



Industry Application Report

September 2020



Military Vehicle Datacoms.

Military vehicles come in all shapes and sizes and with that comes a spectrum of different purposes ranging from the detection and removal of explosives by UGVs (Unmanned Ground Vehicles) to the transport of other vehicles by MHETs (Medium-Heavy Equipment Transporters).

Whatever the usage may be, reliable connections are needed to withstand the plethora of different environmental factors - such as the effects of vibration, shock and exposure to the elements. To ensure internal equipment matches its rugged exterior, the 6000 Series Metal Ethernet Connectors and Sealing Caps are used for data and telecoms on specialist armoured military vehicles.

- ⬡ Potential Markets: Military Applications
- ⬡ 6000 Series Metal Ethernet Connectors are Water & Dustproof to IP66, IP68 & IP69K when mated with compatible connector



Products Related To This Industry:



PXP6034 / PXM6034

6000 Series Ethernet Buccaneer

Rewireable Flex Cable Connectors. Water and dustproof to IP66, IP68, IP69K when mated with compatible connector. 30 degree push twist locking, tamperproof lock prevents accidental un-mating. Supplied with shielded RJ45 plug. Choice of cable acceptance depending on part code.



PXP6033 / PXM6033

6000 Series Ethernet Buccaneer

Front Panel Mount Connectors. Water and dustproof to IP66, IP68, IP69K when mated with compatible connector. 30 degree push twist locking, tamperproof lock. CAT5e shielded coupler - standard RJ45 patchcord can be plugged into rear. Single hole fixing. Supplied with panel sealing gasket. Choice of body material.



PXP6037 / PXP6038

6000 Series Ethernet Buccaneer

Pre-Wired Patch Cord with plastic body overmoulded connector. Water and dustproof to IP66, IP68, IP69K when mated. 30 degree push twist locking, tamperproof lock. Supplied with shielded RJ45 plug. S-FTP cable construction. PUR jacket cable in a choice of lengths depending on part code. 568-B wiring configuration.



Sealing Caps

6000 Series Connectors

Sealing Caps for 6000 Series Power and Data Connectors. Use to maintain IP rating of unmated connectors. PXP6081 fits PXP6010 Power Connectors; PXP6040, PXP6041 Flex USB Connectors; PXP6034, PXP6037, PXP6038 Flex/Patch Cord Ethernet Connectors (push fit). Various other options available.



Door Entry Keypads.

Digital Entry Keypads and or Access Control Systems use digital code instead of a physical key which provides the system with a numerical code in order to allow or deny access. Such access control systems can be installed and utilised to control accessibility into a wide range of different facilities such as office buildings, homes, garages or storage units.

Built into re-enforced housing, the Bulgin Vandal Switch is integral to the operation of a door entry keypad with integrated intercom functionality. Manufactured from Stainless Steel, Bulgin's extensive range of vandal resistant security switches are designed with a high resistance to wear and tear, corrosion and harsh use in potentially hostile environments such as access control applications.

- ⬡ Potential Markets: Security & Surveillance
- ⬡ Choice of Switch Operations, Diameters & IP Ratings depending on Part Code
- ⬡ Illuminated versions available in Dot & Ring LED indication plus a variety of illumination colours



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 - 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).



Surveillance Control Units.

Surveillance Control Units play their part within a Security System although they are not one of the same. Whereas a security system aims to prevent intrusion, a Surveillance Systems aim is to maintain visual control over a desired area through the capturing of images or video - usually through a live feed.

Surveillance Control Units display live video feeds for use across a range of different outdoor environments and industries - one example being that of an Oil Rig that combined two Bulgin products into one unit (the 900 Series Buccaneer and the Piezo Switch range) in order to withstand the outdoor ocean conditions it faced.

- ⬡ Potential Markets: Security & Surveillance / Oil & Gas
- ⬡ 900 Series Buccaneer is Water & Dustproof to IP68 when mated with compatible connector
- ⬡ Piezo Switches are extremely durable (millions of actuations) & require little to no maintenance



Products Related To This Industry:



PX0911 / PXA911

900 Series Buccaneer

Flex Cable Connectors. Water and dustproof to IP68 when mated with compatible connector. Positive fast-acting locking ring - can be turned with a gloved hand. Plug or Socket. 2, 3, 4, 5, 7, 10 Pole with leading Earth on 3, 4, 5, 7 Pole versions, trailing Neutral on 5 Pole version. Screw Terminals.



PX0921 / PXA921

900 Series Buccaneer

Flex In-Line Cable Connectors. Water and dustproof to IP68 when mated with compatible connector. Positive fast-acting locking ring - can be turned with a gloved hand. Plug or Socket. 2, 3, 4, 5, 7, 10 Pole with leading Earth on 3, 4, 5, 7 Pole versions, trailing Neutral on 5 Pole version. Screw Terminals.



PX0931

900 Series Buccaneer

Panel Mount Connector. Water and dustproof to IP68 when mated with compatible connector. Positive fast-acting locking ring - can be turned with a gloved hand. Plug or Socket. 2, 3, 4, 5, 7, 10 Pole with leading Earth on 3, 4, 5, 7 Pole versions, trailing Neutral on 5 Pole version. Single hole fitting, anti-rotation key.



Piezo Switches

MPZ Series

No moving mechanical parts making them extremely durable. Millions of operating cycles. Water and dustproof to IP68, IP69K. Stainless Steel bodies (aluminum body upon request). Vandal resistant. 200mm Flying Leads. Choice of diameter sizes depending on part code: 16mm, 19mm, 22mm.



LED Lighting.

LEDs (or Light-Emitting Diodes) are comprised of a semiconductor light source that emits light when a current is flowing through it. LEDs hold an advantage over other traditional light sources due to two main factors; the low energy input required to power them and their impressive lifespans.

The first LEDs created emitted very low light whilst modern LEDs come in a range of colours, covering the visible spectrum, even being able to emit ultraviolet (UV) and infrared wavelengths - all at a high light output. LEDs are used in a range of environments and conditions such as outdoor sports venues and in order to meet the requirements of such an environment the Bulgin Inline Fuse holder was selected to provide circuit protection on the outdoor LED lighting equipment.

- ⬡ Potential Markets: Lighting / Transport & Infrastructure
- ⬡ Bulgin's range of Fuse Holders are designed to give a high degree of protection
- ⬡ Designed for protection against shock to categories PC1, PC2 & PC3



Products Related To This Industry:



FX0180 Series

Fuse Holders

Protection Category PC1 In-Line Fuse Holders. Screw Termination. Part codes prefixed FX0385, FX0285, FX0185 are IP66 Sealed. Choice of fuse size depending on part code. Choice of colour depending on part code. Part codes prefixed FX0380, FX0280, FX0180 have 4.8mm diameter cable entry.



FX0454 / FX0455

Fuse Holders

Protection Category PC2 Touchproof Fuseholder. 5mm x 20mm fuse carrier, Screw Cap, Screwdriver Release. 16A 250V Max Rating. Panel mount. Solder Tag Termination. Choice of bezel depending on part code: High Profile Bezel. Choice of Keyway Panel Cutout (FX0454) or 'D' Panel Cutout (FX0455).



FX0430 Series

Fuse Holders

Protection Category PC3 Fuseholder. 5mm x 20mm Captive Drawer fuse carrier. Snap Fit To Panel mounting; 1mm, 1.5mm, 2mm, 3mm panel thickness, depending on part code. Choice of Termination depending on part code: /28 - 2.8mm Solder Tag, /48 - 4.8mm Tab, /63 - 6.3mm Tab, /PC - PCB Spills.



FX0460 Series

Fuse Holders

Protection Category PC3 Fuseholder. 5mm x 20mm fuse carrier, Captive Screw Cap, Screwdriver Release. Panel mount. Solder Tag Termination.



Wireless Data Logger.

A Data Logger is an electronic device that can be installed in a manner of different environments to track and record a range of different data sets over time relating to that said environment or location the device has been installed into.

Examples of application include; tracking of wind speed, recording of solar radiation, measurement of soil moisture, measurement of water pH levels and even water flow. Multiple Standard Buccaneer Connectors were used on a water flow logger set to measure flow, level and overall water quality - and due to the environment at hand it was essential the connections could withstand contact with water.

- ⬡ Potential Markets: Transport & Infrastructure / Agriculture / Renewable Energy
- ⬡ These Environmentally Sealed Power Connectors are IP68 & IP69K Rated - setting the gold standard for Dust & Waterproof Circular Connectors



Products Related To This Industry:



PX0736 Series

Standard Series Buccaneer

Water and dustproof to IP68 when mated with compatible connector. Plug or Socket. 2, 3, 4, 6, 7, 9, 12, 25 Pole with leading Earth contact on 3 Pole. Socket versions. Screw, Crimp, Crimp/Solder Terminations depending on part code and number of Poles. Screw contacts supplied fitted, Crimp contacts supplied loose.



PX0730/P Series

Standard Series Buccaneer

Water and dustproof to IP68 when mated with compatible connector. Single hole fixing. Plug or Socket. 2, 3, 4, 6, 7, 9, 12, 25 Pole with leading Earth contact on 3 Pole Socket versions. Screw, Crimp, Crimp/Solder Terminations available depending on part code and number of Poles.



PX0737 Series

Standard Series Buccaneer

Water and dustproof to IP68 when mated with compatible connector. Plug or Socket. 2, 3, 4, 6, 7, 9, 12, 25 Pole with leading Earth contact on 3 Pole Socket versions. Screw, Crimp, Crimp/Solder Terminations available depending on part code and number of Poles. Screw contacts supplied fitted, Crimp contacts supplied loose.



PX0700 Series

Standard Series Buccaneer

Water and dustproof to IP68 when mated with compatible connector. Plug or Socket. 2, 3, 4, 6, 7, 9, 12, 25 Pole with leading Earth contact on 3 Pole Socket versions. Cable acceptance up to 14mm diameter with PVC or PU jackets. PX0734 Sealing Cap available separately to maintain IP rating of unmated connectors.





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