

General Description

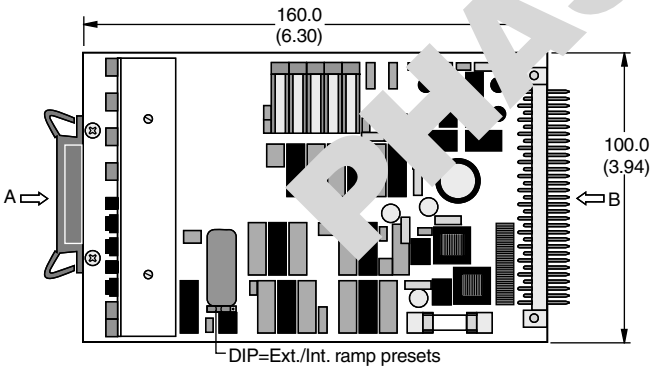
Series EW01104 electronic module is used to control non-feedback D1FW proportional directional valves. The module accepts a ± 10 volt command signal, and produces a proportionally linear output current used to drive the valve's proportional solenoid. Note that the linearity of the valve itself determines the linearity of the system. Refer to the specific valve data for actual linearity performance.

Features

- Spool overlap range can be manipulated with MIN potentiometer, adjustable by feeding a constant set value of 0.2V.
- MAX limiting of spool stroke with full set value range. Can be set up after MIN has been set and feeding a constant set value of 10V.
- DIP — switch from internal ramp generation to external ramp supply.
- 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.

Dimensions

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



For new applications:
EW01104: Refer to PWD00A-400

Ordering Information

EW
Electronic Module
Directional Valve

01
Valve Size

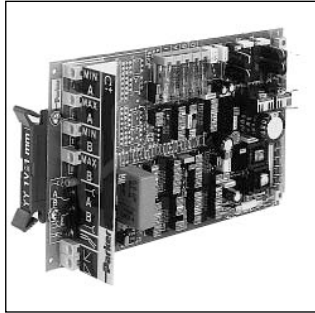
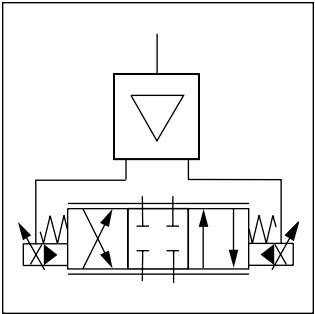
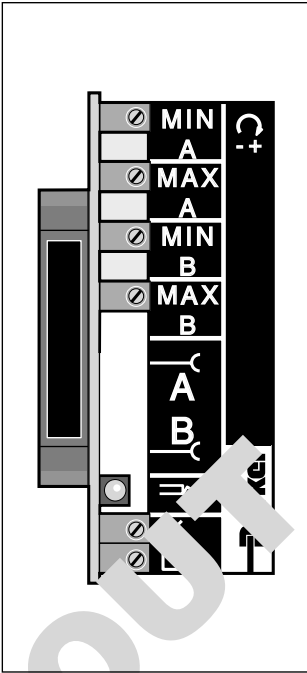
Code	Valve Size	Mounting Pattern
01	*D1FW	NG6

*Solenoid K-12V

104
Module Type

Code	Description
104	Amplifier, adjustable, MIN/MAX-limiting, UP/DOWN ramps

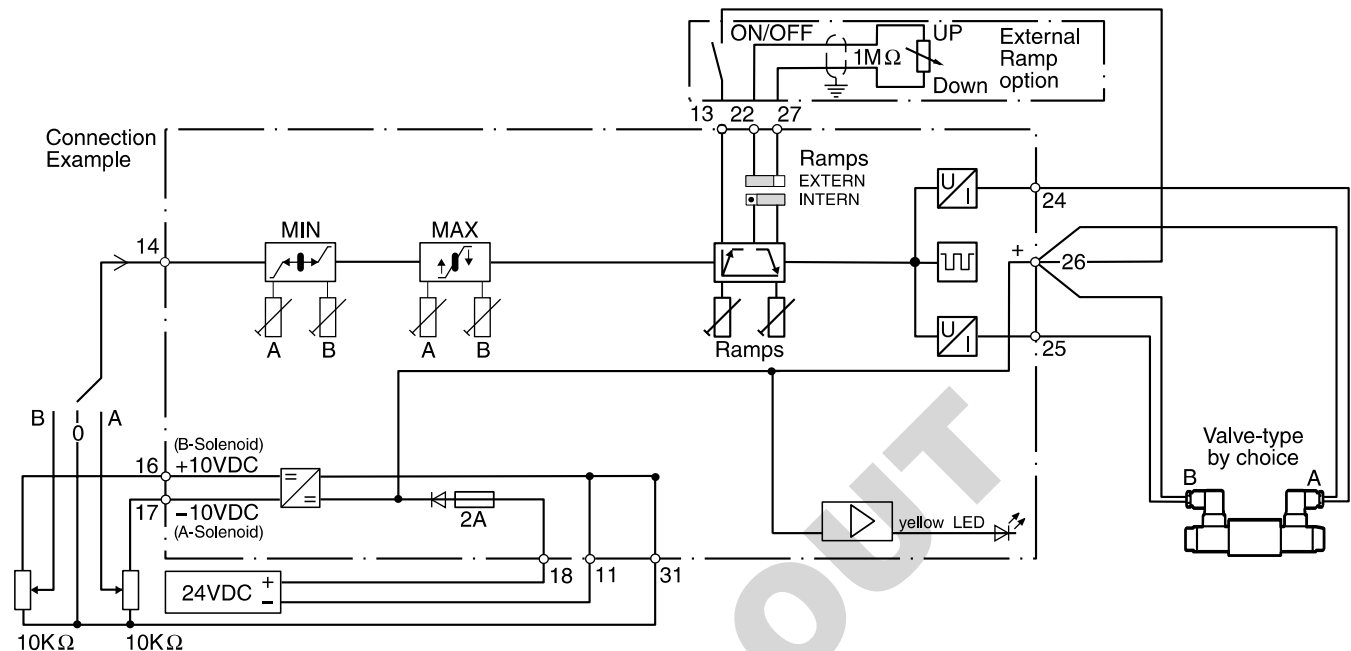
Design Series
NOTE:
Not required when ordering.



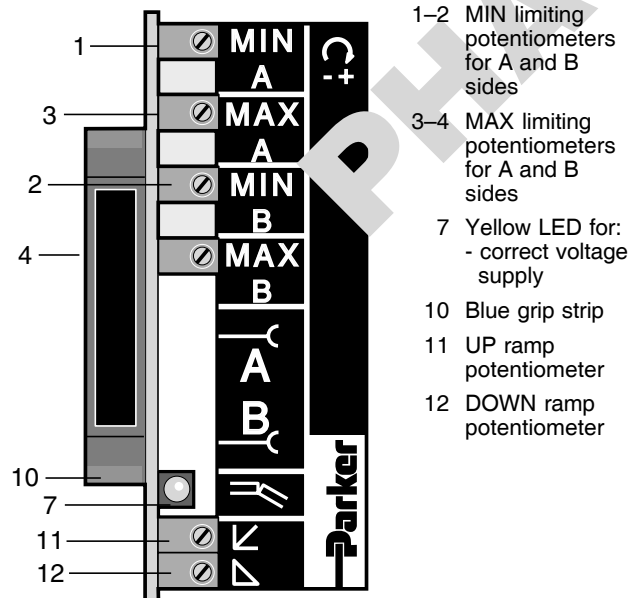
Specifications

Connection	31 Pole Male Connector, DIN 41617
Power Supply	Regulated: 18-26V Unregulated: 22-38V
Command Signal	0 to +10 VDC and 0 to -10 VDC
Input Select Voltage	5 to 30 VDC
Power Required	40 VA
Reference Outputs	± 10 VDC @ 10 mA
Max. Solenoid Output Current	1.8A
Ambient Temp. Range	0°C to +70°C (+32°F to +158°F), Standard Range
Ramps	0-5 seconds adjustable
Shielded Cable Connection	Supply connections + valve: 1.5 sq. mm (16 AWG) Command Signals: 0.5 sq. mm (20 AWG)
Fuse	24 medium lag, DIN 41571

Block Diagram



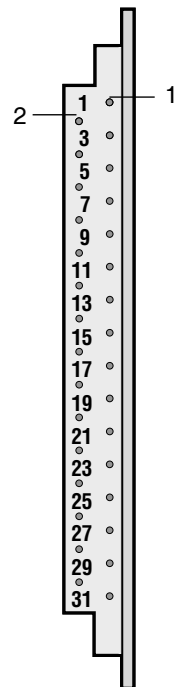
Operating and Diagnostic Elements (Elevation A)



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
- 13 Input ramp disable
- 14 Input command voltage 0...+/-10 VDC
- 16 Output +10V reference
- 17 Output -0V reference
- 18 Input 24 VDC supply
- 22 Input external ramp option
- 24 Output control solenoid B
- 25 Output control solenoid A
- 26 Output control solenoid A+B with possibility for external switch connection
- 27 Input external ramp option
- 31 Reference potential 0V set value