

Head Office
Ringway Control & Automation
ABN 47 087 315 179
4 Lady Penrhyn Dr,
Unanderra, NSW 2526
products@ringway.com.au
Ph 02 4255 4300 Fax 02 42718990

Mackay Office
Ringway Materials Handling
Unit 10 Woodman Pde,
Mackay, QLD 4740
products@ringway.com.au
Ph 07 49524001 Fax 07 49522216



HYDRAULIC VALVE DRIVE

P/N - SPROPDRV

PROPORTIONAL VALVE DRIVER CARD

DESCRIPTION:

The Ringway Spropdrv proportional valve driver card has been designed to interface directly between a PLC 4–20mA output card and a hydraulic proportional control valve. The card is mounted in a rack that can accommodate two cards. If more cards are required for an installation larger racks can be supplied. The card requires a separate power supply of 16 to 24V dc or 13 to 24V ac capable of delivering enough current to drive the connected valve/s. When switched to 'Auto' the card will produce a current flow in a connected valve that is proportional to the controlling 4-20mA PLC signal applied to it. When switched to 'Manual' the level of output signal is controlled by the position of the Manual Potentiometer. The electronic control method employed is a 300Hz switch mode regulator with active current feedback. This method ensures high-speed response and efficiency, with little variation due to heat or other variables.

The output current produced (for a given control signal) can be adjusted from the card's front edge using the 'Gain Setting' potentiometer. **Note:** A valve (inductive load) must be connected for an output to be produced. Onboard jumpers allow for alternate backplane control signals, but are not used for front control applications.

FEATURES:

- Simple, robust and functional.
- Efficient and accurate
- · Handy manual control from front of card
- Span adjustment from front of card (0.15 to 1.6Amps)

APPLICATIONS:

The Spropdrv card can be used wherever the accurate control of a hydraulic proportional valve is required directly from a PLC or other 4-20mA source. The card is widely used in the mining industry to control the acceleration of conveyors driven by hydraulic clutches and the application of torque for tripper driving purposes.

BRIEF TECHNICAL SPECIFICATIONS:

Power Supply: 16 to 24V dc or 13 to 24V ac

Input signal: 4-20mA

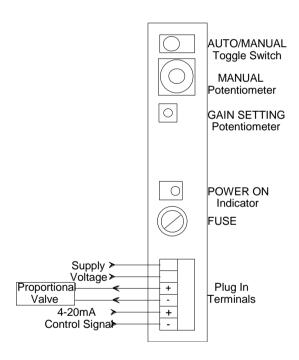
Output: 0 to 150mA minimum or 0 to 1.6A maximum

Output voltage: 0 to 24V dc

Output fuse: 2A

Output load: The output load must be connected and must be inductive

for the card to function.



SPROPDRV LAYOUT AND CONNECTIONS

SPROPDRV RACKS -

P/N: R4SLOT or R8SLOT or R10SLOT

HEIGHT: 150mm

WIDTH: 'R4SLOT' - 150mm (up to 2 cards)

'R8SLOT' - 230mm (up to 4 cards)

'R10SLOT' - 270mm (up to 5 cards)

DEPTH: 190mm