INCH-POUND

MIL-DTL-25427/5 08 December 2009

DETAIL SPECIFICATION SHEET

COUPLING PLUG, HOSE ATTACHMENT, HYDRAULIC, SELF-SEALING, GROUND SUPPORT, QUICK DISCONNECT

This specification is approved for use by all Departments and Agencies of the Department of Defense. The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-25427.

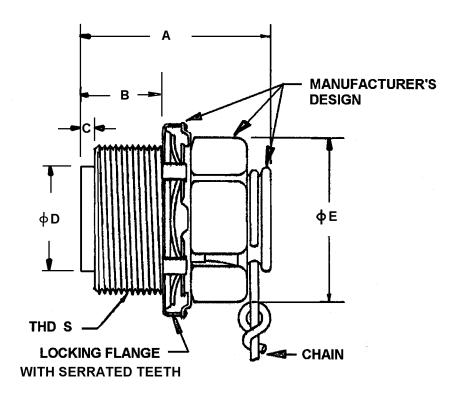


FIGURE 1. Coupling plug, dimensions, and configuration, style 1.

AMSC N/A FSC 4730

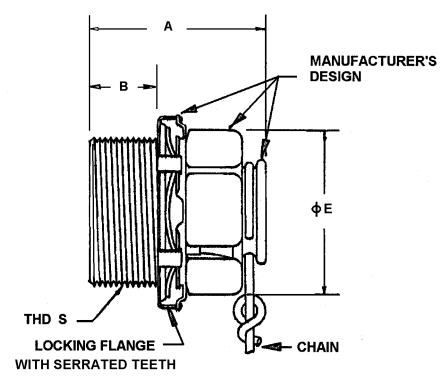


FIGURE 2. Coupling plug, dimensions, and configuration, style 2.

TABLE I. Coupling plug dimensions for style 1 and style 2.

Dash size	Thread S FED-STD-H28/2		A (approx)		B (max)		С	D	Е
	Size 3A	leads	Style 1	Style 2	Style 1	Style 2	C	D	(approx)
-4	0.9375-20UN	10	1.78	1.75	0.625	0.39	0.21	0.56	1.03
-6	1.125-18UN	8	1.93	1.90	0.775	0.54	0.21	0.75	1.25
-8	1.1250-18UN	8	1.93	1.90	0.821	0.54	0.21	0.75	1.25
-10	1.6250-12UN	6	2.26	2.08	0.97	0.72	0.23	1.00	1.80
-12	1.6250-12UN	6	2.26	2.08	0.97	0.72	0.24	1.00	1.80
-16	1.8750-12UN	6	2.59	2.12	1.24	0.76	0.24	1.24	2.00
-20	2.1250-12UN	8	2.38	2.12	1.04	0.76	0.24	1.50	2.30
-24	2.3750-12UN	8	2.51	2.25	1.17	0.89	0.24	1.75	2.60

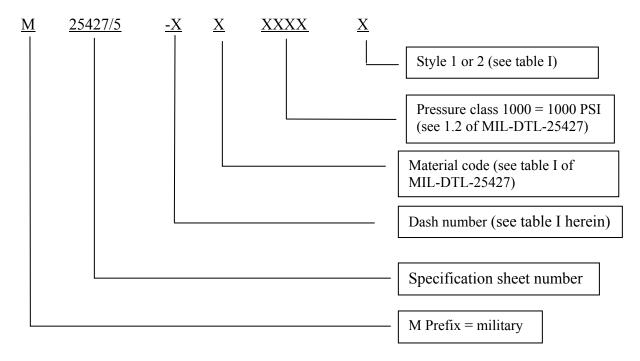
NOTES:

- 1. Dimensions are in inches, unless otherwise specified, tolerance decimals \pm 0.010.
- 2. Thread "S" shall have a multiple lead and a blunt start as specified in FED-STD-H28/2.
- 3. Break all sharp edges and remove all hanging burrs and slivers.
- 4. Serrated teeth of the locking flange must engage with the serrated teeth of the MIL-DTL-25427/6 coupling nut as a hose attaching coupling half assembly and ensuring positive locking.
- 5. For design feature purposes, this specification sheet takes precedence over the procurement document.
- 6. Referenced documents shall be of the issue in effect on date of contract award.

REQUIREMENTS:

- 1. Material -for material requirements, see procurement specification MIL-DTL-25427.
- 2. Finish -for finish requirements, see procurement specification MIL-DTL-25427.
- 3. The surface of the aluminum alloy parts after anodizing, sealing area and surface treatment shall be free of pits, powder coatings, discontinuities such as scratches or breaks and shall be uniform in appearance.
- 4. Threads shall be produced by die cutting or machining by single point method.
- 5. Marking shall consist of the part identification number, manufacturer's name, trademark or CAGE code and shall be impression stamped or laser etched. The marking shall be protected from corrosion.
- 6. <u>Interchangeability</u>. The coupling plug shall be interchangeable among manufacturers having the same tube size and pressure class. Type I coupling plug configuration and dimensions are known to be similar to Parker coupling plug P44000, Eaton coupling plug 155-S9, and Type II plug is similar to Hydraulic International plug DC-L. Suppliers seeking to be on QPL-25427 are responsible for interchangeability and shall perform the manual operation test to ensure coupling plugs manufactured are interchangeable with other suppliers' couplings or coupling plugs and vice versa. Users are cautioned to check the dimensions for their specific application.
- 7. <u>Operation</u>. Connection and disconnection of coupling plugs with MIL-DTL-25427/3 hose attaching coupling half assembly shall be easily accomplished using a one-handed turning motion. The coupling plug shall function as required in MIL-DTL-25427 when connected to a MIL-DTL-25427/3 hose attaching coupling half assembly.

- 8. <u>Test requirements</u>. The test shall be performed in accordance with applicable test requirements of MIL-DTL-25427. Suppliers seeking qualification of new coupling plugs are responsible for interchangeability of their coupling plugs with the existing qualified couplings. The qualifying activity shall perform the manual operation test of the coupling plugs provided by manufacturers whenever necessary to ensure interchangeability and leakage within the allowable limit.
- 9. <u>Part or identification number (PIN)</u>. The PIN shall consist of the letter M, the specification sheet number, a dash number from table I, a material code, pressure class, and style.



Example: M25427/5-8D1000 style 2 represents 0.5 tube coupling plug, 2024 aluminum, 1000 PSI operating pressure, style 2.

9. <u>Intended use</u>. This plug is used as part of the hose attaching coupling half assembly attached to ground support equipment protecting the hydraulic systems from dust and other foreign objects.

CONCLUDING MATERIAL

Custodians:

Army-AV Navy-AS

Air Force-99

Preparing activity: Navy-AS

(Project 4730-2008-128)

Review activities:

Army-AT, MI Navy-SA Air Force-11 DLA-CC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.daps.dla.mil.