

### DESCRIPTION

Giovenzana's standard micro switches with self cleaning contacts, supplied with operator, are high-precision, snap action switches and these are the main features for which they are notable:

- Fast and reliable switching largely independent of actuating speed
  - High electrical ratings but small dimensions
  - High repeat accuracy of switching points and forces
  - Low operating force
  - NC positive opening
  - Very long service life
  - Equipped with self cleaning switching contacts in silver alloy
  - Available with the pin plunger or various type of actuation lever.
- Easy adaptation to numerous applications such as joystick, TV game, time recorder, air conditioner, food processor, juice maker, alarm, mixer, shredder machine, ...

We've five lines of micro switches:



#### MFI series

Micro switches, normalized with self-cleaning contacts including actuating lever with 7 different versions.

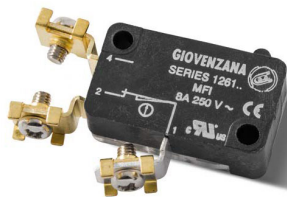
- Faston terminal 6.3 x 0.8



#### MFI.S series

Micro switches, normalized with self-cleaning contacts including actuating lever with 7 different versions.

- Solder micro switches



#### MFI.ST series

Micro switches, normalized with self-cleaning contacts including actuating lever with 7 different versions.

- Screw terminal



#### MFI.STP series

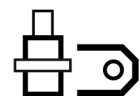
Micro switches, normalized with self-cleaning contacts including actuating lever with 7 different versions.

- Screw terminal and plate protection



#### MFI.T

Micro switch with tower actuator



## QUALITY MARKS

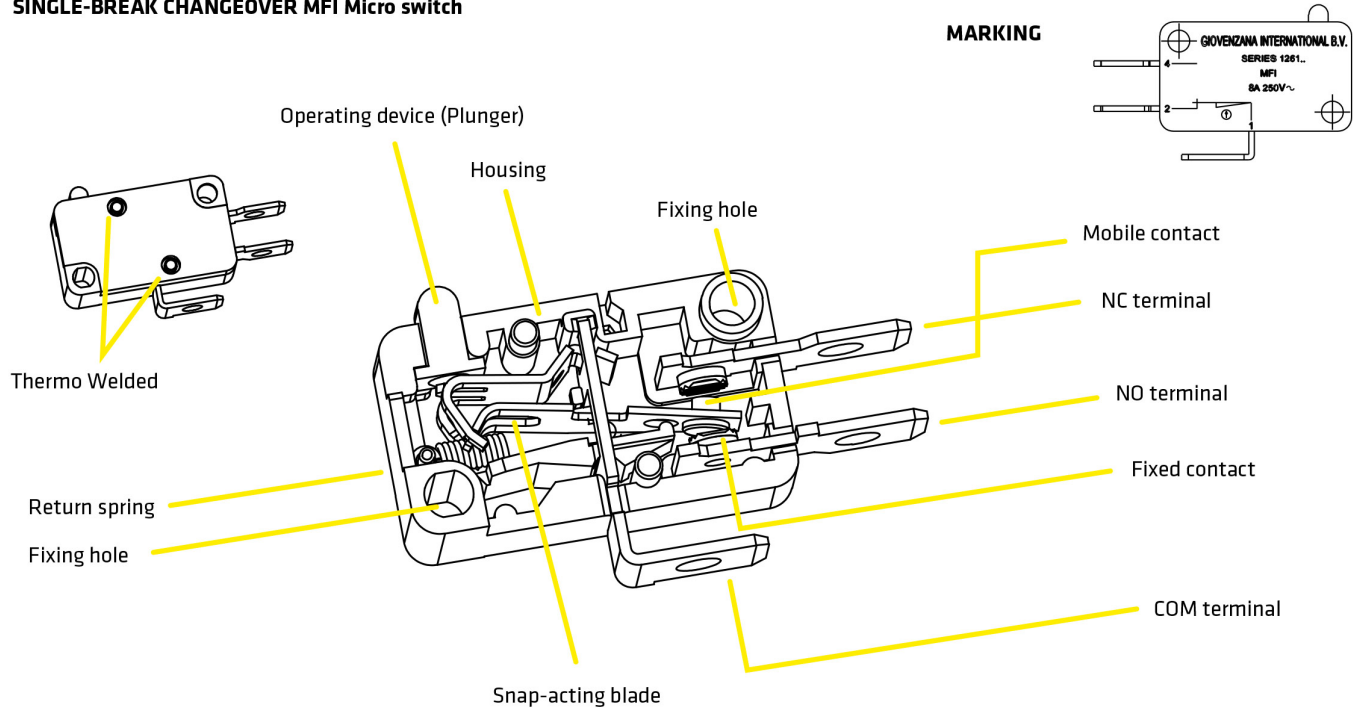


## STANDARDS & APPROVALS

<b>Standards</b>	IEC/EN61058, UL1054
<b>Approvals</b>	cRUus, CE for all applicable directives

## STRUCTURE DESCRIPTION

### SINGLE-BREAK CHANGEOVER MFI Micro switch



Micro switches are activated by a spring-operated (or snap-action) mechanism. Depressing the actuator triggers the switching operation, with a pre-defined force and travel. The switching speed itself is largely independent of the speed of actuation.

### ACTIONING LEVERS

It is possible to attach an actioning lever to a snap switch in order to meet the specific requirements of a given application. Doing so usually alters the travel and forces involved in the switching operation, depending on the length of the levers. By attaching an appropriate actioning lever, it is possible to increase travel and/or reduce actuating force required.

### OPERATION DEVICE (PLUNGER)

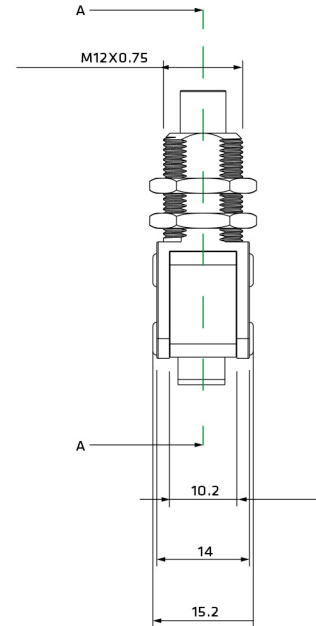
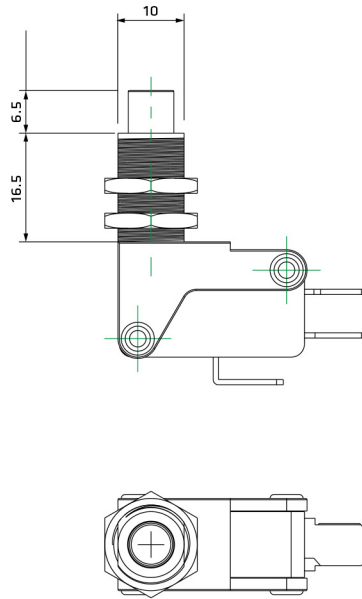
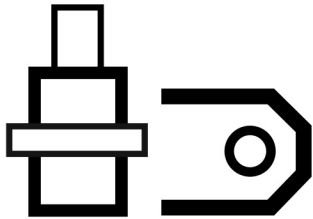
Applying force to the actioning lever of a snap switch releases the snap action mechanism, which in turn triggers the switching operation.

### POSITIVE OPENING



An additional internal mechanism, made of non-resilient parts, forces the opening of NC contacts in case of accidental welding (overload, short circuit, ...) or snap action mechanism failure. Models fitted with this function are particularly suitable for safety related applications according to ISO13849-1 or EN60204-1.

To ensure proper functioning of positive opening operation, the operating device must be depressed up to the positive opening position.



### GENERAL DATA

Operating temperature	Min -25°C (-18°F) / Max 85°C (+185°F)
Mechanical life expectancy	1x10 <sup>6</sup> cycles min
Electrically life expectancy	5x10 <sup>5</sup> cycles min
Termination type	Tower actuator - Faston Terminals

### ELECTRICAL DATA

Rated Thermal current (I <sub>th</sub> )	8A
Rated insulation voltage (U <sub>i</sub> )	250V
Rated impulse withstand voltage (U <sub>imp</sub> )	1500V
Rated operating current (I <sub>e</sub> )	8A - 250V resistive load, 3A - 250V inductive load
Pollution degree	2
Protection against electric shock	Class II

