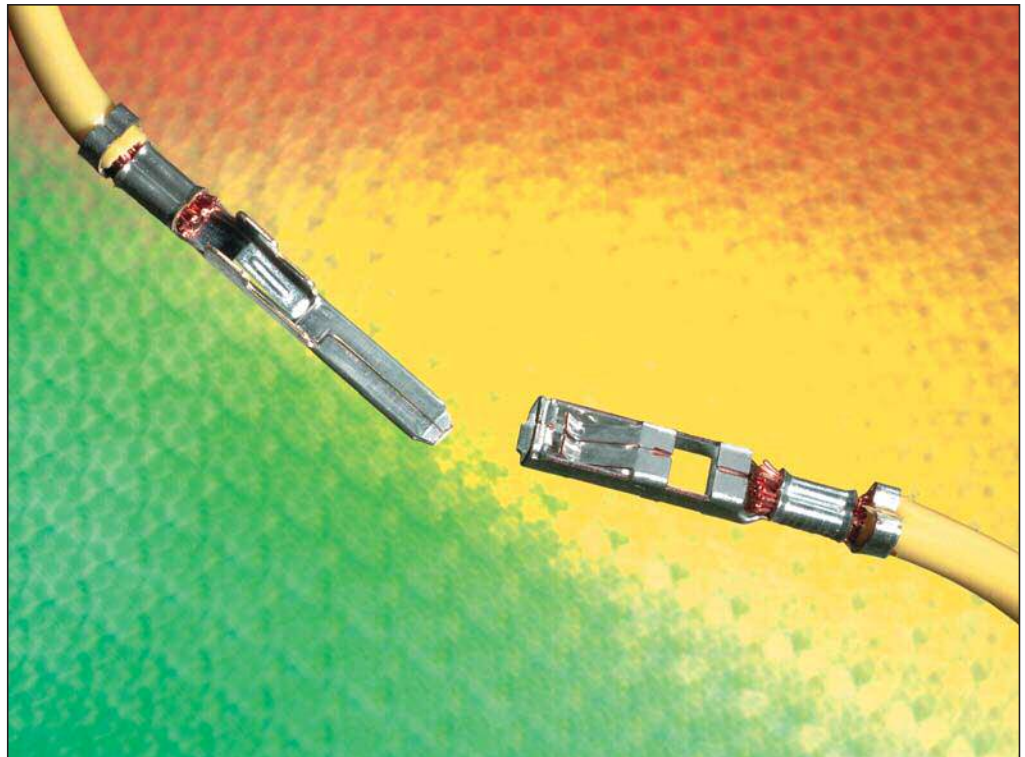


Introduction



Tyco Electronics has developed a series of high contact density receptacle housings and connectors for wire-to-wire connections from front to rear vehicle harnesses, panel mount and wire-to-board connections on equipment.

The female box-type contact is provided with an anti-overstress device in its cavity and allows simple corrections of any tab misalignment.

The required mating force is low and it provides a very reliable electrical contact.

It is connected to 3.0 mm x 0.64 mm crimping tabs (for MIC I) or 2.8 mm x 0.8 mm tabs (for MIC IV).

The allowable wire sizes for MIC I connectors vary between 0.35 mm<sup>2</sup> up to 3.0 mm<sup>2</sup> and in two contact ranges.

The allowable wire sizes for MIC IV connectors vary between 0.35 mm<sup>2</sup> to 5.0 mm<sup>2</sup> and in three contact ranges.

Contact may be crimped manually or using a mini-applier mounted on a press.

The polarized housing includes a locking system with an audible snap-lock on mating. A color code allows identification of mechanical polarization.

**MIC I**

Housings in MIC I version are available with 2, 3 or 4 rows – with 5-, 9-, 13-, 17-, 20- or 27-positions fitted with crimped contacts.

Insertion of the contact into the housing is very precise and easy due to lead in which protect the contact lance.

**MIC IV**

The MIC IV program is special in that it can receive both crimping contacts on 0.35 mm<sup>2</sup> to 5.0 mm<sup>2</sup> wires or insulation displacement contacts for 0.35 mm<sup>2</sup> to 1.0 mm<sup>2</sup> wires in the same cavities.

The housings include 5-, 7-, 9-, 11-, 13- and 21-positions in two rows.

Male or female contacts are retained by a plastic lance provided in the housing.

By use of insulation displacement products, please consult Tyco Electronics.

Receptacle Contacts

**Technical Features**

**Current Rating:**  
15 A per contact under some conditions of use for 3.0 mm<sup>2</sup> wire

**Termination Resistance:**  
Initial 3 mΩ

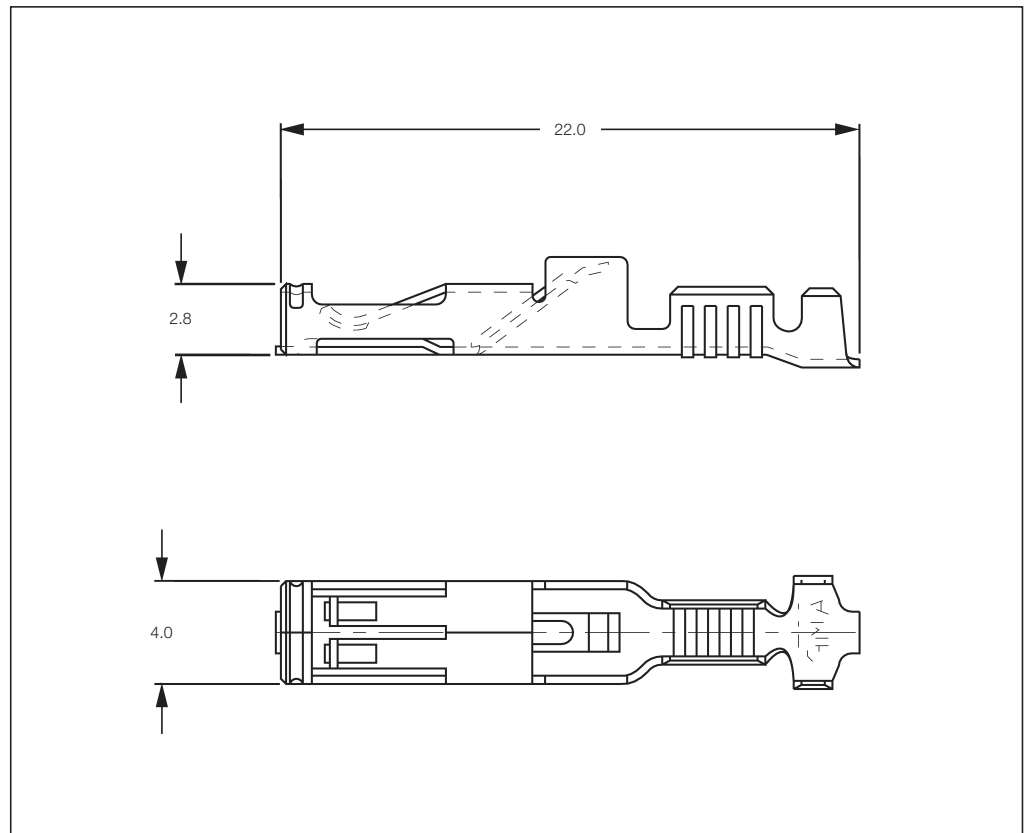
**Temperature Range:**  
-40 °C up to +100 °C

**Number of Cycles:**  
20 mating cycles

**Contact Material:**  
CuZn or CuSn

**Contact Finish:**  
2.5 μm tin plated  
Selective gold plating is also available.

**Extraction Tool:**  
Part No. **724763-1**



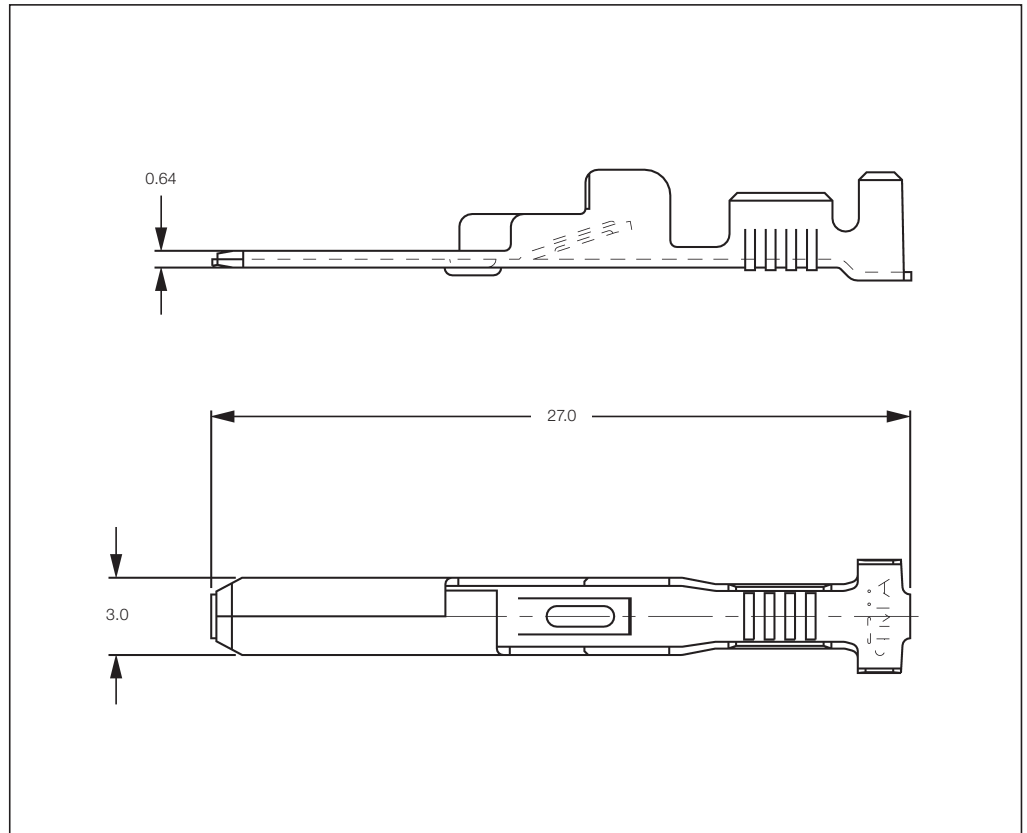
**Receptacle Contacts**

Wire Size Range	Insulation Diameter FLK	Insulation Diameter FLR	Material and Finish	Part Numbers				Applicator	Hand Tool
				Strip Form	Package Quantity	Loose-Piece	Package Quantity		
mm <sup>2</sup> (AWG)	mm (Inch)	mm (Inch)							
0.35-1.0 (22-17)	2.1 max. (.083 max.)	-	CuZn, pre-tin plated	142183-1	4,000	142314-1	100 or 1,000	878300	944032-1
			CuSn, pre-tin plated	142183-2	4,000	142314-2	100 or 1,000		
			CuZn, gold plated	142183-5	4,000	142314-5	100 or 1,000		
1.0-3.0 (17-12)	3.3 max. (.130 max.)	-	CuZn, pre-tin plated	142185-1	3,000	142316-1	100 or 500	878355	944031-1
			CuSn, pre-tin plated	142185-2	3,000	142316-2	100 or 500		

Additional finishes upon request.

**Tab Contacts**

**Tabs 3.0 x 0.64 mm,  
Mates with  
MIC I Receptacles**



**Tab Contacts**

Wire Size Range	Insulation Diameter		Material and Finish	Part Numbers				Applicator	Hand Tool
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
mm <sup>2</sup> (AWG)	mm (Inch)	mm (Inch)							
0.35-1.0 (22-17)	2.1 max. (.083 max.)	-	CuZn, pre-tin plated	142184-1	4,000	142315-1	100 or 1,000	878324	944032-1
			CuZn, gold plated	142184-5	4,000	142315-5	100 or 1,000		
1.0-3.0 (17-12)	3.3 max. (.130 max.)	-	CuZn, pre-tin plated	142186-1	3,000	142317-1	100 or 500	878353	944031-1

Additional finishes upon request.

Receptacle Contacts

**Technical Features**

**Crimping Contacts**

**Current Rating:**

15 A per contact under some conditions of use for 3.0 mm<sup>2</sup> wire

**Termination Resistance:**

Initial 3 mΩ

**Temperature Range:**

-40 °C up to +100 °C

**Number of Cycles:**

20 mating cycles

**Contact Material:**

CuSn

**Contact Finish:**

2.5 μm pre-tin plated

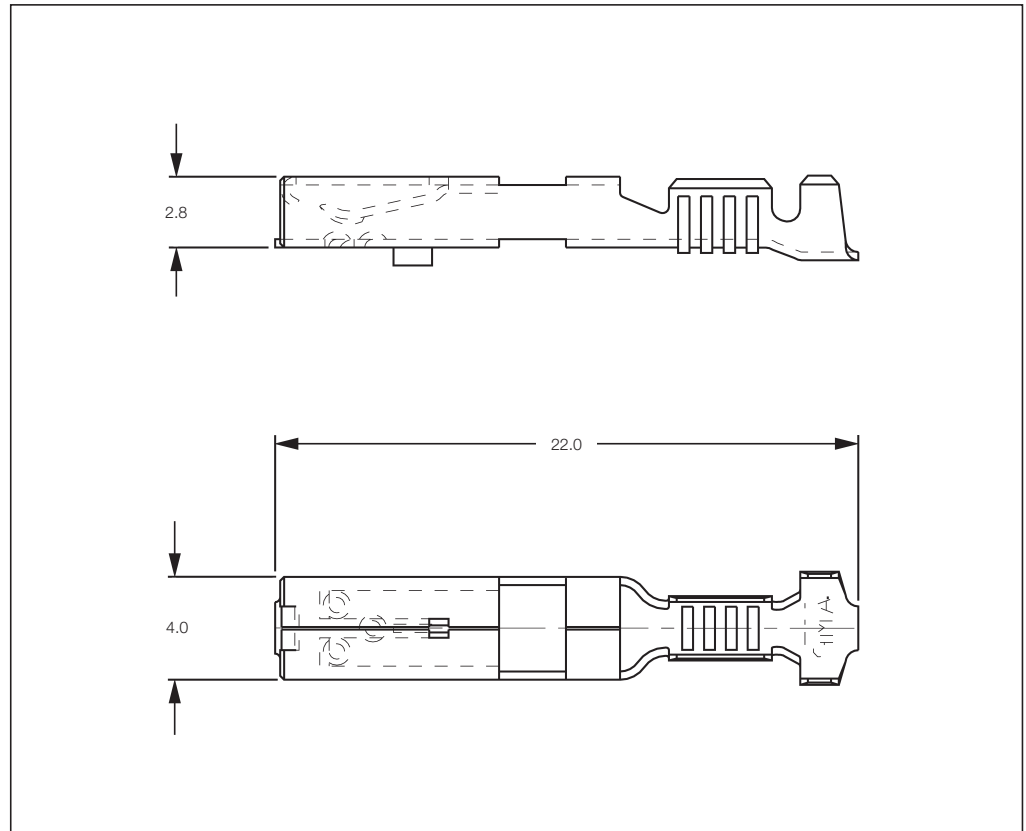
**Extraction Tool:**

Part No. **946948-1**

**Contact Description**

Receptacles mate with 3.0 x 0.64 mm and 2.8 x 0.8 mm tabs.

Receptacles are not fitted with locking lance.

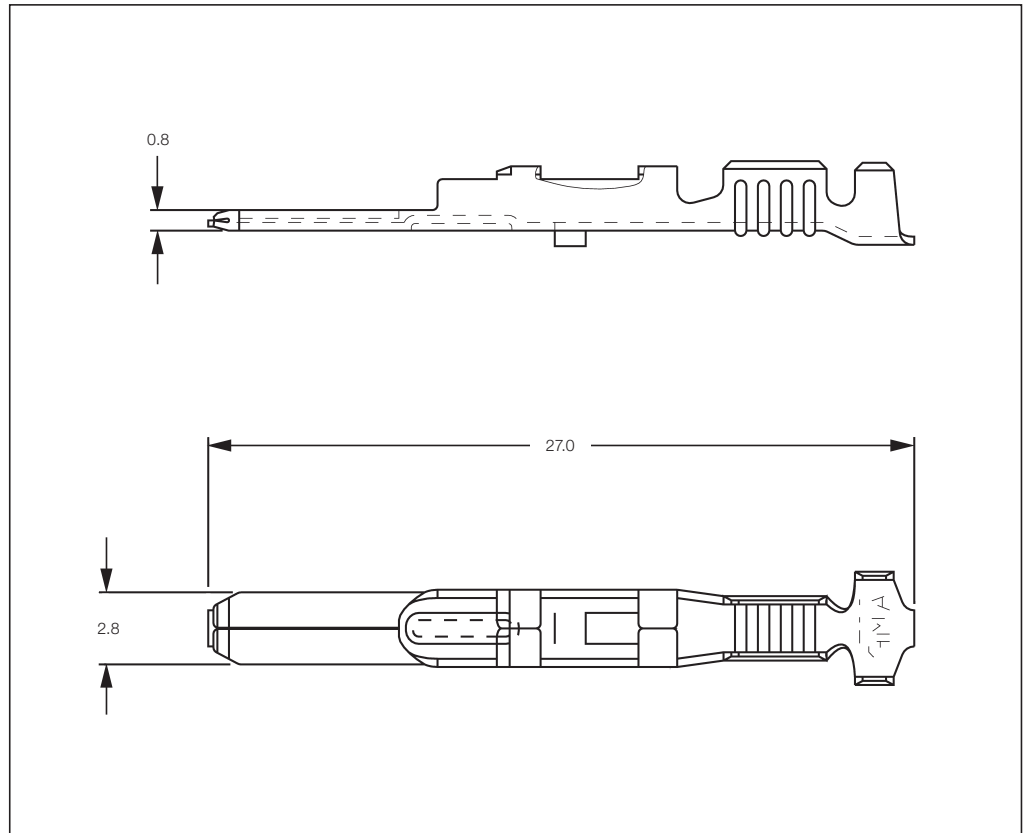


**Receptacle Contacts**

Wire Size Range	Insulation Diameter		Material and Finish	Part Numbers				Applicator	Hand Tool
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
mm <sup>2</sup> (AWG)	mm (Inch)	mm (Inch)							
0.35-1.0 (22-17)	2.15 (.085)	-	CuSn, pre-tin plated	144180-1	6,000	144812-1	100 or 1,000	541625	944032-1
1.0-3.0 (17-12)	3.30 (.130)	-	CuSn, pre-tin plated	144181-1	3,500	144813-1	100	878355	944031-1
3.0-5.0 (12-10)	3.50 (.138)	-	Copper alloy, tin plated	142753-2	3,000	-	-	upon request	-

**Tab Contacts**

**Tabs 2.8 x 0.8 mm,  
Mates with  
MIC IV Receptacles**



**Tab Contacts**

Wire Size Range	Insulation Diameter		Material and Finish	Part Numbers				Applicator	Hand Tool
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
mm <sup>2</sup> (AWG)	mm (Inch)	mm (Inch)							
0.35–1.0 (22–17)	2.15 (.085)	–	CuZn, pre-tin plated	142754-1	6,000	142917-1	1,000	878324	944032-1
1.0–3.0 (17–12)	3.30 (.130)	–	CuZn, pre-tin plated	142755-1	3,000	142918-1	1,000	upon request	944031-1
3.0–5.0 (12–10)	3.50 (.138)	–	Cu, pre-tin plated	142700-1	2,500	–	–	upon request	–

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Engineering Notes

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