Hydraulic Power Supply with Smart Controller (HPS)

- Variable flow / constant pressure
- Flow capacities from 3.8 LPM (1 GPM) to 400 LPM (105 GPM)
- 21 MPa (3,000 psi) standard pressure and 34 MPa (4,500 psi) optional.
- 208-480 VAC (3 phase) and 50/60 Hertz operation
- Standard monitoring of pump fluid level, oil temperature, filter condition, and 3-phase electrical power (phase saver)
- Remote high/low pressure control
- On-demand water cooling control (air cooling optional)
- Control software provides temperature prediction and detailed diagnostic explanation of pump conditions

DESCRIPTION

GCTS has developed a variable volume/constant pressure hydraulic power supply that will meet all of your testing needs and provides built-in computer monitored safety features. These high performance pumps adjust the flow rate according to the demand, providing a very low operation cost in most testing applications where periods of low flow demand are common. All units include oil filter, high-pressure accumulator, heat exchanger, oil pressure gauge, oil level gauge, and temperature gauge. GCTS Hydraulic Power Units can be ordered to supply flow rates as high as 400 liters/minute and working pressures up to 34 MPa.

Added features include high/low pressure selection and an on screen readout of the pumps fluid level, temperature, and pressure. Preventative warning messages and instantaneous shutdown of the pump is provided if a critical limit has been detected. Time to reach critical limits, based on actual temperature and oil level trends, is automatically predicted by the software to prevent pump shutdown during tests on important or expensive specimens.

3-phase electrical power supply is continuously monitored to prevent the pump from being damaged if only one of the electrical lines fails (phase saver feature).

A system status screen is available which fully explains the cause of a system shut down so that remedial action can be easily taken. If a shutdown does occur, the self-diagnostic report allows detecting and correcting the problem easily.

The GCTS system software is designed to provide instantaneous calculation of the maximum system axial load based on the effective area of the system actuator and the detected pressure from the hydraulic power supply.

Also available are sound insulation enclosures and circulation water chillers to reduce water use for cooling.

SPECIFICATIONS

Contact GCTS