





Rev. A1

18 Pos. Header with Action Pin

SCOPE

The specification describes the product performances defining the functional limits. Any test not mentioned here following, will not be considered by Tyco Electronics for the product validation.

REFERENCE DOCUMENTS

Enclosed to the present specification, the following documents must be considered:

Drawing 284582 - 18 Pos. Header with Action Pin Fiat spec. 9.90110 - Rev. July 1999

PRODUCT PROFILE- PRODUCT DESCRIPTION

The product sold by Tyco is composed of the following Pin Headers, to be mounted to Printed Circuit Board:

P/N 284582-1 18 Pos. Header with Action Pin

The Pin Headers are suitable to be mated with the following Receptacle Connectors mounted on Frame, respectively:

P/N 284134-1/-3 9 Pos MQS Crimp module

P/N 284126-1 9 Pos MQS IDC module

P/N 284136-1/-2 18 Pos Frame (Crimp/IDC)

P/N 284360-1/-2 18 Pos Frame (Crimp)

The connector assembly operations are made by different users:

BITRON, producer of the electronic, is responsible for the application of the Pin Headers connectors into the electronic BOX, which will be then assembled on the car and mated with the relevant counterpart Receptacle. Connectors under the responsibility of the OEM (FIAT). Tyco is not responsible for malfunctions caused by an uncontrolled process during the assembly operations in BITRON or in FIAT.

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OPERATING CONDITIONS AND RATINGS

Maximum Voltage: 24 V d.c.; for application at higher voltage please contact AMP.

Current $I = 6 \text{ A max with } 0.75 \text{ mm}^2 \text{ wire for MQS contact}$

Operating temperature 85°C max; -30°C min.

Test temperature: +105°C max; -30°C

TEST CONDITIONS

If not specified, tests must be performed under the following conditions:

Ambient temperature: 23°C ± 5°C Relative Humidity: 45 – 70%

Room pressure: 860-1060 mbar

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TEST DESCRIPTION

1) VISUAL EXAMINATION Any cracking of deformation allowed on the specimen at new ad after mechanical and environmental test 2) THERMAL CYCLING No deformation or cracking of plastic parts Voltage drop: ≤10mV/A 3) ACCELERATED AGEING No deformation or cracking of plastic parts Discoloration are admitted Voltage drop: ≤10mV/A 4) VOLTAGE DROP S10mV/A 4) VOLTAGE DROP S10mV/A Between a point of wire at 1cm from the conn. Edge and pin length up to the pcb Termination resistance is obtained after deducing the mV drop of wire length used for termination. Current rating according to FIAT spec. 91107 5)INSULATION RESISTANCE No breakdown RESISTENCE No breakdown RESISTENCE Any electrical discontinuity greater than per t >1 μ s -milliVolt drop within limits indicated a new -visual examination FORCE Visual examination of the specimen at new additional density and environmental test specimen at new additional environmental test and environmental test	TEAT 11/05	TEAT AND TOOLS					
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7) VIBRATION TEST (Random passenger compartment) -Any electrical discontinuity greater than per $t > 1 \mu$ s diagram fig.1 enclosed) Duration: 16 hrs on the direction of mating axis rest current : 1mA -connector fully loaded roperating speed 25 mm/min.	!		≥1000 V ac. , t= 60 s				
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compartment) -milliVolt drop within limits Duration: 16 hrs on the direction of mating axis -visual examination Test current : 1mA 8) CONNECTOR MATING $F \le 40 \text{ N}$ -connector fully loaded FORCE -operating speed 25 mm/min.		, ,	1				
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8) CONNECTOR MATING $F \le 40 \text{ N}$ -connector fully loaded FORCE -operating speed 25 mm/min.		1	,				
FORCE -operating speed 25 mm/min.	8) CONNECTOR MATING						
	1 /	1 2 70 14	_				
	9) CONNECTOR	F ≤ 40 N	-connector fully loaded)				
UNMATING FORCE -operating speed 25 mm / min.	· · ·		1				

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10) CONNECTOR INSERTION FORCE TO PRINTED CIRCUIT BOARD	F ≤ 3240 N	Applied a force on header perpendicular to PCB -operating speed 25 mm/ min.
11) CONNECTOR RETENTION FORCE TO PRINTED CIRCUIT BOARD	F ≥ 900 N	Applied a force on header perpendicular to PCB -operating speed 25 mm/ min.
12) PIN RETENTION FORCE IN HEADER	F≥ 25 N	-operating speed 25 mm/ min.
13) SALT SPRAY RESISTANCE	-Visual examination Any corrosion spot on contacts - milliVolt drop within the limits at new	Na CI 5% Duration: 96 hrs
14) KESTERNICH	-Visual examination -milliVolt drop 100% more than the values at new	4 cycles as follows: -8 hrs under industrial atmosphere -16 hrs ambient temperature

For additional performances on counterpart connectors and contacts see Product Specifications 108-20182 and 108-18030.

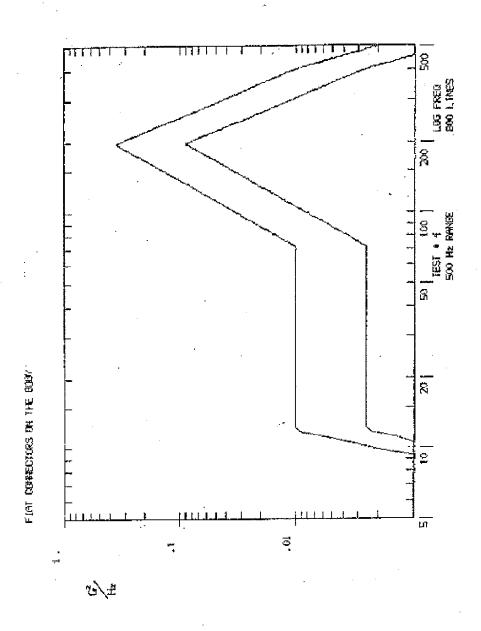


TEST SEQUENCE

TEST TYPE	Α	В	С	D.	E	F	G			
1) VISUAL EXAMINATION	1,6	1,4	1,5	1,6	1,3	1,5	1,5			
2) THERMAL. CYCLES	3									
3) ACCELERATED AGEING	4									
4) VOLTAGE DROP	2,5		2,4			2,4	2,4			
5) INSULATION RESISTENCE		2								
6) DIELECTRIC BREAKDOWN		3				ę				
7)RANDOM VIBRATION			3							
8)CONN.MATING FORCE				4						
9)CONN.UNMATING FORCE				5						
10)INSERT. FORCE TO PCB				2						
11)RETENT. FORCE TO PCB				3						
12)PIN RETENTION FORCE					2			,		
13)SALT SPRAY						3				
14)KESTERNICH							3			

FIGURE 1

Random vibration test for car body



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