

# 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-

#### 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.

connections.

#### SPECIFICATIONS

E	lectric	al Re	quiren	nents	

Power Supply	
Supply Voltage	24 VAC or 24 VDC, +/-10%
Supply Current Input (Pulse)	130 mA max
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



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 knock-

out on the motor actuator. Color coded wire leads

with spade connectors are provided for electrical

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		
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.

## Call for Other Calibration Ranges, Versions, and Wattages.

If you have a different application or need, please call 1-800-886-2281 and discuss your needs with our Sales Engineers.