

Synchro, Torque Differential Transmitter, Type 37TDX6A

FSC 5990

RATIONALE

This Revision consists of a 5 (five) year review, which provides updates to current format and references.

NOTICE

This specification is approved for use by all Departments and Agencies of the Department of Defense. The requirements for acquiring the Synchros described herein shall consist of this specification and the latest issue of SAE AS20708.

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TABLE 1 – REQUIREMENTS

REQUIREMENT	VALUE	UNIT	TOLERANCE
Frequency	60	Hz	±1%
Primary Voltage	78	volts	±1%
Primary Current	2050.0	milliamps	maximum
Primary Power	15.6	watts	maximum
Impedance:			
Z _{so}	----	ohms	min.-max.
Z _{rs}	----	ohms	min.-max.
Impedance Angle:			
Z _{so}	----	degrees	min.-max.
Z _{rs}	----	degrees	min.-max.
Transformation Ratio	1.154	----	±2%
Phase Shift (Lead)	3.0	degrees	maximum
Electrical Error	10.0	minutes	maximum
Torque Gradient	1.10	ounce-inches per degree	minimum
Friction Torque	0.50	ounce-inches	maximum
Radial Play	0.0008	inches	maximum
End Play	0.0030	inches	±0.0020
Temperature Rise	----	degrees (C)	maximum
Variation of Voltage (+10%) and Freq. (-5%)	----	watts	maximum

TABLE 2 – MILITARY PART NUMBER VARIANT CHARACTERISTICS

	A	B	G	Shaft Style	Terminal End	U
Military Part No. 1/	± .010	± .010	Maximum			+ .0000 - .0002
M20708/76-01A	.700	.730	4.285	Splined	Terminal Board	.2405

1/ Military Part number M20708/76-01A shall be the NATO standard.

1/ The suffix letter following the numerical dash number corresponds to the latest modification letter in the type designation.