Equipment and solutions

Spring Submersible Pump

Product technical datasheet

Spring 5" submersible pump for 6" boreholes, clean water, JOVAL-made in Portugal.

FT-P001 · Rev. 3



Spring 5" submersible pump for 6" boreholes, clean water, JOVAL-made in Portugal.

Applications

- Water abstraction from 6" boreholes, reservoirs and water courses.
- Domestic water supply.
- Agricultural irrigation and gardens.
- Hydropneumatic systems.

Operating conditions

- With 20 metres of power cable. Float switch on single-phase versions.

Engineering note	Confirm the installation conditions, power supply and duty point before commissioning.
Complementary equipment	Contact JOVAL for compatible accessories and equipment.
Resources and support	Pump selection guide · JOVAL technical support
Contact	+351 253 490 740 · joval@joval.pt

Technical specifications

Type

Submersible for Clean Water

Material

Radial turbines and diffusers in Noryl reinforced with fiberglass

Motor Details

Rewindable motor filled with food-grade oil

Cooling

Cooled by pumped liquid

Installation

Vertical / Horizontal

Cable

20 m H07RN-F · Float switch: Single-phase versions

Protection

IP 68 | Class F

Voltage

230 V (1~) / 400 V (3~)

Max Temperature

40 °C

Starts/Hour

Maximum 20 starts per hour

Discharge

1" 1/4 - 1" 1/2

Diameter

126 mm

Seal

Silicon carbide mechanical seal (SiC/SiC/NBR) and lip seal

Applications

- Water abstraction from 6" boreholes, reservoirs and water courses.
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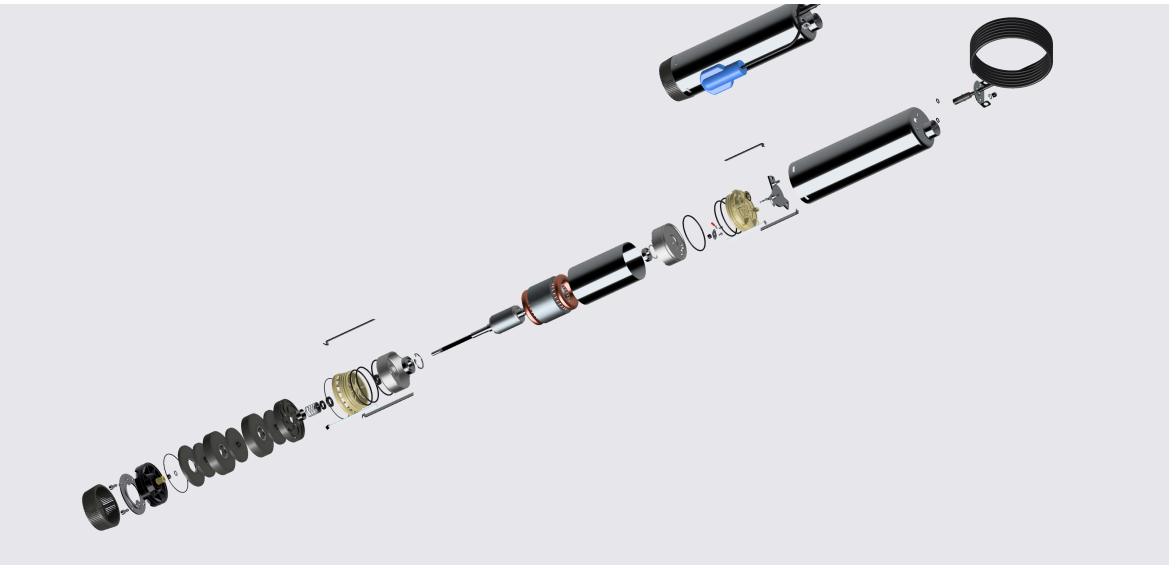
Operating conditions

- With 20 metres of power cable. Float switch on single-phase versions.

Engineering note Confirm the installation conditions, power supply and duty point before commissioning.

List of materials

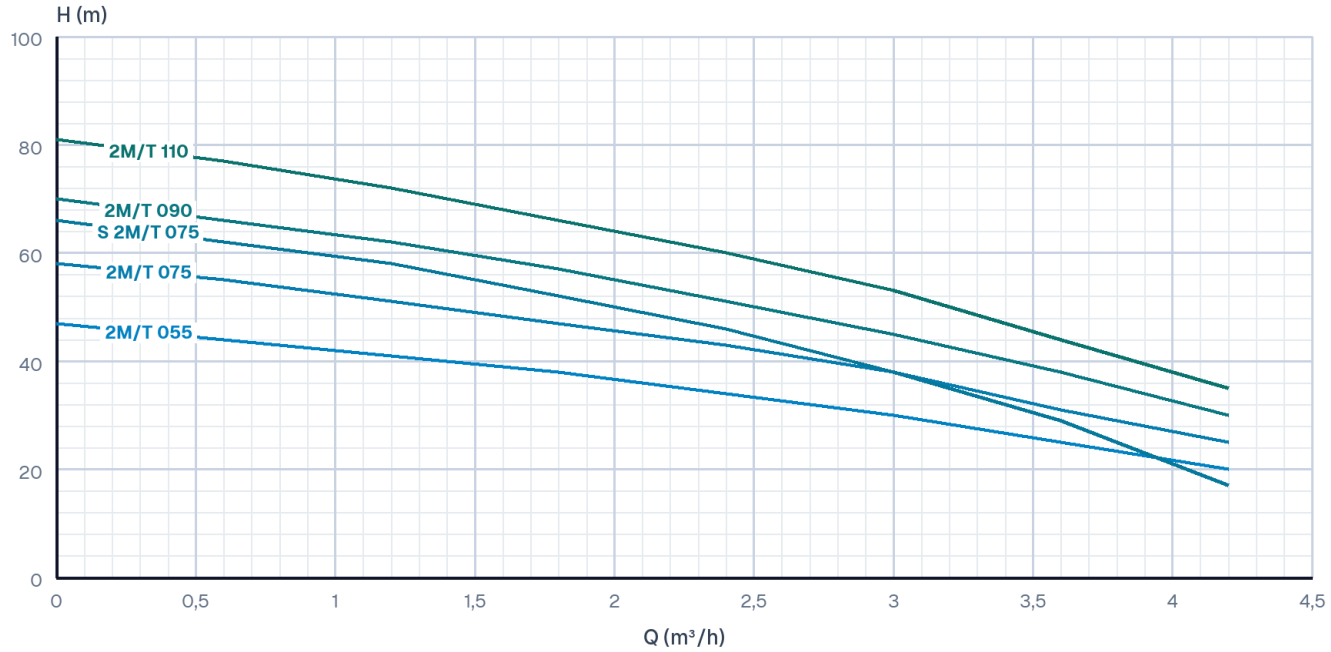
Materials



Pos.	Description	Material (Standard)
1	Threaded delivery outlet	Stainless Steel
2	Jacket cover	Stainless Steel AISI 304
3	Outer jacket	Stainless Steel AISI 304
4	Oil-filled rewindable motor	Stator can AISI 304 · rotor shaft AISI 420
5	Mechanical seal and lip seal	SiC / SiC / NBR · lip seal 16×30×6
6	Diffuser	Glass-fibre reinforced Noryl
7	Impeller	Glass-fibre reinforced Noryl
8	Pump Shaft	AISI 303 stainless steel, 11 mm hexagonal
9	Suction filter	Plastic

Spring 2M (2 m³/h)

Performance curves



Electrical data

Rated values at 230 V / 400 V

Model	kW	HP	A (230 / 400 V)
2M/T 055	0,55	0,75	4,2 / 1,6
2M/T 075	0,75	1	4,8 / 2,1
S 2M/T 075	0,75	1	4,8 / 2,1

Model	kW	HP	A (230 / 400 V)
2M/T 090	0,9	1,2	6,0 / 2,6
2M/T 110	1,1	1,5	7,0 / 2,9

Spring 2M (2 m³/h)

Hydraulic performance

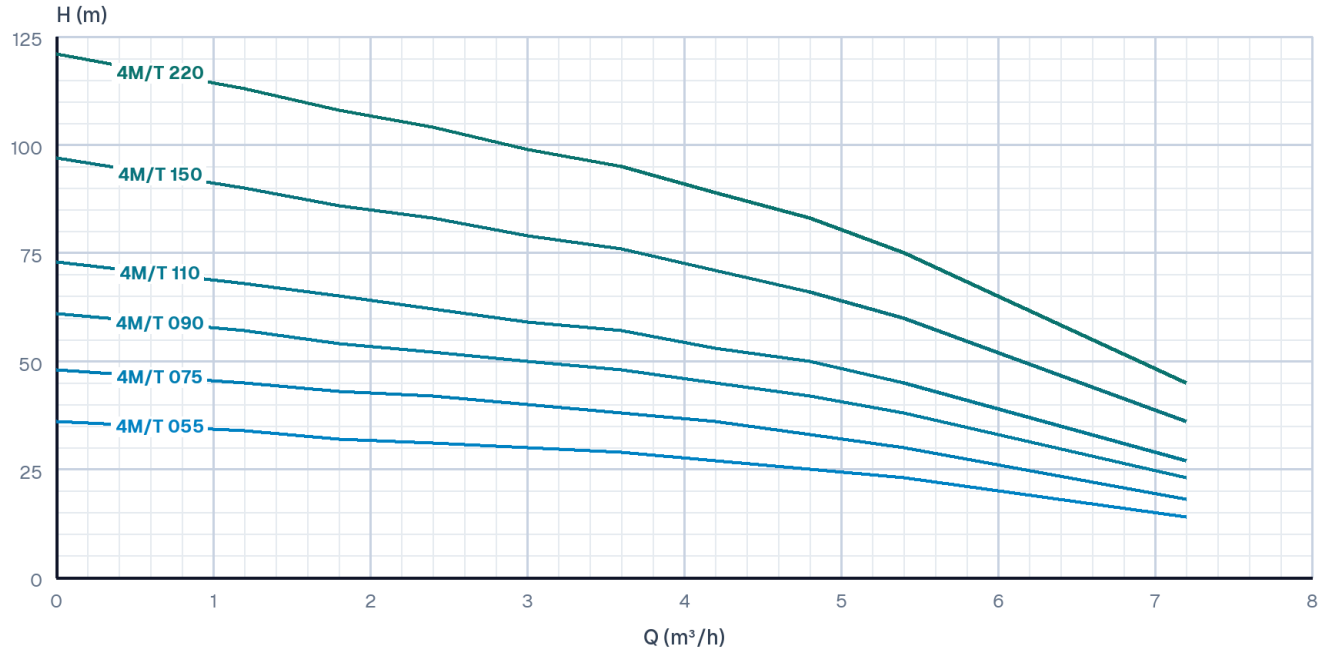
Total head H in metres

	Q · Flow (m³/h)							
Model	0	0,6	1,2	1,8	2,4	3	3,6	4,2
2M/T 055	47	44	41	38	34	30	25	20
2M/T 075	58	55	51	47	43	38	31	25
S 2M/T 075	66	62	58	52	46	38	29	17
2M/T 090	70	66	62	57	51	45	38	30
2M/T 110	81	77	72	66	60	53	44	35

Select the duty point at the intersection of Q and H.

Spring 4M (4 m³/h)

Performance curves



Electrical data

Rated values at 230 V / 400 V

Model	kW	HP	A (230 / 400 V)
4M/T 055	0,55	0,75	4,1 / 1,6
4M/T 075	0,75	1	5,5 / 2,2
4M/T 090	0,9	1,2	7,0 / 2,7

Model	kW	HP	A (230 / 400 V)
4M/T 110	1,1	1,5	7,6 / 3,0
4M/T 150	1,5	2	10,2 / 3,2
4M/T 220	2,2	3	12,8 / 4,7

Spring 4M (4 m³/h)

Hydraulic performance

Total head H in metres

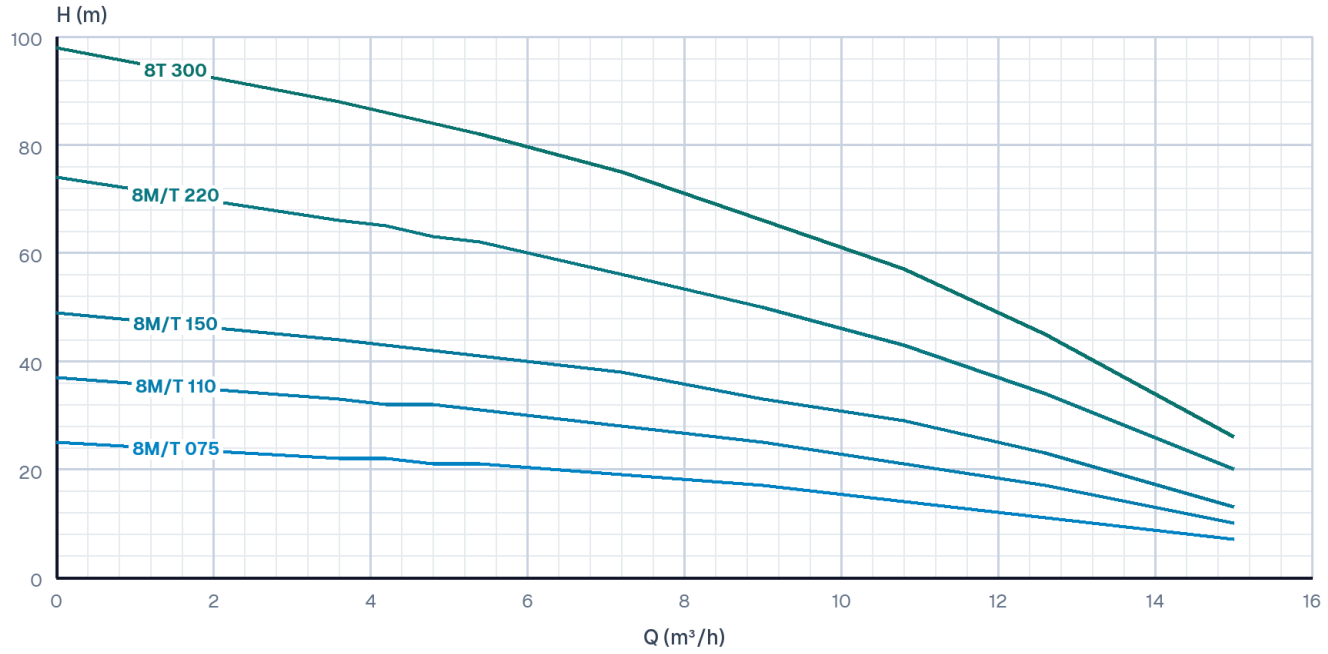
Q · Flow (m³/h)

Model	0	1,2	1,8	2,4	3	3,6	4,2	4,8	5,4	7,2
4M/T 055	36	34	32	31	30	29	27	25	23	14
4M/T 075	48	45	43	42	40	38	36	33	30	18
4M/T 090	61	57	54	52	50	48	45	42	38	23
4M/T 110	73	68	65	62	59	57	53	50	45	27
4M/T 150	97	90	86	83	79	76	71	66	60	36
4M/T 220	121	113	108	104	99	95	89	83	75	45

Select the duty point at the intersection of Q and H.

Spring 8M (8 m³/h)

Performance curves



Electrical data

Rated values at 230 V / 400 V

Model	kW	HP	A (230 / 400 V)
8M/T 075	0,75	1	5,4 / 2,2
8M/T 110	1,1	1,5	7,5 / 3,1
8M/T 150	1,5	2	9,6 / 3,2

Model	kW	HP	A (230 / 400 V)
8M/T 220	2,2	3	14,3 / 5,1
8T 300	3	4	- / 7,0

Spring 8M (8 m³/h)

Hydraulic performance

Total head H in metres

Q · Flow (m³/h)

Model	0	3,6	4,2	4,8	5,4	7,2	9	10,8	12,6	15
8M/T 075	25	22	22	21	21	19	17	14	11	7
8M/T 110	37	33	32	32	31	28	25	21	17	10
8M/T 150	49	44	43	42	41	38	33	29	23	13
8M/T 220	74	66	65	63	62	56	50	43	34	20
8T 300	98	88	86	84	82	75	66	57	45	26

Select the duty point at the intersection of Q and H.

Spring 2M (2 m³/h)

Dimensions and models

Model	Voltage	A (mm)	Weight (kg)	Outlet
2M 055	230V	441	12.1	1" 1/4
2T 055	400V	431	11	1" 1/4
2M 075	230V	480	13.5	1" 1/4
2T 075	400V	465	12.2	1" 1/4
S 2M 075	230V	≈505	–	1" 1/4
S 2T 075	400V	≈496	–	1" 1/4
2M 090	230V	520	15.4	1" 1/4
2T 090	400V	505	13.1	1" 1/4
2M 110	230V	543	15.7	1" 1/4
2T 110	400V	529	13.8	1" 1/4

Spring 4M (4 m³/h)

Dimensions and models

Model	Voltage	A (mm)	Weight (kg)	Outlet
4M 055	230V	417	11.9	1" 1/4
4T 055	400V	406	10.6	1" 1/4
4M 075	230V	456	13.1	1" 1/4
4T 075	400V	440	11.8	1" 1/4
4M 090	230V	495	14.6	1" 1/4
4T 090	400V	481	12.7	1" 1/4
4M 110	230V	520	15.1	1" 1/4
4T 110	400V	505	13.4	1" 1/4
4M 150	230V	599	17.9	1" 1/4
4T 150	400V	569	15.6	1" 1/4
4M 220	230V	677	20.9	1" 1/4
4T 220	400V	647	18.1	1" 1/4

Spring 8M (8 m³/h)

Dimensions and models

Model	Voltage	A (mm)	Weight (kg)	Outlet
8M 075	230V	421	12.8	1" 1/2
8T 075	400V	405	11.5	1" 1/2
8M 110	230V	467	14.3	1" 1/2
8T 110	400V	452	14.7	1" 1/2
8M 150	230V	527	16.8	1" 1/2
8T 150	400V	497	15.1	1" 1/2
8M 220	230V	621	19.6	1" 1/2
8T 220	400V	591	17.4	1" 1/2
8T 300	400V	682	20.6	1" 1/2