

Circular sensor connectors







M10 cables & connectors (snap-in)

This type of connector is commonly used for small applications in medical and commercial industries. The push-pull cable connector enables a seamless mating process, and is available in both male and female versions with 5 and 9-gold plated contacts. When properly mated, the connection is sealed to an IP65 rating, protecting the connection from the ingress of liquids and debris.

- Degree of protection IP65
- 5, 9 poles are available
- Cable length customized, PUR and PVC cable for options

M10

Quick Search Table

Locking type	Snap-in		Snap-in	
Rated Current	2A		1A	
Voltage	60V(A/C) , 72V(D/C)		30V	
Wire Gauge / size	26AWG / 0.14mm ²		26AWG / 0.14mm ²	
Pin layout				
	Male	Female	Male	Female

M10 cables & connectors

05 Pins
09 Pins

Molded Cable



Male Molded Cable Straight Snap-in Type	78	-	78	-
Female Molded Cable Straight Snap-in Type	-	79	-	79

Panel Mount Type



Male Panel Mount Solder Type Rear Fastened	80	-	80	-
Female Panel Mount Solder Type Rear Fastened	-	81	-	81



Male Panel Mount PCB Type Rear Fastened	82	-	82	-
Female Panel Mount PCB Type Rear Fastened	-	83	-	83

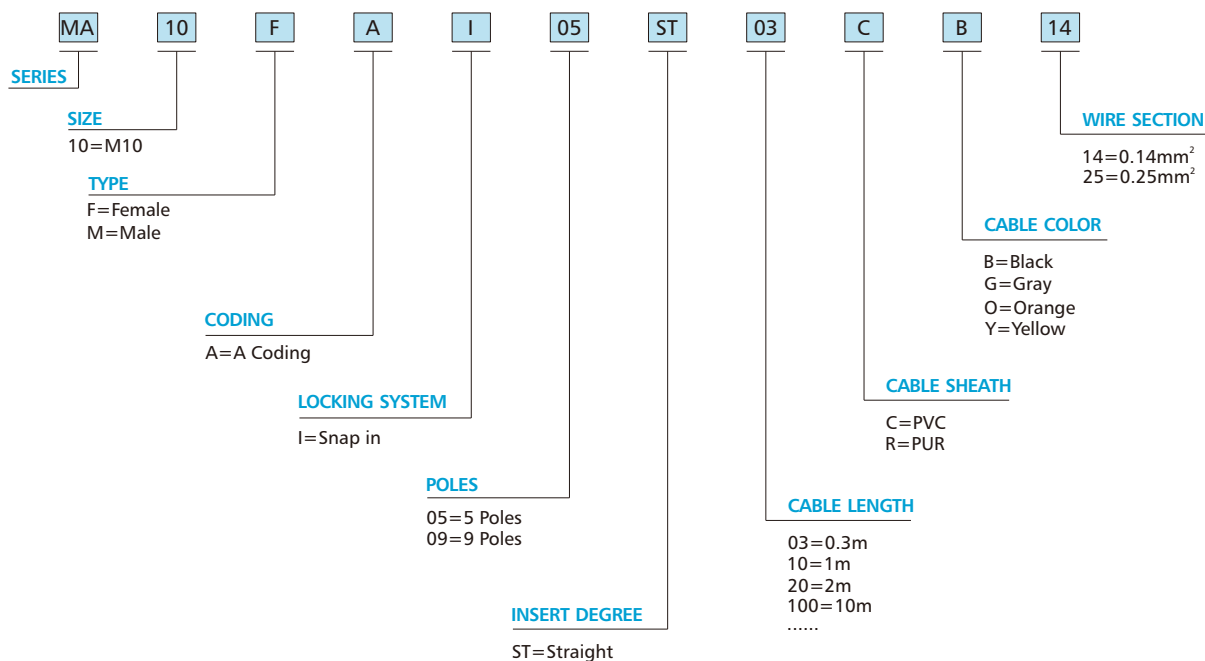
Splitter Connector



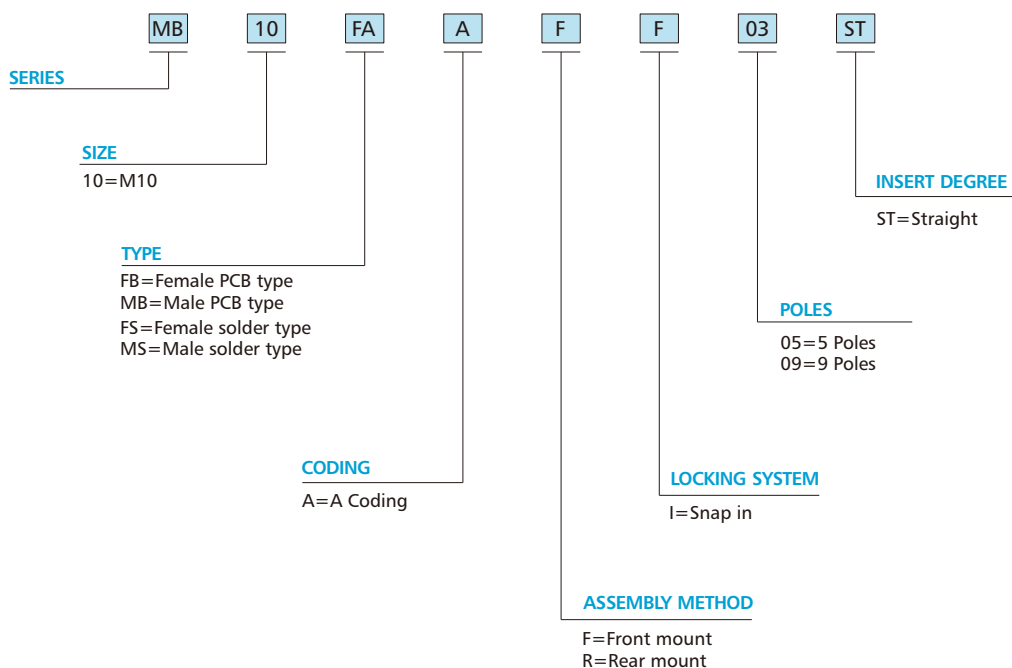
T-Splitter Female-Male-Female	84	84	84	84
Protection Cap for Female Connector	-	85	-	85

How to Order Part Number

■ M10 Series with cable molded



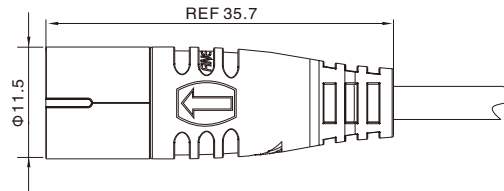
■ M10 Series Assembly / Panel-mount type



M10 Male Molded Cable, Straight , Snap-in Type

- Connector series: M10
- Gender: Male
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: MA10MAI**STXXXX14

** refers to pins number
X refers to cable specification



RoHS

General information

Ambient temperature:	-40°C ~ +80°C(fixed installation) -20°C ~ +80°C(flexible installation)
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU

Insulation resistance:	≥20MΩ
Contact resistance:	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts	Rated current	Voltage		Wire gauge / size		Wire insulation	Cable jacket	Part No.
		A/C	D/C	AWG	mm ²			
05 pins 	2A	60V	72V	26AWG	0.14	PVC	PVC	MA10MAI05STXXCB14
							PUR	MA10MAI05STXXRB14
09 pins 	1A	30V	30V	26AWG	0.14	PVC	PVC	MA10MAI09STXXCB14
							PUR	MA10MAI09STXXRB14

Note: X refers to cable length

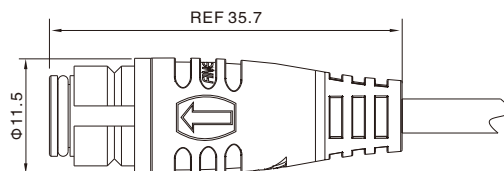
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 77 for products' part number encoding rule.

M10 Female Molded Cable, Straight, Snap-in Type

- Connector series: M10
- Gender: Female
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: MA10FAI**STXXX14

** refers to pins number
X refers to cable specification



RoHS

General information

Ambient temperature:	-40°C ~ +80°C(fixed installation) -20°C ~ +80°C(flexible installation)
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Seal / O-ring:	FKM

Insulation resistance:	≥20MΩ
Contact resistance:	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Wire insulation	Cable jacket	Part No.
			A/C	D/C	AWG	mm ²			
05 pins		2A	60V	72V	26AWG	0.14	PVC	PVC	MA10FAI05STXXCB14
								PUR	MA10FAI05STXXRB14
09 pins		1A	30V	30V	26AWG	0.14	PVC	PVC	MA10FAI09STXXCB14
								PUR	MA10FAI09STXXRB14

Note: X refers to cable length

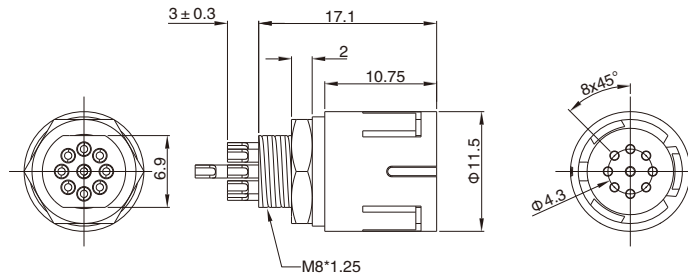
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 77 for products' part number encoding rule.

M10 Male Panel Mount, Solder Type, Rear Fastened

- Connector series: M10
- Gender: Male
- Locking type: Snap-in
- Mounting type: Rear fastened
- Part No.: MB10MSARI**ST

** refers to pins number



RoHS

General information

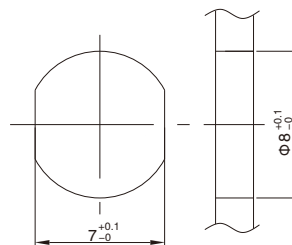
Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Coupling nut:	Brass with nickel plated

Insulation resistance:	≥ 20MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts	Contacts termination	Rated current	Voltage		Wire gauge / size		Wire insulation	Part No.	
			A/C	D/C	AWG	mm ²			
05 pins		Solder version	2A	60V	72V	26AWG	0.14	PVC wire or customized	MA10MSARI05ST
09 pins		Solder version	1A	30V	30V	26AWG	0.14	PVC wire or customized	MA10MSARI09ST

Panel Cut-out Dimensions



Panel cut-out

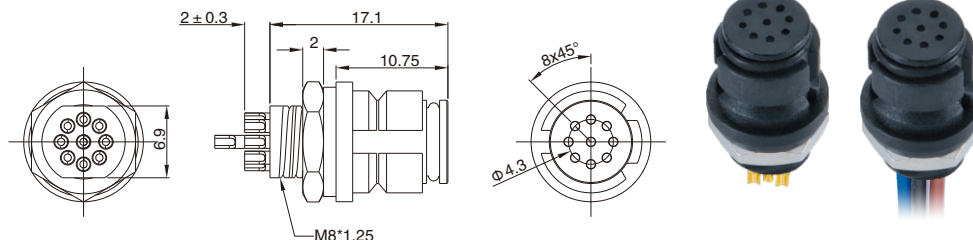
Remarks

- Please refer to Page 77 for products' part number encoding rule.

M10 Female Panel Mount, Solder Type, Rear Fastened

- Connector series: M10
- Gender: Female
- Locking type: Snap-in
- Mounting type: Rear fastened
- Part No.: MB10FSARI**ST

** refers to pins number



RoHS

General information

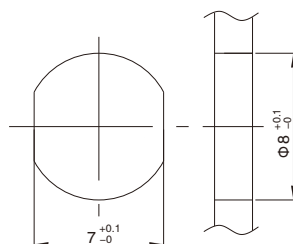
Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Coupling nut:	Brass with nickel plated
O-ring:	FKM

Insulation resistance:	≥20MΩ
Contact resistance:	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts	Contacts termination	Rated current	Voltage		Wire gauge / size		Wire insulation	Part No.	
			A/C	D/C	AWG	mm ²			
05 pins		Solder version	2A	60V	72V	26AWG	0.14	PVC wire or customized	MA10FSARI05ST
09 pins		Solder version	1A	30V	30V	26AWG	0.14	PVC wire or customized	MA10FSARI09ST

Panel Cut-out Dimensions



Panel cut-out

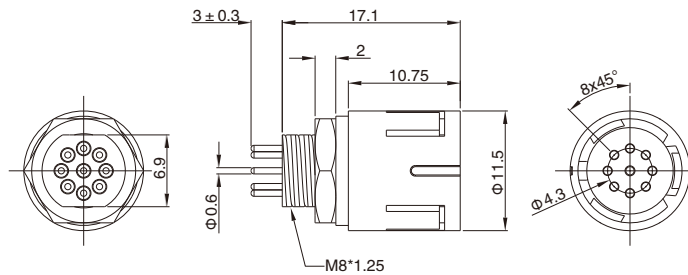
Remarks

- Please refer to Page 77 for products' part number encoding rule.

M10 Male Panel Mount, PCB Type, Rear Fastened

- Connector series: M10
- Gender: Male
- Locking type: Snap-in
- Mounting type: Rear fastened
- Part No.: MB10MBARI**ST

** refers to pins number



RoHS

General information

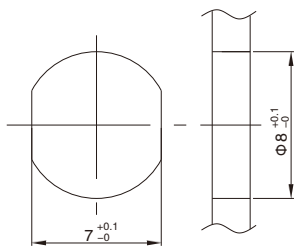
Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Coupling nut:	Brass with nickel plated

Insulation resistance:	≥ 20MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

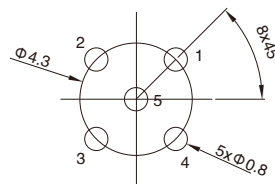
Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
05 pins		PCB version	2A	60V	72V	MB10MBARI05ST
09 pins		PCB version	1A	30V	30V	MB10MBARI09ST

Panel Cut-out Dimensions

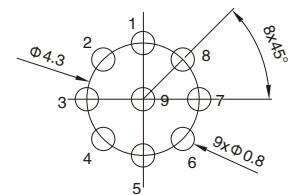


Panel cut-out

PCB Layout



5Pins male



9Pins male

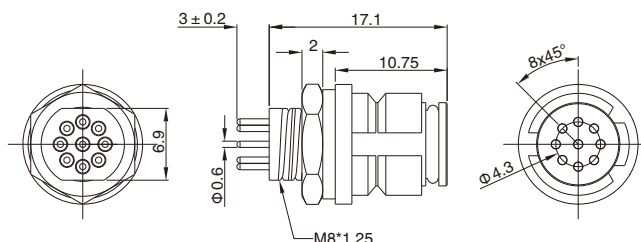
Remarks

- Please refer to Page 77 for products' part number encoding rule.

M10 Female Panel Mount, PCB Type, Rear Fastened

- Connector series: M10
- Gender: Female
- Locking type: Snap-in
- Mounting type: Rear fastened
- Part No.: MB10FBARI**ST

** refers to pins number





General information

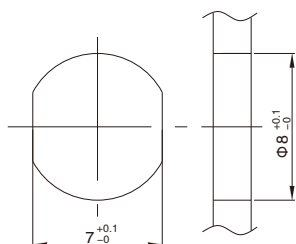
Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Coupling nut:	Brass with nickel plated
O-ring:	FKM

Insulation resistance:	≥ 20MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

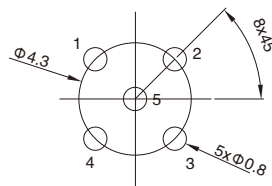
Contacts	Contacts termination	Rated current	Voltage		Part No.
			A/C	D/C	
05 pins	 PCB version	2A	60V	72V	MB10FBARI05ST
09 pins	 PCB version	1A	30V	30V	MB10FBARI09ST

Panel Cut-out Dimensions

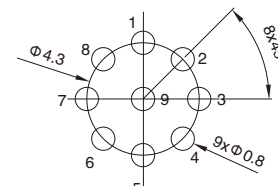


Panel cut-out

PCB Layout



5Pins Female



9Pins Female

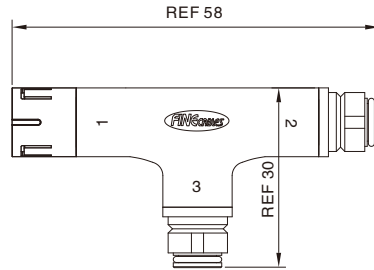
Remarks

- Please refer to Page 77 for products' part number encoding rule.

M10 T-Splitter, Female-Male-Female

- Connector series: M10
- Gender: Female&Male
- Locking type: Snap-in
- Mounting type: T-type
- Part No.: MT10-AI**

** refers to pins number



RoHS

General information

Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Coupling nut:	TPU

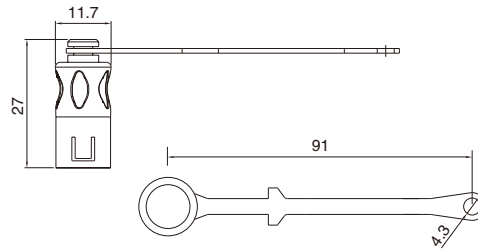
Insulation resistance:	≥20MΩ
Contact resistance:	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
05 pins	 (Male)	Solder version	2A	60V	72V	MT10-AI05
	 (Female)					

M10 Protection Cap for Female Connector

- Connector series: M10
- Gender: for Female
- Locking type: Snap-in
- Part No.: PCNM10-1



■ General information

Color:	Black
nut/screw:	PA+GF

Loop:	TPU
IP rating:	IP65 in locked condition