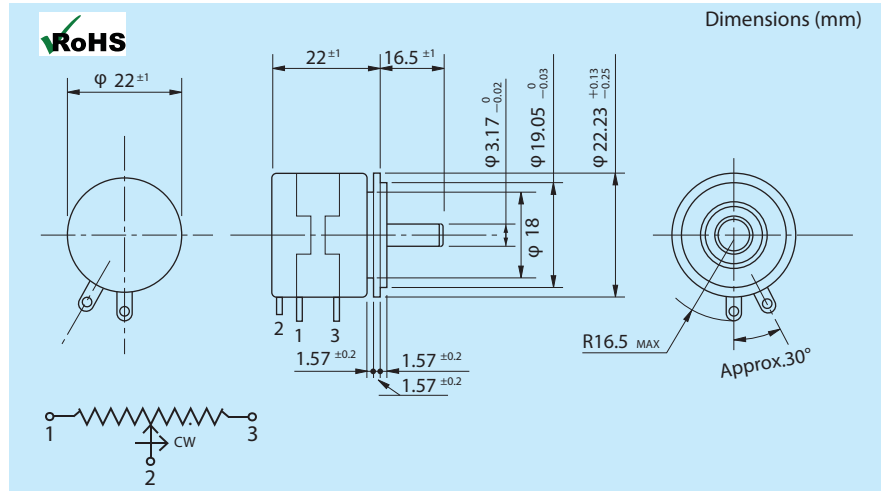


Multi-Turn Wirewound Potentiometer

Series MT22S



Standard Model Nos.

MT22S-5 (5-turn)
MT22S-10 (10-turn)

General Specifications (Note 1)

Standard Resistance

Range: 100, 200, 500, 1k, 2k, 5k, 10k Ω

Max. Practical

Resistance Value: 20k Ω (5-turn)
50k Ω (10-turn)

Total Resistance

Tolerance: Standard Class $\pm 5\%$
Precision Class $\pm 1\%$

Independent Linearity

Tolerance:

	5-turn	10-turn
Standard Class	$\pm 0.3\%$	$\pm 0.2\%$
Precision Class	$\pm 0.2\%$	$\pm 0.1\%$
	(< 5k Ω) ($\pm 0.25\%$)	($\pm 0.15\%$)

Power Rating: 1.0W (5-turn)
2.0W (10-turn)

Noise:

Within 100 Ω E.N.R.

Electrical Travel:

$360^\circ \times n \pm 5^\circ$ (n: No. of turns)

Mechanical Travel:

$360^\circ \times n \begin{matrix} +30^\circ \\ -0^\circ \end{matrix}$ (n: No. of turns)

Rotational Life:

500,000 (5-turn)

(shaft revolutions)

1,000,000 (10-turn)

Protection Grade:

IP40

Operating Temp.:

$-55^\circ\text{C} \dots +105^\circ\text{C}$

Insulation Resistance:

Over 1000M Ω at 500V.D.C.

Dielectric Strength:

1 minute at 1000V.A.C.

Starting Torque:

Within 10mN \cdot m (100gf \cdot cm)

Resist. Temperature

Coefficient of Wire:

$\pm 20 \text{ p.p.m./}^\circ\text{C}$

Vibration:

15G / 10Hz to 2,000Hz 12 hours

Shock:

50G / 11ms 18 times

Mass:

Approx. 20g

Resolution Chart (%)

Resist. Value (Ω)	100	200	500	1k	2k	5k	10k	20k	50k	
MT22S-5	0.08	0.06	0.05	0.04	0.042	0.031	0.026	0.021	0.018	
MT22S-10	0.05	0.04	0.03	0.025	0.02	0.02	0.016	0.013	0.01	
Resist. Wire Used	Cu-Ni System					Ni-Cr System				

Special Specifications Available

3-turn type (MT22S-3), extra tap (1 tap, 10 turn only), multi-ganged (up to 10 gangs, housing length extended by 19mm per gang), shaft with front and rear extension (rear shaft, 15mm length), special shaft machining (flat, pin hole, length, dia., etc.)

Note 1: Customers should test and verify device performance in any given application. General specifications are measured at temperatures of $+15^\circ\text{C} \sim +35^\circ\text{C}$. Specifications subject to change without notice.