

CHRcodile S

The CHRcodile S optical sensor is the all-rounder with an excellent price/performance ratio. It is perfectly suited for challenging measuring tasks, such as the non-contact measurement of topography and thickness. The sensor employs two different methods of measurement and thus is able to measure thicknesses of a wide measuring range. The extraordinarily high dynamic response and the outstanding signal-to-noise ratio of the CHRcodile sensors ensure the best measuring results on surfaces with differing reflectivity and from different angles.

CHRcodile
if time matters...



EFFICIENT

- Precise
- Rapid
- Non-contact

UNIVERSAL

- Distance and topography
- Wide thickness measuring range
- Measurements on all surfaces
- Inline and offline

USER FRIENDLY & SAFE

- Maintenance-free
- Simple to integrate
- Nondestructive measurement
- Robust
- Automatic light control



GRÜNDES PRAZISE SCHNELL BERÜHRUNGSLÖS
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THICKNESS

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DISTANCE

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TOPOGRAPHY

TECHNICAL SPECIFICATIONS OF CHROCODILE S

application	distance, thickness
measurements / second	32 - 2000
interferometric measuring range ¹⁾	3 μ m - 180 μ m
chromatic measuring range	depends on used optical probe
pitch error ²⁾	< 10 ⁻³
linearity error ²⁾	< 3.3 x 10 ⁻⁴ x max. measuring range
resolution	10 ⁻⁷ x max. measuring range (23 Bit)
reproducibility	9 x 10 ⁻⁵ x max. measuring range
number of measuring channels	1
synchronization with external devices	trigger input, synchronizing output, 3 encoder inputs
interface	USB, RS-232, RS-422, 2 x analog (0-10 V, 16 Bit), LVDT ³⁾
transfer rate	RS-232 (9600 - 921600 Baud); RS-422 (9600 - 921600 Baud); USB: virtual comport (921600 Baud)
light source	LED
length optical fibre ⁴⁾	2 m - 40 m (multi mode fibre)
fibre connector	E 2000
operating temperature	+5°C up to +50°C
dimension (w x h x d)	200 mm x 100 mm x 93 mm
weight	1.1 kg
system voltage	16 - 30 V DC (with separate power supply 90 - 264 VAC)
rated power	10 W

¹⁾ optical length | ²⁾ measuring accuracy = linearity error + (pitch error x used measuring range) |

³⁾ optional | ⁴⁾ metal cover up to 15 m also available

The given data was generated for a typical application and may be different given other circumstances. Furthermore misprints, changes and/or innovations may lead to differences in the listed measurements, technical data and features. Therefore all information is non-binding and technical data, measurements as well as features are not guaranteed by information in this product information.

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