

### VORTEX

- Filthy water
- Domestic use
- Civil use
- Industrial use



### PERFORMANCE RANGE

- Flow rate up to **1200 l/min** (72 m<sup>3</sup>/h)
- Head up to **16 m**

### APPLICATION LIMITS

- **10 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Passage of solids:
  - up to **Ø 50 mm** for TITAN /50
  - up to **Ø 70 mm** for TITAN /70
- Minimum immersion depth for continuous service:
  - **390 mm** for TITAN /50
  - **430 mm** for TITAN /70

### CONSTRUCTION AND SAFETY STANDARDS

- Power cable
- External float switch and control box for single-phase versions

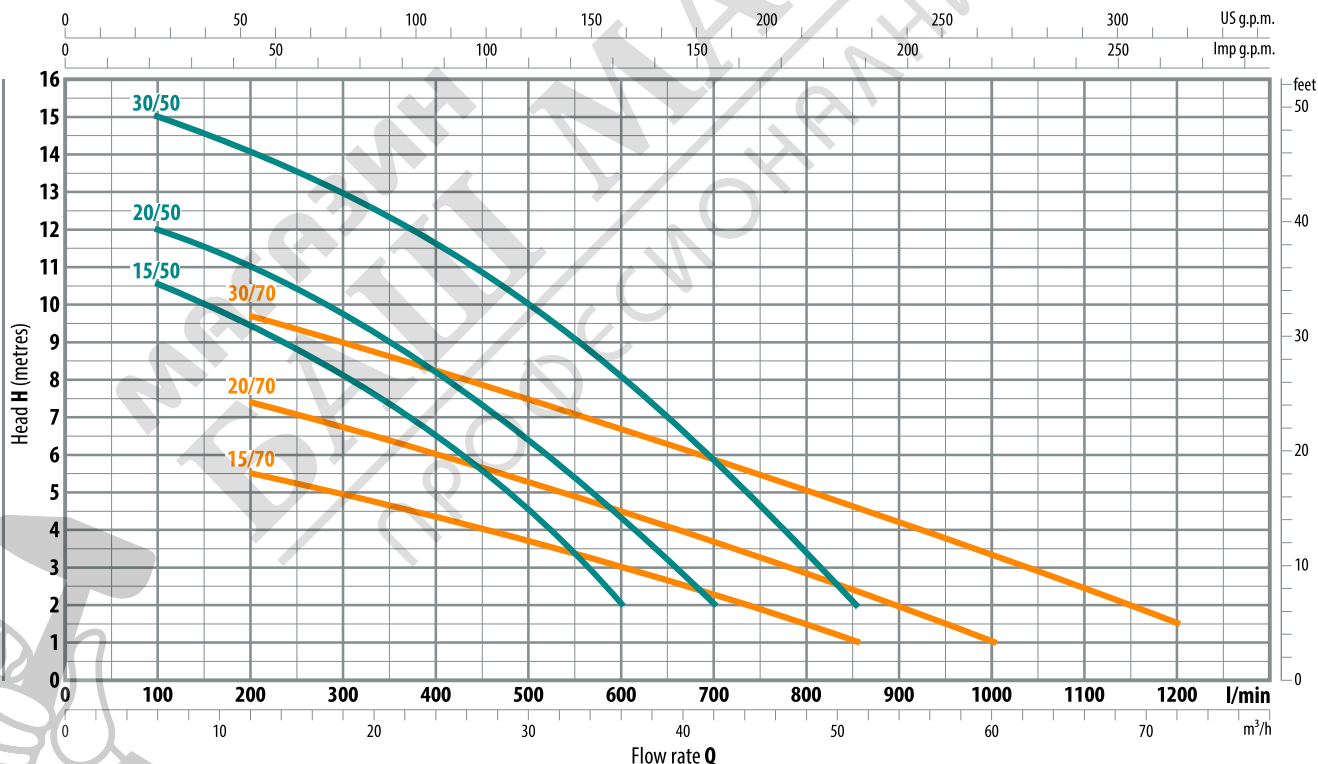
EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz | n= 2900 min<sup>-1</sup>



MODEL		POWER (P <sub>2</sub> )		Q	Flow rate																
Single-phase	Three-phase	kW	HP		0	6	12	18	24	30	36	42	48	51	54	60	66	72			
TITAN 15/50M	TITAN 15/50	1.1	1.5	H metres	0	100	200	300	400	500	600	700	800	850	900	1000	1100	1200			
TITAN 20/50M	TITAN 20/50	1.5	2		11.5	10.5	9.5	8.2	6.5	4.5	2										
TITAN 30/50M	TITAN 30/50	2.2	3		13	12	11	9.5	8	6.5	4.5	2									
TITAN 15/70M	TITAN 15/70	1.1	1.5		16	15	14	13	11.5	10	8	5.9	3.3	2							
TITAN 20/70M	TITAN 20/70	1.5	2		6.5	–	5.5	5	4.4	3.7	3	2.2	1.5	1							
TITAN 30/70M	TITAN 30/70	2.2	3		8.5	–	7.4	6.7	6	5.2	4.5	3.6	2.8	2.4	2	1					
					11	–	9.7	9	8.2	7.5	6.7	5.8	5	4.6	4.2	3.3	2.5	1.5			

Q = Flow rate  
H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

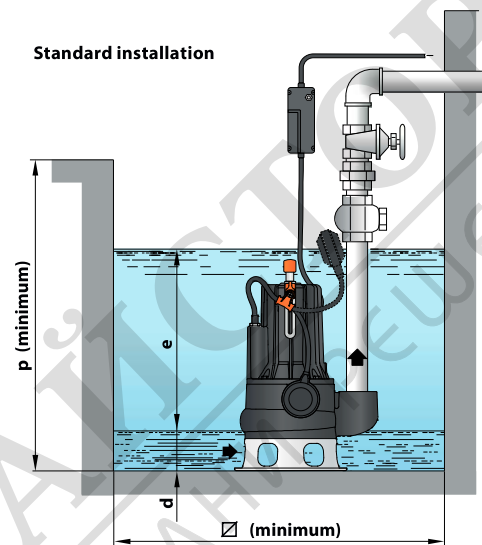
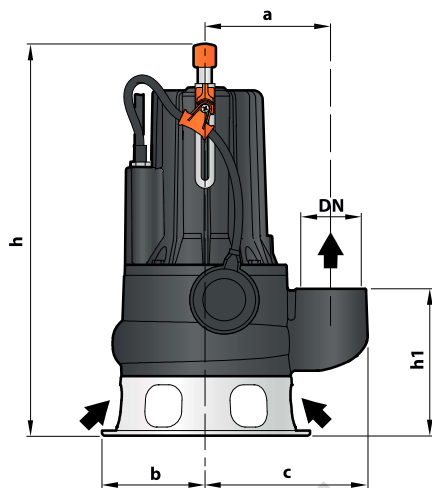
## INSTALLATION AND USE

The TITAN series of pumps, manufactured from heavy gauge robust cast iron, resistant to abrasion and long-lasting, are fitted with a VORTEX impeller and are therefore suitable for draining dirty, filthy and reflux water, and water mixed with putrid mud. They are suitable for installation in sewers, tunnels, excavations, canals, underground car parks, etc.

## CONSTRUCTION CHARACTERISTICS

<b>PUMP BODY</b>	Cast iron with threaded port in compliance with ISO 228/1
<b>IMPELLER</b>	VORTEX type in cast iron with an Epoxy Electro Coating treatment
<b>MOTOR SHAFT</b>	Stainless steel AISI 431
<b>TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER</b>	<b>Motor side:</b> Ceramic - Graphite - NBR <b>Pump side:</b> Silicon carbide - Silicon carbide - NBR
<b>POWER CABLE</b>	H07 RN-F type 10 m long power cable

## DIMENSIONS AND WEIGHT



MODEL		PORT DN	Passage of solids	DIMENSIONS mm										kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	Ø	1~	3~	
TITAN 15/50M	TITAN 15/50	2½"	Ø 50 mm	162	135	210	509	191	75	variable	800	800	36.2	34.9	
TITAN 20/50M	TITAN 20/50						522/509						37.3	36.0	
TITAN 30/50M	TITAN 30/50						522/509						41.2	38.0	
TITAN 15/70M	TITAN 15/70	3"	Ø 70 mm	180	150	237	548	233	85	variable	800	800	39.0	37.7	
TITAN 20/70M	TITAN 20/70						562/548						40.1	38.8	
TITAN 30/70M	TITAN 30/70						562/548						44.0	40.8	

## ABSORPTION

MODEL	VOLTAGE	
	230 V	240 V
<b>Single-phase</b>	230 V	240 V
TITAN 15/50M	8.8 A	8.7 A
TITAN 20/50M	10.2 A	10.1 A
TITAN 30/50M	15.6 A	15.5 A
TITAN 15/70M	8.7 A	8.6 A
TITAN 20/70M	10.0 A	9.9 A
TITAN 30/70M	15.0 A	14.9 A

MODEL	VOLTAGE		
	230÷240 V	400÷415 V	690÷720 V
<b>Three-phase</b>	230÷240 V	400÷415 V	690÷720 V
TITAN 15/50	5.9 A	3.4 A	2.0 A
TITAN 20/50	7.3 A	4.2 A	2.4 A
TITAN 30/50	9.9 A	5.7 A	3.3 A
TITAN 15/70	5.7 A	3.3 A	1.9 A
TITAN 20/70	7.3 A	4.2 A	2.4 A
TITAN 30/70	9.5 A	5.5 A	3.2 A

## PALLETIZATION

MODEL		GROUPAGE n. pumps	CONTAINER n. pumps
Single-phase	Three-phase		
TITAN 15/50M	TITAN 15/50	16	24
TITAN 20/50M	TITAN 20/50	16	24
TITAN 30/50M	TITAN 30/50	16	24
TITAN 15/70M	TITAN 15/70	12	12
TITAN 20/70M	TITAN 20/70	12	12
TITAN 30/70M	TITAN 30/70	12	12