



EBARA

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SPECIFICATION: DS (Sump Pump)

50 Hz

Rev. 0

PUMP	Liquid Handled	Type of liquid	Dirty water
		Max Temp. [°C]	40°
		Max solids size [mm]	5 (50DS)
			6 (65DS)
	7 (80DS)		
	8 (100DS)		
	Max fibers length [mm]	50	
	Submergence	Max [m]	4 (1.5 kW) 8 (2.2÷7.5 kW)
		Min [m]	Refer to low water level (L.W.L.) and usage restriction in dimension
	Construction	Impeller	Semi - open (with strainer)
		Shaft seal type	Oil lubricated, single spring double mechanical seal
	Connection	Suction	Strainer
		Discharge [inch] [mm]	G1½ UNI ISO 228 (50DS 1.5 kW) DN 50, 65, 80, 100 PN 10 according to EN 1092-2
	Materials	Casing	Cast iron
		Impeller	Cast iron
Suction Cover		Stainless Steel (1.5 kW)	
		Cast iron (2.2÷7.5 kW)	
Shaft		Aisi 403	
Motor frame		Cast iron	
Fasteners	Aisi 304		
Accessories	Standard	SiC/SiC/NBR Impeller side Carbon/Ceramic/NBR Motor side Lubricant: Turbine Oil VG32 (SAE 10W/20W)	
		Screwed flange oval type (1.5 kW). Discharge elbow (2.2÷7.5 kW).	
	Optional	Quick Discharge Connector (QDC): LS, LM, LL type	
Applicable standard of test		ISO 9906 Annex A	
MOTOR	Type		Three Phase air filled dry submersible
	No. of Poles		2
	Rotation speed [min ⁻¹]	~ 2850	
	Insulation Class		F
	Protection degree		IP 68
	Power Rating [kW]	1.5 ÷ 7.5	
	Frequency [Hz]	50	
	Voltage [V]	380-415 ±10%	
	Starting		DOL (Direct on line)
	Over load protection		Built in
	Cable	material	H07RN-F
length [m]		6 (up to 1.5 kW), 10 (2.2 kW and above)	
Bearings		Permanently lubricated sealed ball bearings	

SPECIFICATION: DVS (Semi-Vortex Pump)

50 Hz

Rev. 0

PUMP	Type of liquid		Water containing foreign matter		
	Max Temp.	[°C]	40°		
	Liquid Handled	Max solids size	[mm]	21 (50DVS) 33 (65DVS & 80DVS 1.5 kW) 41 (65DVS & 80DVS 2.2 - 3.7 kW)	
			Max fibers length	[mm]	100 (50DVS) 200 (65DVS & 80DVS 1.5 kW) 245 (65DVS & 80DVS 2.2 - 3.7 kW)
	Submergence	Max	[m]	4 (1.5 kW) 8 (2.2 ÷ 3.7 kW)	
		Min	[m]	Refer to low water level (L.W.L.) and usage restriction in dimension	
	Construction	Impeller		Semi - Vortex	
		Shaft seal type		Oil lubricated, single spring double mechanical seal	
	Connection	Suction		open	
		Discharge	[inch] [mm]	G1½ UNI ISO 228 (50DVS 1.5 kW) DN 50, 65, 80 PN 10 according to EN 1092-2	
	Materials	Casing		Cast iron	
		Impeller		Cast iron	
		Shaft		Aisi 403	
Motor frame			Cast iron		
Fasteners			Aisi 304		
Mechanical seal			SiC/SiC/NBR Impeller side Carbon/Ceramic/NBR Motor side Lubricant: Turbine Oil VG32 (SAE 10W/20W)		
Accessories	Standard		Screwed companion oval flange (50 DVS) Discharge elbow (65DVS & 80DVS)		
	Optional		Quick Discharge Connector (QDC): LS, LM, type		
Applicable standard of test			ISO 9906 Annex A		
MOTOR	Type		Three Phase air filled dry submersible		
	No. of Poles		2		
	Rotation speed	[min ⁻¹]		~ 2850	
	Insulation Class			F	
	Protection degree			IP 68	
	Power Rating	[kW]		1.5 ÷ 3.7	
	Frequency	[Hz]		50	
	Voltage	[V]		380-415 ±10%	
	Starting			DOL (Direct on line)	
	Over load protection			Built in	
	Cable	material		H07RN-F	
length		[m]	6 (up to 1.5 kW), 10 (2.2 kW and above)		
Bearings			Permanently lubricated sealed ball bearings		

SPECIFICATION: DL (Sewage Pump)

50 Hz

Rev. 0

PUMP	Type of liquid	Sewage		
	Max Temp. [°C]	40°		
	Liquid Handled	Max solids size [mm]	35 (65DL)	76 (200DL up to 22kW)
			50 (80DL, all DLC)	76 (all 30÷44 kW)
			60 (100DL, 100DLB)	82 (250DL up to 22kW)
			70 (150DL up to 22kW)	90 (300DL up to 22kW)
	Max fibers length [mm]	195 (65DL)	500 (200DL up to 22kW)	
		240 (80DL, all DLC)	500 (all 30÷44 kW)	
		300 (100DL, 100DLB)	550 (250DL up to 22kW)	
		400 (150DL up to 22kW)	600 (300DL up to 22kW)	
	Submergence	Max [m]	8	
		Min [m]	Refer to low water level (L.W.L.) and usage restriction in dimension	
	Construction	Impeller	Non clog, semi-open	
		Shaft seal type	Oil lubricated, single (up to 3.7 kW) or tandem (5.5 kW and above) springs double mechanical seal	
	Connection	Suction	Open	
Discharge [mm]		Flange DN 65, 80, 100, 150, 200, 250, 300 PN 10 according to EN 1092-2		
Materials	Casing	Cast iron		
	Impeller	Cast iron		
	Suction Cover	Cast iron		
	Shaft	Aisi 403		
	Motor frame	Cast iron		
	Fasteners	Aisi 304		
	Mechanical seal	SiC/SiC/NBR	Impeller side	
Accessories	Standard	Discharge elbow		
	Optional	Quick Discharge Connector (QDC): LM, LL type		
	Applicable standard of test	ISO 9906 Annex A		
MOTOR	Type	Three Phase air filled dry submersible		
	No. of Poles	4		
	Rotation speed [min ⁻¹]	~ 1450		
	Insulation Class	F		
	Protection degree	IP 68		
	Power Rating [kW]	1.5 ÷ 22		
	Frequency [Hz]	50		
	Voltage [V]	380-415 ±10%(1.5÷7.5 kW)		
		400-415 ±10% (Δ connection 11÷22 kW)		
		380-415 ±10%(Δ connection 30÷45 kW)		
	Starting	DOL (Direct on line) up to 7.5 kW Y/Δ from 11 kW up to 45 kW		
	Over load protection	Built in		
	Cable	material	H07RN-F	
length [m]		10		
Bearings	Permanently lubricated sealed ball bearings			

SPECIFICATION: DLW/C (Sewage Pump)

50 Hz

Rev. 0

PUMP	Type of liquid	Sewage		
	Max Temp.	[°C]	40°	
	Liquid Handled	Max solids size	[mm]	35 (65DL)
				50 (80DL)
				60 (100DL, 100DLB)
	Max fibers length	[mm]		195 (65DL)
				240 (80DL)
				300 (100DL)
	Submergence	Max	[m]	8
		Min	[m]	Refer to low water level (L.W.L.) and usage restriction in dimension
	Construction	Impeller	Non clog, semi-open with cutting action	
		Shaft seal type	Oil lubricated, single (up to 3.7 kW) or tandem (5.5 kW and above) springs double mechanical seal	
	Connection	Suction	Open	
		Discharge	[mm]	Flange DN 65, 80, 100 PN 10 according to EN 1092-2
	Materials	Casing	Cast iron	
Impeller		Cast iron		
Suction Cover		Cast iron		
Shaft		Aisi 403		
Motor frame		Cast iron		
Fasteners		Aisi 304		
Mechanical seal		SiC/SiC/NBR	Impeller side	
		Carbon/Ceramic/NBR	Motor side	
Accessories	Standard	Discharge elbow		
	Optional	Quick Discharge Connector (QDC): LM, LL type		
Applicable standard of test	ISO 9906 Annex A			
MOTOR	Type	Three Phase air filled dry submersible		
	No. of Poles	4		
	Rotation speed	[min ⁻¹]	~ 1450	
	Insulation Class	F		
	Protection degree	IP 68		
	Power Rating	[kW]	1.5 ÷ 7.5	
	Frequency	[Hz]	50	
	Voltage	[V]	380-415 ±10%	
	Starting	DOL (Direct on line)		
	Over load protection	Built in		
	Cable	material	H07RN-F	
		length	[m]	10
Bearings	Permanently lubricated sealed ball bearings			

SPECIFICATION: DML (Sewage Pump)

50 Hz

Rev. 0

PUMP	Liquid Handled	Type of liquid	Sewage	
		Max Temp. [°C]	40°	
		Max solids size [mm]	76	
		Max fibers length [mm]	500	
	Submergence	Max [m]	8	
		Min [m]	Refer to low water level (L.W.L.) and usage restriction in dimension	
	Construction	Impeller	Non clog, single channel	
		Shaft seal type	Oil lubricated, single spring double mechanical seal	
	Connection	Suction	Open	
		Discharge [mm]	Flange DN 80, 100, 150 PN 10 according to EN 1092-2	
	Materials	Casing	Cast iron	
		Impeller	Cast iron	
		Suction Cover	Cast iron	
		Shaft	Aisi 403	
		Motor frame	Cast iron	
Fasteners		Aisi 304		
Mechanical seal		SiC/SiC/NBR Impeller side Carbon/Ceramic/NBR Motor side Lubricant: Turbine Oil VG32 (SAE 10W/20W)		
Accessories	Standard	Discharge elbow		
	Optional	Quick Discharge Connector (QDC): LM, LL type		
Applicable standard of test		ISO 9906 Annex A		
MOTOR	Type		Three Phase air filled dry submersible	
	No. of Poles		4	
	Rotation speed [min ⁻¹]	~ 1450		
	Insulation Class		F	
	Protection degree		IP 68	
	Power Rating [kW]	2.2 ÷ 22		
	Frequency [Hz]	50		
	Voltage [V]	380-415 -10+6% (2.2 kW) 380-415 ±10% (3.7÷22 kW)		
	Starting	DOL (Direct on line) 2.2 kW Y/Δ from 3.7 kW up to 22 kW		
	Over load protection	Built in motor protector 2.2 kW Built in heat probe from 3.7 kW up to 22 kW		
	Cable	material	H07RN-F	
		length [m]	10	
Bearings		Permanently lubricated sealed ball bearings		

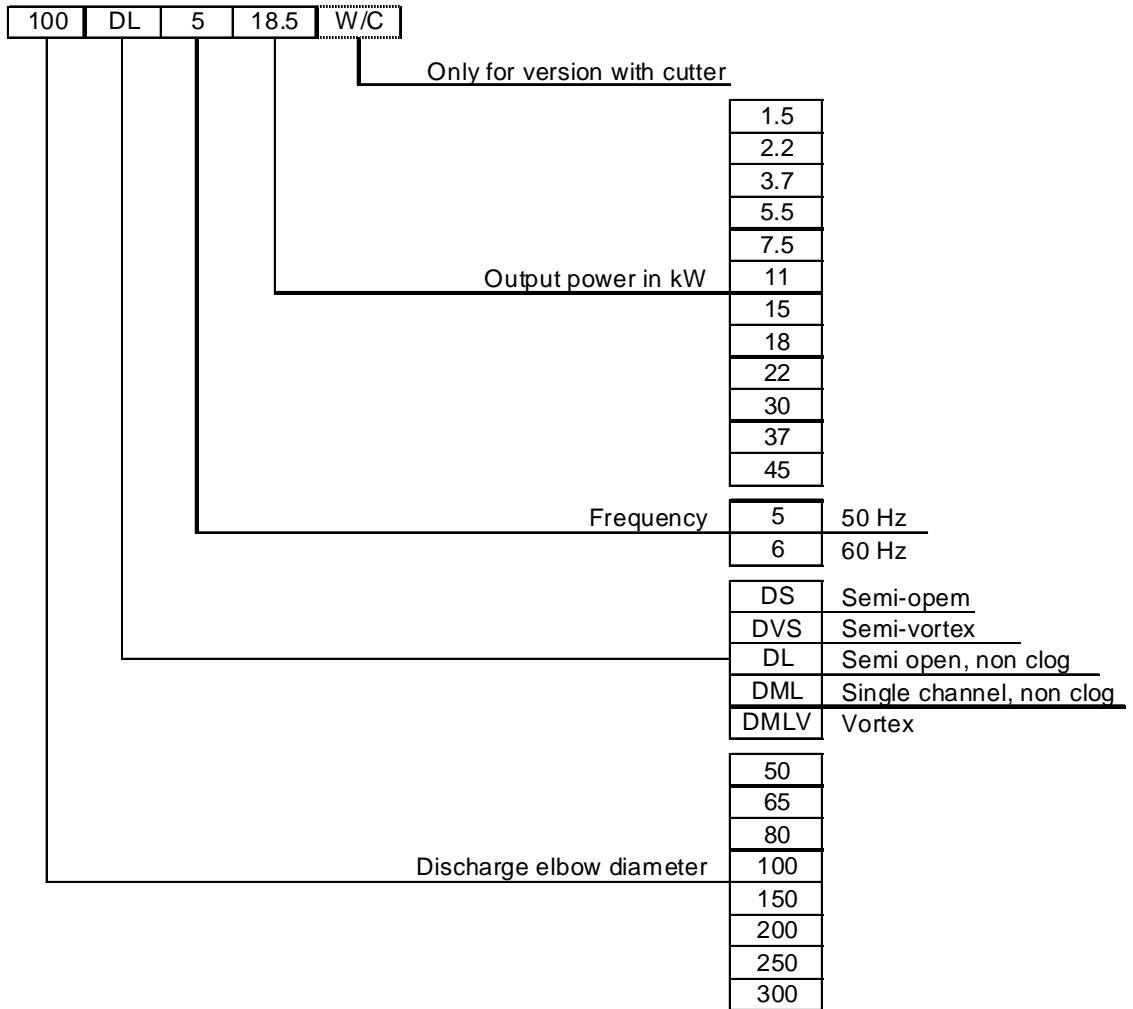
SPECIFICATION: DMLV (Sewage Pump)

50 Hz

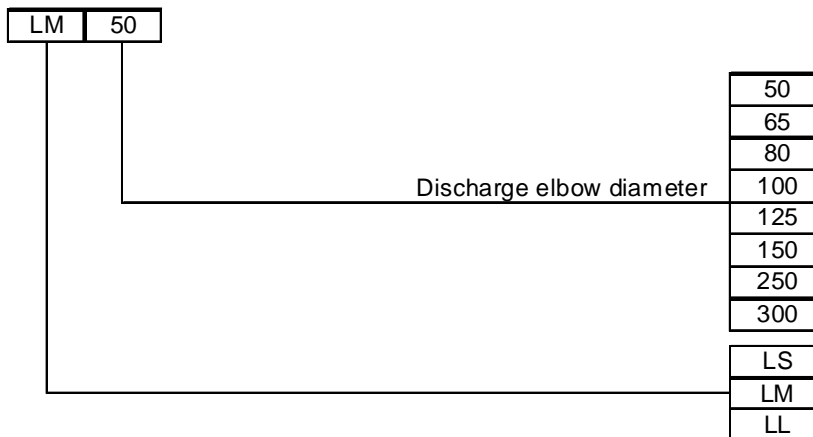
Rev. 0

PUMP	Liquid Handled	Type of liquid	Sewage
		Max Temp. [°C]	40°
		Max solids size [mm]	80 (80DMLV) 100 (100DMLV)
		Max fibers length [mm]	400 (80DMLV) 500 (100DMLV)
	Submergence	Max [m]	8
		Min [m]	Refer to low water level (L.W.L.) and usage restriction in dimension
	Construction	Impeller	Vortex
		Shaft seal type	Oil lubricated, single spring double mechanical seal
	Connection	Suction	Open
		Discharge [mm]	Flange DN 80, 100 PN 10 according to EN 1092-2
	Materials	Casing	Cast iron
		Impeller	Cast iron
		Suction Cover	Cast iron
		Shaft	Aisi 403
Motor frame		Cast iron	
Fasteners		Aisi 304	
Accessories	Standard	Discharge elbow	
	Optional	Quick Discharge Connector (QDC): LM, LL type	
Applicable standard of test		ISO 9906 Annex A	
MOTOR	Type		Three Phase air filled dry submersible
	No. of Poles		4
	Rotation speed [min ⁻¹]		~ 1450
	Insulation Class		F
	Protection degree		IP 68
	Power Rating [kW]		2.2 ÷ 22
	Frequency [Hz]		50
	Voltage [V]		380-415 -10+6% (2.2 kW) 380-415 ±10% (3.7÷22 kW))
	Starting		DOL (Direct on line) 2.2 kW Y/Δ from 3.7 kW up to 22 kW
	Over load protection		Built in motor protector 2.2 kW Built in heat probe from 3.7 kW up to 22 kW
	Cable	material	H07RN-F
		length [m]	10
Bearings		Permanently lubricated sealed ball bearings	

Pumps



Quick Discharge Connector (QDC)

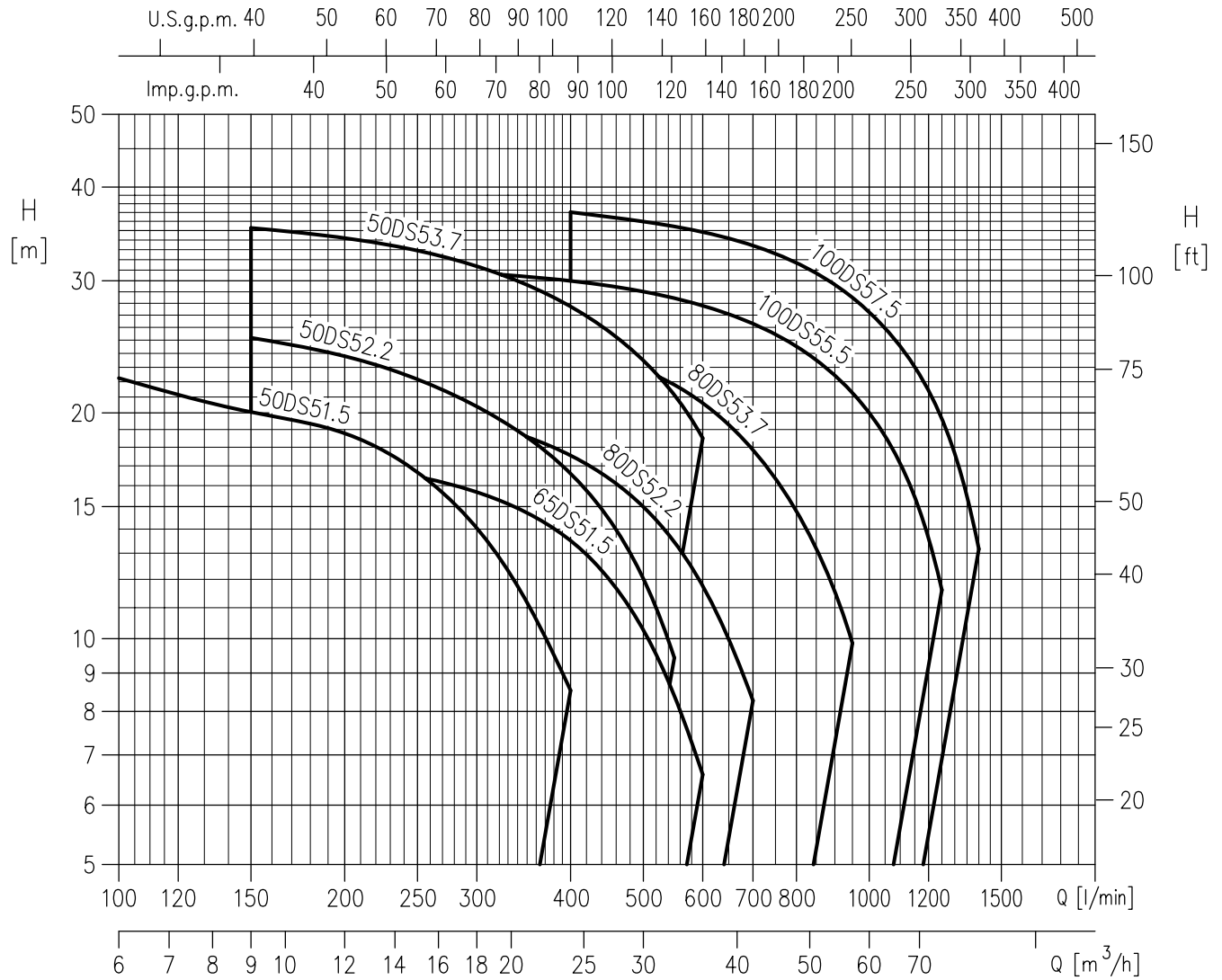


SELECTION CHART

50 Hz

Rev. 0

DS



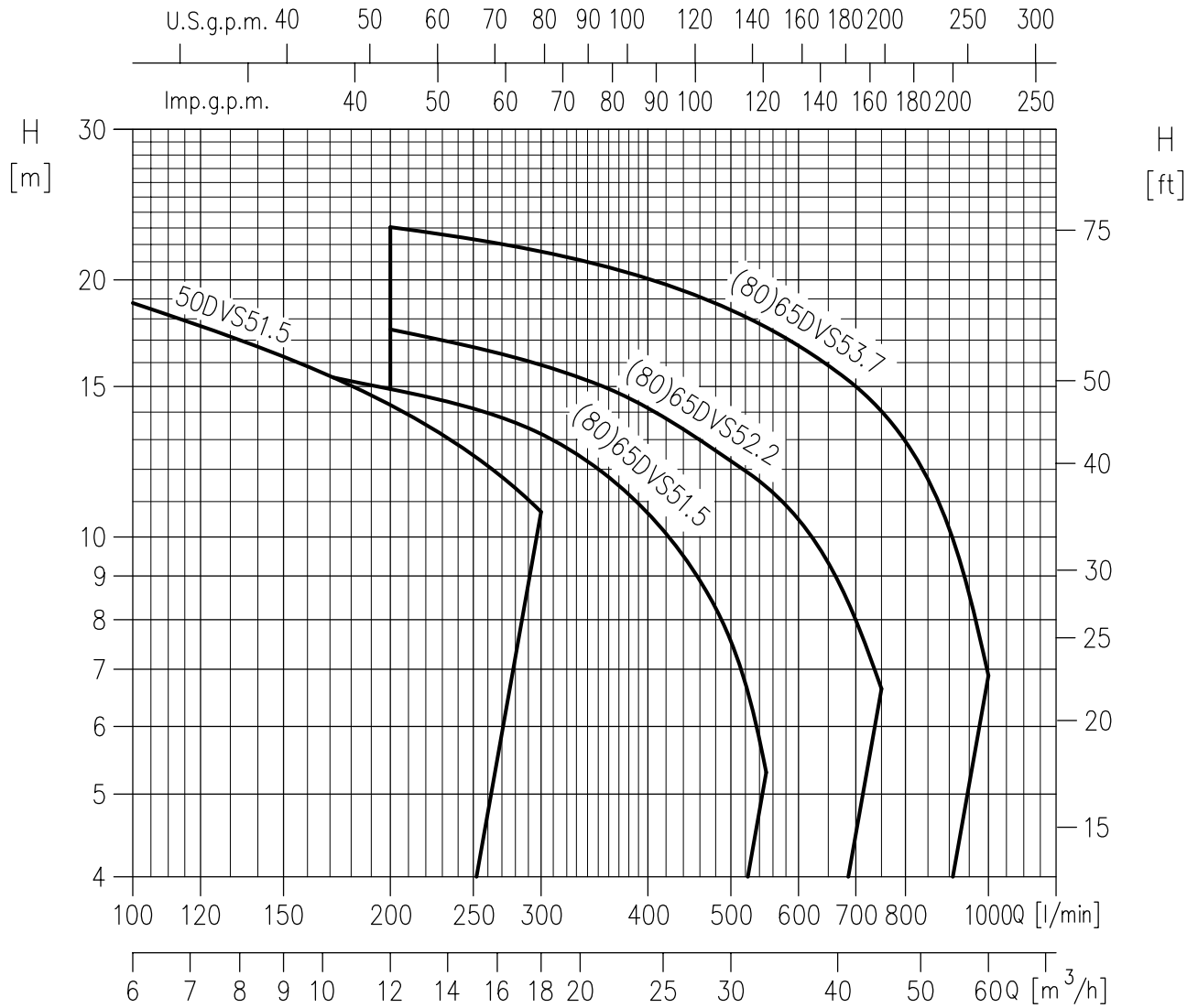
Model	Power		Q=Capacity																		
	[kW]	[HP]	l/min 0	100	150	200	250	300	400	450	500	550	600	700	800	950	1000	1200	1250	1400	
			m³/h 0	6	9	12	15	18	24	27	30	33	36	42	48	57	60	72	75	84	
H=Total manometric head in meters																					
50DS51.5	1.5	2	24.0	22.3	20.7	18.8	16.5	14.0	8.5	-	-	-	-	-	-	-	-	-	-	-	-
50DS52.2	2.2	3	27.0	-	25.2	23.7	22.1	20.4	16.6	14.4	12.0	9.4	-	-	-	-	-	-	-	-	-
50DS53.7	3.7	5	37.4	-	35.3	34.2	32.9	31.4	27.7	25.7	23.5	21.1	18.6	-	-	-	-	-	-	-	-
65DS51.5	1.5	2	18.0	-	17.5	17.1	16.5	15.7	13.5	12.0	10.3	8.5	6.6	-	-	-	-	-	-	-	-
80DS52.2	2.2	3	22.0	-	-	20.8	20.2	19.4	17.6	16.4	15.0	13.4	11.8	8.3	-	-	-	-	-	-	-
80DS53.7	3.7	5	27.5	-	-	-	26.3	25.8	24.6	23.7	22.8	21.8	20.6	17.8	14.8	9.9	-	-	-	-	-
100DS55.5	5.5	7.5	31.6	-	-	-	-	30.7	30.0	29.5	29.0	28.4	27.8	26.3	24.5	21.3	20.0	13.6	11.6	-	-
100DS57.5	7.5	10	39.2	-	-	-	-	-	37.0	36.6	36.0	35.5	34.8	33.4	31.7	28.5	27.3	21.4	19.7	13.2	-

SELECTION CHART

50 Hz

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DVS



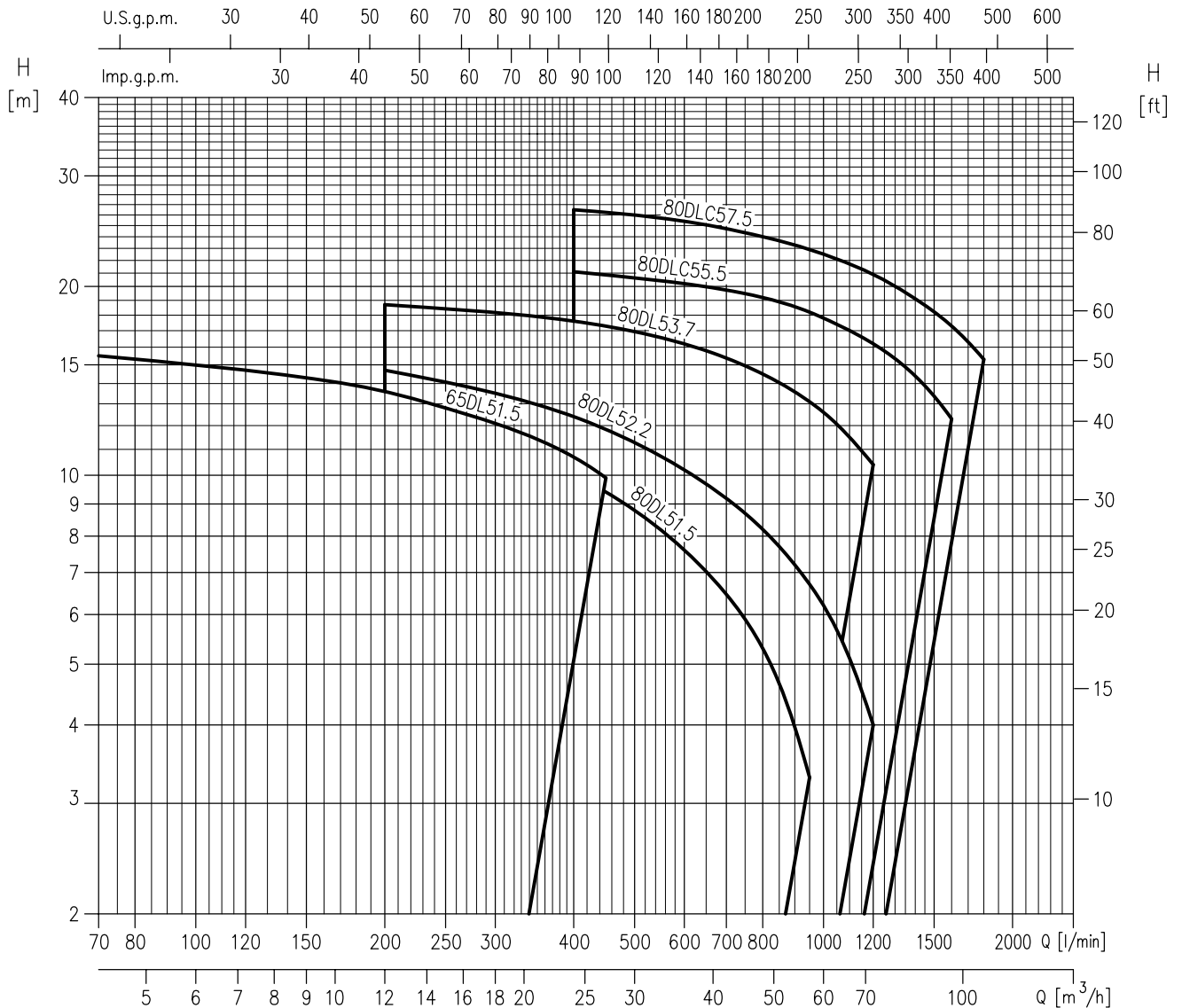
Model	Power		Q=Capacity												
	[kW]	[HP]	l/min 0	100	150	200	300	400	500	550	600	700	750	900	1000
			m³/h 0	6	9	12	18	24	30	33	36	42	45	54	60
			H=Total manometric head in meters												
50DVS51.5	1.5	2	22.0	18.8	16.6	14.3	10.7	-	-	-	-	-	-	-	-
(80)65DVS51.5	1.5	2	18.6	-	15.8	14.9	13.2	10.9	7.6	5.3	-	-	-	-	-
(80)65DVS52.2	2.2	3	20.3	-	-	17.5	15.9	14.2	12.3	11.5	10.5	8.1	6.6	-	-
(80)65DVS53.7	3.7	5	25.7	-	-	23.0	21.6	20.1	18.4	17.6	16.7	15.0	14.0	10.4	6.9

SELECTION CHART

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65DL, 80DL



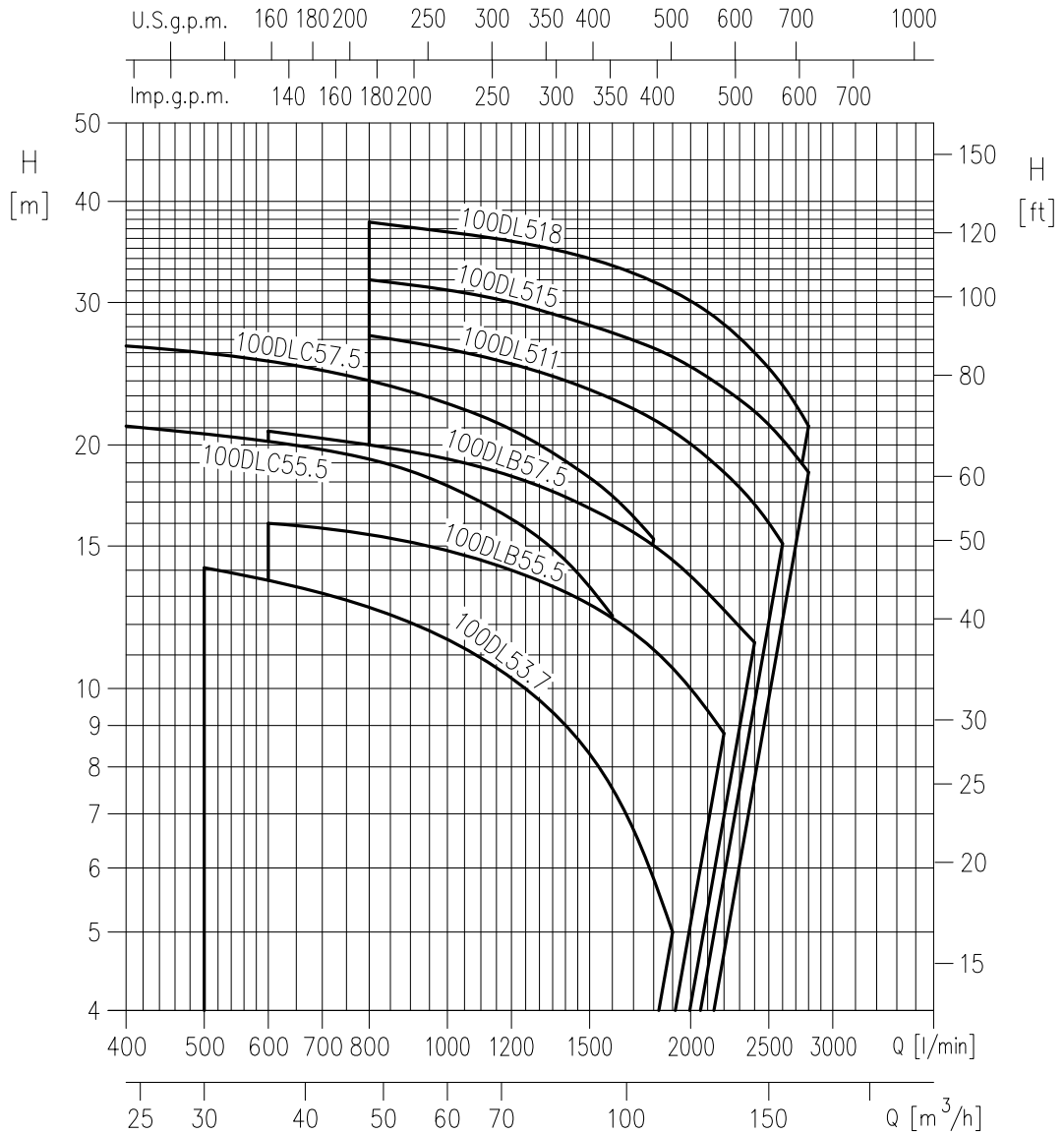
Model	Power		Q=Capacity													
	[kW]	[HP]	l/min	70	150	200	400	450	600	800	950	1000	1200	1400	1600	1800
			m³/h	4	9	12	24	27	36	48	57	60	72	84	96	108
H=Total manometric head in meters																
65DL51.5	1.5	2	16.4	15.5	14.3	13.6	10.7	9.9	-	-	-	-	-	-	-	-
80DL51.5	1.5	2	14.0	-	-	12.2	10.0	9.4	7.6	5.3	3.3	-	-	-	-	-
80DL52.2	2.2	3	17.1	-	-	14.7	12.4	11.8	10.2	8.2	6.7	6.2	4.0	-	-	-
80DL53.7	3.7	5	19.4	-	-	18.7	17.6	17.3	16.2	14.5	13.1	12.6	10.4	-	-	-
80DLC55.5	5.5	7.5	22.2	-	-	-	21.1	20.9	20.2	19.2	18.2	17.8	16.2	14.4	12.3	-
80DLC57.5	7.5	10	28.0	-	-	-	26.5	26.3	25.4	24.0	22.9	22.5	20.9	19.1	17.3	15.3

SELECTION CHART

50 Hz

Rev. 0

100DL



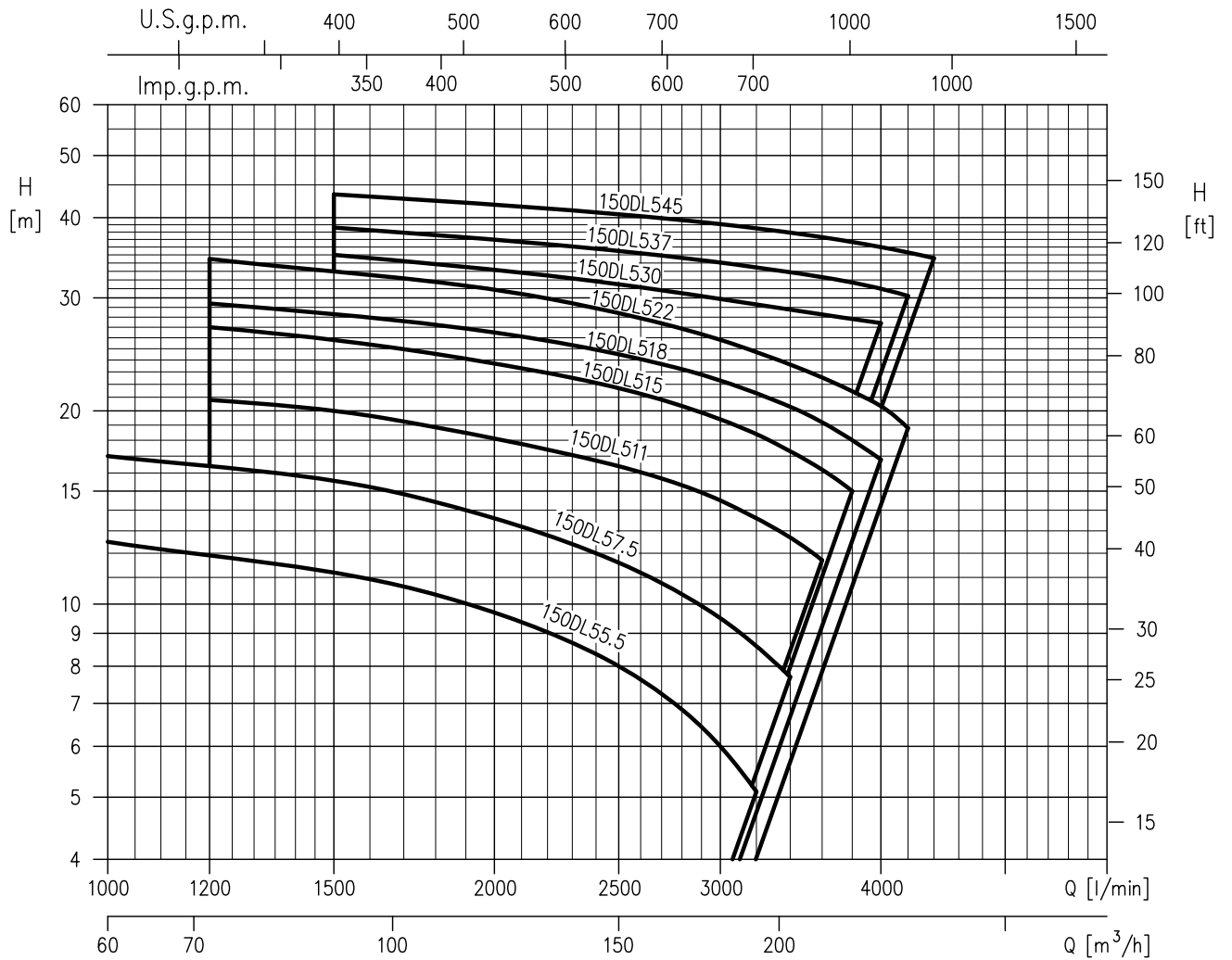
Model	Power		Q=Capacity													
	[kW]	[HP]	l/min 0	400	500	600	800	1200	1500	1600	1800	1900	2200	2400	2600	2800
			m³/h 0	24	30	36	48	72	90	96	108	114	132	144	156	168
H=Total manometric head in meters																
100DLC55.5	5.5	7.5	22.2	21.1	20.7	20.2	19.2	16.2	13.3	12.3	-	-	-	-	-	-
100DLC57.5	7.5	10	28.0	26.5	25.9	25.4	24.0	20.9	18.3	17.3	15.3	-	-	-	-	-
100DL53.7	3.7	5	16.0	-	14.1	13.6	12.6	10.3	8.3	7.5	5.9	5.0	-	-	-	-
100DLB55.5	5.5	7.5	17.0	-	-	16.0	15.5	14.0	12.7	12.2	11.1	10.6	8.8	-	-	-
100DLB57.5	7.5	10	22.5	-	-	20.8	20.0	18.3	16.7	16.1	15.1	15.0	12.5	11.4	-	-
100DL511	11	15	30.4	-	-	-	27.3	25.2	23.4	22.8	21.5	20.8	18.5	16.9	15.1	-
100DL515	15	20	33.9	-	-	-	32.0	30.0	28.1	27.6	26.4	25.7	23.5	22.0	20.3	18.5
100DL518.5	18.5	25	41.0	-	-	-	37.7	35.7	34.0	33.4	31.9	31.0	28.2	26.0	23.7	21.1

SELECTION CHART

50 Hz

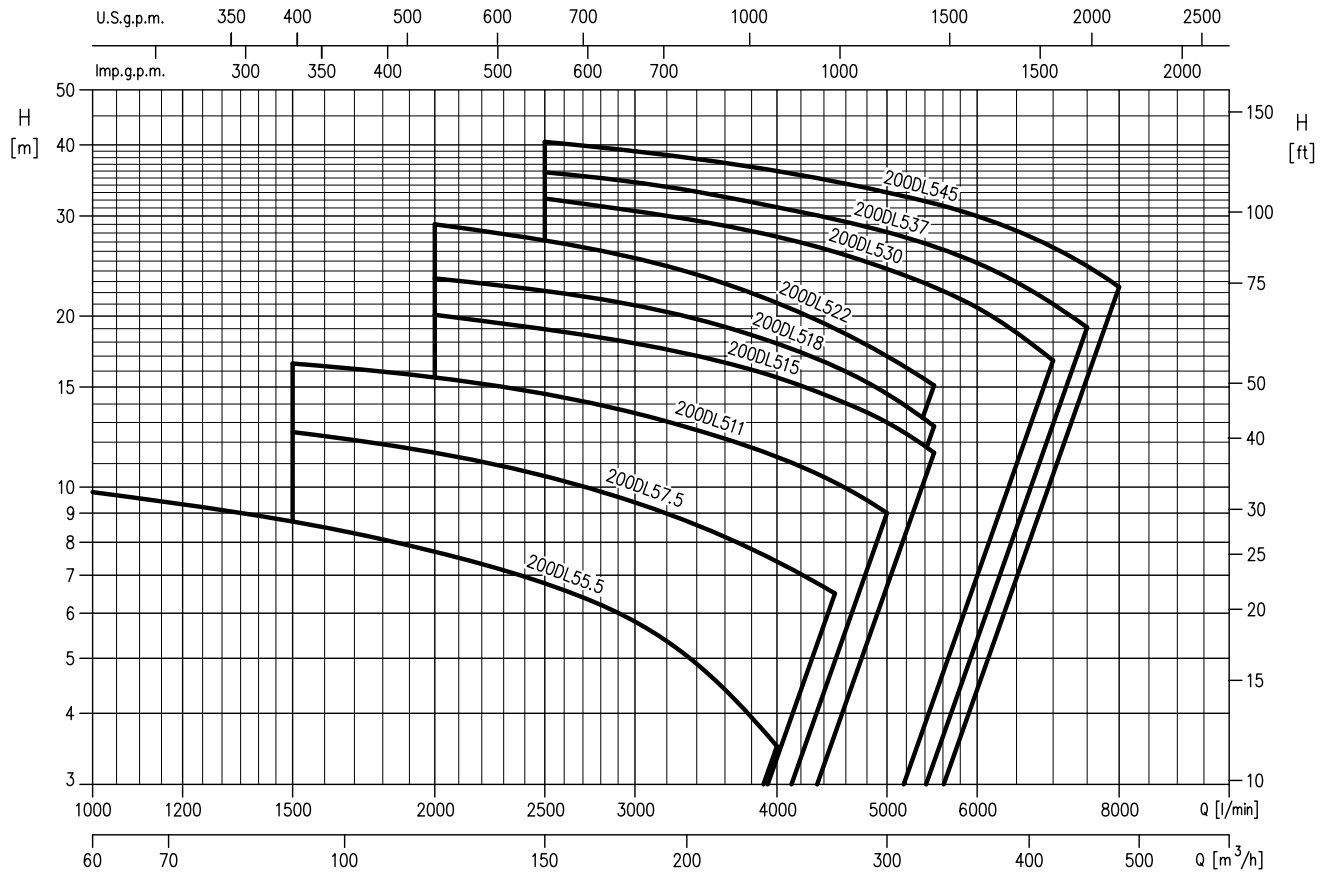
Rev. 0

150DL



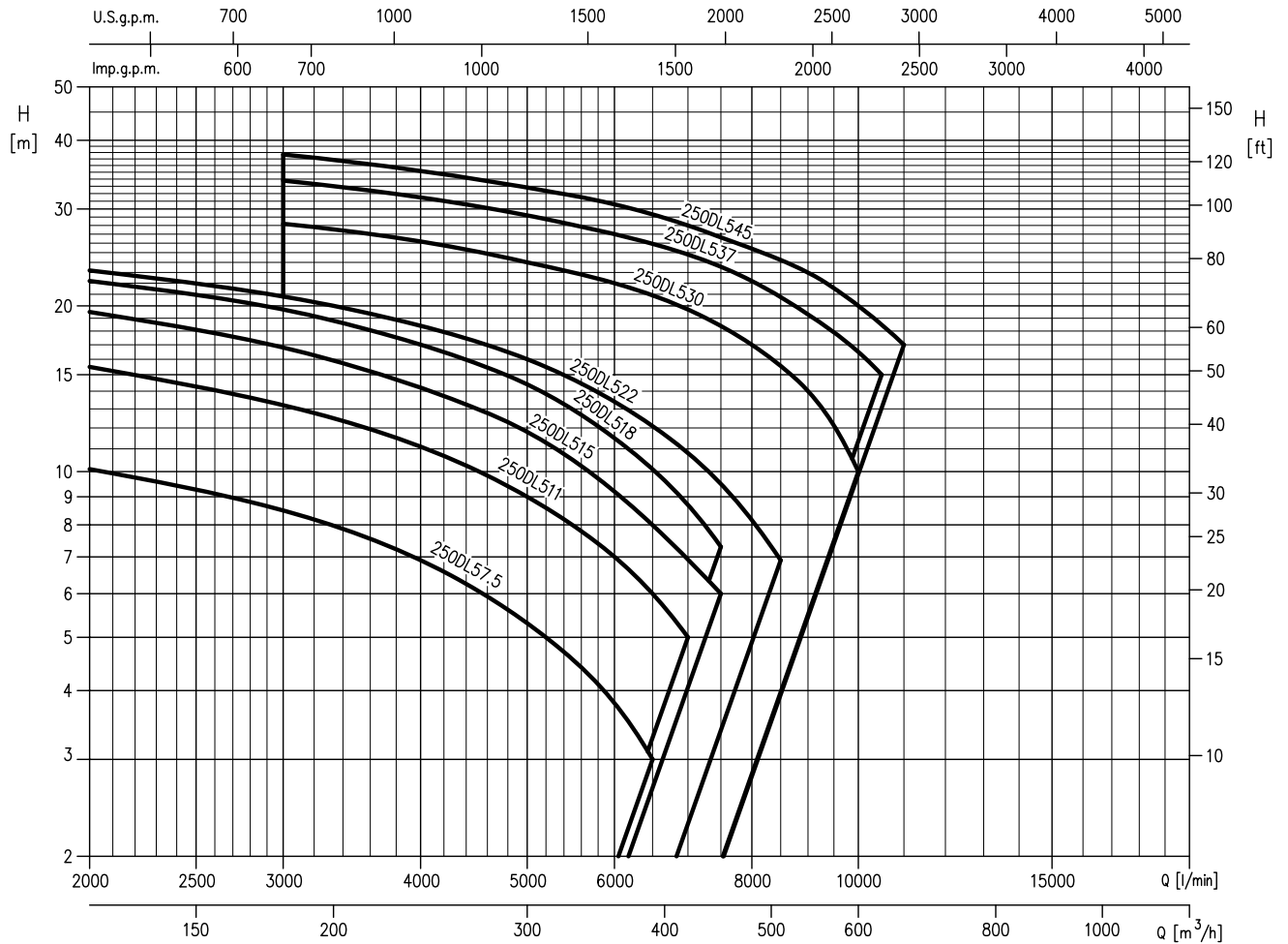
Model	Power		Q=Capacity																
	[kW]	[HP]	l/min	1000	1200	1500	2000	2500	3000	3200	3400	3500	3600	3800	4000	4200	4400		
			m³/h	60	72	90	120	150	180	192	204	210	216	228	240	252	264		
				H=Total manometric head in meters															
150DL55.5	5.5	7.5	15.8	12.5	11.9	11.2	9.7	8.0	6.0	5.1	-	-	-	-	-	-	-		
150DL57.5	7.5	10	19.6	17.0	16.4	15.2	13.6	11.6	9.5	8.6	7.7	-	-	-	-	-	-		
150DL511	11	15	24.7	-	20.8	20.0	18.1	16.4	14.5	13.6	12.7	12.2	11.7	-	-	-	-		
150DL515	15	20	31.4	-	27.0	25.8	23.7	21.7	19.4	18.4	17.3	16.8	16.2	15.0	-	-	-		
150DL518.5	18.5	25	32.5	-	29.4	28.3	26.5	24.5	22.3	21.3	20.3	19.8	19.2	18.0	16.8	-	-		
150DL522	22	30	38.7	-	34.5	33.0	30.9	28.4	25.8	24.7	23.6	23.0	22.4	21.2	20.5	18.8	-		
150DL530	30	40	39.0	-	-	35.0	33.2	31.5	29.9	29.3	28.8	28.5	28.3	27.8	27.4	-	-		
150DL537	37	50	43.0	-	-	38.6	37.0	35.5	34.1	33.5	32.9	32.6	32.3	31.7	31.0	30.2	-		
150DL545	45	60	48.0	-	-	43.5	42.0	40.5	39.1	38.5	37.9	37.6	37.3	36.7	36.0	35.3	34.6		

200DL



Model	Power		Q=Capacity														
	[kW]	[HP]	l/min	0	1000	1500	2000	2500	3000	4000	4500	5000	5500	6000	7000	7500	8000
			m ³ /h	0	60	90	120	150	180	240	270	300	330	360	420	450	480
H=Total manometric head in meters																	
200DL55.5	5.5	7.5	12.0	9.8	8.7	7.7	6.8	5.8	3.5	-	-	-	-	-	-	-	-
200DL57.5	7.5	10	15.5	-	12.5	11.5	10.5	9.4	7.4	6.5	-	-	-	-	-	-	-
200DL511	11	15	19.7	-	16.5	15.6	14.6	13.5	11.3	10.2	9.0	-	-	-	-	-	-
200DL515	15	20	23.9	-	-	20.1	19.0	17.9	15.6	14.3	13.0	11.5	-	-	-	-	-
200DL518.5	18.5	25	26.5	-	-	23.3	22.2	20.9	17.9	16.3	14.6	12.8	-	-	-	-	-
200DL522	22	30	34.9	-	-	29.0	27.2	25.3	21.1	19.0	17.0	15.1	-	-	-	-	-
200DL530	30	40	39.7	-	-	-	32.2	30.6	27.6	25.9	24.2	22.5	20.7	16.7	-	-	-
200DL537	37	50	43.0	-	-	-	35.8	34.4	31.1	29.6	28.1	26.5	24.8	21.0	19.1	-	-
200DL545	45	60	48.0	-	-	-	40.5	39.0	36.0	34.5	33.0	31.5	30.0	26.4	24.5	22.5	-

250DL



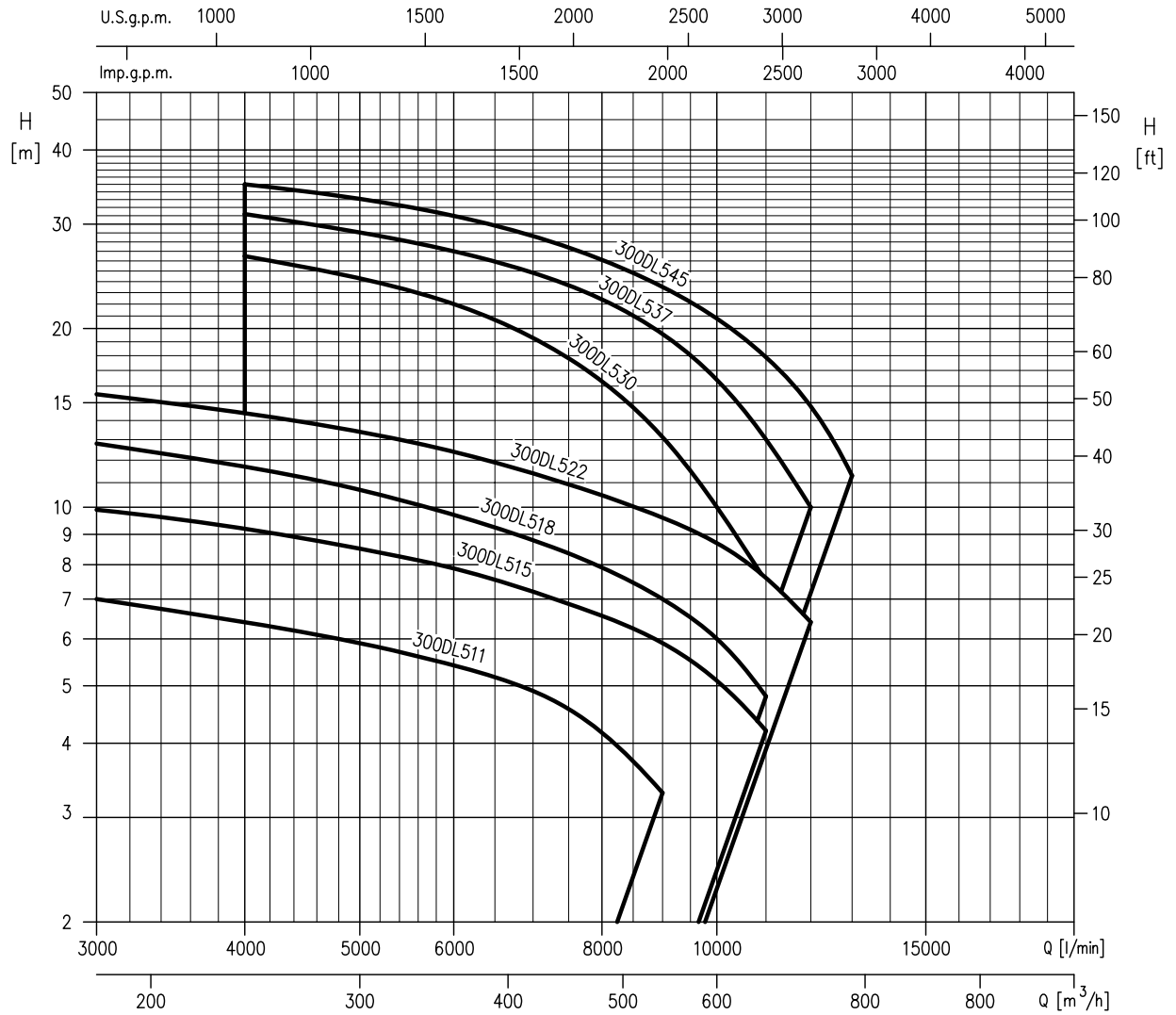
Model	Power		Q=Capacity														
	[kW]	[HP]	l/min	2000	3000	4000	5000	6000	6500	7000	7500	8000	8500	9000	10000	10500	11000
			m ³ /h	120	180	240	300	360	390	420	450	480	510	540	600	630	660
H=Total manometric head in meters																	
250DL57.5	7.5	10	13.6	10.1	8.5	6.9	5.3	3.8	3.0	-	-	-	-	-	-	-	-
250DL511	11	15	20.2	15.5	13.2	11.1	9.0	7.0	6.0	5.0	-	-	-	-	-	-	-
250DL515	15	20	25.2	19.5	16.8	14.2	11.8	9.2	8.0	6.9	6.0	-	-	-	-	-	-
250DL518.5	18.5	25	27.0	22.2	19.7	17.0	14.4	11.5	10.1	8.7	7.3	-	-	-	-	-	-
250DL522	22	30	27.8	23.2	20.8	18.4	16.0	13.4	12.1	10.8	9.5	8.2	6.9	-	-	-	-
250DL530	30	40	36.0	-	28.2	26.2	24.0	22.0	20.9	19.7	18.4	17.0	15.6	14.0	10.0	-	-
250DL537	37	50	40.0	-	33.8	31.5	29.2	27.0	25.9	24.8	23.5	22.2	20.8	19.3	16.5	15.0	-
250DL545	45	60	45.0	-	37.7	35.2	32.8	30.6	29.3	28.0	26.7	25.4	24.2	23.0	20.0	18.5	17.0

SELECTION CHART

50 Hz

Rev. 0

300DL



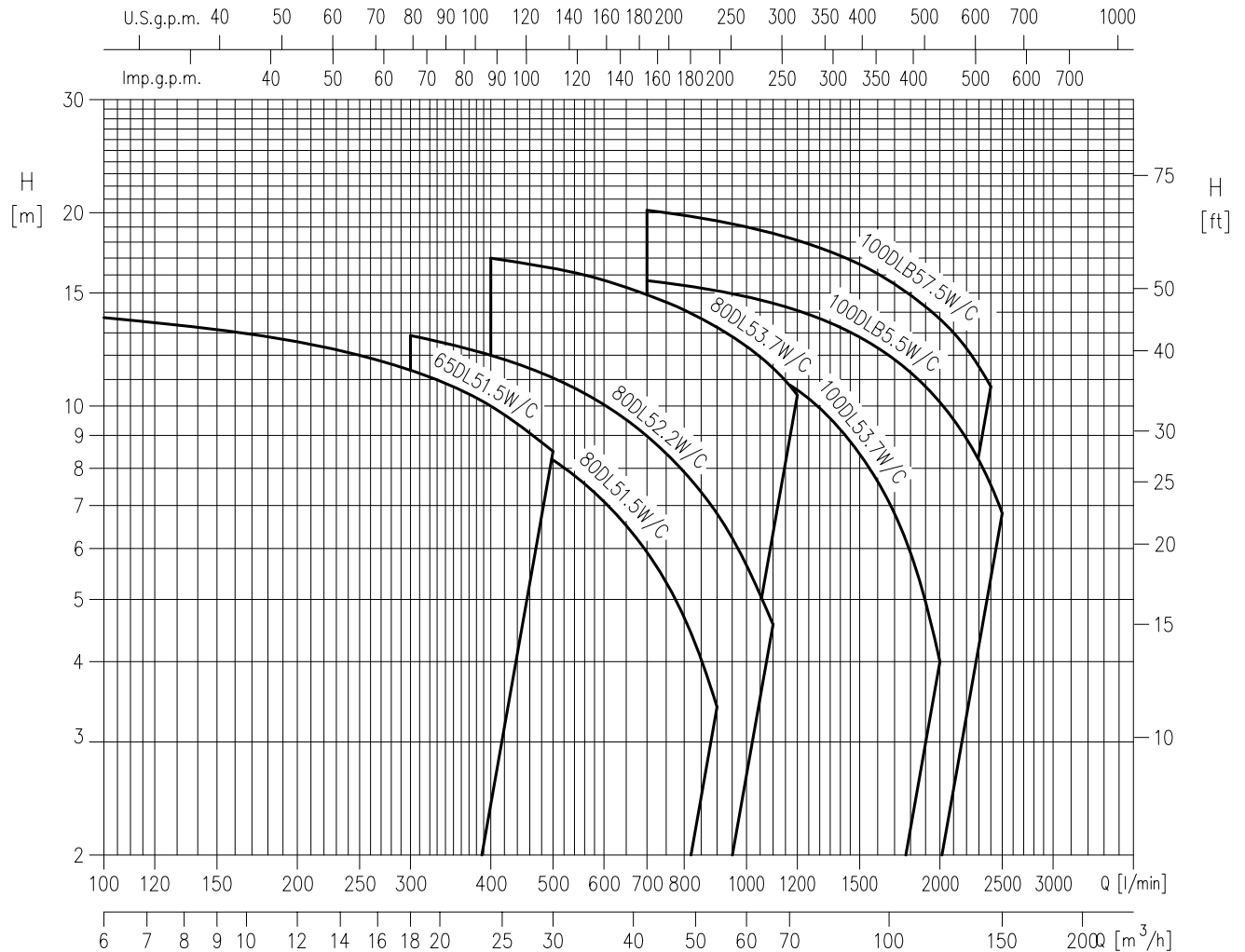
Model	Power		Q=Capacity												
	[kW]	[HP]	l/min 0	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	
			m³/h 0	180	240	300	360	420	480	540	600	660	720	780	
H=Total manometric head in meters															
300DL511	11	15	9.2	7.0	6.4	5.9	5.5	4.9	4.2	3.3	-	-	-	-	
300DL515	15	20	12.2	9.9	9.2	8.5	8.0	7.2	6.6	5.9	5.1	4.2	-	-	
300DL518.5	18.5	25	16.6	12.8	11.7	10.7	9.7	8.8	7.9	7.0	6.0	4.8	-	-	
300DL522	22	30	19.0	15.5	14.4	13.4	12.4	11.4	10.5	9.6	8.7	7.6	6.4	-	
300DL530	30	40	36.0	-	26.5	24.4	22.0	19.3	16.3	13.1	10.0	7.5	-	-	
300DL537	37	50	40.0	-	31.2	29.2	27.0	24.8	22.4	19.6	16.4	13.0	10.0	-	
300DL545	45	60	45.0	-	35.0	33.1	31.0	28.6	26.1	23.5	20.8	17.9	14.8	11.3	

SELECTION CHART

50 Hz

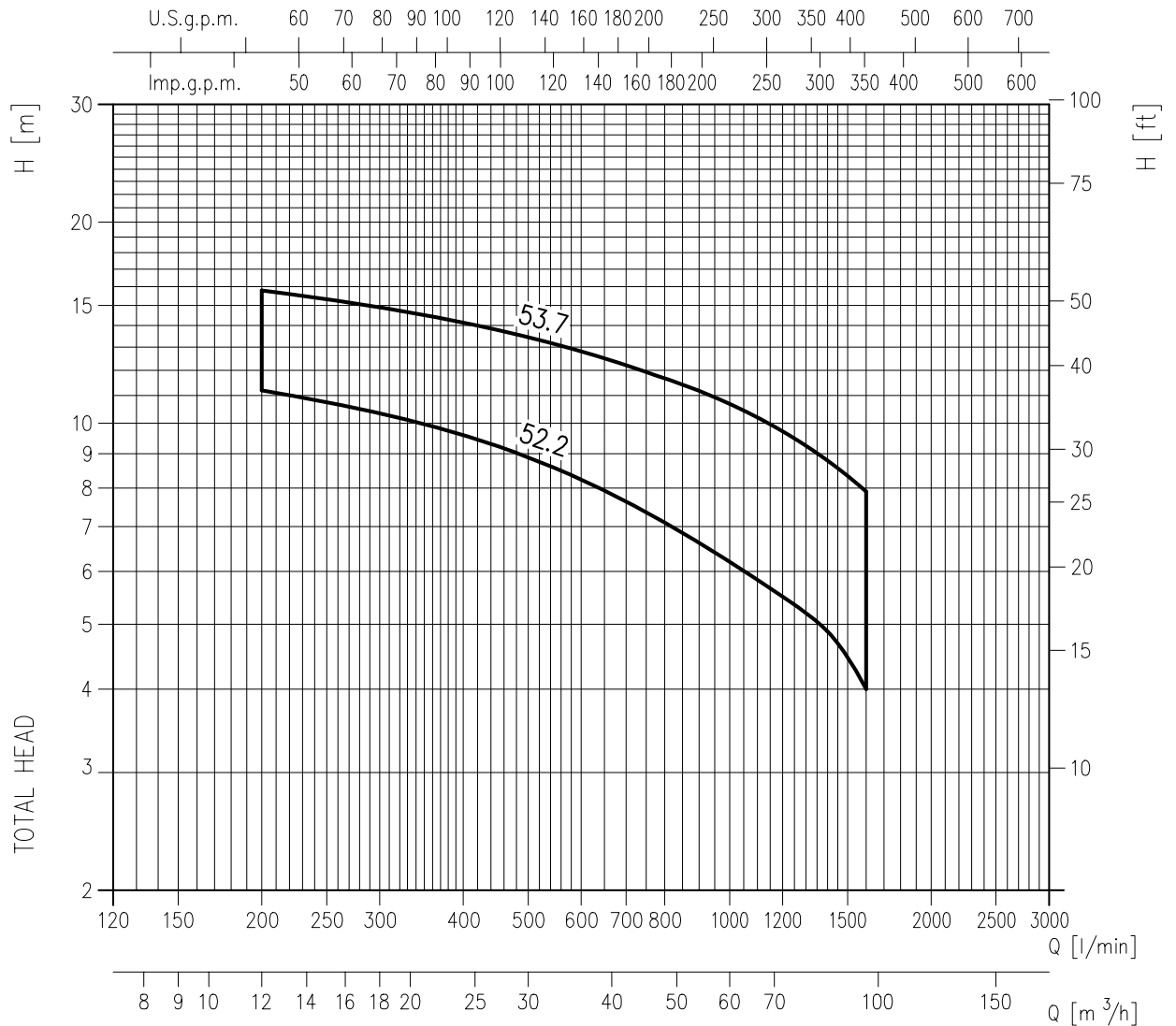
Rev. 0

DL W/C



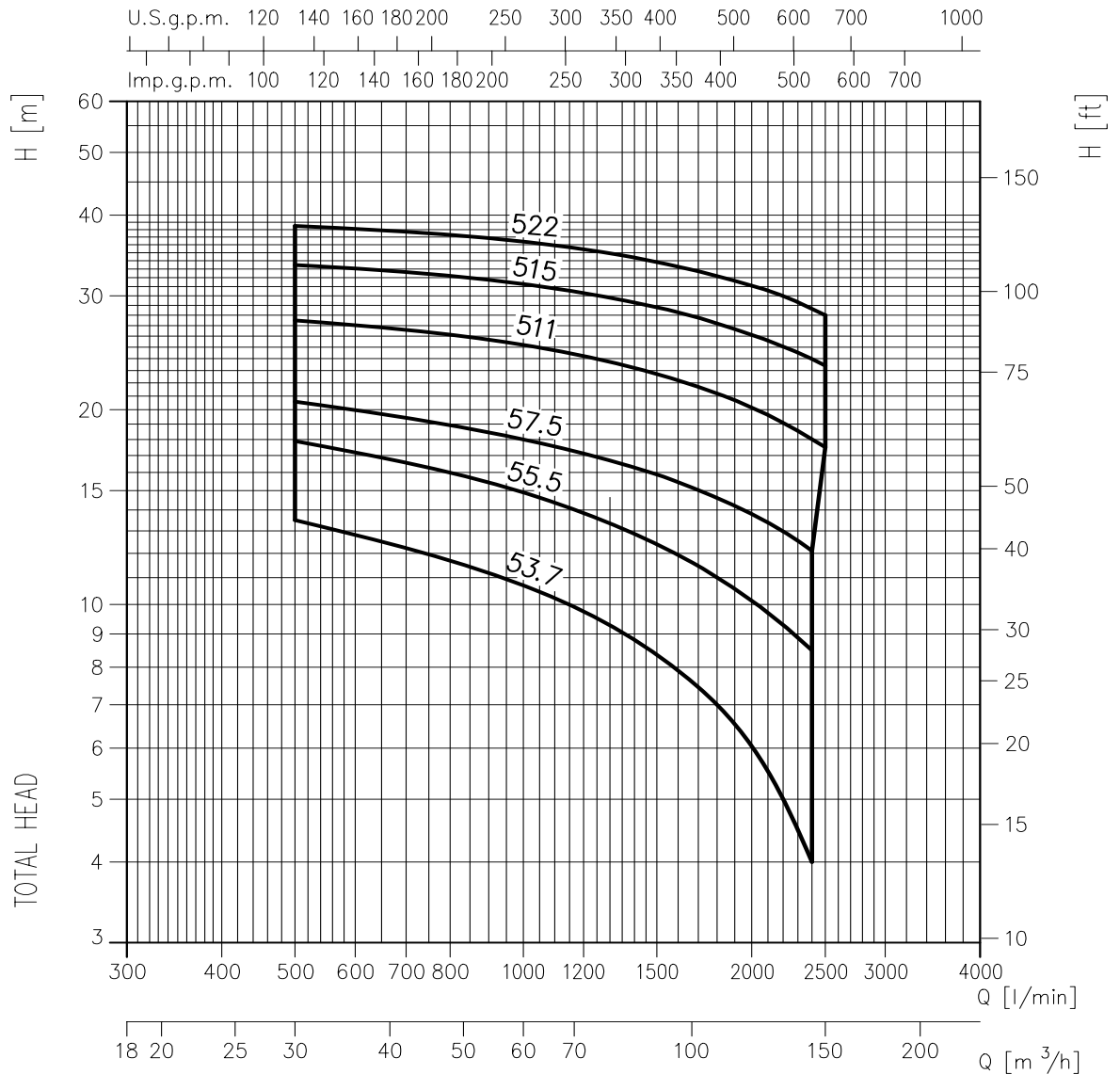
Model	Power		Q=Capacity																
	[kW]	[HP]	l/min	100	250	300	400	500	700	900	1000	1100	1200	1400	1600	2000	2400	2500	
			m³/h	6	15	18	24	30	42	54	60	66	72	84	96	120	144	150	
			H=Total manometric head in meters																
65DL51.5W/C	1.5	2	14.8	13.7	12.0	11.4	10.0	8.5	-	-	-	-	-	-	-	-	-	-	-
80DL51.5W/C	1.5	2	12.7	-	10.7	10.3	9.3	8.2	5.9	3.4	-	-	-	-	-	-	-	-	-
80DL52.2W/C	2.2	3	15.2	-	-	12.9	12.0	11.1	9.0	6.8	5.7	4.6	-	-	-	-	-	-	-
80DL53.7W/C	3.7	5	18.5	-	-	-	17.0	16.4	14.9	13.4	12.6	11.6	10.4	-	-	-	-	-	-
100DL53.7W/C	3.7	5	16.1	-	-	-	-	14.1	13.1	12.2	11.7	11.2	10.6	9.2	7.6	4.0	-	-	-
100DLB55.5W/C	5.5	7.5	16.9	-	-	-	-	-	15.7	15.1	14.8	14.5	14.1	13.3	12.3	10.1	7.5	6.8	-
100DLB57.5W/C	7.5	10	22.5	-	-	-	-	-	20.2	19.4	19.0	18.6	18.1	17.2	16.1	13.7	10.7	-	-

80DML



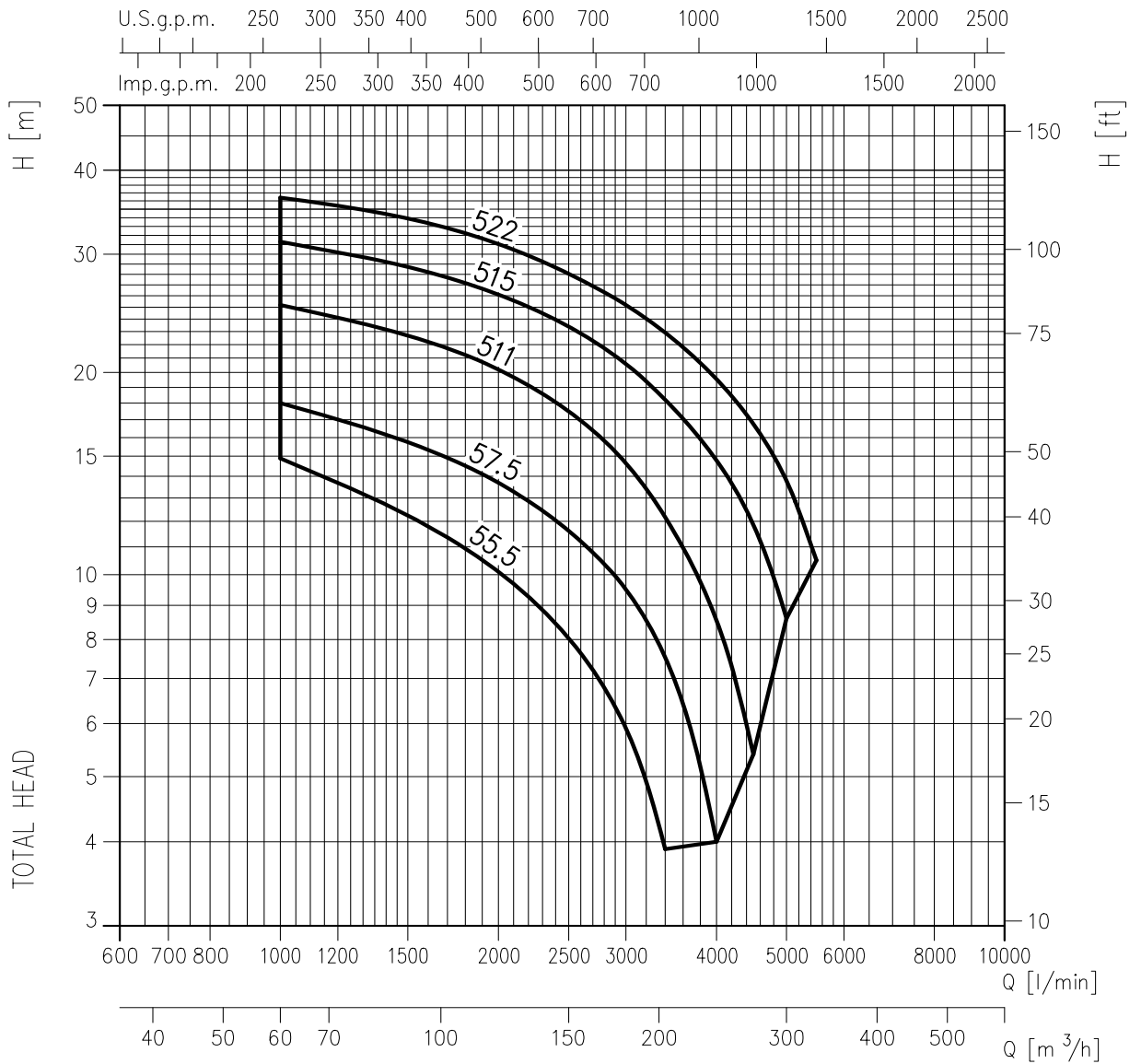
Model	Power		Q= Capacity									
			[l/min]	0	200	400	600	800	1000	1200	1400	1600
	kW	HP	[m³/h]	0	12	24	36	48	60	72	84	96
H=Total manometric head in meters												
80DML52.2	2.2	3	13.1	11.2	9.6	8.2	7.1	6.2	5.5	4.9	4	
80DML53.7	3.7	5	17.9	15.8	14.2	12.8	11.7	10.7	9.7	8.8	7.9	

100DML



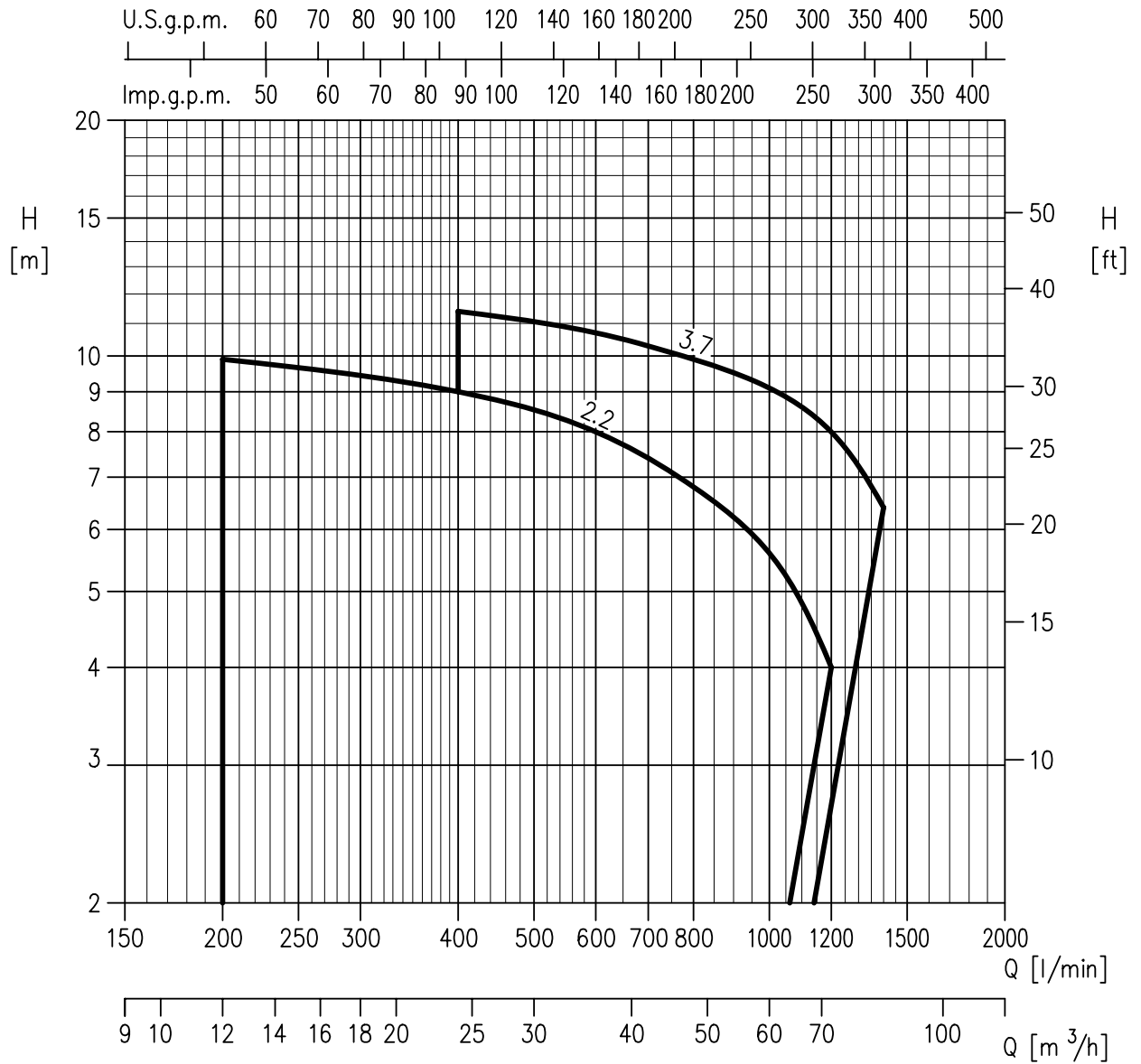
Model	Power		Q= Capacity								
	kW	HP	[l/min]	500	1000	1300	1600	1900	2200	2400	2500
			[m³/h]	30	60	78	96	114	132	144	150
H=Total manometric head in meters											
100DML53.7	3.7	5	17.9	13.5	10.7	9.3	7.9	6.5	5.0	4.0	-
100DML55.5	5.5	7.5	22.0	17.9	14.9	13.4	11.9	10.6	9.3	8.5	-
100DML57.5	7.5	10	25.3	20.6	18.0	16.7	15.5	14.2	13.0	12.1	-
100DML511	11	15	30.3	27.5	25.2	23.7	22.2	20.7	19.1	18.0	17.5
100DML515	15	20	35.0	33.5	31.3	29.8	28.3	26.7	25.1	24.0	23.4
100DML522	22	30	40.0	38.5	36.4	34.9	33.3	31.7	30.0	28.7	28.0

150DML



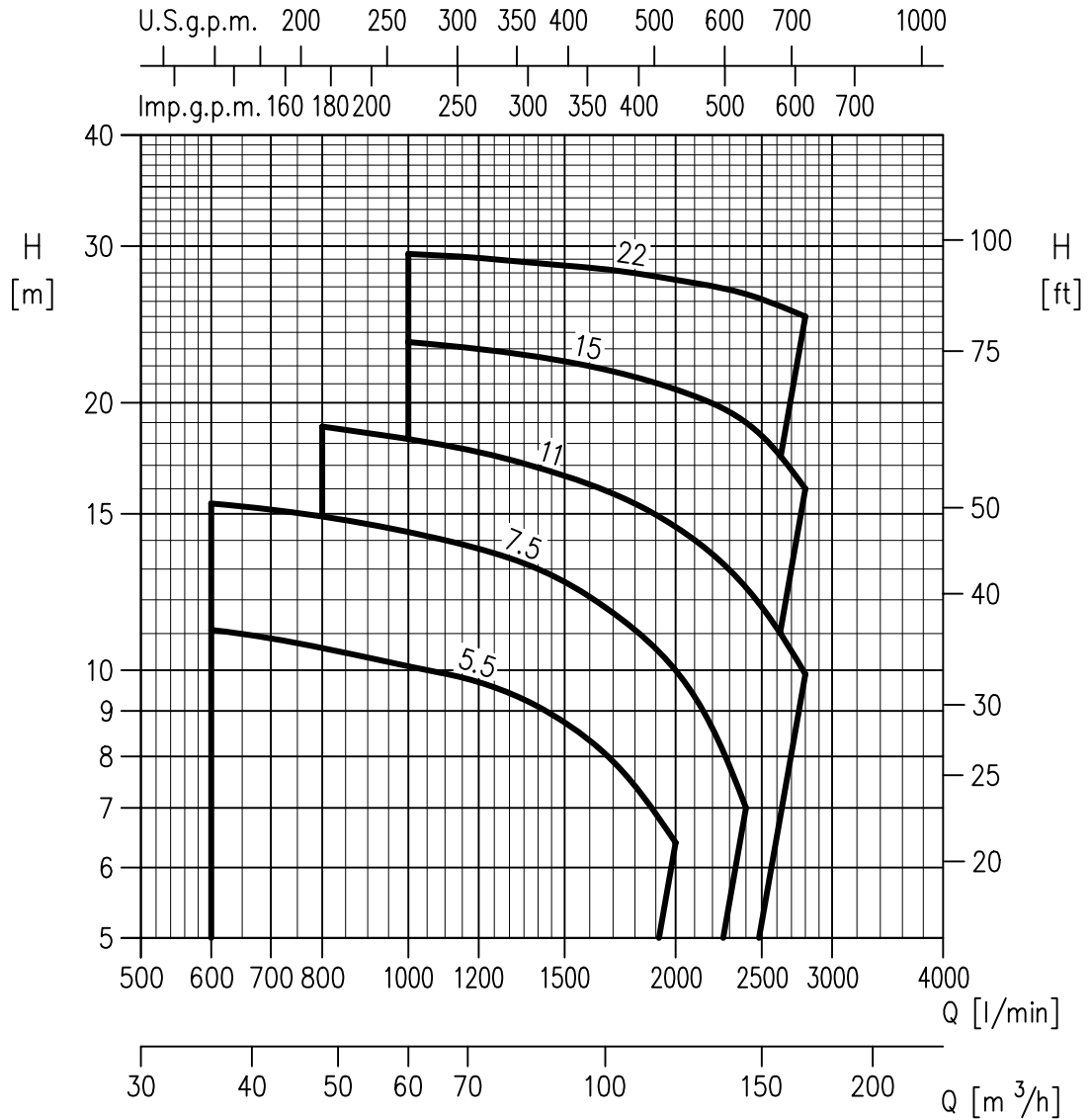
Model	Power		Q= Capacity									
	kW	HP	[l/min]	1000	2000	2500	3000	3400	4000	4500	5000	5500
			[m³/h]	60	120	150	180	204	240	270	300	330
H=Total manometric head in meters												
150DML55.5	5.5	7.5	22.0	14.9	10.1	8.0	5.9	3.9	-	-	-	-
150DML57.5	7.5	10	25.3	18.0	13.7	11.6	9.5	7.5	4.0	-	-	-
150DML511	11	15	30.3	25.2	20.2	17.5	14.7	12.2	8.6	5.4	-	-
150DML515	15	20	35.0	31.3	26.1	23.4	20.6	18.2	14.8	11.9	8.6	-
150DML522	22	30	40.0	36.4	31.1	28.0	25.2	22.9	19.5	16.8	13.8	10.5

80DMLV



Model	Power		Q= Capacity							
	kW	HP	[l/min] 0	200	400	600	800	1000	1200	1400
			[m³/h] 0	12	24	36	48	60	72	84
H=Total manometric head in meters										
80DMLV52.2	2.2	3	10.7	9.9	9.0	8.0	6.8	5.6	4.0	-
80DMLV53.7	3.7	5	12.8	12.0	11.4	10.7	9.9	9.1	8.0	6.4

100DMLV



Model	Power		Q= Capacity									
	kW	HP	[l/min] 0	600	800	1000	1200	1400	1700	2000	2400	2800
			[m³/h] 0	36	48	60	72	84	102	120	144	168
			H=Total manometric head [m]									
100DMLV55.5	5.5	7.5	13.2	11.1	10.6	10.1	9.7	9.1	7.9	6.4	-	-
100DMLV57.5	7.5	10	16.8	15.4	14.9	14.3	13.7	13.0	11.6	10.0	7.0	-
100DMLV511	11	15	20.6	-	18.8	18.2	17.6	16.9	15.8	14.5	12.4	9.9
100DMLV515	15	20	24.9	-	-	23.4	23.0	22.5	21.7	20.7	19.0	16.0
100DMLV522	22	30	32.1	-	-	29.4	29.1	28.7	28.2	27.5	26.5	25.0

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)

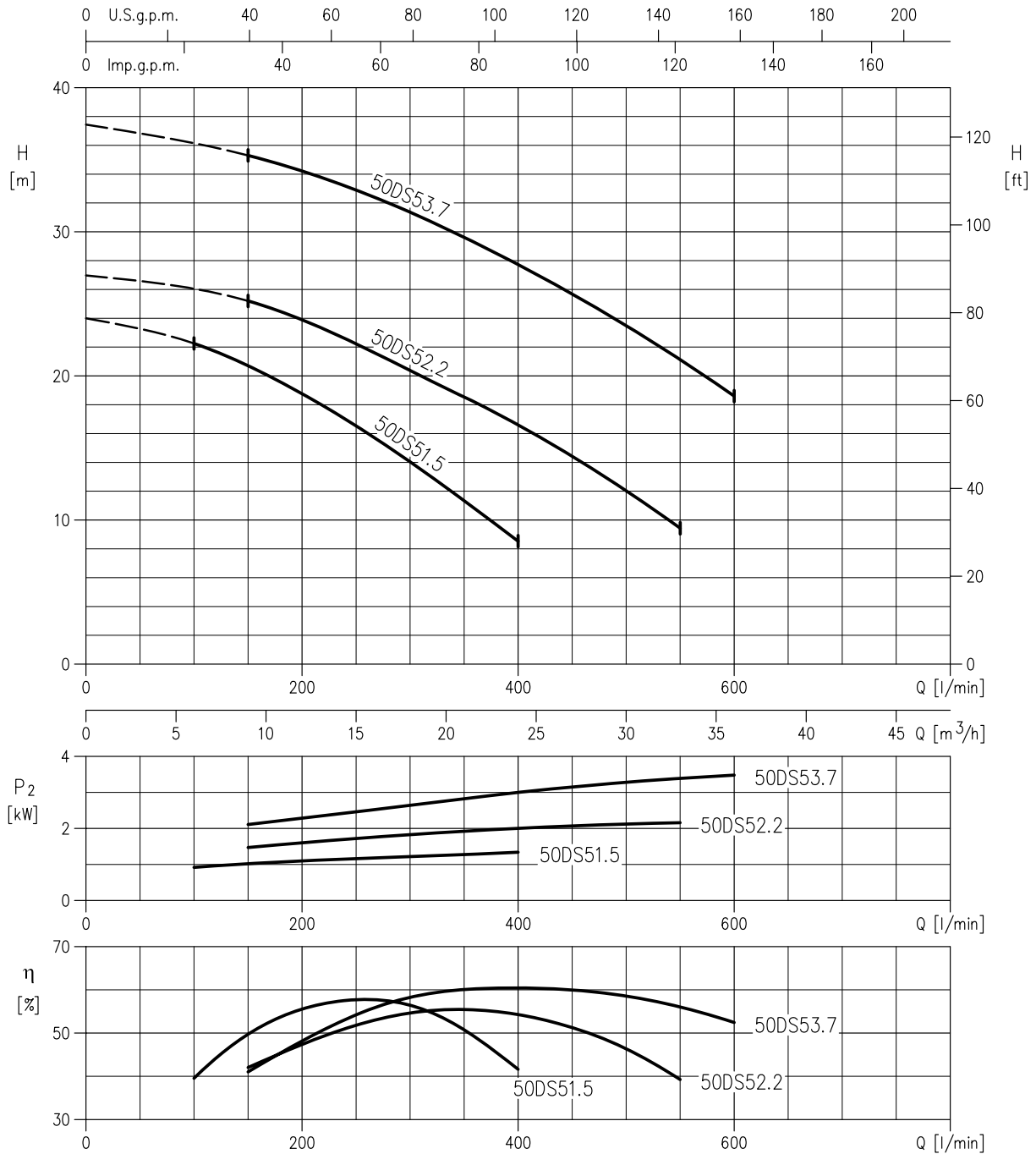
The continuous curves indicate the recommended working range. The dotted curve is only a guide.

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:

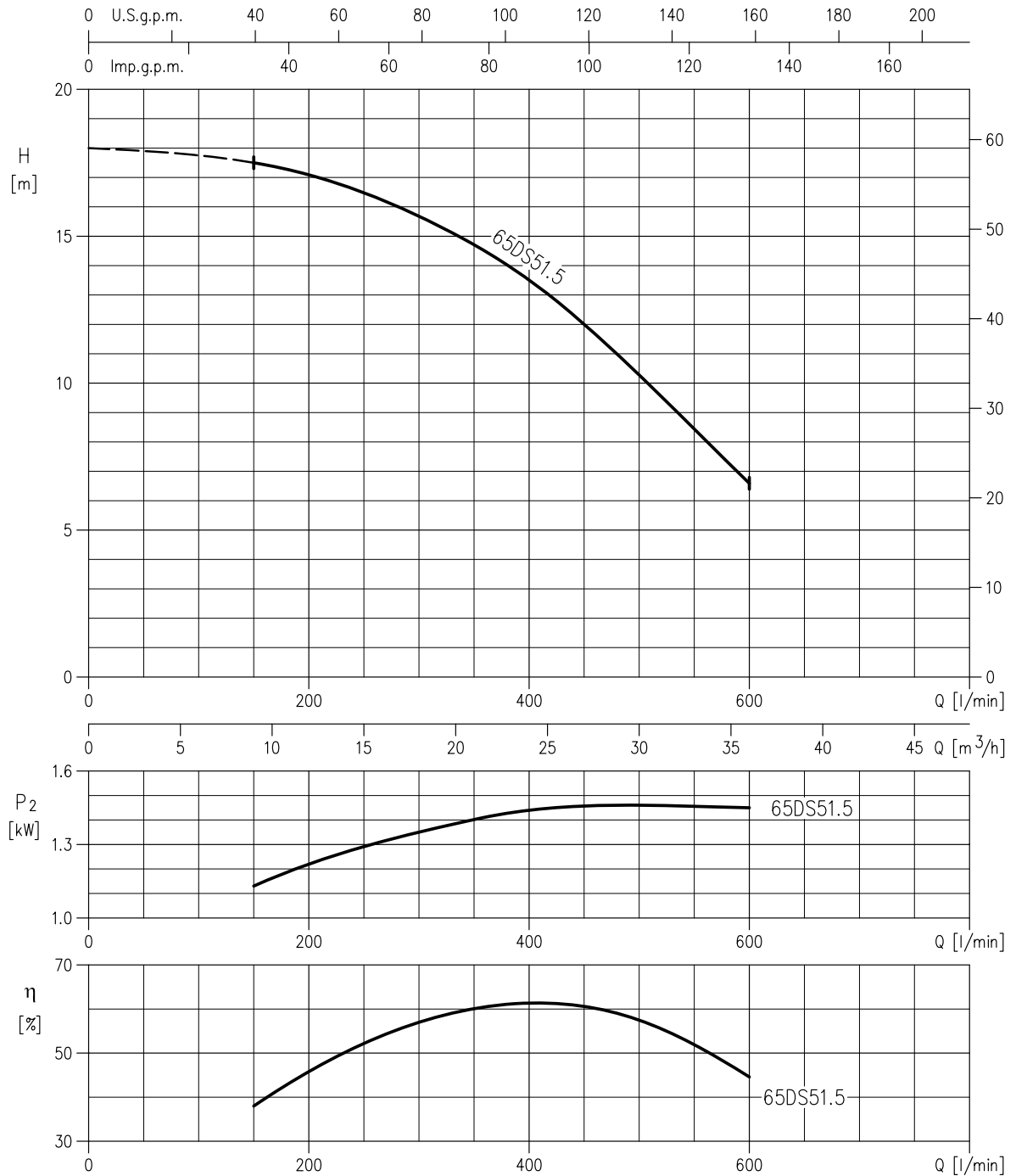
- Q = volume flow rate
- H = total head
- P_2 = pump power input (shaft power)
- η = pump efficiency

50DS51.5 (1.5 kW)
 50DS52.2 (2.2 kW)
 50DS53.7 (3.7 kW)



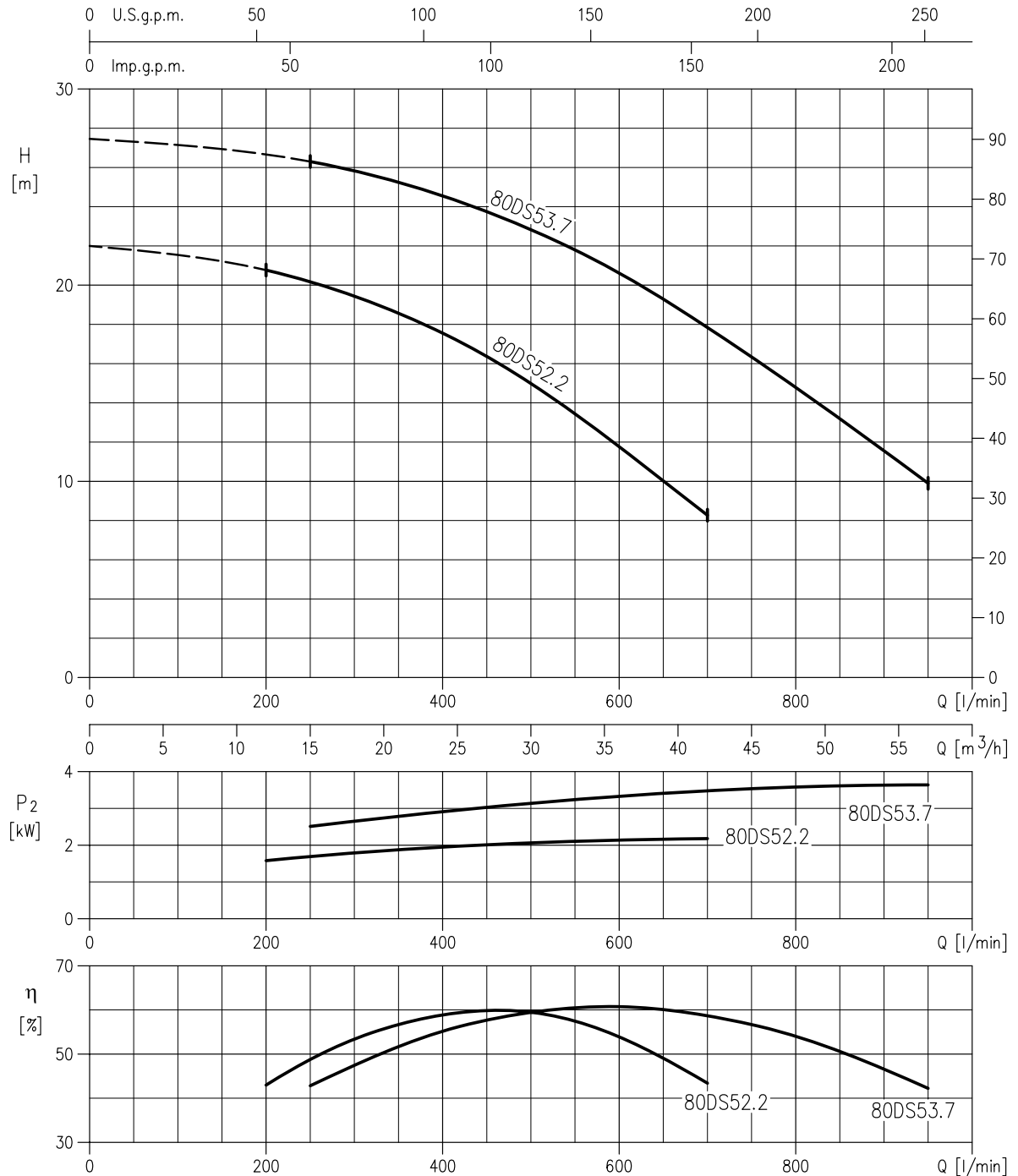
Rotation speed $\approx 2850 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

65DS51.5 (1.5 kW)



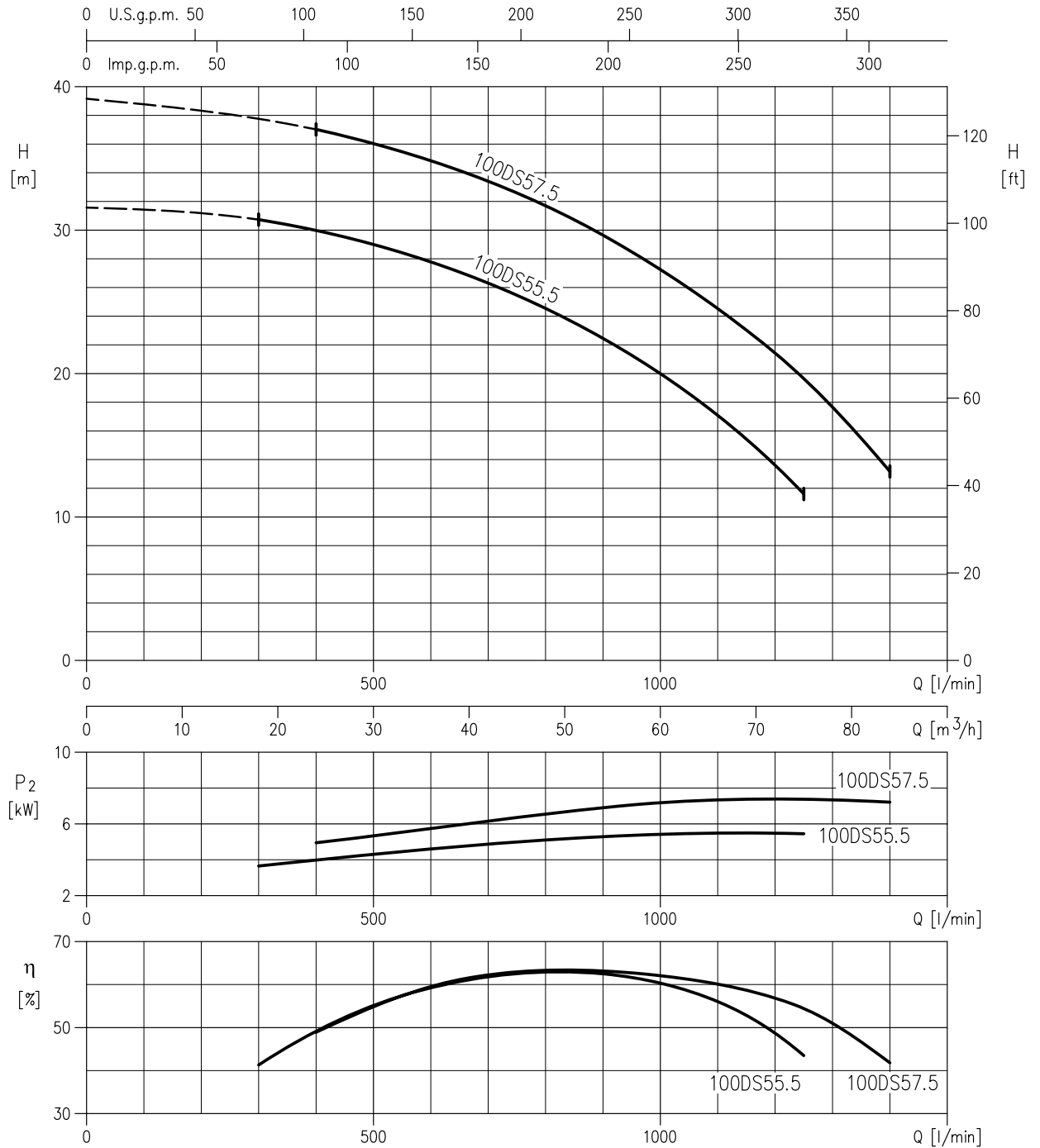
Rotation speed $\approx 2850 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DS52.2 (2.2 kW)
80DS53.7 (3.7 kW)



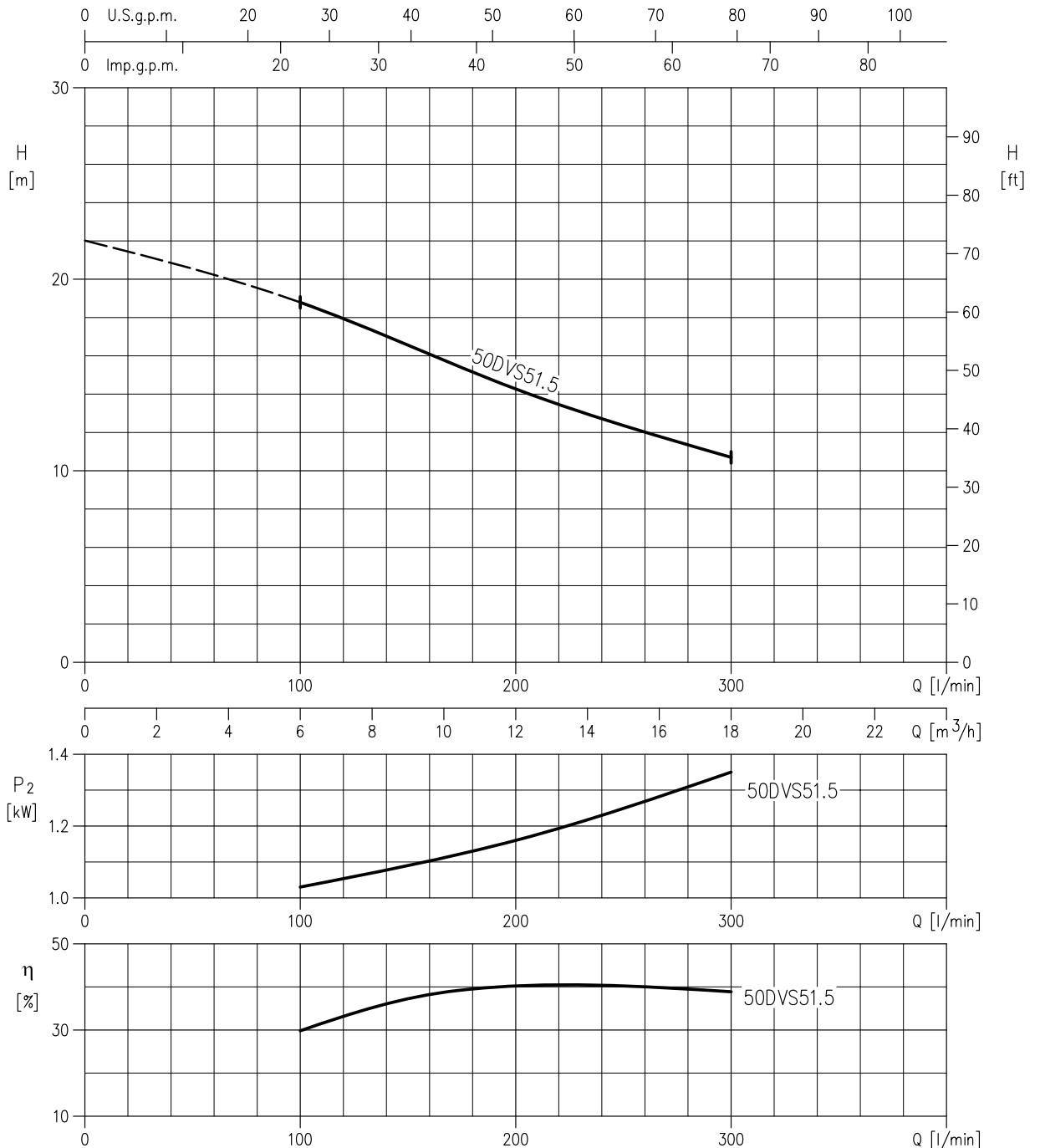
Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

100DS55.5 (5.5 kW)
100DS57.5 (7.5 kW)



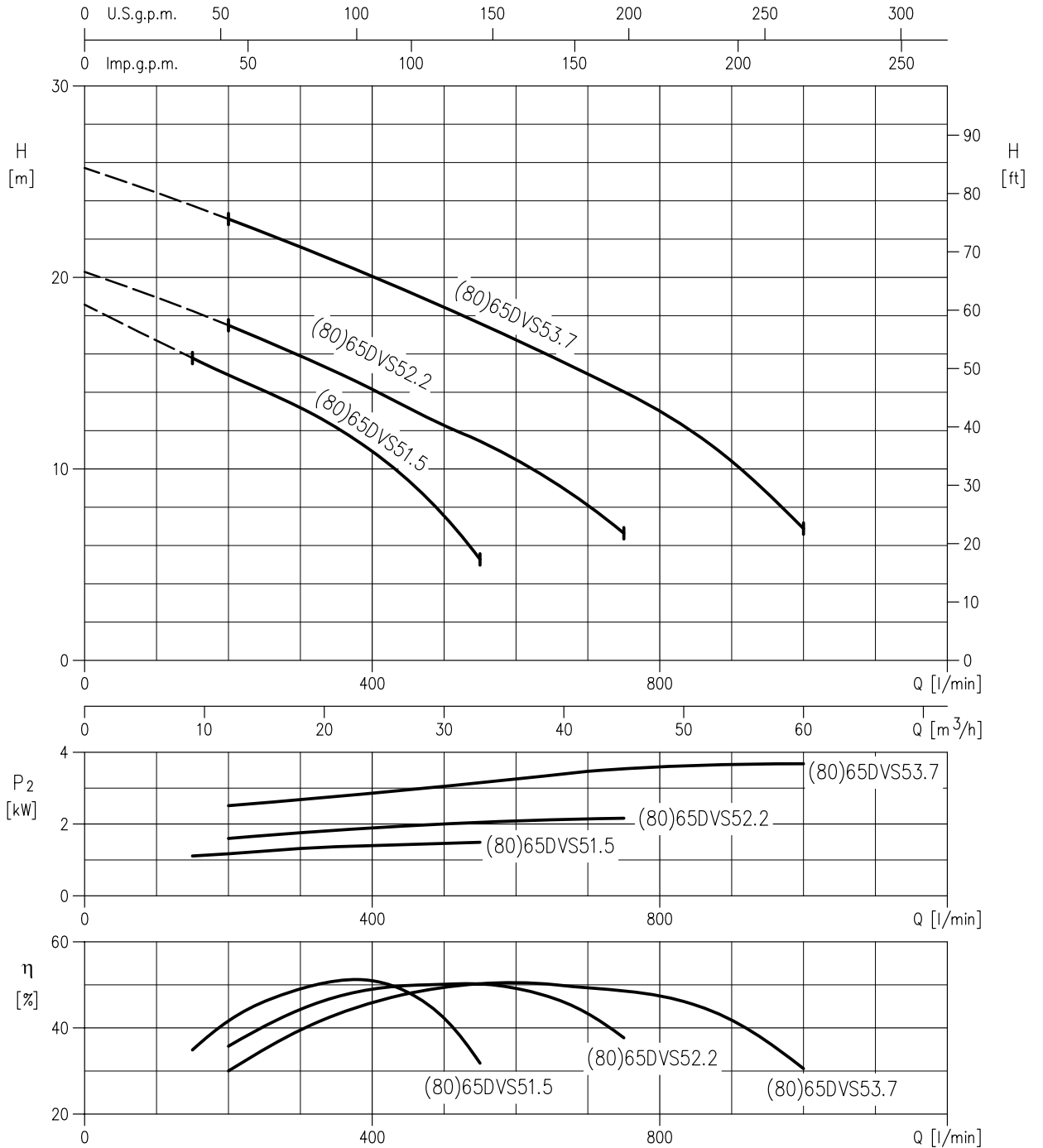
Rotation speed $\approx 2850 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

50DVS51.5 (1.5 kW)



Rotation speed $\approx 2850 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

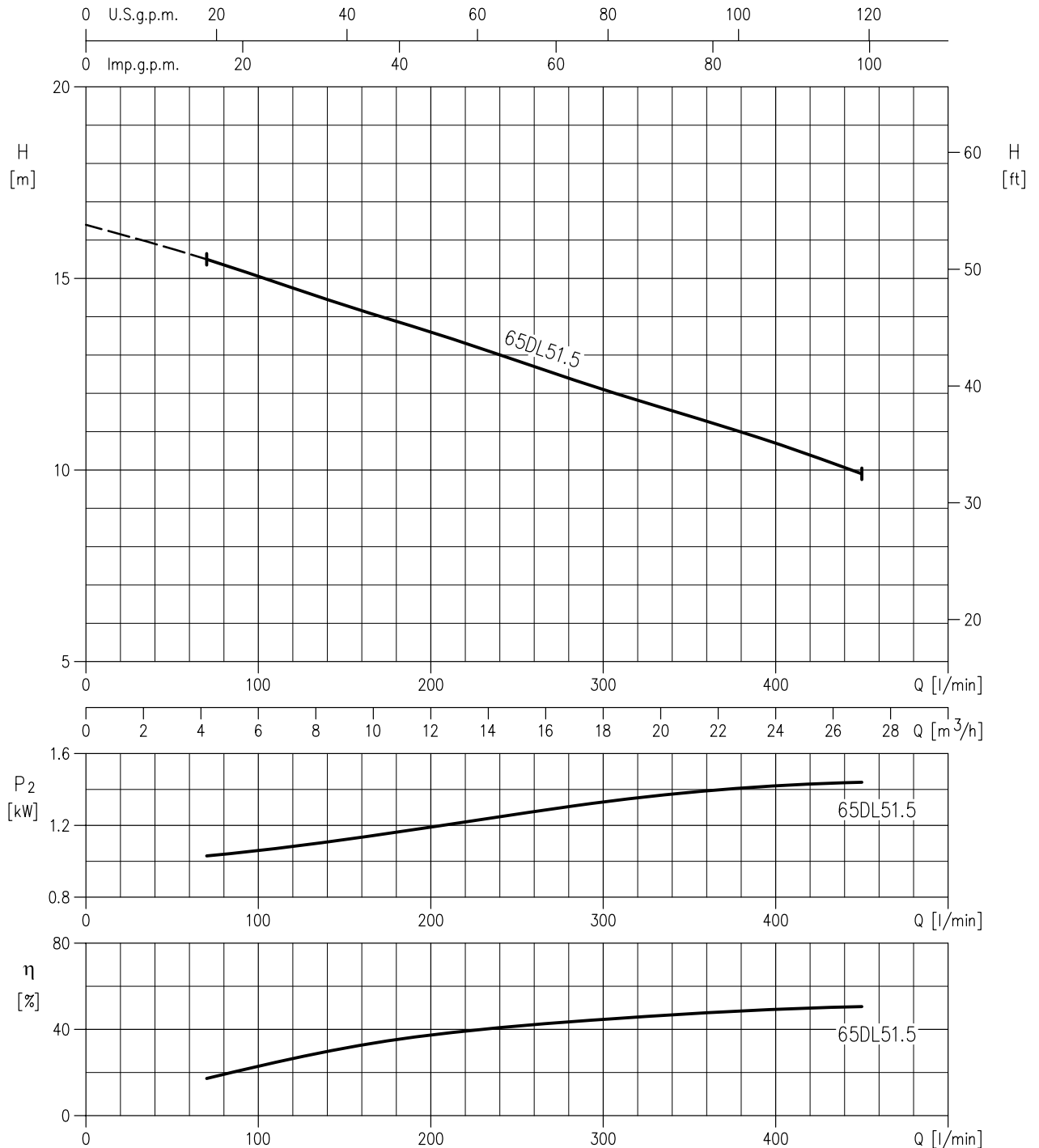
(80)65DVS51.5 (1.5 kW)
 (80)65DVS52.2 (2.2 kW)
 (80)65DVS53.7 (3.7 kW)



Rotation speed ≈ 2850 min⁻¹

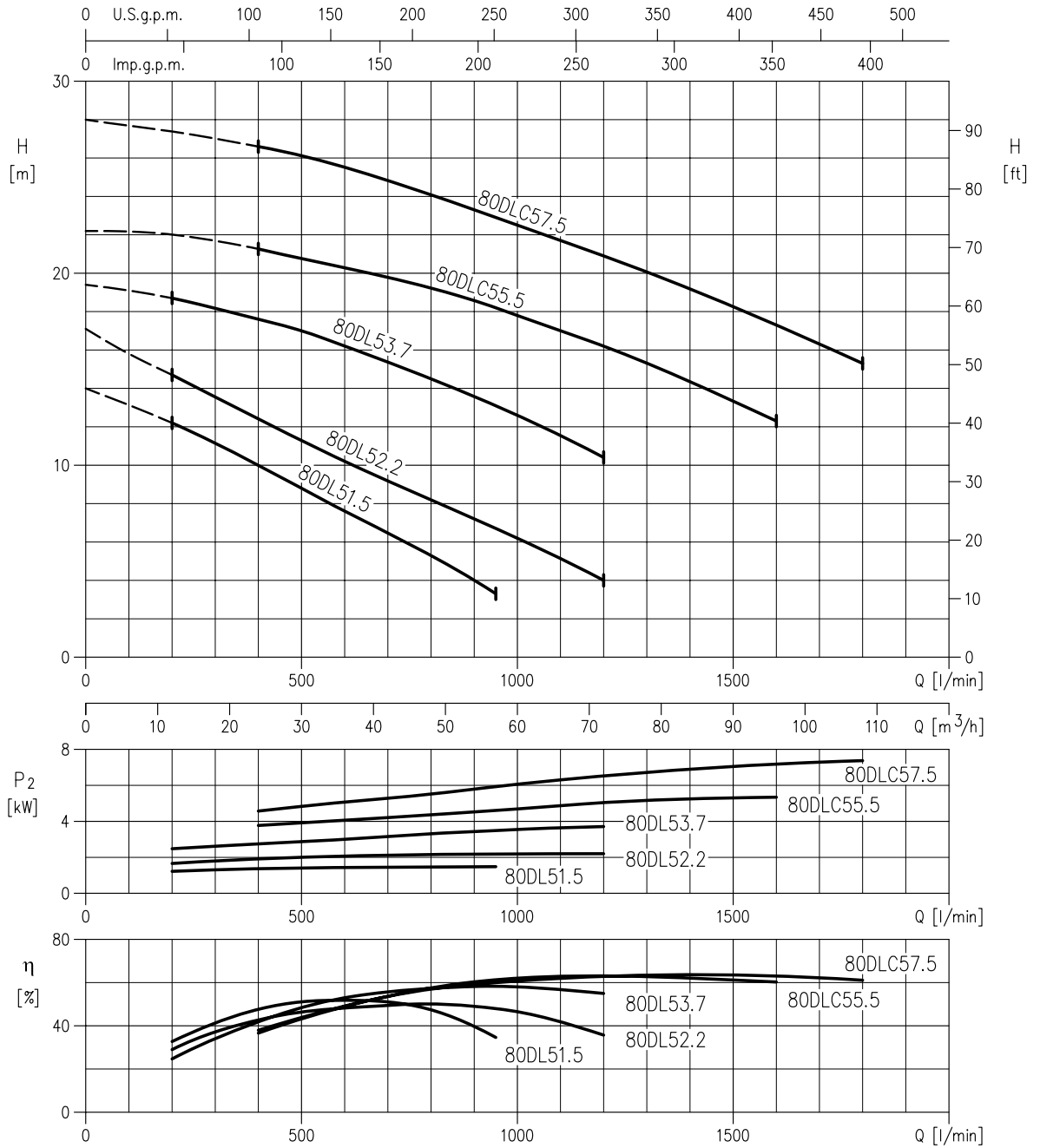
Test standard: ISO 9906 – Annex A Test standard: ISO 9906 – Annex A

65DL51.5 (1.5 kW)



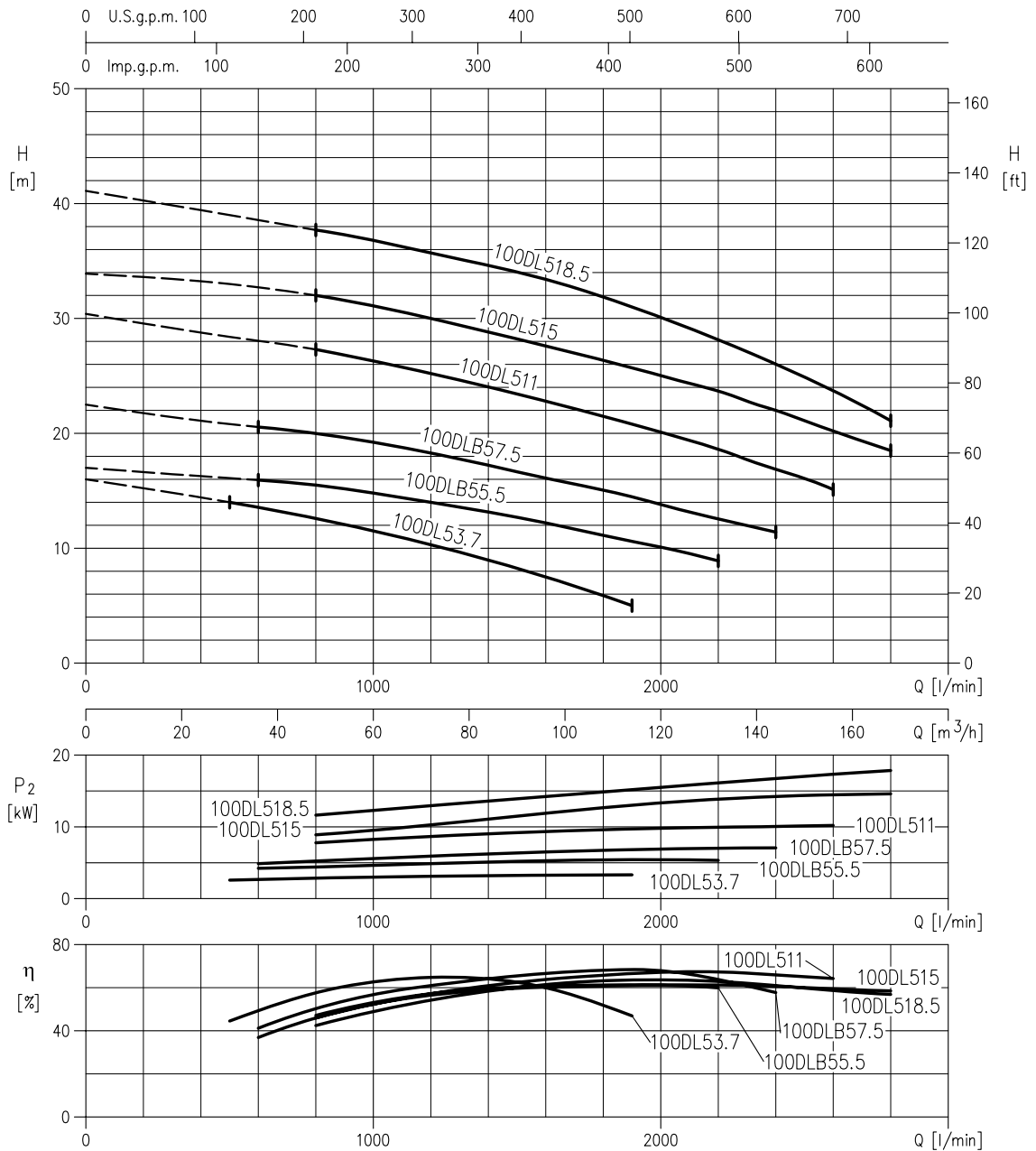
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DL51.5 (1.5 kW)
80DL52.2 (2.2 kW)
80DL53.7 (3.7 kW)
80DLC55.5 (5.5 kW)
80DLC57.5 (7.5 kW)



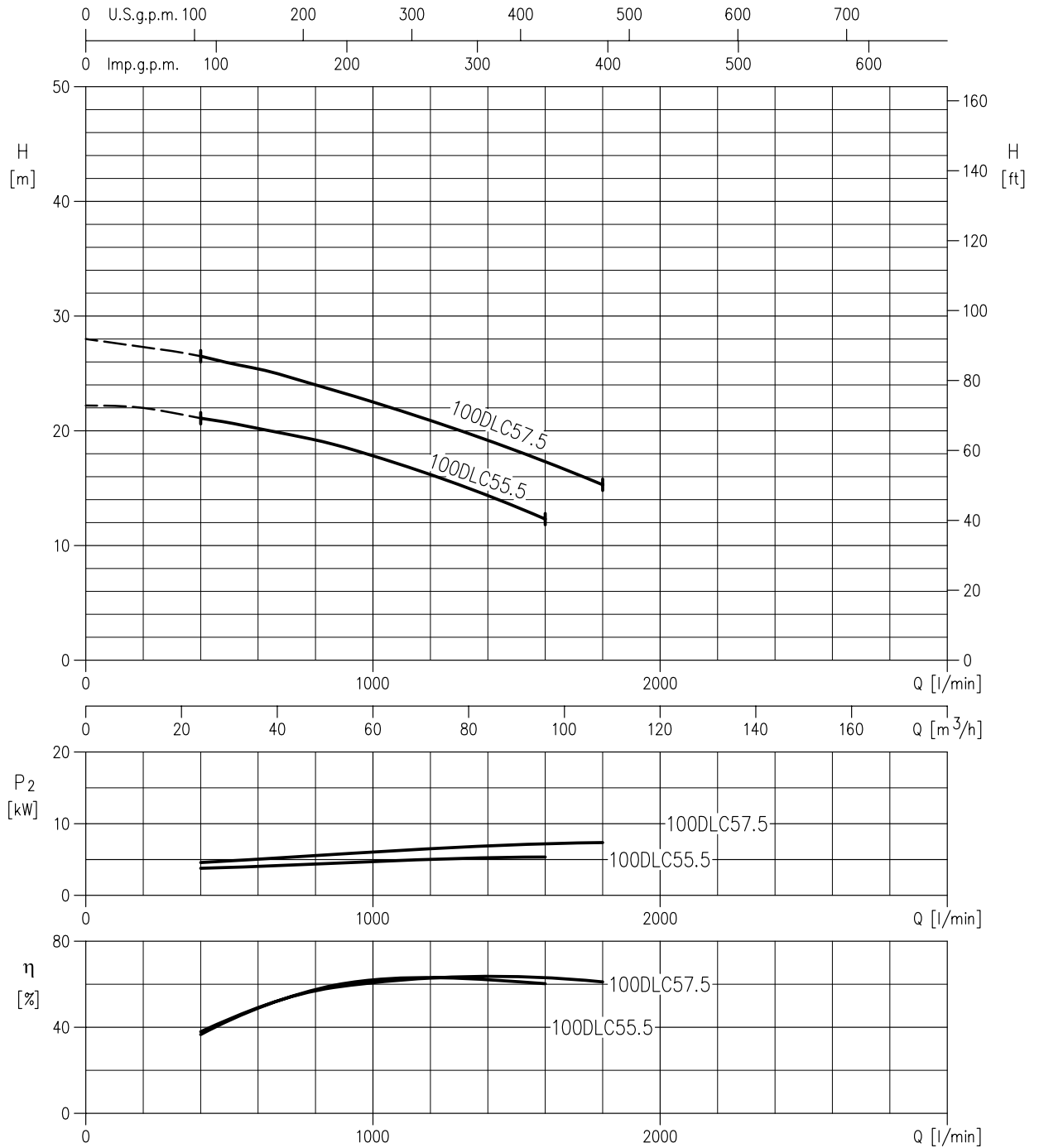
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DL53.7 (3.7 kW)
100DLB55.5 (5.5 kW)
100DLB57.5 (7.5 kW)
100DL511 (11 kW)
100DL515 (15 kW)
100DL518.5 (18.5 kW)



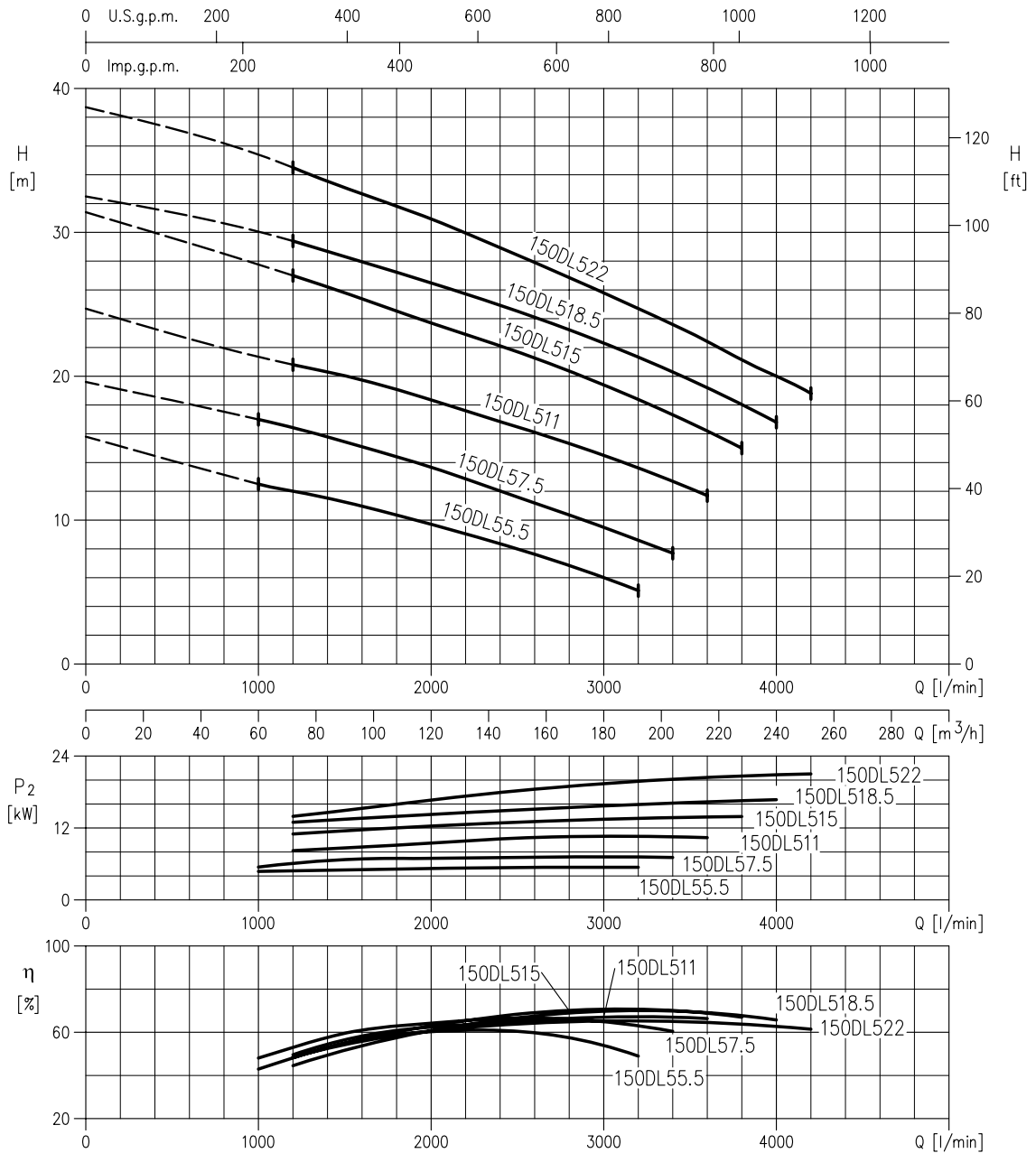
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DLC55.5 (5.5 kW)
100DLC57.5 (7.5 kW)



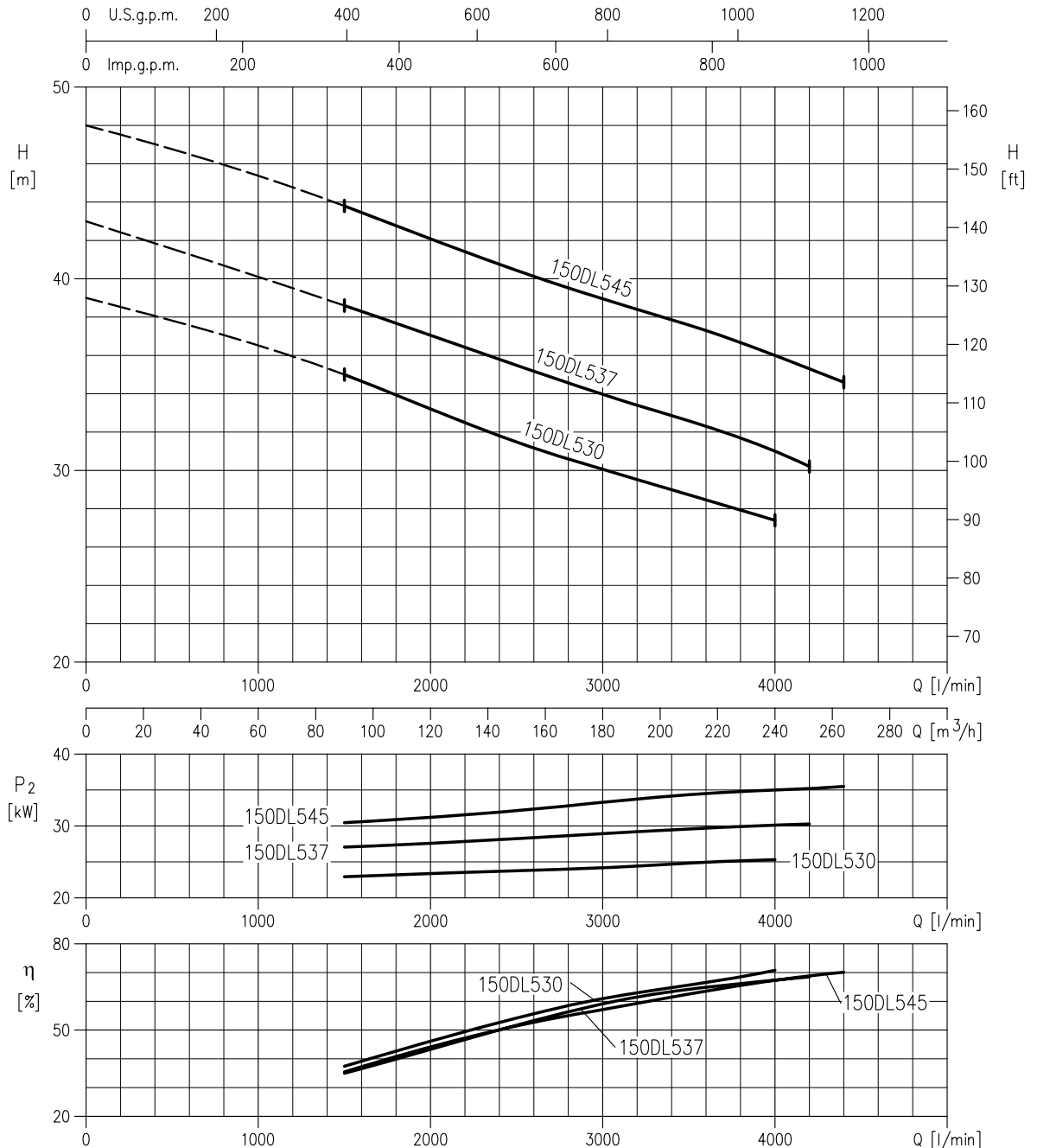
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DL55.5 (5.5 kW)
150DL57.5 (7.5 kW)
150DL511 (11 kW)
150DL515 (15 kW)
150DL518.5 (18.5 kW)
150DL522 (22 kW)



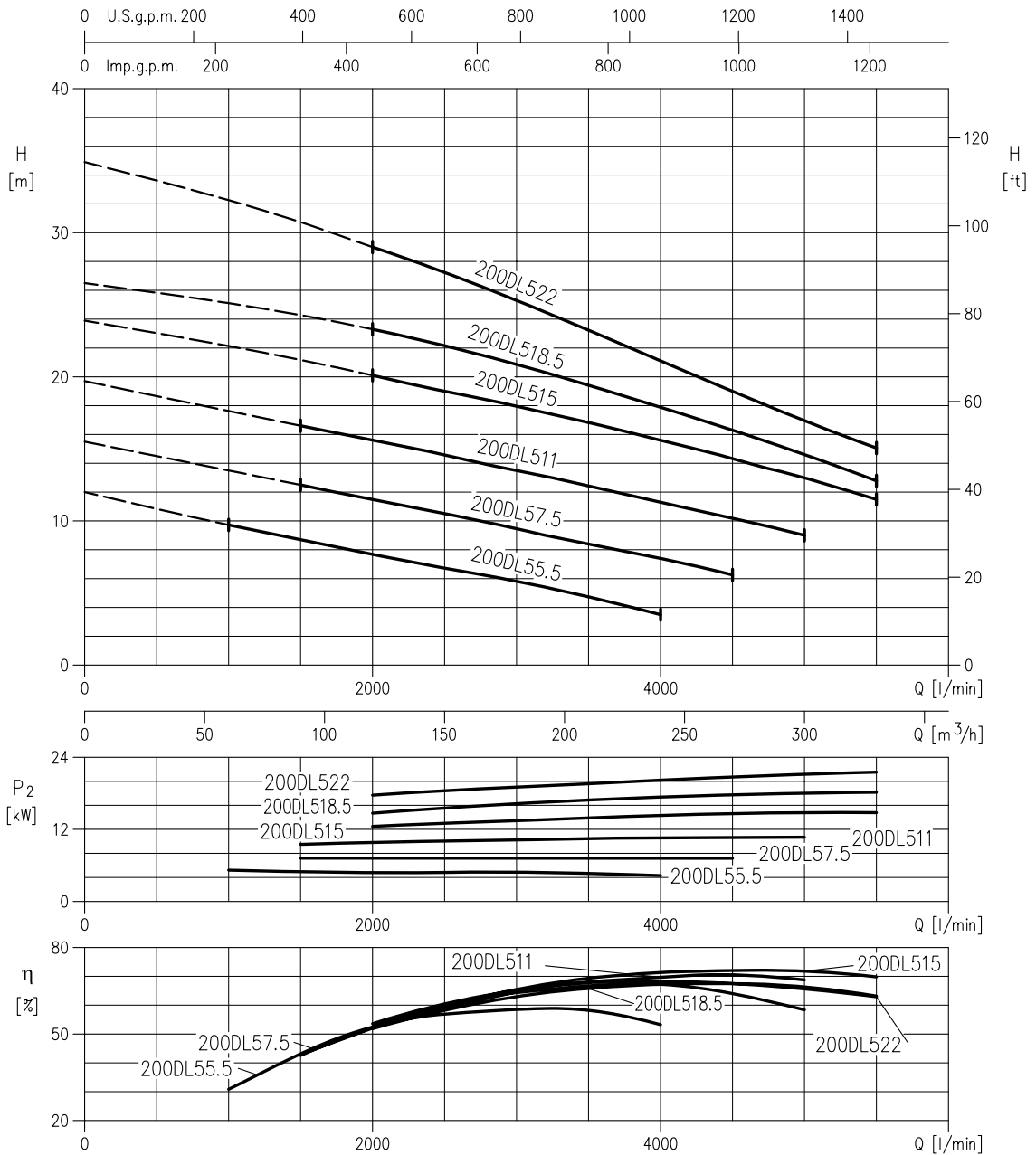
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DL530 (30 kW)
150DL537 (37 kW)
150DL545 (45 kW)



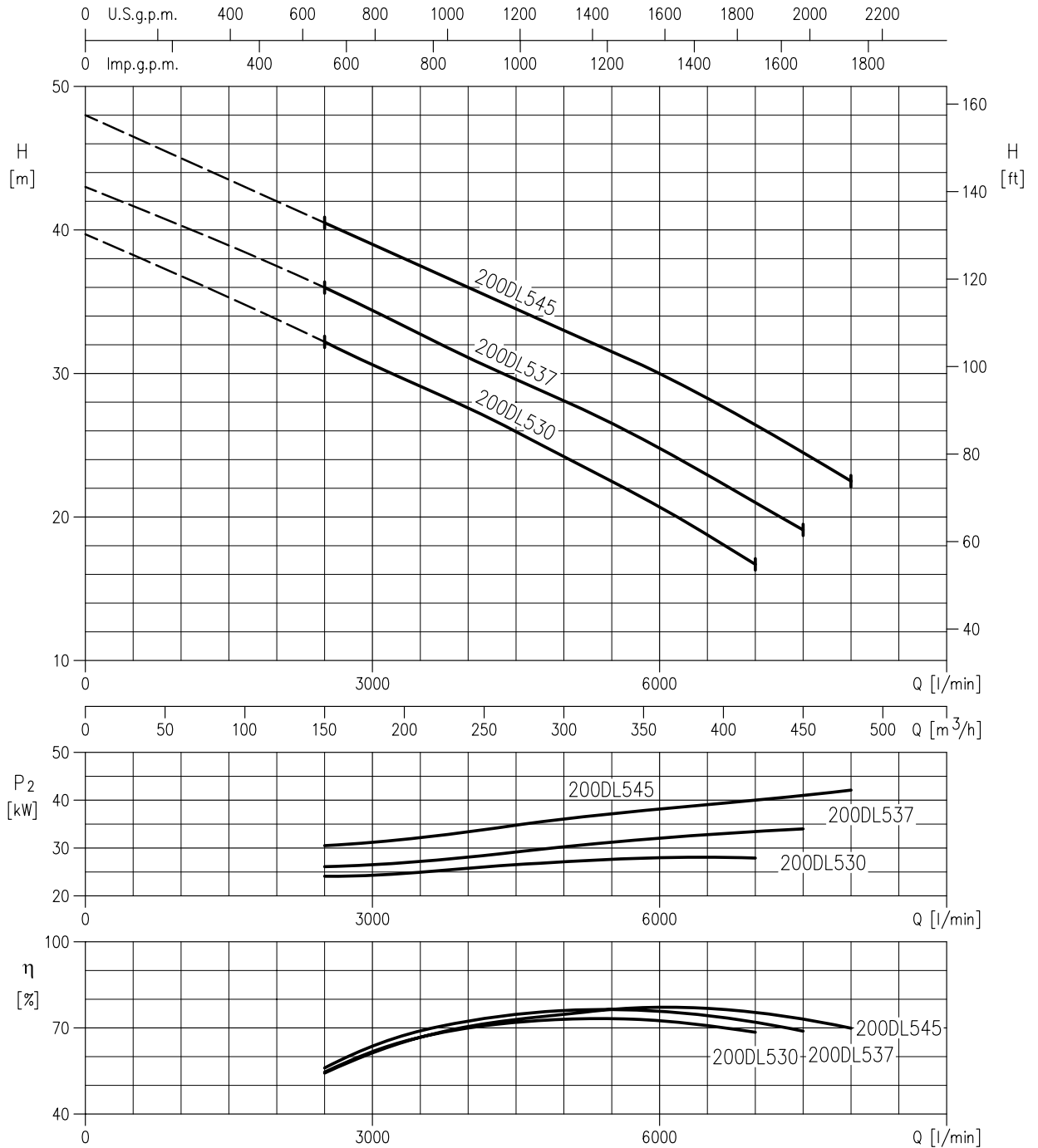
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

200DL55.5 (5.5 kW)
200DL57.5 (7.5 kW)
200DL511 (11 kW)
200DL515 (15 kW)
200DL518.5 (18.5 kW)
200DL522 (22 kW)



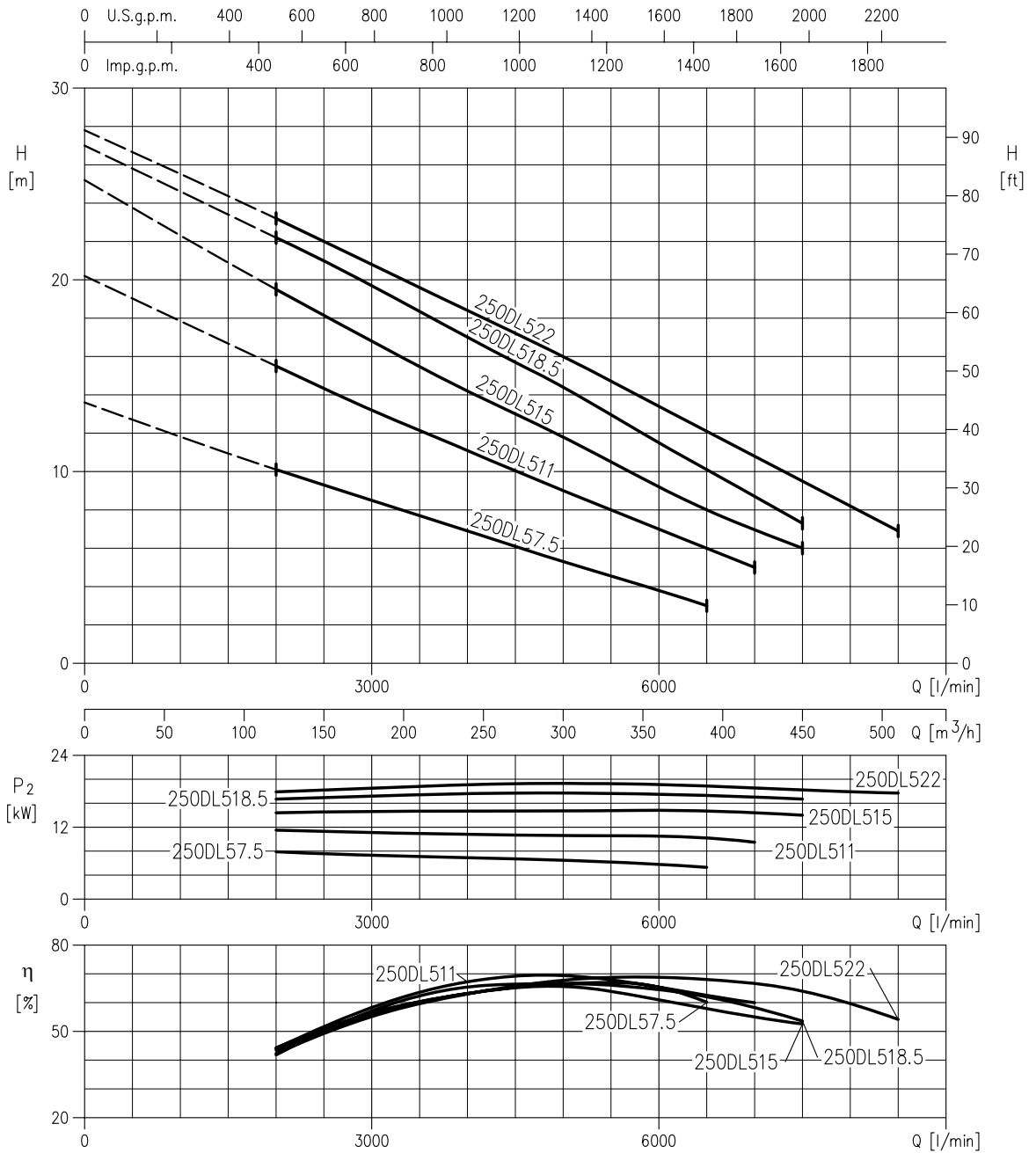
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

200DL530 (30 kW)
200DL537 (37 kW)
200DL545 (45 kW)



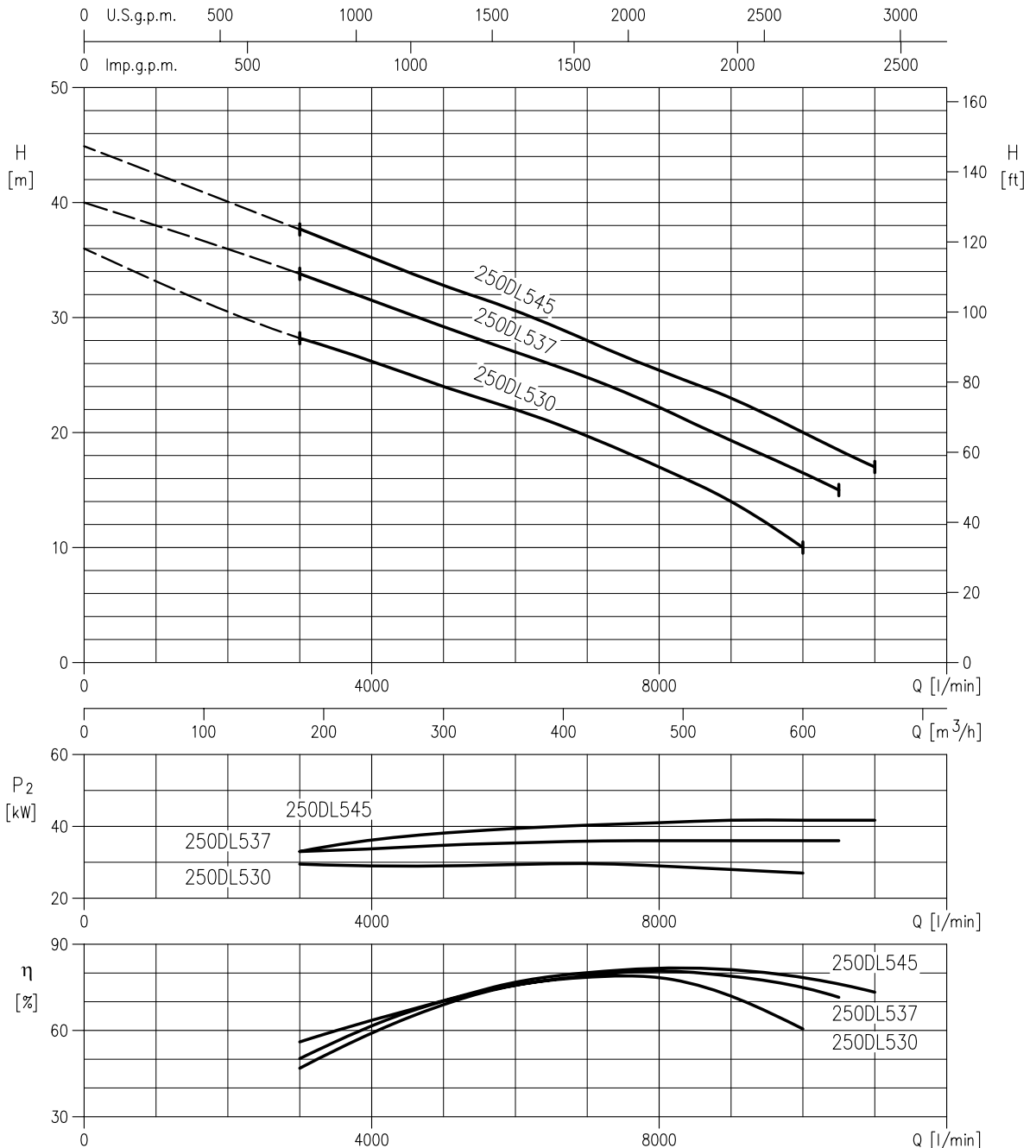
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

250DL57.5 (7.5 kW)
250DL511 (11 kW)
250DL515 (15 kW)
250DL518.5 (18.5 kW)
250DL522 (22 kW)



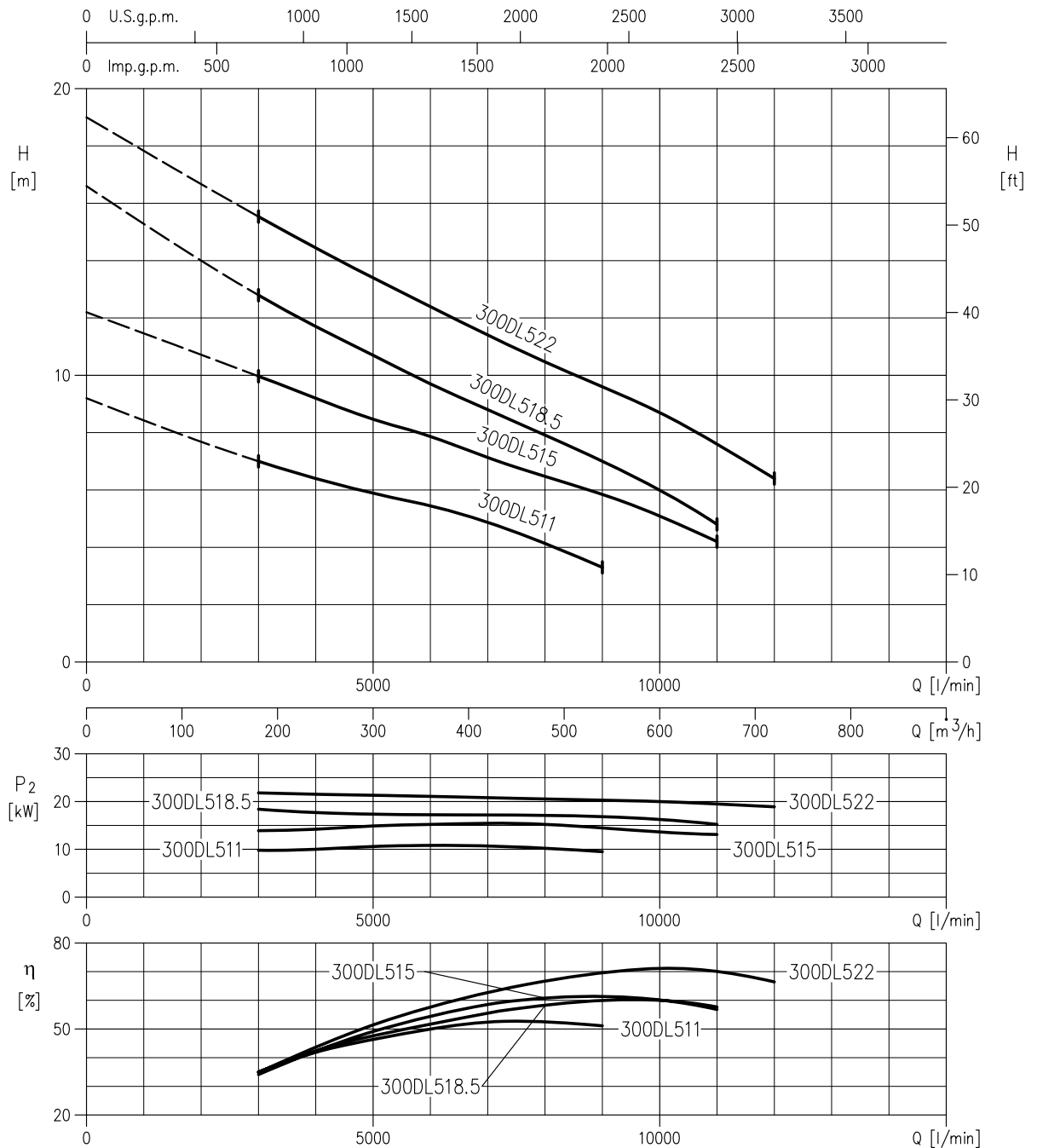
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

250DL530 (30 kW)
250DL537 (37 kW)
250DL545 (45 kW)



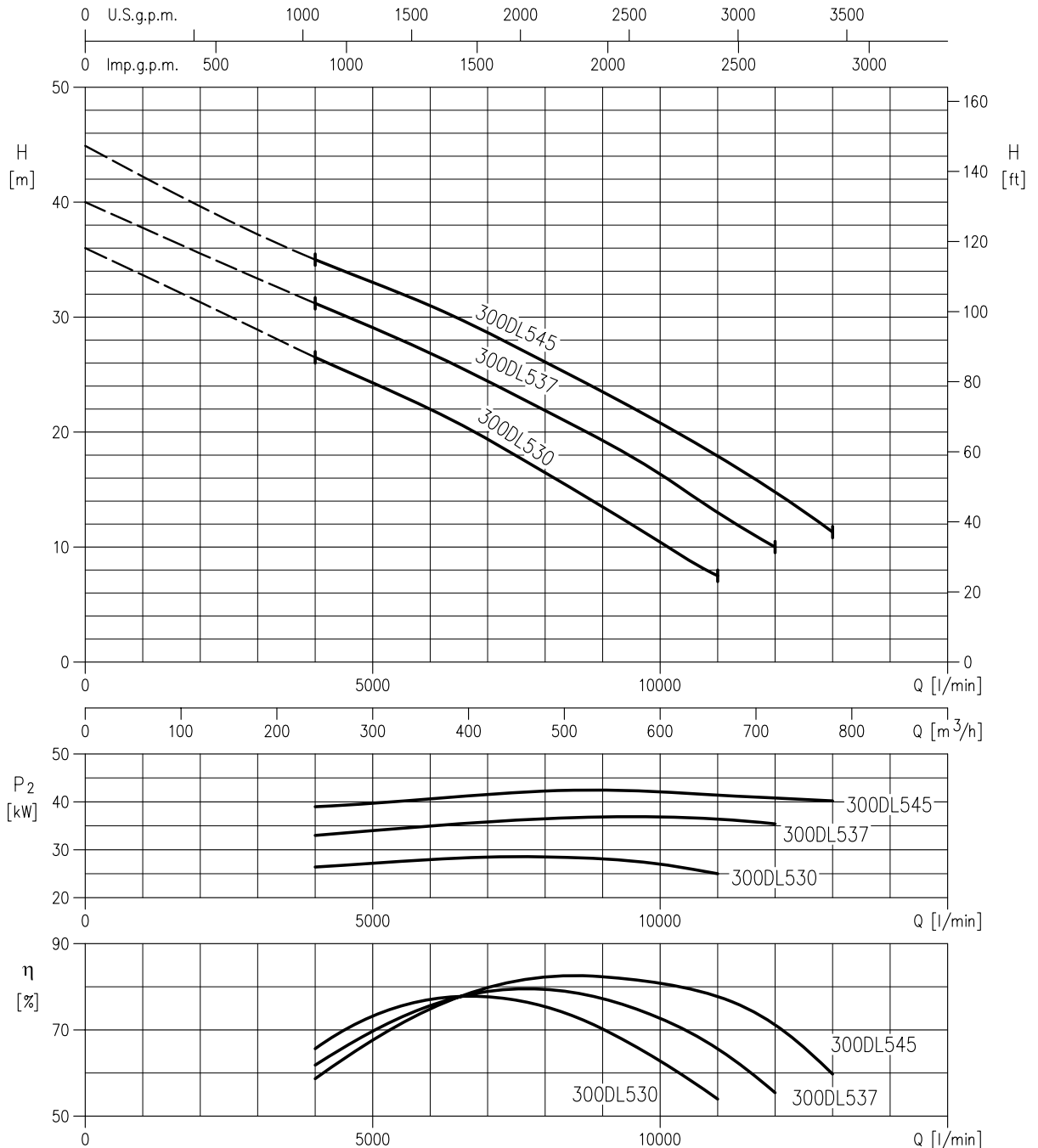
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

300DL511 (11 kW)
 300DL515 (15 kW)
 300DL518.5 (18.5 kW)
 300DL522 (22 kW)



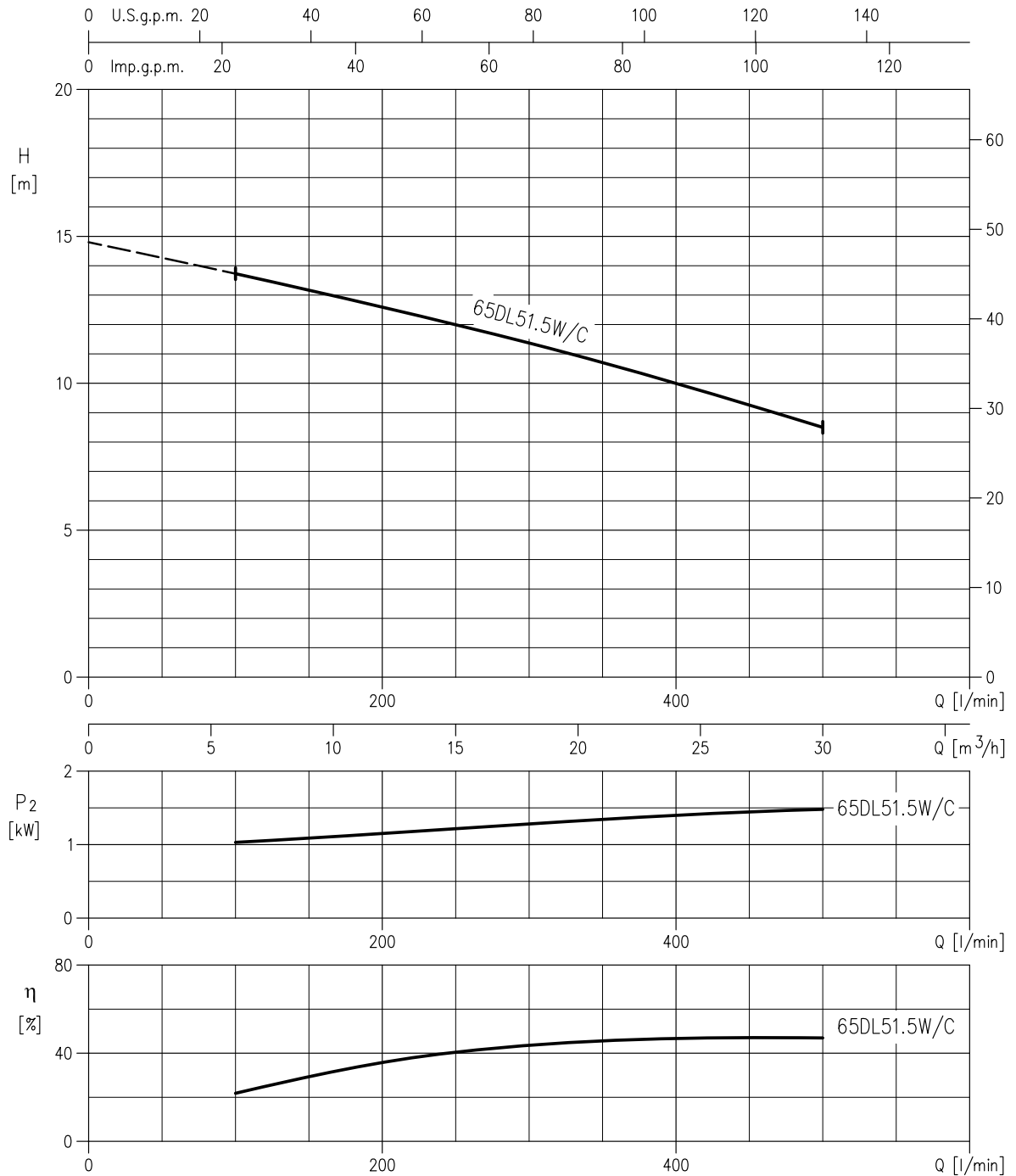
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

300DL530 (30 kW)
300DL537 (37 kW)
300DL545 (45 kW)



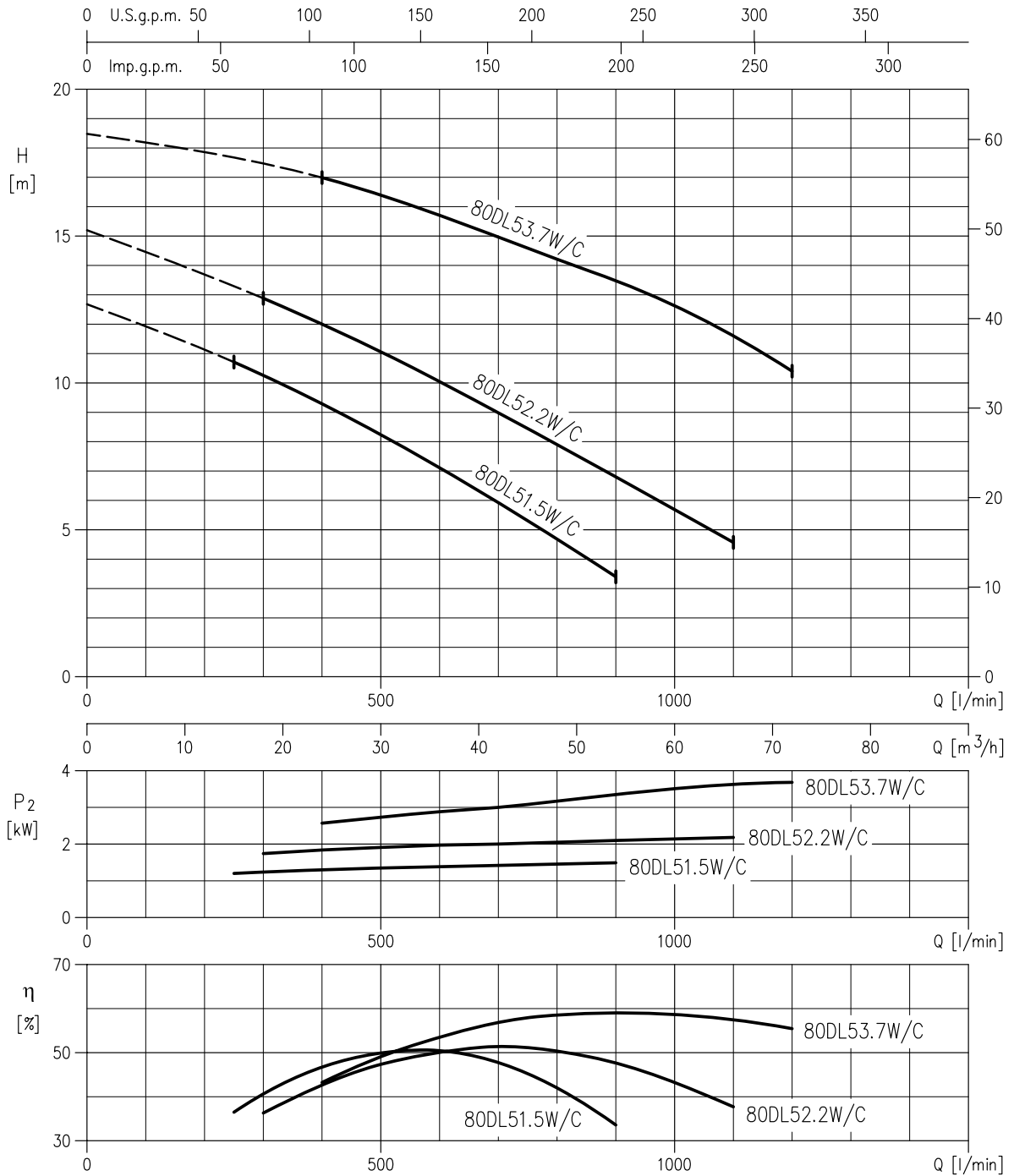
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

65DL51.5W/C (1.5 kW)



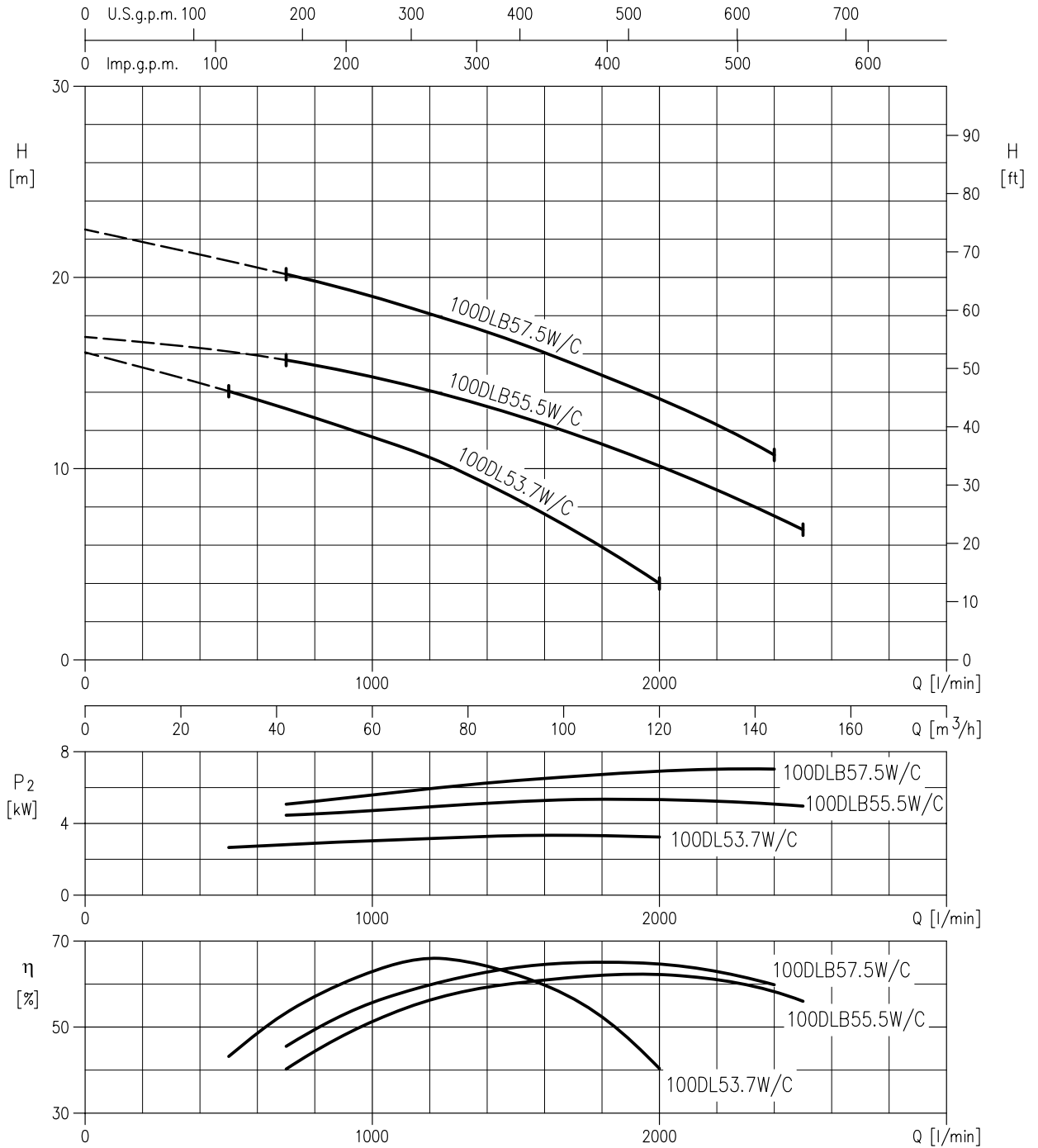
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DL51.5W/C (1.5 kW)
 80DL52.2W/C (2.2 kW)
 80DL53.7W/C (3.7 kW)



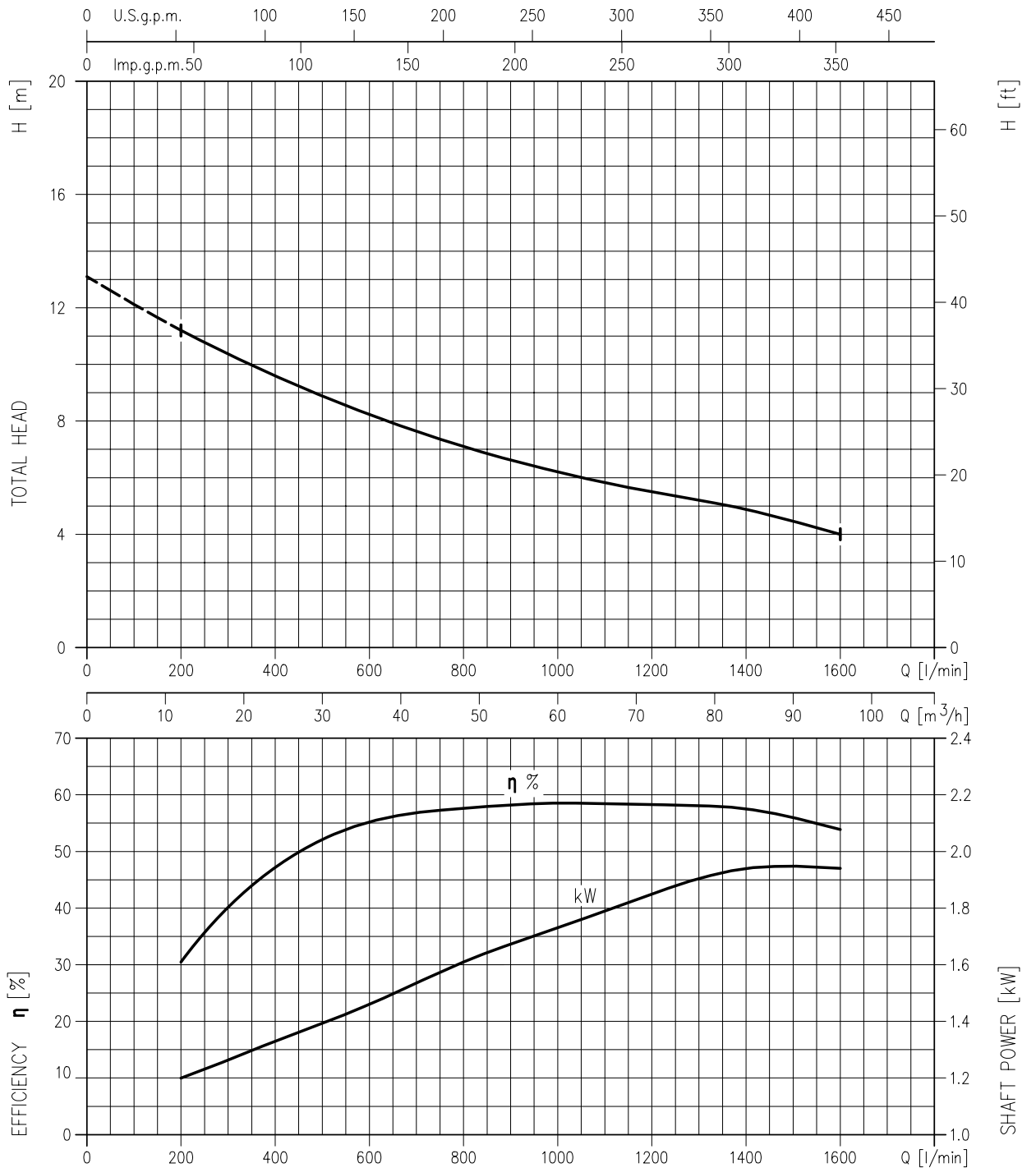
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DL53.7W/C (3.7 kW)
 100DLB55.5W/C (5.5 kW)
 100DLB57.5W/C (7.5 kW)



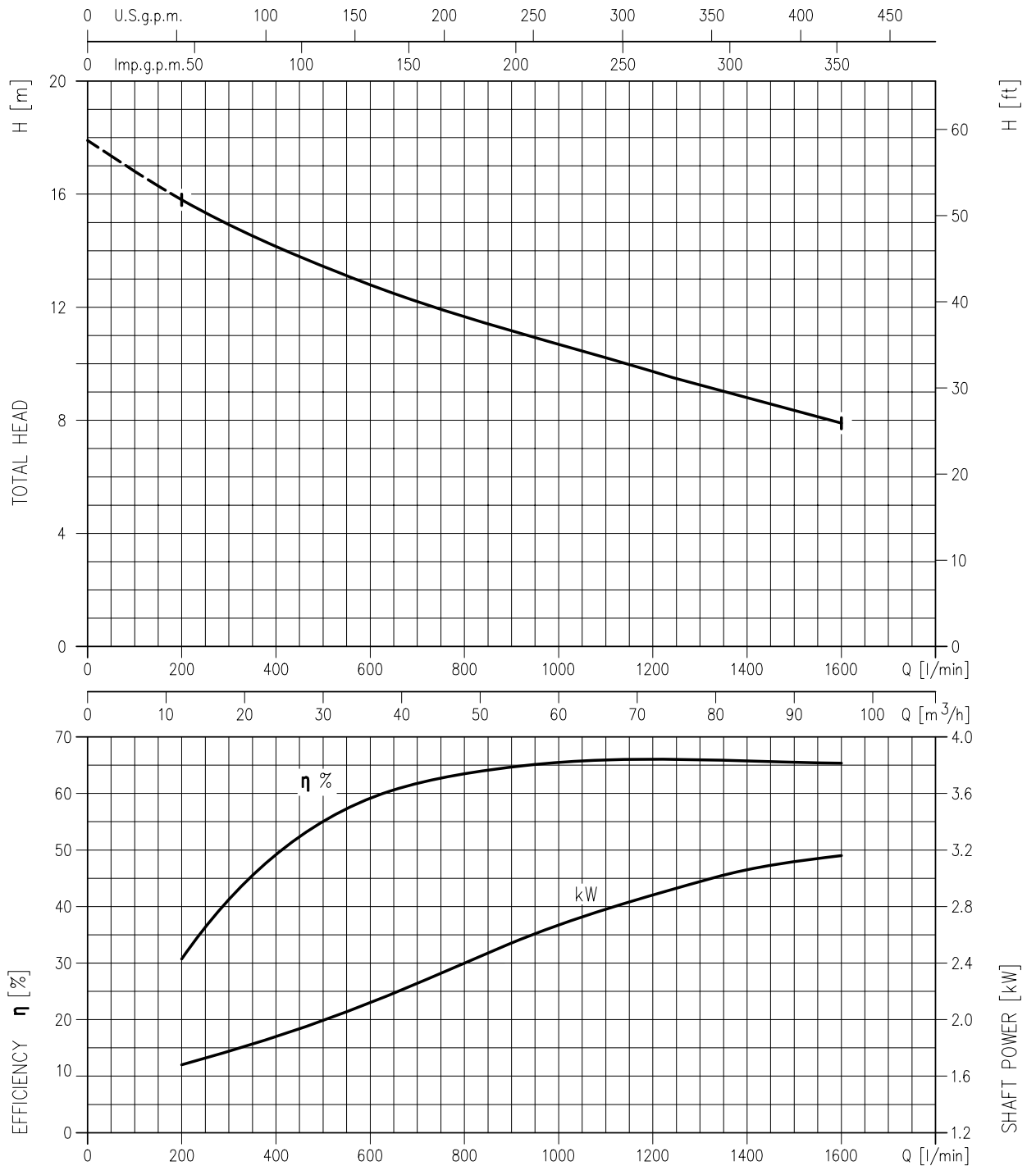
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DML52.2



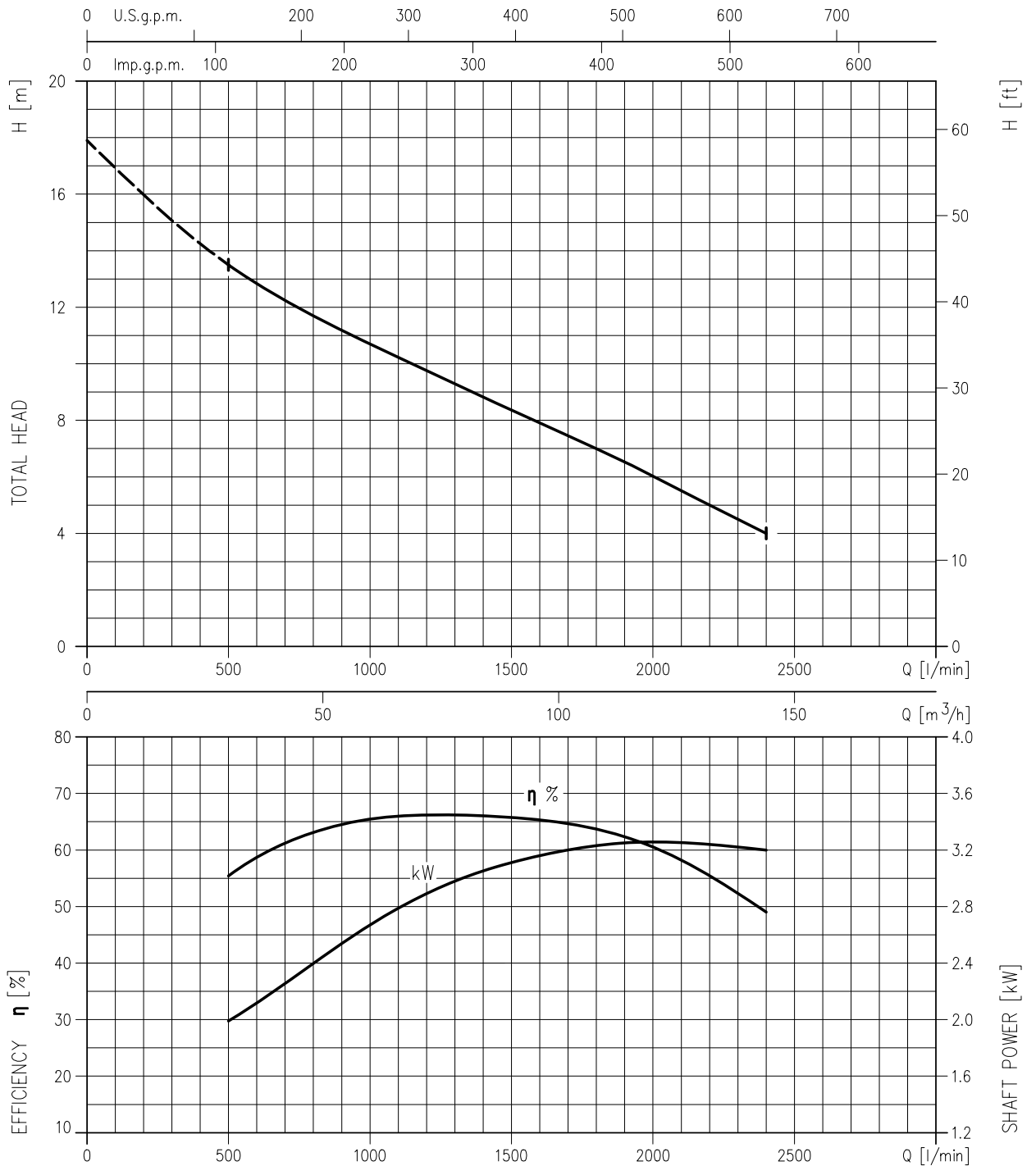
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DML53.7



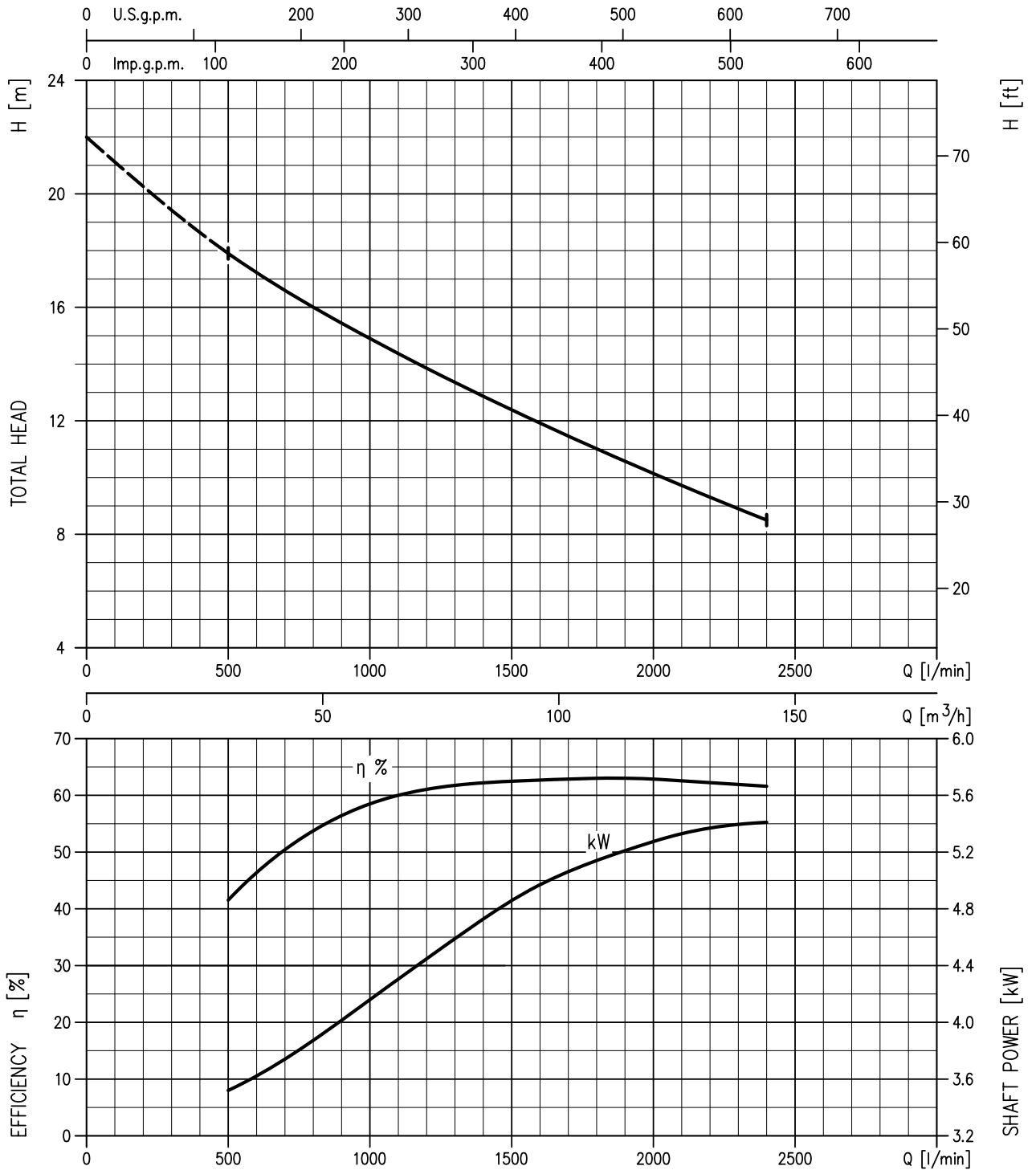
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DML53.7



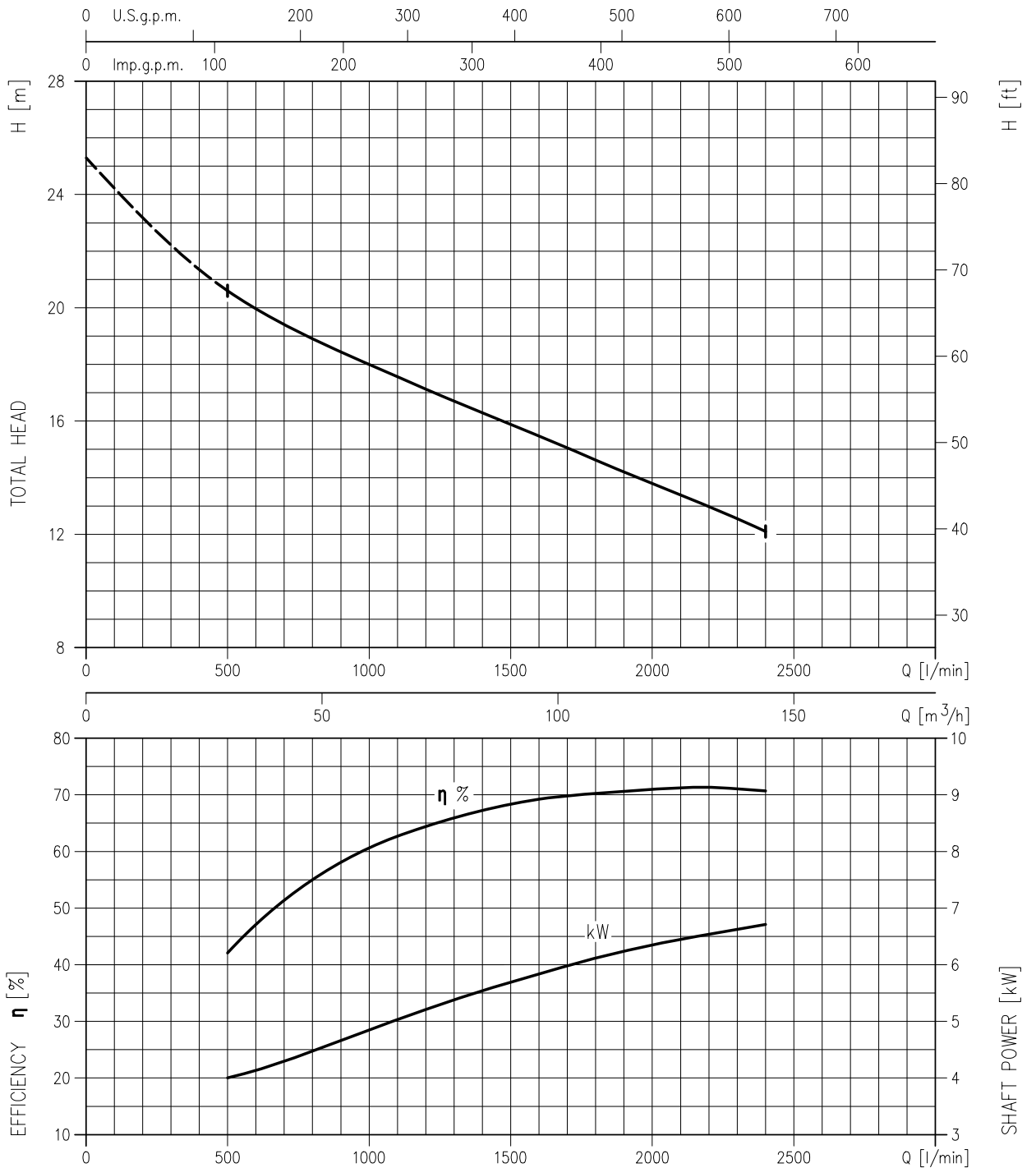
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DML55.5



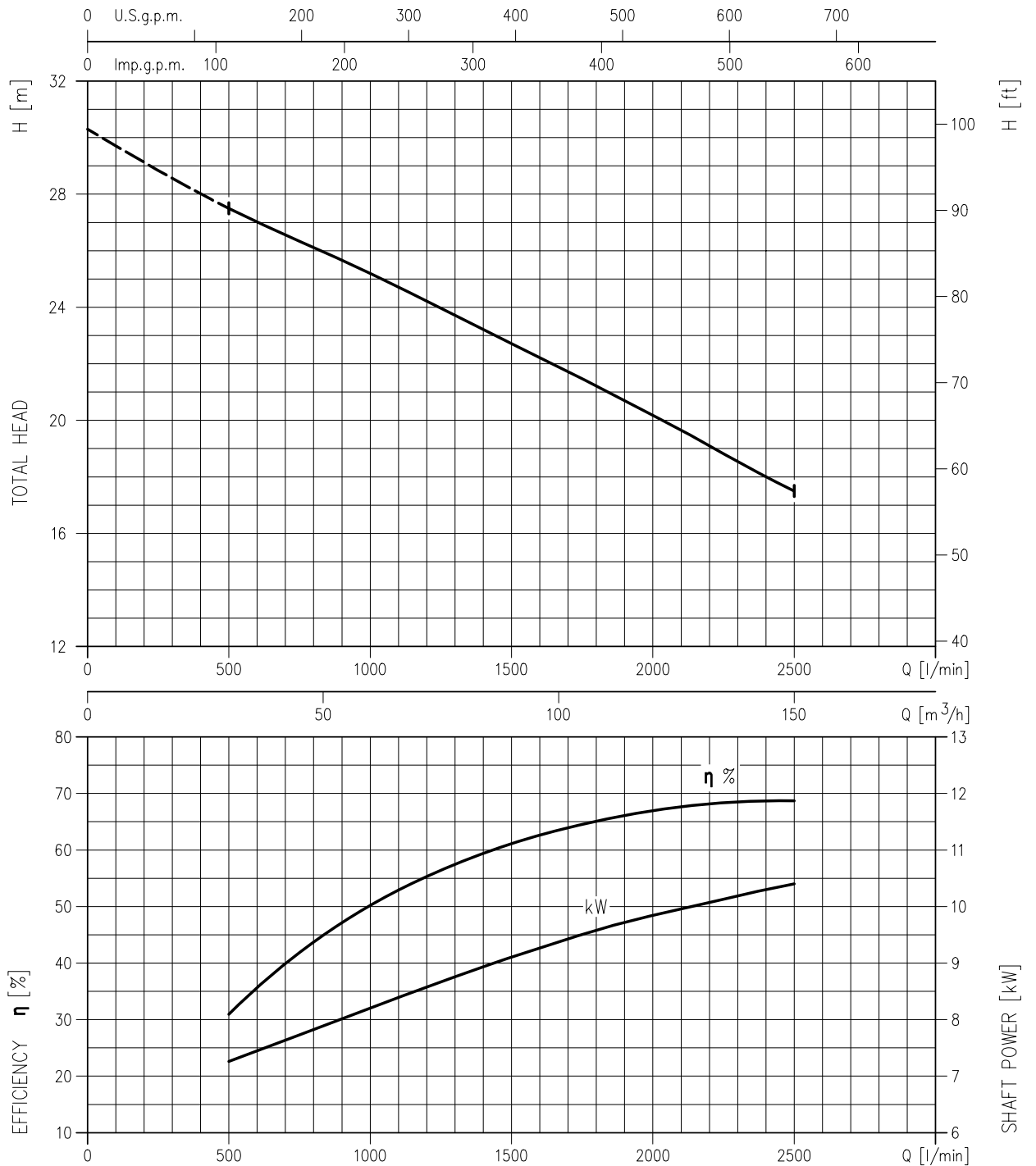
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DML57.5



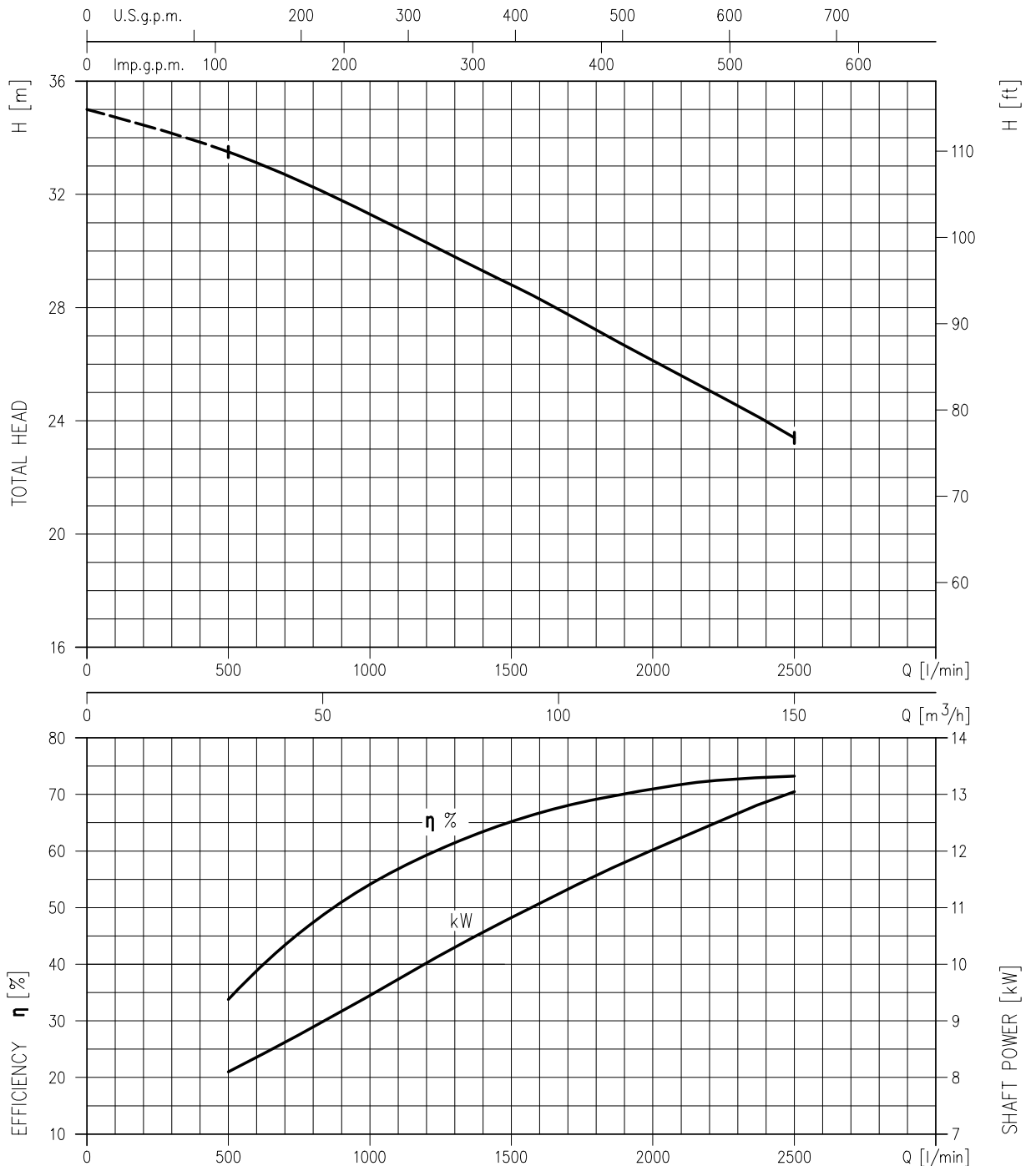
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DML511



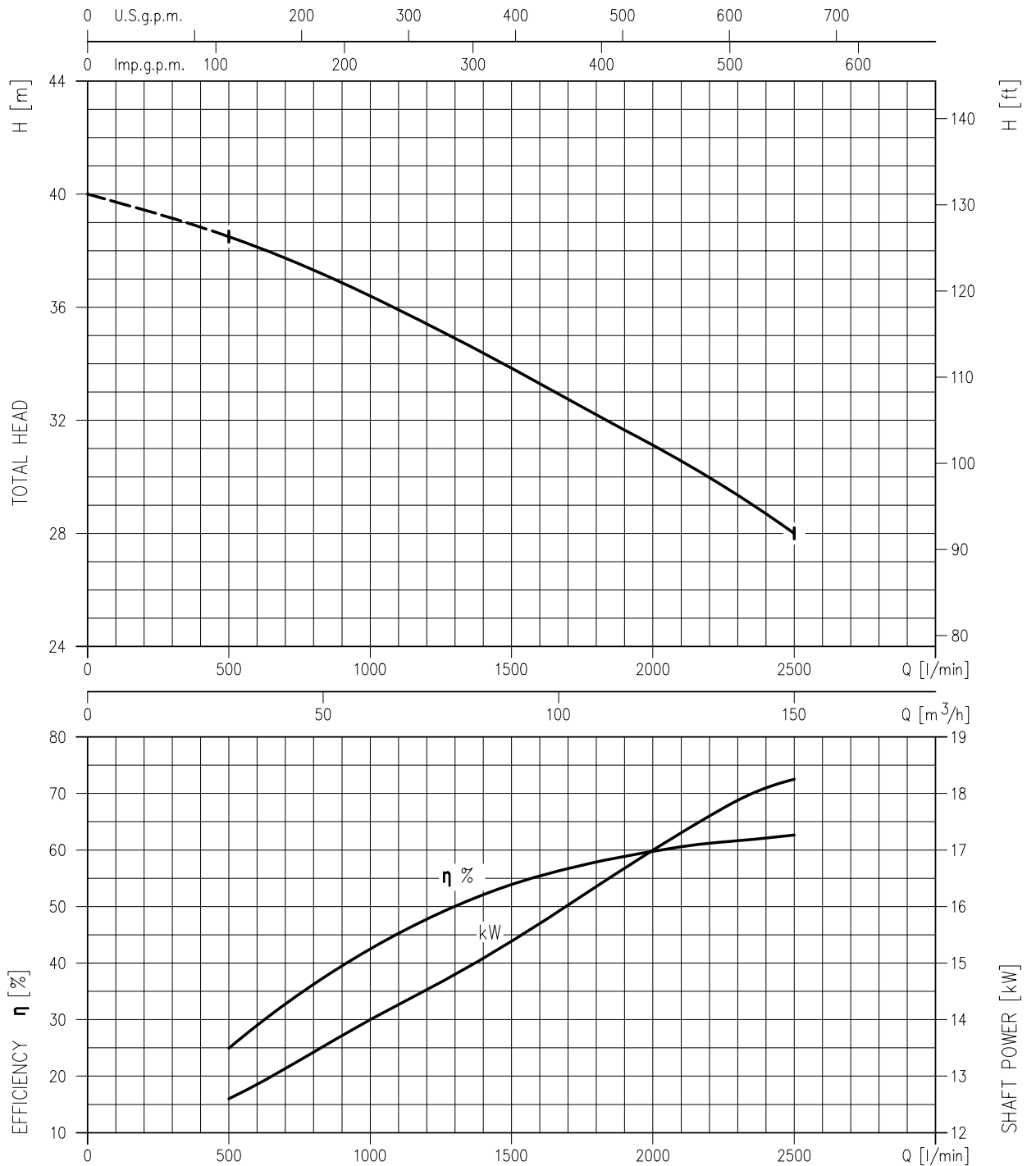
Rotation speed ≈ 1450 min⁻¹
 Test standard: ISO 9906 – Annex A

100DML515



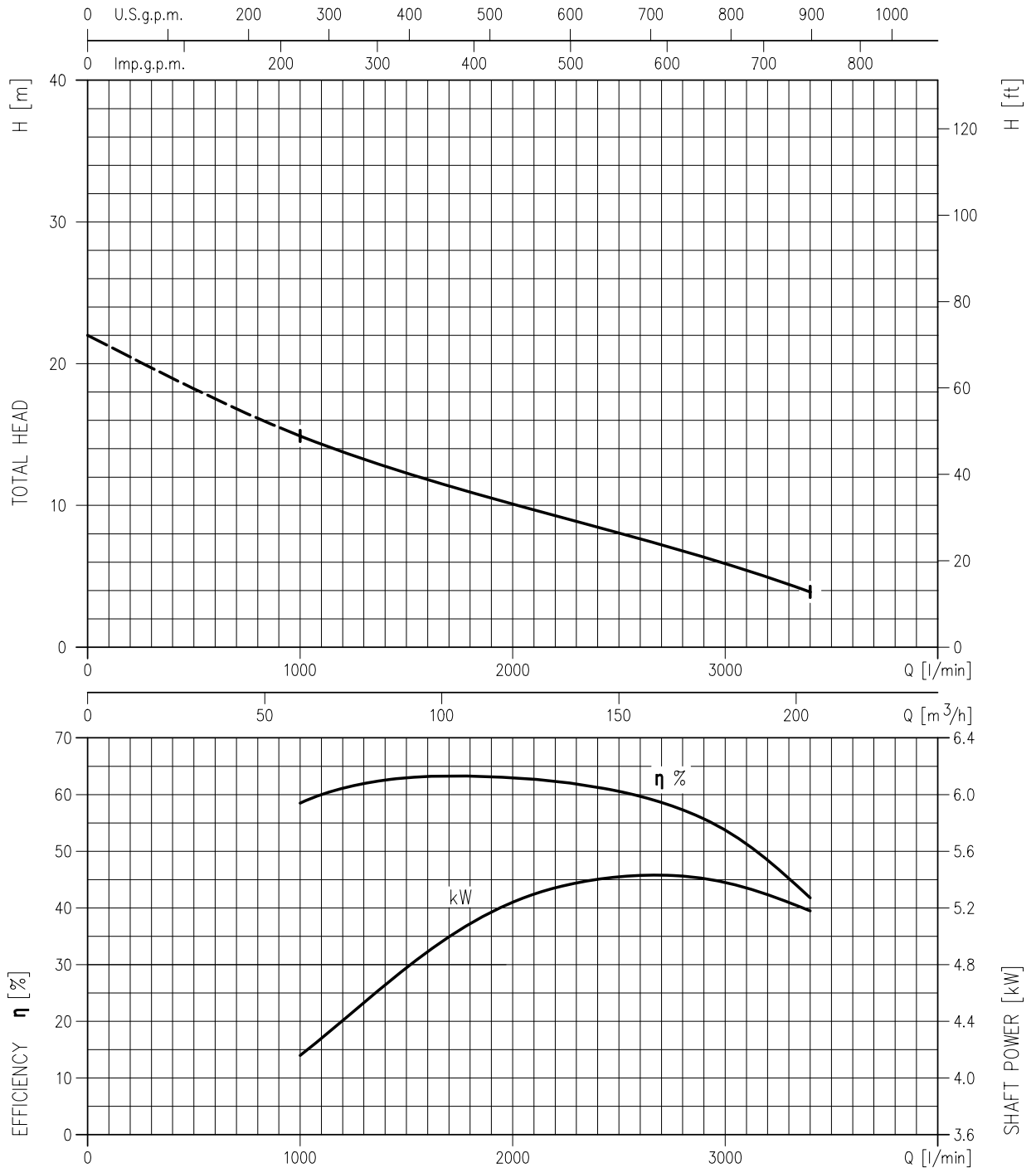
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DML522



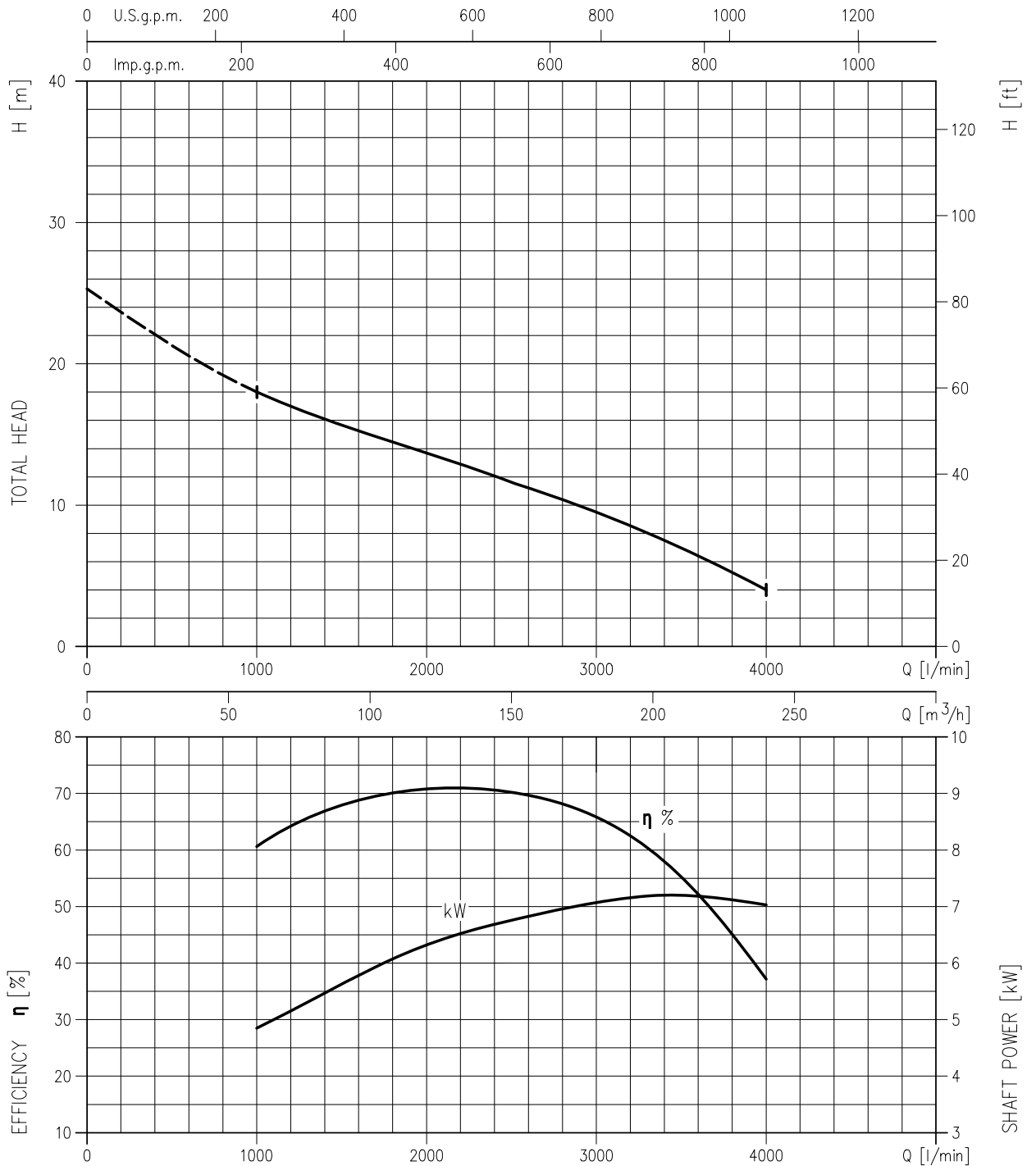
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DML55.5



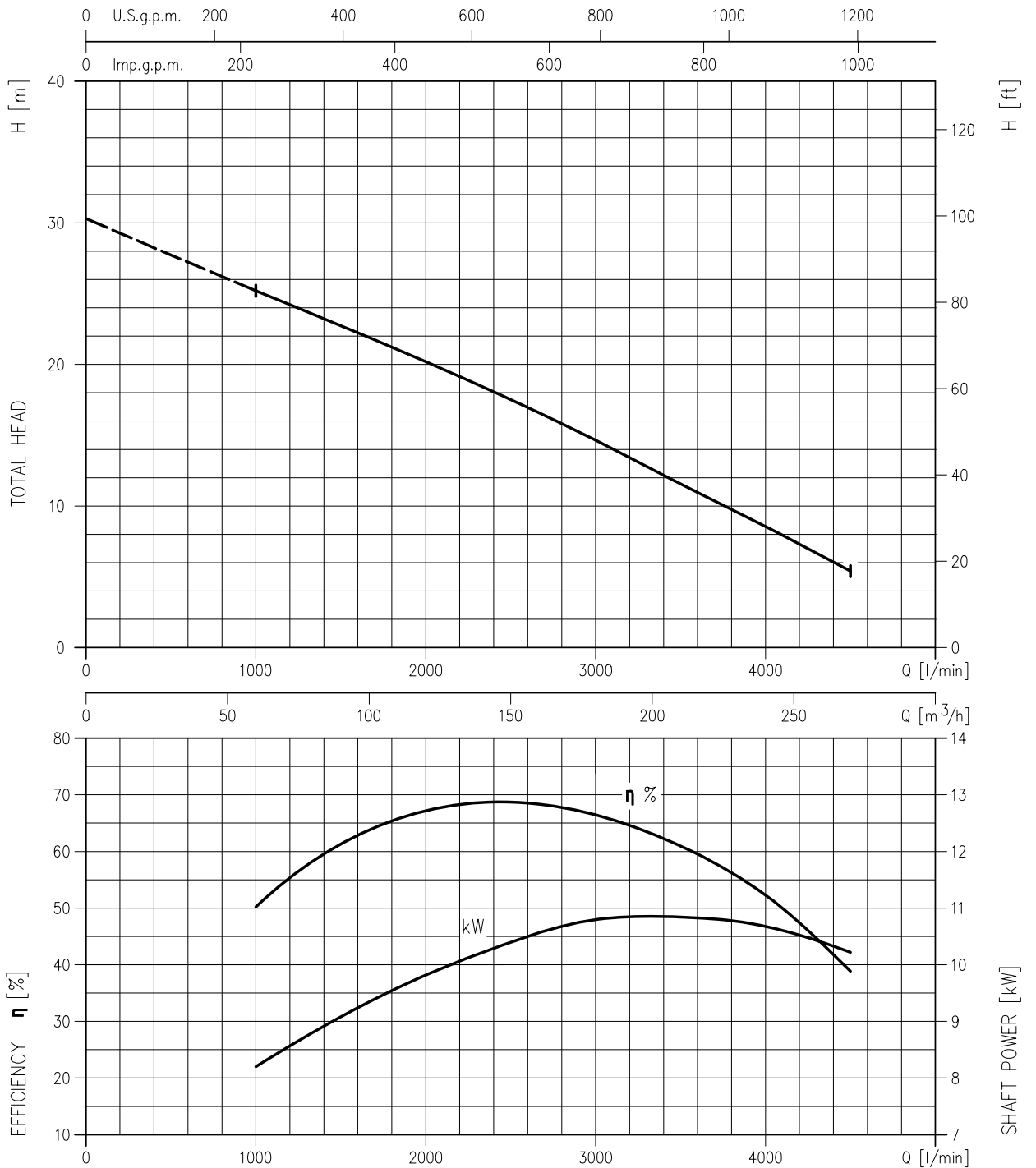
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DML57.5



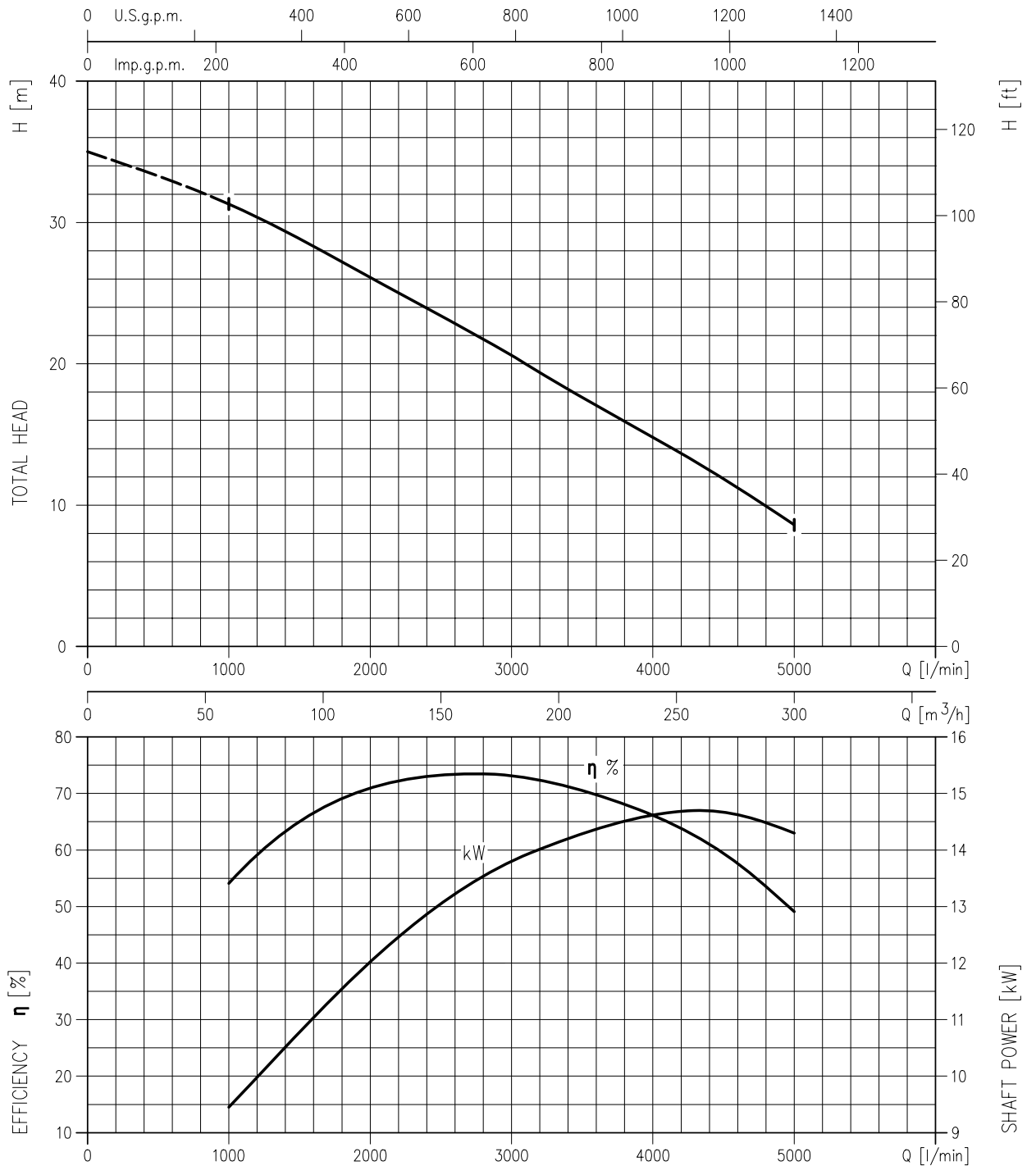
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DML511



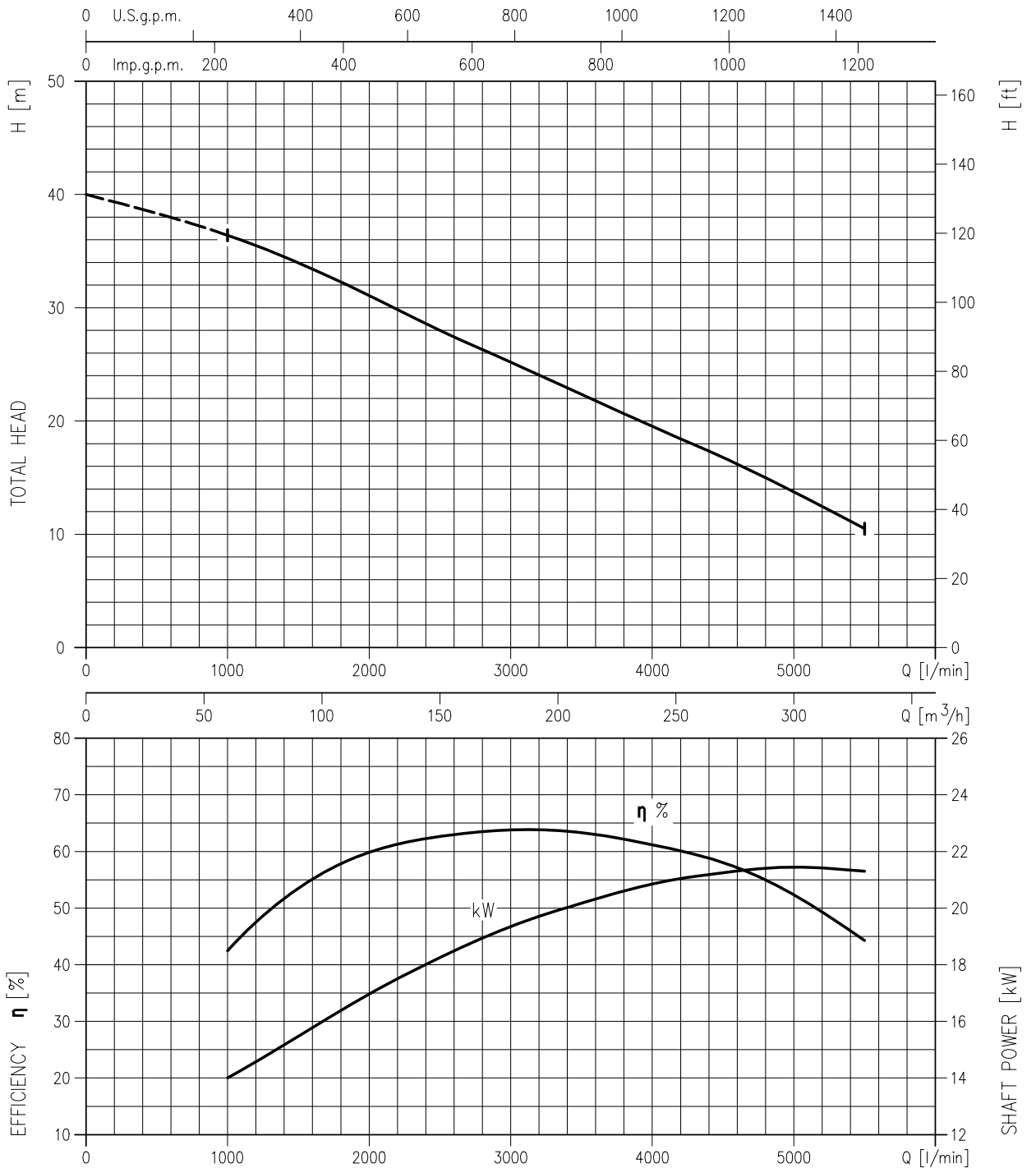
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DML515



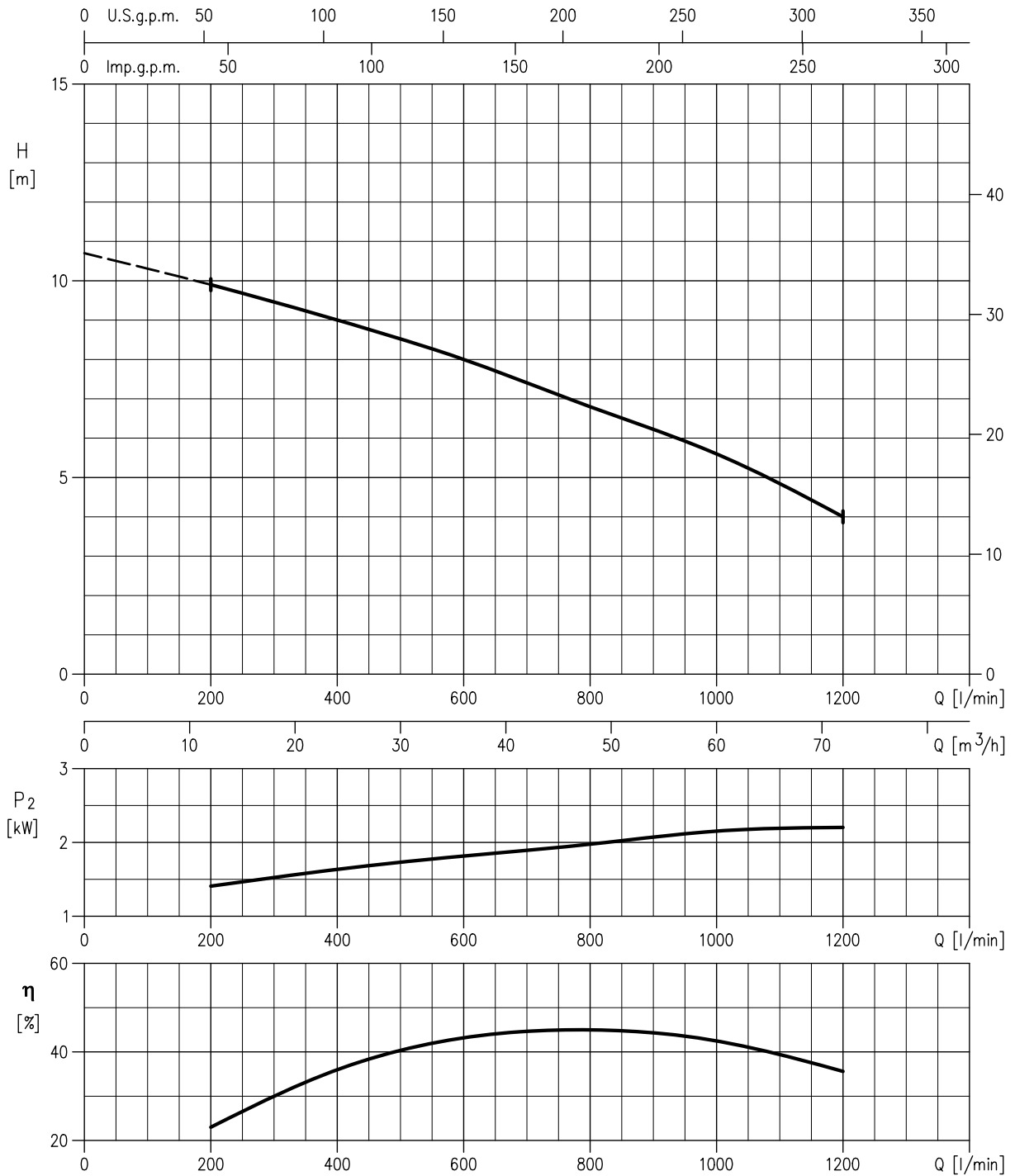
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

150DML522



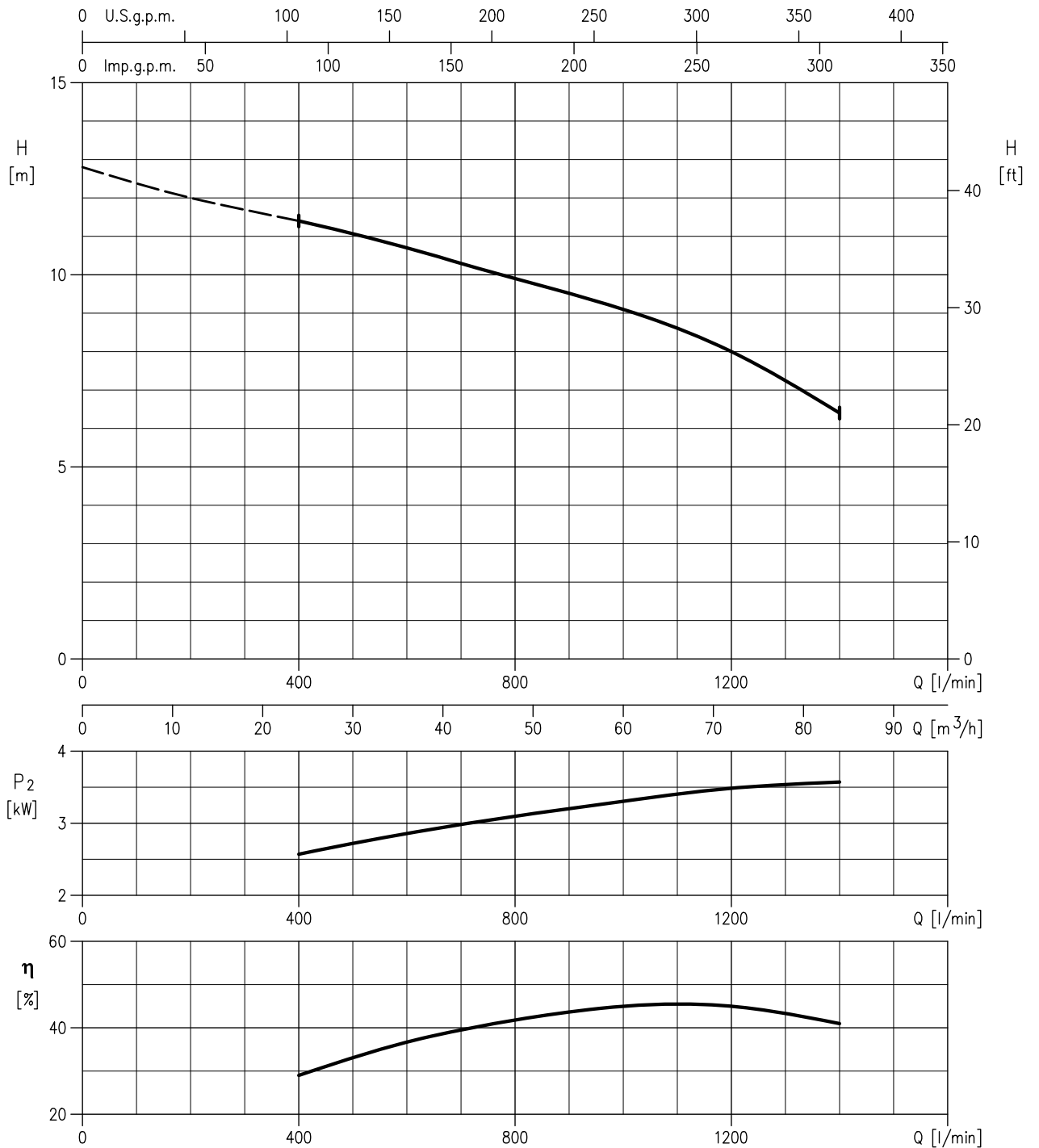
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DMLV52.2



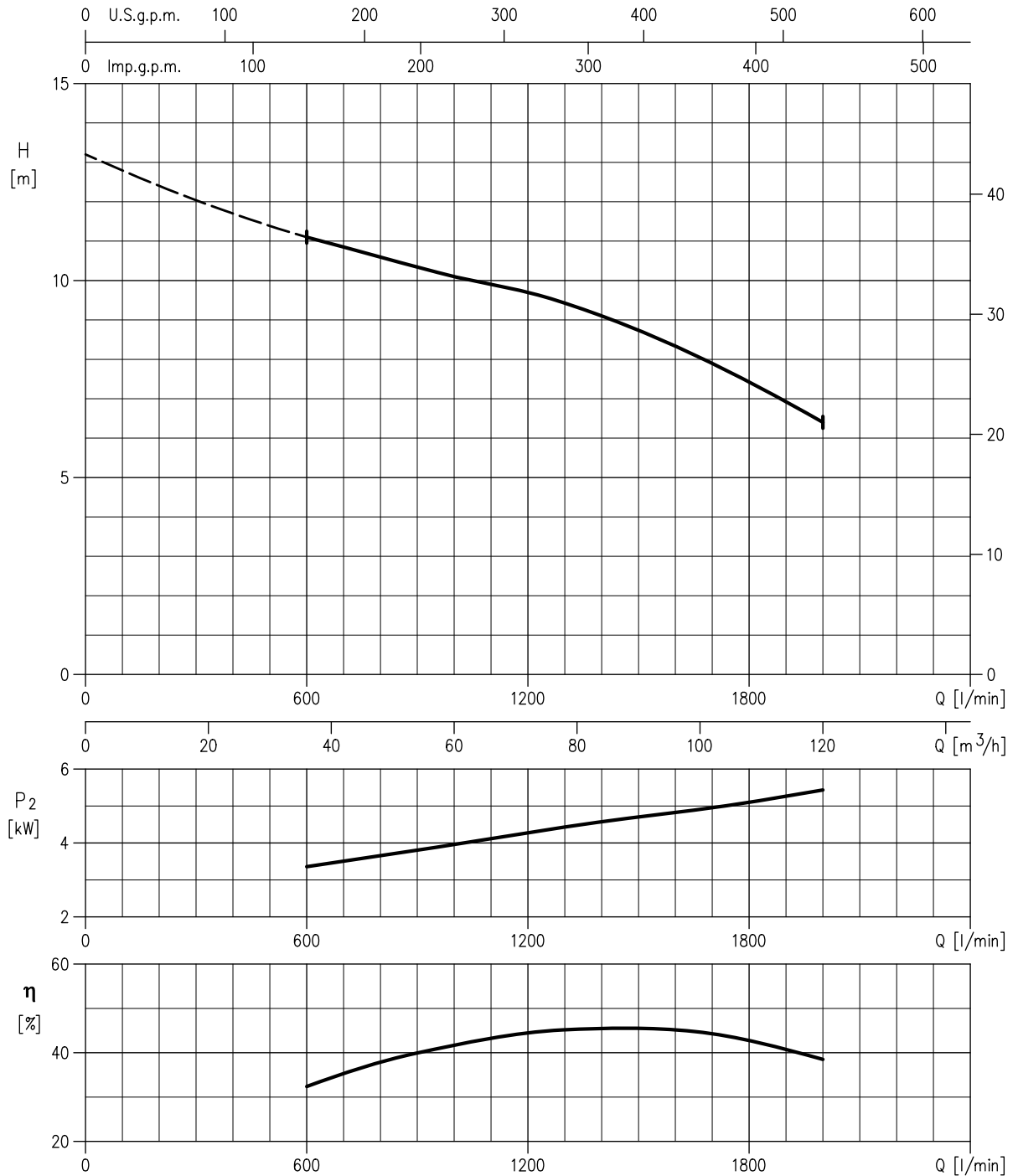
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

80DMLV53.7



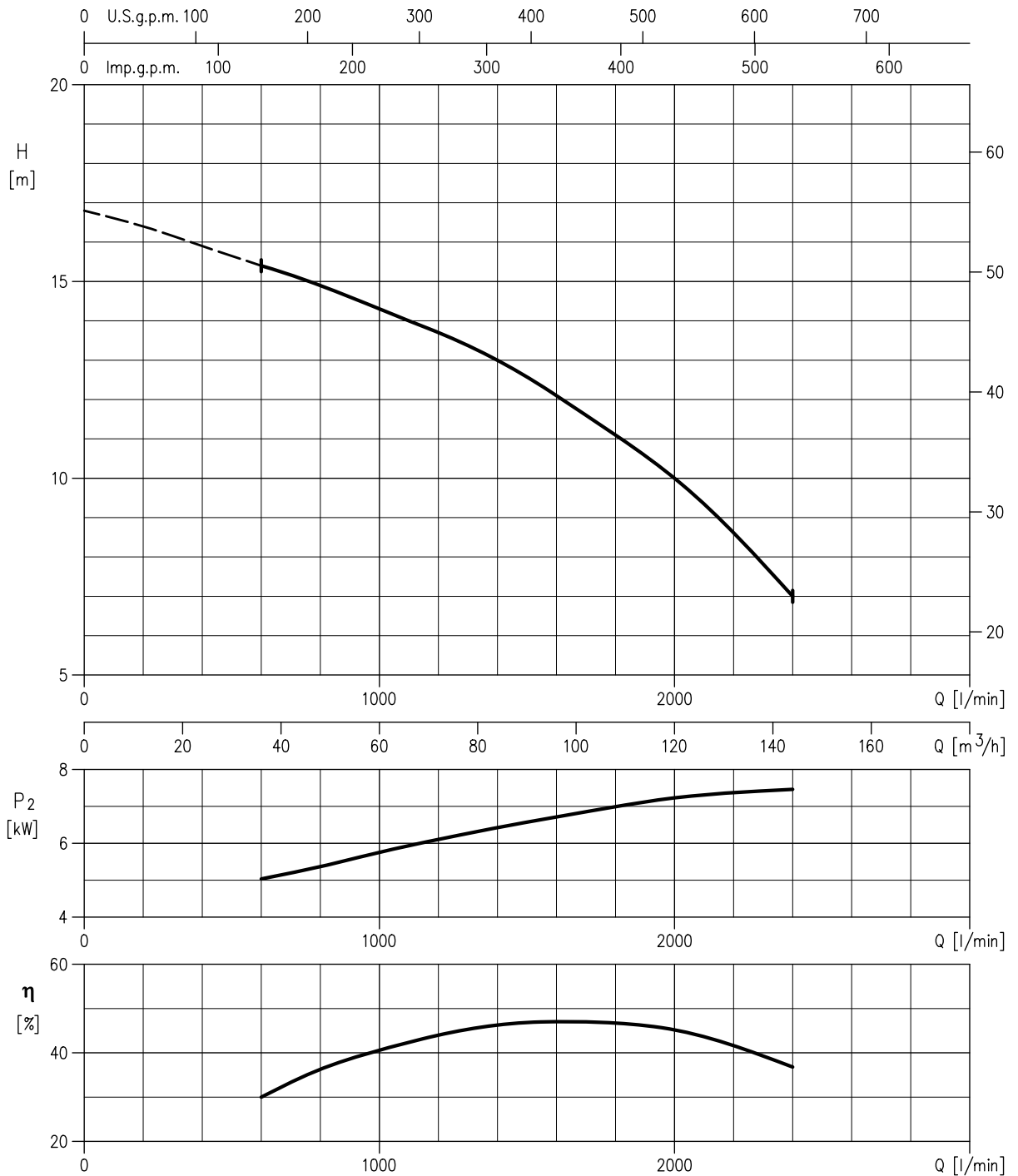
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DMLV55.5



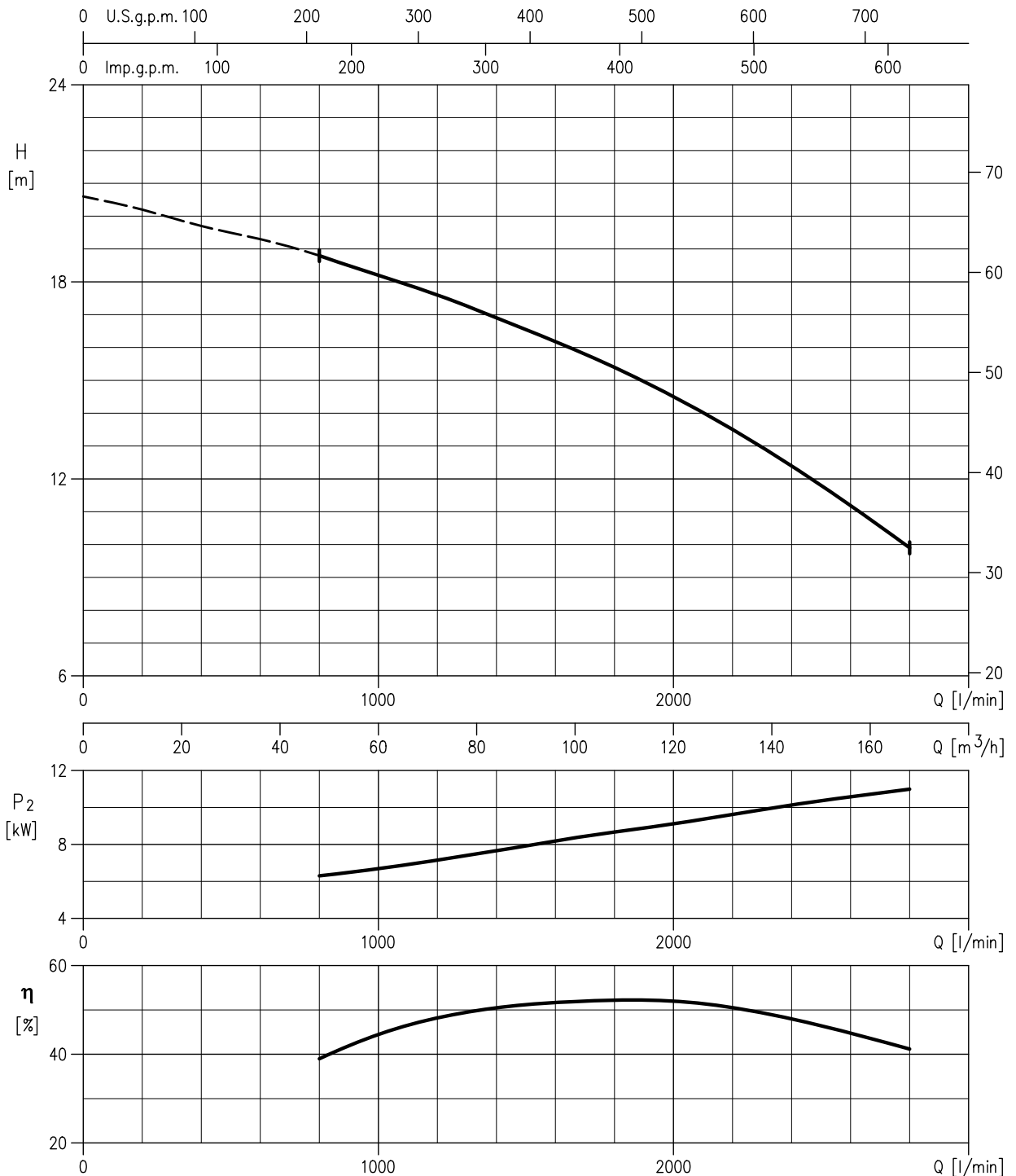
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DMLV57.5



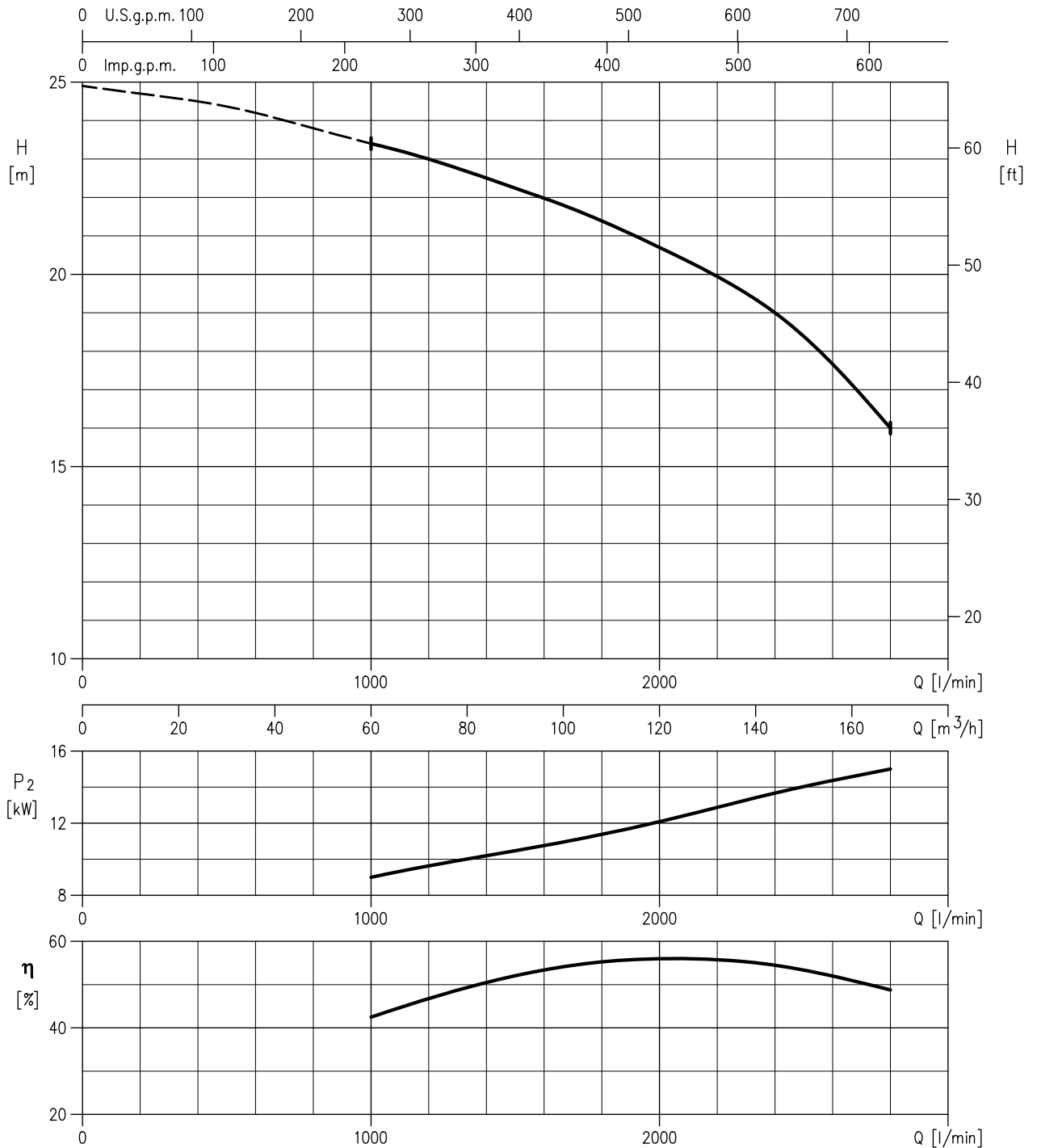
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DMLV511



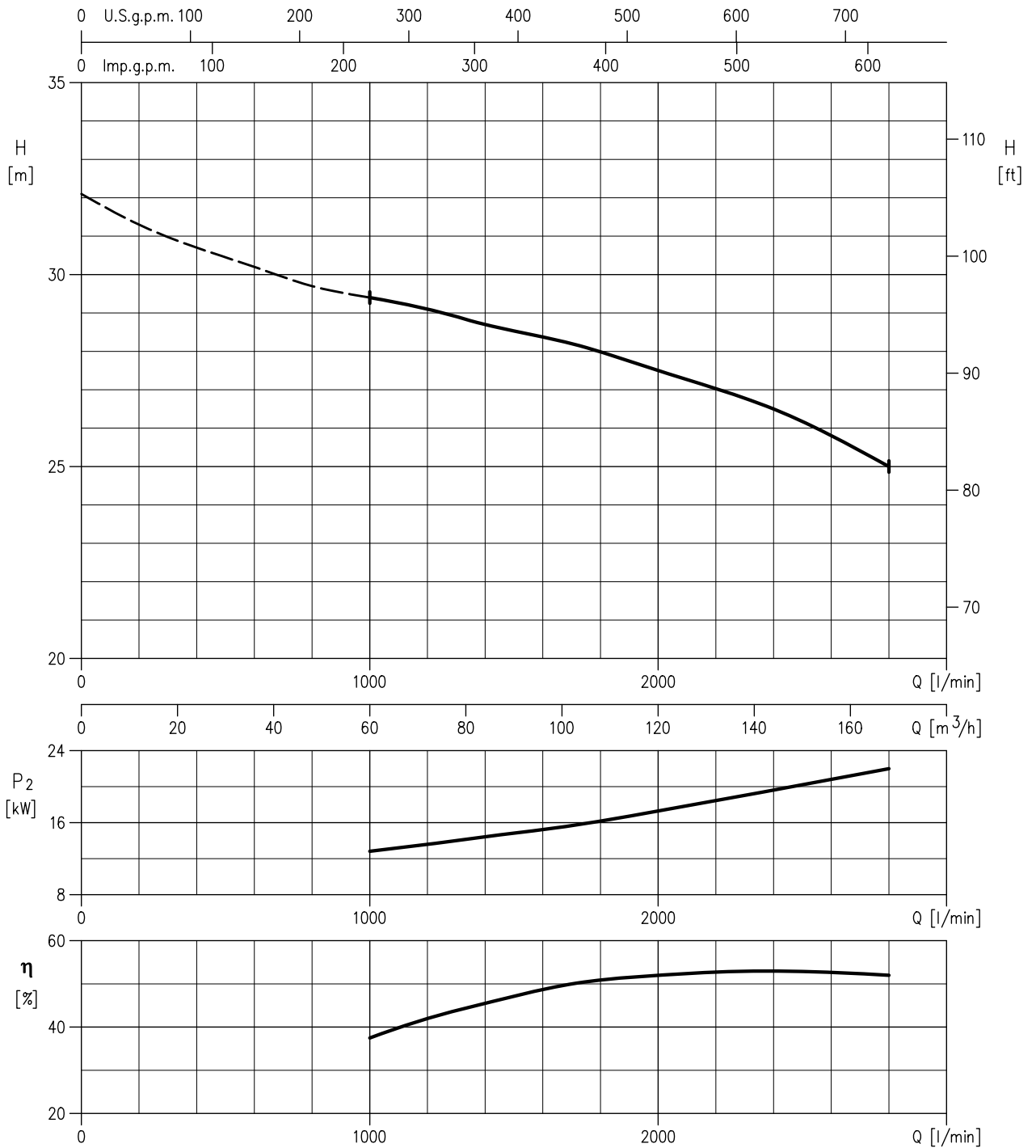
Rotation speed ≈ 1450 min⁻¹
 Test standard: ISO 9906 – Annex A

100DMLV515



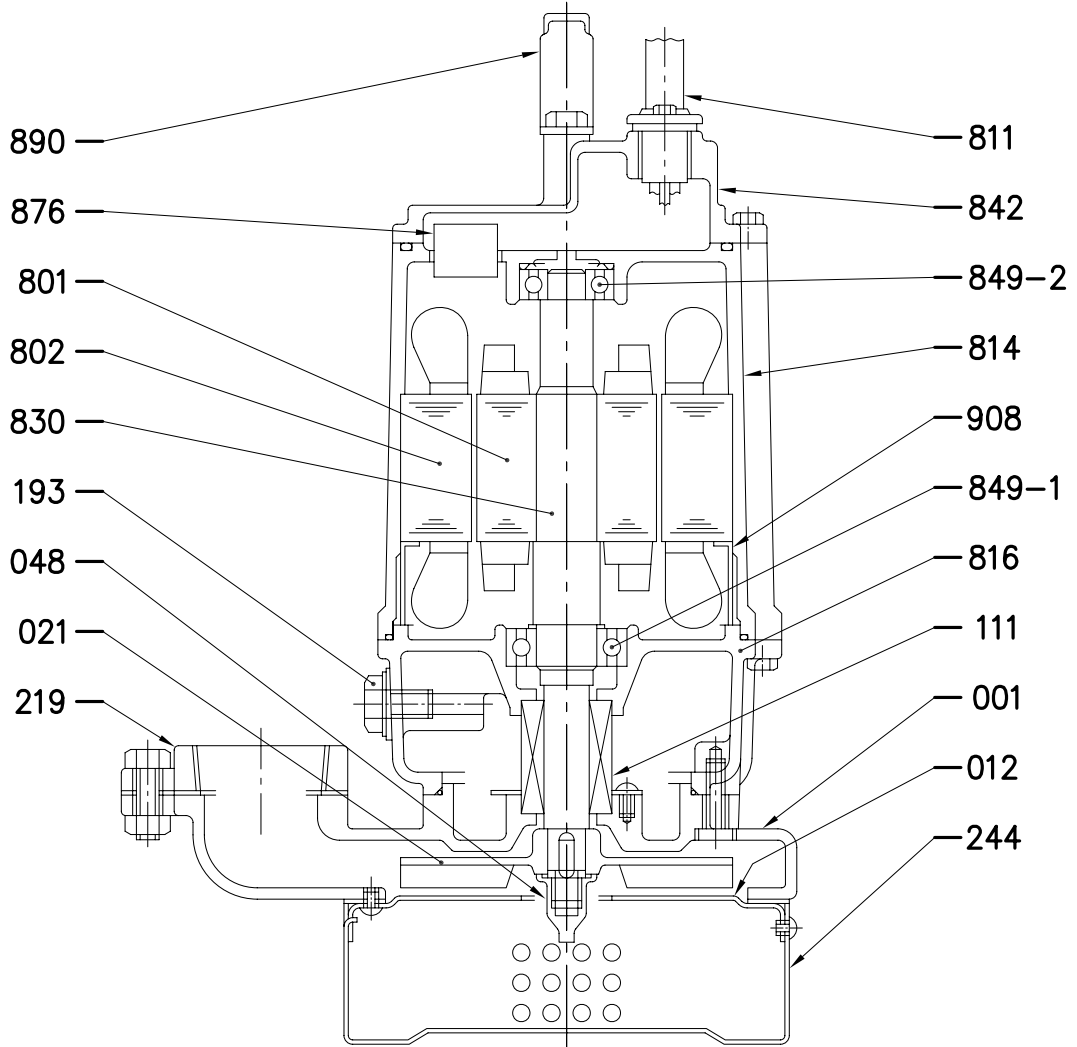
Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test standard: ISO 9906 – Annex A

100DMLV522



Rotation speed ≈ 1450 min⁻¹
 Test standard: ISO 9906 – Annex A

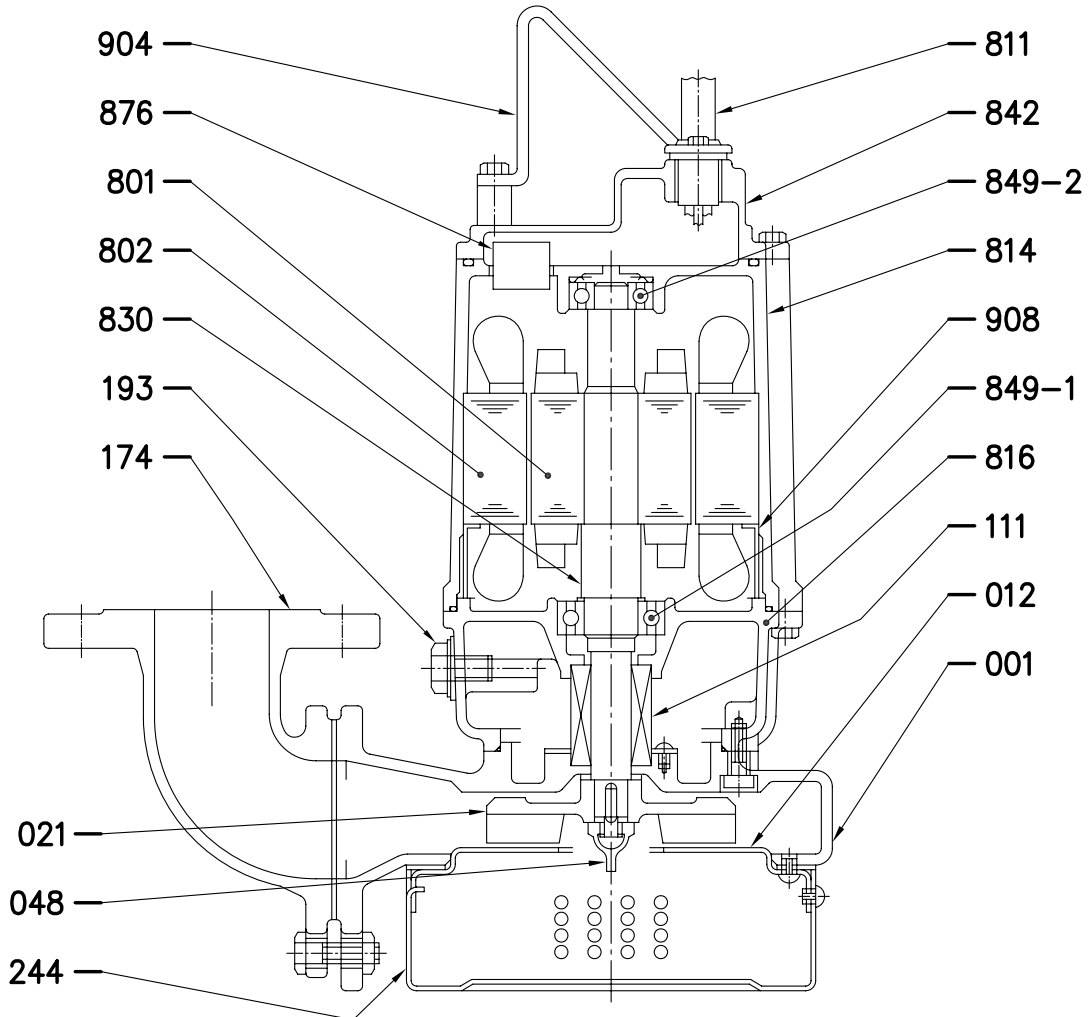
50DS (1.5kW)



POS.	PART. NAME	MATERIAL	Q.TY
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
012	SUCTION COVER	EN 1.4301 (AISI304)	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
048	IMPELLER NUT	Brass	1
111	MECHANICAL SEAL	-	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
219	COMPANION FLANGE	Cast iron EN-GHJL-200-EN 1561	1
244	STRAINER	EN 1.4301 (AISI304)	1
801	ROTOR	-	1
802	STATOR	-	1

POS.	PART. NAME	MATERIAL	Q.TY
811	SUBMERSIBLE CABLE	-	1
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
842	MOTOR COVER	Cast iron EN-GHJL-200-EN 1561	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
890	HANDLE	Stainless steel	1
908	SPACER	Steel	1

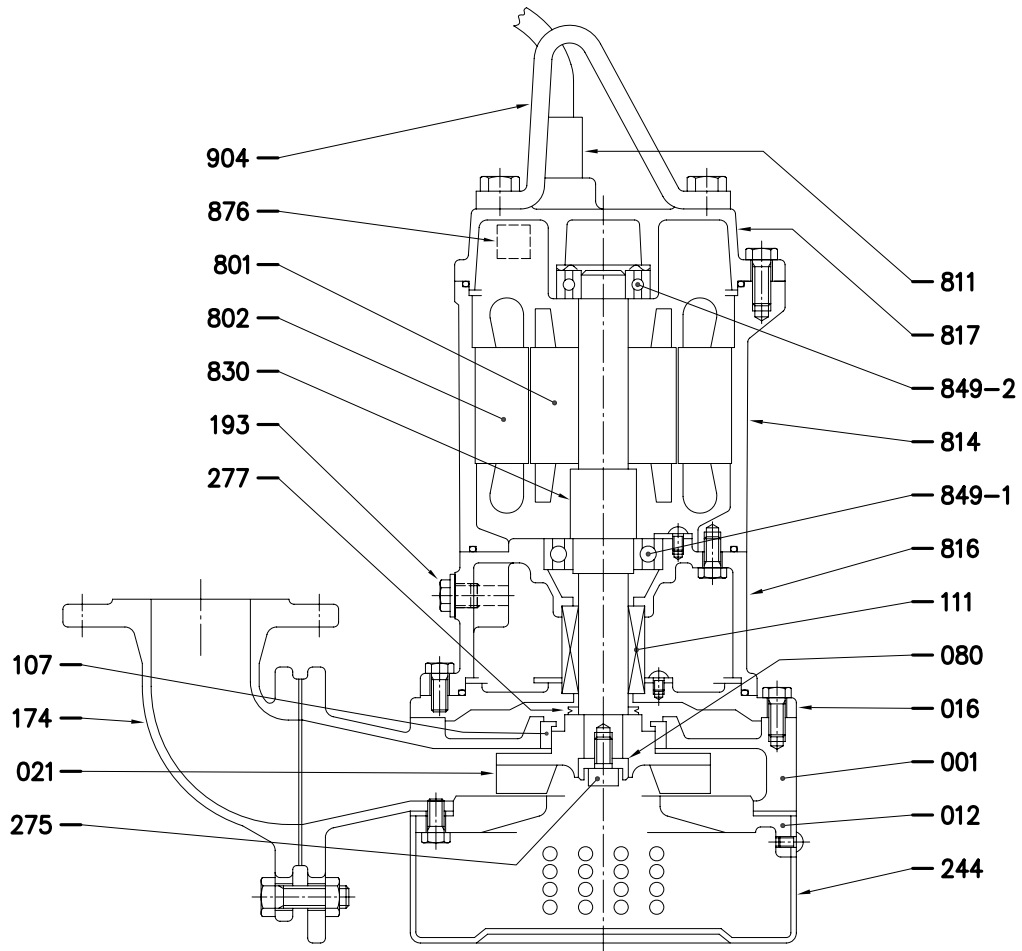
65DS (1.5kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
012	SUCTION COVER	EN 1.4301 (AISI304)	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
048	IMPELLER NUT	Brass	1
111	MECHANICAL SEAL	-	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
244	STRAINER	EN 1.4301 (AISI304)	1
801	ROTOR	-	1
802	STATOR	-	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
811	SUBMERSIBLE CABLE	-	1
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
842	MOTOR COVER	Cast iron EN-GHJL-200-EN 1561	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
904	LIFTING HANGER	Stainless steel	1
908	SPACER	Steel	1

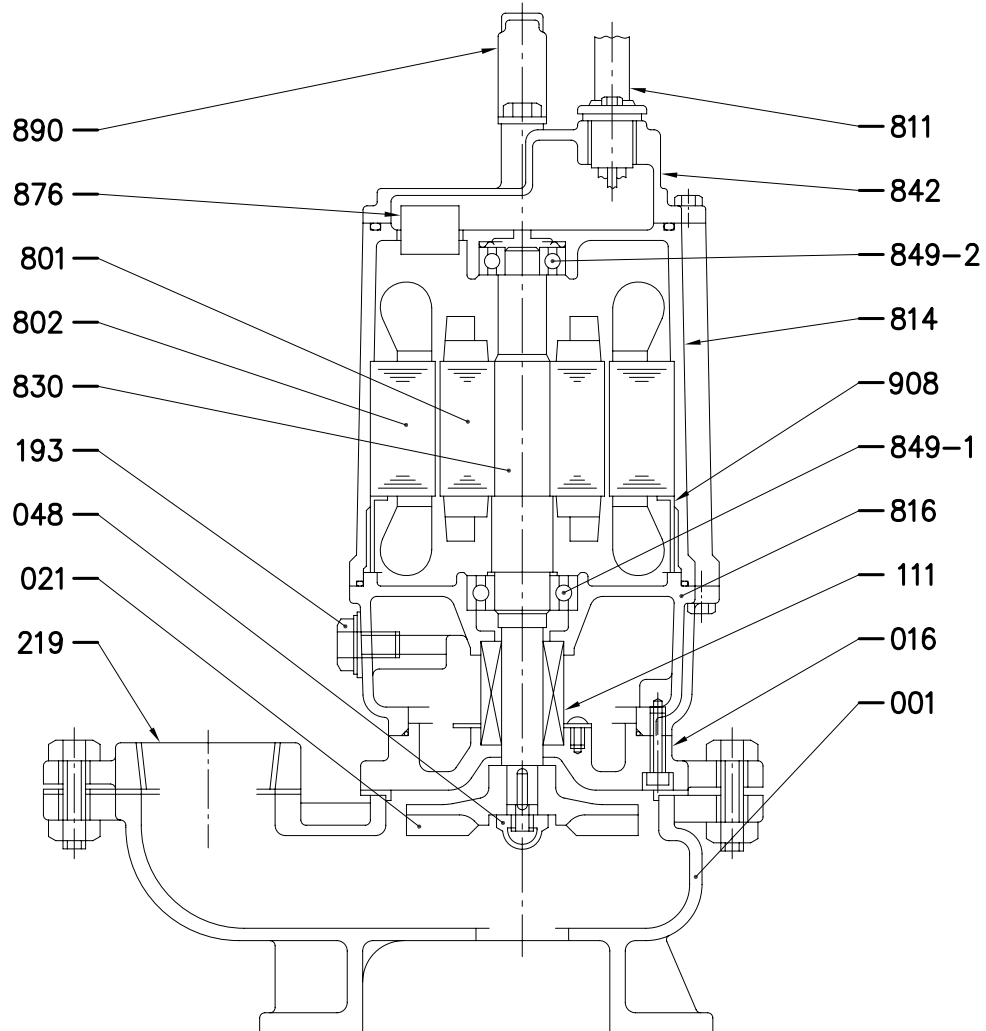
50(80)DS (2.2÷3.7 kW)
100DS (5.5÷7.5 kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
012	SUCTION COVER	Cast iron EN-GHJL-200-EN 1561	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
080	BUSHING	EN 1.4301 (AISI304)	1
107	CASING RING	Brass	1
111	MECHANICAL SEAL	-	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
244	STRAINER	EN 1.4301 (AISI304)	1
275	IMPELLER BOLT	EN 1.4301 (AISI304)	1
277	V-RING	-	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
801	ROTOR	-	1
802	STATOR	-	1
811	SUBMERSIBLE CABLE	-	1
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
817	MOTOR COVER	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
904	LIFTING HANGER	Stainless steel	1

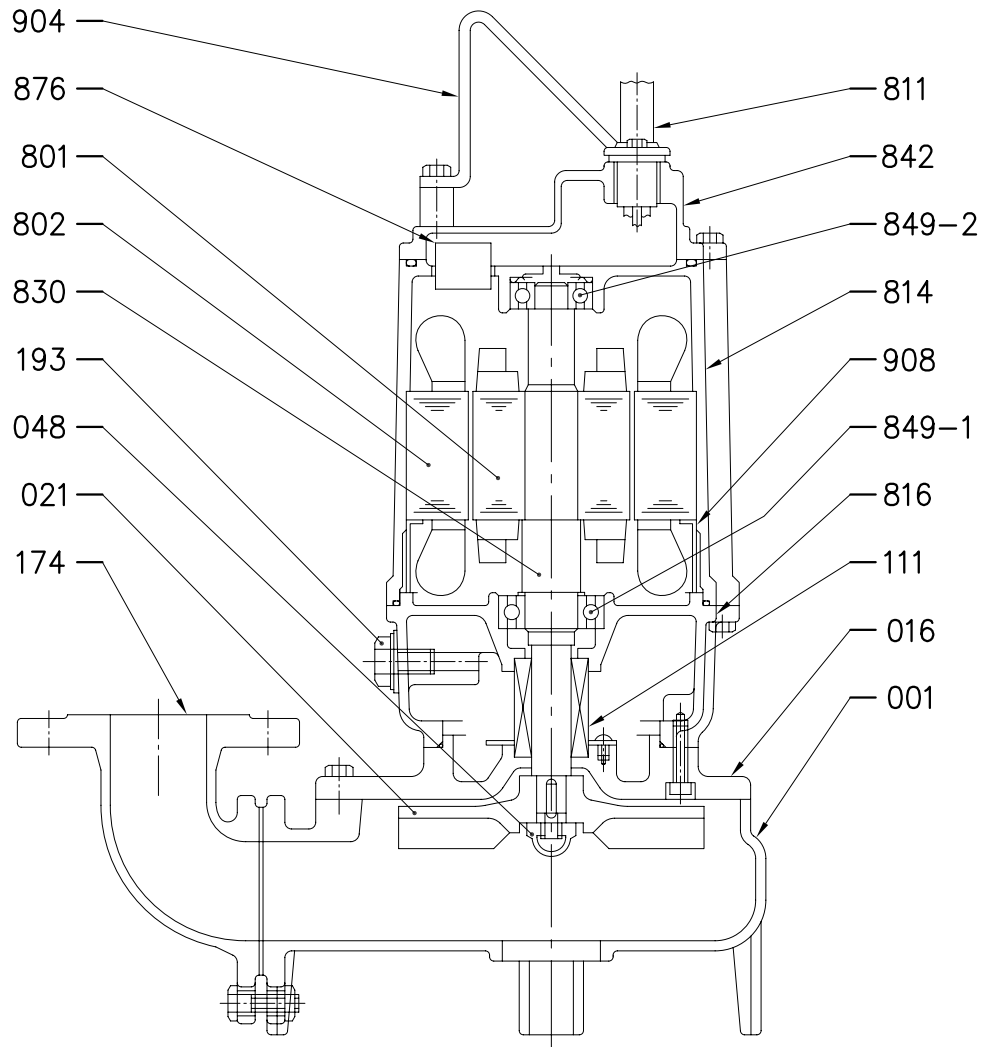
50DVS (1.5kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
048	IMPELLER NUT	Brass	1
111	MECHANICAL SEAL	-	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
219	COMPANION FLANGE	Cast iron EN-GHJL-200-EN 1561	1
801	ROTOR	-	1
802	STATOR	-	1
811	SUBMERSIBLE CABLE	-	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
842	MOTOR COVER	Cast iron EN-GHJL-200-EN 1561	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
890	HANDLE	Stainless Steel	1
908	SPACER	Steel	1

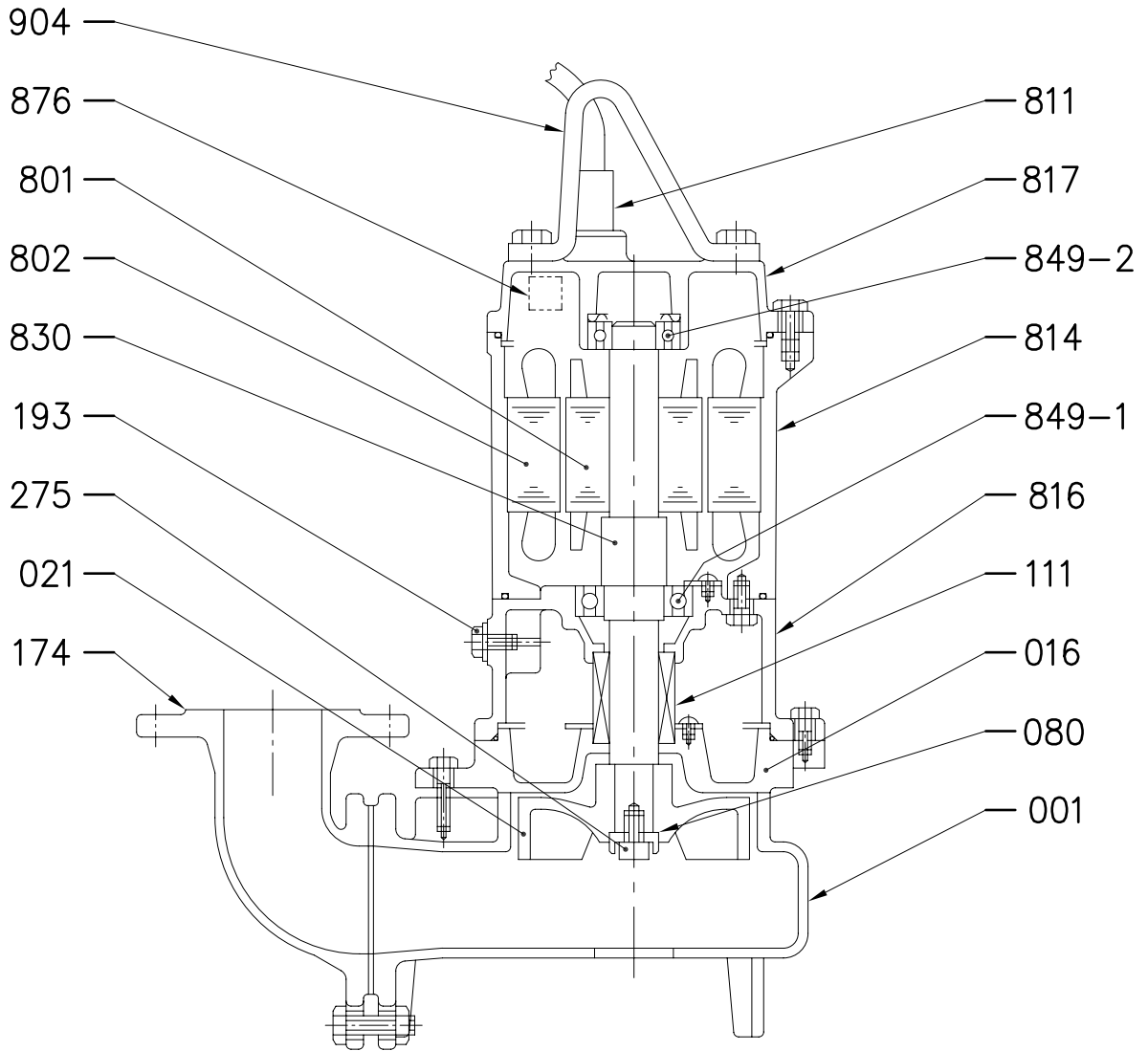
65(80)DVS (1.5kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
048	IMPELLER NUT	EN 1.4301 (AISI304)	1
111	MECHANICAL SEAL	-	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
801	ROTOR	-	1
802	STATOR	-	1
811	SUBMERSIBLE CABLE	-	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
842	MOTOR COVER	Cast iron EN-GHJL-200-EN 1561	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
904	LIFTING HANGER	Stainless Steel	1
908	SPACER	Steel	

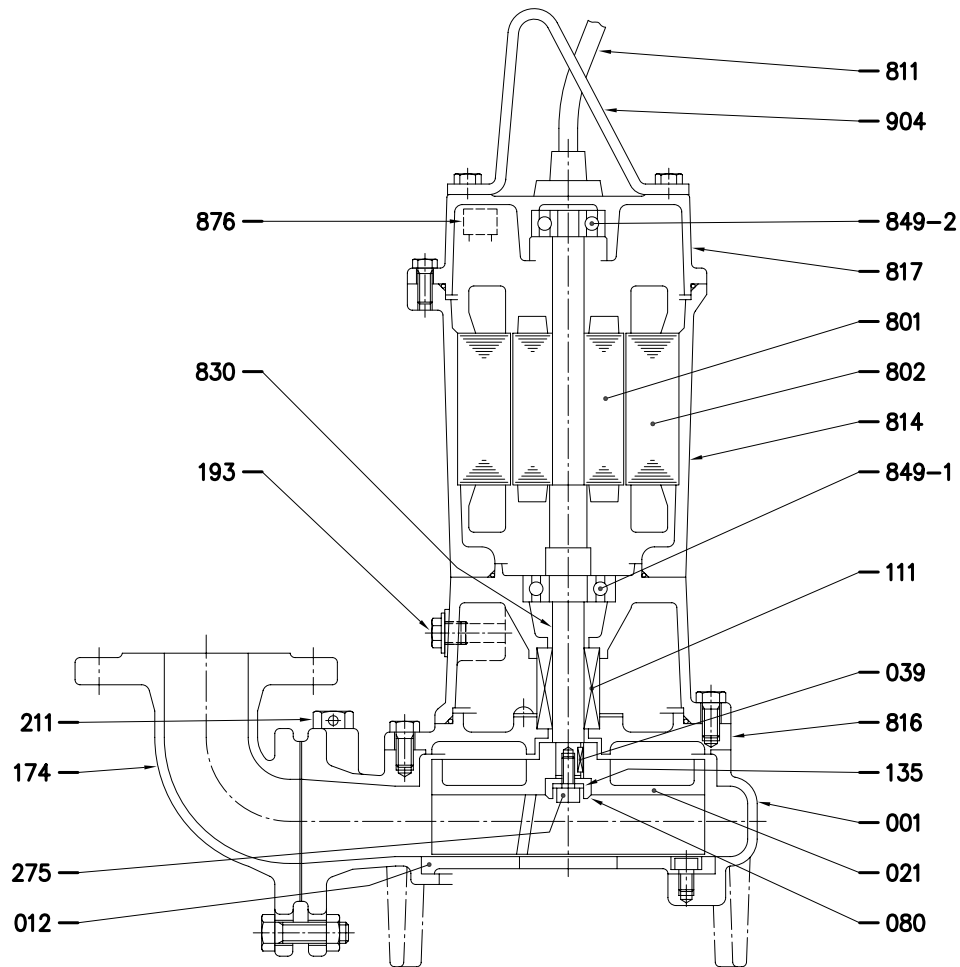
65(80)DVS (2.2÷3.7 kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
080	BUSHING	EN 1.4301 (AISI304)	1
111	MECHANICAL SEAL	-	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1
275	IMPELLER BOLT	EN 1.4301 (AISI304)	1
801	ROTOR	-	1
802	STATOR	-	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
811	SUBMERSIBLE CABLE	-	1
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
817	OPPOSITE SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
876	PROTECTOR	-	1
904	LIFTING HANGER	Stainless Steel	1

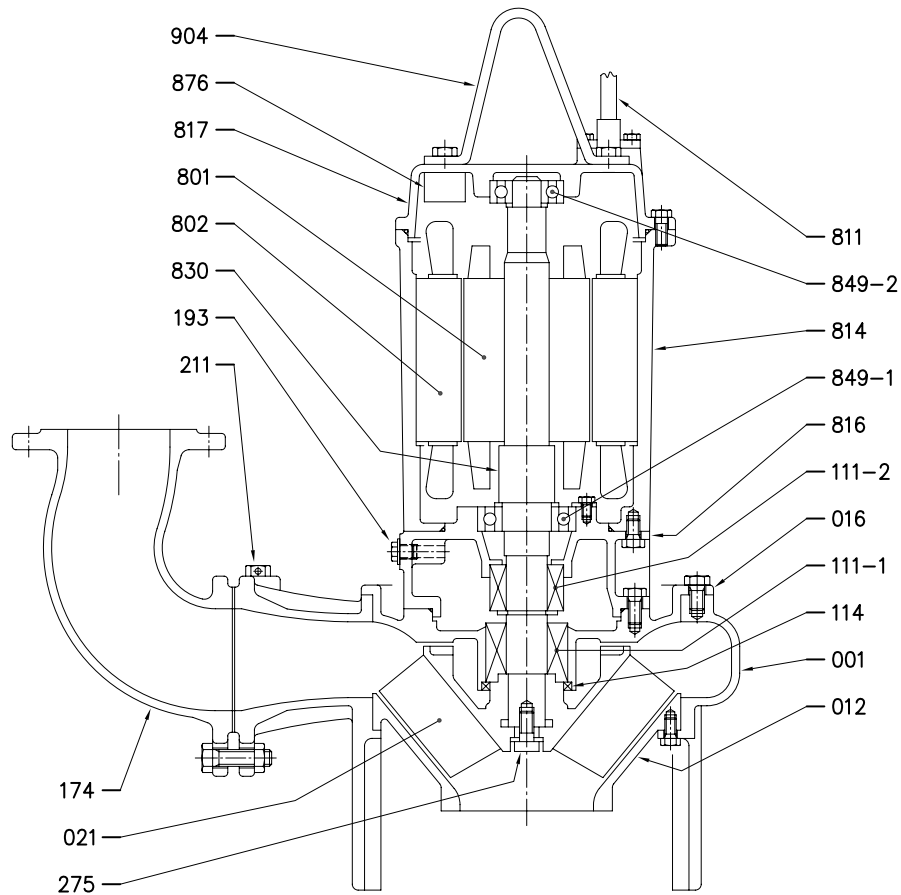
**65DL, 65DL W/C (1.5 kW)
80DL, 80DL W/C (1.5÷3.7 kW)
100DL, 100DL W/C (3.7 kW)**



POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1
012	SUCTION COVER	Cast iron EN-GHJL-200-EN 1561	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1
039	KEY	EN 1.4028 (AISI420)	1
080	BUSHING	EN 1.4301 (AISI304)	1
111	MECHANICAL SEAL	-	1
135	SEAL WASHER	EN 1.4301 (AISI304)	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1
193	Oil Plug	NBR/EN 1.4301 (AISI304)	1
211	AIRVENT VALVE	-	1
275	IMPELLER BOLT	EN 1.4301 (AISI304)	1

POS.	PART. NAME	MATERIAL	N° FOR UNIT
801	ROTOR	-	1
802	STATOR	-	1
811	SUBMERSIBLE CABLE	-	1
814	MOTOR FRAME	Cast iron EN-GHJL-200-EN 1561	1
816	POWER SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
817	OPPOSITE SIDE BRACKET	Cast iron EN-GHJL-200-EN 1561	1
830	SHAFT	EN 1.4006 (AISI403)	1
876	PROTECTOR	-	1
849-1	BALL BEARING	-	1
849-2	BALL BEARING	-	1
904	LIFTING HANGER	Stainless Steel	1

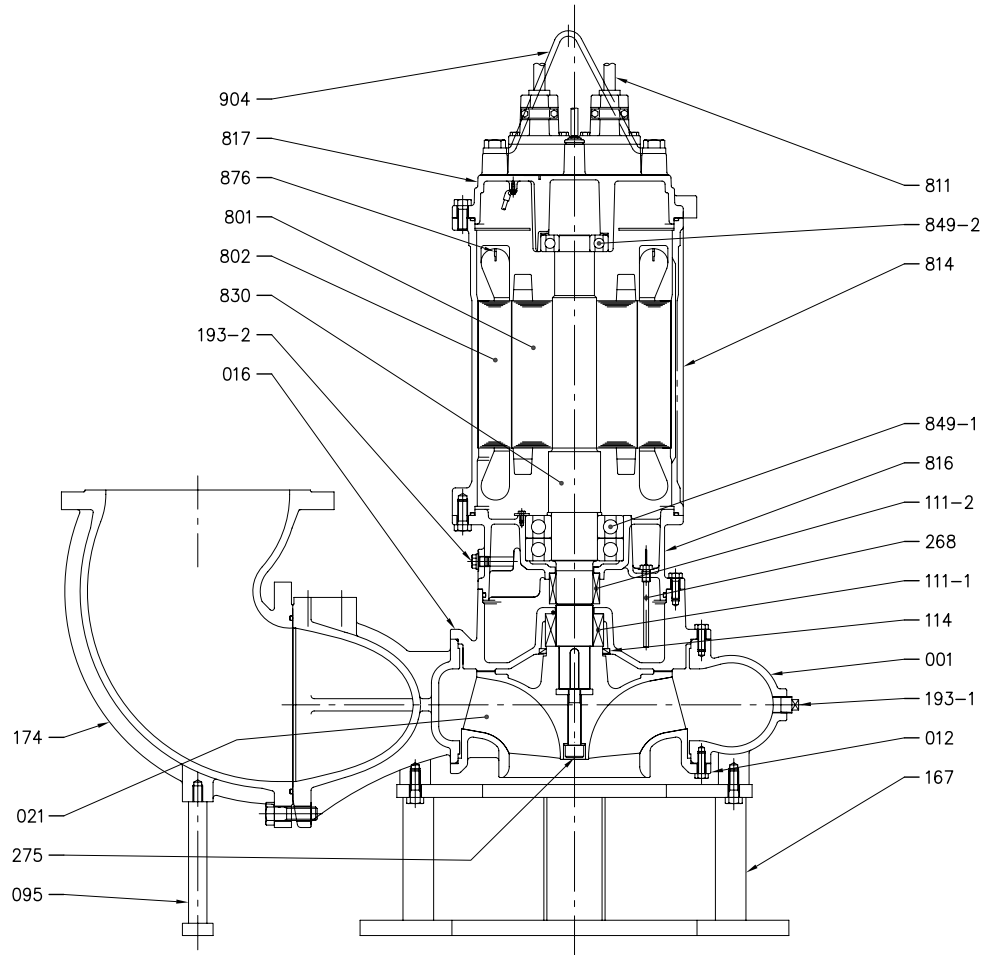
80DL (5.5÷7.5 kW)
100DL (5.5÷18.5 kW), 100DL W/C (5.5÷7.5 kW)
150DL (5.5÷22 kW), 200DL (5.5÷22 kW)
250DL (7.5÷22 kW), 300DL (11÷22 kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT	POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1	801	ROTOR	-	1
012	SUCTION COVER	Cast iron EN-GHJL-200-EN 1561	1	802	STATOR	-	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1	811	SUBMERSIBLE CABLE	-	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1	814	MOTOR FRAME	Cast iron EN-GHJL-150-EN 1561	1
111-1	MECHANICAL SEAL	-	1	816	POWER SIDE BRACKET	Cast iron EN-GHJL-150-EN 1561	1
111-2	MECHANICAL SEAL	-	1	817	OPPOSITE SIDE BRACKET	Cast iron EN-GHJL-150-EN 1561	1
114	OIL SEAL	NBR	1	830	SHAFT	EN 1.4006 (AISI403)	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1	849-1	BALL BEARING	-	1
193	OIL PLUG	NBR/EN 1.4301 (AISI304)	1	849-2	BALL BEARING	-	1
211	AIRVENT VALVE [1]	-	1	876	PROTECTOR	-	1
275	IMPELLER BOLT	EN 1.4301 (AISI304)	1	904	LIFTING HANGER	Stainless Steel	1

[1] Not for 250DL and 300DL

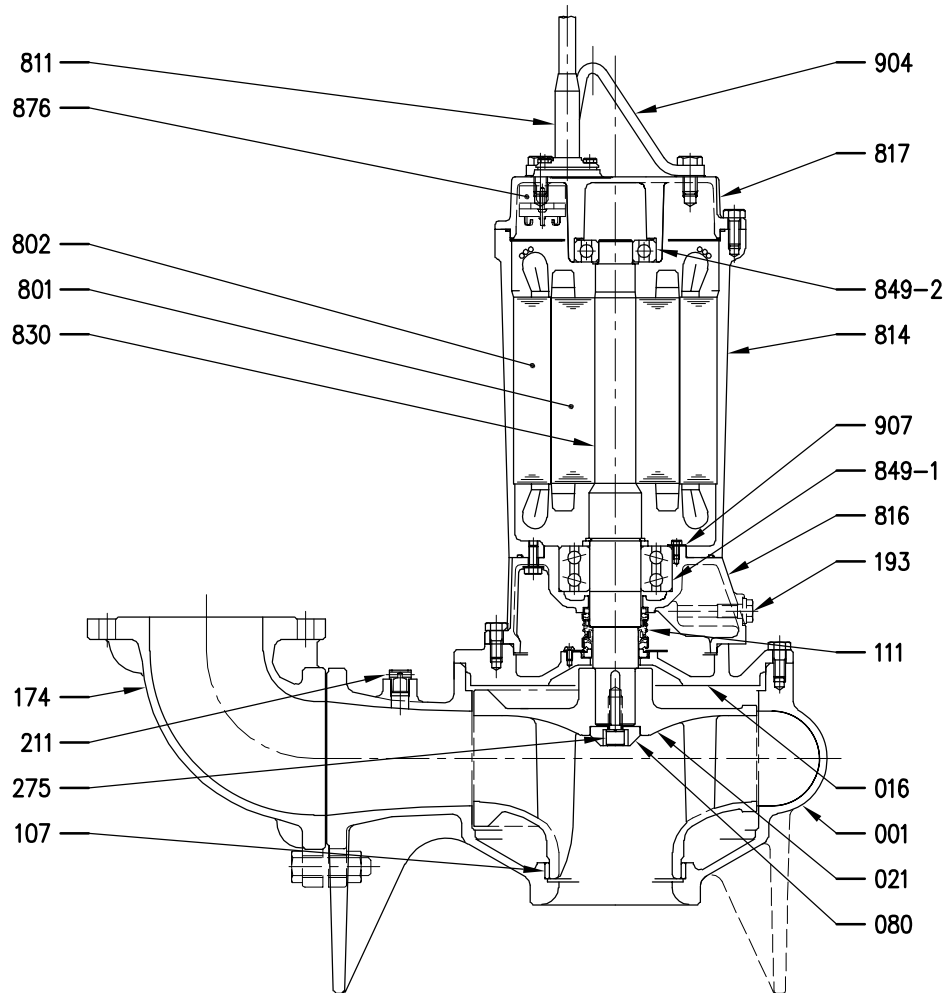
150DL (30÷45 kW), 200DL (30÷45 kW)
250DL (30÷45 kW), 300 DL(30÷45 kW)



POS.	PART. NAME	MATERIAL	N° FOR UNIT	POS.	PART. NAME	MATERIAL	N° FOR UNIT
001	CASING	Cast iron EN-GHJL-200-EN 1561	1	275	IMPELLER BOLT	EN 1.4301 (AISI304)	1
012	SUCTION COVER	Cast iron EN-GHJL-200-EN 1561	1	801	ROTOR	-	1
016	MECHANICAL SEAL COVER	Cast iron EN-GHJL-200-EN 1561	1	802	STATOR	-	1
021	IMPELLER	Cast iron EN-GHJL-200-EN 1561	1	811	SUBMERSIBLE CABLE	-	1
095	STAY [1]	EN 1.4301 (AISI304)		814	MOTOR FRAME	Cast iron EN-GHJL-150-EN 1561	1
111-1	MECHANICAL SEAL	-	1	816	POWER SIDE BRACKET	Cast iron EN-GHJL-150-EN 1561	1
111-2	MECHANICAL SEAL	-	1	817	OPPOSITE SIDE BRACKET	Cast iron EN-GHJL-150-EN 1561	1
114	OIL SEAL	NBR	1	830	SHAFT	EN 1.4006 (AISI403)	1
174	DISCHARGE BEND	Cast iron EN-GHJL-200-EN 1561	1	849-1	BALL BEARING	-	1
193-2	OIL PLUG + GASKET	NBR/EN 1.4301 (AISI304)	1	849-2	BALL BEARING	-	1
193-2	PLUG	EN 1.4301 (AISI304)	1	876	PROTECTOR	-	1
211	AIRVENT VALVE [2]	-	1	904	LIFTING HANGER	Stainless Steel	1

[1] Not for 150DL and 200DL
[2] Not for 250DL and 300DL

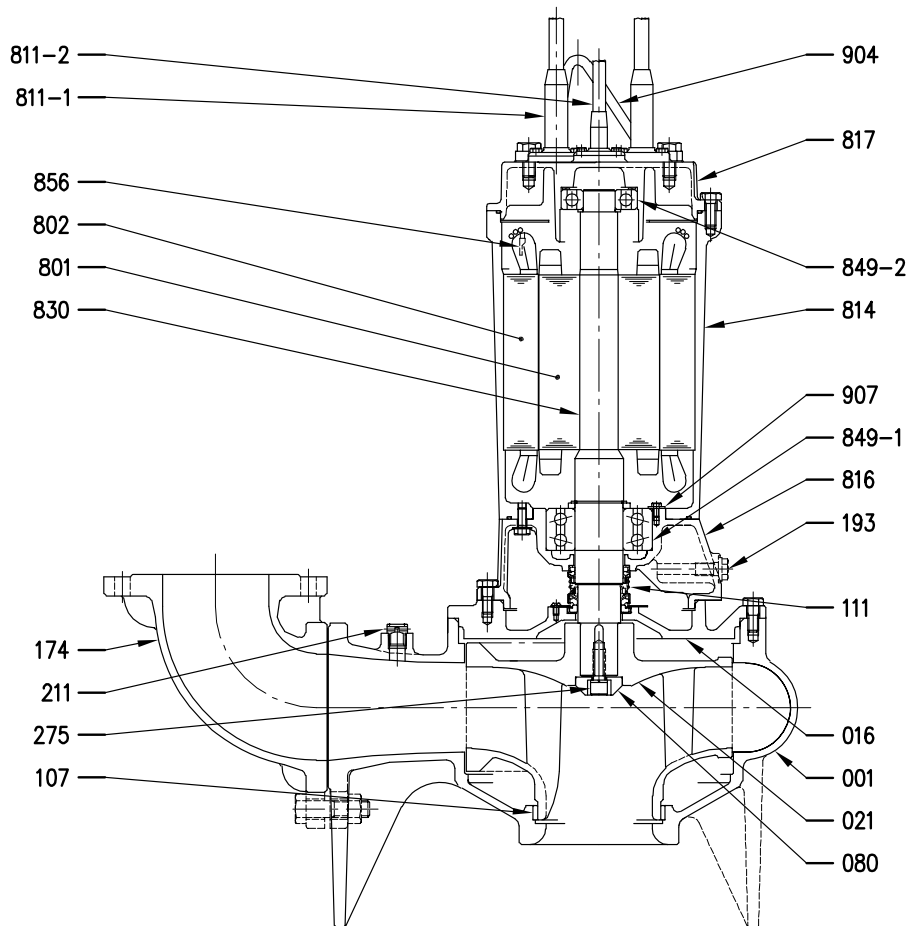
80DML (2.2 kW)



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1
107	Wearing ring	Bronze	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
211	Airvent Valve	Brass	1
275	Impeller Bolt	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1

N°	PART.NAME	MATERIAL	Q.TY
802	Stator	-	1
811	Submersible Cable	-	2
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
876	Auto Cut	-	3
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

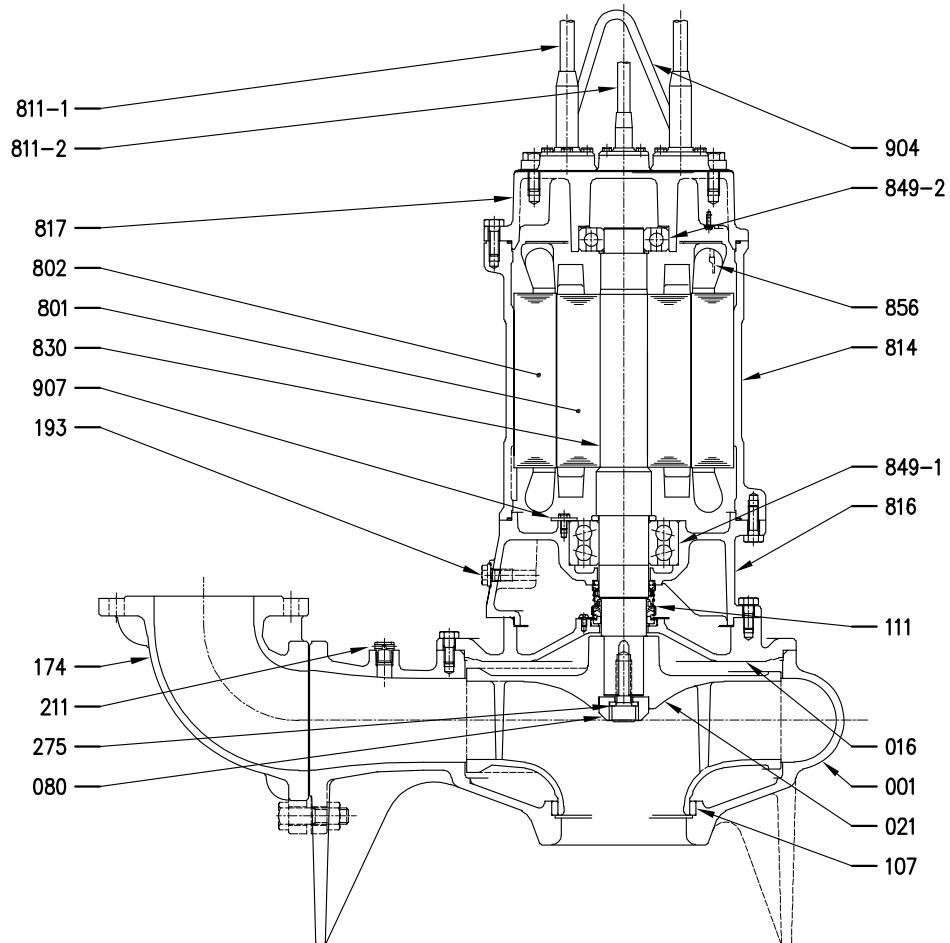
80DML (3.7 kW)
 100DML (3.7÷7.5 kW)
 150DML (5.5÷7.5 kW)



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1
107	Wearing ring	Bronze	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
211	Airvent Valve	Brass	1
275	Impeller Bolt	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1
802	Stator	-	1

N°	PART.NAME	MATERIAL	Q.TY
811-1	Submersible Cable (power)	-	2
811-2	Submersible Cable (signal)	-	1
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
856	Thermal Protector	-	3
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

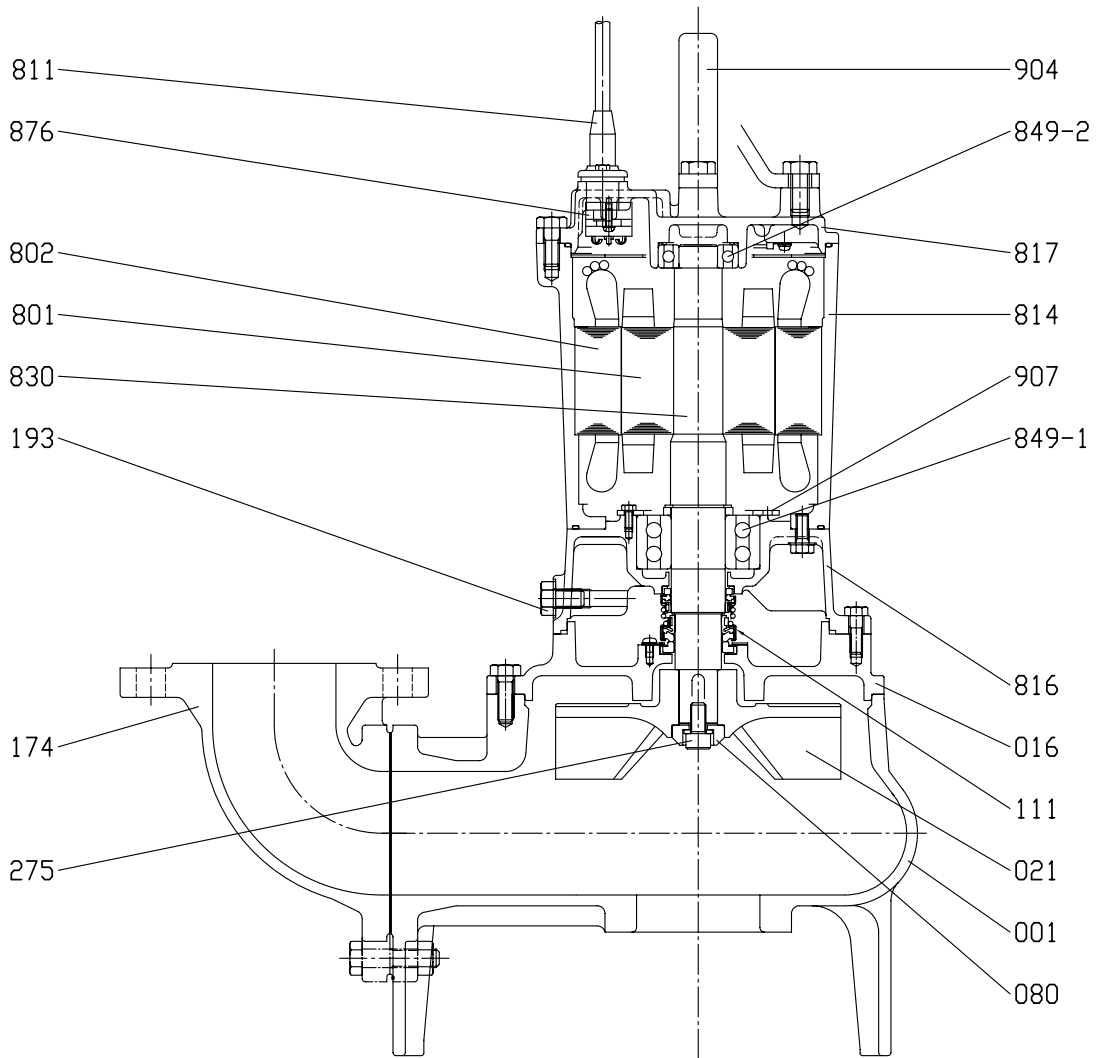
100DML (11÷22 kW)
150DML (11÷22 kW)



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1
107	Wearing ring	Bronze	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
211	Airvent Valve	Brass	1
275	Impeller Bolt	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1
802	Stator	-	1

N°	PART.NAME	MATERIAL	Q.TY
811-1	Submersible Cable (power)	-	2
811-2	Submersible Cable (signal)	-	1
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
856	Thermal Protector	-	3
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

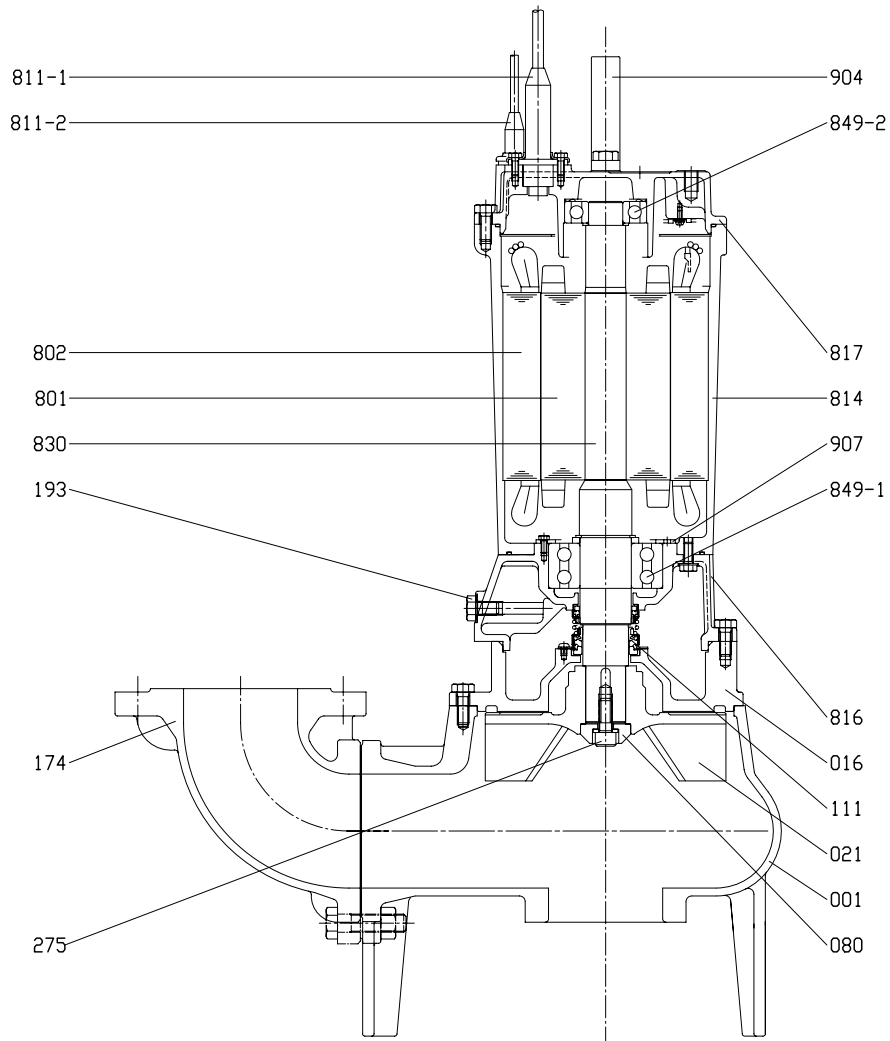
80DMLV (2.2 kW)



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1
802	Stator	-	1

N°	PART.NAME	MATERIAL	Q.TY
811	Submersible Cable	-	2
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
876	Auto Cut	-	1
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

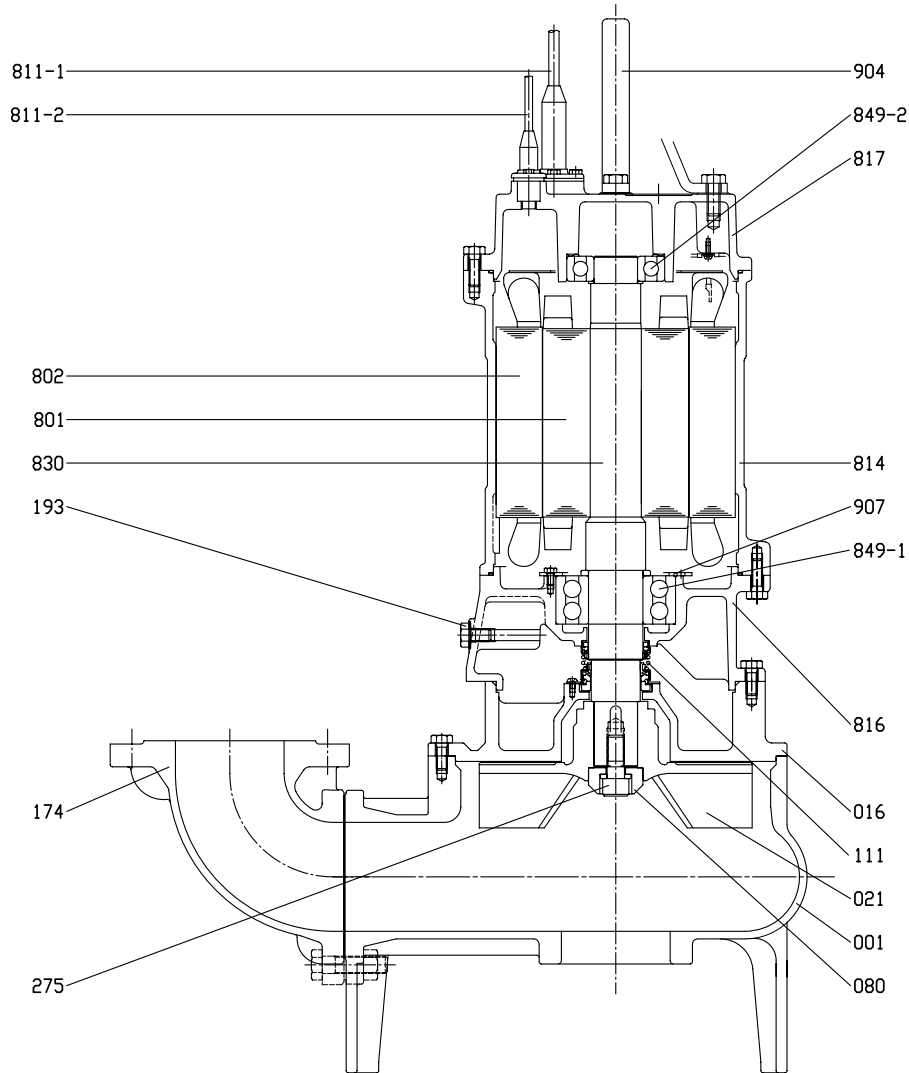
**80DMLV (3.7 kW)
100DMLV (3.7÷5.5 kW)**



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1
802	Stator	-	1

N°	PART.NAME	MATERIAL	Q.TY
811-1	Submersible Cable (power)	-	2
811-2	Submersible Cable (signal)	-	1
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

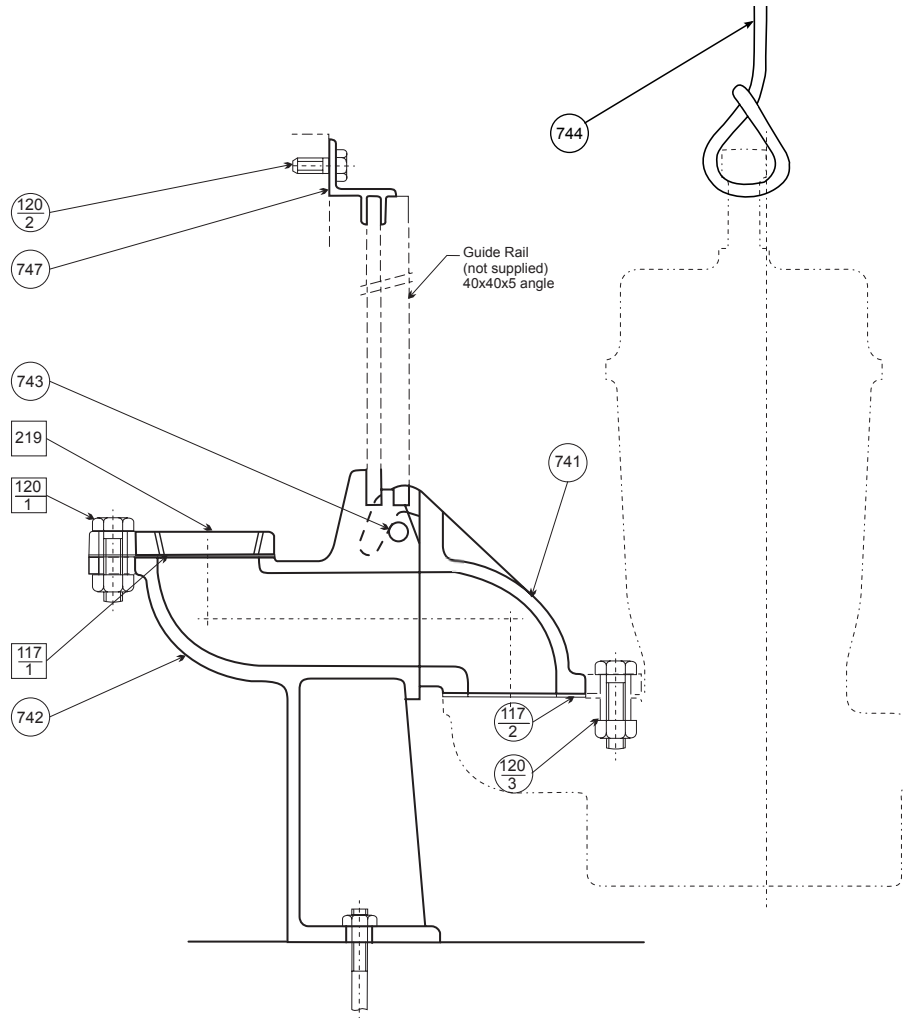
100DMLV (11÷22 kW)



N°	PART.NAME	MATERIAL	Q.TY
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	EN-GHJL-200-EN 1561 (11 kW) EN-GJS-400 -EN 1563 (15-22 kW)	1
080	Bushing	Steel	1
111	Mechanical seal	-	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
193	Oil Plug	NBR/Stainless Steel	1 set
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1
801	Rotor	-	1
802	Stator	-	1

N°	PART.NAME	MATERIAL	Q.TY
811-1	Submersible Cable (power)	-	2
811-2	Submersible Cable (signal)	-	1
814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
830	Shaft	EN 1.4006 (AISI403)	1
849-1	Ball Bearing	-	1
849-2	Ball Bearing	-	1
904	Lifting Hanger	Steel	1
907	Bearing Cover	Steel	1

QDC LS50 (Optional)

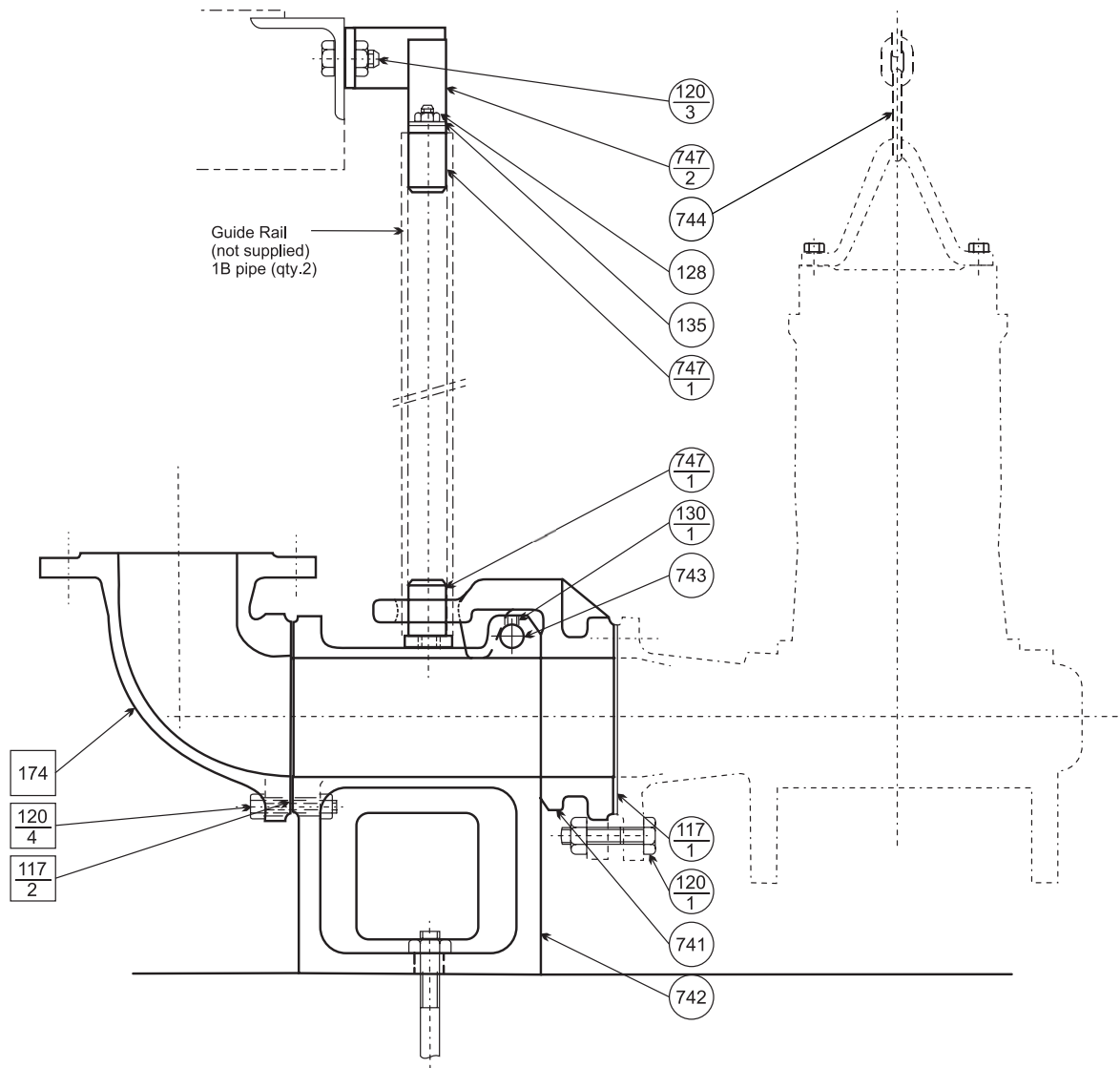


N°	PART.NAME	MATERIAL	Q.TY
117-1	Gasket	NBR Rubber	1
117-2	Gasket	NBR Rubber	1
120-1	Bolt&Nut	AISI 304 Stainless Steel	2
120-2	Bolt	AISI 304 Stainless Steel	2
120-3	Bolt	AISI 304 Stainless Steel	2
219	Companion Flang	Cast iron EN-GHJL-200 - EN	1

N°	PART.NAME	MATERIAL	Q.TY
741	Sliding Guide	Cast iron EN-GHJL-200 - EN 1561	1
742	QDC Body	Cast iron EN-GHJL-200 - EN 1561	1
743	Suspension Bar	AISI 304 Stainless Steel	1
744	Rope	-	1
747	Guide Support	Steel	1

Note: Those parts with item number indicated in a are supplied with the pump.

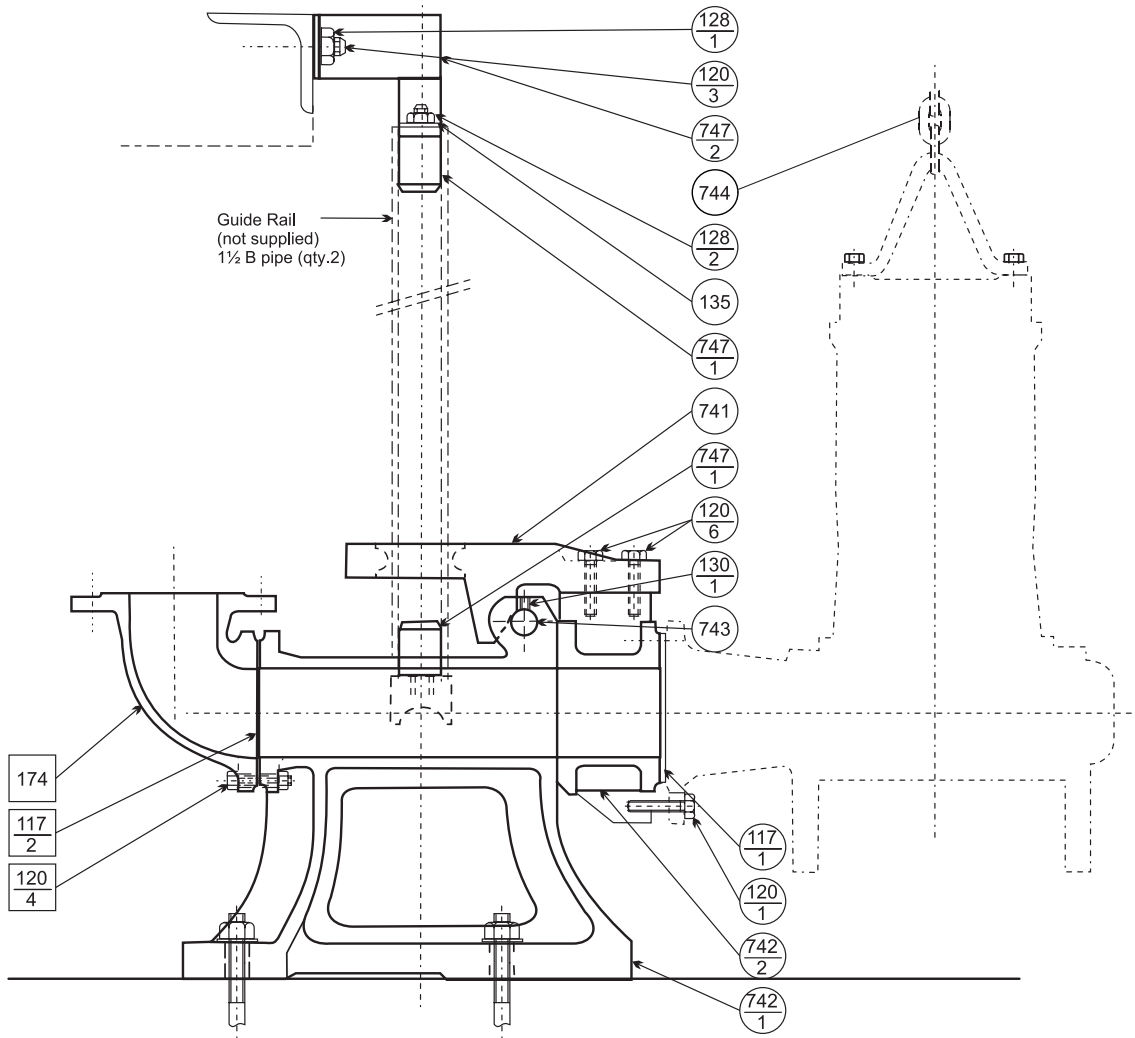
QDC LM50, LM65, LM80 (Optional)



N°	PART.NAME	MATERIAL	Q.TY	N°	PART.NAME	MATERIAL	Q.TY
117-1	Gasket	NBR Rubber	1	135	Washer	AISI 304 Stainless Steel	2
117-2	Gasket	NBR Rubber	1	174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
117-3	Gasket	NBR Rubber	1	741	Sliding Guide	Cast iron EN-GHJL-200 - EN 1563	1
120-1	Bolt & Nut	AISI 304 Stainless Steel	4	742	QDC Body	Cast iron EN-GHJL-200 - EN 1564	1
120-2	Bolt & Nut	AISI 304 Stainless Steel	2	743	Suspension Bar	AISI 304 Stainless Steel	1
120-3	Bolt & Nut	AISI 304 Stainless Steel	4	744	Chain	Steel	1
120-4	Bolt & Nut	AISI 304 Stainless Steel	4	747-1	Guide Pin	Steel	4
120-5	Bolt & Nut	AISI 304 Stainless Steel	4or8	747-2	Guide Support	Steel	1
128	Nut	AISI 304 Stainless Steel	2				
130-1	Set Screw	AISI 304 Stainless Steel	1				

Note: Those parts with item number indicated in a are supplied with the pump.

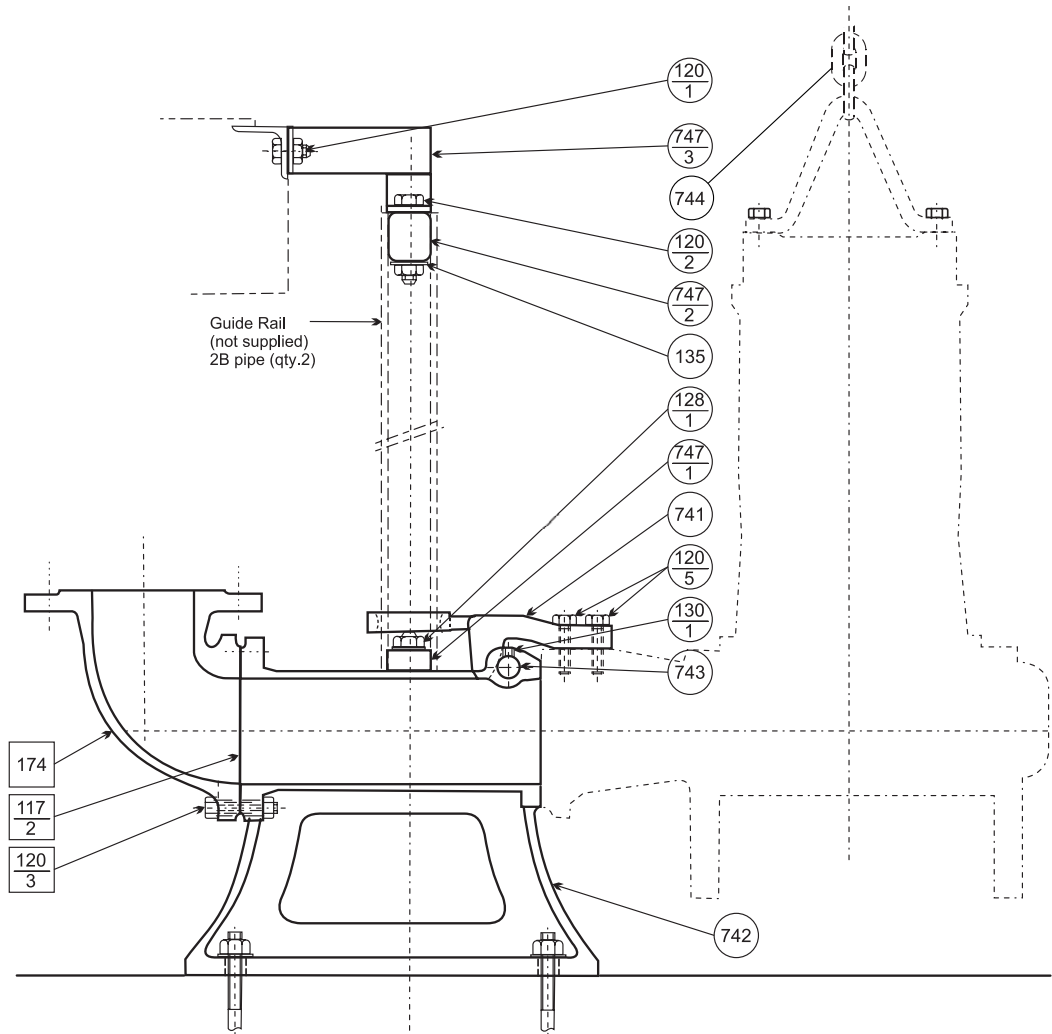
QDC LL80, LL100 (Optional)



N°	PART.NAME	MATERIAL	Q.TY	N°	PART.NAME	MATERIAL	Q.TY
117-1	Gasket	NBR Rubber	1	130-1	Set Screw	AISI 304 Stainless Steel	1
117-2	Gasket	NBR Rubber	1	135	Washer	AISI 304 Stainless Steel	2
117-3	Gasket	NBR Rubber	1	174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
120-1	Bolt	AISI 304 Stainless Steel	4	741	Sliding Guide	Spheroidal graphite cast iron EN-GJS-400 - EN 1563	1
120-3	Bolt	AISI 304 Stainless Steel	2	742-1	QDC Body	Cast iron EN-GHJL-200 - EN 1564	1
120-4	Bolt & Nut	AISI 304 Stainless Steel	4	742-2	QDC Flange	Cast iron EN-GHJL-200 - EN 1564	1
120-5	Bolt & Nut	AISI 304 Stainless Steel	4or8	743	Suspension Bar	AISI 304 Stainless Steel	1
120-6	Bolt	AISI 304 Stainless Steel	4	744	Chain	Steel	1
128-1	Nut	AISI 304 Stainless Steel	2	747-1	Guide Pin	Steel	4
128-2	Nut	AISI 304 Stainless Steel	2	747-2	Guide Support	Steel	1

Note: Those parts with item number indicated in a are supplied with the pump.

QDC LL125, LL150 (Optional)

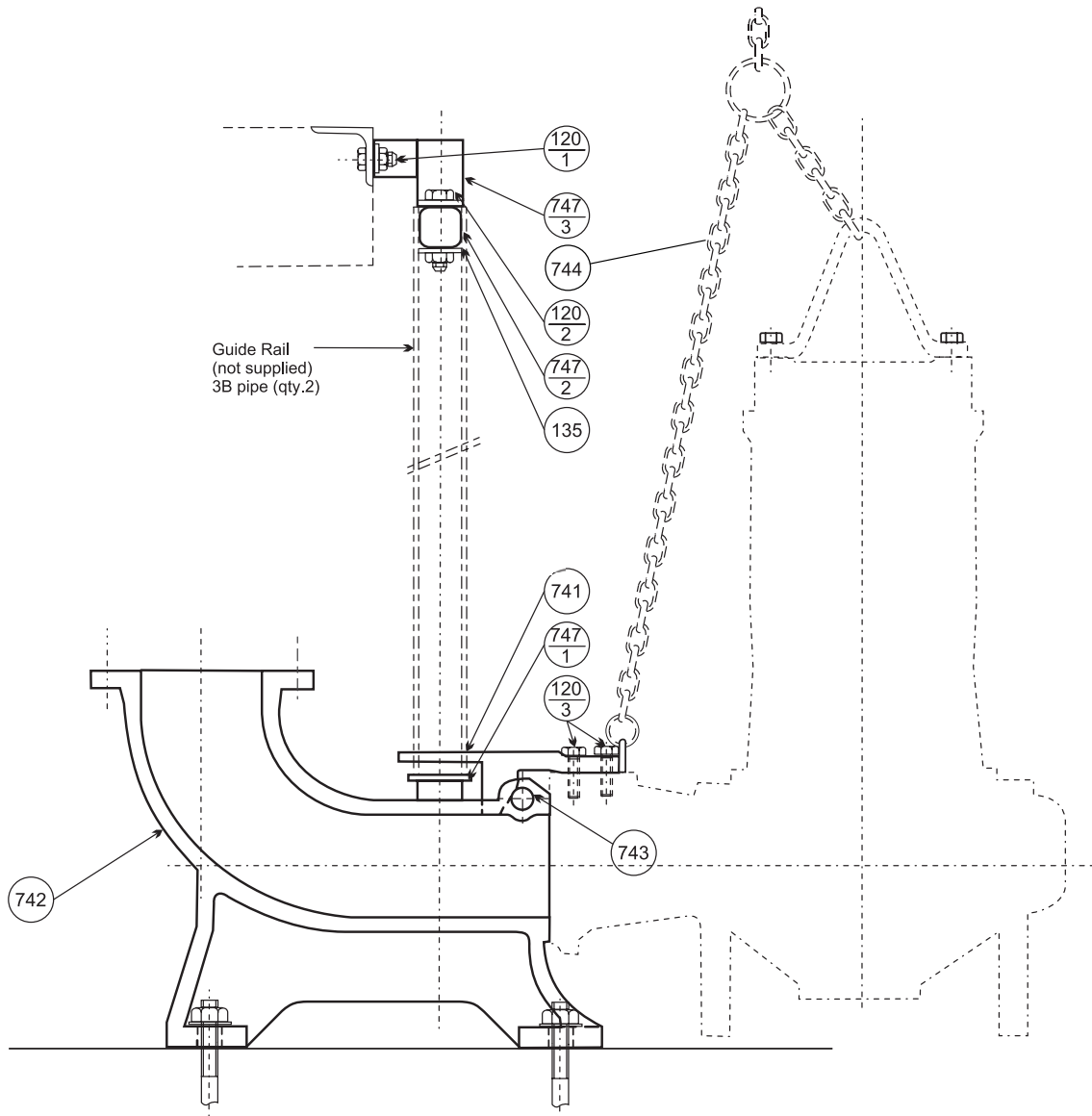


N°	PART.NAME	MATERIAL	Q.TY
117-2	Gasket	NBR Rubber	1
117-3	Gasket	NBR Rubber	1
120-1	Bolt & Nut	AISI 304 Stainless Steel	2
120-2	Bolt & Nut	AISI 304 Stainless Steel	2
120-3	Bolt & Nut	AISI 304 Stainless Steel	4
120-4	Bolt & Nut	AISI 304 Stainless Steel	8
120-5	Bolt	AISI 304 Stainless Steel	4
128-1	Nut	AISI 304 Stainless Steel	2
130-1	Set Screw	AISI 304 Stainless Steel	1

N°	PART.NAME	MATERIAL	Q.TY
135	Washer	AISI 304 Stainless Steel	2
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 156	1
741	Sliding Guide	Spheroidal graphite cast iron EN-GJS-400 - EN 1563	1
742	QCD Body	Cast iron EN-GHJL-200 - EN 1561	1
743	Suspension Bar	AISI 304 Stainless Steel	1
744	Chain	Steel	1
747-1	Guide Pin	Steel	2
747-2	Guide Pin	NR Rubber	2
747-3	Guide Support	Steel	1

Note: Those parts with item number indicated in a □ are supplied with the pump.

QDC LL250, 300 (Optional)



N°	PART.NAME	MATERIAL	Q.TY	N°	PART.NAME	MATERIAL	Q.TY
117-3	Gasket	NBR Rubber	1	742	QCD Body	Cast iron EN-GHJL-200 - EN 1561	1
120-1	Bolt & Nut	AISI 304 Stainless Steel	2	743	Suspension Bar	AISI 304 Stainless Steel	1
120-2	Bolt & Nut	Steel	2	744	Chain	Steel	1
120-3	Bolt	AISI 304 Stainless Steel	4	747-1	Pipe Support	AISI 304 Stainless Steel	1
120-4	Bolt & Nut	AISI 304 Stainless Steel	12 or 16	747-2	Guide Pin	NR Rubber	2
135	Washer	Steel	2	747-3	Guide Support	Steel	1
741	Sliding Guide	Spheroidal graphite cast iron EN-GJS-400 - EN 1563	1				

Note: Those parts with item number indicated in a are supplied with the pump.

MECHANICAL SEALS: TYPE A(20÷45), EAN(30÷45)

Type A (-20, -25, -30, -35)		
No.	Part Name	Material
1	Packing	NBR Rubber
2	Floating Ring	Ceramic
3	Seal Ring	Carbon Graphite
4	Spring	Aisi 304
5	Seal Ring	Silicon Carbide
6	Floating Ring	Silicon Carbide
7	Packing	NBR Rubber

Type A (-40, -45)		
No.	Part Name	Material
1	Packing	NBR Rubber
2	Seal Ring	Carbon Graphite
3	Floating Ring	Ceramic
4	Snap Ring	Spring Steel
5	Snap Ring	Spring Steel
6	Floating Ring	Silicon Carbide
7	Seal Ring	Silicon Carbide
8	Spring	Aisi 304

Type EAN (-30, -40, -45)		
No.	Part Name	Material
1	Packing	NBR Rubber
2	Floating Ring	Ceramic
3	Seal Ring	Carbon Graphite
4	Spring	Aisi 304
5	Seal Ring	Silicon Carbide
6	Floating Ring	Silicon Carbide
7	Packing	NBR Rubber

MECHANICAL SEALS: TYPE EAN-60

Type A-60		
No.	Part Name	Material
1	Parallel Pin	AISI 316
2	O - Ring	NBR Rubber
3	Mating Ring	Silicon Carbide
4	Seal Ring	Silicon Carbide
5	Bellows	NBR Rubber
6	Case	AISI 304
7	Case	AISI 304
8	Drive Ring	AISI 304
9	Spring	AISI 304
10	Spring Retainer	AISI 304
11	Packing	NBR Rubber
12	Mating Ring	Ceramics
13	Seal Rings	Carbon
14	Bellows	NBR Rubber
15	Case	AISI 304
16	Case	AISI 304
17	Drive Ring	AISI 304
18	Spring	AISI 304
19	Spring Retainer	AISI 304

MECHANICAL SEALS TABLE

DS						
Size	Model	Output [kW]	Mechanical Seal Type	Oil Q.ty [cc]	Bearings	
					Bottom	Top
50	50DS51.5	1.5	A-20	650	6205ZZ	6203ZZ
	50DS52.2	2.2	A-30	1180	6307ZZ	6304ZZ
	50DS53.7	3.7			6308ZZ	
65	65DS51.5	1.5	A-20	650	6205ZZ	6203ZZ
80	80DS52.2	2.2	A-30	1180	6307ZZ	6304ZZ
	80DS53.7	3.7			6308ZZ	
100	100DS55.5	5.5	A-35	1700	6308ZZ	6306ZZ
	100DS57.5	7.5				

DVS						
Size	Model	Output [kW]	Mechanical Seal Type	Oil Q.ty [cc]	Bearings	
					Bottom	Top
50	50DVS51.5	1.5	A-20	650	6205ZZ	6203ZZ
	65DVS51.5	1.5				
65	65DVS52.2	2.2	A-30	1380	6307ZZ	6304ZZ
	65DVS53.7	3.7			6308ZZ	
80	80DVS51.5	1.5	A-20	650	6205ZZ	6203ZZ
	80DVS52.2	2.2	A-30	1380	6307ZZ	6304ZZ
80DVS53.7	3.7	6308ZZ				

DML						
Size	Model	Output [kW]	Mechanical Seal Type	Oil Q.ty [cc]	Bearings	
					Bottom	Top
80	80DML(V)52.2	2.2	EAN-30	1000	5307ZZ	6205ZZ
	80DML(V)53.7	3.7				
100	100DML53.7	3.7	EAN-40	1570	5309ZZ	6306ZZ
	100DML(V)55.5	5.5				
	100DML(V)57.5	7.5				
	100DML(V)511	11	EAN-45	2900	5310ZZ	6308ZZ
	100DML(V)515	15				
	100DML(V)522	22				
150	150DML55.5	5.5	EAN-40	1570	5309ZZ	6306ZZ
	150DML57.5	7.5				
	150DML511	11	EAN-45	2900	5310ZZ	6308ZZ
	150DML515	15				
	150DML522	22				

DMLV						
Size	Model	Output [kW]	Mechanical Seal Type	Oil Q.ty [cc]	Bearings	
					Bottom	Top
80	80DMLV52.2	2.2	EAN-30	1100	5307ZZ	6205ZZ
	80DMLV53.7	3.7				
100	100DMLV55.5	5.5	EAN-40	1780	5309ZZ	6306ZZ
	100DMLV57.5	7.5				
	100DMLV511	11				
	100DMLV515	15	EAN-45	3380	5310ZZ	6308ZZ
	100DMLV522	22				

DL, DL W/C						
Size	Model	Output [kW]	Mechanical Seal Type	Oil Q.ty [cc]	Bearings	
					Bottom	Top
65	65DL51.5(W/C)	1.5	A-25	920	6306ZZ	6204ZZ
	80DL51.5(W/C)	1.5				
80	80DL52.2(W/C)	2.2	A-30	1380	6307ZZ	6205ZZ
	80DL53.7(W/C)	3.7			6308ZZ	6205ZZ
	80DLC55.5	5.5	A-40	2500	6309ZZ	6306ZZ
	80DLC57.5	7.5				
100	100DL53.7(W/C)	3.7	A-30	1380	6308ZZ	6205ZZ
	100DLB55.5(W/C)	5.5				
	100DLC55.5	5.5	A-40	2500	6309ZZ	6306ZZ
	100DLB57.5(W/C)	7.5				
	100DLC57.5	7.5				
	100DL511	11	A-45	3500	6313ZZ	6308ZZ
	100DL515	15				
	100DL518.5	18.5				
150	150DL55.5	5.5	A-40	2500	6309ZZ	6306ZZ
	150DL57.5	7.5				
	150DL511	11	A-45	6200	6315ZZ	6308ZZ
	150DL515	15				
	150DL518.5	18.5				
	150DL522	22	A-60	7300	6314ZZDR	3690ZZ
	150DL530	30				
	150DL537	37				
	150DL545	45	A-60	8900	6315ZZDR	6310ZZ
200	200DL55.5	5.5	A-40	2500	6309ZZ	6306ZZ
	200DL57.5	7.5				
	200DL511	11	A-45	6200	6315ZZ	6308ZZ
	200DL515	15				
	200DL518.5	18.5				
	200DL522	22	A-60	7300	6314ZZDR	3690ZZ
	200DL530	30				
	200DL537	37				
	200DL545	45	A-60	8900	6315ZZDR	6310ZZ
250	250DL57.5	7.5	A-40	2500	6309ZZ	6306ZZ
	250DL511	11				
	250DL515	15	A-45	6200	6315ZZ	6308ZZ
	250DL518.5	18.5				
	250DL522	22				
	250DL530	30	A-60	9000	6315ZZDR	6310ZZ
	250DL537	37				
	250DL545	45				
300	300DL511	11	A-40	3500	6313ZZ	6308ZZ
	300DL515	15				
	300DL518.5	18.5	A-45	6200	6315ZZ	6309ZZ
	300DL522	22				
	300DL530	30				
	300DL537	37	A-60	9000	6315ZZDR	6310ZZ
	300DL545	45				

DS

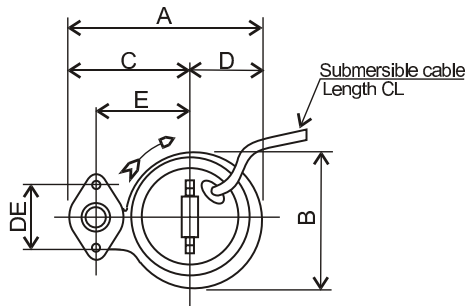


Figure 1

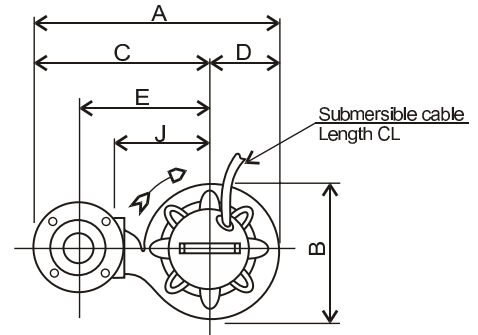
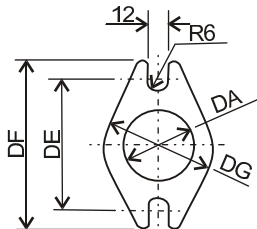
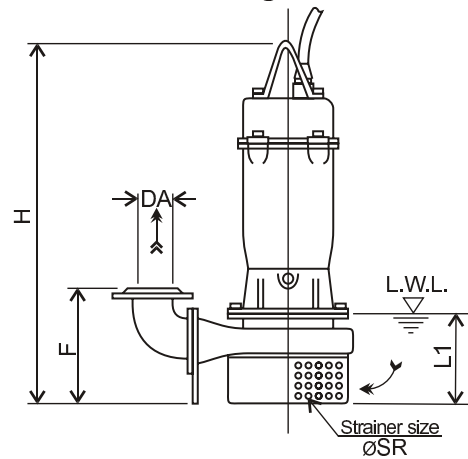
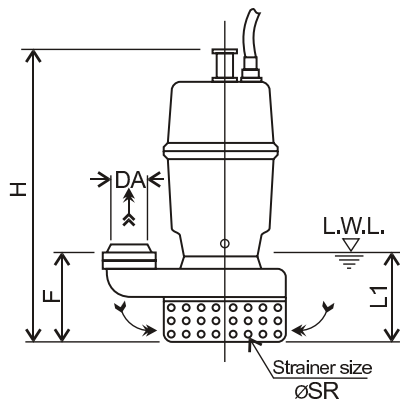
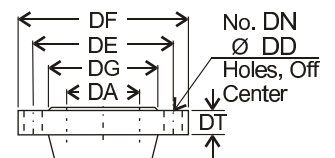


Figure 2



Oval Flange

Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	50	96	114	76	-	-	-
		125	165	99	17	4	19
	65	145	185	118	19	8	
	80	160	200	132	21		
	100	180	220	156			

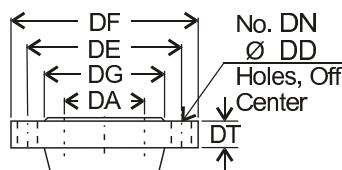
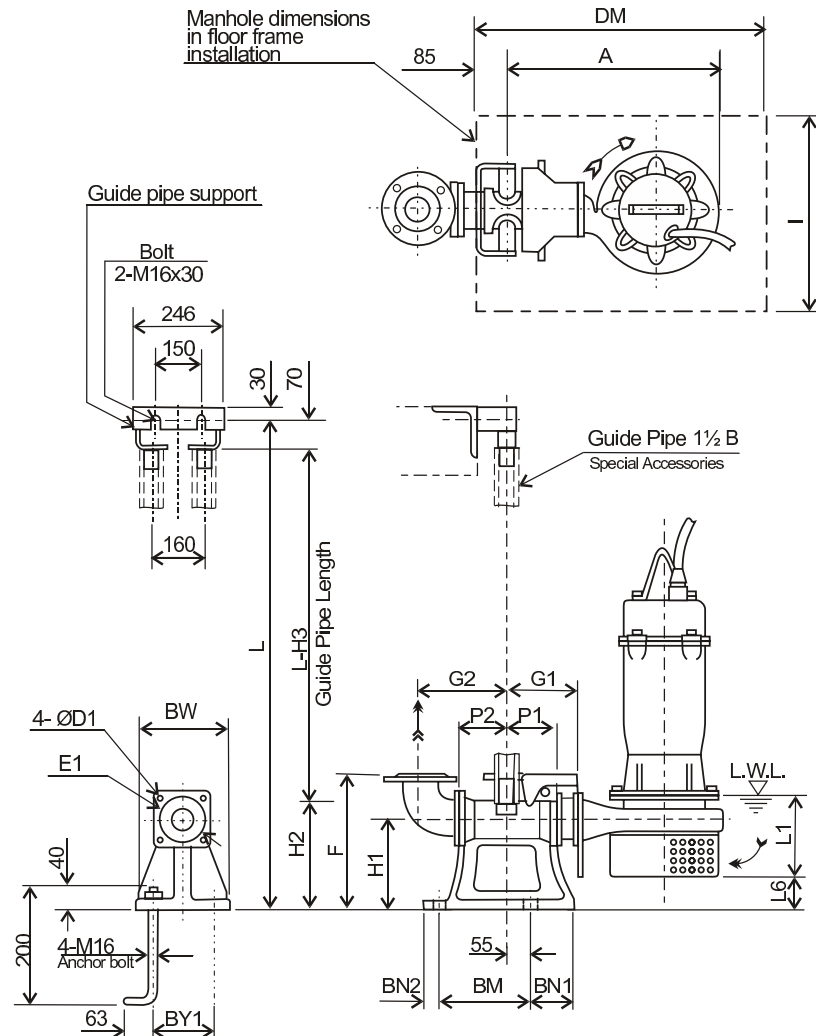


Round Flange

Dimensions [mm]																		
Size DA	Model	Fig.	Flange Type	Output [kW]	DA	A	B	C	D	E	F	H	DE	J	L1 (*)	ØSR	CL [m]	Weight [kg]
50	50DS51.5	1	Oval	1.5	G2"	266	200	168	98	130	115	450	96	-	120	10	6	25
	2.2			50	433	245	313	120	235	198	619	-	180	160	10		55	
	3.7																61	
65	65DS51.5	2	Round	1.5	65	407	210	303	104	215	197	503	-	150	120	10	6	35
2.2	80			503	268	368	135	275	215	625	-	200	160	59				
3.7															64			
100	100DS55.5			5.5	100	615	309	460	155	355	257	730	-	250	200	13	92	
	7.5																104	

- L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

DS (5.5÷7.5 kW) with QDC



Type	DA	DE	DF	DG	DT	DN	DD
Round	100	180	220	156	21	8	19

Dimensions [mm]																								
Size	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	BM	BY1	BW	DM	I	D1	E1	QDC Model	QDC Weight [kg]
100	100DS55.5	5.5	590	105	105	185	210	365	240	265	335	200	108	100	40	220	180	230	800	700	19	175	LL100	46
	100DS57.5	7.5																						

(*) - L.W.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

DVS

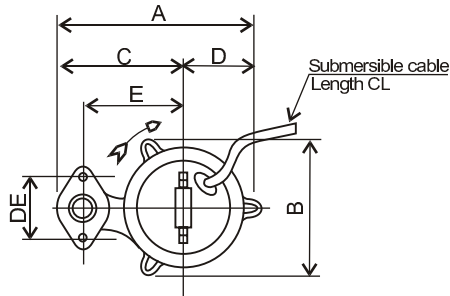


Figure 1

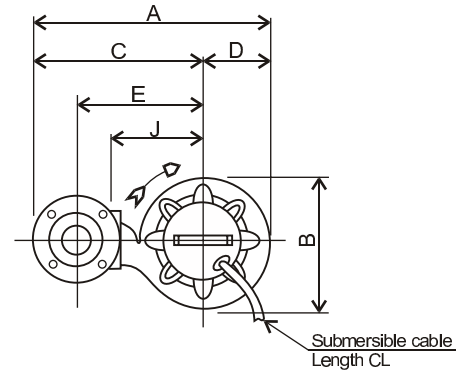
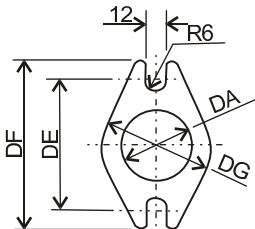
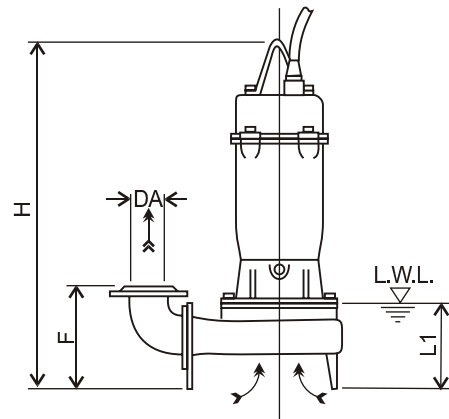
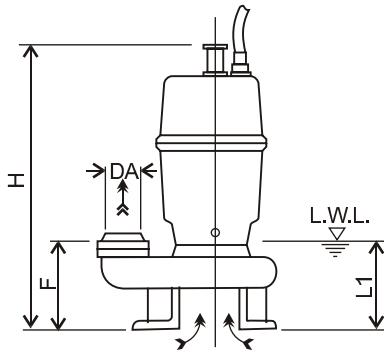
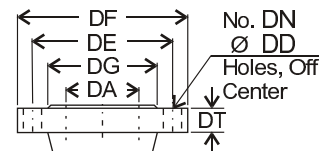


Figure 2



Oval Flange

Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Oval	50	96	114	76	-	-	-
Round	65	145	185	118	17	4	19
	80	160	200	132	19	8	



Round Flange

Dimensions [mm]																		
Size DA	Model	Fig.	Flange Type	Output [kW]	DA	A	B	C	D	E	F	H	DE	J	L1 (*)	CL [m]	Weight [kg]	
50	50DVS51.5	1	Oval	1.5	G2"	249	171	163	86	125	82	439	96	-	105	6	27	
65	65DVS51.5	2	Round	1.5	65	396	195	298	98	210	178	519	-	145	125		10	34
	2.2			160										155	50			
	3.7			185										155	59			
80	80DVS51.5	2	Round	1.5	80	411	195	313	98	220	183	519	-	145	125	6	35	
	2.2			160										155	51			
	3.7			200										155	60			

- (*) - L.W.L (Low Water Level)
- Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

DVS with QDC

Figure 1

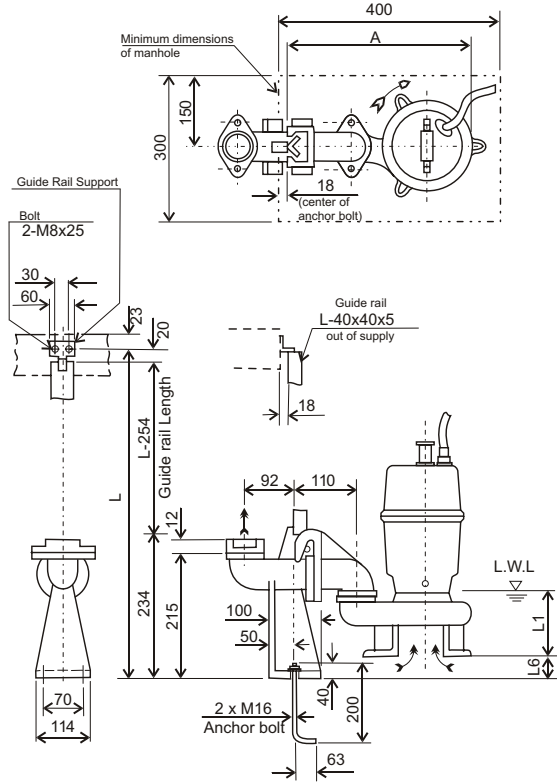
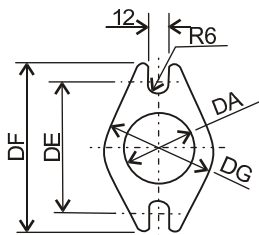
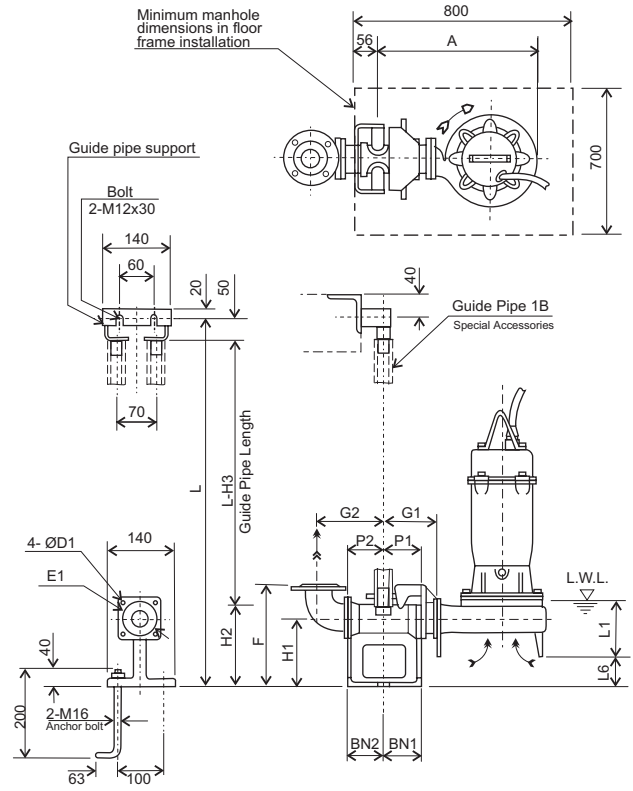
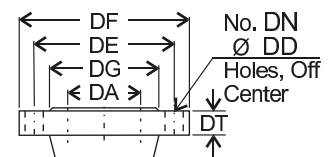


Figure 2



Oval Flange

Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Oval	50	96	114	76	-	-	-
Round	65	145	185	118	17	4	19
	80	160	200	132	19	8	19

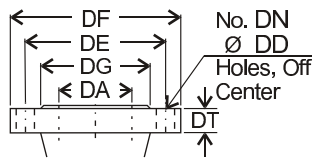
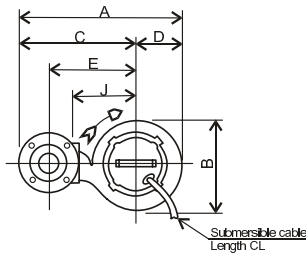
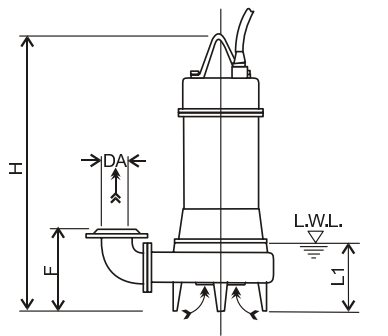


Round Flange

Dimensions [mm]																					
Size	Model	Fig.	Flange Type	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	D1	E1	QDC Model	Weight [kg]
50	50DVS51.5	1	Oval	1.5	311	-	-	-	-	-	-	-	-	105	58	-	-	-	-	LS50	9
65	65DVS51.5	2	Round	1.5	363	75	95	120	160	250	145	190	240	125	72	75	95	12	140	LM65	14
	2.2			394	155									49							
	3.7			394	125									72							
	3.7			394	155									49							
80	80DVS51.5	2	Round	1.5	363	75	95	120	170	255	145	190	240	125	72	75	95	12	140	LM65	14
	2.2			394	125									72							
	3.7			394	155									49							

- (*) - L.W.L (Low Water Level)
- Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

DL

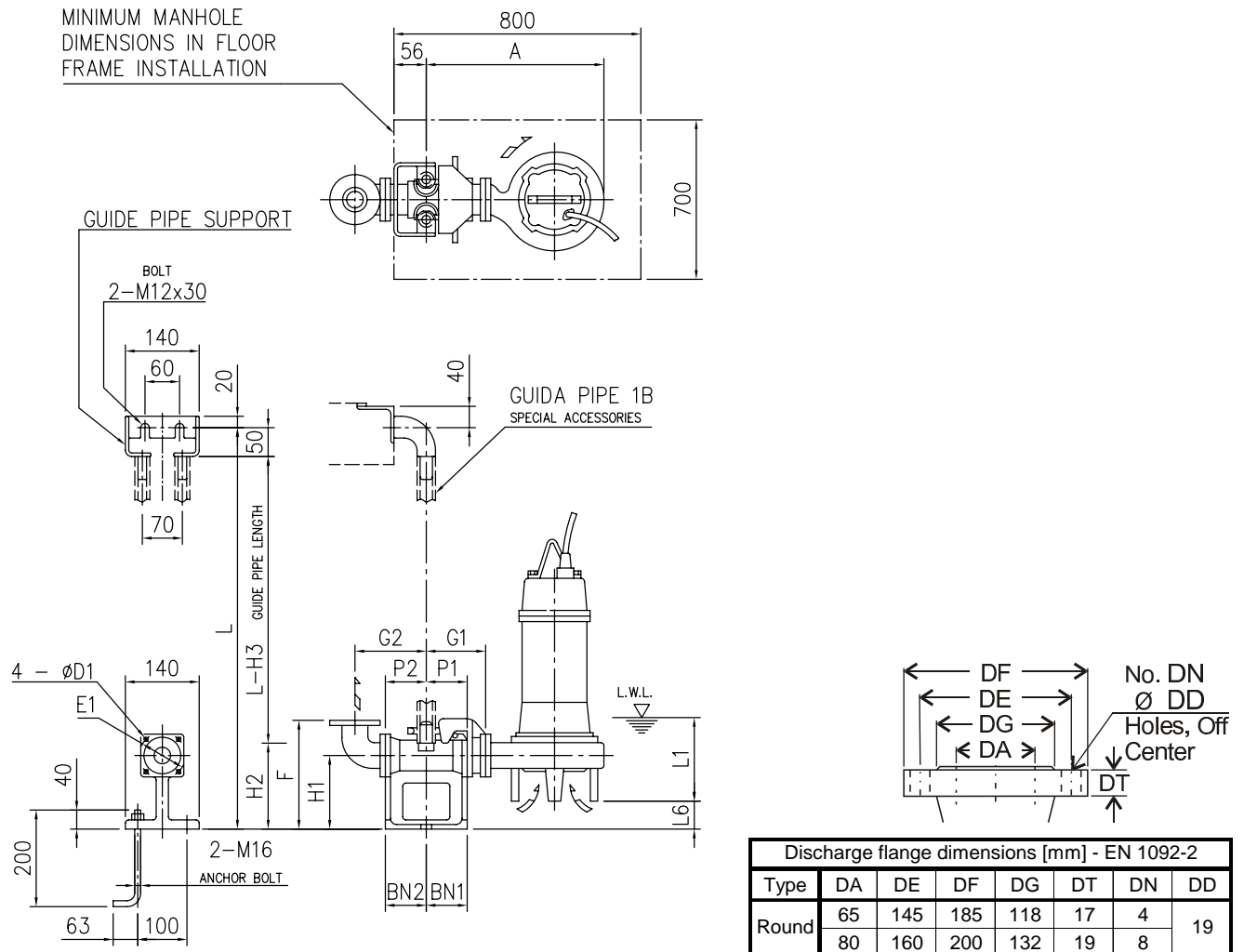


Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	65	145	185	118	17	4	19
	80	160	200	132	19	8	
	100	180	220	156	21		
	150	240	285	211	23		23
	200	295	340	266			
	250	350	395	319	25	12	
300	400	445	370	24			

Dimensions [mm]														
Size DA	Model	Output [kW]	A	B	C	D	E	F	H	J	L1 (*)	CL [m]	Weight [kg]	
65	65DL51.5	1.5	497	291	353	144	265	200	576	200	140	10	52	
80	80DL51.5	1.5	524	292	378	146	285	220	597	210	165		55	
	80DL52.2	2.2	542	308	388	154	295		654	220			67	
	80DL53.7	3.7	567	328	403	164	310	687	235	75				
	80DLC55.5	5.5	618	379	428	190	335	307	753	260	205		134	
	80DLC57.5	7.5	648	399	448	200	355	305	751	280			148	
100	100DL53.7	3.7	614	335	445	169	340	250	706	235	205		79	
	100DLB55.5	5.5	646	369	460	186	355	323	768	250			123	
	100DLC55.5	5.5	660	379	470	190	365	322	753	260			134	
	100DLB57.5	7.5	673	385	480	193	375	323	760	270			141	
	100DLC57.5	7.5	690	399	490	200	385	320	751	280			148	
	100DL511	11	701	402	500	201	395	323	859	290			180	
	100DL515	15	741	441	520	221	415	330	954	310		230		
	100DL518.5	18.5							958			285		
150	150DL55.5	5.5	750	398	550	200	410	381	799	280	245	146		
	150DL57.5	7.5	780	418	570	210	430	377	784	300		158		
	150DL511	11	810	438	590	220	450		883	320		199		
	150DL515	15						972	237					
	150DL518.5	18.5	848	476	610	238	470	381	979	340		300		
	150DL522	22										325		
	150DL530	30	912	520	650	262	510	468	1284	360		486		
	150DL537	37							1404			494		
	150DL545	45							350					
200	200DL55.5	5.5	832	430	615	217	450	414	826	300	285	160		
	200DL57.5	7.5	863	453	635	228	470	410	809	320		176		
	200DL511	11							908			212		
	200DL515	15	896	479	655	241	490	411	995	340		260		
	200DL518.5	18.5	932	512	675	257	510	415	1001	360		305		
	200DL522	22										330		
	200DL530	30	937	520	675	262	510	483	1284	360		486		
	200DL537	37							1404			494		
	200DL545	45							370					
	250	250DL57.5	7.5	969	525	700	269	500	622	904		370	400	260
250DL511		11	993	541	720	273	520	634	1000	390	320			
250DL515		15	1007	549	730	277	530	646	1086	400	380			
250DL518.5		18.5							1089		420			
250DL522		22	1125	660	790	335	590	706	1336	460	440			
250DL530		30							1475		538			
250DL537		37							1475	565				
250DL545		45							540					
300		300DL511	11	1100	588	798	302	575	671	1050	420	450		365
		300DL515	15							1131				395
	300DL518.5	18.5	1135	618	818	317	595	668	1131	440	440			
	300DL522	22									465			
	300DL530	30	1172	660	838	335	615	726	1336	460	538			
	300DL537	37							1475		565			
	300DL545	45							540					

(*) -L.W.L(LowWaterLevel)
 -Operationislimitedto10minutesoperationatL.W.L.
 -Operationislimitedto30minutesoperationwithwaterlevelbelowtopofmotor.

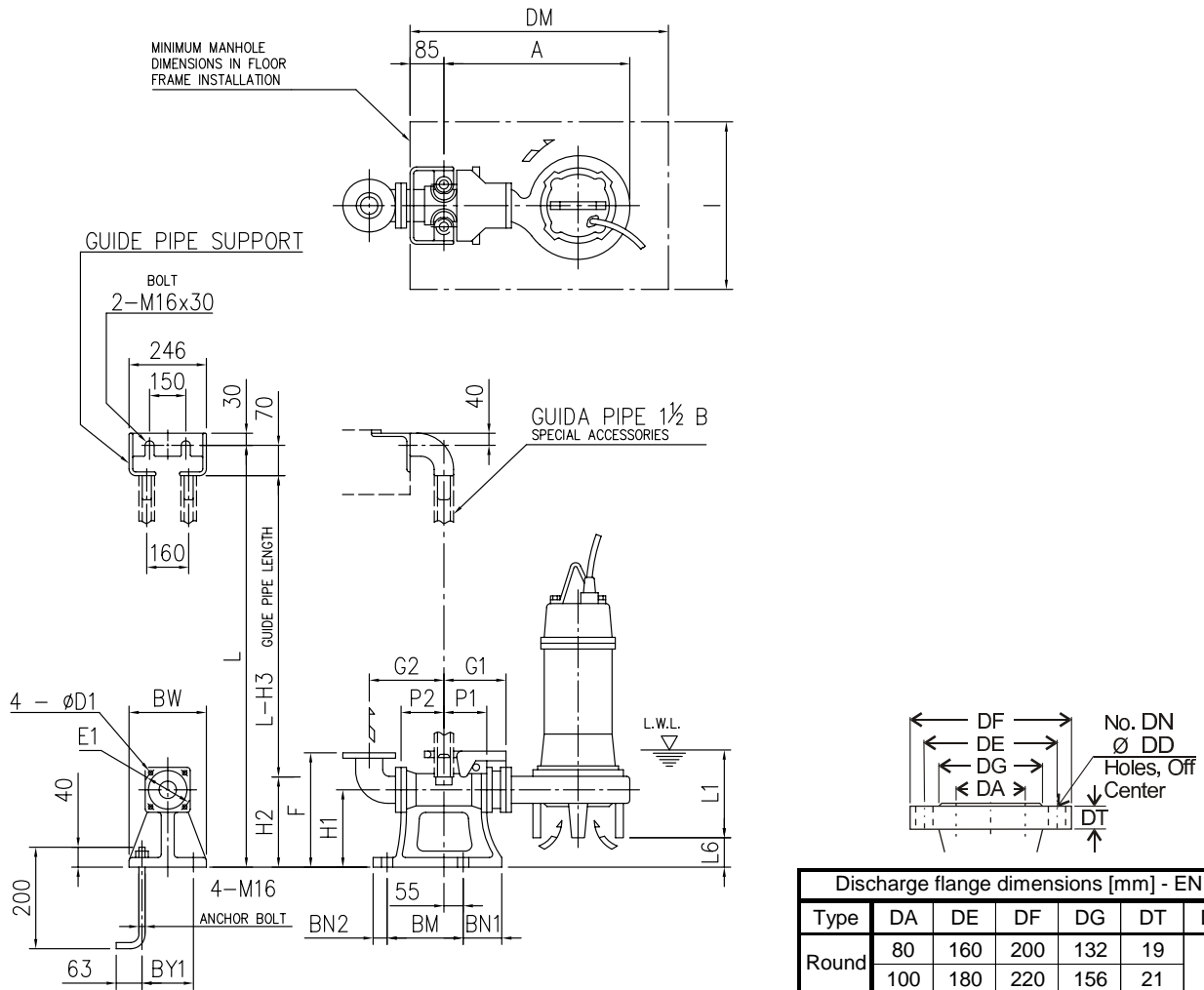
65DL, 80DL (1.5÷3.7 kW) with QDC



Dimensions [mm]																			
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	D1	E1	QDC	
																		Model	Weight [kg]
65	65DL51.5	1.5	464	75	95	120	160	250	145	190	240	140	50	75	95	12	140	LM65	14
	80DL51.5	1.5	481		90	125	165	285	175	230	280	165	65		90	15	155	LM80	17
80	80DL52.2	2.2	499		90	125	165	285	175	230	280	165	65		90	15	155	LM80	17
	80DL53.7	3.7	524		90	125	165	285	175	230	280	165	65		90	15	155	LM80	17

- (*) - L.W.L (Low Water Level)
- Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

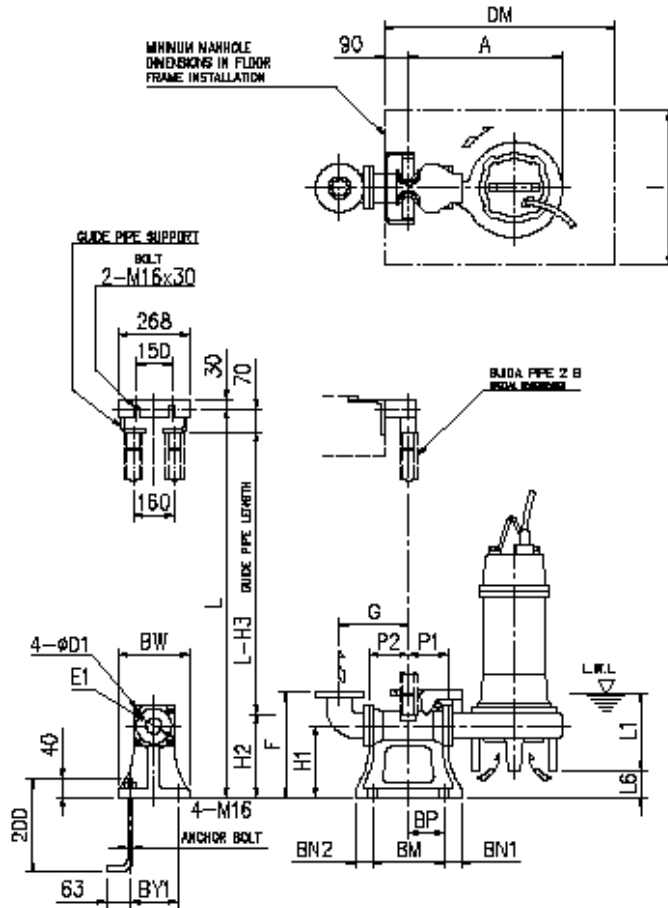
80DL (5.5÷7.5), 100DL with QDC



Dimensions [mm]																										
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	BM	BY1	BW	DM	I	QDC					
																					D1	E1	Model	Weight [kg]		
80	80DLC55.5	5.5	635		120		195	350		255	325	205	43									15	155	LL80	44	
	80DLC57.5	7.5	665																							
100	100DL53.7	3.7	589	105	105	185	210	365	240	265	335	185	115	100	40	220	180	230	800	700		19	175	LL100	46	
	100DLB55.5	5.5	621																							
	100DLC55.5	5.5	635		120	185	225	365	240	255	325	205	43									15	155	LL80	44	
	100DLB57.5	7.5	648																							
	100DLC57.5	7.5	665		120	185	225	365	240	255	325	205	45										15	155	LL80	44
	100DL511	11	676																							
	100DL515	15	716		105	185	210	365	240	265	335	205	42										19	175	LL100	46
	100DL518.5	18.5	716																							

- L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

150DL, 200DL with QDC



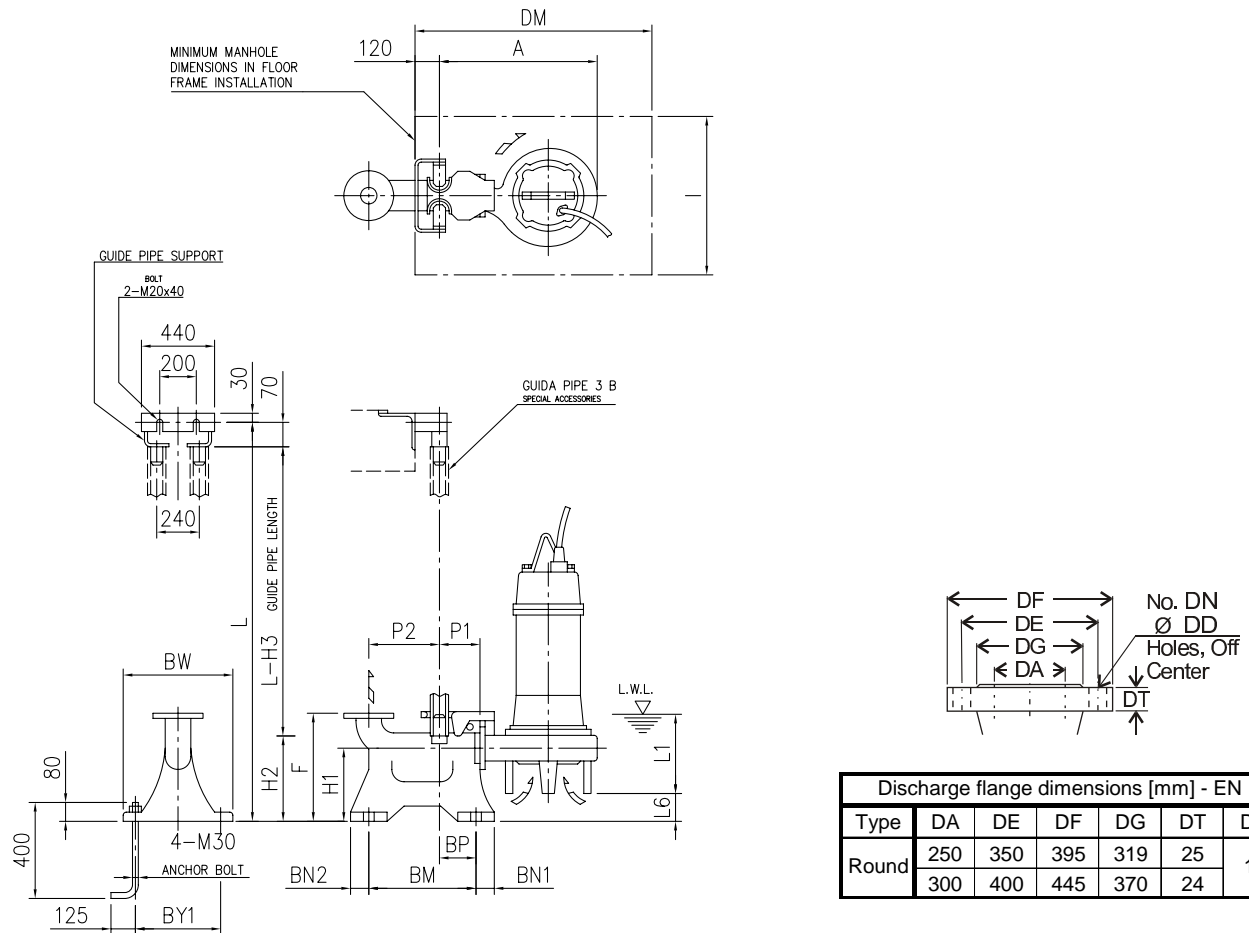
Discharge flange dimensions [mm] - EN 1092-2

Type	DA	DE	DF	DG	DT	DN	DD
Round	150	240	285	211	23	8	23
	200	295	340	266			

Dimensions [mm]																									
Size DA	Model	Output [kW]	A	P1	P2	G	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	BM	BP	BY1	BW	DM	I	D1	E1	QDC		
																							Model	Weight [kg]	
150	150DL55.5	5.5	635	155	195	325	450	290	362	432	69	60	60	370	165	280	330	1000	700	210	LL125	65			
	150DL57.5	7.5	665								73														
	150DL511	11	695								73														
	150DL515	15	733								69														
	150DL518.5	18.5	733								69														
	150DL522	22	733								69														
	150DL530	30	777								288														210
	150DL537	37	777								296														210
200	200DL55.5	5.5	672	205	355	495	320	405	475	81	285	210	390	170	300	350	1100	800	250	LL150	80				
	200DL57.5	7.5	703							85															
	200DL511	11	736							85															
	200DL515	15	736							84															
	200DL518.5	18.5	772							80															
	200DL522	22	772							80															
	200DL530	30	777							288														210	
	200DL537	37	777							296														210	

- (*) - L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- (*) - Operation is limited to 30 minutes operation with water level below top of motor.

250DL, 300DL with QDC



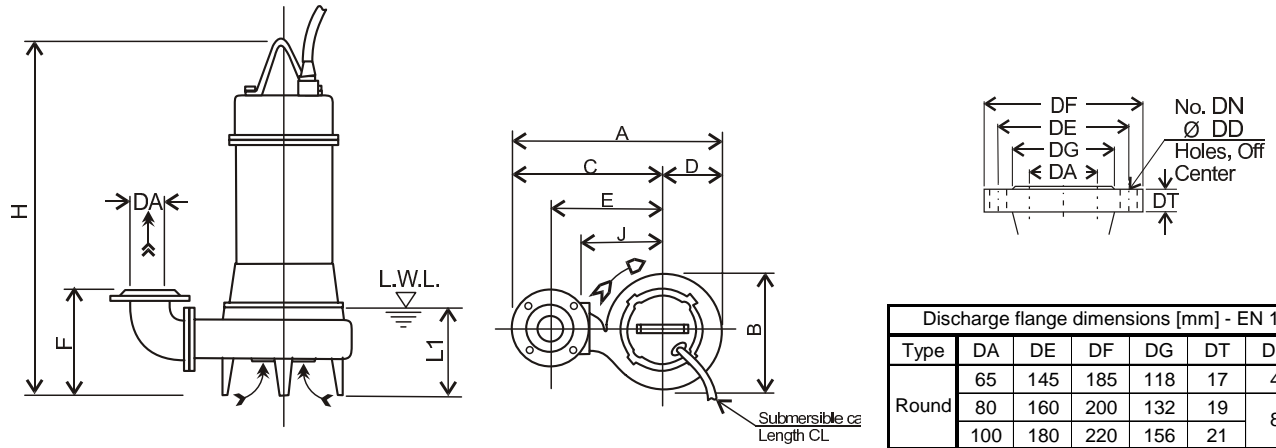
Discharge flange dimensions [mm] - EN 1092-2

Type	DA	DE	DF	DG	DT	DN	DD
Round	250	350	395	319	25	12	23
	300	400	445	370	24		

Dimensions [mm]																					
Size DA	Model	Output [kW]	A	P1	P2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	BM	BP	BY1	BW	DM	I	QDC	
																				Model	Weight [kg]
250	250DL57.5	7.5	834	195	435	700	350	440	510	400	58	70	70	650	500	560	1200	900	LL250	150	
	250DL511	11	858								46										
	250DL515	15	872								34										
	250DL518.5	18.5	872								34										
	250DL522	22	872								34										
	250DL530	30	990								292										300
	250DL537	37	990								319										300
250DL545	45	990	319	300																	
300	300DL511	11	917	465	800	430	550	620	450	109	70	70	680	580	640	1200	900	LL300	200		
	300DL515	15	952							112											
	300DL518.5	18.5	952							112											
	300DL522	22	952							112											
	300DL530	30	990							292										300	
	300DL537	37	990							319										300	
	300DL545	45	990							319										300	

(*) - L.W.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

DL W/C

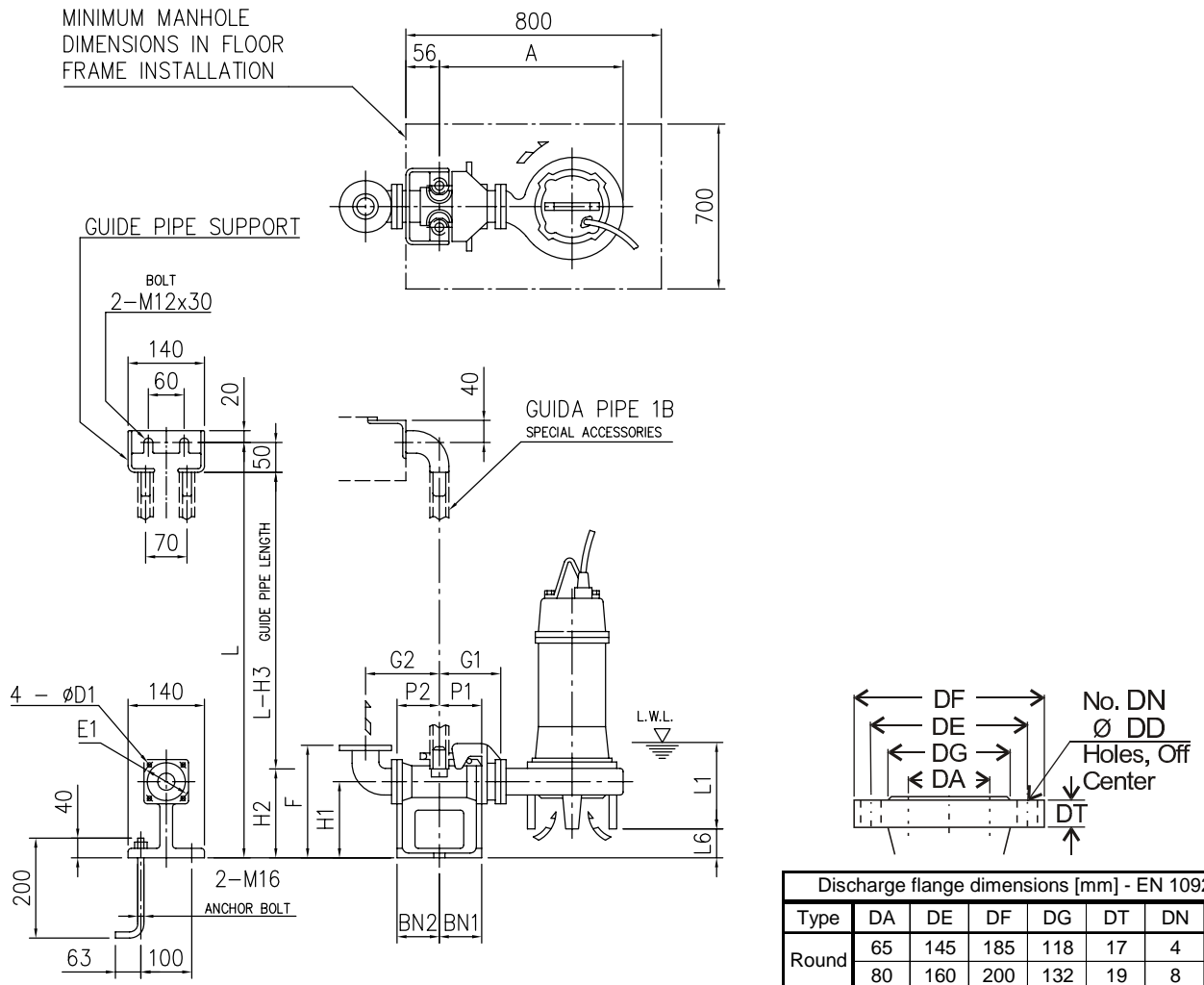


Type	DA	DE	DF	DG	DT	DN	DD
Round	65	145	185	118	17	4	19
	80	160	200	132	19	8	
	100	180	220	156	21	8	

Size DA	Model	Output [kW]	A	B	C	D	E	F	H	J	L1 (*)	CL [m]	Weight [kg]
65	65DL51.5W/C	1.5	497	291	353	144	265	200	576	200	140	10	52
80	80DL51.5W/C	1.5	524	292	378	146	285	220	597	210	165		55
	80DL52.2W/C	2.2	542	308	388	154	295		654	220			67
	80DL53.7W/C	3.7	567	328	403	164	310		687	235			75
100	100DL53.7W/C	3.7	614	335	445	169	340	250	706	235	185		79
	100DLB55.5W/C	5.5	646	369	460	186	355	323	768	250	205		123
	100DLB57.5W/C	7.5	673	385	480	193	375		760	270		141	

- (*) - L.W.L. (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

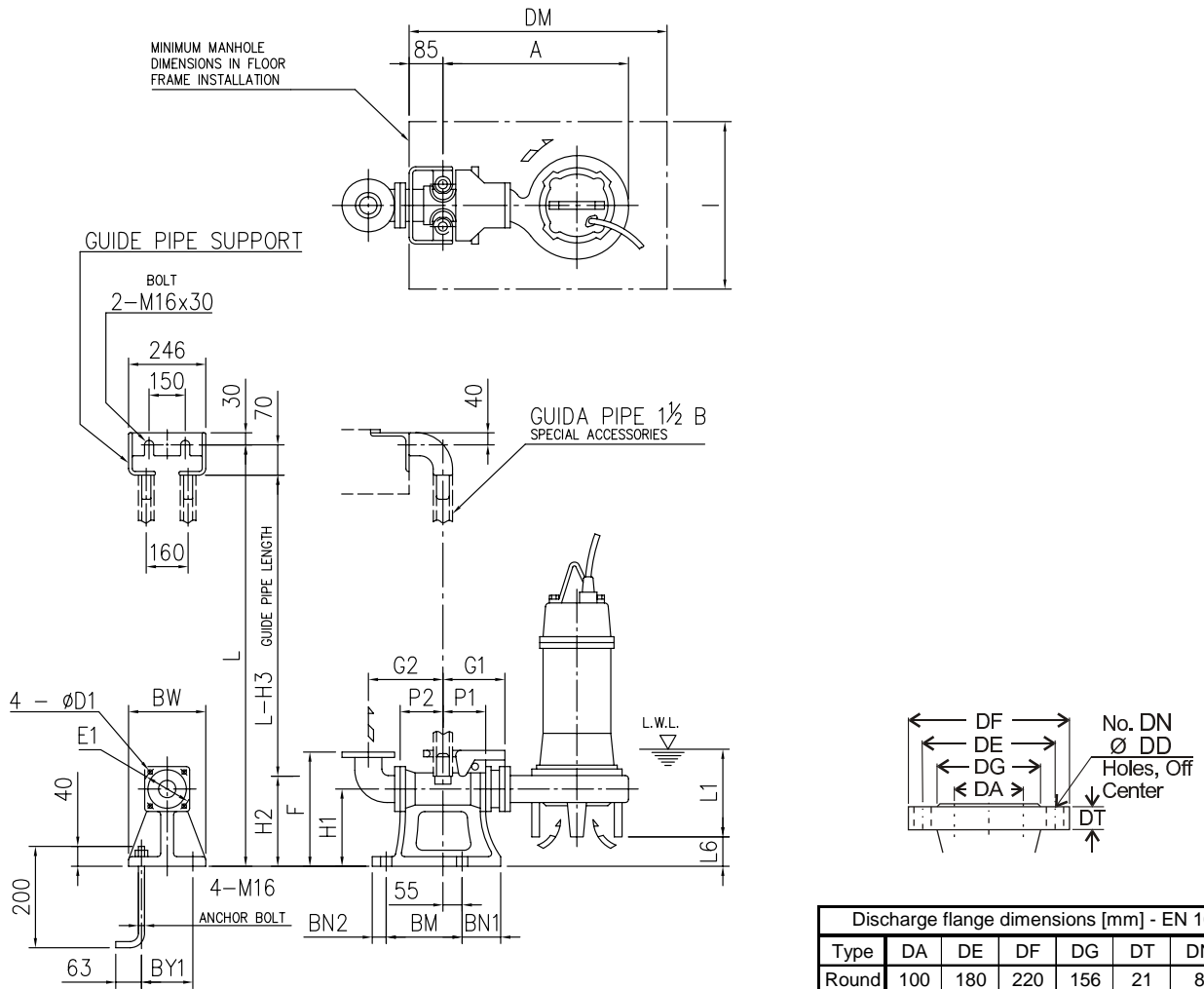
65DL W/C, 80DL W/C (1.5÷3.7 kW) with QDC



Dimensions [mm]																			
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	D1	E1	QDC	
																		Model	Weight [kg]
65	65DL51.5W/C	1.5	464	75	95	120	160	250	145	190	240	140	50	75	95	12	140	LM65	14
	80DL51.5W/C	1.5	481		90	125	165	285	175	230	280	165	65		90	15	155	LM80	17
80	80DL52.2W/C	2.2	499	75	90	125	165	285	175	230	280	165	65	75	90	15	155	LM80	17
	80DL53.7W/C	3.7	524		90	125	165	285	175	230	280	165	65		90	15	155	LM80	17

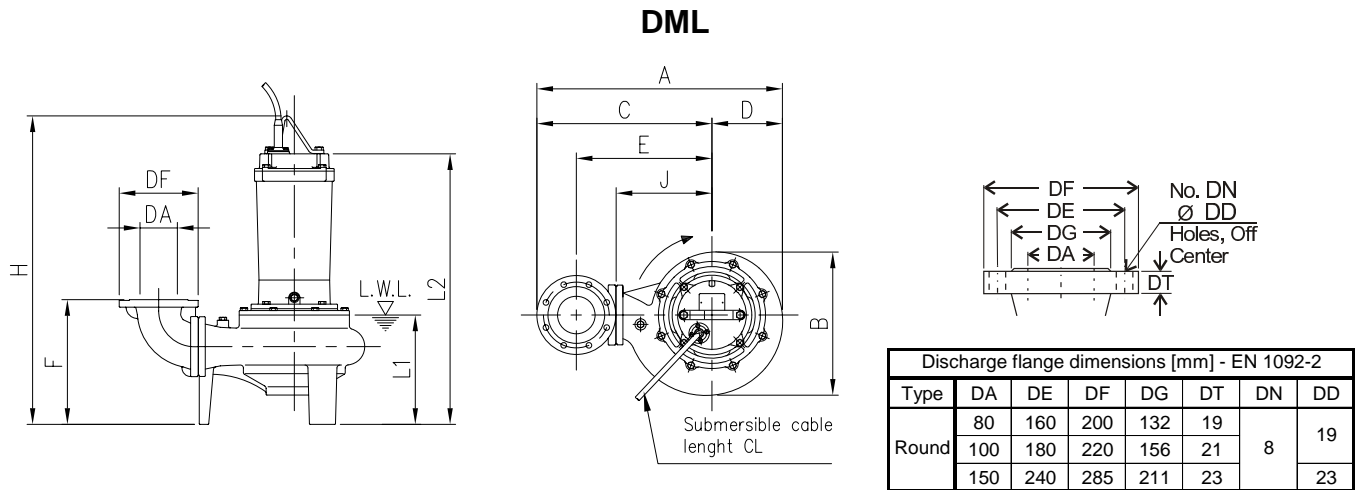
- L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

100DL W/C with QDC



Dimensions [mm]																								
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	BM	BY1	BW	DM	I	D1	E1	QDC Model Weight [kg]	
100	100DL53.7W/C	3.7	589									185	115											
	100DLB55.5W/C	5.5	621	105	105	185	210	365	240	265	335	205	42	100	40	220	180	230	800	700	19	175	LL100 46	
	100DLB57.5W/C	7.5	648																					

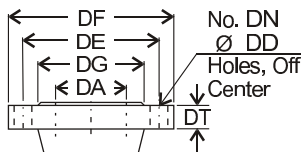
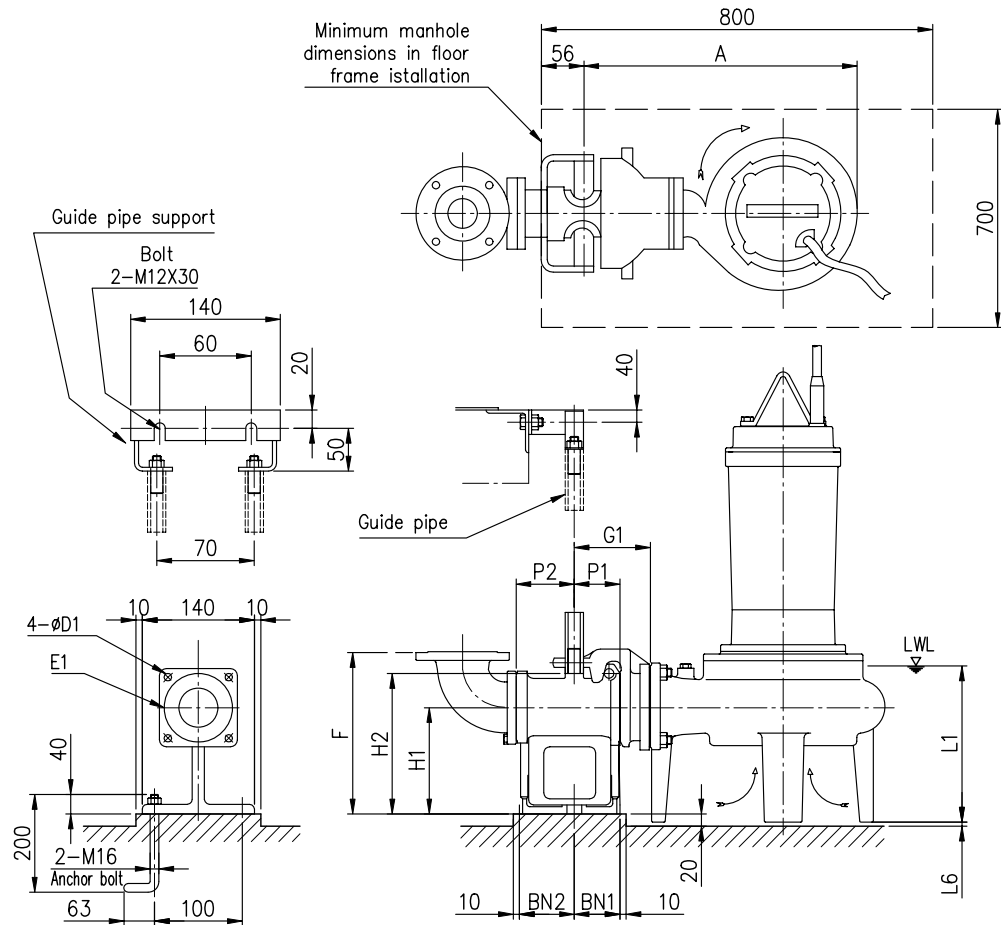
- (*) - L.W.L (Low Water Level)
- Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.



Dimensions [mm]															
Size DA	Model	Output [kW]	A	B	C	D	E	F	H	J	L1 (*)	L2	CL [m]	Weight [kg]	
80	80DML52.2	2.2	542	320	385	157	285	308	668	210	279	547	10	80	
	80DML53.7	3.7			425		315	313						727	627
100	100DML53.7	3.7	582	381	470	188	360	339	824	255	310	724		89	
	100DML55.5	5.5	658		530	221	420	355	938	315	329	778		121	
	100DML57.5	7.5	751		497	550	245	440	358	1021	335	342		841	125
	100DML511	11	795		587.5	221	445	385	938	315	329	778		160	
	100DML515	15	808.5		607.5	245	465	388	1021	335	342	841		166	
	100DML522	22	852.5		607.5	245	465	388	1021	335	342	841		226	
150	150DML55.5	5.5	715.5	381	527.5	188	385	369	824	255	310	724		127	
	150DML57.5	7.5	715.5	381	527.5	188	385	369	824	255	310	724		132	
	150DML511	11	808.5	455	587.5	221	445	385	938	315	329	778	166		
	150DML515	15	808.5	455	587.5	221	445	385	938	315	329	778	172		
	150DML522	22	852.5	497	607.5	245	465	388	1021	335	342	841	232		

- (*) - L.W.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

80DML, 100DML (3.7 kW) with QDC

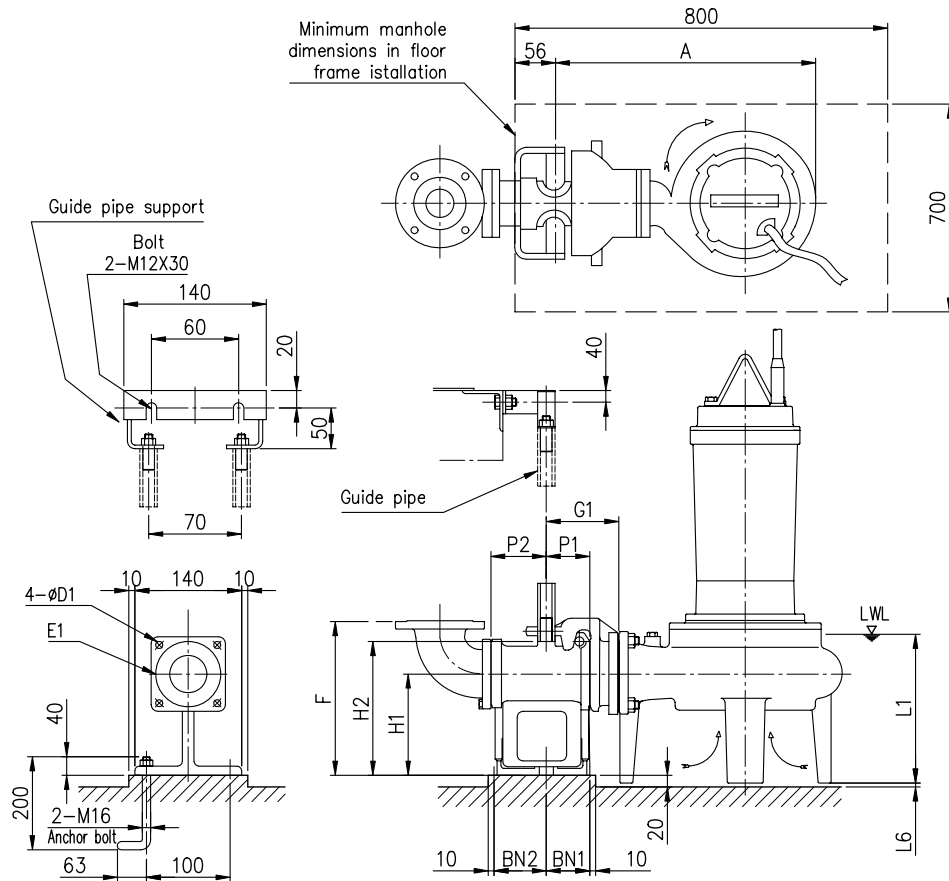


Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	80	160	200	132	19	8	19
	100	180	220	156	21		

Dimensions [mm]																		
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	L1 (*)	L6	BN1	BN2	D1	E1	QDC Model	QDC Weight [kg]
			80	80DML52.2	2.2	492	75	90	125	165	295	175	230	279	7	75	90	15
	80DML53.7	3.7	195	300														
100	100DML53.7	3.7																

- L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

100DML (5.5÷22 kW), 150DML with QDC

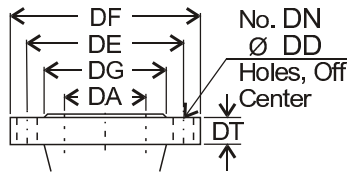
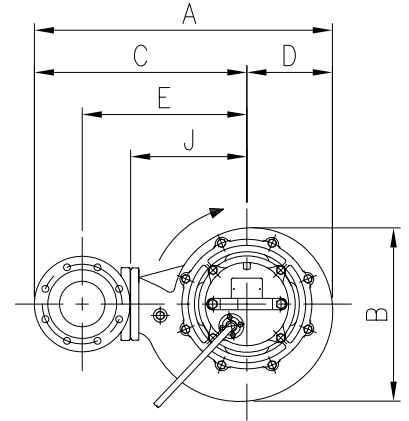
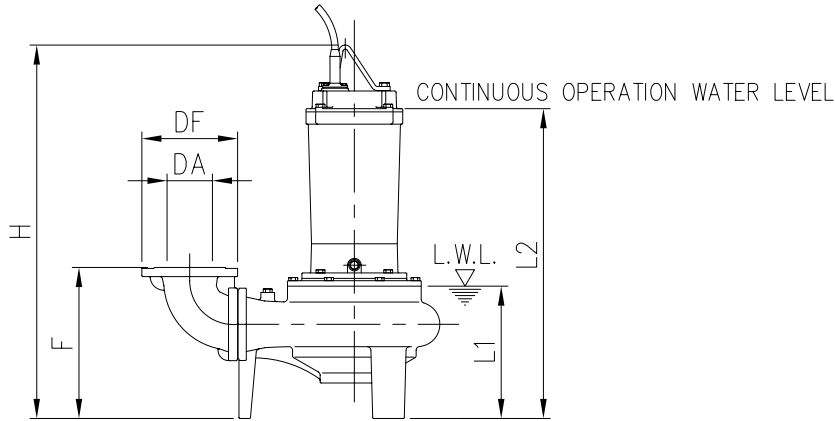


Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	100	180	220	156	21	8	19
	150	240	285	211	23		23

Dimensions [mm]																																						
Size DA	Model	Output [kW]	A	P1	P2	G1	G2	F	H1	H2	L1 (*)	L6	BN1	BN2	BM	BY1	BW	DM	I	D1	E1	QDC Model	Weight [kg]															
100	100DML55.5	5.5	628				210	370				310	31						800																			
	100DML57.5	7.5										329	15						1000																			
	100DML511	11	721									105	105						185						240	265	342	12	100	40	220	180	230	700	19	175	LL100	46kg
	100DML515	15																																				
	100DML522	22	765																																			
150	150DML55.5	5.5	628				235	400				310	31						800																			
	150DML57.5	7.5										329	15						1000																			
	150DML511	11	721									105	105						185					240	265	342	12	100	40	220	180	230	700	19	175	LL100	46kg	
	150DML515	15																																				1000
	150DML522	22	765																																			

(*) - L.V.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

DMLV

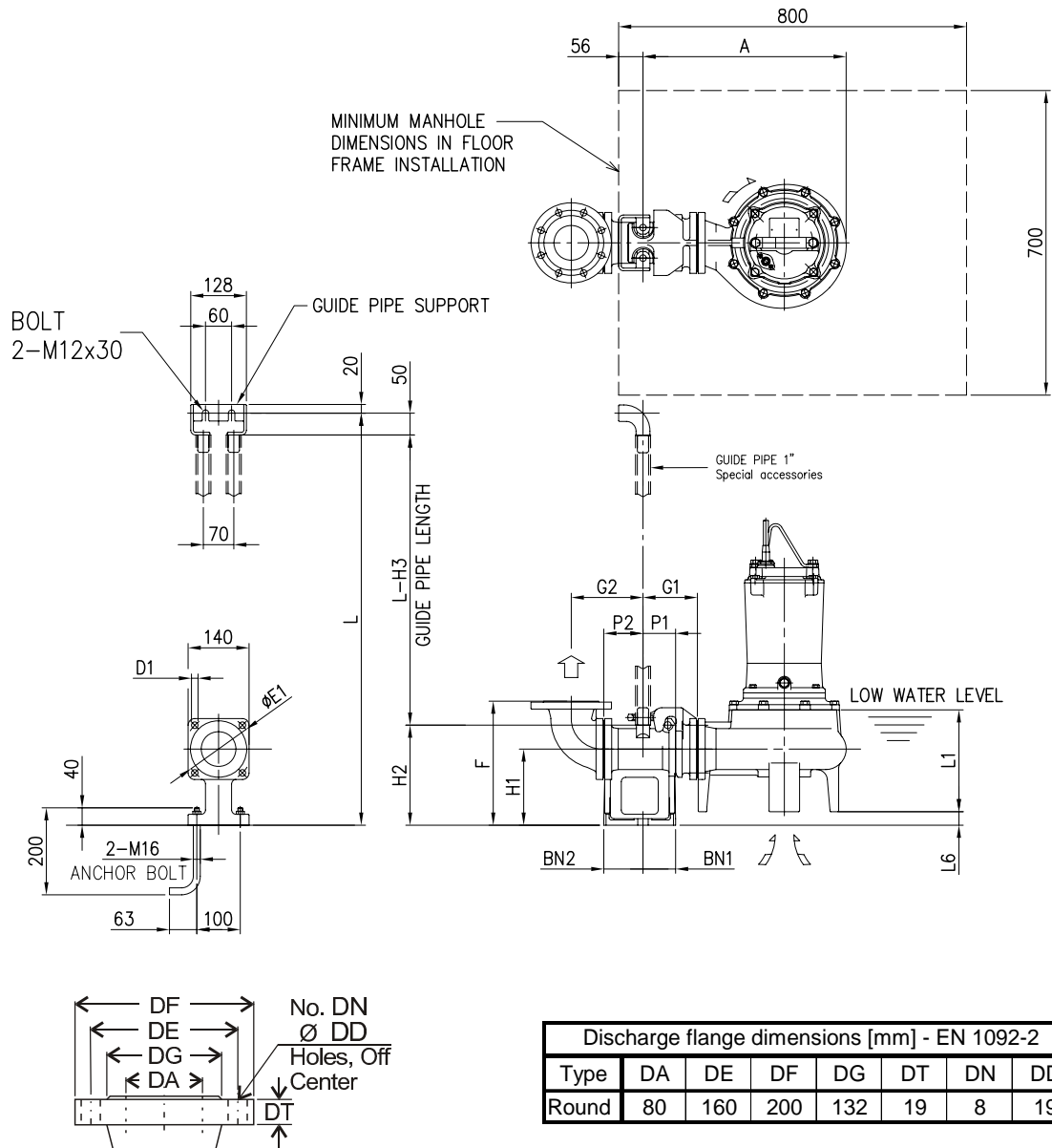


Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	80	160	200	132	19	8	19
	100	180	220	156	21		

Dimensions [mm]															
Size DA	Model	Output [kW]	A	B	C	D	E	F	H	J	L1 (*)	L2	CL [m]	Weight [kg]	
80	80DMLV52.2	2.2	518	285	375	143	275	254	660	200	200	560	10	70	
	80DMLV53.7	3.7										620		80	
100	100DMLV55.5	5.5	584	308	430	154	320	305	860	215	250	760		105	
	100DMLV57.5	7.5	641	352	465	176	355					250		810	120
	100DMLV511	11													150
	100DMLV515	15	728	426	515	213	405					300		865	180
	100DMLV522	22											235		

- (*)
- L.W.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

80DMLV with QDC

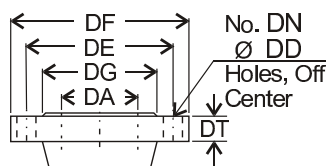
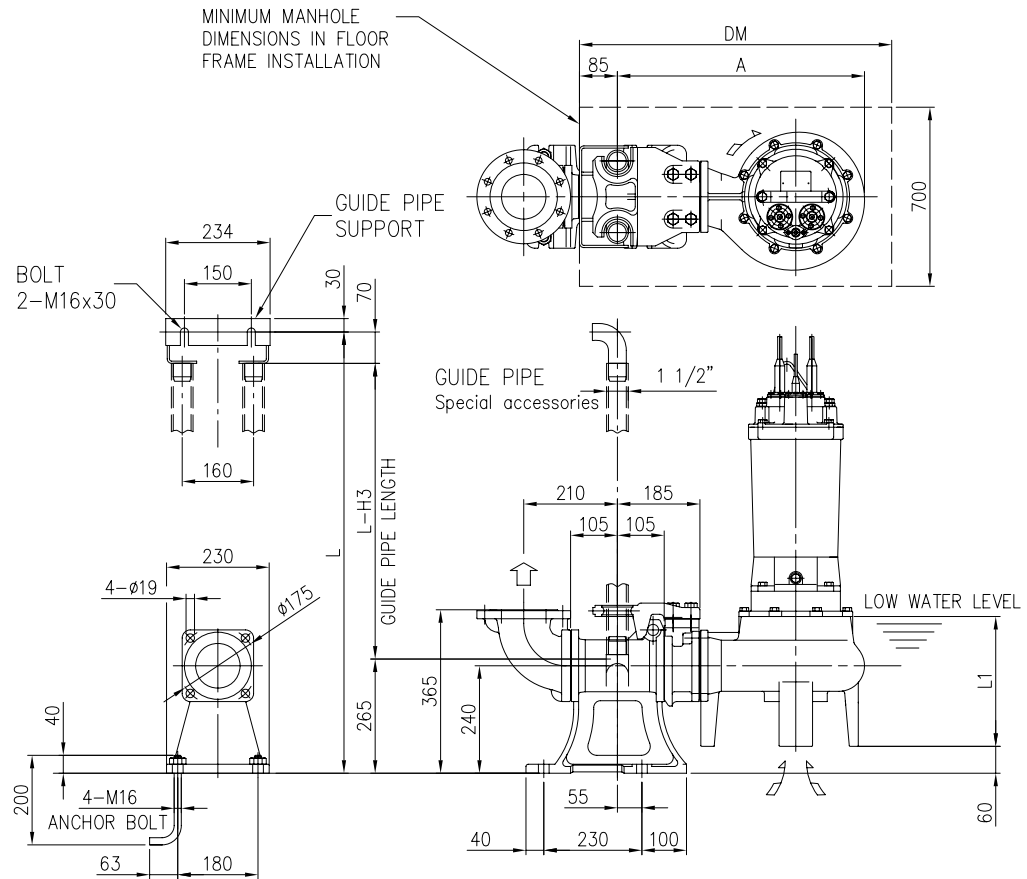


Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	80	160	200	132	19	8	19

Dimensions [mm]																			
Size DA	Model	Output [kW]	Dimensions [mm]														QDC		
			A	P1	P2	G1	G2	F	H1	H2	H3	L1 (*)	L6	BN1	BN2	D1	E1	Model	Weight [kg]
80	80 DMLV 52.2	2.2	468	75	90	125	165	285	175	230	280	200	31	75	90	15	155	LM80	17
	80 DMLV 53.7	3.7																	

- L.W.L (Low Water Level)
- (*) - Operation is limited to 10 minutes operation at L.W.L.
- Operation is limited to 30 minutes operation with water level below top of motor.

100DMLV with QDC



Discharge flange dimensions [mm] - EN 1092-2							
Type	DA	DE	DF	DG	DT	DN	DD
Round	100	180	220	156	21	8	19

Dimensions [mm]							
Size DA	Model	Output [kW]	A	H3	L1 (*)	QDC Model	Weight [kg]
100	100DML55.5	5.5	554	335	250	LL100	46
	100DML57.5	7.5	611				
	100DML511	11	698	300			
	100DML515	15					
	100DML522	22					

- (*) - L.W.L (Low Water Level)
 - Operation is limited to 10 minutes operation at L.W.L.
 - Operation is limited to 30 minutes operation with water level below top of motor.

DS, DVS (1.5÷3.7 kW) MOTOR DATA

Output [P ₂]		[kW]	1.5			2.2			3.7			
Resistance at 20° C		[Ω]	11.973			4.942			2.647			
GD ²		[kg·m ²]	0.0057			0.0082			0.011			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	1.25	1.32	1.30	1.95	2.15	2.33	3.20	3.30	3.90
		Power	[W]	430	405	400	500	500	252	800	500	600
	75%	Current	[A]	2.92	2.62	2.61	4.07	4.06	3.82	7.07	6.32	6.45
		Efficiency	[%]	63.59	69.18	70.11	71.23	69.69	77.58	68.00	75.54	74.26
		Power factor	[%]	91.93	89.54	85.68	86.44	84.27	77.40	87.75	83.92	80.61
		Speed	[min ⁻¹]	2872	2887	2898	2895	2901	2927	2890	2917	2922
	100%	Current	[A]	3.70	3.30	3.30	5.10	5.00	4.60	8.80	7.80	7.80
		Efficiency	[%]	65.61	71.25	70.89	73.05	72.28	79.33	70.79	77.64	76.74
		Power factor	[%]	93.88	92.08	89.21	89.71	87.87	83.88	90.24	88.18	86.00
		Speed	[min ⁻¹]	2821	2847	2854	2851	2864	2900	2847	2886	2890
	Locked Rotor Torque		[%]	243	295	303	161	186	184	175	216	233
	Start Current		[A]	20.5	21.1	22.5	28.7	30.0	31.5	51.2	51.0	53.0
Poles			2									
Phase			3									
Frequency		[Hz]	50									
No. starts per hour			10									
Voltage Tolerance		[%]	±10%									
Frequency Tolerance		[%]	±1%									
Insulation Class			F									
Model			ZDSEU									

DS (5.5÷7.5 kW) MOTOR DATA

Output [P ₂]		[kW]	5.5			7.5			
Resistance at 20° C		[Ω]	2.001			1.345			
GD ²		[kg·m ²]	0.03			0.037			
Voltage		[V]	380	400	415	380	400	415	
Load	0%	Current	[A]	3.00	2.70	2.70	3.65	3.20	3.27
		Power	[W]	340	800	340	400	800	400
	75%	Current	[A]	8.37	8.36	7.59	11.43	11.02	10.17
		Efficiency	[%]	82.89	77.34	83.68	83.36	79.51	84.44
		Power factor	[%]	90.37	92.05	90.40	89.70	92.68	91.14
		Speed	[min ⁻¹]	2944	2932	2945	2941	2928	2942
	100%	Current	[A]	10.80	10.80	9.80	14.80	14.30	13.20
		Efficiency	[%]	83.87	79.10	84.51	84.26	80.96	85.13
		Power factor	[%]	92.25	92.92	92.39	91.34	93.50	92.85
		Speed	[min ⁻¹]	2922	2905	2923	2917	2900	2918
	Locked Rotor Torque		[%]	168	155	168	159	154	159
	Start Current		[A]	77.0	70.0	70.0	105.0	93.5	94.0
Poles			2						
Phase			3						
Frequency		[Hz]	50						
No. starts per hour			10						
Voltage Tolerance		[%]	±10%						
Frequency Tolerance		[%]	±1%						
Insulation Class			F						
Model			ZDSEU						

DL, DL W/C (1.5÷3.7 kW) MOTOR DATA

Output [P ₂]		[kW]	1.5			2.2			3.7			
Resistance at 20° C		[Ω]	8.466			5.937			3.447			
GD ²		[kg·m ²]	0.013			0.025			0.04			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	2.3	2.51	2.746	2.65	2.85	3.2	3.5	3.65	3.9
		Power	[W]	500	420	546	650	450	420	650	800	450
	75%	Current	[A]	3.47	3.37	3.56	4.65	4.34	4.46	6.70	6.73	6.25
		Efficiency	[%]	62.67	70.31	62.99	63.89	69.75	69.23	73.21	69.72	76.38
		Power factor	[%]	78.70	68.43	69.87	84.32	78.63	74.40	85.95	85.37	80.93
	100%	Speed	[min ⁻¹]	1438	1449	1446	1440	1452	1458	1447	1449	1455
		Current	[A]	4.10	3.90	4.10	5.70	5.20	5.20	8.40	8.30	7.60
		Efficiency	[%]	65.69	72.58	65.73	66.44	72.31	71.82	74.67	72.09	77.98
		Power factor	[%]	84.62	76.54	77.83	88.26	84.45	81.96	89.62	89.25	86.85
		Speed	[min ⁻¹]	1414	1432	1426	1417	1437	1443	1427	1430	1440
		Locked Rotor Torque	[%]	319	378	385	216	277	301	229	275	296
		Start Current	[A]	23.70	24.50	23.60	29.30	30.00	32.00	49.40	47.50	49.00
Poles			4									
Phase		3										
Frequency	[Hz]	50										
No. starts per hour		10										
Voltage Tolerance	[%]	±10%										
Frequency Tolerance	[%]	±1%										
Insulation Class		F										
Model		ZDLEU										

DL (5.5÷11 kW), DL W/C (5.5÷7.5 kW) MOTOR DATA

Output [P ₂]		[kW]	5.5			7.5			11			
Resistance at 20° C		[Ω]	2.339			1.513			-	0.869		
GD ²		[kg·m ²]	0.061			0.071			0.12			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	4.9	4.3	4.5	7.85	6.5	7.1	-	7.80	8.60
		Power	[W]	470	900	470	707	1200	707	-	1500	790
	75%	Current	[A]	9.38	8.97	8.58	13.38	12.46	12.07	-	17.03	16.81
		Efficiency	[%]	79.17	75.51	79.10	79.46	76.94	79.81	-	80.39	81.35
		Power factor	[%]	84.39	87.90	84.53	80.38	84.72	81.25	-	86.98	83.95
		Speed	[min ⁻¹]	1464	1458	1464	1467	1463	1467	-	1468	1470
	100%	Current	[A]	11.70	11.30	10.70	16.40	15.50	14.80	-	21.50	21.00
		Efficiency	[%]	80.42	77.14	80.38	80.98	78.64	81.26	-	82.12	82.29
		Power factor	[%]	88.83	91.07	88.97	85.80	88.81	86.76	-	89.92	88.56
		Speed	[min ⁻¹]	1451	1442	1451	1455	1449	1455	-	1456	1458
	Locked Rotor Torque		[%]	271	249	271	288	272	288	-	185	155
	Start Current		[A]	81.00	70.00	74.00	120.00	104.00	108.00	-	121.0	128.0
Poles			4									
Phase			3									
Frequency		[Hz]	50									
No. starts per hour			10						6			
Voltage Tolerance		[%]	±10%									
Frequency Tolerance		[%]	±1%									
Insulation Class			F									
Model			ZDLEU									

DL (15÷22 kW) MOTOR DATA

Output [P ₂]		[kW]	15			18.5			22			
Resistance at 20° C		[Ω]	-	0.677		-	0.439		-	0.376		
GD ²		[kg·m ²]	0.15			0.25			0.28			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	-	8.50	8.85	-	12.80	15.10	-	12.50	13.50
		Power	[W]	-	1600	880	-	2000	1300	-	2000	965
	75%	Current	[A]	-	22.13	21.11	-	27.76	27.38	-	32.73	31.37
		Efficiency	[%]	-	81.59	84.15	-	84.25	85.39	-	82.74	85.54
		Power factor	[%]	-	89.91	88.12	-	85.61	82.55	-	87.94	85.56
		Speed	[min ⁻¹]	-	1464	1464	-	1477	1480	-	1471	1473
	100%	Current	[A]	-	28.50	27.00	-	35.00	34.00	-	42.00	40.00
		Efficiency	[%]	-	82.79	84.99	-	85.77	86.79	-	84.17	86.11
		Power factor	[%]	-	91.76	90.93	-	88.95	87.23	-	89.82	88.86
		Speed	[min ⁻¹]	-	1450	1451	-	1469	1472	-	1460	1463
	Locked Rotor Torque		[%]	-	171	182	-	171	185	-	155	169
	Start Current		[A]	-	160.0	167.0	-	238.0	248.0	-	265.0	265.0
Poles			4									
Phase			3									
Frequency		[Hz]	50									
No. starts per hour			6									
Voltage Tolerance		[%]	±10%									
Frequency Tolerance		[%]	±1%									
Insulation Class			F									
Model			ZDLEU									

DL (30÷45 kW) MOTOR DATA

Output [P ₂]		[kW]	30			37			45			
Resistance at 20° C		[Ω]	0.236			0.152			0.117			
GD ²		[kg·m ²]	0.72			1.11			1.32			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	20	23.7	27.3	25.4	31.4	36.3	29.7	36.2	41.9
		Power	[W]	925	1104	1332	1116	1584	1956	1320	1752	2172
	75%	Current	[A]	45.69	45.96	47.48	56.47	58.11	60.14	68.59	70.07	72.18
		Efficiency	[%]	89.77	89.48	87.78	91.33	90.25	89.33	90.25	88.93	88.13
		Power factor	[%]	83.35	78.97	75.10	81.75	76.38	71.87	82.84	78.17	73.81
		Speed	[min ⁻¹]	1462	1464	1466	1479	1480	1481	1476	1478	1479
	100%	Current	[A]	59.00	58.00	58.50	72.50	72.50	73.50	88.00	87.50	88.50
		Efficiency	[%]	89.28	89.39	88.21	91.57	90.89	90.29	90.63	89.83	89.28
		Power factor	[%]	86.41	83.45	80.60	84.64	80.95	77.56	85.56	82.33	79.12
		Speed	[min ⁻¹]	1447	1451	1453	1470	1472	1473	1467	1470	1471
	Locked Rotor Torque		[%]	245	272	294	154	171	184	156	173	186
	Start Current		[A]	356.50	377.40	393.20	390.70	413.90	431.30	497.80	527.40	549.70
Poles			4									
Phase			3									
Frequency		[Hz]	50									
No. starts per hour			6									
Voltage Tolerance		[%]	±10%									
Frequency Tolerance		[%]	±1%									
Insulation Class			F									
Model			ZDLEU									

DML, DMLV (2.2÷3.7 kW) MOTOR DATA

Output [P ₂]		[kW]	2.2			3.7			
Resistance at 20° C		[Ω]	7.015			3.623			
GD ²		[kg·m ²]	0.02			0.03			
Voltage		[V]	380	400	415	380	400	415	
Load	0%	Current	[A]	2.13	2.52	2.81	3.29	3.88	4.45
		Power	[W]	450	480	580	620	780	840
	75%	Current	[A]	4.33	4.21	4.32	6.79	6.77	6.95
		Efficiency	[%]	67.11	68.45	67.13	72.12	71.40	69.56
		Power factor	[%]	86.20	82.63	79.22	86.08	82.84	79.82
		Speed	[min ⁻¹]	1428	1437	1442	1439	1443	1447
	100%	Current	[A]	5.50	5.20	5.20	8.60	8.40	8.40
		Efficiency	[%]	67.56	69.50	68.98	72.79	72.71	71.61
		Power factor	[%]	89.53	87.56	85.08	89.58	87.44	85.44
		Speed	[min ⁻¹]	1400	1411	1421	1416	1422	1428
	Locked Rotor Torque		[%]	182	204	221	203	226	244
	Start Current		[A]	24.30	25.70	26.70	45.50	48.10	50.00
Poles			4						
Phase			3						
Frequency		[Hz]	50						
No. starts per hour			10						
Voltage Tolerance		[%]	-10 to +6%	±10%					
Frequency Tolerance		[%]	±1%						
Insulation Class			F						
Model			ZDMEU						

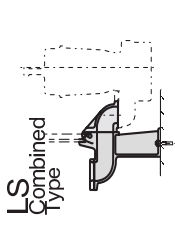
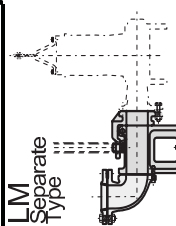
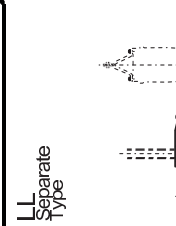
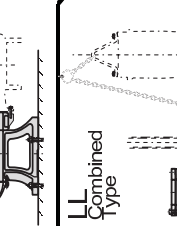
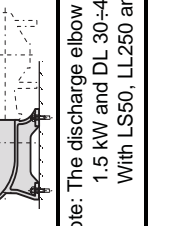

DML, DMLV (5.5÷11 kW) MOTOR DATA

Output [P ₂]		[kW]	5.5			7.5			11			
Resistance at 20° C		[Ω]	1.920			1.326			0.862			
GD ²		[kg·m ²]	0.059			0.076			0.120			
Voltage		[V]	380	400	415	380	400	415	380	400	415	
Load	0%	Current	[A]	5.56	6.67	7.64	6.93	8.41	9.70	8.49	10.15	11.85
		Power	[W]	900	1200	1330	1200	1300	1600	1100	1450	1800
	75%	Current	[A]	10.30	10.51	10.83	13.65	14.06	14.48	18.26	19.27	19.66
		Efficiency	[%]	73.72	72.26	71.38	75.24	76.86	71.60	81.12	75.49	74.70
		Power factor	[%]	82.50	78.43	74.23	83.20	75.16	75.46	84.63	81.87	78.15
		Speed	[min ⁻¹]	1454	1456	1460	1461	1460	1466	1462	1461	1465
	100%	Current	[A]	12.70	12.60	12.70	16.90	16.90	17.10	23.50	23.80	23.80
		Efficiency	[%]	75.37	74.50	74.06	76.89	79.01	74.60	81.65	77.41	77.06
		Power factor	[%]	87.04	84.27	81.03	87.39	80.89	81.76	87.68	85.82	83.31
		Speed	[min ⁻¹]	1437	1440	1445	1445	1447	1455	1447	1446	1451
	Locked Rotor Torque		[%]	227	252	272	231	256	278	154	170	184
	Start Current		[A]	78.00	82.60	87.80	110.20	116.50	121.70	128.20	136.00	141.90
Poles			4									
Phase			3									
Frequency		[Hz]	50									
No. starts per hour			10						7			
Voltage Tolerance		[%]	±10%									
Frequency Tolerance		[%]	±1%									
Insulation Class			F									
Model			ZDMEU									

DML/DMLV (15÷22 kW) MOTOR DATA

Output [P ₂]		[kW]	15			22			
Resistance at 20° C		[Ω]	0.563			0.308			
GD ²		[kg·m ²]	0.16			0.34			
Voltage		[V]	380	400	415	380	400	415	
Load	0%	Current	[A]	10.8	13.13	15.08	13.37	16.27	18.82
		Power	[W]	1220	1650	2000	1500	2000	2100
	75%	Current	[A]	24.86	25.03	25.59	33.90	33.38	34.04
		Efficiency	[%]	79.66	78.43	77.65	84.98	85.54	83.88
		Power factor	[%]	86.32	82.71	78.78	87.01	83.40	80.41
		Speed	[min ⁻¹]	1465	1464	1467	1473	1475	1474
	100%	Current	[A]	31.50	31.00	31.00	43.50	42.00	42.00
		Efficiency	[%]	80.84	80.23	79.78	85.80	86.52	85.34
		Power factor	[%]	89.13	86.77	84.16	89.33	87.27	85.16
		Speed	[min ⁻¹]	1449	1451	1455	1462	1466	1466
	Locked Rotor Torque		[%]	176	195	211	155	172	185
	Start Current		[A]	199.80	211.90	220.90	299.80	318.50	332.70
Poles			4						
Phase			3						
Frequency		[Hz]	50						
No. starts per hour			7						
Voltage Tolerance		[%]	±10%						
Frequency Tolerance		[%]	±1%						
Insulation Class			F						
Model			ZDMEU						

QDC SELECTION TABLE

QDC Model	Size			Applicable Model					
	Discharge Flange Ø	Discharge Elbow Ø	QDC Body Ø	Volute Flange Ø	DS	DVS	DLW/C	DL	DLM(V)
LS50 	50	/	50	50	50DS 1.5 kW	50DVS 1.5 kW			
	50	50x50	50	50	50DS 2.2÷3.7 kW				
LM65 	65	65x65	65	65	65DS 1.5 kW	65DVS 1.5÷3.7 kW	65DLW/C 1.5 kW	65DL 1.5 kW	
	80	65x80	65	65		80DVS 1.5÷3.7 kW			
LM80 	80	80x80	80	80	80DS 2.2÷3.7 kW		80DLW/C 1.5÷3.7 kW	80DL 1.5÷3.7 kW	80&100DML(V) 2.2÷3.7 kW
	80	80x80	80	80				80DLC 5.5÷7.5 kW	
LL80 	100	80x100	80	80				100DLC 5.5÷7.5 kW	
	100	100x100	100	100	100DS 5.5÷7.5 kW		100DLW/C 3.7÷7.5 kW	100DL&DLB 3.7÷18.5 kW	100DML(V) 5.5÷22 kW
LL100 	150	100x150	100	100					150DML 5.5÷22 kW
	150	125x150	125	125				150DL 5.5÷22 kW	
LL150 	150	150x150	150	150				150DL 30÷45 kW	
	200	150x200	150	150				200DL 5.5÷45 kW	
LL250 	250	/	200x250	200				250DL 7.5÷22 kW	
	250	(Reducer) 300x250	250x300	250				250DL 30÷45 kW	
LL300 	300	/	250x300	250				300DL 11÷45 kW	

Note: The discharge elbow & companion flange are not supplied with the QDC. These items are standard accessories supplied with the pump (except for DS and DVS 1.5 kW and DL 30÷45 kW), and they are used with the QDC.
With LS50, LL250 and LL300 the Discharge Elbow is not necessary, because it is included in the QDC body.