

D STNK SERIES

SAFETY LIMIT SWITCHES WITH KEY



The STNK series is a key operated safety interlock switch designed to fit at the leading edge of sliding, hinged or lift-off guards. With its dual entry slots and rotatable head, the versatile STNK series can offer up to eight different actuator entry options.

Operation of the switch is achieved through the insertion of a specially profiled stainless steel key that is permanently mounted to the guard door.

Available with one NC safety contact or two NC contacts, the STNK series is sealed to IP67 and has various conduit entries. A blanking plug is supplied for the unused key entry.

#### **TECHNICAL DATA - HOUSING**

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin and with double insulation Standard: M16

STNK Series one threaded conduit entry

**Protection degree** IP67 according to EN60529 with cable gland having equal or higher protection degree

# **GENERAL DATA**

Positive opening operation	NC contact →
Utilization category	AC15 A600
Insulation resistance	100MΩ min (DC 500V)
Contact resistance	25mΩ max (Initial)
Travel for positive opening	Various
Maximum actuation frequency	2 cycles/sec
Enclosure material	UL approved glass-filled polybutylene terephthalate
Actuator material	Stainless steel
Operating temperature	Min -25°C (-18°F) / Max 80°C (+176°F)
Mechanical life expectancy	1x10 <sup>6</sup> cycles min
Electrically life expectancy	150.000 cycles min
Vibration resistance	IEC 68-2-6, 10-55Hz ± 1Hz, Excursion: 0.35mm, 1 octave/min
Conduit entry	Various
Fixing	2xM4

## **ELECTRICAL DATA**

Rated thermal current (Ith)	10A
Rated insulation voltage (Ui)	600V AC
Rated impulse withstand voltage (Uimp)	2500V AC
Pollution degree	3
Protection against electric shock	Class II (Double insulation)

#### STANDARDS & APPROVALS

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, EAC and CCC for all applicable directives

#### **QUALITY MARKS**

#### **MAIN FEATURES**

- Contacts: Slow action 1NC/1NO; 2NC Snap action 1NC/1NO.
- Positive opening mechanism.
- Double insulation structure.
- Eight possible actuator entry points, easy to install.
- Right angle, flat and adjustable keys.
- Robust stainless steel keys.
- IP67 enclosure rating.

## DATA TYPE APPROVED BY UL

#### **Utilization categories:**

	A600	1 NC/1 NO Slow Action 2 NC Slow Action	
STNK SERIES	STNK SERIES Q300	B600	1 NC/1 NO Snap Action
		4300	2 NC/1 NO Slow Action (3 poles)
	•	A300	3 NC Slow Action (3 poles)

Data of the housing type 1.

For all contact blocks use 60 or 75°C copper (Cu) conductor and wire size No. 14 - 18 AWG.

Terminal tightening torque of 7.1 lb in (0.8 Nm).

In conformity with standard: UL508, CSA 22.2 No. 14 - 10.



#### Please contact our technical service for the list of approved products.

DOUBLE INSULATION

## PROTECTION CLASS

These series switches are all IP67

Materials of group II, according to IEC 536, are made with double insulation. This consists of doubling the insulation capability by means of an additional divider in order to eliminate any electrical shock risk and avoid the need for any additional protections.

## POSITIVE OPENING

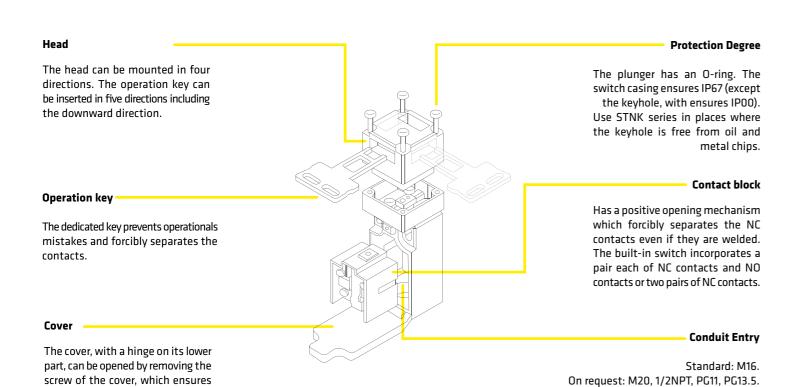


A limit switch complies to the specification when all the normally closed contact elements of the switch can be changed, with certainty, to the open position (no flexible link between the moving contacts and the operator of the switch, to which an actuating force is applied). Positive opening doesn't apply to NO contacts. Control switches with positive opening operation can be equipped with either slow-break or snap action contacts. In order to use different contacts on the same switch, it is necessary to electrically separate them; otherwise only one contact can be used. Every positive opening control switch must be marked on the external housing with the symbol on the left.

www.giovenzana.com

## STRUCTURE DESCRIPTION

ease of maintenance and wiring.

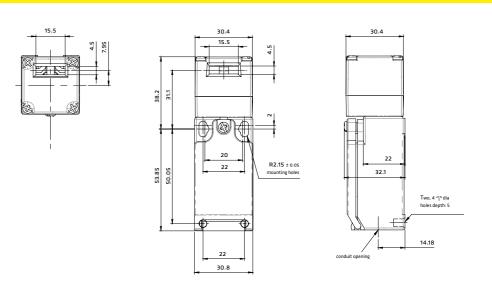


PRODUCT SELECTION			
STNK	01	X11	М
Series	Operation Key Types	Contact Types	Thread dimension of lead exit
	<b>01</b> - Right angle key <b>02</b> - Flat key <b>03</b> - Adjustable key	X11 - 1NC/1NO Slow Action W02 - 2NC Slow Action Z11 - 1NC/1NO Snap Action W12 - 2NC/1NO Slow Action W03 - 3NC Slow Action Slow Action & Snap Action: Type "Zb"	Standard: BLANK - M16  On request: M - M20 N - 1/2NPT G1 - PG11 G3 - PG13.5 C - Connector

## CONTACT BLOCK FORM

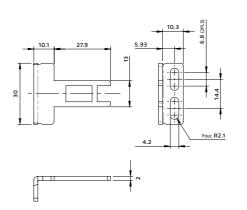
Contact Types	X11	W02	Z11	W12	W03
Contact	1NC/1NO Slow Action	2NC Slow Action	1NC/1NO Snap Action	2NC/1NO Slow Action	3NC Slow Action
Electrical Schemes	① Zb ③ 22 13 — 14 ② ④	① Zb ③ 22 11 → 12 ② ④	① ③ 21 → 22 13 → 14 ② ④	31 32 21 22 13 14	Zb 31 = 32 21 = 22 11 = 12
Connector pin Arrangement	© 0 0 3 M12 Con	© 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	② ⑥	No Conn	ector type

#### DIMENSIONS

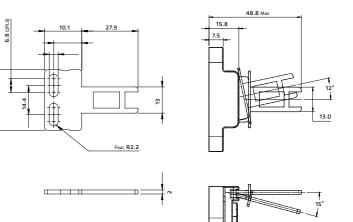


# OPERATION KEYS

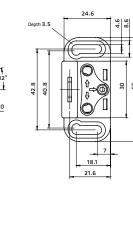
## 01: RIGHT ANGLE KEY



# 02: FLAT KEY



03: ADJUSTABLE





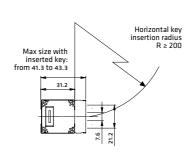


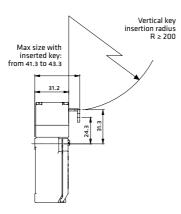
# STNKO1: SAFETY LIMIT SWITCH WITH RIGHT ANGLE KEY

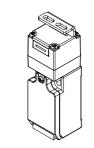
STNK	01	X11	М
Series	Operation Key Types	Contact Types	Thread dimension of lead exit
	01 - Right angle key	X11 - 1NC/1NO Slow Action W02 - 2NC Slow Action Z11 - 1NC/1NO Snap Action W12 - 2NC/1NO Slow Action W03 - 3NC Slow Action Slow Action & Snap Action: Type "Zb"	Standard: BLANK - M16 On request: M - M20 N - 1/2NPT C1 - PC11 G3 - PC13.5 C - Connector

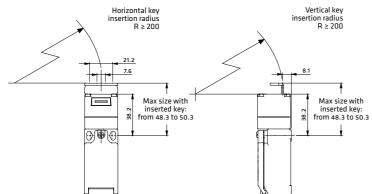










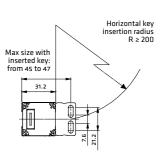


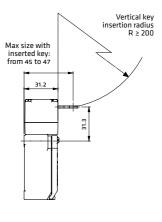
# STNKO2: SAFETY LIMIT SWITCH WITH FLAT KEY

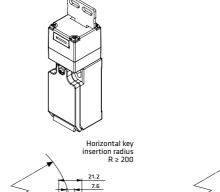
STNK	02	X11	М
Series	Operation Key Types	Contact Types	Thread dimension of lead exit
	02 - Flat key	X11 - 1NC/1NO Slow Action W02 - 2NC Slow Action Z11 - 1NC/1NO Snap Action W12 - 2NC/1NO Slow Action W03 - 3NC Slow Action Slow Action & Snap Action: Type "Zb"	Standard: <b>BLANK</b> - M16 On request: <b>M</b> - M20 <b>N</b> - 1/2NPT <b>G1</b> - PG11 <b>G3</b> - PG13.5 <b>C</b> - Connector

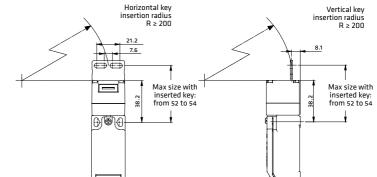












61