

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% x Vs
Output signal tolerance	+/- 10% of specified output
Centre Tap Impedance	1K Ω
Supply current	Typically <15 mA
Operating temperature	-20°C - +55°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 1	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.

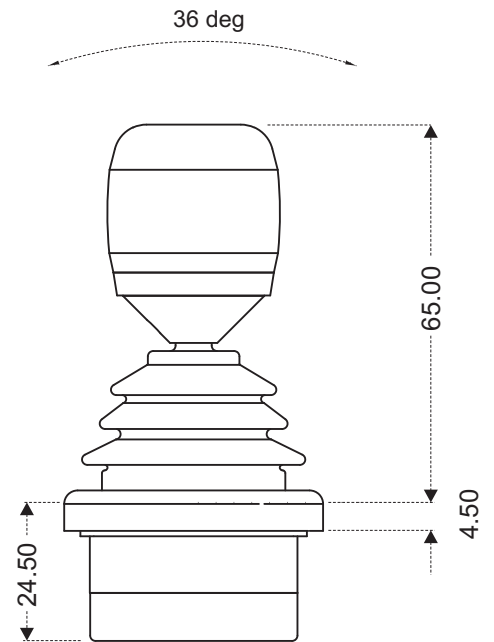
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MECHANICAL SPECIFICATION

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

