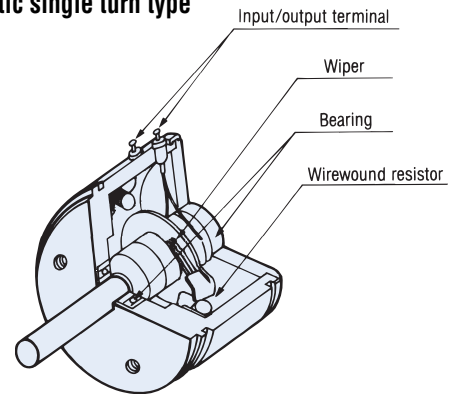


Conductive plastic single turn type

JC series



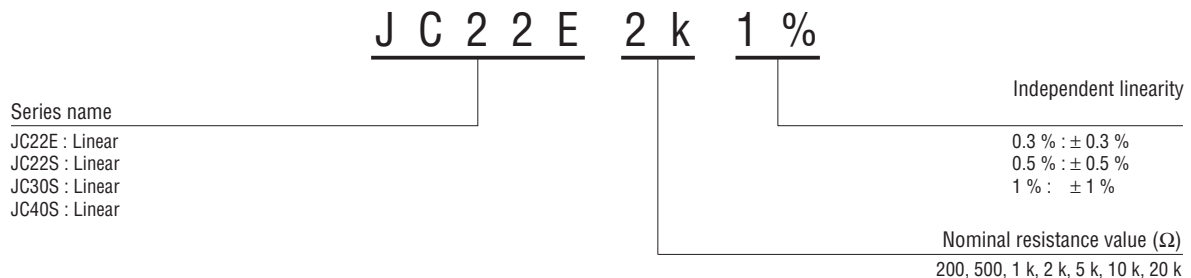
Basic construction Conductive plastic single turn type



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 kΩ	± 1 %	JC22E 1 k 1 %
		2 kΩ		JC22E 2 k 1 %
		5 kΩ		JC22E 5 k 1 %
		10 kΩ		JC22E 10 k 1 %
		200 Ω	± 0.5 %	↻ JC22S 200 0.5 %
		500 Ω		↻ JC22S 500 0.5 %
		1 kΩ		JC22S 1 k 0.5 %
		2 kΩ		JC22S 2 k 0.5 %
		5 kΩ		JC22S 5 k 0.5 %
		10 kΩ		JC22S 10 k 0.5 %

* Verify the above part numbers when placing orders.

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

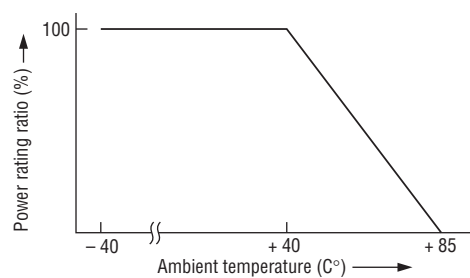
Size	Item	Nominal resistance value	Independent linearity	Part number
φ 30 mm		500 Ω	± 0.5 %	JC30S 500 0.5 %
		1 kΩ		JC30S 1 k 0.5 %
		2 kΩ		JC30S 2 k 0.5 %
		5 kΩ		JC30S 5 k 0.5 %
		10 kΩ		JC30S 10 k 0.5 %
		20 kΩ		JC30S 20 k 0.5 %
φ 40 mm		500 Ω	± 0.3 %	JC40S 500 0.3 %
		1 kΩ		JC40S 1 k 0.3 %
		2 kΩ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

STANDARD SPECIFICATIONS

Item	Output		Single turn			
	Part number		JC22E	JC22S	JC30S	JC40S
Nominal resistance value			Refer to LIST OF PART NUMBERS			
Nominal resistance tolerance	%		± 20	± 15		
Resolution			Essentially infinit			
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

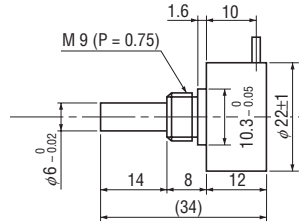
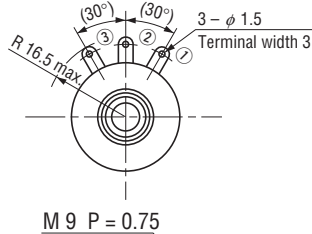


OUTLINE DIMENSIONS

(Unit : mm)

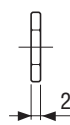
JC22E

(JC22E Accessories)

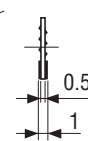


$M 9 \text{ } P = 0.75$

1. Nut

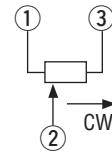


2. Washer

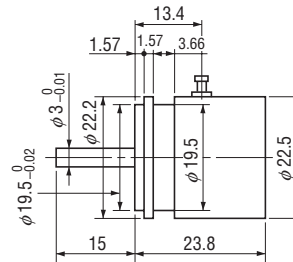
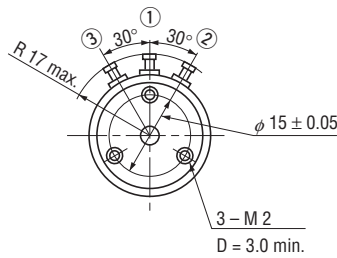


JC22E, JC22S JC30S, JC40S

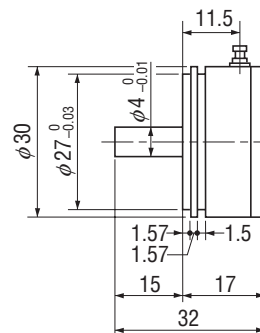
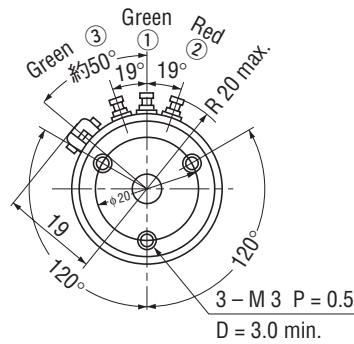
Wiring diagram



JC22S



JC30S



JC40S

