

### 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 indipendent 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 actioning lever with 7 different versions.







### MFI.S series

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

• Solder micro switches





### **MFI.ST series**

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



Screw terminal



### **MFI.STP** series

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



• Screw terminal and plate protection



### MFI.T

Micro switch with tower actuator





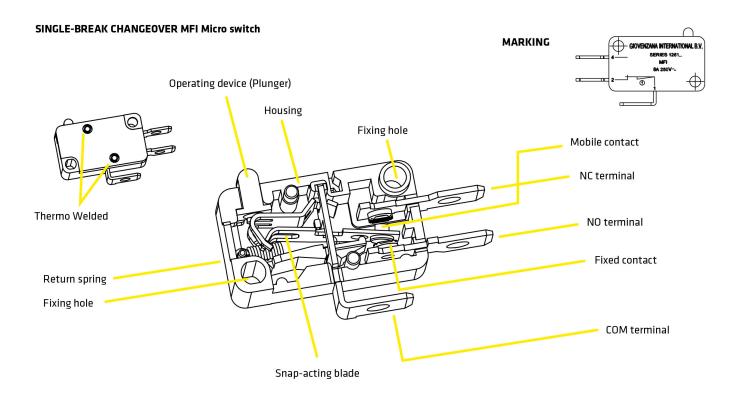
QUALITY MARKS

STANDARDS & APPROVALS



StandardsIEC/EN61058, UL1054ApprovalscRUus, CE for all applicable directives

### STRUCTURE DESCRIPTION



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 a largely indipendent 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.

### **OPERATIONG 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.















### **SERIES**

### MFI

micro switches

### **ACTUATOR**

- blank pin plunger 1 long roller lever
- 2 simulated roller lever
- 3 roller lever
- 4 long lever
- 5 medium lever
- 7 16 mm roller lever
- 6 short lever

### **TERMINAL TYPE**

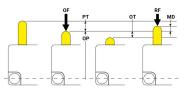
blank 6.3 × 0.8 mm faston

S solder

ST screw

STP screw + plate protection

T tower actuator with threaded flange



OF		Operating Force
		Release force
PT	[mm]	Pretravel
ОТ	[mm]	Overtravel
MD	[mm]	Differential movement

OP [mm] Operating position

20.5

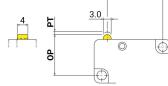
Pin	р	lur	ng	er











	OF RF PT	max min max	5.1 N 1.9 N 1.4 mm
<del>)</del>	OT MD OP	min max	0.8 mm 0.3 mm 14.4 ±
	01		0.5 mm

### Long roller lever

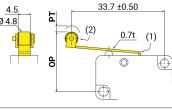




MFI.1S







	OF	max	3.2 N
	RF	min	1.0 N
	PT	max	3.3 mm
7	ОТ	min	0.8 mm
7	MD	max	0.8 mm
1	OP		17.4 ±
	0.		0.8 mm

### Simulated roller lever

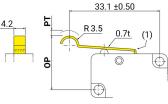






MFI.2ST





	OF	max	3.2 N
	RF	min	1.0 N
	PT	max	3.3 mm
(4	ОТ	min	0.8 mm
+	MD	max	0.8 mm
	OP		17.4 ±
	UP		0.8 mm

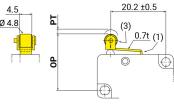
### Roller lever











	OF	max	5.1 N
	RF	min	1.9 N
	PT	max	1.4 mm
)	ОТ	min	0.6 mm
1	MD	max	0.6 mm
	OP		20.3 ±
	UP		0.8 mm

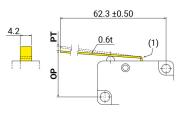
### Long lever











OF	max	1.3 N
RF	min	0.15 N
PT	max	7.6 mm
ОТ	min	2.2 mm
MD	max	2.2 mm
OP		15.1 ±
JF		2.6 mm



