

# Product Specifications



**ELECTRONIC**  
MARKIT GRAPHICS

MECHANICAL	PCB APPLICATION	FLEX CIRCUIT APPLICATION
Thickness (typical)	3.7 mm	2.2 mm
Size & Switch Armature spacing	12.7 mm centre to centre (406 only)	12.7 mm centre to centre (406 only)
Magnetic material	bonded ferrite	bonded ferrite
Armature material	Soft steel -1008/1010 with Electro-nickel & tin plating	Soft steel -1008/1010 with Electro-nickel & tin plating
Life	Minimum 20 million actuations	Minimum 20 million actuations
Typical Actuation Variance	Less than noticable difference	Less than noticable difference
Switch Travel	0.3 mm	0.3 mm
Contact Bounce	1 ns typical	1 ns typical
Actuation Force	625 armature 10 oz/284 g 406 armature 8 oz/ 227 g	625 armature 10 oz/284 g 406 armature 8 oz/ 227 g
ELECTRICAL		
Voltage	3-50VDC or AC Peak (High contact rating is available).	3-30VDC or AC Peak (High contact rating is available).
Current	50 mA (higher contact rating is available)	20 mA (higher contact rating is available)
Power	2.5 Watts (High contact rating is available).	0.6 Watts (High contact rating is available).
Dielectric Withstand Voltage	500 VAC	250 VAC
Switch Resistance	Less than 2 ohms	Less than 100 ohms
Capacitance between traces	25 pf Max	40 pf Max
ENVIRONMENT		
Operation and storage temp	-40C to 85C	-40C to 85C
Mechanical shock	No Closures @ 100 g's	No Closures @ 100 g's
Altitude	No Closures from sea level to 15 Kft	No Closures from sea level to 15 Kft
Thermal Shock	-40C to 85C	-40C to 85C

The Duraswitch PushGate is manufactured using licenced components in our production plants in both Australia & New Zealand.

## AUSTRALIA

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The PushGate is a flat panel switch that combines the best of membrane switches and discrete PCB mounted switches

## Advantages

### CRISP CONSISTENT TACTILE FEEL

- ▶ Superior tactile feel does not deteriorate over time
- ▶ Differentiate your product from the competitors

### CAN BE ENVIRONMENTALLY SEALED

- ▶ Superior performance in harsh conditions

### REMOVABLE OVERLAY AVAILABLE

- ▶ Ease of interchange
- ▶ Multiple graphic options

### CUSTOMISED DESIGN

- ▶ Normally open or normally closed switch
- ▶ Multiple output available
- ▶ Shielding capability

### VARIOUS OVERLAY OPTIONS

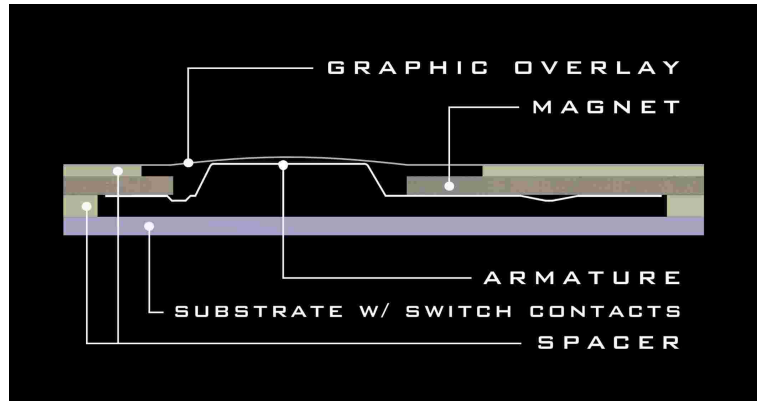
- ▶ Lends itself well to elastomerics, keycaps, embossed polyester

### ROBUST

- ▶ Inherently stable

### DURABILITY AND RELIABILITY

- ▶ Over 500 MILLION actuations and still clicking
- ▶ Able to tolerate extreme temperatures
- ▶ Increased overlay life



### RAPID ACTUATION RESPONSE

- ▶ Faster restoration than dome switches

### INTEGRATION

- ▶ Flex Circuit or PCB compatible
- ▶ Easily integrated with other switch products including: thiNcoder RT, thiNcoder Slider, and MagnaMouse into a thin package

### FULL KEY ILLUMINATION CAPABILITIES

- ▶ Retains crisp tactile feel with backlighting
- ▶ Backlighting easily integrated
- ▶ Armature with hole allows target lighting

