

Servocon Digital Controller Features & Description

a. SE1030: DC Transducer Conditioning and Servo-Valve Drive Card

The Transducer Conditioning Card provides the following functions: -

- Provides ± 10 Volt signal from mV or Volt input for given range of transducers in the system, then processed via 16-bit acquisition system into 32-bit control system.
- Excites transducer with regulated DC Voltage.
- Adjustable hardware signal filtering.
- Servo-Valve Amplifier (Current).
- Inner loop conditioning. Cont'd/

b. SE1011: AC Transducer Conditioning and Servo-Valve Drive Card

The Transducer Conditioning Card provides the following functions: -

- Provides ± 10 Volt signal from mV or Volt input for given range of transducers in the system, then processed via 16-bit acquisition system into 32-bit control system.
- Excites transducer with regulated AC Voltage.
- Adjustable hardware signal filtering.
- Servo-Valve Amplifier (Current).
- Inner loop conditioning.

c. SE100: DC Transducer Conditioning Card

The Transducer Conditioning Card provides the following functions: -

- Provides ± 10 Volt signal from mV or Volt input for given range of transducers in the system, then processed via 16-bit acquisition system into 32-bit control system.
- Excites transducer with regulated DC Voltage.
- Adjustable hardware signal filtering.

d. SE130: Dual AC Transducer Conditioning Card

The Transducer Conditioning Card provides the following functions: -

- Excites and conditions 2 AC Transducers.
- Provides ± 10 Volt signal from mV or Volt input for given range of transducers in the system, then processed via 16-bit acquisition system into 32-bit control system.
- Excites transducers with regulated AC Voltage.
- Adjustable hardware signal filtering.

e. SE4033: Watchdog and Utility Card

The Watchdog and Utility Card provides the following functions: -

- Generates a 10 Hz watchdog for hardware monitoring.

- Load Cell Strain Gauge bridge checking.
- Hydraulic power pack interfaces.

Controller Specification (Entry Level):-

- Two Channel Conditioning. (Expandable to 6 Channels. If more conditioning is required, then a larger rack can be supplied to accept more channels).
- Two Modes of Control. (Expandable to 4 Channels - 1 can be External I/P).
- Watchdog Timer.
- Load Cell Calibration Check System.
- Pump/Pressure Stop/Start System.
- Integral Function Generator. (0.01→100 Hz).
- PID loop speed of 50μs
- Programmable Ramp Profiler.
- Block Programmer.
- Full Adaptive Amplitude Control on Fatigue Tests.
- Data Logging on Condition Channels. (Logging on extra channels is available).
- 10Hz logging frequency during Ramp Tests.
- Peak, Trough, Cycle Count and Elapsed Time Logging during Fatigue Tests.
- Remote Actuator Control via Button Box.
- User-friendly Software.
- Fatigue and Static Trips on Mode of Control Channels.
- The system will be supplied and installed with traceable calibration as part of the contract.