

# Ø1.5mm Socket Receptacle Plug Connector 2 & 4 Position APPLICATION SPECIFICATION

Application Specification 114-3219

20 Nov 00 REV A



All numerical values are in metric units. Dimensions are in millimeters. Unless otherwise specified, dimensions have a tolerance of  $\pm 0.15$ , and angles have a tolerance of  $\pm 2^{\circ}$ . Figures and illustrations are for identification only, and not drawn to scale.

### 1. SCOPE

This specification covers requirements for the application and use of the 2 Position  $\varnothing$ 1.5mm Socket Receptacle Connector Assembly, using the  $\varnothing$ 1.5mm Socket contact System.

This connector mates with a non-customer specific interface (details below). This specification is intended to provide all relevant information required for the assembly and operation of the connector.

## 2. REFERENCE MATERIAL

## 2.1 Applicable reference specifications:-

Design Objective Specification:108-3442Packaging Specification:107-3279Application Specification for Ø1.5mm Socket Contact:114-18040

## 2.2 Applicable Part Numbers:

929988-x	Ø1.5mm Socket Contact, Single Wire Sealing, wire range 0.2-0.4mm²			
929989-x	Ø1.5mm Socket Contact, Single Wire Sealing, wire range 0.5-1.0mm <sup>2</sup>			
929990-x	Ø1.5mm Socket Contact, Single Wire Sealing, wire range >1-2.5mm²			
828904-x	Single Wire Seal, refer to 114-18040 for Wire Range details			
828905-x	Single Wire Seal, refer to 114-18040 for Wire Range details			
828922-x	Blanking Plug, refer to 114-18040 for details			
1337245-3	2 Position Ø1.5mm Socket Receptacle Plug Connector Assembly			
1337352-1	4 Position Ø1.5mm Socket Receptacle Plug Connector Assembly			
114-3223	Header Interface Details, 2 & 4 Position			

Customer drawings for the specified products are available from the service network. The information contained in the customer drawings take priority if there is a conflict with this specification or with any technical documentation supplied by Tyco Electronics.

### **Revision Summary**

REV 1 REV 2 REV A	Preliminary issue EB00-0537-00 EB00-0191-01	29-5-01		
Drawn:- R. Challis		20 Nov 00	Approved:- M. J. Whelan	20 Nov 00

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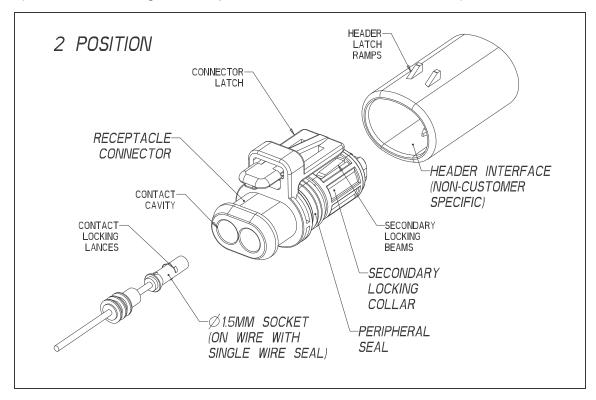
# Ø1.5mm Socket Receptacle **Plug Connector** 2 & 4 Position **APPLICATION SPECIFICATION**

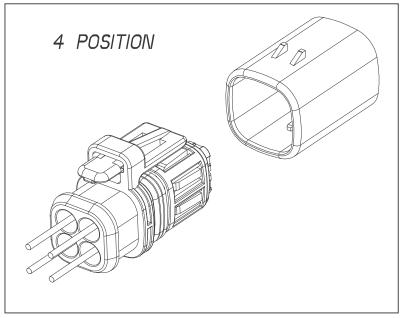
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#### 3. **TERMINOLOGY**

For the purpose of accuracy and consistency, the following terms shall be used to describe the connector and various associated parts throughout this specification. (All views used throughout this specification show the 2 Position version).







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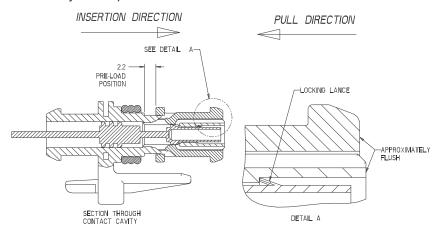
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## 4. CONTACT ASSEMBLY SPECIFICATION

The connector is supplied with the Secondary Locking Collar in a pre-loaded position, shown by Secondary Locking Collar approximately level with the front of the Receptacle Connector and with a 2.2mm gap as shown, permitting immediate insertion of the contacts.

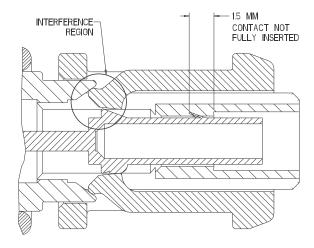
Insert the  $\varnothing$ 1.5mm Socket (crimped to wire with Single Wire Seal) into appropriate cavity in the Receptacle Connector Assembly as shown.

Ensure the contact locking lances are engaged by pulling on the wire in the direction shown (maximum 20N force). Contact removal should not be possible when the locking lances of the contact are in the cavity in the position shown.



The Secondary Lock Collar provides a Terminal Position Assurance function over a length of 1.5mm of contact not fully inserted – Interference here will indicate improper terminal insertion with attempted Secondary Locking Collar closure:

EFFECTIVE ZONE OF T.P.A:





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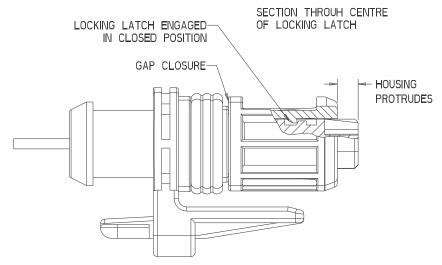
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#### 5. SECONDARY LOCK CLOSURE

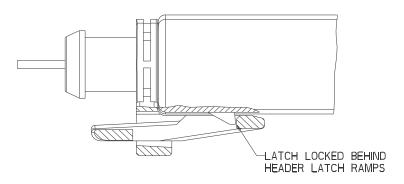
Close the secondary lock by pushing in the direction shown until it is into its closed position, until the locking latch is engaged.

Verify Secondary Locking Collar is closed by visual indication of gap closure / Receptacle Connector Housing Protruding as shown.



#### 6. RECEPTACLE CONNECTOR TO HEADER MATING SPECIFICATION

When assembling the receptacle connector to the header, position the connector in the correct orientation and insert in to fully assembled position as shown where the latch will lock behind the Header Latch Ramps. This is notified by an audible click of the closing of the latch. Adequate force must be applied to ensure full connector mating. Incorrect orientation will be prevented by an internal alignment rib.



SECTION THROUGH LATCH



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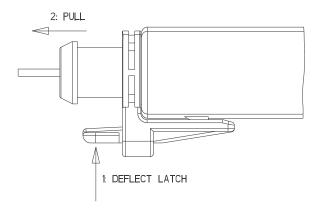
## 7. DISASSEMBLY PROCEDURE

### 7.1 Unmating of Connector from Header

Deflect the latch by pressing as shown to deflect the latch above the Header Latch Ramps.

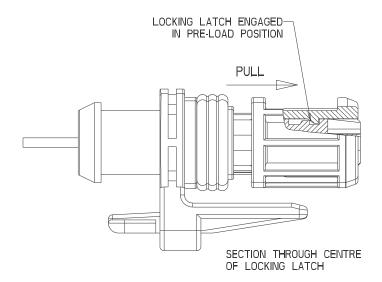
Ø1.5mm Socket Receptacle

Then pull in direction as shown to unmate from the Header Interface. It is permissible to pull on the wires by hand providing the latch is fully deflected (i.e. clear of Header Latch Ramps)



# 7.2 Opening of Secondary Lock Collar into Pre-Load position

Pull on the Secondary Lock Collar in the direction shown, until the pre-load position is achieved. The locking latch will engage in this position.







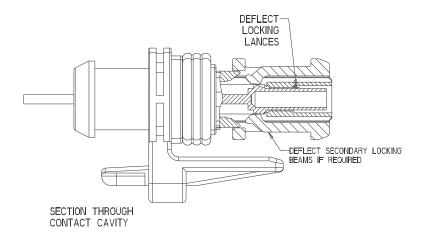
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#### 7.3 **Contact Removal**

To remove the Ø1.5mm Socket, insert the correct extraction tool (please refer to Application Specification 114-18040) into the front of the cavity. Contact removal will be possible by gently pulling on the wire once the Contact Locking Lances are deflected.



If after extensive service and contact removal is found to be difficult, the secondary locking beam can be deflected outwards with a suitable tool.