

An overview of the most common design-ins and applications using our products



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Automation

With an increasing demand for automated machines and systems, secure and reliable connections are vital for industrial automation applications where efficiency and uptime is of the upmost importance. Our waterproof circular connectors are the perfect solution for automation systems such as factory automation, industrial networks and robotics. From movement signals to manufacturing and material handling processes, our robust sealed connector range for power, signal and data perform excellently in harsh environments where moisture, extreme temperatures and vibration are present.

With IP66, IP67, IP68 & IP69K ratings, they are particularly ideal for production lines that are prone to dust & liquid build up.

Applications

Industrial Robotics
Pharmaceutical Manufacturing
Automotive Manufacturing
Food & Beverage Processing
Material Handling Equipment
Packaging Equipment
Process Control Systems
Machining & Metal Processing
Semiconductor Manufacturing
Factory Automation Machines

M5 Series



- A-Coding
- Ratings up to 1A, 60V ac/dc
- IP67 protection
- 3 & 4 contacts
- PUR & PVC cable options

M23 Series





- A-Codina
- Max Rating 8A, 200V ac/dc
- IP67 protection
- 12 & 19 contacts
- Straight & angled options

M8 Series



- A & B Coding
- Ratings up to 3A, 60V ac/dc
- IP67 protection
- 3, 4 & 5 contacts
- PUR & PVC cable options

M12 Series





- A, B & D Coding
- Max rating 4A, 250V ac/dc
- IP67 protection
- 3, 4, 5, 8 & 12 contacts
- PUR & PVC cable options

M16 Series



- A-Codina
- Max Rating 7A. 250V ac/dc
- IP67 protection
- 3, 4, 5, 6, 8 & 12 contacts
- Metal shells with good shielding

I/O Boxes



- Anodised aluminium housing
- M12 inputs M8 outputs
- Operating Temp Range -25°C to 80°C
- IP67 rated
- 5, 8 & 9 port configurations

Standard Ethernet







- Cat5e BJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

6000 Series Power







- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors cULus, UL, VDE Approvals



Tools & Machinery

Industrial environments are exposed to many impeding elements such as water, vibration, chemicals and extreme temperatures. With demand growing for automated processes, there is more pressure than ever before on production and 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 and 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, metal and wood processing equipment, food and beverage processing systems and packaging machinery.

Applications

Industrial Food Slicer
Vacuum Packaging Machine
Printed Electronics Machinery
Heavy Industrial Food Processor
Industrial Grade Printer
Industrial Automated Saws
Industrial Coating Machinery
Industrial Sand Blaster

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

900 Series Power



- 32A, 600V ac/dc rating
- 2. 3. 4. 5. 7 & 10 contacts - IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications
- CCC. UL. CSA & VDE approvals

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

6000 Series Power





- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus, UL. VDE Approvals

M12 Series



- A. B & D Coding
- Max rating 4A, 250V ac/dc
- IP67 protection
- 3. 4. 5. 8 & 12 contacts
- PUR & PVC cable options

M16 Series



- A-Codina
- Max Rating 7A, 250V ac/dc
- IP67 protection
- 3. 4. 5. 6. 8 & 12 contacts
- Metal shells with good shielding

M23 Series





- A-Codina
- Max Rating 8A, 200V ac/dc
- IP67 protection - 12 & 19 contacts
- Straight & angled options

Vandal Resistant **Switches**







- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions



Instrumentation & Measurement

Instrumentation and measurement systems are vital for ensuring productivity, reliability, safety and continuity in the industrial sector. Accurate and consistent measurements allow for process control and automated manufacturing systems to be optimised for maximum efficiency. Reliable electronic components are essential for achieving this.

That's where we come in. From control interfaces to power and data connections, Bulgin has a diverse choice of electronic solutions ideal for systems that measure a variety of parameters including pressure, moisture, flow, temperature and vibration.

Applications

Handheld Moisture Detectors Wireless Data Logger

Flow Meters

Solar Water Pump Controller

Industrial Scales

Terrain Monitoring

Handheld Radiation Detection

Pipe Inspection System

Pressure Transmitter

Test Bench

Wireless Load Sensors

Moisture Meters

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts - IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

M12 Series



- A, B & D Coding - Max rating 4A, 250V ac/dc
- IP67 protection
- 3, 4, 5, 8 & 12 contacts
- PUR & PVC cable options

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system

M₁₆ Series

- High noise immunity & EMI protection

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus, UL, VDE Approvals

Vandal Resistant **Switches**







- High resistance to wear & tear. corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

Battery Holders



- AAA, AA, C, D & PP3 battery sizes
- Accommodating 1, 2, 3 or 4 cells
- IP67 sealed versions - Suitable for PCB mounting
- Panel mounting versions

- A-Coding

- Max Rating 7A, 250V ac/dc - IP67 protection
- -3, 4, 5, 6, 8 & 12 contacts
- Metal shells with good shielding

400 Series SMB



- 50Ω impedance SMB antenna connector
- Frequency range 0 4GHz
- IP66, IP67, IP68 & IP69K protection
- Rewireable & pre-wired connector options
- RG-174 cables



Above Water	1	
Underwater	1	



Above Water.

Surface marine applications such as ship deck systems, marina facilities and boating equipment are constantly exposed to the harshest of conditions. With high corrosion and water ingress posing a constant threat to connectivity solutions, sealed and robust components are a must for applications in this market. Originally designed for leisure yachts, our Buccaneer connector range is perfectly suited to meet the challenging requirements of marine applications both above and below water level.

With a wide portfolio of IP rated power, signal and data connectors, along with years of experience in designing and manufacturing sealed interconnect solutions, we are sure to have the right solution for your marine connectivity needs. If our existing product range doesn't meet your specifications, then our experienced engineering teams have the knowledge and expertise needed to create a custom solution specific to your unique requirements.

Applications

Boat & Yacht Lighting
Water Quality Systems
GPS Marine Equipment
Container Ship Communication
LED Marine Lanterns
Unmanned Surface Vehicle (USV)
Water Flow Data Loggers
Marina Energy Distribution Unit
Sailboats

6000 Series Power



- 2 22 Contacts
- Plastic
- IP66, IP67, IP68 & IP69K protection

Standard Ethernet

- Secure, quick mating & release connectors Pin or socket, screw thread locking
- cULus. UL. VDE Approvals

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- CE, UL, CSA & VDE approvals







- Cat5e RJ45 Fthernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

Vandal Resistant **Switches**







- High resistance to wear & tear. corrosion & harsh use
- Domed, low & prominent profiles - IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

Standard Series USB











- USB V2.0 performance
- IP66, IP67, IP68 & IP69K protection
- Single & double ended cable assemblies & panel mount options - Available in various USB type
- 'A' or 'B' configurations
- 2m. 3m & 5m cable lengths

Sealed Mini-USB cable connectors

400 Series Mini USB

- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

Standard Power







400 Series SMB



- Rating up to 12A, 277V ac/dc
- -2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection - Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals
- 50Ω impedance SMB antenna connector - Frequency range 0 - 4GHz
- IP66, IP67, IP68 & IP69K protection
- Rewireable & pre-wired connector options
- RG-174 cables



Underwater

Operating underwater requires the most rugged and reliable of connectivity components, as pressure, extreme temperatures and salt water all pose complex challenges for underwater marine applications. With more companies seeking to go deeper for longer in such hostile conditions, this has increased the demand of life cycles for submersible connectors, along with the simplification of product maintenance processes.

With a high risk of corrosion affecting the integrity of power, signal and data connections, sealed connector solutions are a must for high performance underwater marine equipment. Bulgin's expertise in producing environmentally sealed connectors makes us one of the world's leading interconnect providers for marine application solutions where immersion is required in low and high pressure underwater environments.

Applications

Sealed Diving Cameras
Diver Communication
Depth Logger
Subsea ROV

4000 Micro-USB



- Data rates up to 480Mbs
- USB V2.0 performance
- IP66, IP67, IP68 & IP69K protection
- Tamperproof Construction
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

6000 Series Power



- 2 22 Contacts
- Plastic
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors Pin or socket, screw thread locking
- cULus. UL. VDE Approvals

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2, 3, 4, 6, 8, 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- CE, UL, CSA & VDE approvals

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

400 Series SMB



- 50Ω impedance SMB antenna connector
- Frequency range 0 4GHz
- IP66, IP67, IP68 & IP69K protection
- Rewireable & pre-wired connector options Plastic Shells
- RG-174 cables

7000 Series Power



- Ratings up to 25A, 600V rated
- 2, 3, 6, 10 & 32 contacts
- IP66, IP67 IP68 and IP69K when mated
- cULus, UL & VDE approvals

Standard Ethernet







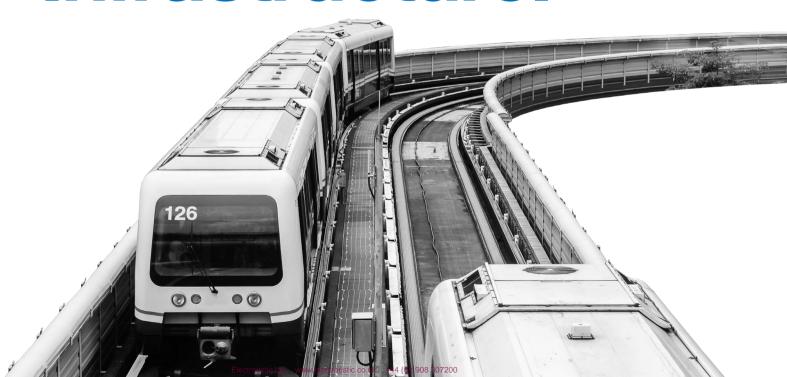
- Cat5e BJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

ROV Tether Connector



- 316 Stainless Steel Construction
- Pressure Balanced Oil Filled (PBOF)
- Data, Power & Fibre Optics
- Ratings up to 5KV, 32A
- Capable of up to 7000m subsea depths

Transport & Infrastructure.



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Lighting

Bulgin is an industry leader in manufacturing reliable electronic solutions for lighting applications around the world. With ambient and environmental conditions such as water, moisture and extreme temperatures posing a constant threat to the performance of outdoor lighting equipment, secure and robust solutions are of paramount importance.

For years we have supported the lighting needs of various infrastructure applications with our industry-leading solutions being used in various indoor, outdoor and industrial applications, from portable lighting for construction to airport flood lights. Our IP rated circular connectors for power, signal and data are particularly suited to providing the high levels of performance needed for such demanding environments. Capable of being submerged in water and able to withstand high levels of UV exposure, they are specifically designed to reduce installation time and excel in challenging environmental conditions.

If you require reliable waterproof connectors and cable assemblies suited to outdoor and architectural lighting applications, then Bulgin is the perfect choice to meet your unique lighting requirements.

Applications

Roadside LED Lighting
Commercial Lighting
External Building LED Lighting
Portable Road Maintenance LED Lighting
Airport Flood Lighting
Sport Venue LED Lighting

400 Series Power



- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking
- CE. UL. CSA & VDE approvals

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

4000 Series Power



- Ratings up to 13A, 600V ac/dc
- 3. 8 &12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL. CSA & VDE approvals

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus, UL, VDE Approvals

Standard Power



- Rating up to 12A, 277V ac/dc
- 2. 3. 4. 6. 7. 9. 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

Fuse Holders



- In-line, panel, PCB & base mounting
- Screw or snap fit variants
- PC1, PC2 & PC3 shock protection categories
- IP66. IP67 & IP68 sealed versions
- Ideal for 5 x 20mm & 6.3 x 32mm fuse sizes



Security & Surveillance

Security systems are at the heart of all transport and infrastructure. With applications such as surveillance cameras constantly operating in some of the world's most challenging outdoor environments, reliable data and power transmissions are vital for ensuring that they can operate 24/7 in harsh ambient conditions.

To resolve this issue, we have created a wide variety of standardised rugged, lightweight and sealed connectivity solutions including field installable connectors and overmolded cable assemblies that can also be customised for your specific design and development needs. Whether you require secure and reliable connectors for camera systems or robust anti vandal switches for door entry keypads, we are sure to have the right solution for your security application. We thrive on providing secure and reliable solutions that prevent downtime and minimise maintenance work for applications where security and surveillance are a priority to your operations.

Applications

Traffic Cameras

ANPR Cameras and Sensors

Parking Control Camera

Security Door Switch

Door Entry Keypads

Aerial Surveillance & Mapping

Security Video Monitoring

Portable Alarm Systems

Unmanned Surface Vehicle

CCTV Cameras

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors - CCC, UL, CSA & VDE approvals



900 Series Power

- 32A, 600V ac/dc rating
- 2, 3, 4, 5, 7 & 10 contacts - IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications
- CCC. UL. CSA & VDE approvals

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking
- CE, UL, CSA & VDE approvals

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors Tamperproof Construction
- cULus, UL, VDE Approvals

4000 Micro-USB



- Data rates up to 480Mbs
- USB V2.0 performance
- IP66, IP67, IP68 & IP69K protection
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Vandal Resistant **Switches**







- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options - Front & rear panel mount versions

400 Series SMB



- 50Ω impedance SMB antenna connector
- Frequency range 0 4GHz
- IP66, IP67, IP68 & IP69K protection
- Rewireable & pre-wired connector options



Buildings & Construction

Heavy duty machinery used for construction & building maintenance require components that are equally as rugged as the environments that they operate in. From outdoor lighting and industrial meters to indoor HVAC systems, rest assured that our wide range of switches, indicators and waterproof connectors are built for maximum reliability and performance.

Applications

Air Compressor

Air Cleaning System
Disabled Refuge Systems
Stair Lifts
Terrain / Mud Monitoring Systems
Moisture Meters
Security Door Switch Panels

Cherry Pickers
Wireless Load Sensors
High Powered LED Searchlight
Fire Pump Controller
Heating Systems
Smart Metering
Vacuum Pump

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

6000 Series USB





- Secure 30° twist locking mechanism - Plug & play capability
- IP66, IP67, IP68 & IP69K protection when mated
- Single & double ended PUR cables
- USB V2.0 performance

Indicators



- LED. Neon & Filament options
- Panel sealed IP66 & IP67 versions
- Wide choice of bezel sizes & styles
- Multiple termination types
- Rugged stainless steel variants

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

Rocker Switches





- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options - Large choice of bezel styles & sizes, panel
- cut-outs, actuators & switching circuits

Vandal Resistant **Switches**







- High resistance to wear & tear. corrosion & harsh use
- Domed, low & prominent profiles - IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

Toggle Switches





- Nylon & Metal variants
- Multiple Lever options
- Ratings up to 20A, 250Vac 277Vac
- IP67 panel seal versions - Quick Connect, Solder, Screw & PCB termination options

400 Series SMB



- 50Ω impedance SMB antenna connector
- Frequency range 0 4GHz
- IP66, IP67, IP68 & IP69K protection
- Rewireable & pre-wired connector options
- RG-174 cables



Transportation

The world is constantly changing and we help to keep it moving with our connectivity solutions. With more transport links and 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 and high performance solutions that last. Experts in manufacturing sealed electrical connectors, we've provided connectivity solutions to transport and infrastructure applications for years.

Particularly suited to provide power, signal & data connections in harsh environments, our reliable connector range makes sure that people and goods successfully get to their destination by land, sea or air.

Applications

Lorry LED Lighting
Road Management Maintenance
Speed Check Signage
Illuminated Taxi Sign
Transport Refrigeration
Noise Monitoring Terminal
Container Cooling Units
Surface Friction Test Equipment
Noise Monitoring Terminal
In-flight Entertainment Systems
Traffic Lights

900 Series Power



- 32A, 600V ac/dc max rating
- -2, 3, 4, 5, 7 & 10 contacts
- IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications CCC, UL, CSA & VDE approvals

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking
- CE. UL. CSA & VDE approvals

4000 Series Power







- Ratings up to 13A, 600V ac/dc
- 3. 8 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL. CSA & VDE approvals

6000 Series Power







- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus. UL. VDE Approvals

Standard Ethernet







- Cat5e RJ45 Fthernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

Toggle Switches





- Nylon & Metal variants
- Multiple Lever options
- Ratings up to 20A, 250Vac 277Vac
- IP67 panel seal versions
- Quick Connect, Solder, Screw & PCB termination options

Automotive.

An ever growing population calls for more vehicles to fulfil transportation needs. The rise of autonomous cars and increasingly connected vehicles also means that reliable and high performance components have never been more important in the automotive industry. Luckily we have a wide range of solutions perfectly suited to the demanding challenges of this industry. From automotive manufacturing and testing equipment to truck lighting and control panels for agricultural vehicles, our products are involved at every stage of a motor vehicles life cycle.

With a wide variety of products on offer including sealed connectors for power, signal and data, we can also produce bespoke custom solutions that combine switches, enclosures, PCB's and cable assemblies to meet the needs of demanding automotive applications.



Applications

Automotive Manufacturing
Agriculture Vehicles
Snowmobile Controls
Automotive Power Diagnostics
RV Heating / Cooling Systems
Heated Car Seats

Lorry / Truck LED Lighting Power Distribution Illuminated Taxi Sign Military Vehicle Datacoms Cherry Pickers Wheel Diagnostic Equipment Off Road Vehicles
Quad-bike Control Panel
Glove Compartment Light
Pressure Washers
Vehicle Tail Lift and Controls

Switches



- Vandal Resistant, Rocker & Toggle
- IP66, IP67 & IP68 sealed versions - Illuminated & Non-Illuminated options
- Front & rear panel mounted versions
- Choice of bezel styles & sizes, panel cut-outs, actuators & switching circuits

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts - IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

900 Series Power



- 32A, 600V ac/dc max rating - 2, 3, 4, 5, 7 & 10 contacts
- IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications
- CCC, UL, CSA & VDE approvals

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

4000 Series Power



- Ratings up to 13A, 600V ac/dc
- 3. 8 &12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL. CSA & VDE approvals

6000 Series Ethernet









- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- Quick 30° turn locking mechanism

Battery Holders







- AAA, AA, C, D & PP3 battery sizes
- Accommodating 1, 2, 3 or 4 cells
- IP67 sealed versions
- Suitable for PCB mounting
- Panel mounting versions

Enclosures



- 3 sizes available
- IP67 rated Dust & Waterproof
- ABS or Flame Retardant Polycarbonate
- Mounting posts & slots for PCB
- M20 thread cable glands & wall mounting brackets

Medical.

High performance and dependability are crucially important in medical technologies. This is why Bulgin's reliable and robust components are used in all areas of the medical industry from the production of pharmaceutical drugs to therapeutic, imaging, diagnostics and patient monitoring devices.

With a broad range of interconnect solutions for power or data and specialised antimicrobial switches perfectly suited for medical equipment, medical device OEMs can be confident in our ability to provide ideal solutions for the unique requirements of medical systems and environments.



ALARMS RESET

Applications

Cryogen-free Refrigerator Nebuliser Pharmaceutical Machinery Medical Ventilation Device MRI Equipment Washdown Scales
Dosing Pumps
Dental X-Ray Equipment
Ultrasonic Equipment
Lullaby Warmer

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus. UL. VDE Approvals

Standard Series USB



- USB V2.0 performance
- IP66, IP67, IP68 & IP69K protection - Single & double ended cable
- assemblies & panel mount options - Available in various USB type
- 'A' or 'B' configurations
- 2m. 3m & 5m cable lengths

IEC Connectors



- IEC Connectors. Inlets & Outlets
- Conforming to IEC & EN 60320 Standards - C13, C14, C15, C16, C18, C19 & C20 as
- well as Sheet E. F. H. I & J types available - Variety of mounting styles & terminations
- UL, CSA, VDE & CE approved versions

Rocker Switches



- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals - Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options
- Large choice of bezel styles & sizes, panel cut-outs, actuators & switching circuits

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection - Pin or socket, screw thread locking
- CE, UL, CSA & VDE approvals

400 Series Mini USB



- Sealed Mini-USB cable connectors
- Data rates up to 480Mbs
- IP66, IP67, IP68 & IP69K protection
- USB V2.0 performance
- Front, rear & PCB panel mount options

Power Entry Modules EMI Filters



- Combinations of IEC inlets/outlets. filtered inlets, switches, fuse holders, voltage selectors & indicators available - Compact single rectangular mounting
- hole, flange fixing alternative available for security of screw fixing - Vertical & horizontal arrangement
- Single or double pole variants







- High performance IEC filtered inlets
- Current ratings from 1 to 10 amps
- Single or twin fused types
- Flange, snap to panel or base / bulkhead mounting options
- 6.3mm tabs



Topside Subsea	3
	3



Topside

With demand for the world's natural resources increasing, so too are the challenges facing the Oil and Gas industry. Harsh conditions such as pressure, extreme temperatures, vibrations and shock explosions are some of the common impediments impacting this sector. In an industry with such high-stakes whereby downtime or accidents can have the most catastrophic of consequences, high-performance and extremely reliable solutions are fundamental to prevent this from occurring in both topside and subsea applications.

Bulgin has a variety of solutions to deal with these challenging environments. For instance our Atex Zone 2 and IP rated connectors are perfectly suited to withstand the challenges of explosive and hazardous environments which constantly affect topside systems. We also have the knowledge and in house expertise to provide you with bespoke custom solutions for the most challenging of subsea applications – typified by our deep sea ROV tether connector.

Applications

Pipe Inspection System Industrial Pressure Washer Security Video Monitoring Oil Rig Surveillance Control Units Pump Motors

Piezo Switches



- Extremely robust: resistant to dust, dirt, chemicals. water & contaminants
- Sealed to IP68 & IP69K
- 16, 19 or 22mm diameter
- Millions of cycles/actuations
- Illuminated & non-illuminated options

Vandal Resistant Switches







- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

EXPlora Series







- Ratings up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP67 & IP68 protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals
- ATEX Zone 2 & 22

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66. IP67. IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus, UL, VDE Approvals

Subsea



1. The Challenge

In environments where connectors and cables are exposed to high pressures and submerged in water for extended periods, secure and waterproof electrical connections are vital for ensuring that installations can be easily assembled, modified and maintained.

As pioneers in environmentally sealed connectors, Bulgin was approached by the largest manufacturer of subsea ROVs to develop a connector which combined quick and convenient connectivity with long-term corrosion-resistance.

2. The Solution

Drawing on Bulgin's extensive expertise in environmental sealing, the ROV Tether Connector is a custom solution that provides a quick yet secure coupling and locking mechanism.

It can withstand demanding subsea conditions such as high pressures and extreme temperatures whilst providing uninterrupted power and data, as well as fibre optic signal feeds.

3. The Result

Engineered to prevent problems happening in the first instance, the ROV Tether Connector helps reduce cable termination time and potential downtime for subsea projects.

Dynamic pressure balancing via free flow of dielectric oil from the surface to the connector enables ROVs to operate at subsea depths of up to 7000m.

ROV Tether Connector Specifications



Data & Telecoms.

With the rise of big data, the Internet of Things (IoT), Industry 4.0 and the race for superfast broadband in recent years, the demand for electronic components is higher than ever before. 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.

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



Small Cell Backhaul Systems
Specialist Outdoor Telephones
UPS - Uninterruptable Power Supply
Smart Metering
Portable Satellite Equipment
Satellite Communication Networks

Network Server Cabinets

Telecom Towers

Mobile Network Transmitter

Network Encryption Equipment

Military Vehicle Datacoms

Network Security &

Communication Equipment



Standard Power



- Rating up to 12A, 277V ac/dc
- 2. 3. 4. 6. 7. 9. 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

Mini Series Power







- Ratings up to 10A, 380V ac
- 2. 3. 4. 6 or 8 contacts
- IP67 & IP68 protection
- Plug & receptacle connectors
- UL approved, compact design

6000 Series Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz - IP67. IP68 & IP69K protection
- Shielded system
- Quick 30° turn locking mechanism

Battery Holders







- AAA, AA, C, D & PP3 battery sizes
- Accommodating 1, 2, 3 or 4 cells
- IP67 sealed versions
- Suitable for PCB mounting
- Panel mounting versions

Toggle Switches





- Nylon & Metal variants
- Multiple Lever options
- Ratings up to 20A. 250Vac 277Vac
- IP67 panel seal versions
- Quick Connect, Solder, Screw & PCB termination options

Indicators



- LED, Neon & Filament options
- Panel sealed IP66 & IP67 versions
- Wide choice of bezel sizes & styles
- Multiple termination types - Rugged stainless steel variants

Fuse Holders



- In-line, panel, PCB & base mounting
- Screw or snap fit variants
- PC1, PC2 & PC3 shock protection categories - IP66, IP67 & IP68 sealed versions
- Ideal for 5 x 20mm & 6.3 x 32mm
- fuse sizes

Agriculture.

The agricultural market has many diverse applications requiring a whole host of electronic components. From marine fish farming systems to agricultural equipment, applications in this market are exposed to a wide variety of harsh conditions including water, dust, dirt, chemicals and extreme temperatures.

To meet the challenging needs of the agriculture industry, we have developed an extensive range of robust sealed connectors that ensure optimal protection against external influences in harsh environments.

We also produce numerous types of switches and indicators that are used around the world on heavy duty farming vehicles and equipment.



Livestock Process Control Systems
Agricultural Vehicles
Dairy Analyser
Cattle Feeding Machines
Livestock Heaters
Washdown Scales

Heating Systems
Fish Feeding Systems
Land Surveying Equipment
Bioacoustics Monitoring System
Vehicle Control Joysticks

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts - IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking
- CE, UL, CSA & VDE approvals

4000 Series Power





- Ratings up to 13A, 600V ac/dc - 3. 8 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL. CSA & VDE approvals

Standard Power







- Rating up to 12A, 277V ac/dc
- -2, 3, 4, 6, 7, 9, 12 & 25 contacts - IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

Push Buttons



- Miniature, round, rectangular & vandal options available
- Domed, low & prominent profiles
- IP66, IP67 & IP68 sealed versions
- Illuminated & non-Illuminated options - Front & rear panel mounted versions

Rocker Switches





- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options - Illuminated & Non-Illuminated options
- Large choice of bezel styles & sizes, panel cut-outs, actuators & switching circuits

Toggle Switches





- Nylon & Metal variants
- Multiple Lever options
- Ratings up to 20A. 250Vac 277Vac - IP67 panel seal versions
- Quick Connect, Solder, Screw & PCB termination options

Indicators



- LED, Neon & Filament options
- Panel sealed IP66 & IP67 versions
- Wide choice of bezel sizes & styles
- Multiple termination types
- Rugged stainless steel variants

Renewable Energy.

Renewable energy technologies operate in some of the harshest environments on the planet. Extreme temperatures, UV exposure, vibrations and water all pose complex challenges in establishing and keeping renewable energy systems operational. With more moving parts than other renewable energy systems, wind turbines in particular require extremely robust connectors to cope with such extreme conditions.

Thoroughly tested and designed specifically to operate reliably in harsh conditions, Bulgin's rugged power and data connectors are the ideal solutions for green and renewable energy applications including wind and solar energy systems.

Applications

Solar Power Inverters
Solar Lighting Panels
Solar Battery Enclosures
Solar PV Combiner Boxes
Wind Turbine Vibration Monitoring System
Solar Water Pump Controller

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP66, IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2. 3. 4. 6. 8. 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking - CE. UL. CSA & VDE approvals

4000 Series Power







- Ratings up to 13A, 600V ac/dc
- 3. 8 &12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL. CSA & VDE approvals

900 Series Power

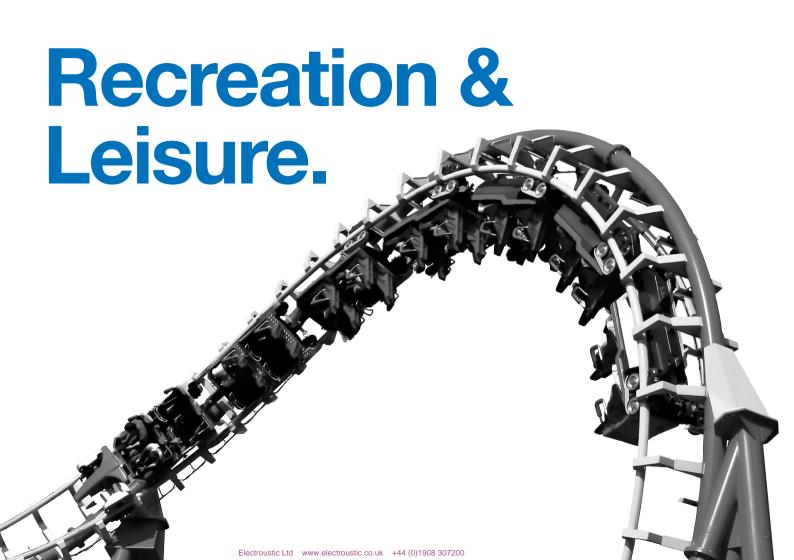


- 32A, 600V ac/dc max rating
- 2, 3, 4, 5, 7 & 10 contacts
- IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications CCC, UL, CSA & VDE approvals

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus, UL, VDE Approvals



Water Systems	4
Entertainment & Hospitality	4



Water Systems

Whether indoor or outdoor, water systems such as swimming pools and water fountains require highly ruggedized and sealed solutions. Our robust connectivity solutions power water features in some the world's most renowned hotels and amusement parks. But that's not where our sealed capabilities end. We also have numerous sealed switches and fuse holders in operation worldwide to compliment systems utilising our watertight connectors and provide a truly comprehensive sealed solution.

Applications

Pool Heating Equipment
Filtration Box
Hotel Water Fountains
Water Quality System
Motorised Swimming Pool Cover
High End Jacuzzi
Water & Light Show Equipment
Robot Pool Cleaning Equipment

Rocker Switches



- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options
- Large choice of bezel styles & sizes, panel
- cut-outs, actuators & switching circuits

900 Series Power



- 32A, 600V ac/dc rating
- -2, 3, 4, 5, 7 & 10 contacts
- IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications
- CCC, UL, CSA & VDE approvals

Standard Ethernet







- Cat5e RJ45 Ethernet Connectors
- Data rates up to 100MHz
- IP67, IP68 & IP69K protection
- Shielded system
- High noise immunity & EMI protection

6000 Series Power



- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating & release connectors
- cULus. UL. VDE Approvals

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts
- IP66, IP67, IP68 & IP69K protection
- Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

Fuse Holders



- In-line, panel, PCB & base mounting
- Screw or snap fit variants
- PC1, PC2 & PC3 shock protection categories
- IP66, IP67 & IP68 sealed versions
- Ideal for 5 x 20mm & 6.3 x 32mm fuse sizes



Entertainment & Hospitality

Power connections and switches are fundamental for activating and controlling a variety of electronic equipment in entertainment and hospitality applications. Whether you require a waterproof power connector for outdoor events and productions or interface components for electrical appliances, we are sure to have the suitable solution for your design and development needs.

Applications

Water & Light Show Equipment
Popcorn Machines
Vending Machines
Champagne Dispensers
Electronic Scoreboards
Event and Stage Lighting
Pool Cleaning Robots
Roulette Machines

Rocker Switches



- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options
- Large choice of bezel styles & sizes, panel cut-outs, actuators & switching circuits

IEC Connectors



- IEC Connectors. Inlets & Outlets
- Conforming to IÉC & EN 60320 Standards - C13, C14, C15, C16, C18, C19 & C20 as
- C13, C14, C15, C16, C18, C19 & C20 as well as Sheet E, F, H, I & J types available - Variety of mounting styles & terminations
- UL, CSA, VDE & CE approved versions

Vandal Resistant Switches







- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options - Front & rear panel mount versions

Standard Power



- Rating up to 12A, 277V ac/dc
- 2, 3, 4, 6, 7, 9, 12 & 25 contacts - IP66. IP67. IP68 & IP69K protection
- IP66, IP67, IP68 & IP69K protections
 Plug & receptacle connectors
- CCC, UL, CSA & VDE approvals

900 Series Power



- 32A, 600V ac/dc max rating
- 2, 3, 4, 5, 7 & 10 contacts
- IP66, IP67, IP68 & IP69K protection
- Single or 3 phase applications
- CCC, UL, CSA & VDE approvals

400 Series Power







- Ratings up to 8A, 250V ac/dc
- 2, 3, 4, 6, 8, 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection - Pin or socket, screw thread locking
- CE, UL, CSA & VDE approvals

4000 Series Power







- Ratings up to 13A, 600V ac/dc
- 3. 8 &12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, bayonet locking
- UL, CSA & VDE approvals

Appliances.



Commercial Goods	4
Consumer Goods	5



Commercial Goods

From hospitality applications to catering and retail equipment, we have a broad portfolio of connectivity solutions and user interface components to help engineers design new, innovative appliances and goods for commercial use.

Applications

Rotisserie Ovens
Vending Machines
Kitchen Climate Control System
Food & Drink Cleaning Machines
Air Compressor
Awning Motors
Electric Insect Control Device
Commerical Coffee Machines
Champagne Dispensing Machines
Commercial Freezers
Commercial Kitchen Grills

Rocker Switches



- Ratings from 10A, 250Vac 20A, 277Vac - Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options - Large choice of bezel styles & sizes, panel
- cut-outs, actuators & switching circuits

Vandal Resistant **Switches**







- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

Piezo **Switches**







- Extremely robust: resistant to dust. dirt. chemicals, water & contaminants
- Sealed to IP68 & IP69K
- 16. 19 or 22mm diameter
- Millions of cycles/actuations - Illuminated & non-illuminated options

IEC Connectors



- IEC Connectors. Inlets & Outlets
- Conforming to IEC & EN 60320 Standards - C13, C14, C15, C16, C18, C19 & C20 as well as Sheet E. F. H. I & J types available
- Variety of mounting styles & terminations
- UL, CSA, VDE & CE approved versions

Mini Series Power



- Ratings up to 10A, 380V ac
- 2, 3, 4, 6 or 8 contacts
- IP67 & IP68 protection
- Plug & receptacle connectors
- UL approved, compact design

Battery Holders



- AAA, AA, C, D & PP3 battery sizes
- Accommodating 1, 2, 3 or 4 cells
- IP67 sealed versions
- Suitable for PCB mounting
- Panel mounting versions

Refrigerator Door Switches



- Door switches
- Switch rating from 0.2A, 250Vac up to 5A, 250Vac
- Splash resistant variants
- Choice of actuators
- Momentary on & momentary off switching



Consumer Goods

The modern day home is filled with many consumer electronics and devices that require reliable electronic components.

With smart homes becoming increasingly connected along with the growth of the consumer electronics market, our range of power connection and switch solutions are perfect for meeting the needs of many small or large domestic appliances including brown and white goods as well as outdoor gardening equipment.

Applications

Popcorn Machine Mini Drinks Cooler **Professional Hairdryer** Cooker Oven **Vacuum Cleaner High End Jacuzzi Portable Alarm Systems Coffee Machines Food Mixer Chest Freezer Amplifiers**

Rocker Switches



- Ratings from 10A, 250Vac 20A, 277Vac
- Push-on, solder & PCB terminals
- Splash resistant & antimicrobial options
- Illuminated & Non-Illuminated options
- Large choice of bezel styles & sizes, panel cut-outs, actuators & switching circuits

Vandal Resistant Switches



- High resistance to wear & tear, corrosion & harsh use
- Domed, low & prominent profiles
- IP66 & IP68 sealing versions
- Illuminated & non-illuminated options
- Front & rear panel mount versions

IEC Connectors



- IEC Connectors, Inlets & Outlets
- Conforming to IEC & EN 60320 Standards
- C13, C14, C15, C16, C18, C19 & C20 as well as Sheet E, F, H, I & J types available - Variety of mounting styles & terminations
- UL, CSA, VDE & CE approved versions

Push Buttons



- Miniature, round, rectangular & vandal options available
- Domed, low & prominent profiles
- IP66. IP67 & IP68 sealed versions
- Illuminated & non-Illuminated options
- Front & rear panel mounted versions

400 Series Power



- Ratings up to 8A, 250V ac/dc
- 2, 3, 4, 6, 8, 10 & 12 contacts
- IP66, IP67, IP68 & IP69K protection
- Pin or socket, screw thread locking
- CE, UL, CSA & VDE approvals

Refrigerator Door Switches



- Door switches
- Switch rating from 0.2A, 250Vac up to 5A, 250Vac
- Splash resistant variants
- Choice of actuators
- Momentary on & momentary off switching



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