

# Grundfos PM GUARD



## Connect Grundfos SCALA2 directly to the city water mains

Protect the water mains network and upstream appliances from water shortages. The PM GUARD pressure manager shuts off your SCALA2 water pressure booster when pressure is too low, in compliance with local regulations.

# Connect your Grundfos SCALA2 directly to the water mains



With the new Grundfos PM GUARD pressure manager you can directly connect SCALA2, the most silent and efficient home booster for constant water pressure, to the mains water network.

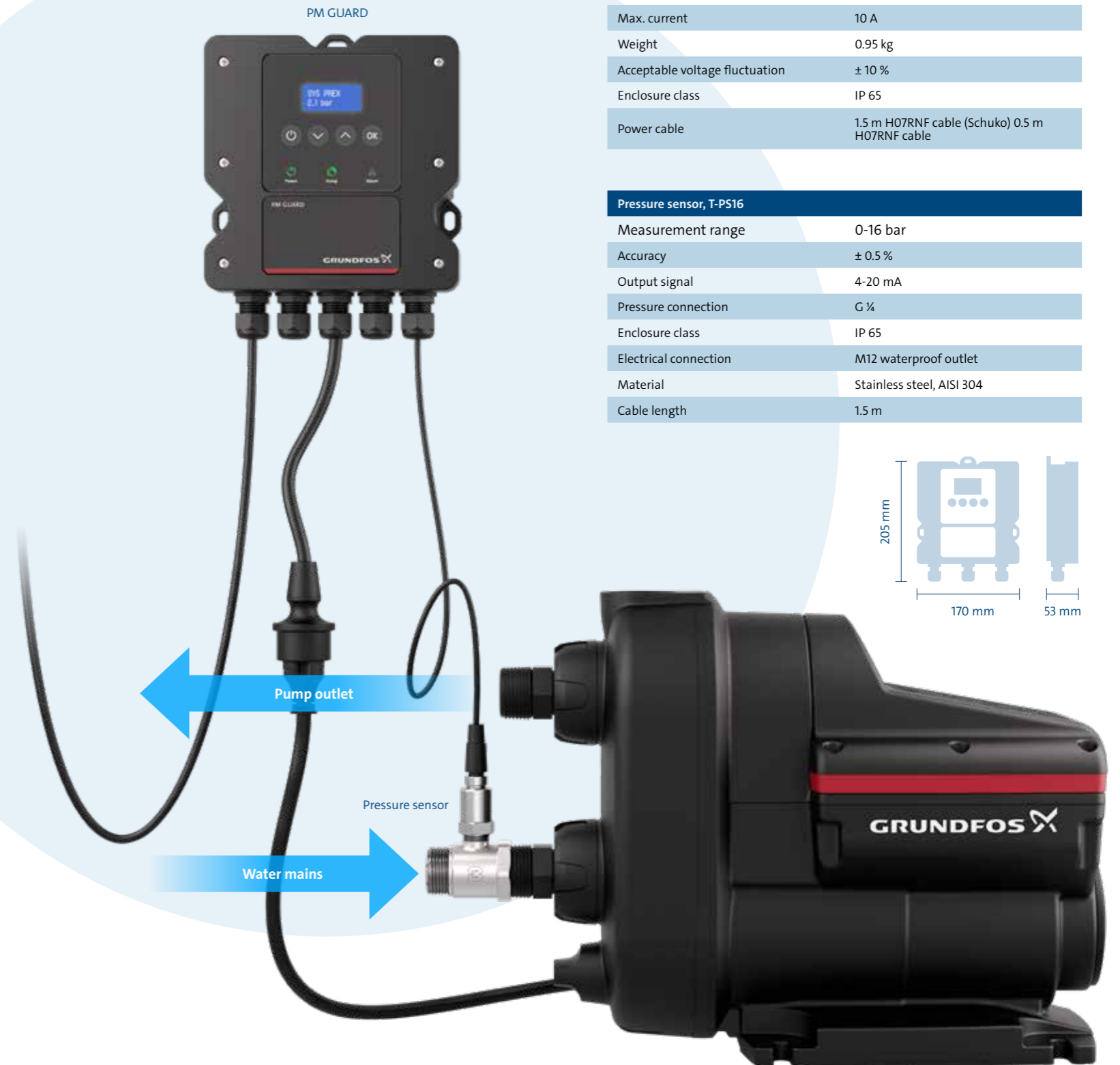
The wall-mounted device monitors water pressure and deactivates SCALA2 if the pressure drops below a specified limit. It can be set to restart manually or automatically when pressure is restored.

In some countries, regulations require a booster pump to be shut off when water mains inlet pressure is too low. PM GUARD has built-in presets that comply with regulations such as DIN 1988-500 (Germany), forthcoming EN 806-2 update (Europe), NEN1006 (WB) 4.3 (Netherlands) and local requirements in Belgium.

  
Connect SCALA2 to water mains

  
Protect mains network

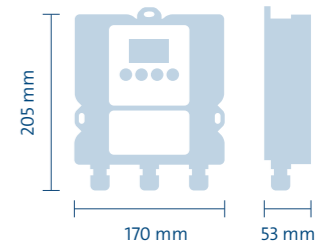
  
Comply with local regulations



| Product number | Description            | Max. system pressure (bar) | T-piece adapter                               |
|----------------|------------------------|----------------------------|---|
| 93225678       | PM Guard 1x230 50/60Hz | 10                         | Sensor G ¼ inlet pipe R 1 SCALA2 connect Rp 1 |

| PM GUARD                       |  |
|--------------------------------|--|
| Supply voltage                 | 230 V, 50/60 Hz                                |
| Max. operating temperature     | 60 °C  |
| Max. current                   | 10 A   |
| Weight                         | 0.95 kg  |
| Acceptable voltage fluctuation | ± 10 %   |
| Enclosure class                | IP 65  |
| Power cable                    | 1.5 m H07RNF cable (Schuko) 0.5 m H07RNF cable |

| Pressure sensor, T-PS16 |                           |
|-------------------------|---------------------------|
| Measurement range       | 0-16 bar                  |
| Accuracy                | ± 0.5 %                   |
| Output signal           | 4-20 mA                   |
| Pressure connection     | G ¼                       |
| Enclosure class         | IP 65                     |
| Electrical connection   | M12 waterproof outlet     |
| Material                | Stainless steel, AISI 304 |
| Cable length            | 1.5 m                     |



# Features and benefits

- Two-line visual display on operating panel to:
- Show water mains pressure for quick surveillance
  - Check SCALA2's current consumption
  - Log shut-off events and faults with time stamp
  - Set preset options

The wall-mounted Grundfos PM GUARD control device comes preassembled with all power connections and presets in-built.

All materials connected to the water from mains are drinking water compliant to new harmonised material lists within the EU.



1.5 m cable with CEE 7/7 plug (Schuko) for power supply

0.5 m cable with CEE 7/7 plug-in coupling (Schuko) for SCALA2

T-piece made of DW-compliant stainless steel for easy and quick installation

Pressure sensor with 2m cable (removable for T-piece assembly)

## Presets

PM GUARD comes with presets for each country where regulations apply – simply select your country on the display and PM GUARD does the rest.

If your local municipal restrictions differ, it's fast and easy to adjust settings manually. Minimum pressure, time delay and manual or auto reset settings can all be adjusted to the required setting.

| Country                               | Germany / Europe          | Netherlands      | Belgium |
|---------------------------------------|---------------------------|------------------|---------|
| Display setting                       | GER                       | NL               | BE      |
| Regulatory compliance                 | DIN 1988-500 / EN 806-2 * | NEN1006 (WB) 4.3 | -       |
| Cut-out pressure (bar)                | 1                         | 0.5              | 2       |
| Time delay for cut-out pressure (sec) | 10                        | 10               | 10      |
| Cut-in pressure (bar)                 | 1.1                       | 0.6              | 2.1     |
| Time delay for cut-in pressure (sec)  | 10                        | 10               | 10      |
| Automatic / Manual reset              | Auto                      | Manual           | Auto    |

\*The EN 806-2 is under review by CEN

## Event log

Any time PM GUARD shuts off the connected pump due to low water pressure, the event is logged and recorded with

a time stamp. You can access a shut-off event history at any time from the operating panel and show it to relevant authorities on the display, if required.

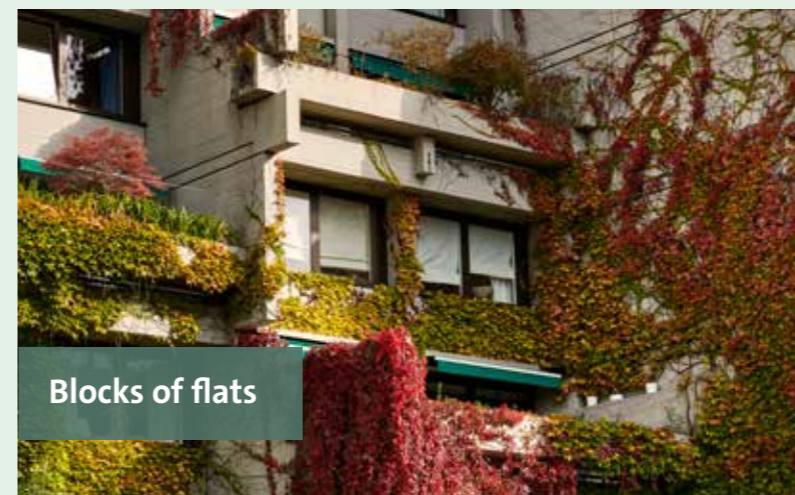
## Applications

PM Guard is typically installed with Grundfos SCALA2 in applications such as water supply systems and rainwater systems in:



### One-family houses

Up to 3 floors and 8 taps



### Blocks of flats



### Horticulture and gardening



### Agriculture

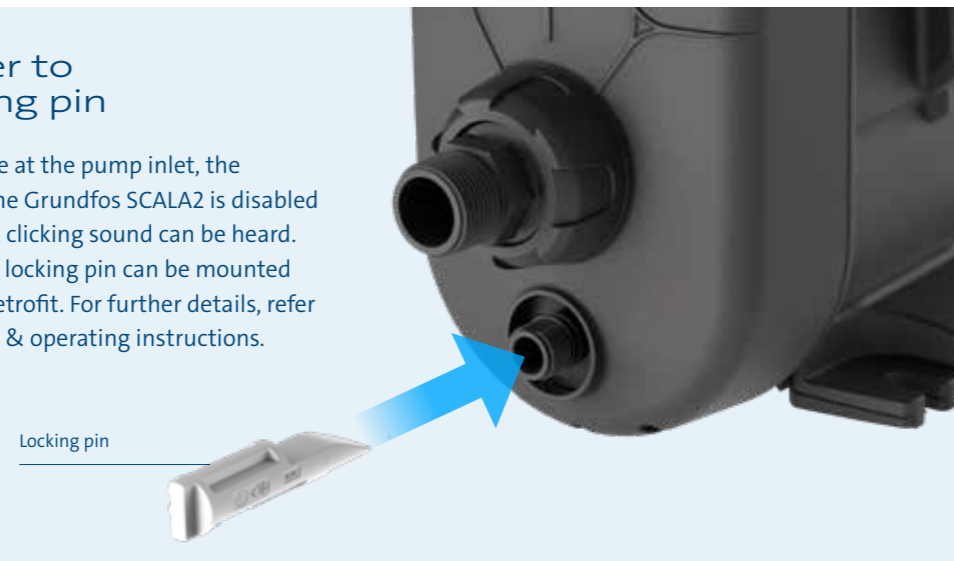


### Summer houses and cottages

# How to install

## ⓘ Check whether to mount a locking pin

If there is positive pressure at the pump inlet, the self-priming function of the Grundfos SCALA2 is disabled automatically and a slight clicking sound can be heard. To avoid this, the supplied locking pin can be mounted before an installation or retrofit. For further details, refer to the SCALA2 installation & operating instructions.



## 1. Location

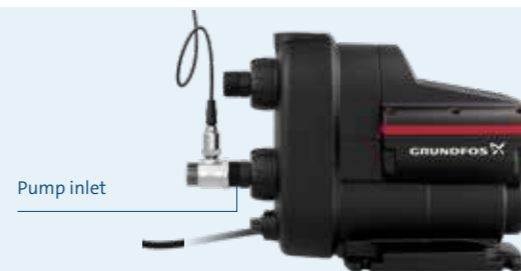
Install the product so that inspection, maintenance and service can easily be performed.



## 2. Position in the pipe system

Install the product on the inlet side of the pump.

The product can be fitted directly to the system manifold inlet port.



## 3. Electrical connection

Connect using the supplied cable and plug. SCALA2 to connect to the schuko socket. The schuko plug to connect to the power supply.



## 4. Start-up

At start-up, simply select your country and PM GUARD will automatically apply pre-settings according to local regulations.

The display will then show the inlet pressure from the water mains, current consumption, and a failure log with timestamps if the booster has been shut off due to low inlet pressure. Further programming can be carried out at any time (please refer to the Installation and Operation Manual).



# How to purchase

PM Guard and SCALA2 can be purchased from your local Grundfos reseller. To find one closest to you, follow the links below:

### Germany

GRUNDFOS GMBH  
Schlüterstr. 33  
DE-40699 Erkrath  
+49 211 929 69 38 30  
[www.grundfos.com/de/contact/where-to-buy](http://www.grundfos.com/de/contact/where-to-buy)

### Netherlands

Grundfos Nederland B.V.  
Veluwezoom 35  
NL-1327 AE Almere  
+31 88 - 478 63 36  
<https://www.grundfos.com/nl/contact/where-to-buy>

### Belgium

NV GRUNDFOS BELLUX SA  
Boomsesteenweg 81-83  
B-2630 Aartselaar  
+32 (0)3 870 73 00  
[www.grundfos.com/be/contact/where-to-buy](http://www.grundfos.com/be/contact/where-to-buy) (NL | FR)

To find your nearest Grundfos reseller in another country, visit your local Grundfos website. Details can be found at [grundfos.com/contact](http://grundfos.com/contact)

**Grundfos Holding A/S**  
Poul Due Jensens Vej 7  
DK-8850 Bjerringbro  
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[www.grundfos.com](http://www.grundfos.com)

