



**MOD II E/S GYROFLEX®**

The MOD II E/S Gyroflex® is the strapdown derivative of Kearfott's highest performance production gyro. The heart of the gyro is a two degree of freedom, 8-flexure suspension system which is tuned to eliminate fixed restraints. The gyro bearings are processed to a Kearfott proprietary process which results in extremely long bearing life and high gyro performance. The Gyroflex Gyro has been used in numerous space applications and consistently demonstrates a life exceeding 10 years of operation.

"Kearfott MOD IIE/S gyros presently in space have accumulated over 6.3 million hours of operation. Laboratory tests at Kearfott have demonstrated a life exceeding 25 years (219,000 hours)."

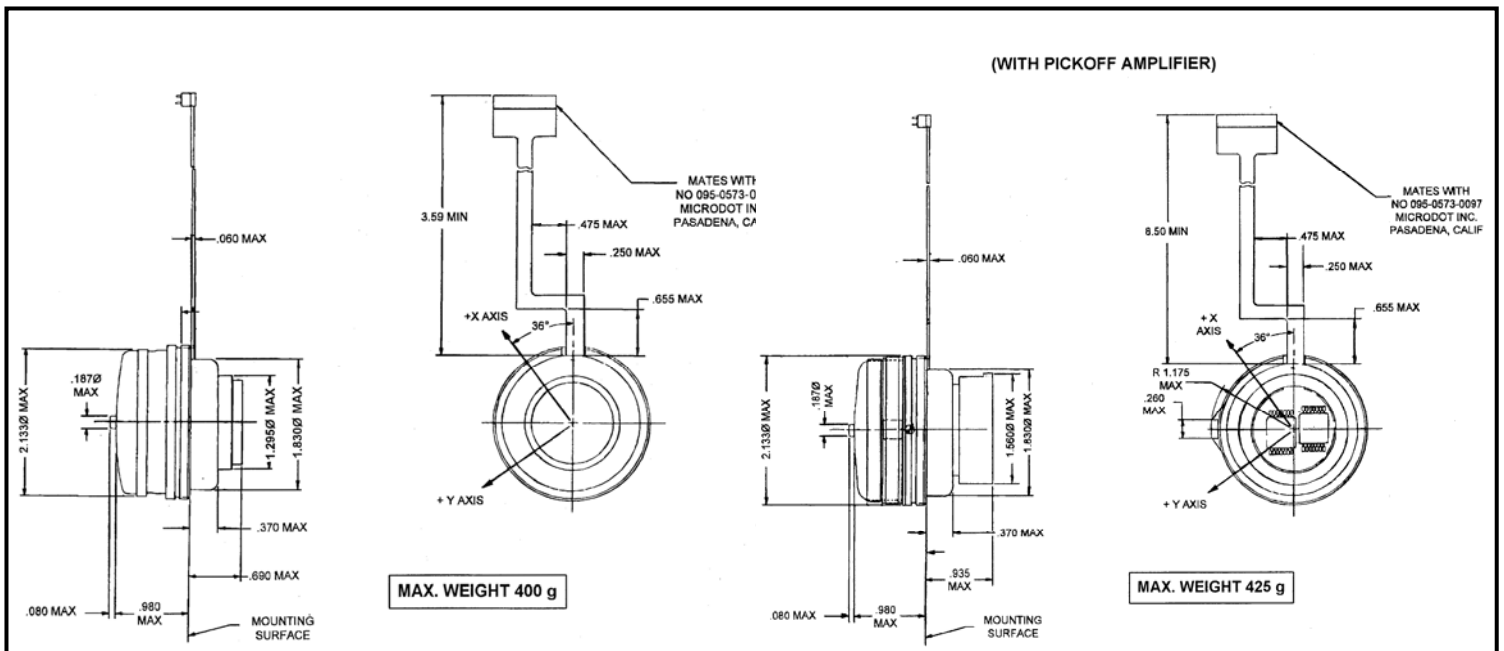


**CHARACTERISTICS**

<b>RATE CAPABILITY</b>	<ul style="list-style-type: none"> <li>• Continuous (°/s)</li> <li>• Survivability (rad/s)</li> </ul>	<p>15 25</p>
<b>DRIFT</b>	<ul style="list-style-type: none"> <li>• g Insensitive Drift (°/h, max)(Uncompensated)</li> <li>• g Sensitive Drift (°/h/g, max)(Uncompensated)</li> <li>• Random Drift (°/h)</li> <li>• Pointing Accuracy (arc seconds) (8 hrs.)</li> <li>• Day-To-Day Repeatability (°/h)</li> </ul>	<p>5.5 3.0 .0015, 3σ &lt;15 &lt;0.024, 3σ</p>
<b>ENVIRONMENTAL CAPABILITY</b>	<ul style="list-style-type: none"> <li>• Storage Temperature (°F)</li> <li>• Operating Temperature (°F)</li> <li>• Pyrotechnic Shock Capability</li> </ul>	<p>-85 to +200 -30 to +180 &gt;4000 g/s Isolator Mounted &gt;15 years 400 425 (with Preamp)</p>
<b>OPTIONAL FEATURES</b>	<ul style="list-style-type: none"> <li>• Class S Gyro Mounted Pickoff Amplifier</li> <li>• Temperature Sensor for Wide Operating Range Thermal Modeling</li> </ul>	

**SPACE APPLICATIONS**

- **JPL:**  
GALILEO (NASA)  
VOYAGER I & II (NASA)
- **LOCKHEED MARTIN:**  
DSCS III  
GRAVITY PROBE B (NASA)  
MACS 4 & 5  
MAGELLAN (NASA)  
MILSTAR  
SPACE SEXTANT  
SPITZER [SIRTF] (NASA)  
TERRA [EOS-AM] (NASA)
- **NASA:**  
TRMM  
XTE
- **TRW / NORTHROP GRUMMAN:**  
CHANDRA [AXAF] (NASA)  
TDRS7  
ZODIAQUE
- **SEVERAL CLASSIFIED PROGRAMS**



# A FAMILY OF GYROS DERIVED FROM KEARFOTT'S DYNAMICALLY TUNED GYROSCOPES

(FROM 1965 TO THE PRESENT)



- **MOD IIC**  
*INERTIAL NAVIGATION SYSTEMS (INS)  
FOR F-16, SRAM, A-7, SPACE SHUTTLE*



- **MOD IIE**  
*HIGH ACCURACY INS FOR B-1, B-2,  
ADVANCED CRUISE MISSILE,*



- **MOD II E/S**  
*HIGH PERFORMANCE  
SPACE APPLICATIONS*



- **MITA 5**  
*INERTIAL GUIDANCE FOR ALL TRIDENT 1  
AND TRIDENT 2 SLBM's*

---

*For additional information on Space Qualified Inertial Reference Units, Missile Guidance Units, or any other Inertial Navigation Systems, Please contact Kearfott Space Marketing at: (973) 785-6555 or fax at: (973) 785-5905. Visit our website: [www.kearfott.com](http://www.kearfott.com)*