

# Model 174, 175, 176

Spectrol

## Conductive Plastic Potentiometers



### FEATURES

- Model 174, 175, 176
- Flat Pack Type Low Mount, Square and Long-Life
- Rotational Life 50K Cycles, 50K Cycles and 2M Cycles
- Grid Type 0.100, 0.100/0.200
- Terminals PC and PC & S.H.
- Conductive Plastic Element
- Quiet Electrical Output
- Smooth Feel
- Robust Construction

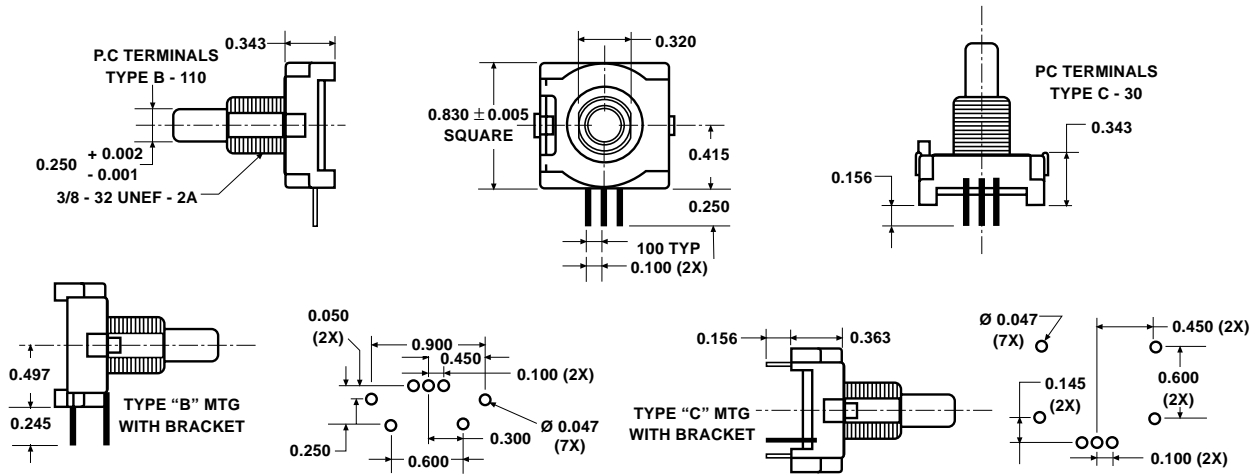
ELECTRICAL SPECIFICATIONS	
PARAMETER	
Resistance Range	100Ω to 2.5MΩ - linear 500Ω to 1.0MΩ - non - linear
Resistance Tolerance	± 20% Standard ± 10% Optional
Linearity	± 5% Independent
Power Rating Bushing Mount	0.5 watt @ 70°C - linear taper 0.25 watt @ 70°C non - linear taper
PC Mount	0.25 watt @ 70°C Derate to 0 watt @ 120°C
Effective Rotation	270° nominal
Minimum Resistance	4Ω maximum Each end - linear 4Ω maximum Low end 1% High end - non - linear
Maximum Continuous Working Voltage	350VAC
Dielectric Withstanding Voltage	Sea level- 750VAC 70,000 feet - 350VAC
Dynamic Noise (CRV):	2% of Rt standard - linear

ORDERING INFORMATION									
175 MODEL	S NUMBER OF SECTIONS	X MECHANICAL CONFIGURATION	1 LOCATING PIN	G BUSHING SIZE & SHAFT	48 SHAFT LENGTH	S SHAFT STYLE	103 RESISTANCE CODE	S TAPER & TOLERANCE	C TERMINAL CONFIGURATION
174	S: Single	Series 174	0: None	G: 3/8"D x 3/8"L	Single Shaft	S: Slotted	(Eia code - first two	S: Linear, ± 20%	Series 74
175		X - No Detent	1: 9:00 position	1/4"D Shaft	(Code - FMS in 64)	F: Flatted	significant digits	Z: CW Log, ± 20%	P: PC, 0.250"L
176		D - Centre Dentent		A: 3/8"D x 1/4"L	48: 3/4"L		third is number	R: CCW Log, 20%	B - 110 0.100 Grid
		E - 20 Detent		1/4"D Shaft	56: 7/8"L		of zeros )		C: PC, 0.156"L
		Series 175		M: M9 x 1/4"L	64: 1.0"L		100 10K 500K		C-30 0.100 Grid
		X - No Dentent		1/4"D Shaft			250 20K 750K		B: pw/B Mtg.
		D - Center Dentent					500 25K 1meg		Bracket
		E- 20 Dentent					750 50K 2.0meg		D: Cw/C Mtg
		F - Center Tap					1K 75K 2.5meg		Bracket
		G - Center Tap					2.5K 100K		
		Center Detent					5K 250K		Series 175 - 176
		Series 176							P: Pc, 0.250"L
		X - No Detent							B - 110 0.100 Grid
		F - Center Tap							R: PC, 0.250"L
									B - 110 0.200 Grid
									C: PC, 0.156"L C - 30 0.100 Grid
									F: PC, 0.156"L C - 30 0.200 Grid
									B: Pw/B Mtg. Bracket
									G: Rw/B Mtg. Bracket
									D: Cw/C MTG. Bracket
									H: Fw/ C Mtg. Bracket
									S: Solder Hook - 200 Grid
									Hardware not included

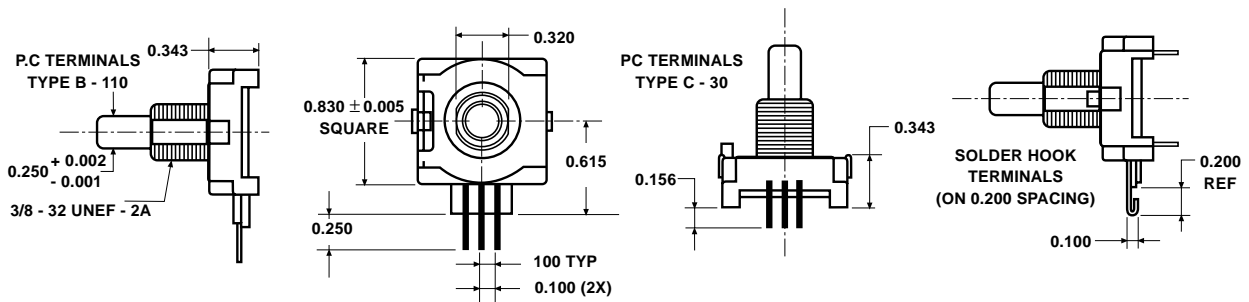
Example: 175 - S - X - 1 - G - 48 - S - 103 - S - C

DIMENSIONS in inches

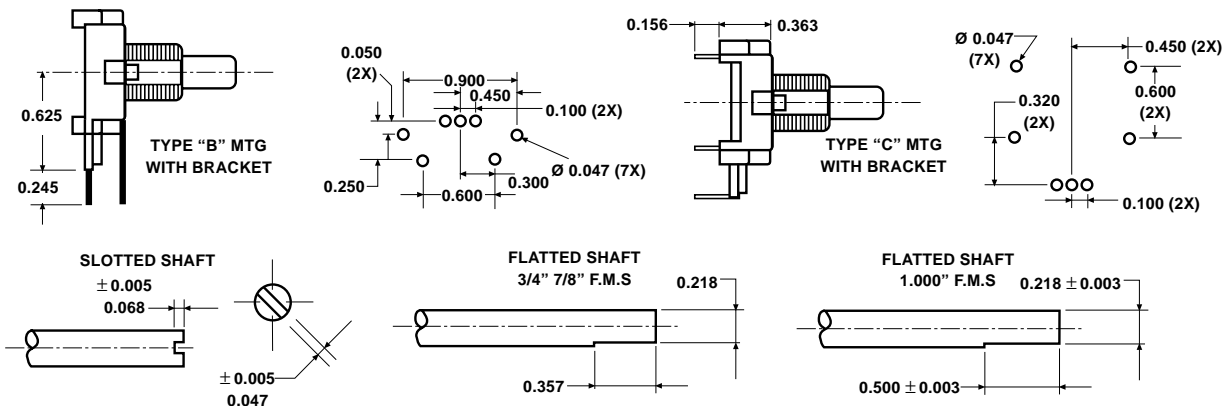
### DIMENSIONS FOR SERIES 174



### DIMENSIONS FOR SERIES 175, 176



### DIMENSIONS FOR SERIES 174, 175, 176



# Model 174, 175, 176

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MECHANICAL SPECIFICATIONS	
PARAMETER	
Construction	Mounting - bushing or PC Locating pin - @ 9 o'clock "B" type mtg. bracket "C" type mtg. bracket Not sealed for washing Detents - centre, 20, none, left & right Shaft variations - see diagram Special shaft ends available
Terminals: Number Strength Taps	3 in line 2lb push & pull centre tap
Mechanical Rotation	300° ± 5°
Torque Operating Stop Mounting	0.2 to 2.5 oz - in 8 in - lbs 7 in - lbs

ENVIRONMENTAL SPECIFICATIONS	
Storage Temperature	- 40°C to + 120°C
Temperature Cycling	- 40°C to + 120°C (4% ΔRt)
Load Life	1000 hrs. rated load @ 70°C (10% ΔRt)
Rotational Load Life	10% ΔRt maximum at rated cycle life
Humidity	85% R.H. @ 40°C, 240 hours, per MIL STD 103B test condition A