Stainless steel guard-lock safety door switch

The F3S-TGR-KHL3 safety-door switch keeps medium to large guard doors closed until hazards have been removed. It has a stainless steel body and is designed to cope with the rigorous applications of the food processing and chemical industries.

- Safety-door switch with electromagnetic lock and unlock mechanism (mechanical lock/solenoid unlock)
- Models with 6 built-in contacts
- Strong key holding force: 2000 N
- LED for diagnosis
- IP69K suitable for SIP and CIP processes
- Positive break contacts to IEC 60947-5-1

Ordering information

Switches

Type	Housing	Conduit	Contacts	Order code
	Stainless steel 316	M20	2NC/1NO+2NC/1NO 4NC safety contacts (2 door monitoring, 2 lock monitoring) 2NO Auxiliary contact (guard open, lock status)*1	F3S-TGR-KHL3
	Stainless steel 316 with rear push button manual release			F3S-TGR-KHL3R

*1 1NO lock status if LED2 Lock Status Indicator not used

Keys (order separately)

Type	Order code
Standard 	F39-TGR-KAM
Horizontal mounting 	F39-TGR-KF
heavy flexible 	F39-TGR-KHF
hygienic flexible 	F39-TGR-KHFH

Accessories

Item	Remarks	Order code
M20 Gland	Stainless steel 316	F39-TGR-M20
Key	Manual release key	F39-TGR-MRK

Specifications

	F3S-TGR-KHL3
Standards	EN1088, IEC 60947-5-1, EN 60204-1, UL508 EN ISO 13849-1: up to PLe*1 EN 62061: up to SIL3*1
Lock principle	Mechanical lock/solenoid unlock
Holding force	2000 N
Indicator LEDs	LED1: Status of solenoid LED2: Lock status indication (if 1NO Auxiliary contact not used)
Utilization category	AC15 A300 3 A
Thermal current (Ith)	5 A
Rated insulation/Withstand voltages	500 VAC/2,500 VAC
Rated travel for positive opening	10 mm
Actuator entry minimum radius	175 mm standard, 100 mm flexible
Maximum approach/Withdrawal speed	600 mm/s
Body dimensions (W × H × D)	48 × 177 × 47 mm
Fixing	4 × M5, mounted from backside
Conduit entry	M20
Material	Stainless steel 316
Enclosure Protection	IP69K
Temperature Range	–25 to 55°C
Vibration	IEC 68-2-6, 10-55 Hz +1 Hz, Excursion: 0.35 mm, 1 octave/min

*1 Depending upon system architecture