

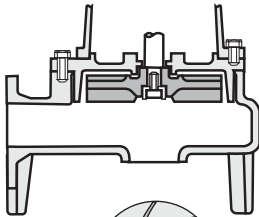


with Vortex Impeller

Model DMLV Submersible Vortex Pumps

Submersible pumps with non clog vortex impellers and double row lower bearings for reliability. Suitable for waste water containing soft solids, raw sewage, storm water, etc.

Impeller Type & Solids Handling



Vortex Impeller



Model	∅	80	100
	kW	All	All
Free Impeller Passage (mm)		80	100



Specifications

- Submersible pump with vortex impeller
- Maximum solids handling: 80 or 100 mm
- Maximum liquid temperature: 40 °C
- Maximum submergence: 8 m

Materials

- Pump casing: Cast Iron
- Impeller: Cast Iron
- Shaft: 403 Stainless Steel
- Motor frame: Cast Iron
- Fasteners: 304 Stainless Steel
- Mechanical seal: Double mechanical seal in oil chamber, Silicon Carbide lower faces, Carbon/Ceramic upper faces.

Motor Data

- Air filled, dry submersible, 4 pole, 50 Hz
- Y-Δ Star-Delta (DOL for 2.2 kW)
- Insulation class F
- IP68 protection
- 3 Phase - 400 Volt

Range

- 80 to 100 mm ∅ discharge
- 2.2 to 22 kW - 3 Phase (Manual only)

Supply

- Cable(s): 10 m
- Discharge elbow with screwed companion flange

Accessories

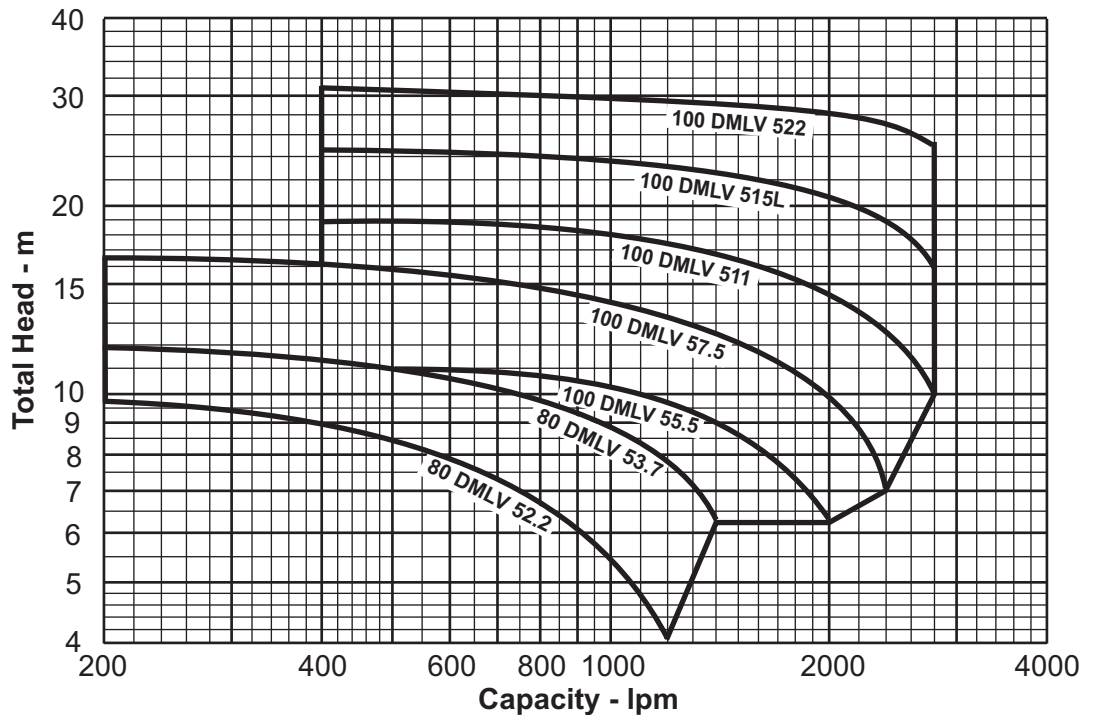
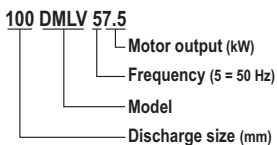
- Quick Discharge Connectors (QDC) available

Performance Curve

Synchronous Speed: 1500 rpm

Applicable standard of test : ISO 9906 Annex A

Model Code



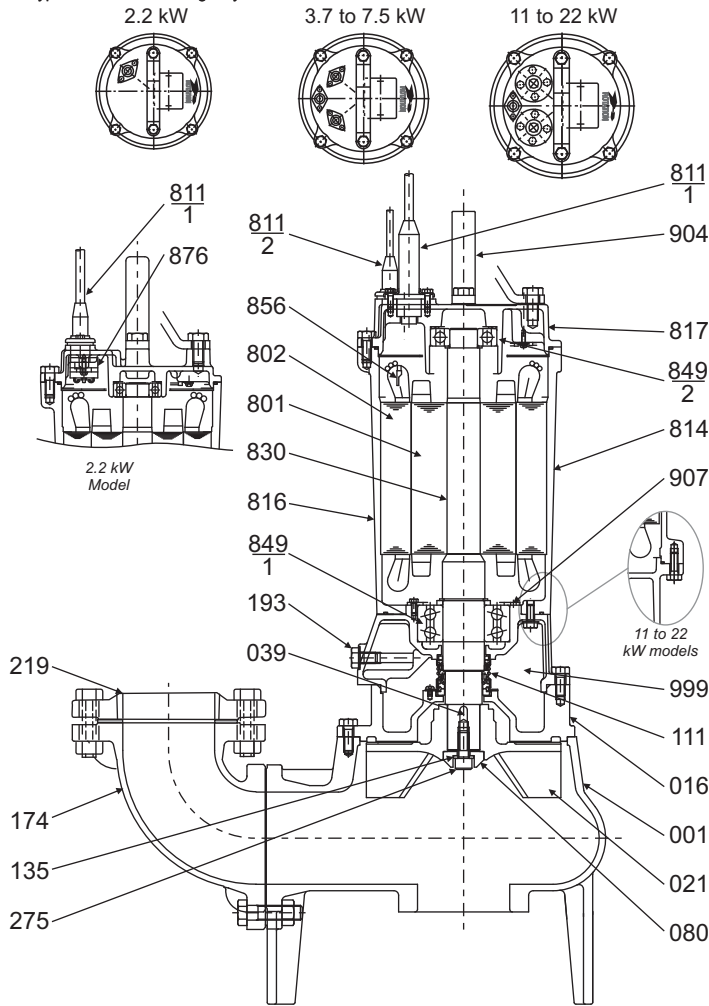
Performance Table

Pump Model	Motor Output	Discharge ∅ mm	Full Load Current 3 PH, 400 V	Capacity - lpm											
				400	600	800	1000	1200	1400	1600	1800	2000	2400	2800	
80 DMLV 52.2	2.2 kW	80 mm	5.2 A	9.0	8.0	6.8	5.6	4.0	--	--	--	--	--	--	
80 DMLV 53.7	3.7 kW	80 mm	8.4 A	11.3	10.7	9.9	9.1	8.0	6.3	--	--	--	--	--	
100 DMLV 55.5	5.5 kW	100 mm	12.6 A	--	11.1	10.7	10.1	9.8	9.1	8.3	7.4	6.3	--	--	
100 DMLV 57.5	7.5 kW	100 mm	16.9 A	--	15.3	14.9	14.3	13.7	13.0	12.0	11.0	10.0	7.0	--	
100 DMLV 511	11.0 kW	100 mm	23.8 A	--	--	18.8	18.2	17.6	16.9	16.2	15.3	14.5	12.3	10.0	
100 DMLV 515L	15.0 kW	100 mm	31.0 A	--	--	--	23.3	23.0	22.5	22.0	21.3	20.7	19.0	16.0	
100 DMLV 522	22.0 kW	100 mm	42.0 A	--	--	--	29.4	29.1	28.8	28.4	28.0	27.5	26.5	25.0	

Sectional Drawing

Model **DMLV**

Note: Typical sectional drawing only.



No.	Description	Material	Qty.
001	Casing	FC200 Cast Iron	1
016	Mechanical seal cover	FC200 Cast Iron	1
021	Impeller	FC200 Cast Iron (up to 11 kW) FCD400 Ductile Cast Iron (15 & 22 kW)	1
039	Impeller key	SUS420 Stainless Steel	1
080	Bushing	St Steel	1
111	Mechanical seal	Silicon Carbide lower faces Carbon/ Ceramic upper faces	1
135	Washer	SUS304 Stainless Steel	1
174	Discharge elbow	FC200 Cast Iron	1
193	Oil plug	SUS304 Stainless Steel	1
219	Companion flange	FC200 Cast Iron	1
275	Impeller bolt	SUS304 Stainless Steel	1
801	Rotor	-	1
802	Stator	-	1
811-1	Cable [1]	4 core power cable	1 or 2
811-2	Cable	2 core protector cable (except 2.2 kW)	1
814	Motor frame	FC150 Cast Iron	1
816	Lower bracket	FC150 Cast Iron	1
817	Upper bracket	FC150 Cast Iron	1
830	Shaft #	SUS403 Stainless Steel	1
849-1	Ball bearing	Double row lower bearing	1
849-2	Ball bearing	-	1
856	Thermal protector	(except 2.2 kW)	2
876	Auto cut	(only 2.2 kW)	1
904	Lifting hanger	St Steel	1
907	Bearing cover	SPCC Steel	1
999	Oil	Turbine Oil SAE 10W or 20W	*

[1] 2.2 kW - 1 cable, 3.7 kW & above - 2 cables * See table for oil capacity
refers to pump side of shaft material

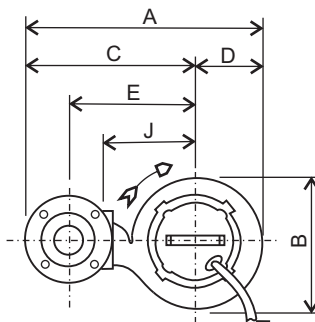
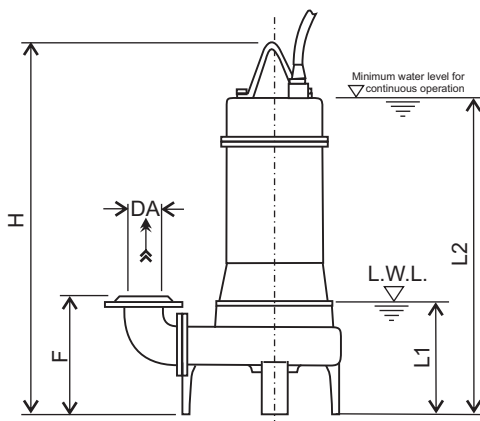
Mechanical Seal Lubricating Oil							
Motor - kW	2.2	3.7	5.5	7.5	11	15	22
Capacity - ml	1100		1780		3380		3350

Dimensions

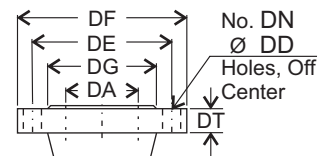
Model **DMLV**

Units: mm unless otherwise specified

Note:
1/ L1 (Low Water Level) - Limited to 10 minutes operation at low water level
2/ L2 - Limited to 30 minutes operation with water level below motor cap.



Discharge Flange Dimensions (JIS 10kgf/cm²)



DA	DE	DF	DG	DT	DN	DD
80	150	185	126	18	8	15
100	175	210	151	20	8	15

Submersible cable(s)
Length CL = 10 metres

Size DA	Pump Model	Output kW	Dimensions										Weight kg
			A	B	C	D	E	F	H	J	L1	L2	
80	80 DMLV 52.2	2.2	518	285	375	143	275	254	660	200	200	560	70
	80 DMLV 53.7	3.7	518	285	375	143	275	254	721	200	200	620	80
100	100 DMLV 55.5	5.5	584	308	430	154	320	305	860	215	250	760	105
	100 DMLV 57.5	7.5	641	352	465	176	355	305	860	250	250	760	120
	100 DMLV 511	11	641	352	465	176	355	305	970	250	250	810	150
	100 DMLV 515L	15	728	426	515	213	405	305	970	300	250	810	180
	100 DMLV 522	22	728	426	515	213	405	305	1045	300	250	865	235

Specifications subject to change without notice