# 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.

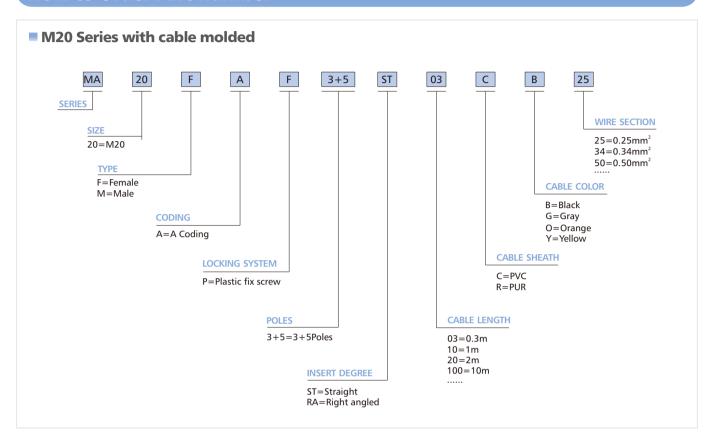
- IP68 rating in locked condition
- 3+5 Poles avaialbe for signal(1.5A) and power (13A) transmission
- PBT connector insert
- PVC/TPU cable jacket and length can be customized

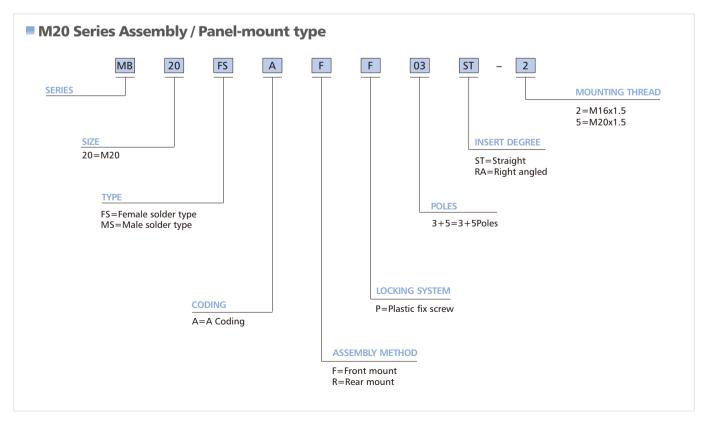


	Locking type	Fix s	crew		
N/120	Rated Current	4A (signal 5Pins), 13A (power 3Pins)			
<b>M20</b>	Voltage		0V		
Quick Search Table	Wire Gauge / size	26~22AWG/0.14~0.3mm², 18~14AWG0.5~2.5mm²			
Quiek Scuren lusic	Pin layout	Male	Female		
M20 cables & conne	ectors	3+5Pin	s (3+5)		
Molded Cable					
11	Male 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	32	24		



### **How to Order Part Number**







## M20 Male Molded Cable, Straight

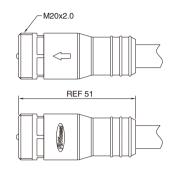
• Connector series: M20

• Gender: Male

• Locking type: Fix screw • Mounting type: Straight

• Part No.: MA20MAP3+5STXXXXXX

X refers to cable specification









#### ■ General information

Ambient temperature:	-40°C ~ $+80$ °C(fixed installation)
	-20°C ~ +80°C(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

Can	Contacts Rated		Vol	tage	Wire gau	uge / size	Wire	Part No.
Con	lacis	current	A/C	D/C	AWG	mm²	insulation	Part No.
3+5Pins		4A (signal 5Pins)	2001/	300V	26~22AWG	0.14~0.3	PVC	MA20MAP3+5STXXXXXX
(3+5)		13A (power 3Pins)	300V	3000	18~14AWG	0.5~2.5	PVC	IVIAZUIVIAP3+55I <u>XXXXXX</u>

Note:  $\underline{X}$  refers to cable specification

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.
- Please refer to Page 317 for products' part number encoding rule.



## M20 Female Molded Cable, Straight

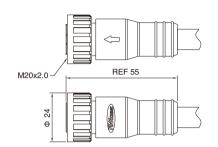
• Connector series: M20

• Gender: Female

• Locking type: Fix screw • Mounting type: Straight

• Part No.: MA20FAP3+5STXXXXXX

X refers to cable specification









#### ■ General information

ation)	: -40°C ~ +8	nt temperature:	Ambient temperatur	
allation)	-20℃ ~ +8			
	PBT	ctor insert:	Connecto	
	Brass with	ctor contacts:	Connecto	
	ASA	ng nut/screw:	Coupling	
	Silicone	O-ring:	Seal / O-ri	
	Silicone	J-ring:	Seal / U-ri	

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

#### ■ Electrical data & Mechanical data

Co	Contacts		Volt	tage	Wire gau	uge / size	Wire	Part No.
Co	ilacis	current	A/C	D/C	AWG	mm²	insulation	Part NO.
3+5Pins		4A (signal 5Pins)	2001/	300V	26~22AWG	0.14~0.3	D) (C	MA20FAP3+5STXXXXXX
(3+5)		13A (power 3Pins)	300V	3000	18~14AWG	0.5~2.5	PVC	IVIAZUFAF3 + 331 AAAAAA

Note:  $\underline{X}$  refers to cable specification

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.
- Please refer to Page 317 for products' part number encoding rule.

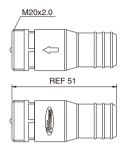


## M20 Plastic Male Terminator

• Connector series: M20

• Gender: Male

• Locking type: Fix screw • Mounting type: Straight • Part No.: MA20MAP3+5ST-T





#### RoHS PS



#### ■ 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

Con	tacts	Rated current	Volt A/C	age D/C	Part No.
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**

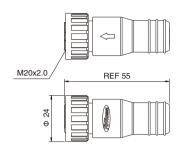
• Connector series: M20

• Gender: Female

• Locking type: Fix screw

• Mounting type: Straight

• Part No.: MA20FAP3+5ST-T









#### ■ 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 cvcles

#### ■ Electrical data & Mechanical data

Contacts		Rated current	Vol:	tage D/C	Part No.
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.



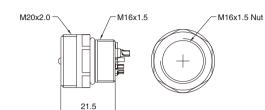
## M20 Male Panel Mount, Solder, Rear Fastened

• Connector series: M20

• Gender: Male

• Locking type: Fix screw

• Mounting type: Rear fastened • Part No.: MB20MSARP3+5ST-2









#### ■ General information

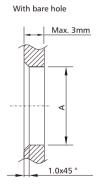
Ambient temperature:	-25℃ ~+125℃
Connector insert:	PBT
Connector contacts:	Brass with gold plated
Coupling nut/screw:	PA66
Seal / O-ring:	Silicone

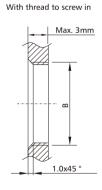
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

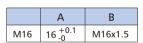
#### ■ Electrical data & Mechanical data

Contacts		Contacts	Rated	Voltage		Wire gauge / size		Wire	Part No.
		termination current		A/C	D/C	AWG	mm²	insulation	rait NO.
3+5Pins	version 13A		4A (signal 5Pins)	signal 5Pins)	2001	26~22AWG	0.14~0.3	D) (C	1 A DOOL 45 A DDO . 55T 5
(3+5)		13A (power 3Pins)	300V	300V	18~14AWG	0.5~2.5	PVC	MB20MSARP3+5ST-5	

#### ■ Panel Cut-out Dimensions







- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.
- Please refer to Page 317 for products' part number encoding rule.



## M20 Female Panel Mount, Solder, Rear fastened

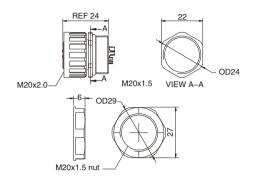
• Connector series: M20

• Gender: Female

• Locking type: Fix screw

• Mounting type: Rear fastened

• Part No.: MB20FSARP3+5ST-5









#### ■ General information

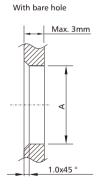
Ambient temperature:	-25℃ ~ +125℃
Connector insert:	PBT
Connector contacts:	Brass with gold plated
Coupling nut/screw:	ASA
Seal / O-ring:	Silicone

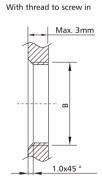
Insulation resistance:	≥100MΩ
Contact resistance:	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cvcles

#### ■ Electrical data & Mechanical data

Contacts		Contacts	Rated	Voltage		Wire gauge / size		Wire	Part No.
		termination	current A/C		D/C	AWG	mm²	insulation	rait No.
3+5Pins	Solo	4A Solder (signal 5Pins)	2001/	2001	26~22AWG	0.14~0.3	D) (C	AADOOF ADDO : FET F	
(3+5)		version	13A (power 3Pins)	300V	300V	18~14AWG	0.5~2.5	PVC	MB20FSARP3+5ST-5

#### ■ Panel Cut-out Dimensions





	А	В
M20	20 +0.1	M20x1.5

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.
- Please refer to Page 317 for products' part number encoding rule.



## M20 Plastic U-Adapter, Male-Female

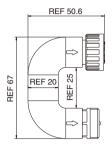
• Connector series: M20

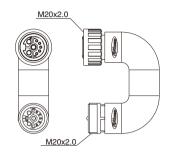
• Gender: Male&Female

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

#### ■ Electrical data & Mechanical data

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