Equipment and solutions

Patrol & Titan Submersible Pump

Product technical datasheet

Submersible pumps for wastewater and effluent drainage.

FT-P030 · Rev. 1

The Patrol & Titan submersible pumps are designed for wastewater pumping and industrial effluent drainage, handling solid particles and small fibres. The TITAN model offers a maximum head of 16 m and flow rate up to 72 m³/h, while the PATROL reaches 24 m head and 96 m³/h. Built.

Applications

- Pumping of wastewater and industrial effluent drainage.
- Civil construction and rainwater drainage.
- Fountains, swimming pools and underground parks.
- Drainage systems for sewage and water with solid particles.
- Applications in environments with suspended particles and small fibers.

Operating conditions

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

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

TITAN (Vortex)

Max Head 16 m.c.a. | Max Flow 72 m³/h

PATROL (Bi-Canal)

Max Head 24 m.c.a. | Max Flow 96 m³/h

Max Temperature

40 °C

Maximum liquid density

1,1 kg/dm³

Admitted voltage

1~ 230 V | 3~ 400 V

Protection

IP68

Applications

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- Drainage systems for sewage and water with solid particles.
- Applications in environments with suspended particles and small fibers.

Operating conditions

Maximum immersion depth

10 m

Minimum immersion height

390 mm

Maximum emptying capacity

75 mm

Maximum solid passage

Dia. 50 mm

Electric cable length

10 m (H07 RN-F)

Starts/Hour

20

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

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

Technical specifications

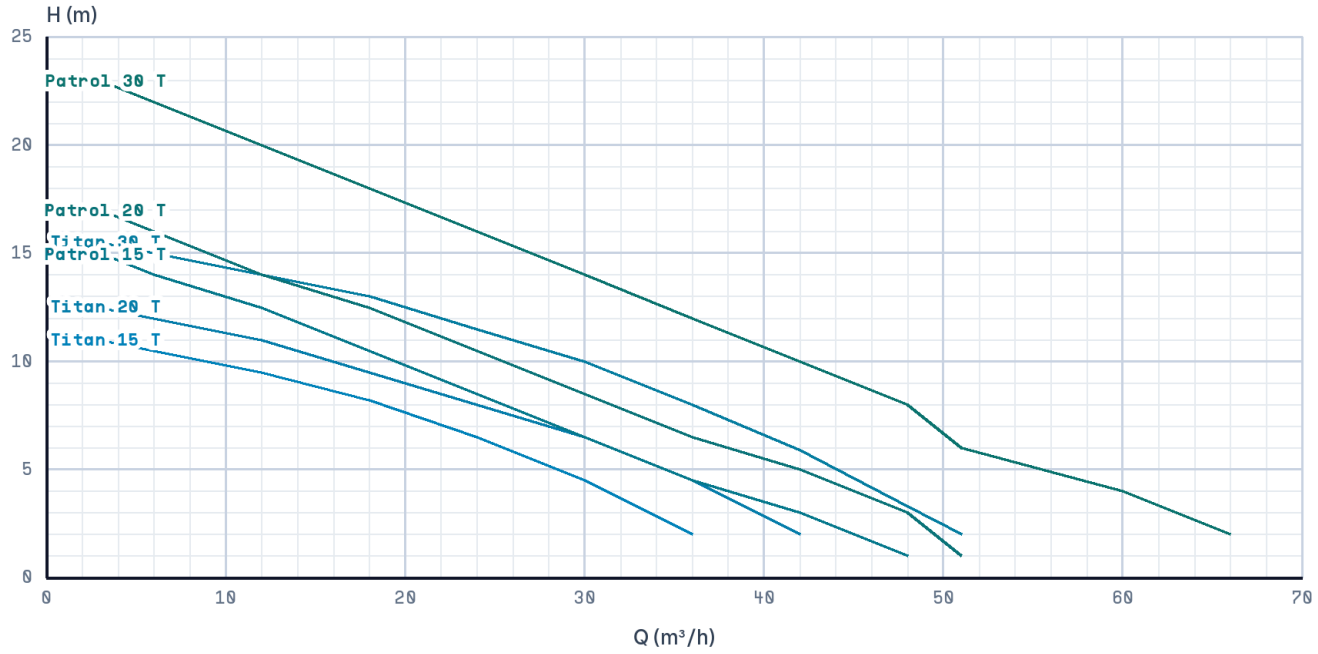
Installation

Fixed installation with coupling foot and guide tubes

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

Performance

Performance curves



Electrical data

Rated values at 400 V

Model	kW	HP	A (400 V)
Titan 15 M	1,1	1,5	8,8
Titan 15 T	1,1	1,5	3,4
Titan 20 M	1,5	2	10,2
Titan 20 T	1,5	2	4,2
Titan 30 T	2,2	3	5,7

Model	kW	HP	A (400 V)
Patrol 15 M	1,1	1,5	9
Patrol 15 T	1,1	1,5	3,5
Patrol 20 M	1,5	2	10,5
Patrol 20 T	1,5	2	4,3
Patrol 30 T	2,2	3	5,7

Performance

Hydraulic performance

Total head H in metres

Model	Q · Flow (m³/h)											
	3	6	12	18	24	30	36	42	48	51	60	66
Titan 15 M	11	10,5	9,5	8,2	6,5	4,5	2	–	–	–	–	–
Titan 15 T	11	10,5	9,5	8,2	6,5	4,5	2	–	–	–	–	–
Titan 20 M	12,5	12	11	9,5	8	6,5	4,5	2	–	–	–	–
Titan 20 T	12,5	12	11	9,5	8	6,5	4,5	2	–	–	–	–
Titan 30 T	15,5	15	14	13	11,5	10	8	5,9	3,3	2	–	–
Patrol 15 M	15	14	12,5	10,5	8,5	6,5	4,5	3	1	–	–	–
Patrol 15 T	15	14	12,5	10,5	8,5	6,5	4,5	3	1	–	–	–
Patrol 20 M	17	16	14	12,5	10,5	8,5	6,5	5	3	1	–	–
Patrol 20 T	17	16	14	12,5	10,5	8,5	6,5	5	3	1	–	–
Patrol 30 T	23	22	20	18	16	14	12	10	8	6	4	2

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

Dimensions and models

Dimensions and models

Model	HP	kW	230V (A)	400V (A)	uF	DN	Weight (kg)
Titan 15	1.5	1.1	8.8	3.4	31.5	2"1/2	21
Titan 20	2	1.5	10.2	4.2	50	2"1/2	22
Titan 30	3	2.2	-	5.7	60	2"1/2	23
Patrol 15	1.5	1.1	9	3.5	31.5	2"1/2	-
Patrol 20	2	1.5	10.5	4.3	50	2"1/2	-
Patrol 30	3	2.2	-	5.7	60	2"1/2	-

Additional information

- quadros-electricos-quadro-aguas-residuais