



Japanese Technology since 1912

MATRIX

Data Book 60Hz



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SPECIFICATIONS

60Hz

Rev. H

PUMP		
Liquid Handled	Type of liquid	Water, moderate aggressive solutions , glycol solutions , moderate viscous fluids
	Temperature [°C]	min.-15 max.+85 (STD*, H**, HS** version) max.+110 (-TE**, U3Q1EGG**, Q1AEGG** version)
Max chlorine content		500 ppm
Maximum working pressure [MPa]		1
Construction	Impeller	Closed centrifugal
	Bearing	Screened ball bearing – greased for life
Pipe Connection	Suction	G 1" (Matrix 3) UNI ISO 228
		G 1"¼ (Matrix 5) UNI ISO 228
		G 1"½ (Matrix 10) UNI ISO 228
		G 2" (Matrix 18) UNI ISO 228
	Discharge	G 1" (Matrix 3) UNI ISO 228
		G 1" (Matrix 5) UNI ISO 228
		G 1"¼ (Matrix 10) UNI ISO 228
		G 1"½ (Matrix 18) UNI ISO 228
Material	Casing	AISI 304 (EN 1.4301)
	Impeller	AISI 304 (EN 1.4301)
	Intermediate casing	AISI 304 (EN 1.4301)
	O-Rings	EPDM
	Shaft seal	Ceramic / Carbon / EPDM
	Liner ring	AISI 304 (EN 1.4301) + PPS
	Casing cover	AISI 304 (EN 1.4301)
	Shaft	AISI 304 wet extension (EN 1.4301)
	Bracket	EN AB-AISI11Cu2(Fe) (Die cast Aluminium)
Applicable standard of test		ISO 9906:2012 - Grade 3B

* Approval for drinking water application
WRAS Approved product



** Approval for drinking water application
DM174/2004

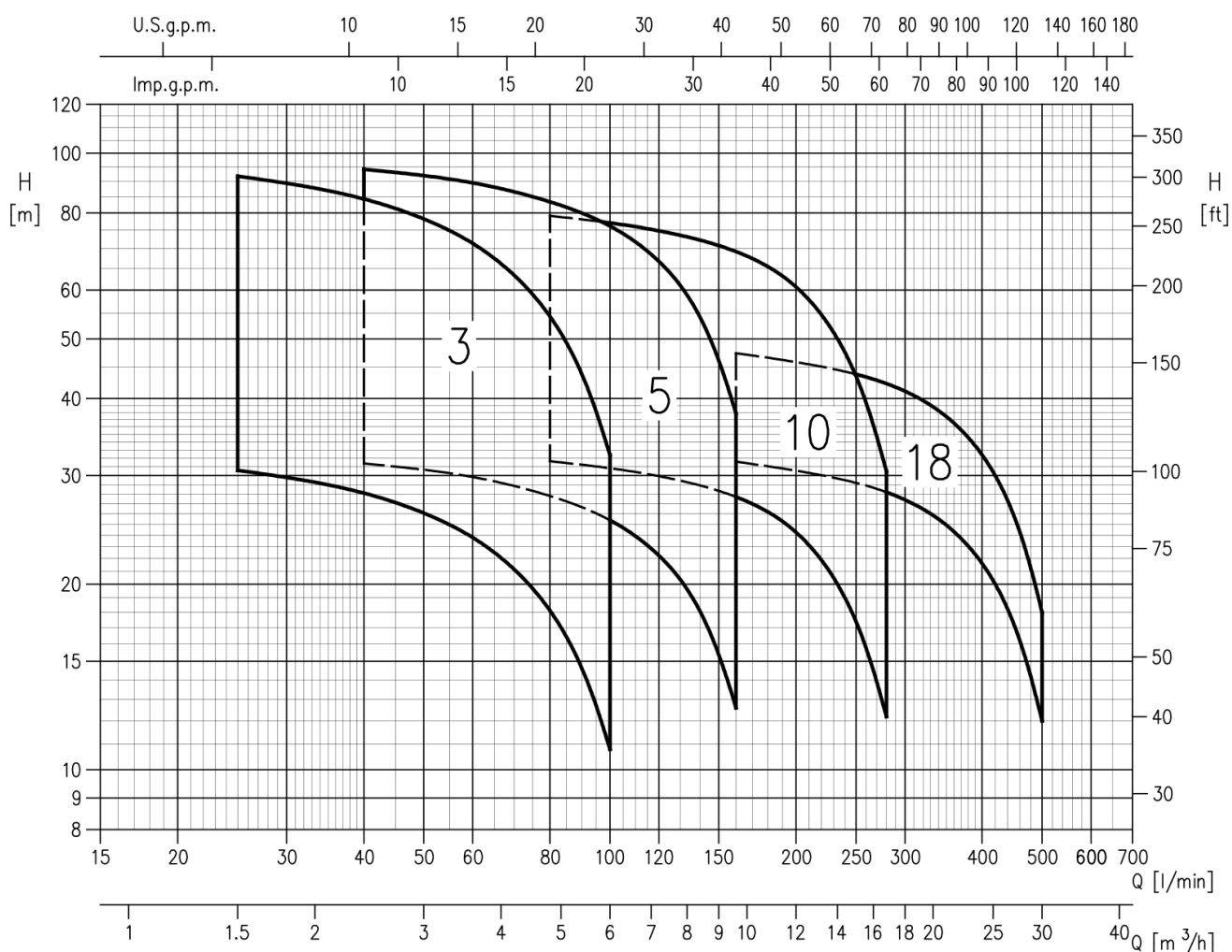
SPECIFICATIONS

60Hz

Rev. H

MOTOR			
Type	Electric - TEFC		
	Single Phase	Three Phase	
Efficiency Level (Rif.178/2019)	-	IE3	
No. of Poles	2		
Rotation speed [min ⁻¹]	≈ 3500		
Insulation Class	F		
Max temperature environment [°C]	40		
Protection degree	IP 55		
Power rating	[kW]	0.65 ÷ 1.5	0.65 ÷ 4.0
	[HP]	0.9 ÷ 2.0	0.9 ÷ 5.5
Frequency [Hz]	60		
Voltage [V]	220-230 ±6%	220/380-460** ±10%	
Capacitor	Built in	-	
Over load protection	Built in	Provided by the user	
Casing material	Aluminium		
Base material/Motor support	Aluminium		
Dimensions of cable entry	M20X1.5	PG11 - PG13.5 - PG16 -M16x1.5 - M20x1.5	

PERFORMANCE RANGE



SELECTION CHART

60Hz

Rev. H

SELECTION CHART

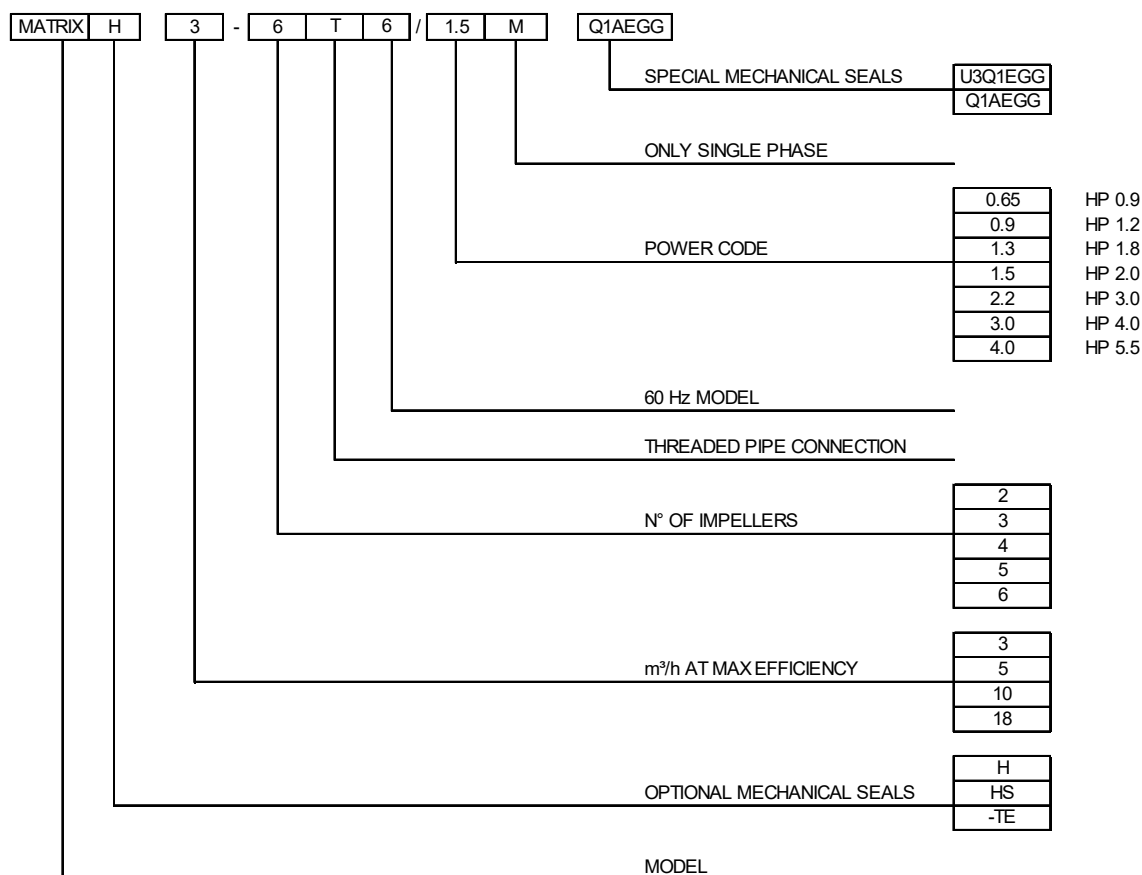
Pump type		Power		Q=Capacity														
				l/min	0	25	40	60	80	100	130	160	220	280	340	400	460	500
Single phase	Three phase	[kW]	[HP]	m ³ /h	0	1.5	2.4	3.6	4.8	6	7.8	9.6	13.2	16.8	20.4	24	27.6	30
H=Total manometric head in meters																		
3-2T6/0.65M	3-2T6/0.65	0.65	0.9	33.4	30.6	28.1	23.8	18.1	10.8									
3-3T6/0.9M	3-3T6/0.9	0.9	1.2	50.0	46.0	42.0	35.7	27.2	16.2									
3-4T6/1.3M	3-4T6/1.3	1.3	1.8	67.0	61.0	56.0	47.5	36.2	21.6									
3-5T6/1.5M	3-5T6/1.5	1.5	2.0	83.5	76.5	70.5	59.5	45.5	27.0									
-	3-6T6/2.2	2.2	3.0	100.0	92.0	84.5	71.5	54.5	32.4									
5-2T6/0.9M	5-2T6/0.9	0.9	1.2	33.5	-	31.4	29.8	27.8	25.4	20.3	12.6							
5-3T6/1.3M	5-3T6/1.3	1.3	1.8	50.0	-	47.0	45.0	41.5	38.1	30.5	18.9							
-	5-4T6/2.2	2.2	3.0	67.0	-	63.0	59.5	55.5	51.0	40.5	25.2							
-	5-5T6/2.2	2.2	3.0	83.5	-	78.5	74.5	69.5	63.5	51.0	31.5							
-	5-6T6/3	3.0	4.0	100.0	-	94.0	89.5	83.5	76.0	61.0	37.8							
10-2T6/1.5M	10-2T6/1.5	1.5	2.0	34.4	-	-	-	31.7	30.8	29.4	27.7	21.9	12.2					
-	10-3T6/2.2	2.2	3.0	51.5	-	-	-	47.5	46.5	44.0	41.5	32.8	18.3					
-	10-4T6/3	3.0	4.0	69.0	-	-	-	63.5	61.5	59.0	55.5	43.5	24.4					
-	10-5T6/4	4.0	5.5	86.0	-	-	-	79.0	77.0	73.5	69.5	54.5	30.5					
-	18-2T6/3	3.0	4.0	34.6	-	-	-	-	-	-	31.6	30.0	28.2	25.5	21.6	16.2	12.0	
-	18-3T6/4	4.0	5.5	52.0	-	-	-	-	-	-	47.5	45.0	42.5	38.3	32.4	24.3	18.0	

TYPE KEY and CURVES SPECIFICATIONS

60Hz

Rev. H

TYPE KEY



CURVES SPECIFICATIONS

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

Tolerances according to ISO 9906:2012 - Grade 3B

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

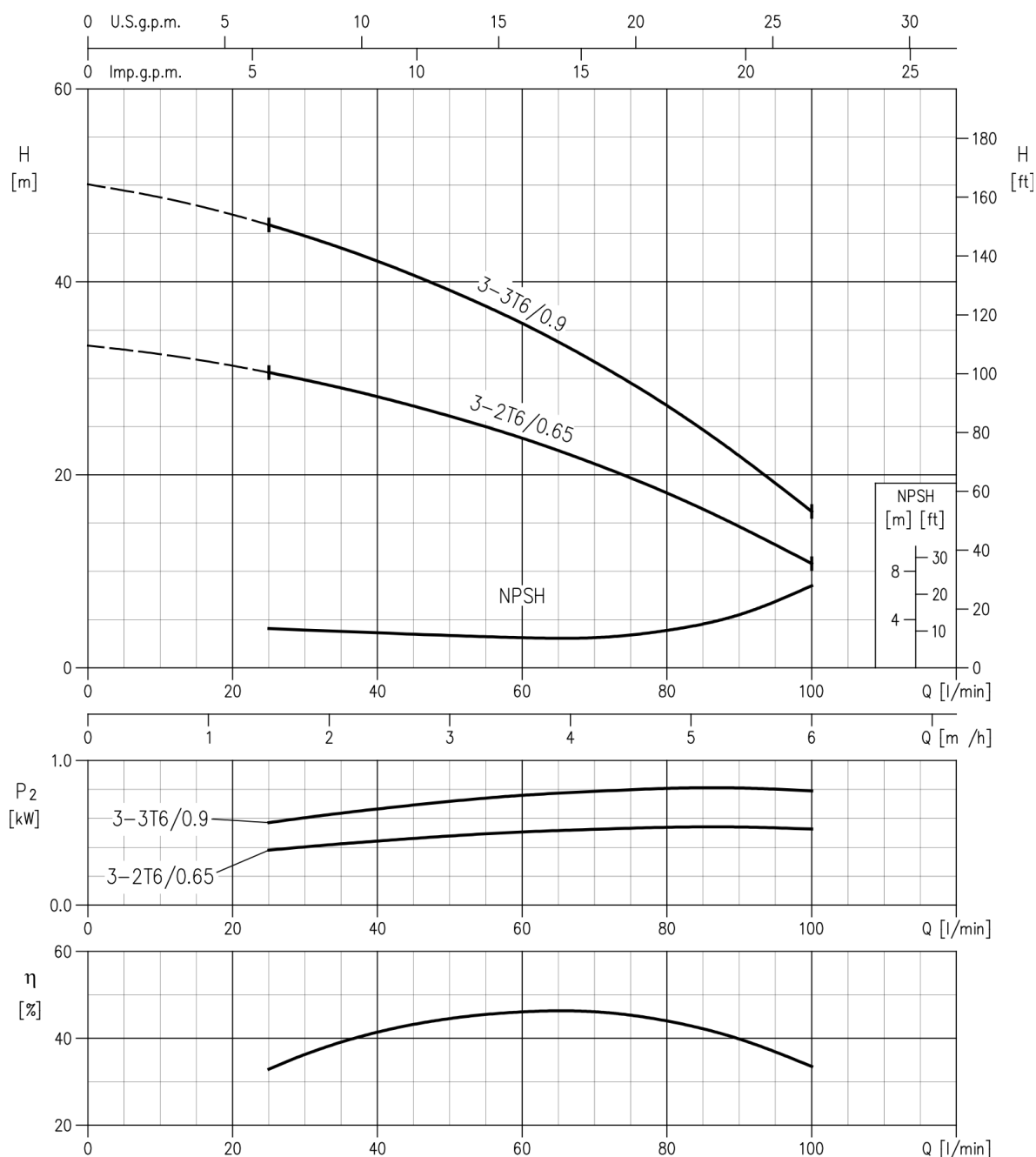
The continuous curves indicate the recommended working range. The dotted curve is only a guide.

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
- P₂ = pump power input (shaft power)
- η = pump efficiency
- NPSH = net positive suction head required by the pump

MATRIX 3-3T6/0.9 (0.90 kW) - Impeller diameter = 98.5 mm
MATRIX 3-2T6/0.65 (0.65 kW) - Impeller diameter = 98.5 mm

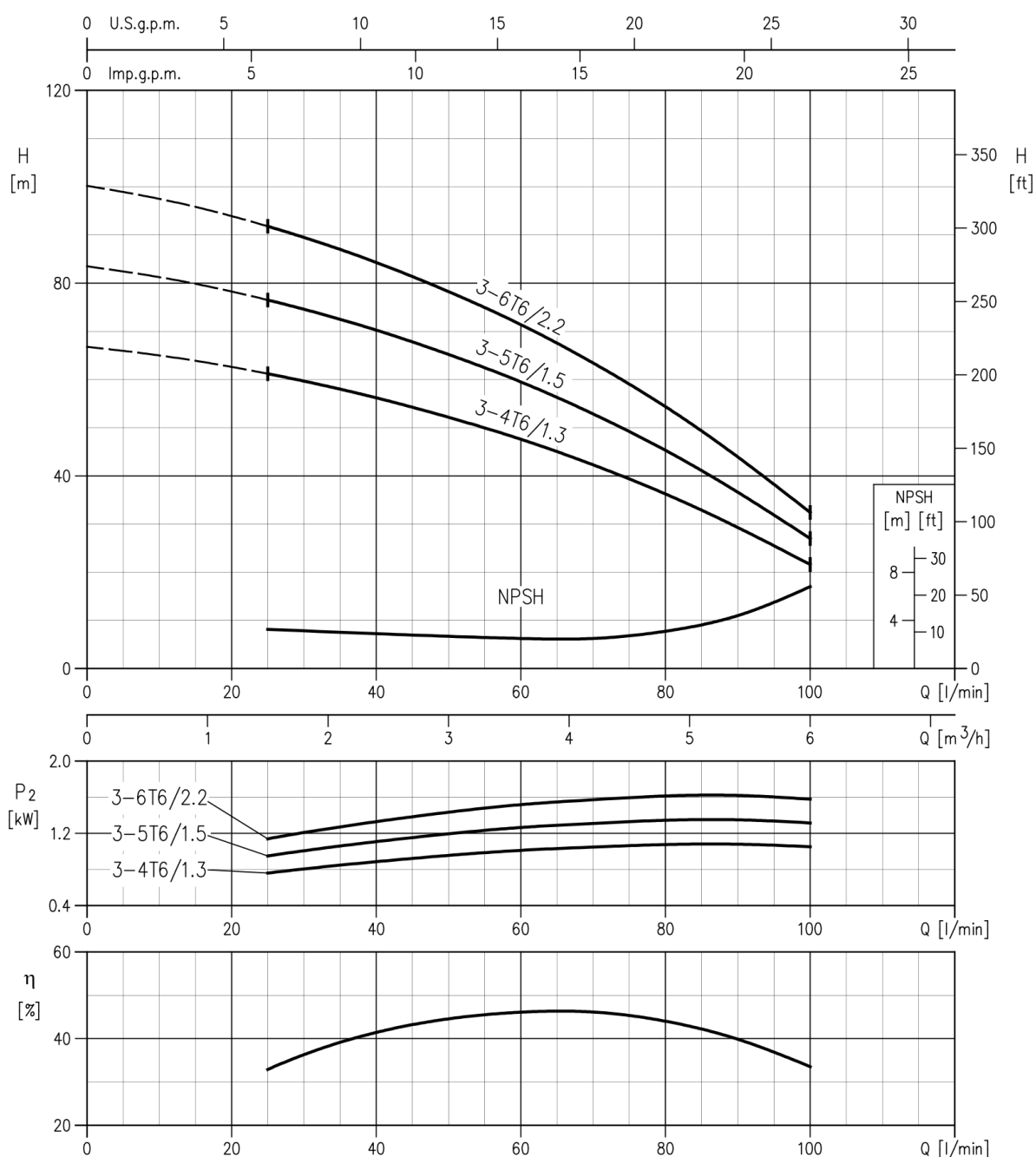


Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

MATRIX 3-6T6/2.2 (2.2 kW) - Impeller diameter = 98.5 mm

MATRIX 3-5T6/1.5 (1.5 kW) - Impeller diameter = 98.5 mm

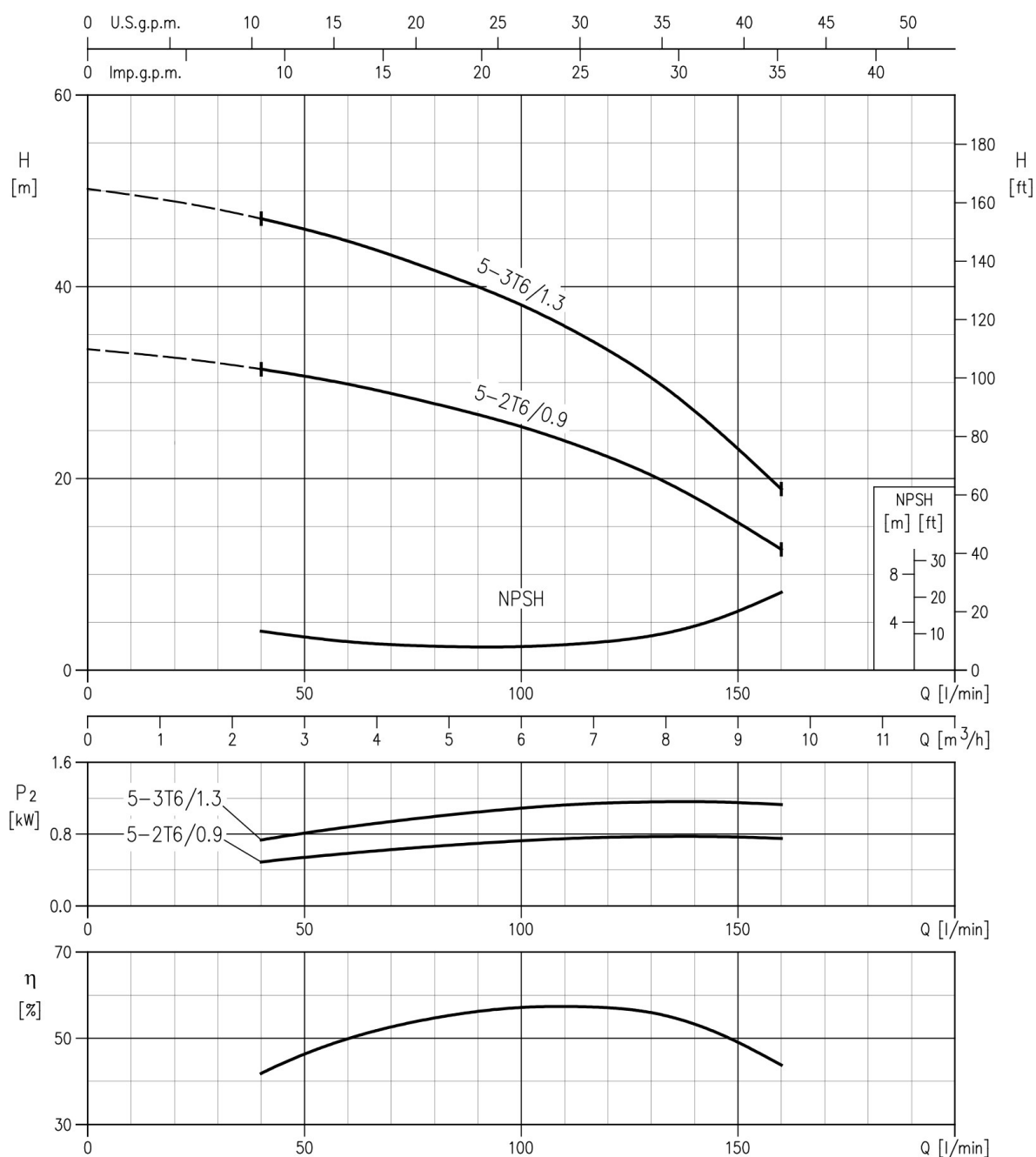
MATRIX 3-4T6/1.3 (1.3 kW) - Impeller diameter = 98.5 mm



Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

MATRIX 5-3T6/1.3 (1.3 kW) - Impeller diameter = 97 mm

MATRIX 5-2T6/0.9 (0.9 Kw) - Impeller diameter = 97 mm

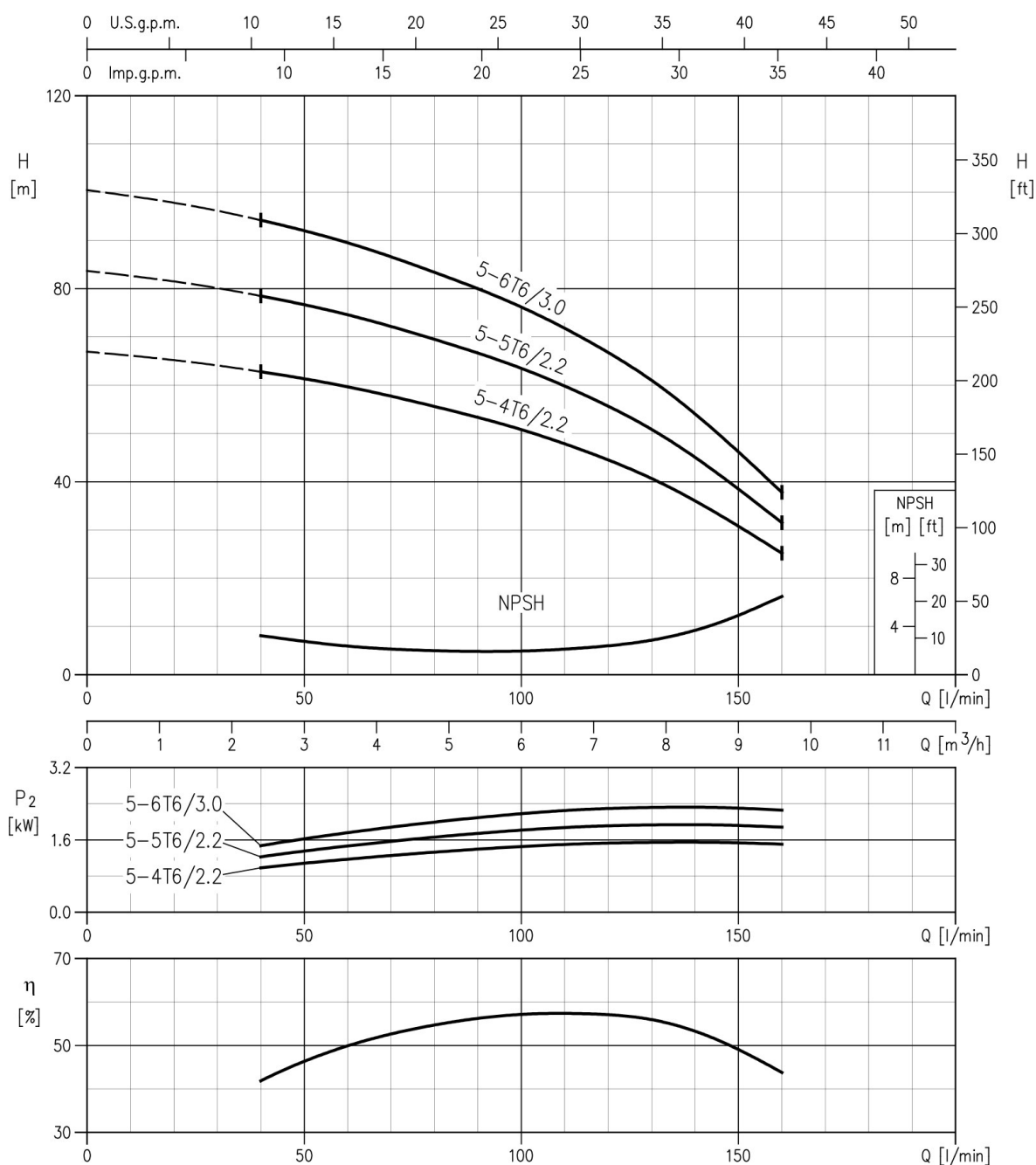


Rotation speed ≈ 3500 min⁻¹
Test standard: ISO 9906:2012 - Grade 3B

MATRIX 5-6T6/3.0 (3.0 kW) - Impeller diameter = 97 mm

MATRIX 5-5T6/2.2 (2.2 kW) - Impeller diameter = 97 mm

MATRIX 5-4T6/2.2 (2.2 kW) - Impeller diameter = 97 mm



Rotation speed $\approx 3500 \text{ min}^{-1}$

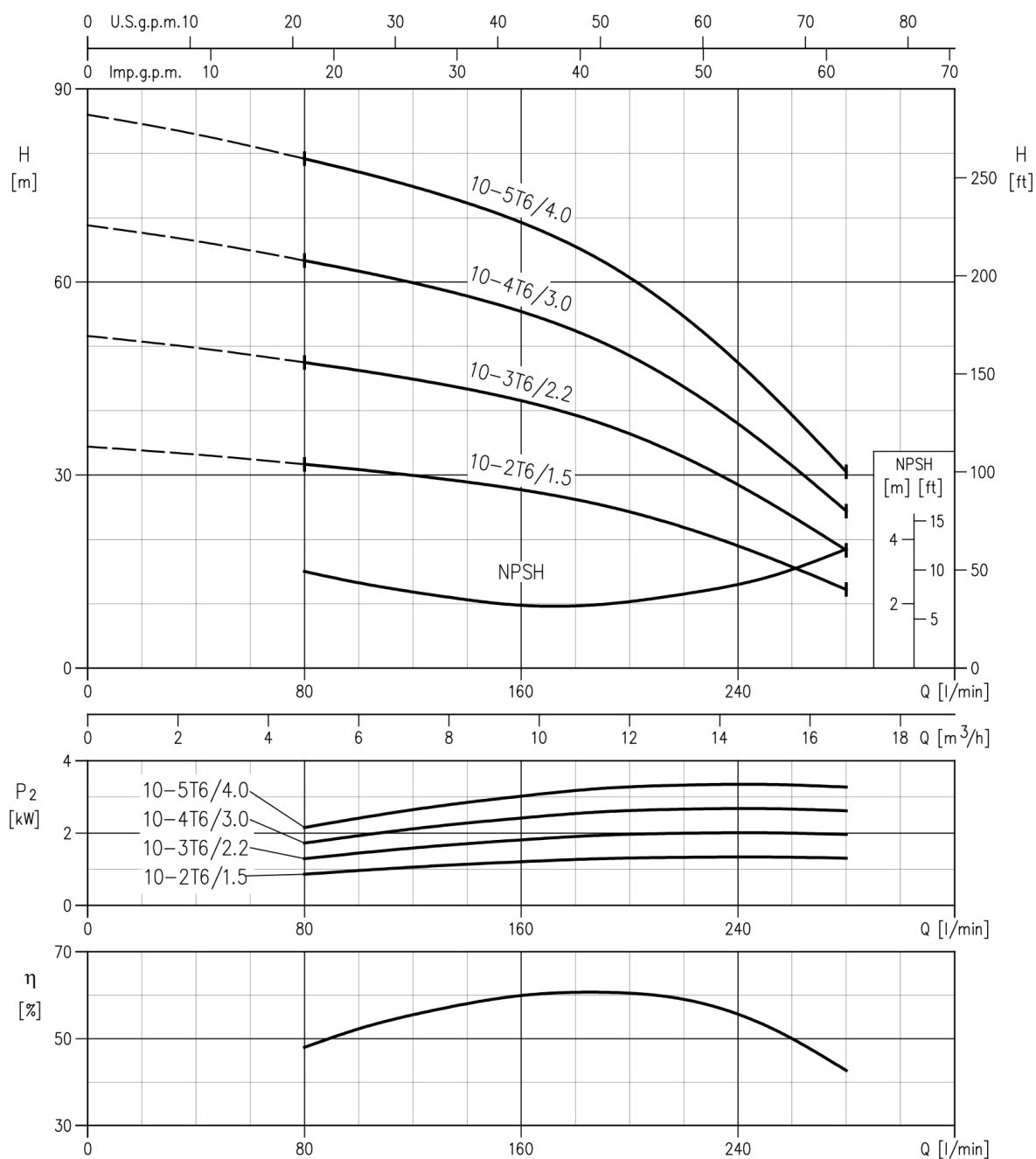
Test standard: ISO 9906:2012 - Grade 3B

MATRIX 10-5T6/4.0 (4.0 kW) - Impeller diameter = 100.5 mm

MATRIX 10-4T6/3.0 (3.0 kW) - Impeller diameter = 100.5 mm

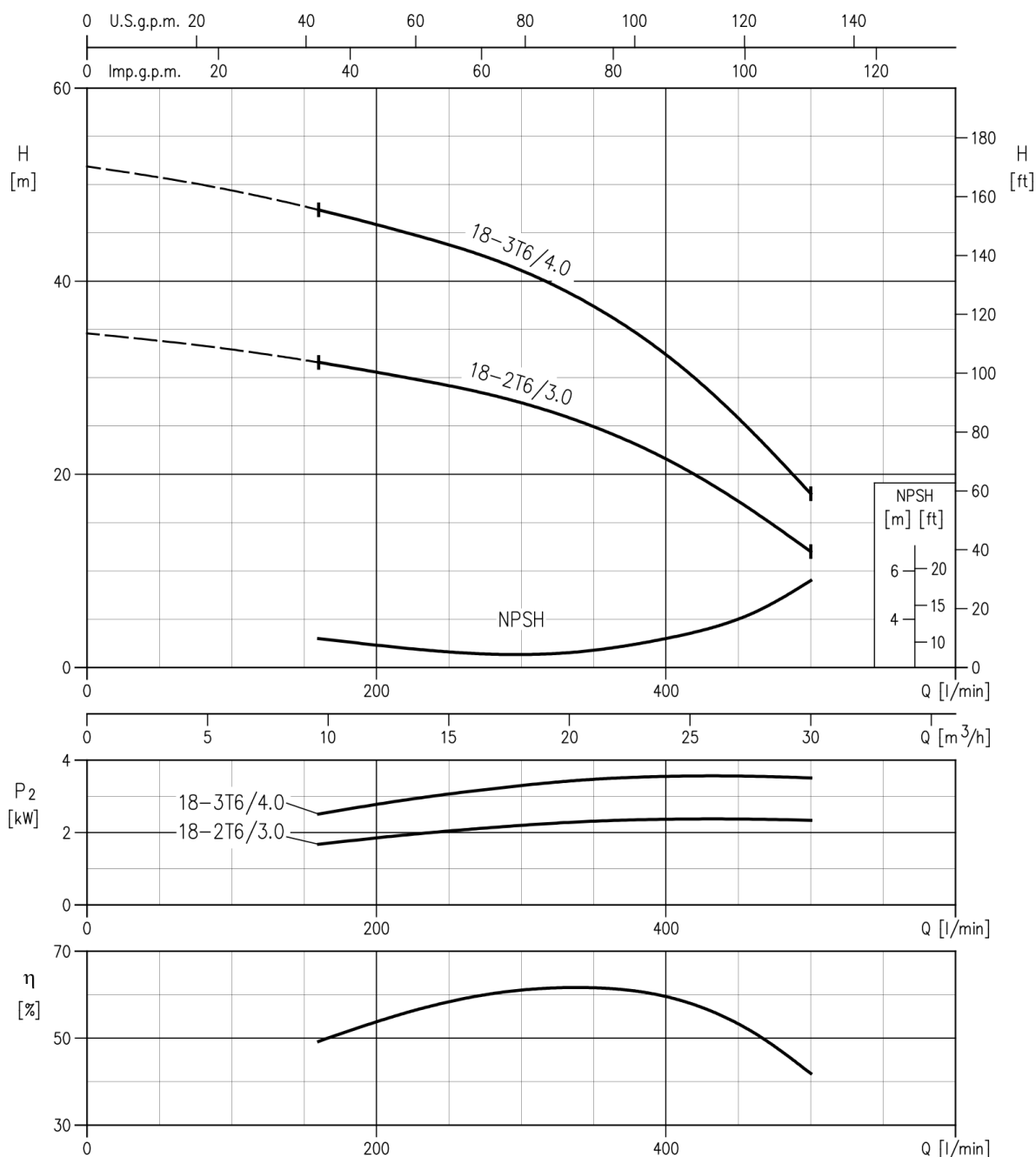
MATRIX 10-3T6/2.2 (2.2 kW) - Impeller diameter = 100.5 mm

MATRIX 10-2T6/1.5 (1.5 kW) - Impeller diameter = 100.5 mm



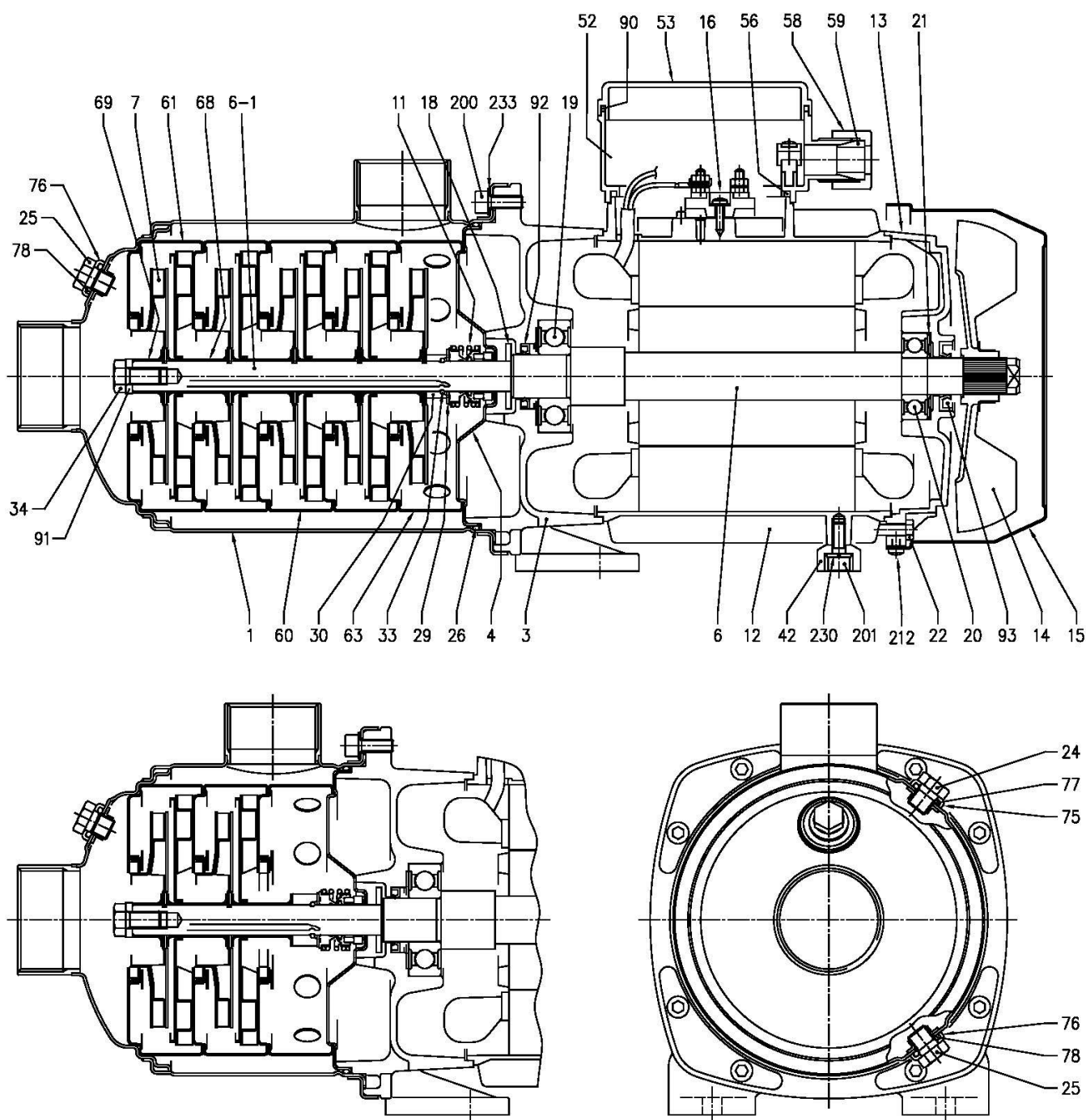
Rotation speed $\approx 3500 \text{ min}^{-1}$

Test standard: ISO 9906:2012 - Grade 3B

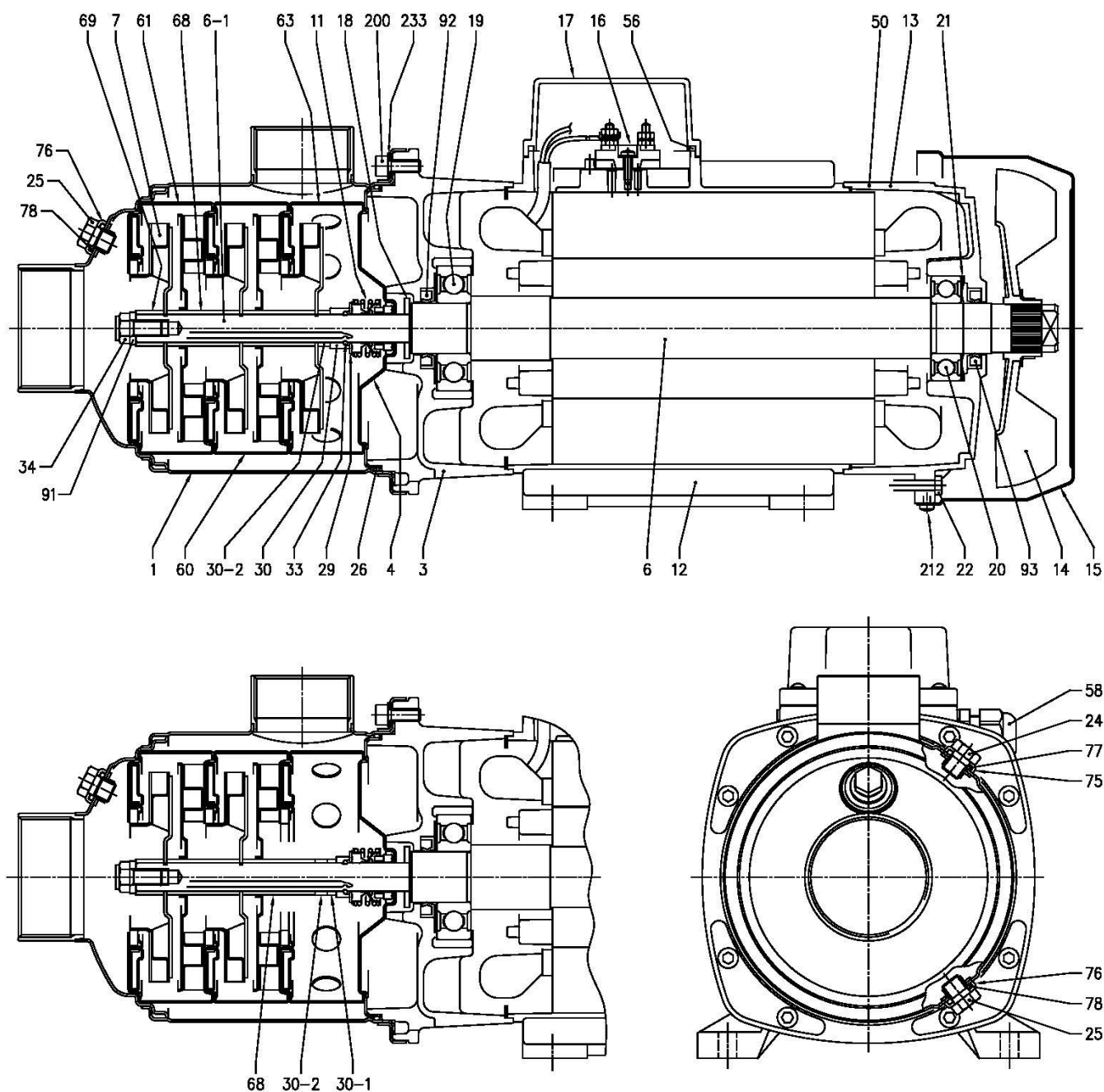
MATRIX 18-3T6/4.0 (4.0 kW) - Impeller diameter = 106.7 mm**MATRIX 18-2T6/3.0 (3.0 kW) - Impeller diameter = 106.7 mm**

Rotation speed $\approx 3500 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW DRAWING MATRIX 3/5/10



SECTIONAL VIEW DRAWING MATRIX 18



SECTIONAL VIEW TABLE

N°	PART NAME	MATERIAL	DIMENSION	STANDARD	Q.TY
1	Casing	EN 1.4301 (AISI 304)			1
3	Bracket	EN AB-AISI11Cu2(Fe)			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Shaft with rotor	-			1
6-1	Pump Shaft	EN 1.4301 (AISI 304)			1
7	Impeller	EN 1.4301 (AISI 304)			[1]
11	Mechanical seal [6]	-			1
12	Motor frame with stator	-			1
13	Motor cover	Aluminium			1
14	Fan	PA6			1
15	Fan cover	Fe P04 Zinc-coated			1
16	Terminal board	-			1
17	Terminal box cover [2]	Aluminium			1
18	Splash ring	NBR	30x13.5x2.5		1
19	Bearing	-			1
20	Bearing	-			1
21	Adjusting ring	Steel C70			1
22	Tie rod	Fe 42 Zinc-coated			4
24	Plug	EN 1.4301 (AISI 304)			1
25	Plug	EN 1.4301 (AISI 304)			2
26	O-ring	EPDM	133.02X2.62		1
29	Washer	EN 1.4301 (AISI 304)	25.1x14x1		1
30	Ring holder	EN 1.4301 (AISI 304)			1
30-1	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)			[1]
30-2	Shaft sleeve (adjustment)	EN 1.4301 (AISI 304)			[1]
33	Ring	EN 1.4301 (AISI 304)			2
34	Screw	EN 1.4301 (AISI 304)	M 8x16	UNI 5739	1
42	Foot	Aluminium			[1]
50	Motor spacer [3]	Aluminium			1
52	Capacitor box [4]	ABS class V-0			1
53	Capacitor box cover [4] [5]	ABS class V-0			1
56	Box gasket	NBR			1
58	Ring nut	-			[1]
59	Conic gasket [4]	NBR			1
60	Intermediate casing	EN 1.4301 (AISI 304)+PPS			[1]
61	Intermediate casing (suction)	EN 1.4301 (AISI 304)+PPS			1
63	Intermediate casing (discharge)	EN 1.4301 (AISI 304)+PPS			1
68	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)			[1]
69	Impeller spacer	EN 1.4301 (AISI 304)			1
75	Washer (plug)	EN 1.4301 (AISI 304)			1
76	Washer (plug)	EN 1.4301 (AISI 304)			2
77	O-ring	EPDM	9.19x2.62		1
78	O-ring	EPDM	9.19x2.62		2
90	Cover box gasket [4]	NBR	-		1
91	Shaft washer	EN 1.4301 (AISI 304)			1
92	Lip seal	0.65-0.75-0.9 kW	17x32x6		1
		1.3-1.5-2.2 kW	20x30x4		1
		3.0-4.0 kW	25x40x7		1
93	Lip seal	0.65-0.75-0.9 kW	15x30x5		1
		1.3-1.5-2.2 kW	17x32x7		1
		3.0-4.0 kW	25x40x7		1
200	Screw	EN 1.4301 (AISI 304)	M6x16	UNI 5931	8
201	Screw	Steel 8.8 strenght class ISO 898/1	M6x20	UNI 5931	[1]
212	Screw	Zincate Steel			4
230	Washer	Steel C70	Ø 6.4	UNI 1751	[1]
233	Plate	EN 1.4301 (AISI 304)			4

[1] See **QUANTITY FOR MODEL** page 303

[2] Only for three-phase

[3] Only for 10-5T6/4 and 18-3T6/4

[4] Only for single-phase

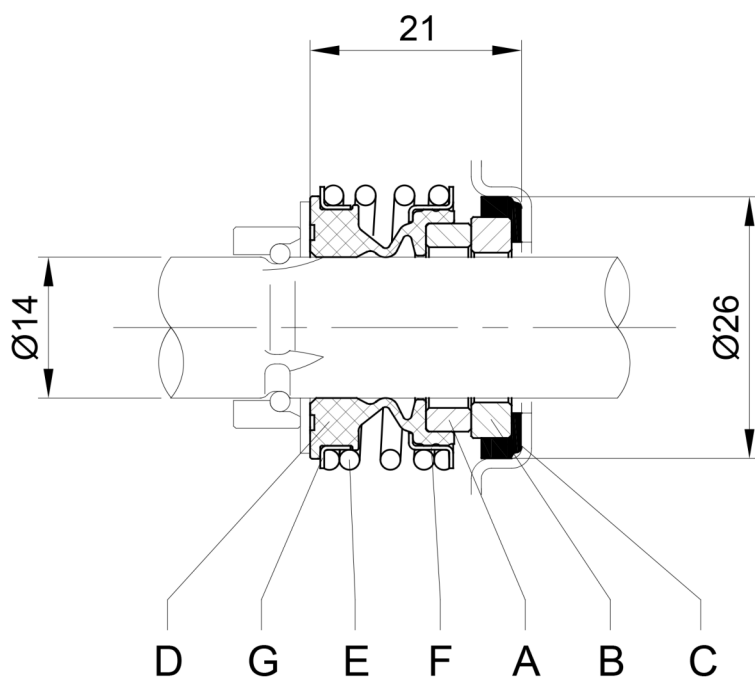
[5] With gasket in NBR only for version single phase 3-2T6/0.65M, 3-3T6/0.9M, 5-2T6/0.9M

[6] See **MECHANICAL SEAL** pages 304 - 306

QUANTITY FOR MODEL

Pump type	7	30-1	30-2	42	60	68	90	201	230
MATRIX 3-2T6/0.65M	2	-	-	1	1	4	1	1	1
MATRIX 3-2T6/0.65		-	-	1	1	4	-	1	1
MATRIX 3-3T6/0.9M	3	-	-	1	1	4	1	1	1
MATRIX 3-3T6/0.9		-	-	1	1	4	-	1	1
MATRIX 3-4T6/1.3M	4	-	-	1	2	6	1	1	1
MATRIX 3-4T6/1.3		-	-	1	2	6	-	1	1
MATRIX 3-5T6/1.5M	5	-	-	1	3	8	1	1	1
MATRIX 3-5T6/1.5		-	-	1	3	8	-	1	1
MATRIX 3-6T6/2.2	6	-	-	1	4	10	-	1	1
MATRIX 5-2T6/0.9M	2	-	-	1	1	4	1	1	1
MATRIX 5-2T6/0.9		-	-	1	1	4	-	1	1
MATRIX 5-3T6/1.3M	3	-	-	1	1	4	1	1	1
MATRIX 5-3T6/1.3		-	-	1	1	4	-	1	1
MATRIX 5-4T6/2.2	4	-	-	1	2	6	-	1	1
MATRIX 5-5T6/2.2	5	-	-	1	3	8	-	1	1
MATRIX 5-6T6/3	6	-	-	-	4	10	-	-	-
MATRIX 10-2T6/1.5M	2	-	-	1	1	4	1	1	1
MATRIX 10-2T6/1.5		-	-	1	1	4	-	1	1
MATRIX 10-3T6/2.2	3	-	-	1	1	4	-	1	1
MATRIX 10-4T6/3	4	-	-	-	2	6	-	-	-
MATRIX 10-5T6/4	5	-	-	-	3	8	-	-	-
MATRIX 18-2T6/3	3	1	1	-	1	2	-	-	-
MATRIX 18-3T6/4	4	-	1	-	1	2	-	-	-

MECHANICAL SEAL



STANDARD*	A	B	C	Material D	E	F	G
	Rotary seal ring	Stationary seal ring	Gasket	Bellows	Spring	Frame	Retainer ring
	Carbon	Ceramic	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

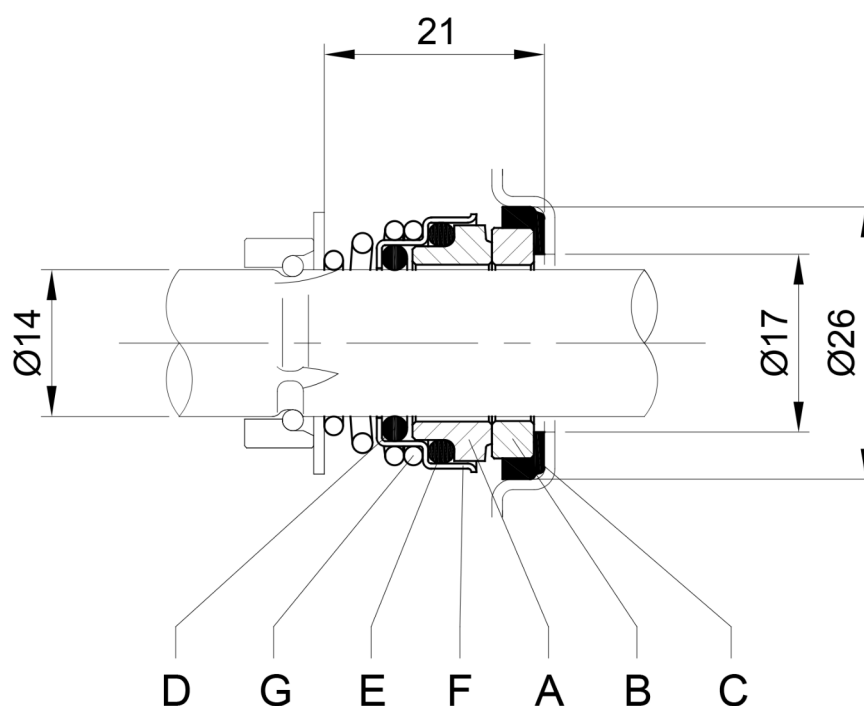
OPTIONAL**	Version	A	B	C	Material D	E	F	G
		Rotary seal ring	Stationary seal ring	Gasket	Bellows	Spring	Frame	Retainer ring
	H	Ceramic	Carbon	FPM	FPM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)
	HS	Silicon Carbide	Silicon Carbide	FPM	FPM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

*Approval for drinking water application
WRAS Approval product

**Approval for drinking water application
DM174/2004



MECHANICAL SEAL

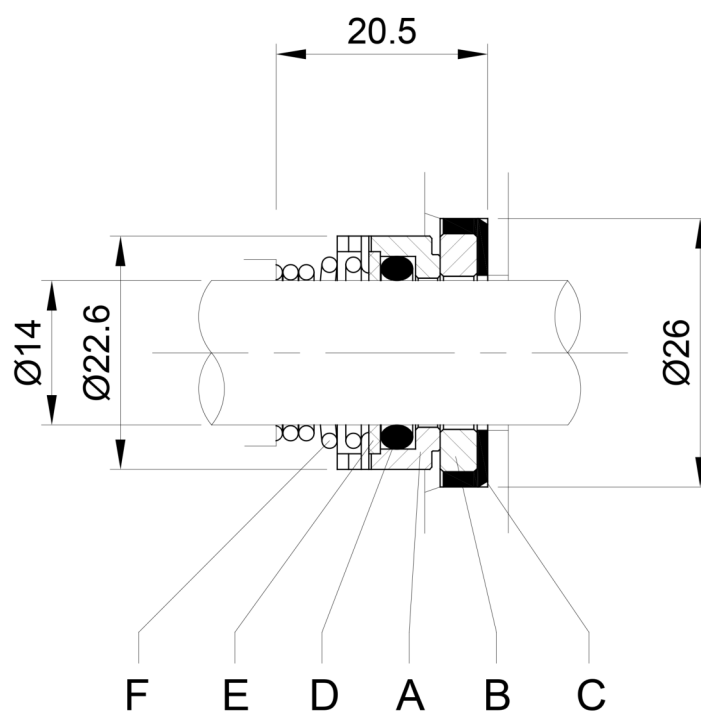


Version	A	B	C	Material			
	Rotary seal ring	Stationary seal ring	Gasket	D O-ring	E O-ring	F Spring	G Retainer ring
OPTIONAL** -TE	Carbon	Ceramic	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

Version	A	B	C	Material			
	Rotary seal ring	Stationary seal ring	Gasket	D O-ring	E O-ring	F Spring	G Retainer ring
SPECIAL** Q1AEGG	Metalized Carbon	Silicon Carbide	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

** Approval for drinking water application
DM174/2004

MECHANICAL SEAL



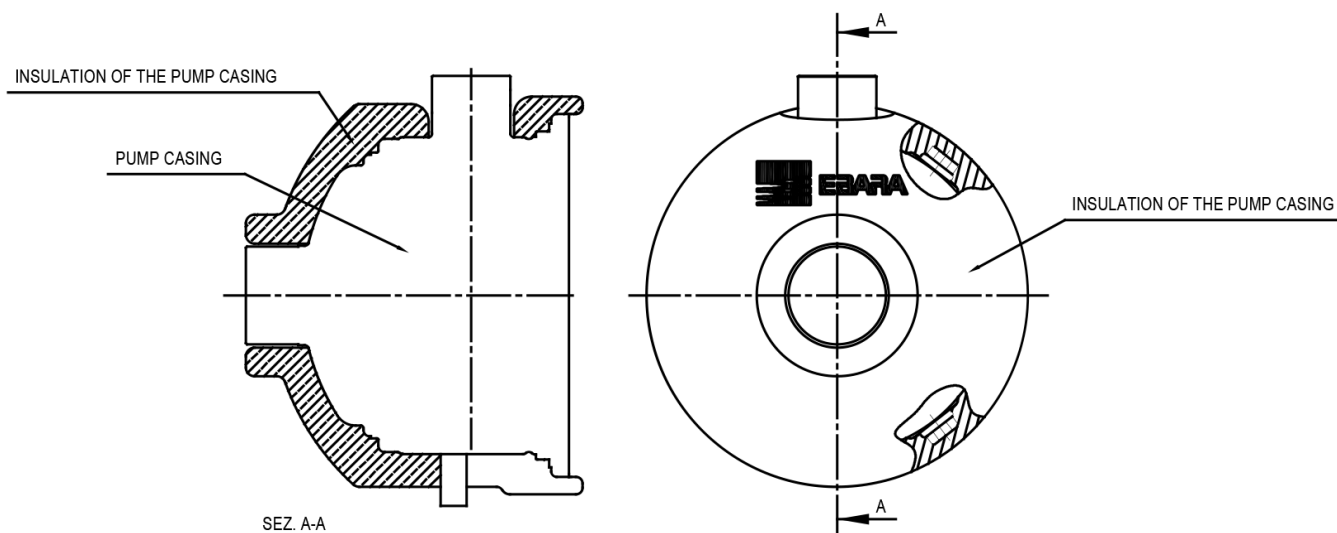
Version	Material					
	A Rotary seal ring	B Stationary seal ring	C Stationary Gasket	D O-Ring	E Washer	F Spring
SPECIAL** U3Q1EGG	Tungsten Carbide	Silicon Carbide	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)

** Approval for drinking water application
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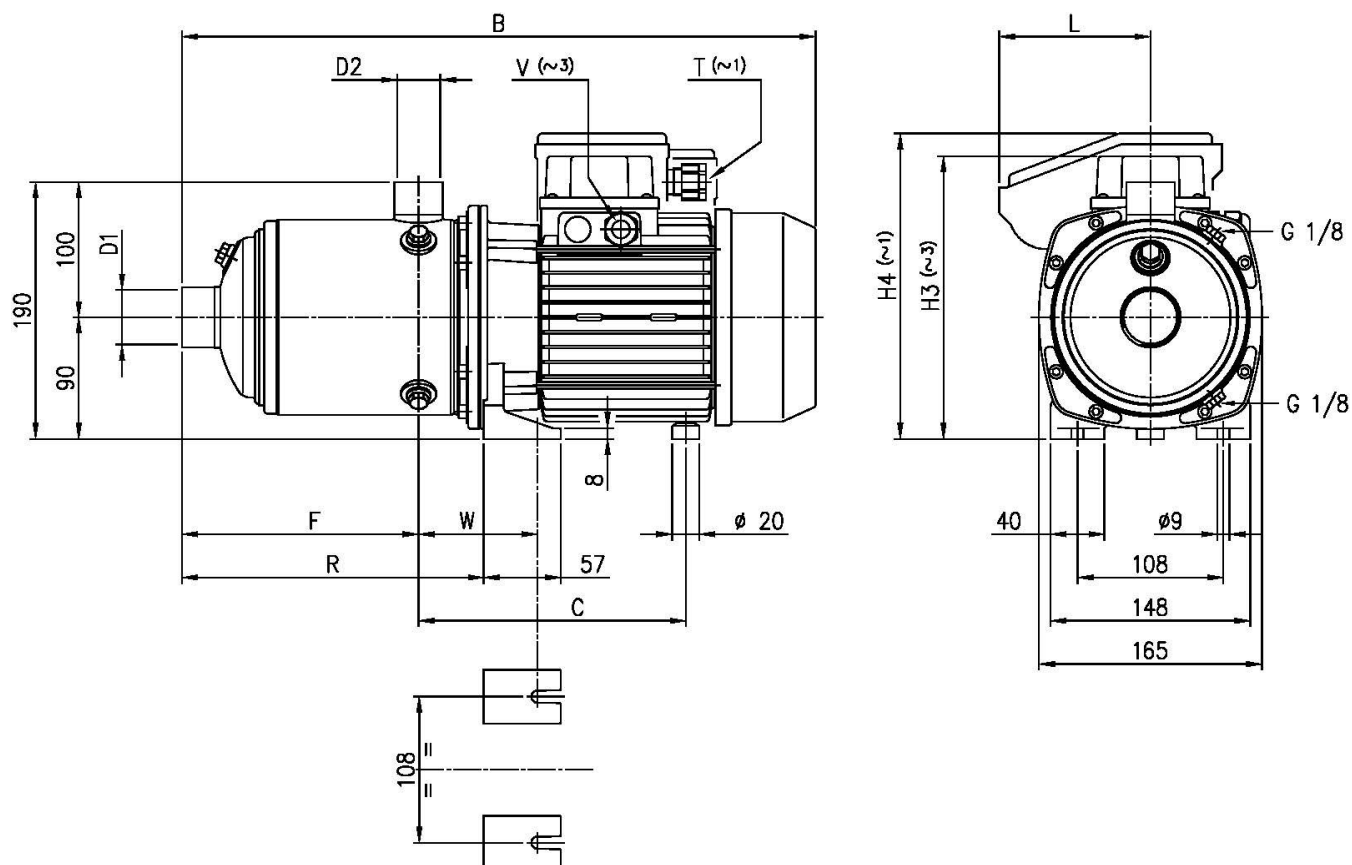
BEARINGS

Pump Type	Ball Bearing			
	Pump side		Fan side	
	[1~]	[3~]	[1~]	[3~]
MATRIX 3-2T6/0.65M	6203-2RSH	-	6202-2RSH	-
MATRIX 3-2T6/0.65	-	6203 2DW C3	-	6202 2DW C3
MATRIX 3-3T6/0.9M	6203-2RSH	-	6202-2RSH	-
MATRIX 3-3T6/0.9	-	6203-ZZ C3	-	6202-ZZ C3
MATRIX 3-4T6/1.3M	6304-2RSH	-	6203-2RSH	-
MATRIX 3-4T6/1.3	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 3-5T6/1.5M	6304-2RSH	-	6203-2RSH	-
MATRIX 3-5T6/1.5	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 3-6T6/2.2	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 5-2T6/0.9M	6203-2RSH	-	6202-2RSH	-
MATRIX 5-2T6/0.9	-	6203-ZZ C3	-	6202-ZZ C3
MATRIX 5-3T6/1.3M	6304-2RSH	-	6203-2RSH	-
MATRIX 5-3T6/1.3	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 5-4T6/2.2	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 5-5T6/2.2	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 5-6T6/3	-	6305-ZZ C3	-	6205-ZZ C3
MATRIX 10-2T6/1.5M	6304-2RSH	-	6203-2RSH	-
MATRIX 10-2T6/1.5	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 10-3T6/2.2	-	6304-ZZ C3	-	6203-ZZ C3
MATRIX 10-4T6/3	-	6305-ZZ C3	-	6205-ZZ C3
MATRIX 10-5T6/4	-	6305-ZZ C3	-	6205-ZZ C3
MATRIX 18-2T6/3	-	6305-ZZ C3	-	6205-ZZ C3
MATRIX 18-3T6/4	-	6305-ZZ C3	-	6205-ZZ C3

THERMAL INSULATION



Pump type		INSULATION OF PUMP CASING
Single phase	Three phase	
3-2T6/0.65M	3-2T6/0.65	ON REQUEST
3-3T6/0.9M	3-3T6/0.9	
3-4T6/1.3M	3-4T6/1.3	
3-5T6/1.5M	3-5T6/1.5	
-	3-6T6/2.2	
5-2T6/0.9M	5-2T6/0.9	
5-3T6/1.3M	5-3T6/1.3	
-	5-4T6/2.2	
-	5-5T6/2.2	
-	5-6T6/3	
10-2T6/1.5M	10-2T6/1.5	
-	10-3T6/2.2	
-	10-4T6/3	
-	10-5T6/4	
-	18-2T6/3	
-	18-3T6/4	

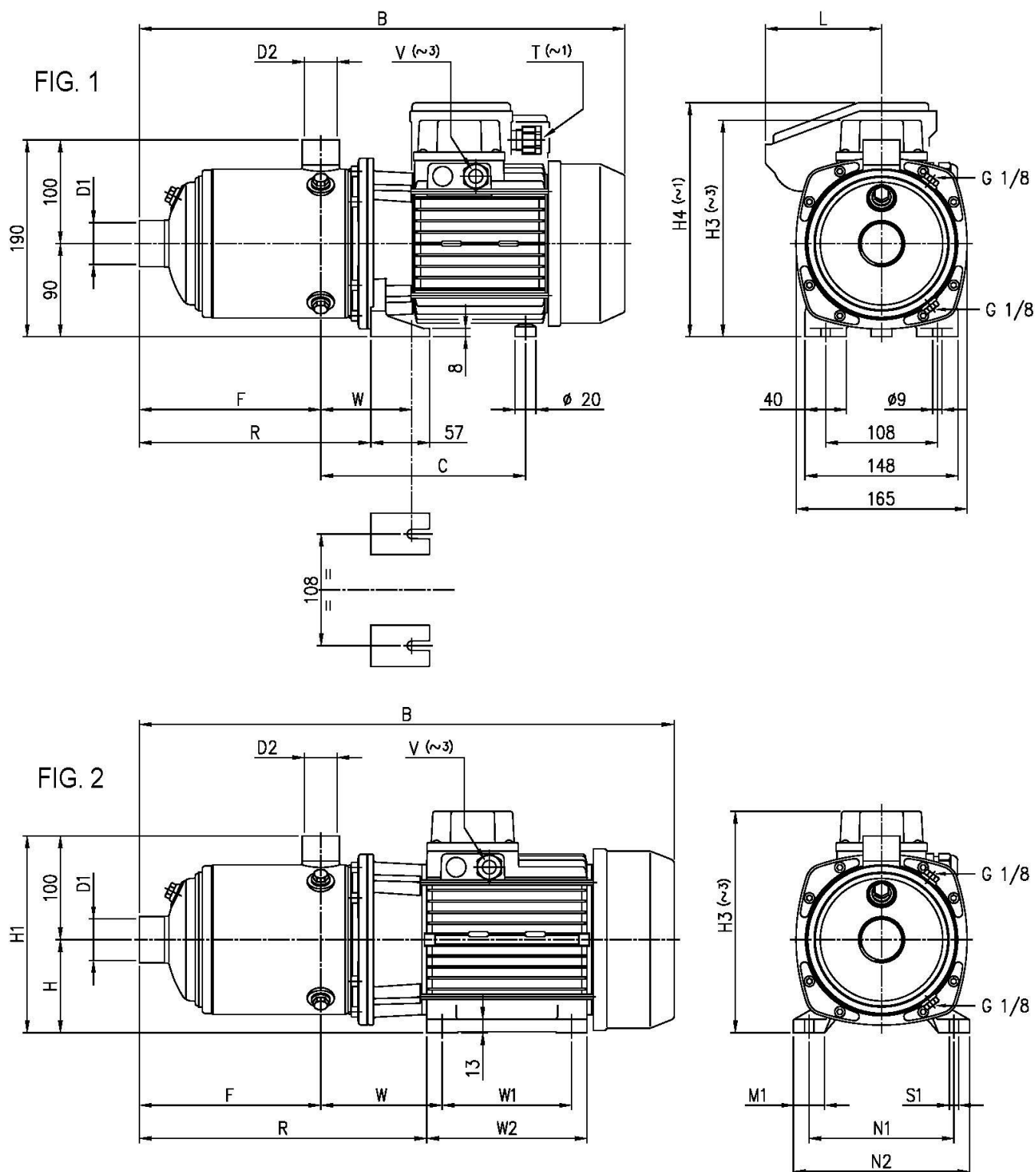
**PUMP DRAWING
MATRIX 3**

**PUMP TABLE
MATRIX 3**

Pump Type	D1	D2	B	C	F	Dimensions [mm]			R	I [1~]	V [3~]	W	Weight [kgf]
						H4 [1~]	H3 [3~]	L					
MATRIX 3-2T6/0.65M	1"	1"	360	171	103	198	-	85	151.5	PG11	-	88 ÷ 97	9.8
MATRIX 3-2T6/0.65			360	171	103	-	192	-	151.5	-	M16x1.5	88 ÷ 97	11.1
MATRIX 3-3T6/0.9M			360	171	103	198	-	85	151.5	M20x1.5	-	88 ÷ 97	11.7
MATRIX 3-3T6/0.9			372	171	103	-	192	-	151.5	-	M16x1.5	88 ÷ 97	12.4
MATRIX 3-4T6/1.3M			419	198	127	223	-	114	175.5	M20x1.5	-	88 ÷ 97	14.7
MATRIX 3-4T6/1.3			432	198	127	-	209	-	175.5	-	M16x1.5	88 ÷ 97	15.3
MATRIX 3-5T6/1.5M			443	198	151	223	-	114	199.5	M20x1.5	-	88 ÷ 97	16
MATRIX 3-5T6/1.5			468	198	151	-	209	-	199.5	-	M16x1.5	88 ÷ 97	18.7
MATRIX 3-6T6/2.2			492	198	175	-	209	-	223.5	-	M16x1.5	88 ÷ 97	19.2

[1~] Single phase

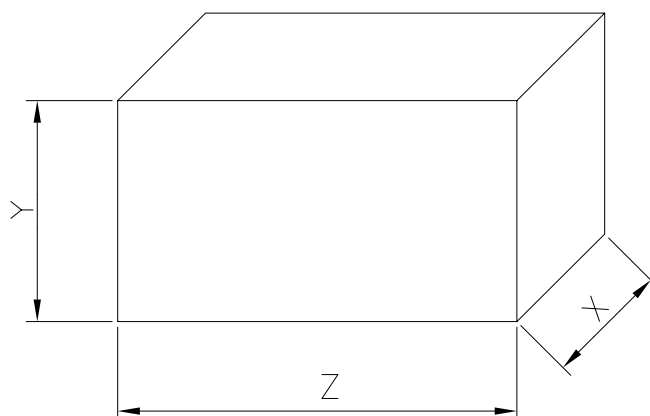
[3~] Three phase

**PUMP DRAWING
MATRIX 5/10/18**



PUMP TABLE
MATRIX 5/10/18

Pump Type	Fig.	D1	D2	Dimensions [mm]																	Weight [kgf]	
				H	H1	B	C	F	H4	H3	L	R	T [1~]	V [3~]	W	W1	W2	M1	N1	N2		S1
									[1~]	[3~]												
MATRIX 5-2T6/0.9M	1	1" 1/4	1"	-	-	360	171	103	198	-	85	151.5	M20x1.5	-	88÷97	-	-	-	-	-	-	11.6
MATRIX 5-2T6/0.9				-	-	372	171	103	-	191	-	151.5	-	M16x1.5	88÷97	-	-	-	-	-	-	12.3
MATRIX 5-3T6/1.3M				-	-	395	198	103	223	-	114	151.5	M20x1.5	-	88÷97	-	-	-	-	-	-	14
MATRIX 5-3T6/1.3				-	-	408	198	103	-	209	-	151.5	-	M16x1.5	88÷97	-	-	-	-	-	-	14.7
MATRIX 5-4T6/2.2				-	-	444	198	127	-	209	-	175.5	-	M16x1.5	88÷97	-	-	-	-	-	-	17.6
MATRIX 5-5T6/2.2				-	-	468	198	151	-	209	-	199.5	-	M16x1.5	88÷97	-	-	-	-	-	-	-
MATRIX 5-6T6/3	2			90	190	554	-	175	-	214	-	277.5	-	M20x1.5	117.5	125	155	30	140	170	9	22.4
MATRIX 10-2T6/1.5M	1	1" 1/2	1" 1/4	-	-	414	202	118	223	-	114	170.5	M20x1.5	-	92÷101	-	-	-	-	-	-	14.8
MATRIX 10-2T6/1.5				-	-	439	202	118	-	209	-	170.5	-	M16x1.5	92÷101	-	-	-	-	-	-	17.4
MATRIX 10-3T6/2.2				-	-	439	202	118	-	209	-	170.5	-	M16x1.5	92÷101	-	-	-	-	-	-	17.2
MATRIX 10-4T6/3	2			90	190	531	-	148	-	214	-	254.5	-	M20x1.5	121.5	125	155	30	140	170	9	22.7
MATRIX 10-5T6/4				100	200	574	-	178	-	241	-	274	-	M20x1.5	111	140	170	35	160	192	11	26
MATRIX 18-2T6/3	2			2"	1" 1/2	90	190	527	-	141	-	214	-	250.5	-	M20x1.5	124.5	125	155	30	140	170
MATRIX 18-3T6/4		100	200			540	-	141	-	241	-	240	-	M20x1.5	114	140	170	35	160	192	11	25.4

PACKING

Pump Type	Packing [mm]			Weight [kgf]
	X	Y	Z	
MATRIX 3-2T6/0.65M	180	220	465	10.4
MATRIX 3-2T6/0.65	180	220	465	11.7
MATRIX 3-3T6/0.9M	180	220	465	12.5
MATRIX 3-3T6/0.9	180	220	465	13
MATRIX 3-4T6/1.3M	210	240	550	15.5
MATRIX 3-4T6/1.3	210	240	570	15.8
MATRIX 3-5T6/1.5M	210	240	570	16.8
MATRIX 3-5T6/1.5	210	240	570	19.2
MATRIX 3-6T6/2.2	210	240	570	19.7
MATRIX 5-2T6/0.9M	180	220	465	12.4
MATRIX 5-2T6/0.9	180	220	465	12.9
MATRIX 5-3T6/1.3M	210	240	550	14.8
MATRIX 5-3T6/1.3	210	240	550	15.2
MATRIX 5-4T6/2.2	210	240	570	18.1
MATRIX 5-5T6/2.2	210	240	570	18.3
MATRIX 5-6T6/3	210	240	660	23.2
MATRIX 10-2T6/1.5M	210	240	550	15.6
MATRIX 10-2T6/1.5	210	240	570	18
MATRIX 10-3T6/2.2	210	240	570	17.7
MATRIX 10-4T6/3	210	240	660	23.5
MATRIX 10-5T6/4	210	240	660	33.5
MATRIX 18-2T6/3	210	240	660	22.4
MATRIX 18-3T6/4	210	240	660	32.5

TECHNICAL DATA

60Hz

Rev. H

MOTOR DATA

Pump type		Power		Capacitor		Efficiency (% load)			Efficiency (% load)			Input		Full load current				Locked rotor current			
Single Phase	Three Phase	[kW]	[HP]	Single Phase		Three phase (380 V)			Three phase (460 V)			Input [kW]		[A]				[A]			
				[μF]	[V]	50%	75%	100%	50%	75%	100%	Single Phase	Three Phase	Single Phase 220-230 V	220 V	380 V	460 V	Single Phase 220-230 V	220 V	380 V	460 V
MATRIX 3-2T6/0.65M	MATRIX 3-2T6/0.65	0.65	0.9	14	450	82.3	83.5	83.2	80.5	83.1	84.5	0.97	0.9	4.7	2.8	1.6	1.5	23.2	17.9	10.3	12.5
MATRIX 3-3T6/0.9M	MATRIX 3-3T6/0.9	0.9	1.2	25	450	84.8	84.5	82.7	82.0	84.4	84.5	1.34	1.30	6.3	4.0	2.3	2.2	30.6	24.6	14.2	17.2
MATRIX 3-4T6/1.3M	MATRIX 3-4T6/1.3	1.3	1.8	35	450	84.2	84.7	84.5	83.2	84.7	85.7	1.70	1.75	7.7	5.3	3.1	2.9	55.0	40.2	23.2	28.1
MATRIX 3-5T6/1.5M	MATRIX 3-5T6/1.5	1.5	2.0	35	450	86.5	86.8	86.2	86.9	87.8	87.4	1.88	2.48	8.7	7.5	4.3	4.1	69.0	55.7	32.2	38.9
-	MATRIX 3-6T6/2.2	2.2	3.0	-	-	86.5	86.8	86.2	86.9	87.8	87.4	-	2.48	-	7.5	4.3	4.1	-	55.7	32.2	38.9
MATRIX 5-2T6/0.9M	MATRIX 5-2T6/0.9	0.9	1.2	25	450	84.8	84.5	82.7	82.0	84.4	84.5	1.34	1.30	6.3	4.0	2.3	2.2	30.6	24.6	14.2	17.2
MATRIX 5-3T6/1.3M	MATRIX 5-3T6/1.3	1.3	1.8	35	450	84.2	84.7	84.5	83.2	84.7	85.7	1.70	1.75	7.7	5.3	3.1	2.9	55.0	40.2	23.2	28.1
-	MATRIX 5-4T6/2.2	2.2	3.0	-	-	86.5	86.8	86.2	86.9	87.8	87.4	-	2.48	-	7.5	4.3	4.1	-	55.7	32.2	38.9
-	MATRIX 5-5T6/2.2	2.2	3.0	-	-	86.5	86.8	86.2	86.9	87.8	87.4	-	2.48	-	7.5	4.3	4.1	-	55.7	32.2	38.9
-	MATRIX 5-6T6/3	3.0	4.0	-	-	86.8	87.0	87.5	87.0	87.9	88.5	-	3.42	-	10.2	5.9	5.6	-	75.7	43.7	52.8
MATRIX 10-2T6/1.5M	MATRIX 10-2T6/1.5	1.5	2.0	35	450	86.5	86.8	86.2	86.9	87.8	87.4	1.88	2.48	8.7	7.5	4.3	4.1	69.0	55.7	32.2	38.9
-	MATRIX 10-3T6/2.2	2.2	3.0	-	-	86.5	86.8	86.2	86.9	87.8	87.4	-	2.48	-	7.5	4.3	4.1	-	55.7	32.2	38.9
-	MATRIX 10-4T6/3	3.0	4.0	-	-	86.8	87.0	87.5	87.0	87.9	88.5	-	3.42	-	10.2	5.9	5.6	-	75.7	43.7	52.8
-	MATRIX 10-5T6/4	4.0	5.5	-	-	89.7	89.6	88.6	86.1	88.4	88.5	-	4.52	-	13.5	7.8	7.6	-	107.1	61.8	74.9
-	MATRIX 18-2T6/3	3.0	4.0	-	-	86.8	87.0	87.5	87.0	87.9	88.5	-	3.42	-	10.2	5.9	5.6	-	75.7	43.7	52.8
-	MATRIX 18-3T6/4	4.0	5.5	-	-	89.7	89.6	88.6	86.1	88.4	88.5	-	4.52	-	13.5	7.8	7.6	-	107.1	61.8	74.9

NOISE DATA

Pump type		Power		LpA-dB(A)*
Single Phase	Three Phase	[kW]	[HP]	
MATRIX 3-2T6/0.65M	MATRIX 3-2T6/0.65	0.65	0.9	65
MATRIX 3-3T6/0.9M	MATRIX 3-3T6/0.9	0.9	1.2	
MATRIX 3-4T6/1.3M	MATRIX 3-4T6/1.3	1.3	1.8	68
MATRIX 3-5T6/1.5M	MATRIX 3-5T6/1.5	1.5	2.0	
-	MATRIX 3-6T6/2.2	2.2	3.0	69
MATRIX 5-2T6/0.9M	MATRIX 5-2T6/0.9	0.9	1.2	65
MATRIX 5-3T6/1.3M	MATRIX 5-3T6/1.3	1.3	1.8	68
-	MATRIX 5-4T6/2.2	2.2	3.0	69
-	MATRIX 5-5T6/2.2	2.2	3.0	
-	MATRIX 5-6T6/3	3.0	4.0	72
MATRIX 10-2T6/1.5M	MATRIX 10-2T6/1.5	1.5	2.0	68
-	MATRIX 10-3T6/2.2	2.2	3.0	69
-	MATRIX 10-4T6/3	3.0	4.0	72
-	MATRIX 10-5T6/4	4.0	5.5	73
-	MATRIX 18-2T6/3	3.0	4.0	72
-	MATRIX 18-3T6/4	4.0	5.5	73

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