



MQS (Micro Quadlok System)



1. SCOPE

This specification contains the guidelines for the application of contact system MQS. It applies primarily to the full- or semi-automatic application of the contacts

2. REFERENCED DOCUMENTS

2.1 Customer Drawings

The dimensions and materials of the contacts are shown in the TE customer drawings. In the case of a conflict between this document and the customer drawing, the customer drawing takes precedence.

2.2 Application Specification

The crimp quality must also comply with the general guidelines laid down in the application specification 114-18022.

3. DESCRIPTION OF NOMENCLATURE

The following terms are used in the specification. Fig.1

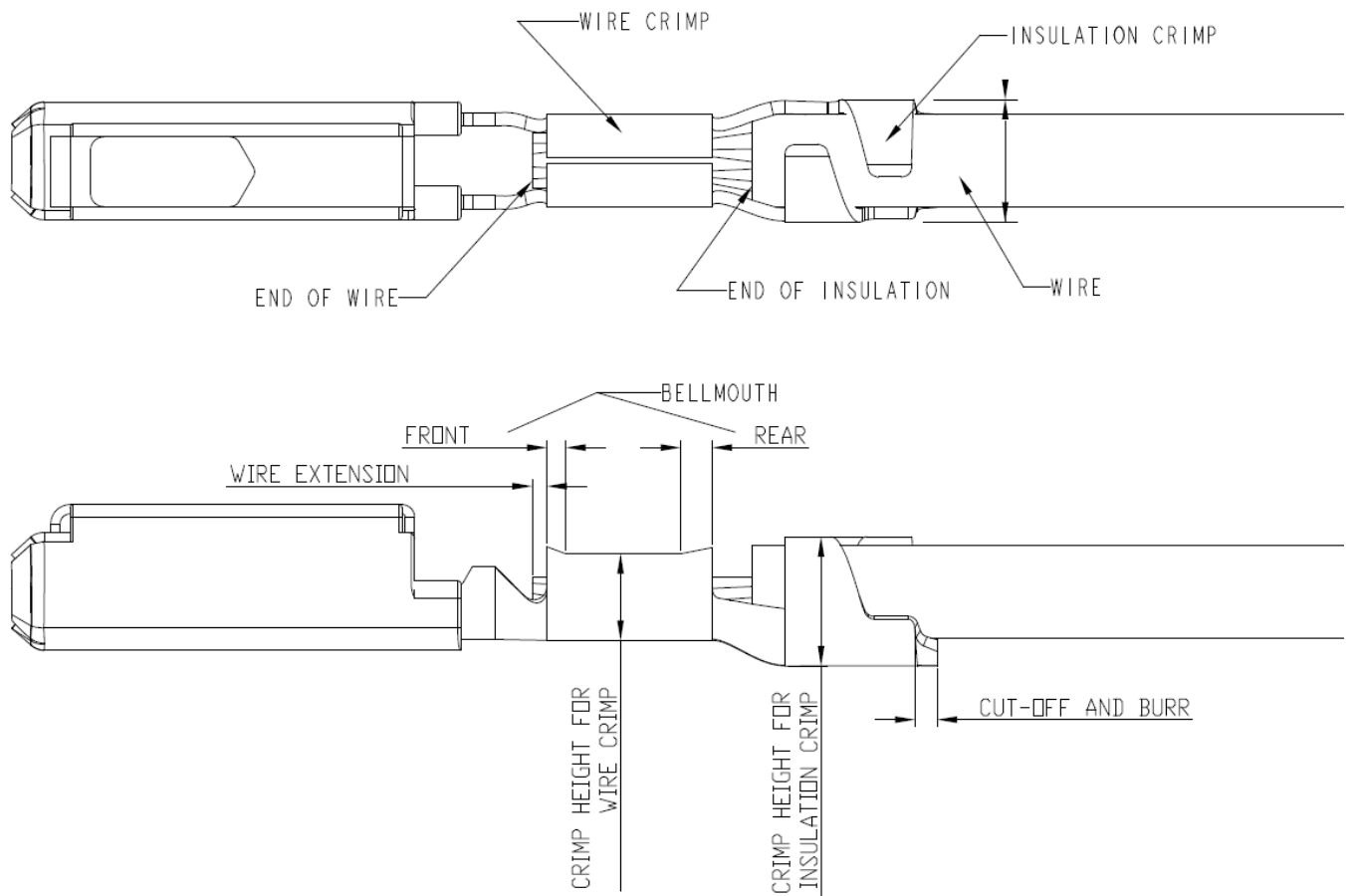


Fig. 1

4. REQUIREMENTS

4.1 Wire

Only single termination is permitted.

4.2 Cut off Tab

The cut off tab is still visible and may not exceed 0.3mm.

4.3 Wire Crimp

A. Wire position

After crimping, the end of the wire must extend 0.1 to 0.7mm beyond the front edge of the wire crimp.
(max 0.4 at 0.75mm² or family-seal application)

The mating and locking function of the contact must not be affected by the wire extension of single strands.

Upraising single strands are not permitted.

In no case may the end of the insulation be crimped under the wire crimp.

B. Crimping data

The shape, height, width of the crimp and the wire range are shown in table 1.

Crimp height measurement: see 114-18022.

C. Burr on base of crimp

According to spec 114-18022.

D. Bellmouth

The rear bellmouth must be $0.25^{+0.15}$ according to Spec. 114-18022.

The front bellmouth should be absent or can be 0.15mm Max.

4.4 Transition

A bulging of contact material to the outside at the transitions of wire crimp to body and wire crimp to insulation crimp is not allowed.

4.5 Insulation Crimp

The shape and width are shown in Table 1.

The crimp height is set according the bending or winding test as described in Spec 114-18022.

To ensure loading it is important to keep the crimper width test dimension CP₂ in tolerance.

This dimension must also kept in the transition-areas.

4.6 Contact Area

Neither the locking lance nor the contact body may be bent or deformed.

4.7 Shape and Positional Tolerances of the Crimped Contact

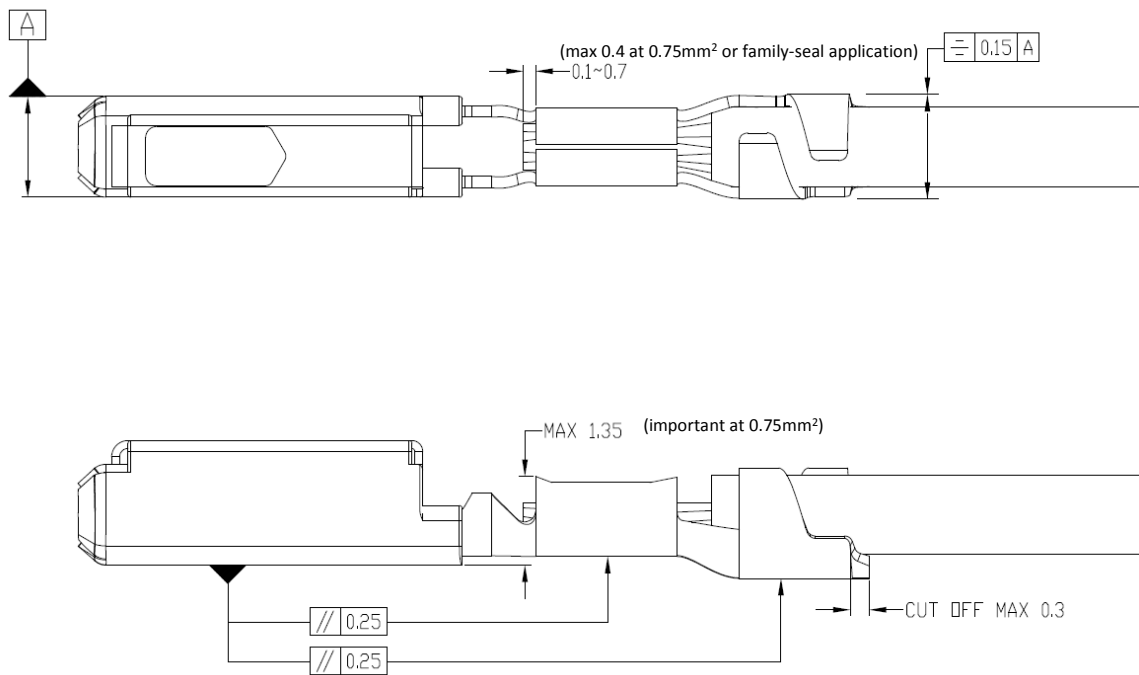


Fig. 2

5. CRIMP DATA

Contact P/N	Wire Range (mm ²)	Insulation Range Ø (mm)	Strip Length (mm)	Wire Barrel Crimp			Insulation Barrel Crimp		
				Width(CB ₁) (mm)	Height (CH ₁) (mm)	Crimper Width Test Dimension CP ₁ (mm)	Width(CB ₂) (mm)	Height(CH ₂) (mm)	Crimper Width Test Dimension CP ₂ (mm)
x-2005119-1	0.3/0.35	1.1~1.6	3.6±0.15	1.4 "F"	0.76±0.03	1.4 ^{+0.15}	1.83 "O"	1.6 Max	1.83 ^{+0.2}
x-2390121-1	0.5				0.86±0.03			1.9 Max	
x-2005120-1	0.5	1.3~1.9	3.8±0.15	1.4 "F"	0.93±0.03	1.4 ^{+0.15}	2.03 "O"	1.8 Max	2.03 ^{+0.2}
x-2390130-1	0.75				1.07±0.03			2.05 Max	



6. APPLICABLE WIRE RANGE (REFERENCE)



Nominal Wire Size	Number of Strands / Diameter of Strand (mm)	Calculated Cross Section Area (mm ²)	Overall outside Diameter (mm)	
			Normal	Maximum
0.3	7 / 0.26	0.3717	1.4	1.5
0.35	12 / 0.21	0.4156	1.2	1.4
0.5	7/0.32	0.5630	1.6	1.7
0.75	19/0.23	0.7894	1.8	1.9

7. Revision History

REV.	REVISION RECORD	DATE
B1	P/N (x-2390121-1, x-2390130-1) Added	22.Jul.'21
B	Revised	02.MAR.'18