

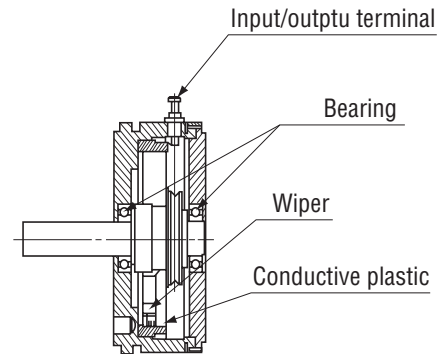
# JC series

## CONDUCTIVE PLASTIC SINGLE TURN TYPE

RoHS compliant



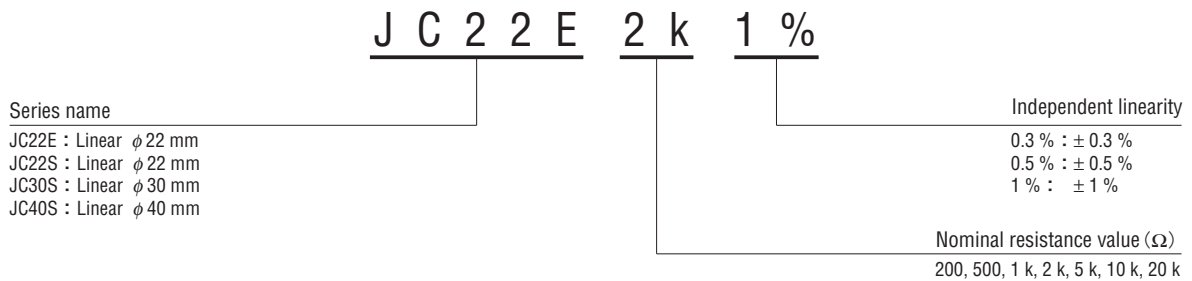
### Basic construction Conductive plastic single turn type



### 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	
$\phi$ 22 mm		1 k $\Omega$	$\pm 1$ %	JC22E 1 k 1 %	
		2 k $\Omega$		JC22E 2 k 1 %	
		5 k $\Omega$		JC22E 5 k 1 %	
		10 k $\Omega$		JC22E 10 k 1 %	
			200 $\Omega$	$\pm 0.5$ %	↻ JC22S 200 0.5 %
			500 $\Omega$		↻ JC22S 500 0.5 %
			1 k $\Omega$		JC22S 1 k 0.5 %
			2 k $\Omega$		JC22S 2 k 0.5 %
			5 k $\Omega$		JC22S 5 k 0.5 %
			10 k $\Omega$		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.

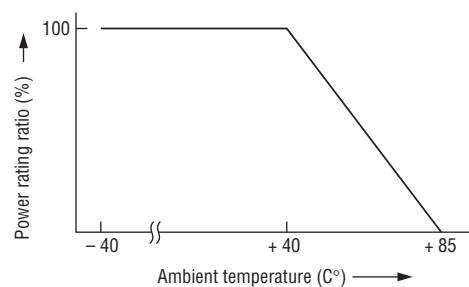
Size	Item	Nominal resistance value	Independent linearity	Part number
$\phi$ 30 mm		500 $\Omega$	$\pm 0.5$ %	JC30S 500 0.5 %
		1 k $\Omega$		JC30S 1 k 0.5 %
		2 k $\Omega$		JC30S 2 k 0.5 %
		5 k $\Omega$		JC30S 5 k 0.5 %
		10 k $\Omega$		JC30S 10 k 0.5 %
		20 k $\Omega$		JC30S 20 k 0.5 %
		$\phi$ 40 mm		
1 k $\Omega$	JC40S 1 k 0.3 %			
2 k $\Omega$	JC40S 2 k 0.3 %			
5 k $\Omega$	JC40S 5 k 0.3 %			
10 k $\Omega$	JC40S 10 k 0.3 %			
20 k $\Omega$	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						
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 <sup>-1</sup>	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.

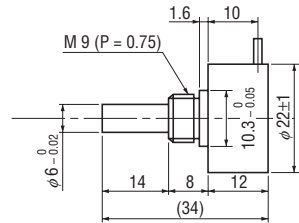
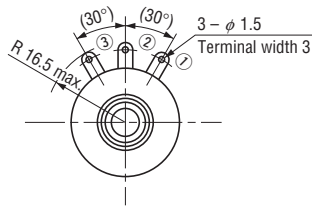
### RATED POWER DERATING CURVE



**OUTLINE DIMENSIONS**

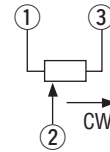
(Unit : mm)

● **JC22E**

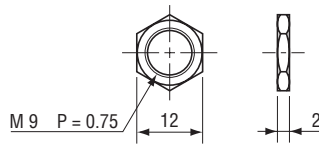


**JC22E, JC22S  
JC30S, JC40S**

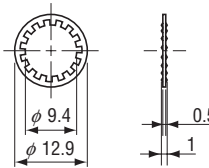
Wiring diagram



(JC22E Accessories)

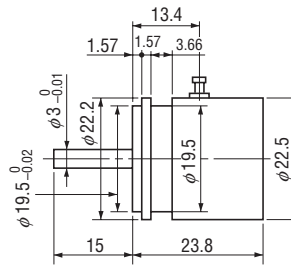
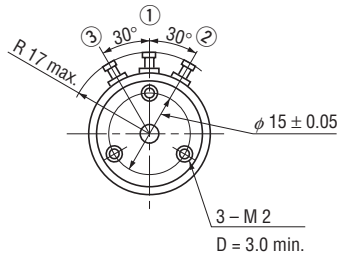


1. Nut

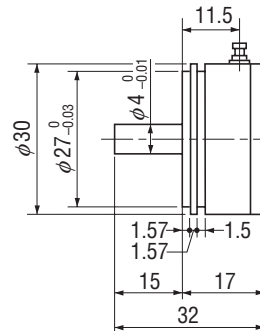
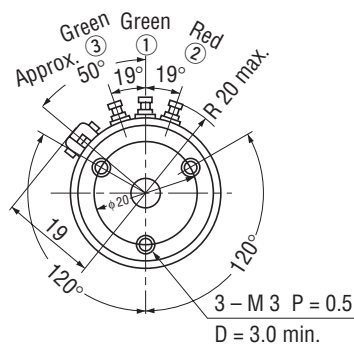


2. Washer

● **JC22S**



● **JC30S**



● **JC40S**

