

Circular sensor connectors



M5 cables & connectors

The M5 Series is specifically developed for the miniature sensor market and any similar applications that require multiple sensors within a miniaturized area. This product line offers both 3 and 4 Pins cable cord-sets and a range of panel-mount receptacles. All connectors are either over-molded on PUR/PVC cables or panel-mount receptacles with a solder-cup for wire connecting or with PCB termination for dip solder. In locked condition, this series can meet IP67 rating.

- Design as per IEC 61076-2-105
- Degree of protection IP67
- 3, 4 poles are available
- TPU over-molded
- Cable length customized, PUR and PVC cable options

M5

Quick Search Table

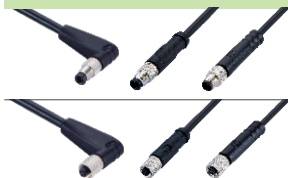
Available Coding	A-coding			
Rated Current	1A			
Voltage	60V			
Wire Gauge / size	26AWG / 0.14mm ²			
Pin layout				
	Male	Female	Male	Female

M5 cables & connectors

03 Pins

04 Pins

Molded Cable



Male Molded Cable Straight	04	-	04	-
Male Molded Cable Straight Shield	06	-	06	-
Male Molded Cable Angled	08	-	08	-
Female Molded Cable Straight	-	05	-	05
Female Molded Cable Straight Shield	-	07	-	07
Female Molded Cable Angled	-	09	-	09

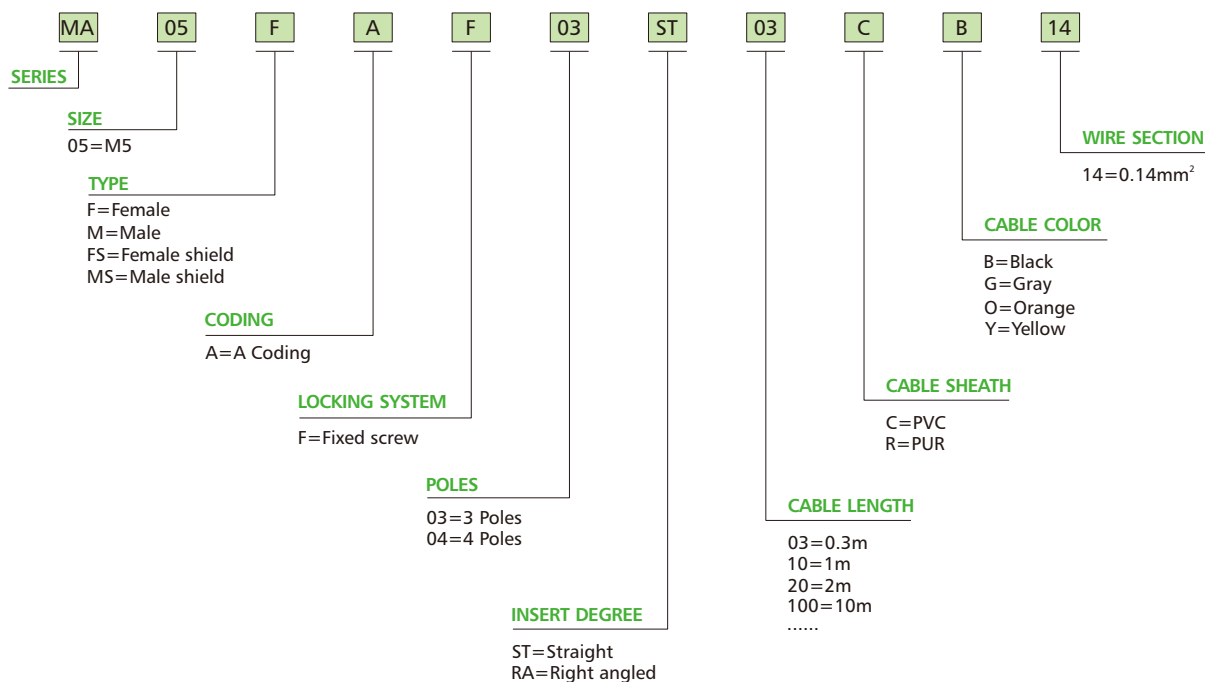
Panel Mount Type



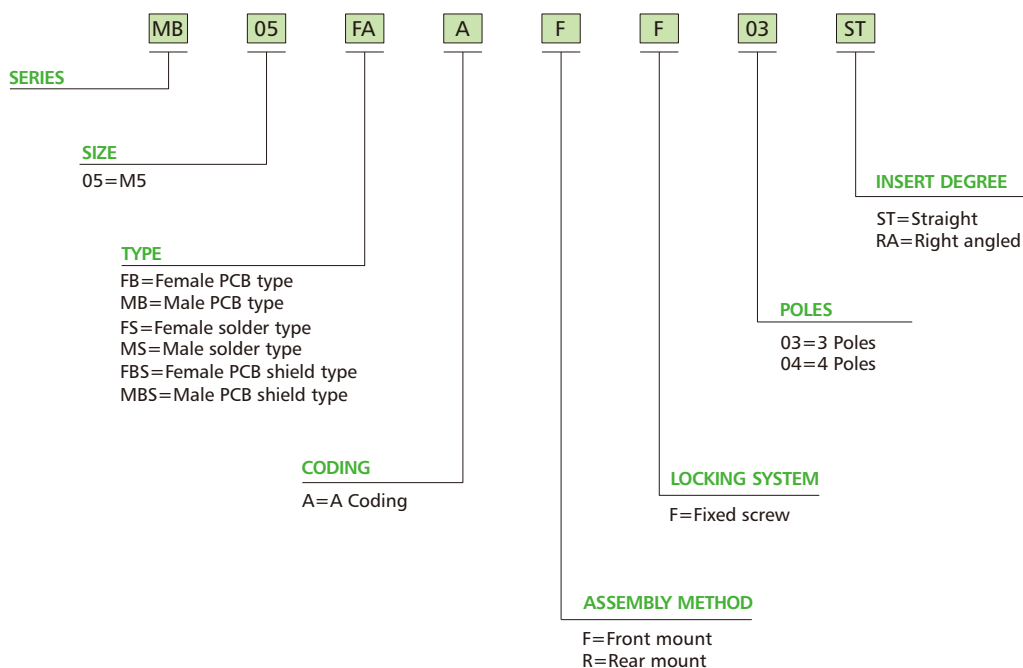
Male Panel Mount Solder Front Fastened	10	-	10	-
Male Panel Mount Solder Rear Fastened	12	-	12	-
Female Panel Mount Solder Front Fastened	-	11	-	11
Female Panel Mount Solder Rear Fastened	-	13	-	13
Male Panel Mount PCB Type Front Fastened	14	-	14	-
Male Panel Mount PCB Type Front Fastened Shield	16	-	16	-
Female Panel Mount PCB Type Front Fastened	-	15	-	15
Female Panel Mount PCB Type Front Fastened Shield	-	17	-	17

How to Order Part Number

■ M5 Series with cable molded



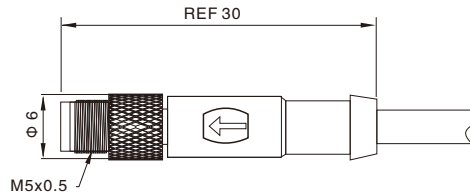
■ M5 Series Assembly / Panel-mount type



M5 Male Molded Cable, Straight

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA05MAF**STXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MAF03STXXCB14
							PUR	MA05MAF03STXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MAF04STXXCB14
							PUR	MA05MAF04STXXRB14

Note: X refers to cable length

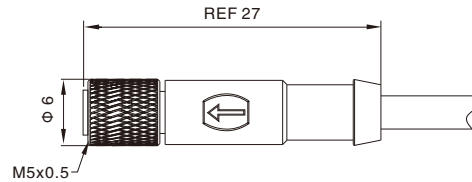
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Female Molded Cable, Straight

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA05FAF**STXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FAF03STXXCB14
							PUR	MA05FAF03STXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FAF04STXXCB14
							PUR	MA05FAF04STXXRB14

Note: X refers to cable length

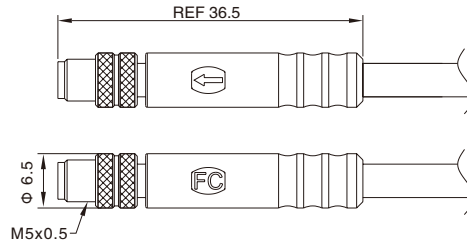
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Male Molded Cable, Straight, Shielded

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA05MSAF**STXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40°C ~ +80°C(fixed installation) -20°C ~ +80°C(flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MSAF03STXXCB14
							PUR	MA05MSAF03STXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MSAF04STXXCB14
							PUR	MA05MSAF04STXXRB14

Note: X refers to cable length

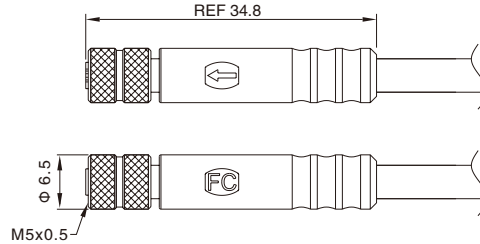
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Female Molded Cable, Straight, Shielded

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA05FSAF**STXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40°C ~ +80°C(fixed installation) -20°C ~ +80°C(flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FSAF03STXXCB14
							PUR	MA05FSAF03STXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FSAF04STXXCB14
							PUR	MA05FSAF04STXXRB14

Note: X refers to cable length

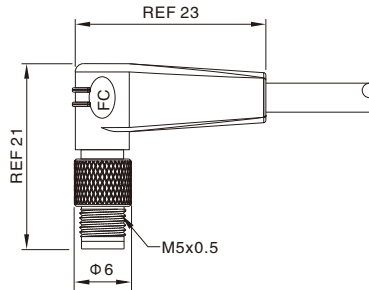
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Male Molded Cable, Angled

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA05MAF**RAXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MAF03RAXXCB14
							PUR	MA05MAF03RAXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05MAF04RAXXCB14
							PUR	MA05MAF04RAXXRB14

Note: X refers to cable length

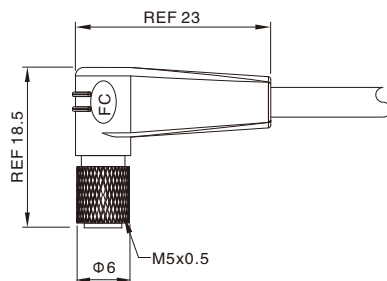
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Female Molded Cable, Angled

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA05FAF**RAXXX14

**refers to pins number
X refers to cable specification



General information

Standard:	IEC 61076-2-105
Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Cable jacket	Part No.
			A/C	D/C	AWG	mm ²		
03 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FAF03RAXXCB14
							PUR	MA05FAF03RAXXRB14
04 pins		1A	60V	60V	26AWG	0.14	PVC	MA05FAF04RAXXCB14
							PUR	MA05FAF04RAXXRB14

Note: X refers to cable length

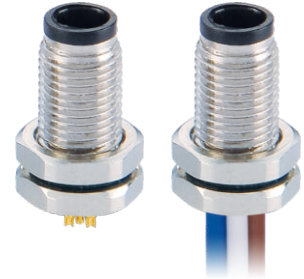
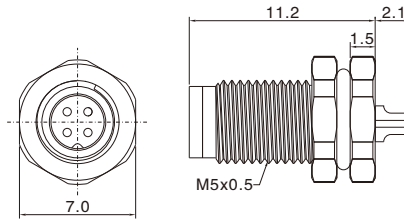
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Male Panel Mount, Solder, Front fastened

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05MSAFF**ST

**refers to pins number



General information

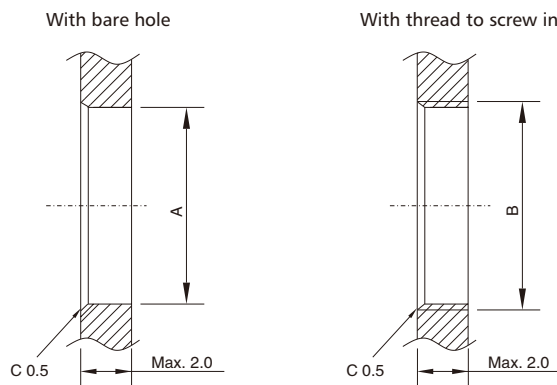
Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 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		
03 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05MSAFF03ST
04 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05MSAFF04ST

Panel Cut-out Dimensions



	A	B
M5	5.0 ^{+0.1} ₋₀	M5x0.5

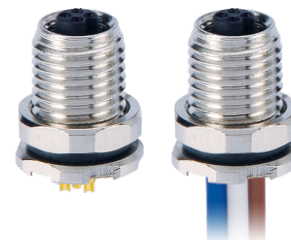
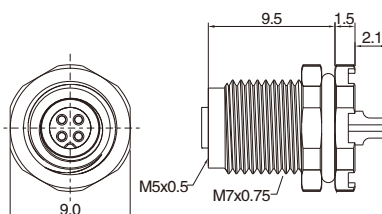
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Female Panel Mount, Solder, Front fastened

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05FSAFF**ST

**refers to pins number



General information

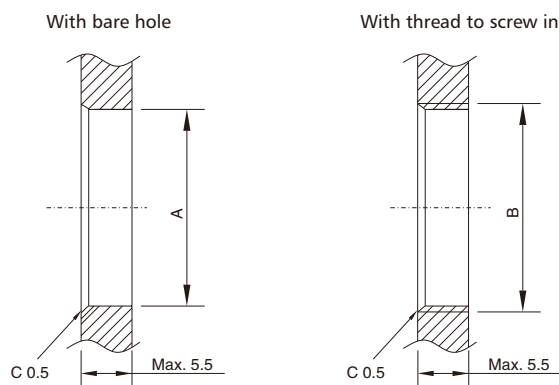
Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 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		
03 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05FSAFF03ST
04 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05FSAFF04ST

Panel Cut-out Dimensions



	A	B
M7	7.0 ^{+0.1} ₋₀	M7x0.75

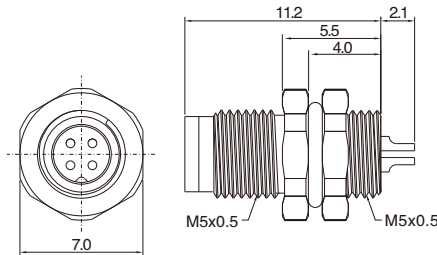
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Male Panel Mount, Solder, Rear fastened

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB05MSARF**ST

**refers to pins number



General information



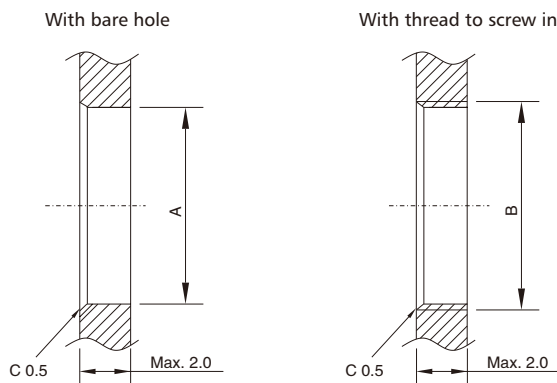
Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 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		
03 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05MSARF03ST
04 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05MSARF04ST

Panel Cut-out Dimensions



	A	B
M5	5.0 ^{+0.1} ₋₀	M5x0.5

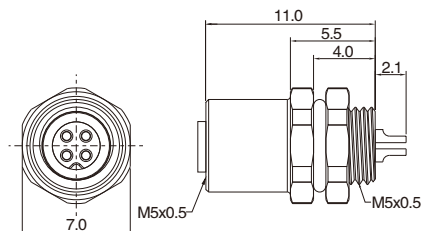
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Female Panel Mount, Solder, Rear fastened

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB05FSARF**ST

**refers to pins number



General information

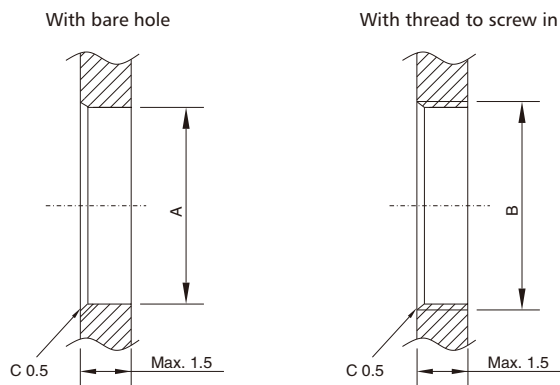
Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 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		
03 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05FSARF03ST
04 pins		Solder version	1A	60V	60V	26AWG	0.14	PVC wire or customized	MB05FSARF04ST

Panel Cut-out Dimensions



	A	B
M7	5.0 ^{+0.1} ₋₀	M5x0.75

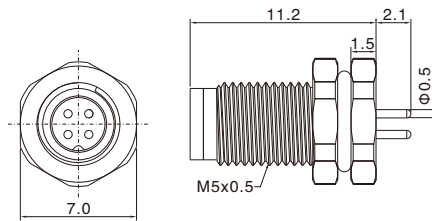
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 3 for products' part number encoding rule.

M5 Male Panel Mount, PCB Type, Front fastened

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05MBAFF**ST

**refers to pins number



General information



Standard:	IEC 61076-2-105
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

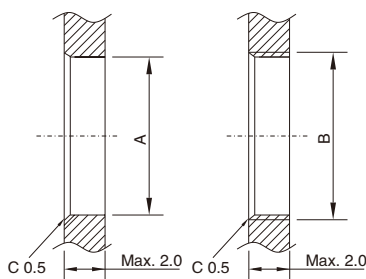
Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
03 pins		PCB version	1A	60V	60V	MB05MBAFF03ST
04 pins		PCB version	1A	60V	60V	MB05MBAFF04ST

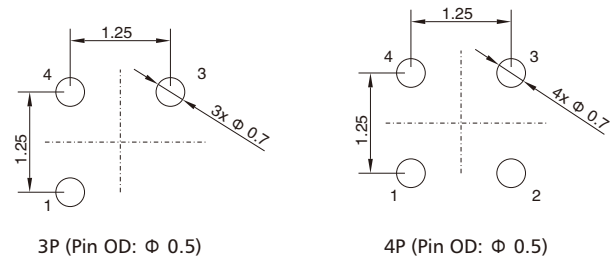
Panel Cut-out Dimensions

With bare hole With thread to screw in



	A	B
M5	5.0 ^{+0.1} ₋₀	M5x0.5

PCB Layout



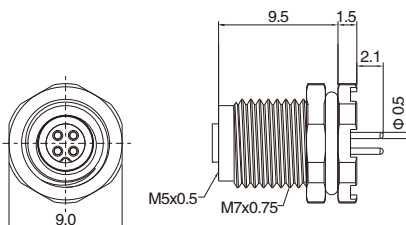
Remarks

- Please refer to Page 3 for products' part number encoding rule.

M5 Female Panel Mount, PCB Type, Front fastened

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05FBAFF**ST

**refers to pins number



General information



Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

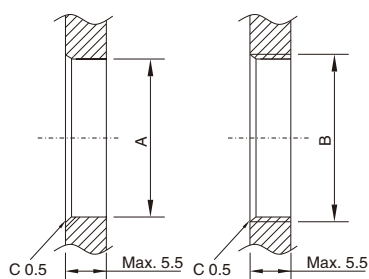
Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
03 pins		PCB version	1A	60V	60V	MB05FBAFF03ST
04 pins		PCB version	1A	60V	60V	MB05FBAFF04ST

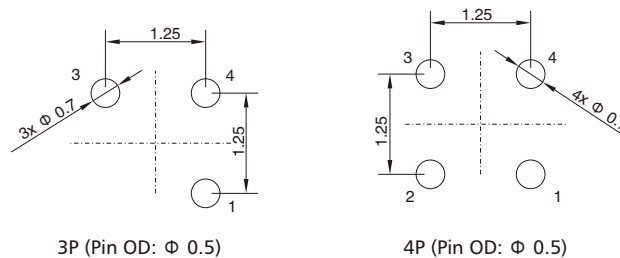
Panel Cut-out Dimensions

With bare hole With thread to screw in



	A	B
M7	7.0 ^{+0.1} ₋₀	M7x0.75

PCB Layout



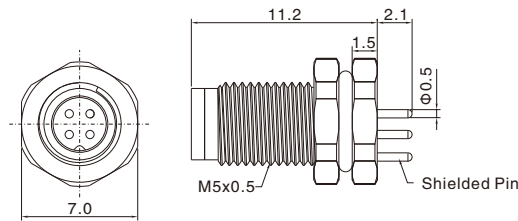
Remarks

- Please refer to Page 3 for products' part number encoding rule.

M5 Male Panel Mount, PCB Type, Front fastened, Shielded

- Connector series: M5
- Gender: Male
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05MBSAFF**ST

**refers to pins number



General information



Standard:	IEC 61076-2-105
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

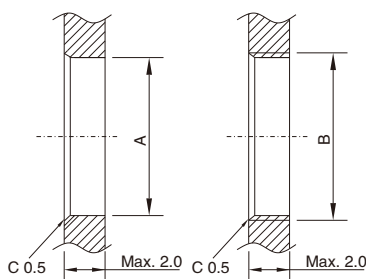
Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
03 pins		PCB version	1A	60V	60V	MB05MBSAFF03ST
04 pins		PCB version	1A	60V	60V	MB05MBSAFF04ST

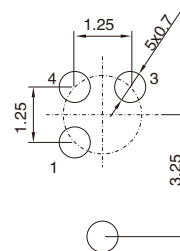
Panel Cut-out Dimensions

With bare hole With thread to screw in

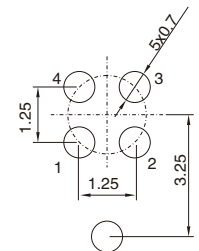


	A	B
M5	5.0 ^{+0.1} ₋₀	M5x0.5

PCB Layout



3P (Pin OD: Φ 0.5)



4P (Pin OD: Φ 0.5)

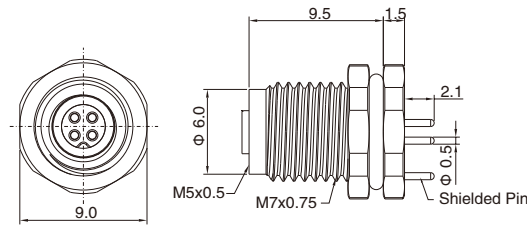
Remarks

- Please refer to Page 3 for products' part number encoding rule.

M5 Female Panel Mount, PCB Type, Front fastened, Shielded

- Connector series: M5
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB05FBSAFF**ST

**refers to pins number



General information



Standard:	IEC 61076-2-105
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

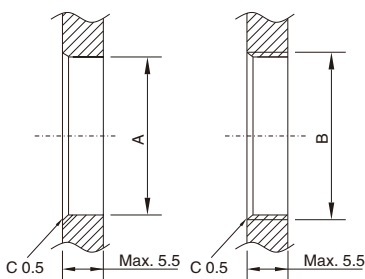
Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
03 pins		PCB version	1A	60V	60V	MB05FBSAFF03ST
04 pins		PCB version	1A	60V	60V	MB05FBSAFF04ST

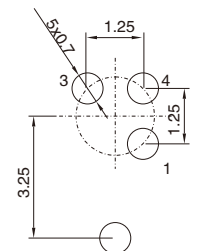
Panel Cut-out Dimensions

With bare hole With thread to screw in

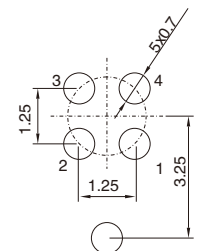


	A	B
M7	7.0 ^{+0.1} ₋₀	M7x0.75

PCB Layout



3P (Pin OD: Φ 0.5)



4P (Pin OD: Φ 0.5)

Remarks

- Please refer to Page 3 for products' part number encoding rule.