Fluid Study/Mechanical Systems

Educational Training Equipment for the 21st Century

Bulletin 664-6B

H-6646 Gear Pump Trainer

Purpose

The Hampden MODEL H-6646 Gear Pump Trainer provides a hands-on introduction to the gear pump and its operation. The trainer uses sensors which interface with the Hampden MODEL H-6648 Control Interface Module sold separately.

Description

The Hampden MODEL H-6646 Gear Pump Trainer is bench-top mounted consisting of a storage tank, pump, flow control valve, orifice plate, and sensors. When interfaced with the MODEL H-6648 Control Interface Module, it is linked to any laptop computer (included with Model H-6648) via its USB port.



Hampden Model H-6646 Gear Pump Trainer

Specifications

Base:

14-gauge furniture stock steel finished in instrument tan texture.

Pump:

Type: Bronze gear pump Maximum Flow: 6-gpm Maximum Pressure: 100 psi

Valves:

Ball, (2) required Needle, (1) required

Tank:

Nalgene, 10-gallon with cover

Sensors:

Flow - Orifice Plate Temperature - Type "T" thermocouple, with 8 foot wire and plug

Transmitters:

Differential/Pressure Transmitter for flow with 4-20mA output, with 8 foot wire and plug.

Pressure Transmitter with 4-20mA output, with 8 foot cord and 5-pin plug.

All Hampden units are available for operation at any voltage or frequency



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