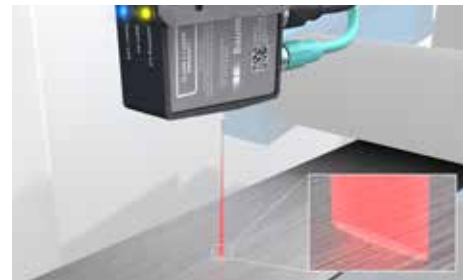# Baumer
Passion for Sensors

Reliable, connected and leading in usability

OM70 high performance laser distance sensors solve even demanding measurement applications extremely easily. The sensor can be quickly and optimally adjusted to the measuring task via the integrated web interface. State-of-the-art interfaces ensure easy integration.

Reliable and precise – best-in-class measurement performance

- Unrivalled measurement performance even under difficult environmental conditions like ambient light
- Robust measurement results even on demanding surfaces thanks to extra fine line beam
- Stable measurement signals thanks to comprehensive functions such as automatic exposure control or adjustable filters

Leading in usability – intuitive adjustment to the measuring application

- Extremely easy sensor adjustment to specific requirements via intuitive Baumer web interface
- Fast analyses thanks to live monitoring of measurement values and conditions
- Early detection and suppression of interference signals for process-reliable measurements

Connected – efficient integration with standardized interfaces

- Easy connection to different levels of the automation pyramid
- IIoT and Industry 4.0 ready with OPC/UA
- On-the-fly parameterization via any interface for flexible production lines
- Additional sensor data such as signal quality or exposure reserve enable predictive maintenance

Product overview OM70 with Ethernet Interface

	OM70-P0070 / OM70-L0070	OM70-P0140 / OM70-L0140	OM70-P0250 / OM70-L0250	OM70-P0600 / OM70-L0600	OM70-P1000 / OM70-L1000	OM70-P1500 / OM70-L1500
Measuring distance (Sd)	30 … 70 mm	40 … 140 mm	50 … 250 mm	100 … 600 mm	100 … 1000 mm	150 … 1500 mm
Measuring range (MR)	40 mm	100 mm	200 mm	500 mm	900 mm	1350 mm
Sweet Spot (focus area)	65 mm	130 mm	240 mm	500 mm	1000 mm	1500 mm
Resolution	0.7 … 1 µm	1.2 … 2.5 µm	1.4 … 6.3 µm	3 … 24 µm	3 … 63 µm	13 … 125 µm
Repeat accuracy	0.1 … 0.3 µm	0.3 … 0.7 µm	0.3 … 2 µm	1 … 9 µm	1 … 32 µm	3 … 63 µm
Linearity error	± 24 µm	± 70 µm	± 180 µm	± 600 µm	± 1710 µm	± 4320 µm
	± 0.06% Mr	± 0.07% Mr	± 0.09% Mr	± 0.12% Mr	± 0.19% Mr	± 0.32% Mr
Measuring frequency	2 kHz					
Laser class	1			1 and 2		
Ambient light immunity	< 28 kLux	< 38 kLux	< 175 kLux	< 300 kLux	< 100 kLux	< 35 kLux
Digital interface	Ethernet TCP/IP					
Protocols	Modbus TCP, OPC UA, Profinet, UDP Streaming, Ethernet/IP					
Additional functions	Adjustable zero position reference / selectable filters/ parameterizable digital switching output with adjustable hysteresis in millimeters / current or voltage output conversion / 3 memory locations for parameter settings / export and import function for parameter setups					
Part numbers for OM70-P Ethernet with laser- point beam shape						
Function: Distance OM70-Px.EK	11216511	11216512	11194696	LK1: 11216518 LK2: 11186912	LK1: 11216519 LK2: 11216513	LK1: 11216520 LK2: 11216514
Part numbers for OM70-L Ethernet with laser-line beam shape						
Function: Distance OM70-Lx.EK	11216505	11216506	11194698	LK1: 11216515 LK2: 11216507	LK 1: 11216516 LK2: 11216508	LK1: 11216517 LK2: 11216510

Please find the complete OM70 high performance laser distance sensor portfolio with all interfaces, measuring ranges and sweet spots as well as the complete accessories here: www.baumer.com/OM70