

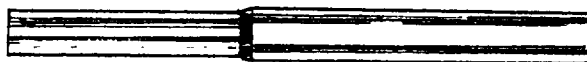
FED. SUP CLASS
6640ARMY - MD, DM
NAVY - MS

USER ACTIVITIES:

ARMY - MF
NAVY - OS
AIR FORCE - 82

REVIEWER ACTIVITIES:

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.



PART NUMBER	COPPER TUBE O.D. LENGTH mm (inches)	GLASS TUBE OD mm
MS51421-1	6 (.25)	8
MS51421-2	8 (.31)	10
MS51421-3	10 (.37)	12
MS51421-4	13 (.50)	16
MS51421-5	16 (.62)	19
MS51421-6	19 (.75)	22
MS51421-7	22 (.87)	28
MS51421-8	25 (1.0)	28
MS51421-9	32 (1.25)	35
MS51421-10	38 (1.50)	41
MS51421-11	44 (1.75)	48
MS51421-12	51 (2.00)	57
MS51421-13	57 (2.25)	64
MS51421-14	64 (2.50)	70
MS51421-15	70 (2.75)	75
MS51421-16	76 (3.00)	80
MS51421-17	83 (3.25)	90
MS51421-18	89 (3.50)	95
MS51421-19	101 (4.00)	110

MATERIAL: Borosilicate glass and copper tubing.

DESIGN: The borosilicate glass tubing shall be fused to the copper tubing to form a seal suitable for low temperature applications. The assembly shall be oven-annealed and thermal shock tested by immersion in liquid nitrogen. Each assembly shall be vacuum tight to at least 5×10^{-9} torr or 6.6×10^{-7} Pa. The overall length shall be 225 ± 10 mm.

- NOTES:
- Items differing from this Military Standard by minor variations in design or dimensions are considered standard under this document, provided such variations do not affect performance and are not in conflict with the material requirements specified herein.
 - FSCM: 07736.

APPROVED 20 JUL 1983 REVISED

P.A.	EA	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust	MS 99		SEAL, GRADED, BOROSILICATE GLASS TO COPPER TUBING	MS51421-
Procurement Specifications	NONE	SUPERSEDES:	SHEET	OF
			1	1