



工业ICP® 三轴加速度计

同时测量水平、垂直、轴向振动

特点

- 三个方向同时测量, 减少劳动时间, 增加测量一致性
- 通孔螺栓设计用于空间受限的场合
- 各种可用选项, 以满足大多数工业应用需求:
 - 10 mV/g和100 mV/g灵敏度
 - 顶端和侧端接头
 - 集成聚氨酯和铠装电缆可选

典型应用

- 使用2或3通道数据采集器进行多轴的基于路径的预测性维修 (PdM)
- 机械基础故障诊断
- 径向与轴向电机轴承振动监测
- 结构脉冲与响应研究



IMI传感器有广泛的产品线, 开发的ICP®三轴加速度计主要用于工业振动监测。所有这些传感器在一个外壳内有三个敏感元件, 每一个有自己专用的放大器和专用接头或电缆引线。

危险区域认证

CSA (如无特别指明, 为加拿大和美国标准)

- AEx/Ex ic IIC T4 Gc Class I, Div. 2, Groups A, B, C, D (EX629A11A/)
- AEx/Ex ic IIC T4 Gc Class I, Zone 2 (EX629A11A/)
- AEx/Ex ia IIC T4 Ga Class I, Division 1, Groups A, B, C, D (EX639A91)
- AEx/Ex ia IIC T4 Ga Class I, Division 2, Groups A, B, C, D (EX639A91)
- AEx/Ex ia IIC T4 Ga Class I, Zone 0 (EX639A91)
- Ex ia T4 Class I, Division 1, Groups C, D (Canada only) (CS604B31)

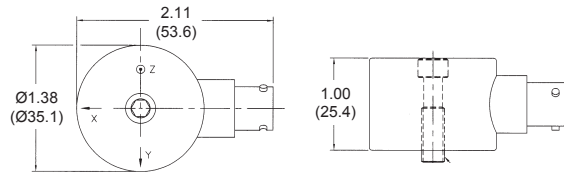
ATEX

- Ex ic IIC T4 Gc (EX629A11A/)
- Ex nA IIC T4 Gc (EX629A11A/)

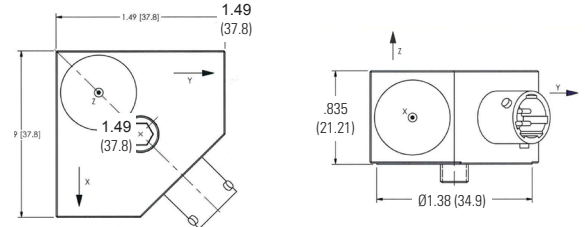




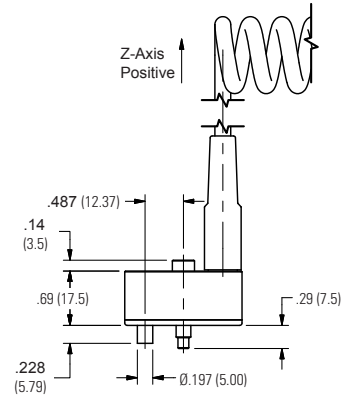
技术参数				
型号	(CS)604B31	629A31	EX629A11A/	(EX)639A91
性能				
灵敏度	100 mV/g			
	10.2 mV/(m/s ²)			
测量范围	± 50 g			
	± 490 m/s ²			
频率范围- X (±3 dB)	0.5 至 5,000 Hz	0.8 至 8,000 Hz	2 至 7,000 Hz	0.5 至 10,000 Hz
频率范围- Y (±3 dB)	0.5 至 5,000 Hz	0.8 至 8,000 Hz	2 至 7,000 Hz	0.5 至 10,000 Hz
频率范围- Z (±3 dB)	0.5 至 5,000 Hz	0.8 至 8,000 Hz	2 至 10,000 Hz	0.5 至 10,000 Hz
谐振频率	10 kHz	20 kHz	17 kHz	25 kHz
宽带分辨率	350 µg	100 µg	560 µg	300 µg
	3,434 µm/s ²	981 µm/s ²	5,694 µm/s ²	3,000 µm/s ²
非线性度	±1%			
横向灵敏度	≤5%		≤7%	≤5%
环境				
过载 (冲击)	5,000 g pk			
	49,050 m/s ² pk			
温度范围	-65 至 +250 °F		-40 至 +176 °F	-65 至 +250 °F
	-54 至 +121 °C		-40 至 +80 °C	-54 至 +121 °C
危险区域验证	CSA (仅CS)	N/A	CSA	CSA (仅EX)
危险区域验证	N/A	N/A	ATEX	N/A
防护等级	IP68			IP68, IP69K
电气特性				
稳定时间	≤2.0 sec	≤3.0 sec		≤2.0 sec
放电时间常数	≥0.3 sec	≥0.2 sec	≥0.1 sec	≥0.32 sec
激励电压	18 至 28 VDC			18 至 30 VDC
恒流激励	2 至 20 mA			
输出阻抗	<150 ohm	<100 ohm	<350 ohm	<150 ohm
输出偏置电压	8 至 12 VDC			
频谱噪声 (10 Hz)	8.0 µg√Hz	7.0 µg√Hz	40.0 µg√Hz	20.0 µg√Hz
频谱噪声 (100 Hz)	5.0 µg√Hz	2.8 µg√Hz	10.0 µg√Hz	10.0 µg√Hz
频谱噪声 (1 kHz)	4.0 µg√Hz	1.0 µg√Hz	6.0 µg√Hz	3.0 µg√Hz
电气绝缘 (外壳)	>10 ⁸ ohm			
物理特性				
敏感元件	陶瓷			
敏感元件几何方式	剪切			
外壳材料	不锈钢			316L 不锈钢
密封	激光焊接密封			
安装螺纹	1/4-28 Male			
安装扭矩	2 至 5 ft-lb			
	2.7 至 6.8 N-m			
电气接头	4-Pin		可选	4-pin M12
电气接头位置	侧端		顶端	侧端
电缆类型	N/A		伸缩聚氨酯电缆	N/A
电缆长度	N/A		6 ft	N/A
	N/A		1.83 m	N/A
尺寸 (L x W x H)	1.38ø x 1.00 in	1.5 x 1.5 x 0.82 in	1.49ø x 0.69 in	0.95 x 0.95 x 0.72 in
	35.1ø x 25.4 mm	38.1 x 38.1 x 20.8 mm	37.9ø x 17.5 mm	24.1 x 24.1 x 18.3 mm
重量 (不带线)	4.4 oz	4.9 oz	3.9 oz	3.0 oz
	124 g	139 g	110 g	85 g
相近型号				
100 mV/g & 集成电缆	604B11	629A11	N/A	N/A
100 mV/g & 集成铠装电缆	604B61	629A61	N/A	N/A
100 mV/g & 4-Pin 接头	604B30	629A30	N/A	N/A
100 mV/g & 集成电缆	604B10	629A10	N/A	N/A
100 mV/g & 集成铠装电缆	604B60	629A60	N/A	N/A



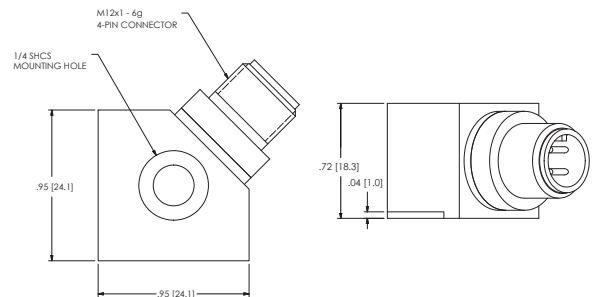
(CS)604B31



629A31



EX629A11A



(EX)639A91



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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