

### VORTEX

- Filthy water
- Domestic use
- Civil use



### PERFORMANCE RANGE

- Flow rate up to **650 l/min** (39 m<sup>3</sup>/h)
- Head up to **14 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 40 mm** for TITAN /35
  - up to **Ø 50 mm** for TITAN /45
- Minimum immersion depth for continuous service:
  - **280 mm** for TITAN /35
  - **300 mm** for TITAN /45

### CONSTRUCTION AND SAFETY STANDARDS

- Power cable
- Float switch for single-phase versions

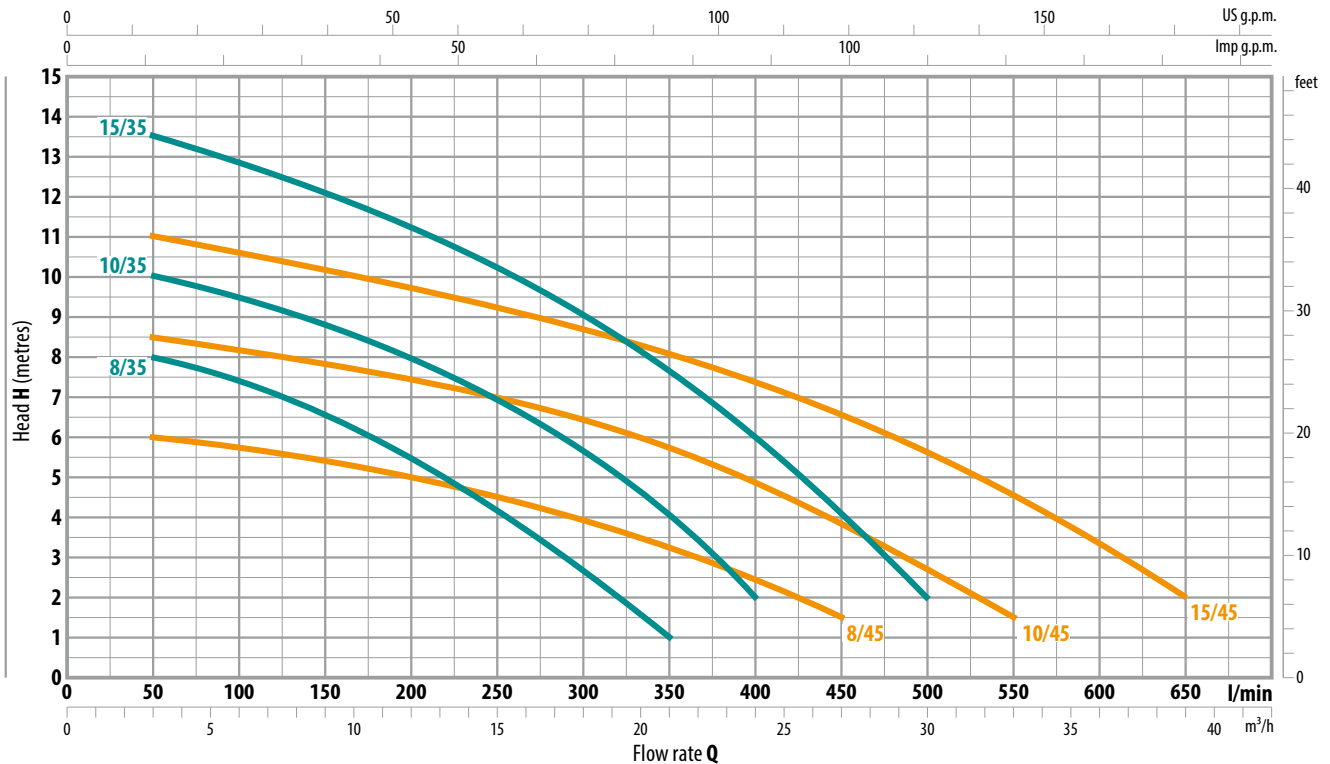
**EN 60335-1**  
**IEC 60335-1**  
**CEI 61-150**

**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	3	6	12	18	21	24	27	30	33	36	39		
				H metres	0	50	100	200	300	350	400	450	500	550	600	650		
TITAN 8/35M	TITAN 8/35	0.55	0.75		H metres	9	8	7.5	5.5	2.7	1							
TITAN 10/35M	TITAN 10/35	0.75	1	11		10	9.5	8	5.7	4	2							
TITAN 15/35M	TITAN 15/35	1.1	1.5	14		13.5	12.8	11.2	9	7.7	6	4	2					
TITAN 8/45M	TITAN 8/45	0.55	0.75	6.5		6	5.8	5	4	3.3	2.5	1.5						
TITAN 10/45M	TITAN 10/45	0.75	1	9		8.5	8.2	7.5	6.5	5.8	5	3.8	2.5	1.5				
TITAN 15/45M	TITAN 15/45	1.1	1.5	11.5		11	10.5	9.8	8.7	8	7.5	6.5	5.5	4.5	3.5	2		

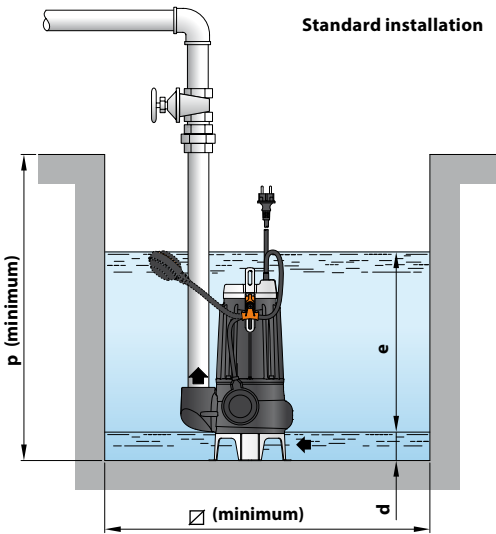
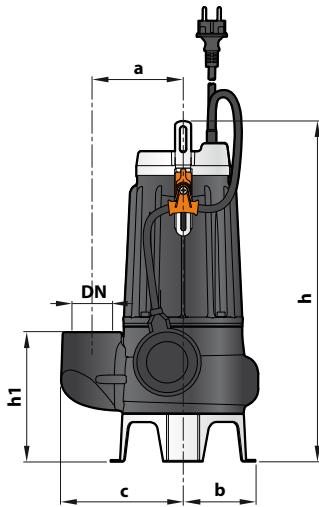
Q = Flow rate  
H = Total manometric head

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

## INSTALLATION AND USE

TITAN series pumps, made from heavy gauge cast iron offering exceptional sturdiness and abrasion resistance, come equipped with a VORTEX impeller and are therefore suitable for draining waste water containing suspended solids, filthy water and mixed with mud.

## DIMENSIONS AND WEIGHT



## CONSTRUCTION CHARACTERISTICS

<b>PUMP BODY</b>	Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO 228/1
<b>IMPELLER</b>	Stainless steel AISI 304 VORTEX type
<b>MOTOR SHAFT</b>	Stainless steel AISI 431
<b>SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER</b>	<b>Motor side:</b> Silicon carbide - Graphite - NBR <b>Pump side:</b> Silicon carbide - Silicon carbide - NBR
<b>POWER CABLE</b>	H07 RN-F type 10 m long power cable (with Schuko plug for single-phase versions only)

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 8/35M	TITAN 8/35	1½"	Ø 40 mm	115	95	148	388	139	50	variable	500	500	17.0	16.7
TITAN 10/35M	TITAN 10/35						403							
TITAN 15/35M	TITAN 15/35													
TITAN 8/45M	TITAN 8/45	2"	Ø 50 mm	115	95	155	413	164	60	variable	500	500	17.5	17.2
TITAN 10/45M	TITAN 10/45						428							
TITAN 15/45M	TITAN 15/45													

## ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
<b>Single-phase</b>			
TITAN 8/35M	3.5 A	3.4 A	7.0 A
TITAN 10/35M	4.8 A	4.6 A	9.6 A
TITAN 15/35M	7.4 A	7.1 A	-
TITAN 8/45M	3.7 A	3.5 A	7.4 A
TITAN 10/45M	5.0 A	4.8 A	10.0 A
TITAN 15/45M	7.1 A	6.8 A	-

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
<b>Three-phase</b>				
TITAN 8/35	3.0 A	1.7 A	2.9 A	1.65 A
TITAN 10/35	3.5 A	2.0 A	3.4 A	1.95 A
TITAN 15/35	5.2 A	3.0 A	5.0 A	2.9 A
TITAN 8/45	3.2 A	1.8 A	3.1 A	1.75 A
TITAN 10/45	3.5 A	2.0 A	3.4 A	1.95 A
TITAN 15/45	5.2 A	3.0 A	5.0 A	2.9 A

## PALLETIZATION

MODEL		GROUPAGE n. pumps	CONTAINER n. pumps
Single-phase	Three-phase		
TITAN 8/35M	TITAN 8/35	60	80
TITAN 10/35M	TITAN 10/35	60	80
TITAN 15/35M	TITAN 15/35	60	80
TITAN 8/45M	TITAN 8/45	54	72
TITAN 10/45M	TITAN 10/45	54	72
TITAN 15/45M	TITAN 15/45	54	72