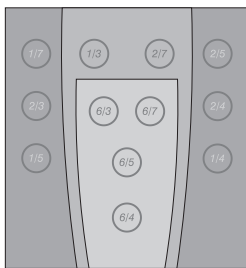



**protean
Plus**

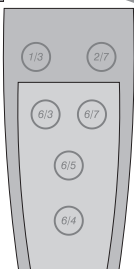
is a multiversant keypad specifically designed for product developers. With a Protean Plus kit in your prototype armoury, development keypads can be created quickly and stylishly in moments.




**protean
Plus**

can be used as is, or be simply cut down to suit several standard keypad enclosures. (see reverse for details) Clearly marked cut lines and key matrix identification make shaping and connection a simple task.

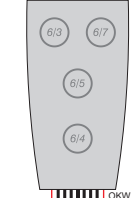
OKW Smartbox 110




**protean
Plus**

Due to innovative circuit tracking, key function of retained keys is maintained, even when cut as indicated. Protean Plus is both robust and flexible.

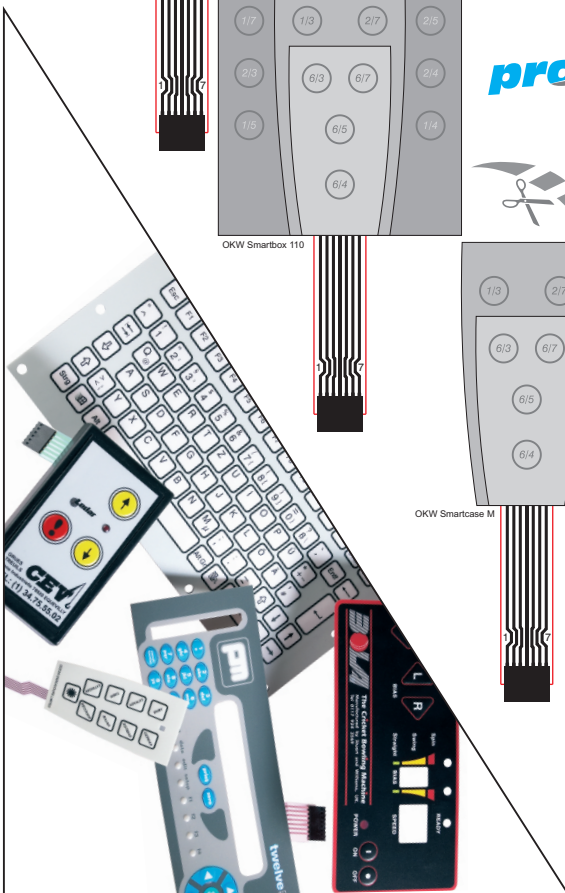
OKW Smartcase M




**protean
Plus**

The Membrane Keypad Developer's Kit

OKW Smartcase S



**protean
Plus** Membrane Keypad Developer's Kit comprises:-

1x Protean Plus Keypad

5x A4 Inkjet/Laser White Self Adhesive Paper Sheets

5x A4 Clear Self Adhesive Polyester Cover Sheets

1x CD Data File (containing Templates and Profile guides in CorelDraw and PDF formats)

MECHANICAL SPECIFICATIONS:

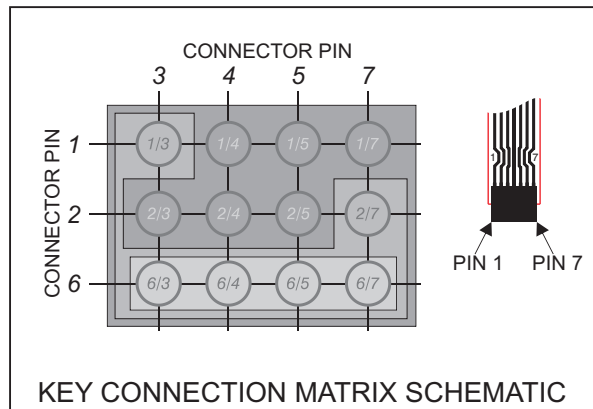
CONTACT FORCE 350 grams.
TRAVEL 0.80 TO 0.90 mm.

ELECTRICAL SPECIFICATIONS:

CONTACT VOLTAGE RATING 30V (dc).
CONTACT CURRENT RATING 100mA.
INSULATION RESISTANCE AT 100 V >100 Mohms.
DIELECTRIC STRENGTH 250 V rms.
CAPACITANCE 10 pF typ.
CONTACT BOUNCE BELOW 10 msec. typ.
CONTACT RESISTANCE <30 Ohm
CONTACT MATERIAL Ag

ENVIRONMENTAL SPECIFICATIONS:

OPERATING TEMPERATURE -30 TO +55 C.
STORAGE TEMPERATURE -40 TO +60 C.



NOTES TO DEVELOPERS

Your PROTEAN Plus Developer's Keypad can be simply cut to various shapes to suit several standard keypad enclosures. Alternatively, PROTEAN Plus can be used as is, without trimming.

To enhance your prototypes, PROTEAN Plus Develop's Kit includes many useful design tools to enable you to create prototype overlays for design presentations, exhibitions, concept models, or prototype function testing.

Cut and paste your chosen keypad profiles, key shapes, borders, and colours into your preferred graphics design software. Colour print your design onto self adhesive paper. (5 sheets included with this kit). For added protection, your printed design can be over laminated with clear self adhesive polyester before cutting to the required shape. (5 self adhesive polyester sheets included with this kit)

Templates, including dimensions, are also included on the CD for cutting the required keypad tail exit slot into your chosen enclosure or support panel.

The profile shapes indicated on the face of Protean Plus will fit OKW Smartbox 110, OKW Smartcase M, and OKW Smartcase S.

IMPORTANT NOTES

It is important to ensure that cutting follows the indicated profile shapes printed on the face of PROTEAN Plus, and that good quality scissors, or scalpels are used. Providing the lines are followed accurately, the underlying switching circuitry will not be compromised. Failure to follow the lines accurately may render inoperable some of the keys within the selected shape.

PROTEAN Plus has been specifically engineered as a design and development tool. Keypads created from PROTEAN Plus Developer's Kits are not suitable for production use, unless used in it's full size, uncut form.

Once your development and prototype cycle is complete and you need to progress to production keypads, please contact Apem Components Limited technical sales team. We can then discuss the many features and benefits available, plus offer advice on technologies, materials, and processes available to suit your specific application.

RoHS COMPLIANT

www.farnell.com

Many of the these Apem products are also available through the Farnell catalogue

Switches and Indicators



Membrane Switchpanels

Joysticks

