

Sensor box SRBE

FESTO



Explosive atmosphere specialist

Highlights

- Worldwide certification to ATEX, IECEx, cCSAus
- "Flameproof enclosure" ignition protection for installation without safety barriers
- SIL 2 to IEC 61508
- Weather-tight housing for outdoor applications
- Extensive range of switch variants for virtually all applications
- Two cable inputs for common power supply or the sensor box and solenoid valve

The new sensor box SRBE is a reliable and cost-effective solution when it comes to optical position indication and electronic position sensing of automated or manually actuated process valves. Ideal in explosive atmospheres: SRBE is certified worldwide in line with explosion protection standards. The sturdy design in IP67/NEMA4X is suitable for indoor and outdoor applications.

Explosive environment?

SRBE is certified according to ATEX, cCSAus and IECEx for use in potentially explosive areas. The "flameproof enclosure" type of protection enables installation without safety barriers or NAMUR switching amplifier in potentially explosive areas.

Flexibility means suitability for many tasks

The wide range of mechanical, inductive or magnetic switch variants makes SRBE extremely flexible – and suitable for virtually any application. At the same time, the two cable inputs enable solenoid valves and other

devices to be connected. The highly visible position indicator makes it easy to identify the switching status.

Fast and simple mounting and commissioning

Thanks to the integrated mounting adapters, the sensor box can be mounted quickly and easily on quarter turn actuators with hole pattern to VDI/VDE 3845. SRBE can not only be mounted quickly on the quarter turn actuator, but is also very easy to commission because the actuating cams can be adjusted without any additional tools.

Sensor box SRBE



The sturdy design and robust technology make it suitable for use in potentially explosive areas, including applications with stringent safety require-

ments, such as hydrogen and acetylene environments. Certification according to international, European and North American standards

guarantee worldwide use. The "flameproof enclosure" ignition protection allows simple installation without safety barriers.

Technical data

General characteristics

Housing	Cast aluminium, epoxy-coated
Cable entry	2 x M20x1.5 or 2 x NPT 1/2"
Optical position indicator	3D OPEN-CLOSE position indicator/yellow-red
Mounting	Pre-assembled mounting adapter 80 x 30 x H 20 mm for interface to VDI/VDE 3845 (NAMUR interface)
Electrical connection	Terminal strip
Solenoid valve connection	Two cable inputs for common power supply for sensor box and solenoid valve
Number of switches	2 (2 or 4 for mechanical switches)
Switch type	Mechanical, inductive, magnetic reed

Operating and environmental conditions

Housing protection class	IP67, NEMA 4/4x
cCSAus	Class I, Div. 1; Class I, Div. 2; Class II, Div. 1; Class III, T4A; Class I, Zone 1; Class II, Zone 21
ATEX	II 2G II 2D
IECEX	EPL Gb, EPL Db
Type of ignition protection	Ex d Ex tb
Safety Integrity Level [SIL] acc. to IEC 61508	Up to SIL 2
Ambient temperature [°C]	-20 ... 60

Material data

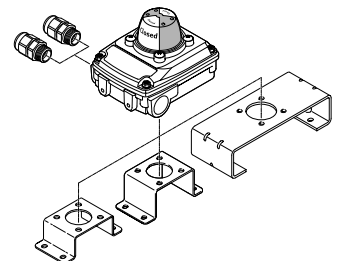
Housing	Cast aluminium, epoxy-coated
Shaft	Stainless steel
Screws	Stainless steel
Seals	NBR
Optical position indicator	PC
Mounting adapter	Stainless steel

Switch types

Mechanical switches	3-wire SPDT, CHERRY D45 3-wire SPDT, Omron D3V
Inductive proximity sensor	<ul style="list-style-type: none"> • 2-wire NAMUR, NC, Pepperl+Fuchs NCB2-V3-N0 • 2-wire DC, NO, Pepperl+Fuchs NBB3-V3-Z4 • 3-wire PNP, NO, Pepperl+Fuchs NBB2-V3-E2 • 3-wire NPN, NO, Pepperl+Fuchs NBB2-V3-E0
Magnetic switch	3-wire SPDT, HSI Sensing HSR 834W

Accessories

DARQ mounting adapters for quarter turn actuators with interface to VDI/VDE 3845 (NAMUR interface)



Technical details

Hole pattern length [mm]	Hole pattern width [mm]	Shaft height on the actuator [mm]
80	30	20
80	30	30
130	30	30