MICRO-EPSILON

More Precision

capaNCDT 6120 // Compact capacitive single-channel measurement system

Compact capacitive single-channel measurement system

capaNCDT 6120

- *Compact and robust construction*
- *High temperature stability*
- *Nanometer repeatability*
- *Suitable for all conductive materials*
- *24V (9 – 36V) standard power supply for industrial applications*
- *Ideal for OEM applications*
- *Digital output RS485*
- *Suitable for all sensors*

System construction

The capaNCDT 6120 single channel capacitive electronics is compatible with all Micro-Epsilon capacitive sensor ranges. The measurement system stands out due to its compact designed together with high performance.

Due to the miniaturized design and its ease of use, the capaNCDT 6120 is ideally suited to integration in machines and facilities. With power supply options between 9 - 28V, the system can also be operated in passenger cars and trucks. As well as an analog output, a RS485 interface is also available. The capaNCDT 6120 stands out due to its excellent price/performance ratio, which makes it particularly suitable for high volume applications.

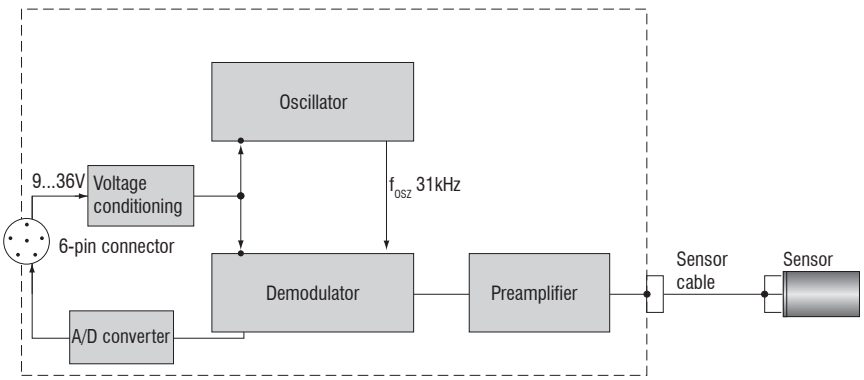
The measurement system consists of:

- Capacitive displacement sensor
- Sensor cable
- Controller
- Supply and signal output cable

Accessory:

- Power supply

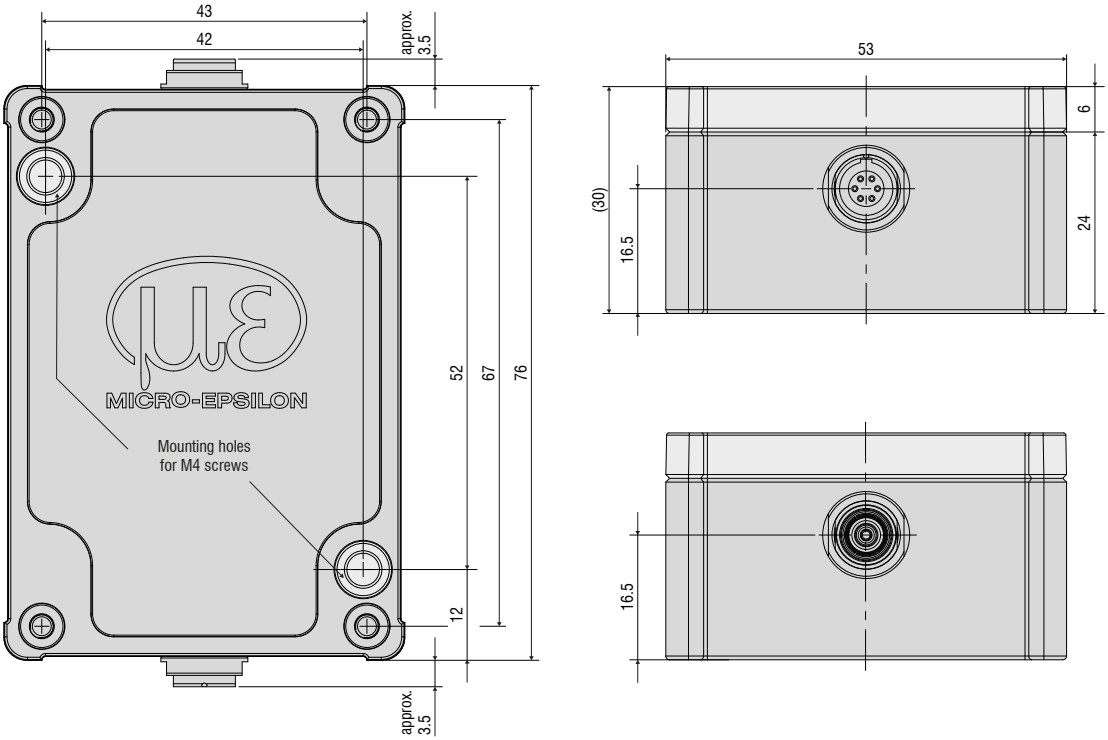
Block diagram



Controller type		DT6120	DT6120/ECL2
Resolution static		0.01 % FSO	0.01 % FSO
Resolution dynamic		0.015 % FSO (1kHz)	0.015 % FSO (1kHz)
Bandwidth		1kHz (-3dB)	1kHz (-3dB)
Linearity (typ.)		±0.05% FSO	±0.05% FSO
Max. sensitivity deviation		±0.1% FSO	±0.1% FSO
Long-term stability		<0.05% FSO/month	<0.05% FSO/month
Synchronous operation		no	no
Insulator measurement		no	no
Temperature stability		200ppm	200ppm
Temperature range (operation)	Sensor	-50 ... + 200°C	-50 ... + 200°C
	Controller	+10 ... +60°C	+10 ... +60°C
Temperatur range (storage)		-10…+75°C	-10…+75°C
Supply		24VDC/60mA (9...28V), RS485	24VDC/60mA (9...28V), RS485
Output		0 … 10V (short-circuit-proof), optional: ±5V, 10 … 0V	0 … 10V (short-circuit-proof), optional: ±5V, 10 … 0V
Digital interface		RS485, 230400 Baud (adjustable), 24 bit measuring values, max. 2kSamples (adjustable)	RS485, 230400 Baud (adjustable), 24 bit measuring values, max. 2kSamples (adjustable)
Sensors		suitable for all sensors	suitable for all sensors
Sensor cable		CC cable ≤ 1m CCm cable = 1.4m CCg cable = 2m	CC cable ≤ 2 m CCm cable = 2.8m CCg cable = 4m

FSO = Full Scale Output

Controller



Sensors and Systems from Micro-Epsilon

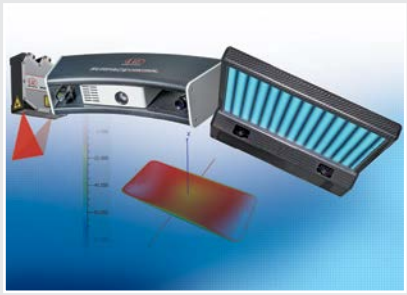
Sensors and systems for displacement, distance and position

Sensors and measurement devices for non-contact temperature measurement

Measuring and inspection systems for metal strips, plastics and rubber

Optical micrometers and fiber optics, measuring and test amplifiers

Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

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