



VISHAY INTERTECHNOLOGY, INC.



PRECISION POTENTIOMETERS

Wirewound Technology, Single- and Multi-Turn Models



Precision Potentiometers

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FEATURES

- Large electrical angles
- High power dissipation:
2 W @ 40 °C to 10 W at 40 °C
- Low temperature coefficient: for standard values 20 ppm/°C

APPLICATIONS

- Temperature control for industrial refrigerators
- CCTV cameras
- Industrial machines for welding and wire cutting
- Medical equipment (X-ray machines)

Model	Electrical Travel (°)	High Accuracy (Linearity)	Ohmic Values (ohms)	Resistance Tolerance at 20 °C	Starting Torque (N.cm)	Operating Life (Cycles)	Temperature Range (°C)	Cylindrical External Diameter (mm)	Options
100	352° ± 2° (single turn)	± 0.5 %, 100 < Rt < 35 K ± 1.0 %, 5 < Rt < 100	5 to 35 K	± 3 %, 50 < Rt ± 5 %, 5 < Rt < 50	< 0.45 (Servo) < 0.75 (Bushing) < 0.25 (Each add.)	1 million	- 55 °C to + 105 °C	33.3	Up to 6 sections
122	350° ± 2° (single turn)	± 0.5 %, 200 < Rt < 100 K ± 1.0 %, 5 < Rt < 200	5 to 100 K	± 3 %, 20 < Rt < 100 K ± 5 %, 5 < Rt < 20	< 0.2 (Servo) < 0.25 (Bushing) < 0.15 (Each add.)	1 million	- 55 °C to + 125 °C	27	Up to 6 sections
132	352° ± 2° (single turn) bushing mount	± 0.5 %, 200 < Rt < 35 K ± 1.0 %, 5 < Rt < 200	5 to 35 K	± 3 %, 50 < Rt < 35 K ± 5 %, 5 < Rt < 50	< 0.75	500000	- 55 °C to + 125 °C	33.3	Stops on request
140	320° ± 5° (single turn) bushing mount	± 1 %	50 to 20 K	± 5 %	< 0.15	500000	- 55 °C to + 125 °C	12.7	Sealed on request
142	350° + 0° - 4° (single turn) servo mount	± 1 %	50 to 20 K	± 5 %	< 0.06	500000	- 55 °C to + 125 °C	12.7	Sealed on request
152	340° ± 2° (single turn)	± 0.5 %, 500 < Rt < 40 K ± 1.0 %, 5 < Rt < 500	5 to 40 K	± 3 %, 50 < Rt < 40 K ± 5 %, 5 < Rt < 50	< 0.2 (Servo) < 0.25 (Bushing)	2 million (Servo) 1 million (Bushing)	- 55 °C to + 125 °C	22.2	-
202	350° ± 2° (single turn)	± 0.25 %, 500 < Rt < 65 K ± 0.5 %, 50 < Rt < 500 ± 1 %, 5 < Rt < 50	5 to 65 K	± 3 %, 50 < Rt < 65 K ± 5 %, 5 < Rt < 50	< 0.50 (Servo) < 0.75 (Bushing) < 0.30 (Each add.)	1 million	- 55 °C to + 125 °C	44.5	Up to 6 sections
302	350° ± 2° (single turn)	± 0.25 %, 200 < Rt < 85 K ± 0.5 %, 50 < Rt < 200 ± 1 %, 5 < RT < 50	5 to 85 K	± 3 %, 50 < Rt < 85 K ± 5 %, 5 < Rt < 50	< 0.75 (Servo) < 1.25 (Bushing) < 0.45 (Each add.)	1 million	- 55 °C to + 125 °C	50.8	Up to 6 sections
402	350° ± 2° (single turn)	± 0.25 %, 200 < Rt < 150 K ± 0.5 %, 10 < Rt < 200	10 to 150 K	± 3 %, 100 < Rt < 150 K ± 5 %, 10 < Rt < 100	< 0.80 (Servo) < 1.40 (Bushing) < 0.60 (Each add.)	1 million	- 55 °C to + 125 °C	76.2	Up to 6 sections
702	350° ± 2° (single turn)	± 0.5 %, 500 < Rt < 100 K ± 1.0 %, 5 < Rt < 500	5 to 100 K	± 3 %, 20 < Rt < 100 K ± 5 %, 5 < Rt < 20	< 0.10 (Servo) < 0.20 (Bushing) < 0.10 (Each add.)	1 million	- 55 °C to + 125 °C	22.2	-
162	3600° + 15° - 0° (10 turns) bushing mount	± 0.30 %	100 to 115 K	± 5 %	< 0.60	500000	- 55 °C to + 125 °C	12.7	-



Model	Electrical Travel (°)	High Accuracy (Linearity)	Ohmic Values (ohms)	Resistance Tolerance at 20 °C	Starting Torque (N.cm)	Operating Life (Cycles)	Temperature Range (°C)	Cylindrical External Diameter (mm)	Options
164	3600° + 15° - 0° (10 turns) servo mount	± 0.30 %	100 to 115 K	± 5 %	< 0.30	500000	- 55 °C to + 125 °C	12.7	-
502	3600° + 4° - 0° (10 turns)	± 0.25 %	15 to 150 K	± 3 %, 100 < Rt < 150 K ± 5 %, 15 < Rt < 100	< 0.30 (Servo) < 0.40 (Bushing) < 0.25 (Each add.)	2 million	- 55 °C to + 125 °C	22.2	Up to 2 sections
533	1080° + 0° + 10° (3 turns)	± 0.25 %	50 to 20 K (60 K)	± 5 %	< 0.50 (One section) < 0.80 (Two sections)	300000	- 55 °C to + 125 °C	22.2	Up to 2 sections
534	3600° + 0° + 10° (10 turns)	± 0.25 %	100 to 100 K (200 K)	± 5 %	< 0.35 (One section) < 0.65 (Two sections)	1 million	- 55 °C to + 125 °C	22.2	Up to 2 sections
535	1800° + 0° + 10° (5 turns)	± 0.25 %	50 to 50 K (100 K)	± 5 %	< 0.50 (One section) < 0.80 (Two sections)	500000	- 55 °C to + 125 °C	22.2	Up to 2 sections
536	3600° + 0° + 10° (10 turns)	± 0.25 %	100 to 100 K	± 5 %	< 0.40	1 million	- 55 °C to + 125 °C	22.2	-
552	1080° + 4° - 0° (3 turns)	± 0.25 %	5 to 45 K	± 3 %, 50 < Rt < 45 K ± 5 %, 5 < Rt < 50	< 0.30 (Servo) < 0.40 (Bushing) < 0.25 (Each add.)	600000	- 65 °C to +125 °C	22.2	-
802	3600° + 4° - 0° (10 turns)	± 0.25 %	20 to 500 K	± 3 %, 200 < Rt < 500 K ± 5 %, 20 < Rt < 200	< 0.90 (Servo) < 1.30 (Bushing) < 0.60 (Each add.)	2 million	- 55 °C to + 125 °C	50.8	Up to 3 sections
830	1080° + 4° - 0° (3 turns) bushing mount	± 0.25 %	15 to 150 K	± 3 %, 200 < Rt < 150 K ± 5 %, 15 < Rt < 200	< 1.30 (One section) < 1.90 (Two sections)	500000	- 55 °C to + 125 °C	46	Up to 2 sections
852	1080° + 4° - 0° (3 turns)	± 0.25 %	15 to 150 K	± 3 %, 100 < Rt < 150 K ± 5 %, 15 < Rt < 100	< 0.90 (Servo) < 1.30 (Bushing) < 0.6 (Each add.)	600000	- 55 °C to + 125 °C	46	Up to 3 sections
860	3600° + 4° - 0° (10 turns) bushing mount	± 0.25 %	20 to 500 K	± 1 %, 200 < Rt < 500 K ± 3 %, 20 < Rt < 200	< 1.30 (One section) < 1.90 (Two sections)	500000	- 55 °C to + 125 °C	46	Up to 2 sections



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