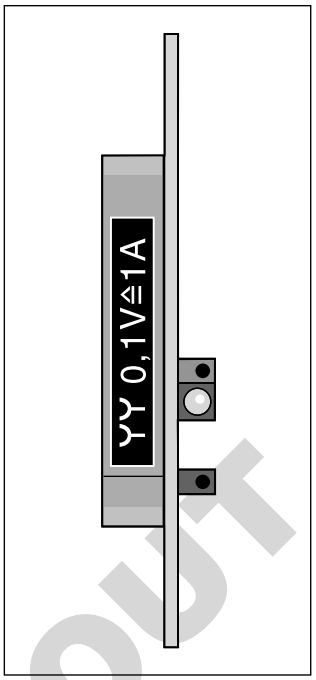
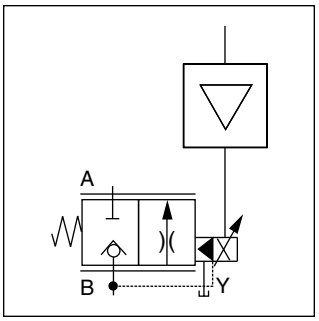
General Description

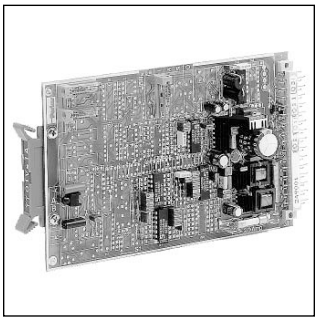
Series ET102 electronic module is used to control TDA and TEA proportional throttle valves configured with the 'L' solenoid option. For valves configured with the 'M' solenoid option, refer to ET154. The module accepts a 0 to 10 volt command signal, and produces a proportionally linear output current used to drive the valve's proportional solenoid. Note that the linearity of the valve itself determines the linearity of the system. Refer to the specific valve data for actual linearity performance.

Features

- Processing and amplification of the externally supplied positive set-values into output signals for the control solenoid.
- Can be combined with EZ150 or external programmable control.
- Pulsed amplifier power stage with constant current control.
- Dither generator with applied frequency to improve static characteristics.
- Diagnosis by means of diagnostic sockets as well as light diodes for indicating working conditions.





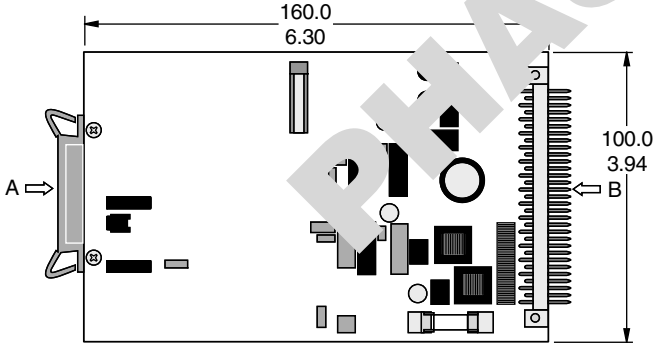


Specifications

Connection	31 Pole Male Connector, DIN 41617
Power Supply	Regulated: 18-26V Unregulated: 22-38V
Power Required	40 VA
Command Signal	0 to +10 VDC and 0 to -10 VDC
Input Select Voltage	5 to 30 VDC
Reference Outputs	+10 VDC 10 mA
Max. Solenoid Output Current	1.05A with set value 10V
Ambient Temp. Range	0°C to +70°C (+32°F to +158°F), Standard Range
Ramps	Not available
Shielded Cable Connections	Supply connections + valve: 1.5 sq. mm (16 AWG) Command Signals: 0.5 sq. mm (20 AWG)
Fuse	2A medium lag, DIN 41571/5x20mm

Dimensions

Inch equivalents for millimeter dimensions are shown in (**)



For new applications:
ET102: Refer to PCD00A-400

Ordering Information

ET — Electronic Module Pressure Valve

☐ — Valve Size

Code	Valve	Sol.
00	TDA...LAF E16 to E50	35mm
00	TEA...LAF E16 to E50	35mm
99	TDA...LAF E63 to E100	60mm
99	TEA...LAF E63 to E100	60mm

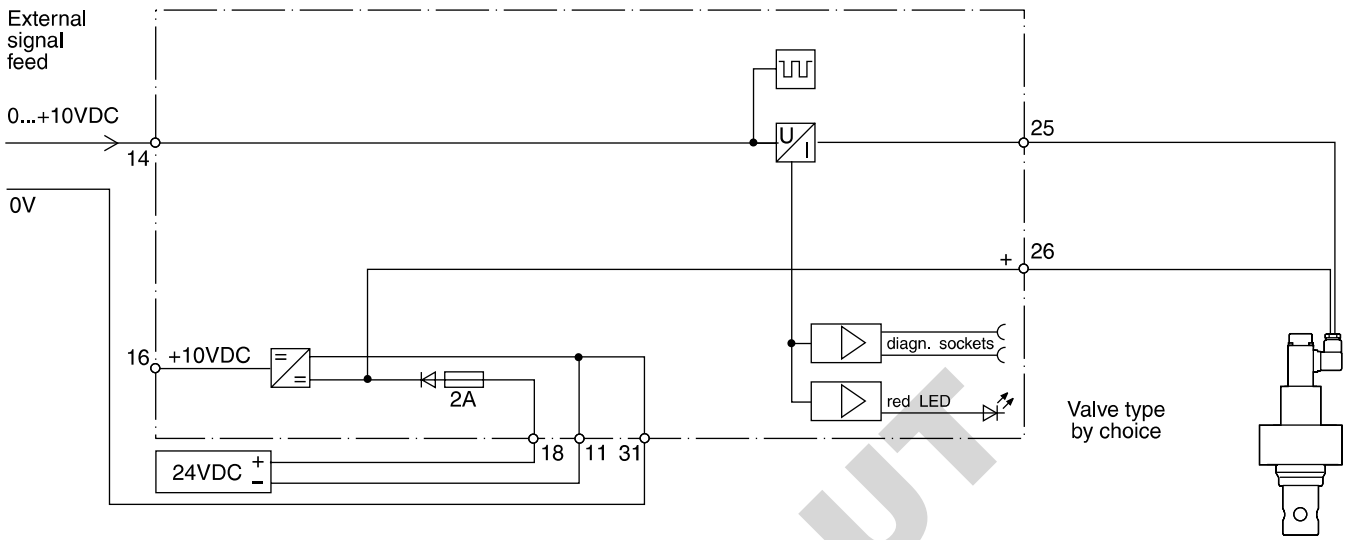
102 — Module Type

Code	Description
102	Amplifier — Basic for valves with 'L' solenoid option

⌐ ¬ — Design Series

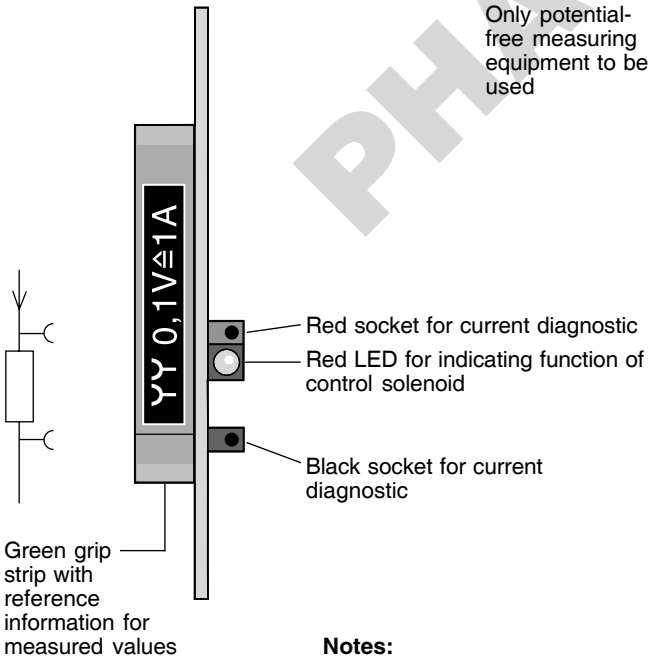
NOTE: Not required when ordering.

Block Diagram



D

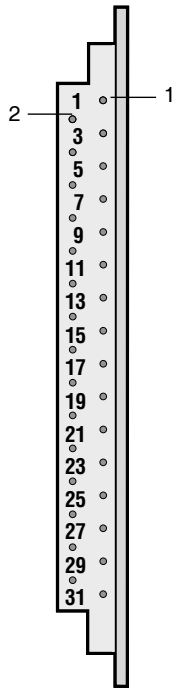
Operating and Diagnostic Elements (Elevation A)



Notes:

- Turn off the electrical power to this board whenever the hydraulic supply to the valve is not on.
- Always turn off the power to this board before removing it from the card holder.

Connector (Elevation B)



11 Reference potential 0V supply
14 Input command voltage 0...+10VDC
16 Output +10V reference
18 Input 24 VDC supply
25 Output control solenoid
26 Output control solenoid
31 Reference potential 0V set value

ET102.p65, dd

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