

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

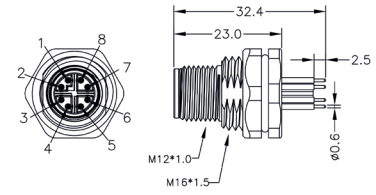


M12 X Code Rear Panel Mounting Male



PXMBNI12RPM08XPCM16

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



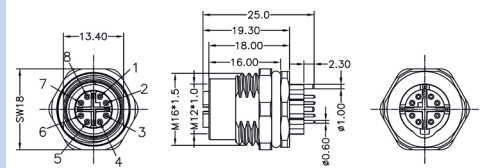
| Part Number | Contacts | Code | Termination | Mounting Nut |
|---------------------|----------|------|--------------|---------------------------------|
| PXMBNI12RPM08XPCM16 | 08 | X | PCB Terminal | M16 Mounting / Gland Nut Thread |

M12 X Code Rear Panel Mounting Female



PXMBNI12RPF08XPCM16

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



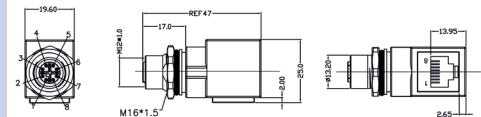
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M12 X Code Rear Panel Mounting Female - RJ45



PXMBNI12RAF08XRJM16

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



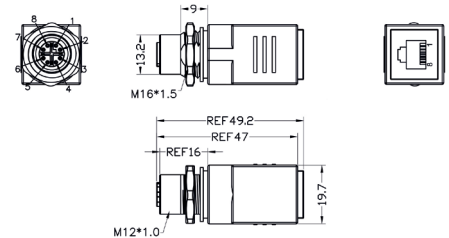
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| PXMBNI12RAF08XRJM16 | 08 | X | RJ45 | M16 Mounting / Gland Nut Thread |

M12 X Code Rear Panel Mounting Female - RJ45



PXMBNI12RPM08XRJM16

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



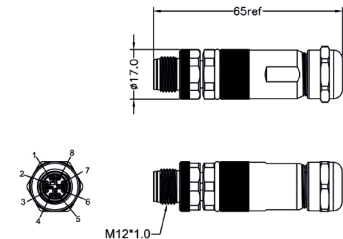
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|---------------------|----------|------|-------------|--------------------------------|
| PXMBNI12RPM08XRJM16 | 08 | X | RJ45 | M16 Mounting / Gland Nut Threa |

Nickel Plated M12 X Code Inline Body Male



PXMBNI12FIM08XSCPG9

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



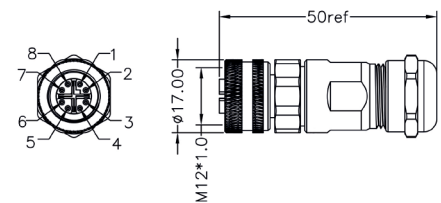
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|---------------------|----------|------|-----------------|---------------------------------|
| PXMBNI12FIM08XSCPG9 | 08 | X | Solder Terminal | PG9 Mounting / Gland Nut Thread |

Nickel Plating M12 X Code Flex Body Female



PXMBNI12FBF08XSCPG9

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



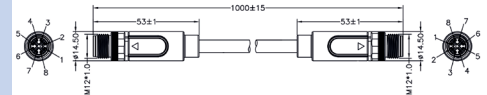
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|---------------------|----------|------|-----------------|--------------------------------|
| PXMBNI12FBF08XSCPG9 | 08 | X | Solder Terminal | PG9 Mounting / Gland Nut Threa |

Inline to Inline Overmould Cable



PXPTPU12FIM08XFI010PU

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



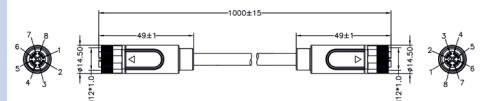
| Part Number | Contacts | Code | Termination | Lead Length | Cable Material |
|-----------------------|----------|------|----------------|-------------|----------------|
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| PXPTPU12FIM08XFI020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FIM08XFI030PU | 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



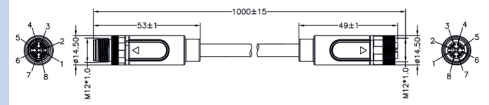
| Part Number | Contacts | Code | Termination | Lead Length | Cable Material |
|-----------------------|----------|------|----------------|-------------|----------------|
| PXPTPU12FBF08XFB010PU | 08 | X | Overmold Cable | 1m | PU |
| PXPTPU12FBF08XFB020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FBF08XFB030PU | 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



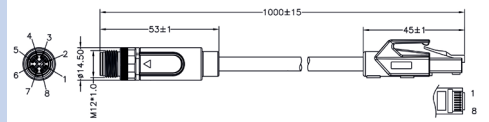
| Part Number | Contacts | Code | Termination | Lead Length | Cable Material |
|-----------------------|----------|------|----------------|-------------|----------------|
| PXPTPU12FIM08XFB010PU | 08 | X | Overmold Cable | 1m | PU |
| PXPTPU12FIM08XFB020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FIM08XFB030PU | 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



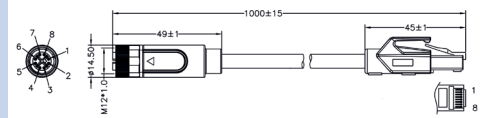
| Part Number | Contacts | Code | Termination | Lead Length | Cable Material |
|-----------------------|----------|------|----------------|-------------|----------------|
| PXPTPU12FIM08XRJ010PU | 08 | X | Overmold Cable | 1m | PU |
| PXPTPU12FIM08XRJ020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FIM08XRJ030PU | 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



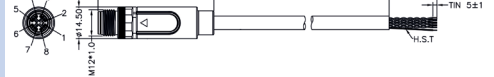
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| PXPTPU12FBF08XRJ020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FBF08XRJ030PU | 08 | X | Overmold Cable | 3m | PU |
| PXPTPU12FBF08XRJ050PU | 08 | X | Overmold Cable | 5m | PU |
| PXPTPU12FBF08XRJ100PU | 08 | X | Overmold Cable | 10m | PU |

Inline Overmould Cable



PXPTPU12FIM08XCL010PU

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



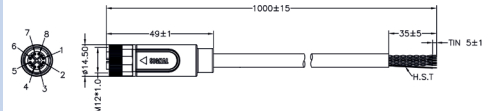
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| PXPTPU12FIM08XCL020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FIM08XCL030PU | 08 | X | Overmold Cable | 3m | PU |
| PXPTPU12FIM08XCL050PU | 08 | X | Overmold Cable | 5m | PU |
| PXPTPU12FIM08XCL100PU | 08 | X | Overmold Cable | 10m | PU |

Inline Overmould Cable



PXPTPU12FBF08XCL010PU

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



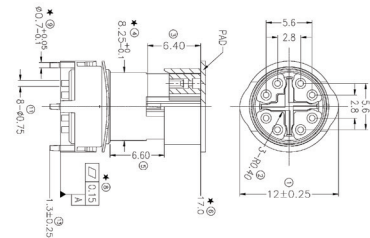
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| PXPTPU12FBF08XCL020PU | 08 | X | Overmold Cable | 2m | PU |
| PXPTPU12FBF08XCL030PU | 08 | X | Overmold Cable | 3m | PU |
| PXPTPU12FBF08XCL050PU | 08 | X | Overmold Cable | 5m | PU |
| PXPTPU12FBF08XCL100PU | 08 | X | Overmold Cable | 10m | PU |

M12 SMT Connectors



PXPLCP12SM

- 4, 5, 8 & 12 Contacts
- Male and Female options
- PCB Termination



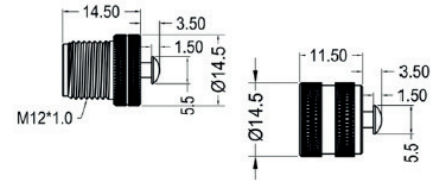
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|------------------|----------|------|--------------|
| PXPLCP12SMF08XPC | 8 | X | PCB Terminal |

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

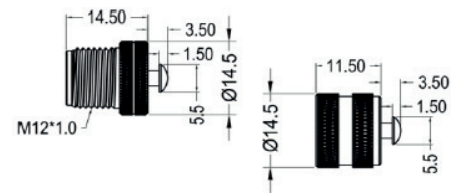
PA66
PA66

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 |

| | | | | | | | |
|---------------|--|--------------------|--|------------------------|-----------------|-------------|--|
| MX | XXX | XX | XX | X | XX | X | XX |
| Series | Material | Series Size | Body Style | Orientation | Contacts | Code | Termination |
| 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 |

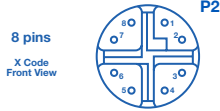
| | | |
|------------------------------------|---|-----------------------|
| XXX | XXX | XXX |
| Mounting / Gland Nut Thread | Lead Length | Cable Material |
| PG9 M16 | 010 = 1m 020 = 2m 030 = 3m 050 = 5m 100 = 10m | PUR |

Contact Diagrams:

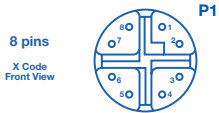
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PXMBNI12FBF08XSCPG9



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PXMBNI12RPM08XRJM16



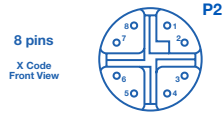
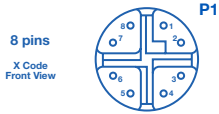
| P1 | PAIR | WIRE COLOUR | P2 |
|----|------|----------------|----|
| 1 | X | WHITE / ORANGE | 1 |
| 2 | | | 2 |
| 3 | X | WHITE / GREEN | 3 |
| 4 | | | 4 |
| 5 | X | WHITE / BLUE | 5 |
| 6 | | | 6 |
| 7 | X | WHITE / BROWN | 7 |
| 8 | | | 8 |

PXPTPU12FIM08XFI010PU

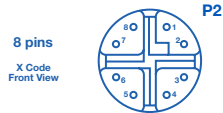


| P1 | PAIR | WIRE COLOUR | P2 |
|-------|------|----------------|-------|
| 1 | X | WHITE / ORANGE | 1 |
| 2 | | | 2 |
| 3 | X | WHITE / GREEN | 3 |
| 4 | | | 4 |
| 5 | X | WHITE / BLUE | 5 |
| 6 | | | 6 |
| 7 | X | WHITE / BROWN | 7 |
| 8 | | | 8 |
| SHELL | — | BRAID | SHELL |

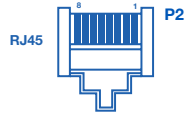
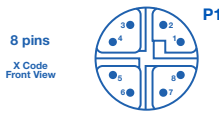
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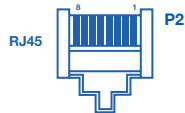
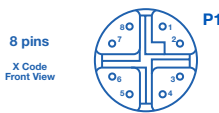


PXPTPU12FIM08XRJ010PU



| 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 | |