

# 力平衡式/伺服式 角加速度计

## SR-220RNP, SR-220RNC

- \* **Small Size / Lightweight**
- \* **Electronic Damping**
- \* **Rugged Construction**

SR-220RNP和SR-220RNC是精密力平衡角加速度传感器，专为空间有限的应用而设计。哥伦比亚获得专利的HP悬架系统具有极高的耐用性和出色的线性加速度抑制能力。两种设计仅在电气接口上有所不同。SR-220RNP提供焊接引脚，而SR-220RNC则具有4引脚连接器。

这些加速度计不依赖于流体阻尼或旋转惯量，而是电阻尼的。这导致角加速度计在灵敏度范围内具有出色的高频特性。伺服回路设计可确保零偏置，比例因子和频率特性的出色热稳定性。请向工厂咨询这些传感器的定制版本。

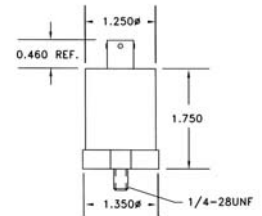
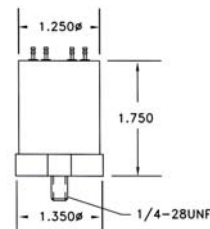
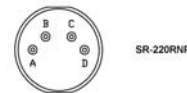


SR-220RNP



SR-220RNC

	SR-220RNP	SR-220RNC
<b>Operational</b>		
Ranges Available	$\pm 100, \pm 500, \pm 1000, \pm 5000$ Rad/Sec <sup>2</sup>	
Output Voltage	$\pm 5$ Volts into 100K Load	
Excitation	$\pm 15$ VDC <20 mA	
Output Impedance	<500 Ohms	
Sensitive Axis Alignment	0.5 Deg	
Scale Factor Tolerance	$\pm 1\%$	
Scale Factor Temp Coefficient	0.05% / Deg C Max.	
Zero Bias	$\pm 10$ mV	
Null Temp Sensitivity	$\pm 0.1$ mV / Deg C	
Natural Frequency	50 To 200 Hz Dependent Upon Range	
Damping	0.7 $\pm$ 0.2	
Linear Acceleration Sensitivity	0.3% F.R. / G	
Cross Axis Sensitivity	$\pm 2\%$	
Output Noise (DC To 400 Hz)	<0.02% F.R.	
Non-Linearity	$\pm 0.01\%$ F.R.	
Hysteresis & Non-Repeatability	$\pm 0.25\%$ F.R.	
Threshold & Resolution	0.005% F.R.	



### Environmental

Temperature, Operating	-50 To +85 Deg C
Temperature, Storage	-55 To +95 Deg C
Vibration Survival (2 To 2,000 Hz)	10 G RMS, 0.5" Disp D.A.
Linear Acceleration Survival	100 G
Range $\pm 100$ Rad/Sec <sup>2</sup>	150 G
All Other Ranges	
Shock Survival	500 G, 1 mSec
Ambient Pressure	0 To 7 Atmospheres
Humidity	95% R.H.

### Physical

Weight	4 Oz (113 Gms)	4.3 Oz (122 Gms)
Size (Excluding Stud Mount & I/O Termination)	1.35 In. Dia. x 1.75 In. H (3.4 cm Dia. x 4.5 cm H)	
Case Material	Stainless Steel	
Sealing	Environmental	
Connector	Solder Pins	PT1H-8-4P or Equiv.
Optional Mating Connector	N/A	PT06A-8-4S or Equiv.

### I/O Pin Functions:

Model SR-220RNP	
Pin	Function
A	+15 VDC
B	Ground
C	-15 VDC
D	Eo (Voltage Out)

Model SR-220RNC	
Pin	Function
A	Sig & Pwr Grd
B	+15 VDC
C	-15 VDC
D	Signal Output

### Ordering Information:

SR-220RNP (+/- X Rad/Sec<sup>2</sup>)

SR-220RNC (+/- X Rad/Sec<sup>2</sup>)

Standard Accelerometer

Range +/- X Rad/Sec<sup>2</sup> (Required)

Mating Connector Supplied (Optional)

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