# **Grundfos iGRID Pressure Zone**

**District Heating** 



Possibility in every drop

### **Improve pressure control** In your district heating grid

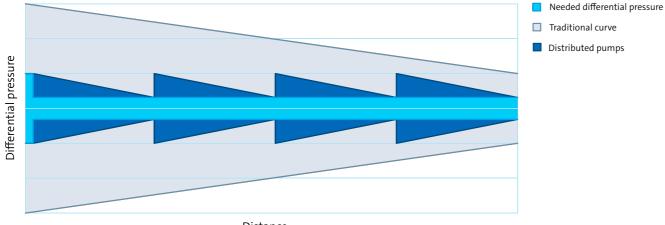
The Grundfos iGRID Pressure Zone is a plug'n'pump solution that is built in a modular way, making it cost-efficient and possible to customise to your needs.

You can choose only to place an iGRID Pressure Zone in the most critical / remote areas of your grid or you can place iGRID Pressure Zones throughout the grid.

By adding the pressure where needed, you can significantly reduce the overall pressure in parts of the grid, making it possible to lower your pressure class, extend the lifetime of installations in the grid, and reduce the size of your main pumps.

Combining the iGRID Pressure Zone with our iGRID Measure Points makes it possible to carry out demand-driven control based on real-time data in critical parts of the grid. As a result, it ensures the right supply of differencial pressure without the typical safety margin.

Overall, your pump energy costs will be reduced!



Distance

## How does it work?

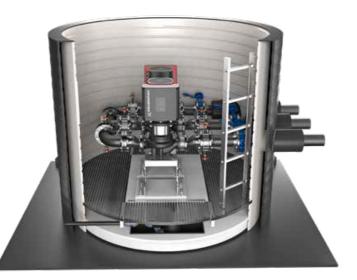
The iGRID Pressure Zone can be delivered as a plug'n'pump solution in a pit below the ground, in a cabinet above the ground or on a skid.

This means that the iGRID Pressure Zone comes with pumps, controls, pre-insulated pipe, valves, a ladder, a top cover etc. The pipes just need to be welded to the outside pipework and connected to the usual power supply cabinet above the ground.

The iGRID Pressure Zone comes with a built-in PID controller to ensure correct pressure and it can be controlled locally or via SCADA system..

By combining the the solution with certain accessories, the constant pressure control can be based on the real-time data in the critical points of the grid.

Further details can be found in our Installation & Operation manuals.



# **Product data**

Data	Pit	Cabinet	Skid
Pump type	TPE/CRE	TPE/CRE	TPE/CRE
Pressure rating	Up to 16 bar	Up to 16 bar	Up to 16 bar
Media temperature	0 - 110, ETO to 120	0 - 110, ETO to 120°C	0 - 110, ETO to 120°C
Ambient temperature	0 - 40 °C	0 - 40 °C	0 - 40 °C
Maximum motor power	11 kW standard, maks 22 ETO	11 kW standard, maks 22 ETO	11 kW standard, maks 22 ETO
Power supply	3 × 400 V 50 Hz	3 × 400 V 50 Hz	3 × 400 V 50 Hz
IP rating	54	54	54
Pipe connection	Welding joint/ flanged	Welding joint/ flanged	Welding joint/ flanged
Number of pipes	2	3	3
Pipe size	DN 50 - 100	DN 50-200	DN 50-200
Top cover	Light aluminium / Traffic cover	-	-
Diameter	2000 mm	On request	On request
Height	std 2000mm - or on request	On request	On request

#### **Built-in Options**

- Temperature and pressure sensors
- Flow meters
- Pressure gauges
- Pipe insulation covers
- Level sensor (only in pit)

#### Solution add-ons

- Grundfos iGRID Building Bypass
- Grundfos iGRID Pit Measure Point
- Grundfos iGRID Pressure Optimiser

For more information, see relevant product brochures

- Grundfos iGRID Building Measure Point

### Grundfos iGRID is a solution range for district heating

With this range we fight heat losses and prepare for utilisation of renewable energy sources through intelligent temperature control.

By creating zones with mixing loops, temperatures can be lowered to meet the actual demands in those zones and thereby deliver exactly the heat energy needed – nothing more and nothing less!

Find out more about the Grundfos iGRID concept by contacting your local Grundfos Sales Company or visit grundfos.com form more information.

