

# IDROMAT

Electronic regulator for pumps



### Construction

Regulation device for pump control equipped with flow and pressure sensor connected to an electronic system.  
 Inlet and delivery connection ports of the same diameter.  
 Built-in check valve.  
 Pressure gauge 0-12 bar supplied as standard for IDROMAT 5.. (IDROMAT 6.. not present).  
 Automatic reset function for the reset of the system without manual operation.

### Applications

Automatic control of pumps for water supply and increase of network pressure.

**Control of starting/stopping of the pump** when cocks are opened/closed.

#### For protection of the pump:

- against dry running;
- against the risk of operation without water at the inlet (caused by a lack of water inflow in the inlet pipe under positive suction head, by a non-immersed suction pipe, by excessive suctionlift or by air entering the suction pipe);
- against operation with closed connection ports.

### Operating conditions

Mains voltage: single-phase 230 V ±10% Idromat 5e;  
 single-phase 115 - 240 V ±5% for Idromat 5, 6.  
 Frequency: 50 - 60 Hz.  
 Current values:  
 - 8A max during operation (16A max at start-up) for IDROMAT 5;  
 - 16A max during operation (30A max at start-up) for IDROMAT 6  
 Maximum pump motor power 1,5 kW (2,2 kW for IDROMAT 6).  
 Protection: IP 65.  
 Maximum working pressure: 12 bar (1,2 MPa)  
 Maximum Operating temperature up to 65 °C.  
 Minimum flow ~ 1 l/min.  
 Male connections 1" (1 1/4 for IDROMAT 6).

### Materials

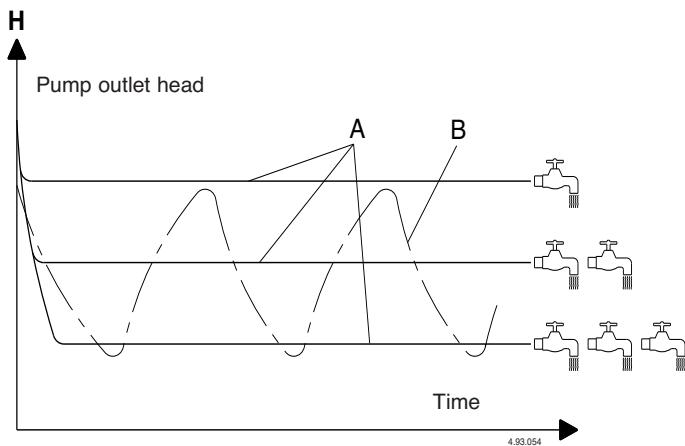
Component	Material
Housing	Polyamide PA 6 G.F. reinforced
Membrane	Natural rubber

### Operating conditions

TYPE	Switching-on pressure	Pump head
<b>IDROMAT 5-12</b>	1,2 bar	> 25 m
<b>IDROMAT 5-15</b>	1,5 bar	> 30 m
<b>IDROMAT 5-22</b>	2,2 bar	> 35 m
<b>IDROMAT 5-30</b>	3 bar	> 45 m
<b>IDROMAT 6-15</b>	1,5 bar	> 30 m
<b>IDROMAT 6-30</b>	3 bar	> 45 m
<b>IDROMAT 5e</b>	adjustable from 1,5 to 2,5 bar	(1)

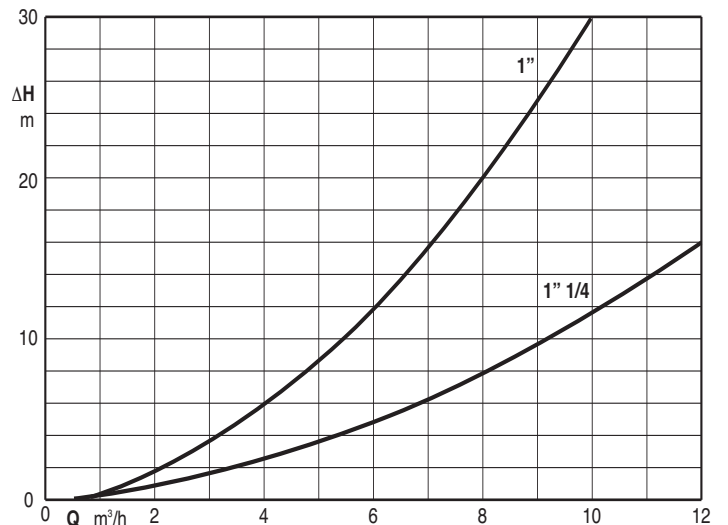
(1) 1,5 bar more than the expected restart pressure

### Comparison of pressure values



A = operation with **IDROMAT** = constant pressure;  
 B = operation with traditional vessel and pressure switch system.

### Diagram of head loss



ΔH = Head loss in meters

### Control Panel



#### Status indications and system reset

The three leds give the information about the system operativity, the first led indicates the presence of supply, the second led indicates if the pump is operating and the third led indicates if an alarm has occurred in the system. The Reset button allows to manually restart the system when an alarm occur.



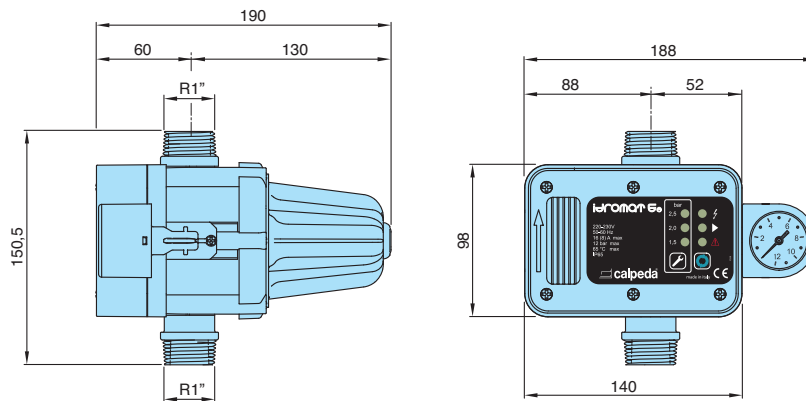
#### Programming of the re-start pressure

The display allows to visualize the re-start pressure of the system, the buttons allow to change the re-start pressure value.

### Dimensions and weights

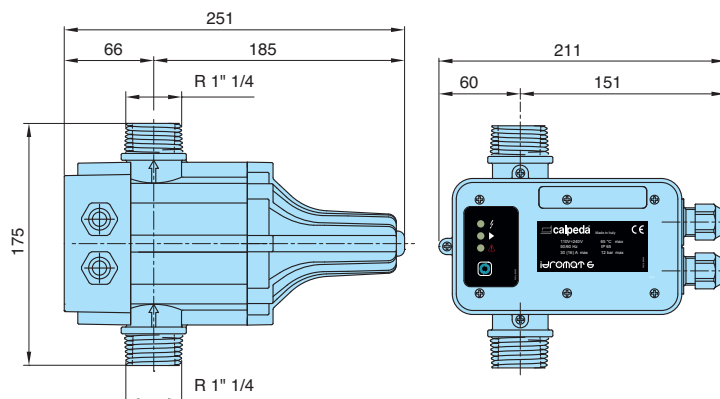
#### IDROMAT 5

kg 1,2

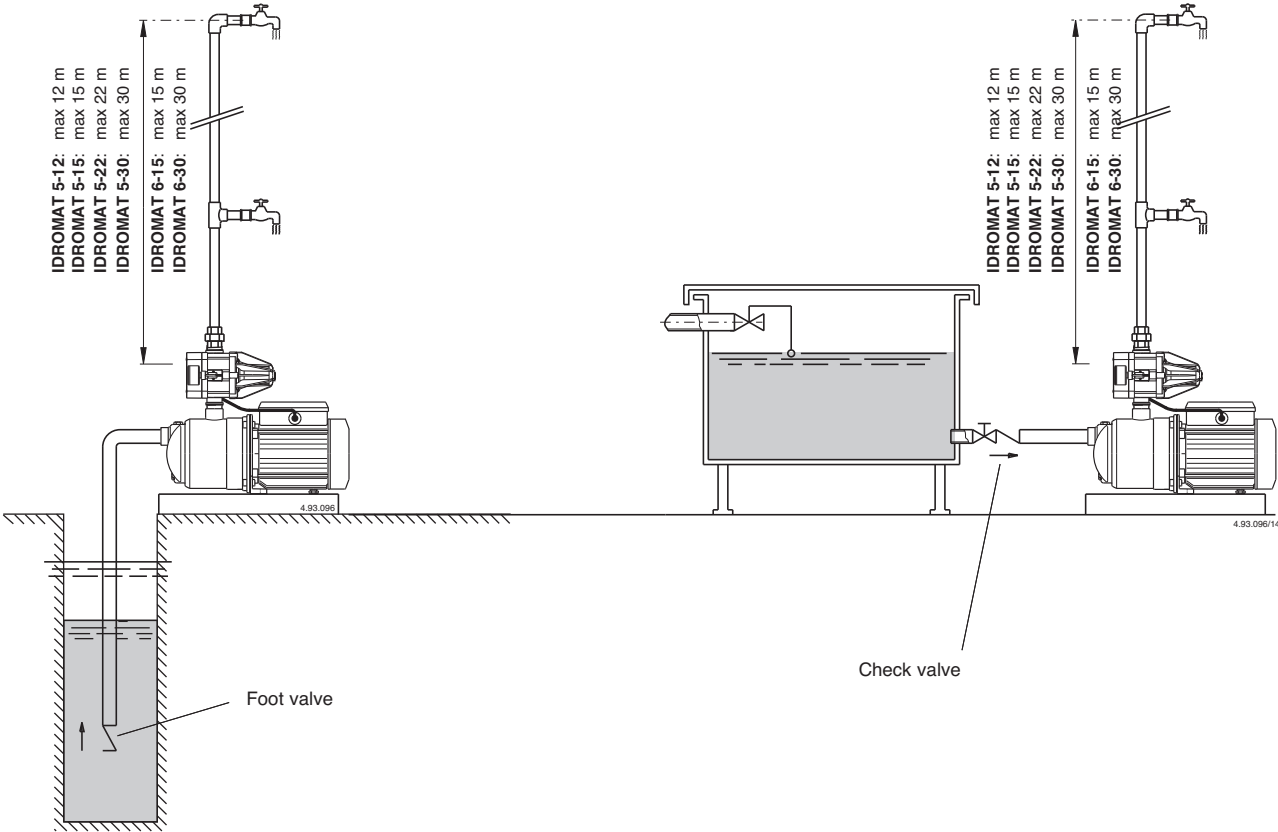


#### IDROMAT 6

kg 1,5



Installation example



### Features



#### Flexibility

The standard double supply voltage (only for Idromat 5 and 6) allows to connect power supply of 115 - 240V without modifications on the device.

#### Easy to use

With the Idromat 5e it is possible to change the re-start pressure, the operation is possible also with the pump that operate.

#### Safety

The device includes a automatic re-start system with anti-lock mode in order to reduce the user operations.

#### Reliability

The pressure gauge locking system (patented) allows an easy replacement in case of failure and an easy drainage of the device.

#### User friendly

The high luminosity leds allows a higher visibility of the operating conditions.