



THIRD AXES HALL EFFECT JOYSTICK

APEM - 3000 SERIES

The three axes joystick combines unparalleled levels of robustness with an enhanced style to deliver a low cost, ergonomic solution. This joystick has hall effect sensing for a consistent performance over a lifetime of 5+ million cycles and yields a <20mm depth below panel.

A round limiter plate is supplied fitted to the joystick body to control the throw of the lever. This joystick offers self-centering, omni-directional functionality with an analogue, proportional output that is nominally set at +/-40% of Vs.

Do not exceed specified voltage.

ELECTRONIC SPECIFICATION

Supply voltage (Vs) 5V

Signal swing (from centre) $+/-40\% \times Vs$

Output signal tolerance +/- 10% of specified output

Centre Tap Impedance IKI

Supply current Typically <15 mAOperating temperature $-20^{\circ}\text{C} - +55^{\circ}\text{C}$

RFI rejection - (Base specification) 100V/m, EN 61000-4-3 (extended)

Preferred load >100K
Signal Ripple <1% of Output

WIRING SPECIFICATION

Red - Pin 6 +Vs

Blue - Pin 5 X Axis wiper

Yellow - Pin 4 Y Axis wiper

Black - Pin I 0V

Green - Pin 2 Centre Tap reference (50% *Vs)

Orange - Pin 7 Centre Detect

Purple - Pin 3 Z axis output

See overleaf for Mechanical Specification, Orientation and Dimensions.





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MECHANICAL SPECIFICATION

Body Glass re-enforced ABS

Shaft - Material A303 Stainless steel

Shaft diameter 5mm nominal

Centering cone Brass

Spring Stainless steel

Pivot pins Hardened steel

Limiter plate Glass re-enforced Nylon
Bezel Glass re-enforced Nylon

Gaiter (Boot) Neoprene

Knob Santoprene over nylon. (Soft Touch) Operating lever deflection +/- 15° (@ N/E/S/W points on X & Y axes)

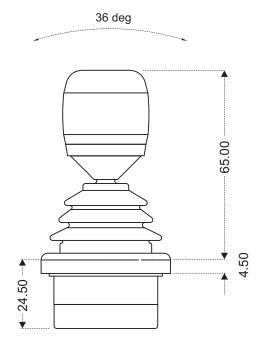
Output leads insulation Soft PVC

Output leads 14/0076 tinned copper

Weight 100g typical

Service life, mechanical 5,000,000 cycles typical

DIMENSIONS



ORIENTATION

