

# 20mA Position Sensor S2, 2 Line

## Redesign

The redesign of the position sensor S2 is completely dimension compatible and function compatible with the original module from the manufacturer 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 along with a drive and a drive control module PE01 Redesign 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. The position sensors delivers an analogue current signal of 4...20mA in proportion to the rotation angle of the axle.

The rotation movement 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 4...20mA is drawn from the power supply over an angle of 40°...120°. The current creates a voltage drop of 2...10V on a 500 Ohm shunt in the supply voltage lead proportional to the rotation angle of the carrier.

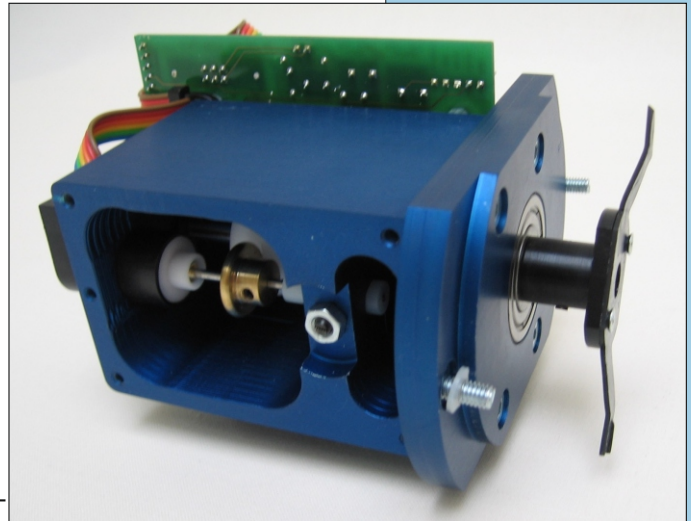
### Gear box for position sensor S2/S4

The gear box can be mounted on the mechanical flange of the S2 or S4 position sensor and reduces the input angle on the carrier by a factor of 4:1 or 10:1.

Other reducers are available optionally.

The gear flange with the carrier wing has fastening bolts that fit precisely in the boreholes on the mounting position of the actuator.

S2 and S4 gear samples are available in stock.



#### Technical data position sensor S2:

Supply voltage: 2-wire, 24V DC nom.  
Output: 4...20mA, Shunt < 500  $\Omega$ /2...10V  
Range: Fullscale appr. 40° to 120°  
Direction: Changeable by bridge contactor

#### Technical data gearbox:

Diameter: 90mm  
Flange mounting: 70mm  
Height: 32mm  
Speed reduction: 4:1; 10:1; opt. other  
Inside: Wheel set



#### DIE ENTWICKLER

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