

ADOPTION NOTICE

SAE-J928, "TERMINALS, ELECTRICAL-PIN AND RECEPTACLE TYPE", was adopted on 03-OCT-94 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Commander, Defense Supply Center, Richmond, ATTN: DSCR-VBE, Richmond, VA 23297-5610. Copies of this document may be purchased from the Society of Automotive Engineers 400 Commonwealth Drive Warrendale, Pennsylvania, United States, 15096-0001. <http://www.sae.org/>

Custodians:

Army - AT
Navy - SH
Air Force - 11
DLA - GS2

Adopting Activity:

DLA - GS2

SAENORM.COM : Click to view the full PDF of J928-198907

FSC 5940

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

Submitted for recognition as an American National Standard

ELECTRICAL TERMINALS—PIN AND RECEPTACLE TYPE

Foreword—This Document has also changed to comply with the new SAE Technical Standards Board format.

1. **Scope**—This SAE Standard covers general requirements and terminal interface dimensions of various sizes of pin and receptacle type terminals.

1.1 **General Requirements**—The pin and receptacle type terminals listed in this SAE Standard may be used for terminating wire ends, or for terminating circuits on devices other than wire. Performance requirements for low tension wire terminals are specified in SAE J163 JAN74.

Terminals shall be free from burrs, corrosion, or any foreign matter, and shall be of a temper that will permit attachment to wires or circuits on devices without fracturing or cracking

Terminals may be applied to wire by crimping, welding, swaging, soldering, or any combination thereof at the conductor grip. Insulation grips shall be used on all terminals assembled to 14 gage (2 mm²) and smaller insulated wire except where usage provides other means of relieving strain.

The type, thickness, and finish of the metal used in fabricating these terminals may vary according to the end product use. The dimensions shown in Tables 1 and 2/Figures 1 and 2 are included to assure proper fits between manufacturing sources.

Terminal sizes other than those listed are permissible, providing they meet the general requirements of this standard and the performance requirements of SAE J163.

Pin terminals fabricated from rod or bar stock must provide suitable stepped internal diameters to fit the wire conductors and insulation consistent with the method by which they are attached.

Insertion and removal forces are also variables that can be adjusted to fit the end use. It is recommended, however, that single connections with indentures should not exceed 15 lb (67 N) and multiple connections without indentures should not exceed 7 lb (31 N) per connection.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

QUESTIONS REGARDING THIS DOCUMENT: (724) 772-8512 FAX: (724) 776-0243
TO PLACE A DOCUMENT ORDER; (724) 776-4970 FAX: (724) 776-0790
SAE WEB ADDRESS <http://www.sae.org>

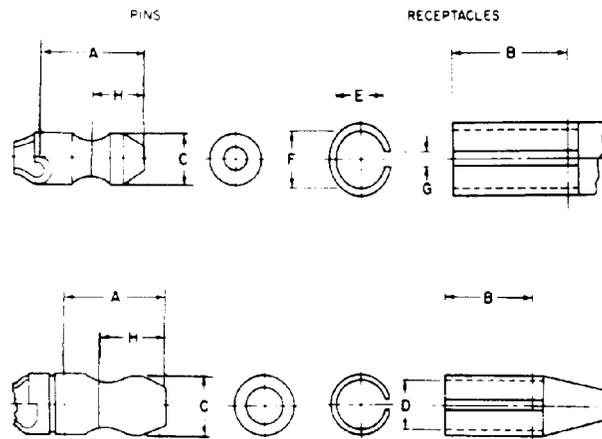


FIGURE 1—TYPE I PIN TERMINALS

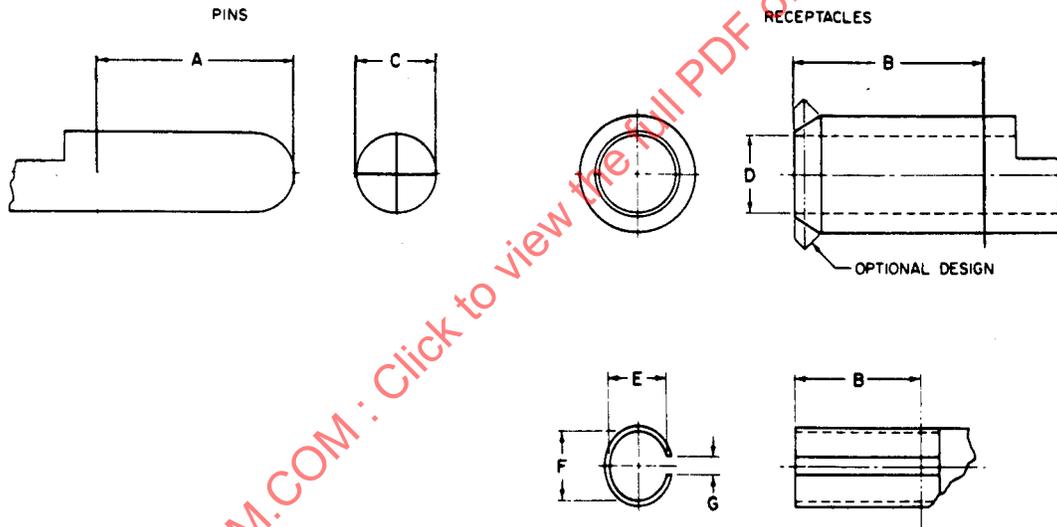


FIGURE 2—TYPE II PIN TERMINALS

SAENORM.COM : Click to view the full PDF of j928_198907

TABLE 1—TYPE I PIN TERMINALS

Nominal Dia	SAE Wire Size Range	A Min (1)		B Min(1)		C		D Nominal		E Nominal		F Nominal		G Nominal		H	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
0.156	22-12 (0.35-3.0 mm ²)	0.34	8.7	0.34	8.7	0.159-0.155	4.04-3.94	0.150	3.81	0.147	3.73	0.181	4.60	0.034	0.86	0.219	5.56
0.180	22-10 (0.35-5.0 mm ²)	0.40	10.2	0.40	10.2	0.182-0.178	4.62-4.52	0.174	4.42	—	—	—	—	—	—	0.190	4.83

NOTE 1— Detent Female—When a female detent is required, the detent of the receptacle must match the H dimensions of the pin.

NOTE 2— Metric dimensions are for reference purposes only.

1. Minimum insertion length.

TABLE 2—TYPE II PIN TERMINALS

Nominal Dia	SAE Wire Size Range	A Min (1)		B Min(1)		C		D Nominal		E Nominal		F Nominal		G Nominal	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
0.086	22-14 (0.35-2.0 mm ²)	0.17	4.4	0.17	4.4	0.086-0.083	2.18-2.11	0.080	2.03	—	—	—	—	—	—
0.093	22-14 (0.35-2.0 mm ²)	0.21	5.4	0.21	5.4	0.093-0.091	2.36-2.31	0.086	2.18	0.086	2.18	0.134	3.40	0.022	0.56
0.156	22-12 (0.35-3.0 mm ²)	0.20	5.1	0.20	5.1	0.159-0.154	4.04-3.91	0.152	3.86	—	—	—	—	—	—

NOTE—Metric dimensions are for reference purposes only.

1. Minimum insertion length.