



Industry Application Report

April 2020



Alpine Snow & Avalanche Research.

Bulgin products have recently been used in a custom sensor network located in Switzerland & to sense avalanches & other snow related activity. This device plays a key role in saving lives. Robust, maintenance free & vibration proof Ethernet connections are used to help detect avalanche like threats through the deployment of environmental sensors.

Standard Buccaneer Ethernet Couplings serve as maintenance free additions to a reliable warning system in case of possible sudden avalanches, thus helping to cope with a range of climatic issues whilst being capable of maintaining a data rate of 100 MHz at temperatures down to -40°C . The Standard Buccaneer Ethernet is the most suitable solution for sensor applications.

- ⬡ Early warning of avalanches in mountainous areas
- ⬡ Standard Buccaneer Ethernet Couplings serve as maintenance free reliable Data connections
- ⬡ Safe deployment on critical environment where reliability & safety are the target



Products Related To This Industry:



PX0833

Standard Series Ethernet

Front Panel Mounting Connector. Water & dustproof to IP68 when mated with compatible connector. Single hole fixing. Supplied with panel sealing gasket. CAT5e or Cat6a shielded coupler - standard RJ45 patch-cord can be plugged into rear. PX0833/E or PX0893/E version has additional Earth wire.



PX0834/B

Standard Series Ethernet

Rewireable Flex Cable Connector. Water & dustproof to IP68 when mated with compatible connector. Supplied with shielded RJ45 plug. PX0834/A & PX0894/A has Cable Glands optimised for PUR jacket cable to maintain CAT5e & Cat6a performance. PX0834/B & PX0894/B can be used with cable 3.5mm-8mm diameter.



PX0839

Standard Series Ethernet

AT5e shielded socket. Supplied with panel sealing gasket. Choice of Termination: PX0839/PC has straight PCB pins, for direct vertical mounting to PCB. PX0839/90 has 90 degree PCB pins, for direct horizontal mounting to PCB. PX0839/IDC has two IDC blocks, for discrete termination.



PX0711

Standard Series USB

Sealing Caps. Maintain IP rating of unmated connectors. PX0733 fits many Standard Series Power & Data connectors. PX0711 fits PCB Mounting, Rear Panel Mounting Standard Power connectors, PX0839 Ethernet PX0845, PX0848 & PX0849 USB Standard Data Connectors.



Industrial Grade Printer.

With an increasing demand for automated machines & systems, secure & reliable connections are vital for industrial automation applications where efficiency & uptime is of the utmost importance.

Our robust range of vandal proof push button switches are also a perfect solution for operating heavy duty tools, metal & wood processing equipment, food & beverage processing systems & packaging machinery. To meet the specific requirements of an industrial printer, the Bulgin 8300 Series Vandal Switch is selected due to its sealed IP66 rating & 13A capability.

- Secure & reliable connections are vital for industrial automation applications
- Efficiency & up-time is of the utmost importance
- Bulgin's push button switches are a perfect solution for operating heavy duty machinery



Products Related To This Industry:



8300 Series

Vandal Resistant Switch

Vandal Resistant IP66 Panel Sealed Stainless Steel Push Button Switches. ENEC, UL, CSA approved. Approvals & ratings can vary with function - see technical data for details. Single Pole & Double Pole versions in same body size.



MPI001 Series

Vandal Resistant Switch

22mm diameter bezel. 19.2mm Panel Cutout
Single pole. Push to make tactile (momentary action).
Choice of Termination depending on part code:
/28 - 2.8mm Tab. /TE or /TERM - Screw Terminal.
/RP - Solder Tag. /FL - 300mm Flying Leads; white
- switch, red - LED +, black - LED.



MPB Series

Vandal Resistant Switch

Brass Chrome Plated Low Profile Vandal Resistant Push Button Switches. Choice of switch operations, diameters & IP ratings depending on part code. Solder Tag except for MPB037 (Screw Terminal). Where an IP rating is shown, switch is front panel sealed to IP rating given, microswitch is not sealed.



MP0050 Series

Vandal Resistant Switch

Stainless Steel Large Diameter Vandal Resistant Push Button Switches. Front panel sealed to IP66 (microswitch is not sealed). 32mm diameter. Solder Tag. Choice of Low Profile (MP0050) or Protruding Profile (MP0050/2).



Pressure Washers.

Industrial environments are often exposed to many harsh elements such as water, vibration, chemicals & extreme temperatures, but with demand growing for automated processes. To overcome these challenging conditions, our connectivity solutions with metal or plastic housings are used around the world to facilitate secure power, signal & data connections in the harshest of environments.

Our robust range of vandal proof push button switches are also a perfect solution for operating heavy duty tools such as pressure washer systems. Where splash resistance is not sufficient, the Bulgin MP0037 Vandal Switch is engineered into pressure washer systems ideal because of its IP68 rating.

- ⬡ Low Profile Vandal Resistant Push Button Switches has a choice of switch operations, diameters & IP ratings depending on part code
- ⬡ Connectivity solutions with metal or plastic housings are used around the world to facilitate secure power, signal & data connections in the harshest of environments



Products Related To This Industry:



MP0037

Vandal Resistant Switch

Stainless Steel Low Profile Vandal Resistant Push Button Switches. Choice of switch operations, diameters & IP ratings depending on part code. Solder Tag Termination except for MP0037 (Screw Terminal). Where an IP rating is shown, switch is front panel sealed to IP rating given, microswitch is not sealed.



MPI001 Series

Vandal Resistant Switch

22mm diameter bezel. 19.2mm Panel Cutout
Single pole. Push to make tactile (momentary action).
Choice of Termination depending on part code:
/28 - 2.8mm Tab. /TE or /TERM - Screw Terminal.
/RP - Solder Tag. /FL - 300mm Flying Leads; white
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MP0050 Series

Vandal Resistant Switch

Stainless Steel Large Diameter Vandal Resistant Push Button Switches. Front panel sealed to IP66 (microswitch is not sealed). 32mm diameter. Solder Tag. Choice of Low Profile (MP0050) or Protruding Profile (MP0050/2).



Interactive Games.

The Bulgin IEC distribution unit is part of an interactive games system designed to engage with children with exciting sound & visuals. The unit itself is used to power various equipment involved in the setup.

Operating in a more robust sector of the consumer electronics market, our products provide the user interfaces for power, switching & indicating for a broad array of applications. Our solutions reliably connect both commercial & domestic appliances. The Bulgin IEC distribution unit comes in a Box Style Rectangular IEC Distribution Units with 5 shuttered Outlets.

- ⬡ Bulgin products provide the interfaces for power, switching & indicating for an array of applications
- ⬡ The Bulgin IEC distribution unit is used to power various equipment involved in the setup



Products Related To This Industry:



PXD301

IEC Power Distribution Units

5 shuttered Outlets. Choice of power input depending on part code prefix: PXD301: Single integral EN60320 Inlet. PXD303: BS1363 plug on 2M cable. PXD306: CEE7 Sheet VII Schuko plug on 2M cable. Choice of unfiltered (part codes containing /050) or with EMI filter fitted (part codes containing /550).



PXD100/050/01/1

IEC Power Distribution Units

Panel Mount Rectangular IEC Distribution Unit. Screw fit to panel. 5 shuttered Outlets. 5mm x 20mm fuseholder. Neon indicator. Mate with PX0686, PX.



PXD200 / PXD201

IEC Power Distribution Units

Box Style Compact Rectangular IEC Distribution Unit. Choice of power input depending on part code prefix: 4 Outlets. PX200: Single integral EN60320 Inlet. PX201: BS1363 plug on 2M cable. PX201/1: CEE7 Sheet VII Schuko plug on 2M cable. PX201/2: NEMA.



PXD500/061/10/1

IEC Power Distribution Units

Panel Mount Square IEC Distribution Unit. Screw fit to panel. 6 shuttered Outlets. 5mm x 20mm fuseholder. Neon indicator. Switch.



Printed Electronics.

Industrial environments are exposed to many impeding elements such as water, vibration, chemicals & extreme temperatures. With demand growing for automated processes, there is more pressure than ever before on production & motion control systems.

To overcome these potentially detrimental conditions, our connectivity solutions with metal or plastic housings are used around the world to facilitate secure power, signal & data connections in the harshest of environments. The Bulgin 6000 Series Buccaneer provides power to heat based machinery & equipment producing printed electronics such as RFID, displays & flex circuits.

- ⬡ The Bulgin 6000 Series Buccaneer provides power to heat based machinery & equipment producing printed electronics such as RFID, displays & flex circuits
- ⬡ It is Water & dustproof to IP66, IP68, IP69K when mated with compatible connector. It is also 30 degree push twist locking, tamperproof lock prevents accidental un-mating



Products Related To This Industry:



PXP / PXM6010

6000 Series Buccaneer

Water & dustproof to IP66, IP68, IP69K when mated.
30 degree push twist locking, tamperproof lock prevents accidental un-mating. Plug or Socket. 2, 3, 8, 16, 22 Pole with leading Earth contact on 3 Pole versions. Screw, Crimp / Solder terminations available, depending on part code. Choice of body material depending on part code.



PXP / PXM6012

6000 Series Buccaneer

Water & dustproof to IP66, IP68, IP69K when mated with compatible connector. 30 degree push twist locking, tamperproof lock prevents accidental un-mating. Plug or Socket. 2, 3, 8, 16, 22 Pole with leading Earth contact on 3 Pole versions. Screw, Crimp/Solder terminations available, depending on part code; Screw contacts supplied fitted.



PXP / PXM6010

6000 Series Buccaneer

Water & dustproof to IP66, IP68, IP69K when mated.
30 degree push twist locking, tamperproof lock prevents accidental un-mating. Plug or Socket. 2, 3, 8, 16, 22 Pole with leading Earth contact on 3 Pole versions. Screw, Crimp / Solder terminations available, depending on part code. Choice of body material depending on part code.



PXP / PXM7010

7000 Series Buccaneer

Water & dustproof to IP66, IP68, IP69K when mated with compatible connector. Quick turn locking ring with less than quarter turn locking & positive feedback. Plug or Socket. 2, 3, 6, 10, 32 Pole with leading Earth contact on 3 Pole versions.



RMU Protection Relay.

In an increasingly connected world, we have the necessary solutions to fulfil the ongoing needs of Data Centres & Telecom Networks across the globe. From power distribution to high speed data transmissions & user interface components, we have the solutions that you need to manage the stringent data demands of the future.

Despite an increasing shift towards wireless technologies, the core equipment that enables these systems to operate are still heavily reliant on physical components such as electrical connectors, battery holders & switches.

- ⬡ The Bulgin AA Battery Holder performs in -30°C to $+70^{\circ}\text{C}$ Operating Temperature & has a UL94V-0 Flammability Rating
- ⬡ Bulgin AA Battery Holder is designed into a RMU protection relay providing a separate power source for use in power distribution networks



Products Related To This Industry:



BX0011/1

Battery Holders

AA/R6 Flanged Panel Mount Battery Holders For 1-3 Cells (Bayonet Cap With Coin Slot). Panel Mount Battery Holder. Solder Tags. Bayonet/Screwdriver release. -30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating. RoHS Compliant. Number of battery cells: BX0011/1, BX0012/1 & BX0013/1.



BXS/ 011 / 012 / 013/1

Battery Holders

AA/R6 Sealed Flanged Panel Mount Battery Holders For 1-3 Cells. IP67 Rated. Panel Mount Battery Holder. Front Panel Sealed to IP67 - Dust & Waterproof. Solder Tag. Bayonet Cap with Finger/Coin Release. -30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.



BXS/ 001 / 002 / 003/1

Battery Holders

C/R14 Sealed Panel Mount Battery Holders For 1-3 Cells, IP67 Rated. Panel Mount Battery Holder. Front Panel. Sealed to IP67 - Dust & Waterproof. Solder Tag. Screw Cap with Finger Release. -30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.



BXS / 016 / 017 / 018

Battery Holders

D/R20 Sealed Flanged Panel Mount Battery Holders For 1-3 Cells. IP67 Rated. Panel Mount Battery Holder. Front Panel Sealed to IP67 - Dust & Waterproof. Solder Tag. Bayonet Cap with Finger Release. -30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.



Transport Refrigeration.

With ambient & environmental conditions such as water, moisture & extreme temperatures posing a constant threat to transport & infrastructure applications, reliable & robust solutions are vitally important in this sector.

With more transport links & vehicles needed than ever before to meet the challenging needs of a growing population, we help to future proof your investment by providing cost effective & high performance solutions that last. The Bulgin 3900 Series Toggle Switches feature on large transport refrigeration equipment as the input controls for various settings.

- ⬡ Bulgin provide a Range of Toggle Switches including Single Pole (3900 Series) & Double Pole (3950 Series) with a Standard or Sealed body (panel seal to IP67)
- ⬡ Moisture & extreme temperatures pose a constant threat to transport & infrastructure applications



Products Related To This Industry:



3900 Series Toggle Switches



ENEC, UL, CSA approved (approvals & ratings vary with function & switch body type - see technical data for details). Choice of: Single Pole (3900 Series), Double Pole (3950 Series) Standard or Sealed body (panel seal to IP67)
Actuator: 10mm, 17.5mm, 38.1mm Metal Toggle or 17.5mm Flatted Nylon Toggle.



1700 / 1750 Series Toggle Switches



Range of Toggle Switches with Nylon actuators. ENEC, UL, CSA approved (approvals & ratings vary with function & switch body type - see technical data for details). Single Pole (1700 Series), Double Pole (1750 Series).
Actuator: 13.8mm Nylon Toggle, 16.4mm Flatted Nylon Toggle.



Accessories Toggle Switches



Covers (with internal nylon/metal nuts) & Seals:
A1080MOAAA Actuator Cover for use with 3900 Series & compatible 1700/1750 Series switches. A0539MOAAA Neck Seal (actuator remains visible) for use with 3900 Series & 1700/1750 Series switches. A0331MOAAA Actuator Cover for use with compatible 1700/1750 Series.



5500 Series Rocker Switches



Range of Single Pole Rocker Switches. Standard (5500 Series) & Illuminated (5503, 5508 Series) versions. ENEC, UL, CSA approved. Approvals & ratings can vary with function - see technical data for details. Choice of Single or Twin units. Termination: 6.3 x 0.8 QC, 4.8 x 0.8 QC, Solder Lug. Body/bezel styles.



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