



AEROSPACE STANDARD	AS20708™/17	REV. B
	Issued	1999-07
	Revised	2011-02
	Stabilized	2017-10
	Superseding AS20708/17A	
Synchro, Torque Differential Transmitter, Type 15TDX4C		
FSC 5990		

RATIONALE

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

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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 AS20708.

TABLE 1 – REQUIREMENTS

REQUIREMENT	VALUE	UNIT	TOLERANCE
Frequency	400	Hz	± 1 %
Primary Voltage	78	Volts	± 1 %
Primary Current	215.0	Milliamps	Maximum
Primary Power	3.5	Watts	Maximum
Impedance:			
Zso	375 – 525	Ohms	Min. – Max.
Zrs	113 – 138	Ohms	Min. – Max.
Impedance Angle:			
Zso	80.0 – 84.0	Degrees	Min. – Max.
Zrs	27.0 – 33.0	Degrees	Min. – Max.
Transformation Ratio	1.154	-----	± 2 %
Phase Shift (Lead)	5.0	Degrees	Maximum
Electrical Error	8.0	Minutes	Maximum
Torque Gradient	0.011	Ounce – Inches Per Degree	Minimum
Friction Torque	0.05	Ounce – Inches	Maximum
Radial Play	0.0006	Inches	Maximum
End Play	0.0010	Inches	± 0.0005
Temperature Rise	20.0	Degrees – C	Maximum
Variation of Voltage (+10%) and Freq. (-5%)	4.9	Watts	Maximum