

F-16 Flight Control Systems Gyroscopes

Condor Pacific's sub-miniature F-16 Series Rate Gyro was designed for use on the flight control system on the F-16 fighter aircraft.

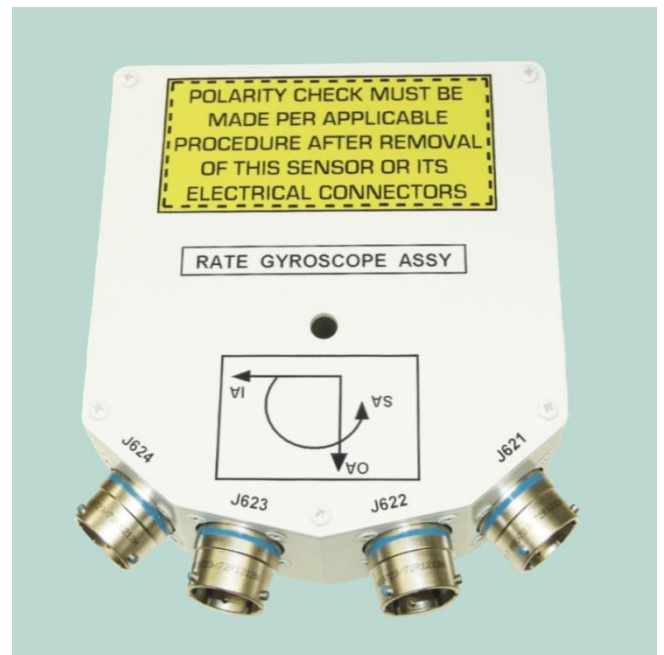
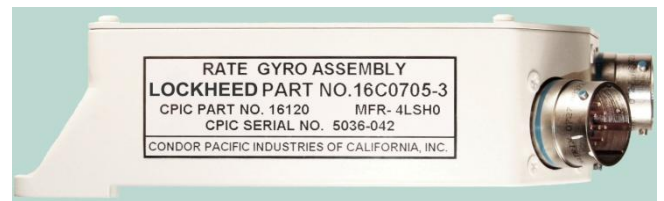
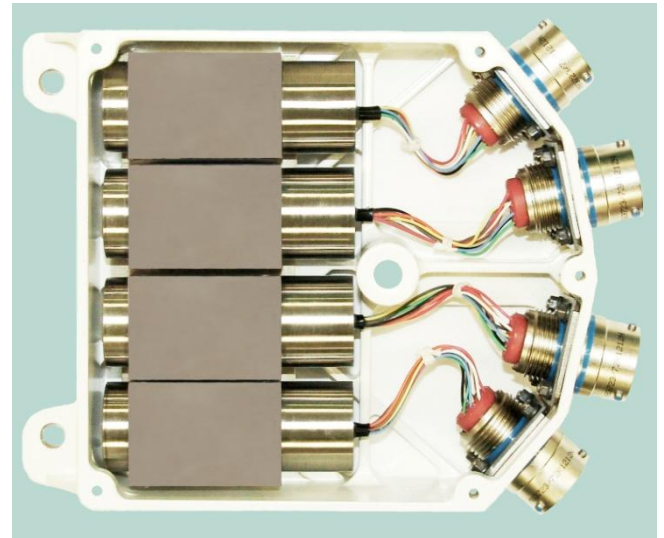
Condor Pacific PN 16100 was qualified to the F-16 procurement specification (16ZC006A) in conjunction with Hill Air Force Base. Over 2000 units have been delivered to the U. S. Air Force and many more units to foreign Air Forces.

PN 16100 gyros are individually and collectively interchangeable with the original Lockheed gyros utilized for this application.

PN 16120 Quad boxes are available as shown at the right.

Condor Pacific can perform acceptance tests on your gyro or quad package and replace gyros found to be out of specification limits. Additionally PN 16100 gyros can be repaired at our facility.

Condor Pacific maintains a Quality Assurance Program compliant with ISO 9001-2015, insuring the quality inherent in the design.



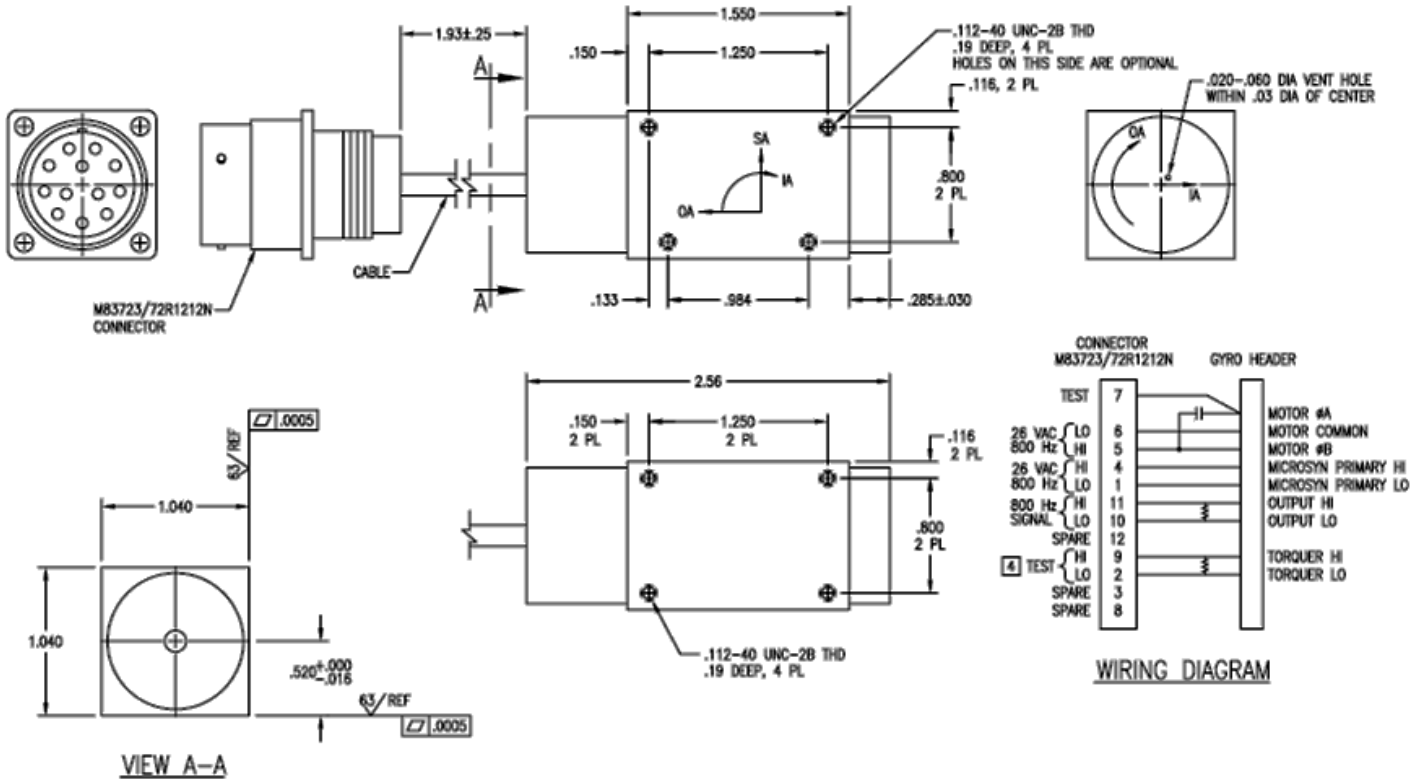
F-16 Quad Redundant Rate Gyro Package PN 16120

Cross Reference Chart

Item	NSN	Lockheed PN	Condor PN
Gyro	6615010714513	16VC006-2	16100
Quad Gyro Package	6615010427834	16C0705-3	16120

Specifications

PERFORMANCE	Range	±300°/sec	
	Scale Factor	0.020 VAC/°/Sec ± 5%	
	Threshold	0.01°/sec	Over Temperature Range
	Resolution	0.01°/sec	Over Temperature Range
	Hysteresis	±0.5°/Sec	Over Temperature Range
	In Phase Null	± 1.5°/Sec	Over Temperature Range
	Linearity	0.5% To Half Scale, 2.0% to Full Scale	Over Temperature Range
	Natural Frequency	47Hz Minimum	Over Temperature Range
	Damping ratio	0.3 to 2.5 of Critical	Over Temperature Range
	Linear Acceleration Sensitivity	0.1°/sec/g	Over Temperature Range
	Cross Coupling	0.05°/Sec/°/Sec Cross Axis & Spin Axis	Over Temperature Range
Phase Shift	± 10°	Over Temperature Range	
MOTOR	Voltage (AC)	26V, 800 Hz 2ø	
	Starting Power	4.0 Watts	
	Running Power	3.35 Watts	
	Warmup Time	60 Seconds at Temperatures above -40°F 90 Seconds at Temperatures below -40°F	
PICKOFF	Voltage (AC)	26V, 800Hz.	
	Load Resistance	20KΩ ± 1%	
	Output	Up to 6.6Volts, 800 Hz	
	Phase Shift	± 10°	
ENVIRONMENT	Operating Temperatures	-65°F to +160°F, transient to 250°F for 10 Minutes Max	
	Vibration	See 16ZC006A	Per MIL-STD-810
	Shock	See 16ZC006A	Per MIL-STD-810
	Acceleration	See 16ZC006A	Per MIL-STD-810
	Other Environments	See 16ZC006A	Per MIL-STD-810
GENERAL	MTBF	12,000 hours	
	Sealing	Hermetic	
	Weight	150 grams	
	Self-Test – Torquer Scale Factor	0.15°/Sec/mA, 150mA continuous, 600mA transient	
	-- Spin Motor speed	Spin synchronous detection by monitor motor phase 2	



PN 16100 Pin out & Outline Dimensions