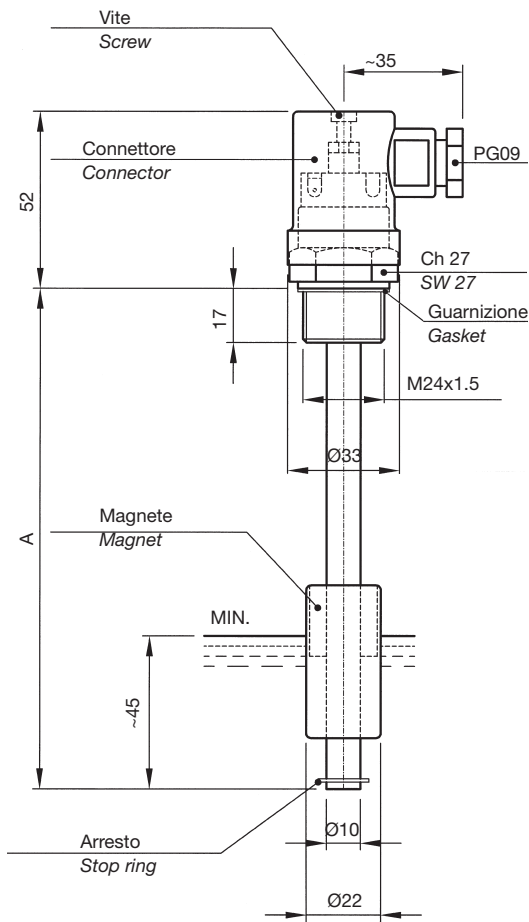


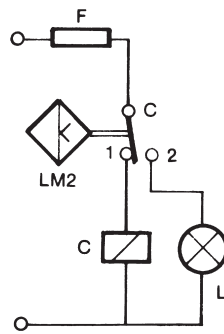
# LIVELLOSTATI ELETTROMAGNETICI

## Float level switches

### LM1CSA... LM2CSA...



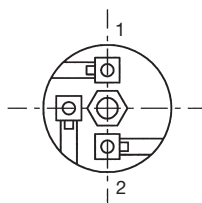
Schema di applicazione  
Application chart



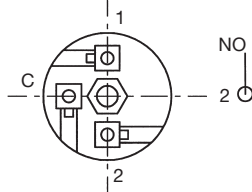
F = Fusibile - Fuse  
C = Relè - Relay  
L = Lampada - Lamp

Collegamenti elettrici standard  
Standard electrical connection

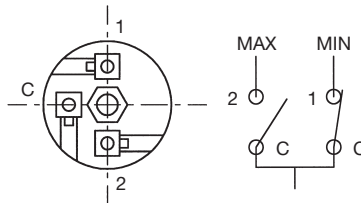
### LM1CSA



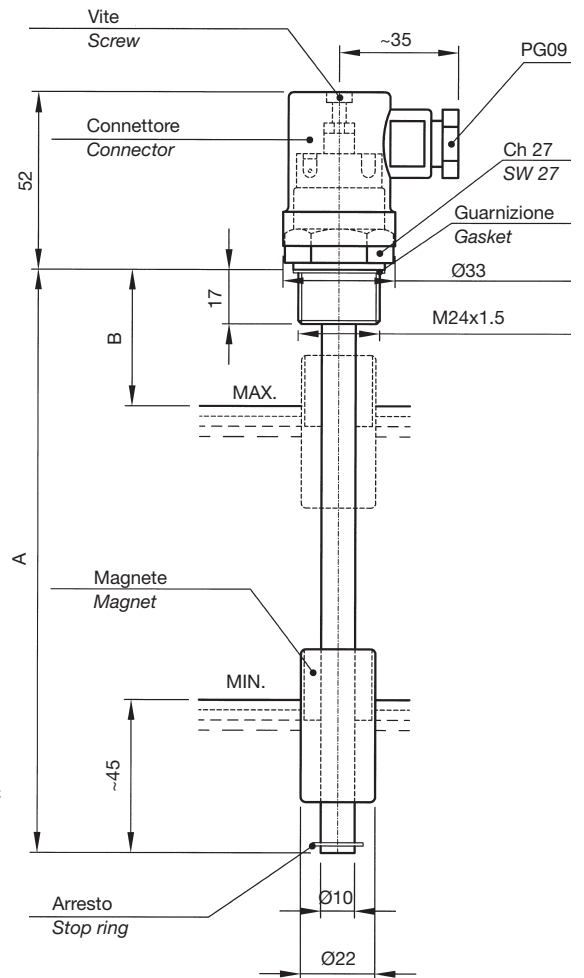
### LM2CSA



### LMM1CSA



### LMM1CSA...B...



**MATERIALI:** flangia filettata in alluminio anodizzato, tubo in ottone, anelli di arresto in bronzo, galleggiante in resina espansa NBR.

**N.B.** - A richiesta, forniamo lunghezze superiori, fino a 1500 mm, oppure diverse da quelle indicate in tabella.

**MATERIAL:** thread connection in anodized aluminium, brass stem, stop rings in bronze, NBR float.

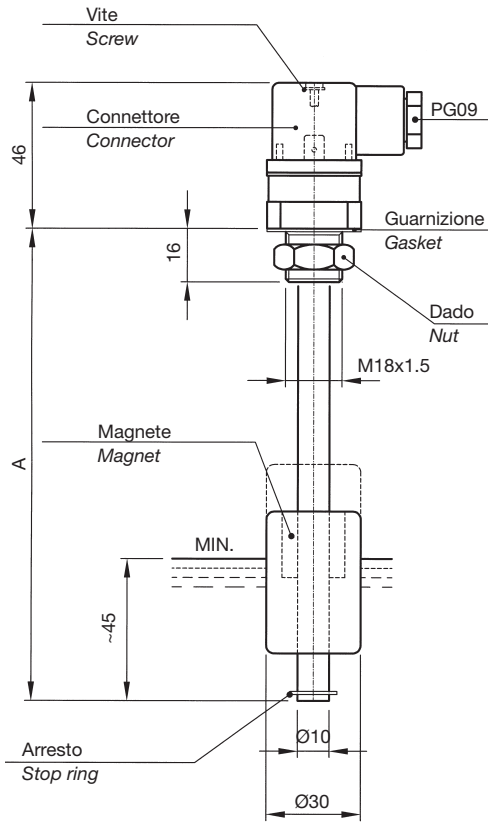
**N.B.** - Customized lengths can be supplied on request. Max length 1500 mm.

LM1CSA...		LM2CSA...		LMM1CSA...B...		
TIPO Model	A	TIPO Model	A	TIPO Model	A	B
LM1CSA150	150	LM2CSA150	150	LMM1CSA150B40	150	40
LM1CSA200	200	LM2CSA200	200	LMM1CSA200B60	200	60
LM1CSA250	250	LM2CSA250	250	LMM1CSA250B60	250	60
LM1CSA300	300	LM2CSA300	300	LMM1CSA300B60	300	60
LM1CSA350	350	LM2CSA350	350	LMM1CSA350B60	350	60
LM1CSA400	400	LM2CSA400	400	LMM1CSA400B70	400	70
LM1CSA450	450	LM2CSA450	450	LMM1CSA450B70	450	70
LM1CSA500	500	LM2CSA500	500	LMM1CSA500B80	500	80

# LIVELLOSTATI ELETTROMAGNETICI

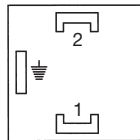
## Float level switches

### LM1CA... LM2CA...

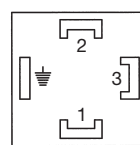


Collegamenti elettrici standard  
Standard electrical connection

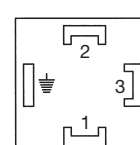
#### LM1CA



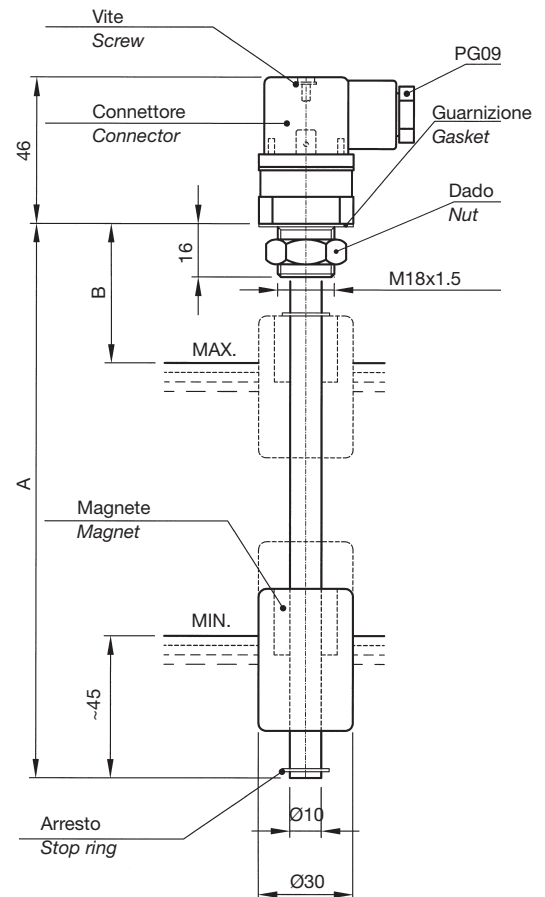
#### LM2CA



#### LMM1CA



### LMM1CA...B...



**MATERIALI:** flangia filettata in alluminio anodizzato, tubo in ottone, anelli di arresto in bronzo, galleggiante in resina espansa NBR.

**N.B.** - A richiesta, forniamo lunghezze superiori, fino a 1500 mm, oppure diverse da quelle indicate in tabella.

**MATERIAL:** thread connection in anodized aluminium, brass stem, stop rings in bronze, NBR float.

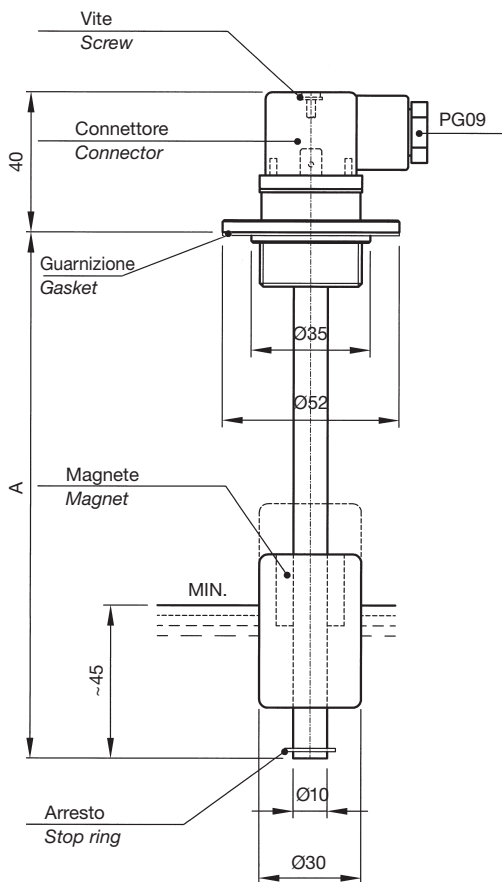
**N.B.** - Customized lengths can be supplied on request. Max. length 1500 mm.

LM1CA...		LM2CA...		LMM1CA...B...		
TIPO Model	A	TIPO Model	A	TIPO Model	A	B
LM1CA100	100	LM2CA100	100			
LM1CA150	150	LM2CA150	150	LMM1CA150B40	150	40
LM1CA200	200	LM2CA200	200	LMM1CA200B60	200	60
LM1CA250	250	LM2CA250	250	LMM1CA250B60	250	60
LM1CA300	300	LM2CA300	300	LMM1CA300B60	300	60
LM1CA350	350	LM2CA350	350	LMM1CA350B60	350	60
LM1CA400	400	LM2CA400	400	LMM1CA400B70	400	70
LM1CA450	450	LM2CA450	450	LMM1CA450B70	450	70
LM1CA500	500	LM2CA500	500	LMM1CA500B80	500	80

# LIVELLOSTATI ELETTROMAGNETICI

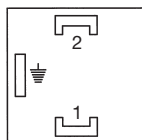
## Float level switches

### LM1CFA... LM2CFA...

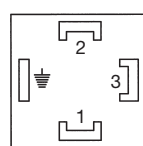


Collegamenti elettrici standard  
Standard electrical connection

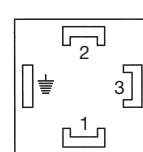
#### LM1CFA



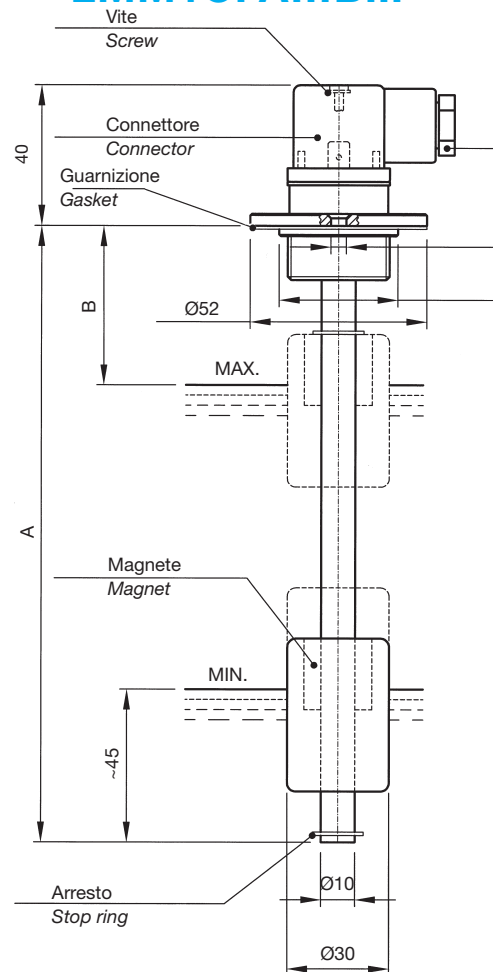
#### LM2CFA



#### LMM1CFA



### LMM1CFA...B...




**MATERIALI:** flangia in alluminio anodizzato, tubo in ottone, anelli di arresto in bronzo, galleggianti in resina espansa NBR.

**N.B.** - A richiesta, forniamo lunghezze superiori, fino a 1500 mm, oppure diverse da quelle indicate in tabella.

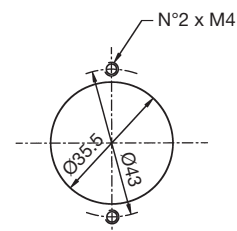
**MATERIAL:** flange in anodized aluminium, brass stem, stop rings in bronze, NBR float.

**N.B.** - Customized lengths can be supplied on request. Max. length 1500 mm.

 Disponibili in versione conforme alla Direttiva ATEX 94/9/CE in esecuzione a sicurezza intrinseca con stringa di certificazione II 1/2 G Ex ia IIB T6.



Executions also available in accordance with the Directive ATEX 94/9/EC on intrinsic safety equipment with marking II 1/2 G Ex ia IIB T6.



Esempio di foratura  
Exemple of perforation

LM1CFA...		LM2CFA...		LMM1CFA...B...		
TIPO Model	A	TIPO Model	A	TIPO Model	A	B
LM1CFA150	150	LM2CFA150	150	LMM1CFA150B40	150	40
LM1CFA200	200	LM2CFA200	200	LMM1CFA200B60	200	60
LM1CFA250	250	LM2CFA250	250	LMM1CFA250B60	250	60
LM1CFA300	300	LM2CFA300	300	LMM1CFA300B60	300	60
LM1CFA350	350	LM2CFA350	350	LMM1CFA350B60	350	60
LM1CFA400	400	LM2CFA400	400	LMM1CFA400B70	400	70
LM1CFA450	450	LM2CFA450	450	LMM1CFA450B70	450	70
LM1CFA500	500	LM2CFA500	500	LMM1CFA500B80	500	80

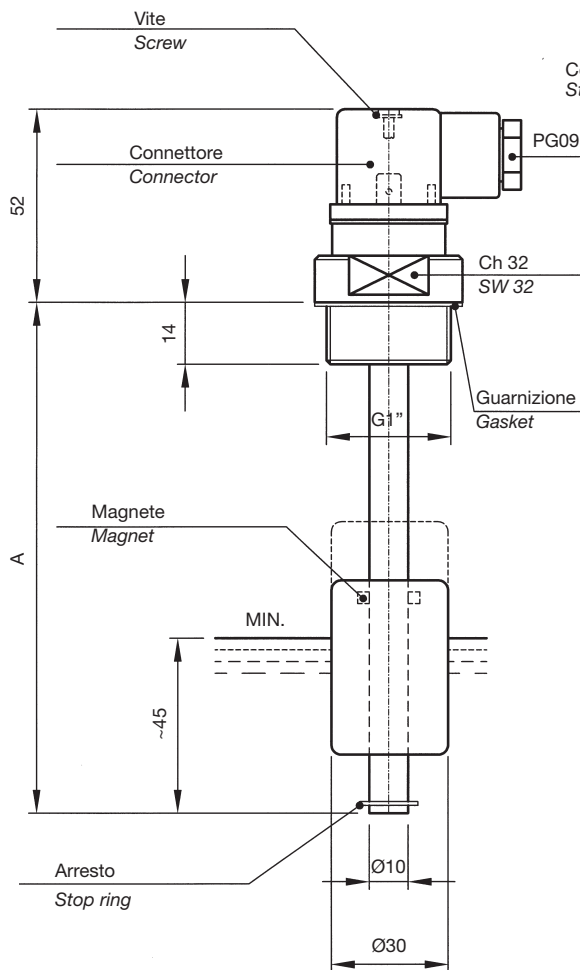


# LIVELLOSTATI ELETTROMAGNETICI

## Float level switches

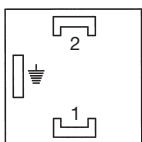
LM1CTA...  
LM2CTA...

LMM1CTA...B...

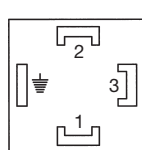


Collegamenti elettrici standard  
Standard electrical connection

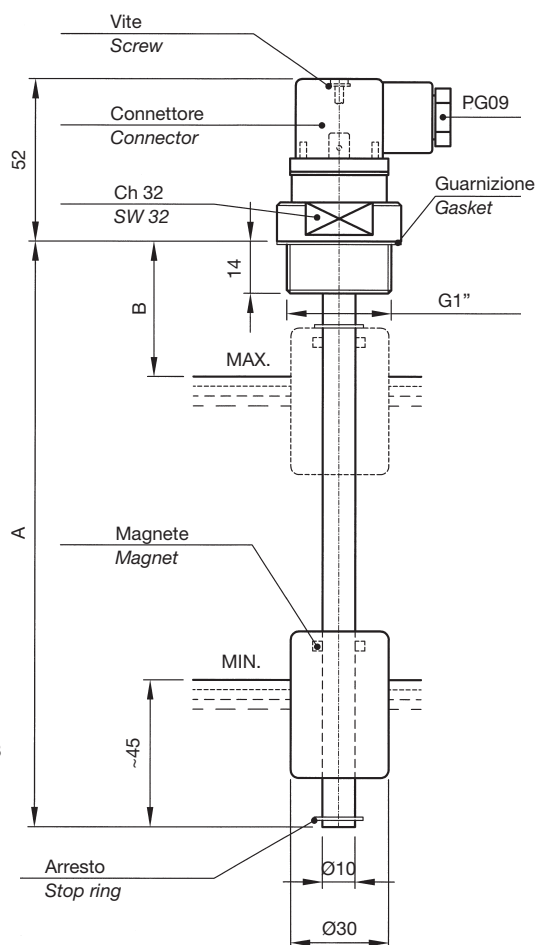
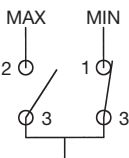
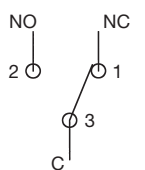
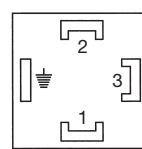
LM1CTA



LM2CTA



LMM1CTA



**MATERIALI:** flangia filettata in alluminio anodizzato, tubo in ottone, anelli di arresto in bronzo, galleggiante in resina espansa NBR.

**N.B.** - A richiesta, forniamo lunghezze superiori, fino a 1500 mm, oppure diverse da quelle indicate in tabella.

**MATERIAL:** thread connection in anodized aluminium; brass stem; stop rings in bronze, NBR float.

**N.B.** - Customized lengths can be supplied on request. Max length 1500 mm.



Disponibili in versione conforme alla Direttiva ATEX 94/9/CE in esecuzione a sicurezza intrinseca con stringa di certificazione II 1/2 G Ex ia IIB T6.



Executions also available in accordance with the Directive ATEX 94/9/EC on intrinsic safety equipment with marking II 1/2 G Ex ia IIB T6.

LM1CTA...		LM2CTA...		LMM1CTA...B...		
TIPO Model	A	TIPO Model	A	TIPO Model	A	B
LM1CTA150	150	LM2CTA150	150	LMM1CTA150B40	150	40
LM1CTA200	200	LM2CTA200	200	LMM1CTA200B60	200	60
LM1CTA250	250	LM2CTA250	250	LMM1CTA250B60	250	60
LM1CTA300	300	LM2CTA300	300	LMM1CTA300B60	300	60
LM1CTA350	350	LM2CTA350	350	LMM1CTA350B60	350	60
LM1CTA400	400	LM2CTA400	400	LMM1CTA400B70	400	70
LM1CTA450	450	LM2CTA450	450	LMM1CTA450B70	450	70
LM1CTA500	500	LM2CTA500	500	LMM1CTA500B80	500	80



#### DATI TECNICI GENERALI

Max viscosità fluido: 150 cSt  
Pressione massima: 10 bar  
Peso specifico:  $\geq 0,7$   
Connessione elettrica: PG09 – DIN43650  
Protezione elettrica: IP65 – DIN40050  
Temperatura di lavoro:  $-10^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
Temperatura max con guarnizioni FKM e cavi Silicone:  $+130^{\circ}\text{C}$

#### DATI ELETTRICI

Le ampole reed utilizzate nei livellostati ELETTRITEC sono ermeticamente sigillate, ad attuazione magnetica e con una affidabilità di milioni di cicli.  
Il tipo di contatto a riposo è Normalmente Chiuso/Normalmente Aperto (SPST) o in scambio (SPDT). La portata dei contatti varia secondo il tipo di ampola reed adottata. Per i dati elettrici fare riferimento alla tabella sotto riportata.

#### GENERAL SPECIFICATIONS

Max. fluid viscosity: 150 cSt  
Max. pressure: 10 bar  
Fluid specific gravity:  $\geq 0,7$   
Electrical connection: PG09 – DIN43650  
Electrical protection: IP65 – DIN40050  
Operating temperature:  $-10^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
Max temperature with FKM gasket and Silicone cable:  $+130^{\circ}\text{C}$

#### ELECTRICAL DATA

Standard reed switches in ELETTRITEC level switch units are hermetically-sealed, magnetically actuated, designed for reliability to millions of cycles.  
Switches are Normally Closed/Normally Open (SPST) or SPDT. Each ELETTRITEC level switch varies in rating depending on the type of reed switch used, see the chart below for electrical ratings.

Tensione Max Max Voltage	Potenza Commutabile Rating Power	Corrente Max Max Current	Capacità Contatti Capacitance	Resistenza Isolamento Insulation Resistance	Contatto (a riposo) Switch Type (dry)
220V – 50Hz	60 W 60 VA	0.8A	0.6pF	$10^{10}$ Ohm	NC
220V – 50Hz	60 W 60 VA	0.8A	0.6pF	$10^{10}$ Ohm	NA/NO Modelli reversibili Reversible float
220V – 50Hz	30 W	0.5A	2pF	$10^9$ Ohm	NA/NO Modelli non reversibili Non-reversible float
220V – 50Hz	30 W	0.5A	2pF	$10^9$ Ohm	SPDT

**ATTENZIONE:** la combinazione tra la tensione e la corrente di commutazione non deve mai superare la potenza commutabile indicata in tabella.

I valori elettrici relativi alla portata dei contatti si riferiscono a **carichi resistivi**. Per applicazioni che implicano carichi induttivi o capacitivi è richiesto l'impiego di addizionali circuiti protettivi. Per assicurare lunga durata e ripetibilità dei contatti fare riferimento alle informazioni tecniche di pagina 6 e 7.

**WARNING:** any combination of the switching voltage and current must not exceed the given rated power.

The switch contact ratings, as listed in the switch data chart, are based on use with **resistive type load**. For applications requiring the control of an inductive or capacitance load, additional interface circuitry may be required. To ensure long life and repeatability, see the contact protection information on pages 6 and 7.

MODEL / MODEL	PUNTI DI INTERVENTO ACTUATION POINTS	TIPO DI CONTATTO CONTACT TYPE
LM1...	1 punto di intervento / 1 actuation point	NC
LM1...NA	1 punto di intervento / 1 actuation point	NA / NO
LM2...	1 punto di intervento / 1 actuation point	SPDT
LMM1...	2 punti di intervento - 1 galleggiante 2 actuation points - 1 float	Min. NC Max. NA / NO
LMM1...	2 punti di intervento - 2 galleggianti 2 actuation points - 2 floats	Min. NC Max. NC
LM3...	3 punti di intervento - 3 galleggianti 3 actuation points - 3 floats	NC/NC/NC
LM4...	4 punti di intervento - 4 galleggianti 4 actuation points - 4 floats	NC/NC/NC/NC

A richiesta, i modelli LMM1..., LM3..., LM4... sono disponibili con altre combinazioni di contatti.  
On request, LMM1... – LM3... – LM4... models can be supplied with different switch operations.

