

Features

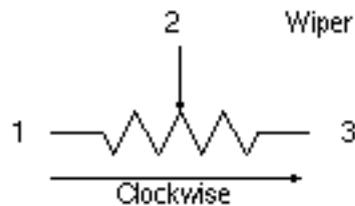
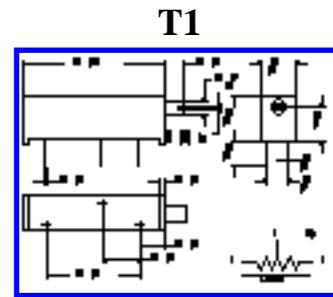
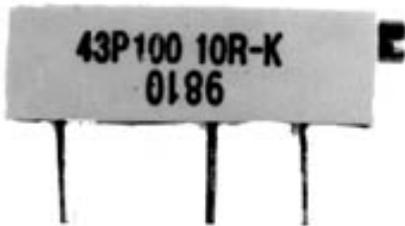
- Multifinger wiper for better contact resistance variation
- Unique "T" slider block for excellent stability and setability
- Chevron shaft for sealing and smooth constant torque
- IC style pins for easier board insertion

Spectrol

43P Series

Trimmer - 3/4" rectangular, multiturn, cermet

Dimensional Drawing



Spectrol No.	NTE Part No.	Value Ohms	Diag. No.
43P-100	500-0001	10	T1
43P-200	500-0002	20	T1
43P-500	500-0003	50	T1
43P-101	500-0004	100	T1
43P-201	500-0005	200	T1
43P-501	500-0006	500	T1
43P-102	500-0007	1K	T1
43P-202	500-0008	2K	T1
43P-502	500-0009	5K	T1
43P-103	500-0010	10K	T1
43P-203	500-0011	20K	T1
43P-253	500-0012	25K	T1
43P-503	500-0013	50K	T1
43P-104	500-0014	100K	T1
43P-204	500-0015	200K	T1
43P-254	500-0016	250K	T1
43P-504	500-0017	500K	T1
43P-105	500-0018	1M	T1
43P-205	500-0019	2M	T1

Specifications

Electrical

Effective Travel: 20 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance:

±100ppm/°C. 100 Ohms to 2 Meg Ohms

-100 to +200ppm/°C. 10 Ohms, 20 Ohms, 50 Ohms

Power Rating: 3/4W @ +70°C derated to 0W @ +125°C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 1% or 1 Ohm, whichever is greater

Mechanical

Stop: Wiper idles against stops

Starting Torque: 22.5mNm max

Resistance Element: Cermet

Setability: $\pm 0.05\%$ RT

Rotation Life: 200 cycles min with max change of $\pm 2\%$ in total resistance

Environmental

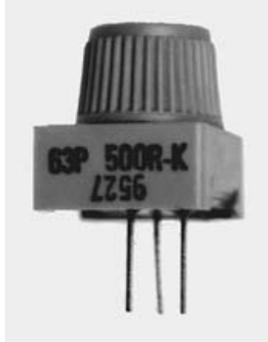
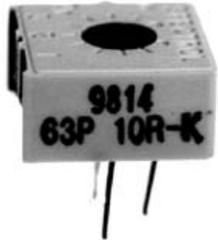
Operating Temperature: -55° to $+125^{\circ}\text{C}$

Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles

Features

- Multifinger wiper for better contact resistance
- Arrow and graduations for repeatable settings
- "O" ring seal for solvent and aqueous washing
- IC style pins for easier board insertion
- Solid end stop



Spectrol

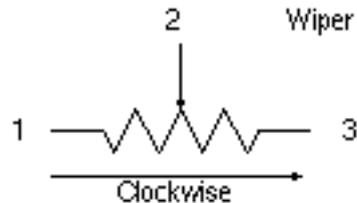
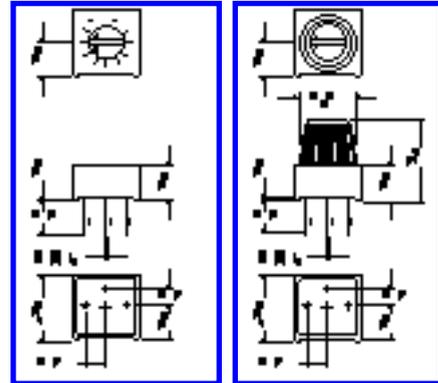
63P Series

Trimmer - 3/8" square, single turn, cermet

Dimensional Drawing

T2

T3



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
63P-100	500-0070	10	Top	T2
63P-200	500-0071	20	Top	T2
63P-500	500-0072	50	Top	T2
63P-101	500-0073	100	Top	T2
63P-201	500-0074	200	Top	T2
63P-501	500-0075	500	Top	T2
63P-102	500-0076	1K	Top	T2
63P-202	500-0077	2K	Top	T2
63P-502	500-0078	5K	Top	T2
63P-103	500-0079	10K	Top	T2
63P-203	500-0080	20K	Top	T2
63P-253	500-0081	25K	Top	T2
63P-503	500-0082	50K	Top	T2
63P-104	500-0083	100K	Top	T2
63P-204	500-0084	200K	Top	T2
63P-254	500-0085	250K	Top	T2
63P-504	500-0086	500K	Top	T2
63P-105	500-0087	1M	Top	T2
63P-205	500-0088	2M	Top	T2
63P-T607-101	500-0098	100	Dial Knob	T3
63P-T607-201	500-0099	200	Dial Knob	T3
63P-T607-501	500-0100	500	Dial Knob	T3
63P-T607-102	500-0101	1K	Dial Knob	T3
63P-T607-202	500-0102	2K	Dial Knob	T3

Specifications

Electrical

Effective Travel: 270° nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance:

100ppm/°C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/°C. below 100 Ohms

Power Rating: 1/2W @ +70°C derated to 0W @ +125°C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Solid

Starting Torque: 35mNm max

Spectrol 63P Series

63P-T607-502	500-0103	5K	Dial Knob	T3
63P-T607-103	500-0104	10K	Dial Knob	T3
63P-T607-203	500-0105	20K	Dial Knob	T3
63P-T607-253	500-0106	25K	Dial Knob	T3
63P-T607-503	500-0107	50K	Dial Knob	T3
63P-T607-104	500-0108	100K	Dial Knob	T3
63P-T607-204	500-0109	200K	Dial Knob	T3
63P-T607-254	500-0110	250K	Dial Knob	T3
63P-T607-504	500-0111	500K	Dial Knob	T3
63P-T607-105	500-0112	1M	Dial Knob	T3

Resistance Element: Cermet

2-Terminal Adjustability: 0.15% RT

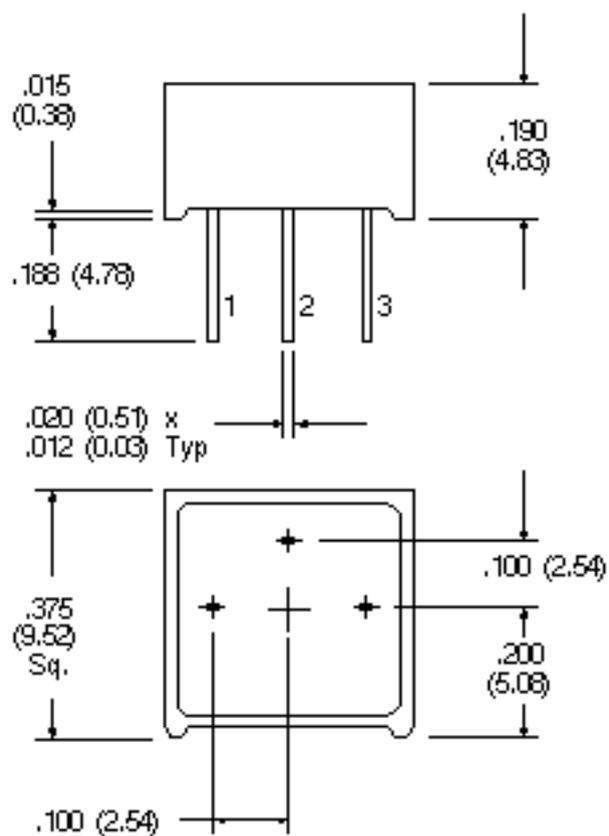
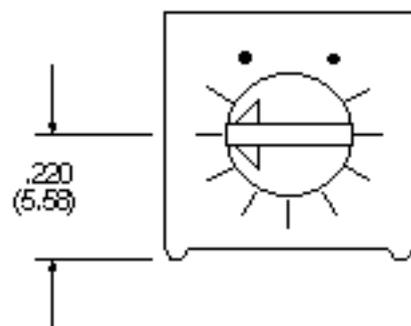
3-Terminal Adjustability: 0.05% of applied voltage

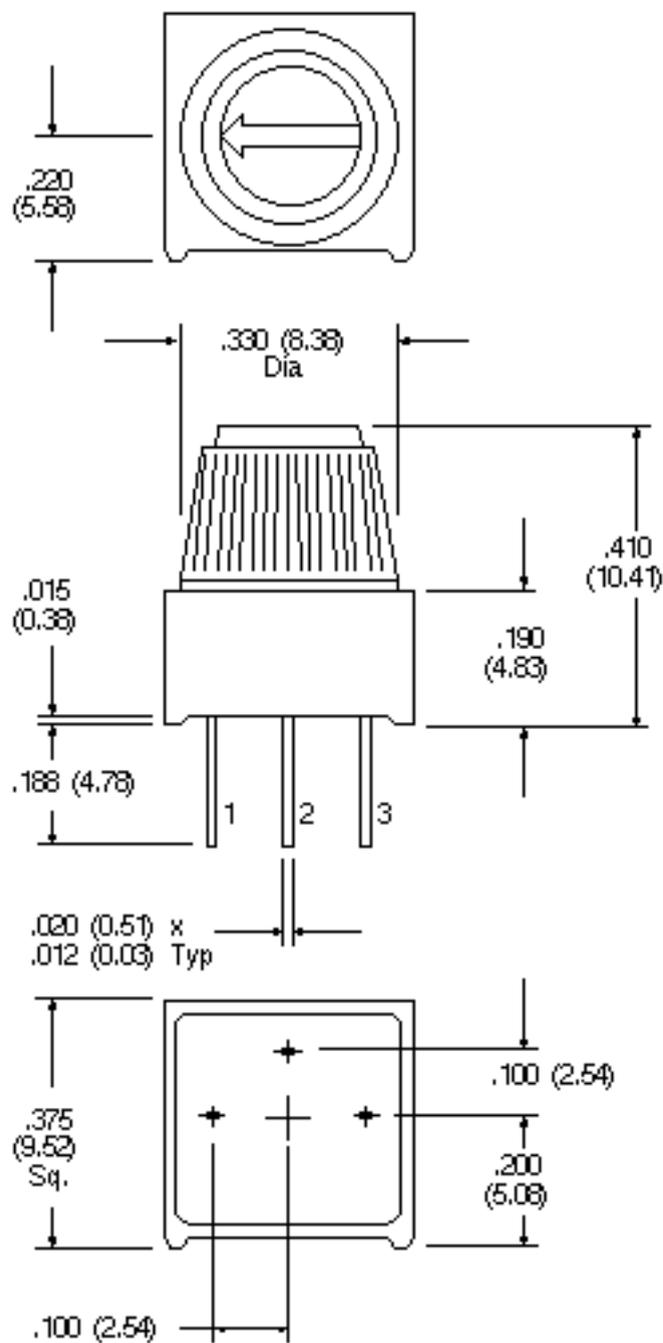
Environmental

Operating Temperature: -55° to +125°C

Electrical Endurance: 1000 hr.

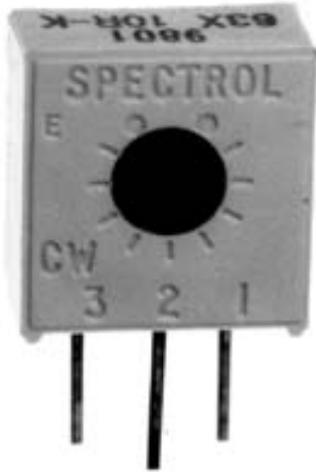
Mechanical Life: 200 cycles





Features

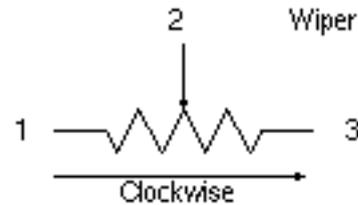
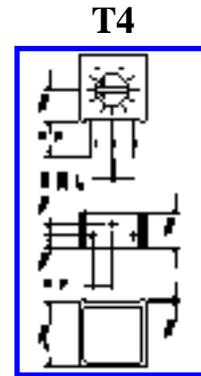
- Multifinger wiper for better contact resistance
- Arrow and graduations for repeatable settings
- "O" ring seal for solvent and aqueous washing
- IC style pins for easier board insertion
- Solid end stop



Spectrol 63X Series

Trimmer - 3/8" square, single turn, cermet

Dimensional Drawing



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
63X-100	500-0365	10	Side	T4
63X-200	500-0366	20	Side	T4
63X-500	500-0367	50	Side	T4
63X-101	500-0368	100	Side	T4
63X-201	500-0369	200	Side	T4
63X-501	500-0370	500	Side	T4
63X-102	500-0371	1K	Side	T4
63X-202	500-0372	2K	Side	T4
63X-502	500-0373	5K	Side	T4
63X-103	500-0374	10K	Side	T4
63X-203	500-0375	20K	Side	T4
63X-253	500-0376	25K	Side	T4
63X-503	500-0377	50K	Side	T4
63X-104	500-0378	100K	Side	T4
63X-204	500-0379	200K	Side </td <td>T4</td>	T4
63X-254	500-0380	250K	Side	T4
63X-504	500-0381	500K	Side	T4
63X-105	500-0382	1M	Side	T4
63X-205	500-0383	2M	Side	T4

Specifications

Electrical

Effective Travel: 270° nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance:

100ppm/°C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/°C. below 100 Ohms

Power Rating: 1/2W @ +70°C derated to 0W @ +125°C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Solid

Starting Torque: 35mNm max

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% RT

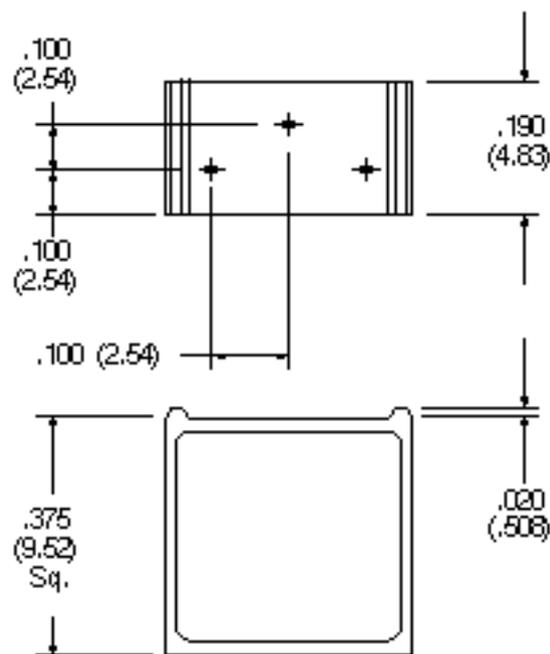
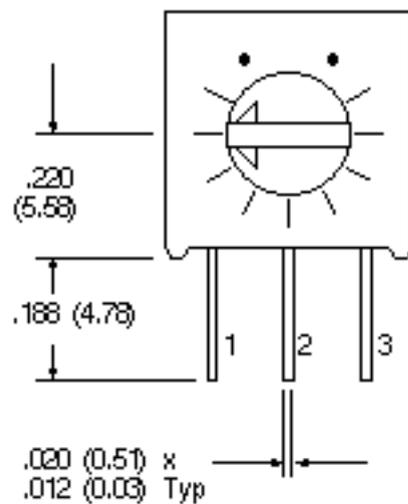
3-Terminal Adjustability: 0.05% of applied voltage

Environmental

Operating Temperature: -55° to +125°C

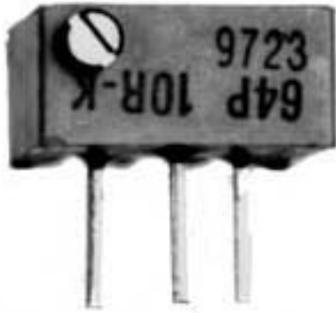
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger precious metal wiper for long term set point stability
- Central pivot locating gear for improved stability
- Unique ratchet device integral with gear to ensure long term reliability
- Double chevron shaft for sealing plus consistant torque and reliable adjustability
- IC style pins for easier board insertion



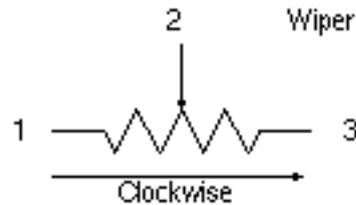
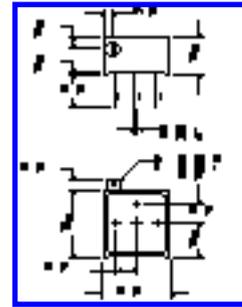
Spectrol

64P Series

Trimmer - 3/8" square, multiturn, cermet

Dimensional Drawing

T5



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
64P-100	500-0170	10	Side	T5
64P-200	500-0171	20	Side	T5
64P-500	500-0172	50	Side	T5
64P-101	500-0173	100	Side	T5
64P-201	500-0174	200	Side	T5
64P-501	500-0175	500	Side	T5
64P-102	500-0176	1K	Side	T5
64P-202	500-0177	2K	Side	T5
64P-502	500-0178	5K	Side	T5
64P-103	500-0179	10K	Side	T5
64P-203	500-0180	20K	Side	T5
64P-253	500-0181	25K	Side	T5
64P-503	500-0182	50K	Side	T5
64P-104	500-0183	100K	Side	T5
64P-204	500-0184	200K	Side	T5
64P-254	500-0185	250K	Side	T5
64P-504	500-0186	500K	Side	T5
64P-105	500-0187	1M	Side	T5
64P-205	500-0188	2M	Side	T5

Specifications

Electrical

Effective Travel: 25 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: Less than 2 Ohms

Temperature Coefficient of Resistance:

100ppm/°C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/°C. below 100 Ohms

Power Rating: 1/2W @ +70°C derated to 0W @ +125°C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 3mNm nom

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% RT

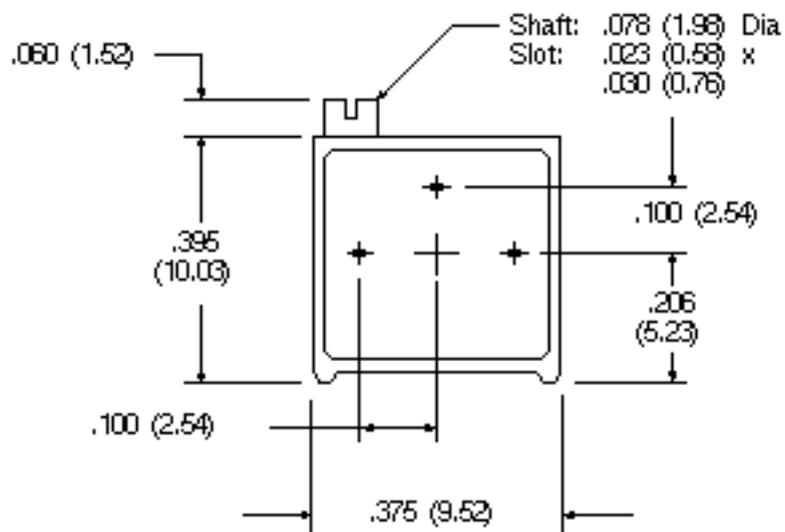
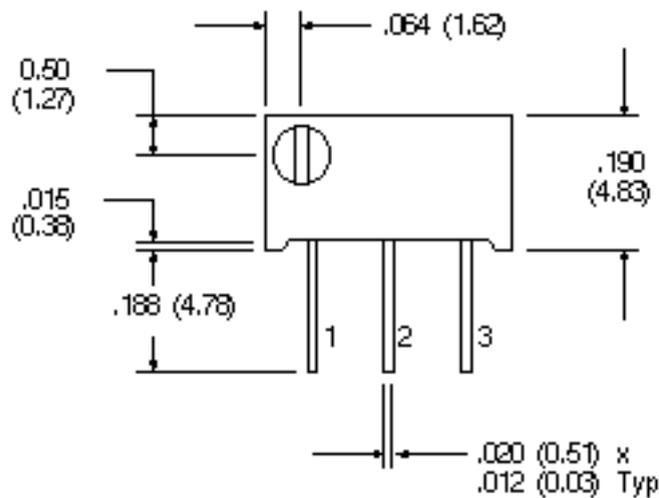
3-Terminal Adjustability: 0.01% of applied voltage

Environmental

Operating Temperature: -55° to +125°C

Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger precious metal wiper for long term set point stability
- Central pivot locating gear for improved stability
- Unique ratchet device integral with gear to ensure long term reliability
- Double chevron shaft for sealing plus constant torque and reliable adjustability
- IC style pins for easier board insertion

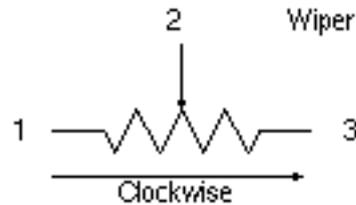
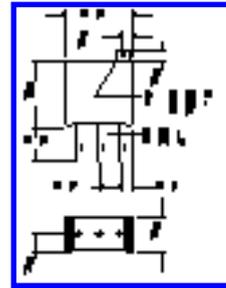


Spectrol 64W Series

Trimmer - 3/8" square, multiturn, cermet

Dimensional Drawing

T6



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
64W-100	500-0192	10	Top	T6
64W-200	500-0193	20	Top	T6
64W-500	500-0194	50	Top	T6
64W-101	500-0195	100	Top	T6
64W-201	500-0196	200	Top	T6
64W-501	500-0197	500	Top	T6
64W-102	500-0198	1K	Top	T6
64W-202	500-0199	2K	Top	T6
64W-502	500-0200	5K	Top	T6
64W-103	500-0201	10K	Top	T6
64W-203	500-0202	20K	Top	T6
64W-253	500-0203	25K	Top	T6
64W-503	500-0204	50K	Top	T6
64W-104	500-0205	100K	Top	T6
64W-204	500-0206	200K	Top	T6
64W-254	500-0207	250K	Top	T6
64W-504	500-0208	500K	Top	T6
64W-105	500-0209	1M	Top	T6
64W-205	500-0210	2M	Top	T6

Specifications

Electrical

Effective Travel: 25 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: $\pm 10\%$

End Resistance: Less than 2 Ohms

Temperature Coefficient of Resistance:

100ppm/ $^{\circ}$ C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/ $^{\circ}$ C. below 100 Ohms

Power Rating: 1/2W @ +70 $^{\circ}$ C derated to 0W @ +125 $^{\circ}$ C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 3mNm nom

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% RT

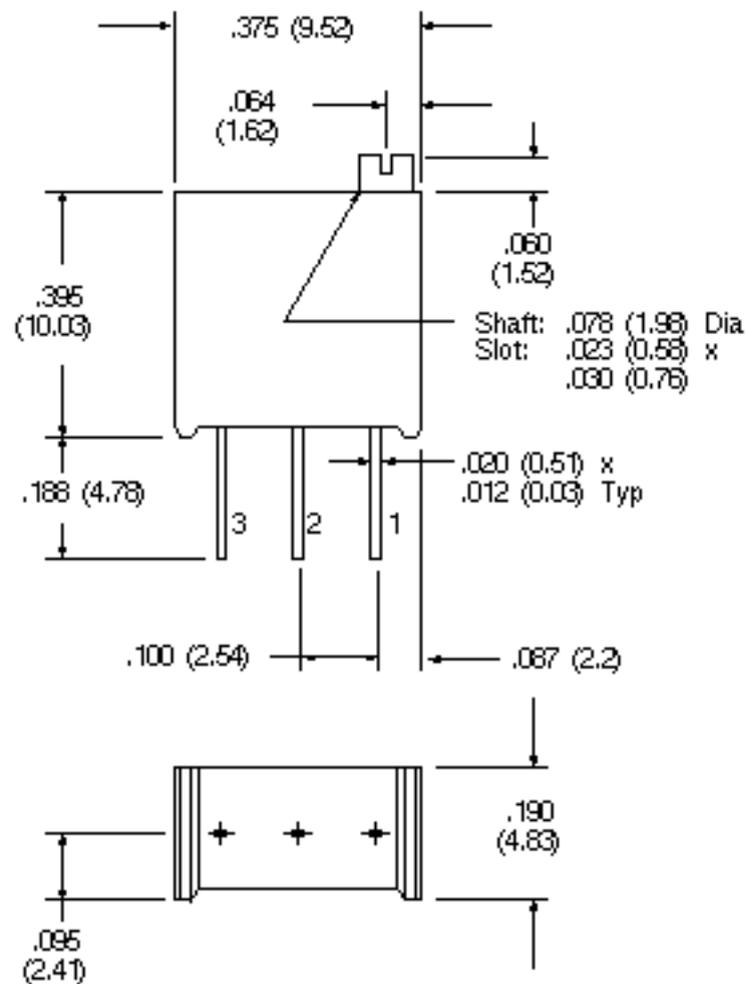
3-Terminal Adjustability: 0.01% of applied voltage

Environmental

Operating Temperature: -55° to +125°C

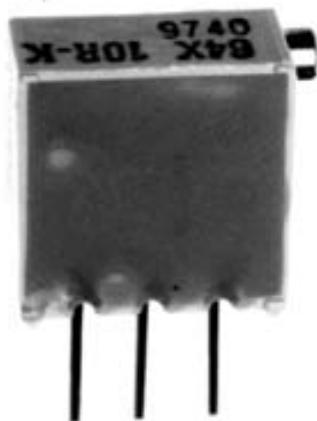
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger precious metal wiper for long term set point stability
- Central pivot locating gear for improved stability
- Unique ratchet device integral with gear to ensure long term reliability
- Double chevron shaft for sealing plus consistent torque and reliable adjustability
- IC style pins for easier board insertion



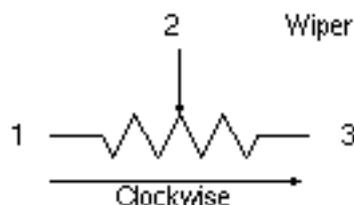
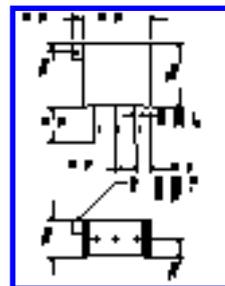
Spectrol

64X Series

Trimmer - 3/8" square, multiturn, cermet

Dimensional Drawing

T7



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
64X-100	500-0215	10	Side	T7
64X-200	500-0216	20	Side	T7
64X-500	500-0217	50	Side	T7
64X-101	500-0218	100	Side	T7
64X-201	500-0219	200	Side	T7
64X-501	500-0220	500	Side	T7
64X-102	500-0221	1K	Side	T7
64X-202	500-0222	2K	Side	T7
64X-502	500-0223	5K	Side	T7
64X-103	500-0224	10K	Side	T7
64X-203	500-0225	20K	Side	T7
64X-253	500-0226	25K	Side	T7
64X-503	500-0227	50K	Side	T7
64X-104	500-0228	100K	Side	T7
64X-204	500-0229	200K	Side	T7
64X-254	500-0230	250K	Side	T7
64X-504	500-0231	500K	Side	T7
64X-105	500-0232	1M	Side	T7
64X-205	500-0233	2M	Side	T7

Specifications

Electrical

Effective Travel: 25 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: Less than 2 Ohms

Temperature Coefficient of Resistance:

100ppm/°C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/°C. below 100 Ohms

Power Rating: 1/2W @ +70°C derated to 0W @ +125°C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 3mNm nom

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% RT

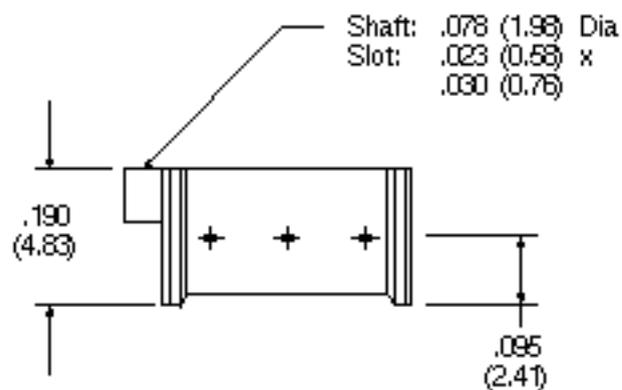
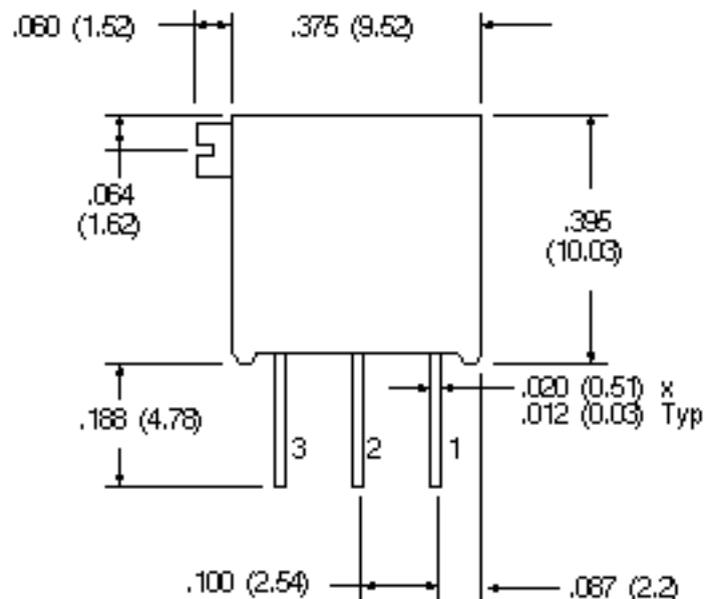
3-Terminal Adjustability: 0.01% of applied voltage

Environmental

Operating Temperature: -55° to +125°C

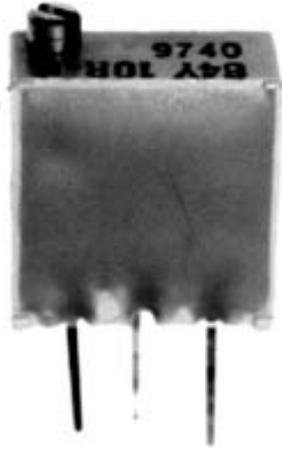
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger precious metal wiper for long term set point stability
- Central pivot locating gear for improved stability
- Unique ratchet device integral with gear to ensure long term reliability
- Double chevron shaft for sealing plus constant torque and reliable adjustability
- IC style pins for easier board insertion

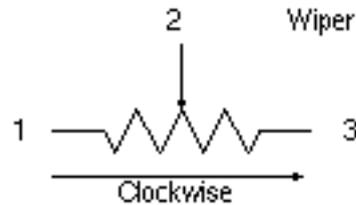
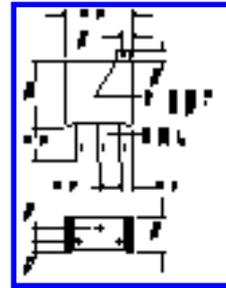


Spectrol 64Y Series

Trimmer - 3/8" square, multiturn, cermet

Dimensional Drawing

T8



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
64Y-100	500-0240	10	Top	T8
64Y-200	500-0241	20	Top	T8
64Y-500	500-0242	50	Top	T8
64Y-101	500-0243	100	Top	T8
64Y-201	500-0244	200	Top	T8
64Y-501	500-0245	500	Top	T8
64Y-102	500-0246	1K	Top	T8
64Y-202	500-0247	2K	Top	T8
64Y-502	500-0248	5K	Top	T8
64Y-103	500-0249	10K	Top	T8
64Y-203	500-0250	20K	Top	T8
64Y-253	500-0251	25K	Top	T8
64Y-503	500-0252	50K	Top	T8
64Y-104	500-0253	100K	Top	T8
64Y-204	500-0254	200K	Top	T8
64Y-254	500-0255	250K	Top	T8
64Y-504	500-0256	500K	Top	T8
64Y-105	500-0257	1M	Top	T8
64Y-205	500-0258	2M	Top	T8

Specifications

Electrical

Effective Travel: 25 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: $\pm 10\%$

End Resistance: Less than 2 Ohms

Temperature Coefficient of Resistance:

100ppm/ $^{\circ}$ C. 100 Ohms to 2 Meg Ohms

0 to +250ppm/ $^{\circ}$ C. below 100 Ohms

Power Rating: 1/2W @ +70 $^{\circ}$ C derated to 0W @ +125 $^{\circ}$ C

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 2% or 20 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 3mNm nom

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% RT

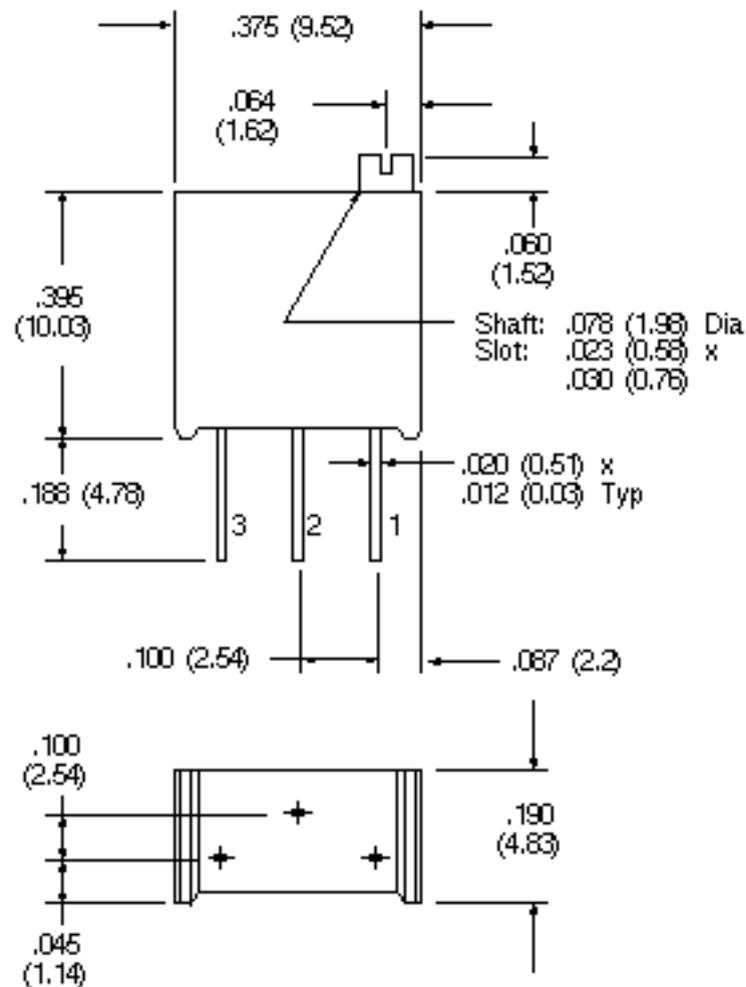
3-Terminal Adjustability: 0.01% of applied voltage

Environmental

Operating Temperature: -55° to +125°C

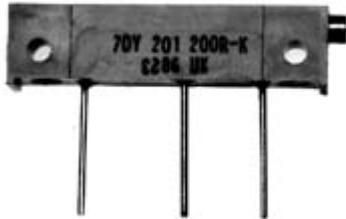
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger wiper for better contact resistance variation
- Unique "T" slider block for excellent stability and setability
- Chevron shaft for sealing and smooth consistant torque
- IC style pins for easier board insertion



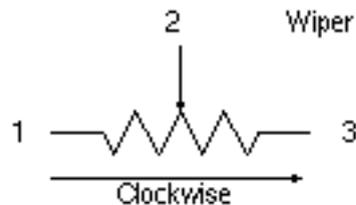
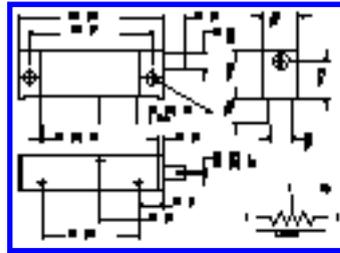
Spectrol No.	NTE Part No.	Value Ohms	Diag. No.
70Y-100	500-0390	10	T9
70Y-200	500-0391	20	T9
70Y-500	500-0392	50	T9
70Y-101	500-0393	100	T9
70Y-201	500-0394	200	T9
70Y-501	500-0395	500	T9
70Y-102	500-0396	1K	T9
70Y-202	500-0397	2K	T9
70Y-502	500-0398	5K	T9
70Y-103	500-0399	100K	T9
70Y-203	500-0400	20K	T9
70Y-503	500-0401	50K	T9
70Y-104	500-0402	100K	T9
70Y-204	500-0403	200K	T9
70Y-504	500-0404	500K	T9
70Y-105	500-0405	1M	T9

Spectrol 70Y Series

Trimmer - 1 1/4" rectangular, multiturn, cermet

Dimensional Drawing

T9



Specifications

Electrical

Effective Travel: 20 turns nom

Resistance Range: 10 Ohms to 2 Meg Ohm

Resistance Tolerance: $\pm 10\%$

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance:

$\pm 100\text{ppm}/^\circ\text{C}$. 100 Ohms to 2 Meg Ohms

-100 to $+200\text{ppm}/^\circ\text{C}$. 10 Ohms to 100 Ohms

Power Rating: 1W @ $+85^\circ\text{C}$ derated to 0W @ $+150^\circ\text{C}$

Dielectric Withstanding Voltage:

1000V AC at sea level

250V AC at 80,000 feet (24,400 meters)

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 3% or 3 Ohms, whichever is greater

Mechanical

Stop: Wiper idles against stop

Operating Torque: 22.5mNm max

Rotation Life: 200 cycles min with max change of $\pm 2\%$ in total

resistance

Resistance Element: Cermet

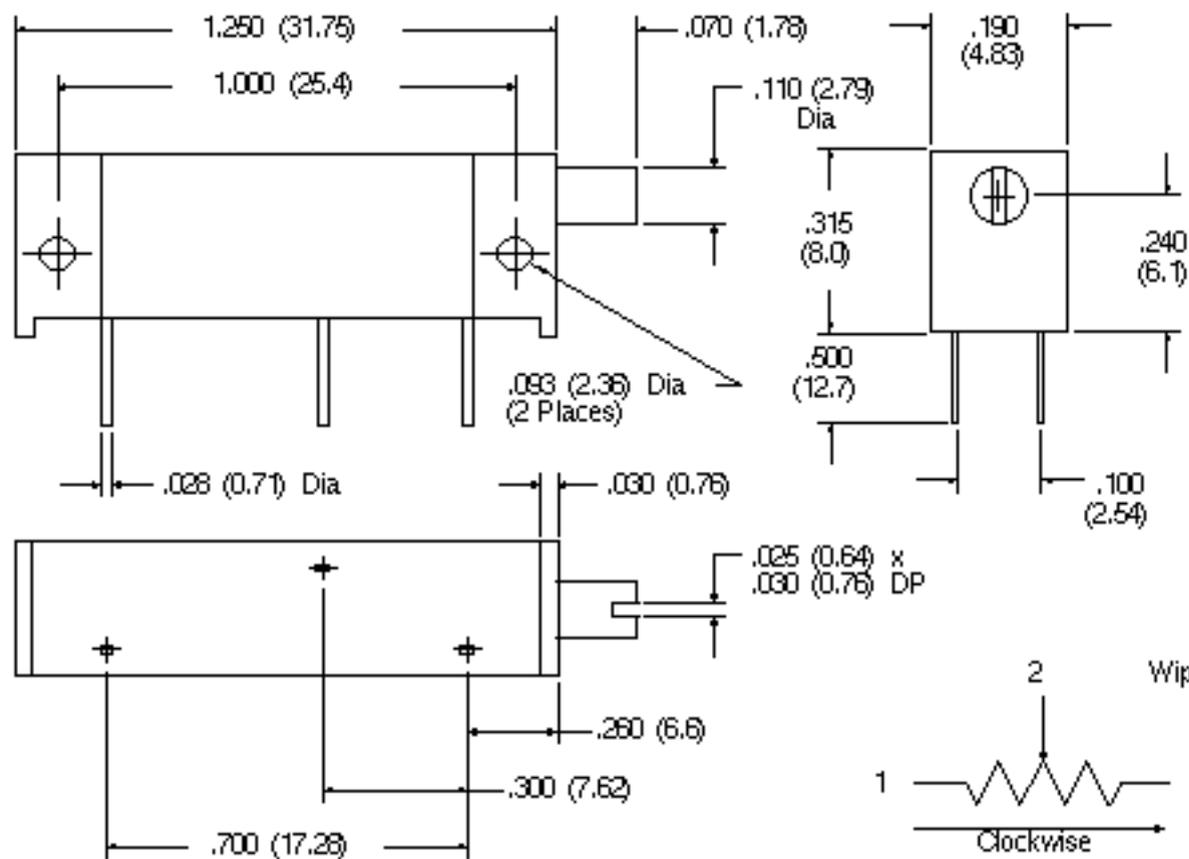
Stability: $\pm 0.05\%$ RT

Environmental

Operating Temperature: -55° to $+150^{\circ}\text{C}$

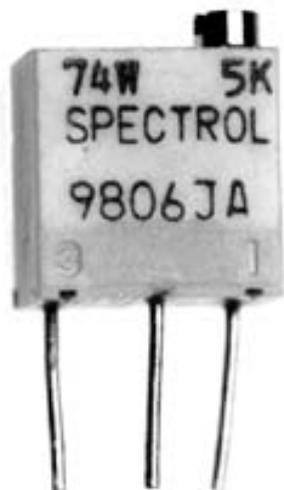
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

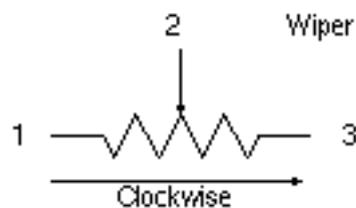
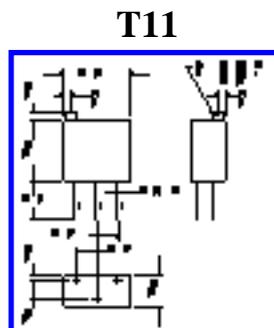
- Multifinger wiper for better contact resistance
- Fully sealed housing for immersion cleaning
- Small compact size



Spectrol 74W Series

Trimmer - 1/4" square, multiturn, cermet

Dimensional Drawing



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
74W-100	500-0280	10	Top	T11
74W-200	500-0281	20	Top	T11
74W-500	500-0282	50	Top	T11
74W-101	500-0283	100	Top	T11
74W-201	500-0284	200	Top	T11
74W-501	500-0285	500	Top	T11
74W-102	500-0286	1K	Top	T11
74W-202	500-0287	2K	Top	T11
74W-502	500-0288	5K	Top	T11
74W-103	500-0289	10K	Top	T11
74W-203	500-0290	20K	Top	T11
74W-503	500-0291	50K	Top	T11
74W-104	500-0292	100K	Top	T11
74W-204	500-0293	200K	Top	T11
74W-504	500-0294	500K	Top	T11
74W-105	500-0295	1M	Top	T11

Specifications

Electrical

Effective Travel: 12 turns nom

Resistance Range: 10 Ohms to 1 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance: ±100ppm/°C

Power Rating: 1/4W @ +85°C derated to 0W @ +125°C

Dielectric Withstanding Voltage: 600V AC

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 3% or 3 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 21.6mNm max

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% of RT

3-Terminal Adjustability: 0.01% of applied voltage

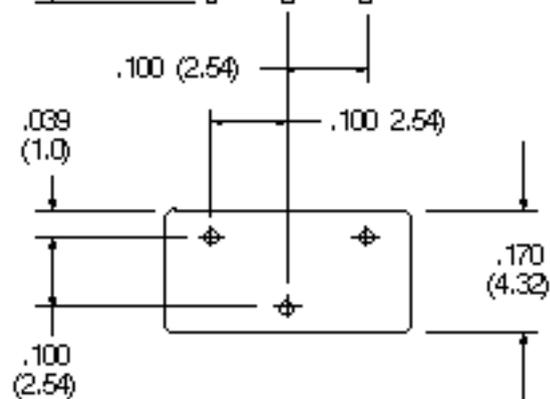
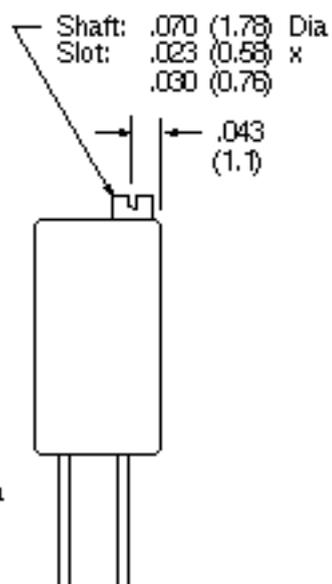
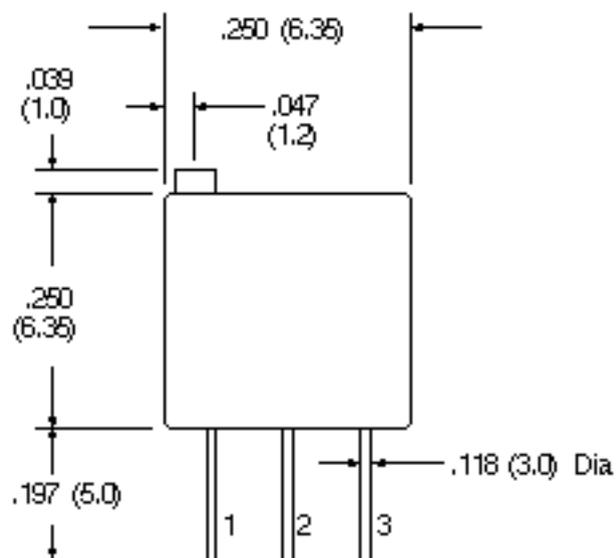
Spectrol 74W Series

Environmental

Operating Temperature: -55° to $+125^{\circ}\text{C}$

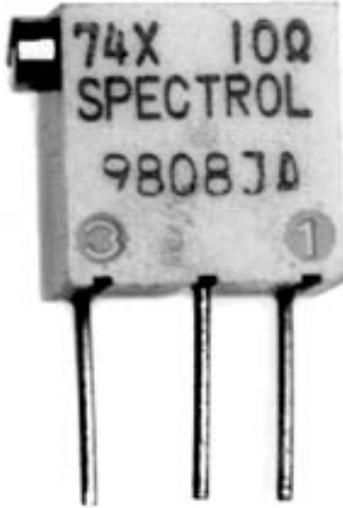
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger wiper for better contact resistance
- Fully sealed housing for immersion cleaning
- Small compact size

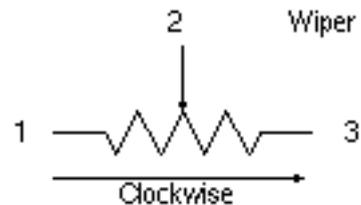
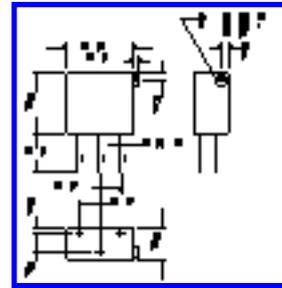


Spectrol 74X Series

Trimmer - 1/4" square, multiturn, cermet

Dimensional Drawing

T10



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
74X-100	500-0260	10	Side	T10
74X-200	500-0261	20	Side	T10
74X-500	500-0262	50	Side	T10
74X-101	500-0263	100	Side	T10
74X-201	500-0264	200	Side	T10
74X-501	500-0265	500	Side	T10
74X-102	500-0266	1K	Side	T10
74X-202	500-0267	2K	Side	T10
74X-502	500-0268	5K	Side	T10
74X-103	500-0269	10K	Side	T10
74X-203	500-0270	20K	Side	T10
74X-503	500-0271	50K	Side	T10
74X-104	500-0272	100K	Side	T10
74X-204	500-0273	200K	Side	T10
74X-504	500-0274	500K	Side	T10
74X-105	500-0275	1M	Side	T10

Specifications

Electrical

Effective Travel: 12 turns nom

Resistance Range: 10 Ohms to 1 Meg Ohm

Resistance Tolerance: $\pm 10\%$

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance: $\pm 100\text{ppm}/^\circ\text{C}$

Power Rating: 1/4W @ +85°C derated to 0W @ +125°C

Dielectric Withstanding Voltage: 600V AC

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 3% or 3 Ohms, whichever is greater

Mechanical

Stop: Contact idles at stop

Operating Torque: 21.6mNm max

Resistance Element: Cermet

2-Terminal Adjustability: 0.05% of RT

3-Terminal Adjustability: 0.01% of applied voltage

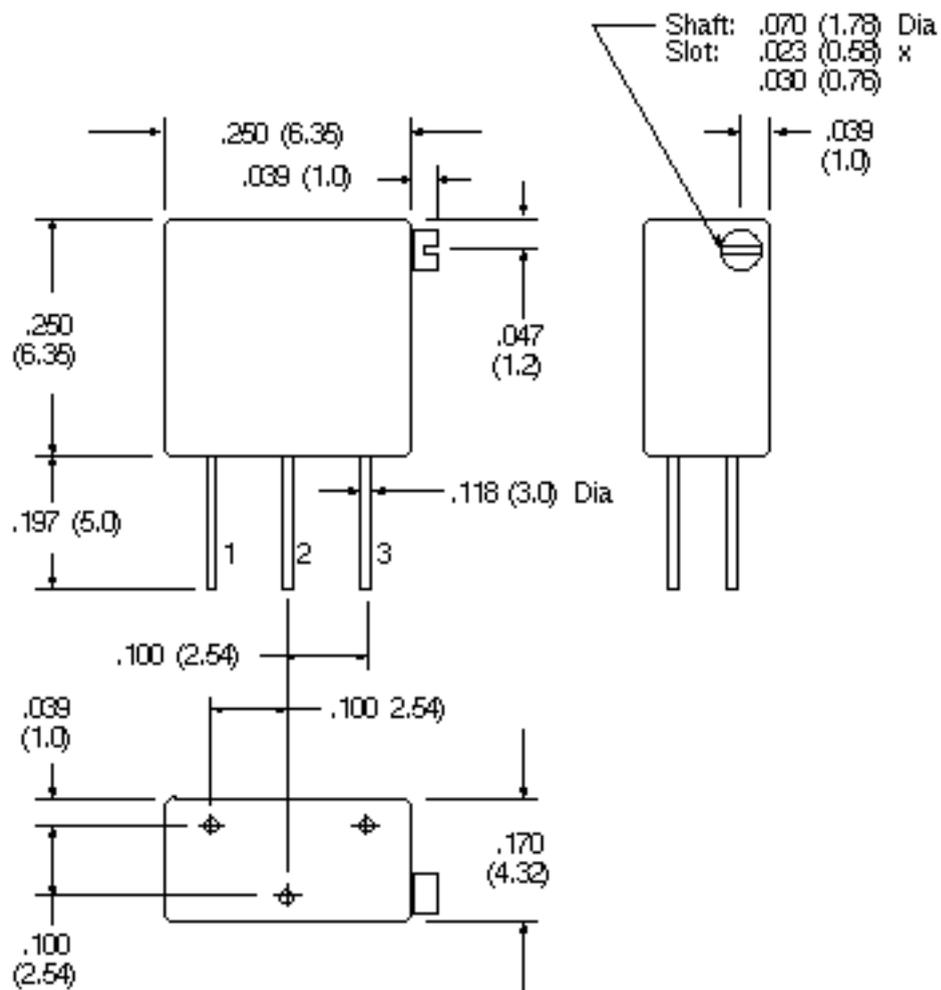
Spectrol 74X Series

Environmental

Operating Temperature: -55° to $+125^{\circ}\text{C}$

Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

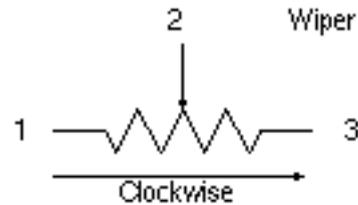
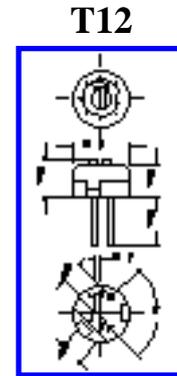
- Multifinger wiper for better contact resistance
- "O" ring seal for solvent and aqueous washing
- Graduations for easier setting
- Rotor and body material flame retardant



Spectrol 75H Series

Trimmer - 1/4" round, single turn, cermet

Dimensional Drawing



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
75H-100	500-0300	10	Top	T12
75H-200	500-0301	20	Top	T12
75H-500	500-0302	50	Top	T12
75H-101	500-0303	100	Top	T12
75H-201	500-0304	200	Top	T12
75H-501	500-0305	500	Top	T12
75H-102	500-0306	1K	Top	T12
75H-202	500-0307	2K	Top	T12
75H-502	500-0308	5K	Top	T12
75H-103	500-0309	10K	Top	T12
75H-203	500-0310	20K	Top	T12
75H-503	500-0311	50K	Top	T12
75H-104	500-0312	100K	Top	T12
75H-204	500-0313	200K	Top	T12
75H-504	500-0314	500K	Top	T12
75H-105	500-0315	1M	Top	T12
75H-205	500-0316	2M	Top	T12

Specifications

Electrical

Effective Travel: 240° nom

Resistance Range: 10 Ohms to 1 Meg Ohm

Resistance Tolerance: ±10%

End Resistance: 2 Ohms max

Temperature Coefficient of Resistance: ±100ppm/°C

Power Rating: 1/2W @ +85°C derated to 0W @ +150°C

Dielectric Strength: 600V AC at sea level

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 3% or 3 Ohms, whichever is greater

Maximum Wiper Current: 100mA

Mechanical

Stop: Solid

Travel: 260° nom

Operating Torque: 200mNm max

Resistance Element: Cermet

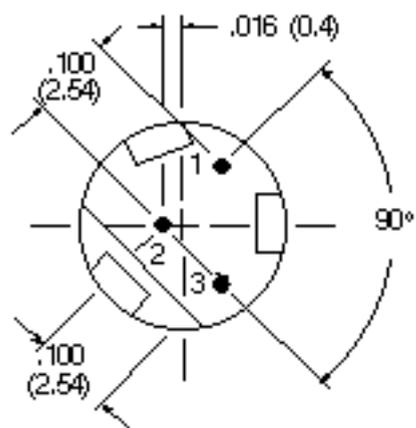
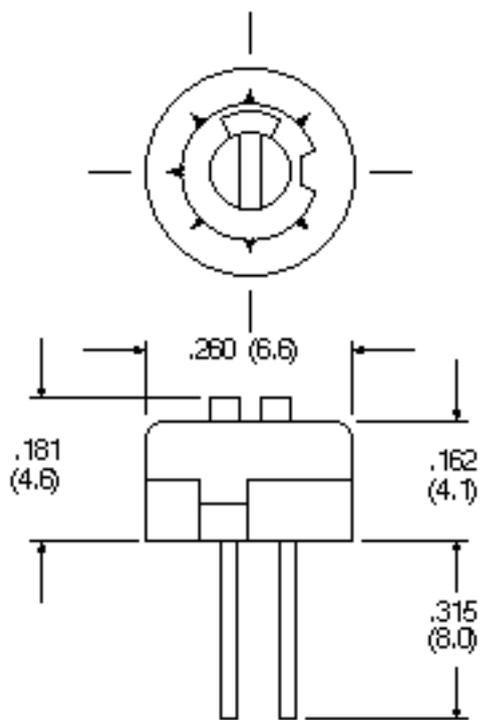
Spectrol 75H Series

Environmental

Operating Temperature: -55° to $+150^{\circ}\text{C}$

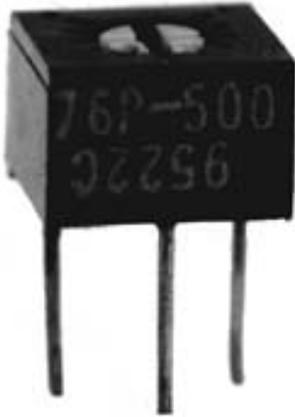
Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Multifinger wiper for better contact resistance
- Withstands immersion cleaning process
- Graduations for easier setting
- Rotor design for automatic adjustment

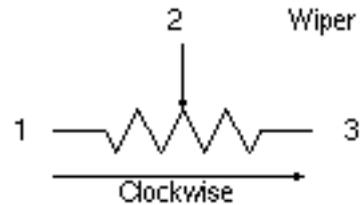
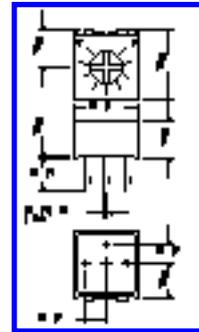


Spectrol 76P Series

Trimmer - 1/4" square, single turn, cermet

Dimensional Drawing

T13



Spectrol No.	NTE Part No.	Value Ohms	Adjust	Diag. No.
76P-500	500-0342	50	Top	T13
76P-101	500-0343	100	Top	T13
76P-201	500-0344	200	Top	T13
76P-501	500-0345	500	Top	T13
76P-102	500-0346	1K	Top	T13
76P-202	500-0347	2K	Top	T13
76P-502	500-0348	5K	Top	T13
76P-103	500-0349	10K	Top	T13
76P-203	500-0350	20K	Top	T13
76P-503	500-0351	50K	Top	T13
76P-104	500-0352	100K	Top	T13
76P-204	500-0353	200K	Top	T13
76P-504	500-0354	500K	Top	T13
76P-105	500-0355	1M	Top	T13

Specifications

Electrical

Effective Travel: 240° nom

Resistance Range: 10 Ohms to 2 Meg Ohms

Resistance Tolerance: ±10%

Temperature Coefficient of Resistance: ±100ppm/°C

Power Rating: 1/2W @ +70°C derated to 0W @ +150°C

Dielectric Strength: 900V AC at sea level

Insulation Resistance: 1000 Meg Ohms min

Contract Resistance Variation: 1% or 3 Ohms, whichever is greater

Mechanical

Stop Strength: 7 oz min

Travel: 270° nom

Operating Torque: 3 oz-in max

Resistance Element: Cermet

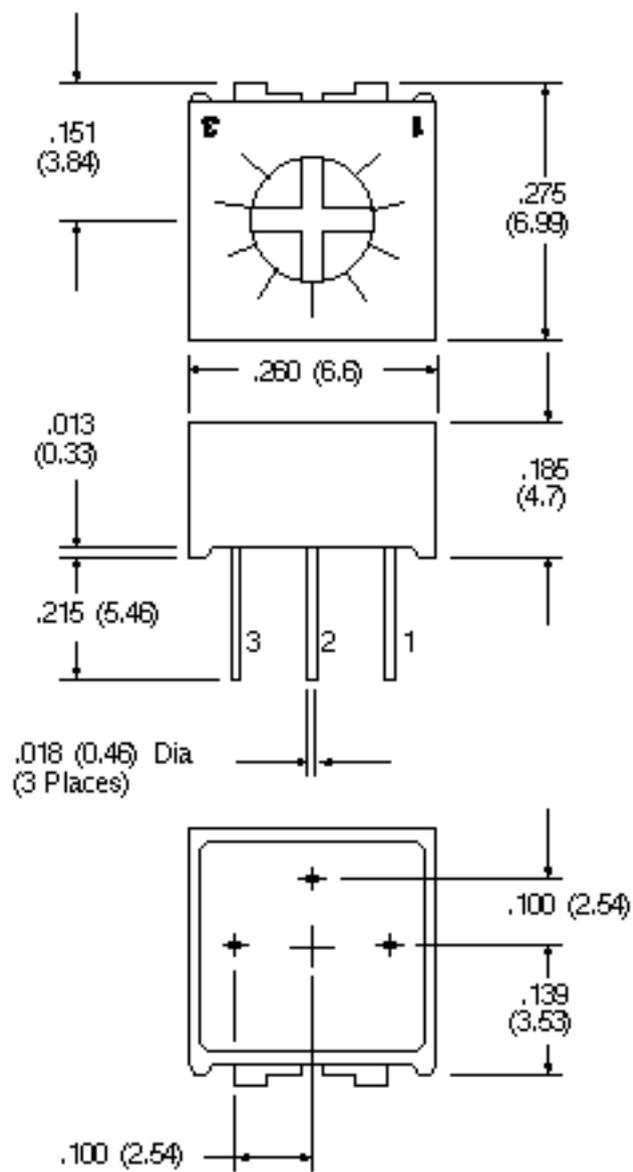
Environmental

Spectrol 76P Series

Operating Temperature: -55° to $+125^{\circ}\text{C}$

Electrical Endurance: 1000 hr.

Mechanical Life: 200 cycles



Features

- Phosphor bronze, solder plated terminals
- Available in 1/8" and 1/4" shaft diameter
- Plastic flame retardant housing
- Available in audio taper (J types)

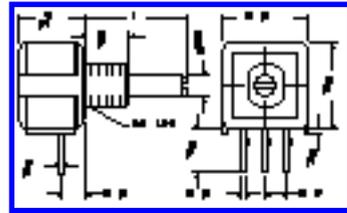


Spectrol 149 Series

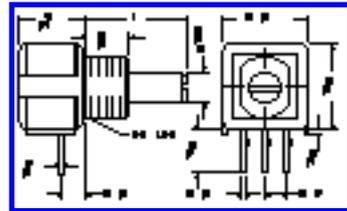
Potentiometer - 1 Watt, 1/2" square, 1/8" and 1/4" dia. shaft

Dimensional Drawing

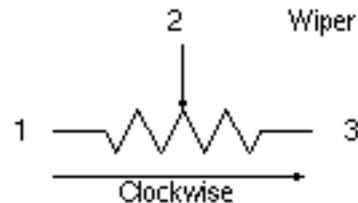
P7



P8



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
149-8-08-101	502-0002	100	3/4"	P7
149-9-10-101	502-0021	100	7/8"	P8
149-8-08-200	502-0003	200	3/4"	P7
149-9-10-200	502-0022	200	7/8"	P8
149-8-08-251	502-0004	250	3/4"	P7
149-9-10-251	502-0023	250	7/8"	P8
149-8-08-501	502-0005	500	3/4"	P7
149-9-10-501	502-0024	500	7/8"	P8
149-8-08-102	502-0006	1K	3/4"	P7
149-9-10-102	502-0025	1K	7/8"	P8
149-J-9-10-102	502-0045	1K	7/8"	P8
149-8-08-252	502-0007	2.5K	3/4"	P7
149-9-10-252	502-0026	2.5K	7/8"	P8
149-J-9-10-252	502-0046	2.5K	7/8"	P8
149-8-08-502	502-0008	5K	3/4"	P7
149-9-10-502	502-0027	5K	7/8"	P8
149-J-9-10-502	502-0047	5K	7/8"	P8
149-8-08-103	502-0009	10K	3/4"	P7
149-9-10-103	502-0028	10K	7/8"	P8
149-J-9-10-103	502-0048	10K	7/8"	P8



Specifications

Electrical

Resistance Range - Linear Taper: 100 Ohms to 1Meg Ohms

- CW Audio Taper: J types

Resistance Tolerance: ±10%

Power Rating: 1W @ +85°C derated to 0W @ +125°C

Temperature Coefficient of Resistance: ±150ppm/°C

Linearity Tolerance: ±5% independent

Contact Resistance variation: 3% of total resistance

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 750V RMS min 60Hz

End Resistance: 2 Ohms max each end

Effective Electrical Angle: 265° ±5°

Spectrol 149 Series

149-8-08-253	502-0010	25K	3/4"	P7
149-9-10-253	502-0029	25K	7/8"	P8
149-J-9-10-253	502-0049	25K	7/8"	P8
149-8-08-503	502-0011	50K	3/4"	P7
149-9-10-503	502-0030	50K	7/8"	P8
149-J-9-10-503	502-0050	50K	7/8"	P8
149-8-08-104	502-0012	100K	3/4"	P7
149-9-10-104	502-0031	100K	7/8"	P8
149-J-9-10-104	502-0051	100K	7/8"	P8
149-8-08-254	502-0013	250K	3/4"	P7
149-9-10-254	502-0032	250K	7/8"	P8
149-8-08-504	502-0014	500K	3/4"	P7
149-9-10-504	502-0033	500K	7/8"	P8
149-8-08-105	502-0015	1M	3/4"	P7
149-9-10-105	502-0034	1M	7/8"	P8
149-8-08-205	502-0016	2M	3/4"	P7
149-9-10-205	502-0035	2M	7/8"	P8

Rotation Life: 25,000 cycles

Mechanical

Resistance Element: Cermet

Mechanical Rotation: 295° ±5°

Starting and Running Torque: 21.6 to 216gm-cm

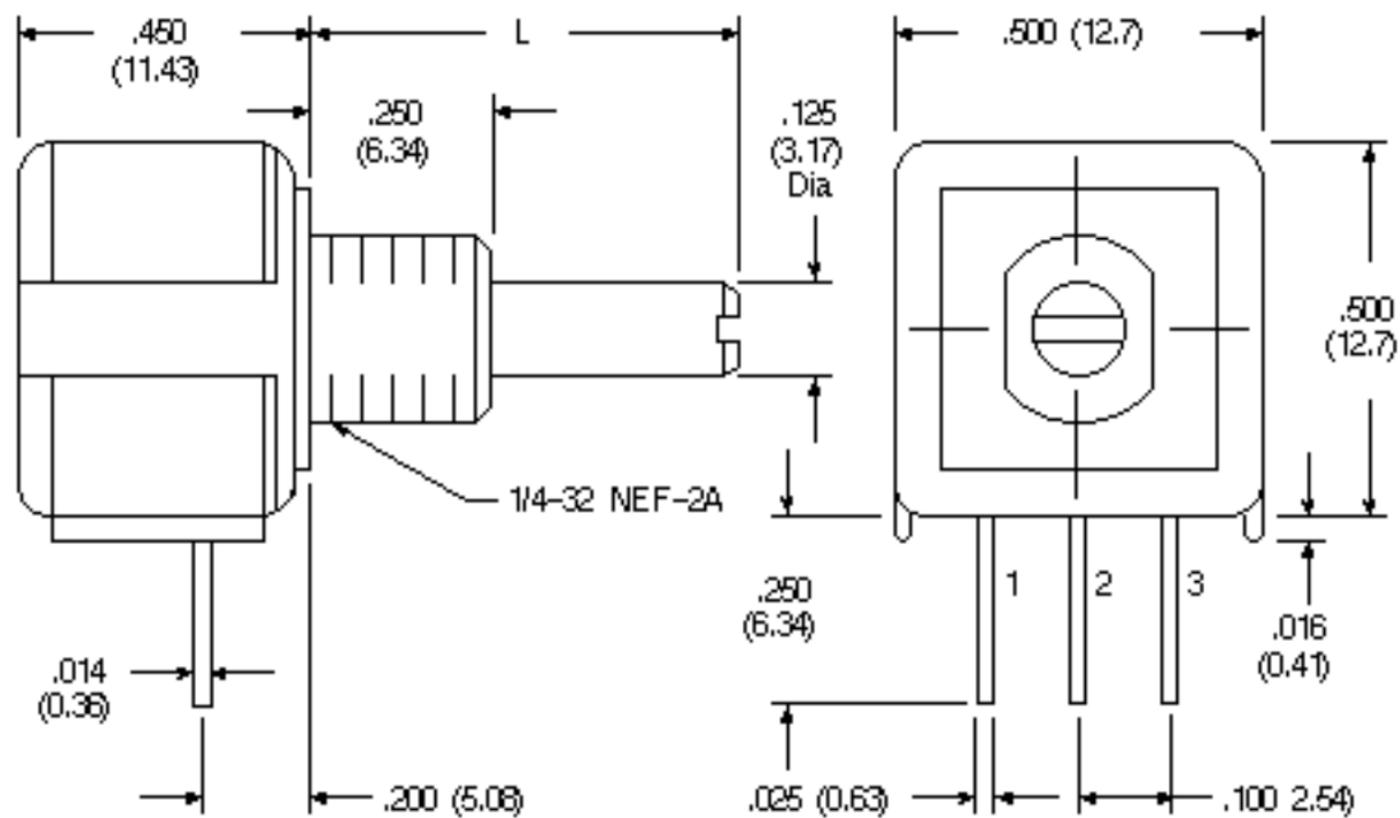
End Stop Torque: 0.339Nm (48 oz in)

Environmental

Operating Temperature: -55° to +150°C

Rotation Life: 2,000,000 shaft revolutions

Load Life: 1000 hr.



Features

- Phosphor bronze, solder plated terminals
- Available in 1/8" and 1/4" shaft diameter
- 1/4" plastic shaft types
- Plastic flame retardant housing
- Available in audio taper (J types)

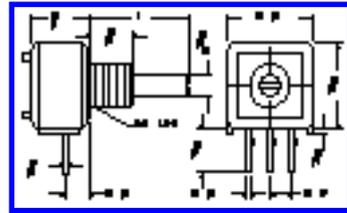


Spectrol 249 Series

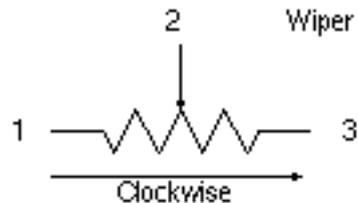
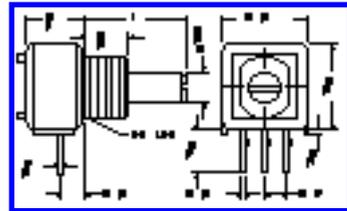
Potentiometer - 1 Watt, 1/2" square, 1/8" and 1/4" dia. shaft

Dimensional Drawing

P9



P10



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
249-7-10-501	502-0164	500	7/8"	P10
249-8-08-501	502-0064	500	3/4"	P9
249-7-10-102	502-0165	1K	7/8"	P10
249-8-08-102	502-0065	1K	3/4"	P9
249-J-8-08-102	502-0180	1K	3/4"	P9
249-J-9-10-102	502-0185	1K	7/8"	P10
249-7-10-252	502-0166	2.5K	7/8"	P10
249-8-08-252	502-0066	2.5K	3/4"	P9
249-7-10-502	502-0167	5K	7/8"	P10
249-8-08-502	502-0067	5K	3/4"	P9
249-7-10-103	502-0168	10K	7/8"	P10
249-8-08-103	502-0068	10K	3/4"	P9
249-J-8-08-103	502-0181	10K	3/4"	P9
249-J-9-10-103	502-0186	10K	7/8"	P10
249-7-10-253	502-0169	25K	7/8"	P10
249-8-08-253	502-0069	25K	3/4"	P9
249-7-10-503	502-0170	50K	7/8"	P10
249-8-08-503	502-0070	50K	3/4"	P9
249-J-8-08-503	502-0182	50K	3/4"	P9
249-J-9-10-503	502-0187	50K	7/8"	P10
249-7-10-104	502-0171	100K	7/8"	P10

Specifications

Electrical

Resistance Range - Linear Taper: 500 Ohms to 500K Ohms
- CW Audio Taper: J types

Resistance Tolerance: $\pm 10\%$

Power Rating: 1W @ +70°C derated to 0W @ +125°C

Temperature Coefficient of Resistance: $\pm 100\text{ppm}/^\circ\text{C}$

Linearity Tolerance: $\pm 5\%$ independent

Contact Resistance variation: 3% of total resistance

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 750V RMS min 50Hz

End Resistance: 2 Ohms max each end

Effective Electrical Angle: $265^\circ \pm 5^\circ$

Rotation Life: 25,000 cycles

Spectrol 249 Series

249-8-08-104	502-0071	100K	3/4"	P9
249-J-8-08-104	502-0183	100K	3/4"	P9
249-J-9-10-104	502-0188	100K	7/8"	P10
249-7-10-254	502-0172	250K	7/8"	P10
249-8-08-254	502-0072	250K	3/4"	P9
249-7-10-504	502-0173	500K	7/8"	P10
249-8-08-504	502-0073	500K	3/4"	P9

NOTE: 249-7-XX-XX are plastic shaft types

Mechanical

Resistance Element: Cermet

Mechanical Rotation: $295^{\circ} \pm 5^{\circ}$

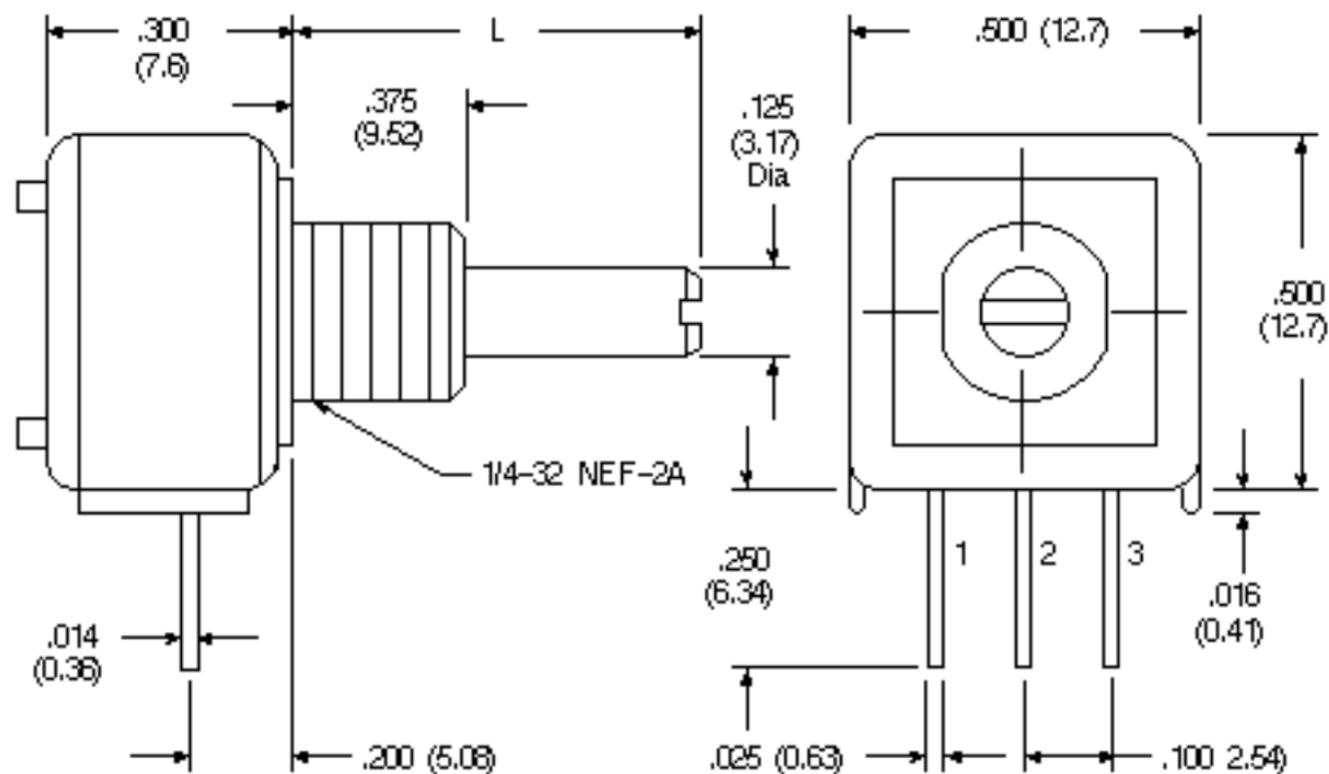
Starting and Running Torque: 1.5 to 18.75mNm

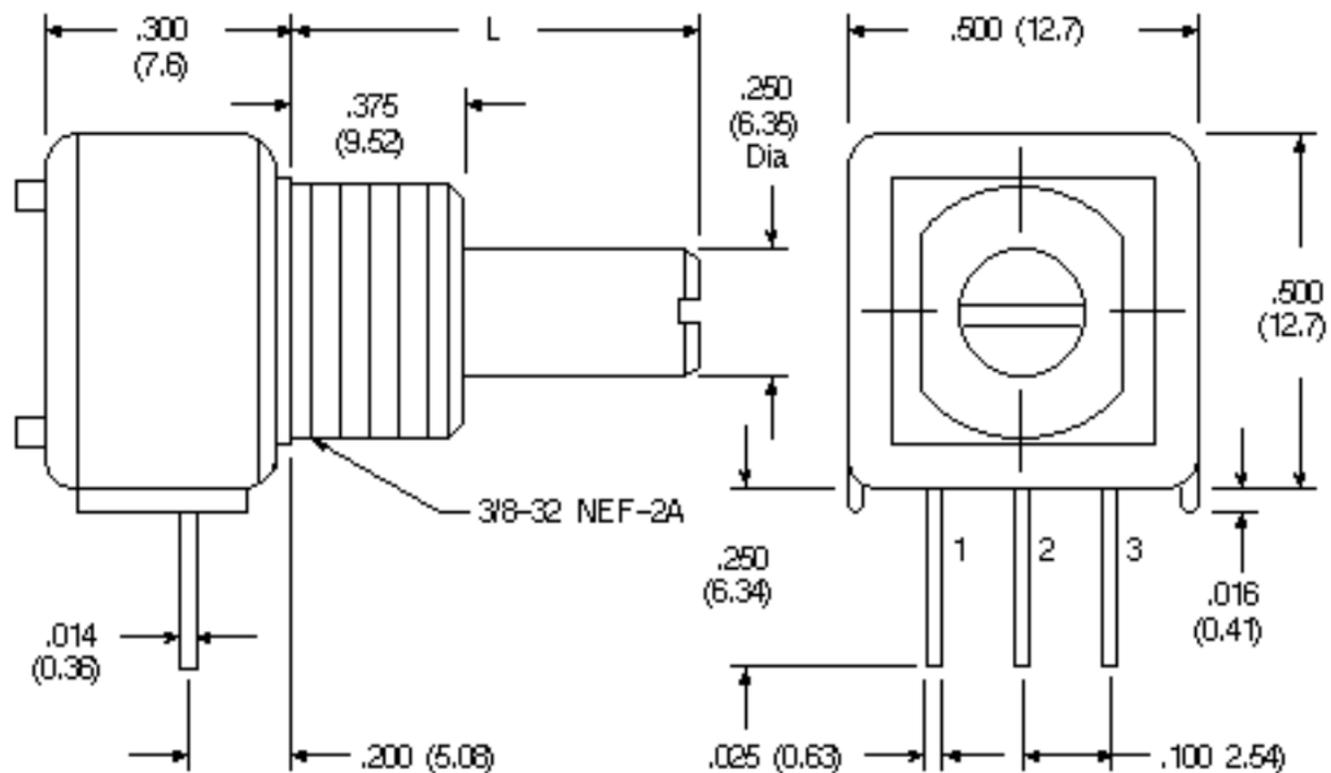
End Stop Torque: 0.35Nm (50 oz in)

Environmental

Operating Temperature: -55° to $+125^{\circ}\text{C}$

Load Life: 1000 hr.





Features

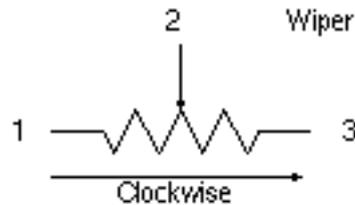
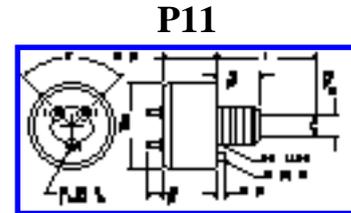
- Compact size
- Stainless steel 1/4" diameter shaft
- Turret type, solder plated terminals
- Plastic housing with non-turn pin



Spectrol 357 Series

Potentiometer - 1 Watt, 7/8" round case, 1/4" dia. shaft, single turn

Dimensional Drawing



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
357-0-0-102	502-0080	1K	7/8"	P11
357-2-0-102	502-0087	1K	7/8"	P11
357-0-0-202	502-0081	2K	7/8"	P11
357-2-0-202	502-0088	2K	7/8"	P11
357-0-0-502	502-0082	5K	7/8"	P11
357-2-0-502	502-0089	5K	7/8"	P11
357-0-0-103	502-0083	10K	7/8"	P11
357-2-0-103	502-0090	10K	7/8"	P11
357-0-0-203	502-0084	20K	7/8"	P11
357-2-0-203	502-0091	20K	7/8"	P11
357-0-0-503	502-0085	50K	7/8"	P11
357-2-0-503	502-0092	50K	7/8"	P11

NOTE: 357-0-XX-XX types are continuous rotation
357-2-XX-XX types contain rotation stops

Specifications

Electrical

Resistance Range - Linear Taper: 1K Ohms to 50K Ohms

Resistance Tolerance: $\pm 20\%$

Power Rating: 1W @ +70°C derated to 0W @ +125°C

Temperature Coefficient of Resistance: $\pm 600\text{ppm}/^\circ\text{C}$

Linearity Tolerance: $\pm 2\%$ independent

Output Smoothness: 0.1% max

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 1000V RMS min 50Hz

End Voltage: 0.5% max

Electrical Travel: $340^\circ \pm 3^\circ$

Rotation Life: 2,000,000 shaft revolutions

Mechanical

Bearing Type Bushing: Sleeve bearing

Resistance Element: Conductive plastic

Mechanical Rotation: 360° (Continuous), $340^\circ \pm 3^\circ$ (With Stops)

Starting and Running Torque: 3.68mNm (0.5 oz in)

Shaft Tolerance: 0.13 mm (Runout)

0.25 mm (End Play)

Spectrol 357 Series

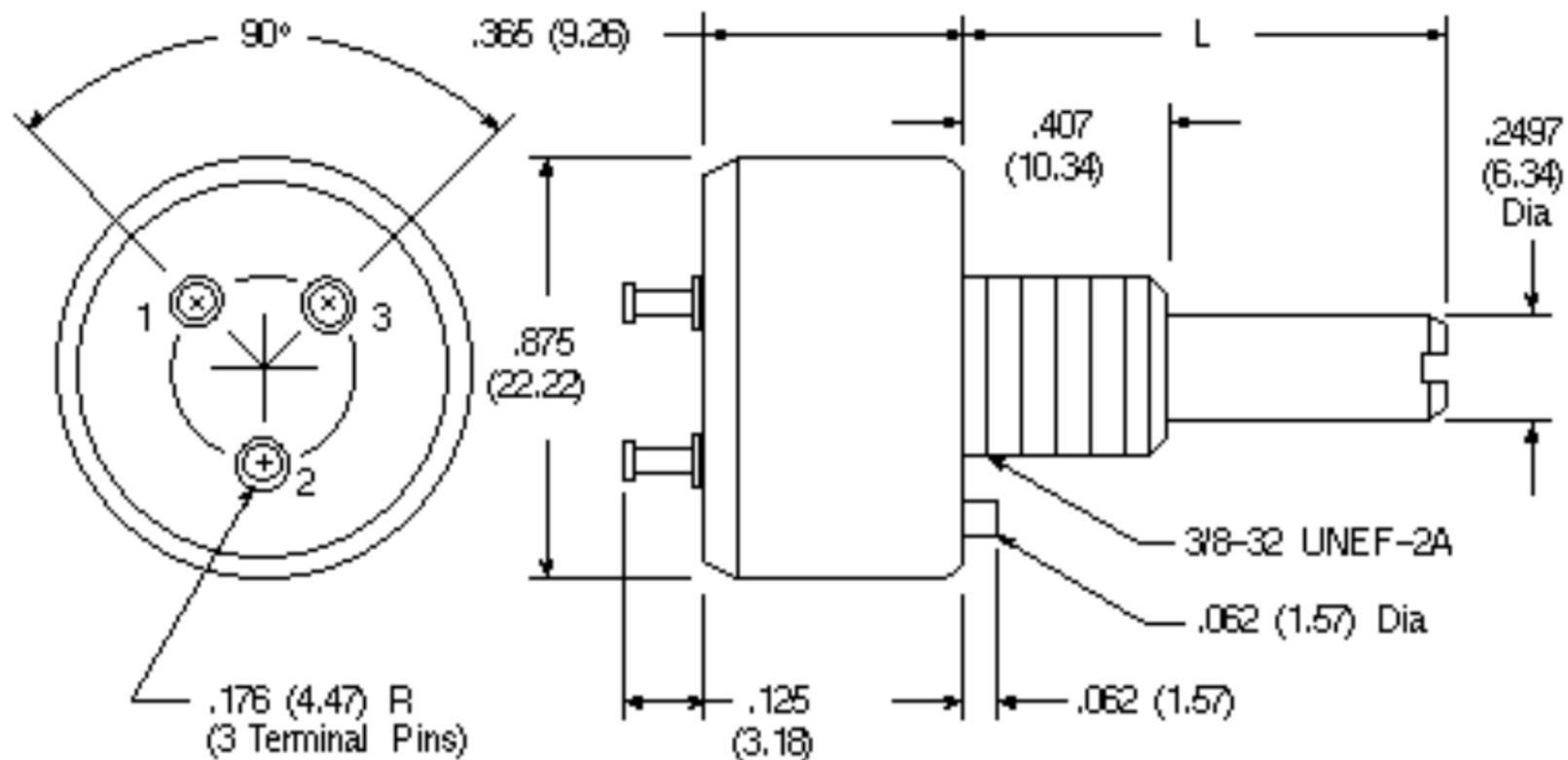
0.13 mm (Radial Play)

Rotation Life: 10,000,000 shaft revolutions

Environmental

Operating Temperature: -55° to +125°C

Load Life: 1000 hr.



Features

- Permanickel contact
- Stainless steel 1/4" diameter shaft
- Gold plated terminals
- Internal tracking surfaces gold plated
- Precision winding with excellent linearity

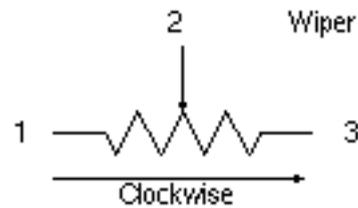
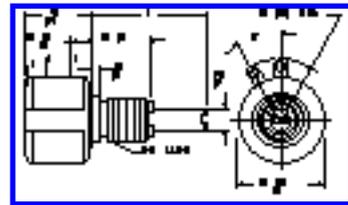


Spectrol 533 Series

Potentiometer - 1.5 Watt, 7/8" round case, 1/4" dia. shaft, 3 turn, precision wirewound

Dimensional Drawing

P12



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
533-1-1-101	502-0130	100	7/8"	P12
533-1-1-201	502-0131	200	7/8"	P12
533-1-1-501	502-0132	500	7/8"	P12
533-1-1-102	502-0133	1K	7/8"	P12
533-1-1-202	502-0134	2K	7/8"	P12
533-1-1-502	502-0135	5K	7/8"	P12
533-1-1-103	502-0136	10K	7/8"	P12
533-1-1-203	502-0137	20K	7/8"	P12

Specifications

Electrical

Resistance Range: 50 Ohms to 20K Ohms

Resistance Tolerance: $\pm 5\%$

Linearity Tolerance: $\pm 0.25\%$ independent

Noise: 100 Ohms ENR

Rotation: 1080°, +10°, -0°

Power Rating: 1W @ +70°C derated to 0W @ +125°C

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 1000V RMS min 50Hz

Absolute Minimum Resistance: Not to exceed linearity x total resistance or 1 Ohm, whichever is greater

Temperature Coefficient of Resistance: 20ppm/°C (wire only)

End Voltage: 0.25% of total applied voltage, max

Mechanical

Bearing Type Bushing: Sleeve bearing

Resistance Element: See Table

Resistance Element Data

Resistance Value (Ohms)	Resolution (%)	Ohms per Turn	Max Current @ 70°C Ambient (mA)	Max Voltage Across Coil (Volts)
100	.111	.1114	100.00	10.0
200	.097	.1954	70.70	14.1

Spectrol 533 Series

500	.069	.3424	44.70	22.4
1K	.063	.6331	31.60	31.6
2K	.041	.8206	22.40	44.7
5K	.044	2.2330	14.10	70.7
10K	.034	3.4510	10.00	100.0
20K	.031	6.1790	7.07	200.0

Rotation: 1080°, +10°, -0°

Starting Torque (maximum): 50 gm-cms (0.7 oz in)

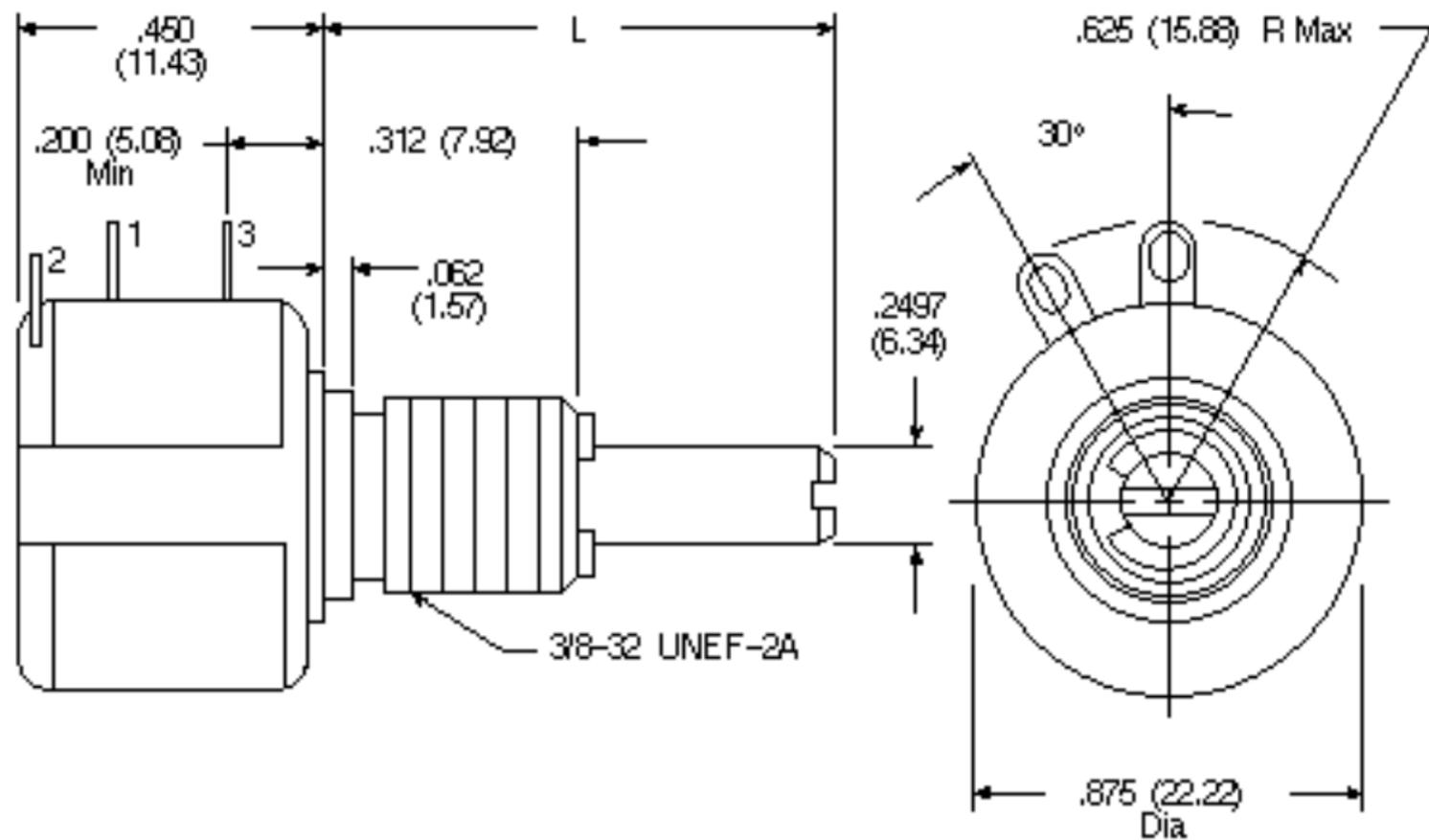
Stop Strength (static): 5.4 Kgm-cm (75 oz in)

Rotation Life: 300,000 shaft revolutions

Environmental

Operating Temperature: -55° to +125°C

Load Life: 900 hr.



Features

- Permanickel contact
- Stainless steel 1/4" diameter shaft
- Gold plated terminals
- Internal tracking surfaces gold plated
- Precision winding with excellent linearity

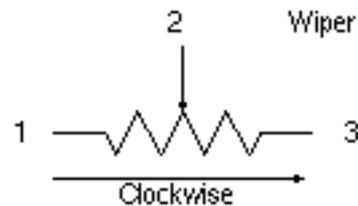
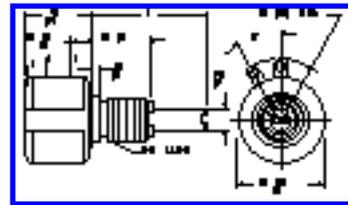


Spectrol 534 Series

Potentiometer - 3 Watt, 7/8" round case, 1/4" dia. shaft, 10 turn, precision wirewound

Dimensional Drawing

P12



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
534-1-1-101	502-0100	100	7/8"	P12
534-1-1-201	502-0101	200	7/8"	P12
534-1-1-501	502-0102	500	7/8"	P12
534-1-1-102	502-0103	1K	7/8"	P12
534-1-1-202	502-0104	2K	7/8"	P12
534-1-1-502	502-0105	5K	7/8"	P12
534-1-1-103	502-0106	10K	7/8"	P12
534-1-1-203	502-0107	20K	7/8"	P12
534-1-1-503	502-0108	50K	7/8"	P12
534-1-1-104	502-0109	100K	7/8"	P12

Specifications

Electrical

Resistance Range: 100 Ohms to 100K Ohms

Resistance Tolerance: $\pm 5\%$

Linearity Tolerance: $\pm 0.25\%$ independent

Noise: 100 Ohms ENR

Rotation: 3600°, +10°, -0°

Power Rating: 2W @ +70°C derated to 0W @ +125°C

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 1000V RMS min 50Hz

Absolute Minimum Resistance: Not to exceed linearity x total resistance or 1 Ohm, whichever is greater

Temperature Coefficient of Resistance: 20ppm/°C (wire only)

End Voltage: 0.25% of total applied voltage, max

Mechanical

Bearing Type Bushing: Sleeve bearing

Resistance Element: See Table

Resistance Element Data

Resistance Value (Ohms)	Resolution (%)	Ohms per Turn	Max Current @ 70°C Ambient (mA)	Max Voltage Across Coil (Volts)
100	.060	.0603	141.00	14.1

Spectrol 534 Series

200	.037	.0746	100.00	20.0
500	.031	.1520	63.20	31.6
1K	.025	.2459	44.70	44.7
2K	.021	.4113	31.60	63.2
5K	.016	.8206	20.00	100.0
10K	.017	1.7230	14.10	141.0
20K	.015	3.0160	10.00	200.0
50K	.009	4.6690	6.23	316.0
100K	.007	7.4560	4.47	447.0

Rotation: 3600°, +10°, -0°

Starting Torque (maximum): 36 gm-cms (0.5 oz in)

Stop Strength (static): 5.4 Kgm-cm (75 oz in)

Rotation Life: 1,000,000 shaft revolutions

Environmental

Operating Temperature: -55° to +125°C

Load Life: 900 hr.

Features

- Permanickel contact
- Stainless steel 1/4" diameter shaft
- Gold plated terminals
- Internal tracking surfaces gold plated
- Precision winding with excellent linearity

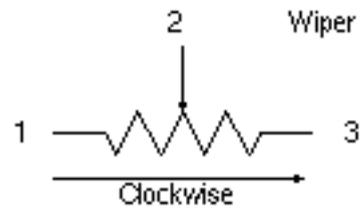
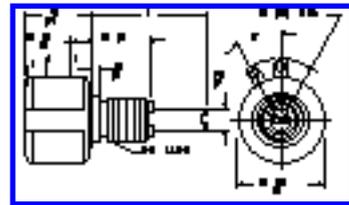


Spectrol 535 Series

Potentiometer - 2.3 Watt, 7/8" round case, 1/4" dia. shaft, 5 turn, precision wirewound

Dimensional Drawing

P12



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
535-1-1-101	502-0145	100	7/8"	P12
535-1-1-201	502-0146	200	7/8"	P12
535-1-1-501	502-0147	500	7/8"	P12
535-1-1-102	502-0148	1K	7/8"	P12
535-1-1-202	502-0149	2K	7/8"	P12
535-1-1-502	502-0150	5K	7/8"	P12
535-1-1-103	502-0151	10K	7/8"	P12
535-1-1-203	502-0152	20K	7/8"	P12
535-1-1-503	502-0153	50K	7/8"	P12

Specifications

Electrical

Resistance Range: 50 Ohms to 50K Ohms

Resistance Tolerance: $\pm 5\%$

Linearity Tolerance: $\pm 0.25\%$ independent

Noise: 100 Ohms ENR

Rotation: 1800°, +10°, -0°

Power Rating: 1.5W @ +70°C derated to 0W @ +125°C

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 1000V RMS min 50Hz

Absolute Minimum Resistance: Not to exceed linearity x total resistance or 1 Ohm, whichever is greater

Temperature Coefficient of Resistance: 20ppm/°C (wire Only)

End Voltage: 0.25% of total applied voltage, max

Mechanical

Bearing Type Bushing: Sleeve bearing

Resistance Element: See Table

Resistance Element Data

Resistance Value (Ohms)	Resolution (%)	Ohms per Turn	Max Current @ 70°C Ambient (mA)	Max Voltage Across Coil (Volts)
100	.075	.0746	122.00	12.2

Spectrol 535 Series

200	.061	.1220	86.60	17.3
500	.049	.2549	54.70	27.4
1K	.041	.4113	38.70	38.7
2K	.031	.6331	27.40	54.8
5K	.034	1.7230	17.30	86.6
10K	.030	3.0160	12.20	122.0
20K	.020	3.9910	8.66	173.0
50K	.015	7.4560	5.47	274.0

Rotation: 1800°, +10°, -0°

Starting Torque (maximum): 50 gm-cms (0.7 oz in)

Stop Strength (static): 5.4 Kgm-cm (75 oz in)

Rotation Life: 500,000 shaft revolutions

Environmental

Operating Temperature: -55° to +125°C

Load Life: 900 hr.

Features

- Permanickel contact
- Plastic 1/4" diameter shaft
- Gold plated terminals
- Internal tracking surfaces gold plated
- Precision winding with excellent linearity

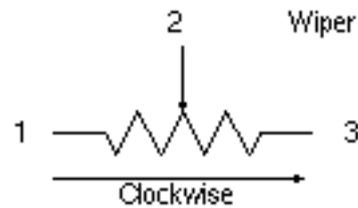
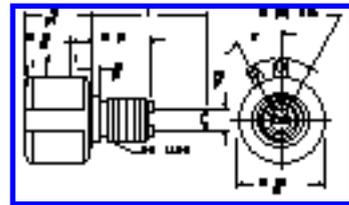


Spectrol 536 Series

Potentiometer - 3 Watt, 7/8" round case, 1/4" dia. shaft, 10 turn, precision wirewound

Dimensional Drawing

P12



Spectrol No.	NTE Part No.	Value Ohms	Shaft Length	Diag. No.
536-1-1-101	502-0115	100	7/8"	P12
536-1-1-201	502-0116	200	7/8"	P12
536-1-1-501	502-0117	500	7/8"	P12
536-1-1-102	502-0118	1K	7/8"	P12
536-1-1-202	502-0119	2K	7/8"	P12
536-1-1-502	502-0120	5K	7/8"	P12
536-1-1-103	502-0121	10K	7/8"	P12
536-1-1-203	502-0122	20K	7/8"	P12
536-1-1-503	502-0123	50K	7/8"	P12
536-1-1-104	502-0124	100K	7/8"	P12

Specifications

Electrical

Resistance Range: 100 Ohms to 100K Ohms

Resistance Tolerance: $\pm 5\%$

Linearity Tolerance: $\pm 0.25\%$ independent

Noise: 100 Ohms ENR

Rotation: 3600°, +10°, -0°

Power Rating: 3W @ +70°C derated to 0W @ +125°C

Insulation Resistance: 1000 Meg Ohm min, 500VDC

Dielectric Strength: 1000V RMS min 60Hz

Absolute Minimum Resistance: Not to exceed .10% of total resistance or 1 Ohm, whichever is greater

Temperature Coefficient of Resistance: 20ppm/°C (wire only)

End Voltage: 0.25% of total applied voltage, max

Mechanical

Bearing Type Bushing: Sleeve bearing

Resistance Element: See Table

Resistance Element Data

Resistance Value (Ohms)	Resolution (%)	Ohms per Turn	Max Current @ 70°C Ambient (mA)	Max Voltage Across Coil (Volts)
100	.060	.0603	141.00	14.1

Spectrol 536 Series

200	.037	.0746	100.00	20.0
500	.031	.1520	63.20	31.6
1K	.025	.2459	44.70	44.7
2K	.021	.4113	31.60	63.2
5K	.016	.8206	20.00	100.0
10K	.017	1.7230	14.10	141.0
20K	.015	3.0160	10.00	200.0
50K	.009	4.6690	6.23	316.0
100K	.007	7.4560	4.47	447.0

Rotation: 3600°, +10°, -0°

Starting Torque (maximum): 36 gm-cms (0.5 oz in)

Stop Strength (static): 5.4 Kgm-cm (75 oz in)

Rotation Life: 1,000,000 shaft revolutions

Environmental

Operating Temperature: -55° to +125°C

Load Life: 900 hr.

Features

- 3 digit or 4 digit types
- 2 No. 4-40 hex socket set screws for mounting
- Brake lever knob
- Open window display
- Satin clear anodize finish



Spectrol No.	NTE Part No.	Numeric Display	No. of Turns	Diag. No.
15-1-11	503-0001	3 Digit	10	D1
15-2-11	503-0002	4 Digit	100	D1

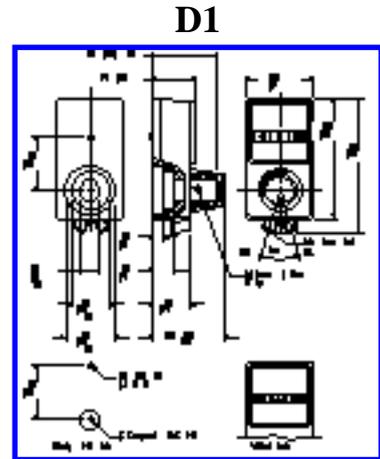
Spectrol

Model 15

**Dial - 1" x 1 3/4" rectangular,
1/4" dia.**

shaft

Dimensional Drawing



Specifications

Operation

3 Digit (10 turn): The left digit indicates the number of complete revolutions of the turning knob and the right two digits indicate the percent of a revolution. The unit registers a total count of 999.

4 Digit (100 turn): The left two digits indicates the number of complete revolutions of the turning knob and the right two digits indicate the percent of a revolution. The unit registers a total count of 9999.

Minor Scale Division: 1/500 turn

Indication: 0 to 9.99 turn (3 Digit), 0 to 99.99 (4 Digit)

Accuracy: $\pm 0.2\%$ of knob position

Rotation: The indication shall increase with clockwise rotation.

Transfer Point: between 9.2 and 0

Mechanical

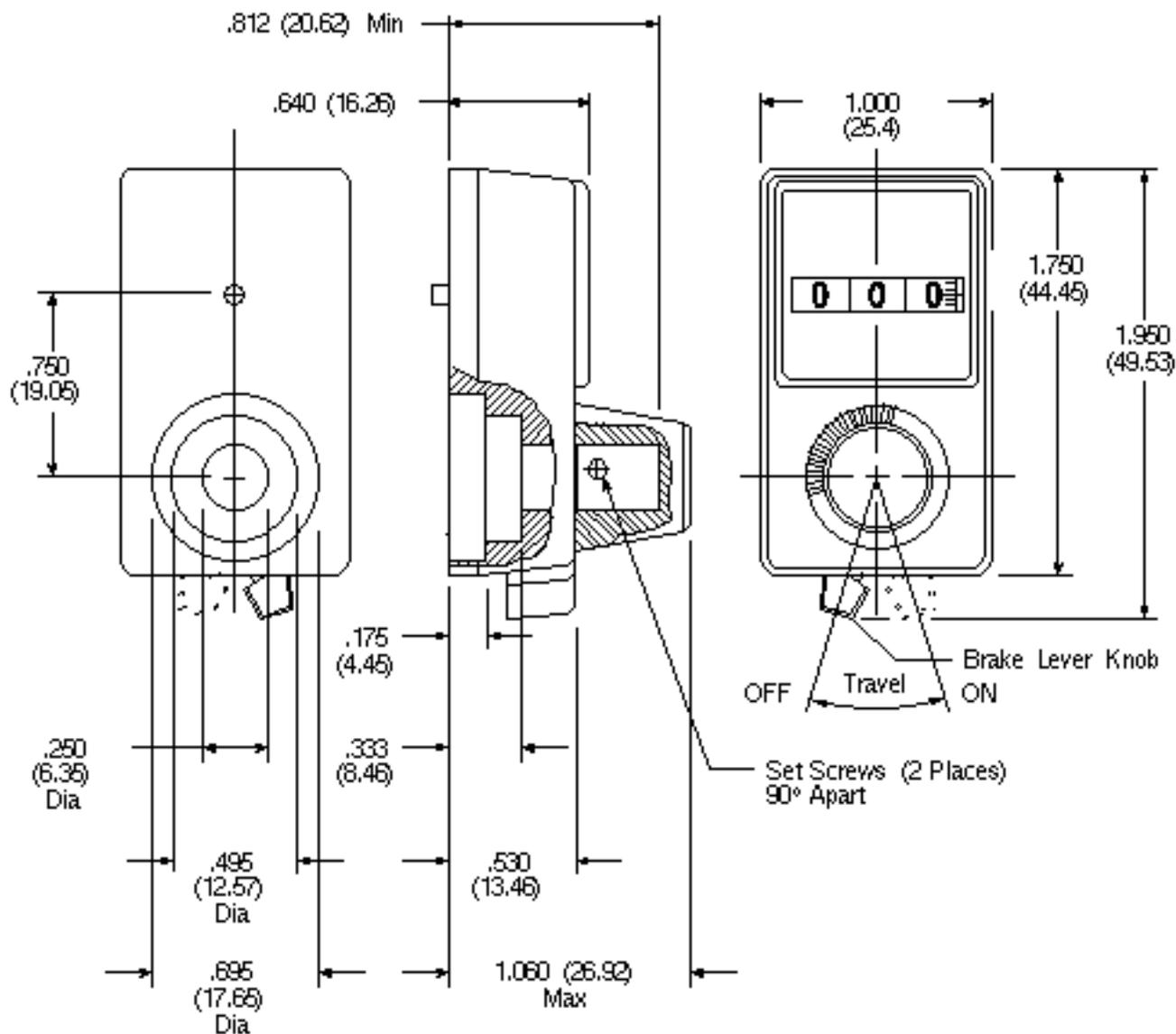
Shaft Bore: 0.250"

Runout: 0.004in/in (Note 1)

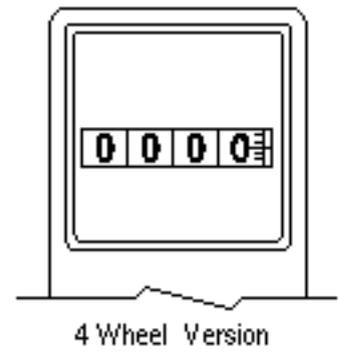
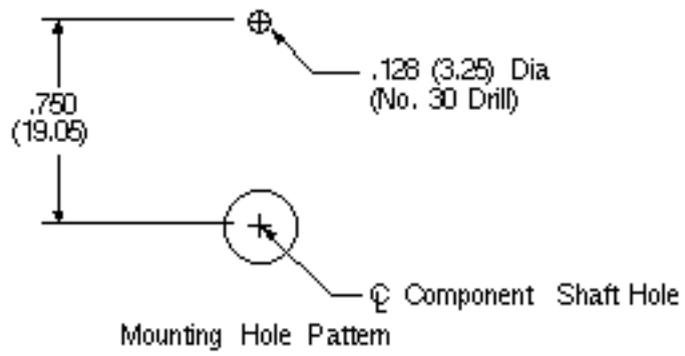
Mounting: The spring detented knob be removed using a straight pull, exposing two No. 4-40 hex set screws for mounting the dial directly to the

component shaft (hex key included).

Note 1. Dial to be free running and without binds when axis of drive sleeve is perpendicular to mounting surface within the specified dimension.



Brake Lever Knob
OFF Travel ON
Set Screws (2 Places)
90° Apart



Features

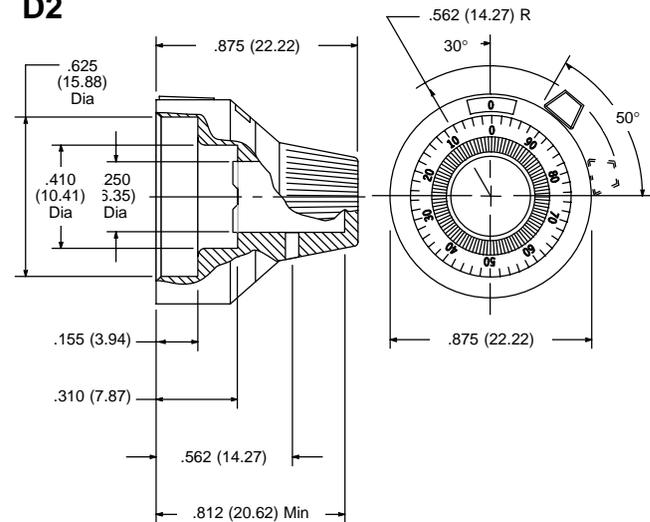
- Vernier Scale
- No. 2–56 Spline Socket Set Screw for Mounting
- Brake Lever Knob
- Open Window Display
- Satin/Black Chrome Finish, Black/White Markings



Spectrol Model 16

Dial – 7/8” diameter, 1/4” dia shaft

D2



Specifications

Operation

Readout and Operation: Unit shall register a total count of 15 turns. The number in the window (0 thru 14) indicates completed number of turns of the drive sleeve. Graduated circular dial indicates the percent of a partial turn of the drive sleeve.

Minor Scale Division: 1/50 turn

Indication: 0 to 14.99 turn

Brake Lever: 1st position (15° movement of brake lever) operates a high torque system for fine adjustment; 2nd position (15° additional movement of brake lever) actuates brake.

Accuracy: Backlash shall be zero between graduated dial and drive sleeve

Rotation: The indication shall increase with clockwise and decrease with a counterclockwise rotation.

Transfer Point: The number in the center of the window shall change as graduated dial rotates between 94 and 0.

Mechanical

Shaft Bore: 0.250”

Runout: 0.004 in/in (Note 1)

Mounting: Install mounting bracket (included) between panel and panel nut. Multidial shall mount directly to shaft with No. 2–56 spline socket set screw, located adjacent to No. 50 on graduated dial (hex key included).

Note 1. Dial to be free running and without binds when axis of drive sleeve is perpendicular to mounting surface within the specified dimension.

Spectrol No.	NTE Part No.	Numeric Display	No. of Turns	Diag No.
16–1–11	503–0004	Vernier Scale	15	D2
16–1–21	503–0005	Vernier Scale	15	D2

NEW

Features

- Vernier scale
- No. 4-40 hex socket set screw for mounting
- Brake lever knob
- Open window display
- Satin chrome finish, black markings



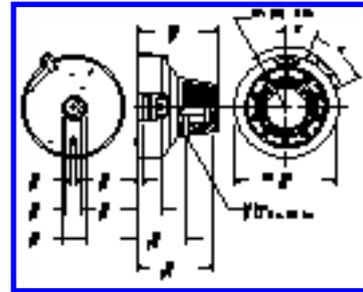
Spectrol

Model 21

Dial - 1 13/16" diameter, 1/4" dia. shaft

Dimensional Drawing

D3



Spectrol No.	NTE Part No.	Numeric Display	No. of Turns	Diag. No.
21-1-11	503-0006	Vernier Scale	15	D3

Specifications

Operation

Readout and Operation: Unit shall register a total count of 1499. The number in the center of the window (0 thru 14) indicates completed number of turns of the drive sleeve. Graduated circular dial indicates the percent of a partial turn of the drive sleeve.

Minor Scale Division: 1/100 turn

Indication: 0 to 14.99 turn

Accuracy: Backlash shall be zero between graduated dial and drive sleeve.

Rotation: The indication shall increase with clockwise and decrease with a counterclockwise rotation.

Transfer Point: The number in the center of the window shall change as graduated dial rotates between 94 and 0.

Mechanical

Shaft Bore: 0.250"

Runout: 0.004in/in (Note 1)

Mounting: Unit shall mount directly to shaft with No. 4-40 hex socket set screw, located adjacent to No. 75 on graduated dial (hex key included).

Note 1. Dial to be free running and without binds

Spectrol Model 21

when axis of drive sleeve is perpendicular to mounting surface within the specified dimension.

