

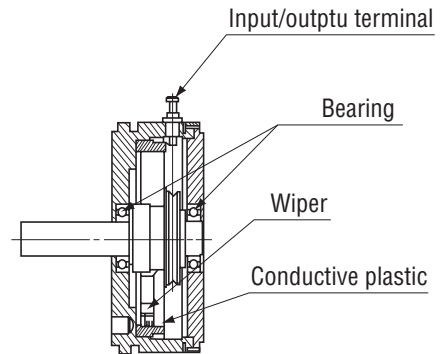
JC series

CONDUCTIVE PLASTIC SINGLE TURN TYPE

RoHS compliant



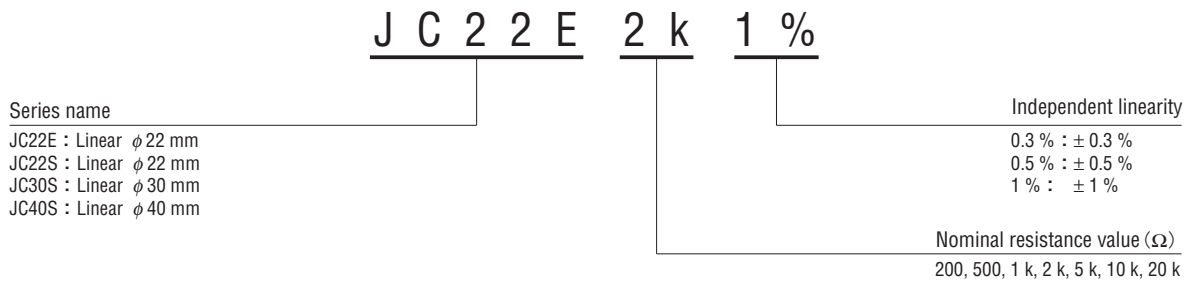
Basic construction Conductive plastic single turn type



FEATURES

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

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 %

※Verify the above part numbers when placing orders.

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

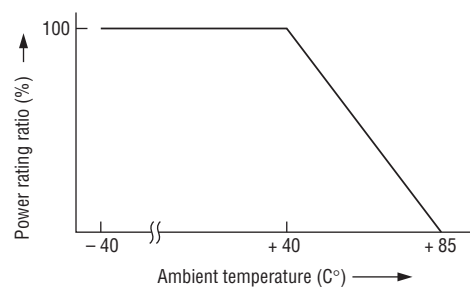
Size	Item	Nominal resistance value	Independent linearity	Part number
ϕ 30 mm		500 Ω	± 0.5 %	JC30S 500 0.5 %
		1 k Ω		JC30S 1 k 0.5 %
		2 k Ω		JC30S 2 k 0.5 %
		5 k Ω		JC30S 5 k 0.5 %
		10 k Ω		JC30S 10 k 0.5 %
		20 k Ω		JC30S 20 k 0.5 %
		ϕ 40 mm		
1 k Ω	JC40S 1 k 0.3 %			
2 k Ω	JC40S 2 k 0.3 %			
5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

STANDARD SPECIFICATIONS

Output		Single turn			
Item	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
Protection grade		IP-40			

※() 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.

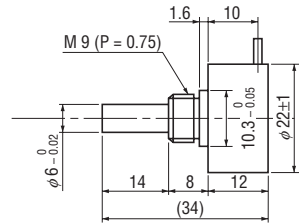
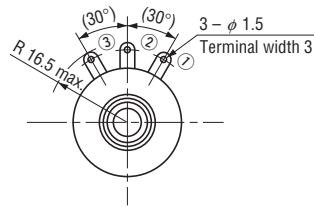
RATED POWER DERATING CURVE



OUTLINE DIMENSIONS

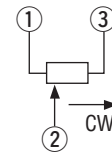
(Unit : mm)

JC22E

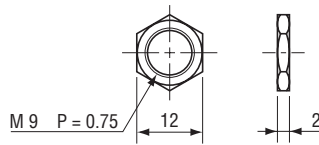


JC22E, JC22S
JC30S, JC40S

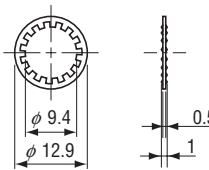
Wiring diagram



(JC22E Accessories)

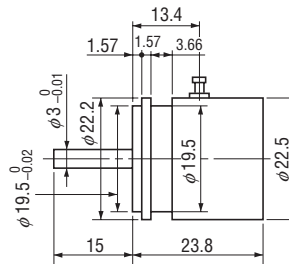
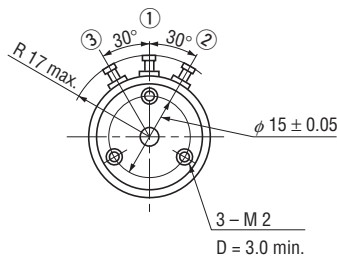


1. Nut

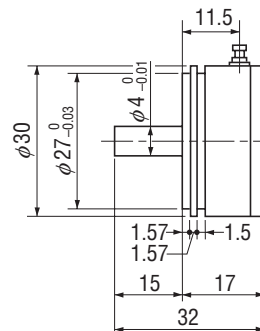
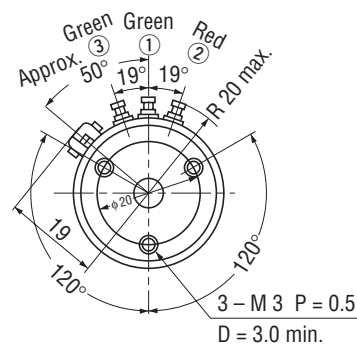


2. Washer

JC22S



JC30S



JC40S

