

FMa Series



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FMa Series submersible sewage pumps are supplied with semi open single channel for handling fibrous material without clogging. It can handle the solids upto 1½" in diameter. These pumps are suitable for pumping municipal wastewater, Industrial wastewater, land fill wastewater, rain water and activated sludge.

Operating parameters

Max Flow	upto 36m³/h
Max Head	upto 25.5m
Impeller Type	Single Channel Semi Open
Outlet Size	50mm
Max Solid Size	upto 40mm
Maximum Liquid Temperature	upto 40°C
Service	S1 Duty
No. of Starts / Per Hour	20
Max. immersion depth	20m
pH range	6 to 12
Liquid Viscosity	1 mm²/s
Liquid Density	1kg/dm³
Max. Noise level	≤ 70dB

Specifications

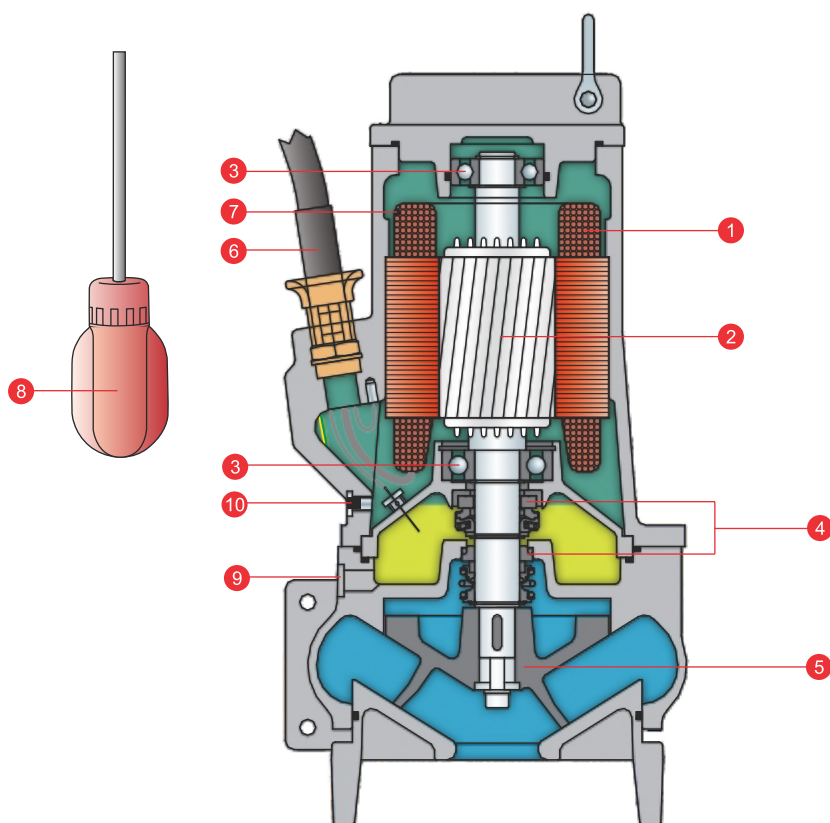
Power Range	1.1 to 2.6kW
Power Supply	380-415V - Three Phase, 50Hz, AC.
Ingress Protection	IP68
Motor	Dry Type Induction motor
Speed	2850 rpm
Class of Insulation	H
Moisture sensor	# Available
Thermal Overload Protector	* Available
Starting Method	Three Phase - DOL & SD
Shaft Seal	Single / Double Mechanical seal
Mechanical Seal Face Combination	Motor Side : Graphite / Alumina Pump Side : Silicon Carbide / Silicon Carbide
Bearing Type	Shielded prelubricated bearing
Cable Type	HO7RNF
Standard Cable Length	10m

Material of Construction

Casing	Cast iron EN-GJL-260
Impeller	Cast iron EN-GJL-260
Motor Housing	Cast iron EN-GJL-260
Shaft	Stainless Steel X30 Cr13 (AISI 420)
Fasteners	Stainless Steel A2 (AISI 304)



Cross Sectional Drawing

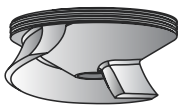


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|--|---|
| 1. Fully submersible pressure tight electric motor | 6. Cable |
| 2. Rotor Shaft | 7. Thermal over load protector |
| 3. Bearings | 8. Float switch |
| 4. Mechanical seal | 9. Oil inspection plug |
| 5. Single-channel semi open impeller | 10. Air plug hole for the motor water tightness control |

PRODUCTS IDENTIFICATION CODE

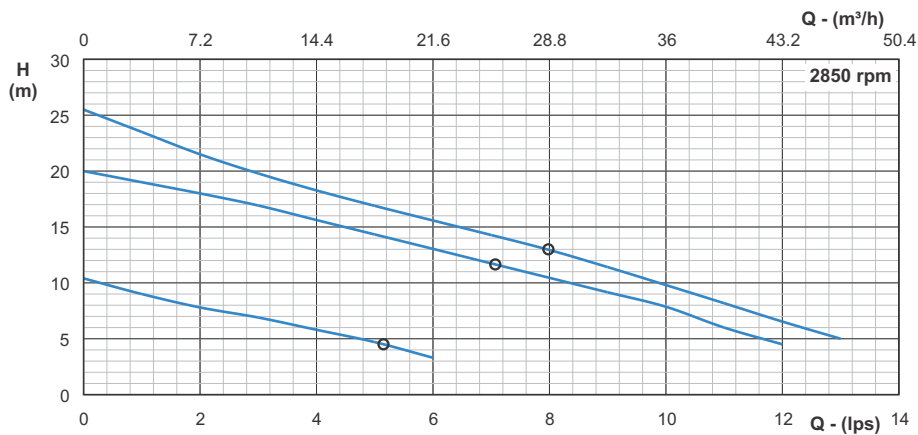
F	Ma	50.	0,6	-	4	/	105	(m)	(s)
• FIPS PRODUCTION	• IMPELLER DESIGN (SINGLE CHANNEL SEMI OPEN)	• SERIES NAME	• P2 MOTOR NOMINAL POWER	• NO. POLES (MOTOR SPEED)	• IMPELLER DIAMETER	• SINGLE-PHASE	• SINGLE PHASE MODEL WITH EXTERNAL CAPACITOR (SUPPLIED WITH CONTROL BOX)		

* The above diagram is only for illustration purpose the actual construction of the product may vary according to the model.



FMa 50-2

PERFORMANCE CURVES



PERFORMANCE TABLE

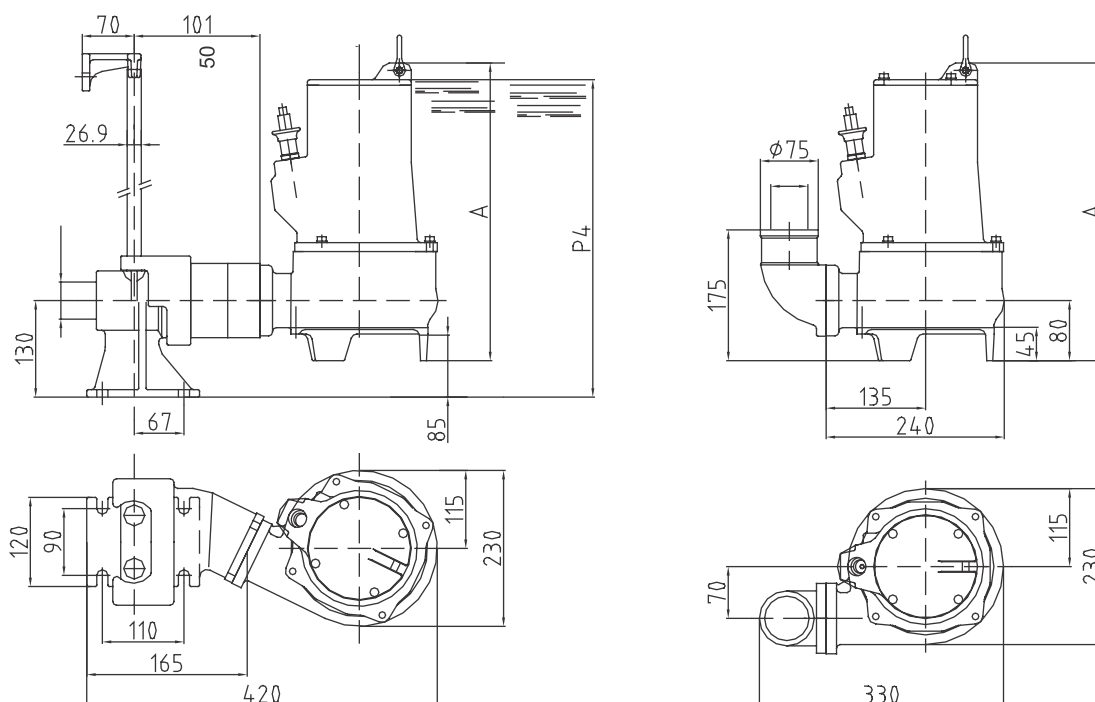
No	Model - Type	P1 kW	P2 kW	Volt	µF	Amp	Giri rpm	Delivery size (mm)	Max.Solid size (mm)	I/sec m³/h	0	1	2	3	4	5	6	7	8	9	10	11	12	13
1	FMa 50.1,1-2/105*#	1.5	1.1	400		3	2850	50	40	Head in m	10.4	9	7.8	6.9	5.8	4.7	3.3	-	-	-	-	-	-	-
2	FMa 50.1,85-2/115*#	2.2	1.85	400		4.5	2850	50	40		20	19	18	16.9	15.6	14.3	13	11.7	10.4	9.1	7.8	6	4.5	-
3	FMa 50.2,6-2/127*#	3.2	2.6	400		5.8	2850	50	40		25.5	23.5	23.5	19.8	18.3	16.8	15.5	14.3	12.9	11.4	9.8	8.2	6.5	5

* Inbuilt with TOP / # Moisture sensor available

DIMENSION & WEIGHT DATA

No	Model - Type	A max	P4	Auto coupling V	Weight (kg)	Power Cable	
						No. of Core	Size in Sq.mm
1	FMa 50.1,1-2/105	417	421	50	30	7	1.5
2	FMa 50.1,85-2/115	417	421	50	32	7	1.5
3	FMa 50.2,6-2/127	444	447	50	45	7	1.5

DIMENSION DRAWING



Performance curve tolerances are as per HI : 14.6 / ISO : 9906, Grade - 2B.
In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.