



## Handles with double contact monostable switch

### Technopolymer certified self-extinguishing

#### MATERIAL

- **Handle body:** glass-fibre reinforced polyamide based (PA) technopolymer certified self-extinguishing UL-94 VO, black colour, matte finish.
- **Front cover:** glass-fibre reinforced polyamide based (PA) technopolymer certified self-extinguishing UL-94 VO, black colour.
- **Button:** polyamide based (PA) technopolymer, light-blue colour.

#### MICROSWITCH WITH BUTTON

With four slow action electrical contacts 2 NO + 2 NC with double interruption Zb shaped (see IEC EN 60947-5-1).

Positive opening in compliance with IEC EN 60947-5-1 annex K: the separation of the electrical contacts is the direct result of an actuator action on which an action force is applied by means of non elastic elements, that is to say not dependant on, for example, spring-like elements.

The contact elements guarantee a self-cleaning action of the silver pastes.

#### STANDARD EXECUTIONS

Brass bushings, M6 threaded blind holes for rear mounting.

Plastic 8 poles M12x1 connector, back output.

- **M.2000-SWM-2NC-2NO-C:** 2 NC contacts + 2 NO contacts. 8-pole cable UL: AWG22 RAL9005 PVC UL AWM Style 1569/2517, back output, cable bending radius > 70 mm
- **M.2000-SWM-2NC-2NO-F2.5:** 2 NC contacts + 2 NO contacts, cable length 2.5 metres.
- **M.2000-SWM-2NC-2NO-F5:** 2 NC contacts + 2 NO contacts, cable length 5 metres.

#### IP PROTECTION

IP67 and IP69K protection class, see Table EN 60529.

#### FEATURES AND APPLICATIONS

The M.2000-SWM handle is an ideal combination of ergonomics, functionality, and compactness.

In addition to the handle function, it integrates in a single product the function of control box with normally open or normally closed contacts.

It can be incorporated into a security system or simply used as a control device to operate electrical devices.

Staff protection: the action NC (normally closed) switch ensures correct interruption of the circuit.

In case of use of an extension with angled connector, the direction of the cable output is shown in Fig.1.

#### ACCESSORIES ON REQUEST

FC-M12x1: extensions with 8 pole M12x1 female axial connector.

#### SPECIAL EXECUTIONS ON REQUEST

- Quick release electrical contact.
- Non-IP69K handle, with reduced key action force (15N). To order this, add the suffix -N15 to the code and description of the desired standard execution.

#### OTHER STANDARD EXECUTIONS

M.2000: Single complementary handle without switch.

M.2000-LD: Handles with LED indicator light.

M.2000-SWM-LD: Handles with monostable switch and LED indicator light.



ELESA Original design

#### TECHNICAL DATA

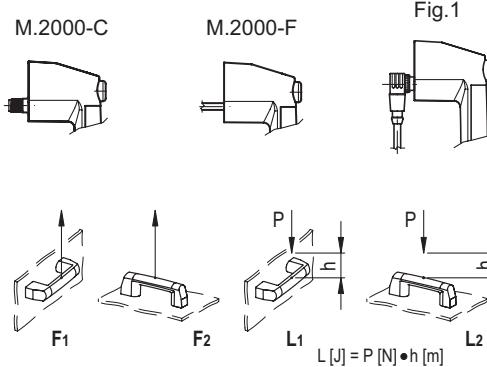
Tensile stress and impact strength: the values F1, F2, L1 and L2 indicated in the table were obtained during breaking tests carried out under the test conditions shown in the figure with ambient temperature.

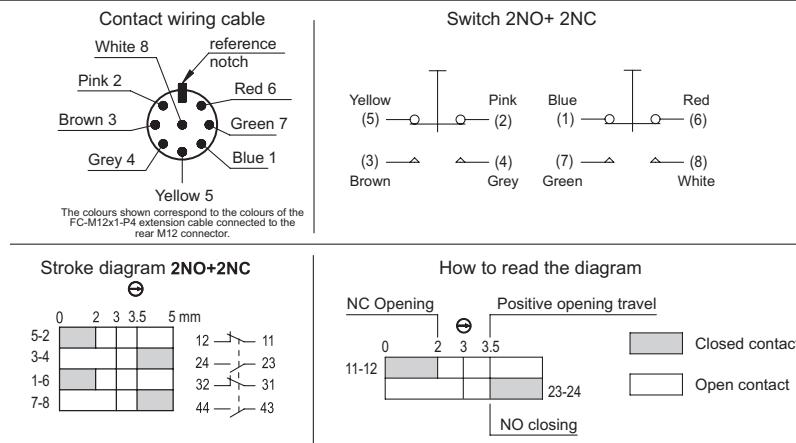
#### CE DECLARATION OF CONFORMITY

The object of the above declaration described above is in conformity with the relevant European Union harmonisation legislation:

- **2014/35/EU** Low-voltage directive
- **2014/30/EU (EMC)** Electromagnetic Compatibility Directive
- **2011/65/EU (RoHS)** Restriction of the use of certain hazardous substances in electrical and electronic equipment

Harmonised standards and references to other technical specifications used in relation to which conformity is declared: **EN 60947-5-1:2017**

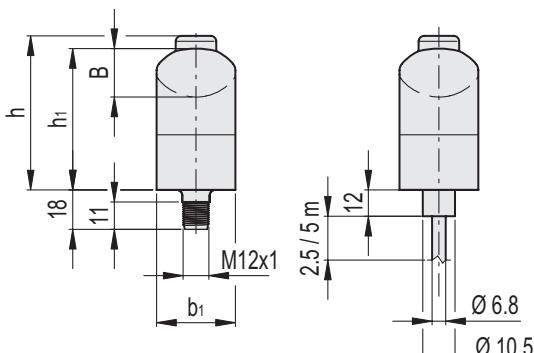
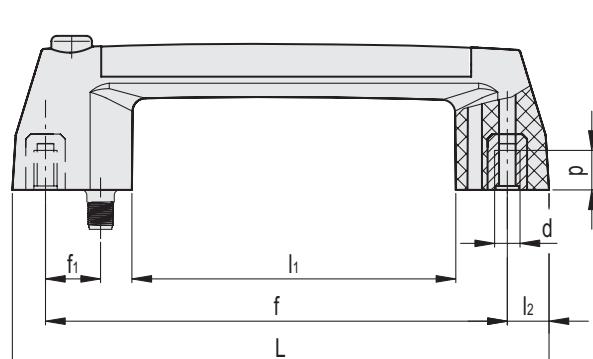




Mechanical features	Electrical features	
<b>Type of contacts:</b> Ag 999	<b>Thermic power <math>I_{th}</math></b>	Cable 4 A Connector 2.5 A
<b>Maximum operating frequency:</b> 3600 cycles/hour *	<b>Insulation nominal <math>U_I</math> voltage</b>	Cable: 250 Vac Connector: 30 Vac/Vdc
<b>Mechanical life-span:</b> 10 million *	<b>Short circuit protection:</b> 4A 500V gG	<b>Resistance between contacts:</b> 25 m $\Omega$
<b>Category of use (cable)</b>		
$I_{e/AC-15}^{**}$	24V-50/60 Hz	4A
$I_{e/DC-13}^{**}$	240V-50/60 Hz	3A
$I_{e/DC-13}^{**}$	24V-d.c.	2A
$I_{e/DC-13}^{**}$	240V-d.c.	0.4A
<b>Key action force:</b> 30N	<b>Category of use (connector)</b>	
<b>Cable bending radius</b> > 70 mm	le/DC-13 (according to IEC 60947-5-1)	24V-d.c. 2A
	<b>B10D:</b> 20 million manoeuvres	<b>Pollution degree:</b> 3

\* according to standard EN 60947-5-1

\*\* according to standard EN 60945-5-1

**M.2000-C****M.2000-F****M.2000-SWM-2NC-2NO-C**

Code	Description	L	$f_{\pm 1}$	d	f <sub>1</sub>	h	h <sub>1</sub>	B	b <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	p	F <sub>1</sub> [N]	F <sub>2</sub> [N]	L <sub>1</sub> [J]	L <sub>2</sub> [J]	$\Delta$
260804	M.2000/180-M6-SWM-2NC+2NO-C	212.5	180	M6	29	70	65	24	35	113	20	12	700	900	7	6	240

**M.2000-SWM-2NC-2NO-F2.5**

Code	Description	L	$f_{\pm 1}$	d	f <sub>1</sub>	h	h <sub>1</sub>	B	b <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	p	F <sub>1</sub> [N]	F <sub>2</sub> [N]	L <sub>1</sub> [J]	L <sub>2</sub> [J]	$\Delta$
260814	M.2000/180-M6-SWM-2NC+2NO-F2.5	212.5	180	M6	29	70	65	24	35	113	20	12	700	900	7	6	436

**M.2000-SWM-2NC-2NO-F5**

Code	Description	L	$f_{\pm 1}$	d	f <sub>1</sub>	h	h <sub>1</sub>	B	b <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	p	F <sub>1</sub> [N]	F <sub>2</sub> [N]	L <sub>1</sub> [J]	L <sub>2</sub> [J]	$\Delta$
260824	M.2000/180-M6-SWM-2NC+2NO-F5	212.5	180	M6	29	70	65	24	35	113	20	12	700	900	7	6	634

