



EverSwitch[®]



Bringing Piezo Technology to Perfection

Switches | Keypads | Access Control

Industrial Solutions | Custom Design

EverSwitch[®]

 **BARAN**
ADVANCED TECHNOLOGIES LTD.

BARANTEC



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We Engineer Piezo Switches



About Us

Baran Advanced Technologies (1986) Ltd. Develops and manufactures the EverSwitch product line for over 3 decades. The EverSwitch piezoelectric Touch Metal technology for switches, keypads and control panels was the first commercially viable piezo switching technology. Baran Advanced Technologies has led the way with continuous innovations in touch metal user-interface controls ever since.

Baran Advanced Technologies (1986), Ltd. operates from its' production facilities in Omer, Israel and from Barantec, Inc., a fully owned US subsidiary located in northern New Jersey. Products are used worldwide with more than 500 million switches operating in applications ranging from luxury white appliances, to aseptic clean rooms, to correctional facilities, military, naval equipment and submarines. Baran Advanced Technologies commitment to extensive research and development ensures market leadership with developments such as self-diagnostic reporting capability and switching of line voltages up to 277 Volts and 30 Amperes.

EverSwitch Touch Metal switches and keypads are hyper-ruggedized and provide worry free operation for years in the most extreme environments. Requiring no external power for switch operation, EverSwitch offers a wide range of switches and keypads that meet or exceed CE, UL, IP69K, NEMA, MIL-STD, ATEX, ETL and FAA requirements. Reflecting our commitment to quality, we are certified to the International Quality Standard ISO 9001:2008 and products are provided with an industry leading five year warranty.

One product, Multiple solutions



EverSwitch Piezo Technology

The principal behind Baran's EverSwitch technology is the assembly of all the necessary components into a single unit (the module) which eliminates the need to handle multiple components for every single push point manufactured.

The EverSwitch Touch technology is based on stand-alone piezoelectric modules that can be arranged in a myriad of configurations from individual switches to multi-function switch panels and keypads. The technology uses the piezoelectric effect (the property exhibited by certain crystals that generate voltage when subjected to pressure) to create switches and keypads that are completely sealed, impervious to the environment and operate from -40 to +125°C. These individual modules (or PC Boards with an array of modules) are press-fit into a solid metal housing, so that when pressed, the piezoelectric crystal material produces a corresponding change in voltage, which passes through a conductive connecting material to a circuit board mimicking a dry-contact switch closure.

This patented, modular approach eliminates the need for a solder connection to the delicate piezo ceramic and creates a robust 125msec minimum switch closure, which is a significant improvement over market standards of just 20msec. With no moving parts, EverSwitch products last indefinitely even in the most extreme operating conditions as switch failure due to motion, friction, dirt, moisture, vandalism or ice are completely eliminated

The EverSwitch features a few significant advantages:

- Product line spans from single switches to a variety of keypads and control panels to full size keyboards.
- All products are rugged, sealed, tamper and vandal proof solid state constructions featuring unprecedented durability and reliability.
- The EverSwitch family of products has been successfully tested for 50,000,000 cycles including vibration and impact tests.
- The non-mechanical, fully electronic patented switch technology allows for perfect adaptation to retro fit as well as new designs and interfaces easily with existing systems.





EverSwitch Applications

Commercial Kitchen Equipment – Sterilizable switches and custom keypads, beverage dispensing, bump bar and steamer equipment.

Chemical Plants and Hazardous Locations – operation controller for petroleum machinery.

Correctional Facilities – Guard tour buttons, retrofit of legacy equipment, lavatory switches, access control, in-cell emergency call switch panels.

Emergency Call and Help Point – Help and Info pushbuttons with self-diagnostic capability for use in unattended and vandal prone areas, typically mass transit systems.

Food Processing – Fish Processing keypads and switches that are essentially submerged, chicken and meat processing switches, Stainless Steel controls for CIP (Clean In Place) requirements.

Fuel Dispensing – Remote location and unattended custom keypads.

Hospital / Medical – Sterilizable access control, nurse call system, intercoms for prevention of HAI (Hospital Acquired Infections).

Labs / Clean Rooms – Full QWERTY & custom keyboards for use in controlled substance environments and aseptic clean rooms.

Locomotive Controls – Upgraded driver controls, custom 22Key Panel with LEDs and LCD window eliminated five separate keypads.

Luxury White Appliances – Stainless steel user interface for ovens, dishwashers & microwaves that are seamless, sleek and sanitary.

Military – Army vehicle systems operation in harsh and demanding environment.

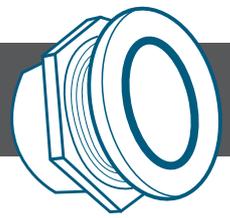
Oil & Gas – Valves and control switches in extreme hazardous environments.

Parking - Parking Pay Station alpha numeric keypads, parking meter switches and keypads.

Outdoor Kiosks Self-diagnostic switches and custom keypads.

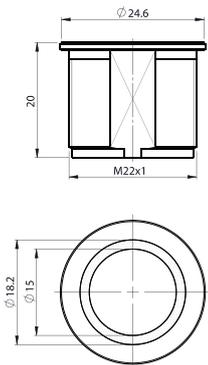
Underwater – Submarines, submerged vehicles, lights, rebreathers, dive computers and instruments, oceanographic equipment and buoys.

Piezo Electric Pushbutton Switches | Ring Illuminated



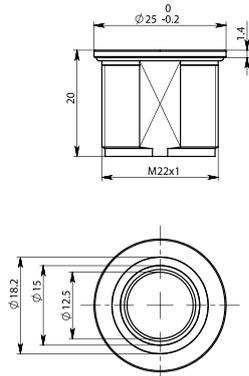
SBR 11

Flush Face
22 mm



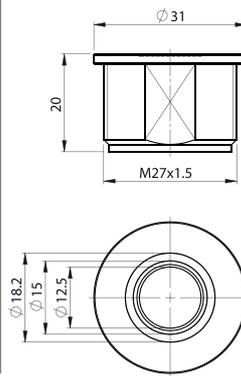
SBR 22

Recessed Face
22 mm



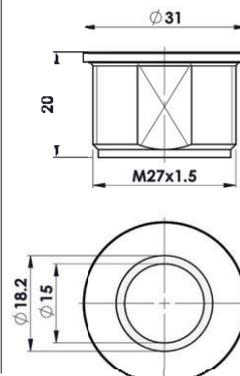
SBR 33

Recessed Face
27 mm



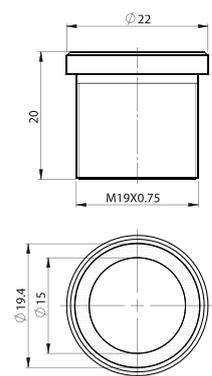
SBR 44

Flush Face
27 mm



SBR 5

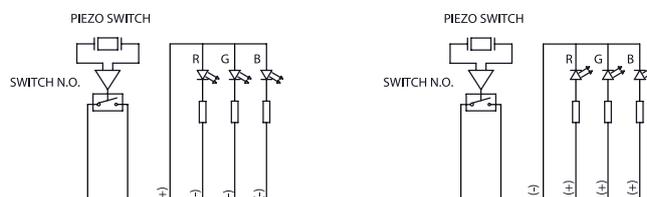
Flush Face
19 mm



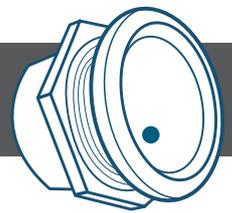
Technical Specification:

Pulse:	Momentary / Continuous
Contact Arrangement:	SPST N.O./N.C.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA / 500mA / 1A
Led Current Color:	12 VDC/24 VDC Red, Green, Blue, Yellow, Red/Green RGB
Material:	Aluminium / Stainless Steel
Thread:	M19, M22, PG-16, M27
IP Protection Class:	IP69K
Anodize Colors:	
Operating Temperature:	-40°c to +125°c
Electrical Connection	Wires, Pins, Cable, Cable+Connector

Electrical Diagram:

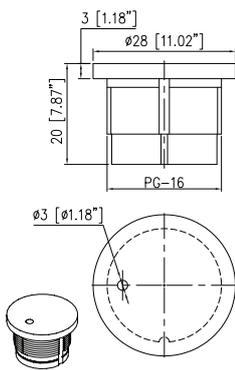


Piezo Electric Pushbutton Switches | Point Illuminated



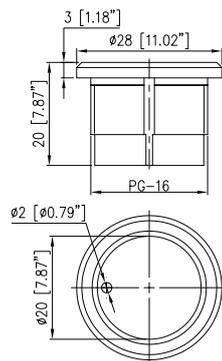
SML 1

Flush Face
22.5 mm



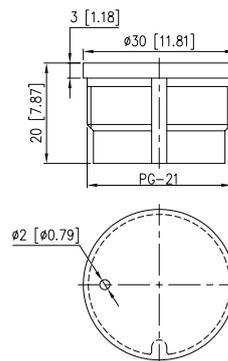
SML 2

Recessed Face
22.5 mm



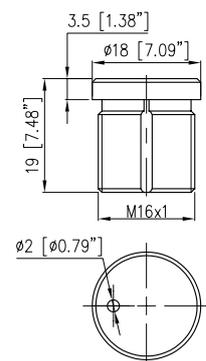
SML 3

Flush Face
28.5 mm



SML 5

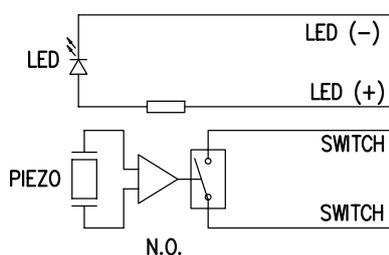
Flush Face
16 mm



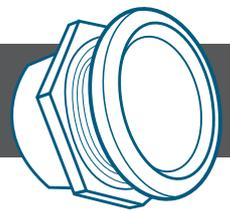
Technical Specification:

Pulse:	Momentary
Contact Arrangement:	SPST N.O./N.C.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA / 500mA / 1A
Led Current Color:	5 VDC/12 VDC/24VDC Red, Green, Blue, Yellow, Red/Green
Material:	Aluminium / Stainless Steel
Thread:	M16, M22, PG-16, PG-21
IP Protection Class:	IP69K
Anodize Colors:	
Operating Temperature:	-40°c to +125° c
Electrical Connection	Wires, Pins, Cable, Cable+Connector

Electrical Diagram:

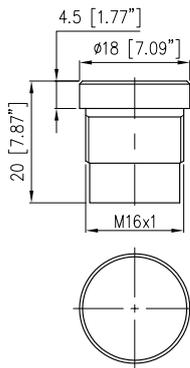


Piezo Electric Pushbutton Switches | Non Illuminated



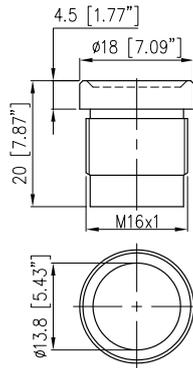
SMF 1

Flush Face
16 mm



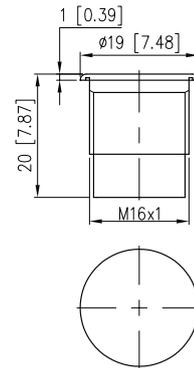
SMF 2

Recessed Face
16 mm



SMF 6

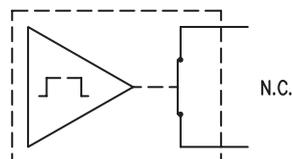
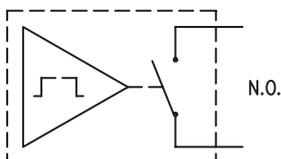
Flush Face
16 mm



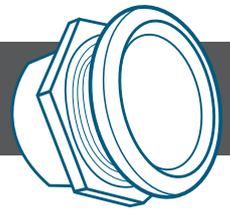
Technical Specification:

Pulse:	Momentary / Prolonged
Contact Arrangement:	SPST N.O./N.C.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA / 500mA / 1A
Material:	Aluminium / Stainless Steel
Thread:	M16
IP Protection Class:	IP69K
Anodize Colors:	
Operating Temperature:	-40°C to +125°C
Electrical Connection:	Wires, Pins, Cable, Cable+Connector
Switch closure:	125-300 mses typical

Electrical Diagram:

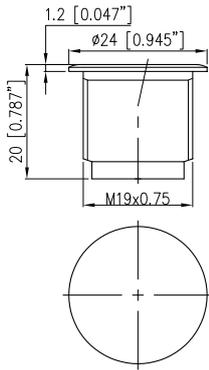


Piezo Electric Pushbutton Switches | Non Illuminated



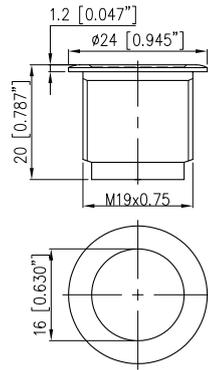
SBS 1

Flush Face
19 mm



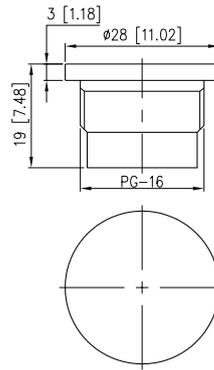
SBS 2

Recessed Face
19 mm



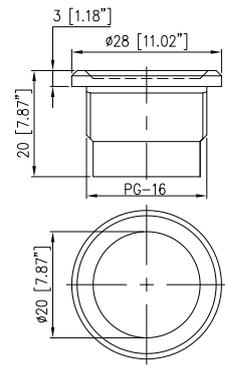
SMA 1

Flush Face
22.5 mm



SMA 2

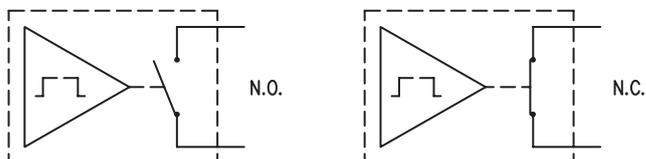
Recessed Face
22.5 mm



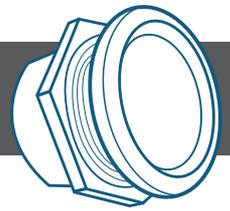
Technical Specification:

Pulse:	Momentary / Prolonged
Contact Arrangement:	SPST N.O./N.C.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA / 500mA / 1A
Material:	Aluminium / Stainless Steel
Thread:	PG16 / M22 / M19
IP Protection Class:	IP69K
Anodize Colors:	
Operating Temperature:	-40°C to +125°C
Electrical Connection	Wires, Pins, Cable, Cable+Connector
Switch closure:	125-300 msec typical

Electrical Diagram:

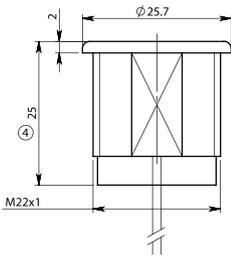


Electric Pushbutton Switches



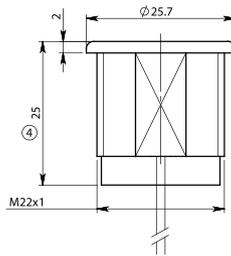
Piezo BPS

Recessed Face
22 mm



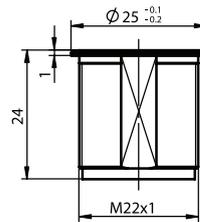
Piezo BPS Illuminated

Recessed Face
22 mm



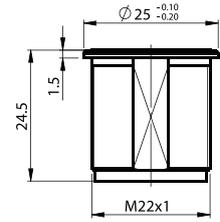
Piezo Tactile

Mechanical Movement
22 mm



SBC Capacitive

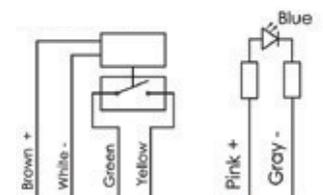
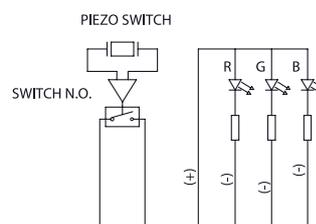
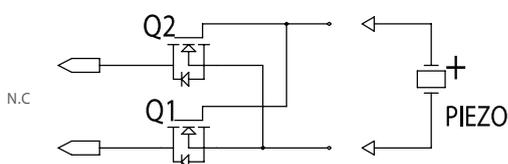
Recessed Face
22 mm



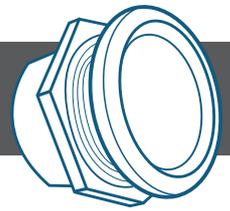
Technical Details:

	BPS	TACTILE	SBC
Pulse:	Momentary	Momentary one shot / Prolong	Continuous
Contact Arrangement:	SPST N.O./N.C.	SPST N.O./N.C.	SPST N.O.
Voltage:	RGB LEDs 12/24 V DC	RGB LEDs 12/24 V DC	BLUE IED
Switching Current:	0.125A / 0.2A / 1A	0.125A / 0.2A / 1A	MAX 117
Material:	Polyoxymethylene	Aluminum / Stainless steel	Steinless steel
Thread:	M22	M22	M22
IP Protection:	IP69K	IP69K	IP69K
Anodize Colors:			
Operating Temperature:	-40°c to 125° c	-40°c to 125° c	-40°c to 85° c
Electrical Connection:	Wires, Pins, Cable, Cable+Connector		

Electrical Diagram:

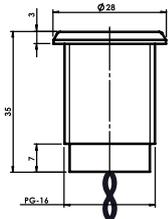


Piezo Electric Pushbutton Smart Switches



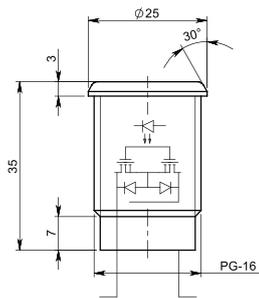
SBA1

Flush Face
22.5 mm



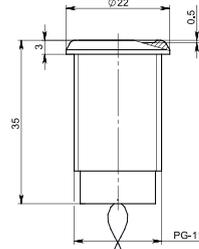
SBA2

Recessed Face
22.5 mm



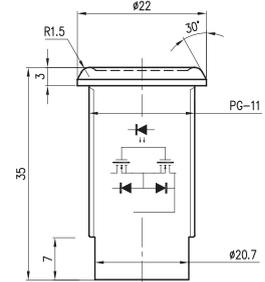
SBF1

Flush Face
18.6 mm



SBF2

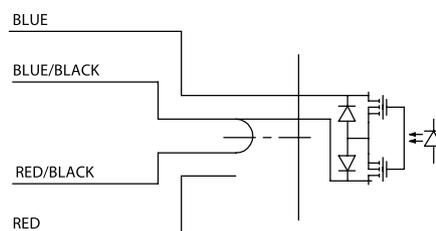
Recessed Face
18.6 mm

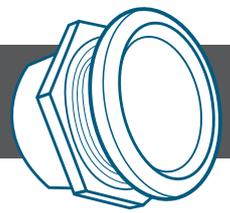


Technical Details:

Pulse:	*NEW	On off / Continuous / Programmable / WiFi enabled for IOT
Contact Arrangement:		SPST N.O./N.C.
Switching Voltage:		10-24V AC/DC
Switching Current:		200mA / 500mA / 1A
Material:		Aluminium / Stainless Steel
Thread:		PG16 , PG11
IP Protection Class:		IP69K
Anodize Colors:		
Operating Temperature:		-40°c to +125°c
Electrical Connection		Wires, Pins, Cable, Cable+Connector

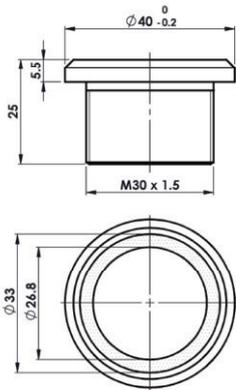
Electrical Diagram:





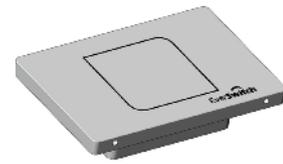
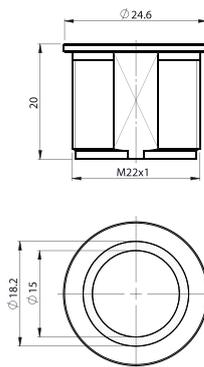
Self Testing Switch Illuminated

30 mm

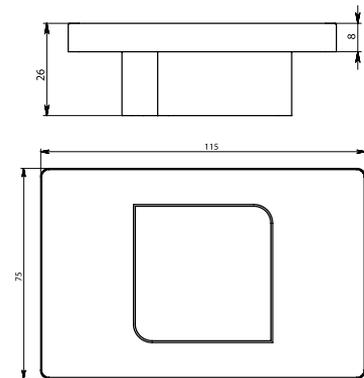


Haptic Switch

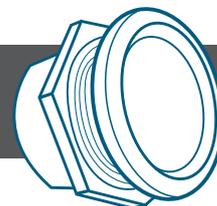
22 mm



High Voltage Piezo Switch

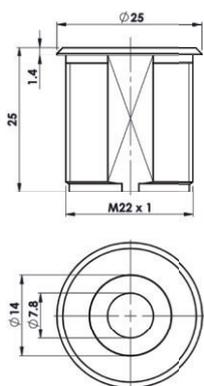


Technical Details:	Self Testing Switch	Haptic Switch	High Voltage
Function:	Momentary	Programmable	On/OFF
Contact Arrangement:	SPST N.O./N.C.	SPST N.O./N.C.	SPST N.O./N.C.
Voltage:	1-24 AC/DC	12 DC	110-277 VAC
Current:	0.2A	1A	16A
Material:	Aluminum / Stainless steel	Aluminum / Stainless steel	Aluminum / Stainless steel
Thread:	M30	M22	
IP Protection:	IP68	IP69	IP88
Anodize Colors:			
Operating Temperature:	-40°c to 75° c	-20°c to 70° c	-20°c to 70° c
Electrical Connection:	Wires, Pins, Cable, Cable+Connector	Wires, Pins, Cable, Cable+Connector Compatible with SBR 11	Wire, Gewiss standard

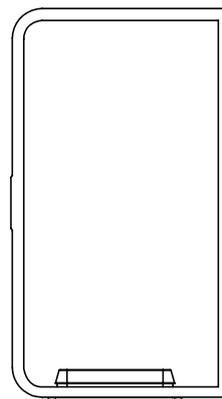


Ultra Sonic Sensor

22.5 mm

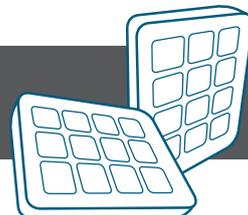


IOT Conector Wifi

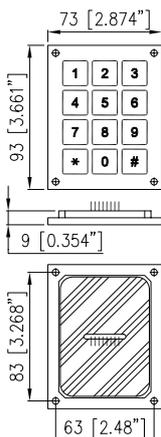


Technical Details:	Ultra Sonic	IOT Conector
Function:	Programmable	Programmable
Voltage:	12 VDC	12 DC
Current:	100 mA	60 mA
Material:	Aluminium / Stainless Steel	Polyoxymethylene
Thread:	22mmX1	
IP Protection Class:	IP69K	IP68
Anodize Colors:		
Operating Temperature:	0°c to + 65° c	-20°c to + 70° c
Electrical Connection:	4 Wires (12"24 AWG std)	6 Wires (12"24 AWG std)
Detection range:	300 cm max	

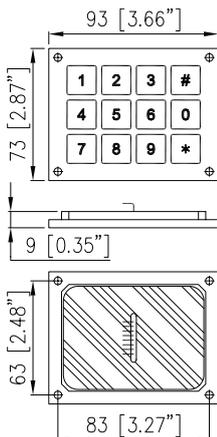
Piezo Electric Keypads



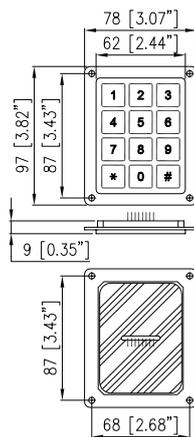
KBA 11



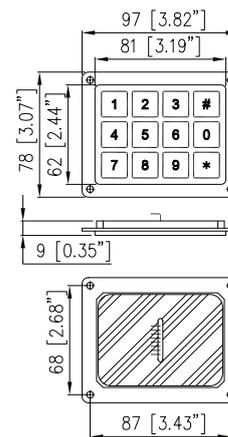
KBA 22



KBA 33



KBA 44



Technical Specification:

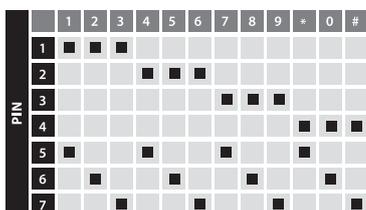
Output:	Matrix / Common Bus
Contact Arrangement:	SPST N.O.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA
Material:	Aluminium / Stainless Steel
Graphics:	Anodize / Laser Engraving / Pantograph
IP Protection:	IP69K
Operating Temperature:	-40°C to +125°C
Electrical Connection:	Flat Cable / Pins
Available Interfaces:	RS232 / RS485 / AT / PS2 / USB

Electrical Diagram:

3x4

KBA11

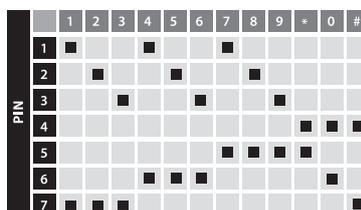
KBA33



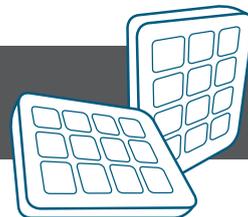
4x3

KBA22

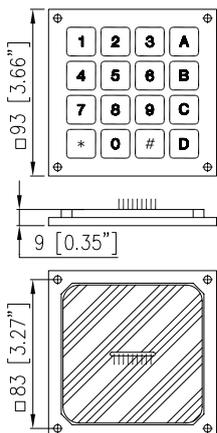
KBA44



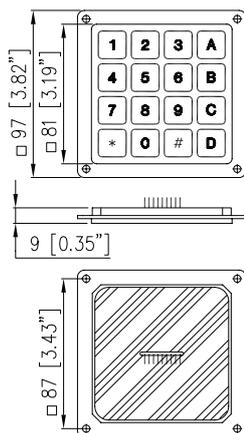
Piezo Electric Keypads



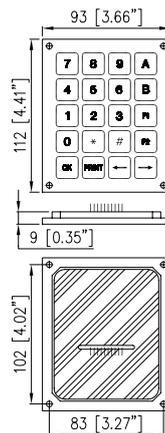
KBF 11



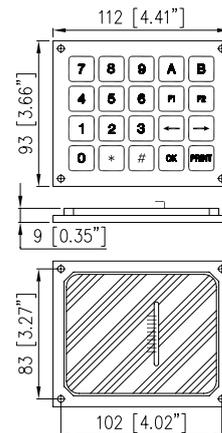
KBF 22



KBH 11



KBH 22

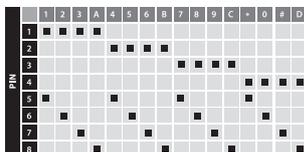


Technical Specification:

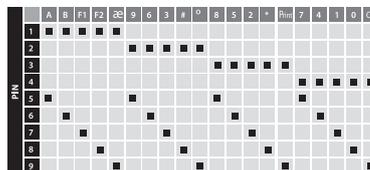
Output:	Matrix / Common Bus
Contact Arrangement:	SPST N.O.
Switching Voltage:	1-24V AC/DC
Switching Current:	200mA
Material:	Aluminium / Stainless Steel
Graphics:	Anodize / Laser Engraving / Pantograph
IP Protection:	IP69K
Operating Temperature:	-40°c to +125° c
Electrical Connection:	Flat Cable / Pins
Available Interfaces:	RS232 / RS485 / AT / PS2 / USB

Electrical Diagram:

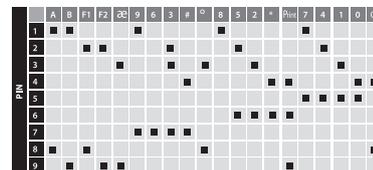
4x4
KBF11
KBF22



4x5
KBH11



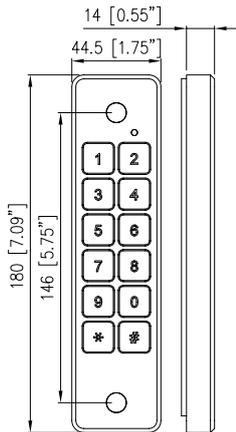
5x4
KBH22



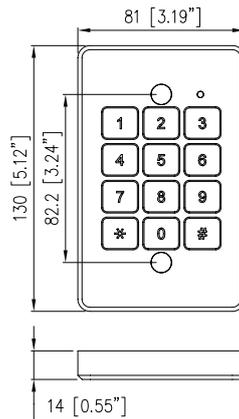
Access Control Stand Alone



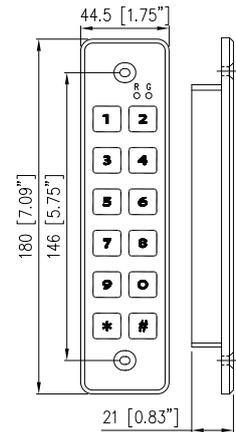
2X6 AT1G26-200



3X4 AT1G34-200



2X6 mortise AS626M-200



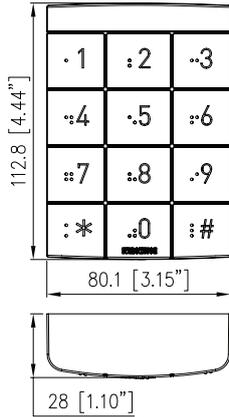
Technical Details:

Power supply:	12 / 24V AC/DC
Current Consumption:	20 mA max
Connections:	Cable
Relay Switching Current:	2A max
Housing:	Aluminium
** Current Consumption:	300 mA max
Remote Door Opening	Yes
Operating Temperature:	-40°c to 125° c
Anodize Colors:	● ●
IP Protection:	IP69K
Mounting:	Surface Mounting / Mortise / Single Gang

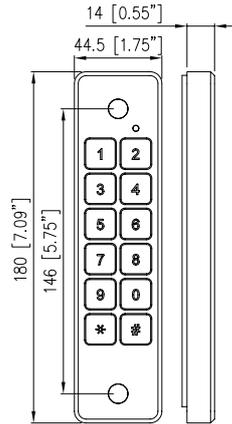
- Features:
- 100 million combinations, 4-8 digits
 - Visual & Audible Feedback
 - Vandal Proof / Tamper Proof
 - Water & Dust Proof
 - Self-contained
 - Remote Door Opening
 - Patented Piezo Technology
 - Led Signaling Red/Green



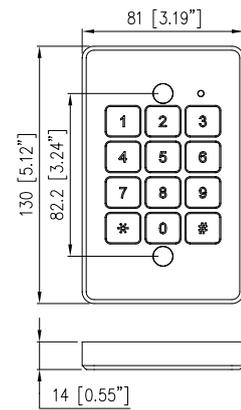
Backlit AT2PW34-200



2X6 AT1W26



3X4 AT1W34



Technical Details:

Power supply: 12 / 24V AC/DC

Current Consumption: 20 mA max

Connections: Cable

Relay Switching Current: 2A max

Housing: Polycarbonate / Aluminium

Keypad Out Put: 4/8/26/44

Operating Temperature: -40°c to 125° c

Anodize Colors: ● ●

IP Protection: IP69K

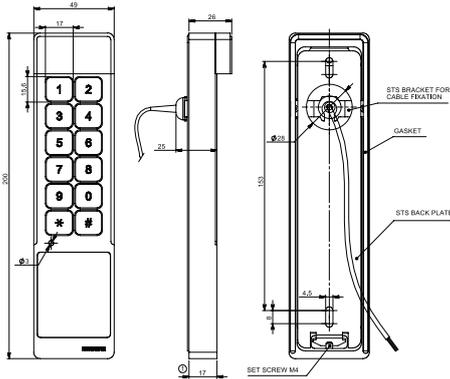
Mounting: Surface Mounting / Mortise / Single Gang

Features:

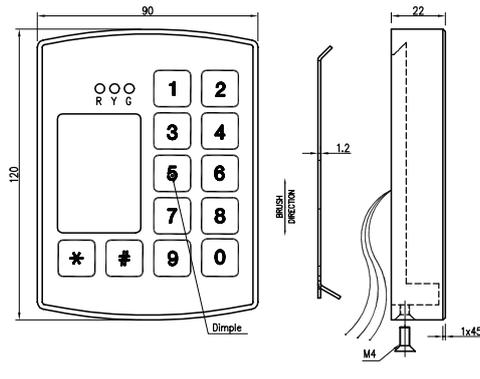
- Visual & Audible Feedback
- Vandal Proof / Tamper Proof
- Water & Dust Proof
- Self-contained
- Remote Door Opening
- Patented Piezo Technology
- Led Signaling Red/Green



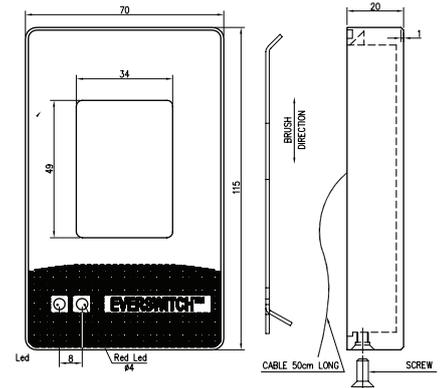
2X6 ASP26



ASP34



ASP reader only



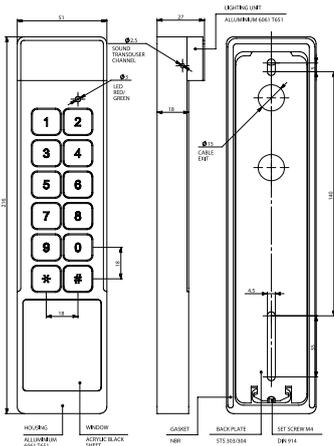
Technical Details:

Card Reader Frequency:	125 kHz
Power supply:	12 / 24V AC/DC
Current Consumption:	20 mA
Connections:	Cable
Keypad Output	Wiegand 8 / 26 / 44
Housing:	Aluminium
Current Consumption:	100 mA max
Operating Temperature:	-40°c to 125° c
Anodize Colors:	● ●
IP Protection:	IP69K
Mounting:	Surface Mounting / Mortise / Single Gang

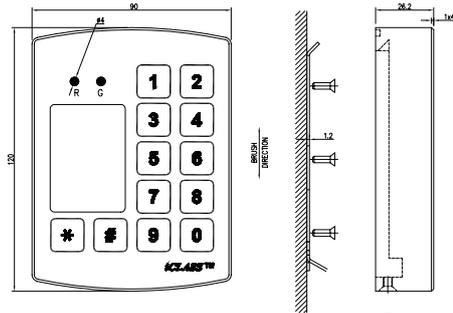
- Features:
- Visual & Audible Feedback
 - Vandal Proof / Tamper Proof
 - Water & Dust Proof
 - Patented Piezo Technology
 - Led Signaling Red/Green



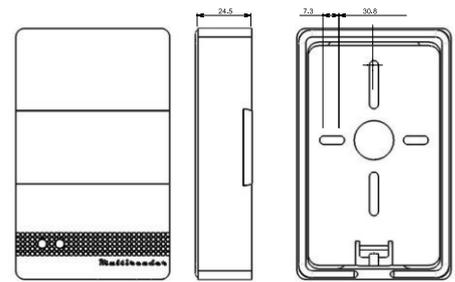
AT1M0826S



ASH0834



ASH reader only



Technical Details:

Card Reader Frequency:	13,56 kHz
Power supply:	12 / 24V AC/DC
Current Consumption:	20 mA
Connections:	Cable
Keypad Output	Wiegand 8 / 26 / 44
Housing:	Aluminium
Current Consumption:	100 mA max
Operating Temperature:	-40°c to 125° c
Anodize Colors:	● ●
IP Protection:	IP69K
Mounting:	Surface Mounting / Mortise / Single Gang

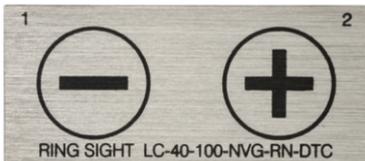
- Features:
- Visual & Audible Feedback
 - Vandal Proof / Tamper Proof
 - Water & Dust Proof
 - Patented Piezo Technology
 - Led Signaling Red/Green



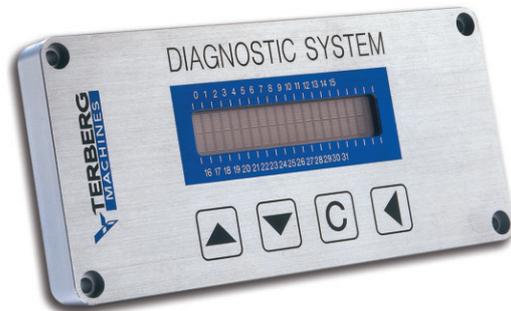
Clean Room Lighting Control.



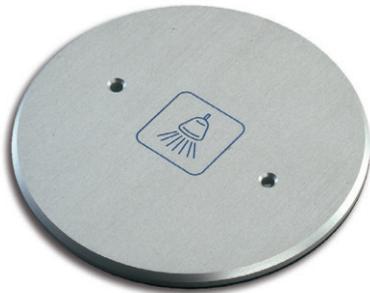
POS Fueling Keypad



Micro Military 1x2 Keypad



Waste Truck Control System



Timer Switch for Public/Prison Showers



Luxury White Appliance Control



Mining/Fueling Ex-Proof Controls



Door Control Switch, Stainless Steel



LCD Bezel IP69K Washdown.



1x5 Fueling Keypad



Forklift Access Control System



"Encrypted Keypad, VISA Approved"



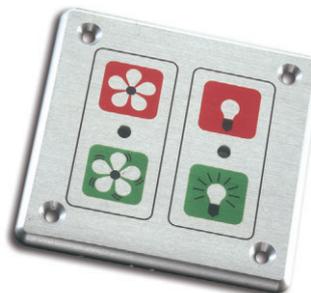
Aviation Attendant Call Button



Train Control Keypad with LEDs and LCD



Car Wash Control Panel



Clean Room Light and Fan Controller

Leaders in Engineering, Innovation and Quality
EVERSWITCH brings Piezo Technology to perfection



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