

Intelligent, Efficient, In-line Pumping

GRUNDFOS TPE3

The Grundfos TPE3 joins the Grundfos commercial products line as not only the smartest in-line pump, but also one of the easiest to use. The TPE3 offers increased flow and pressure, as well as breakthrough efficiency, in a plug-and-pump design.

With features that simplify installation, commissioning, operation and maintenance, the TPE3 is a logical choice for almost any commercial heating and cooling application. Adaptive control modes, integrated sensors, hassle-free communication capabilities and an ultra-efficient permanent magnet motor combine to provide simplified, intelligent pumping that can save you up to 85% in energy consumption compared to a typical circulator.



KEY FEATURES AND BENEFITS

- **Plug-and-pump** with features like built-in temperature and pressure sensors, which eliminate the need for additional sensors in most cases
- **Intelligent control modes** simplify the optimization of pump performance using temperature, pressure and flow to deliver unrivaled efficiency automatically
 - **Differential temperature** can control system performance based on ΔT with just one additional temperature sensor
 - **Proportional pressure** adjusts pressure when the setpoint is known, to match flow to actual demand and decrease energy consumption with integrated sensor
 - **AUTOADAPT** controls proportional pressure even when the setpoint is unknown in order to maximize efficiency
 - **FLOWADAPT** monitors flow and ensures that the flow rate never exceeds the FLOWLIMIT value, eliminating the need for a pump balancing valve
- **Advanced permanent magnet motor** offers an additional 7-10% decrease in energy cost over NEMA Premium, operating at IE5—the world's highest efficiency rating
- **Wireless communication** allows connection of up to four single TPE3 pumps, enabling cascade control for wider range and greater efficiency
- **Easy BMS integration** available with snap-in CIM modules that follow LON, Profibus, Modbus, SMS/GSM/GPRS and BACnet standards and provide over 30 points of data and control using single poll functionality
- **I/O package** includes multiple replays and inputs for accurate system monitoring and optimal pump regulation
- **Heat energy monitor** is built-in to provide system performance data and to help avoid system imbalances

- **High quality user interface** provides simple setup, commissioning and monitoring on TFT color display
- **Cataphoresis surface treatment** protects against corrosion, while the same treatment inside the pump keeps efficiency high
- **Siliconcarbide shaft seal** is Grundfos-designed and manufactured for reliability

APPLICATIONS

- Hydronic Heating and Cooling
 - Single-pipe Heating Systems
 - Primary/Secondary
 - Heat Recovery Systems
 - Distributed Pumping
 - District Energy Systems
- Boiler Bypass Pumps
- Domestic Hot Water Recirculation

TECHNICAL DATA

TPE3 (Single & Dual Head Models)	
FLOW, Q:	max. 500 gpm (114 m³/h)
HEAD, H:	max. 80 ft (24 m)
MOTOR:	1-Phase: 200–240V 3-Phase: 440–480V
WORKING PRESSURE:	max. 145 psi
LIQUID TEMPERATURE:	-13°F to 248°F (-25°C to 120°C)
APPROVALS:	NSF372 (Stainless Steel ONLY)

Available Materials:
Cast Iron – Standard
Stainless Steel – Single pumps only

Visit grundfos.us/pei to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.