

Intelligent, Efficient, Inline Pumping

GRUNDFOS TPE3

The Grundfos TPE3 joins the Grundfos commercial products line as not only the smartest inline 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 imbalance
- **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
- **Available materials:**
 - Cast Iron – Standard for single and dual pumps
 - Stainless Steel – Single pumps ONLY

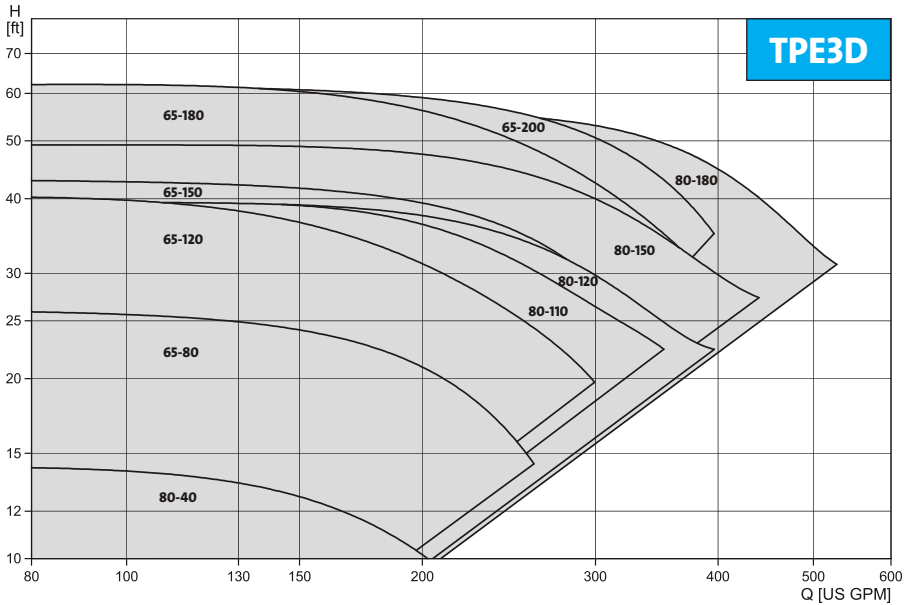
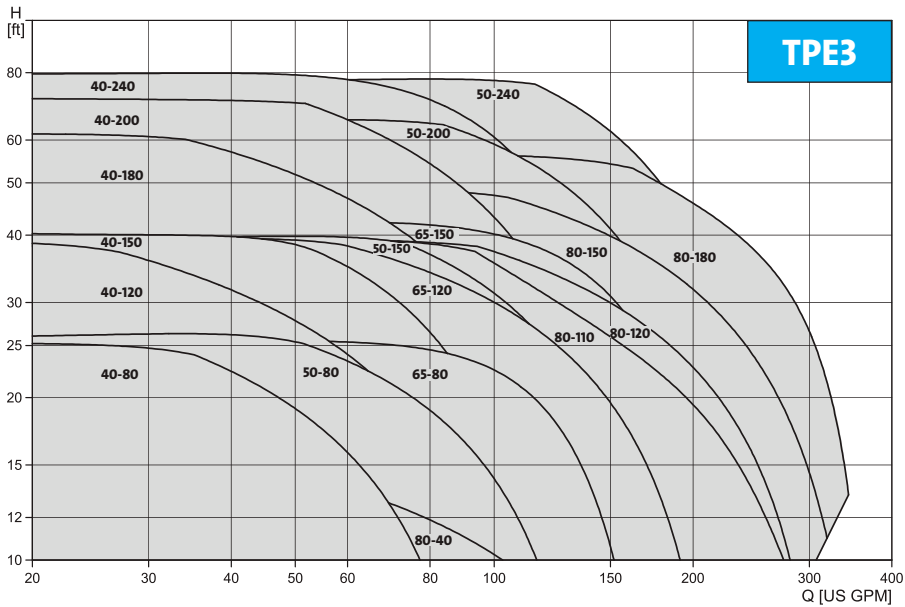
APPLICATIONS

- 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 and Dual Head Models)			
FLOW, Q:	max. 500 gpm (114 m³/h)		
HEAD, H:	max. 80 ft (24 m)		
MOTOR:	1/60/200–240V	3/60/200–240V	3/60/440–480V
WORKING PRESSURE:	max. 232 psi		
LIQUID TEMPERATURE:	-13°F to 248°F		
AMBIENT TEMPERATURE:	1/60/200–240V AND 3/60/440–480V: -4 °F to 122 °F		3/60/200–240V: -4 °F to 104 °F
APPROVALS:	NSF372 (Stainless Steel ONLY)		

PERFORMANCE DATA



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