

General Description

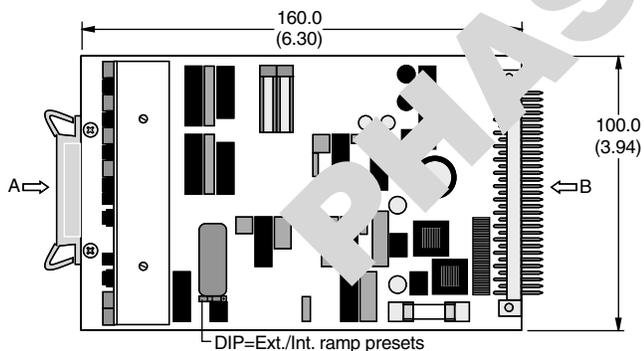
Series ET101 electronic module is used to control non-feedback TDA and TEA proportional throttle valves configured with the 'L' solenoid option. For valves configured with the 'M' solenoid option, refer to ET154. The module accepts up to 4 on/off input signals which select one of four speeds set by potentiometer adjustments on the card. Two ramp adjustments provide control of actuator acceleration and deceleration.

Features

- Modulated output signals to the control solenoid through four selectable set-values and ramp potentiometers, adjustable from 0 to 100%.
- DIP switch from internal ramp generation to external ramp setting.
- 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

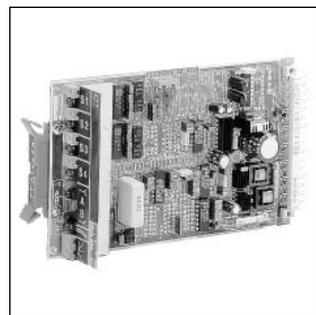
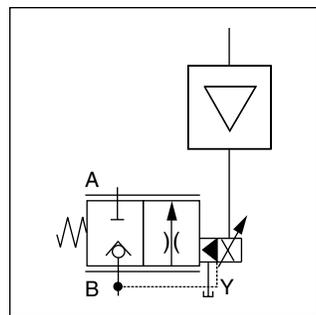
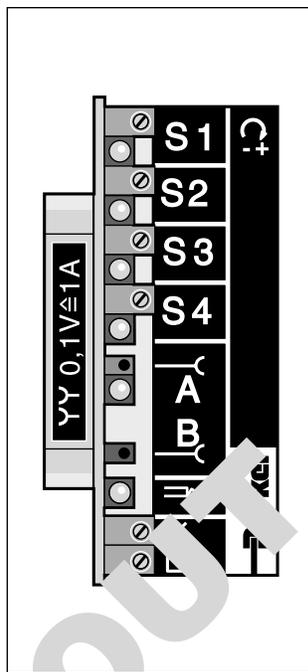
Inch equivalents for millimeter dimensions are shown in (**)



**For new applications:
 ET101: Refer to PCD00A-400**

Ordering Information

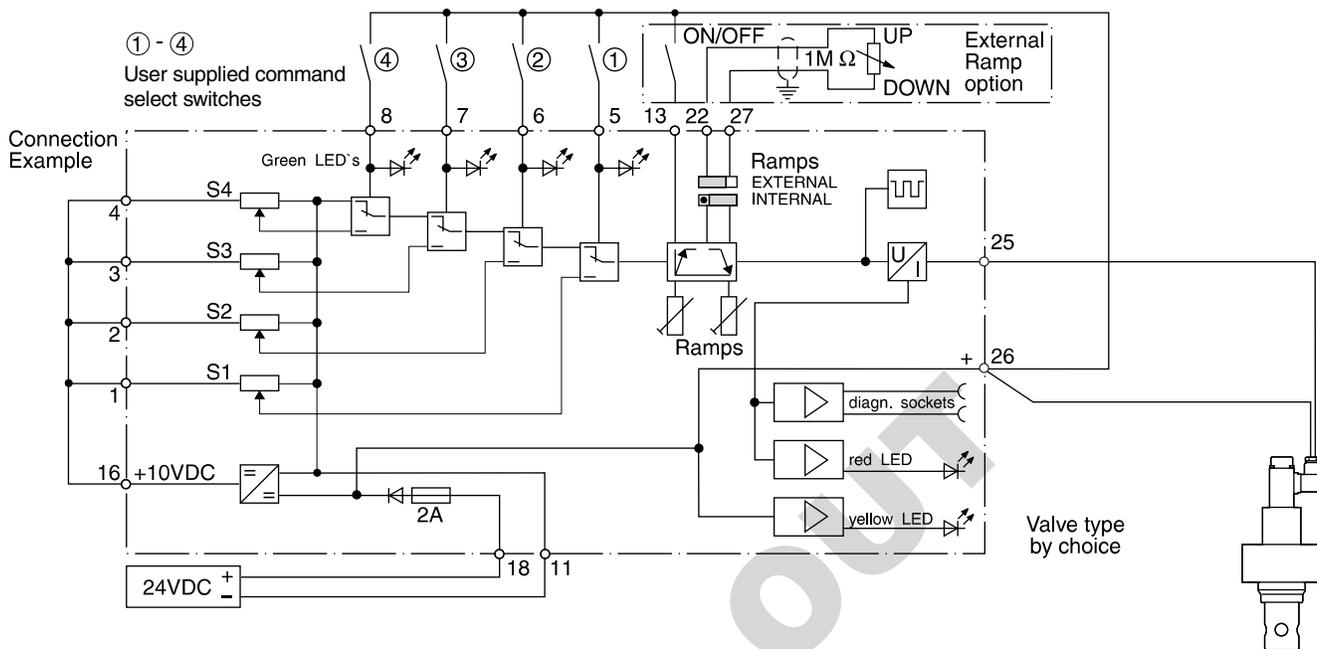
ET Electronic Module Pressure Valve	Valve Size	101 Module Type	Design Series NOTE: Not required when ordering.	
Code	Valve	Sol.	Code	Description
00	TDA...LAF E16 to E50	35mm	101	Amplifier, 4 command channels, Up/Down ramps for valves with 'L' solenoid option
00	TEA...LAF E16 to E50	35mm		
99	TDA...LAF E63 to E100	60mm		
99	TEA...LAF E63 to E100	60mm		



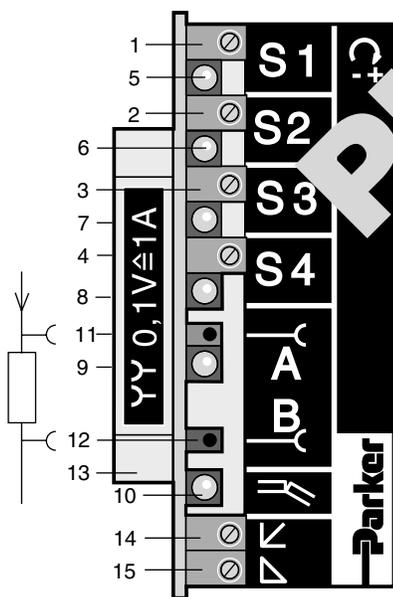
Specifications

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	0 to 5 seconds adjustable
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)



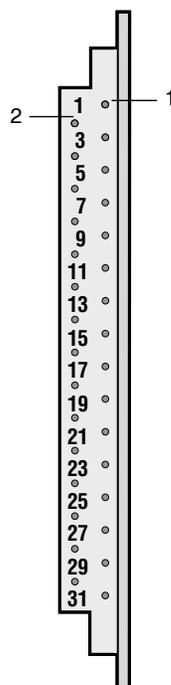
- 1-4 Set value potentiometers S1-S4
- 5-8 Green LED's for:
 - channel activity of the set values
- 9 Red LED (A) for:
 - function indicator control solenoid
 - (B not used)
- 10 Yellow LED for:
 - correct voltage supply
- 11 Red socket for current diagnostic
- 12 Black socket for current diagnostic
- 13 Green grip strip with reference information for measured values
- 14 UP ramp potentiometer
- 15 DOWN ramp potentiometer

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.

Only potential-free measuring equipment to be used

Connector (Elevation B)



- 1 Input preselection channel 1
- 2 Input preselection channel 2
- 3 Input preselection channel 3
- 4 Input preselection channel 4
- 5 Input set value lock on channel 1
- 6 Input set value lock on channel 2
- 7 Input set value lock on channel 3
- 8 Input set value lock on channel 4
- 11 Reference potential 0V supply
- 13 Input ramp disable
- 16 Output +10V reference
- 18 Input 24 VDC supply
- 19 Input ramp disable
- 21 Input ramp disable
- 22 Input external ramp option
- 25 Output control solenoid
- 26 Output control solenoid
- 27 Input external ramp option
- 29 Input external ramp option
- 31 Input external ramp option

