

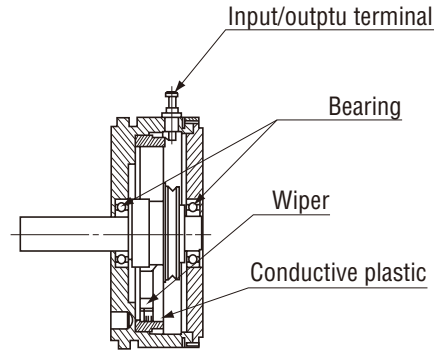
JC series

CONDUCTIVE PLASTIC SINGLE TURN TYPE

RoHS compliant



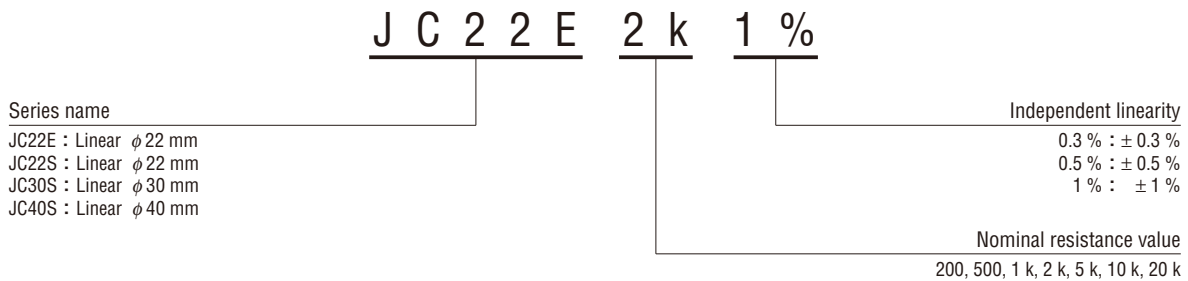
Basic construction Conductive plastic single turn type



FEATURES

- Compact
- Cost effective (JC22E) in house comparison
- Long life
- High following characteristics
- High resolution (Essentially infinite)

PART NUMBER DESIGNATION



LIST OF PART NUMBERS

Size	Item	Nominal resistance value	Independent linearity	Part number	
ϕ 22 mm		1 k Ω	± 1 %	JC22E 1 k 1 %	
		2 k Ω		JC22E 2 k 1 %	
		5 k Ω		JC22E 5 k 1 %	
		10 k Ω		JC22E 10 k 1 %	
			200 Ω	± 0.5 %	↻ JC22S 200 0.5 %
			500 Ω		↻ JC22S 500 0.5 %
			1 k Ω		JC22S 1 k 0.5 %
			2 k Ω		JC22S 2 k 0.5 %
			5 k Ω		JC22S 5 k 0.5 %
			10 k Ω		JC22S 10 k 0.5 %

Size	Item	Nominal resistance value	Independent linearity	Part number
ϕ 30 mm		500 Ω	± 0.5 %	JC30S 500 0.5 %
		1 k Ω		JC30S 1 k 0.5 %
		2 k Ω		JC30S 2 k 0.5 %
		5 k Ω		JC30S 5 k 0.5 %
		10 k Ω		JC30S 10 k 0.5 %
		20 k Ω		JC30S 20 k 0.5 %
ϕ 40 mm		500 Ω	± 0.3 %	JC40S 500 0.3 %
		1 k Ω		JC40S 1 k 0.3 %
		2 k Ω		JC40S 2 k 0.3 %
		5 k Ω		JC40S 5 k 0.3 %
		10 k Ω		JC40S 10 k 0.3 %
		20 k Ω		JC40S 20 k 0.3 %

※ Verify the above part numbers when placing orders.

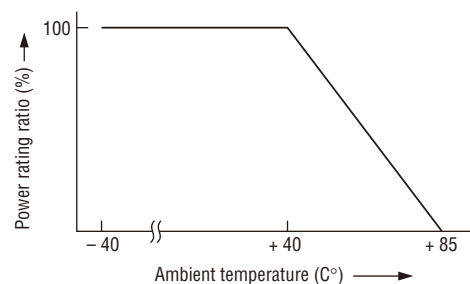
The products indicated by ↻ mark are manufactured upon receipt of order basis.

STANDARD SPECIFICATIONS

Item	Output		Single turn			
	Part number		JC22E	JC22S	JC30S	JC40S
Nominal resistance value			Refer to LIST OF PART NUMBERS			
Resistance tolerance	%		± 20	± 15		
Resolution			Essentially infinite			
Independent linearity	%		± 1	± 0.5 (± 0.3, ± 0.1)※		± 0.3 (± 0.15, ± 0.05)※
Effective electrical angle			320° ± 5°	340° ± 5°	343° ± 5°	345° ± 5°
Mechanical angle			360° continuous			
Power rating (at 40 °C)	W		0.5		0.7	1.5
Dielectric strength	Vrms		1000 1 min			
Insulation resistance	MΩ minimum		1000 (at DC500 V)			
Rotational torque	mN·m {gf·cm} maximum		4.9 {50}	0.98 {10}	1.18 {12}	1.47 {15}
Strength of tighten screw	N·m {kgf·cm} maximum		0.98 {10}	—		
Temp. coefficient resistance	ppm/°C		± 400			
Operating temp. range	°C		-40 ~ 85			
Maximum rotational speed	min ⁻¹		100	300		
Rotational life (cycles)			10 million	20 million	30 million	
Output smoothness			0.1 % maximum			
Net weight	g		Approx. 15	Approx. 17	Approx. 24	Approx. 56

※ () are made after the receipt of order basis. The availability of the ± 0.05 % linearity is limited to those resistance values that are greater than or equal to 5 kΩ.

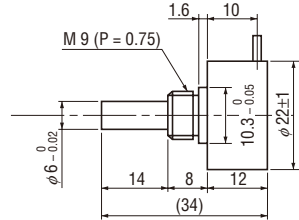
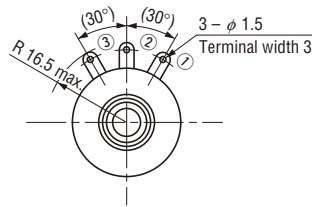
RATED POWER DERATING CURVE



OUTLINE DIMENSIONS

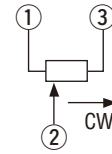
(Unit : mm)

JC22E

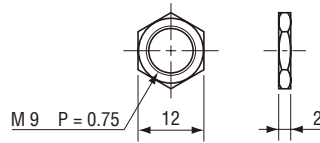


JC22E, JC22S
JC30S, JC40S

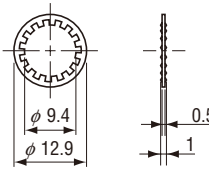
Wiring diagram



(JC22E Accessories)

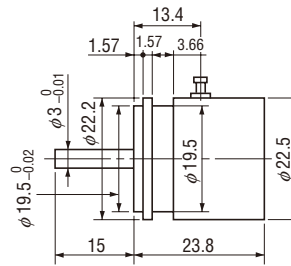
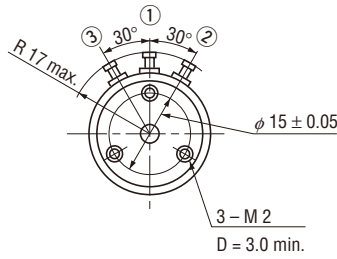


1. Nut

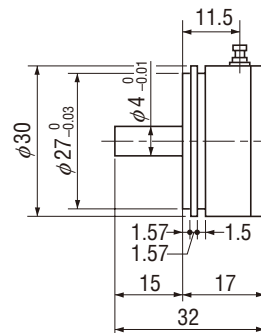
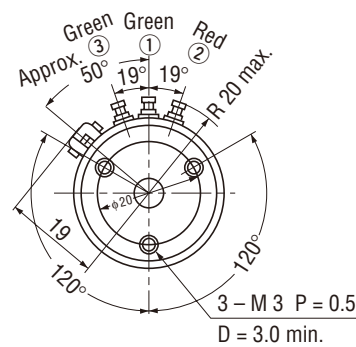


2. Washer

JC22S



JC30S



JC40S

