PRODUCT DATASHEET

High-Pressure Dual-Cylinder Precision Pump

Pulse-free continuous flow to 1,400 bar for core floods and PVT

Product page





Close-up: dual cylinders and valve manifold

OVERVIEW

The Tech Inc. High-Pressure Dual-Cylinder Precision Pump delivers continuous, pulse-free flow at very high pressure for core flooding, PVT and permeability work. Two servo-driven cylinders work in turn: while one delivers, the other refills and pre-pressurises, so the flow never stops.

TYPICAL DESIGN DATA

Pressure	To about 700, 1,000 or 1,400 bar
Flow	About 0.001 to 30 mL/min, continuous
Modes	Constant flow, constant pressure, ramp and receive
Codes and standards	Pressure parts designed with a safety factor on burst; electrical to IEC 61010
Volume resolution	Nanolitre-level displacement measurement
Wetted materials	316 stainless, Alloy C-276 or titanium
Interface	Ethernet or RS-485, with software and open protocol

MODELS AND CAPACITIES

- **TI-DCP-700** – to about 700 bar, about 0.001 to 30 mL/min
- **TI-DCP-1400** – to about 1,400 bar, about 0.001 to 10 mL/min
- **TI-DCP-1000** – to about 1,000 bar, about 0.001 to 20 mL/min
- **TI-DCP-H** – heated cylinders

Indicative pressure and flow range.

ORDERING CODE

Example **TI-DCP-1000-C-2**: **1000** maximum pressure, bar; **C** material: S stainless, C C-276, T titanium; **2** number of pumps.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** heated cylinders; floating-piston transfer vessels; second pump for paired operation; integration into an existing rig; seal kits.

KEY ADVANTAGES

- **Pulse-free** – two cylinders, continuous flow
- **Accurate volume** – precise displacement measurement
- **Very high pressure** – to about 1,400 bar
- **Corrosion-resistant** – C-276 or titanium

How to cite: High-Pressure Dual-Cylinder Precision Pump (model TI-DCP; Tech Inc., Vaughan, Ontario, Canada). www.techincresearch.com/product-page/high-pressure-dual-cylinder-pump

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