



**THE DATASHEET OF  
PXMBNI12RPF04SFLM16020**



With a high degree of mechanical and electrical stability, **Bulgin's M12 X Coding connectors** provide a **cost effective and flexible connectivity solution** for onsite installations, helping to **decrease downtime** in process control, manufacturing automation and industrial instrumentation applications.

## Key features:

- Reliable industry standard (EN 61076-2-109) screw locking mechanism
- Field installable, cable and panel mount options
- Maximum Data Signaling Rate to 10Gbit/s
- -25 °C to 85 °C Temperature Range
- Plastic and metal options variants
- Cat6a cables
- Ethernet, Profinet Application
- 800V Rated Impulse Voltage
- IP67 degree of protection
- 0.5A Rated Current
- M12 X Coding

**M12 Series coding options:**  
(Full Contact Diagrams Page 194)



X-Coding

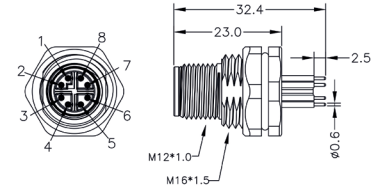


M12 X Code Rear Panel Mounting Male



PXMBNI12RPM08XPCM16

- 8 Contacts
- PCB termination
- Mates with flex body connectors



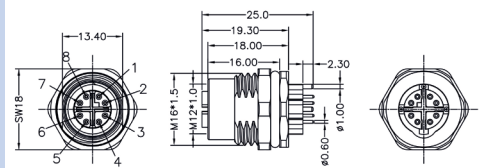
Part Number	Contacts	Code	Termination	Mounting Nut
PXMBNI12RPM08XPCM16	08	X	PCB Terminal	M16 Mounting / Gland Nut Thread

M12 X Code Rear Panel Mounting Female



PXMBNI12RPF08XPCM16

- 8 Contacts
- PCB termination
- Mates with Inline body connectors



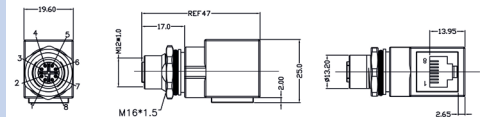
Part Number	Contacts	Code	Termination	Mounting Nut
PXMBNI12RPF08XPCM16	08	X	PCB Terminal	M16 Mounting / Gland Nut Thread

M12 X Code Rear Panel Mounting Female - RJ45



PXMBNI12RAF08XRJM16

- 8 Contacts
- Solder termination
- Metal flex body
- Mates with Inline body connectors



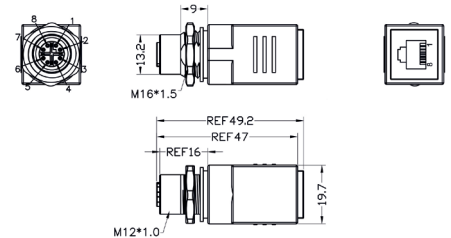
Part Number	Contacts	Code	Termination	Mounting Nut
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M12 X Code Rear Panel Mounting Female - RJ45



PXMBNI12RPM08XRJM16

- 8 Contacts
- Solder termination
- Metal flex body
- Mates with Inline body connectors



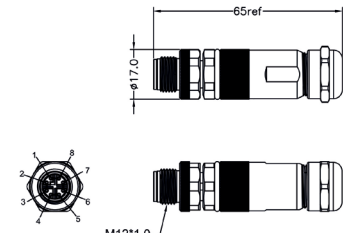
Part Number	Contacts	Code	Termination	Mounting Nut
PXMBNI12RPM08XRJM16	08	X	RJ45	M16 Mounting / Gland Nut Threa

Nickel Plated M12 X Code Inline Body Male



PXMBNI12FIM08XSCPG9

- 8 Contacts
- Solder termination
- Metal Inline body
- Mates with flex body and panel mount connectors



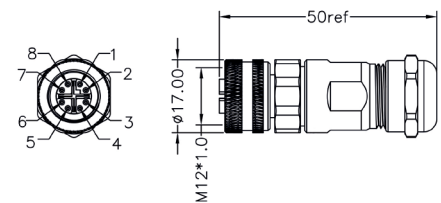
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Nickel Plating M12 X Code Flex Body Female



PXMBNI12FBF08XSCPG9

- 8 Contacts
- Solder termination
- Metal Flex Body
- Mates with Inline Body and panel mount connectors



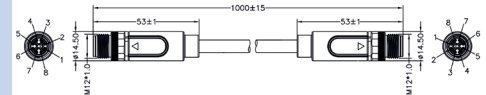
Part Number	Contacts	Code	Termination	Mounting Nut
PXMBNI12FBF08XSCPG9	08	X	Solder Terminal	PG9 Mounting / Gland Nut Threa

Inline to Inline Overmould Cable



PXPTPU12FIM08XFI010PU

- 8 Contacts
- 1, 2, 3, 5 & 10m cable options
- TPU flex body overmold
- PU jacket cable



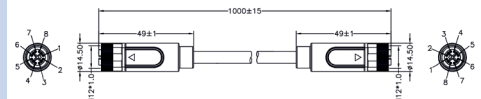
Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPTPU12FIM08XFI010PU	08	X	Overmold Cable	1m	PU
PXPTPU12FIM08XFI020PU	08	X	Overmold Cable	2m	PU
PXPTPU12FIM08XFI030PU	08	X	Overmold Cable	3m	PU
PXPTPU12FIM08XFI050PU	08	X	Overmold Cable	5m	PU
PXPTPU12FIM08XFI100PU	08	X	Overmold Cable	10m	PU

Flex Body to Flex Body Overmould Cable



PXPTPU12FBF08XFB010PU

- 8 Contacts
- 1, 2, 3, 5 & 10m cable options
- TPU flex body overmold
- PU jacket cable



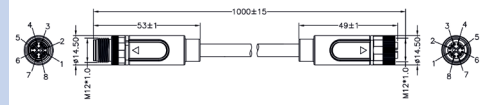
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PXPTPU12FBF08XFB020PU	08	X	Overmold Cable	2m	PU
PXPTPU12FBF08XFB030PU	08	X	Overmold Cable	3m	PU
PXPTPU12FBF08XFB050PU	08	X	Overmold Cable	5m	PU
PXPTPU12FBF08XFB100PU	08	X	Overmold Cable	10m	PU

Inline to Flex Body Overmould Cable



PXPTPU12FIM08XFB010PU

- 8 Contacts
- 1, 2, 3, 5 & 10m cable options
- TPU flex body overmold
- PU jacket cable



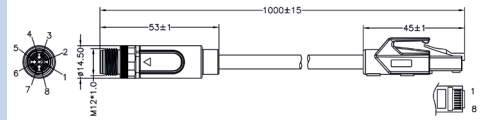
Part Number	Contacts	Code	Termination	Lead Length	Cable Material
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PXPTPU12FIM08XFB030PU	08	X	Overmold Cable	3m	PU
PXPTPU12FIM08XFB050PU	08	X	Overmold Cable	5m	PU
PXPTPU12FIM08XFB100PU	08	X	Overmold Cable	10m	PU

Inline to RJ45 Overmould Cable



PXPTPU12FIM08XRJ010PU

- 8 Contacts
- 1, 2, 3, 5 & 10m cable options
- TPU flex body overmold
- PU jacket cable



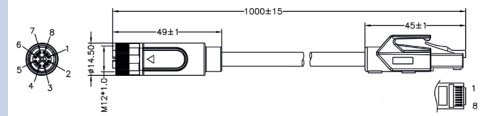
Part Number	Contacts	Code	Termination	Lead Length	Cable Material
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PXPTPU12FIM08XRJ020PU	08	X	Overmold Cable	2m	PU
PXPTPU12FIM08XRJ030PU	08	X	Overmold Cable	3m	PU
PXPTPU12FIM08XRJ050PU	08	X	Overmold Cable	5m	PU
PXPTPU12FIM08XRJ100PU	08	X	Overmold Cable	10m	PU

Flex body to RJ45 Overmould Cable



PXPTPU12FBF08XRJ010PU

- 8 Contacts
- 1, 2, 3, 5 & 10m cable options
- TPU flex body overmold
- PU jacket cable



Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPTPU12FBF08XRJ010PU	08	X	Overmold Cable	1m	PU
PXPTPU12FBF08XRJ020PU	08	X	Overmold Cable	2m	PU
PXPTPU12FBF08XRJ030PU	08	X	Overmold Cable	3m	PU
PXPTPU12FBF08XRJ050PU	08	X	Overmold Cable	5m	PU
PXPTPU12FBF08XRJ100PU	08	X	Overmold Cable	10m	PU

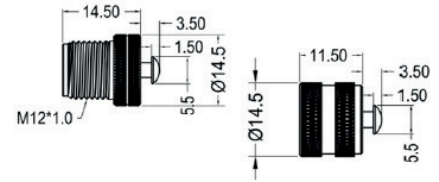


PA66 M12 Sealing Cap



PXPPAM12

- Sealing caps to maintain IP67 rating
- Male & Female versions



**Part Number**

**Series**

**Type**

**Material**

PXPPAM12CAM  
PXPPAM12CAF

M12  
M12

Male  
Female

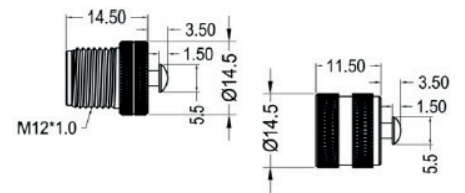
PA66  
PA66

Brass - Nickel Plating M12 Sealing Cap



PXMBNI12

- Sealing caps to maintain IP67 rating
- Male & Female versions



**Part Number**

**Series**

**Type**

**Material**

PXMBNI12CAM  
PXMBNI12CAF

M12  
M12

Male  
Female

Brass - Nickel Plating  
Brass - Nickel Plating

Buccaneer  
**M12 X Coding Series**

Specifications



**Electrical:**

No. Contacts:	8
Current Rating:	0.5A
Voltage Rating (ac/dc) :	48V
Contact Resistance:	<5mΩ
Insulation Resistance:	>100MΩ
Operating Temp Range:	-25°C to 85°C

**Mechanical:**

Locking Mechanism:	Screw coupling
Sealing:	IP67
Contact Accomodation:	
8 Contacts	26AWG x 4P + AEB
Cable:	6.2mm Dia
Contacts:	Terminations:
8 Contacts	PCB / Solder / Cable
Mechanical Operation:	500 mating cycles
Largest diameter over coupling ring:	20.0mm

**Panel Mount:**

Body Material:	Nickel Plated Brass
Coupling Nut Material:	Nickel Plated Brass
Colour:	Grey
Plug Contacts Material:	Brass, Gold plating
Socket Contacts Material:	Phosphor Bronze, Gold plating
O Rings & Gaskets Materials:	Viton
RoHS:	Compliant

**Cable Connectors:**

TPU / LCP
Nickel Plated Brass
Black
Brass, Gold plating
Phosphor Bronze, Gold plating
Viton
Compliant

**Flex & Inline Connectors:**

Nickel Plated Brass
Nickel Plated Brass
Grey
Brass, Gold plating
Phosphor Bronze, Gold plating
Viton
Compliant

<b>MX</b>	<b>XXX</b>	<b>XX</b>	<b>XX</b>	<b>X</b>	<b>XX</b>	<b>X</b>	<b>XX</b>
<b>Series</b>	<b>Material</b>	<b>Series Size</b>	<b>Body Style</b>	<b>Orientation</b>	<b>Contacts</b>	<b>Code</b>	<b>Termination</b>
PXM PXP	BNI = Brass Nickel TPU = overmold for PUR LCP = Liquid Crystal Polymer	12	FB = Flex Body FI = Inline Body RP = Rear Panel Mounting RA = Right Angle	M = Male F = Female	08	X	PC = PCB CL = Cable SC = Solder RJ = RJ45 FB = FLEX BODY FI = Inline BODY

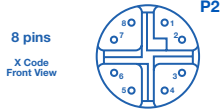
<b>XXX</b>	<b>XXX</b>	<b>XXX</b>
<b>Mounting / Gland Nut Thread</b>	<b>Lead Length</b>	<b>Cable Material</b>
PG9 M16	010 = 1m 020 = 2m 030 = 3m 050 = 5m 100 = 10m	PUR

Contact Diagrams:

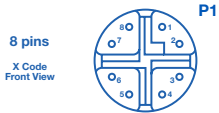
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PXMBNI12FIM08XSCPG9



PXMBNI12RPF08XPCM16  
PXMBNI12FBF08XSCPG9



PXMBNI12RAF08XRJM16  
PXMBNI12RPM08XRJM16



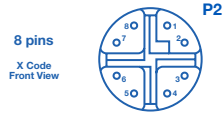
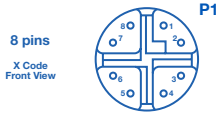
P1	PAIR	WIRE COLOUR	P2
1	X	WHITE / ORANGE	1
2			2
3	X	WHITE / GREEN	3
4			4
5	X	WHITE / BLUE	5
6			6
7	X	WHITE / BROWN	7
8			8

PXPTPU12FIM08XFI010PU

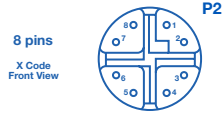


P1	PAIR	WIRE COLOUR	P2
1	X	WHITE / ORANGE	1
2			2
3	X	WHITE / GREEN	3
4			4
5	X	WHITE / BLUE	5
6			6
7	X	WHITE / BROWN	7
8			8
SHELL	—	BRAID	SHELL

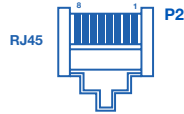
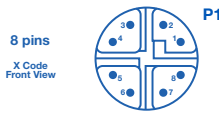
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PXPTPU12FIM08XFB010PU

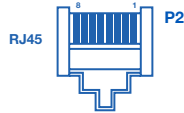
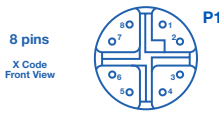


PXPTPU12FIM08XRJ010PU



P1	PAIR	WIRE COLOUR	PAIR	P2
1	X	WHITE / ORANGE ORANGE	X	1
2				2
3	X	WHITE / GREEN GREEN	X	3
4				6
7	X	WHITE / BLUE BLUE	X	5
8				4
5	X	WHITE / BROWN BROWN	X	7
6				8

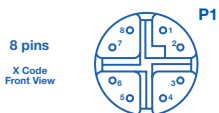
PXPTPU12FBF08XRJ010PU



PXPTPU12FIM08XCL010PU



PXPTPU12FBF08XCL010PU



P1	PAIR	WIRE COLOUR	P2
1	X	WHITE / ORANGE	OPEN
2			
3	X	WHITE / GREEN	
4			
5	X	WHITE / BLUE	
6			
7	X	WHITE / BROWN	
8			
SHELL	—	BRAID	

## Looking for pricing, stock, or lifecycle information?

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