

This specification defines the technical characteristics and performances of the 2 way MPQ + 3 way MQS socket housing .

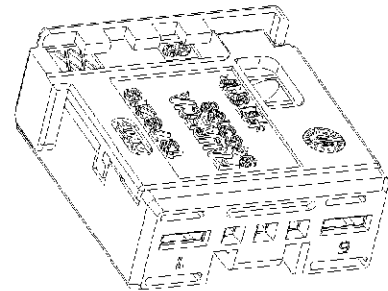
**1. PRODUCT**

**1.1. Description**

**1.1.1. Reference**

- 2 way MPQ + 3 way MQS socket housing : 1379217-X
- Cover for the 2 way MPQ + 3 way MQS socket hsg : 1379218-X

The dash defines the variants of color.



**1.1.2. Material**

PBT reinforced glass fiber of 10%, for all the components.

**1.2. Functions**

**1.2.1. Polarization**

Two polarizations :

- Between contact and socket housing.
- Between socket housing + cover and counter-part.

**1.2.2. Double-locking**

Two levels of locking :

- Contact/cavity : The first locking is made by the cage lance of the contact.
- Cover/socket hsg : The second locking is made by the plastic click of cover on the socket hsg.

**1.3. Contacts**

- Micro Power Quadlock receptacle crimp version : 968075-2 (pre-tinned)
- Micro Quadlock System receptacle crimp version : 144969-1 (pre-tinned)

**1.4. Wires**

Type	Section (mm <sup>2</sup> )	Ø Insulation (mm)
MQS	0.35	1.28 mini – 1.40 maxi
MPQ	1.50	2.10 mini – 2.25 maxi

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**2. OPERATION CONDITIONS**

**2.1. Temperatures**

Class	Operating temperature	Test temperature
T2	-40°+ 100°C	125°C

**2.2. Class of vibration : Class 1.**

**2.3. Sealing : Class 0 ( no sealed).**

**2.4. Nominal voltage : ≤ 16 V.**

**3. TESTS**

Tests are carried according to IEC 60512.

GENERAL EXAMINATION		
TESTS	MODALITIES	SANCTION
VISUAL EXAMINATION	Visual examination	No defects that would impair normal operation.
ELECTRICAL TESTS		
TESTS	TEST PROCEDURES	REQUIREMENTS
INSULATION RESISTANCE	Test Voltage : 100 V	Ri ≥ 100 MΩ
DIELECTRIC RIGIDITY	Test Voltage : 1000Vac, between each way. During 1 min.	No arc No breakdown
MECHANICAL TESTS		
TESTS	TEST PROCEDURES	REQUIREMENTS
INSERTION FORCE OF THE CONTACT INTO THE CAVITY	Insertion by hand . (Double –locking passive device)	MQS : F ≤ 8N MPQ : F ≤ 20N
RETENTION FORCE OF THE CONTACT INTO THE CAVITY	Double –locking passive device	MQS : F ≥ 40N MPQ : F ≥ 60N
	Double –locking active device	MQS : F ≥ 60N MPQ : F ≥ 100N
POLARIZATION CONTACT/ CAVITY	Try to insert the contact into the cavity differently of the normal way .	MQS : F ≥ 50N MPQ : F ≥ 80N
INSERTION FORCE OF THE CONNECTOR	Apply a force in the mating direction	10 N ≤ F ≤ 50N
EXTRACTION FORCE OF CONNECTOR	Apply a force in the un-mating direction	10 N ≤ F ≤ 80N
POLARIZATION OF CONNECTOR	Attempt to engage the connector into the header upside down.	F ≥ 150 N
DROP	Drop from 1m on concrete floor (socket hsg + cover)	No deterioration