

General Description

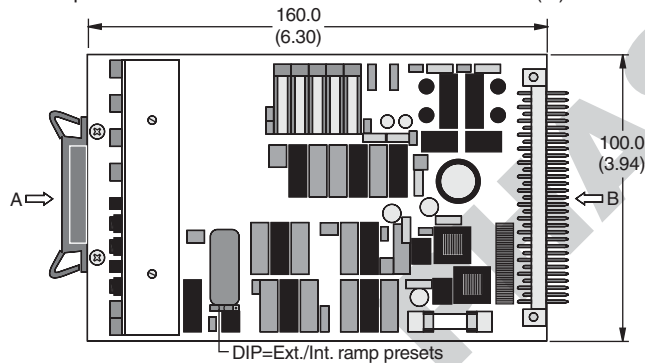
Series EW*104 electronic module is used to control pilot operated D**FS proportional directional valves with main stage spool position feedback. The module accepts a ± 10 volt command signal where spool position is controlled by a closed loop PID circuit on the module.

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 consistent temperature-independent solenoid forces.
- Dither generator with applied frequency to improve static characteristics.
- Diagnosis of spool stroke by means of measuring sockets as well as LEDs for indicating working conditions.

Dimensions

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



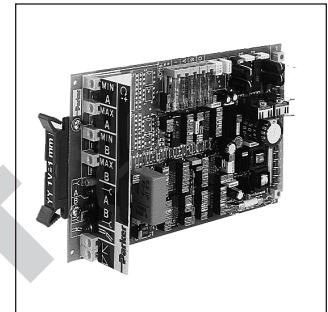
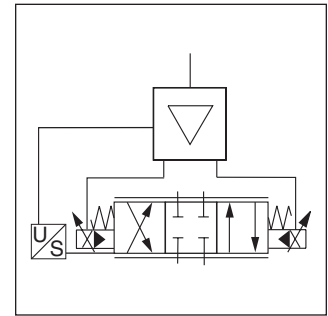
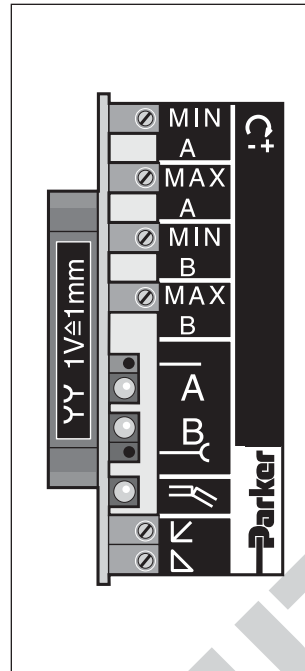
For new applications:
EW*104: Refer to PWDXXA-400

Ordering Information



Code	Valve Size	Mounting Pattern	Valve Spool Stroke
10	D31FS	NG10	± 5.0 mm (0.20 in.)
16	D41FS	NG16	± 6.0 mm (0.24 in.)
25	D81FS	NG25	± 9.3 mm (0.37 in.)
26	D91FS	NG25	± 9.3 mm (0.37 in.)
32	D111FS	NG32	± 15.0 mm (0.59 in.)

Code	Description
104	Amplifier, adjustable, MIN/MAX-limiting Up/Down ramps

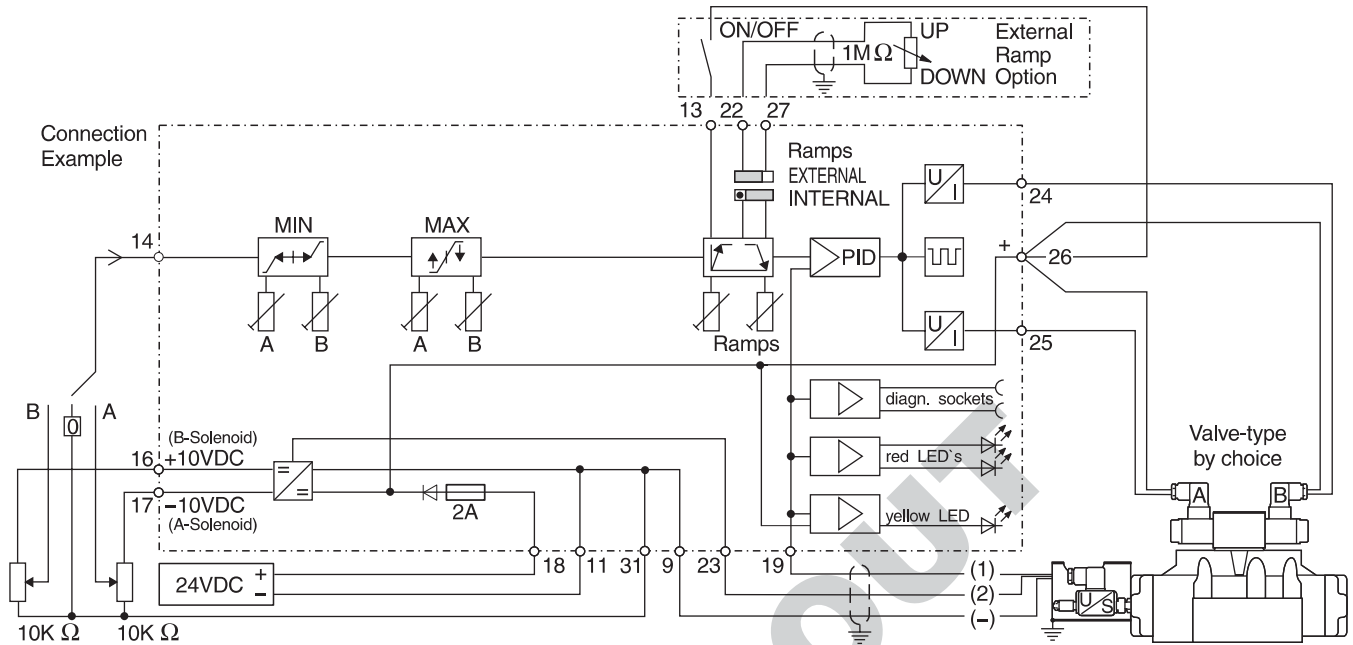


Specifications

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	1.3A
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) Transducer + Command Signals: 0.5 sq. mm (20 AWG)
Fuse	2A medium lag, DIN 41571/5x20 mm

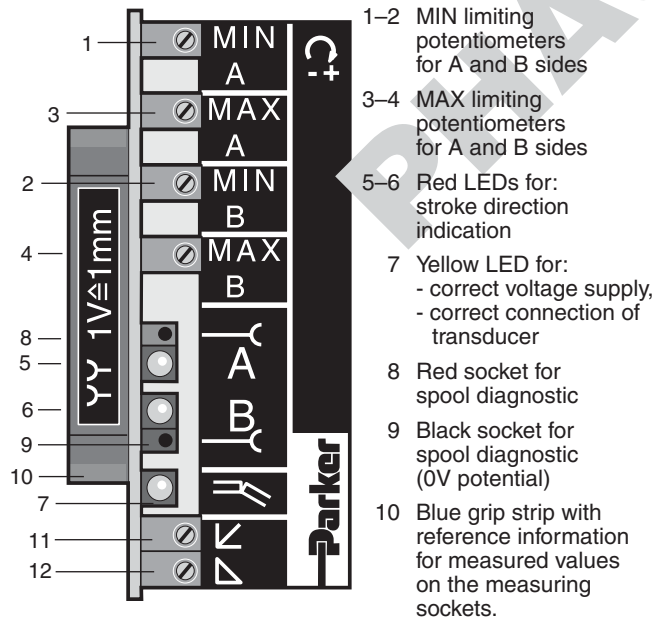


Block Diagram — Wiring



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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)

