



# ITT

Interconnect Solutions  
Cannon, VEAM, BIW

Enabling miniaturization of **critical,**  
soldier technology **applications**  
through the fielding of the industry's most  
**innovative** mini-circular product lines



*Engineered for life*

## High Vibration, Higher Temperature, Highest Sealing

ITT Interconnect Solutions has been always looking forward to satisfy their customers' needs. In order to meet these specific demands ITT ICS developed a new signal connector series for sensor applications (100V / 4A) in harsh environments. One such application is the engine compartments of both heavy diesel and gas units. ITT ICS's engineered for life design philosophy ensures that Metr1x connectors stay dry and fully functional in all situations. Engine oils, soot or even aggressive salt spray have no impact on the connector's performance or function. The connector provides EMI shielding as well as resistance against vibration of up to 20g and shock of up to 50g. In addition it is sealed to IP69K, can operate up to 150°C (+302°F) conforms to UL94-V0 and is RoHS compliant.



### Metr1x Product Line Talking Dog

**M1X** — **1** — **P** — **3** — **C1** — **S** — **P1**

**M1X** SERIES  
Metr1x

**1** SHELL STYLE  
1 - Cable Receptacle (pin)  
6 - Cable Plug (socket)

**P** CONTACT GENDER  
P - Pin  
S - Socket

**3** CONTACT ARRANGMENT  
2 = 2-way  
3 = 3-way  
4 = 4-way

**C1** CONTACT TYPE  
C1 Gold plated crimp contact  
0,22 mm<sup>2</sup> to 0,75 mm<sup>2</sup> (AWG 24-20)

**S** CABLE TYPE  
S - Standard, without cable

**P1** VARIANT/LENGTH OF CABLE  
P1 - Piece parts with contacts, no cable  
P0 - Piece parts, no contacts, no cable



B

Mini Circular

### Specifications

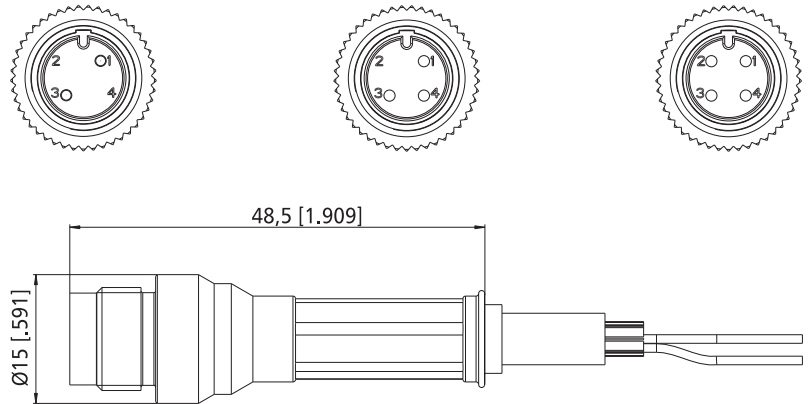
<b>Contact Type</b>	CGK crimp contacts, size 20
<b>Wire Accomodation</b>	0,22 - 0,75 mm <sup>2</sup> (AWG 24-20)
<b>Housing Material</b>	Stainless Steel V2A
<b>Cable Diameter</b>	6 mm
<b>Durability</b>	50 mating cycles
<b>Current Rating</b>	4A
<b>Voltage Rating</b>	100V dc
<b>Mating Face</b>	Acc. DIN EN 61076-2-1001 / Type D
<b>Locking Torque</b>	1,5Nm to 2,1Nm
<b>Insulation Resistance</b> (acc. IEC 60512, Method 3a)	1 GΩ minimum / 500 V dc
<b>Operating Temperature</b>	-40°C to +150 °C (-40 °F to +302 °F)
<b>Contact Resistance</b> (acc. IEC 60512, Method 2a)	5 mΩ maximum
<b>Vibration</b> (acc. IEC 60512, Method 6e)	20g rms, 5Hz to 2 kHz
<b>Shock</b> (acc. IEC 60512, Method 6c)	50g, half-sine, 11 ms
<b>EMI Shielding</b> (acc. VG95328 / VG 95343)	50 dB minimum, 30 kHz – 100 MHz
<b>Sealing Class</b>	IP69K, IP68 (4m / 2 hours) in mated condition
<b>Flammability Rating</b>	UL94-V0
<b>Salt Spray Resistance</b> (acc. IEC 60512, Method 11f)	48 hours
<b>Resistance against fluids</b>	Engine oil, diesel, cooling liquid, kerosene, hydraulic oil



# Metr1x Connectors

## Metr1x Receptacle

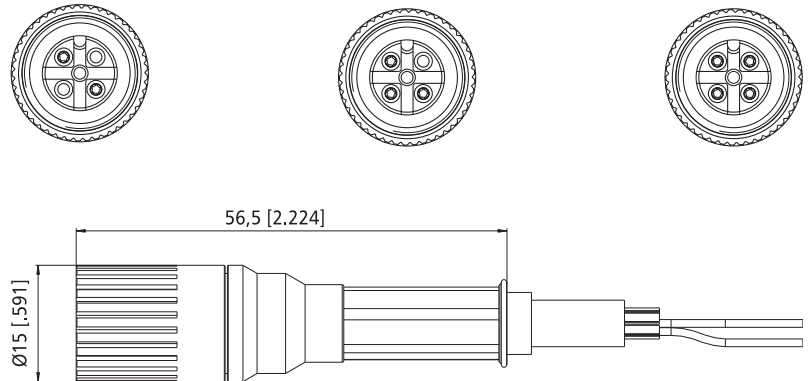
2-, 3-, 4-way Pin



B

## Metr1x Plug

2-, 3-, 4-way Socket



Mini Circular

## Metr1x Housing



Robust stainless steel housing is available in different versions for receptacle. Further housing variations on request.

For assembly and crimp tooling please consult factory.