



Miniature magnetic position sensors

Programmable switching points with integrated electronics

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The BERNSTEIN range of teachable electronic magnetic sensors combines two programmable switching points and fully integrated electronics in an enclosure that boasts the smallest dimensions in its class.

This highly compact design allows the intelligent sensor to be fully recessed in standard T and C-slots (e.g. FESTO or SMC), providing maximum protection for the integrated electronics within an IP67 rated enclosure.

When the easy to use teaching tool is placed over the installed sensor, it automatically selects programming mode and the two switching points can then be set at the push of a button. The two LEDs on the sensor then serve as function indicators, providing information on

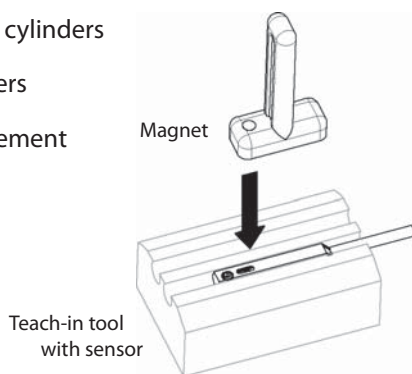
the programming status and displaying signal faults. This helps prevent unintentional changes to the settings whilst retaining the safety class rating.

This switching is quickly programmed by mounting the sensor near the cylinder or gripper, which is then moved to the desired switching position. One push of a button sets the switch-on point and the process is repeated for the second switching position. This method saves installation time and greatly improves accuracy.

The new sensors include protection against short circuits and polarity reversal as standard. An internal EEPROM stores the switching points in the event of power failure. Versions are available with a 4-pin M8 connector or as a cable version with open wires.

Industries and Applications

- Assembly and handling systems
- Short-stroke cylinders
- Block cylinders
- Clamping element
- Robotics
- Grippers



- the installed sensor assumes programming mode when the teach-in tool is placed over it
- the positions of the magnet are assigned to the respective outputs by aligning the tool
- the programmable switching points are stored in the sensor
- the switching points can be changed by repeating the teach-in procedure

Advantages

- Fully integrated electronic solution
- Permanent protection rating
- No need to mount additional electronics
- Fully immersed and therefore protected installation in the slot
- Suitable for standard C and T-slots
- Available as cable or plug version
- Only takes up one slot
- Two freely programmable switching points
- Straightforward teach-in procedure
- Reduced installation and wiring requirements
- Top-mounted
- High switching accuracy