

Product Information

9610 Profile Digital Controller BPS-CO9610.00.01



Features and Benefits

- Wide range of different transducers. DC devices (e.g. load cells and strain gauges), AC devices (e.g. LVDTs, digital transducers) and high-level inputs (± 10 V full scale) can be used.
- Precise measurement values. Transducers can be linearized and calibrated by a table in 32-bit format.
- Integrated data acquisition. The 9610 profile controller with additional conditioning cards can process up to 8 signals.
- Flexible, easy to configure. Any transducer may be used for control or data acquisition.
- Derived channel. The unit employs a derived channel for control and acquisition that is mathematically created and operated at the control loop frequency.
- Transducer mapping. This feature allows an input to be displayed as a user defined output, enabling the working range of a transducer to be extended or non-linear responses output.
- Enhanced control accuracy. Every 100 μ s the electronic refreshes the control value. This 10 kHz control loop ensures that the system is following the commanded waveform.
- High precision with automatic range selection. The 19-bit resolution of all of our transducers ensures the desired precision.
- Hand-held remote unit. Available for each actuator, the hand-held unit allows the user to remotely move an actuator without using the PC, facilitating specimen setup for testing.
- Storage of loading profile without PC. With the 16 MB on-board memory option, approximately 4 million turning points can be stored. These points can be allocated to different profile names.
- Versatile sequencing of profiles. The order in which the profiles can be executed can be altered quickly and easily.
- Greater data storage capacity. The memory capacity of this controller can be freely divided between data acquisition and loading profiles

Applications

The 9610 digital electronic controls a linear or rotary servo-hydraulic actuator, used in a testing frame, test stand or separate system.

This servo-controller performs static, single-shot and dynamic testing of materials, components, assemblies and structures.

Additionally profiles can be saved and replayed to simulate different load cases.

Advantages

This controller offers enhanced flexibility in control and data acquisition, with highest levels of specimen and transducer protection.

The 9610 is accessed via a standard personal computer (PC) and is supported by the *testXpert*[®] or Workshop software package for a wide range of testing procedures. This software-controller combo not only assures test consistency and test and data integrity, it also offers ease of use.

Product Information

9610 Profile Digital Controller BPS-CO9610.00.01

Charakteristic	Description
Control Loop Rate	10 kHz
Conditioning	For strain gauge, LVDT, and digital devices 8 feedback channels possible, one digital channel included
Control	32-bit command waveform generation Any connected transducer can be used for control Able to accommodate derived transducers, which can be used in the 10 kHz control
Data Skew	0.0125 milliseconds channel to channel Equates to less than 0.5° at 100 Hz
Data Acquisition	10 kHz per transducer, 19 bit on all channels 80,000 points in total available (10,000 per transducer)
Interfaces	2 free selectable analog signal outputs (0...10 V) 8 general purpose opto-isolated inputs 8 general purpose opto-isolated outputs RS 232/422 19.2/115 kBaud 24 V hydraulic status control Hydraulic On/Off, Pressure On, Pressure Off
Power Supply	200, 220, 240 V +10% - 6% 47...63 Hz
Environmental Conditions	0...40 °C (on-board sensors)
Dimensions (D x W x H)	525 x 255 x 590 mm
Weight	40 kg

Prerequisite Equipment	Item no.	Option
Signal Conditioning		- Supplied with 150 Hz as standard; higher responses available on request
- For DC devices such as load cells and extensometers (A10)	BPS-CO9610.10.xx	
- For AC devices such as LVDTs (stroke transducers) (A20)	BPS-CO9610.20.xx	- Phased-matched conditioning filters
Actuator Cable Set (includes load cell, position transducer and servo valve)		Supplied as standard in 5 m length; other lengths available on request.
- For linear actuators	BPS-CO9600.70.xx	
- For rotary actuators	BPS-CO9600.74.xx	
Hydraulic Cable Set	BPS-CO9600.75.xx	Supplied as standard with 5 m length; other lengths available on request.
- For connection to hydraulic power supplies (pumps)		
Software		For application software, please consult a sales representative.
- testXpert®	BX169000.00.xx	
- Workshop software	BRA3.952000.xx	
- Profile Software package	BRA3.952337.0	

Optional Equipment	Item no	Option
Increased Memory for data acquisition and profile	BPS-CO9600.82.xx	Options available to 3,924,000 points
Analog Input (A30)	BPS-CO9610.30.xx	Available with auto recognition
- ±10 V full-scale; replaces a conditioned input		
Second Digital Interface	BPS-CO9600.40.00	
- Replaces an analog input		
Sample and Hold Option	BPS-CO9600.81 .xx	Requires phase-matched filters
- Allows synchronous captures on selected channels		