

# PRM, PRMIN Series

Pressure switches with manual resetting

## Technical Data Sheet



## Description

Without the aid of any energy source other than the pressurised fluid itself, **PRM-PRMIN Series, shut-off pressure switches** automatically shut off the flow of heat to the boiler when the water pressure reaches a pre-set limit (maximum or minimum). The pressure switches are manufactured in compliance with the "R" regulations - 2009 edition, the technical specification implementing Italian Ministerial Decree 1-12-1975.



### PRM

Safety shut-off pressure switch with manual resetting for heating systems.

Compliant with RoHS 2011/65/EU.

Compliant with PED 2014/68/EU.

Compliant with LVD 2014/35/EU.

Type	Part No.	DN	bar	Weight (Kg)
PRM	0402101N	1/4" F	3	0.38



### PRMIN

Minimum shut-off pressure switch with manual resetting for heating systems.

Compliant with RoHS 2011/65/EU.

Compliant with PED 2014/68/EU.

Compliant with LVD 2014/35/EU.

Type	Part No.	DN	bar	Weight (Kg)
PRMIN	0402103N	1/4" F	5	0.39

#### Technical features

	PRM	PRMIN
Max. operating pressure	5 bar	5 bar
Adjustment range	2-4,5 bar	0.5-1.7 bar
Factory setting	3 bar	0.9 bar
Maximum permissible fluid temperature	110°C	110°C
Maximum ambient temperature	50°C	50°C
Contact type	N.C.	N.O.
Contact rating	16A(10) - 250VAC	16A(10) - 250VAC
IP rating	IP44	IP44
Galvanised steel water connection	1/4" F	1/4" F
Fluid	water/water + 50% glycol	water/water + 50% glycol

#### Materials

Lever	galvanised steel
Diaphragm	EPDM
Cover	ABS
Electrical contacts	brass alloy with Ag-Ni coating

## Application

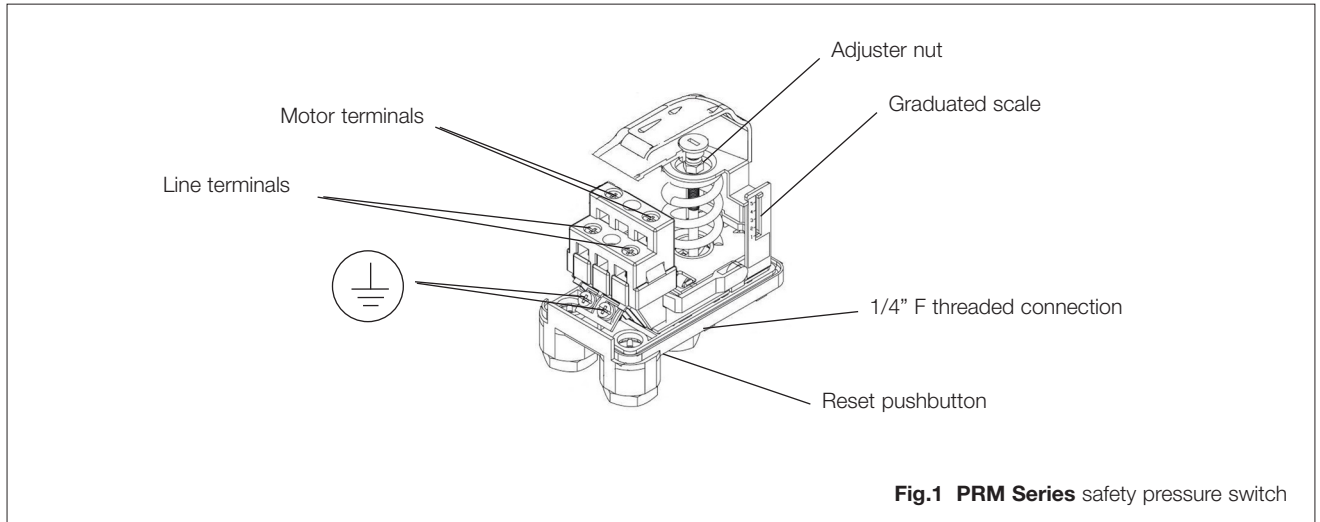
**PRM-PRMIN Series** shut-off pressure switches are generally used in closed circuit heating systems with power of more than 35kW and hot water with a temperature of less than 110°C.

In the **PRM Series** safety version, the pressure switch is designed to protect the boiler against increases in circuit pressure, and must be set to a lower pressure than the safety valve setting. In the **PRMIN Series** protection version, the pressure switch is designed to ensure that boiler pressure never falls below a minimum safety value (0.5 bar), so as to prevent the water from vaporising and protect the circuit against the risk of running dry.

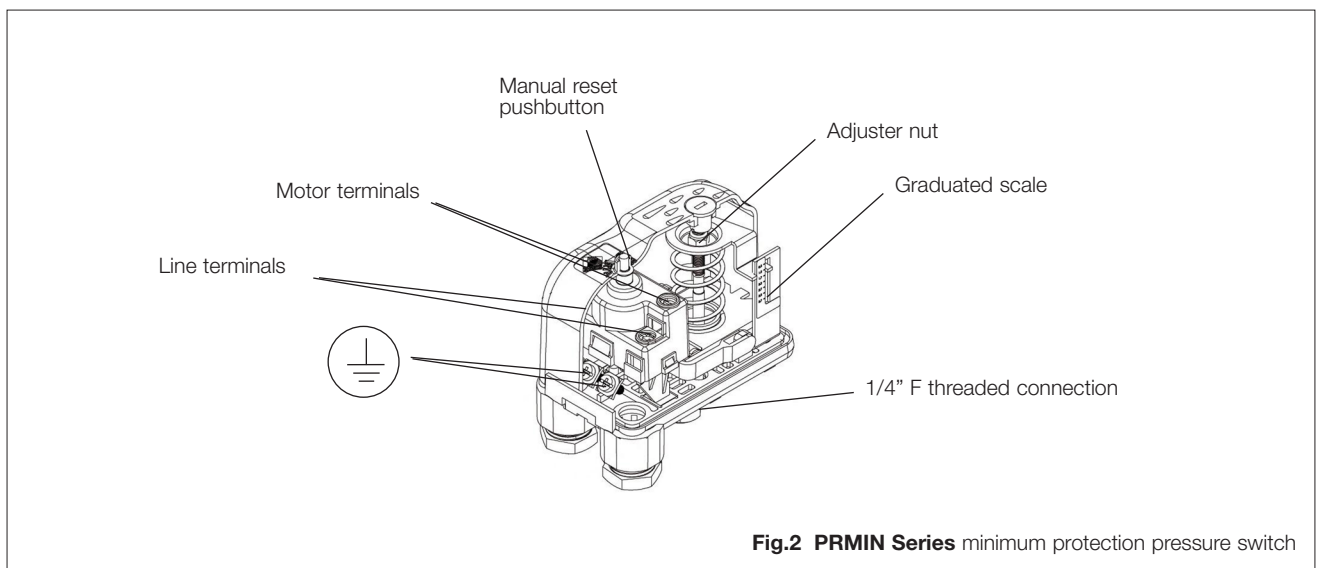
If actuated, both versions can only be reset manually (reset pushbutton).

## Operation

The **PRM Series** pressure switch has two normally closed electrical contacts, which are insulated from each other. When the shut-off pressure is reached, both contacts open. To adjust the shut-off pressure, if necessary, turn the adjuster nut. The value is shown on the graduated scale.



The **PRMIN Series** pressure switch has two normally open electrical contacts, which are insulated from each other. When the system is pressurised the contacts close. When the minimum shut-off pressure setting is reached, both contacts **open**. To adjust the shut-off pressure, if necessary, turn the adjuster nut. The set value is shown on the graduated scale.



## Installation

**PRM-PRMIN Series** shut-off pressure switches can be installed at the top of the boiler or in the immediate vicinity of the flow pipe (<1m) upstream of any shut-off device.

The pressure switch has a 1/4\"F connection for coupling to a suitably sealed 1/4\"M threaded connection or pipe, and must be fastened with a 17 fixed wrench (recommended tightening torque 35Nm).

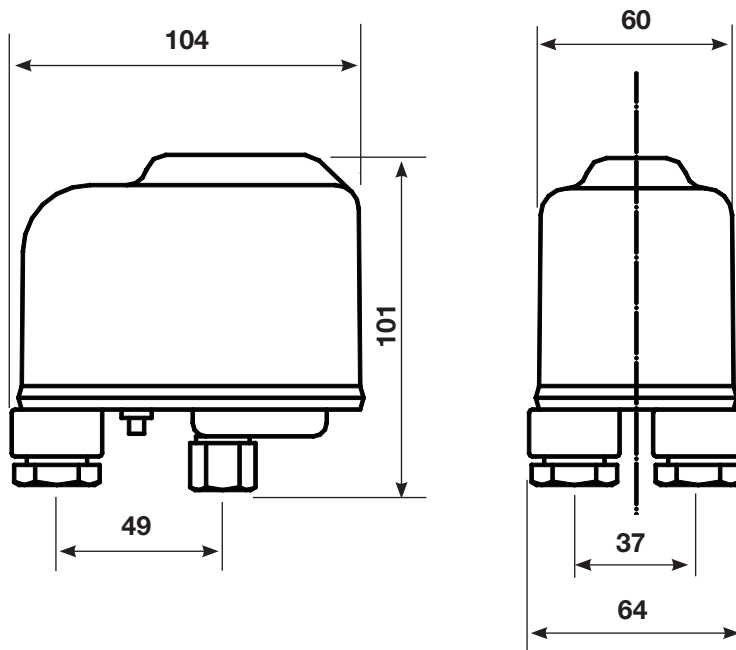
The device can only be reset manually, by means of the reset pushbutton:

- on the **PRM Series** safety model, once the pressure has fallen to at least 0.4 bar below the shut-off value;
- on the **PRMIN Series** protection model, when the minimum differential of 0.5 bar is reached.

By way of routine maintenance, inspect once a year for fluid leaks or corrosion, and every three years to ensure that the contacts open.

## Overall dimensions (mm)

### PRM-PRMIN



## Specification text

### **PRM Series**

Safety shut-off pressure switch **PRM Series** – WATTS brand – with manual resetting for heating systems. Adjustment range: 2-4,5 bar. Contact rating: 16(A)–250VAC. Protection rating IP44. Max. fluid temperature: 110°C. Compliant with PED 2014/68/EU. Compliant with LVD 2014/35/EU.

### **PRMIN Series**

Minimum shut-off pressure switch with manual reset pushbutton **PRMIN Series** – WATTS brand. Adjustment range: 0.5-1.7 bar. Max. pressure: 5 bar. IP rating: IP44. Max. fluid temperature: 110°C. Contact rating: 16A(10) – 250VAC. Standard actuation pressure 0.9 bar. Minimum reset differential 0.5 bar. Compliant with PED 2014/68/EU. Compliant with LVD 2014/35/EU.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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