

The most **compact connector** type in the M-Series range, Bulgin's **waterproof M5 sensor connectors** come in straight and angled forms with **PVC** or **PUR overmolded cable** options and a variety of panel mount receptacles.



With an industry standard screw coupling mechanism and IP67 rating, this circular connector product line is particularly suited to automotive, process control, commercial electronics & instrumentation applications that require reliable and robust miniature sensors.

## Key features:

- Secure & reliable screw locking mechanism
- Robust PVC & PUR overmolded cables
- Cable length from 1m - 15m
- High degree of environmental protection - IP67 rated
- Straight & right angled cable connectors
- Rear & front panel mount receptacles
- Available with 3 or 4 Contacts
- Interchangeable with other EN61076-2-105

**M5 Series coding options:**  
(Full Contact Diagrams Page 137)



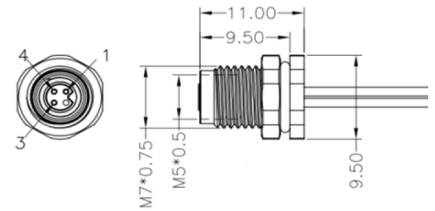
A-Coding

M5 Rear Panel Mounting Female



PXMBNI05RPF

- Available in 3 & 4 Contacts
- PCB or flying lead termination
- Mates with Inline Body connectors



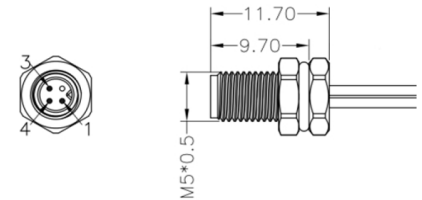
Part Number	Contacts	Code	Termination	Lead Length
PXMBNI05RPF03AFL001	03	A	Flying Lead	100 mm
PXMBNI05RPF03AFL002	03	A	Flying Lead	200 mm
PXMBNI05RPF03AFL003	03	A	Flying Lead	300 mm
PXMBNI05RPF04AFL001	04	A	Flying Lead	100 mm
PXMBNI05RPF04AFL002	04	A	Flying Lead	200 mm
PXMBNI05RPF04AFL003	04	A	Flying Lead	300 mm
PXMBNI05RPF03APC	03	A	PCB Terminal	-
PXMBNI05RPF04APC	04	A	PCB Terminal	-

M5 Rear Panel Mounting Male



PXMBNI05RPM

- Available in 3 & 4 Contacts
- PCB or flying lead termination
- Mates with Flex Body connectors



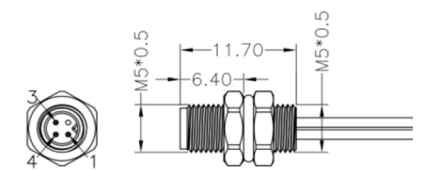
Part Number	Contacts	Code	Termination	Lead Length
PXMBNI05RPM03AFL001	03	A	Flying Lead	100 mm
PXMBNI05RPM03AFL002	03	A	Flying Lead	200 mm
PXMBNI05RPM03AFL003	03	A	Flying Lead	300 mm
PXMBNI05RPM04AFL001	04	A	Flying Lead	100 mm
PXMBNI05RPM04AFL002	04	A	Flying Lead	200 mm
PXMBNI05RPM04AFL003	04	A	Flying Lead	300 mm
PXMBNI05RPM03APC	03	A	PCB Terminal	-
PXMBNI05RPM04APC	04	A	PCB Terminal	-

M5 Front Panel Mounting Male



PXMBNI05FPM

- Available in 3 & 4 Contacts
- PCB or flying lead termination
- Mates with Flex Body connectors



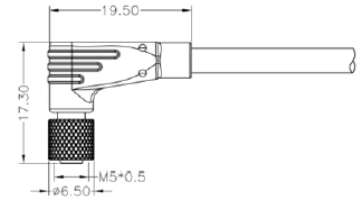
Part Number	Contacts	Code	Termination	Lead Length
PXMBNI05FPM03AFL001	03	A	Flying Lead	100 mm
PXMBNI05FPM03AFL002	03	A	Flying Lead	200 mm
PXMBNI05FPM03AFL003	03	A	Flying Lead	300 mm
PXMBNI05FPM04AFL001	04	A	Flying Lead	100 mm
PXMBNI05FPM04AFL002	04	A	Flying Lead	200 mm
PXMBNI05FPM04AFL003	04	A	Flying Lead	300 mm
PXMBNI05FPM03APC	03	A	PCB Terminal	-
PXMBNI05FPM04APC	04	A	PCB Terminal	-

M5 Right Angled Female



PXPTPU05RAF  
PXPPVC05RAF

- Available in 3 & 4 Contacts
- 1,2,3,5,10 & 15m cable options
- Overmold Flex Body
- Mates with Inline Body & panel mount connectors



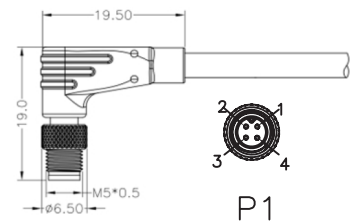
Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPPVC05RAF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05RAF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05RAF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05RAF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05RAF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05RAF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05RAF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05RAF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05RAF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05RAF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05RAF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05RAF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05RAF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05RAF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05RAF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05RAF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05RAF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05RAF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05RAF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05RAF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05RAF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05RAF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05RAF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05RAF04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Right Angled Male



PXPTPU05RAM  
PXPPVC05RAM

- Available in 3 & 4 Contacts
- 1,2,3,5,10 & 15m cable options
- Overmold Inline Body
- Mates with Flex Body & panel mount connectors



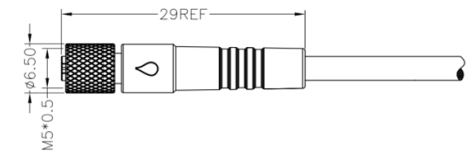
Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPPVC05RAM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05RAM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05RAM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05RAM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05RAM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05RAM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05RAM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05RAM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05RAM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05RAM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05RAM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05RAM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05RAM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05RAM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05RAM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05RAM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05RAM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05RAM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05RAM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05RAM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05RAM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05RAM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05RAM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05RAM04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Flex Body Female



PXPTPU05FBF  
PXPPVC05FBF

- Available in 3 & 4 Contacts
- Overmold Flex Body
- 1,2,3,5,10 & 15m cable options
- Mates with Inline Body & panel mount connectors



Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPPVC05FBF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05FBF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05FBF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05FBF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05FBF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05FBF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05FBF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05FBF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05FBF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05FBF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05FBF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05FBF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05FBF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05FBF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05FBF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05FBF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05FBF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05FBF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05FBF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05FBF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05FBF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05FBF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05FBF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05FBF04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Inline Body Male



PXPTPU05FIM  
PXPPVC05FIM

- Available in 3 & 4 Contacts
- 1,2,3,5,10 & 15m cable options
- Overmold Inline Body
- Mates with Flex Body & panel mount connectors



Part Number	Contacts	Code	Termination	Lead Length	Cable Material
PXPPVC05FIM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05FIM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05FIM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05FIM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05FIM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05FIM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05FIM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05FIM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05FIM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05FIM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05FIM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05FIM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05FIM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05FIM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05FIM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05FIM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05FIM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05FIM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05FIM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05FIM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05FIM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05FIM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05FIM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05FIM04ACL150PUR	04	A	Overmold Cable	15m	PUR

**Electrical**

No. Contacts:	3	4
Current Rating:	1A	1A
Voltage Rating (ac/dc) :	60V	60V
Contact Resistance:	<10mΩ	
Insulation Resistance:	>100MΩ	
AC Breakdown Voltage:		
3 Contacts	1.5KV	
4 Contacts	1.5KV	
Operating Temp Range:	-25°C to 80°C	

**Mechanical:**

Locking Mechanism:	Screw coupling
Rating:	IP67
Contacts:	Terminations:
3 Contacts	Flying Lead / PCB / Cable
4 Contacts	Flying Lead / PCB / Cable
Mechanical Operation:	500 mating cycles
Diameter over coupling ring:	6.5mm

**Panel Mounting Connectors:**

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:**

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

<b>XXX</b>	<b>XXX</b>	<b>XX</b>	<b>XX</b>	<b>X</b>	<b>XX</b>	<b>X</b>	<b>XX</b>
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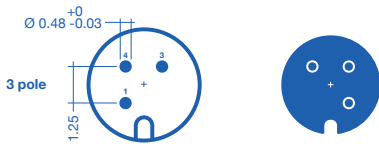
Series	Material	Series Size	Body Style	Orientation	Contacts	Code	Termination
PXM	BNI = Brass Nickel	05	FB = Flex Body	M = Male	03	A	FL = Flying Lead
PXP	TPU = overmold for PUR PVC = overmold for PVC		FI = Inline Body FP = Front Panel Mounting RP = Rear Panel Mounting RA = Right Angle	F = Female	04		PC = PCB CL = Cable

<b>XXX</b>	<b>XXX</b>
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Lead Length	Cable Material
001 = 100mm	PUR
002 = 200mm	PVC
003 = 300mm	
010 = 1m	
030 = 3m	
050 = 5m	
100 = 10m	
150 = 15m	

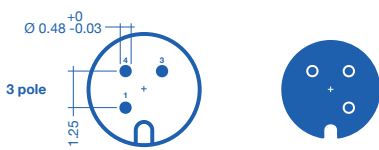
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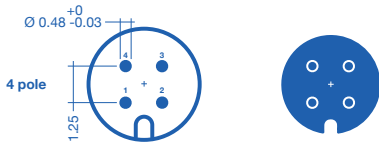
P1	PAIR	WIRE COLOUR	P2
1	—	RED	1
3	—	GREEN	3
4	—	BLACK	4

PXPPVC05FBF03ACLXXXPVC



P1	PAIR	WIRE COLOUR	P2
1	—	BROWN	1
3	—	BLUE	3
4	—	BLACK	4

XXXXXXXXXXM04XXXXXXXXXX  
XXXXXXXXXXF04XXXXXXXXXX



P1	PAIR	WIRE COLOUR	P2
1	—	RED	1
2	—	WHITE	2
3	—	GREEN	3
4	—	BLACK	4