

Product Range



Rotary Switches

- **Wire hooking versions:**
MRC Series
- **PCB versions:**
MRJ and 6000 Series

Main features:

- Adjustable stop on 1, 2 and 3 pole
- Different output coding
- Wiping contacts
- Metal shaft
- with or without knob
- PCB terminal versions
- Splashproof versions



MRC Series, 500m Amp page 12



MRJ Series, 0.4 VA page 15



6000 Series page 18

MRC Series, 500m Amp

Features

- 36° throw
- Adjustable stop on 1, 2, and 3 pole
- Insert molded terminals
- Wiping contacts



Typical performance characteristics

Contact timing non-shorting
 Contact rating 500 mA @ 125 VAC or 28 VDC resistive
 Electrical life up to 10,000 cycles @ full contact rating
 up to 25,000 cycles @ 150 mA @ 125 VAC
 or 250 mA @ 28 VDC
 Contact resistance, initial 50 mOhms max.
 Insulation resistance 100 MOhms min.
 Dielectric strength 1,000 Vrms @ sea level
 Rotation torque 9.8 Ncm max
 Plunger/actuator travel 36°

Environmental specification

Operating temperature -20°C to 80°C
 Storage temperature -20°C to 100°C
 Solder heat resistance manual: 270°C for 3 seconds
 wave: 245°C for 3 seconds

Material specifications

Contacts silver
 Case material aluminum
 Actuator material brass
 Terminals/fixed contacts silver plated brass
 Terminal seal insert molded, DAP base
 Bushing nickel plated brass

Product key

Typical product key

MRC 110 04

Type
MRC Rotary switches, 500m Amp

Number of poles, positions
110 1 pole, 2 to 10 positions **33** 3 poles, 2 to 3 positions
25 2 poles, 2 to 5 positions **42** 4 poles, 2 positions (fixed)

Knob
S shaft, no knob **blank** knob included

Material
04 RoHS compliant

MRC Series, 500m Amp (Continued)

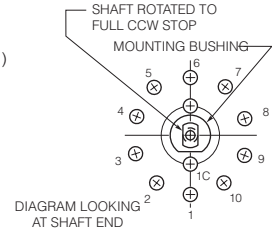
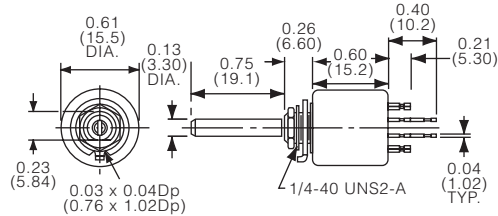
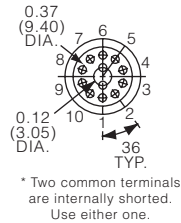
Number of poles, positions



110 1 pole, 2-10 positions, shaft without knob



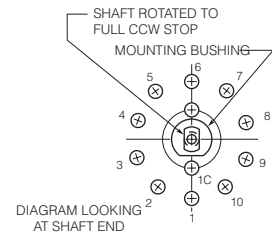
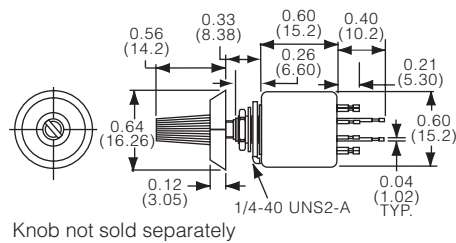
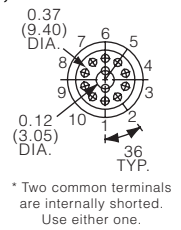
MRC110S04



110 1 pole, 2-10 positions, with knob



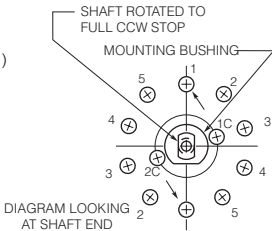
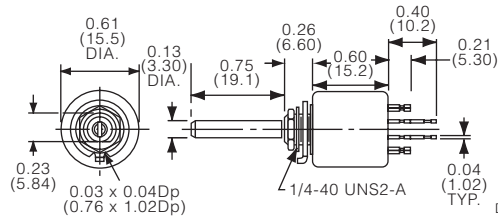
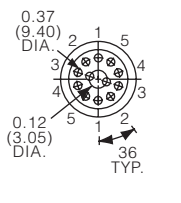
MRC11004



25 2 pole, 2-5 positions, shaft without knob



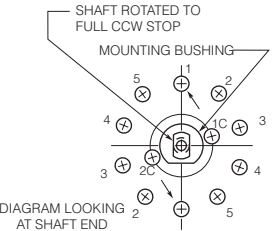
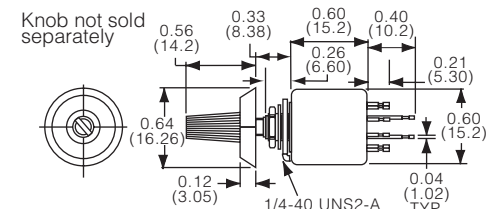
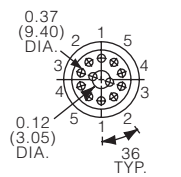
MRC25S04



25 2 pole, 2-5 positions, with knob



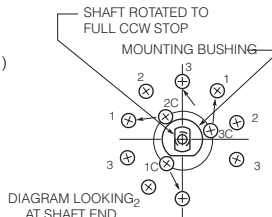
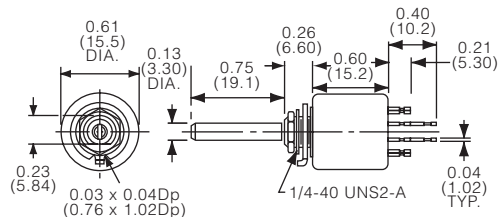
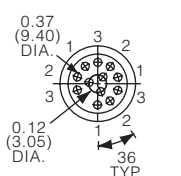
MRC2504



33 3 pole, 2-3 positions, shaft without knob



MRC33S04

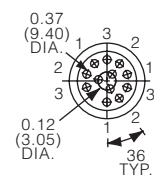


MRC Series, 500m Amp (Continued)

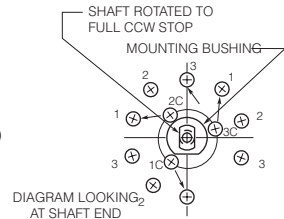
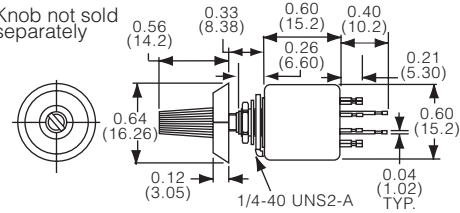
33 3 pole, 2-3 positions, with knob



MRC3304



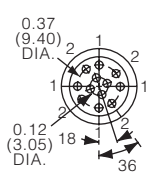
Knob not sold separately



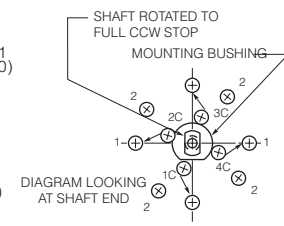
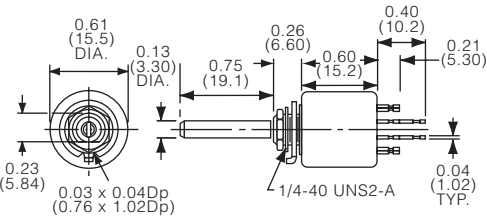
42 4 pole, 2 positions, shaft without knob



MRC42S04



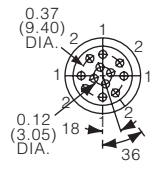
Knob not sold separately



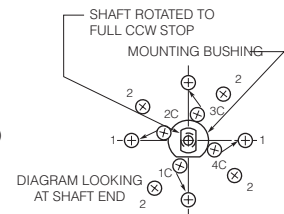
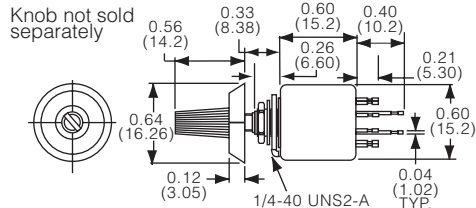
42 4 pole, 2 positions, with knob



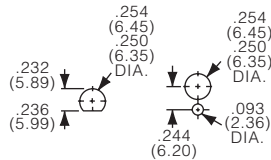
MRC4204



Knob not sold separately



Mounting



Product key	Poles	Positions	Knob	Part Number
MRC11004	1 pole	2 to 10	yes	1825495-1
MRC110S04			no	1825496-1
MRC2504	2 pole	2 to 5	yes	1825497-1
MRC25S04			no	1825498-1
MRC3304	3 pole	2 to 3	yes	1825499-1
MRC33S04			no	1825500-1
MRC4204	4 pole	2 (fixed)	yes	1825501-1
MRC42S04			no	1825502-1

MRJ Series, 0.4 VA

Features

- 30° throw
- PC mount
- Splashproof versions



Typical performance characteristics

Contact timing non-shorting
 Contact rating 0.4 VA max. @ 20 VDC or peak VAC
 Electrical life up to 10,000 cycles @ full contact rating
 up to 30,000 cycles @ 0.1 mA, 12 VDC
 Contact resistance, initial 30 mOhms max.
 Insulation resistance 10,000 MOhms min.
 Dielectric strength 1,000 Vrms @ sea level
 Rotation torque 100 Nmm (14 inch oz) max.
 Plunger/actuator travel 30°C

Environmental specification

Operating temperature -20°C to 70°C
 Storage temperature -20°C to 70°C
 Solder heat resistance 285°C ± 3°C for 15 seconds

Material specifications

Contacts gold plate over nickel plate
 Case material zinc die cast
 Actuator material brass
 Terminals/fixed contacts gold plated
 Terminal seal molded-in epoxy base
 Process seal MRJB and MRJE

Product key

Typical product key

MRJ B 112 04

Type

MRJ Rotary switches, 0.4 VA

Actuator shaft

blank standard shaft
E standard shaft, splashproof
B screwdriver slot, splashproof

Number of poles, positions

standard
112 1 pole, 2 to 12, adjustable or continuous rotation
26 2 poles, 2 to 6, adjustable
34 3 poles, 2 to 4, adjustable
43 4 poles, 2 to 3, adjustable
splashproof
112 1 pole, 12 continuous rotation (splashproof)
26 2 poles, 6 fixed (splashproof)
34 3 poles, 4 fixed (splashproof)
43 4 poles, 3 fixed (splashproof)

Material

04 RoHS compliant

MRJ Series, 0.4 VA (Continued)

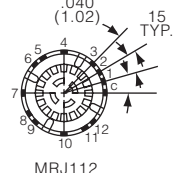
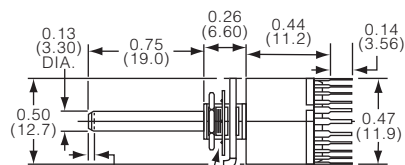
Actuator shaft



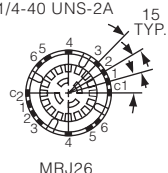
blank standard shaft, adjustable



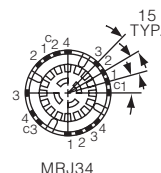
MRJ2604



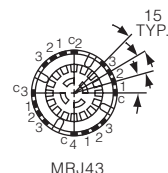
MRJ112



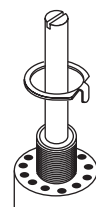
MRJ26



MRJ34



MRJ43

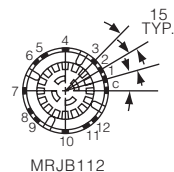
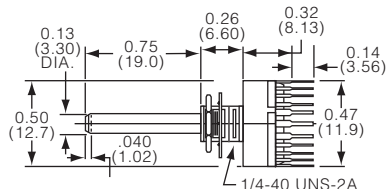


adjustable shaft

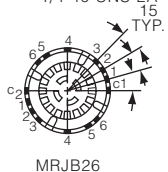
E standard shaft, splashproof



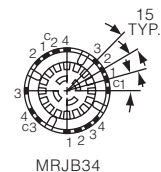
MRJE2604



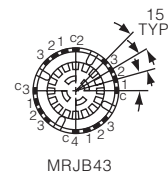
MRJB112



MRJB26



MRJB34

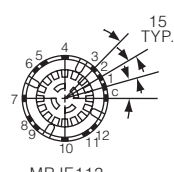
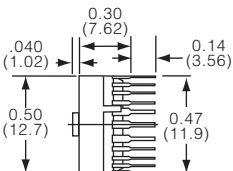


MRJB43

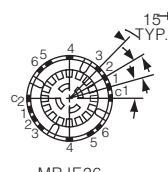
B screwdriver slot, splashproof



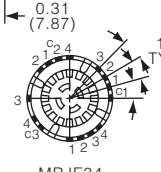
MRJB2604



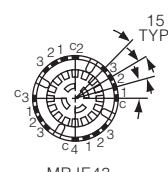
MRJE112



MRJE26

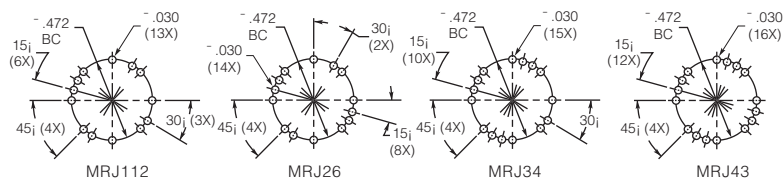


MRJE34



MRJE43

Mounting



MRJ112

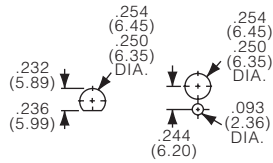
MRJ26

MRJ34

MRJ43

MRJ Series, 0.4 VA (Continued)

Mounting



Product key	Actuator shaft	Poles	Positions	Pos. conditions	Part Number
MRJ11204	standard shaft	1 pole	2 to 12 or 12	adjustable or cont. rot.	1825535-1
MRJ2604		2 pole	2 to 6	adjustable	1825535-2
MRJ3404		3 pole	2 to 4		1825535-3
MRJ4304		4 pole	2 to 3		1825535-4
MRJB11204	standard shaft	1 pole	12	continous rotation	1825536-1
MRJB2604	splashproof	2 pole	6	fixed	1825536-2
MRJB3404		3 pole	4		1825536-3
MRJB4304		4 pole	3		1825536-4
MRJE11204	screwdriver slot	1 pole	12	continous rotation	1825537-1
MRJE2604		2 pole	6	fixed	1825537-2
MRJE3404		3 pole	4		1825537-3
MRJE4304		4 pole	3		1825537-4

6000 Series

Features

- **Compact design**
- **Positive detent action**
- **Variety of outputs**
- **Large readable characters**



Typical performance characteristics

Contact timing	.....	non-shorting
Contact rating	.....	0.4 VA max. @ 20 VDC or peak VAC
Electrical life	.....	10,000 cycles @ full contact rating
	.....	30,000 cycles @ 0.1 mA, 12 VDC
Contact resistance, initial	.....	30 mOhms max.
Insulation resistance	.....	10,000 MOhms min.
Dielectric strength	.....	1,000 Vrms @ sea level
Rotation torque	.....	100 Nmm (14 inch oz) max.
Plunger/actuator travel	.....	30°
Product specification	.....	108-7514
Instruction sheet	.....	408-7523
Application specification	.....	114-7005

Environmental specification

Environmental specification

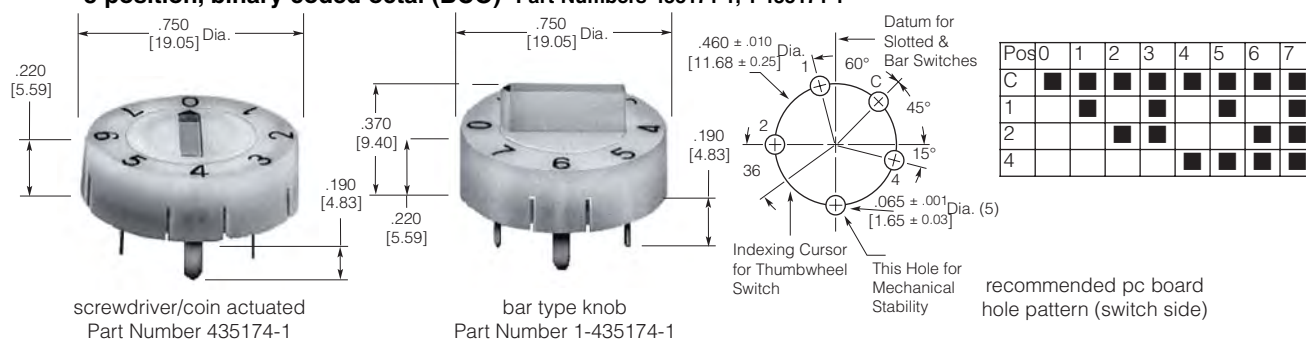
Operating temperature	-18°C to 88°C
Storage temperature	-45°C to 88°C
Humidity	+40°C and 95% RH for 96 hours

Material specifications

Contacts	phosphor bronze, gold over nickel plated
Solder tabs and pins	beryllium copper, tin plated
Coded switches	beryllium copper, tin plated
Single pole switches	brass, tin plated
Structural parts	thermoplastic

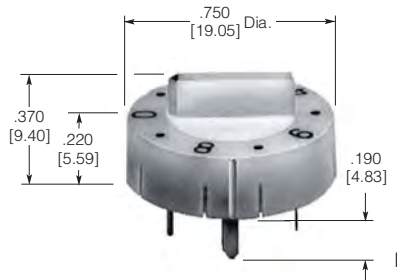
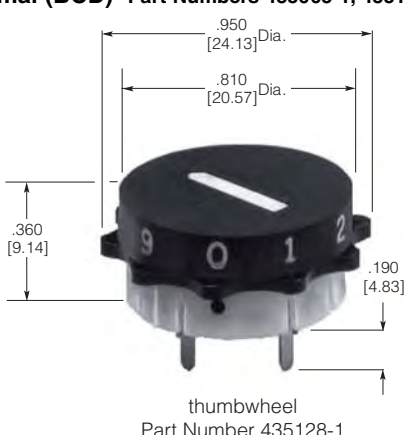
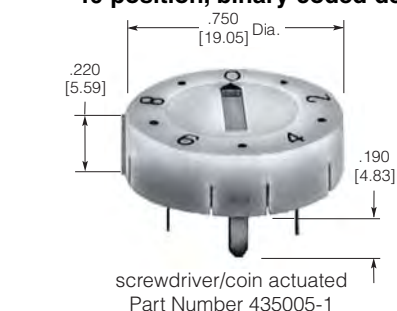
6000 Series, rotary switches, pc mount

8 position, binary coded octal (BCO) Part Numbers 435174-1, 1-435174-1

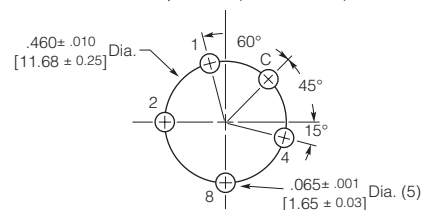


6000 Series (Continued)

10 position, binary coded decimal (BCD) Part Numbers 435005-1, 435123-1, 435128-1

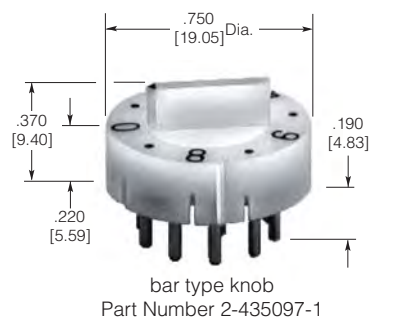
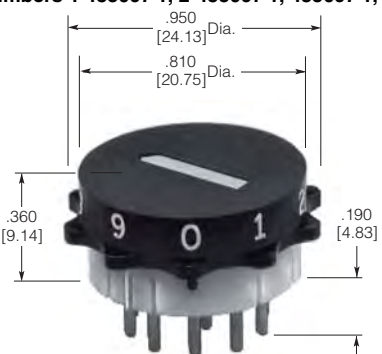
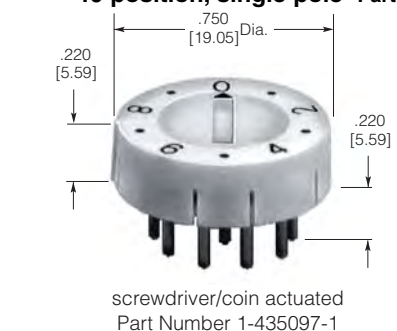


recommended pc board
hole pattern (switch side)

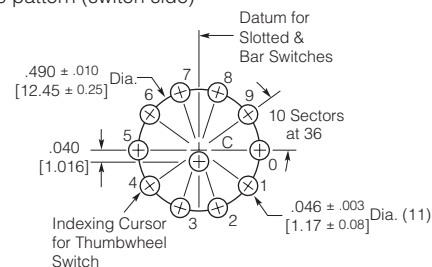


Pos	0	1	2	3	4	5	6	7	8	9
C										
1										
2										
4										
8										

10 position, single pole Part Numbers 1-435097-1, 2-435097-1, 435097-1, 435097-2



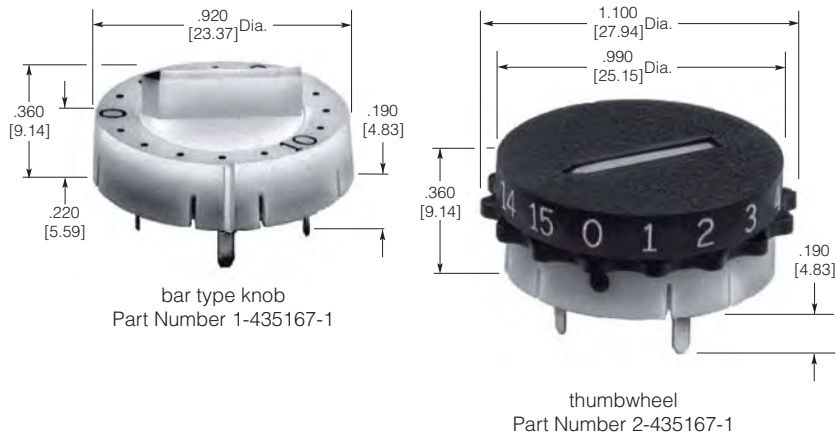
recommended pc board
hole pattern (switch side)



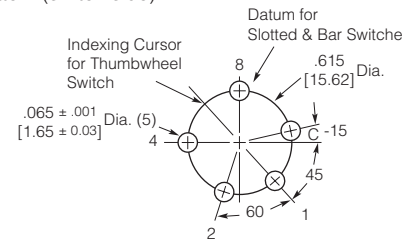
P.	0	1	2	3	4	5	6	7	8	9
C										
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

6000 Series (Continued)

16 position, hexadecimal Part Numbers 1-435167-1, 2-435167-1



recommended pc board
hole pattern (switch side)



P.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C																
1																
2																
4																
8																

Positions	Actuator type	Coding	Part Number
10	screwdriver/coin	single pole	1-435097-1
16	bar	hexadecimal	1-435167-1
8		binary coded octal	1-435174-1
10		single pole	2-435097-1
16	thumbwheel	hexadecimal	2-435167-1
10	screwdriver/coin	BCD	435005-1
10	thumbwheel	single pole	435097-1
10	bar	BCD	435123-1
8	screwdriver/coin	binary coded octal	435174-1