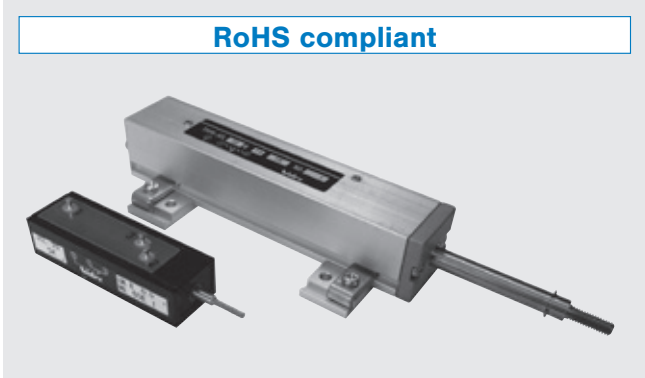
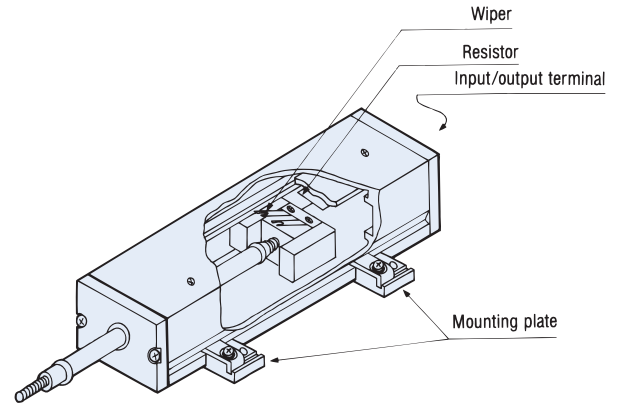


# CONDUCTIVE PLASTIC RECTILINEAR TYPE

# JCL·JCL B



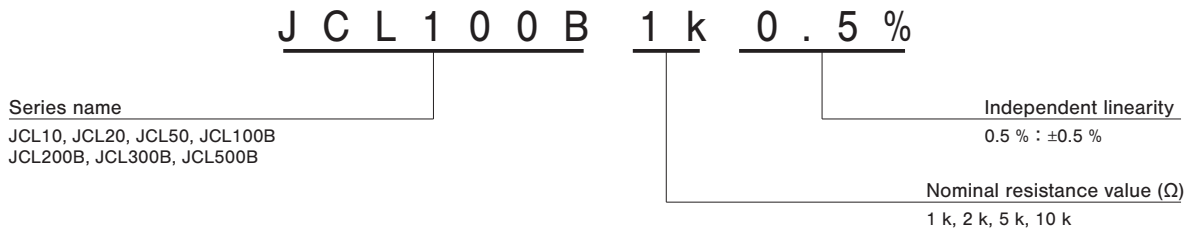
## Basic construction Conductive plastic rectilinear type



## FEATURES

- 10 ~ 500 mm
- High resolution (Essentially infinite)
- Long life
- Mounting plate seating position can be set to any positions (JCL B)
- RoHS compliant

## PART NUMBER DESIGNATION



## LIST OF PART NUMBERS

Effective electrical travel	Item	Nominal resistance value	Part number
10 mm		1 kΩ	JCL10 1 k 0.5 %
		2 kΩ	JCL10 2 k 0.5 %
		5 kΩ	JCL10 5 k 0.5 %
20 mm		1 kΩ	JCL20 1 k 0.5 %
		2 kΩ	JCL20 2 k 0.5 %
		5 kΩ	JCL20 5 k 0.5 %
50 mm		1 kΩ	JCL50 1 k 0.5 %
		2 kΩ	JCL50 2 k 0.5 %
		5 kΩ	JCL50 5 k 0.5 %
		10 kΩ	JCL50 10 k 0.5 %

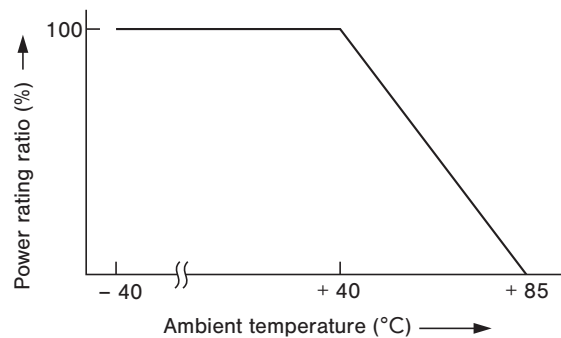
Effective electrical travel	Item	Nominal resistance value	Part number
100 mm		1 kΩ	JCL100B 1 k 0.5 %
		2 kΩ	JCL100B 2 k 0.5 %
		5 kΩ	JCL100B 5 k 0.5 %
200 mm		10 kΩ	JCL100B 10 k 0.5 %
		1 kΩ	JCL200B 1 k 0.5 %
		2 kΩ	JCL200B 2 k 0.5 %
300 mm		5 kΩ	JCL200B 5 k 0.5 %
		10 kΩ	JCL200B 10 k 0.5 %
		2 kΩ	JCL300B 2 k 0.5 %
500 mm		5 kΩ	JCL300B 5 k 0.5 %
		10 kΩ	JCL300B 10 k 0.5 %
		5 kΩ	JCL500B 5 k 0.5 %
		10 kΩ	JCL500B 10 k 0.5 %

※ Verify the above part numbers when placing orders.

## STANDARD SPECIFICATIONS

Item	Part number	JCL						
		10	20	50	100B	200B	300B	500B
Resistance tolerance	%	± 20						
Resolution		Essentially infinite						
Independent linearity	%	± 0.5						
Effective electrical travel	mm	10 <sup>+1</sup> <sub>0</sub>	20 <sup>+1</sup> <sub>0</sub>	50 <sup>+1</sup> <sub>0</sub>	100 <sup>+2</sup> <sub>0</sub>	200 <sup>+2</sup> <sub>0</sub>	300 <sup>+3</sup> <sub>0</sub>	500 <sup>+3</sup> <sub>0</sub>
Mechanical travel	mm	Minimum effective electrical travel						
Power rating (at 40 °C)	W	0.13	0.25	0.6	1.5	3	4	7
Dielectric strength	Vrms	1000 1 min						
Insulation resistance	MΩ minimum	1000 (at DC500 V)						
Operating force	mN {gf} maximum	147 {15}			1960 {200}			
Stop strength	N·m {kgf·cm} minimum	0.196 {2}			0.981 {10}			
Maximum traveling speed	mm/s	500						
Temp. coefficient of resistance	ppm/°C	± 400						
Operating temp. range	°C	-40 ~ 85						
Life	cycle	20 million				10 million	6 million	4 million
Net weight	g	Approx. 23	Approx. 27	Approx. 38	Approx. 182	Approx. 272	Approx. 373	Approx. 555
Protection grade		IP40						

## RATED POWER DERATING CURVE

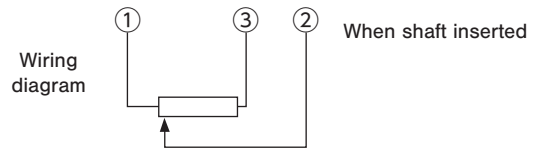
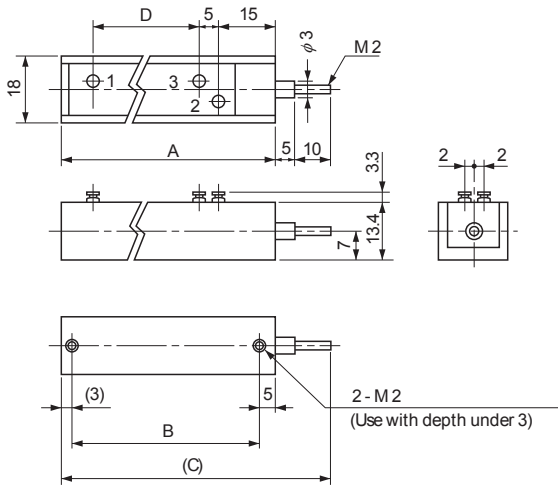


# JCL/JCL B POTENTIOMETERS

## OUTLINE DIMENSIONS

### JCL10 ~ 50

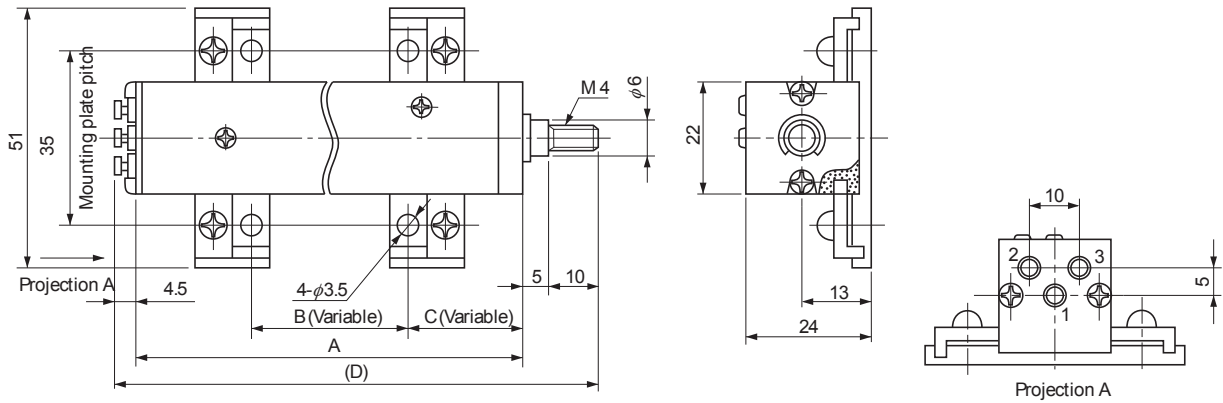
Unless otherwise specified, tolerance:  $\pm 0.5$  (Unit: mm)



### JCL10 ~ 50

Part number	Mark	A	B	(C)	D
JCL10		45	37	60	18
JCL20		55	47	70	28
JCL50		85	77	100	58

### JCL100B ~ 500B



### JCL100B ~ 500B

Part number	Mark	A	B	C	(D)
JCL100B		159	50 ~ 129	17 ~ 96	178.5
JCL200B		259	100 ~ 229	17 ~ 146	278.5
JCL300B		369	150 ~ 339	17 ~ 206	388.5
JCL500B		569	250 ~ 539	17 ~ 306	588.5

B dimensions require minimum 1/2 of effective electrical length.

# Mouser Electronics

Authorized Distributor

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## Nidec:

[JCL10 1K 0.5%](#) [JCL10 2K 0.5%](#) [JCL10 5K 0.5%](#) [JCL100B 10K 0.5%](#) [JCL100B 1K 0.5%](#) [JCL500B 5K 0.5%](#)  
[JCL300B 5K 0.5%](#) [JCL50 10K 0.5%](#) [JCL50 1K 0.5%](#) [JCL50 2K 0.5%](#) [JCL50 5K 0.5%](#) [JCL500B 10K 0.5%](#) [JCL200B](#)  
[10K 0.5%](#) [JCL200B 1K 0.5%](#) [JCL200B 2K 0.5%](#) [JCL200B 5K 0.5%](#) [JCL300B 10K 0.5%](#) [JCL300B 2K 0.5%](#)  
[JCL100B 2K 0.5%](#) [JCL100B 5K 0.5%](#) [JCL20 10K 0.5%](#) [JCL20 1K 0.5%](#) [JCL20 2K 0.5%](#) [JCL20 5K 0.5%](#)