

Press release SCHNEEBERGER AMSABS 3L Measuring System

Absolute distance measurement for particularly long axes

With the AMSABS 3L, SCHNEEBERGER has developed a unique measuring system. It is suitable for use in particularly long axes but at the same time has the advantages of absolute measurement. This means: Even after switching the machine off and on again, the system knows the exact axis position.

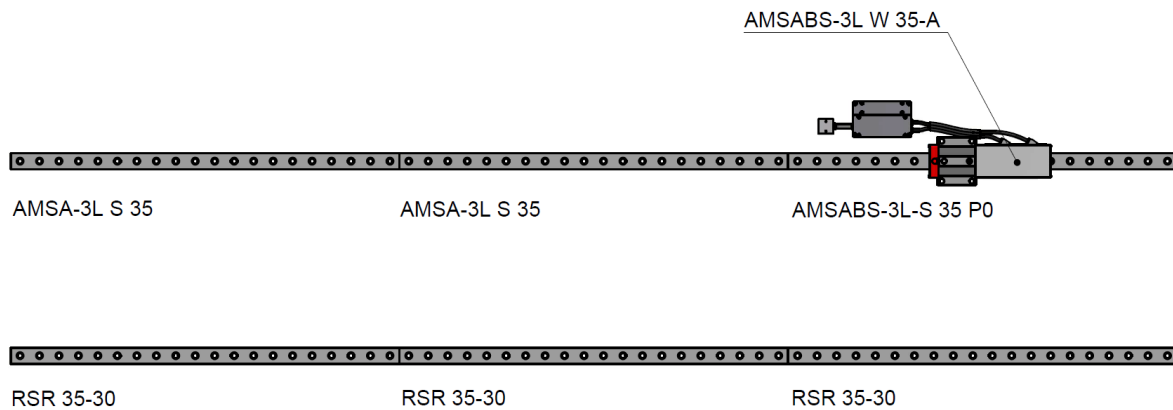
Profiled guideways make a decisive contribution to the high precision of various machines and systems. They must therefore meet the highest mechanical requirements. Equally important is the continuous monitoring of system accuracy by high-quality distance measuring systems. The longer the distances, the more important is an exact measurement and the greater are the requirements for the measuring system used.

SCHNEEBERGER's AMS long series is a solution that is designed for applications with extremely long linear movements and can be integrated into various system rails from the MONORAIL series. The newly developed AMSABS 3L distance measuring system now combines the advantages of AMS long with those of the AMSABS-3B absolute measuring system that has been successful on the market.

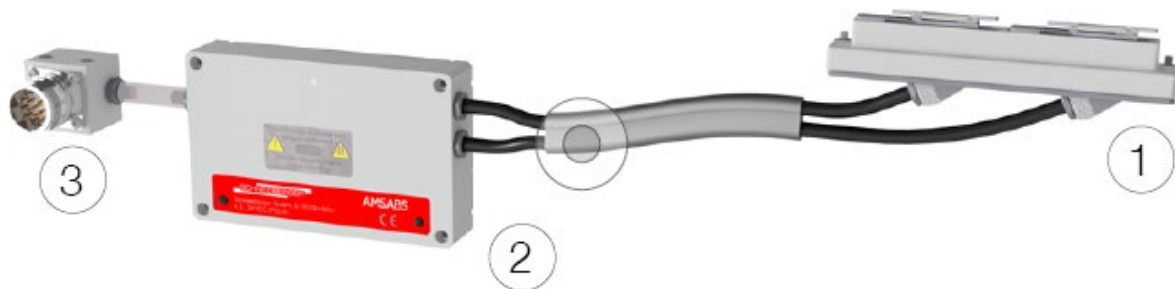
Where up to now, after switching on machines with long linear paths, reference moves lasting just as long were indispensable in determining the position of the axis, these reference moves will be completely dispensed with in the future. This will save the numerous potential users a lot of time on the one hand, and on the other hand the absolute measurement of the AMSABS 3L will ensure the highest precision. In addition, the new SCHNEEBERGER product offers all the established advantages of AMSABS technology: The sensor is rugged and liquid-tight, and the read head, which is identical for all sizes, can be easily exchanged laterally without having to be subsequently calibrated.

Among other things, these properties predestine the AMSABS 3L for use in industries such as heavy-duty machining, the aviation, wood and paper industries as well as in assembly and handling technology. It is also suitable for many other large machines, such as laser welding and cutting machines, water jet cutting systems, testing facilities and foundry technology machines.

This means that large machine builders will be able to integrate absolutely coded measuring axes in extreme lengths in the future. The decisive factor for this is that the AMSABS 3L is mechanically based on the MONORAIL MR roller guideway and that its special design of the rail joints allows it in combination with the AMSABS 3L read head to travel over joints without signal loss. Various options regarding lubrication and sealing of the measuring carriages furthermore enable optimal adaptation to the requirements of the application. SCHNEEBERGER provides the absolute interfaces SSI, SSI+1Vss and Fanuc with different cable lengths as a control interface.



B01: Absolute distance measurement on particularly long axes - this is only available with SCHNEEBERGER's newly developed AMSABS 3L system. Once referenced, the measuring carriage is able to transmit the absolute position on a sustained basis and over the entire length of the measuring axis. This position is retained even after the power supply is switched off and on again.



The scanning unit is installed in the measuring carriage. This unit consists of the read head (1), the electronics housing (2) and the plug or installation base (3).

The SCHNEEBERGER Group

SCHNEEBERGER® serves original equipment manufacturers operating (OEM) in various industries worldwide – from **machine tool**, **solar technology** and **semiconductor technology** to **electrical engineering** and **medical engineering** and others. Linear bearings, profiled linear guideways, **measuring systems**, **gear racks**, **slides**, **positioning systems** and **mineral casting** are all part of SCHNEEBERGER's product and manufacturing range. **A.MANNESMANN** has been part of the SCHNEEBERGER Group since October 2017. A.MANNESMANN is a leading supplier for the production of ballscrew drives, telescopic actuators and drill spindles. A further expansion of the SCHNEEBERGER Group, an additional site was founded in Poland. The new company SCHNEEBERGER Components Poland (SPO) officially started on November 19, 2020 and has already commenced operations, producing precision parts for the entire Group. The core competence lies in the production of rolling bearing rollers. Also as part of its strategic development, the Business Unit Systems has established the company "SCHNEEBERGER Precision Motion Systems (Shenzhen)". With the establishment of the new technology center for systems in Shenzhen with development, production, sales and service, SCHNEEBERGER will be closer to its Asian customers and thus be able to serve them even better with high-precision single and multi-axis systems.

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