Rapid Response Team.

With the introduction of a dedicated Rapid Response Team, Bulgin can provide fast turnaround times on bespoke customer projects and requirements. Ranging from the manufacturing of cable assemblies to bespoke product customisations and developments.

With in-house rapid prototyping technologies, including Silicon Moulding and 3D SLS Printing, Bulgin can produce working samples for customer evaluation and testing. Never before has the process of enquiry to sample delivery been so seamless.

New capabilities to meet customer needs:

- **Cable Assembly**
- **3D Printing**

Providing Rapid Turnaround Times on Bespoke Custom Projects and Requirements
Cable Assembly.

Considering using Bulgin connectivity solutions for your project? Why not use our rapid response department to quote, sample and deliver production cable assemblies as a single connectivity solution. Bulgin can pre-terminate and over-mould cables to your chosen connector range and add other connectivity components to deliver a custom finished harness for your needs.

Customisation

From cable preparation to complex projects each and every project is created bespoke to your requirements. Cable assemblies are customised, incorporating custom lengths, colours and special pin-outs in our designs, through to fully customised connectors, raw cable, overmoulds and cable looms.

Finding a ready-made cable assembly to fit your exact project requirements can prove difficult, if not impossible. However, custom cable assemblies are manufactured as per the specifications. As an example, cables can be colour coded or labelled in order to reduce the chance of elements being installed incorrectly and guaranteeing a perfect fit from production through to implementation.

Reliability

Assemblies are tested guaranteeing reliability and compliance, a variety of appropriate tests are applied depending on cable assembly type such as: short or open circuit, intermittent circuit, and miss-wiring.
3D Printing.

3D printing enables the physical demonstration of a new product to customers and investors instead of leaving it to their imaginations, therefore reducing the risk of information being misunderstood or lost during communication. It also allows for cost-effective market testing, obtaining feedback from potential customers and investors on a tangible product, without the risk of large upfront expenditures for manufacturing.

Prototyping

Whilst rapid prototyping is one of the most well-known applications of 3D printing, recent developments in both the machines abilities and the materials available mean that Bulgin is now capable of producing the most realistic models with outstanding print quality and lifelike details.

The nature of 3D printing allows the step-by-step assembly of the part or sub-assembly, which guarantees enhancement of the design and better quality parts/sub-assemblies. Moreover, a physical prototype can be tested and if flaws are found, the CAD file can be modified and a new version printed out.

Flexibility

With traditional manufacturing processes, each new part or change in part design, requires a new tool, mould, die, or jig to be manufactured to create the new part. 3D printing allows the creation and manufacture of geometries impossible for traditional methods to produce, either as a single part, or at all.

3D printing, in contrast to traditional methods, enables the inclusion of multiple materials into a single object, enabling an array of colours, textures, and mechanical properties to be mixed and matched.
Uniquely Tailored Solutions.

From cable assemblies through to custom deep sea connectors and box builds, Bulgin is able to provide bespoke services and solutions that are uniquely tailored to customer’s individual needs, giving you the very best results when we take an original concept from design through to manufacture.

Response In 24 Hours  Bespoke Solutions  Rapid Turnaround

Case Studies:

Student Robotics
Connectors for purpose built ROVs at California based High School.

Floating Aerators & Fountains
Creating secure and reliable connections within a water fountain application.

Agricultural Monitoring
Using modern technology to solve modern challenges.

Subsea ROV
Using modern technology in the oil and gas industry.

ANPR Cameras
Using ANPR cameras in all weather conditions.

Water Fountains
Connections for state-of-the-art water features.

Have a question or project enquiry you'd like to talk to us about? info@bulgin.com
Agricultural Monitoring.

The Challenge: Using modern technology to solve modern challenges.

In order to improve farming efficiencies and processes, the agricultural industry has become more precise and technologically advanced than ever before. Now, technology companies are eyeing the agricultural sector with the intention of pushing back the boundaries to make farming more productive than ever before.

Our Approach

When Bulgin’s team was asked in January 2016 if it would be possible to mould the EEPROM device into the connector without causing any damage to the electronics, they first embarked upon a feasibility study to determine whether any issues could arise from moulding the device into the connector.

Throughout this process, the team identified and assessed the risks and potential problems that could arise as a result of the integration. After rigorous tests, Bulgin sent some trial prototypes for field-testing.

The Implementation

The ultimate result of this collaboration is that users of the Agricultural system can easily pair up each sensor to the correct connector on the harness, eliminating the possibility of misuse or incorrect cables plugged into sensors on the fields.

While the connectors were in the testing phase, Bulgin designed a test box that could be plugged into a computer to check the status of the connectors and determine if the EEPROM was connected and wired correctly.

The Results

Changing Agricultural Practices for the Better. The intelligent connector project enabled a way to develop and deliver a solution in a cost-effective way – which has ultimately proven to be beneficial to their clients.

“With intelligent connectors you could reprogram them from a distance and tell them to do something different.”
Custom Solution Case Study

Aqua Control Water Fountains.

The Challenge: Create secure and reliable connections within a water fountain application.

In order for Aqua control to test and put their fountains into practice it is imperative that they have secure connections that can withstand harsh environments. Continuous connection and disconnection as the fountains are brought in and out of the water is also common practice so reliability is absolutely fundamental.

Our Approach

After seeing an advertisement for Bulgin, Aqua Control, from Spring Valley, IL, asked Bulgin to send sample connectors to Aqua Control, in the US, at a time where there was no US distributor.

It was made clear that whichever connector Aqua Control chose would be dealing with fresh water, small ponds, large salt water bays, ocean salt grade water and chemical applications, so we had to send samples of our connectors. Supporting the water fountains manufacturers throughout the testing process, the company settled on the 900 Buccaneer Series.

The Implementation

This is perfect for industrial pumps, motors and fans – exactly what Aqua Control needed. The connector is ideal for high power ratings, reliable, robust and secure power connections. Due to the quick disconnect feature, this meant for Aqua Control that fountain maintenance and management can be completed more frequently and efficiently.

The Results

The most important result of this collaboration is that the quality and reliability of the overall product for the end consumer have been increased. Creating a secure connection for the harsh environments that the electrical connections endure within the fountains was the real aim. The company is now able to test and quality check the fountains more efficiently and frequently thanks to the Bulgin connector.

“...it’s nice to know that the connector is one point that we don’t see failures.”

- Rob Hank, Design Engineer at Aqua Control
Do you have a question or a project enquiry that you’d like to talk to us about?

Contact Us