

### General Description

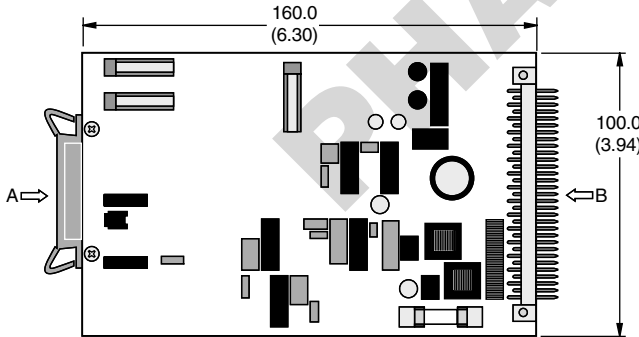
Series ET105 electronic module is used to control TDA and TEA proportional throttle valves configured with the 'L' solenoid option. For valves configured with the 'M' solenoid option, refer to ET154. The module accepts a 0 to 10 volt command signal, and produces a proportionally linear output current 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.
- MIN/MAX limiters for matching the working range to the full set value range.
- Pulsed low-loss amplifier power stage with supporting constant current control for constant, temperature-independent, solenoid forces.
- Dither generator with applied frequency to improve static characteristics.
- Diagnosis by means of diagnostic sockets as well as LEDs for indicating working conditions.

### Dimensions

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



For new applications:  
ET105: Refer to PCD00A-400

### Ordering Information

**ET**  
Electronic Module  
Pressure Valve

**□**  
Valve Size

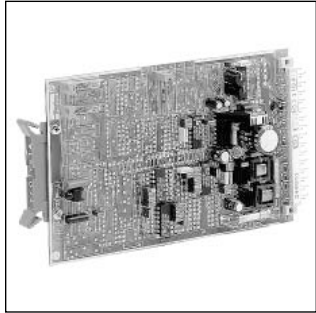
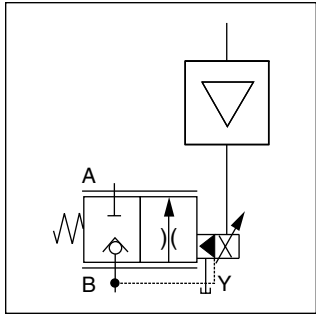
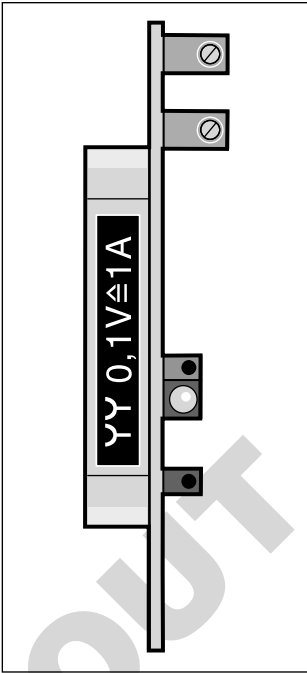
**105**  
Module Type

**□ □**  
Design  
Series

NOTE:  
Not required  
when ordering.

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

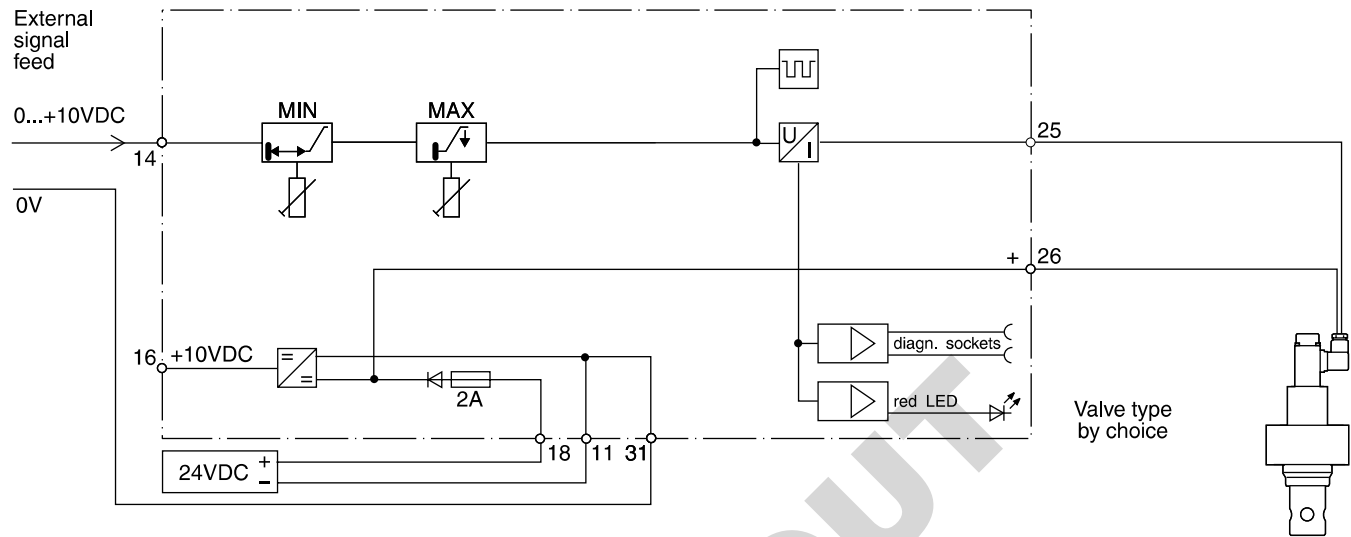
Code	Description
105	Amplifier, adjustable MIN/MAX limits for valves with 'L' solenoid option



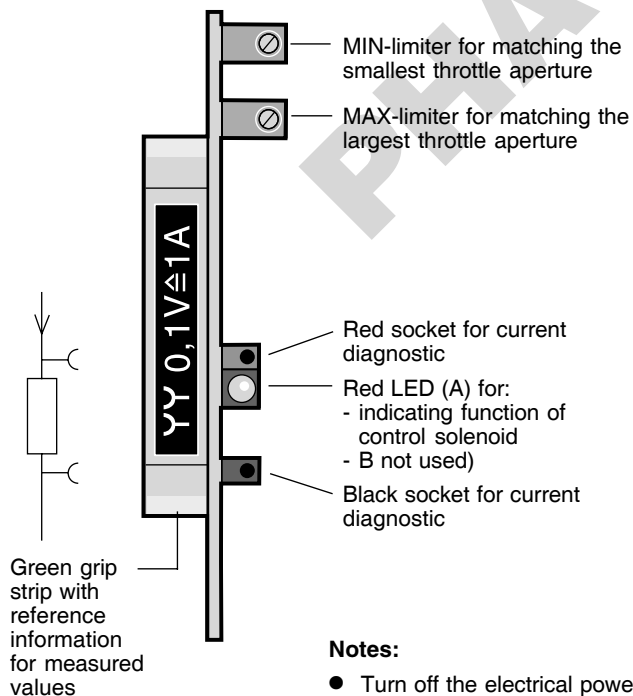
### Specifications

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
Reference Outputs	+10 VDC 10 mA
Max. Solenoid Output Current	1.05A at 10V set value
Ambient Temp. Range	0°C to +70°C (+32°F to +158°F), Standard Range
Ramps	Not available
Shielded Cable Connection	Supply connections + valve: 1.5 sq. mm (16 AWG) Command Signals: 0.5 sq. mm (20 AWG)
Fuse	2A medium lag, DIN 41571/5x20 mm

## Block Diagram



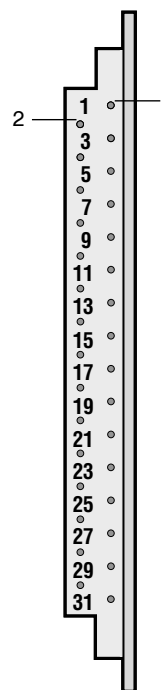
## Operating and Diagnostic Elements (Elevation A)



### 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...+10 VDC
- 16 Output +10V reference
- 18 Input 24 VDC supply
- 25 Output control solenoid
- 26 Output control solenoid
- 31 Reference potential 0V set value

Only potential-free measuring equipment to be used

ET105.p65, dd