

# M12 CIRCULAR

## M12 Circular Connectors



- ▶ **High Reliability**
- ▶ **Outer body diameter 15mm**
- ▶ **For cable diameters up to 10mm**
- ▶ **Over-moulded and free assembled versions**

### COMPACT DESIGN

The Smiths Connectors M12 series has been specifically developed for applications where space or weight are at a premium. The compact and robust design incorporates hyperboloid contacts to provide an unrivalled performance. The new design features a unique side loading contact retention system that provides a positive contact retention and simplifies the assembly process. This simplified approach to contact assembly not only makes the product series very user friendly, but also reduces assembly times.

Within a common housing design, Smiths Connectors M12 series includes insert options from 3 to 8 ways, with both crimp and solder contact terminations available.

### 360° ELECTROMAGNETIC SHIELDING

Smiths Connectors M12 series, are ideal for communication applications, including factory automation, drive motors, machine tools, robots, conveyor systems, handling machines and elevators, etc. They all feature outstanding protection against electromagnetic interference through a full 360° screen connection.

### OPTIMISED DESIGN

A complete range of options and accessories are available as standard, making the series suitable for a wide range of applications. In addition, the total number of components used in the design has been optimised to reduce stocking requirements on free assembled versions.

### HYPERTAC HYPERBOLOID CONTACT

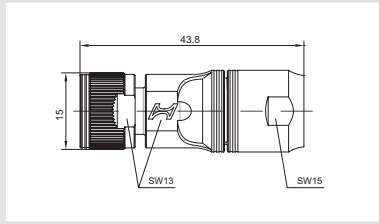
Hyperboloid contact technology is ideally suited for use in harsh and demanding environments where high reliability and safety are critical. The electrical and mechanical characteristics of the contact ensure unrivalled performance in terms of reliability, number of mating cycles, low contact forces and electrical stability over time.

These performance characteristics provide a real commercial benefit in terms of the total installed cost of ownership.

# TECHNICAL DRAWINGS

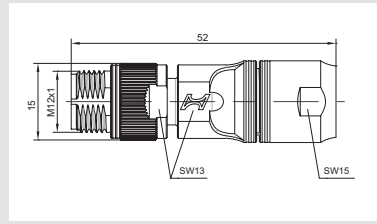
## PART WPCA

Straight female cable plug



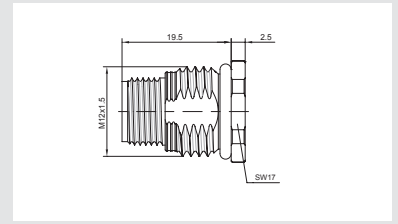
## PART WRCA

Straight male cable plug



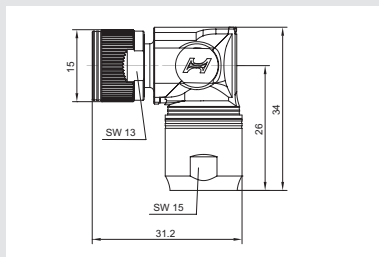
## PART WEBA

Receptacle



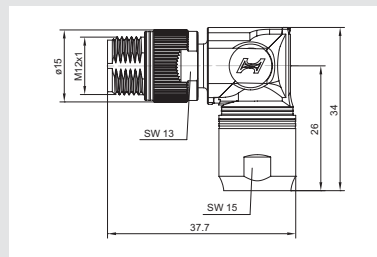
## PART WPEA

90° female cable plug



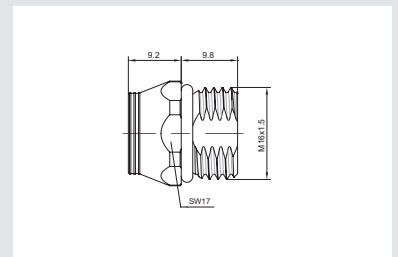
## PART WREA

90° male cable plug



## PART WDAA

Panel feed through



For more types please contact factory

# M12 CONNECTORS

## TECHNICAL CHARACTERISTICS

### FEATURES

- ▶ Overmoulded and free assembled versions
- ▶ Contact assembly with sideway clip insulator design
- ▶ Fire and smoke compliance UL94 V0/HB
- ▶ Robust housings
- ▶ Environmental level IP67
- ▶ For cable diameters up to Ø 10mm
- ▶ 360° electromagnetic shielding
- ▶ Crimp and solder contacts
- ▶ Machined and stamped contacts
- ▶ Very compact design Ø 15mm
- ▶ Fluid resistance against oil, hydrolysis, microbes
- ▶ Vibration resistance acc. to DIN EN 60068-2-64
- ▶ RoHS compliant

### SPECIFICATIONS

- ▶ **Coding:** A-code, D-code
- ▶ **Shell:** CuZn, zinc die-cast, plastic
- ▶ **Shell plating:** nickel-plated
- ▶ **Sealing:** FKM
- ▶ **Insert:** PA
- ▶ **Contact size:** Ø 1mm / Ø 0,8mm
- ▶ **Contacts:** CuZn alloy, tin bronze
- ▶ **Contact plating:** gold-plated and partly gold-plated
- ▶ **Current rating:** 4 A (2 ... 5 contacts)  
2 A (6 ... 8 contacts)
- ▶ **Voltage rating:** 90V acc. NF F 61-030  
250V acc. DIN 61076-2-101 (4 contacts)  
60V acc. DIN 61076-2-101 (5 contacts)  
30V acc. DIN 61076-2-101 (8 contacts)
- ▶ **Operating temperature:** -40°C to 125°C

smiths connectors

FOR MORE INFORMATION | [smithsconnectors.com](http://smithsconnectors.com) |    