

NEW

PEDROLLO[®]
... the spring of life



TISSEL

Water pump rotation speed control system



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Water pump rotation speed control system

Max 200 l/min

1~ / 1~ | 1 HP
2 HP

1~ / 3~ | 1,5 HP
3,0 HP

THE TECHNOLOGY

The single-phase fixed frequency grid voltage (220V / 50 Hz) is converted into variable frequency voltage

INVERTER technology

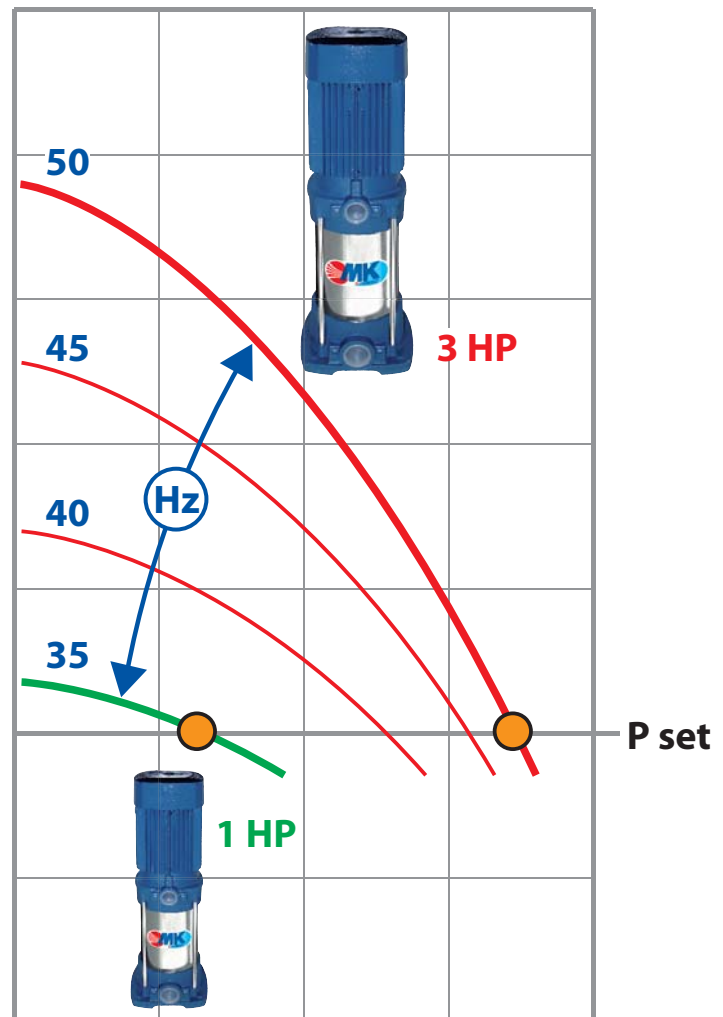
The pump rotation speed is regulated by varying the frequency.

THE ADVANTAGES

- **Constant pressure**
The installation pressure is kept constant at the set value **P set** even when the amount of water required changes.
- **Significant energy savings**
At low flow rates it is comparable to having a lower powered pump running.
- **Silence and reduced pump wear**
The pump works at lower speeds for most of its working life and is started and stopped progressively.
- **Reduced dimensions**
It is sufficient to fit the system with a surge tank of only a few liters capacity since the pump is stopped only when the flow rate falls below 1-2 liters/min.

SAFETY FEATURES

- **Dry running**
Stops the pump after a few seconds and effects programmed restarts in order to detect the return of water.
- **Current - voltage - temperature**
Limits the current; voltage limit alarm; protects against over-heating and short-circuiting between the exit phases.



DESIGNED

- FUNCTIONAL, INDIVIDUALLY ACCESSABLE AREAS
- EASY TO INSTALL
- EASY TO USE
- EASY TO MAINTAIN

BODY

Sturdy techno polymer body for drinking water. Characterized by low pressure losses which make it suitable for use with pumps with flow rates of up to 200 liters/min.

EXPANSION-BOX

Contains the EXPANSION BOARD that regulates:

- multiple TISSEL working in parallel;
- the entrance of eventual LEVEL signals;
- the ALARM exits.

POWER-BOX

Contains the POWER BOARD which is mounted on an EFFICIENT METALLIC DISSIPATOR that, lapped by the pumped fluid, ensures that the electronic components are cooled even in the most testing of working conditions.



PRESSURE SENSOR

CONTROL-PANEL

The keypad and rear-lit LCD screen make it easy to program the service parameters.

The control panel contains the CONTROL BOARD that regulates:

- the easy to replace PRESSURE SENSOR;
- the easy to clean FLOW RATE SENSOR which is integrated into the NONRETURN VALVE (patent pending).

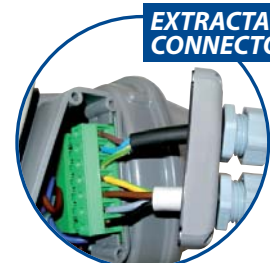


HYDRAULIC COUPLING

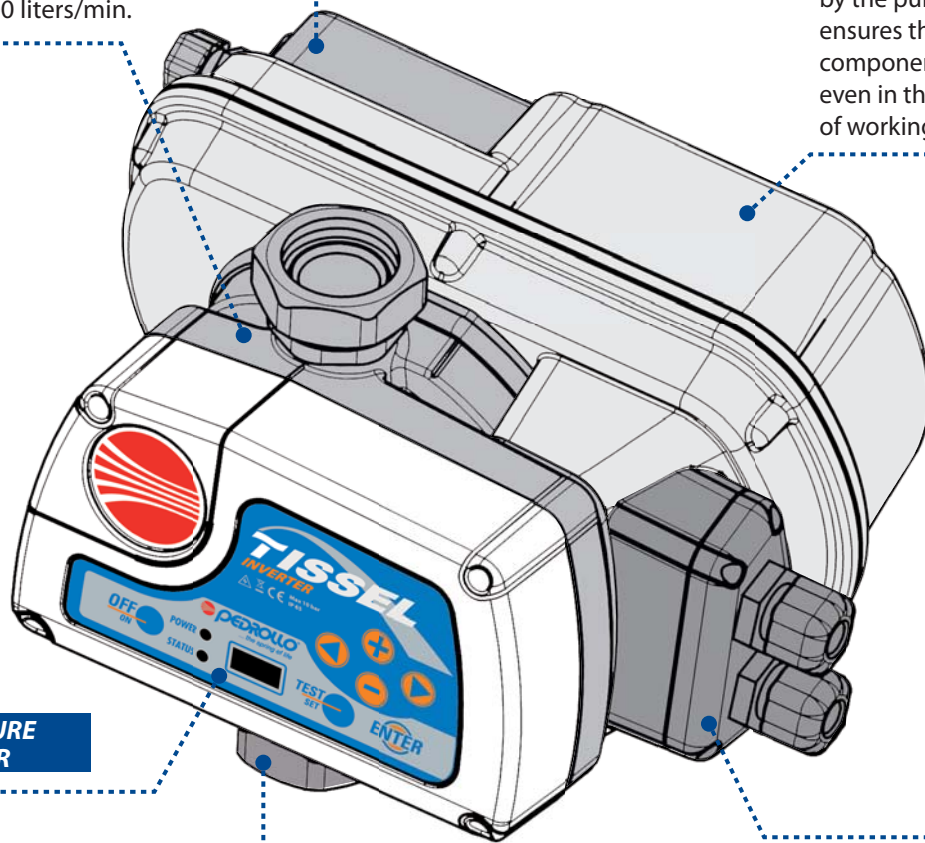
In order to facilitate installation, TISSEL can be supplied with special THREE-PIECE JOINTS on both the entrance and exit.

CONNECTION-BOX

The connection of the entrance and exit lines is made safe thanks to the practical EXTRACTABLE CONNECTOR both during installation and maintenance operations



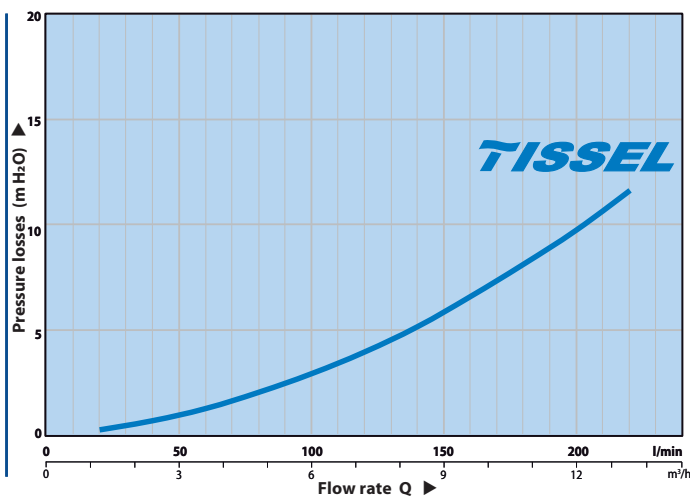
EXTRACTABLE CONNECTOR



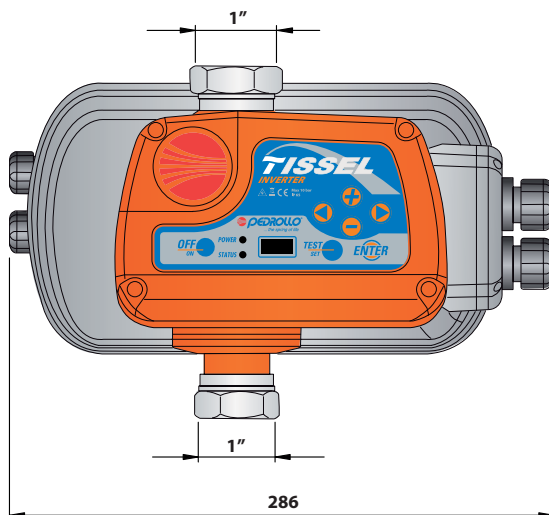
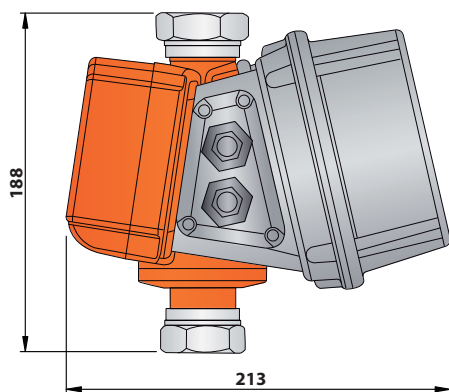
TECHNICAL DATA

- INPUT VOLTAGE: **single-phase 230 Volt/50 Hz**
- OUTPUT VOLTAGE/MAX CURRENT:
 - **single phase/single phase models:**
1~ 230 Volt/ 30-60 Hz – 7 / 10 A
 - **single phase/three phase models:**
3~ 230 Volt/ 30-60 Hz – 7 / 10 A
- IP PROTECTION: **IP 65**
- WORKING TEMPERATURE: **0÷60 °C**
- CONNECTIONS: **G 1" (ISO 228-1)** (on request "NPT")
- WORKING PRESSURE: **10 Bar**
- BURSTING PRESSURE: **> 40 Bar**

PRESSURE LOSSES



DIMENSIONS



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