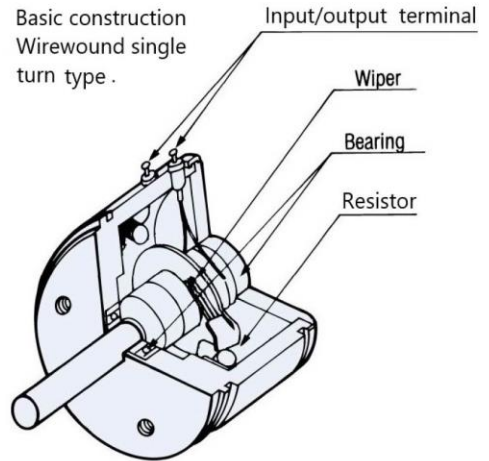




得豐實業有限公司

Dfwisdom Industrial CO., LTD

J40S-J45S-J50S-單回轉電位器 (Single - turn potentiometer)



FEATURES

- High linearity through precision wire winding
- Long life
- High following characteristics
- Low noise
- RoHS compliant

PART NUMBER DESIGNATION

J 50 S 500

Series name

Nominal resistance value (Ω)

J40S
J45S
J50S

500, 1 k, 2 k, 5 k, 10 k, 20 k, 50 k

STANDARD SPECIFICATIONS

LIST OF PART NUMBERS

Size	Item	Nominal resistance value	Part number
φ 40 mm		500 Ω	J40S 500
		1 k Ω	J40S 1 k
		2 k Ω	J40S 2 k
		5 k Ω	J40S 5 k
		10 k Ω	J40S 10 k
φ 44.45 mm		500 Ω	J45S 500
		1 k Ω	J45S 1 k
		2 k Ω	J45S 2 k
		5 k Ω	J45S 5 k
		10 k Ω	J45S 10 k
		20 k Ω	J45S 20 k
φ 50.8 mm		50 k Ω	J45S 50 k
		500 Ω	J50S 500
		1 k Ω	J50S 1 k
		2 k Ω	J50S 2 k
		5 k Ω	J50S 5 k
		10 k Ω	J50S 10 k
	20 k Ω	J50S 20 k	
	50 k Ω	J50S 50 k	

Item	Part number	J40S	J45S	J50S
Resistance tolerance	%	±5		
Effective electrical angle		350° ±1.5°	353° ±1.5°	355° ±1.5°
Mechanical angle		360° continuous		
Power rating (at 40 ° C)	W	1	1.3	1.5
Dielectric strength	Vrms	1000 1 min		
Insulation resistance	$\frac{M\Omega}{\text{minimum}}$	1000 (at DC500 V)		
Rotational torque		0.59 {6}		0.69 {7}
Peak noise	$\frac{mN \cdot m \{gf \cdot cm\}}{\text{maximum}}$	10 (4 min ⁻¹)		
Temp. coefficient of resistance	ppm/° C	±50		
Operating temp. range	° C	-55 ~ 85		
Maximum rotational speed	min ⁻¹	100	200	
Net weight	g	Approx. 58	Approx. 60	Approx. 73
Connecting accuracy		Based on No. 1 terminal		
Protection grade		IP40		

※ Verify the above part numbers when placing orders.



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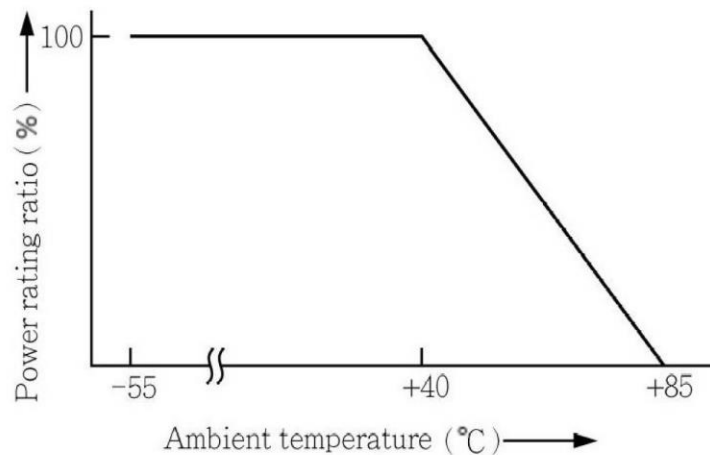
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RESISTANCE VALUES, RESOLUTION, INDEPENDENT LINEARITY, ROTATIONAL LIFE

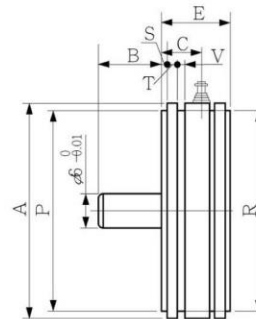
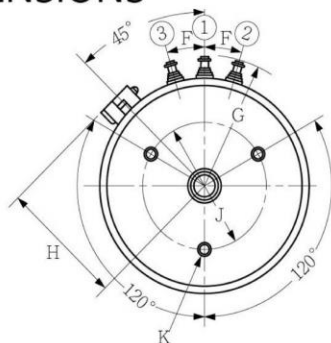
Nominal resistance value(Ω)	Resolution(%)			Independent linearity(%)			Rotational life (million cycles)		
	J40S	J45S	J50S	J40S	J45S	J50S	J40S	J45S	J50S
500	0.13	0.12	0.1	± 0.15	± 0.1	± 0.1	5	10	10
1 k	0.1	0.1	0.08						
2 k	0.08	0.07	0.06						
5 k	0.07	0.08	0.07						
10 k	—	0.07	0.05	—	± 0.15	± 0.15	1	1	1
20 k		0.05	0.05						
50 k	—	0.04	0.03	—	—	—	—	—	—

RATED POWER DERATING CURVE

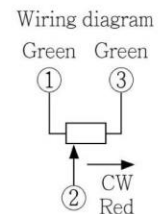


OUTLINE DIMENSIONS

J40S
J45S
J50S



(Unit : mm)



List of outline dimensions

Part number	Marks	A	B	C	E	F	G	H	J	K	P	R	S	T	V
J40S	$\phi 40$	20	13.3	20	16°	R25	25	$\phi 30$	M 3 (P = 0.5) D = 3.0 minimum	$\phi 37_{-0.03}^0$	$\phi 37$	1.57	2.36	1.86	
J45S	$\phi 44.45$														
J50S	$\phi 50.8$														