THE NEW TP/TPE 25 BAR RANGE

# HIGH-PRESSURE PERFORMANCE FOR HEATING AND COOLING APPLICATIONS



# HIGH APPLICATION PRESSURE? NO PROBLEM

Adding to the world's most comprehensive selection of high- efficiency in-line pumps, the new TP/TPE 25 bar range is designed for a wide range of heating and cooling applications. The robust pumps deliver world-class energy-efficient performance in installations with pressure ratings up to 25 bar

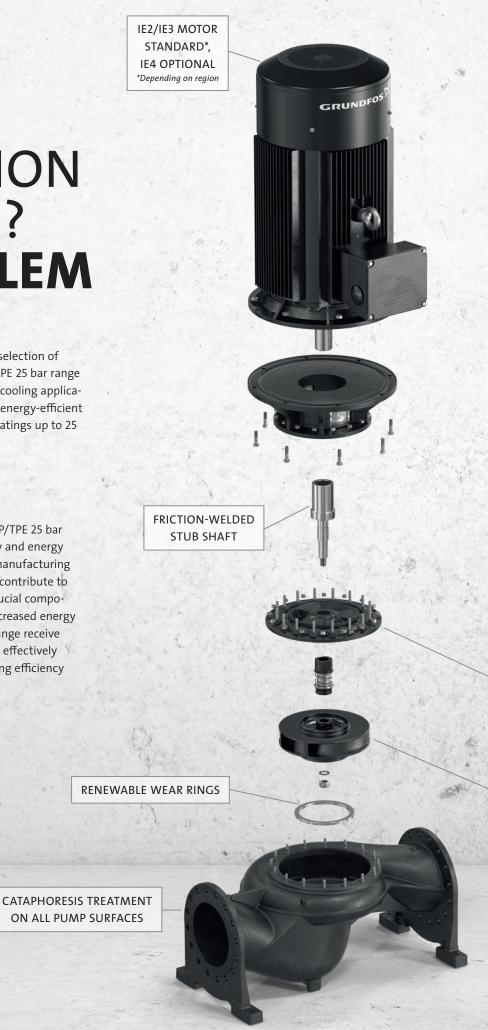
## BUILT-IN RELIABILITY AND ENERGY EFFICIENCY

Like the rest of the TP/TPE series, the new TP/TPE 25 bar range offers features that increase reliability and energy efficiency. For example, extremely narrow manufacturing tolerances in the impeller and pump casing contribute to optimised flow geometries for these two crucial components, resulting in minimal backflow and increased energy efficiency. And all surfaces of the TP/PTPE range receive cataphoresis surface treatments, protecting effectively against corrosion and providing high pumping efficiency in the long term.

#### **APPLICATIONS**

The Grundfos TP/TPE range is suitable for the following main application areas.

- HEATING
- DISTRICT HEATING
- · AIR-CONDITIONING
- · DISTRICT COOLING
- INDUSTRIAL COOLING



## ENGINEERED FOR RELIABLE LONG-TERM PERFORMANCE

Key benefits of the Grundfos TP/TPE 25 bar range

#### DRAMATICALLY REDUCED VIBRATION LEVELS

FRICTION-WELDED STUB SHAFT

The stub shaft is friction-welded to create a completely stable mechanical unit. This reduces vibration levels dramatically, and the stability of this all-in-one solution prolongs the service life of both shaft seal and bearings.

#### HIGH QUALITY SURFACE TREATMENT

CATAPHORESIS TREATMENT ON ALL PUMP SURFACES All surfaces are cataphoresis treated using a Powercron® cathodic electrocoating and a zinc phosphate coating. This ensures protection against corrosion. The inside surfaces are treated as well, prolonging pump service life and ensuring high pumping efficiency in the long term.

UNIQUE SHAFT SEAL CHAMBER DESIGN

MECHANICALLY AND HYDRAULICALLY **BALANCED IMPELLER** 

#### **BUILT-IN ENERGY EFFICIENCY**

IE2/IE3 MOTOR STANDARD, IE4 OPTIONAL All pump models come with IE2/IE3 compliant motors as standard (depending on region) and can optionally be delivered with an IE4 compliant motor, ensuring maximum efficiency in any application.

#### MINIMISED VIBRATION AND AXIAL FORCES

MECHANICALLY AND HYDRAULICALLY BALANCED IMPELLER

The pump impeller has been carefully mechanically and hydraulically balanced, minimising vibration levels and axial forces, and prolonging motor bearing and shaft seal service life.

#### MAXIMUM PUMP SERVICE LIFE

RENEWABLE WEAR RING

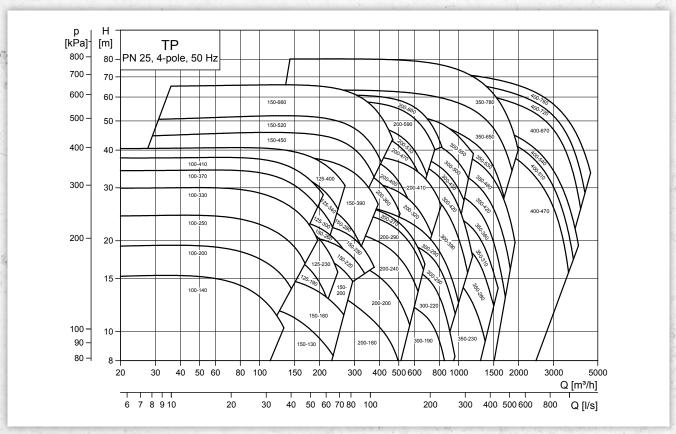
All pump models feature renewable wear rings that can be replaced as necessary, prolonging pump service life.

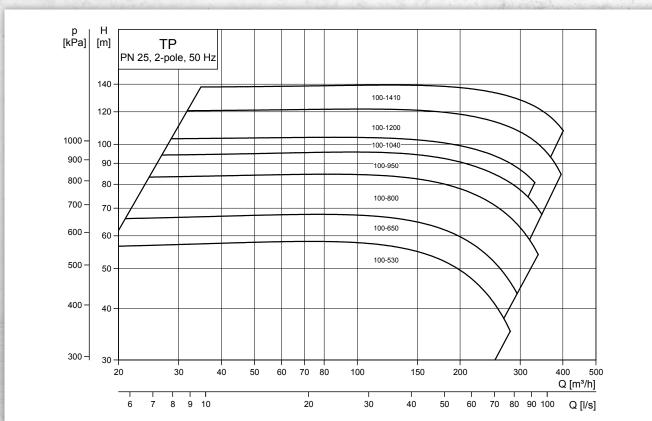
#### NO EXTERNAL PIPING NEEDED

UNIQUE SHAFT SEAL CHAMBER DESIGN

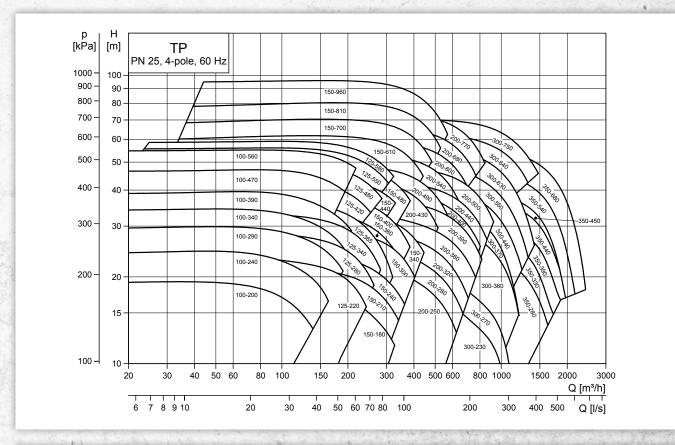
The unique design of the shaft seal chamber removes the need for external piping. It also ensures optimal water circulation, prolonging the service life of the shaft seal.

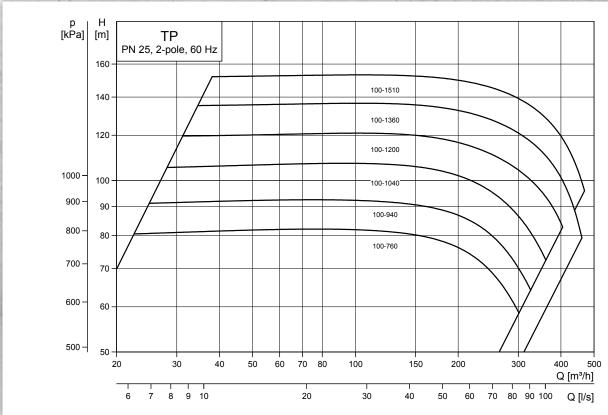
## **TP/TPE 50 Hz PUMP TYPES**





### TP/TPE 60 Hz PUMP TYPES





# TECHNICAL SPECIFICATIONS

The TP/TPE pumps are non-self-priming, centrifugal volute pumps with in-line suction and discharge port and a vertical shaft.

|                    | 50 Hz range                     | 60 Hz range                   |
|--------------------|---------------------------------|-------------------------------|
| Flow rate          | 30 to 4,500 m³/h                | 30 to 2,500 m <sup>3</sup> /h |
| Head               | 10 to 140 m                     | 15 to 150 m                   |
| Motor              | 2.2 to 630 kW<br>(IE2/IE3/IE4)* | 4 to 315 kW<br>(IE2/IE3/IE4)* |
| Pressure rating    | PN25                            | PN25                          |
| Medium temperature | -40 to 150° C                   | -40 to 150° C                 |

<sup>\*</sup>Depending on region

#### TWO HOUSING DESIGNS

The TP/TPE 25 bar range comes in two housing designs with different mounting options. On DN100 to DN200 units, the mounting holes are placed under the volute area, while the holes are placed in the flanges on DN300 and DN350 units.

## OPTIONAL BUILT-IN FREQUENCY CONVERTER

For motor ratings up to and including 22 kW (2-pole) and 18.5 kW (4-pole), pumps can be supplied with Grundfos MGE motors with built-in frequency converters. These pumps are named TPE while pumps with standard motors are named TP

- Advantages of a built-in frequency converter include easy installation and commissioning, and space savings as motor, frequency converter and motor are combined in one compact unit.
- For more information, please contact Grundfos.





# GET THE PUMP YOU NEED

For more information on the TP/TPE 25 bar range, and other energy-efficient pumping solutions from Grundfos, contact your nearest Grundfos dealer, or visit www.grundfos.com.

#### **FIND YOUR SOLUTION IN** THE GRUNDFOS PRODUCT CENTER

Grundfos Product Center is an online tool that helps you find and specify pumping solutions for all applications. You can search for a new pump by size, application or liquid, find a replacement for an existing pump, or browse our product catalogue.

The search results provide you with all key technical features of the pumps as well as an overview of the life-cycle cost for a 15-year period, allowing you to quickly estimate the total cost of ownership of the pump.

Go to the Grundfos Product Center by visiting www.grundfos.com and clicking the link to the Product Center.

