



AEROSPACE STANDARD	AS20708™/4	REV. B
	Issued 1999-07 Revised 2011-02 Stabilized 2016-06 Superseding AS20708/4A	
Synchro, Torque Transmitter, Type 11TX4C		
FSC 5990		

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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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 AS20708.

TABLE 1 – REQUIREMENTS

REQUIREMENT	VALUE	UNIT	TOLERANCE
Frequency	400	Hz	± 1 %
Primary Voltage	115	Volts	± 1 %
Primary Current	60.0	Milliamps	Maximum
Primary Power	1.0	Watts	Maximum
Impedance:			
Zss	180 - 250	Ohms	Min. – Max.
Impedance Angle:			
Zss	22.0 - 28.0	Degrees	Min. – Max.
Transformation Ratio	0.783	-----	± 2 %
Phase Shift (Lead)	6.0	Degrees	Maximum
Electrical Error	7.0	Minutes	Maximum
Torque Gradient	0.0080	Ounce – Inches Per Degree	Minimum
Null Voltage			
Total	-----	Millivolts	Maximum
Fundamental	-----	Millivolts	Maximum
Radial Play	0.0006	Inches	Maximum
End Play	0.0010	Inches	± 0.0005
Temperature Rise	25.0	Degrees – C	Maximum
Friction Torque	0.07	Ounce – Inches	Maximum
Variation of Voltage (+10%) and Freq. (-5%)	1.45	Watts	Maximum