



NEW
from iwis

CCM-S – Chain Condition Monitoring: The chain elongation monitoring system

The **CCM-S**, the latest chain monitoring innovation from iwis, is now equipped with additional sensors and interfaces, measures the wear elongation of chains during use and, in this way, helps maintenance staff recognise in good time when the chain has to be replaced due to wear elongation.





Intelligent chain monitoring

- Gives maintenance staff time to (re)act!
- No risk to promised delivery dates – no interruption of the logistics chain
- Prevents financial losses caused by interruptions to production
- Monitoring of precision chain applications
- "Plug and Play" principle applies – does not require calibration, etc.
- Wear- and impact-resistant **1** sliding shoe
- Stable, leakproof **2** plastic housing (Protection class: IP67)

- ✓ Digitalisation interface
- ✓ Ready-to-install plug-and-play principle
- ✓ Optimised design

CCM-S all-in-one solution

- Scope of supply consisting of:
 - CCM-S module
 - Mounting strips
 - IODD file [DOWNLOAD](#)
 - PC software [DOWNLOAD](#)
 - Installation and Operating Instructions [DOWNLOAD](#)
- Optionally available as accessories:
 - IO link cable in various lengths:
 - 5 m (Art. 40012346), 10 m (Art. 40012347) and 15 m (Art. 40012348)
 - USB cable (Art. 40012712)
- 3D data exists and is available on request
- Information on electrical and mechanical connections can be found in the Installation and Operating Instructions [DOWNLOAD](#).

Range

Article no.	Designation	Article no.	Designation
40011816	CCM-S-08B IWIS	40011822	CCM-S-40 IWIS
40011817	CCM-S-10B IWIS	40011824	CCM-S-50 IWIS
40011818	CCM-S-12B IWIS	40011825	CCM-S-60 IWIS
40011819	CCM-S-16B IWIS	40011826	CCM-S-80 IWIS
40011821	CCM-S-20B IWIS	40011827	CCM-S-100 IWIS
40011828	CCM-S-24B IWIS	40011831	CCM-S-120 IWIS
40011829	CCM-S-28B IWIS	40011855	CCM-S-140 IWIS
40011830	CCM-S-32B IWIS	40011856	CCM-S-160 IWIS





Highlights of our CCM-S system



DATA TRANSFER

Globally standardised, field bus-independent IO-Link technology as communication standard.



SLE FUNCTION

Special connectors serve as reference points. These allow **individual measurement** of chain segments and an evaluation of deviations from the average elongation. Connectors are sold separately.



ADD-ON SENSORS

Chain temperature, along with shocks on the CCM-S's sliding shoe, is monitored thanks to two additional sensors.



PRESENTATION

Measurement results can be sent to the computer via USB and be presented using the software provided by iwis.



SPEED

Different speed ranges and changes of load direction are not a problem for CCM-S.



CHAIN SIZES

The CCM-S can be used for **simplex** as well as for **duplex** and **triplex** chains because only one chain strand is detected at a time.



CONTACT-FREE

Precise measurements are taken without any direct contact and without interfering with the chain drive.



INTEGRATION

The CCM-S can be integrated **quickly and easily** in numerous chain applications – including as a retrofit without the need for special tools.



Operating conditions

- Normal industrial environmental conditions
→ The CCM-S system must be specially configured for tough or highly abrasive conditions!
- Operating temperature range: 0 °C to 70 °C (32 °F to 160 °F)
- In the case of chains with attachments on both sides or extended pins, iwis must carry out a separate inspection.
- Protection class: IP67
- Insensitive to non-magnetic contamination
- If the device is to be attached to a customer interface, we recommend that damping elements should be fitted (e.g. between the housing and the mounting plate).
- We recommend that the CCM-S system is installed at the tight strand; Installation at the slack strand is also possible under certain circumstances
- USB connection to PC interface
→ Connection via USB connector 2.0 Type A
- External power supply as per IO-Link specification: 18-30V

NOTE

The CCM-S system is only used to provide information. It is expressly stated that the system does not protect against chain drive failures and machine stoppages. The CCM-S system also does not indicate the probability of future chain elongations.

The customer is aware that the CCM-S system is preset to a chain elongation value of 3% as reference value. iwis has preset this reference value without reference to concrete applications. The customer shall define the reference value themselves and bears the responsibility for testing whether the reference value is non-critical in the specific application scenario or whether it could lead to critical situations or damage resulting from impermissible chain elongation.

On request, and following consultation, iwis will set the preset reference value of 3% to another value specified by the customer. The customer can, however, also set the value applicable to their application themselves using the supplied software.

