

Safety Transponder System

STS4

In combination with the STS4/B actuating element the STS4 sensor functions by the identification of a unique 6-digit safety code that is programmed during manufacture. The benefits of this non-contact, transponder based safety sensor are considerable: no mechanical wearing parts, a high tolerance to lateral mis-alignment between the sensor and actuating element, plus high integrity 'anti-tamper' security of the safety function, achieved by each sensor being individually matched to one defined transponder. In addition the Safety Transponder System is unaffected by dirty/contaminated environments.

Approved according to EN 954-1, Category 4, the STS4 has dual channel safety outputs which are internally self monitored in both the switched and unswitched state. These outputs can be connected directly to a Bernstein SCR safety relay or into the customer's own safety control system.

Safe

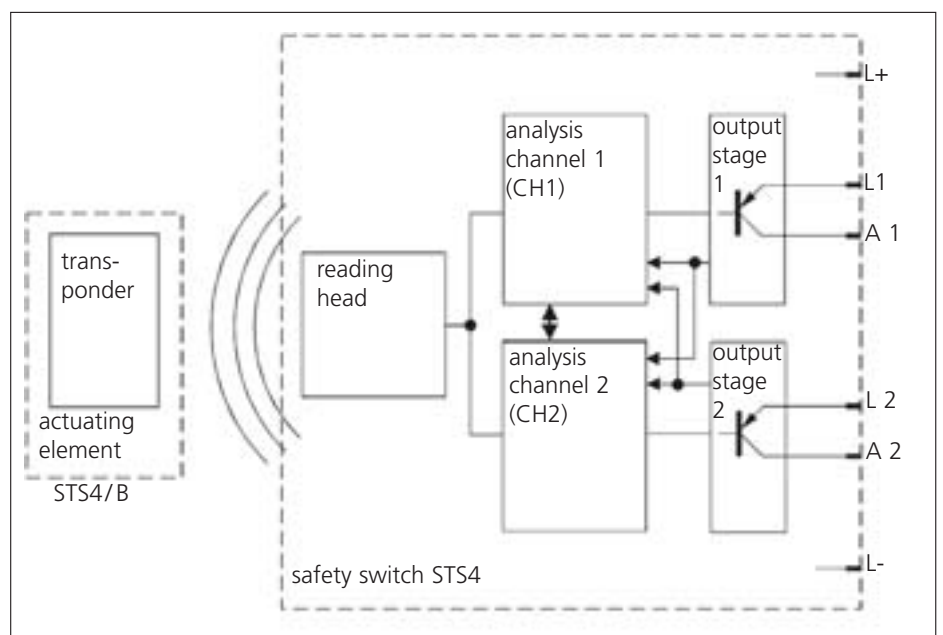
- 2-channel output
- Internal self monitoring
- Category 4 acc. to EN 954-1

Flexible

- Connects to safety control system or SCR
- 5 selectable positions for active face

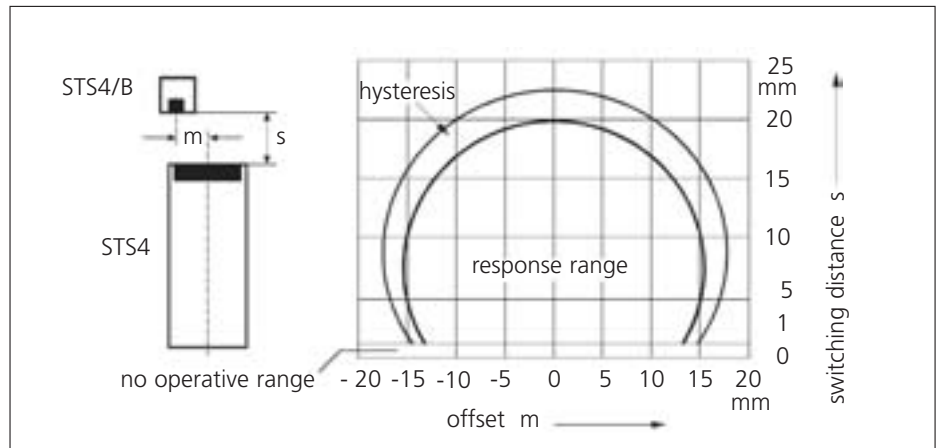
Reliable

- Insensitive to mechanical vibrations
- Extended lateral offset
- Tamper-proof
- Insensitive to dirt
- No mechanical wear



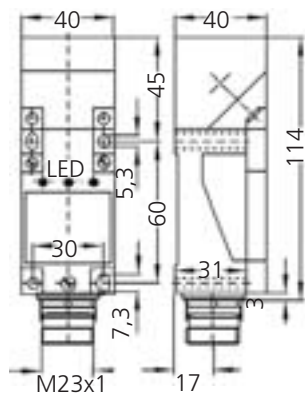
Sensing distance/offset

The following values apply to parallel and centred alignment of the active faces of the safety switch and actuating element. If the active faces lean towards each other, the values will differ from those specified. At an inclination of up to 30° the deviation would be ± 10%.

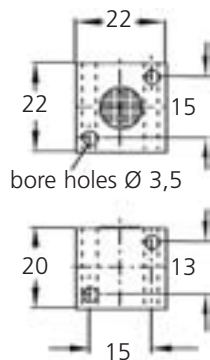


Areas of use

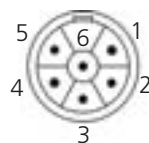
The STS4 Safety Transponder System monitors the presence of removable/hinged machinery guards and ensures that hazardous work on and with machines or applications can only be conducted if the protective guard is in place. In areas where safety devices are exposed to vibration and mechanical wear, the STS4 really demonstrates its advantages by providing tamper-proof access control and ensuring dependable operator protection from the dangerous movements of the machinery.



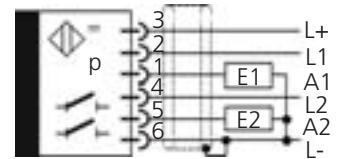
dimensioned drawing:
category 4 safety switch



dimensioned drawing:
actuating element



connector pin configuration



wiring diagram

Technical data

Description	STS4-N44US/020-KLS
Part number	6505054001

Operational data

Rated operating distance, hysteresis	20 mm, < 15 %
Protection, weight	IP 67, 250 g
Operating voltage range L+	15 ... 24 ... 30 VDC
Operating mode	2 NO contacts
Output current	< 400 mA per output, short circuit-proof
Ambient temperature range	-30 ... +70 °C
Connection, plug	6-pole, coninverse RC (included)