

Professional Conductive Plastic, Single Turn Models



FEATURES

- High precision: linearity down to 0.015 %
- Long life: up to 50 M cycles
- Customized parameters available
- Nearly infinite resolution and excellent repeatability

APPLICATIONS

- Command positioning on civil and military aircraft
- Servo control of fins on missiles and torpedos
- Painting and/or welding robots
- Security systems for cranes

RESOURCES

- For technical questions contact sferprecisionpot@vishay.com

Resistors - High Precision, Long Life





ROTATIONAL TRANSDUCERS

Vishay Sfernice



Resistors - High Precision, Long Life

Model	Electrical Travel (°)	High Accuracy (Linearity)	Repeatability	Ohmic Values (ohms)	Resistance Tolerance at 20 °C	Starting Torque (N.cm)	Operating Life (Millions of Cycles)	Temperature Range (°C)	External Diameter (mm)	Options
34 BF *1	340° ± 3°	< ± 1 % to < ± 0.25 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	19.18	Voltage or current tap
34 SF *2	340° ± 3°	< ± 1 % to < ± 0.1 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.2 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	19.18	Voltage or current tap
708-1 *1	340° ± 5°	< ± 0.5 % to < ± 0.2 %	-	500 to 50 K	± 10 %	< 0.2 (one cup) < 0.1 (each add.)	> 5	- 55 °C to + 125 °C	22.22	Extra-taps & Up to 6 sections
78 BF *1	340° ± 3°	< ± 1 % to < ± 0.25 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	22.3	Voltage or current tap
708-2 *2	340° ± 5°	< ± 0.5 % to < ± 0.2 %	-	500 to 50 K	± 10 %	< 0.1 (one cup) < 0.1 (each add.)	> 20	- 55 °C to + 125 °C	22.22	Extra-taps & Up to 6 sections
78 SF *2	340° ± 3°	< ± 1 % to < ± 0.1 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.2 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	22.3	Voltage or current tap
128-1 *1	345° ± 4°	< ± 0.5 % to < ± 0.15 %	-	500 to 50 K	± 10 %	< 0.25 (one cup) < 0.15 (each add.)	> 5	- 55 °C to + 125 °C	27.07	Extra-taps & Up to 6 sections
116 BF *1	350° ± 2°	< ± 1 % to < ± 0.1 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	27.07	Voltage or current tap
128-2 *2	345° ± 4°	< ± 0.5 % to < ± 0.15 %	-	500 to 50 K	± 10 %	< 0.2 (one cup) < 0.15 (each add.)	> 20	- 55 °C to + 125 °C	27.07	Extra-taps & Up to 6 sections
116 SF *2	350° ± 2°	< ± 1 % to < ± 0.05 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.2 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	27.07	Voltage or current tap
156 BF *1	350° ± 2°	< ± 1 % to < ± 0.1 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	33.35	Voltage or current tap
156 SF *2	350° ± 2°	< ± 1 % to < ± 0.05 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.2 (one cup) 0.15 (each add.)	> 50	- 55 °C to + 125 °C	33.35	Voltage or current tap

*1 Bushing Mount
*2 Servo Mounting



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Model	Electrical Travel (°)	High Accuracy (Linearity)	Repeatability	Ohmic Values (ohms)	Resistance Tolerance at 20 °C	Starting Torque (N.cm)	Operating Life (Millions of Cycles)	Temperature Range (°C)	External Diameter (mm)	Options
176 BF *1	350° ± 2°	< ± 1 % to < ± 0.1 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	36.6	Voltage or current tap
176 SF *2	350° ± 2°	< ± 1 % to < ± 0.025 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.25 (one cup) 0.15 (each add.)	> 50	- 55 °C to + 125 °C	36.6	Voltage or current tap
208-1 *1	350° ± 3°	< ± 0.3 % to < ± 0.1 %	-	500 to 50 K	± 10 %	< 0.8 (one cup) < 0.3 (each add.)	> 5	- 55 °C to + 125 °C	44.5	Extra-taps & Up to 6 sections
134 BF *1	350° ± 2°	< ± 1 % to < ± 0.05 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	44.5	Voltage or current tap
208-2 *2	350° ± 3°	< ± 0.3 % to < ± 0.1 %	-	500 to 50 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	44.5	Extra-taps & Up to 6 sections
134 SF *2	350° ± 2°	< ± 1 % to < ± 0.025 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.25 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	44.5	Voltage or current tap
308-1 *1	350° ± 2°	< ± 0.25 % to < ± 0.05 %	-	500 to 100 K	± 10 %	< 1.2 (one cup) < 0.5 (each add.)	> 5	- 55 °C to + 125 °C	50.8	Extra-taps & Up to 6 sections
200 BF *1	350° ± 2°	< ± 1 % to < ± 0.05 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	50.8	Voltage or current tap
308-2 *2	350° ± 2°	< ± 0.25 % to < ± 0.05 %	-	500 to 100 K	± 10 %	< 0.8 (one cup) < 0.5 (each add.)	> 20	- 55 °C to + 125 °C	50.8	Extra-taps & Up to 6 sections
200 SF *2	350° ± 2°	< ± 1 % to < ± 0.015 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.25 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	50.8	Voltage or current tap
300 BF *1	350° ± 2°	< ± 1 % to < ± 0.05 %	< 0.02 %	1 K to 20 K	± 10 %	< 0.5 (one cup) < 0.3 (each add.)	> 20	- 55 °C to + 125 °C	76.4	Voltage or current tap
300 SF *2	350° ± 2°	< ± 1 % to < ± 0.015 %	< 0.01 %	1 K to 20 K	± 10 %	< 0.25 (one cup) < 0.15 (each add.)	> 50	- 55 °C to + 125 °C	76.4	Voltage or current tap

*1 Bushing Mount
*2 Servo Mounting



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