

# DURASWITCH®

### Typical Applications

- ATM / POS / Kiosk
- Industrial Controls
- Medical
- Military / Aerospace
- Restaurant equipment
- Security and Access Control

### Features and Benefits

- Crisp, consistent tactile feel
- Easily integrated other products
- Long life: no flexing of material to actuate
- Robust: armature protected in construction
- Normally-closed circuit options
- Normally-closed / normally-open safety switching
- Dual output available
- Backlighting options
- Environmentally sealed option
- Large Key construction available
- High impact construction available
- Peel and Place Island available

## PushGate®

*Set your product line apart from your competition by giving your keypad a high-quality feel*

The Duraswitch PushGate® is our unique push button design that combines the advantages of discrete mechanical and flat panel membrane switches with a host of other benefits that make it ideal for next-generation products.

The thin profile PushGate® push buttons are cost effective and simple in design. Nothing in the marketplace today comes close to this technology for reliability and durability. Its crisp, consistent tactile feel does not degrade over time differentiating it substantially from conventional mechanical and membrane switches.

#### CRISP, CONSISTENT TACTILE FEEL

- Superior tactile feel does not degrade over time or use

#### DURABILITY AND RELIABILITY

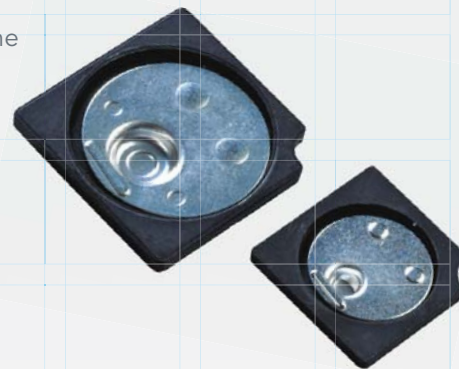
- 30 MILLION plus actuations
- Ideal replacement for tactile or metal dome switches
- Impossible to "tease" (Click = Closure)
- No bending or flexing parts to fail
- Ability to tolerate extreme temperatures

#### INTEGRATION

- Easily integrated with thiNcoder® RT products
- Flex circuit or PCB compatible

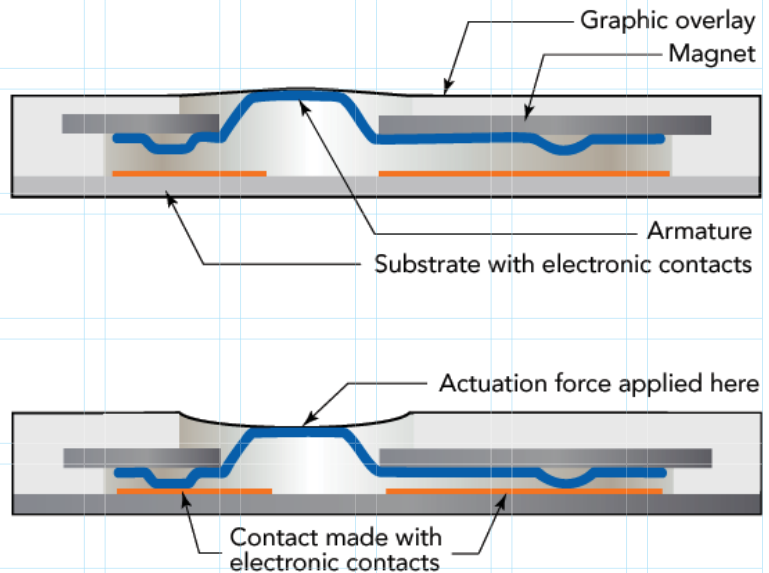
#### OPTIONS AVAILABLE

- *Full Key Illumination* maintains crisp tactile feel with EL, fiber optics or LED backlighting
- *High Impact Construction* provides superior performance where keypads are subject to abuse or vandalism
- *Large Keys* specs up to 2" square active key area on flat panel keys
- *Environmentally Sealed* switch for superior performance in harsh environments
- *Normally Closed*, normally open or both normally closed/normally open designs available
- *Dual Output* available for redundancy or multi-function switching
- *Peel and Place* low profile, reliable, adhesively bonded switch is perfect replacement for poor performing snap action switches



# SPECIFICATIONS

	PCB Application	Flex Circuit Application
<b>ELECTRICAL</b>		
Current	50mA	20mA
Voltage	3 – 50 VDC or AC peak	3 – 30 VDC or AC Peak
Power	1.5W	0.6W
Switch resistance	Less than 2 $\Omega$ initial	Less than 100 $\Omega$ initial
<b>MECHANICAL</b>		
Thickness (typical)	0.145" / 3.7mm	0.086" / 2.2mm
Switch armature spacing	0.470" / 12 mm center spacing available	
ESD/EMI/RFI shielding	Capable	
Life	>30 million actuation constructions available	
Actuation variance	No noticeable difference	
Actuation force	625 Armature 10oz. /284 gm / 2.8N 406 Armature 8oz./227gm/2.2N	
Switch travel	0.012" /0.3 mm	
Contact bounce	1ms typical	
<b>ENVIRONMENTAL</b>		
Storage temperature	-40°C to 85°C	
Operating temperature		
Standard construction	-40°C to 85°C	
Extreme construction	-54°C to 105°C	
Extreme construction positive pressure	+5psi	
Altitude	40,000 ft	
Thermal shock	-40°C to 85°C	
Humidity	95% RH	
Salt fog, 5% solution	24 hours	
Shock	100g	
Drop	3 feet	
<b>MATERIAL</b>		
Magnetic material	Bonded ferrite	
Armature material	1008/1010 steel with silver plating	



**Esterline**

Interface Technologies

600 W. Wilbur Avenue  
 Coeur d'Alene, ID 83815  
 Tel: 208-765-8000  
 E-mail: eit.sales@esterline.com  
 www.esterline.com/interfacetechologies