

Multiple DDC Signal Input to Proportional Resistance Output

FEATURES

- Mounts directly to actuator
- Accepts voltage, current, pulse or floating point control signals
- Local override button for easy field testing
- Available in 135 ohm output resistance
- LED status indicator
- No wrap around

APPLICATIONS

- Electric Actuator Control
- Electronic Potentiometer
- Resistive Sensor Simulation
- Remote Volume Control
- Motor Pot Replacement



PRODUCT DESCRIPTION

The DRN4 is a resistive output motor actuator interface that accepts several types of DDC system signals. The DRN4 output is 0 to 135 ohms. The input signal types are field selectable by an 8-position DIP switch. Signal input selections include voltage, current, pulse and floating point. Voltage input ranges are 0-5, 1-5, 0-10, or 2-10. Current ranges are 0-20 or 4-20 milliamps. **Version 1** pulse input ranges are .59-2.93s, .02-5s, and .1-25.5s.

Version 2 pulse input range is .023-6 seconds. The floating point input accepts two digital signals, one for increase and the other for decrease. The floating point full scale rate of change is 55 seconds. Some triac input signals require an accessory (see ordering information). Custom input signal types and ranges are also available. The DRN4 is supplied in an enclosure that can be directly mounted to a 1/2 inch knockout on the motor actuator. Color coded wire leads with spade connectors are provided for electrical connections.

ORDERING INFORMATION

Specify: **DRN4 Version 1 or Version 2**

If you need a resistance range other than 0-135 ohms, see DRN3.1 in your catalog.

NOTE: Some triac inputs require an ACT triac adapter kit. Order with DRN4. **EXCEPTION!** Johnson Control triac input signal requires a 1,000 ohm 1/2 watt resistor, and is included with all DRN4s.

SPECIFICATIONS

Electrical Requirements

Power Supply

Supply Voltage	24 VAC or 24 VDC, +/-10%
Supply Current	130 mA max

Input (Pulse)

Signal Source	Relay, contact closure, transistor or triac (ACT triac adapter required)
Signal Trigger Level	5 to 24 volts AC or DC
Off time between pulses	80 ms

Version 1 ranges:	.59 - 2.93 seconds
	.02 - 5 seconds
	.1 - 25.5 seconds
Version 2 ranges:	.023 - 6 seconds (Solidyne™)

Input (Floating Point or Tri-State)

Signal Source	Relay, contact closure, transistor or triac (order triac adapter kit)
Signal Trigger level	5 to 24 volts AC or DC
Rate of Change	55 seconds for full output span

Input (Analog)

Voltage	0-5 VDC, 1-5 VDC, 0-10 VDC, 2-10 VDC
Current	0-20 mA, 4-20 mA
Impedance	Current/250 ohms Voltage/100,000 ohms

Output

Resistive	0 to 135 ohms (3 watts)
Resolution	32 steps

Mechanical Requirements

Relay Contacts

Electrical Life	100,000 operations @ 1 amp
Mechanical Life	10 million operations

Connections

Dimensions	Approx. 2.25" L x 3.5" W x 1.5" H
Weight	2 lbs
Mounting	Mounts directly to 1/2" knockout on actuator housing

Environmental Requirements

Operating Temperature	32 to 120 deg F
Storage Temperature	-20 to 150 deg F
Operating Humidity	10% to 95% non-condensing

Specifications may change without notice to improve product performance.