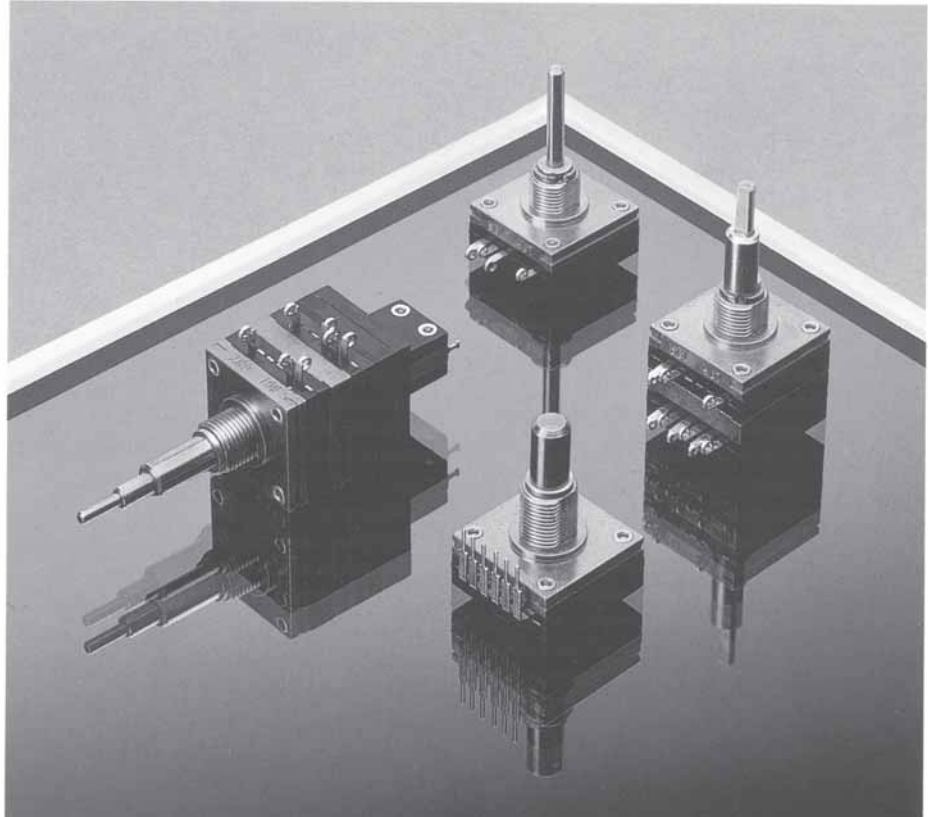


MM P/Rel ROTARY SWITCHES

The MM P/Rel Series represents the best in contemporary rotary technology, and reflects the high standards of reliability which have made **ELECTROSWITCH** rotary devices known worldwide. At only .865" square, these compact switches have up to 36 positions and adapt to numerous design requirements. Strong, electron-welded PC terminations permit easy insertion into printed circuit boards.

Stainless steel detents provide long term performance and increased stop strength. Durable construction and an enclosed, high-temperature-resistant design make the MM P/Rel Series ideal for wave solder applications. Contacts are insert molded in place for lifetime registration and switching accuracy.

Precious metal contacts ensure a long service life of over 50,000 cycles. Available options include concentric shafts and metric shafts and bushings. Highly versatile and economically customized, the MM P/Rel Series is the cost-effective solution for a wide range of applications.



Applications

Defibrillators

Voltage control

Oscilloscopes

Scale input control

Avionics

Radio channel select, Auto pilot select

GPS (Global Position System)

Co-ordinates input

Commercial & Military Radio

Channel select

Voltage Regulators

Limit set device

Agricultural

Combine platform height select

Postage Meter

Selectors input

X Ray

Intensity input

General Specifications

Electrical/Mechanical Characteristics

Current Carrying Capacity

Resistive load
250 MA at 28 VDC

Shock Humidity

MIL-STD 202E ~

Code Program

Shorting or non-shorting (non-shorting versions, up to 16 positions only)

Dielectric Strength

From pole to shaft 1,000 volts minimum

Contact Resistance

75 milliohms maximum, over lifetime

Contacts

Phosphor-bronze with silver inlay at interface with program disc. Gold inlays available upon request. External terminals are solder (60-40) plated except on die cut edges.

Codes

Hexadecimal, B.C.D., Gray and others on special order

Switching Loads

1.5 MA at 115 VAC
150 MA at 14 VDC

Operating Forces

(torque over detents): 7 to 20 in./oz. ±25%

Life

50,000 minimum cycles at rated load

Stop Strength

15 in./lb. minimum

Operating Temperature Range

-55°C to +85°C (105°C optional)

Sealing

Terminals are insert molded into housing. Front and rear molded sections of module are interlock construction. Ideally suited for wave soldering.

Shafts and Hardware

Shafts and hardware are steel, cadmium plated and chromate treated. Detent parts, including stops, are stainless steel.

Anti-Rotation Device

Flatted mounting bushing
.375" dia. x .320", double "D"

Concentric Shafts

Available

Detent Angles

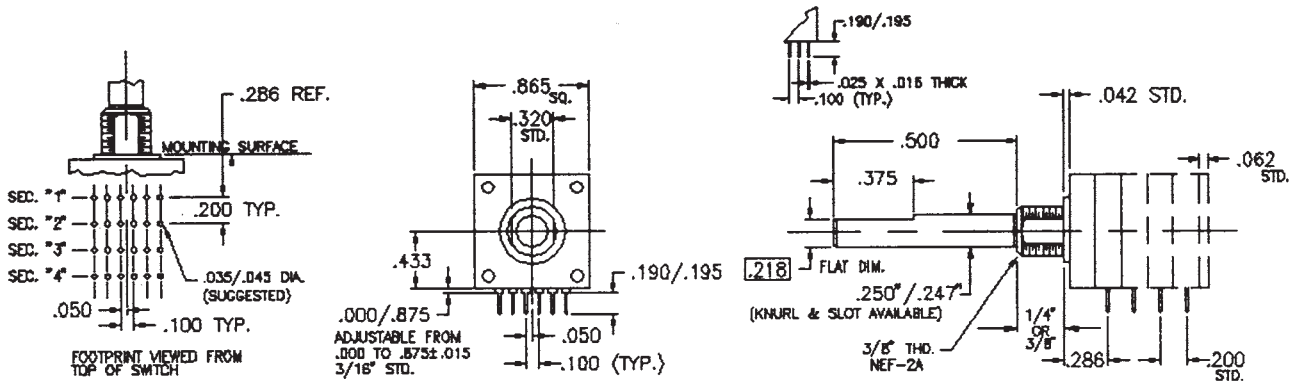
90°, 60°, 45°, 36°, 30°, 22.5°, 20°, 18°, 15°, 12.8°, 11.25°, 10°

Molded Construction

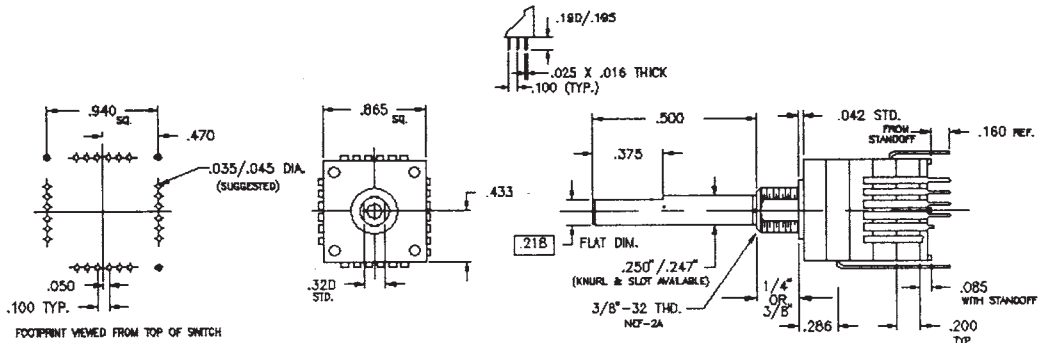
Molded parts are Ryton R4 and Polyester PBT, chosen for heat resistance and electrical characteristics. Rated 94 V-O or better.

Disc Construction

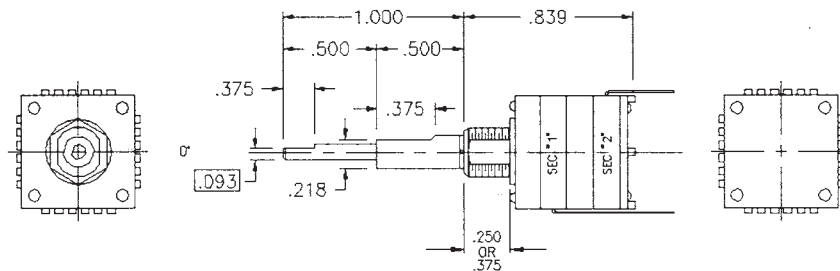
Program disc is glass epoxy, copper clad with silver plating standard. Gold upon request.



Parallel Shaft Mounting (relative to PC Board)



Perpendicular Shaft Mounting (relative to PC Board)



Perpendicular Shaft Mounting (relative to PC Board)