

4000 - Series

Product Specification



- Three standard mounting options
- Available in closed & open body variants
- Inherently immune to R.F.I.
- Low current drain
- IP65 above panel
- Variety of potentiometer options
- Robust, industrial, all metal mechanism
- Available as one, two or three axis
- High quality, plastic film potentiometers
- Wide variety of knobs available
- Optional, centre-detect micro-switching



Developed to address the changing needs of modern industry, the **OCS 4000 SERIES** is available, either as the 'closed body' **4000 - R SERIES** with encased moving parts, or as the 'open framed' **4000 - P SERIES**.

All variants share the same, all-metal, mechanism to provide the finest performance and service life over a wide range of temperatures and loads.

With the widest range of options available, fully custom built joysticks are available to suit all users direct from the factory. If required, the **4000 SERIES** can even be specified with microswitch triggering.

The high quality plastic film potentiometers employed as standard in the **OCS 4000 SERIES**, have 340° tracks. With a shaft travel angle of 55° (+/- 27.5°), a typical 12V supply would therefore result in full-scale nominal deflection from 5V to 7V, operating about a nominal 6V centre.

The **OCS 4000 - SERIES** joystick is designed for use as a variable potential divider, rather than a two pin variable resistor. Noise generated by the contact resistance of the wiper to the track dictates that for optimum performance the output signals should be fed into a load of greater than 100K.

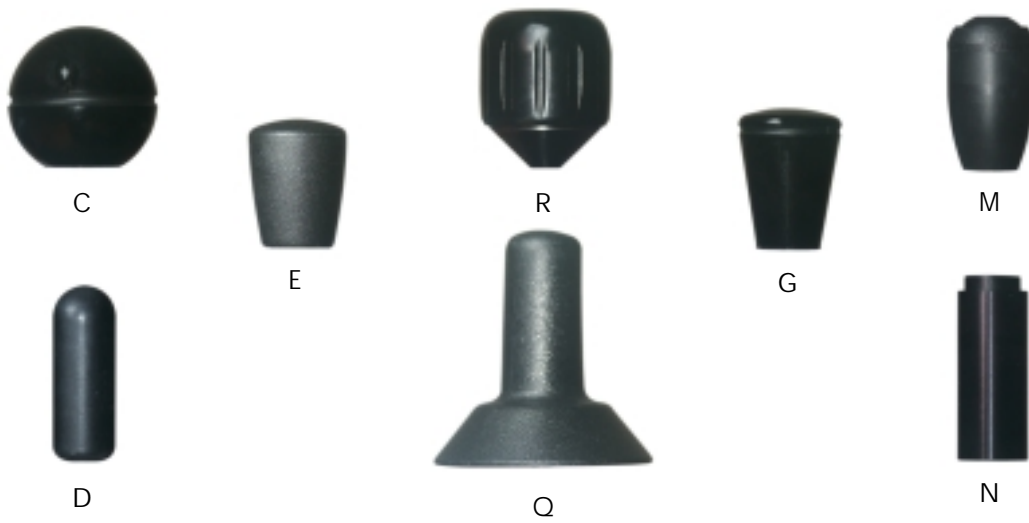
The **OCS 4000 - SERIES** is also available with alternative potentiometers, including the option of the 5K-55° track variant, providing rail-to-rail signal swings for applications where these are necessary and additional amplification is not practical.

The **OCS 4000 SERIES** is the ideal choice for any of the following control applications:-

- Camera Operation - Cranes and gantries
- Hand held remote boxes
- Positional measuring systems
- Lighting rigs - Optical systems
- Industrial equipment
- Electric vehicles - Medical equipment
- & many more.

4000 - Series

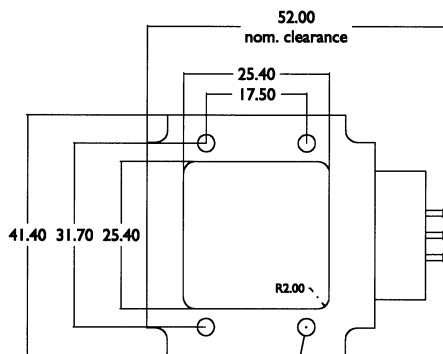
Product Specification



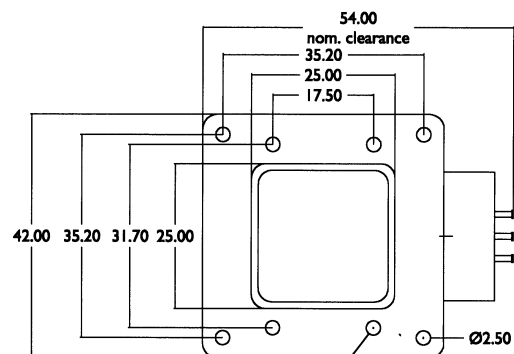
Standard Knob Selection

Standard Wiring Colours	
Red	+Vcc
Blue	X Axis output
Green	Centre tap (optional)
Yellow	Y Axis output
Black	0V

Mechanical Specification	
Housing - Open Frame	Pressed metal
Housing - Closed Body	Glass reinforced ABS
Shafts	Stainless steel
Pivot blocks	HE30 Alloy
Alignment	+/- 0.5% of track



4000 - Series 'Open frame'
installation dimensions.
Below panel clearance -
38mm nominal.



4000 - Series 'Closed body'
installation dimensions.
Below panel clearance -
38mm nominal.

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Product Specification

Standard Options

SERIES	4	4000
BODY STYLE	R	Closed - Moulded
	P	Open frame - Metal
AXES (NO)	1	Single
	2	Dual
	3	Triple
POTENTIOMETERS	1	10K - 340°
	5	5K - 340°
	8	5K - 55°
	9	5K - 55° + C/Tap**
—	—	—
LEVER	2	2BA - (Std)
	4	4BA
SPRING(S)	S	Standard
	H	Strong
WIRING	1	200 mm (std)
	Z	To specification
	0	Not wired
KNOB / GRIP	0	None Supplied
	C	Round 32mm - (Phenolic)
	D	Cylindrical - (Anodised Aluminium)
	E	Conical 18mm - (Nylon)
	M	Conical with 'Click' Push Switch
	N	Cylindrical with 'Soft' Push Switch
	P	Third Axis with Push Switch
	Q	Skirted - (Nylon with Gaiter Protector)
R	Third Axis	
—	—	—
MOUNTING BEZEL	0	None Supplied
	3	Shallow (Std)
GAITER (BOOT)	0	None Supplied
	1	Internal
	2	External Large Rib (Lo-Gloss)
	3	External Large Rib (Vinyl Hi-Gloss)
4	External Small Rib (Vinyl Hi-Gloss)	
—	—	—
SPECIAL MODIFIER	00	No Special Modification

** To special order only.



Options

Designed to be versatile, the OCS 4000 series provides for easy customisation of specification. While not all combinations of the options listed are possible, the specification elements may be combined to suit your application.

The unique specification of the joystick is shown by the 'Build Code', formed from the elements shown in the centre column. A typical Build Code would be shown as:- 4R21-2S1E-32-00

All **4000 - SERIES** joysticks are normally supplied with a 60mm operating lever and are wired with a 200mm long cable.

Signal Tolerancing

The **4000 - SERIES** is aligned to centre the potentiometers within +/- 0.05V tolerance. (10Vapplied) In addition to those stated, **OCS** offers a further range of non-standard features and fittings. For details of these or any other **OCS** products and service please call our technical sales team.

For Technical Sales Contact:-

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