

PushGate®

**NEW
MOLDED
MAGNETIC
ISLANDS**

Molded Magnet Island



Armature
(Available in multiple sizes)

Next generation switch technology that provides engineering solutions beyond traditional switch mechanisms.

CRISP, CONSISTENT TACTILE FEEL

- Superior tactile feel does not degrade over time or use
- High-quality tactile feel

DURABILITY AND RELIABILITY

- 30 million plus actuations
- Impossible to "tease", (Click=Closure)
- No bending or flexing parts to fail

LARGE KEY CONSTRUCTION AVAILABLE

- Up to 2" x 2" active key area

HIGH-IMPACT CONSTRUCTION AVAILABLE

- Superior performance where keypads are subject to abuse or vandalism

ENVIRONMENTALLY SEALED OPTION

- Superior performance in harsh environments

EXTREME TEMPERATURE & PRESSURE CONSTRUCTIONS

- Perfect for Military Applications

MULTIPLE ELECTRONIC OUTPUTS AVAILABLE

- **Normally closed** or normally open designs available
- **Dual output available for redundancy or multi-function switching**

Markets

- Medical, Military, Industrial Controls, Kiosks, Restaurant Equipment, Security and Access Control

DURASWITCH®
The world is switching.®

Duraswitch
Esterline Interface Technologies

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U.S. PAT. Nos. 5,523,730; 5,666,096; 5,867,082; 5,990,772; 6,023,213;
6,069,545; 6,069,552; 6,130,593; 6,137,387; 6,262,646;
6,305,071; 6,369,692; 6,466,118

CANADA PAT. No. 2177540
CHINA PAT. No. ZL96110385.X
TAIWAN PAT. Nos. NI 090979; NI 132948
AUSTRALIA PAT. No. 727962

www.duraswitch.com

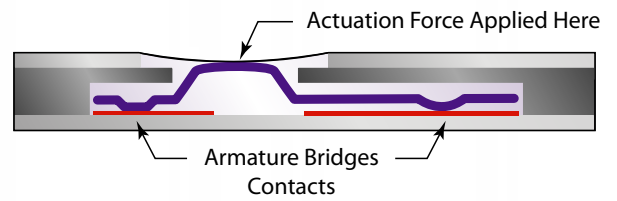
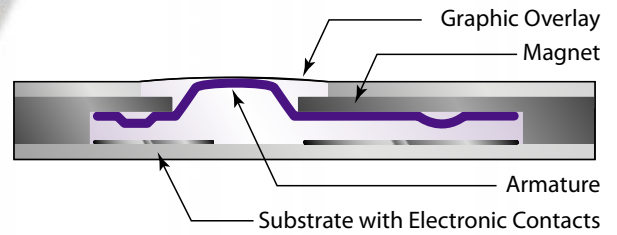
PushGate®

Mechanical	PCB Applications	Flex Circuit Application
Thickness (Typical)	0.145" / 3.7mm	0.086" / 2.2mm
Switch Armature Spacing	0.500" / 12.7mm Center Spacing	0.500" / 12.7mm Center Spacing
ESD/EMI/RFI Shielding	Capable	Capable
Life	>30 Million Actuation Constructions Available	>30 Million Actuation Constructions Available
Typical Actuation Variance	No Noticeable Difference	No Noticeable Difference
Switch Travel	0.012" / 0.3mm	0.012" / 0.3mm
Contact Bounce	1ms Typical	1ms Typical
Actuation Force	625 Armature 10oz. / 284gm / 2.8N 406 Armature 8oz. / 227gm / 2.2N	625 Armature 10oz. / 284gm / 2.8N 406 Armature 8oz. / 227gm / 2.2N

Electrical	PCB Applications	Flex Circuit Application
Operating Voltage	3 - 50 VDC or AC Peak	3 - 50 VDC or AC Peak
Current	50mA	20mA
Power	1.5W	0.6W
Switch Resistance	Less Than 2 ohms Initial	Less Than 100 ohms Initial

Material	PCB Applications	Flex Circuit Application
Magnetic Material	Bonded Ferrite	Bonded Ferrite
Armature Material	1008/1010 Steel with Silver Plating	1008/1010 Steel with Nickel and Electro-Tin Plating

Environment	PCB Applications	Flex Circuit Application
Storage	-40°C to 85°C	-40°C to 85°C
Operating Temperature: Standard Construction	-40°C to 85°C	-40°C to 85°C
Operating Temperature: Extreme Construction	-54°C to 105°C	-54°C to 105°C
Positive Pressure: Extreme Construction	+5psi	+5psi
Altitude	40,000 ft	40,000 ft
Thermal Shock	-40°C to 85°C	-40°C to 85°C
Humidity Resistance	95% RH	95% RH
Salt Fog, 5% Solution	24 Hours	24 Hours
Shock	100g	100g
Drop	3 Feet	3 Feet



Elastomer Example



Large Key Example



Center Key Illumination Example



Removable Overlay Example