

Electrical Terminals— Pin and Receptacle Type— SAE J928 JUN80

SAE Standard
Completely Revised June 1980

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ELECTRICAL TERMINALS—PIN AND RECEPTACLE TYPE—SAE J928 JUN80

SAE Standard

Report of the Electrical Equipment Committee, approved July 1965, completely revised June 1980.

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

2. **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 (January, 1974).

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 are included to assure proper fits between manufacturing sources.

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.

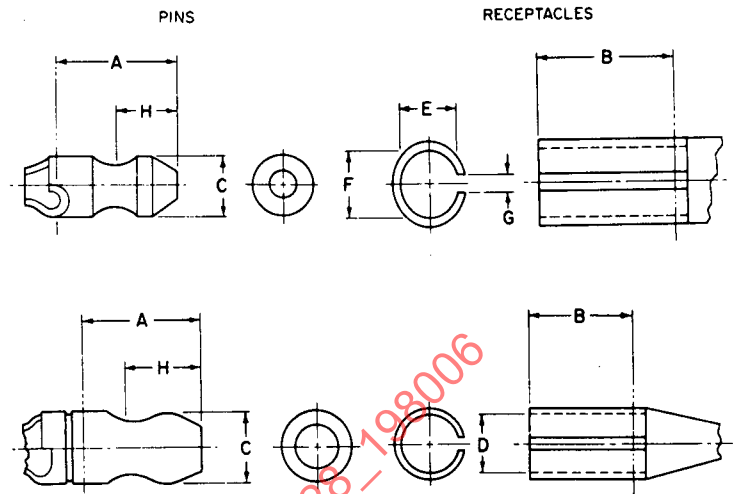


FIG. 1—TYPE I PIN TERMINALS

TABLE 1—TYPE I PIN TERMINALS

Nominal Dia		SAE Wire Size Range	A Min ^a		B Min ^a		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	in	mm
0.156	3.96	20–12 (0.5–3.0 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	4.57	20–10 (0.5–5.0 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

^aMinimum insertion length.

Note: Detent Female—When a female detent is required, the detent of the receptacle must match the H dimension of the pin.

The ϕ symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.