Inductive distance sensors SOIA

FESTO

Position
Speed
Acceleration



IO-Link

Improve your operations!

Highlights

- Distance, speed and acceleration sensor
- IO-Link 1.1 – Smart Sensor Profile
- Sizes: M8, M12, M18, M30 and Q40
- Flush and non-flush
- Plug and cable types
- Distance measuring range up to 30 mm
- Speed measuring range 0,001 ... 3,00 m/s
- Acceleration measurement range 0,1...3270 m/s²
- Two measuring windows
- Monitoring functions for damping elements
- In SIO-Mode can replace any PNP/NPN, NO/NC inductive proximity switch

Choose our position, speed, and acceleration inductive sensor SOIA for unparalleled monitoring of elastic, pneumatic, and hydraulic damping elements. Its unique capability to perform real-time calculations internally ensures instantaneous and precise data, enhancing reliability and accuracy in demanding applications.

Real-Time Calculations
SOIA calculates speed and acceleration internally, eliminating delays and ensuring instantaneous data processing.

Continuous Monitoring
SOIA keeps track of position, speed, and acceleration of damping elements effortlessly, allowing for proactive maintenance and immediate response to kinematic deviations.

Predictive Maintenance
SOIA reduces unexpected downtime and costly repairs with alerts that notify your team of potential issues before they escalate.

Optimized Performance
Say goodbye to over-dimensioned pneumatic cylinders and hello to significant energy savings and reduced CO_2 emissions, making your operations more sustainable.

Data-Driven Insights
Generate valuable data for AI-based analytics, empowering smarter decision-making and operational excellence.

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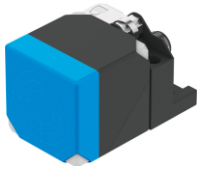





	SOIA-M8PB-	SOIA-M8PNB-	SOIA-M12PB-	SOIA-M12PNB-
Size	M8	M8	M12	M12
Mounting	Flush	Non flush	Flush	Non flush
Measuring Range	0...2 mm	0...4 mm	0...4 mm	0...7 mm
Repeat Accuracy	0,02 mm	0,04 mm	0,04 mm	0,07 mm
Max. switching frequency	1300 Hz	1400 Hz	1400 Hz	1400 Hz
Max. speed	800 mm/s	1100 mm/s	1400 mm/s	2100 mm/s

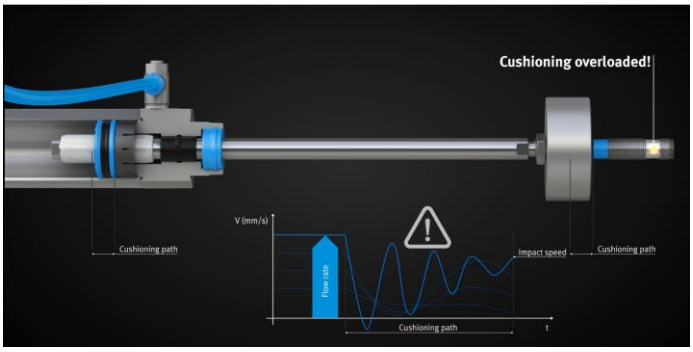




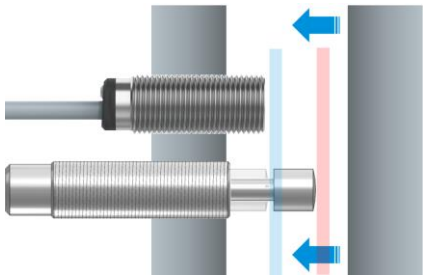


	SOIA-M18PB-	SOIA-M18PNB-	SOIA-M30PB-	SOIA-M30PNB-	SOIA-Q40NB-
Size	M18	M18	M30	M30	40x40 mm
Mounting	Flush	Non flush	Flush	Non flush	Non flush
Measuring Range	0...8 mm	0...12 mm	0...10 mm	0...20 mm	0...30 mm
Repeat Accuracy	0,08 mm	0,12 mm	0,1 mm	0,2 mm	0,3 mm
Max. switching frequency	1200 Hz	1100 Hz	1300 Hz	1000 Hz	250 Hz
Max. speed	2700 mm/s	3000 mm/s	2400 mm/s	3000 mm/s	3000 mm/s

Monitoring of impact energy and cushioning status of pneumatic cylinders



Monitoring of shock absorbers



Measuring window 1: impact speed / energy

Measuring window 2: end speed / damping reserve

XXXXXX en 2024/11 – Errors and omissions excepted