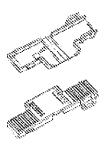


Product Specification

108-20109

Rev. C

FLAG FASTON BOOT FOR FASTON* Connector, 6.3 mm series FLAG RECEPTACLE CONTACT.



1. SCOPE

This specification covers the performance requirements and test methods of the 1 way FLAG FASTON BOOT P/N 180984 and suitable FASTON* Connector, 6.3 mm series FLAG RECEPTACLE Contact P/N.s 280050, 282181, 180464, 282184 (see table on para. 2.7 for details)

In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence.

In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

For test reports contact Engineering.

2. REQUIREMENTS

2.1. Design and construction

Connectors shall be of the design, construction and physical dimensions specified on the applicable product drawings, called Customer drawing (C-TE AMP P/N).

2.2. Materials

Housing: Poliammide 6.6 unfilled natural, Poliammide 6.6 unfilled natural

UL-94V0 (for P/N.s 8-180984-0 & 8-180984-1).

Receptacle contact: Tin plated Brass and Tin plated Phosphor Bronze.

Tab: Plain Brass (TE AMP P/N 140736-1)

2.3. Current Carrying Capacity

According to FIAT Norm 91107 6A for 0.5 mm2 wire section 20A for 2.5 mm2 wire section.

С	REVISED & RETYPED, ET00-0088-04	H.Y.	29 April 2004	C.T.	29 April 2004
rev letter	rev. record	DR	Date	CHK	Date
DR.	DATE	APVD			DATE
H. Yaali	02 April 2004	C. Tartari			02 April 2004

This specification is a controlled

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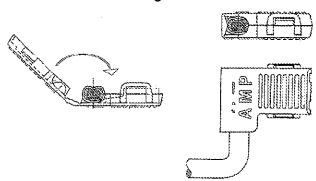
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2.4. Function

Insulation is guarantee by manual positioning of the crimped contact in it's appropriate boot location. Boot is manually closed until the complete fastening of the locking ears (see fig. 1)

Fig. 1



2.5. Temperature rating

Tempperature rating shall be within the following range:

-25°C - +105°C

-25°C - +125°C for P/N 8-180984-0 & 8-180984-1.

2.6. Flammability

The housing material should pass the flammability test according to UL norm 94-V2 and 94-V0 (only for P/N.s 8-1809984-0 and 8-180984-1).

2.7. TE AMP P/N.s table with description and wire range.

TE AMP	DESCRIPTION	WIRE RANGE	
BASE P/N.s			
C-280050	6.3mm srs. FLAG FASTON Rec. Ctc.	0.5-1.5mm2 std. Ins. wire	
C-282181	6.3mm srs. FLAG FASTON Rec. Ctc.	0.5-1.5mm2, rid. ins. wire	
C-180464	6.3mm srs. FLAG FASTON Rec. Ctc.	1.0-2.5mm2 std. Ins. wire	
C-282184	6.3mm srs. FLAG FASTON Rec. Ctc.	1.0-2.5mm2, rid. ins. wire	

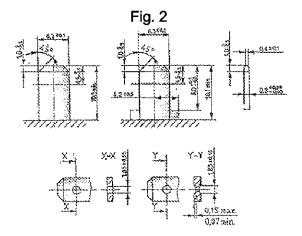
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3. TEST REQUIREMENT AND PROCEDURE SUMMARY

3.1. Mechanical requirements

3.1. Mechanical requirements					
TEST DESCRIPTION	PROCEDURE	REQUIR	EMENT		
3.1.1. Mating force	Use housing loaded with	Ist IN ≤ 80N			
	contact as per para. 1.1				
	and plain tab according to				
	ISO Norm 8092/1 (See				
	also Fig. 2), at a 25-50				
	mm/min. speed.				
3.1.2. Unmating force		Ist OUT ≤80N	XthOUT ≥20N		
3.1.3. Crimp tesile	Subject terminal to direct	WIRE	MINIMUM		
strenght	pull at a rate of 25-50	SECTION	TENSILE		
	mm/minute (the wire	(mm2)	FORCE (N)		
	insulation must be cut to	0.5	70		
	avoid the plastic material	0.8	90		
	contribution to the wire	1.0	115		
	crimp tensile)	1.5	155		
		2.5	235		
3.1.4. Housing opening resistance	The state of the s	F≥30N			
		1	1		



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3.2. Electrical requirements

3.2. Electrical requirements				
TEST DESCRIPTION	PROCE	DURE	REQUIREMENT	
	As per Fig. 3 page 5			
3.2.1. Millvolt drop	Wire size	Test current	Max. value	
specified current	(mm2)	(A)	(mV/A)	
	0.5	5	3.6	
	0.75-0.8	8	3.0	
	1.0	10	2.6	
	1.5	14	2.4	
	2.5	20	2.2	
3.2.2. Current overload	For 1 hour ap	ply a current	No deformation, colour	
	of 1.5 times th	ne one	modification and other	
	specified at po	oint 3.2.1.	damage.	
	Use plain tab	contact and	Max. millivolt increasement	
	receptacle loc	ated into the	permitted = 50% the one	
	boot.		specified on para. 3.2.1	
3.2.3.Thermal cycling	Subject mate	d connectors	Mechanical requirements:	
	to 5 cycles.	Each cycle	As specified on para. 3.1.	
	consists of:			
	• 2 hrs at +105°C ±2°C		Millivolt drop:	
	• 2 hrs at +4	10°C ±2°C at	Max. increasement allowed =	
	90-95% R	H.	100% the requirement	
	• 2 hrs at -4	0°C ±2°C	specified in para 3.2.1.	
	(Use plain tab	contact)		
3.2.4.Insulation resistance	Put in touch e		≥10 MΩ	
	Rec. contact Loaded into			
	housing and			
	plain test			
	metallic eleme	•		
	500 Vcc, hold			
3.2.5.Dielectric	Put in touch e		≥1500 V for 1 minute	
withstanding voltage	Rec. contact	•		
	housing and			
	plain test			
	metallic eleme			
3.2.6.Accelerated ageing	To be perform		No deformation or cricks are	
	insulated conf	•	permissible, but only pigment	
	200 hours at		change.	
	8		Max. millivolt increasement	
	200 hours at		permitted = 50% the one	
	(for P/N.s 180984-8		specified on para. 3.2.1	
			Mechanical performance as	
			specified in para 3.1.4.	

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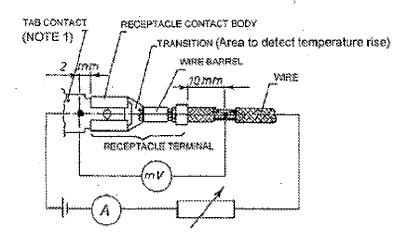
3.3. Environmental requirements

3.3.1.Corrosion, salt spray	Subject mated connector to 72 hours at 5% NaCl	Max. millivolt increasement permitted = 50% the one
	concentration.	specified on para. 3.2.1
3.3.2.Vibration	According to FIAT Norm 7. Z8510 Use connector mated with plain test tab 8 hours for each axis frequency: 10-200-10 Hz Amplitude: 2 mm (peak to peak) Sweep rate: 1/8 per minute Acceleration: 3g over 28Hz	Millivolt drop as per para. 3.2.1 requirements. And mechanical performance as per para. 3.1.1 and 3.1.2.

4. QUALIFICATION

When all the tests have been successfully performed on the subject product line, the product is qualified according to the present specification.

Fig. 3
ARRANGEMENT FOR THE VOLTAGE DROP MEASUREMENT FOR RECEPTACLES



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