

Safety-Rated Accelerometer

Dynamic Performance

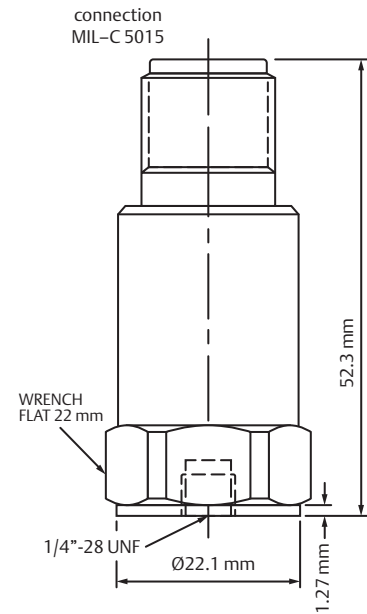
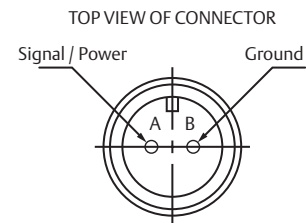
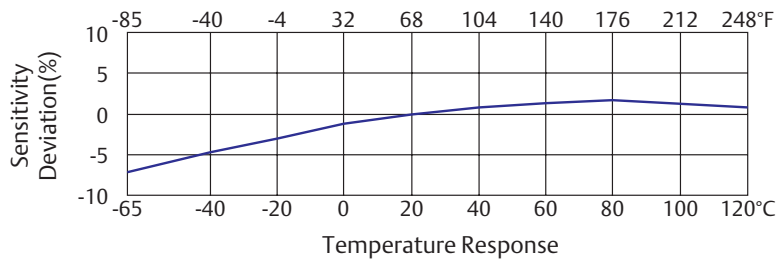
Sensitivity ($\pm 5\%$)	100 mV/g (10.2 mV/m/s ²)
Measurement Range	± 50 g (± 490 m/s ²)
Frequency Range (± 3 dB)	0.20 to 10,000 Hz (12 to 600,000 cpm)
Mounted Resonant Frequency	20 kHz Nominal
Amplitude Linearity	$\pm 1\%$ (0 Based, Least Squares, Straight Line)
Transverse Sensitivity	$\leq 5\%$

Environmental

Shock Limit	5,000 g pk (49,050 m/s ²)
Temperature Range	-54 to 121°C (-65 to 250°F)
Sealing	IP68 / Welded Hermetic
Agency Ratings	CE ATEX Ex II 1G EEx ia IIC T4 -54 \leq Ta \leq 121°C

Electrical

Settling Time	≤ 5 sec (Within 1% of Bias)
Discharge Time Constant	≥ 0.8 sec
Excitation Voltage / Current	18 to 28 VDC / 2 to 20 mA
Output Impedance	< 100 ohms
Output Bias	8 to 12 VDC
Broadband Resolution (< 10 kHz)	50 μ g (490 μ m/s ²) Electrical Noise
Case Isolation	$> 10^8$ ohms



Mechanical

Weight / Case Material	94 grams (3.3 oz) / Stainless Steel
Mounting Thread	¼-28 UNF-2B
Mounting Torque	2.7 to 6.8 Nm (2 to 5 lb ft)
Sensor Element / Geometry	Ceramic / Shear
Connector Type (Top)	MIL-C-5015, 2 Pin

Supplied Accessories

Three Point Calibration	
¼-28 Mounting Stud, either ¼-28 to M6x1 or M10x1	

Typical Part Numbers

PR9270-Ex	Accelerometer sensor only	9200-00109
PR9670/000-000	5 m, Shielded 2 wire, no armor, blunt cut Cable	9700-00046
PR9670/001-000	10 m, Shielded 2 wire, no armor, blunt cut Cable	9700-00047
Harting Connection Assembly	6 Pin M and F with Housings	9500-00064

Cable Order Matrix		PR9670 /	X	X	X	-	X	X
Cable	2 Pole (shield grounded at instrument)	0						
	3 Pole (shield grounded at sensor)	1						
Armored Cable	WITH		1					
	WITHOUT		0					
Cable Length	0(5 m), 1(10 m), 2(15 m), 3(20 m)			X				
Cable Termination	Blunt cut – with stripped wire ends						0	
	Harting connection						1	
Agency Rating	CE and ATEX standard							EX

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