

20mA Position Sensor S4, 4 Line

Redesign

The redesign of the position sensor S4 is completely dimension and function compatible with the original module from Schoppe & Faeser.

The original module thus has a "plug-and-play" replacement in the redesign, with no changes required to the system.

The position sensor works with a drive and a PE01 Red. drive control module. Both provide continuous control and feedback of the actual position of the drive so that continuous proportional drive positioning is possible based on the desired position.

In proportion to the angle of rotation on the axis, the position sensor delivers an analogue current signal of 0/4...20mA to PE01.

The rotation of the carrier is converted in a linear movement using a self-adjusting mechanism, which is connected to a LVDT.

The LVDT is a high-resolution differential transformer, which generates an analogue signal in proportion to the linear movement. The LVDT signal is conditioned and scaled corresponding to the default angle range on the rotation axis so that the current of 0/4...20mA is drawn from the power supply over an angle of 40°...120°.

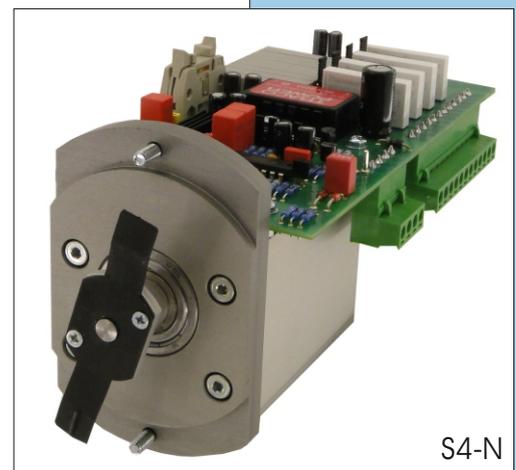
Optionally the S4 Red position sensor can be equipped with four configurable comparators, which activate 4 relays with one pole switches and with galvanically separated outlets.

The high-precision spindle trimmers mean the comparators can be configured so that a precise match with low hysteresis for a preconfigured analogue value of the rotation angle on the trimmer will activate the corresponding output relay.

Thanks to this fully electronic solution the micro-switches and cam disks on the original S4 position sensor can be replaced easily and reliably.

The individual configuration of the monitored rotation angle is drastically simplified thanks to the potentiometer settings.

Samples available in stock.



Technical data:

Supply voltage: DC 24V nom. ca. 3VA

Output: 0/4...20mA, load < 750 Ω , short circuit proof

Range: FS appr. 40° bis 300°, linearity 0,15%

Direction: Changeable by settings

Option: S4-N position sensor with analog monitoring by comparator adjustment, 4 ch.

Relay output: 4, 1 pol. galvanical separated, change over contacts

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DIE ENTWICKLER

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