

## DC2 SERIES POTENTIOMETERS



- ◆ Conditioned for use with  
**Proportion-Air products**
- ◆ Available in single or 10 turn design
- ◆ Available with numeric indicator

### FUNCTIONAL DESCRIPTION

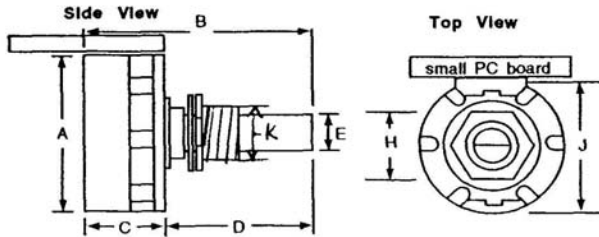
The DC2 Series line of potentiometers are designed for use as a command signal for Proportion-Air control valves. A 10 volt reference is used to provide excitation to the potentiometer. An op-amp measures the output on the wiper of the potentiometer and provides buffering to eliminate external components from affecting the linearity of the potentiometer. A three wire cord is provided and is attached to the pc board to make necessary power signal and common connections.

### SPECIFICATIONS

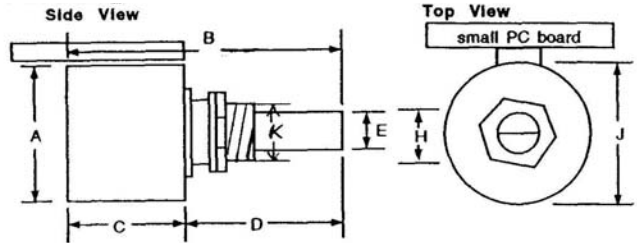
	DC2	DC2C	DC2-10T	DC2-10TC	DC2-10TI	DC2-10TIC
<b><u>ELECTRICAL</u></b>						
Input voltage	15-24 VDC	15-24 VDC	15-24 VDC	15-24 VDC	15-24 VDC	15-24 VDC
Output voltage	0 -10VDC	-	0-10VDC	-	0-10VDC	-
Output current	10mA Max.	4-0mA sourcing	10mA Max.	4-20mA sourcing	10mA Max.	4-20mA sourcing
Linearity	+ - 1%	+ - 1%	+ - 0.25%	+ - 0.25%	+ - 0.25%	+ - 0.25%
Power consumption	20 mA	30 mA	20 mA	30 mA	20 mA	30 mA
Temperature range	32-158 °F 0-70 °C	32-158 °F 0-70 °C	32-158 °F 0-70 °C	32-158 °F 0-70 °C	32-158 °F 0-70 °C	32-158 °F 0-70 °C
Cord length	10 Feet	10 Feet	10 Feet	10 Feet	10 Feet	10 Feet
<b><u>MECHANICAL</u></b>						
	<b>DC2 &amp; DC2C</b>		<b>DC2-10T &amp; DC2-10TC</b>		<b>DC2-10TI &amp; DC2-10TIC</b>	
Rotation	270 degrees + -3 degrees		3600 degrees + 10s -0 degrees		3600 degrees + 10s -0 degrees	
Rotation life	25,000 cycles		50,000 cycles		50,000 cycles	
Bushing length	3/8 (9.52 mm) x 3/8-32 UNEF -2A		5016 (20.64 mm) x 3/8-32 UNEF -2A		5016 (20.64 mm) x 3/8-32 UNEF -2A	
Overall Weight	<b>DC2</b> 0.34 lb <b>DC2C</b> 0.52 lb		<b>DC2-10T</b> 0.32 lb <b>DC2-10TC</b> 0.50 lb		<b>DC2-10TI</b> 0.50 lb <b>DC2-10TIC</b> 0.52 lb	

# DIMENSIONS

## DC2

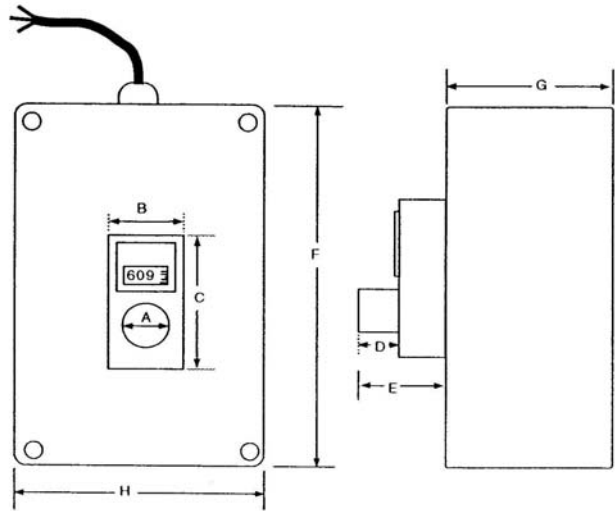


## DC2-10T



	DC2		DC2-10T		DC2-10TI DC2-10TIC	
	INCH	MM	INCH	MM	INCH	MM
A	1.35	34	0.87	22	0.65	17
B	1.50	38	1.57	40	1.00	25
C	0.52	13	0.74	19	1.75	44
D	0.90	23	0.87	22	0.44	11
E	0.25	06	0.25	06	1.00	25
F	-	-	-	-	3.30	85
G	-	-	-	-	1.40	35
H	0.37	09	0.48	12	2.35	60
J	1.05	27	0.90	23	2.35	60
K	Y DRILL		Y DRILL		-	

## DC2-10TI & DC2-10TIC\*



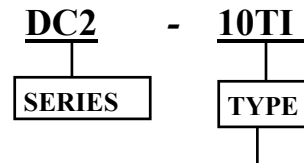
\* DC2C & DC2-10TC uses the same box but without the indicator

## CONNECTION

DC SERIES WIRING	
BLACK	POWER (15-24 Vdc)
WHITE	SIGNAL OUT**
GREEN	DC COMMON

\*\* When wiring a 4-20mA output potentiometer (DC2C, DC2-10TC & DC2-10TIC) to a Proportion-Air control valve, the SIGNAL OUT (WHITE) should be connected to the control valve's (+) command. The control valve's (-) command (if present) should be tied to a DC common (ground)

## ORDERING INFORMATION



DC2	1 Turn Pot. (0-10Vdc output)
DC2-10T	10 Turn Pot. (0-10Vdc output)
DC2-10TC	10 Turn Pot. (4-20mA output)
DC2-10TI	10 Turn Pot., Mechanical Thumb Wheel Indicator (0-10Vdc output)
DC2-10TIC	10 Turn Pot., Mechanical Thumb Wheel Indicator (4-20mA output)

All potentiometers come standard with 10 ft cord

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