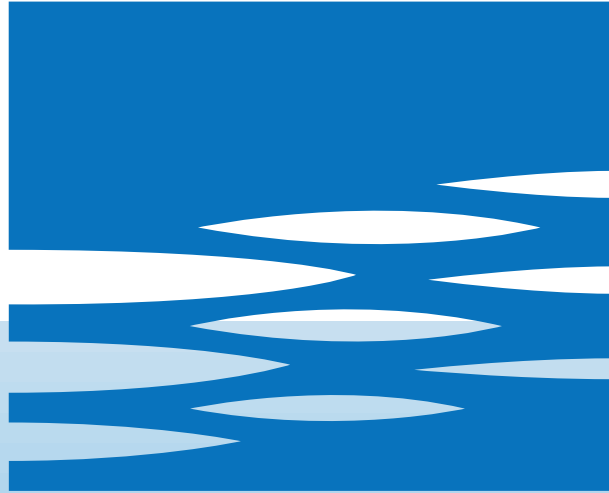




EBARA

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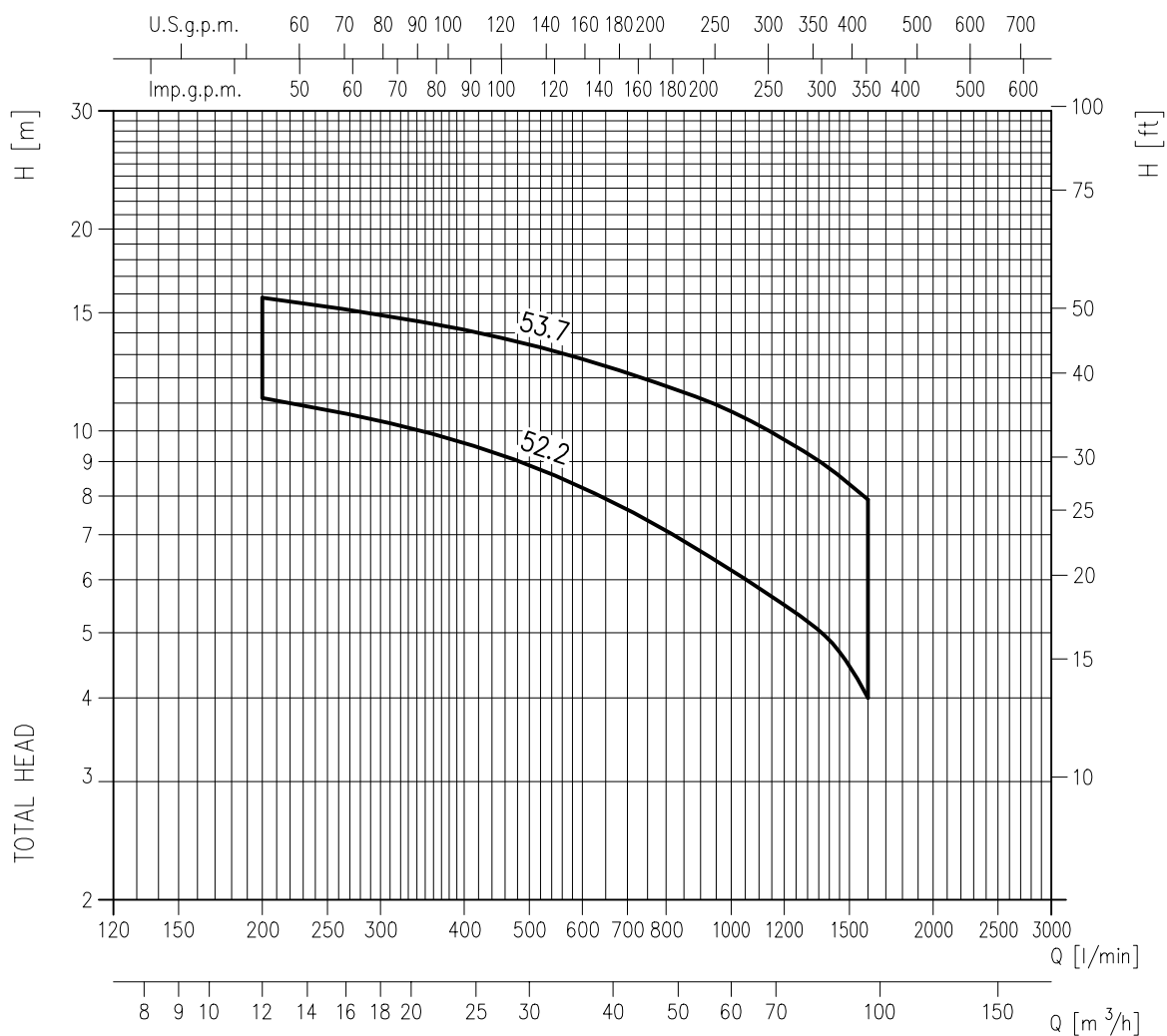
PUMP			
Scope	Discharge	[mm]	80 - 150
	Motor Power	[kW]	2.2 - 22
	Performance	Capacity	[m ³ /h] 12 - 330
		Head	[m] 4 - 40
Liquid	Type		Sewage
	Maximum temperature	[°C]	40
	Maximum diameter of solids	[mm]	76
Submergence	Maximum	[m]	8
	Minimum		Refer to low water level (L.W.L.) in dimensions
Construction	Impeller		Non-clog single channel
	Mechanical seal		Oil lubricated, double mechanical seals
Materials	Casing		Cast iron
	Impeller		Cast iron
	Shaft		403 Stainless steel
	Motor frame		Cast iron
	Fasteners		304 Stainless steel
	Mechanical seal		Upper Faces: Carbon / Ceramic/NBR
			Lower Faces: SiC / SiC/NBR
			Lubricating Oil: Turbine Oil VG32 (SAE10W/20W)
Accessories	Kit connector		
Applicable standard of test			ISO 9906 annex A

MOTOR		
Motor	Type	Air filled dry submersible Three Phase
	No. of Poles	4
	Insulation Class	Class F
	Protection degree	IP 68
	Nominal Speed	[min ⁻¹] 1450
	Frequency	[Hz] 50
	Voltage	[V] 380/400/415
	Starting	DOL (2.2 kW)
		Delta (3.7 to 22kW)
	Protection	In built overload protection (2.2 kW)
		Miniature thermal protector (3.7 to 22 kW)
	Bearings	Sealed ball bearing with permanent grease
Cable	Lenght	[m] 10

Pump:	80	DML	5	2.2
			50 Hz	
			PUMP TYPE	
			OUTPUT kW	2.2
				3.7
				5.5
				7.5
				11
				15
				22
			OUTLET DIAMETER OF ELBOW	80
				100
				150

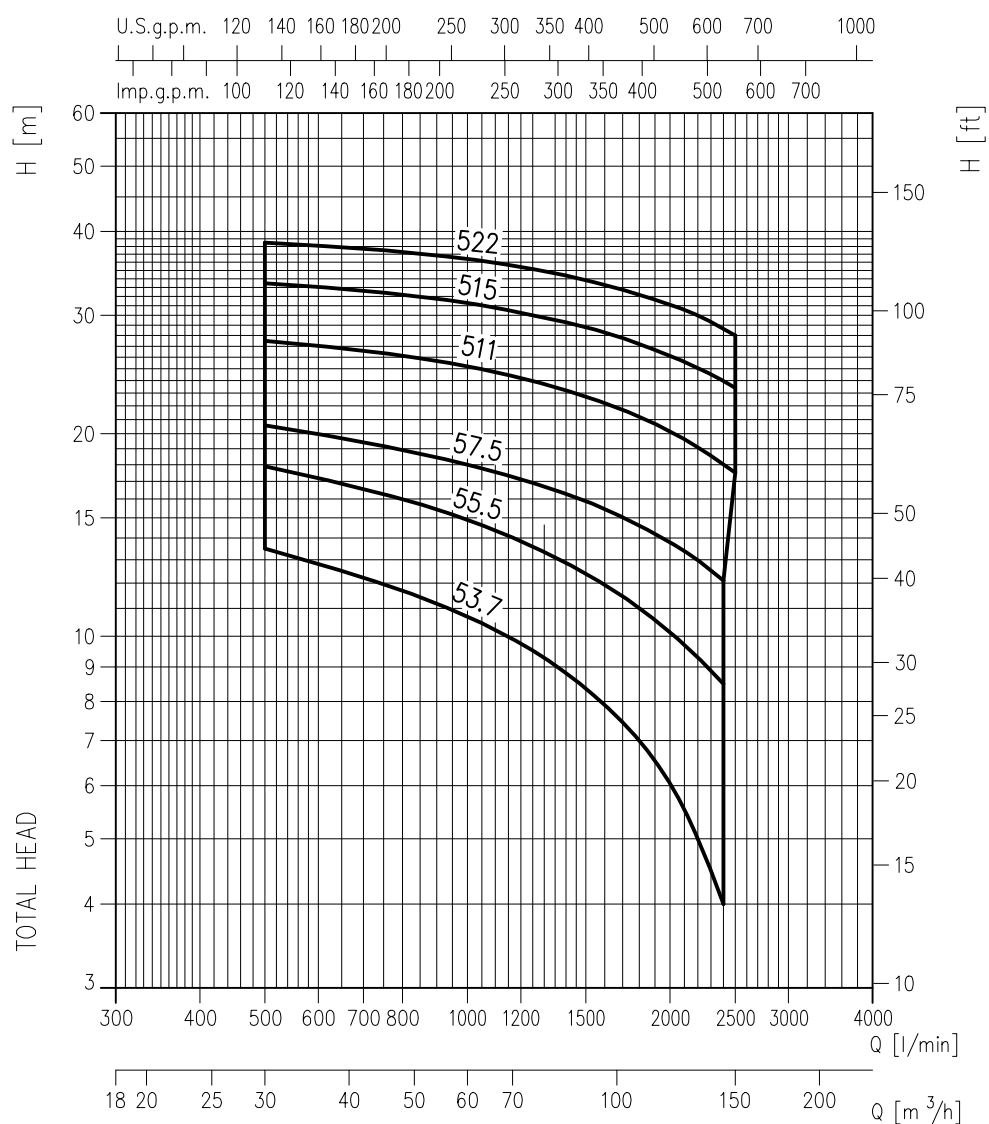
Kit connector (accessory) :	LM	80
		OUTLET DIAMETER OF PUMP
		80
		100
	TYPE	LM
		LL

80DML



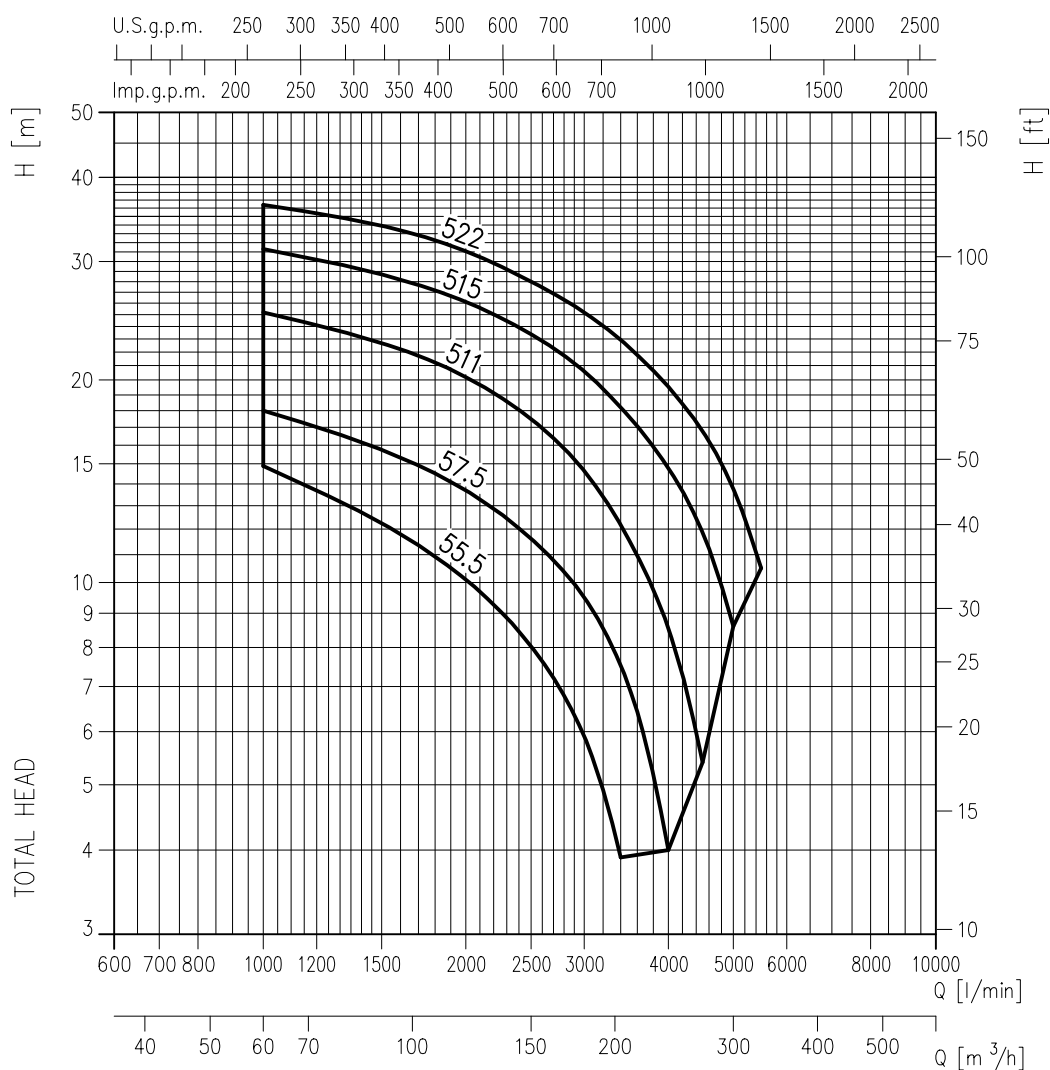
PUMP TYPE DML	kW	HP	Q= Capacity									
			[l/min]	0	200	400	600	800	1000	1200	1400	1600
			[m³/h]	0	12	24	36	48	60	72	84	96
			H=Total manometric head [m]									
80DML52.2	2.2	3	-	13.1	11.2	9.6	8.2	7.1	6.2	5.5	4.9	4
80DML53.7	3.7	5	-	17.9	15.8	14.2	12.8	11.7	10.7	9.7	8.8	7.9

100DML



PUMP TYPE DML	kW	HP	Q= Capacity									
			[l/min]	0	500	1000	1300	1600	1900	2200	2400	2500
			[m³/h]	0	30	60	78	96	114	132	144	150
H=total manometric head [m]												
100DML53.7	3.7	5	-	17.9	13.5	10.7	9.3	7.9	6.5	5	4	—
100DML55.5	5.5	7.5	-	22	17.9	14.9	13.4	11.9	10.6	9.3	8.5	—
100DML57.5	7.5	10	-	25.3	20.6	18	16.7	15.5	14.2	13	12.1	—
100DML511	11	15	-	30.3	27.5	25.2	23.7	22.2	20.7	19.1	18	17.5
100DML515	15	20	-	35	33.5	31.3	29.8	28.3	26.7	25.1	24	23.4
100DML522	22	30	-	40	38.5	36.4	34.9	33.3	31.7	30	28.7	28

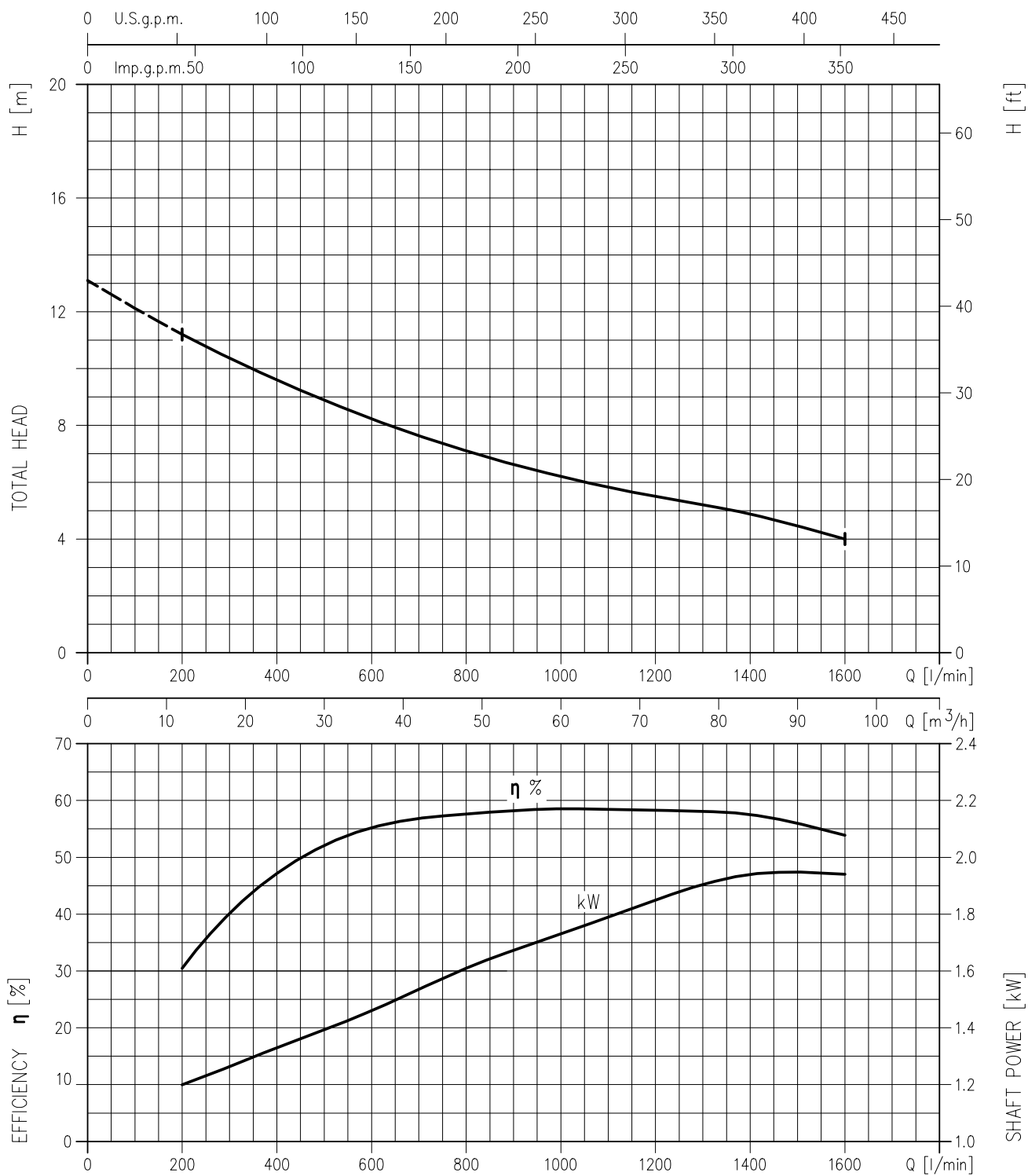
150DML



PUMP TYPE DML	kW	HP	Q= Capacity										
			[l/min]	0	1000	2000	2500	3000	3400	4000	4500	5000	5500
			[m³/h]	0	60	120	150	180	204	240	270	300	330
H=total manometric head [m]													
150DML55.5	5.5	7.5	-	22	14.9	10.1	8	5.9	3.9	—	—	—	—
150DML57.5	7.5	10	-	25.3	18	13.7	11.6	9.5	7.5	4	—	—	—
150DML511	11	15	-	30.3	25.2	20.2	17.5	14.7	12.2	8.6	5.4	—	—
150DML515	15	20	-	35	31.3	26.1	23.4	20.6	18.2	14.8	11.9	8.6	—
15DML522	22	30	-	40	36.4	31.1	28	25.2	22.9	19.5	16.8	13.8	10.5

80DML52.2

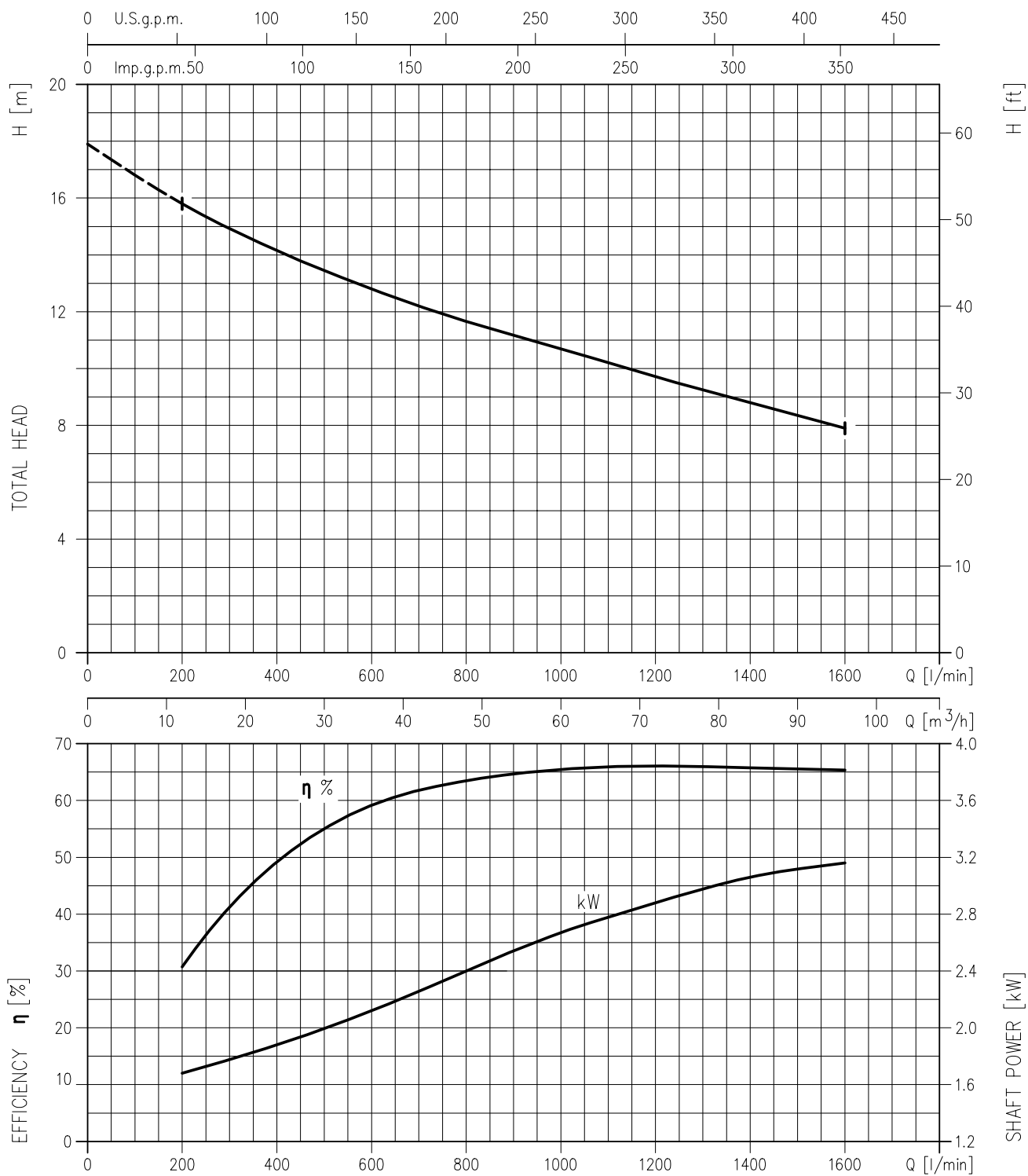
Impeller diameter = 179 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

80DML53.7

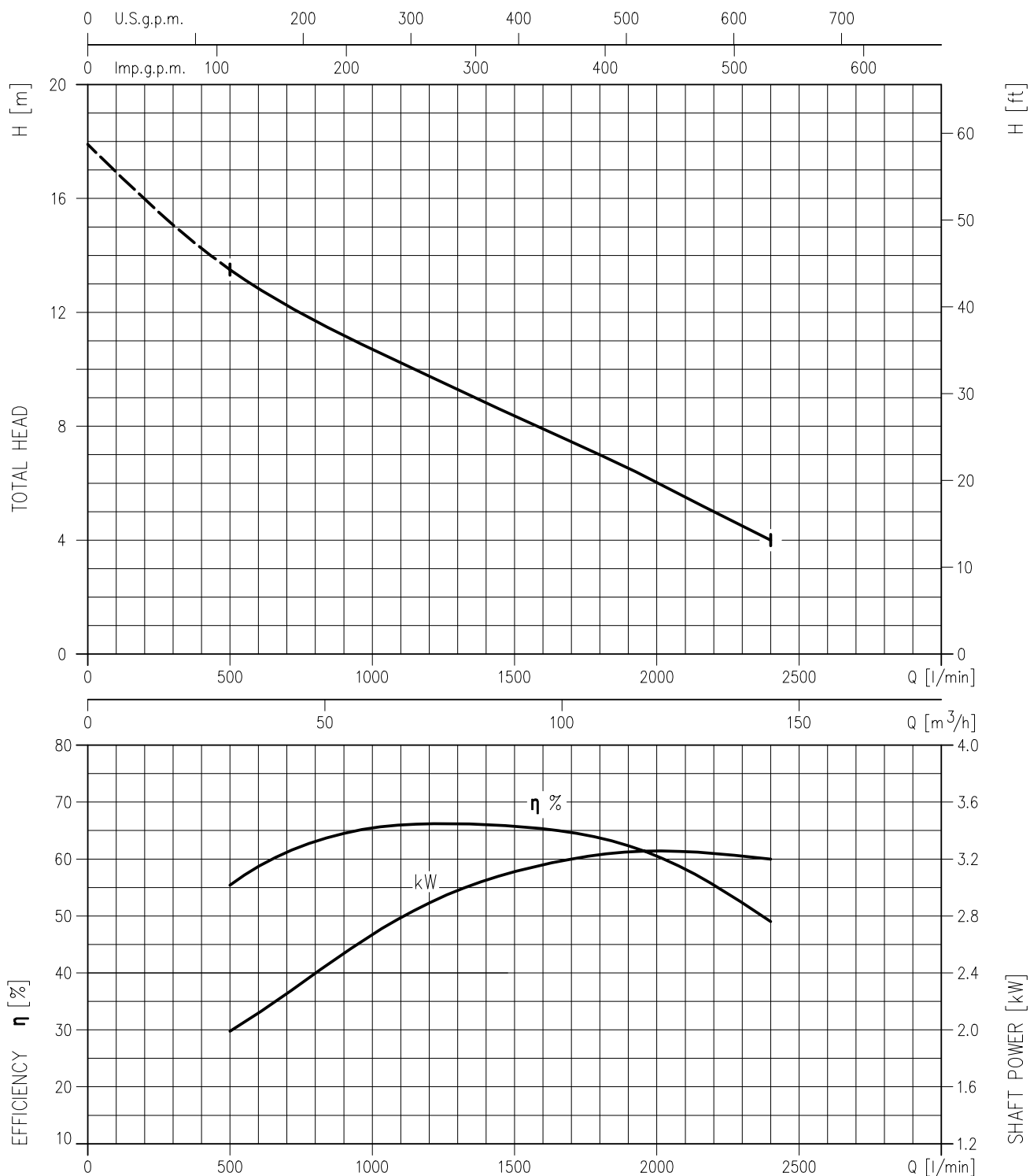
Impeller diameter = 210 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML53.7

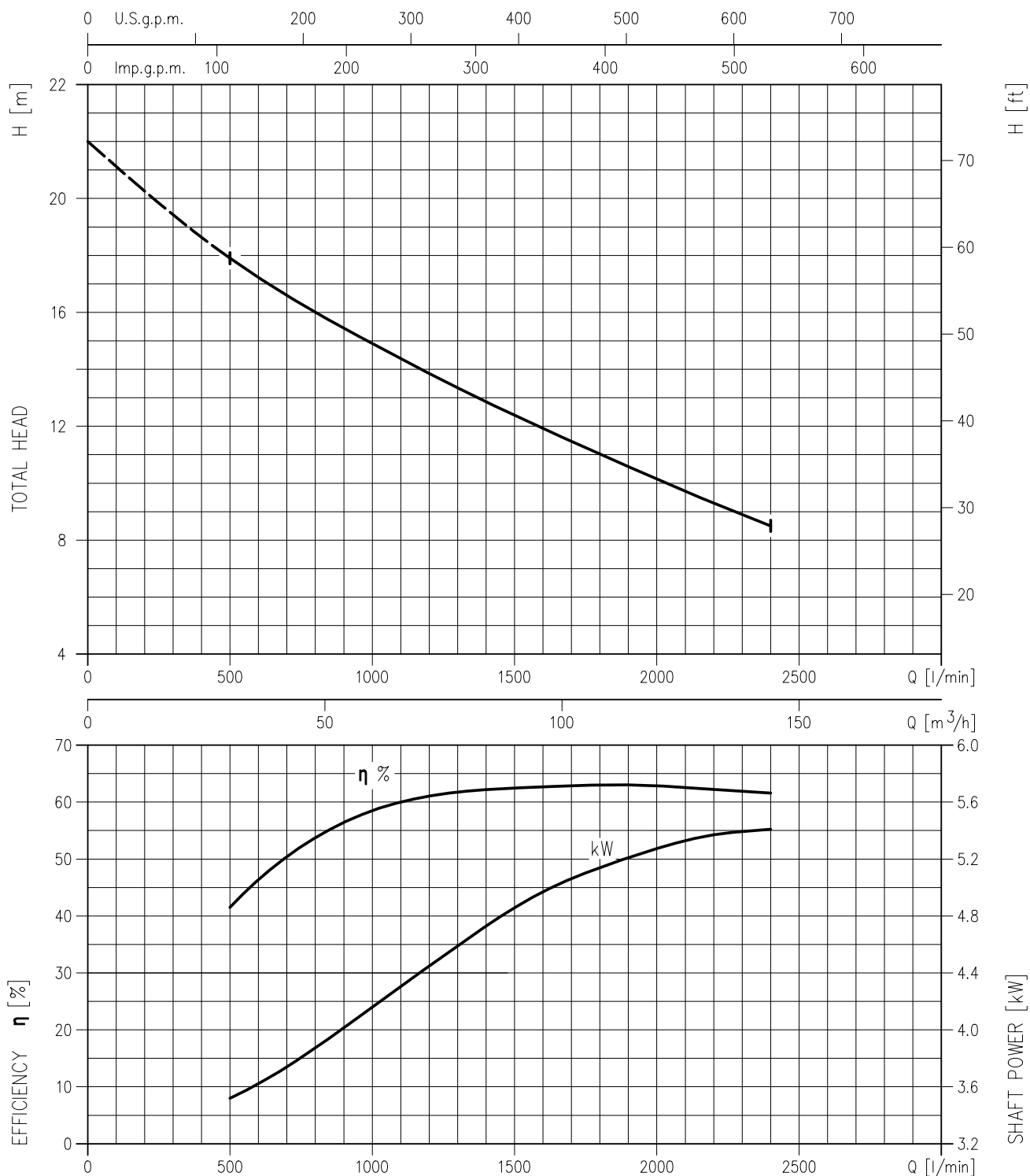
Impeller diameter = 210 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML55.5

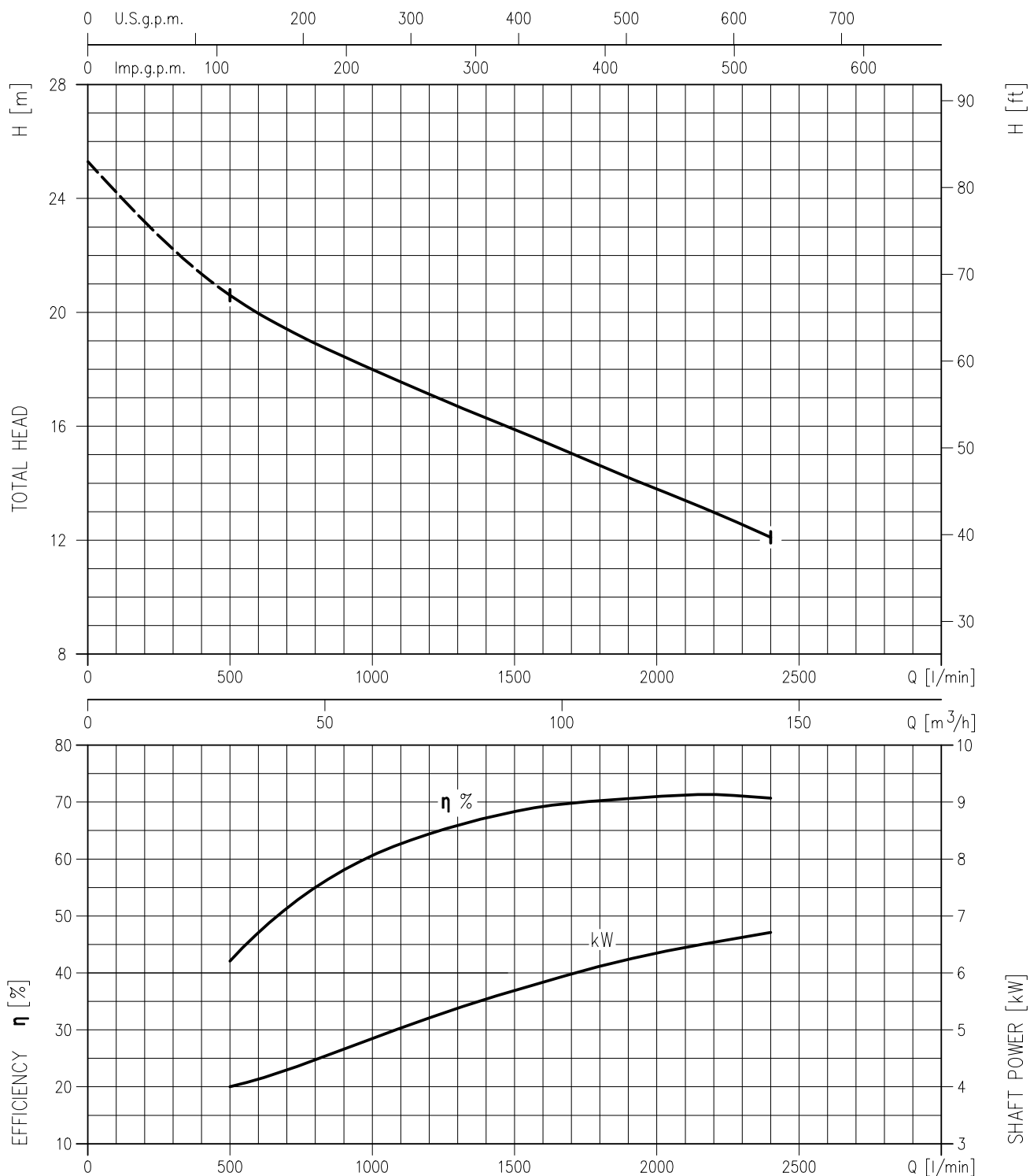
Impeller diameter = 232 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML57.5

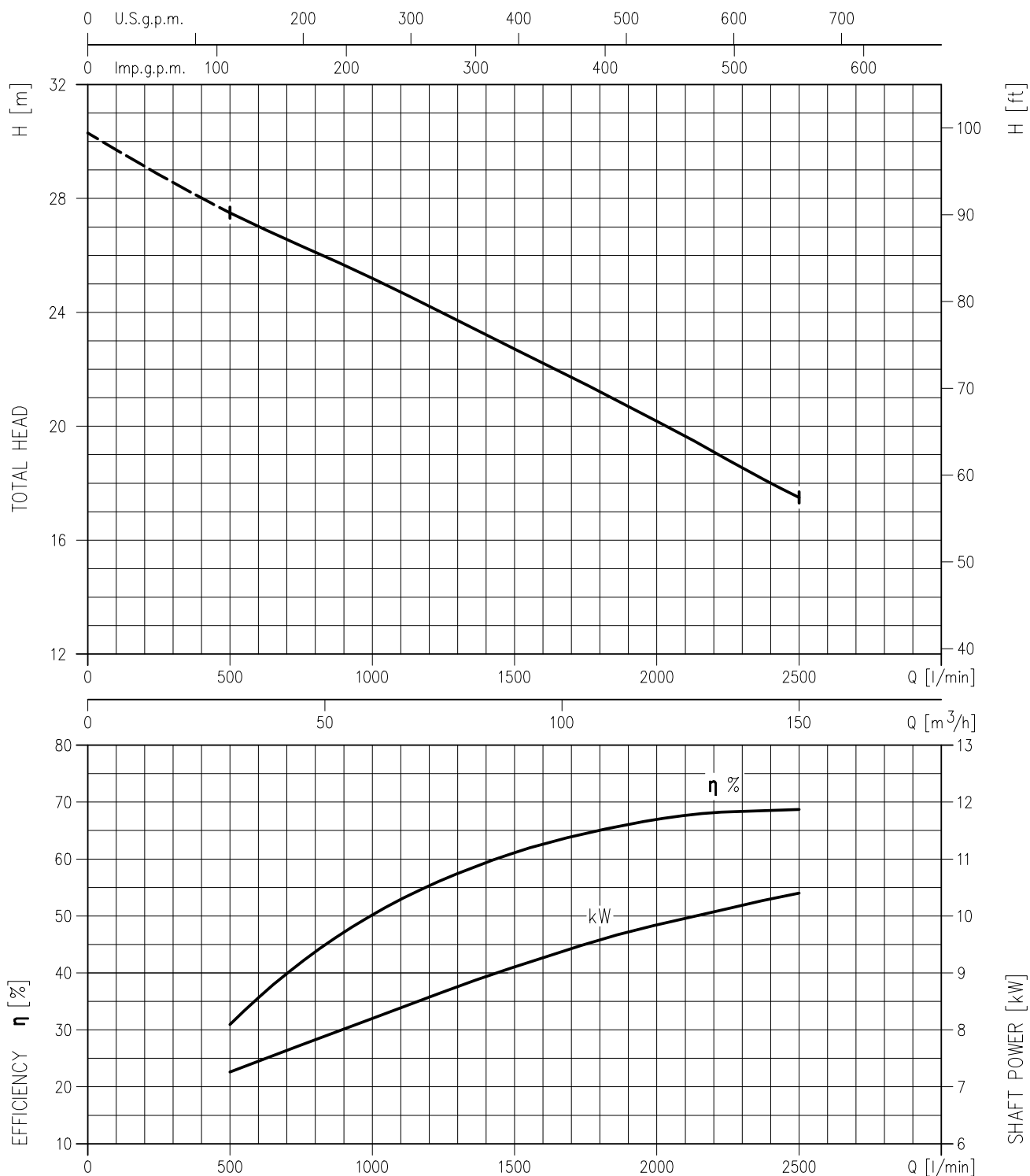
Impeller diameter = 248 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML511

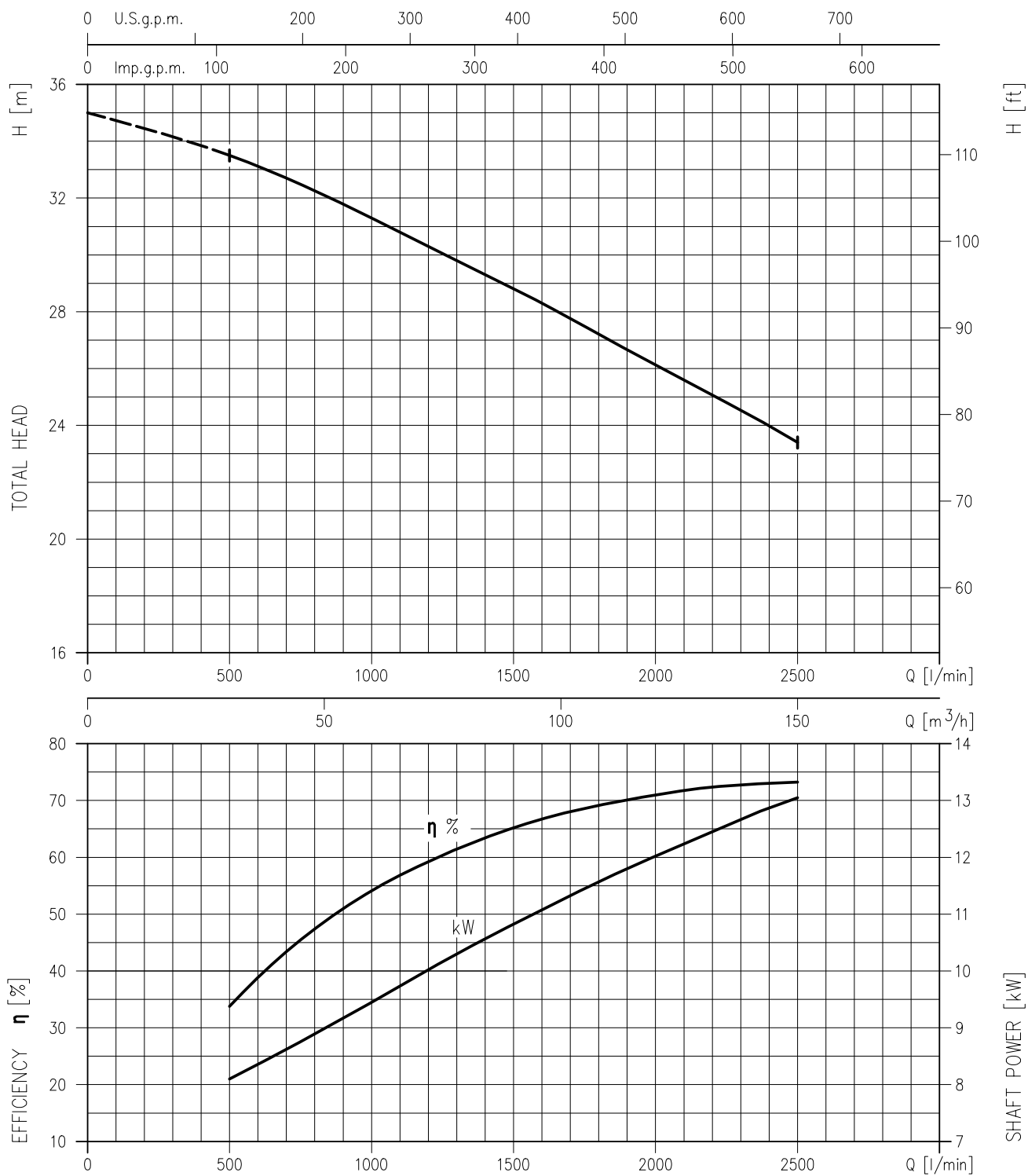
Impeller diameter = 286 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML515

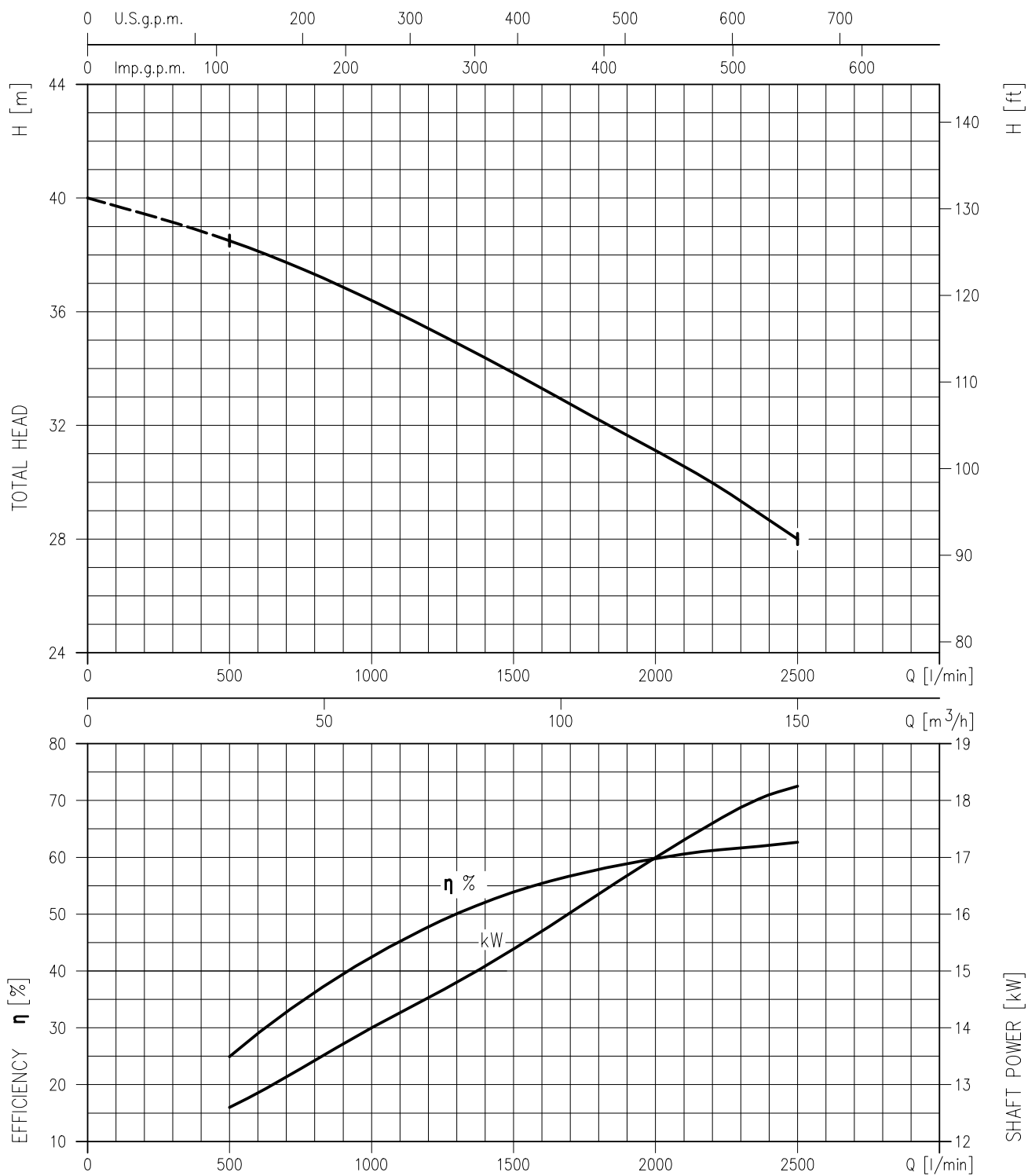
Impeller diameter = 309 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

100DML522

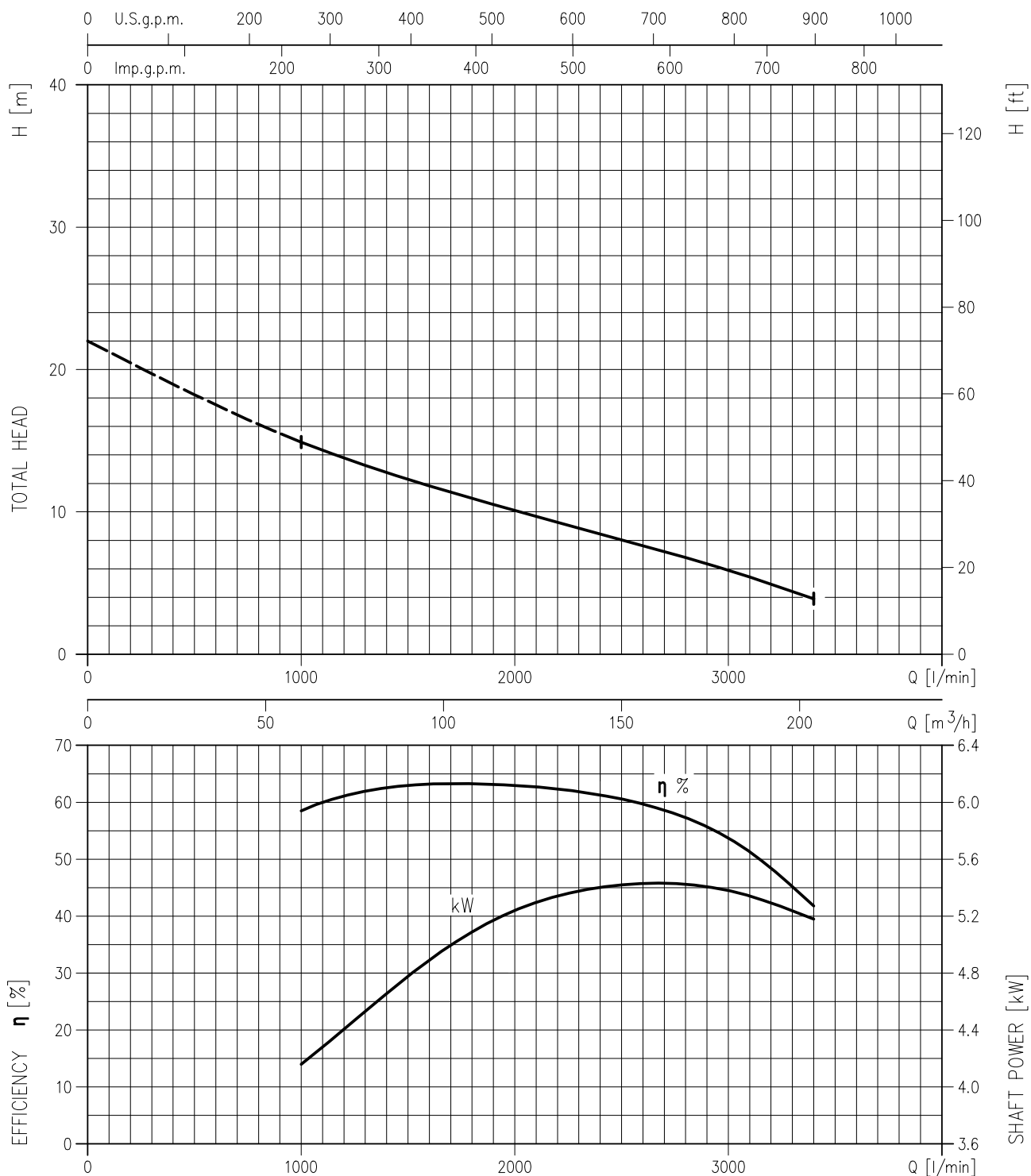
Impeller diameter = 330 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

150DML55.5

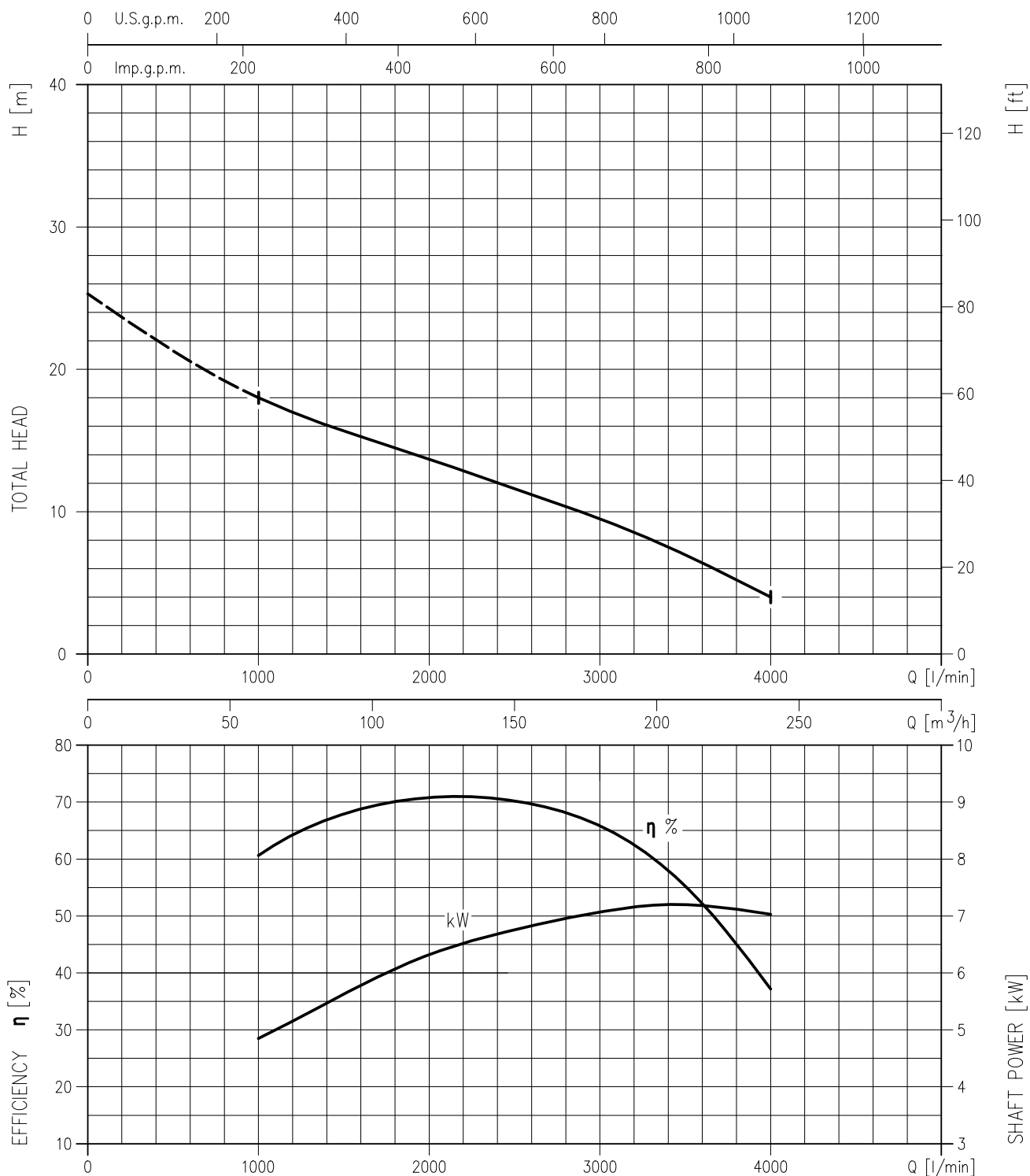
Impeller diameter = 232 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

150DML57.5

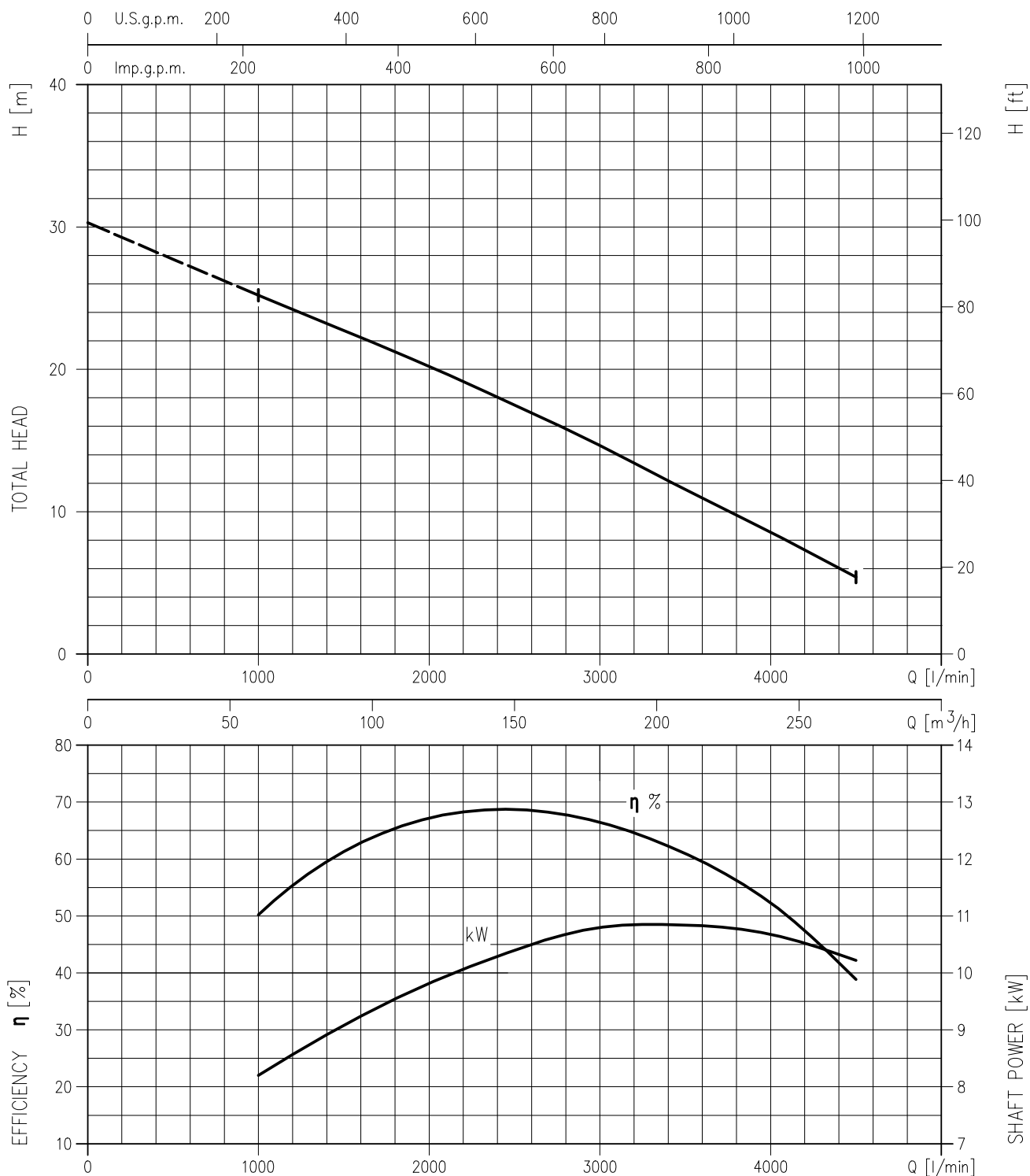
Impeller diameter = 248 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

150DML511

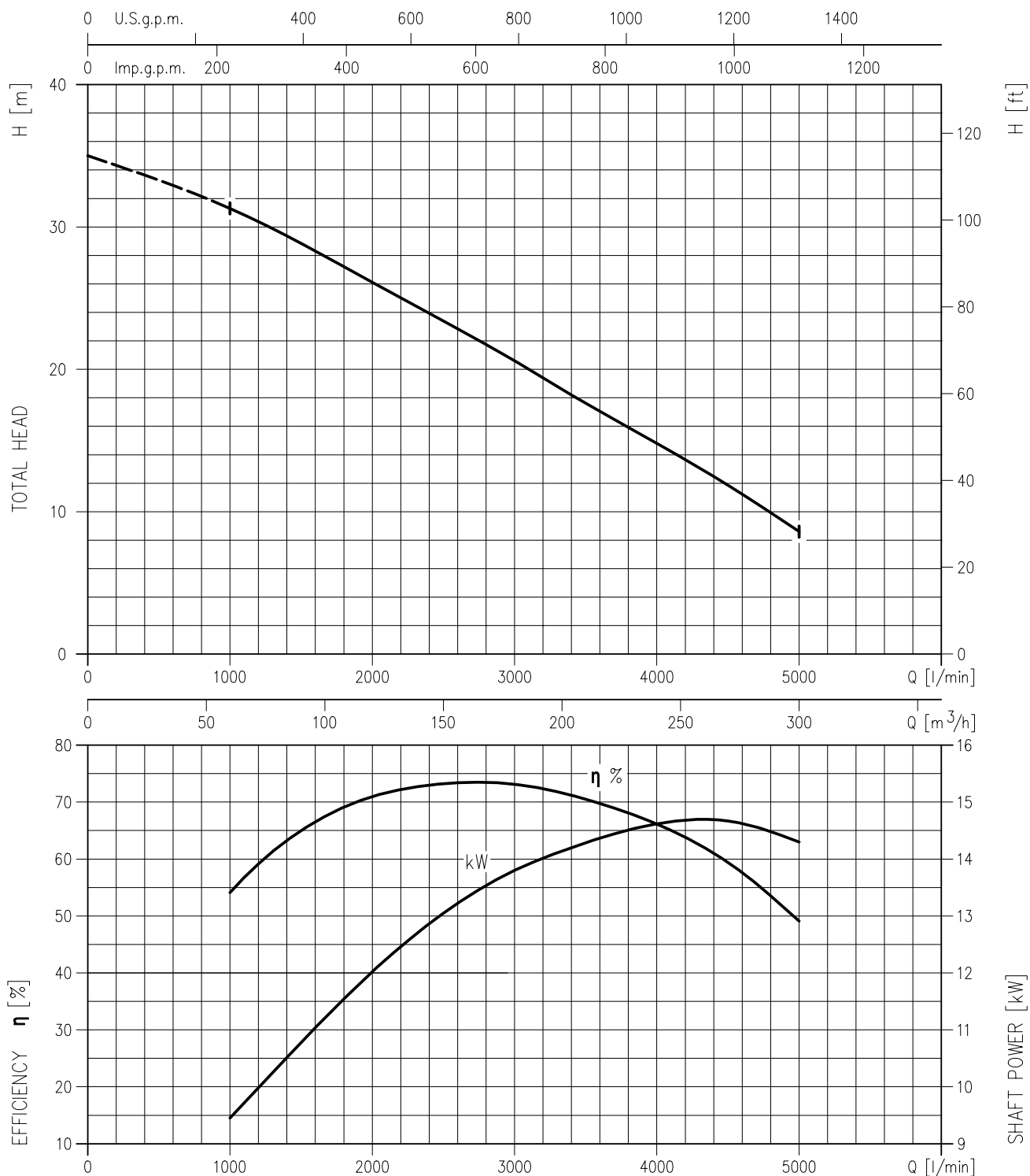
Impeller diameter = 286 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

150DML515

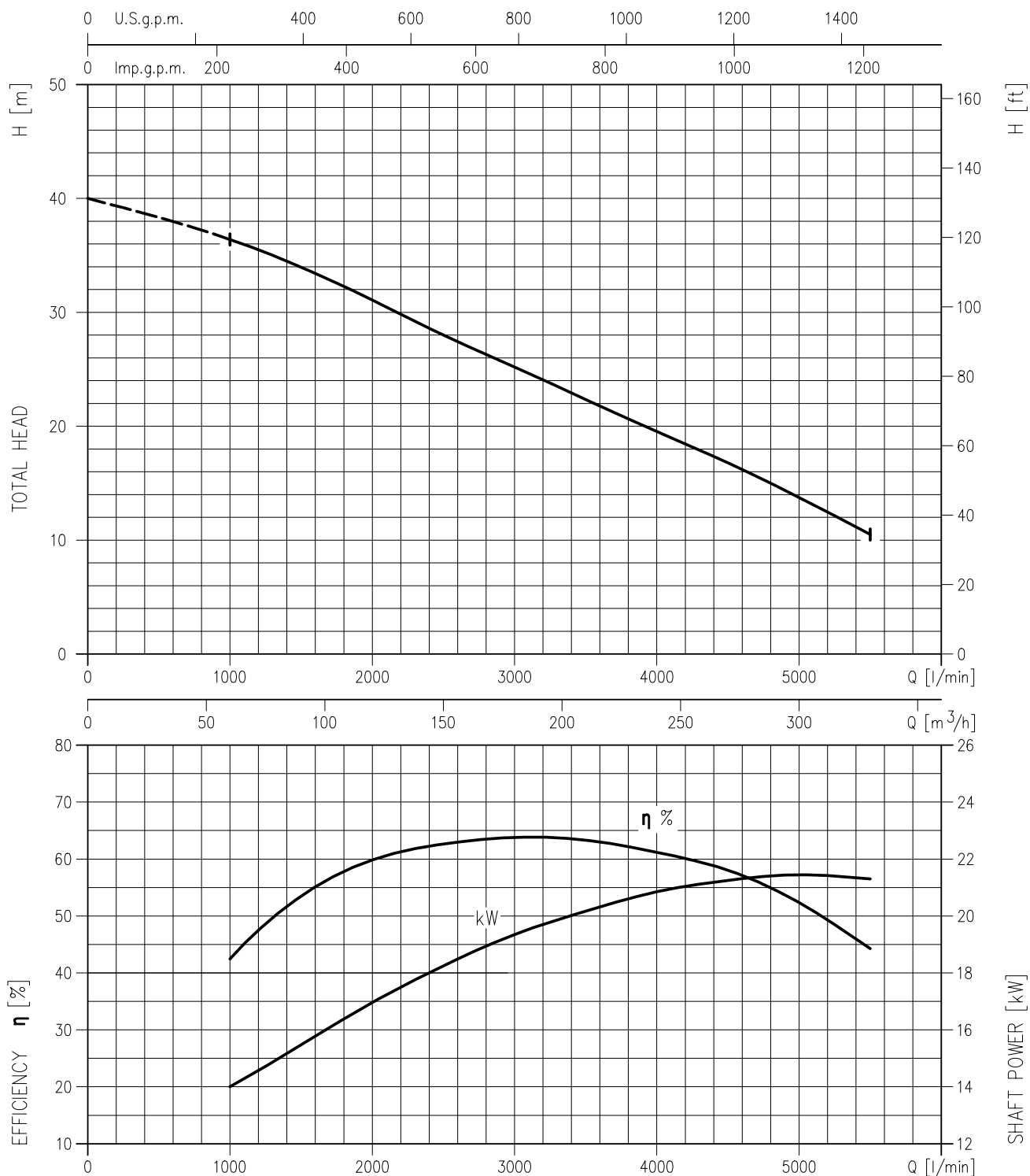
Impeller diameter = 309 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

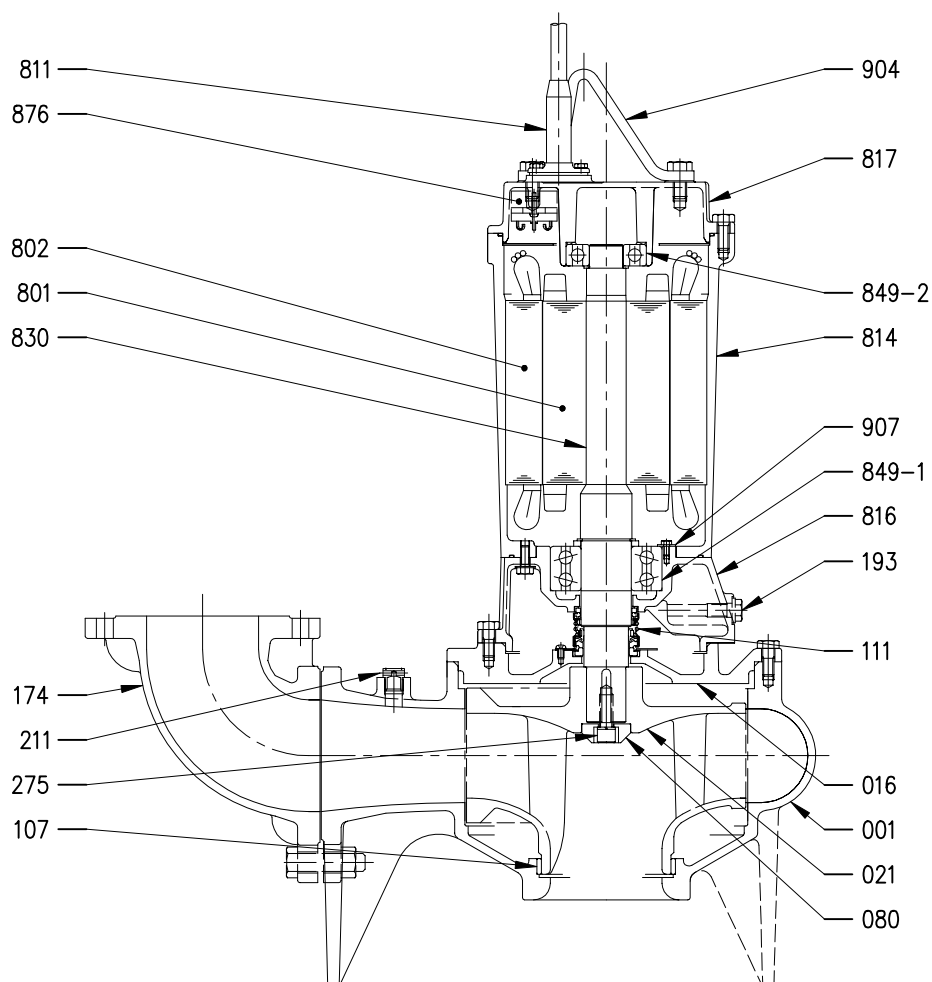
150DML522

Impeller diameter = 330 mm



Rotation speed $\approx 1450 \text{ min}^{-1}$
 Test fluid : clean water at 20°C
 Applicable standard of test : ISO 9906 annex A

80 DML 52.2

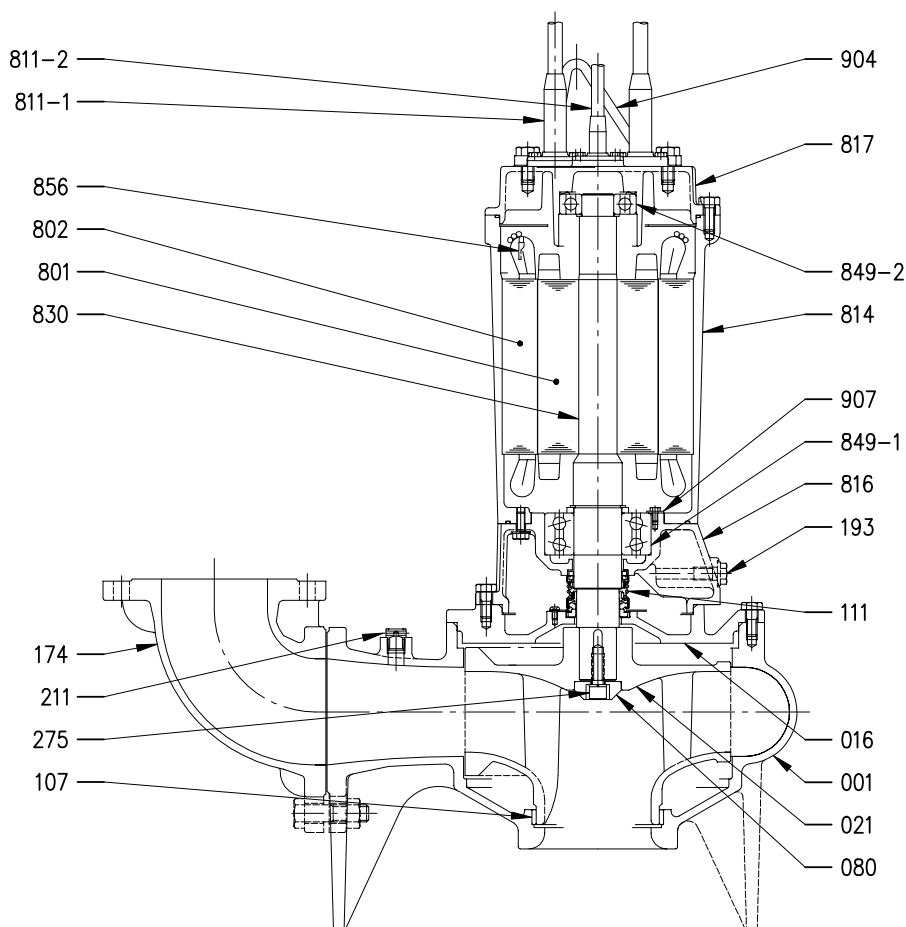


N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1	802	Stator		1
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1	811	Submersible Cab		2
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1	814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1	816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
107	Wearing ring	Bronze	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
111	Mechanical seal		1	830	Shaft	SUS403 Stainless Steel	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1	849-1	Ball Bearing		1
193	Oil Plug	NBR/Stainless Steel	1 set	849-2	Ball Bearing		1
211	Airvent Valve	Brass	1	876	Auto Cut		3
275	Impeller Bolt	Stainless steel AISI 304	1	904	Lifting Hanger	Steel	1
801	Rotor		1	907	Bearing Cover	Steel	1

SECTIONAL VIEW

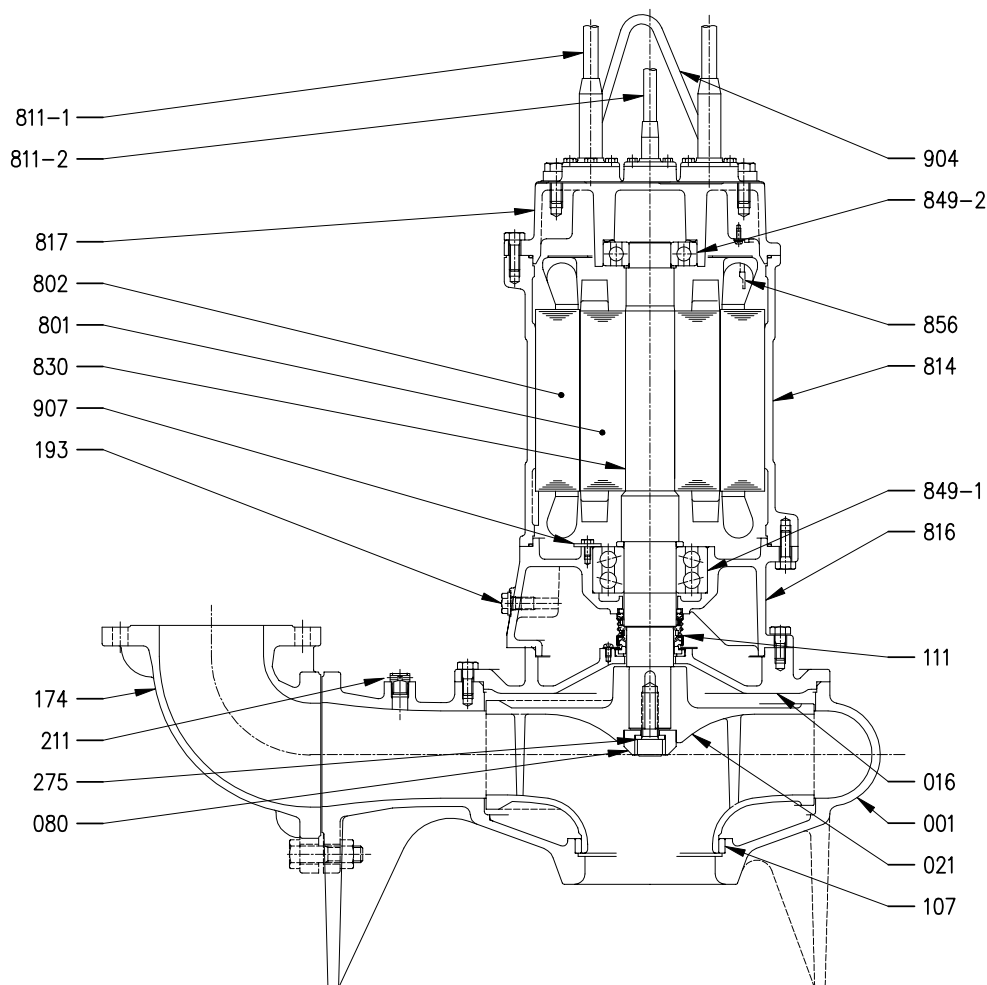
50Hz

80 (100) (150) DML (3.7÷7.5kW)



N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1	811-1	Submersible Cable (power)		2
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1	811-2	Submersible Cable (signal)		1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1	814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1	816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
107	Wearing ring	Bronze	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
111	Mechanical seal		1	830	Shaft	Stainless Steel SUS403	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1	849-1	Ball Bearing		1
193	Oil Plug	NBR/Stainless Steel	1 set	849-2	Ball Bearing		1
211	Airvent Valve	Brass	1	856	Thermal Protector		3
275	Impeller Bolt	Stainless steel AISI 304	1	904	Lifting Hanger	Steel	1
801	Rotor		1	907	Bearing Cover	Steel	1
802	Stator		1				

100 (150) DML (11÷22kW)

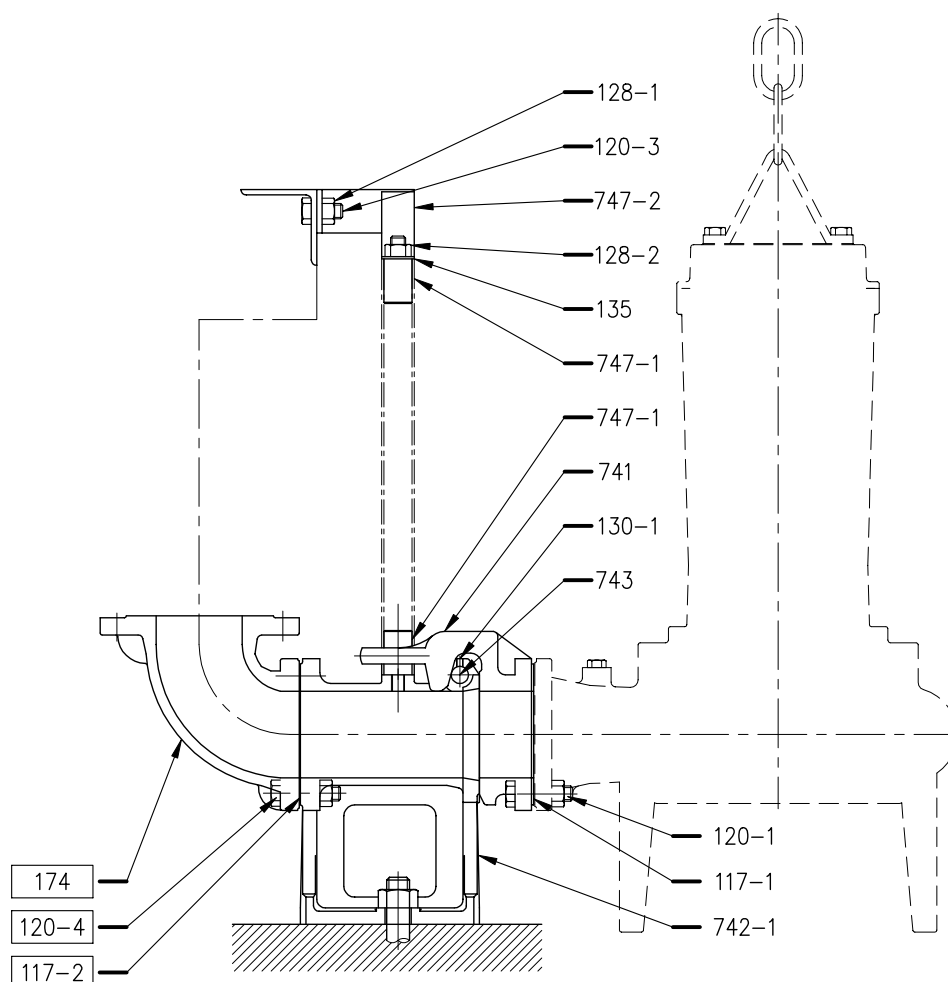


N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1	811-1	Submersible Cable (power)		2
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1	811-2	Submersible Cable (signal)		1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1	814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1	816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
107	Wearing ring	Bronze	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
111	Mechanical seal		1	830	Shaft	Stainless Steel SUS403	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1	849-1	Ball Bearing		1
193	Oil Plug	NBR/Stainless Steel	1 set	849-2	Ball Bearing		1
211	Airvent Valve	Brass	1	856	Thermal Protector		3
275	Impeller Bolt	Stainless steel AISI 304	1	904	Lifting Hanger	Steel	1
801	Rotor		1	907	Bearing Cover	Steel	1
802	Stator		1				

SECTIONAL VIEW

50 Hz

KIT CONNECTOR LM80 (OPTIONAL)



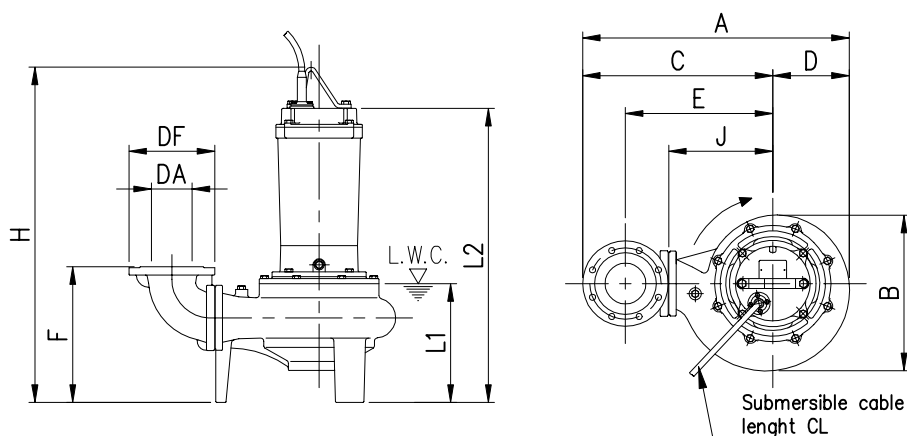
N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
117-1	Gasket	NBR Rubber	1	135	Washer	AISI 304 Stainless Steel	2
117-2	Gasket	Aramide fibers	1	174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
120-1	Bolt	AISI 304 Stainless Steel	4	741	Sliding Guide	Spheroidal graphite cast iron EN-GJS-400 - EN 1563	1
120-3	Bolt	AISI 304 Stainless Steel	2	742-1	QCD Body	Cast iron EN-GHJL-200 - EN 1561	1
120-4	Bolt & Nut	AISI 304 Stainless Steel	4	743	Suspension Bar	AISI 304 Stainless 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
130-1	Set Screw	AISI 304 Stainless Steel	1				

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

50 Hz

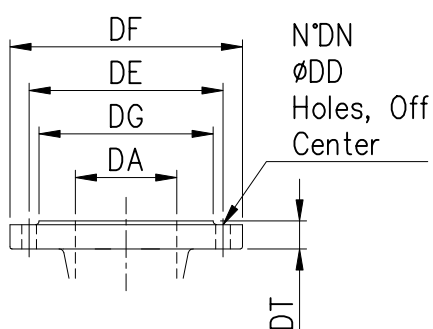
N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
117-1	Gasket	NBR Rubber	1	135	Washer	AISI 304 Stainless Steel	2
117-2	Gasket	Aramide fibers	1	174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
120-1	Bolt	AISI 304 Stainless Steel	4	741	Sliding Guide	Spheroidal graphite cast iron EN-GJS-400 - EN 1563	1
120-3	Bolt	AISI 304 Stainless Steel	2	742-1	QCD Body	Cast iron EN-GHJL-200 - EN 1561	1
120-4	Bolt & Nut	AISI 304 Stainless Steel	4	742-2	QDC Flange	Cast iron EN-GHJL-200 - EN 1561	1
120-6	Bolt	AISI 304 Stainless Steel	4	743	Suspension Bar	AISI 304 Stainless 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
130-1	Set Screw	AISI 304 Stainless Steel	1				

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



Note:

- 1) L.W.L (Low water Level) is limited: to 10 minutes operation at low water level.
- 2) It is limited to 30 minutes operation with water level below top of motor.



Discharge Flange Dimensions PN 10
According to EN 1092 - 2

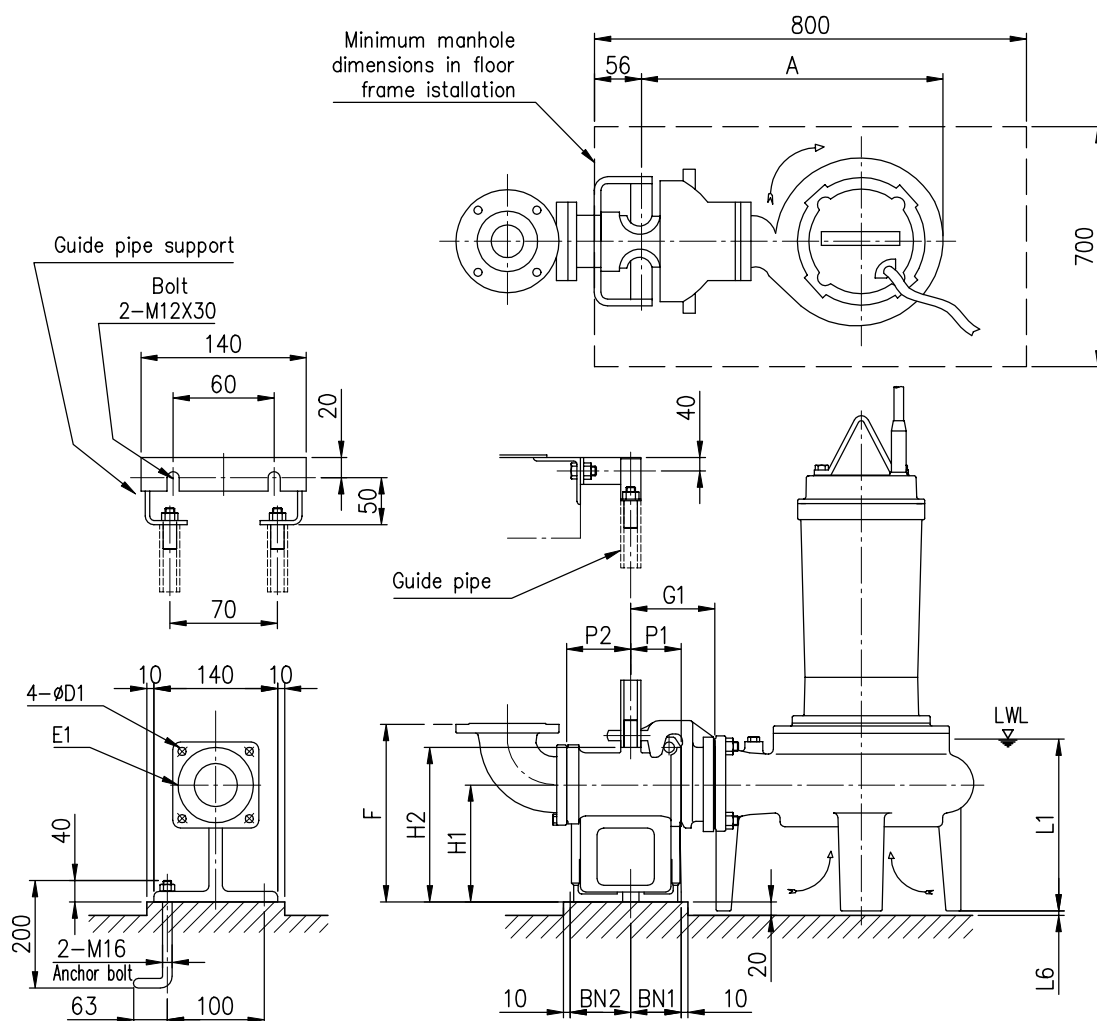
DA	DG	DE	DF	DT	No.DN	DD
80	138	160	200	22	8	18
100	158	180	220	24		22
150	212	240	285	26		22

PUMP TYPE DML	DIMENSIONS												WEIGHT [kg]
	DA	kW	A	B	C	D	E	F	H	J	L1	L2	
80 DML52.2	80	2.2	542	320	385	157	285	308	668	210	279	547	80
80DML53.7		3.7										627	87
100DML53.7	100	3.7	582	381	425	188	315	313	727	255	310	724	89
100DML55.5		5.5	658		470		360	339					121
100DML57.5		7.5	751	455	530	221	420	355	938	315	329	778	125
100DML511		11											160
100DML515		15											166
100DML522		22	795	497	550	245	440	358	1021	335	342	841	226
150DML55.5	150	5.5	715.5	381	527.5	188	385	369	824	255	310	724	127
150DML57.5		7.5											132
150DML511		11	808.5	455	587.5	221	445	385	938	315	329	778	166
150DML515		15											172
150DML522		22	852.5	497	607.5	245	465	388	1021	335	342	841	232

DIMENSIONS KIT CONNECTOR LM80

50 Hz

Applicable Models – 80 (100) DML 52.2, 53.7

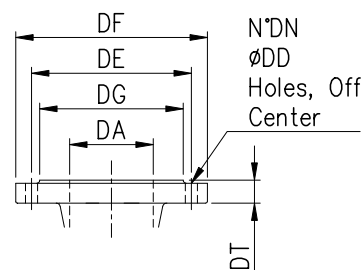


Note:

- 1) For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 2) The discharge bend supplied with the pump are used with the QDC.
- 3) The weight in dimension tables refers only the weight of the QDC.

Discharge Flange Dimensions PN 10
According to EN 1092 - 2

DA	DG	DE	DF	DT	No. DN	DD
80	138	160	200	22	8	18
100	158	180	220	24		

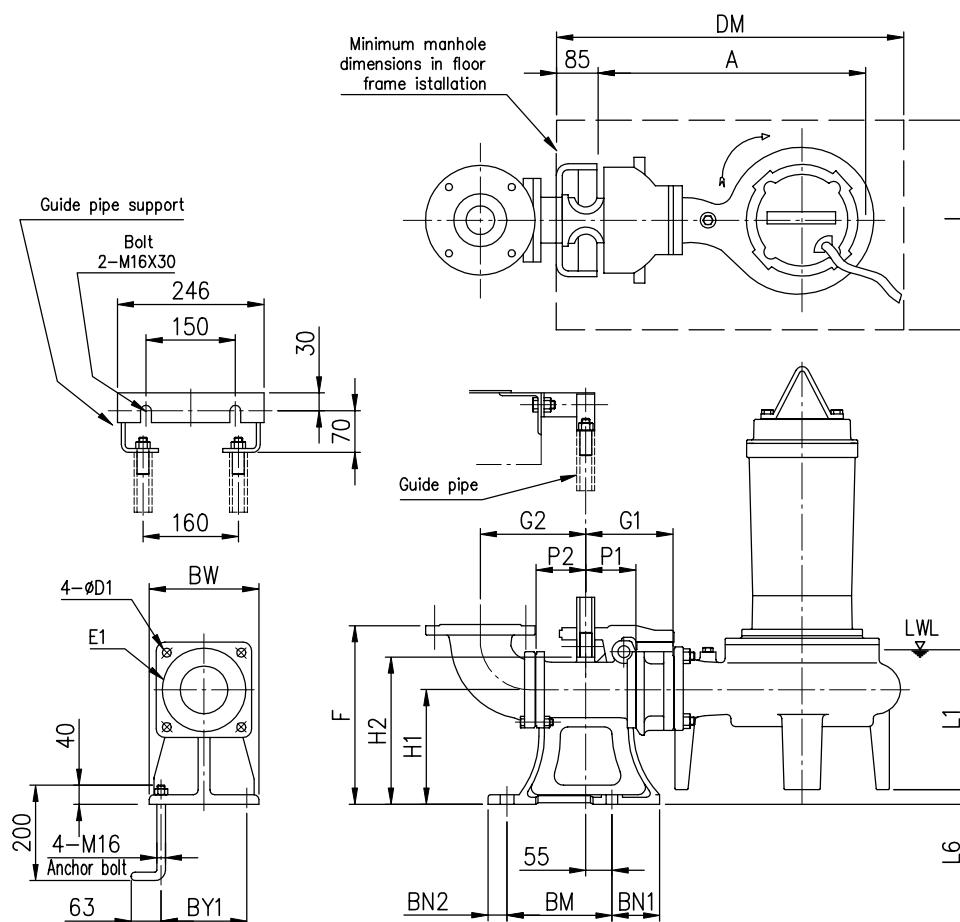


PUMP TYPE DML	A	P1	P2	G1	G2	F	H1	H2	L1	L6	BN1	BN2	D1	E1	KIT CONNECTOR	WEIGHT [kgf]
80 DML 52.2	492	75	90	125	165	295	175	230	279	7	75	90	15	155	LM80	17
80 DML 53.7					195	300										
100DML53.7																

DIMENSIONS KIT CONNECTOR LL100

50 Hz

Applicable Models – 100 (150) DML

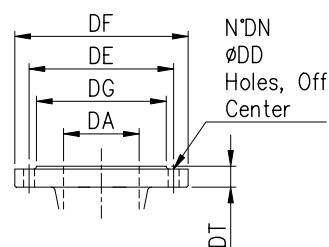


Note:

- 1) For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 2) The discharge bend supplied with the pump are used with the QDC.
- 3) The weight in dimension tables refers only the weight of the QDC.

Discharge Flange Dimensions PN 10
According to EN 1092 - 2

DA	DG	DE	DF	DT	No.DN	DD
100	158	180	220	24	8	18
150	212	240	285	26		22



PUMP TYPE DML	A	P1	P2	G1	G2	F	H1	H2	L1	L6	BN1	BN2	BM	BY1	BW	DM	I	D1	E1	KIT CONNECTOR	WEIGHT [kg]
100DML55.5	628								310	31						800				LL100	46kg
100DML57.5																					
100DML511	721				210	370			329	15						1000					
100DML515																					
100DML522	765	105	105	185			240	265	342	12	100	40	220	180	230		700	19	175		
150DML55.5	628								310	31						800					
150DML57.5																					
150DML511	721				235	400			329	15						1000					
150DML515																					
150DML522	765								342	12											

2.2 TO 22kW, THREE PHASE, 4 POLES MOTORS, SUIT DML

Name Plate Rating	Output kW	2.2			3.7			5.5			7.5		
	Phase	3											
	Poles	4											
	Volts	380	400	415	380	400	415	380	400	415	380	400	415
	Amps	5.4	5.2	5.2	8.6	8.4	8.4	12.7	12.6	12.7	16.9	16.9	16.9
	Speed min ⁻¹	1400	1410	1420	1410	1420	1420	1430	1440	1440	1440	1440	1450
	Insulation Class	F											
No Load Test [A]		2.13	2.52	2.81	3.29	3.88	4.45	5.56	6.67	7.64	6.93	8.41	9.70
[w]		450	480	580	620	780	840	900	1200	1330	1200	1300	1550
Resistance at 20°C [Ω]		6.953	6.953	6.953	3.592	3.592	3.592	1.842	1.842	1.842	1.248	1.248	1.248
75% Load	Current [A]	4.25	4.21	4.32	6.79	6.77	6.95	10.30	10.51	10.83	13.65	14.06	14.34
	Efficiency %	68.81	68.45	67.13	72.12	71.40	69.56	73.72	72.26	71.38	75.24	76.86	72.81
	Power factor %	85.79	82.63	79.22	86.08	82.84	79.82	82.50	78.43	74.23	83.20	75.16	74.96
	Speed min ⁻¹	1430	1437	1442	1439	1443	1447	1454	1456	1460	1461	1460	1467
100% Load	Current [A]	5.40	5.20	5.20	8.60	8.40	8.40	12.70	12.60	12.70	16.90	16.90	16.90
	Efficiency %	68.98	69.50	68.98	72.79	72.71	71.61	75.37	74.50	74.06	76.89	79.01	75.61
	Power factor %	89.37	87.56	85.08	89.58	87.44	85.44	87.04	84.27	81.03	87.39	80.89	81.47
	Speed min ⁻¹	1400	1411	1421	1416	1422	1428	1437	1440	1445	1445	1447	1446
Locked Rotor Torque %		182	204	221	203	226	244	227	252	272	231	256	278
Start Current [A]		24.3	25.7	26.7	45.5	48.1	50.0	78.0	82.6	87.8	110.2	116.5	121.7
N° starts per hour		20											
Voltage Tolerance		±10%											
Frequency Tolerance		±5%											
GD ² [kgxm ²]		0.020			0.030			0.059			0.076		

2.2 TO 22kW, THREE PHASE, 4 POLES MOTORS, SUIT DML

Name Plate Rating	Output kW	11			15			22		
	Phase	3								
	Poles	4								
	Volts	380	400	415	380	400	415	380	400	415
	Amps	23.0	22.8	23.0	30.5	30.0	30.0	43.5	42.0	42.0
	Speed min ⁻¹	1440	1450	1450	1450	1450	1450	1460	1460	1460
	Insulation Class	F								
No Load Test [A]		8.49	10.15	11.85	10.80	13.13	15.08	13.37	16.27	18.82

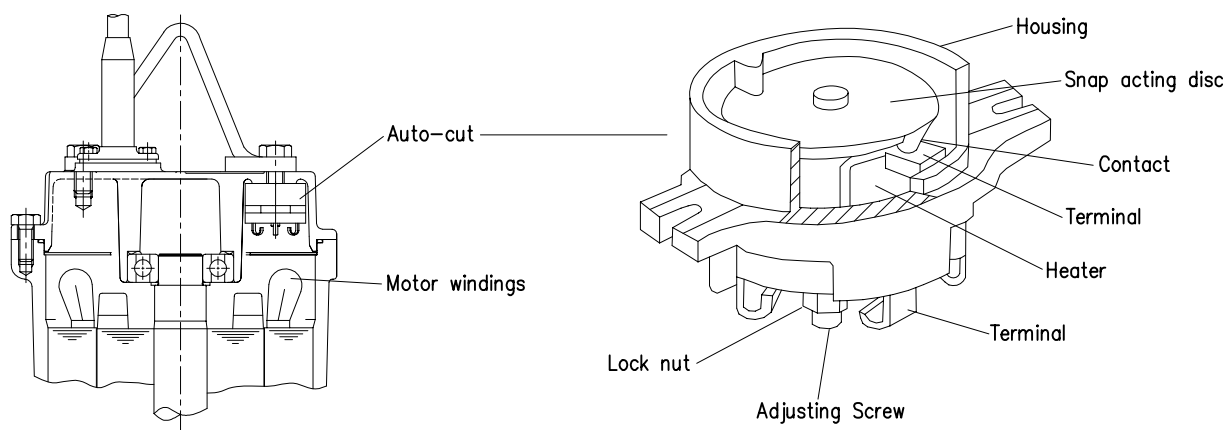
TECHNICAL DATA AUTO CUT

50 Hz

Applicable to DML 2.2Kw

The three pole auto-cuts model is illustrated below.

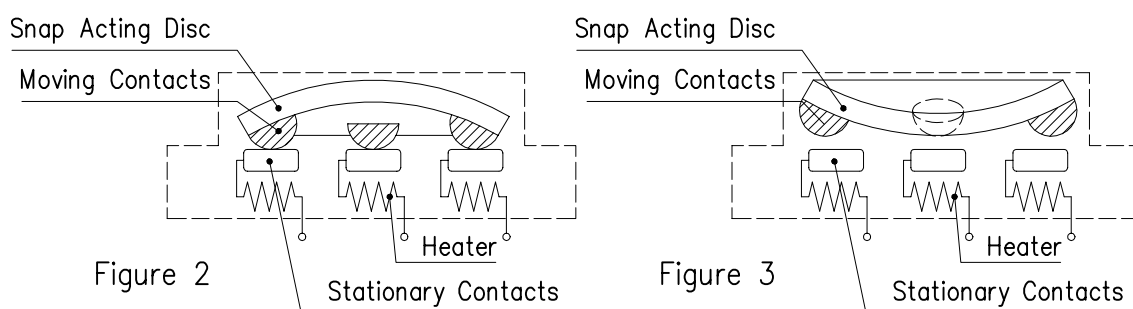
The Auto-Cut consists on: 3 sets of contacts, 1 snap-acting disk, 3 heaters, 3 terminals and 1 calibration bolt and nut, all enclosed in a bakelite housing.



The Auto-Cut is installed directly over the motor winding of the motor where it not only senses over heating of the winding but also excess amperage draw by each winding.

Figure 2 shows the Auto-Cut in its normal operating condition (contact closed). When actuating temperature is reached, the snap acting disc opens to interrupt the circuit as shown in figure 3 and stops the motor.

When the motor temperature cools down to the safe operating temperature, the snap acting disc resets automatically to the original position as shown in figure 2, and the motor restart!



Auto-Cut Part Numbers

Phase	Power kW	Auto-Cut
Three	2.2	KA-313-GCLXL102

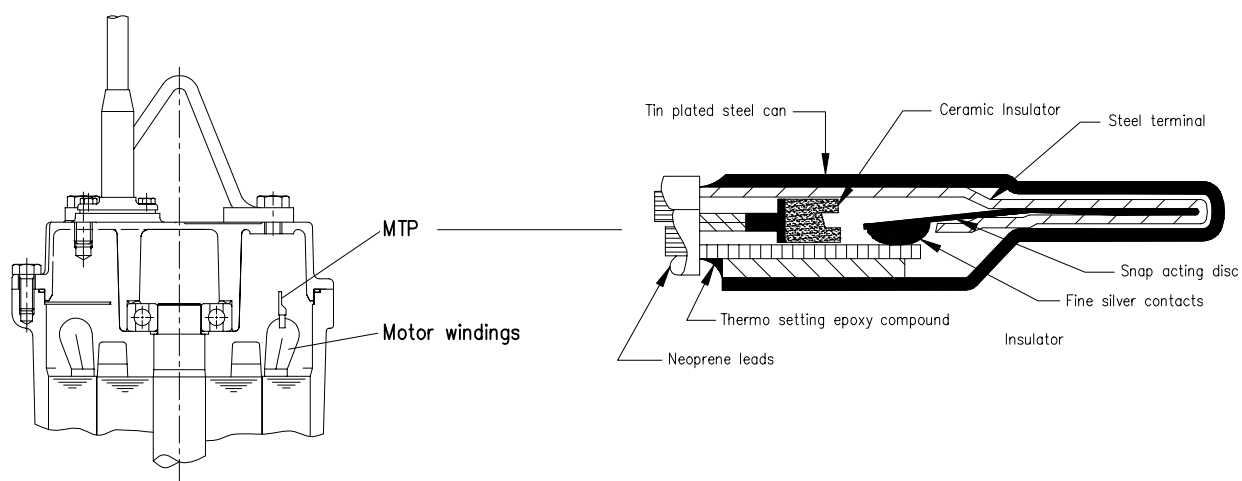
TECHNICAL DATA MINIATURE THERMAL PROTECTORS

50 Hz

Applicable to DML 3.7 to 22 kW

A Miniature Thermal Protector (MTP) is embedded in each winding of the motor as illustrated below, and provides automatic cut off with manual reset.

When the temperature of the windings increases and reaches the MTP acting point, an external motor protection circuit (not supplied) is activated.



Specification

Model	Klixon 9700K-46-215
Type of contact	b (Normally-Closed, Acting-Open)
Acting temperature	150°C (+/-5)
Re-setting temperature	100 °C
Contact rating	DC24V-18A
	DC230V-13A

CABLE SPECIFICATIONS

		kW	Starting method	Length of cable	Power Cable Material	Number & size of conductor(s)	
						Power Cable(s)	Protector Cable
DML	Three Phase	2.2	DOL	10m	HVCT	4x2 mm ²	
		3.7	Y-Δ	10m	HVCT	4x2 mm ² & 3x2 mm ²	2x1.25 mm ²
		5.5	Y-Δ	10m	HVCT	4x3.5 mm ² & 3x3.5 mm ²	2x1.25 mm ²
		7.5	Y-Δ	10m	HVCT	4x3.5 mm ² & 3x3.5 mm ²	2x1.25 mm ²
		11	Y-Δ	10m	HVCT	4x3.5 mm ² & 3x3.5 mm ²	2x1.25 mm ²
		15	Y-Δ	10m	HVCT	4x5.5 mm ² & 3x5.5 mm ²	2x1.25 mm ²
		22	Y-Δ	10m	2PNCT	4x14 mm ² & 3x14 mm ²	2x1.25 mm ²

Applicable	Cross sectional area of conductor	No. Of conductors	Cable Type	Sheath Material	Insulation Material	Sheath Thickness [mm]	Insulation Thickness [mm]	Overall Diameter [mm]			
DOL start motors use 1x4 core	2.0 mm ²	4		Chloroprene Rubber (Heat Resist Vinyl)	Ethylene Propylene Rubber (Heat Resist Vinyl)	1.9 (1.8)	0.8 (0.8)	12.3 (11.8)			
	3.5 mm ²					2.0 (2.0)	0.8 (0.8)	14.2 (13.9)			
	5.5 mm ²					2.1 (2.1)	1.0 (1.0)	16.8 (16.5)			
	8.0 mm ²					2.2	1.0	18.4			
	14.0 mm ²					2.4	1.0	21.7			
	2.0 mm ²					(1.8)	(0.8)	(10.9)			
Y-D start motors use 1x4 core - 1x3 core 1x2 core protector cable	3.5 mm ²	3				1.9 (1.9)	0.8 (0.8)	12.9 (12.6)			
	5.5 mm ²								2.1 (2.1)	1.0 (1.0)	15.2 (15.0)
	8.0 mm ²								2.1	1.0	16.7
	14.0 mm ²								2.3	1.0	19.7
Thermal Protector	1.25 mm ²	2	VCT	Vinyl	Vinyl	1.7	0.8	9.6			

MECHANICAL SEALS, LUBRICATION & BEARINGS

	kW	Type	Mechanical Seal		Bearings	
			Capacity - Cm ³	Lubrication Type	Bottom	Top
DML	2.2	EAN-30	1100	Turbine Oil SAE 10W or SAE 20W (Turbine Oil #32)	5307ZZ	6205ZZ
	3.7					
	5.5	EAN-40	1600		5309ZZ	6306ZZ
	7.5					
	11	EAN-45	2900		5310ZZ	6308ZZ
	15					
	22					

LUBRICATION (CAPACITY)

Mechanical Seal Lubricating Oil Capacity - cm ³									
Motor kW		2.2	3.7	5.5	7.5	11	15	18.5	22
Model									
DML	80 DML	1100	1100	1600	1600	2900	2900	3000	3000
	100 DML								
	150 DML								

MECHANICAL SEALS

No.	Part Name	Material	No. per Set
1	Packing	N.B.Rubber	1
2	Floating Ring	Ceramic	1
3	Seal Ring	Carbon Graphite	1
4	Spring	304 SS	1
5	Seal Ring	Silicon Carbide	1
6	Floating Ring	Silicon Carbide	1
7	Floating Ring	N.B.Rubber	1

