CUI Devices is now Same Sky! Learn More

SERIES: PTN24B | DESCRIPTION: ROTARY POTENTIOMETER

FEATURES

- carbon element
- Includes switch
- 10K lifecycle
- plastic shaft options

RoHS

SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
maximum operating voltage				200	Vdc
power rating	at 70°C			0.5	W
taper	linear, logarithmic, and reverse logarithmic				
standard resistance range	see Resistance Table	10		2,000	kΩ
standard resistance tolerance			±20		%
residual resistance				±1	%
sliding noise				6	mV
operating temperature		-10		75	°C
hand soldering	for 3 seconds max			260	°C
RoHS	yes				

MECHANICAL

parameter	conditions/description	min	typ	max	units
mechanical angle		295	300	305	°
rotational torque		10		150	gf-cm
switch operating force		200		800	gf-cm
stop strength		4			kg-cm
rotational life			10,000		cycles
weight		12	15	18	g

PART NUMBER KEY

PTN24B - X XXX XX XX X

Base Number

Terminal Configuration:
B = Horizontal, Solder Lugs
C = Horizontal, Rear facing pins

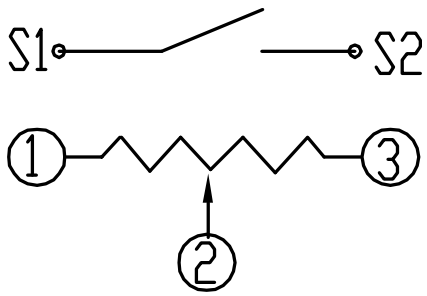
Resistance:
10 = 10 kΩ
20 = 20 kΩ
25 = 25 kΩ
50 = 50 kΩ
100 = 100 kΩ
200 = 200 kΩ
500 = 500 kΩ
11 = 1 MΩ
22 = 2 MΩ

Shaft Length:
15 = 15 mm
20 = 20 mm
25 = 25 mm

Shaft Style:
D = D-Cut (metal)
DP = D-Cut (plastic)
E = Smooth with partial slot
K1 = Knurled 18 tooth (metal)
K1P = Knurled 18 tooth (plastic)

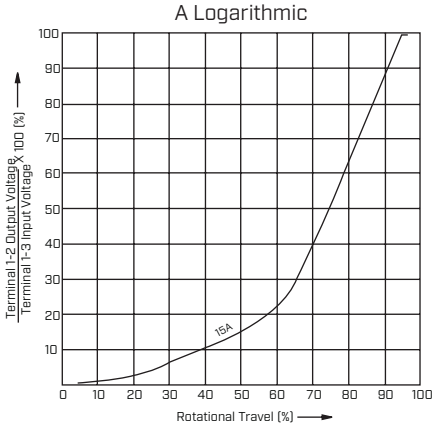
Resistance Taper:
A = Logarithmic
B = Linear
C = Reverse Logarithmic

SCHEMATIC/TAPERS

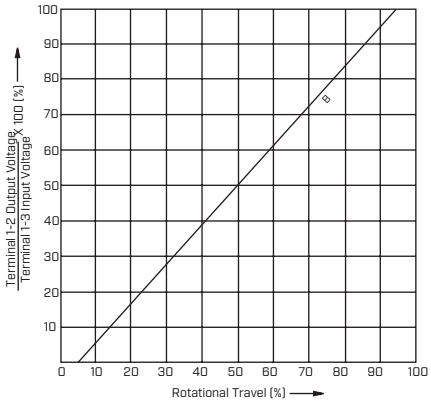


Resistance Table	
Resistance (kΩ)	Code
10	10
20	20
25	25
50	50
100	100
200	200
500	500
1,000	11
2,000	22

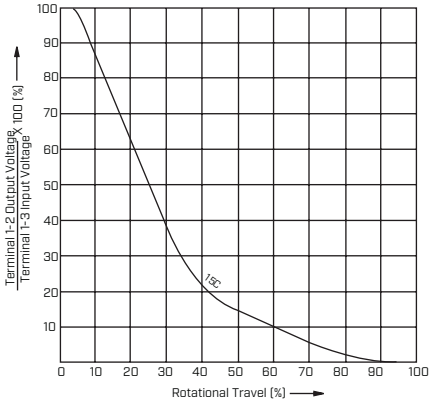
A Logarithmic



B Linear



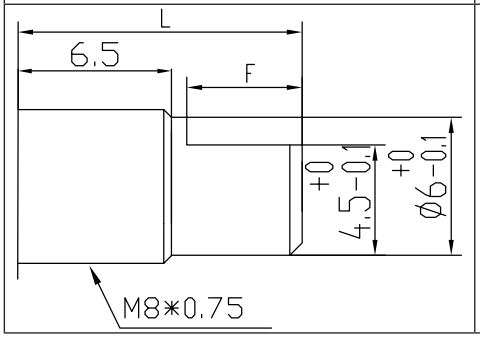
C Reverse Logarithmic



SHAFT TYPES

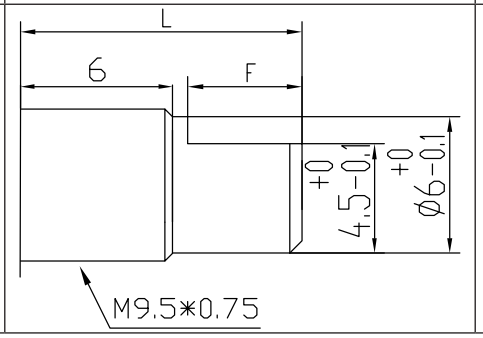
units: mm
tolerance:
X≤10.00: ±0.30 mm
10.00<X≤30.00: ±0.50 mm
30.00<X≤100.00: ±1.0 mm
unless otherwise noted

D Type



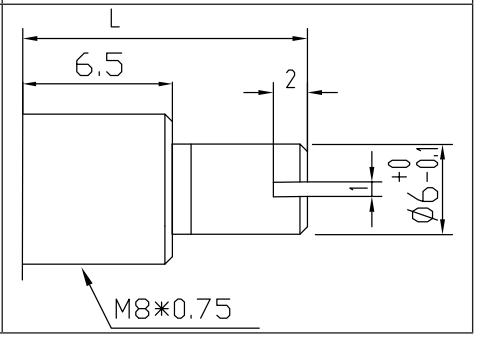
L	15	20	25
F	7	12	12

DP Type



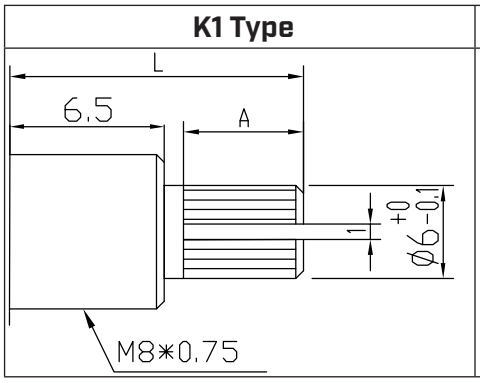
L	15	20	25
A	7	12	12

E Type



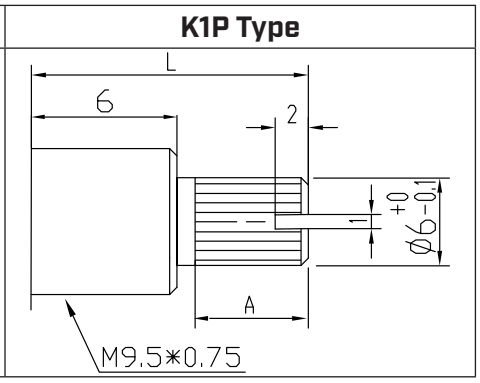
L	15	20	25

K1 Type



L	15	20	25
F	7	11	17

K1P Type



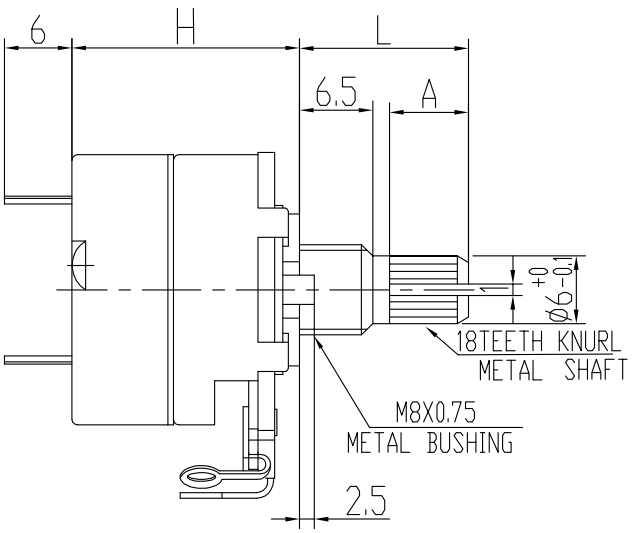
L	15	20	25
A	7.5	12.5	17

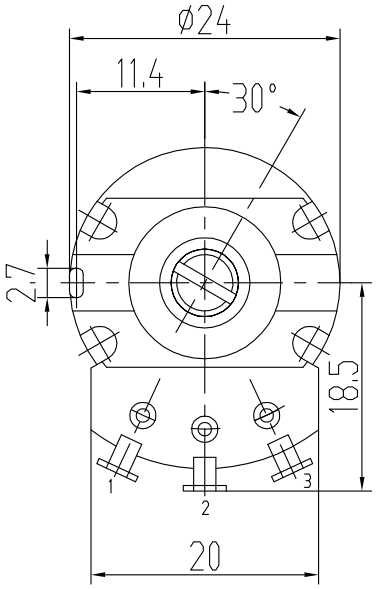
MECHANICAL DRAWING (B TERMINAL CONFIGURATION)

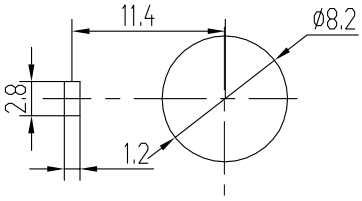
units: mm
tolerance:
X≤10.00: ±0.30 mm
10.00<X≤30.00: ±0.50 mm
30.00<X≤100.00: ±1.0 mm
unless otherwise noted

DESCRIPTION	MATERIAL	PLATING/COLOR
housing	cold rolled steel	
terminals	cold rolled steel	
bushing	zinc alloy or POM	
plastic shaft models	POM	black
metal shaft models (smooth shaft models & 25 mm D-cut model)	aluminum	
metal shaft models (all other versions)	zinc alloy	
switch base	H161 PF	black

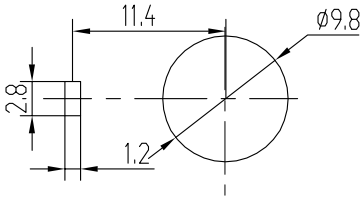
HOUSING LENGTH, H (mm)	
Plastic Shaft/Bushing Models	20.2
Metal Shaft/Bushing Models	19.2



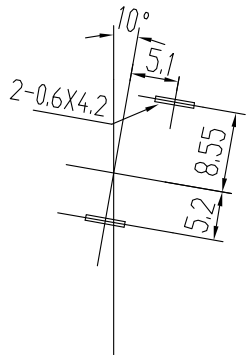




Recommended Panel Cutout
Front View
Metal Bushing



Recommended Panel Cutout
Front View
Plastic Bushing



Recommended PCB Layout
Top View

MECHANICAL DRAWING (C TERMINAL CONFIGURATION)

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tolerance:
X≤10.00: ±0.30 mm
10.00<X≤30.00: ±0.50 mm
30.00<X≤100.00: ±1.0 mm
unless otherwise noted

DESCRIPTION	MATERIAL	PLATING/COLOR
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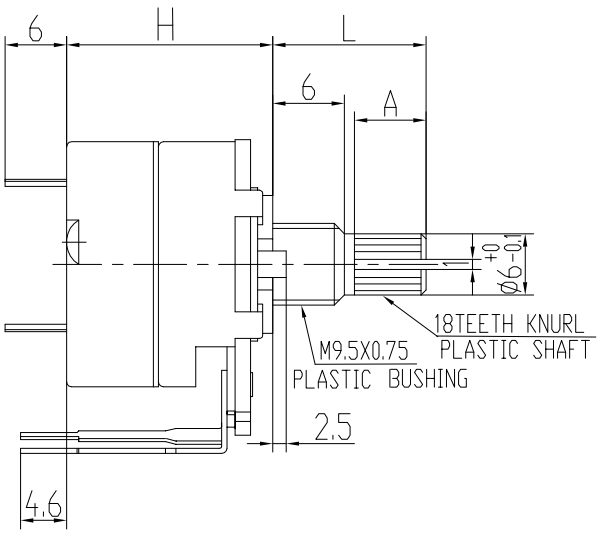
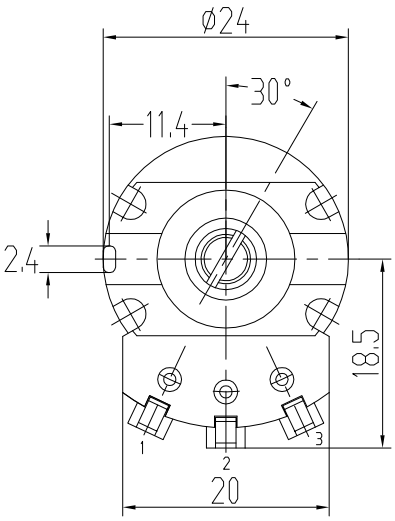
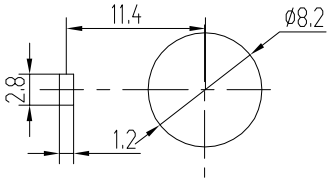
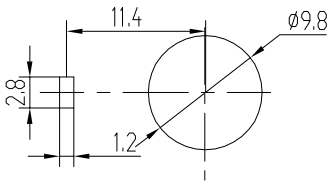
HOUSING LENGTH, H (mm)	
Plastic Shaft/Bushing Models	20.2
Metal Shaft/Bushing Models	19.2



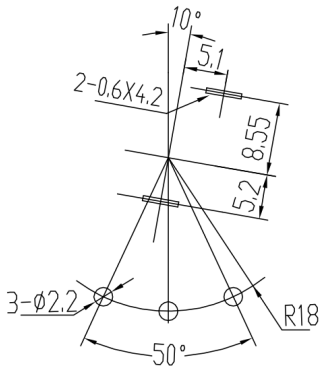




Recommended Panel Cutout
Front View
Metal Bushing



Recommended Panel Cutout
Front View
Plastic Bushing

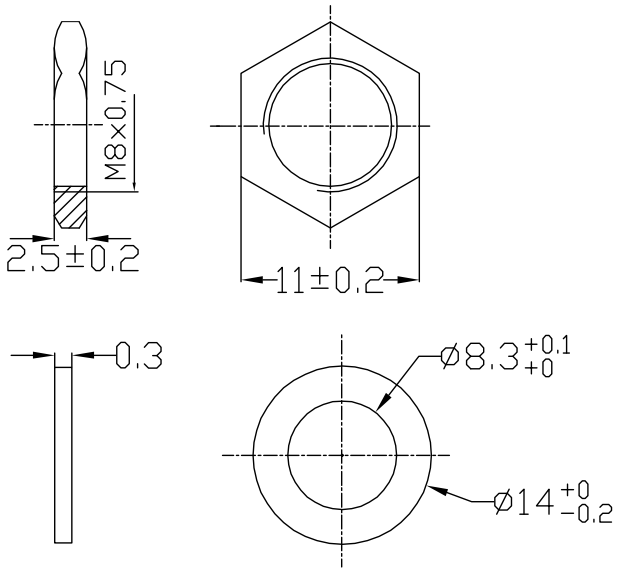


Recommended PCB Layout
Top View

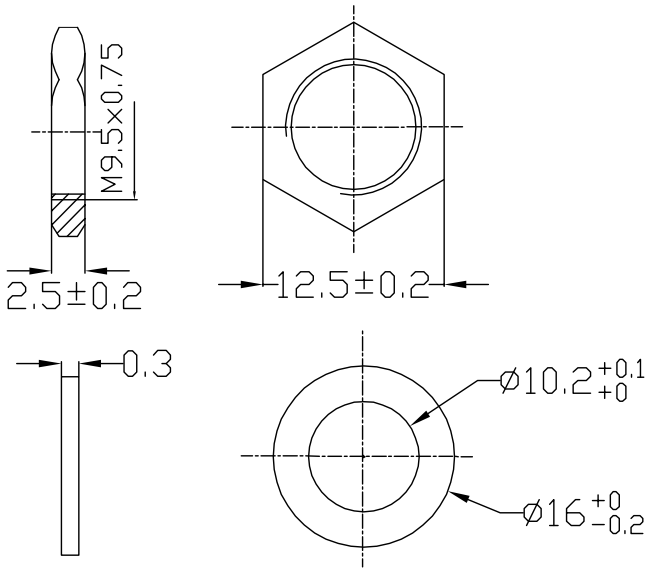
MOUNTING HARDWARE

units: mm
tolerance:
X≤10.00: ±0.30 mm
unless otherwise noted

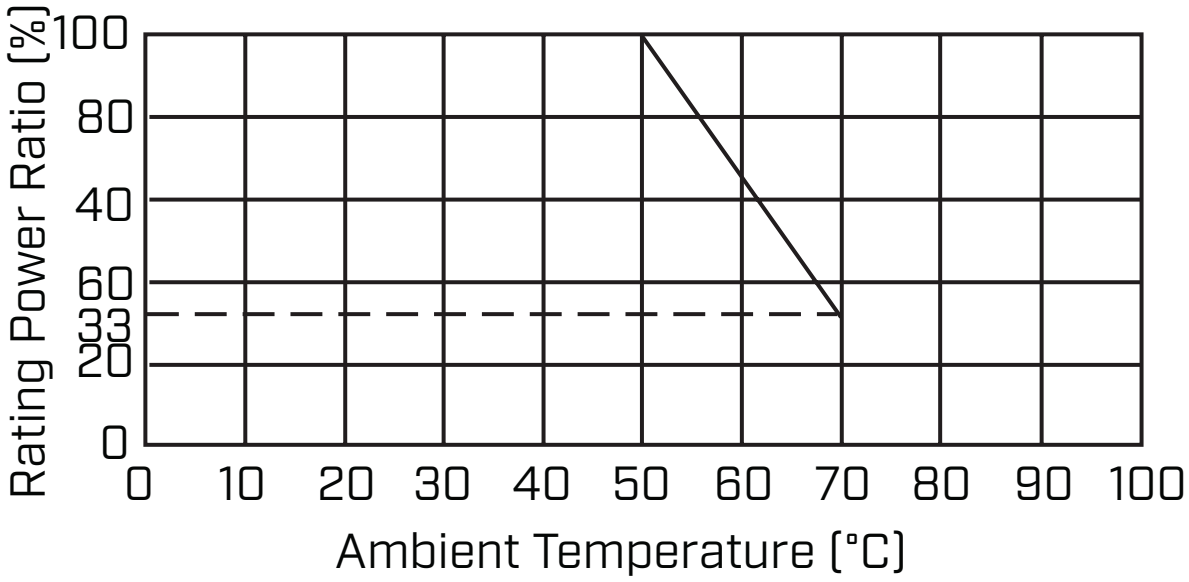
Metal Shaft Models



Plastic Shaft Models



POWER DERATING CURVE



REVISION HISTORY

rev.	description	date
1.0	initial release	12/06/2023
1.01	updated datasheet	05/07/2024
1.02	CUI Devices rebranded to Same Sky	09/12/2024

The revision history provided is for informational purposes only and is believed to be accurate.

same sky

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