# Connectivity

# **Connection Technology for Automation**

Powerful sensor technology also requires powerful connection technology. For this reason, Pepperl+Fuchs offers a complete solution with the connectivity product portfolio, in which these two components are perfectly matched in every detail.

#### **Harmonized Systems from a Single Source**

Decades of practical experience as a pioneer and innovator in sensor technology have resulted in a portfolio for connection technology that is perfectly matched to the requirements of automation. Harmonized systems increase productivity and increase the availability of machines and plants.

#### **The Highest Quality in Any Environment**

Since sensors can only perform as intended when they are connected optimally, Pepperl+Fuchs places particular emphasis on quality and reliability in the field of connectivity. Connection technology is therefore subjected to an automated, 100% functional test. State-of-the-art production technologies at the production site in Hungary allow zero-tolerance for defects, guaranteeing smooth and long-lasting service.



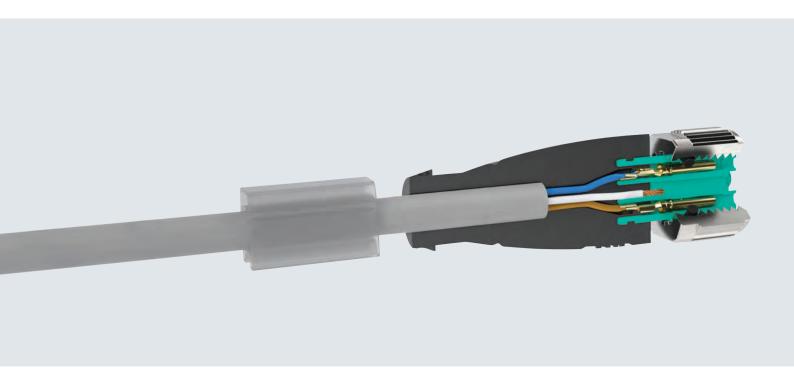




### Sensor-Actuator Cables

# Standardized and Perfected for an Extremely Long Service Life

Developed from decades of application experience, the sensor-actuator cables from Pepperl+Fuchs guarantee process reliability through the highest load capacity and service life. In addition, they are well-considered down to the last detail and enable quick and convenient assembly by hand with a tool.



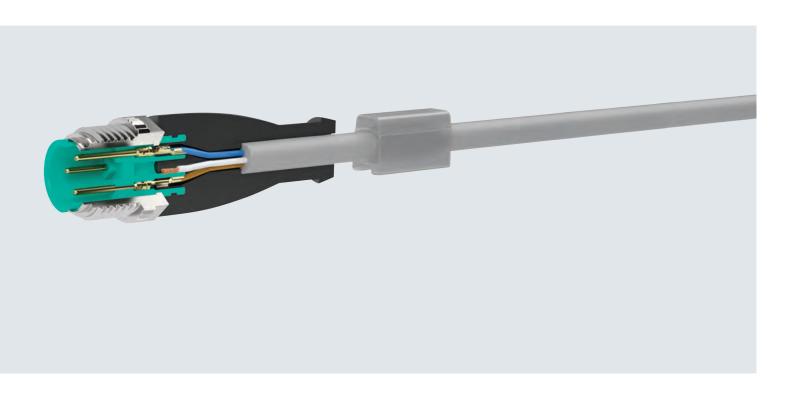
#### Your Benefits at a Glance

- Screw plug with knurling and hexagonal shape for quick and convenient installation by hand or with a tool
- Captive seal made of FKM for maximum sealing and media resistance
- O-ring is protected by integrated fixed stop for torque values from 0.4 Nm to 1.0 Nm
- High load capacity due to optimized vibration protection and gas-tight crimp connections
- Double creepage distance and protection up to IP68 and IP69K for use even in harsh industrial applications

#### **Large Selection of Available Cable Qualities**

No two applications are alike. Each operating environment has its own set of requirements. The mechanical and chemical properties of the connection technology used are a crucial aspect in determining the solution. Pepperl+Fuchs offers exactly the cable quality that you need.

- PVC—Solid and Economical
- PUR—Durable and Highly Flexible
- PUR U—Highly Flexible with UL Approval
- PUR A—Resistant to welding sparks for the automotive industry
- PUR O—Robust for demanding outdoor applications
- PUR-R—Highly flexible for demanding robotics applications
- STOOW—Designed Specifically for the American Market
- POC—Specifically for the welding industry



#### **Technical Features**

#### **Mounting without a Datasheet**

- Pin assignment is printed in the contact carrier
- Coding easily recognizable through clear arrow on the handle body

#### **Practical and Quick Mounting**

- Quick attachment by hand or tool due to combination knurling and hex nut
- Integrated fixed stop for protection of the O-ring and wide torque ranges
- Easy status diagnosis even with bright extraneous light thanks to high-contrast LED variants

#### 100° Angle for Longer Service Life

- Strain relief of individual wires for a longer service life
- Highly prominent corrugated tube latching mechanism allows the use of additional protection for demanding applications

#### **High Durability even in Harsh Industrial Applications**

- High vibration resistance due to optimized vibration protection
- Double creepage distance for increased tolerance against contamination even when open

## Connectivity Product Portfolio

# **More Than Just Connectors and Cables**

Fully overmolded sensor-actuator splitters represent the ultimate standard in robustness. Field-attachable connectors provide the individual solution for your application. In addition to connectors and cables, Pepperl+Fuchs offers components which also guarantee long-term functional reliability and machine availability.









#### **Sensor-Actuator Splitters**

Splitter enabling you to easily merge two signals to one slot. Also suitable for cost-effective looping of bus signals with minimal wiring.

- Fully overmolded housing in accordance with IP68
- With rear sockets or molded cables
- Various cable lengths available

#### Field-Attachable Connectors

A wide range of connectors suitable for a diverse range of applications. Also ideal for easy repair or plant expansion on-site.

- Plastic or metal version
- Shielded and unshielded versions available
- Different connection standards including M8, M12, 1/2NPT, 7/8" and others, with screw technology or QUICKON technology
- Enable precise configuration on-site

#### **Junction blocks**

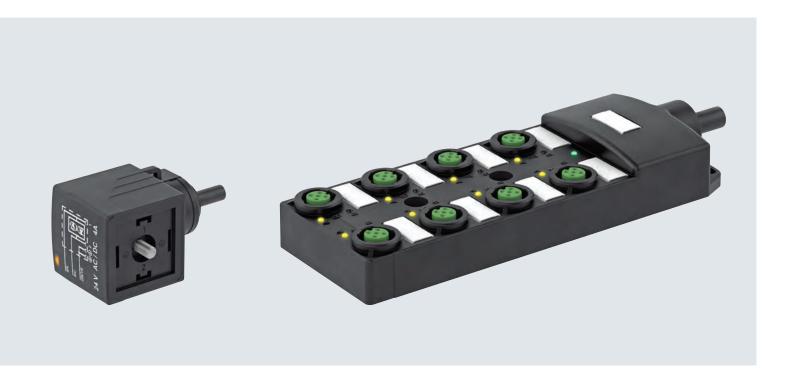
M8 and M12 distributor with a molded master cable for reduced installation costs.

- Fully encapsulated housing in accordance with IP68
- 100 % tested for complete reliability
- Integrated LEDs for easier diagnostics
- Large socket spacings (M12) or offset sockets (M8) for easy fitting of connection
- Also available as an especially robust outdoor version

#### Receptacle

Signal routing from the control cabinet directly into the field. Also ideal as a flexible, separable connection for service engineers.

- Permanent impermeability in accordance with IP67/IP68
- Different connections
- Available with PG or metric thread
- Also available as a positionable version



#### **Data Connectors**

Fieldbus cables enable you to create a permanently reliable network between the different components of an automation system.

- PROFIBUS
- PROFINET/Ethernet
- CAN/DeviceNet

#### **Valve Connector**

As a system provider, Pepperl+Fuchs provides ready-made components with exceptionally robust designs.

- Fully overmolded housing design in accordance with IP68
- Overmolded, captive seal
- Different circuits for secure EMC suppression
- Different versions in accordance with DIN and industry standard
- Also available as a robust outdoor version with stainless steel screw and silicone seal

#### **Tool**

Speed and precision are also crucial for installation and maintenance. Pepperl+Fuchs therefore also offers accessories that facilitate and speed up these routine tasks, such as the mounting aid for connectors to allow the secure attachment of connectors by thumbscrew to exactly the right torque.

#### **Industry-Specific Connectivity Solutions**

Each industry has individual requirements for connection technology. In addition to universal standard products, Pepperl+Fuchs therefore also offers specialized solutions tailored to individual requirements. One example is the Mobile Equipment Connectivity (MEC) series, which includes DEUTSCH plugs and other components specially designed for mobile use under extreme outdoor conditions.