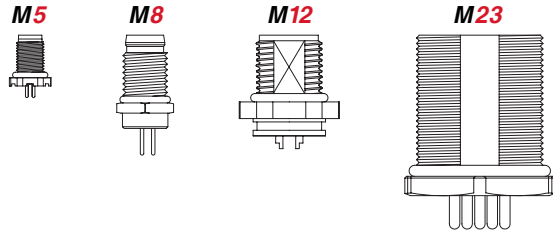


## Your connectivity solution

ATTEND M-series circular connectors cover an extensive range of M5/8/12/23 connectors supporting customers looking for solutions based on this international standard. This series has been proven as very reliable connectivity of choice for applications such as industrial automation, ethernet system, intelligent transportation system, Traffic safety system and outdoor devices for many years.



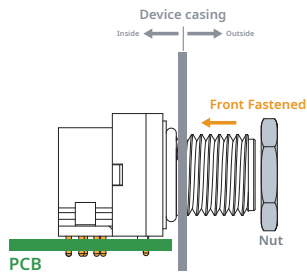
▲ The differentiation between M5, M8, M12, M23 circular connector

## Mounting options

To maximize the commonality of customer's needs, the M series connectors cover different mounting options including the front and rear fastened.

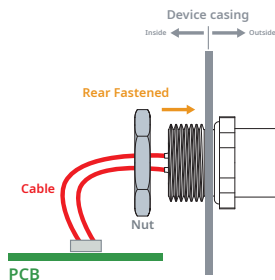
### Front Fastened

Since the nut is mounted outside of the device casing, the user can easily assemble and maintain the equipment without disassembling the entire device.



### Rear Fastened

While the nut fastened inside the device, the user is able to ensure the security and avoid damage of the system.



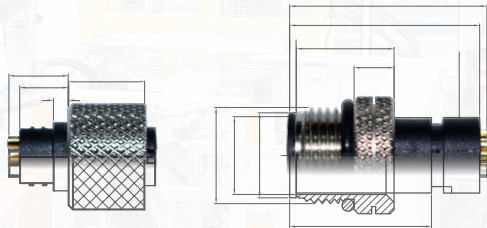
# M-SERIES CIRCULAR CONNECTOR

WATERPROOF CONNECTIVITY SOLUTIONS



## What is a circular connector?

It applies to any connector possessing multi-pin interconnects with cylindrical contact housings and circular contact interface geometries. Designers often choose circular connectors because the systems are easy to connect and disconnect, which allow a wide range of voltages and currents. It is reliable rugged construction which offers an easy way to protect the system against water and dust.



▲ A pair of M12 circular connector



## M5 220 series

M5 circular connector is the most compact type in the M series. The straight and right angle types are available for your design needs. With an IP protection rating of IP67 and screw cap of durable design, this M5 circular connector type becomes the perfect solution for medical devices, automotive sensors, industrial controllers as well as embedded systems exposed to extreme working environments.



220A-XXFRF 220A-XXMSF 220A-XXFOO 220A-XXMOO

## M8 219 series

Standardized M8 circular connectors thread is widely used in sensors installation, industrial machinery, and automation applications. An IP67 protection rating ensures secure and reliable protection against water and dust.



219A-XXMAR 219A-XXFAF 219A-XXFOO 219A-XXMOO

## M23 221 series

Most commonly used in large industrial device automation or commercial applications, the M23 series provides highly reliable performance for the signal and power transmission. The IP67 protection ensures the communication never interrupted.



221A-04MOO 221A-05FOO 221A-05FSF 221A-05MF0

## M12 216 series

M12, the most popular type of all series, offers support for high power and high frequency. Thanks to its IP67 rating and robustness, it is considered to be the best option for high speed signal transmission and power feeding solution for industrial and rugged applications under severe environments. In addition, its coding defined under the standards coding helps preventing incorrect mating connection.



	A code	D code	X code
<b>Contact</b>	2 - 12	4	8
<b>Rated Voltage (AC or DC)</b>	250V (2-4 contacts) 60V (5 contacts) 30V (6-12 contacts)	250V	125V
<b>Rated Current</b>	4A (2-5 contacts) 2A (6-8 contacts) 1.5A (9-12 contacts)	4A	5A
<b>Application</b>	Connecting sensor Actuators Factory automation (EU)	Industrial Ethernet RJ45 replacement	High speed 10 Gbit/s rugged industrial



M12 A Code, PCB through-hole Type	M12 D Code, 4 Pin Female	M12 X Code, 8 Pin
<b>Male</b> 4 Pin 216A-04MSF 5 Pin 216A-05MSF 8 Pin 216A-08MSF 12 Pin 216A-12MSF 8 Pin, Right Angle 216A-08MRF	<b>Female</b> 5 Pin 216A-05FSF 8 Pin 216A-08FSF 12 Pin 216A-12FSF 8 Pin, Right Angle 216A-08FRF	<b>Solder Type, Front Fastened</b> 216D-04FAF <b>DIP Type, Front Fastened</b> 216D-04FSF <b>Plug, Overmold with cable</b> 216D-04FOO <b>Male, Plug, For Overmold with Cable</b> 216X-08MOO <b>Female, Solder Type, Front Fastened</b> 216X-08FAF <b>Female, Straight, Front Fastened</b> 216X-08FSF <b>Female, Straight, Rear Fastened</b> 216X-08FSR

## Circular connector cable assembly

M Series waterproof connectors are widely used for industrial automation, building automation and automated control systems. We are ready to provide customized cable solutions based on your request!

