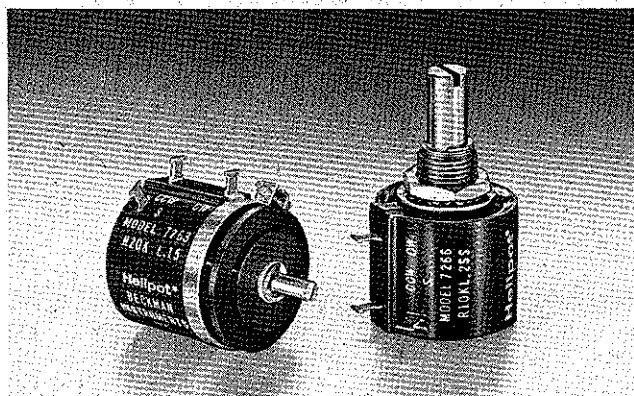


OBSCLETE

Series 7260 7/8" (22,225mm) Diameter 10-Turn Wirewound



Helipot® Models 7263 and 7266 precision potentiometers provide:

- 2-watt power rating at 70°C.
- 125°C maximum operating temperature.
- Resistance tolerances available to $\pm 1\%$.
- Independent linearities available to $\pm 0.05\%$.
- Standard resistances from 10 Ω to 107.8K Ω .
- Numerous special features available at nominal increase in price.
- 15 standard resistance values.
- Separate contact position guide, decreasing coil wear.

Models: 7263 servo mount with ball bearing.

7266 bushing mount with sleeve bearing.

Matching Turns-Counting Dials: See selection chart on page 6-48.

SPECIFICATIONS

Standard resistance range, ohms	10 to 107.8K
Standard resistance tolerance	$\pm 3\%$
Min. practical resistance tolerance	$\pm 1\%$
Standard linearity (independent)	$\leq 75\Omega \pm .50\% / 76-299\Omega \pm .25\% / 300\Omega \text{ up } \pm .20\%$
Min. practical independent linearity	$\leq 75\Omega \pm .25\% / 76-299\Omega \pm .15\% / 300-999\Omega \pm .075\% / \geq 1K\Omega \pm .05\%$
Power rating, watts	2 at 70°C, derating to 0 at 125°C
Input voltage, max.	1000V DC
Dielectric strength	1,000V RMS
Insulation resistance min.	1,000 megohms
Actual electrical travel, nominal	3600° $\pm 10^\circ$ - 0° $> 100\Omega$ 3600° $\pm 10^\circ$ - 5° $\leq 100\Omega$
Noise, max.	100 μ
Tap tolerance	$\leq 75\Omega \pm 5^\circ / 76-299\Omega \pm 3^\circ$
Mechanical	300 Ω up $\pm 2^\circ$

Number of turns	10
Resistance element length, approx.	20.9" (531mm) in 3600°
Total mechanical travel	3600° $\pm 10^\circ$ - 0°
Shaft runout, max., T.I.R.	.002" (0.051mm)
Pilot diameter runout, max., T.I.R.	7263; .002" (0.051mm); 7266; .004" (0.102mm)
Lateral runout, max., T.I.R.	.004" (0.102mm)
Shaft end play, max.	7263; .005" (0.127mm); 7266; .010" (0.254mm)
Shaft radial play, max.	.002" (0.051mm)
Starting torque, max.	7263; 0.6 oz-in. (0.0042mm); 7266; 0.8 oz-in. (0.0056mm)
each added cup	7263; 0.6 oz-in. (0.0042mm); 7266; 0.8 oz-in. (0.0056mm)
Running torque, max.	7263; 0.6 oz-in. (0.0042mm); 7266; 0.8 oz-in. (0.0056mm)
each added cup	7263; 0.6 oz-in. (0.0042mm); 7266; 0.8 oz-in. (0.0056mm)

Number of cups, max.	2
Weight, single cup, approx.	.75 oz. (22g)
each added cup, approx.	.4 oz. (12g)
Moment of inertia, / cup	.5 g-cm ²
Static stop strength	36 oz-in. (0.25N*m)
Housing & rear lid & front lid (7266)	Plastic
Lid (7263)	Aluminum
Bushing	Brass
Shaft	Stainless steel
Terminals	Solderable

Special Features

The following coded features are available:

CT - center tap	SS - slotted shaft**
LT - linearity tape	SL - shaft lock (Model 7266 only)
RS - rear shaft extension	HT - high torque (7266 only)*
FS - flattened shaft	

*2 oz-in. (0.0014N*m) minimum.

**Std on 7266 single cup without RS (Coding not req'd)

Standard Resistance Values Available without Setup Charge

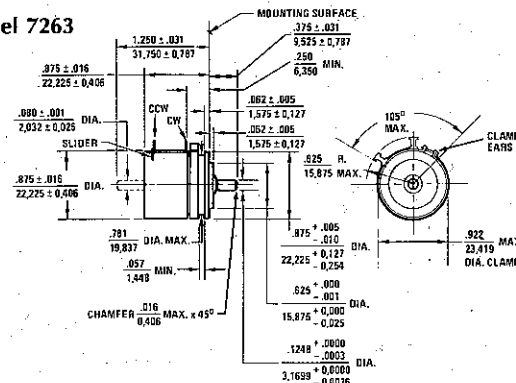
Total Resistance (ohms)	Theoretical Resolution (% nominal)	Wire Tempco (ppm/°C)
10*	0.121	+800
25*	0.048	+800
50*	0.119	± 20
100*	0.059	± 20
200*	0.037	± 20
500*	0.030	± 20
1,000*	0.024	± 20
2,000*	0.020	± 20
5,000*	0.018	± 20
10,000*	0.017	± 20
20,000*	0.016	± 20
30,000*	0.012	± 20
50,000*	0.010	± 20
100,000*	0.009	± 20
107,800	0.009	± 20

*Distributor stock item (Model 7266 only)

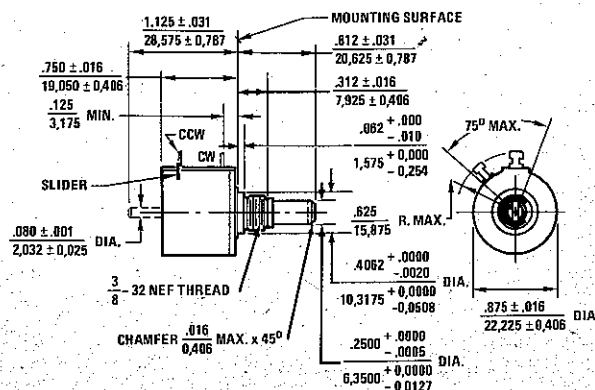
Environmental

Ambient temperature range	-65° to 125°C
Temperature cycling	5 cycles, -65° to 125°C MIL-R-12934
Low temperature operation	4 hrs. at -65°C R_T at -65°C $\leq 5\%$ MIL-R-12934
Low temperature exposure	24 hours at -65°C $R_T \leq 5\%$ MIL-R-12934
High temperature exposure	1,000 hrs. at 125°C MIL-R-12934
Shock	100 g's sawtooth, 10 ms pulse width MIL-R-12934
Vibration	10 to 2,000 Hz, 15 g's MIL-R-12934
Moisture resistance	10 days at 80-98% RH MIL-R-12934
Dielectric withstanding voltage	250V RMS applied (reduced pressure) MIL-R-12934
Fungus	all non-nutrient materials MIL-R-12934
Sand and dust	6 hr. exposure at 25°C MIL-STD-202 method 110, test Cond. B
Rotational load life at 70°C	1,000,000 shaft rev.

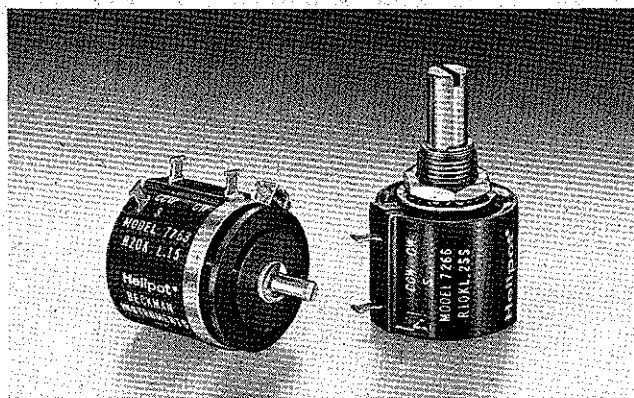
Model 7263



Model 7266



Series 7260
7/8" (22,225mm) Diameter
10-Turn Wirewound



Helipot® Models 7263 and 7266 precision potentiometers provide:

- 2-watt power rating at 70°C.
- 125°C maximum operating temperature.
- Resistance tolerances available to $\pm 1\%$.
- Independent linearities available to $\pm .05\%$.
- Standard resistances from 10 Ω to 107.8K Ω .
- Numerous special features available at nominal increase in price.
- 15 standard resistance values.
- Separate contact position guide, decreasing coil wear.

Models: 7263 servo mount with ball bearing

7266 bushing mount with sleeve bearing.

Matching Turns-Counting Dials: See selection chart on page 6-48.

SPECIFICATIONS

Electrical

Standard resistance range, ohms	10 to 107.8K
Standard resistance tolerance	±3%
Min. practical resistance tolerance	±1%
Standard linearity (independent)	≤75Ω ±.50% / 76-299Ω ±.25% / 300Ω up ±.20%
Min. practical independent linearity	≤75Ω ±.25% / 76-299Ω ±.15% / 300-999Ω ±.075% / ≥1KΩ ±.05%
Power rating, watts	2 at 70°C, derating to 0 at 125°C
Input voltage, max.	1000V DC
Dielectric strength	1,000V RMS
Insulation resistance min.	1,000 megohms
Actual electrical travel, nominal	3600° ±10° -0° >100Ω 3600° ±10° -5° ≤100Ω
Noise, max.	100μ
Tap tolerance	≤75Ω ±5° / 76-299Ω ±3° / 300Ω up ±2°
Mechanical	

Number of turns	10
Resistance element length, approx.	20.9" (531mm) in 3600°
Total mechanical travel	3600° + 10° - 0°
Shaft runout, max., T.I.R.	.002" (0,051mm)
Pilot diameter runout, max., T.I.R.	7263; .002" (0,051mm), 7266; .004" (0,102mm)
Lateral runout, max., T.I.R.	.004" (0,102mm)
Shaft end play, max.	7263; .005" (0,127mm), 7266; .010" (0,254mm)
Shaft radial play, max.	.002" (0,051mm)
Starting torque, max.	7263; 0.6 oz-in. (0,0042mm), 7266; 0.8 oz-in. (0,0056mm)
each added cup	7263; 0.6 oz-in. (0,0042mm), 7266; 0.8 oz-in. (0,0056mm)
Running torque, max.	7263; 0.6 oz-in. (0,0042mm), 7266; 0.8 oz-in. (0,0056mm)
each added cup	7263; 0.6 oz-in. (0,0042mm), 7266; 0.8 oz-in. (0,0056mm)

Number of cups, max.	2
Weight, single cup, approx.	.75 oz. (22g)
each added cup, approx.	4 oz. (12g)
Moment of inertia, / cup	.5 g-cm ²
Static stop strength	36 oz-in. (0,25N*m)
Housing & rear lid & front lid (7266)	Plastic
Lid (7263)	Aluminum
Bushing	Brass
Shaft	Stainless steel
Terminals	Solderable

Special Features

The following coded features are available:

CT - center tap
LT - linearity tape
RS - rear shaft extension
FS - flatted shaft
SS - slotted shaft**
SL - shaft lock (Model 7266 only)
HT - high torque (7266 only)*

*2 oz-in. (0,0014N•m) minimum

** Std on 7266 single cup without RS (Coding not req'd)

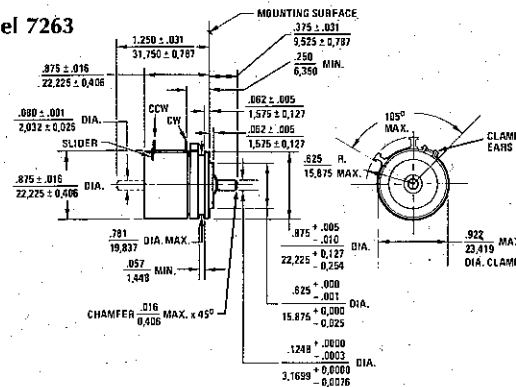
Standard Resistance Values Available without Setup Charge

Total Resistance (ohms)	Theoretical Resolution (% nominal)	Wire Tempco (ppm/°C)
10*	0.121	+800
25*	0.048	+800
50*	0.119	±20
100*	0.059	±20
200*	0.037	±20
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1,000*	0.024	±20
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10,000*	0.017	±20
20,000*	0.016	±20
30,000*	0.012	±20
50,000*	0.010	±20
100,000*	0.009	±20
107,800	0.009	+20

*Distributor stock item (Model 7266 only)

Environmental

Ambient temperature range		-65° to 125°C	
Temperature cycling	 5 cycles, -65° to 125°C	MIL-R-12934	
Low temperature operation	 4 hrs. at -65°C R_T at	-65°C $\leq 5\%$	MIL-R-12934
Low temperature exposure	 24 hours at	-65°C $R_T \leq 5\%$	MIL-R-12934
High temperature exposure	 1,000 hrs. at 125°C		MIL-R-12934
Shock	 100 g's sawtooth, 10 ms pulse width		MIL-R-12934
Vibration	 10 to 2,000 Hz, 15 g's		MIL-R-12934
Moisture resistance	 10 days at 80-98% RH		MIL-R-12934
Dielectric withstanding voltage (reduced pressure)	 250V RMS applied		MIL-R-12934
Fungus	 all non-nutrient materials		MIL-R-12934
Sand and dust	 6 hr. exposure at 25°C MIL-STD-202 method 110, test Cond. B		
Rotational load life at 70°C		1,000,000 shaft rev.	

Model 7263

Model 7266

