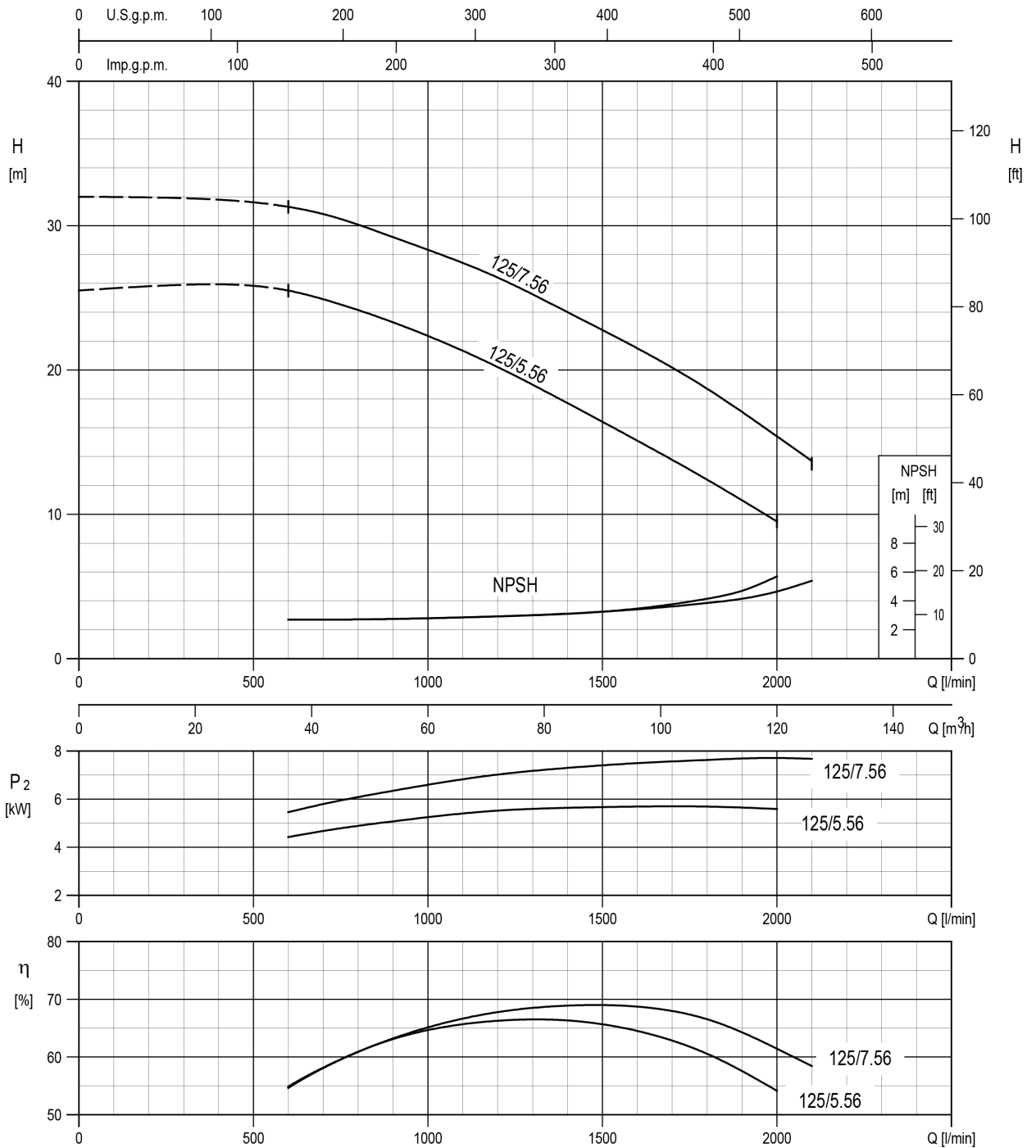
Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

50-160/9.26 (9.2 kW) – Impeller diameter = 154 mm  
 50-160/156 (15 kW) – Impeller diameter = 166 mm



Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

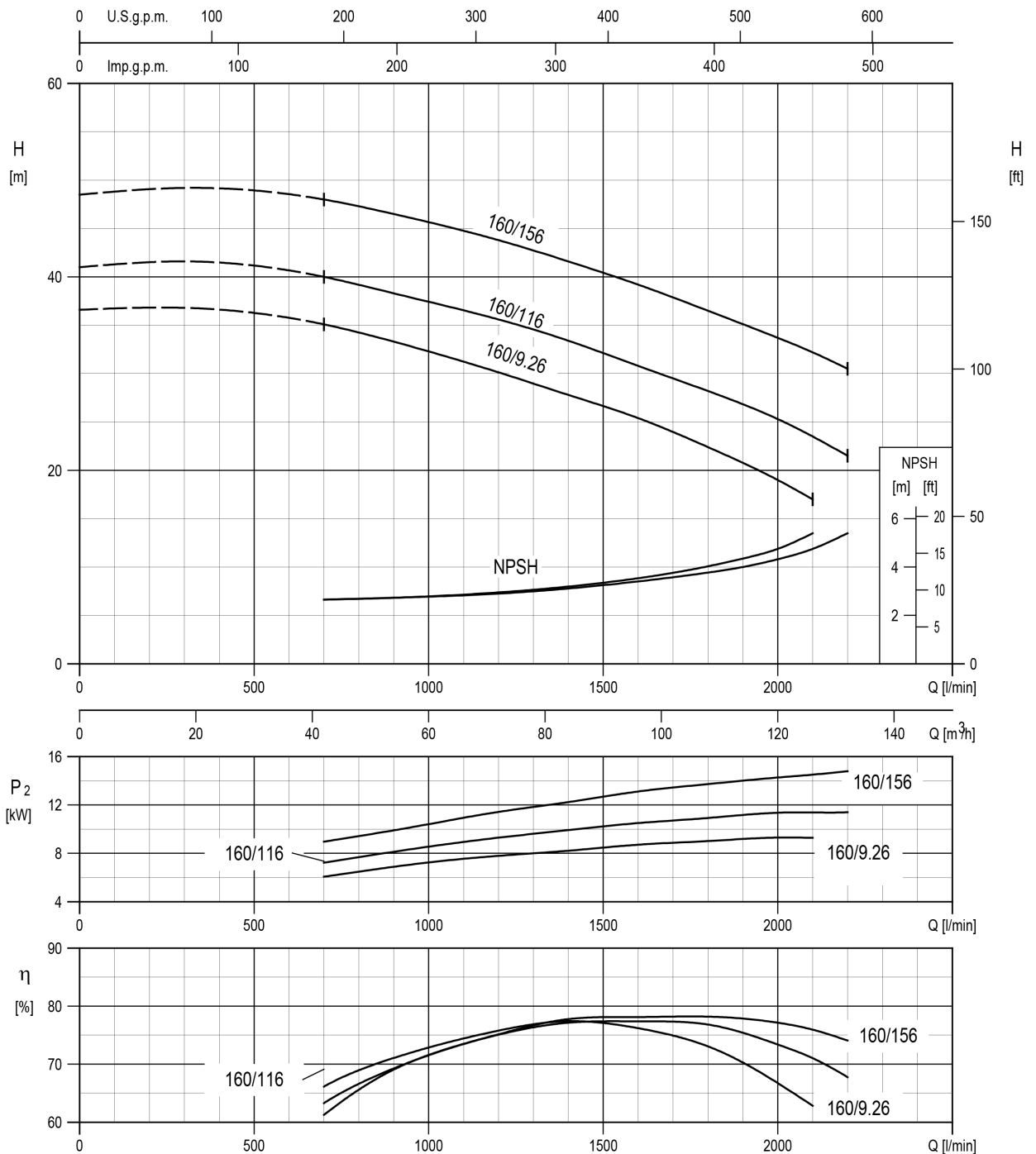
**65-125/5.56 (5.5 kW) – Impeller diameter = 121 mm**  
**65-125/7.56 (7.5 kW) – Impeller diameter = 132 mm**



Rotation speed  $\approx 3480 \text{ min}^{-1}$   
 Test standard: ISO 9006:2012 - Grade 3B

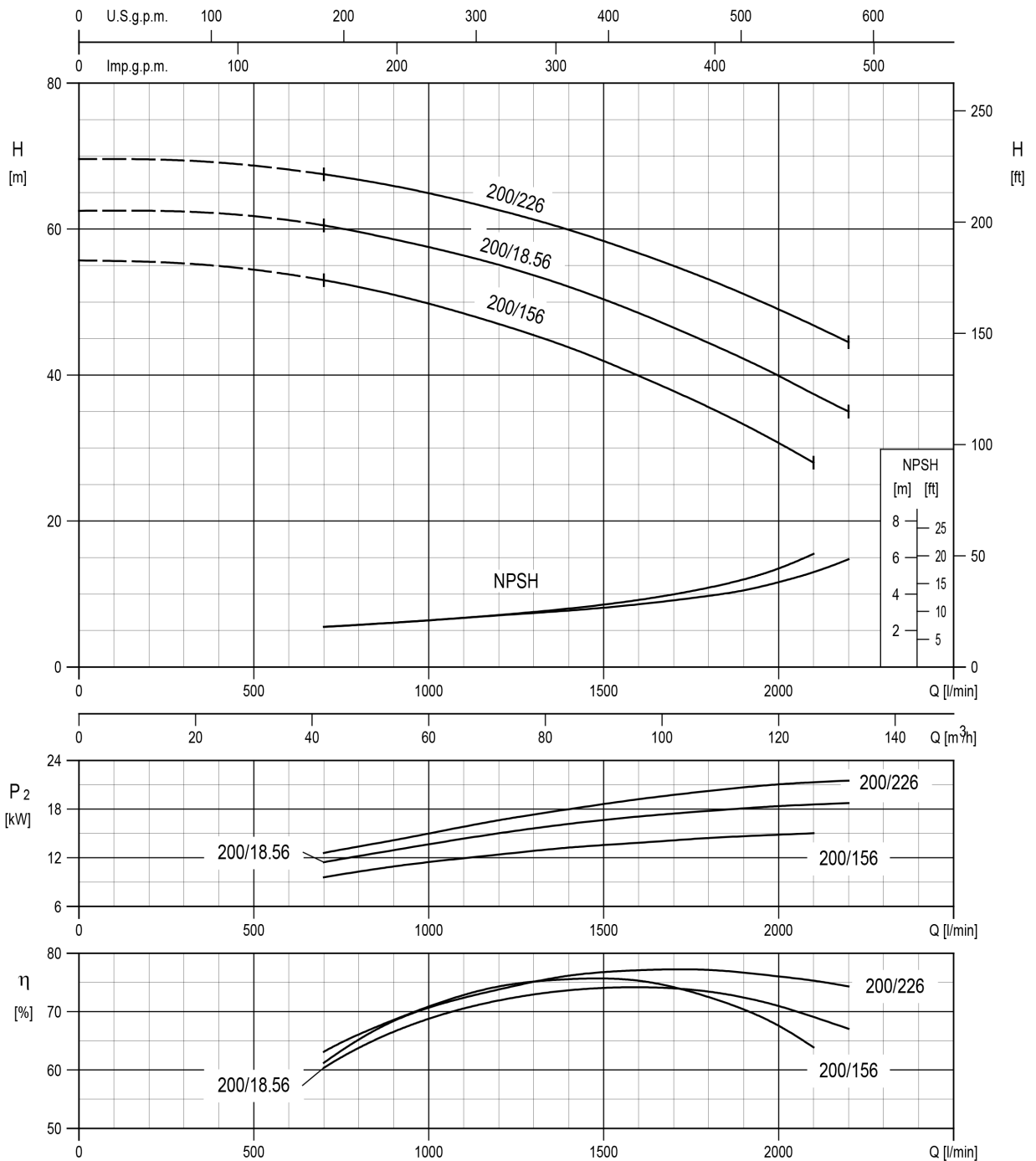


**65-160/9.26 (9.2 kW) – Impeller diameter = 139 mm**  
**65-160/116 (11 kW) – Impeller diameter = 146 mm**  
**65-160/156 (15 kW) – Impeller diameter = 157 mm**



Rotation speed  $\approx 3480 \text{ min}^{-1}$   
 Test standard: ISO 9006:2012 - Grade 3B

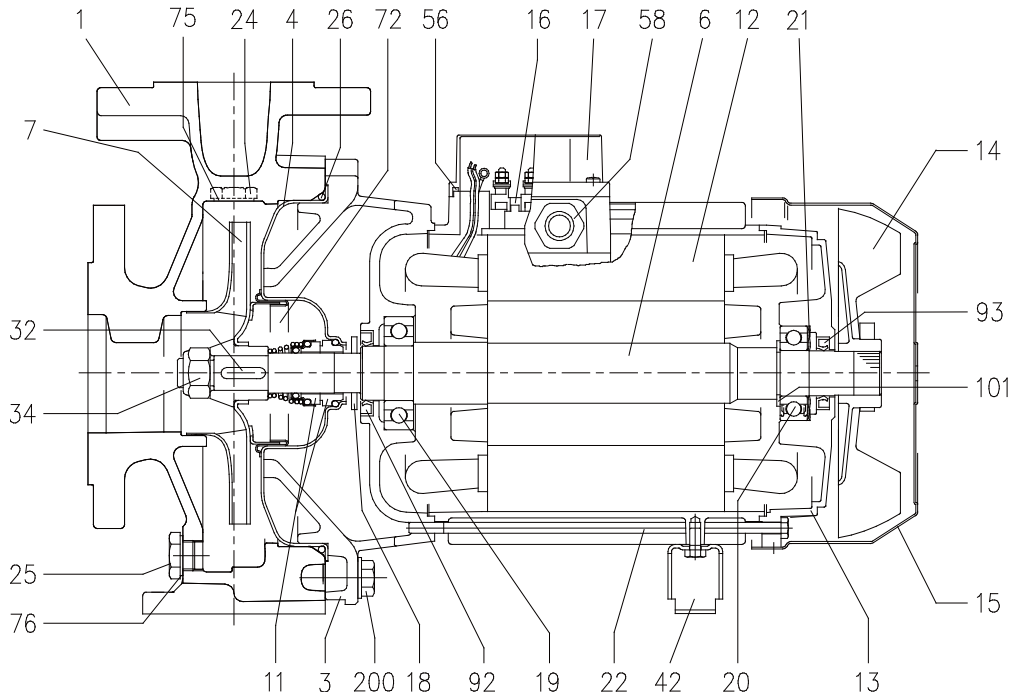
65-200/156 (15 kW) – Impeller diameter = 165 mm  
 65-200/18.56 (18.5 kW) – Impeller diameter = 175 mm  
 65-200/22 (22 kW) – Impeller diameter = 184 mm



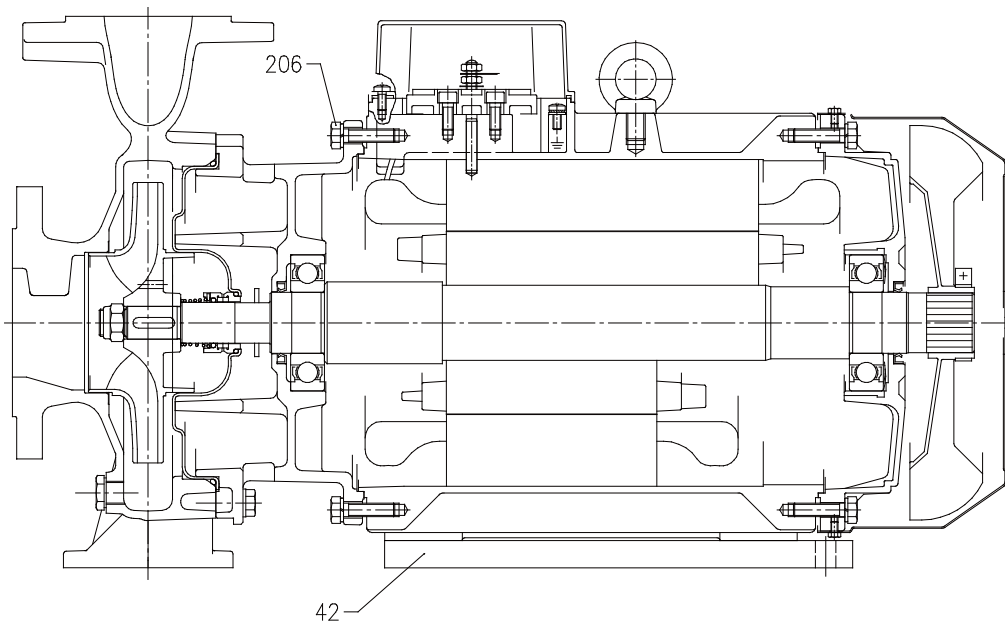
Rotation speed ≈ 3480 min<sup>-1</sup>  
 Test standard: ISO 9006:2012 - Grade 3B

3D SECTIONAL VIEW DRAWING

UP TO 11 kW



15 kW AND ABOVE



## 3D SECTIONAL VIEW TABLE

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	Cast iron EN-GJL-250-EN 1561			1
3	Motor bracket	[1]	-		1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Shaft with rotor - Wet extension	EN 1.4301 (AISI 304)			1
7	Impeller	[2]	-		1
11	Mechanical seal	[3]	-		1
12	Motor frame with stator	-			1
13	Motor cover	Aluminium			1
14	Fan	PA			1
15	Fan cover	Fe P04 Galvanized			1
16	Terminal	-			1
17	Terminal box cover	Aluminium (three phase version)			1
18	Splash ring	Up to 11 kW 15 kW and above	NBR	40x21.5x2 50x29.5x3	EBARA DRAWING 1
19	Bearing	[4]	-		1
20	Bearing	[4]	-		1
21	Adjusting ring	Steel C70			1
22	Tie rod	Up to 3 kW For 4 - 5.5 - 7.5 kW 9.2 e 11kW	Fe 42 Galvanized	M5 M6 M8	EBARA DRAWING 4
	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	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	[5] NBR/FPM/EPDM	158.11x5.34 183.52x5.34 227.96x5.34	OR 6625 OR 6720 OR 6895
32	Key	Up to 11 kW 15 kW and above	EN 1.4401 (AISI 316)	A 6x6x25 A 8x7x30	UNI 6604 1
34	Impeller nut	Up to 11kW 15 kW and above	EN 1.4301 (AISI 304)	M16x1.5 M20x1.5	UNI 7474 1
42	Foot		Aluminium / Galvanized steel		EBARA DRAWING [6]
56	Box gasket		NBR		1
58	Cable gland		-		[7]
72	Casing ring	[8]	EN 1.4301 (AISI 304)		1
75	Washer		Aluminium	22x17x1.5	EBARA DRAWING 1
76	Washer		Aluminium		1
92	Lip seal	Up to 3kW From 4 to 7.5 kW From 9.2 kW to 11 kW From 15 kW to 22 kW	-	25x40x7 30x47X7 40x55x7 45x60x7	DIN 3760 without spring 1
93	Lip seal	Up to 4 kW From 5.5 kW to 7.5 kW From 9.2 kW to 11 kW From 15 kW to 22 kW	-	25x40x7 30x47X7 40x55x7 45x60x7	DIN 3760 without spring 1
101	Snap ring	[9]	Carbon tool steels TC 80	Ø 40	UNI 7435 1
200	Screw	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	Gv. Steel 8.8 strenght class ISO 898-1	M 8x30 M 10x35	UNI 5739 8 10 12
235	Washer	32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	Galvanized Steel	8.4x17 10.5x21	UNI 6592 8 10 12
206	Screw for bracket	[10]	Gv. Steel 8.8 strenght class ISO 898-1	M 10x40	UNI 5739 4

[1] Cast iron EN-GJL-200-EN 1561 for 3D 40-125/4.6, 40-160/7.56, 65-125/5.56; 65-125/7.56

Aluminium 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 **3D BEARINGS** page 311

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

[6] 0 for 65-160/15 kW;

1 for pumps up to 11 kW

2 for 65-200/15, 18.5, 22 kW

[7] 1 for pumps with motor up to 11 kW

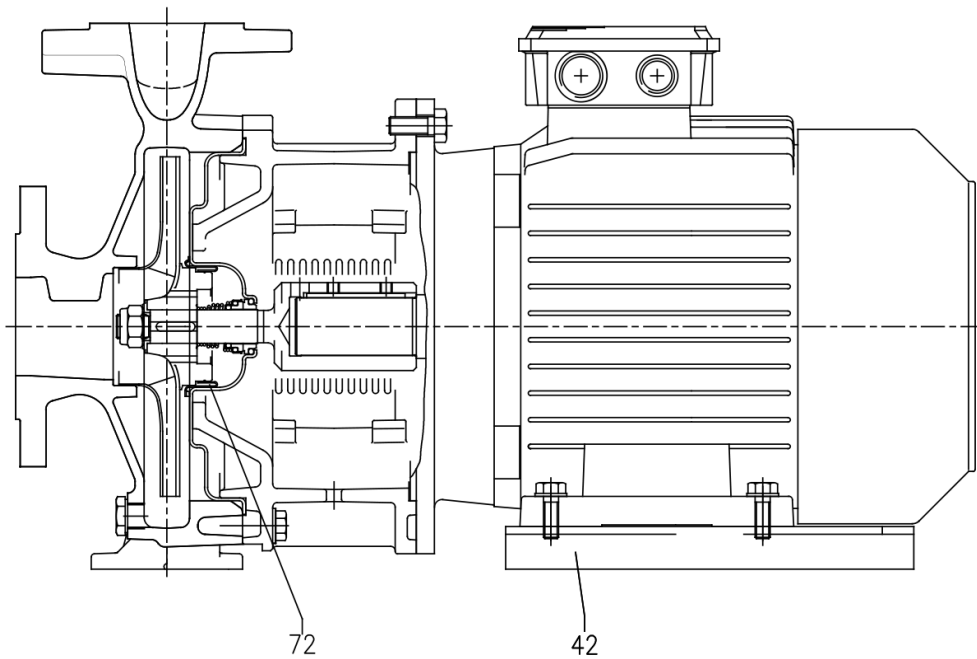
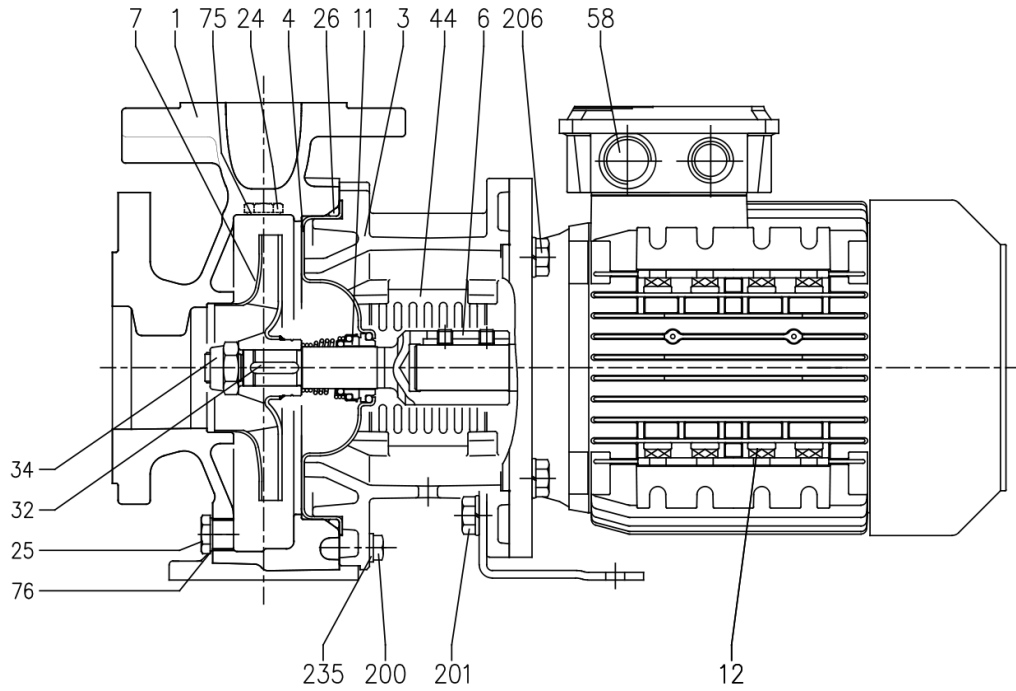
2 for pumps with 15 kW motor and above

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

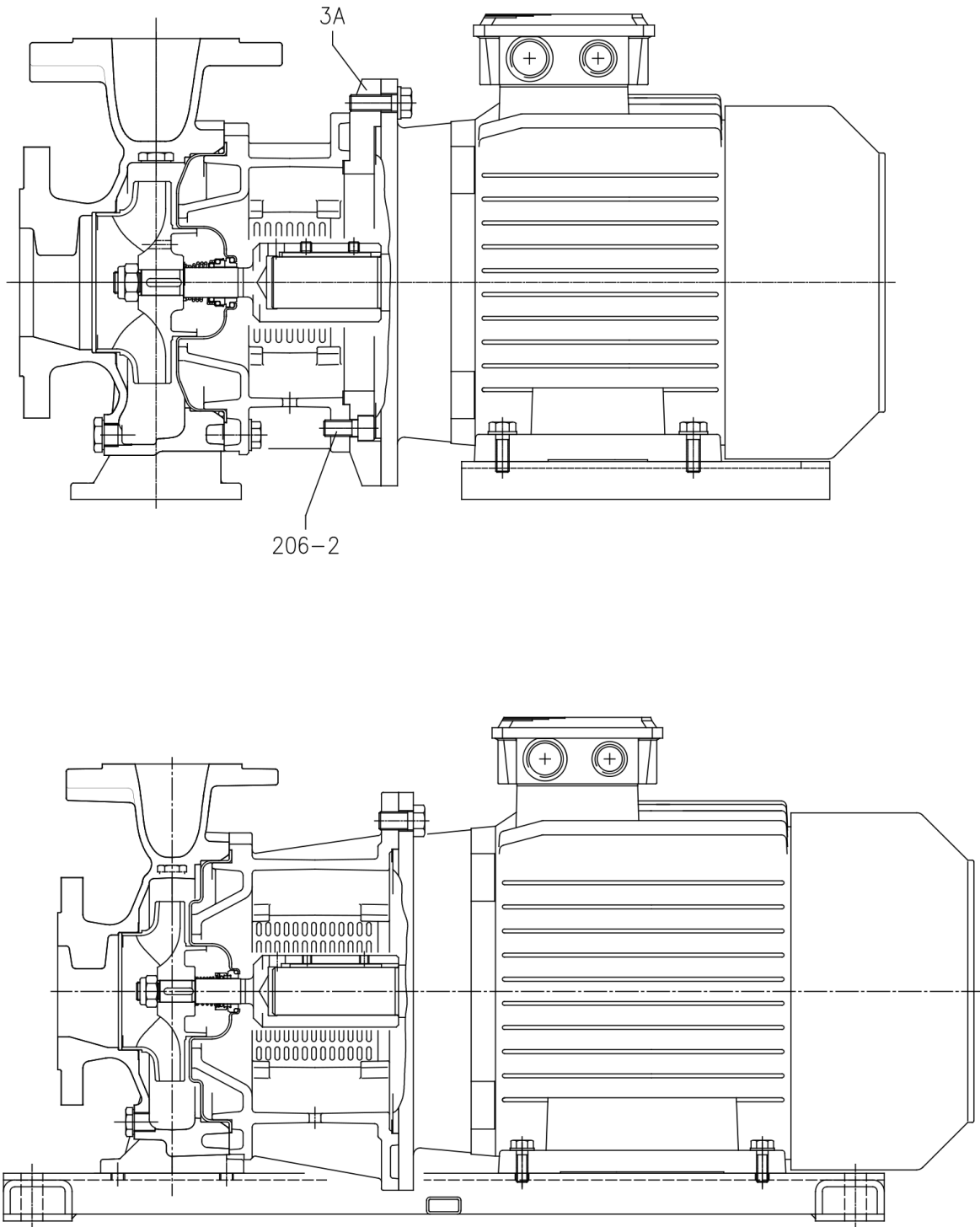
[9] Only for pumps with 9.2 and 11 kW motor

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

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	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Coupling - Wet extensions	EN 1.4301 (AISI 304)			1
7	Impeller	-			1
11	Mechanical seal	-			1
12	Motor	-			1
24	Priming plug	Brass	G 3/8" L=8		1
25	Draing plug	Brass	G 3/8" L=8		1
26	O-ring 32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	NBR/FPM/EPDM	158.11x5.34	OR 6625	1
			183.52x5.34	OR 6720	
			227.96x5.34	OR 6895	
32	Key Up to 11 Kw 15 kW and above	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
			8x7x30		
34	Impeller nut Up to 11kW 15 kW and above	EN 1.4301 (AISI 304)	M16x1.5	UNI 7474	1
			M20x1.5		
42	Foot	Galvanized Steel			[6]
44	Protection	EN 1.4301 (AISI 304)		EBARA DRAWING	1
58	Cable gland	-			
72	Casing ring	EN 1.4301 (AISI 304)			1
75	Washer	Aluminum	22x17x1.5	EBARA DRAWING	1
76	Washer	Aluminum			1
200	Screw 32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	Gv. Steel 8.8 strenght class ISO 898-1	M8x30	UNI 5739	8
			M10x35		10
					12
201	Screw	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	Gv. Steel 8.8 strenght class ISO 898-1	M12x20	UNI 5931	4
235	Washer 32-125, 40-125 32-160, 40-160, 50-125, 65-125 32-200, 40-200, 50-160, 65-160, 65-200	Galvanized Steel	8.4x17	UNI 6592	8
			10.5x21		10
					12

[1] Only for 65-125/5.56 and 65-125/7.56

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

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

EN 1.4401 (AISI 316) for 65 series

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

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

[6] 0 for version 65-200/226

1 for version for 32, 40, 50, 65-125/5.56, 65-125/7.56, 65-160/116, 65-160/156, 65-200/156, 65-200/18.56

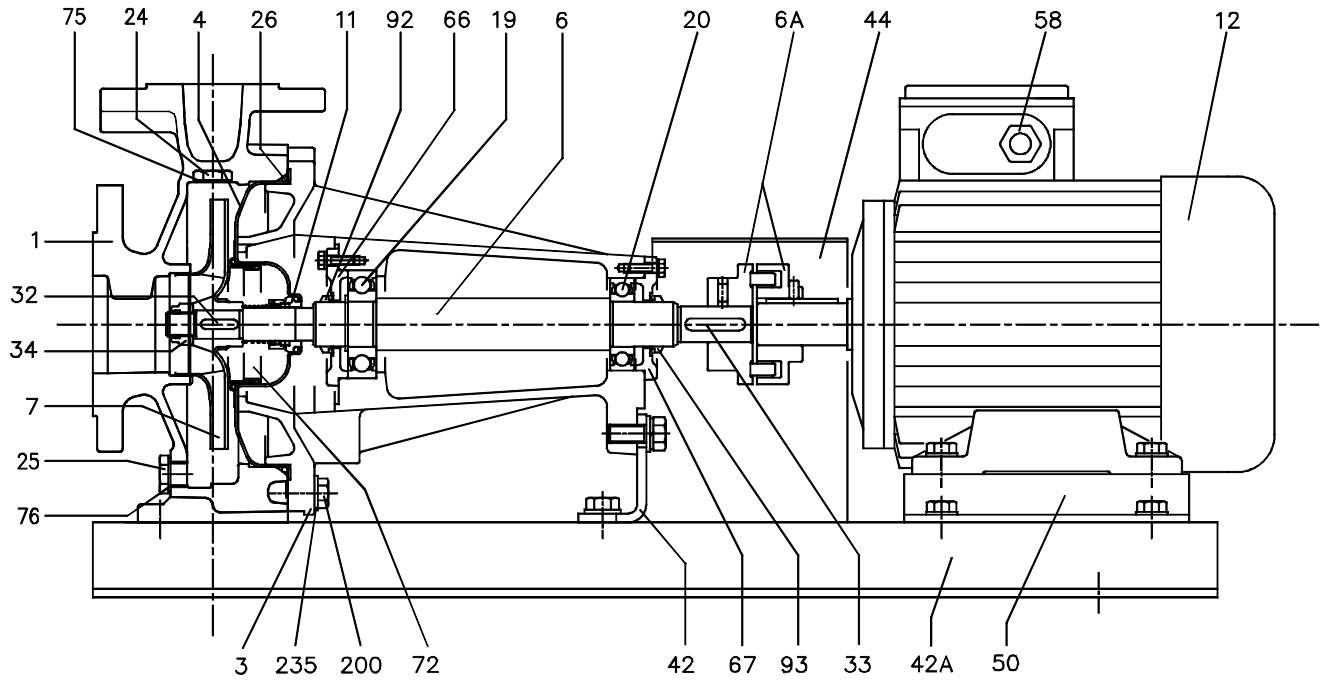
2 for version for 65-125/4.06, 65-160/7.56, 65-160/9.26

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

[8] Only for version 32-125/1.16, 32-160/1.56, 32-160/2.26,

40-125/1.56, 40-125/2.26, 50-125/2.26

## 3DP SECTIONAL VIEW DRAWING



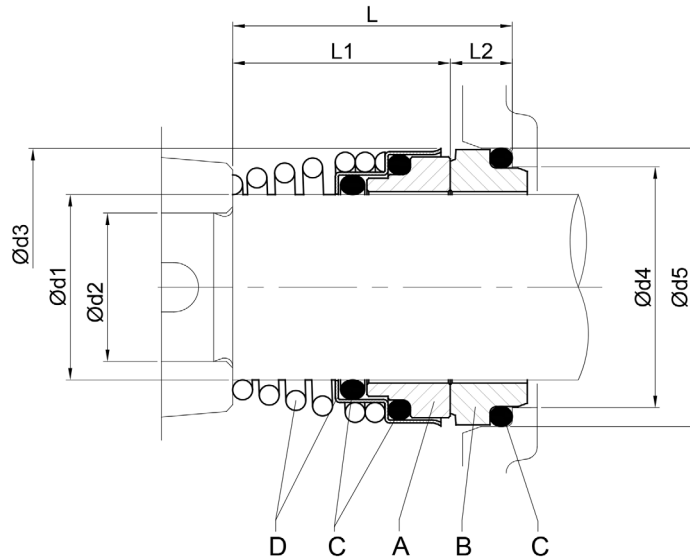


## 3DP SECTIONAL VIEW TABLE

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 [1]	Cast iron EN-GJL-250-EN 1561			1	
7	Impeller [2]	-			1	
11	Mechanical seal [3]	-			1	
12	Motor	-			1	
19	Bearing	-			1	
20	Bearing [4]	-			1	
24	Priming plug [4]	Brass	G 3/8" L=8	DIN 906	1	
25	Draing plug	Brass	G 3/8" L=8	DIN 906	1	
26	O-ring [5]	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, 65-160, 65-200	227.96x5.34	OR 6895	
32	Key	EN 1.4401 (AISI 316)	Up to 11 kW	6x6x25	UNI 6604	1
			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
			15 kW and above	M20x1.5		
42	Pump support	Fe 37 Galvanized		EBARA DRAWING	1	
42A	Base	Fe 37 Galvanized			1	
44	Protection	Fe 37 Galvanized			1	
50	Foot	Aluminium / Galvanized steel			1	
58	Cable gland	-			1	
66	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561			1	
67	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561			1	
72	Casing ring [6]	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	
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	M 10x35		10
			32-200, 40-200, 50-160, 65-160, 65-200			12
235	Washer	Galvanized Steel	32-125, 40-125	8.4x17	UNI 6592	8
			32-160, 40-160, 50-125, 65-125	10.5x21		10
			32-200, 40-200, 50-160, 65-160, 65-200			12

- [1] See **3DP FLEXIBLE COUPLING** page 314  
 [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 **3DS-3DP BEARINGS** page 312  
 [5] See **MECHANICAL SEAL**, "O-ring" column, pages from 307 to 310  
 [6] Only for: 32-200, 40-200, 50-160

MECHANICAL SEAL

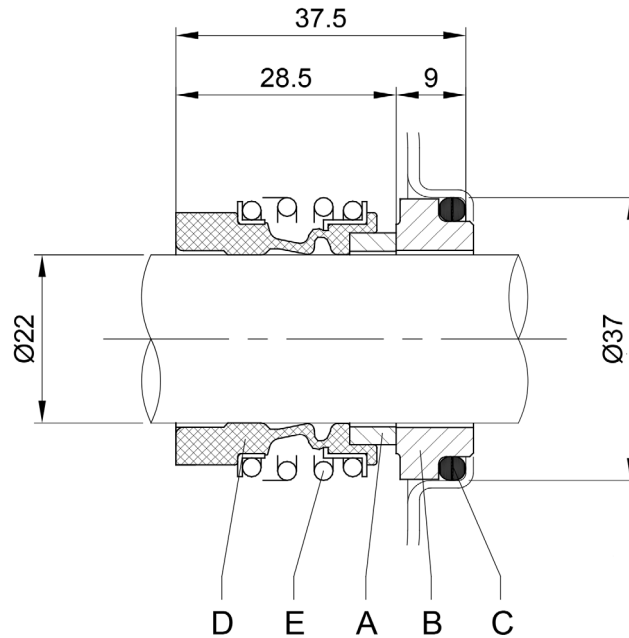


Pump type	Dimensions [ mm ]									Material			
	d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring	
<b>STANDARD</b>	32-125/160/200	22	19	38	31	37	37.5	27.5	10	Ceramic	Carbon	NBR	EN 1.4301 (AISI 304)
	40-125/160/200												
	50-125/160												
	65-125												
	65-160/9.26-116												
65-160/156	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>	32-125/160/200	22	19	38	31	37	37.5	27.5	10	Ceramic	Carbon	FPM	EN 1.4401 (AISI 316)	
	40-125/160/200													
	50-125/160													
	65-125													
	65-160/9.26-116													
65-160/156	30	24	46	39	45	42.5	32.5	10						
65-200														
<b>OPTIONAL</b>	32-125/160/200	22	19	38	31	37	37.5	27.5	10	Ceramic	Carbon	EPDM	EN 1.4401 (AISI 316)	
	40-125/160/200													
	50-125/160													
	65-125													
	65-160/9.26-116													
65-160/156	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>	65-160/156	30	24	46	39	45	42.5	32.5	10	Tungsten carbide	Tungsten carbide	EPDM	EN 1.4401 (AISI 316)	
	65-200													
	65-160/156													Carbon
	65-200													
	65-160/156													SiC
65-200														
Q1AEGG	65-160/156	22	19	38	31	37	37.5	27.5	10	Ceramic	Carbon metalized	EPDM	EN 1.4401 (AISI 316)	
	65-200													
	32-125/160/200													
	40-125/160/200													
	50-125/160													
65-125														
65-160/9.26-116														

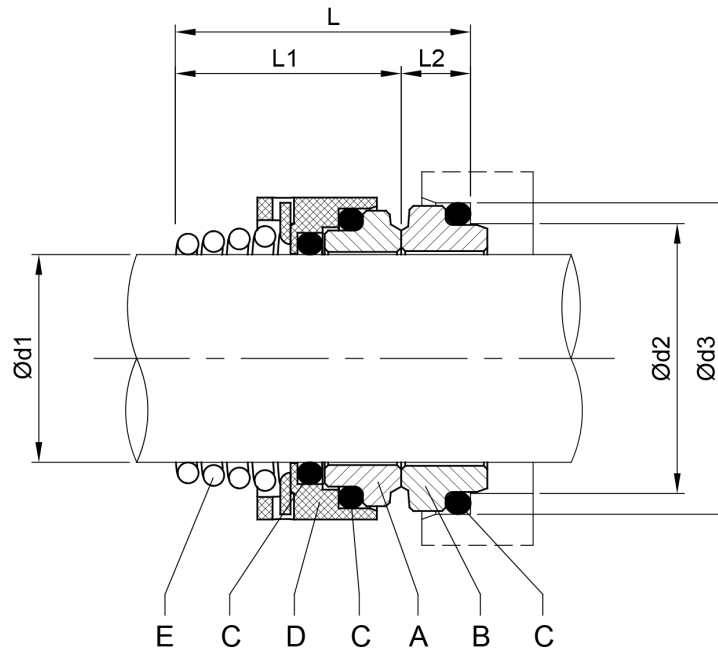
**MECHANICAL SEAL**



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 65-125 65-160/9.26-116	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
HW	32-125/160/200 40-125/160/200 50-125/160 65-125 65-160/9.26-116	Tungsten Carbide	Tungsten Carbide	FPM	FPM	EN 1.4401 (AISI 316)

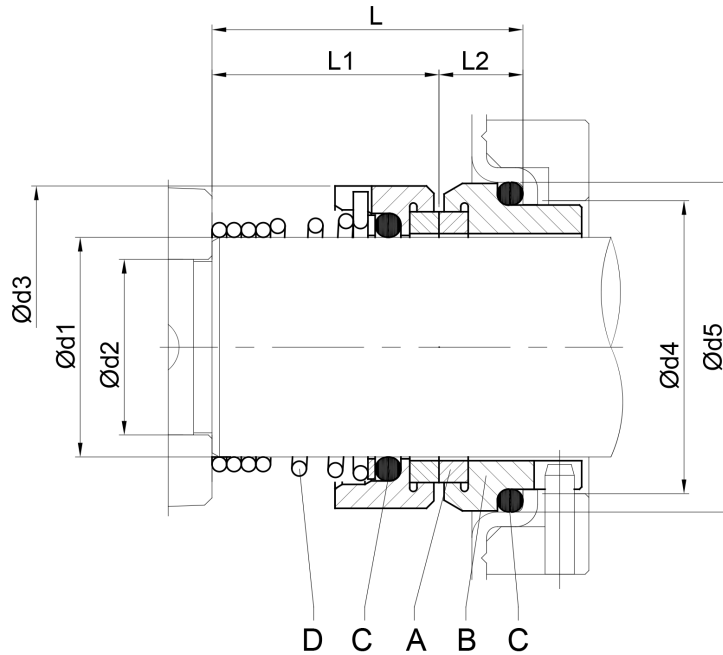
MECHANICAL SEAL



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 65-160/156 65-200	30	39	45	42.5	31	11.5	SiC	SiC	FPM	FPM	EN 1.4401 (AISI 316)
	HW 65-160/156 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 65-125 65-160/9.26-116	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 65-125 65-160/9.26-116	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 65-125 65-160/9.26-116	22	31	37	37.5	27.5	10		Carbon			
	Q1U3EGG 32-125/160/200 40-125/160/200 50-125/160 65-125 65-160/9.26-116							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													
	65-125													
	65-160/9.26-116													

**3D BEARINGS**

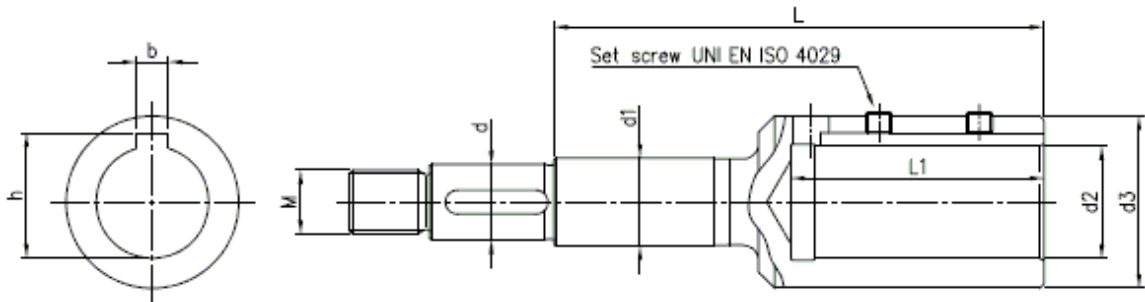
Pump type	Ball Bearing			
	Pump side		Fan side	
		(*)		(*)
3D 32-125/2.26	6205-2RSH	6205-ZZ C3	6205-2RSH	6205-ZZ C3
3D 32-160/3.06				
3D 32-160/4.06	6206-2RSH	6206-ZZ C3		
3D 32-200/5.56	6306-2RS1	6306-ZZ C3	6206-2RS1	6206-ZZ C3
3D 32-200/7.56				
3D 40-125/3.06	6205-2RSH	6205-ZZ C3	6205-2RSH	6205-ZZ C3
3D 40-125/4.06	6206-2RS1	6206-ZZ C3		
3D 40-160/5.56	6306-2RS1	6306-ZZ C3	6206-2RS1	6206-ZZ C3
3D 40-160/7.56				
3D 40-200/9.26	6308-ZZ	6308-ZZ C3	6208-ZZ	6208-ZZ C3
3D 40-200/156	6309-ZZ	6309-ZZ C3	6309-ZZ	6309-ZZ C3
3D 50-125/5.56	6306-2RS1	6306-ZZ C3	6206-2RS1	6206-ZZ C3
3D 50-125/7.56				
3D 50-160/9.26	6308-ZZ	6308-ZZ C3	6208-ZZ	6208-ZZ C3
3D 50-160/156	6309-ZZ	6309-ZZ C3	6309-ZZ	6309-ZZ C3
3D 65-125/5.56	6306-2RS1	6306-ZZ C3	6206-2RS1	6206-ZZ C3
3D 65-125/7.56				
3D 65-160/9.26	6308-ZZ	6308-ZZ C3	6208-ZZ	6208-ZZ C3
3D 65-160/116				
3D 65-160/156	6309-ZZ	6309-ZZ C3	6309-ZZ	6309-ZZ C3
3D 65-200/156				
3D 65-200/18.56				
3D 65-200/226				

(\*) Only for 460 V

**3DS-3DP BEARINGS**

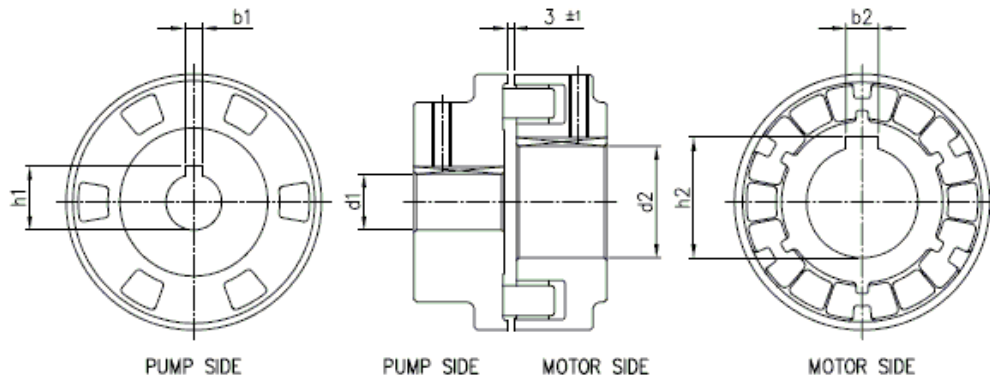
Pump type	Ball bearing		Pump type	Ball bearing			
	Pump side	Fan side		Pump		Motor	
			Pump side	Motor side	Pump side	Fan side	
3DS 32-125/2.26	6205-2Z C3	6205-2Z C3	3DP 32-125/2.26	6306-2RS1	6206-2RS1	6205-2Z C3	6205-2Z C3
3DS 32-160/3.06	6206-2Z C3	6206-2Z C3	3DP 32-160/3.06			6206-2Z C3	6206-2Z C3
3DS 32-160/4.06	6306-2Z C3	6306-2Z C3	3DP 32-160/4.06			6306-2Z C3	6306-2Z C3
3DS 32-200/5.56	6208-2Z C3	6208-2Z C3	3DP 32-200/5.56	6306-2RS1	6206-2RS1	6208-2Z C3	6208-2Z C3
3DS 32-200/7.56			3DP 32-200/7.56				
3DS 40-125/3.06	6206-2Z C3	6206-2Z C3	3DP 40-125/3.06	6306-2RS1	6206-2RS1	6206-2Z C3	6206-2Z C3
3DS 40-125/4.06	6306-2Z C3	6306-2Z C3	3DP 40-125/4.06			6306-2Z C3	6306-2Z C3
3DS 40-160/5.56	6208-2Z C3	6208-2Z C3	3DP 40-160/5.56			6208-2Z C3	6208-2Z C3
3DS 40-160/7.56			3DP 40-160/7.56				
3DS 40-200/9.26	6309-2Z C3	6309-2Z C3	3DP 40-200/9.26	6306-2RS1	6206-2RS1	6309-2Z C3	6309-2Z C3
3DS 40-200/156			3DP 40-200/156				
3DS 50-125/5.56	6208-2Z C3	6208-2Z C3	3DP 50-125/5.56	6308-2RS1	6306-2RS1	6208-2Z C3	6208-2Z C3
3DS 50-125/7.56			3DP 50-125/7.56				
3DS 50-160/9.26	6309-2Z C3	6309-2Z C3	3DP 50-160/9.26	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DS 50-160/156			3DP 50-160/156				
3DS 65-125/5.56	6208-2Z C3	6208-2Z C3	3DP 65-125/5.56	6308-2RS1	6306-2RS1	6208-2Z C3	6208-2Z C3
3DS 65-125/7.56			3DP 65-125/7.56				
3DS 65-160/9.26			3DP 65-160/9.26				
3DS 65-160/116	6309-2Z C3	6309-2Z C3	3DP 65-160/116	6308-2RS1	6306-2RS1	6309-2Z C3	6309-2Z C3
3DS 65-160/156			3DP 65-160/156				
3DS 65-200/156			3DP 65-200/156				
3DS 65-200/18.56			3DP 65-200/18.56				
3DS 65-200/226	6311 C3	6311 C3	3DP 65-200/226			6311 C3	6311 C3

**3DS COUPLING**



Pump type	Power		Motor Size	Dimensions [ mm ]									
	[ kW ]	[ HP ]		d	d1	d2	d3	M	L	L1	b	h	Set screw
32-125/2.26	2.2	3	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
32-160/3.06	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
32-160/4.06	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
32-200/5.56	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
32-200/7.56	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
40-125/3.06	3	4	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
40-125/4.06	4	5.5	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
40-160/5.56	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
40-160/7.56	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
40-200/9.26	9.2	12.5	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
40-200/156	15	20	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
50-125/5.56	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
50-125/7.56	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
50-160/9.26	9.2	12.5	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
50-160/156	15	20	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
65-125/5.56	5.5	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
65-125/7.56	7.5	10	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
65-160/9.26	9.2	12.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
65-160/116	11	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
65-160/156	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
65-200/156	15	20	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
65-200/18.56	18.5	25	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
65-200/226	22	30	180	24	30	48	72	M20x1.5	184	114	14	51.8	M10x10

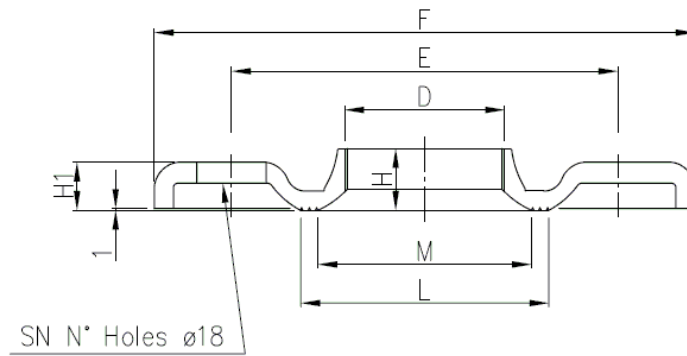


**3DP FLEXIBLE COUPLING**

Pump type	Power		Motor Size	Dimensions [ mm ]						
	[ KW ]	[ HP ]		d1	b1	h1	d2	b2	h2	
32-125/2.26	2.2	3	90	24	8	27.3	24	8	27.3	
32-160/3.06	3	4	100	24	8	27.3	28	8	31.3	
32-160/4.06	4	5.5	112	24	8	27.3	28	8	31.3	
32-200/5.56	5.5	7.5	132	24	8	27.3	38	10	41.3	
32-200/7.56	7.5	10	132	24	8	27.3	38	10	41.3	
40-125/3.06	3	4	100	24	8	27.3	28	8	31.3	
40-125/4.06	4	5.5	112	24	8	27.3	28	8	31.3	
40-160/5.56	5.5	7.5	132	24	8	27.3	38	10	41.3	
40-160/7.56	7.5	10	132	24	8	27.3	38	10	41.3	
40-200/9.26	9.2	12.5	160	24	8	27.3	42	12	45.3	
40-200/156	15	20	160	24	8	27.3	42	12	45.3	
50-125/5.56	5.5	7.5	132	24	8	27.3	38	10	41.3	
50-125/7.56	7.5	10	132	24	8	27.3	38	10	41.3	
50-160/9.26	9.2	12.5	160	24	8	27.3	42	12	45.3	
50-160/156	15	20	160	24	8	27.3	42	12	45.3	
65-125/5.56	5.5	7.5	132	24	8	27.3	38	10	41.3	
65-125/7.56	7.5	10	132	24	8	27.3	38	10	41.3	
65-160/9.26	9.2	12.5	132	24	8	27.3	38	10	41.3	
65-160/116	11	15	160	24	8	27.3	42	12	45.3	
65-160/156	15	20	160	24	8	27.3	42	12	45.3	
65-200/156	15	20	160	24	8	27.3	42	12	45.3	
65-200/18.56	18.5	25	160	24	8	27.3	42	12	45.3	
65-200/226	22	30	180	24	8	27.3	48	14	51.8	

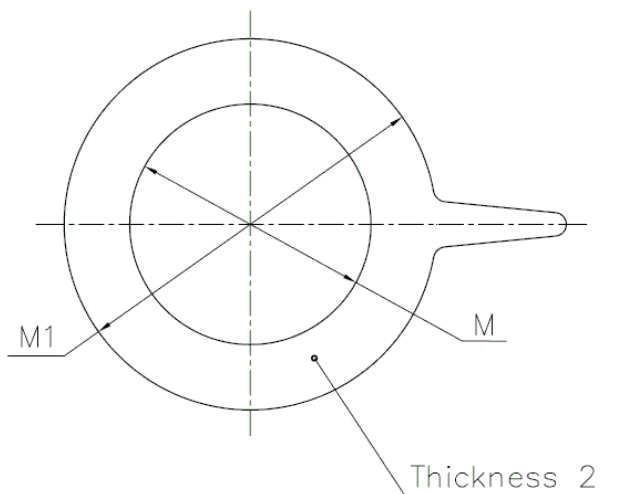
FITTINGS

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 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		
80	G 3	16	160	200	24	16	120	98	8		

GASKETS

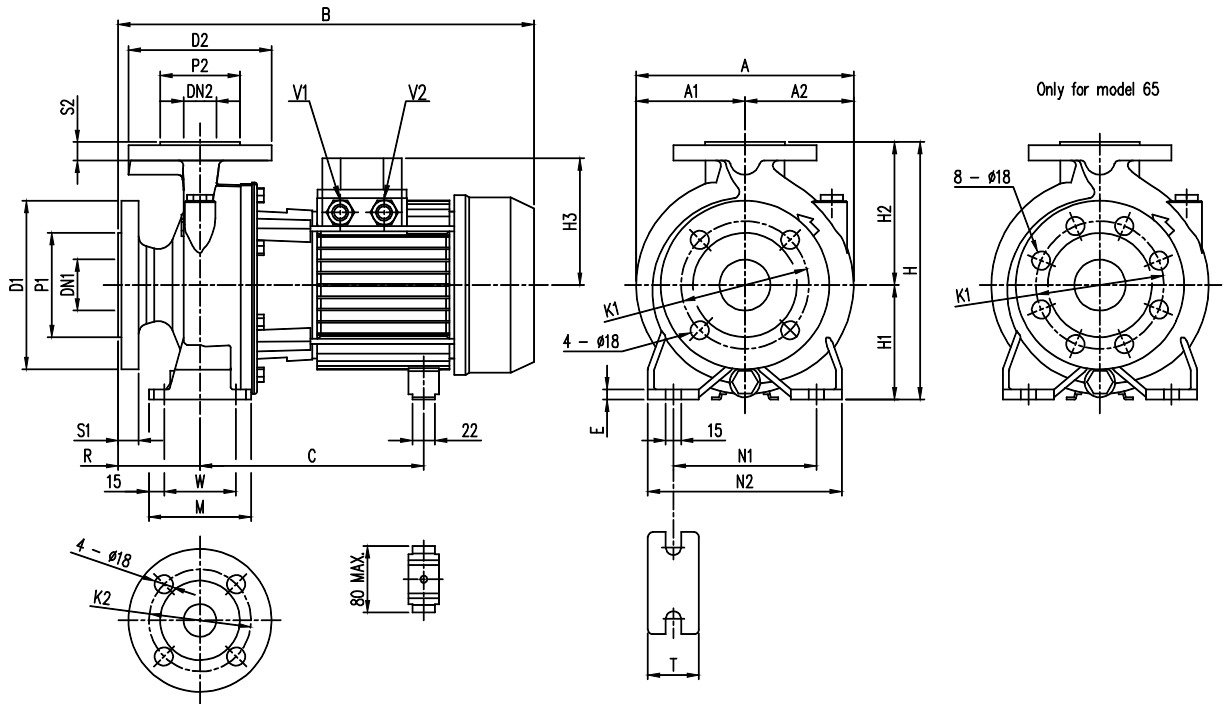


DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140

Material: EPDM for standard version  
FPM for hot water version

PUMP 3D

UP TO 11 kW

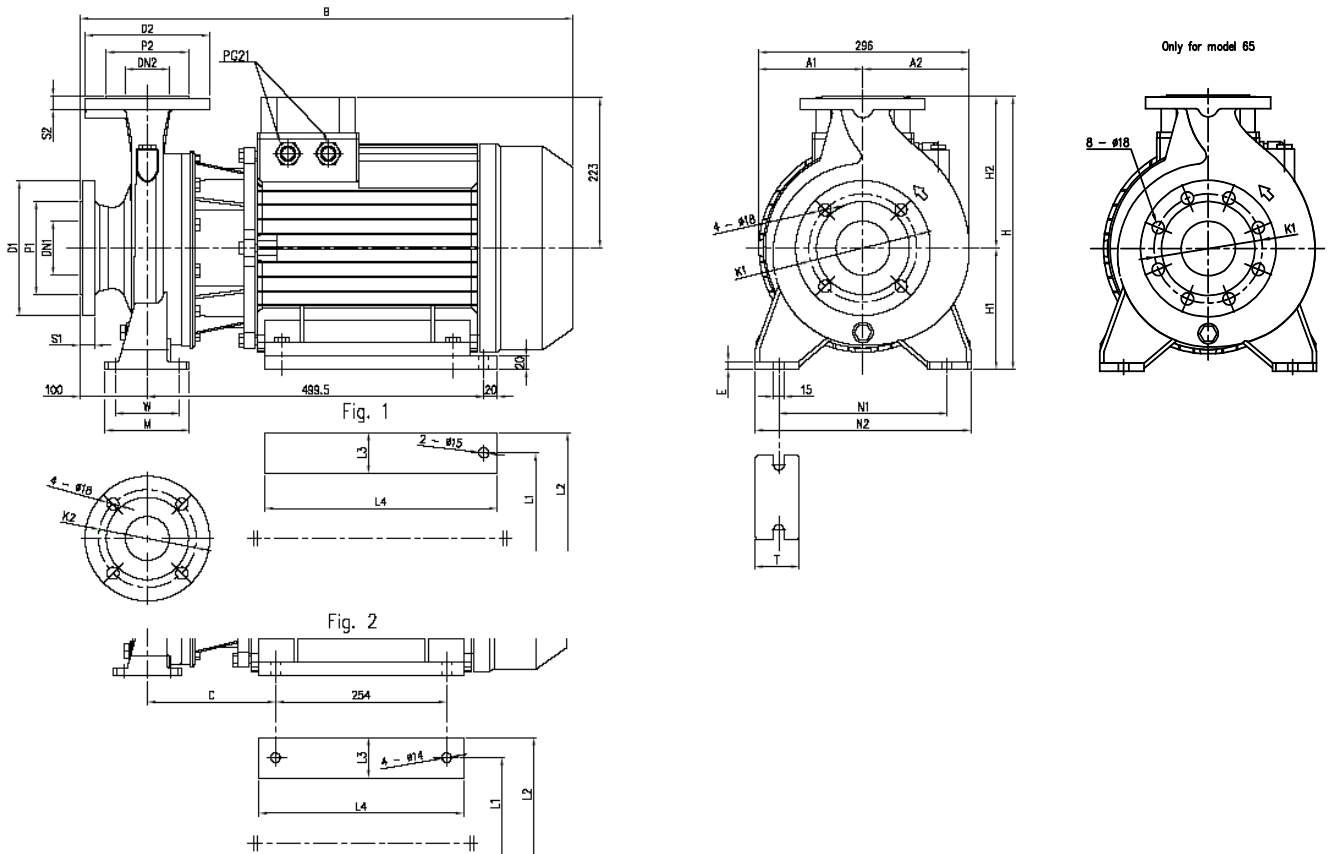


Pump type	Dimensions [ mm ]																				Weight [ kgf ]													
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	H	H1	H2	H3	(*)	R	W	M	N1	N2		T	E	A	A1	A2	B	(*)	C		V1	V2		(*)
32-125/2.26	50	102	125	165	20	32	78	100	140	18	252	112	140	124	119	80	70	100	140	190	50	10	213	106,5	106,5	432	431	244±255	232	-	PG 13.5	M20x1.5	31,0	32,0
32-160/3.06	50	102	125	165	20	32	78	100	140	18	292	132	160	124	119	80	70	100	190	240	50	10	254	127	127	471	471	244±255	244±255	-	PG 13.5	M20x1.5	37,6	37,6
32-160/4.06	50	102	125	165	20	32	78	100	140	18	292	132	160	141	141	80	70	100	190	240	50	10	254	127	127	494	494	253	253	-	PG 16	M20x1.5	45,9	45,9
32-200/5.56	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	519	519	275	275	PG13.5	PG 16	M25x1.5	59,9	59,9
32-200/7.56	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	PG13.5	-	PG16	-	59,4
40-125/3.06	65	122	145	185	20	40	88	110	150	18	252	112	140	124	119	80	70	100	160	210	50	10	213	108	112	471	471	244±255	244±255	-	PG 13.5	M20x1.5	32,1	32,1
40-125/4.06	65	122	145	185	20	40	88	110	150	18	252	112	140	141	141	80	70	100	160	210	50	10	213	108	112	494	494	253	253	-	PG 16	M20x1.5	45,7	45,7
40-160/5.56	65	122	145	185	20	40	88	110	150	18	292	132	160	150	150	80	70	100	190	240	50	12	254	127	127	519	519	275	275	PG13.5	PG 16	M25x1.5	54,3	54,3
40-160/7.56	65	122	145	185	20	40	88	110	150	18	292	132	160	-	150	80	70	100	190	240	50	12	254	127	127	-	539	275	275	PG13.5	PG 16	PG16	-	62,2
40-200/9.26	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	PG13.5	PG 21	PG21	-	74,7
50-125/5.56	65	122	145	185	20	50	102	125	165	20	292	132	160	150	150	100	70	100	190	240	50	10	254	127	127	539	539	275	275	PG13.5	PG 16	M25x1.5	56,2	56,2
50-125/7.56	65	122	145	185	20	50	102	125	165	20	292	132	160	-	150	100	70	100	190	240	50	10	254	127	127	-	559	-	275	PG13.5	PG 16	PG16	-	56,7
50-160/9.26	65	122	145	185	20	50	102	125	165	20	340	160	180	-	178	100	70	100	212	265	50	10	296	148	148	-	595	-	359	PG13.5	PG 21	PG21	-	76,6
65-125/5.56	80	138	160	200	22	65	122	145	185	20	340	160	180	150	150	100	95	125	212	280	65	12	254	127	136	539	539	275	275	PG13.5	PG 16	M25x1.5	67,3	67,3
65-125/7.56	80	138	160	200	22	65	122	145	185	20	340	160	180	-	150	100	95	125	212	280	65	23	254	127	136	-	559	-	275	PG13.5	PG 16	PG16	-	68,3
65-160/9.26	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	PG13.5	PG 21	PG21	-	71,9
65-160/116	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	PG13.5	PG 21	PG21	-	81,0

(\*) Only for 460 V

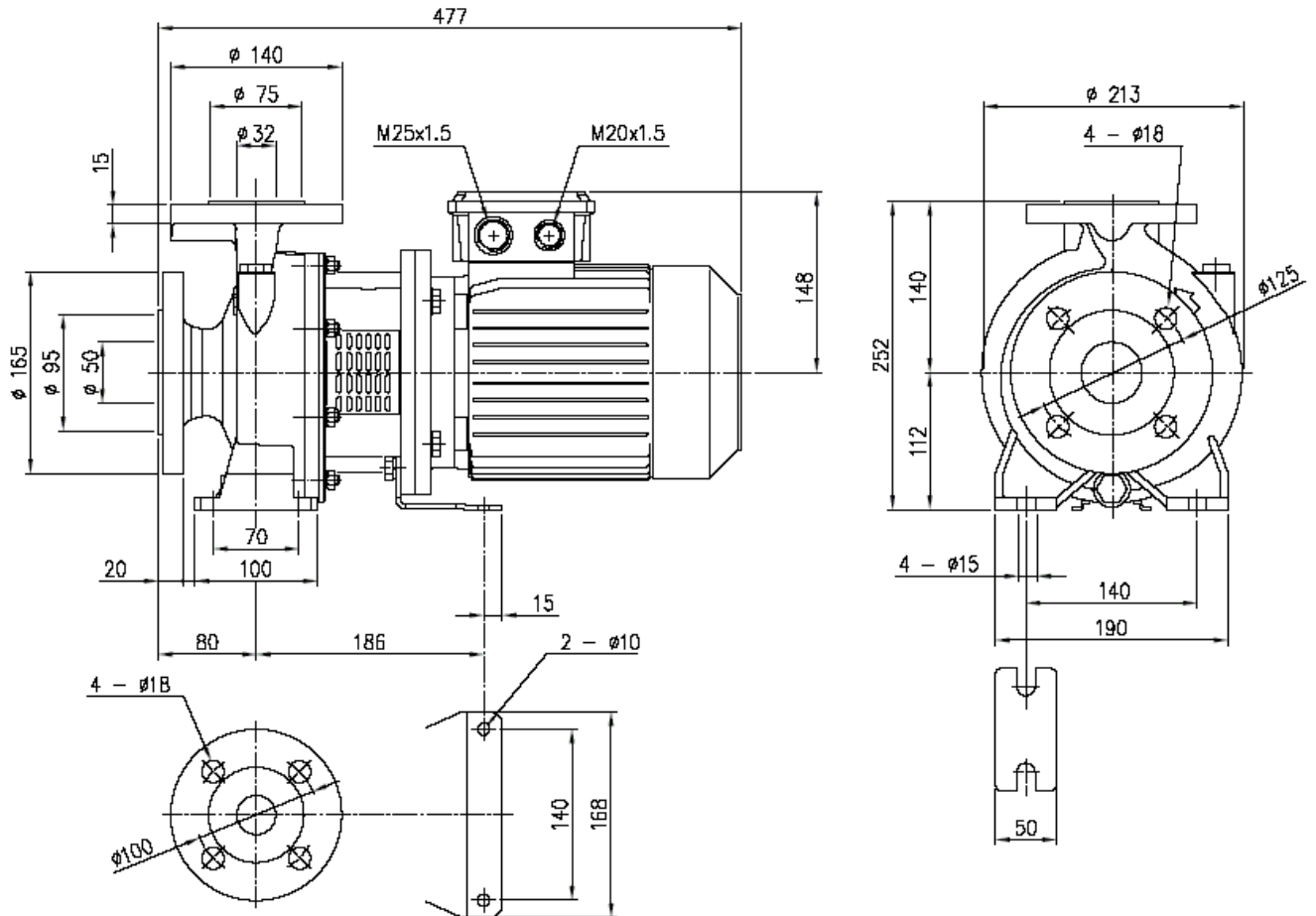
PUMP 3D

15 kW AND ABOVE



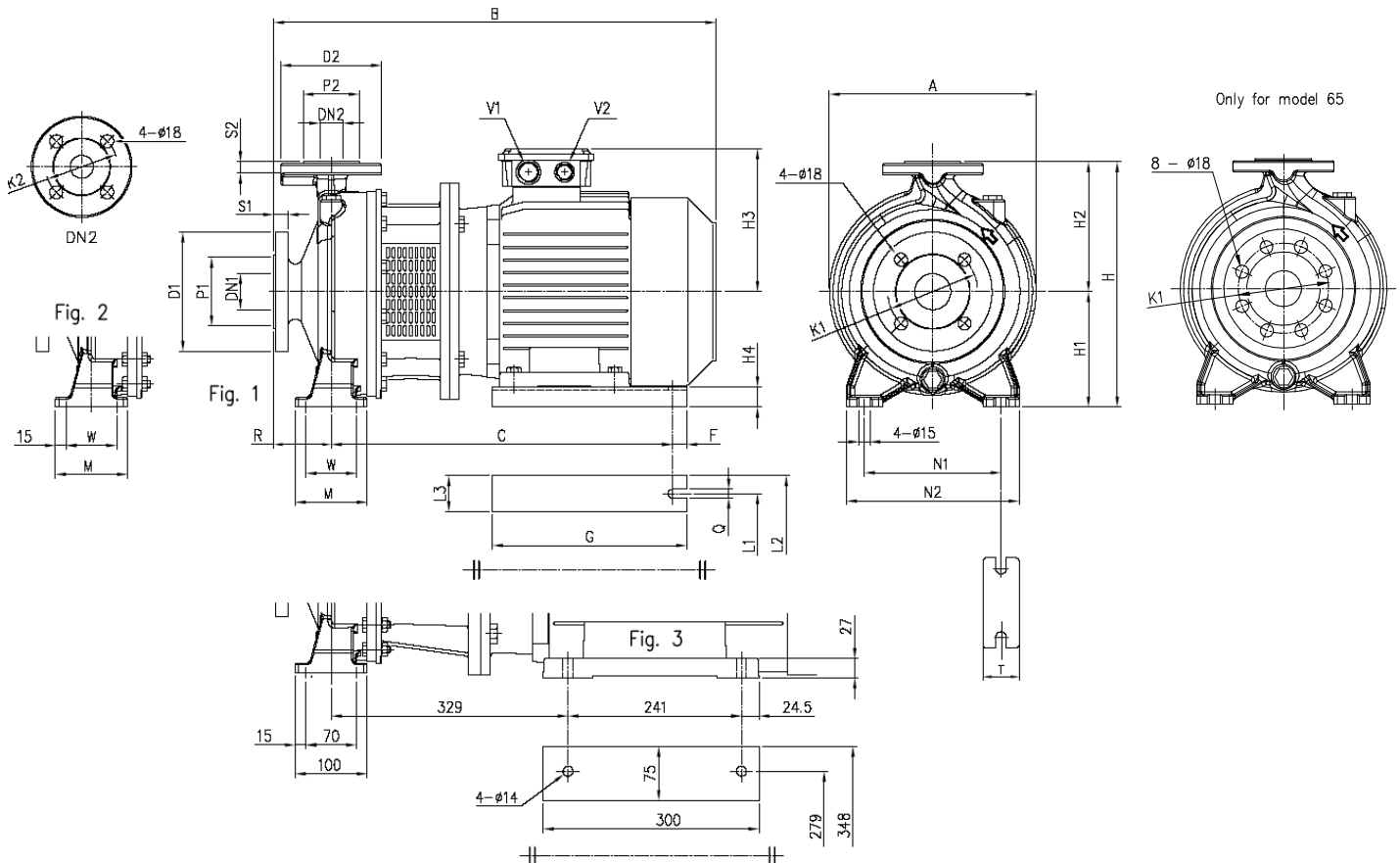
Pump type	Dimensions [ mm ]																				Weight [ kgf ]								
	Ø DN1	Ø P1	Ø K1	Ø D1	S1	Ø DN2	Ø P2	Ø K2	Ø D2	S2	Fig.	H	H1	H2	W	M	N1	N2	T	E		A1	A2	B	C	L1	L2	L3	L4
40-200/156	65	122	145	185	20	40	88	110	150	18	2	340	160	180	70	100	212	265	50	12	148	148	723	190,5	254	318	64	304	115,7
50-160/156	65	122	145	185	20	50	102	125	165	20	2	340	160	180	70	100	212	265	50	10	148	148	723	190,5	254	318	64	304	93,1
65-160/156	80	138	160	200	22	65	122	145	185	20	2	360	160	200	95	125	212	280	65	12	148	148	732	199,5	254	318	64	304	119,0
65-200/156	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	122,5
65-200/18.56	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	136,5
65-200/226	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	144,5

PUMP 3DS 32-125/2.26



Pump weight: 40.3 kgf

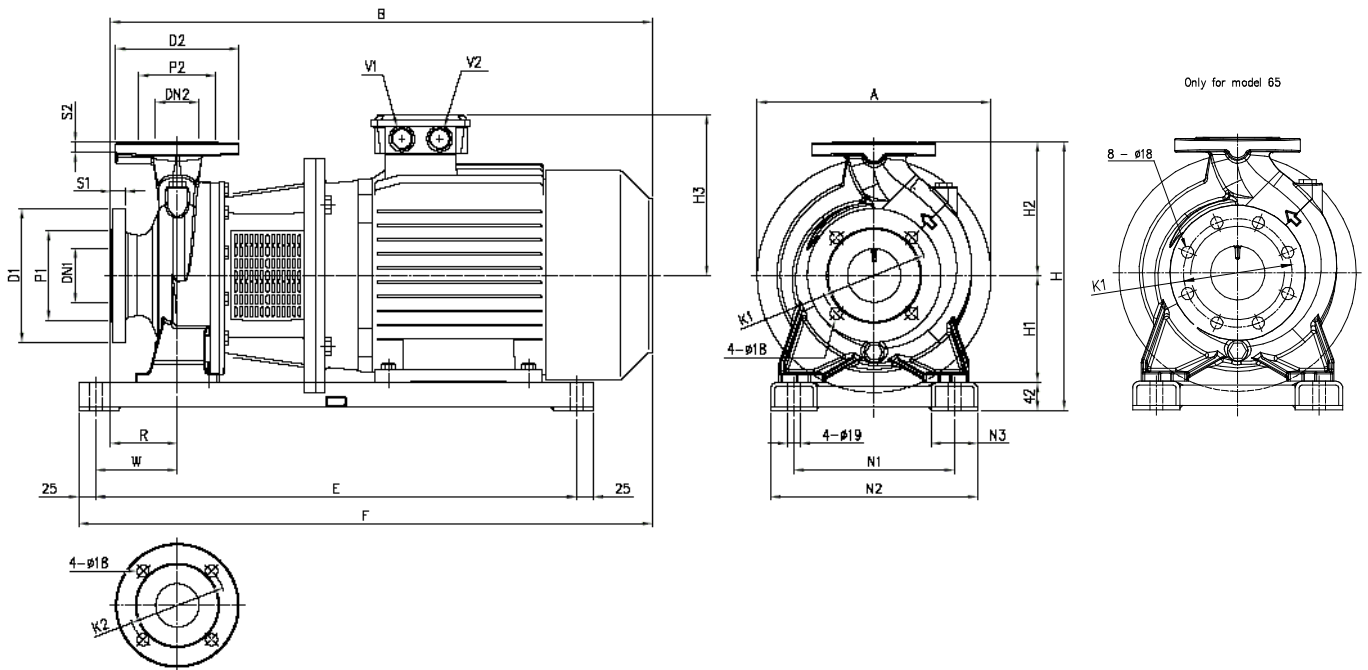
PUMP 3DS 32, 65



Pump type	Dimensions [ mm ]																											Weight [ kg ]									
	DN1	P1	K1	D1	S1	DN2	P2	K2	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	(*)	(*)		
32-160/3.06	50	102	125	165	20	32	78	100	140	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	49,8	49,8		
32-160/4.06	50	102	125	165	20	32	78	100	140	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	51,4	55,1		
32-200/5.56	50	102	125	165	20	32	78	100	140	18	1	340	160	180	198	28	80	70	100	190	240	50	300	607	479	15	270	12	216	266	50	M32X1.5	M32X1.5	83,2	83,2		
32-200/7.56	50	102	125	165	20	32	78	100	140	18	1	340	160	180	198	28	80	70	100	190	240	50	300	607	479	15	270	12	216	266	50	M32X1.5	M32X1.5	96,4	98,4		
65-125/5.56	80	138	160	200	22	65	122	145	185	20	2	340	160	180	198	28	100	95	125	212	280	65	300	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	75,3	75,3		
65-125/7.56	80	138	160	200	22	65	122	145	185	20	2	340	160	180	198	28	100	95	125	212	280	65	300	627	479	15	270	12	216	266	50	M32X1.5	M32X1.5	92,7	94,7		
65-160/9.26	80	138	160	200	22	65	122	145	185	20	2	360	160	200	198	28	100	95	125	212	280	65	300	667	479	15	270	12	216	266	50	M32X1.5	M32X1.5	103,0	104		
65-200/156	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	350	806	621	20	350	14	254	314	60	M40X1.5	M40X1.5	137,6	154,5		
65-200/18.56	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	350	850	621	20	350	14	254	314	60	M40X1.5	M40X1.5	147,2	153,5		
65-200/226	80	138	160	200	22	65	122	145	185	20	3	405	180	225	268	-	100	-	-	250	320	65	360	885	-	-	-	-	-	-	-	-	-	M32X1.5	M32X1.5	184,5	191,5

(\*) Only for 460 V

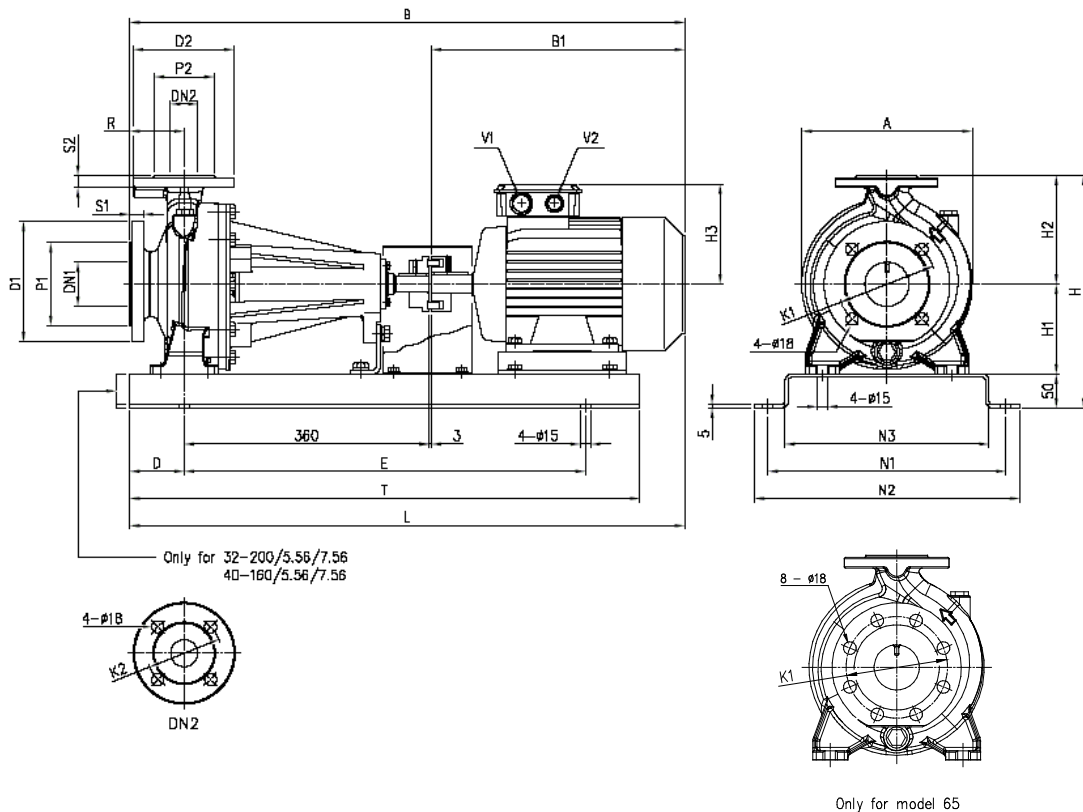
PUMP 3DS 40, 50, 65



Pump type	Dimensions [ mm ]																				Weight [ kgf ]						
	∅ DN1	∅ P1	∅ K1	∅ D1	S1	∅ DN2	∅ P2	∅ K2	∅ D2	S2	H	H1	H2	H3	R	W	N1	N2	N3	A	B	E	F	V1	V2	(*)	
40-125/3.06	65	122	145	185	20	40	88	110	150	18	294	112	140	155	80	90	180	240	60	250	528	500	563	M25x1.5	M20x1.5	43,6	43,6
40-125/4.06	65	122	145	185	20	40	88	110	150	18	294	112	140	171	80	90	180	240	60	250	550	500	585	M25x1.5	M20x1.5	53,7	57,4
40-160/5.56	65	122	145	185	20	40	88	110	150	18	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1.5	M32x1.5	83,2	83,2
40-160/7.56	65	122	145	185	20	40	88	110	150	18	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1.5	M32x1.5	91,0	93
40-200/9.26	65	122	145	185	20	40	88	110	150	18	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1.5	M40x1.5	119,7	130,5
40-200/15.6	65	122	145	185	20	40	88	110	150	18	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1.5	M40x1.5	143,7	160,6
50-125/5.56	65	122	145	185	20	50	102	125	165	20	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1.5	M32x1.5	75,1	75,1
50-125/7.56	65	122	145	185	20	50	102	125	165	20	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1.5	M32x1.5	100,3	102,3
50-160/9.26	65	122	145	185	20	50	102	125	165	20	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1.5	M40x1.5	88,6	99,4
50-160/15.6	65	122	145	185	20	50	102	125	165	20	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1.5	M40x1.5	116,6	133,5
65-160/11.6	80	138	160	200	22	65	122	145	185	20	402	160	200	238	100	122.5	240	310	70	350	796	720	844	M40x1.5	M40x1.5	89,6	100,4
65-160/15.6	80	138	160	200	22	65	122	145	185	20	402	160	200	238	100	122.5	240	310	70	350	806	720	854	M40x1.5	M40x1.5	117,6	134,5

(\*) Only for 460 V

PUMP 3DP 32, 40, 50, 65

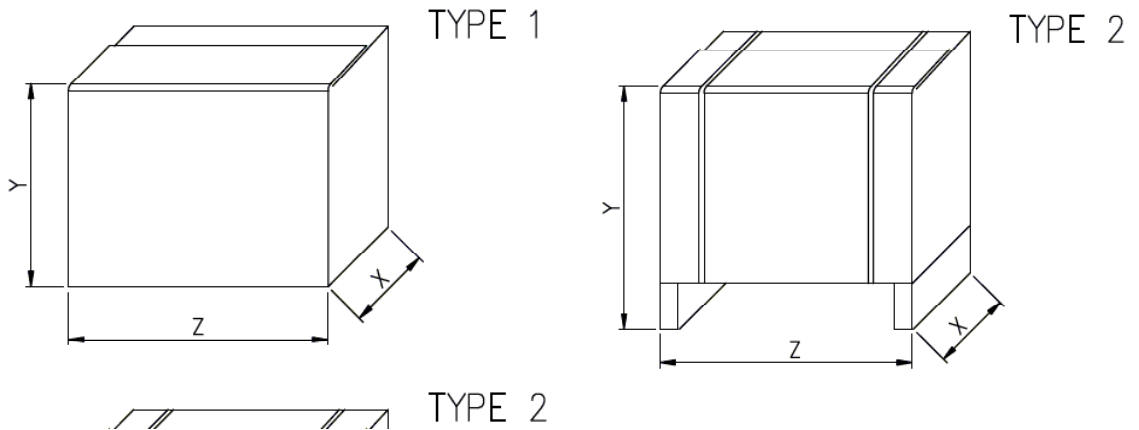


Pump type	Dimensions [ mm ]																							Weight [ kgf ]					
	∅ DN1	∅ P1	∅ K1	∅ D1	∅ S1	∅ DN2	∅ P2	∅ K2	∅ D2	∅ S2	H	H1	H2	H3	R	A	B	B1	D	E	N1	N2	N3	T	L	V1	V2		(*)
32-125/2.26	50	102	125	165	20	32	78	100	140	18	302	112	140	148	80	213	760	317	80	550	300	340	250	710	760	M25x1.5	M20x1.5	61.4	61.4
32-160/3.06	50	102	125	165	20	32	78	100	140	18	342	132	160	155	80	254	809	366	80	590	350	390	300	750	809	M25x1.5	M20x1.5	81.9	81.9
32-160/4.06	50	102	125	165	20	32	78	100	140	18	342	132	160	171	80	254	831	388	80	590	350	390	300	750	831	M25x1.5	M20x1.5	85.5	89.2
32-200/5.56	50	102	125	165	20	32	78	100	140	18	390	160	180	198	80	296	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	108.4	108
32-200/7.56	50	102	125	165	20	32	78	100	140	18	390	160	180	198	80	296	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	121.6	124
40-125/3.06	65	122	145	185	20	40	88	110	150	18	302	112	140	155	80	213	809	366	80	590	300	340	250	750	809	M25x1.5	M20x1.5	89.1	89.1
40-125/4.06	65	122	145	185	20	40	88	110	150	18	302	112	140	171	80	213	831	388	80	590	300	340	250	750	831	M25x1.5	M20x1.5	75.7	79.4
40-160/5.56	65	122	145	185	20	40	88	110	150	18	342	132	160	198	80	254	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	109.0	109
40-160/7.56	65	122	145	185	20	40	88	110	150	18	342	132	160	198	80	254	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	115.9	118
40-200/9.26	65	122	145	185	20	40	88	110	150	18	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	129.7	141
40-200/15.6	65	122	145	185	20	40	88	110	150	18	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	130.7	148
50-125/5.56	65	122	145	185	20	50	102	125	165	20	342	132	160	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	110.3	110
50-125/7.56	65	122	145	185	20	50	102	125	165	20	342	132	160	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	117.2	119
50-160/9.26	65	122	145	185	20	50	102	125	165	20	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	130.1	141
50-160/15.6	65	122	145	185	20	50	102	125	165	20	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	131.1	148
65-125/5.56	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	114.3	114
65-125/7.56	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	122.7	125
65-160/9.26	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	945	482	100	650	350	390	300	850	945	M32x1.5	M32x1.5	133.0	134
65-160/11.6	80	138	160	200	22	65	122	145	185	20	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	130.0	141
65-160/15.6	80	138	160	200	22	65	122	145	185	20	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	128.1	145
65-200/15.6	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	136.6	154
65-200/18.56	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	296	1115	652	100	800	380	420	330	1000	1115	M40x1.5	M40x1.5	145.2	152
65-200/22.6	80	138	160	200	22	65	122	145	185	20	455	180	225	268	100	296	1150	687	100	800	410	450	360	1000	1150	M32x1.5	M32x1.5	198.5	206

(\*) Only for 460 V

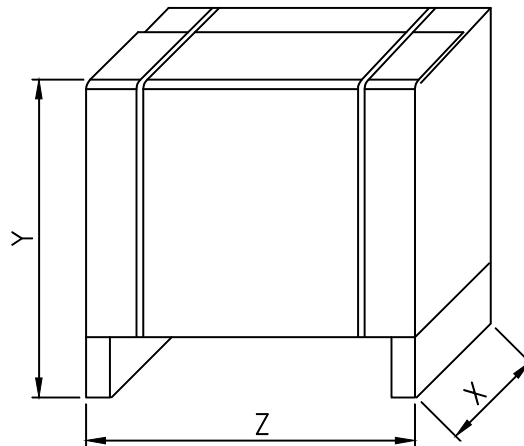


**PACKING  
3D**



Pump type	Packing [ mm ]				Weight [ kgf ]		Pack type
	X	Y	Z	Z (*)	(*)	(*)	
32-125/2.26	280	340	490	490	33	34	1
32-160/3.06	350	480	550	580	41,7	41,7	2
32-160/4.06					51,7	51,7	
32-200/5.56					66	66	
32-200/7.56			-	700	-	65,9	
40-125/3.06			37,5	37,5			
40-125/4.06			51,3	51,3			
40-160/5.56			64,6	64,6			
40-160/7.56			-	700	-	67,4	
40-200/9.26			-	-	-	82,4	
40-200/156			390	520	-	880	
50-125/5.56	350	480	580	580	61	61	
50-125/7.56			-	700	-	67,6	
50-160/9.26			-	880	-	80,6	
50-160/156	390	520	-	880	87,9		
65-125/5.56	350	480	580	580	72,3	72,3	
65-125/7.56		74,2					
65-160/9.26		490	700	-	78,3		
65-160/116		83					
65-160/156		-	-	-	127		
65-200/156	390	520	880	880	130,5		
65-200/18.56					146,5		
65-200/226					153,5		

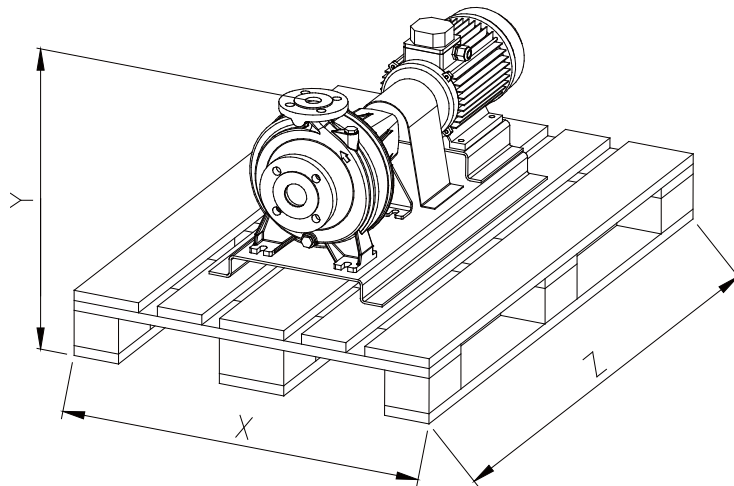
(\*) Only for 460 V

**PACKING  
3DS**

Pump type	Packing [ mm ]			Weight [ kgf ]	
	X	Y	Z		(*)
32-125/2.26	350	488	580	42,3	42,3
32-160/3.06				55,1	55,1
32-160/4.06				56,7	60,4
32-200/5.56		508	700	88,4	88,4
32-200/7.56				101,6	103,6
40-125/3.06		488	580	48,9	48,9
40-125/4.06				59	62,7
40-160/5.56		508	700	88,4	88,4
40-160/7.56				96,2	98,2
40-200/9.26		360	542	880	127,8
40-200/156	151,8				168,7
50-125/5.56	350	508	700	83,2	83,2
50-125/7.56				108,4	110,4
50-160/9.26	360	542	880	96,7	107,5
50-160/156				124,7	141,6
65-125/5.56	350	508	700	80,5	80,5
65-125/7.56				97,9	100
65-160/9.26				108,2	109,2
65-160/116	360	542	880	97,7	108,5
65-160/156	390	598	970	125,6	142,5
65-200/156				145,6	162,5
65-200/18.56				157,7	164,2
65-200/226				193,5	200,5

(\*) Only for 460 V

**PACKING  
3DP**



Pump type	Packing [ mm ]			Weight [ kgf ]	
	X	Y	Z	(*)	
32-125/2.26	800	394	1200	75	75
32-160/3.06		434		95,5	95,5
32-160/4.06				99	102,7
32-200/5.56		482		122	122
32-200/7.56				135	137
40-125/3.06		394		102,5	102,5
40-125/4.06				89,2	92,9
40-160/5.56		434		122,5	122,5
40-160/7.56				129,5	131,5
40-200/9.26		482		143,2	154
40-200/156				144,2	161,1
50-125/5.56		434		123,8	123,8
50-125/7.56				130,7	132,7
50-160/9.26		482		143,5	154,3
50-160/156				144,5	161,4
65-125/5.56		502		127,8	127,8
65-125/7.56				136,2	138,2
65-160/9.26		502		146,5	147,5
65-160/116				143,5	154,3
65-160/156		547		142	158,9
65-200/156				150	166,9
65-200/18.56		547		158,7	165,2
65-200/226				212	219

(\*) Only for 460 V

MOTOR DATA  
3D

Pump type	Power		Efficiency Three Phase	Efficiency (% load) Three phase (380 V)			Efficiency (% load) Three phase (460 V)			Input [ kW ]	Full load current [ A ]				Locked rotor current [ A ]			
	[ kW ]	[ HP ]		η %			η %				Three Phase				Three Phase			
				50%	75%	100%	50%	75%	100%		220 V	380 V	460 V	660 V	220 V	380 V	460 V	660 V
3D 32-125/2.26	2.2	3.0	-	80.5	83.3	83.5	77,3	82,4	84,1	2,9	7,0	4,1	4,1	-	61,5	35,5	43,0	-
			IE3*	86.5	86.8	86.2	86,9	87,8	87,4	2,5	7,5	4,3	4,1	-	55,7	32,2	38,9	-
3D 32-160/3.06	3.0	4.0	-	84,0	85,9	85,2	80,2	83,5	84,6	3,9	10,5	6,1	5,6	-	92,1	53,2	57,0	-
			IE3*	86.8	87,0	87,5	87,0	87,9	88,5	3,4	10,2	5,9	5,6	-	75,7	43,7	52,8	-
3D 32-160/4.06	4.0	5.5	-	83.2	85.8	86.1	81,0	85,1	86,7	5,1	14,7	8,5	8,0	-	108,8	62,8	76,0	-
			IE3*	89.66	89.59	88.58	86,1	88,4	88,5	4,5	13,5	7,8	7,6	-	107,1	61,8	74,9	-
3D 32-200/5.56	5.5	7.5	-	83.4	85.3	85.7	82,9	86,0	87,4	7,0	-	11,6	9,5	6,7	-	90,9	110,0	63,5
			IE3*	90.36	90.86	90.42	88,7	90,5	91,0	6,0	-	10,1	8,9	5,8	-	94,5	114,3	54,6
3D 32-200/7.56	7.5	10	-	83.1	85.4	85.8	82,6	86,1	87,5	9,4	-	14,9	12,7	8,6	-	121,4	147,0	84,9
			IE3*	90.0	90.61	90.3	88,1	90,3	90,8	8,3	-	13,6	11,9	7,8	-	118,0	143,0	68,1
3D 40-125/3.06	3.0	4.0	-	84,0	85,9	85,2	80,2	83,5	84,6	3,9	10,5	6,1	5,6	-	92,1	53,2	57,0	-
			IE3*	86.8	87,0	87,5	87,0	87,9	88,5	3,4	10,2	5,9	5,6	-	75,7	43,7	52,8	-
3D 40-125/4.06	4.0	5.5	-	83.2	85.8	86.1	81,0	85,1	86,7	5,1	14,7	8,5	8,0	-	108,8	62,8	76,0	-
			IE3*	89.66	89.59	88.58	86,1	88,4	88,5	4,5	13,5	7,8	7,6	-	107,1	61,8	74,9	-
3D 40-160/5.56	5.5	7.5	-	83.4	85.3	85.7	82,9	86,0	87,4	7,0	-	11,6	9,5	6,7	-	90,9	110,0	63,5
			IE3*	90.36	90.86	90.42	88,7	90,5	91,0	6,0	-	10,1	8,9	5,8	-	94,5	114,3	54,6
3D 40-160/7.56	7.5	10	-	83.1	85.4	85.8	82,6	86,1	87,5	9,4	-	14,9	12,7	8,6	-	121,4	147,0	84,9
			IE3*	90.0	90.61	90.3	88,1	90,3	90,8	8,3	-	13,6	11,9	7,8	-	118,0	143,0	68,1
3D 40-200/9.26	9.2	12.5	-	87.3	88.8	88.6	85,9	88,7	89,6	11,3	-	17,7	15,4	10,3	-	125,6	152,0	87,8
			IE3*	90.3	91.24	91.2	88,3	90,5	91,3	10,9	-	18,3	15,1	10,6	-	115,0	140,0	66,4
3D 40-200/156	15	20	-	90.9	91.5	91.0	89,4	91,3	91,8	17,9	-	28,7	25,0	16,6	-	198,3	240,0	138,6
			IE3*	92.46	92.65	92.1	91,0	92,5	92,7	16,2	-	27,1	23,9	15,7	-	184,0	223,0	106,2
3D 50-125/5.56	5.5	7.5	-	83.4	85.3	85.7	82,9	86,0	87,4	7,0	-	11,6	9,5	6,7	-	90,9	110,0	63,5
			IE3*	90.36	90.86	90.42	88,7	90,5	91,0	6,0	-	10,1	8,9	5,8	-	94,5	114,3	54,6
3D 50-125/7.56	7.5	10	-	83.1	85.4	85.8	82,6	86,1	87,5	9,4	-	14,9	12,7	8,6	-	121,4	147,0	84,9
			IE3*	90.0	90.61	90.3	88,1	90,3	90,8	8,3	-	13,6	11,9	7,8	-	118,0	143,0	68,1
3D 50-160/9.26	9.2	12.5	-	87.3	88.8	88.6	85,9	88,7	89,6	11,3	-	17,7	15,4	10,3	-	125,6	152,0	87,8
			IE3*	90.3	91.24	91.2	88,3	90,5	91,3	10,9	-	18,3	15,1	10,6	-	115,0	140,0	66,4
3D 50-160/156	15	20	-	90.9	91.5	91.0	89,4	91,3	91,8	17,9	-	28,7	25,0	16,6	-	198,3	240,0	138,6
			IE3*	92.46	92.65	92.1	91,0	92,5	92,7	16,2	-	27,1	23,9	15,7	-	184,0	223,0	106,2
3D 65-125/5.56	5.5	7.5	-	83.4	85.3	85.7	82,9	86,0	87,4	7,0	-	11,6	9,5	6,7	-	90,9	110,0	63,5
			IE3*	90.36	90.86	90.42	88,7	90,5	91,0	6,0	-	10,1	8,9	5,8	-	94,5	114,3	54,6
3D 65-125/7.56	7.5	10	-	83.1	85.4	85.8	82,6	86,1	87,5	9,4	-	14,9	12,7	8,6	-	121,4	147,0	84,9
			IE3*	90.0	90.61	90.3	88,1	90,3	90,8	8,3	-	13,6	11,9	7,8	-	118,0	143,0	68,1
3D 65-160/9.26	9.2	13	-	87.3	88.8	88.6	85,9	88,7	89,6	11,3	-	17,7	15,4	10,3	-	125,6	152,0	87,8
			IE3*	90.3	91.24	91.2	88,3	90,5	91,3	10,1	-	16,9	14,9	9,7	-	115,0	140,0	66,4
3D 65-160/116	11	15	-	91.9	91.8	91.2	90,9	92,0	91,9	13,2	-	18,3	18,3	10,5	-	132,2	160,0	92,4
			IE3*	91.9	91.8	91.2	90,9	91,8	91,3	12,1	-	20,3	18,5	11,7	-	153,0	185,0	88,3
3D 65-160/156	15	20	-	90.9	91.5	91.0	89,4	91,3	91,8	17,9	-	28,7	25,0	16,6	-	198,3	240,0	138,6
			IE3*	92.46	92.65	92.1	91,0	92,5	92,7	16,2	-	27,1	23,9	15,7	-	184,0	223,0	106,2
3D 65-200/156	15	20	-	90.9	91.5	91.0	89,4	91,3	91,8	17,9	-	28,7	25,0	16,6	-	198,3	240,0	138,6
			IE3*	92.46	92.65	92.1	91,0	92,5	92,7	16,2	-	27,1	23,9	15,7	-	184,0	223,0	106,2
3D 65-200/18.56	18.5	25	-	91.7	92.8	92.5	90,3	92,1	92,9	21,9	-	34,8	31,0	20,1	-	271,0	328,0	189,4
			IE3*	92.19	92.9	92.7	90,8	92,5	92,9	19,9	-	33,5	30,3	19,3	-	273,0	331,0	157,6
3D 65-200/226	22	30	-	89.7	91.2	91.3	88,4	91,0	91,7	26,4	-	41,7	36,4	24,0	-	316,4	383,0	221,1
			IE3*	92.4	92.7	92.7	92,6	93,1	93,1	23,7	-	39,5	34,5	22,8	-	321,0	389,0	185,3

\* Only for 460 V

**MOTOR DATA  
3DS-3DP**

Pump type		Motor Size	Power		Efficiency	Input [kW]	Efficiency (% load)				Full load current		Locked rotor current	
3(.)S	3(.)P		[kW]	[HP]			η %	cos-φ	Three Phase		Three Phase			
						50%	75%	100%		265 V	460 V	265 V	460 V	
3DS 32-125/2.26	3DP 32-125/2.26	90L	2.2	3.0	-	2,65	79,6	83,2	84,3	0,81	7,1	4,1	56,8	32,8
					IE2	2,55	86	86,4	86,5	0,82	6,8	3,9	64,1	37,0
3DS 32-160/3.06	3DP 32-160/3.06	100L	3.0	4.0	-	3,56	80,7	84,4	85,5	0,86	9,0	5,2	86,4	49,9
					IE2	3,44	86,4	87,8	87,5	0,9	8,3	4,8	95,3	55,0
3DS 32-160/4.06	3DP 32-160/4.06	112M	4.0	5.5	-	4,70	81,3	84,2	85	0,83	12,3	7,1	125,4	72,4
					IE2	4,62	84,2	86,2	87,5	0,92	10,9	6,3	69,3	40,0
3DS 32-200/5.56	3DP 32-200/5.56	132S	5.5	7.5	-	6,22	83,5	86,6	87,8	0,84	-	9,3	-	84,6
					IE2	6,24	87,2	88,7	89,1	0,91	-	8,6	-	89,0
3DS 32-200/7.56	3DP 32-200/7.56	132S	7.5	10	IE2	8,45	89,8	90,1	89,7	0,93	-	11,4	-	112,0
3DS 40-125/3.06	3DP 40-125/3.06	100L	3.0	4.0	-	3,56	80,7	84,4	85,5	0,86	9,0	5,2	86,4	49,9
					IE2	3,44	86,4	87,8	87,5	0,9	8,3	4,8	95,3	55,0
3DS 40-125/4.06	3DP 40-125/4.06	112M	4.0	5.5	-	4,70	81,3	84,2	85	0,83	12,3	7,1	125,4	72,4
					IE2	4,62	84,2	86,2	87,5	0,92	10,9	6,3	69,3	40,0
3DS 40-160/5.56	3DP 40-160/5.56	132S	5.5	7.5	-	6,22	83,5	86,6	87,8	0,84	-	9,3	-	84,6
					IE2	6,24	87,2	88,7	89,1	0,91	-	8,6	-	89,0
3DS 40-160/7.56	3DP 40-160/7.56	132S	7.5	10	IE2	8,45	89,8	90,1	89,7	0,93	-	11,4	-	112,0
3DS 40-200/9.26	3DP 40-200/9.26	160M	11	15	IE2	12,13	87,2	89,5	90,9	0,88	-	17,3	-	159,0
3DS 40-200/156	3DP 40-200/156	160M	15	20	IE2	16,34	90,9	92,3	91,8	0,88	-	23,3	-	226,0
3DS 50-125/5.56	3DP 50-125/5.56	132S	5.5	7.5	-	6,22	83,5	86,6	87,8	0,84	-	9,3	-	84,6
					IE2	6,24	87,2	88,7	89,1	0,91	-	8,6	-	89,0
3DS 50-125/7.56	3DP 50-125/7.56	132S	7.5	10	IE2	8,45	89,8	90,1	89,7	0,93	-	11,4	-	112,0
3DS 50-160/9.26	3DP 50-160/9.26	160M	11	15	IE2	12,13	87,2	89,5	90,9	0,88	-	17,3	-	159,0
3DS 50-160/156	3DP 50-160/156	160M	15	20	IE2	16,34	90,9	92,3	91,8	0,88	-	23,3	-	226,0
3DS 65-125/5.56	3DP 65-125/5.56	132S	5.5	7.5	-	6,22	83,5	86,6	87,8	0,84	-	9,3	-	84,6
					IE2	6,24	87,2	88,7	89,1	0,91	-	8,6	-	89,0
3DS 65-125/7.56	3DP 65-125/7.56	132S	7.5	10	IE2	8,45	89,8	90,1	89,7	0,93	-	11,4	-	112,0
3DS 65-160/9.26	3DP 65-160/9.26	132M	9.2	12.5	IE2	10,18	85	88,6	90	0,9	-	14,2	-	172,0
3DS 65-160/116	3DP 65-160/116	160M	11	15	IE2	12,13	87,2	89,5	90,9	0,88	-	17,3	-	159,0
3DS 65-160/156	3DP 65-160/156	160M	15	20	IE2	16,34	90,9	92,3	91,8	0,88	-	23,3	-	226,0
3DS 65-200/156	3DP 65-200/156	160M	15	20	IE2	16,34	90,9	92,3	91,8	0,88	-	23,3	-	226,0
3DS 65-200/18.56	3DP 65-200/18.56	160L	18.5	25	IE2	20,19	90,3	92	91,7	0,88	-	28,8	-	340,0
3DS 65-200/226	3DP 65-200/226	180M	22	30	IE2	23,40	91,8	93	93,4	0,89	-	33	-	350,0

**NOISE DATA  
3D**

Pump type	Power		L <sub>pA</sub> - dB(A) *
	[kW]	[HP]	
3D 32-125/2.26	2.2	3	68
3D 32-160/3.06	3.0	4	75
3D 32-160/4.06	4.0	5.5	
3D 32-200/5.56	5.5	7.5	78
3D 32-200/7.56	7.5	10	
3D 40-125/3.06	3.0	4	75
3D 40-125/4.06	4.0	5.5	
3D 40-160/5.56	5.5	7.5	78
3D 40-160/7.56	7.5	10	
3D 40-200/9.26	9.2	12.5	82
3D 40-200/156	15	20	
3D 50-125/5.56	5.5	7.5	78
3D 50-125/7.56	7.5	10	
3D 50-160/9.26	9.2	12.5	82
3D 50-160/156	15	20	
3D 65-125/5.56	5.5	7.5	78
3D 65-125/7.56	7.5	10	
3D 65-160/9.26	9.2	12.5	82
3D 65-160/116	11	15	
3D 65-160/156	15	20	86
3D 65-200/156	15	20	
3D 65-200/18.56	18.5	25	
3D 65-200/226	22	30	

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

**NOISE DATA****3DS – 3DP**

Pump type		Power		L <sub>pA</sub> - dB(A) *
3DS	3DP	[kW]	[HP]	
3DS 32-125/2.26	3DP 32-125/2.26	2.2	3	70
3DS 32-160/3.06	3DP 32-160/3.06	3.0	4	74
3DS 32-160/4.06	3DP 32-160/4.06	4.0	5.5	78
3DS 32-200/5.56	3DP 32-200/5.56	5.5	7.5	82
3DS 32-200/7.56	3DP 32-200/7.56	7.5	10	
3DS 40-125/3.06	3DP 40-125/3.06	3.0	4	74
3DS 40-125/4.06	3DP 40-125/4.06	4.0	5.5	78
3DS 40-160/5.56	3DP 40-160/5.56	5.5	7.5	82
3DS 40-160/7.56	3DP 40-160/7.56	7.5	10	
3DS 40-200/9.26	3DP 40-200/9.26	9.2	12.5	84
3DS 40-200/156	3DP 40-200/156	15	20	
3DS 50-125/5.56	3DP 50-125/5.56	5.5	7.5	82
3DS 50-125/7.56	3DP 50-125/7.56	7.5	10	
3DS 50-160/9.26	3DP 50-160/9.26	9.2	12.5	84
3DS 50-160/156	3DP 50-160/156	15	20	
3DS 65-125/5.56	3DP 65-125/5.56	5.5	7.5	82
3DS 65-125/7.56	3DP 65-125/7.56	7.5	10	
3DS 65-160/9.26	3DP 65-160/9.26	9.2	12.5	84
3DS 65-160/116	3DP 65-160/116	11	15	
3DS 65-160/156	3DP 65-160/156	15	20	84
3DS 65-200/156	3DP 65-200/156	15	20	
3DS 65-200/18.56	3DP 65-200/18.56	18.5	25	85
3DS 65-200/226	3DP 65-200/226	22	30	

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

Tolerance  $\pm 2.5$  dB.