



MODEL 674A91

ICP[®] ACCELEROMETER WITH IO-LINK



- Accurate equipment condition assessment and automated alerts
- Data processing in the sensor without the complexity and high price
- Simple data connection to your local network using IO-Link Masters easy configuration tools
- No control cabinets or extensive wiring required

APPLICATIONS

- Real-time remote monitoring for fault conditions in motors, gearboxes, pumps, conveyers, and bearing assemblies
- Applications requiring true peak acceleration, acceleration and velocity RMS, velocity peak, crest factor, and/or temperature measurements

SEAMLESS DEVICE INTEGRATION FOR MACHINE HEALTH MONITORING

As industrial automation systems become more complex and demanding, IO-Link technology has provided one of the simplest and most versatile ways to add intelligent sensing to your operations. IO-Link is a global standard (IEC61139-9) that redefines how we enable continuous and bi-directional communication with digital sensors on the factory floor.

Model 674A91 pairs the industry's most trusted accelerometers with IO-Link universal protocol for smarter, easier, and more effective data processing. The sensor analyzes a full spectrum of data providing peak values for condition monitoring, up to 10 kHz. Unlike when using intermittent single measurement monitoring systems, machine performance is continually monitored for multiple common fault conditions to allow timely and predictable scheduling of maintenance before machine failure and production downtime.

SPECIFICATIONS			
Model Number	English	Metric	Notes
Performance			
Amplitude Max Acceleration	50g peak	491 m/s ² peak	
Amplitude Max Velocity	3 in/sec peak	76.2 mm/sec peak	
Crest Factor Max	50		
Functions	True Acc Peak, Acc RMS, Velocity RMS, Velocity Peak, Crest Factor, Temperature		
Sensing Element	Piezoelectric		
Performance: Acceleration RMS			
Frequency Range Accel (±3 dB): 1 Hz HP	1 Hz to 10 kHz		Analog High Pass Filter
Frequency Range Accel (±3 dB): 1 Hz HP	10 Hz to 10 kHz		Analog High Pass Filter
Performance: Acceleration Peak			
Frequency Range Accel (±3 dB): 1 Hz HP	1 kHz to 10 kHz		Analog High Pass Filter
Frequency Range Accel (±3 dB): 10 Hz HP	10 Hz to 10 kHz		Analog High Pass Filter
Frequency Range Accel (±3 dB): 1 kHz HP	1 kHz to 10 kHz		Digital High Pass Filter
Frequency Range Accel (±3 dB): 5 kHz HP	5 kHz to 10 kHz		Digital High Pass Filter
Performance: Velocity Peak/RMS			
Frequency Range Accel (±3 dB): 1 Hz HP	3 Hz to 10 kHz		Analog High Pass Filter
Frequency Range Accel (±3 dB): 10 Hz HP	10 Hz to 10 kHz		Analog High Pass Filter
Performance: Temperature Measurement			
Range	-40 °F to 185 °F	-40 °C to 85 °C	
Physical			
Dimensions	2.6 x .99 x .99	66 x 25.15 x 25.15	
Weight	4.48 oz	130 grams	
Housing Material	Stainless Steel		
Connector	M12		
Mounting Thread	1/4 - 28 UNF Stud Mount		
Electrical			
Operating Voltage	18 - 30 VDC		
Rated Voltage	24 VDC		
Isolation	Case, 100 Mohm minimum		
Environmental			
Operating Temp	-40 °F to 185 °F	-40 °C to 85 °C	
Humidity	5% to 90%		
Enclosure Rating	N/A	IP68	
Input / Output Interface			
Interface	IO-Link 1.1		
Resolution	24 bits		
Cycle Time (Typ)	100 ms		
Transfer Rate	COM2 (38.4 kBaud)		
Output	Switching Signal, IO-Link		
Insulation Resistance (High Temperature)	≥ 100,000 Ohms		



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