

Circular sensor connectors



M20 cables & connectors

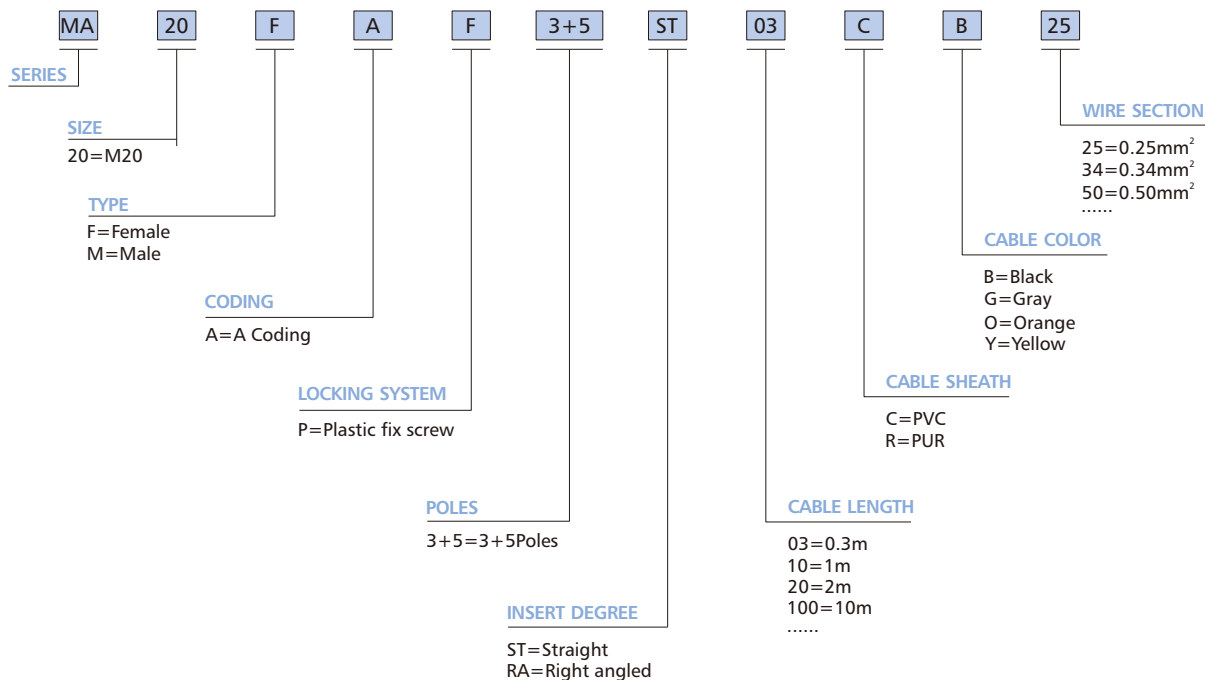
With our intelligence and endeavor, the M20 series has been successfully developed, for the fields of intelligentized lighting, stage lighting control system, architectural and LED series. This series is divided into straight overmolding and panel-mount types. Their 3+5 hybrid-pole design is able to ensure signal and power transmission simultaneously. Fix screw locking system can meet IP68 rating in fully locked condition.

- IP68 rating in locked condition
- 3+5 Poles available for signal(1.5A) and power (13A) transmission
- PBT connector insert
- PVC/TPU cable jacket and length can be customized

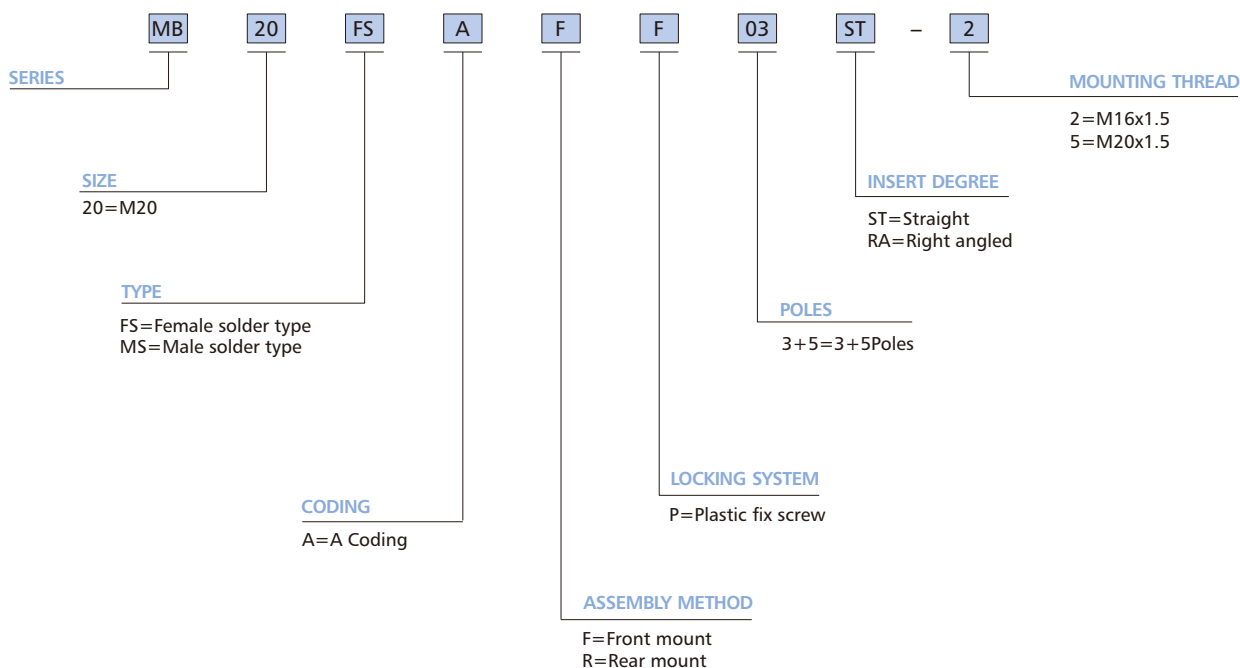
M20 Quick Search Table	Locking type	Fix screw	
	Rated Current	4A (signal 5Pins), 13A (power 3Pins)	
	Voltage	300V	
	Wire Gauge / size	26~22AWG/0.14~0.3mm ² , 18~14AWG0.5~2.5mm ²	
	Pin layout	 Male	 Female
M20 cables & connectors		3+5Pins (3+5)	
Molded Cable			
	Male Molded Cable Straight	318	-
	Female Molded Cable Straight	-	319
Terminator			
	Plastic Male Terminator	320	-
	Plastic Female Terminator	-	321
Panel Mount Type			
	Male Panel Mount Solder Rear Fastened	322	-
	Female Panel Mount Solder Rear Fastened	-	323
Adapter Connector			
	Plastic U-Adapter Male-Female	324	

How to Order Part Number

■ M20 Series with cable molded



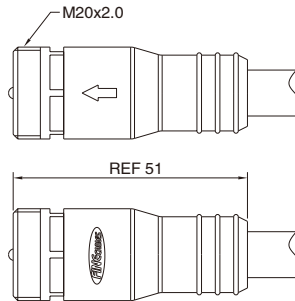
■ M20 Series Assembly / Panel-mount type



M20 Male Molded Cable, Straight

- Connector series: M20
- Gender: Male
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA20MAP3+5STXXXXXX

X refers to cable specification



RoHS

General information

Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	PBT
Connector contacts:	Brass with gold plated

Insulation resistance:	≥ 100MΩ
Contact resistance :	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Wire insulation	Part No.
			A/C	D/C	AWG	mm ²		
3+5Pins (3+5)		4A (signal 5Pins) 13A (power 3Pins)	300V	300V	26~22AWG	0.14~0.3	PVC	MA20MAP3+5STXXXXXX
					18~14AWG	0.5~2.5		

Note: X refers to cable specification

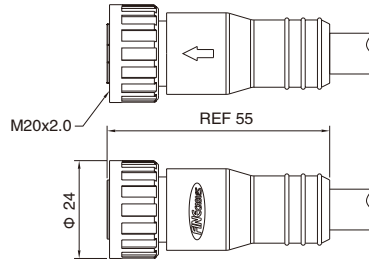
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 317 for products' part number encoding rule.

M20 Female Molded Cable, Straight

- Connector series: M20
- Gender: Female
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA20FAP3+5STXXXXXX

X refers to cable specification



RoHS

General information

Ambient temperature:	-40℃ ~ +80℃(fixed installation) -20℃ ~ +80℃(flexible installation)
Connector insert:	PBT
Connector contacts:	Brass with gold plated
Coupling nut/screw:	ASA
Seal / O-ring:	Silicone

Insulation resistance:	≥ 100MΩ
Contact resistance :	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

Contacts		Rated current	Voltage		Wire gauge / size		Wire insulation	Part No.
			A/C	D/C	AWG	mm ²		
3+5Pins (3+5)		4A (signal 5Pins) 13A (power 3Pins)	300V	300V	26~22AWG	0.14~0.3	PVC	MA20FAP3+5STXXXXXX
					18~14AWG	0.5~2.5		

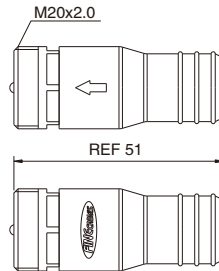
Note: X refers to cable specification

Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 317 for products' part number encoding rule.

M20 Plastic Male Terminator

- Connector series: M20
- Gender: Male
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA20MAP3+5ST-T



RoHS

General information

Ambient temperature:	-20℃ ~ +90℃
Connector insert:	PBT
Connector contacts:	Brass with gold plated

Insulation resistance:	≥ 100MΩ
Contact resistance :	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

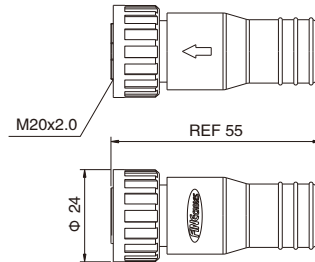
Contacts		Rated current	Voltage		Part No.
			A/C	D/C	
3+5Pins (3+5)		4A (signal 5Pins) 13A (power 3Pins)	300V	300V	MA20MAP3+5ST-T

Remarks

- Please refer to Page 317 for products' part number encoding rule.

M20 Plastic Female Terminator

- Connector series: M20
- Gender: Female
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA20FAP3+5ST-T



RoHS

General information

Ambient temperature:	-20℃ ~ +90℃
Connector insert:	PBT
Connector contacts:	Brass with gold plated
Coupling nut/screw:	ASA
Seal/O-ring:	Silicone

Insulation resistance:	≥ 100MΩ
Contact resistance :	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Electrical data & Mechanical data

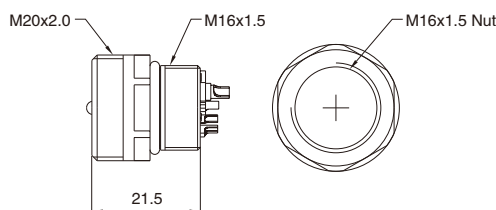
Contacts		Rated current	Voltage		Part No.
			A/C	D/C	
3+5Pins (3+5)		4A (signal 5Pins) 13A (power 3Pins)	300V	300V	MA20FAP3+5ST-T

Remarks

- Please refer to Page 317 for products' part number encoding rule.

M20 Male Panel Mount, Solder, Rear Fastened

- Connector series: M20
- Gender: Male
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB20MSARP3+5ST-2



General information

Ambient temperature: -25℃ ~ +125℃

Connector insert: PBT

Connector contacts: Brass with gold plated

Coupling nut/screw: PA66

Seal / O-ring: Silicone

Insulation resistance: $\geq 100\text{M}\Omega$

Contact resistance: $\leq 5\text{m}\Omega$

Shielding: Unavailable

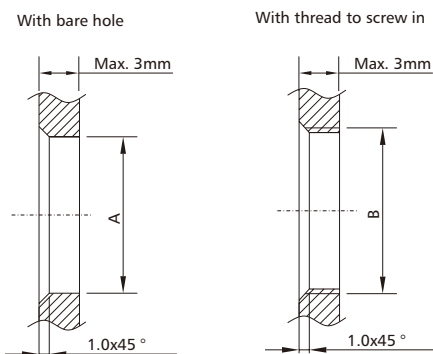
IP rating: IP68 in locked condition

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		
3+5Pins (3+5)		Solder version 4A (signal 5Pins) 13A (power 3Pins)	300V	300V	26~22AWG	0.14~0.3	PVC	MB20MSARP3+5ST-5
					18~14AWG	0.5~2.5		

Panel Cut-out Dimensions



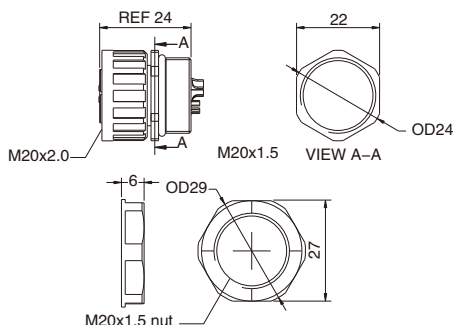
	A	B
M16	16 ^{+0.1} ₋₀	M16x1.5

Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 317 for products' part number encoding rule.

M20 Female Panel Mount, Solder, Rear fastened

- Connector series: M20
- Gender: Female
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB20FSARP3+5ST-5



General information

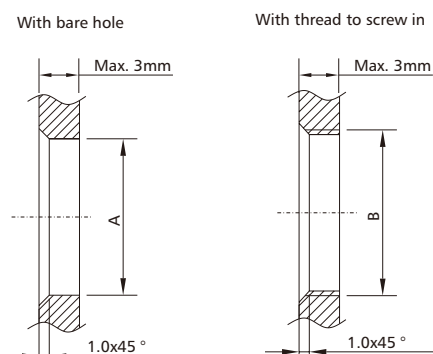
Ambient temperature:	-25℃ ~ +125℃
Connector insert:	PBT
Connector contacts:	Brass with gold plated
Coupling nut/screw:	ASA
Seal / O-ring:	Silicone

Insulation resistance:	≥ 100MΩ
Contact resistance :	≤ 5mΩ
Shielding:	Unavailable
IP rating:	IP68 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		
3+5Pins (3+5)		Solder version	4A (signal 5Pins) 13A (power 3Pins)	300V	300V	26~22AWG	0.14~0.3	PVC	MB20FSARP3+5ST-5
						18~14AWG	0.5~2.5		

Panel Cut-out Dimensions



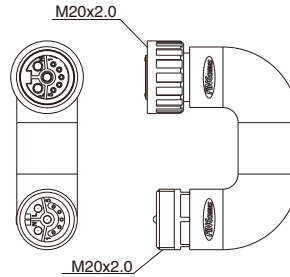
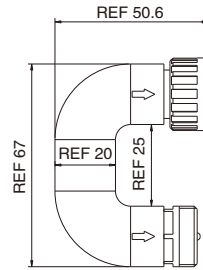
	A	B
M20	20 ^{+0.1} ₋₀	M20x1.5

Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 317 for products' part number encoding rule.

M20 Plastic U-Adapter, Male-Female

- Connector series: M20
- Gender: Male&Female
- Locking type: Fix screw
- Mounting type: U type
- Part No.: MB20UP-MF3+5



RoHS 

General information

Ambient temperature: -20℃ ~ +125℃

Connector insert: PBT

Connector contacts: Brass with gold plated

Coupling nut/screw: ASA

Seal/O-ring: Silicone

Insulation resistance: $\geq 100M\Omega$

Contact resistance : $\leq 5m\Omega$

Shielding: Unavailable

IP rating: IP68 in locked condition

Mating endurance: >500 cycles

Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Voltage		Part No.
				A/C	D/C	
3+5Pins (3+5)	  Male Female	Solder version	4A (signal 5Pins) 13A (power 3Pins)	300V	300V	MB20UP-MF3+5