



Main characteristics

- Power: 1 to 2 W at 70°C
- 3, 5 or 10 turn execution
- 2 gang execution available
- Multiple special executions available

Electrical characteristics

Resistance range

Series 7110: Standard: 100R to 100K (enlarged 10R to 200K)

Series 7103: Standard: 50R to 20K (enlarged 5R0 to 60K)

Series 7105: Standard: 50R to 50K (enlarged 5R0 to 100K)

Tolerance

J (± 5 %), restricted on request

Independent linearity

± 0.25 %

Electrical noise

Maximum 100 Ω ENR

Electrical angle

Series 7110: 3600° ^{+10°}/_{-0°}

Series 7103: 1080° ^{+10°}/_{-0°}

Series 7105: 1800° ^{+10°}/_{-0°}

Absolute minimal resistance

0.25 %, minimum 1 Ω

End voltage

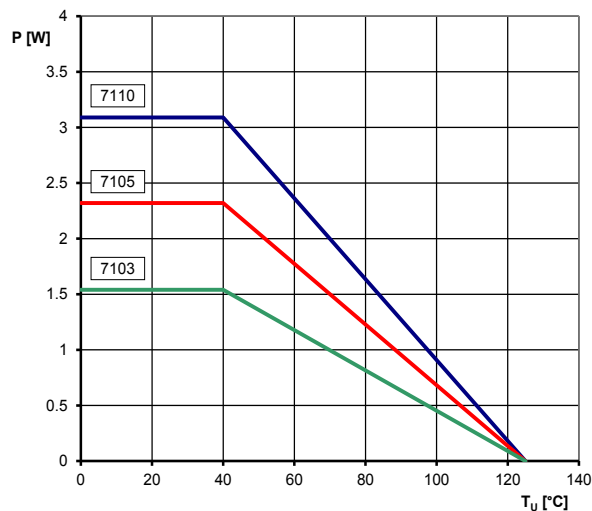
Maximum 0.25% x applied voltage

Power rating

Series 7110: 2.0 W at 70°C, according to derating curve

Series 7103: 1.0 W at 70°C, according to derating curve

Series 7105: 1.5 W at 70°C, according to derating curve



Insulation resistance

> 1000 MΩ at 500 V DC

Dielectric strength

> 1000 V AC / 60 Hz / 1 minute, at 1 bar

Temperature coefficient of wire

± 20 ppm / °C

Phase shift

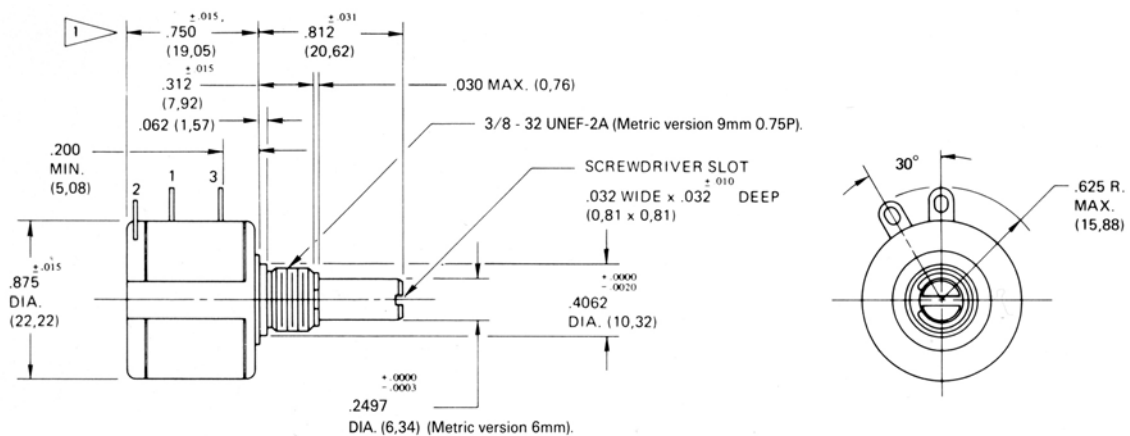
± 2° (Section 1 phased to section 2)

Table for standard executions

Nominal resistance			Resolution [%]			Resistance per turn [Ω]			I _{max} at 70 °C [mA]			U _{max} across coil [V]		
7110	7103	7105	7110	7103	7105	7110	7103	7105	7110	7103	7105	7110	7103	7105
-	50 R	50 R	-	0.149	0.120	-	0.0746	0.0603	-	141.00	173.00	-	7.07	8.66
100 R	100 R	100 R	0.600	0.111	0.075	0.6030	0.1114	0.0746	141.00	100.00	122.00	14.4	10.00	12.20
200 R	200 R	200 R	0.370	0.097	0.061	0.7460	0.1954	0.1220	100.00	70.70	86.60	20.0	14.10	17.30
500 R	500 R	500 R	0.310	0.069	0.049	0.1520	0.3424	0.2459	63.20	44.70	54.70	31.6	22.40	27.40
1 K 0	1 R 0	1 K 0	0.250	0.063	0.041	0.2459	0.6331	0.4113	44.70	31.60	38.70	44.7	31.60	38.70
2 K 0	2 K 0	2 K 0	0.210	0.041	0.031	0.4113	0.8206	0.6331	31.60	22.40	27.40	63.2	44.70	54.80
5 K 0	5 K 0	5 K 0	0.160	0.044	0.034	0.8206	2.2330	1.7230	20.00	14.10	17.30	100.0	70.70	86.60
10 K	10 K	10 K	0.170	0.034	0.030	1.7230	3.4510	3.0160	41.10	10.00	12.20	141.0	100.00	122.00
20 K	20 K	20 K	0.150	0.031	0.020	3.0160	6.1790	3.9910	10.00	7.07	8.66	200.0	141.00	173.00
50 K	-	50 K	0.090	-	0.015	4.6690	-	7.4560	6.32	-	5.47	316.0	-	274.00
100 K	-	-	0.007	-	-	7.4560	-	-	4.47	-	-	447.0	-	-

Mechanical and physical characteristics

- Mechanical angle: Series 7110: 3600° ^{+10°}/_{-0°}
 Series 7103: 1080° ^{+10°}/_{-0°}
 Series 7105: 1800° ^{+10°}/_{-0°}
- Number of full turns: Series 7110: 10
 Series 7103: 3
 Series 7105: 5
- Rotational life: Series 7110: 1.0 · 10⁶ shaft revolutions
 Series 7103: 0.3 · 10⁶ shaft revolutions
 Series 7105: 0.5 · 10⁶ shaft revolutions
- Load life: 900 h
- Starting torque: 1 section Series 7110: maximum 0.36 Ncm
 Series 7103 / 7105: maximum 0.50 Ncm
 2 sections Series 7110: maximum 0.65 Ncm
 Series 7103 / 7105: maximum 0.79 Ncm
- Stop strength: Maximum 54 Ncm
- Bearing type: Sleeve bearing
- Sections: Maximum 2 sections
- Weight: 1 section: maximum 21.26 g
 2 sections: maximum 35.44 g
- Ambiant temperature: - 55 °C to + 125 °C
- Shock: 50 g
- Vibrations: 15 g up to 2'000 Hz
- Salt spray test: 96 h without corrosion



MOUNTING HARDWARE Lockwasher and Panel nut, nickel plated

TOLERANCES: UNLESS OTHERWISE NOTED.
 DECIMALS ± .005 ANGLES ± 2°
 BASIC DIMENSIONS ARE IN INCHES
 MILLIMETER DIMENSIONS IN PARENTHESES

ADD .695 (17,65) FOR 2 SECTION UNIT

