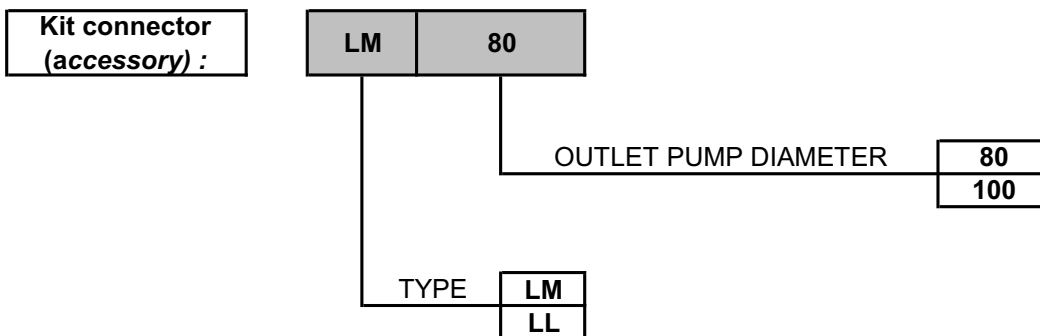
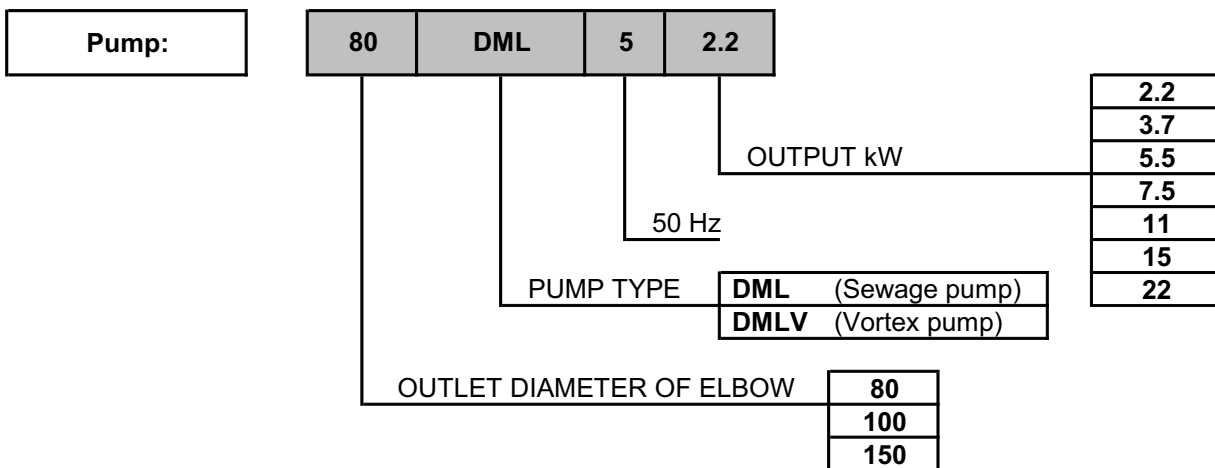


<b>PUMP</b>				
Scope	Discharge	[ mm ]	80 - 100	
	Motor Power	[ kW ]	2.2 - 22	
	Performance	Capacity	[ m <sup>3</sup> /h ]	12 - 168
		Head	[ m ]	29,4 - 40
Liquid	Type		Sewage	
	Maximum temperature	[ °C ]	40	
	Maximum diameter of solids	[ mm ]	Equivalent to the pump diameter	
	Length fibrous shape	[ mm ]	Ø 80 : 400 mm Ø 100 : 500 mm	
Submergence	Maximum	[ m ]	8	
	Minimum		Refer to low water level (L.W.L.) in dimensions	
Construction	Impeller		Vortex	
	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	

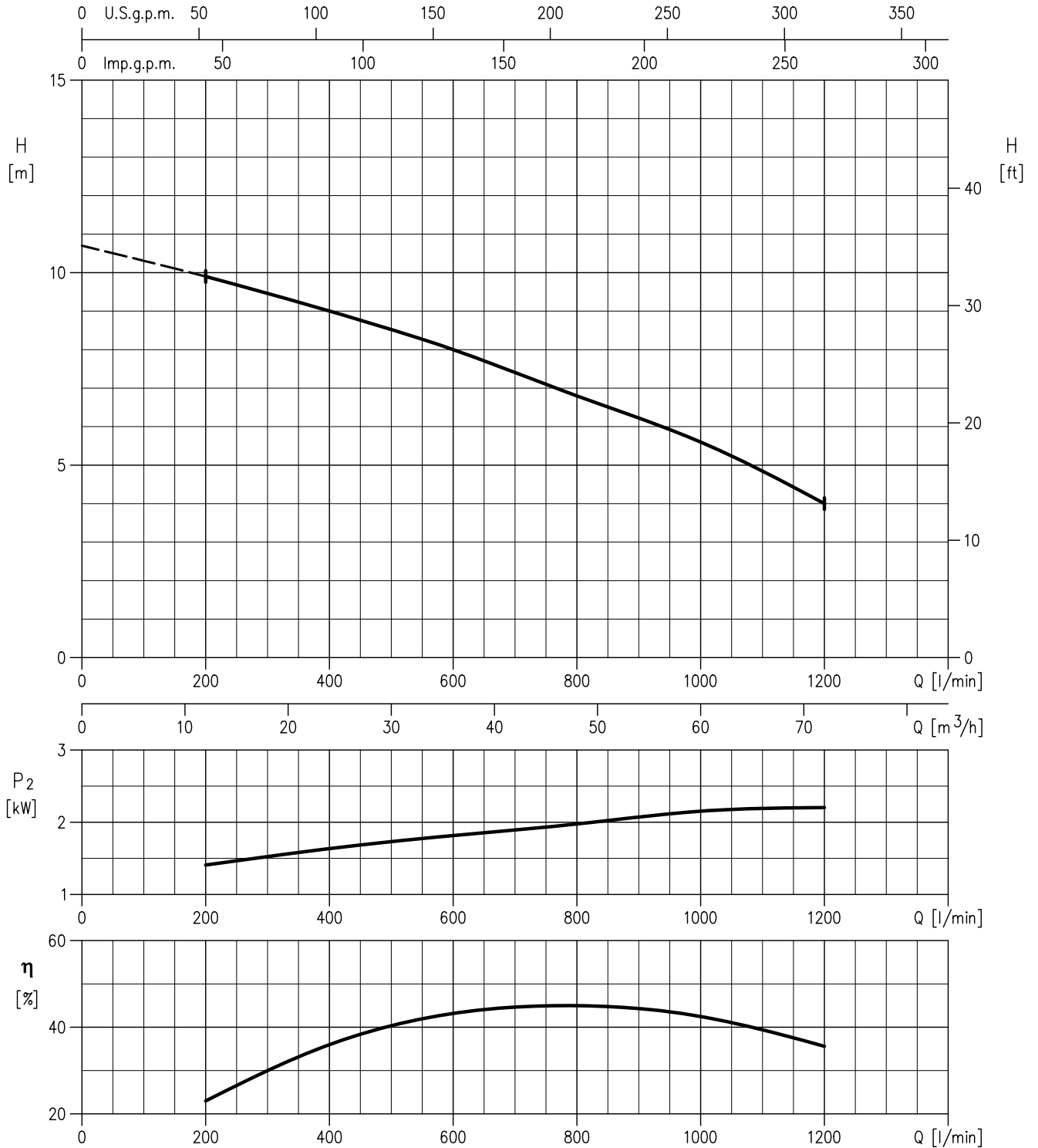
<b>MOTOR</b>				
Motor	Type		Air filled dry submersible Three Phase	
	No. of Poles		4	
	Insulation Class		Class F	
	Protection degree		IP X8	
	Nominal Speed	[ min <sup>-1</sup> ]	1450	
	Frequency	[ Hz ]	50	
	Voltage	[ V ]	380/400/415	
	Starting			DOL (2.2 kW) Delta (3.7 to 22kW)
				In built overload protection (2.2 kW) Miniature thermal protector (3.7 to 22 kW)
	Bearings		Sealed ball bearing with permanent grease	
	Cable	Length	[ m ]	10



**PERFORMANCE CURVE**

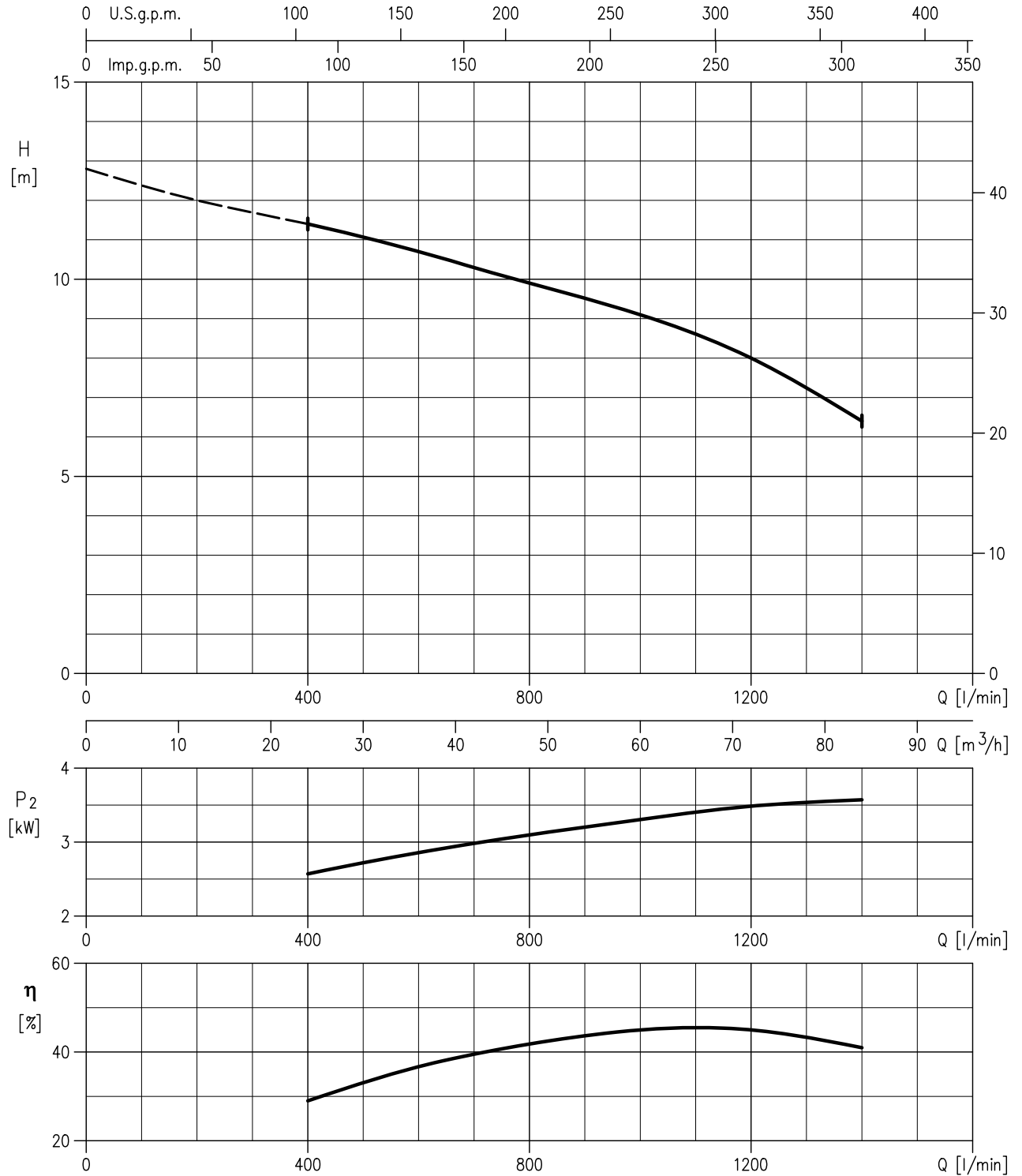
50 Hz  
REV.A

**80DMLV52.2**  
Impeller diameter ≈ 185 mm



Rotation speed ≈ 1450 min<sup>-1</sup>  
 Test fluid : clean water at 20°C  
 Applicable standard of test : ISO 9906 annex A

**80DMLV53.7**  
Impeller diameter  $\varnothing 204\text{mm}$

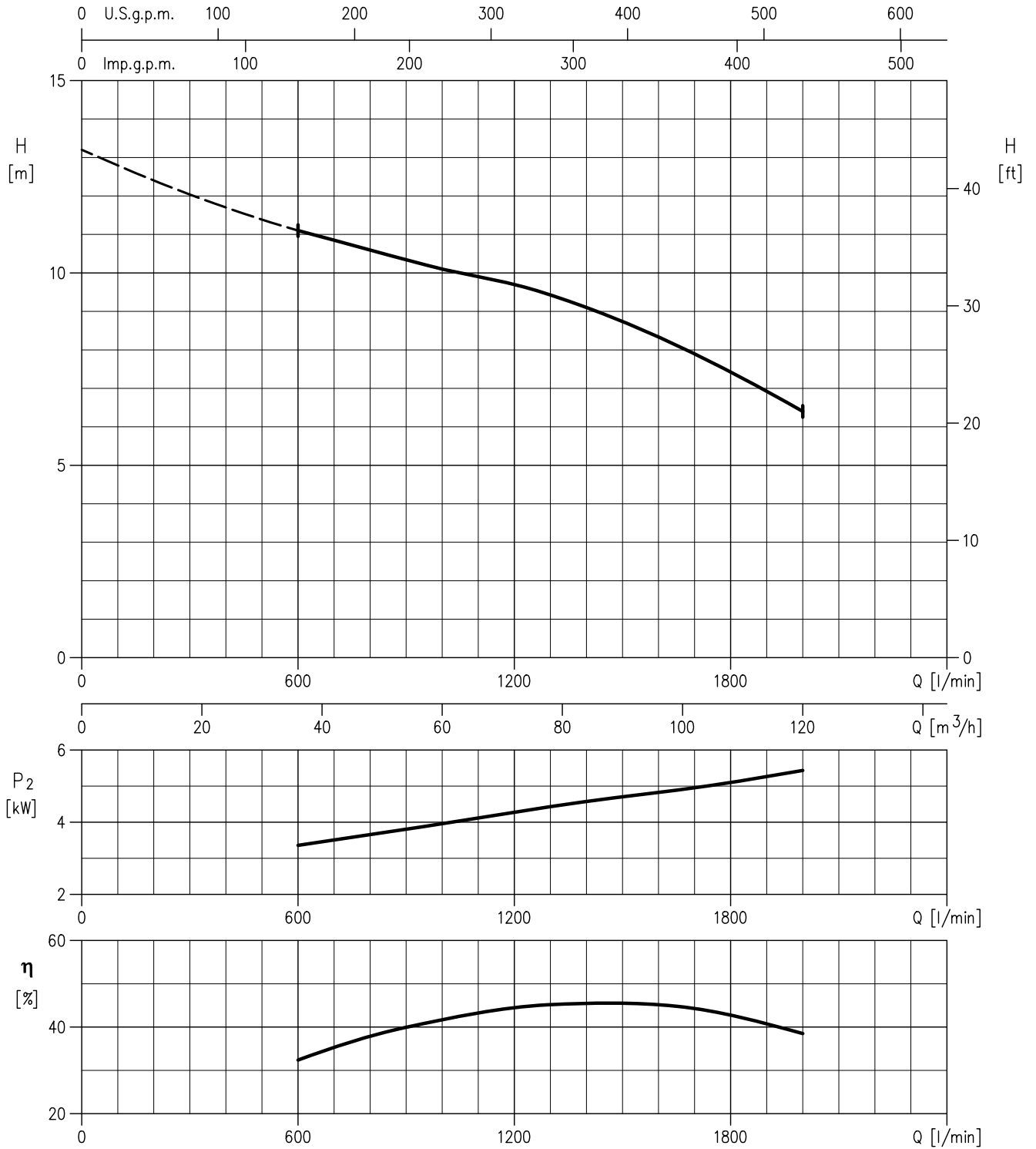


Rotation speed  $\approx 1400 \text{ min}^{-1}$   
 Test fluid : clean water at 20°C  
 Applicable standard of test : ISO 9906 Annex A

**PERFORMANCE CURVE**

**50 Hz**  
REV.A

**100DMLV55.5**  
Impeller diameter ≈211 mm

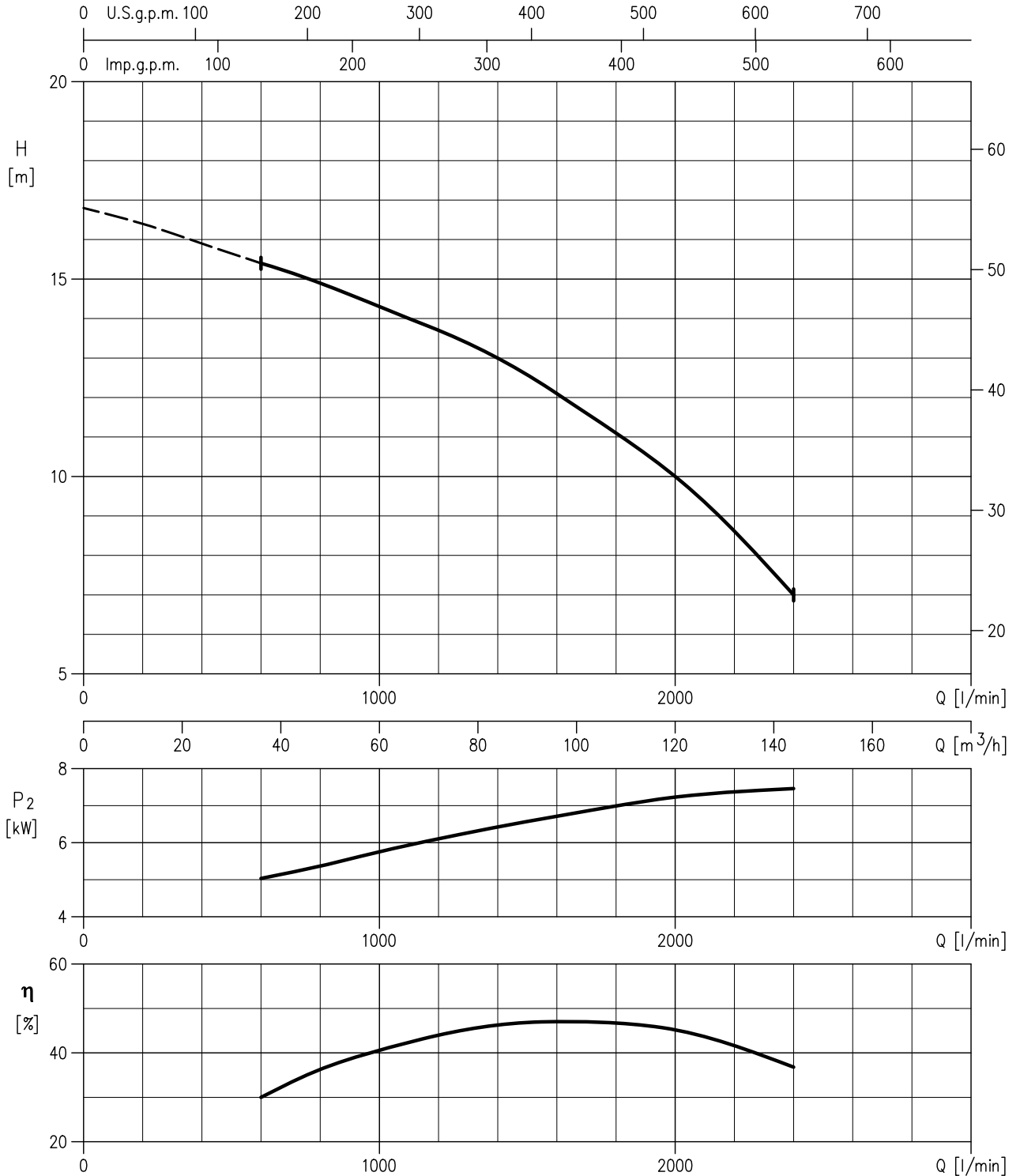


Rotation speed ≈ 1450 min<sup>-1</sup>  
Test fluid : clean water at 20°C  
Applicable standard of test : ISO 9906 annex A

**PERFORMANCE CURVE**

**50 Hz**  
REV.A

**100DMLV57.5**  
Impeller diameter = 231 mm

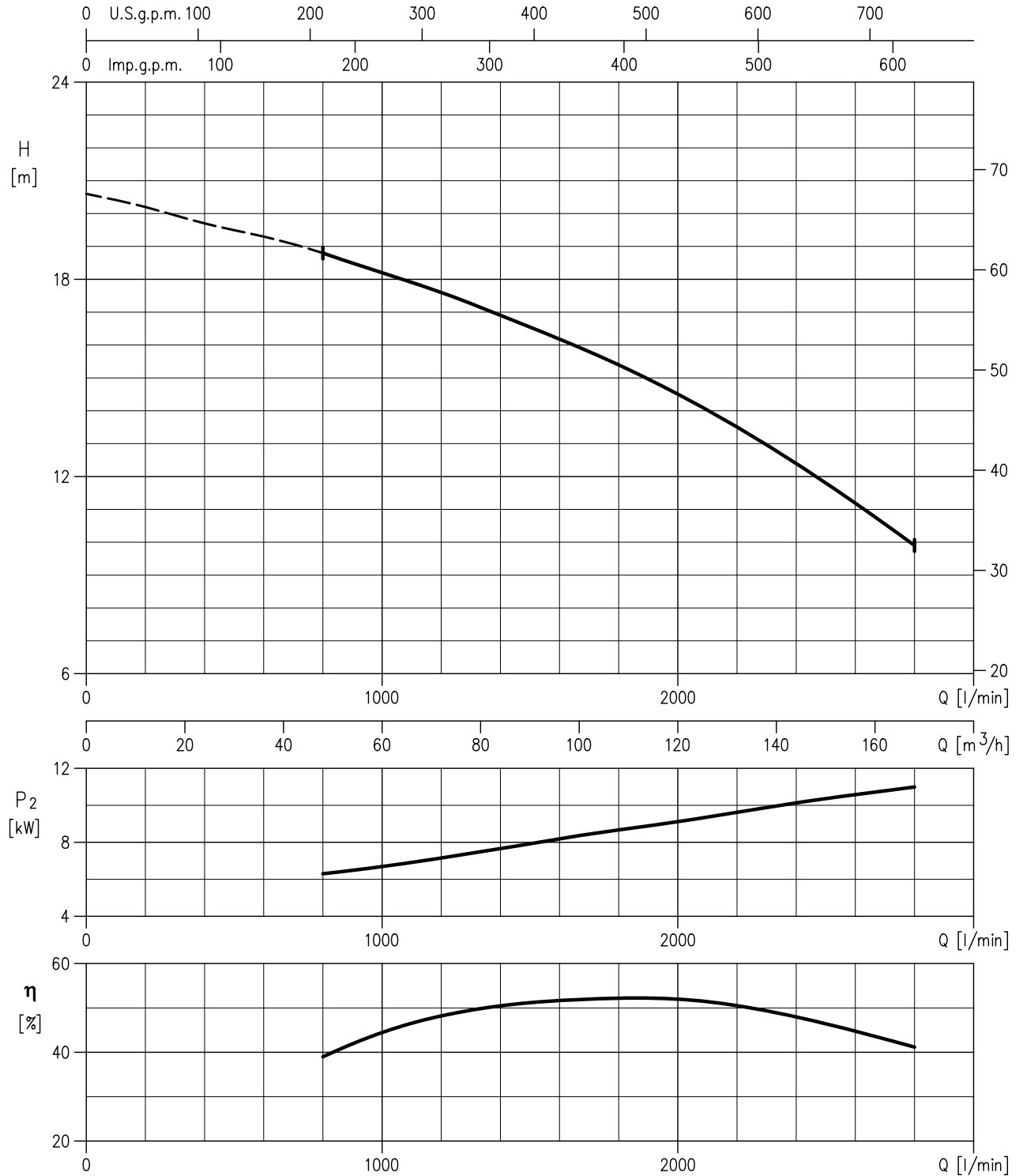


Rotation speed  $\approx 1450 \text{ min}^{-1}$   
 Test fluid : clean water at 20°C  
 Applicable standard of test : ISO 9906 annex A

**PERFORMANCE CURVE**

50 Hz  
REV.A

**100DMLV511**  
Impeller diameter ≈251 mm

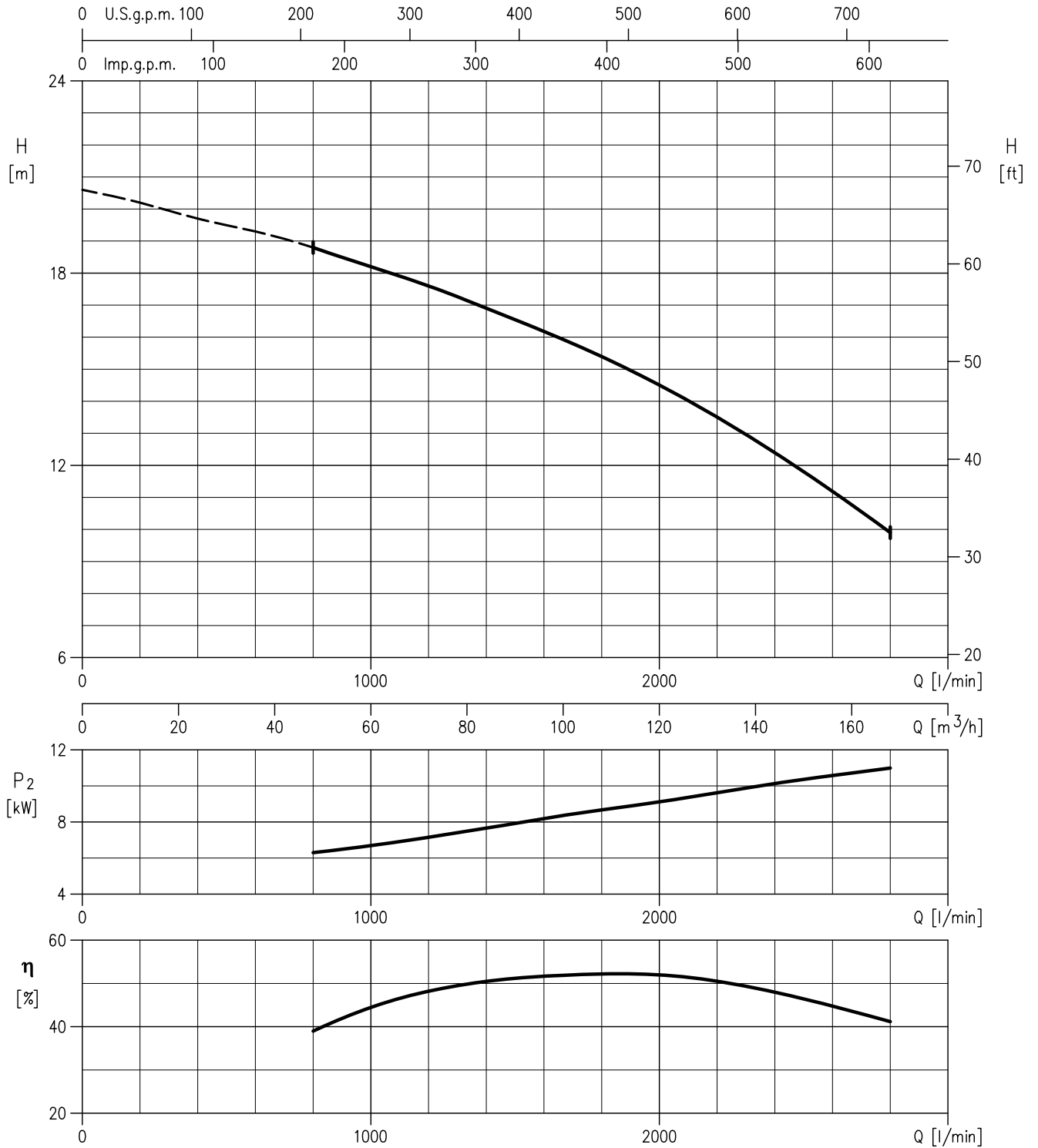


Rotation speed ≈ 1450 min<sup>-1</sup>  
Test fluid :clean water at 20°C  
Applicable standard of test :ISO 9906 annexA

**PERFORMANCE CURVE**

**50 Hz**  
REV.A

**100DMLV515**  
Impeller diameter = 268 mm



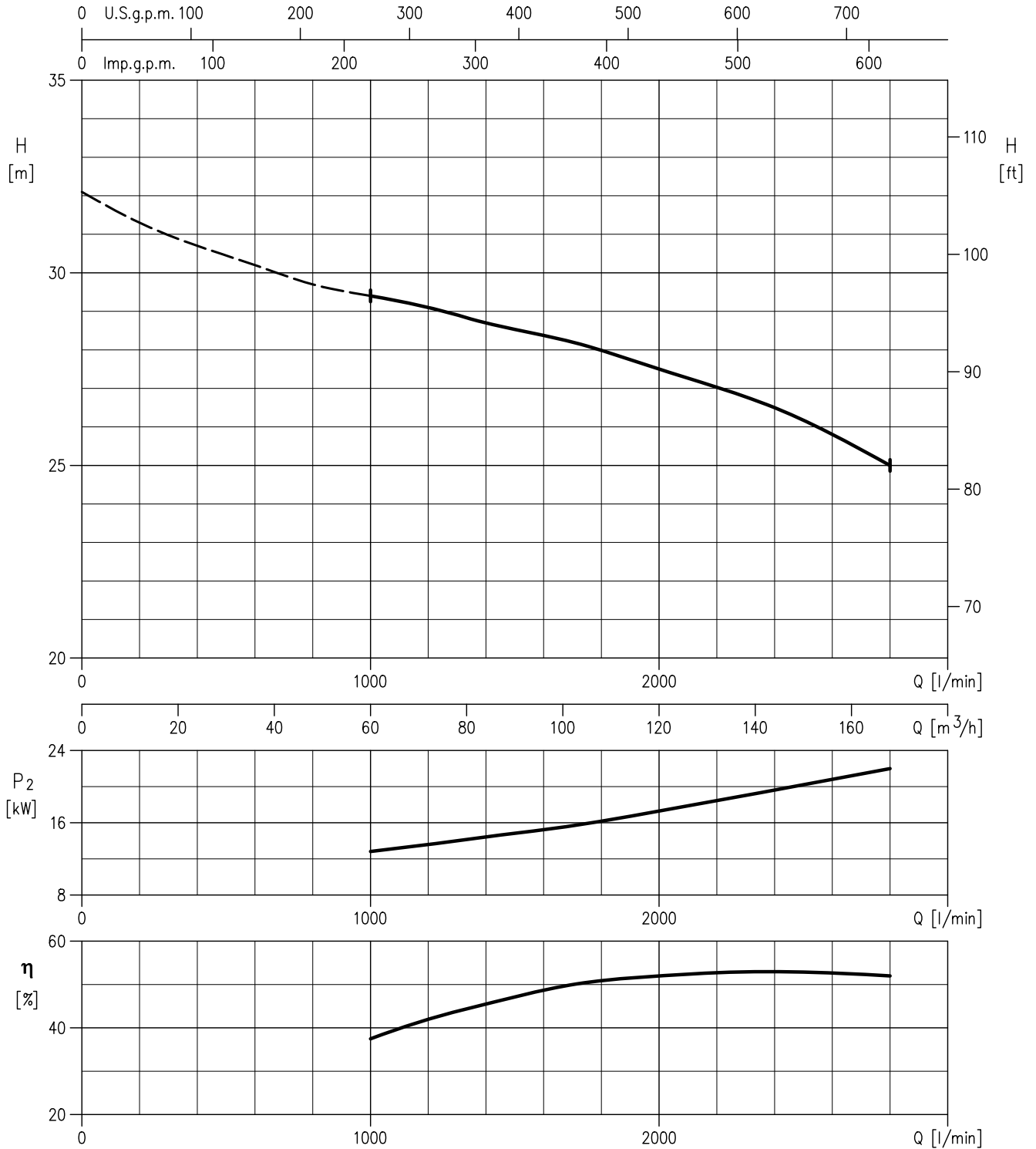
Rotation speed  $\approx 1450 \text{ min}^{-1}$   
 Test fluid : clean water at 20°C  
 Applicable standard of test : ISO 9906 annex A



**PERFORMANCE CURVE**

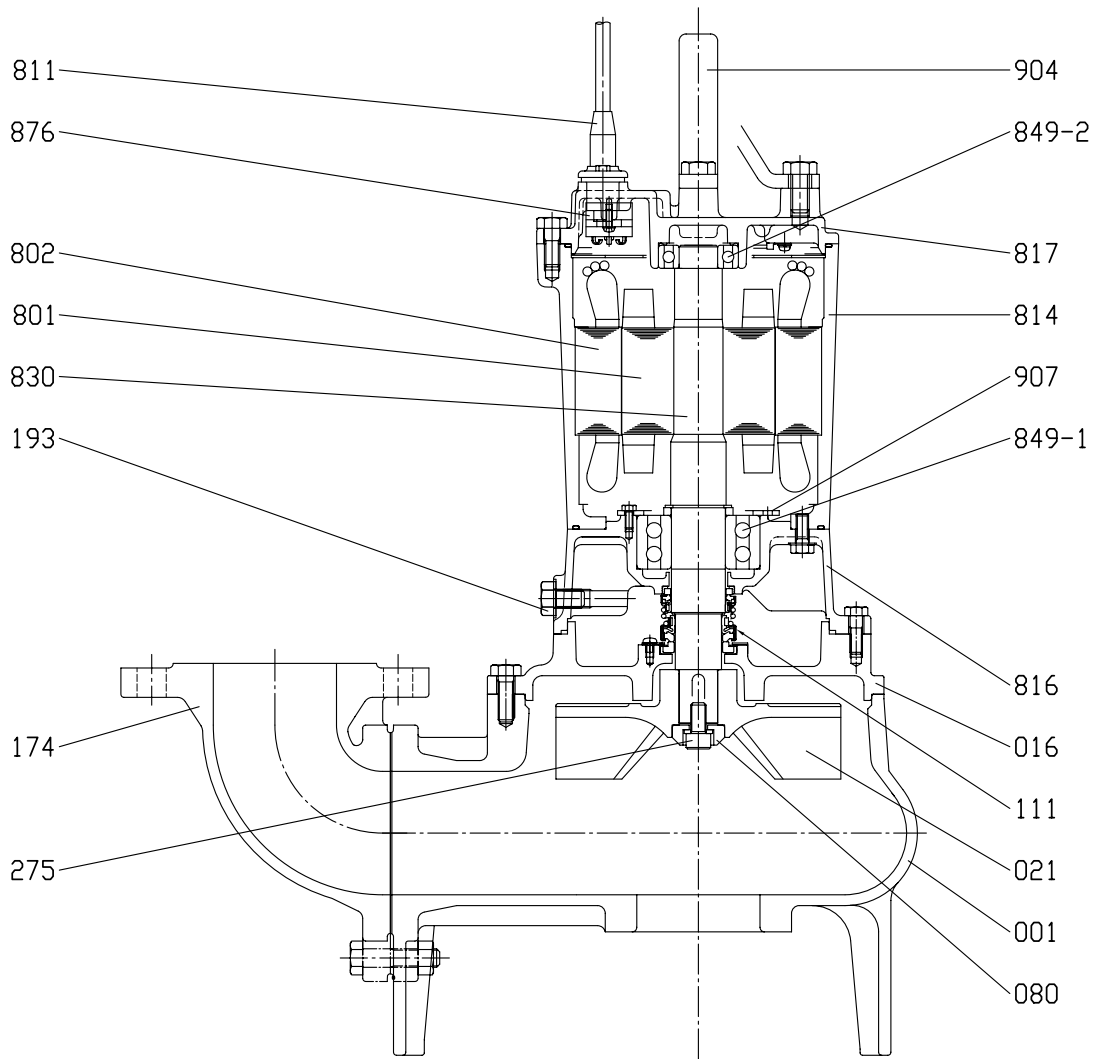
**50 Hz**  
REV.A

**100DMLV522**  
Impeller diameter  $\approx 300$  mm



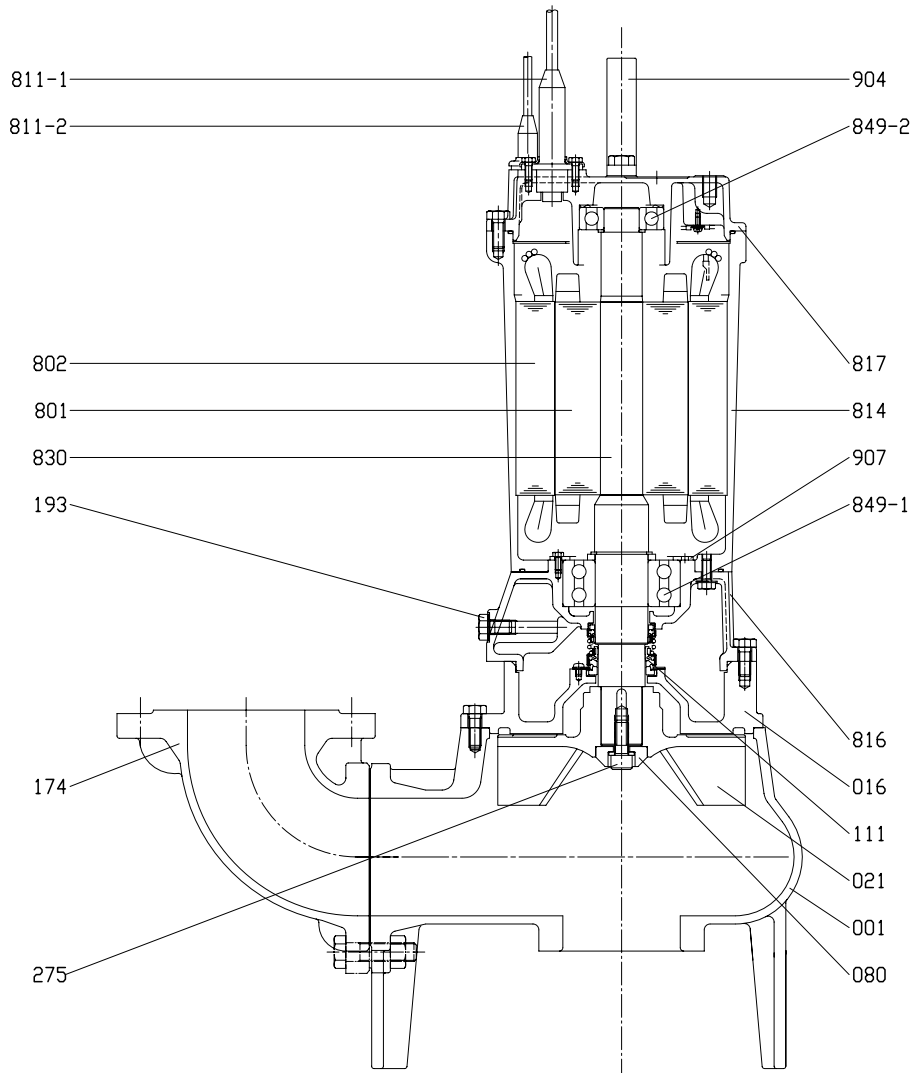
Rotation speed  $\approx 1450$  min<sup>-1</sup>  
 Test fluid : clean water at 20°C  
 Applicable standard of test : ISO 9906 annex A

**80 DMLV 52.2**



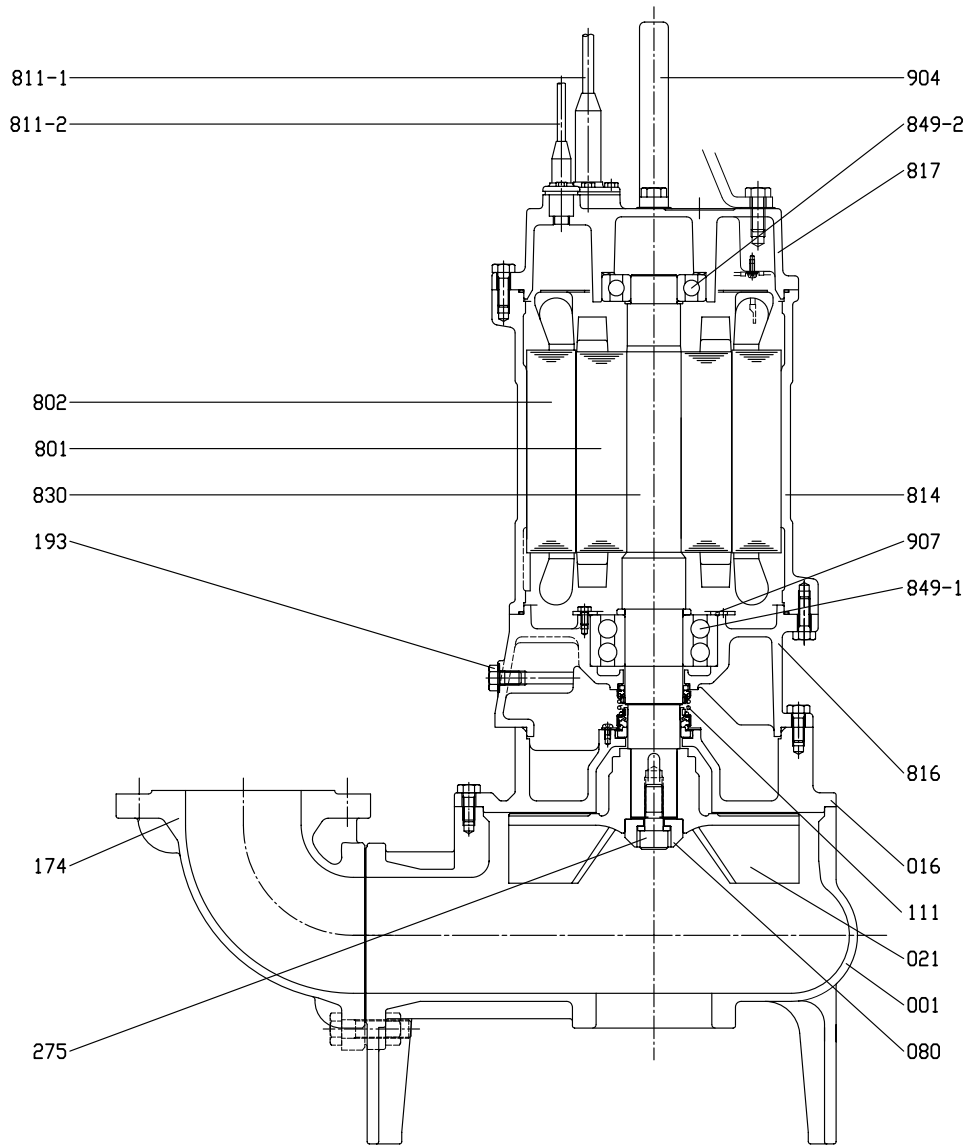
N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1	811	Submersible Cable	-	2
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1	814	Motor Frame	Cast iron EN-GHJL-200 - EN 1561	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1	816	Power Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
080	Bushing	Steel	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
111	Mechanical seal	-	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/Stainless Steel	1 set	849-2	Ball Bearing	-	1
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1	876	Auto Cut	-	1
801	Rotor	-	1	904	Lifting Hanger	Steel	1
802	Stator	-	1	907	Bearing Cover	Steel	1

**DMLV (3.7÷7.5kW)**



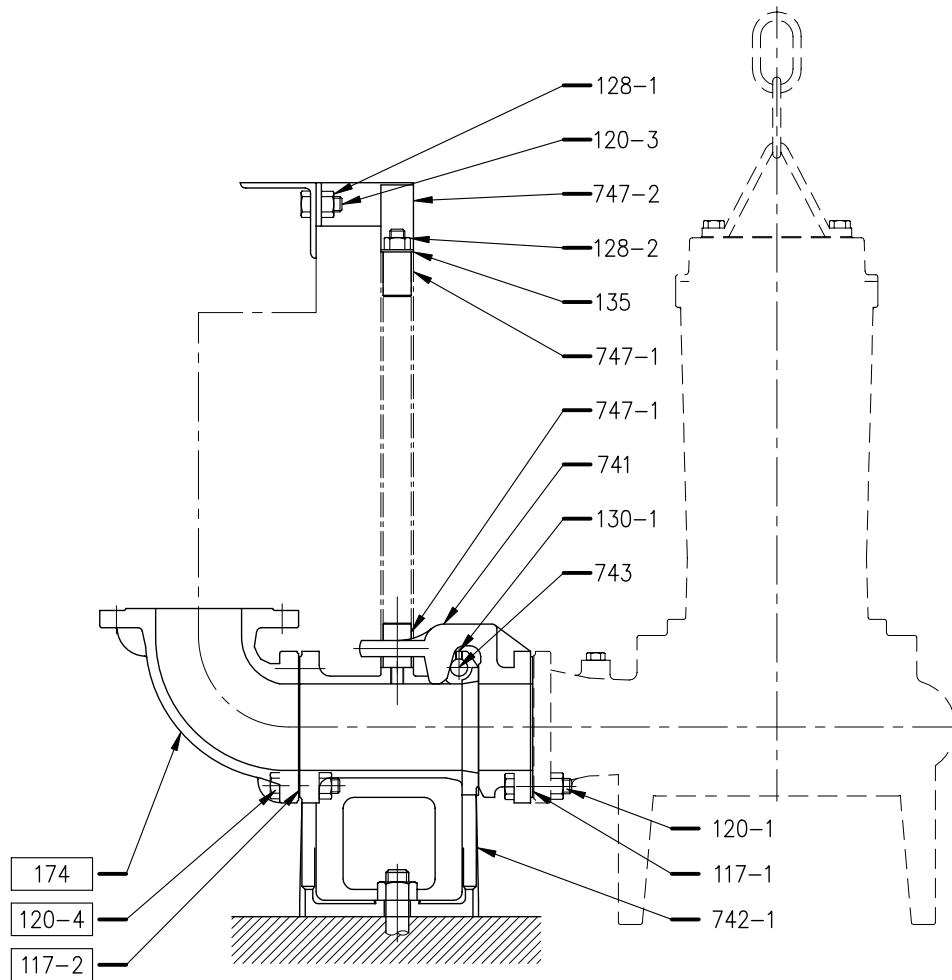
N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
001	Pump Casing	Cast iron EN-GHJL-200 - EN 1561	1	811-1	Submersible Cable (power)	-	2
016	Mechanical Seal Cover	Cast iron EN-GHJL-200 - EN 1561	1	811-2	Submersible Cable (signal)	-	1
021	Impeller	Cast iron EN-GHJL-200 - EN 1561	1	814	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
111	Mechanical seal	-	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1	830	Shaft	EN 1.4006 (AISI403)	1
193	Oil Plug	NBR/Stainless Steel	1 set	849-1	Ball Bearing	-	1
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1	849-2	Ball Bearing	-	1
801	Rotor	-	1	904	Lifting Hanger	Steel	1
802	Stator	-	1	907	Bearing Cover	Steel	1

**DMLV (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	EN-GHJL-200-EN 1561 (11 kW) EN-GJS-400 -EN 1563 (15-22 kW)	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
111	Mechanical seal	-	1	817	Opposite Side Bracket	Cast iron EN-GHJL-200 - EN 1561	1
174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1	830	Shaft	EN 1.4006 (AISI403)	1
193	Oil Plug	NBR/Stainless Steel	1 set	849-1	Ball Bearing	-	1
275	Impeller screw	Stainless steel A2-70 class ISO 3506/1	1	849-2	Ball Bearing	-	1
801	Rotor	-	1	904	Lifting Hanger	Steel	1
802	Stator	-	1	907	Bearing Cover	Steel	1

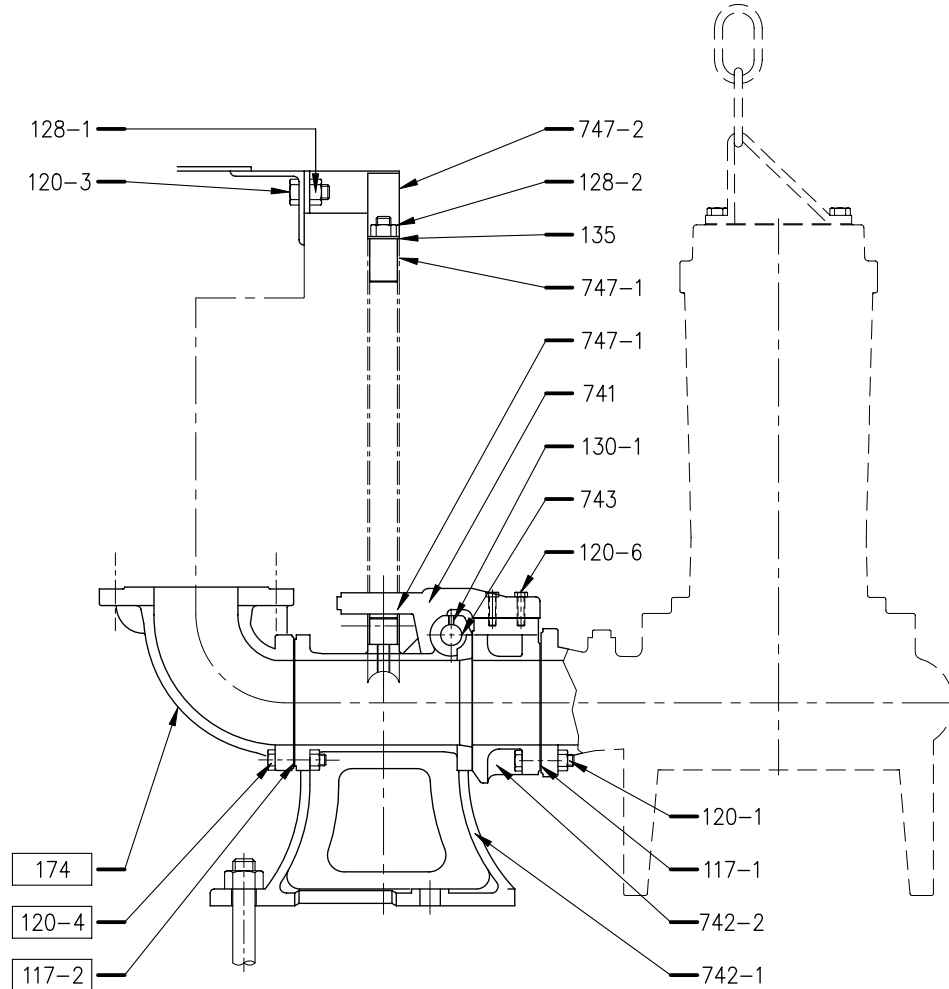
**LM80 (Optional)**



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				

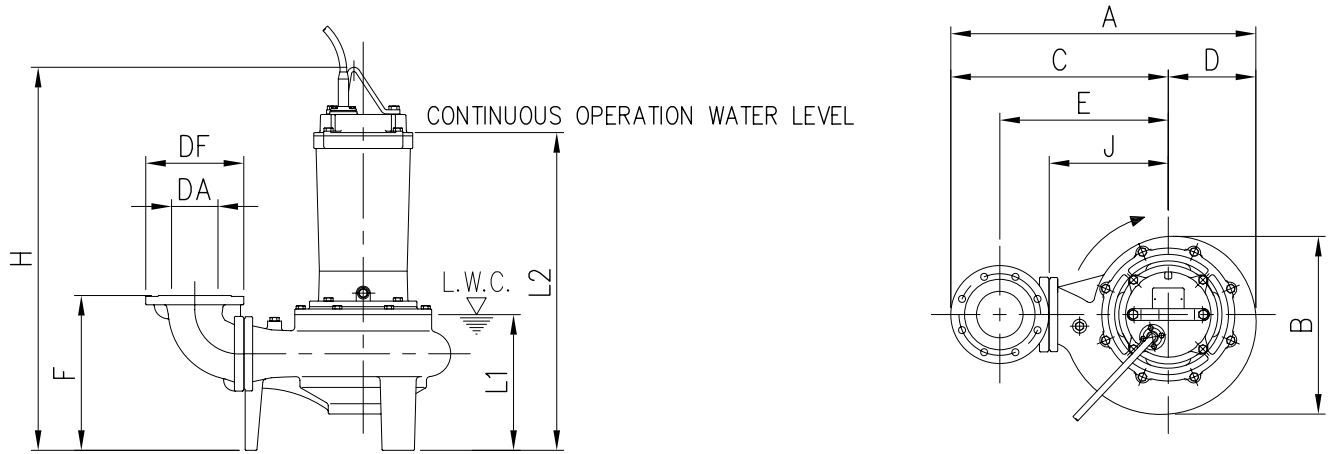
Note: Those parts with item number indicated in a are supplied with the pump.

**LL100 (Optional)**

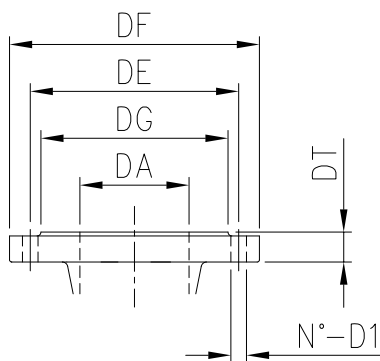


N°	PART.NAME	MATERIAL	No.FOR UNIT	N°	PART.NAME	MATERIAL	No.FOR UNIT
117-1	Gasket	NBR Rubber	1	135	Washer	AISI 304 Stainless Steel	2
117-2	Gasket	Aramide fibers	1	174	Discharge Bend	Cast iron EN-GHJL-200 - EN 1561	1
120-1	Bolt	AISI 304 Stainless Steel	4	741	Sliding Guide	Spheroidal graphite cast iron 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	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.



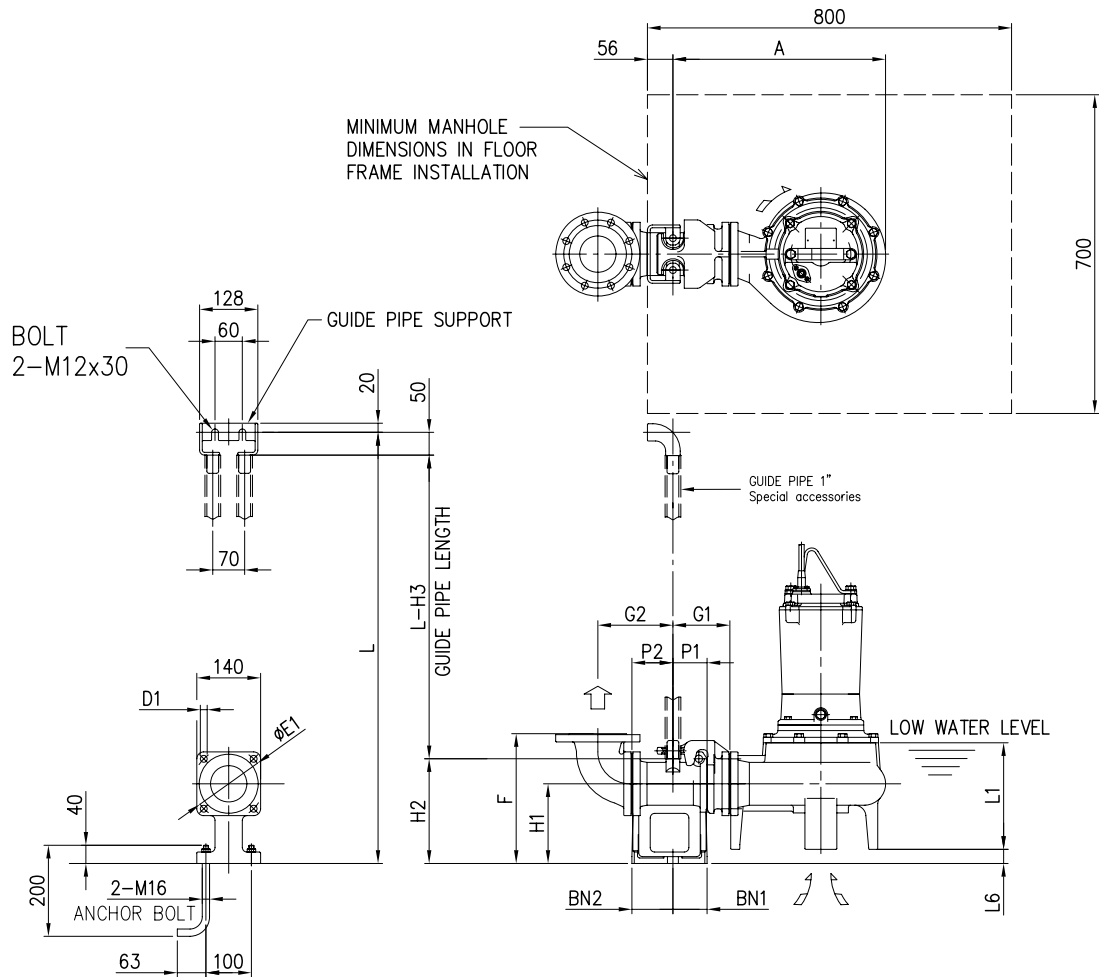
- 1) L.W.L (Low water Level) is limited: to 10 minutes operation at low water level.
- 2) It is limited to 30 minutes operation with water level below top of motor.



Discharge flange dimensions PN 10  
According to EN 1092-2

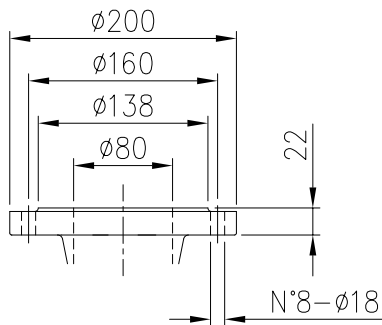
PUMP TYPE DMLV	DIMENSIONS																		
	DA	kW	DE	DF	DG	DT	N°	D1	A	B	C	D	E	F	H	J	L1	L2	Weight [kg]
80DMLV52.2	80	2,2	160	200	138	22	8	18	518	285	375	143	275	254	660	200	200	560	70
80DMLV53.7		3,7	160	200	138	22	8	18	518	285	375	143	275	254	721	200	200	620	80
100DMLV55.5	100	5,5	180	220	158	24	8	22	584	308	430	154	320	305	860	215	250	760	105
100DMLV57.5		7,5	180	220	158	24	8	22	641	352	465	176	355	305	860	250	250	760	120
100DMLV511		11	180	220	158	24	8	22	641	352	465	176	355	305	970	250	250	810	150
100DMLV515		15	180	220	158	24	8	22	728	426	515	213	405	305	970	300	250	810	180
100DMLV522		22	180	220	158	24	8	22	728	426	515	213	405	305	1045	300	250	865	235
			180	220	158	24	8	22	728	426	515	213	405	305	1045	300	250	865	235

Applicable Models – 80DMLV 52.2 – 80DMLV53.7



**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.

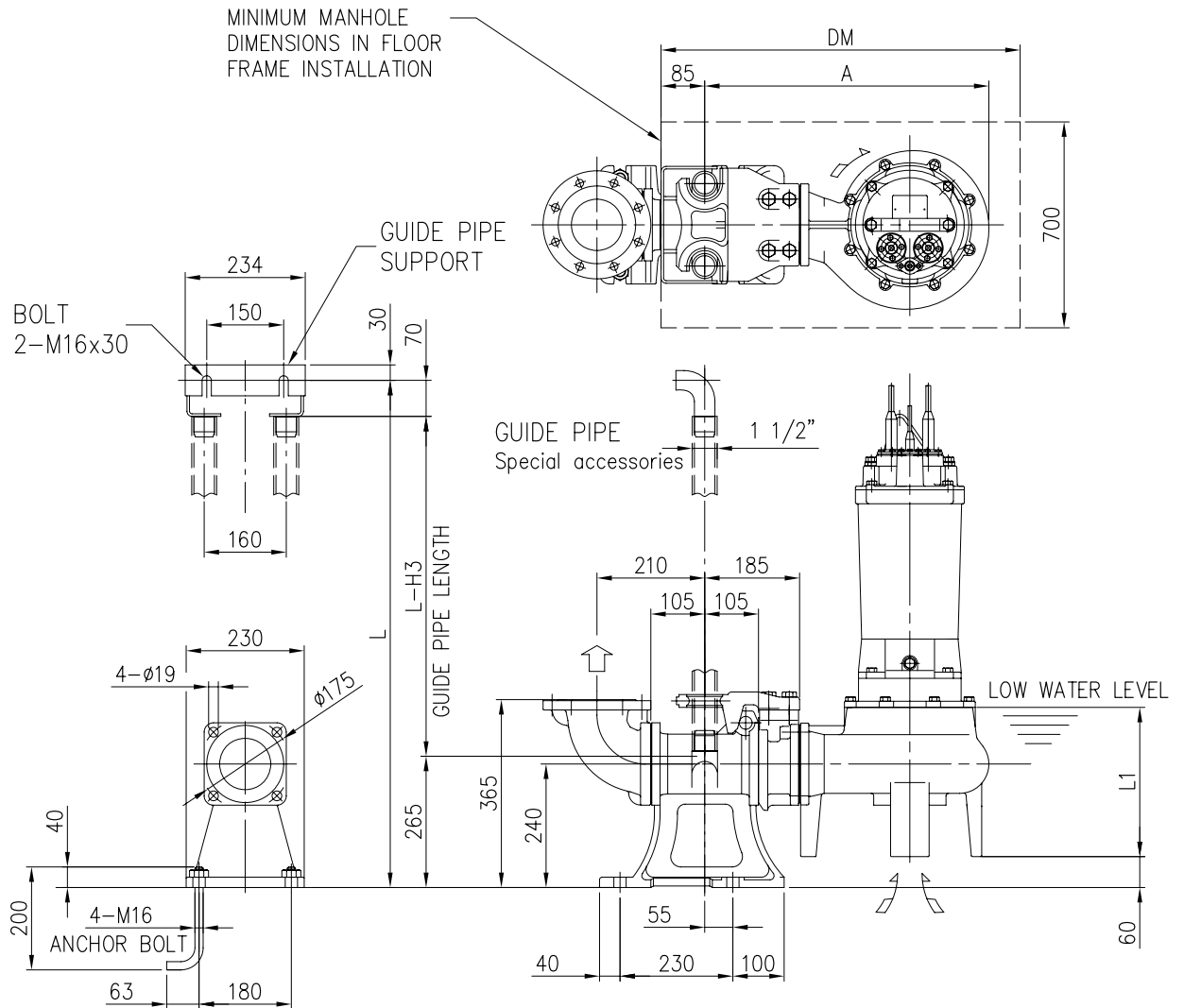


Discharge Flange Dimensions PN 10  
According to EN 1092 - 2

PUMP TYPE DMLV	A	P1	P2	G1	G2	F	H1	H2	H3	L1	L6	BN1	BN2	D1	E1	KIT CONNECTOR	WEIGHT [ kgf ]
80 DMLV52.2	468	75	90	125	165	285	175	230	280	200	31	75	90	15	155	LM80	17
80 DMLV53.7	468	75	90	125	165	285	175	230	280	200	31	75	90	15	155	LM80	17



**Applicable Models – DMLV**

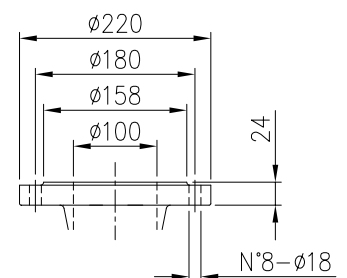


**Note:**

- 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 **Q**.
- 3) The weight in dimension tables refers only the weight of the **Q**.

PUMP TYPE DMLV	A	H3	L1	KIT CONNECTOR	WEIGHT [ kgf ]
100DML5,5	554	335	250	LL100	6
100DML7,5	61	335	250		
100DML11	61	335	250		
100DML15	8	335	300		
100DML22	8	335	300		

**Discharge Flange Dimensions PN0**  
According to EN02 - 2

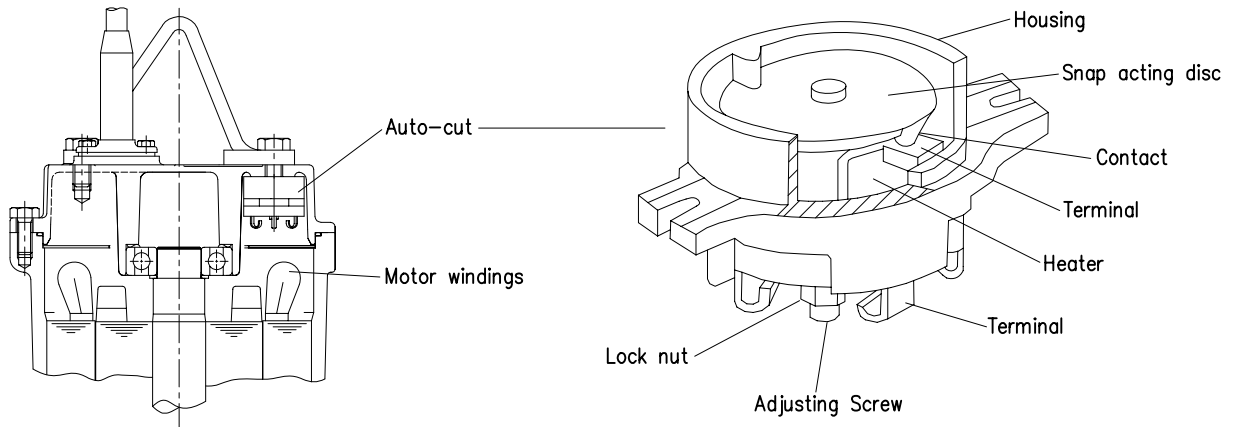


Output kW		2,2	3,7	5,5	7,5	11	15	22
Phase		3						
Poles		4						
Insulation Class		F						
Full Load	Voltage [V]	230	230	230	230	230	230	230
	Current [A]	5,2	8,4	12,6	16,9	23,8	31	42
	Efficiency %	65	72	75	79	81	82	83
	Power factor %	86	87	88	89	90	90	90
Locked Rotor Torque %		204	226	252	256	310	319	312
Start Current [A]		25,7	31	36	41	51	61,9	71
Starts per hour		20						
Voltage Tolerance		±10%						
Frequency Tolerance		±5%						
GD <sup>2</sup> [kgxm <sup>2</sup> ]		0,020	0,030	0,059	0,06	0,120	0,16	0,30

**Applicable to DML-DMLV 2.2 KW**

The three pole auto-cuts model is illustrated below.

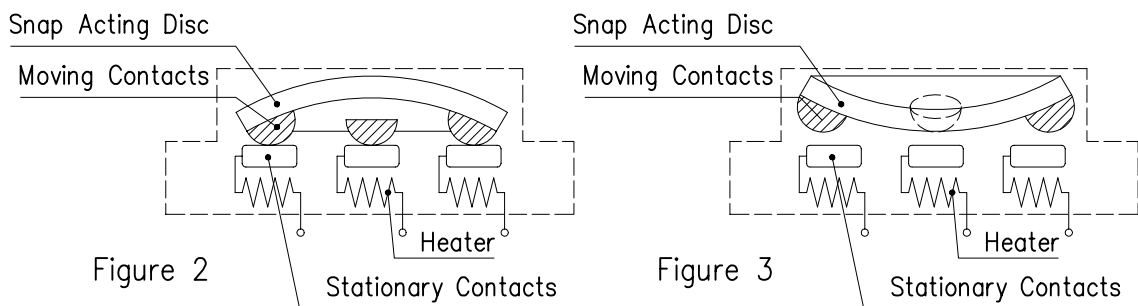
The Auto-Cut consists on: 3 sets of contacts, 1 snap-acting disk, 3 heaters, 3 terminals and 1 calibration bolt and nut, all enclosed in a bakelite housing.



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!



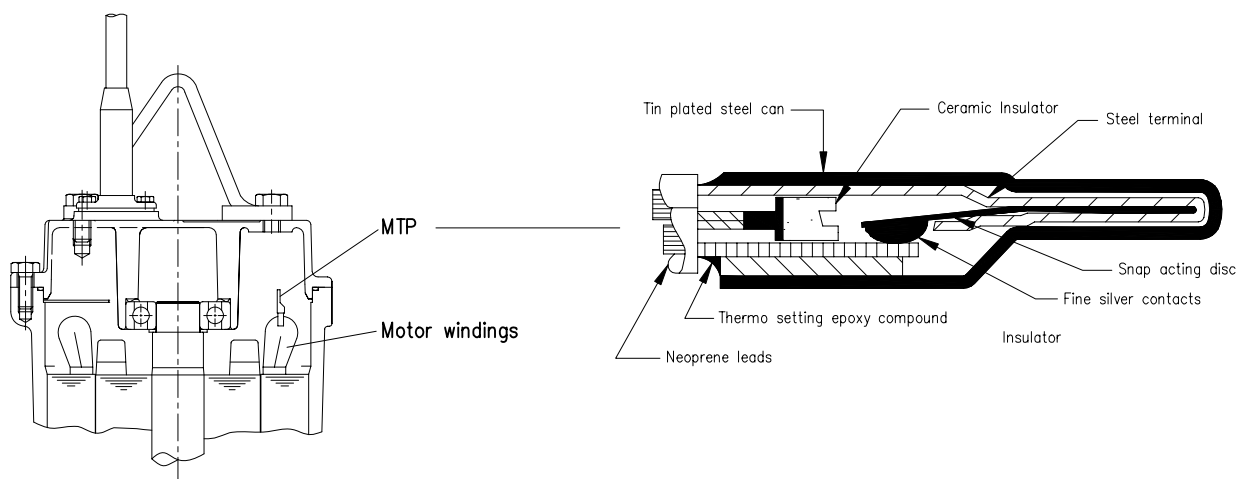
**Auto-Cut Part Numbers**

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

**Applicable from DML-DMLV 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**

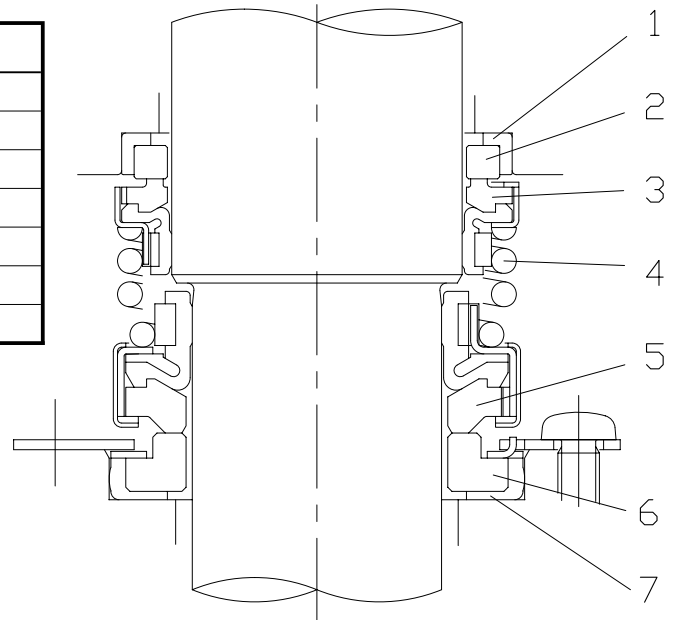
Model	Klixon 9700K-46-215
Type of contact	b (Normally-Closed, Acting-Open)
Acting temperature	150°C (+/-5)
Re-setting temperature	100 °C
Contact rating	DC24V-18A
	DC230V-13A

**TECHNICAL DATA**

**50 Hz**  
REV.A

	kW	Mechanical Seal				Bearings		
		Type		Lubrication		Lower side	Upper side	
		Diameter [mm]	Model	Capacity [cm <sup>3</sup> ]	Type			
				DML	DMLV			
DML-DMLV	2,2	30	EAN-30	1100		Turbine Oil SAE 10W or SAE 20W (Turbine Oil #32)	5307ZZ	6205ZZ
	3,7							
	5,5	40	EAN-40	1600	1780		5309ZZ	6306ZZ
	7,5							
	11	45	EAN-45	2900	3380		5310ZZ	6308ZZ
	15							
	22			3000	3550		5312ZZ	6309ZZ

No.	Part	Material
1	Ruber part (motor side)	NBR
2	Stationary seal ring (motor side)	Ceramic
3	Rotary seal ring (motor side)	Carbon Graphite
4	Spring	EN 1.4301 (AISI304)
5	Rotary seal ring (pump side)	Silicon Carbide
6	Stationary seal ring (pump side)	Silicon Carbide
7	Rubber part (pump side)	NBR



	kW	Starting method	Length of cable	Cable material	Number & size of conductor			
					Power Cable		Protector Cable	
					Cross section conductor area	Overall diameter [mm]	Cross section conductor area	Overall diameter [mm]
DML-DMLV	2,2	DOL	10m	H07RN-F	4x1,5 mm <sup>2</sup>	11,2	-	-
	3,7	Y-Δ	10m	H07RN-F	4x1,5 mm <sup>2</sup> x 2 cables	11,2	2x1 mm <sup>2</sup>	8,7
	5,5	Y-Δ	10m	H07RN-F	4x1,5 mm <sup>2</sup> x 2 cables	11,2	2x1 mm <sup>2</sup>	8,7
	7,5	Y-Δ	10m	H07RN-F	4x1,5 mm <sup>2</sup> x 2 cables	11,2	2x1 mm <sup>2</sup>	8,7
	11	Y-Δ	10m	H07RN-F	4x4 mm <sup>2</sup> x 2 cables	15,4	2x1 mm <sup>2</sup>	8,7
	15	Y-Δ	10m	H07RN-F	4x4 mm <sup>2</sup> x 2 cables	15,4	2x1 mm <sup>2</sup>	8,7
	22	Y-Δ	10m	H07RN-F	4x6 mm <sup>2</sup> x 2 cables	18,1	2x1 mm <sup>2</sup>	8,7