

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
29 West 39th Street  
New York City

## AMS 7205

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Revised

### SPRING PINS, STEEL

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **TYPE:** Tubular shaped pins having a full-length longitudinal slot to permit flexure when inserted in a hole.
3. **APPLICATION:** Primarily to provide a pin with sufficient flexure to remain tight against the inner surface of a hole into which it has been inserted, after adjusting itself to the hole tolerances.
4. **MATERIAL:** Unless otherwise specified, steel strip in accordance with the latest issue of AMS 5121.
5. **TECHNICAL REQUIREMENTS:**
  - 5.1 **Shear Strength:** Shall be not lower than the value specified below when tested in double shear, in holes of the respective size shown.

Nominal Pin Diameter Inch	Hole Diameter Inch	Double Shear Strength lb, min
0.062	0.064-0.065	425
0.078	0.080-0.081	650
0.094	0.096-0.097	1,000
0.125	0.128-0.129	2,100
0.156	0.160-0.161	3,000
0.187	0.191-0.192	4,400
0.219	0.223-0.224	5,700
0.250	0.255-0.256	7,700
0.312	0.317-0.318	11,500
0.375	0.381-0.382	17,600
0.437	0.445-0.446	20,000
0.500	0.509-0.510	25,800

- 5.1.1 **Procedure:** The shear plane shall be at least one pin diameter away from each end of the pin. The pin slot shall be located approximately 90 degrees to the line of application of force. Pins too short to test in double shear shall be tested by placing two pins in single shear simultaneously. The clearance between loading member and supporting member shall be not greater than 0.005 inch. The pin supports and bushing for applying load shall each have hardness not lower than Rockwell C 58 or equivalent.

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