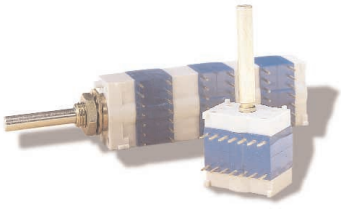
# C&K MIL Series
# 1-4 Pole Miniature Right



## Features/Benefits

- *Bushing option for panel mounting*
- *1 to 4 poles per bank and up to 5 banks per switch*
- *Totally sealed (insert molded contacts and terminals)*
- *Low profile – 12 mm above PCB*

## Typical Applications

- *Telecom switching equipment*
- *Military communications*
- *Instrumentation*
- *Medical monitors*

## Specifications

CONTACT RATING: Switch: 20 mA, 1 VA max. resistive load
Carry: 1 AMP.
ELECTRICAL LIFE: 20,000 operations.
OPERATING TORQUE: < 6 Ncm.
STOP STRENGTH: > 50 Ncm.
CONTACT RESISTANCE: < 40 mΩ
INSULATION RESISTANCE: $10^9$ Ω
DIELECTRIC STRENGTH: 500 V rms
OPERATING TEMPERATURE: –40ºC to + 85ºC
STORAGE TEMPERATURE: –55ºC to + 85ºC

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## Materials

HOUSING: Thermoplastic (nylon) and thermoset (diallyl phthalate)
ACTUATOR: Steel
MOVABLE CONTACTS: Brass, gold plated.
ROTOR: Thermoset (polysulfone)
O-RING: Silicone
STATIONARY CONTACTS & TERMINALS: Brass, gold plated.
TERMINAL SEAL: Totally sealed (insert molded).
BUSHING: Brass
STOP PIN: Stainless steel
HARDWARE: Nut: Brass, nickel plated. Washer: Brass, nickel plated.
Gasket: Neopren.



## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages K-23 thru K-25. For additional options not shown in catalog, consult Customer Service Center.

**Designation**
MIL

**Number of Banks**
1 (STD.) 1 Bank
2 2 Banks
3 3 Banks
4 4 Banks
5 5 Banks

**Switch Function**
112S (STD.) SP, 30° Index, 12 pos. no stop
102B02 SP, 30° Index, 2 pos.
103B03 SP, 30° Index, 3 pos.
104B04 SP, 30° Index, 4 pos.
105B05 SP, 30° Index, 5 pos.
106B06 SP, 30° Index, 6 pos.
107B07 SP, 30° Index, 7 pos.
108B08 SP, 30° Index, 8 pos.
109B09 SP, 30° Index, 9 pos.
110B10 SP, 30° Index, 10 pos.
111B11 SP, 30° Index, 11 pos.
112B12 (STD.) SP, 30° Index, 12 pos.
206S (STD.) DP, 30° Index, 6 pos. no stop
202B02 DP, 30° Index, 2 pos.
203B03 DP, 30° Index, 3 pos.
204B04 DP, 30° Index, 4 pos.
205B05 DP, 30° Index, 5 pos.
206B06 (STD.) DP, 30° Index, 6 pos.
303S 3P, 30° Index, 3 pos. no stop
302B02 3P, 30° Index, 2 pos.
303B03 3P, 30° Index, 3 pos.
402S 4P, 30° Index, 2 pos. no stop
402B02 4P, 30° Index, 2 pos.

**Switching Mode**
N (STD.) Non-shorting BBM (break-before-make)
C Shorting, MBB (make-before-break)

**Mounting Style**
SD (STD.) Without panel mount
AD (STD.) With panel mount

**Actuator Option**
(NONE) (STD.) 4 mm diameter shaft
M10X3 4 mm shaft with flat
F2X1 4 mm shaft with screwdriver slot

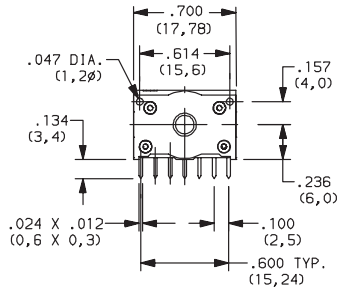
**Actuator Option Angle***
(NONE) (STD.)
K0 0° angle
K30 30° angle
K60 60° angle
K90 90° angle
K120 120° angle
K180 180° angle
K270 270° angle

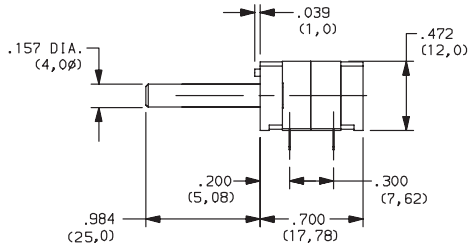
**Actuator Option Length****
25 (STD.) 25 mm standard shaft

* Other angles available by request
** Other lengths available by request.

## DESIGNATION

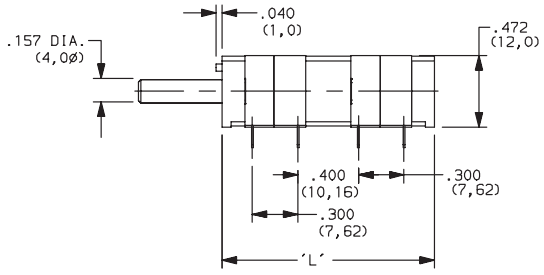
MIL




## NUMBER OF BANKS

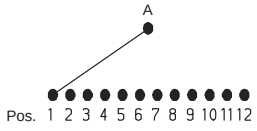
| OPTION CODE | DIM. 'L' | WITH BUSHING DIM. 'L' |
|---|---|---|
| 1 | .770 (17,78) | .897 (22,78) |
| 2 | 1.400 (35,56) | 1.597 (40,56) |
| 3 | 2.100 (53,34) | 2.297 (58,34) |
| 4 | 2.800 (71,12) | 3.00 (76,12) |
| 5 | 3.500 (88,90) | 3.697 (93,90) |



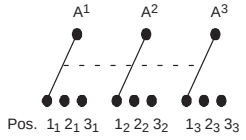

## SWITCH FUNCTION

| 30° INDEXING | | |
|---|---|---|
| NO. POLES | MODEL NO. | SWITCH FUNCTION |
| SP | 112S | 12 Position No Stops |
| | 102B02 | 2 Positions |
| | 103B03 | 3 Positions |
| | 104B04 | 4 Positions |
| | 105B05 | 5 Positions |
| | 106B06 | 6 Positions |
| | 107B07 | 7 Positions |
| | 108B08 | 8 Positions |
| | 109B09 | 9 Positions |
| | 110B10 | 10 Positions |
| | 111B11 | 11 Positions |
| | 112B12 | 12 Positions |

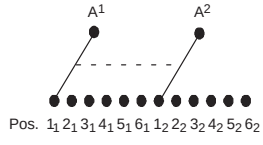
SP MODELS SCHEMATIC



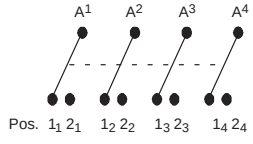

3P MODELS SCHEMATIC



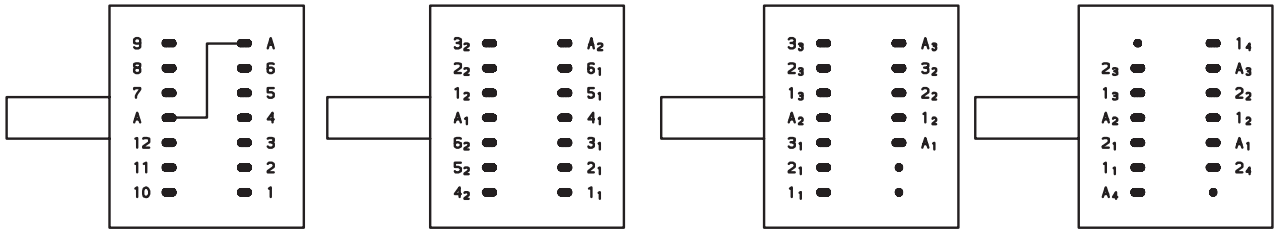

DP MODELS SCHEMATIC




4P MODELS SCHEMATIC




| 30° INDEXING | | |
|---|---|---|
| NO. POLES | MODEL NO. | SWITCH FUNCTION |
| DP | 206S | 4 Position No Stops |
| | 202B02 | 2 Positions |
| | 203B03 | 3 Positions |
| | 204B04 | 4 Positions |
| | 205B05 | 5 Positions |
| | 206B06 | 6 Positions |
| 3P | 303S | 3 Positions No Stop |
| | 302B02 | 2 Positions |
| | 303B03 | 3 Positions |
| 4P | 402S | 2 Positions No Stop |
| | 402B02 | 2 Positions |




Third Angle Projection

*Dimensions are shown: IN (mm)*
*Dimensions subject to change*

# C&K MIL Series
# 1-4 Pole Miniature Right

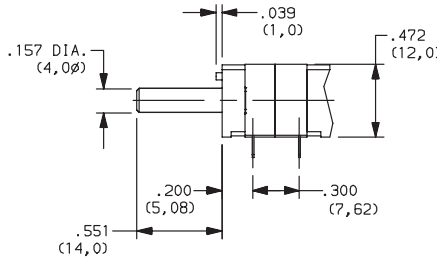
## SWITCHING MODE

**N** **(STD.) NON-SHORTING, BBM (break-before-make)**

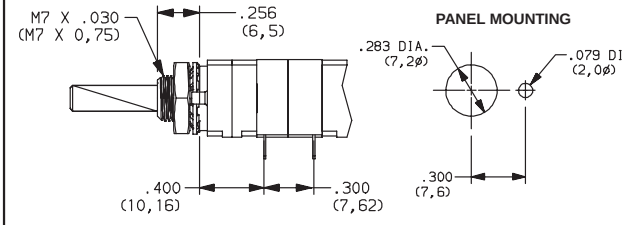
**C** SHORTING, MBB (make-before-break)

## MOUNTING STYLE

**SD** WITHOUT

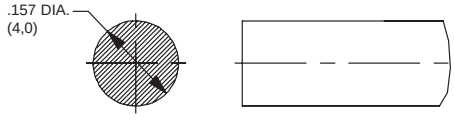



**AD** WITH PANEL MOUNT

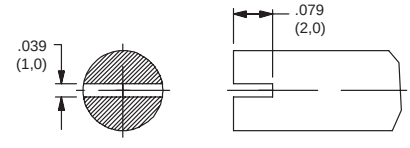



## ACTUATOR OPTION

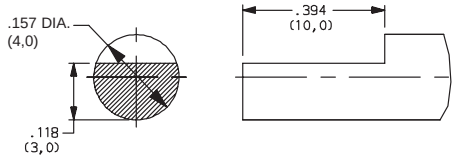
**(NONE)** **(STD.) .157 DIA. (4,0)**




**F2X1** SCREWCRIVER SLOT




**M10X3** FLAT

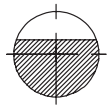



Third Angle Projection

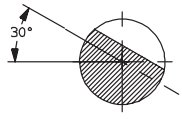
*Dimensions are shown: IN (mm)*
*Dimensions subject to change*

## ACTUATOR OPTION ANGLE

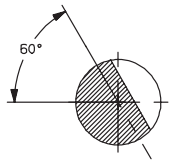
**(NONE)** (STD.)



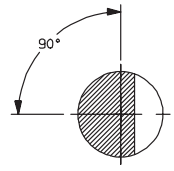
**K0** (STD.) 0 ANGLE



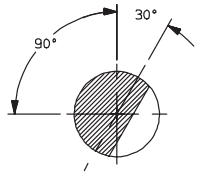

**K30** 30º



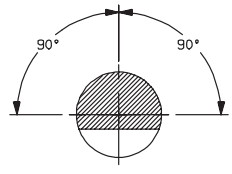

**K60** 60º



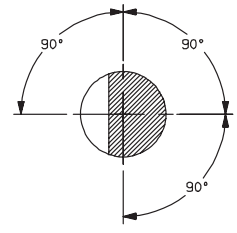

**K90** 90º



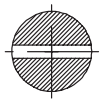

**K120** 120º



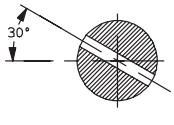

**K180** 210º



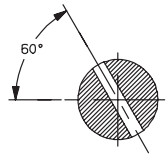

**K270** 300º



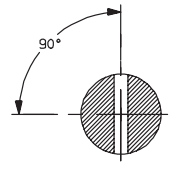
**K0** (STD.) 0 ANGLE



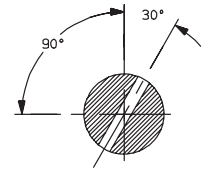

**K30** 30º




**K60** 60º




**K90** 90º




**K120** 120º

## ACTUATOR LENGTH

**25** 0,25 mm (.984) STANDARD SHAFT

Other lengths available by request.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Components:

MIL1112SNSD25

C&K Switches:

MIL2112B12NSD25 MIL1303B03NSD25 MIL1303B03NAD25 MIL1106B06NAD25