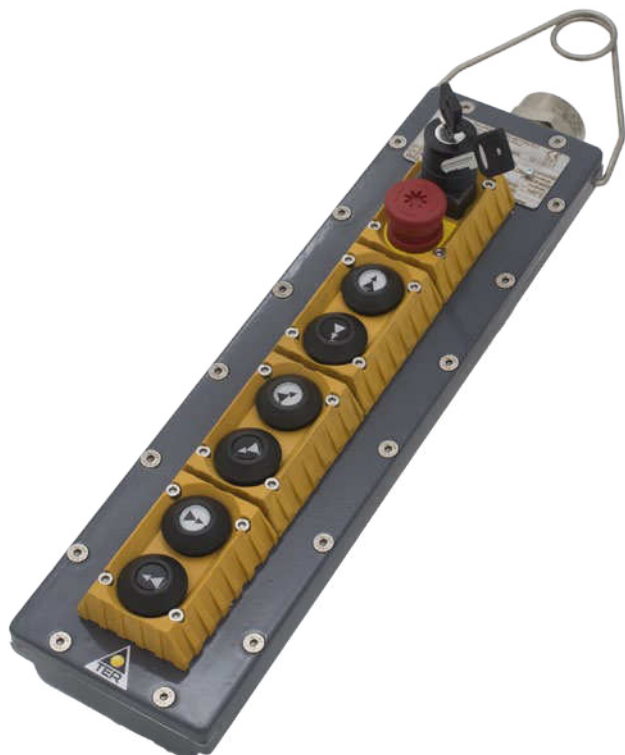


# MIKE-X

## HAZARDOUS AREAS

### Pendant control station



Explosion proof pendant control station for auxiliary control, rugged, sturdy and easy to handle, designed for heavy industry in potentially explosive areas.

## FEATURES

- Pendant control station for use in industrial areas and hazardous locations for ATEX and IECEx zones 1, 2, 21, 22.
- Reduced installation and wiring time and costs: the optimized internal space enables easy and quick connections.
- Positive opening NC contacts for safety functions.
- IP protection degree: Mike-X is classified IP65.
- Extreme temperature resistance: -20°C to +60°C.
- It features solid but light weight body made of epoxy painted aluminum or steel, resistant to temperature changes.
- All materials and components used are shock and wear resistant and guarantee protection of the unit against water, dust and oils.

## OPTIONS


- Available in configurations from 4 to 16 actuators.
- Two speed switches with NO or NC contacts.
- Wide range of actuators: two speed pushbuttons and key-selector switches in various operations configurations.
- Mechanical interlock to prevent simultaneous operation of opposite functions..
- Connecting bridges available on request to reduce wiring time.
- It can be equipped with thermal protectors and resistances as anti-condensation heaters (max. power 24W).

## CERTIFICATIONS

- CE marking.
- Conformity to ATEX Standards EN 60079-0:2012, EN 60079-1:2014, EN 60079-31:2014.
- Conformity to IECEx Standards IEC 60079-0:2012, IEC 60079-1:2014, IEC 60079-31:2013.

*Fill in the request form to configure properly the product.*


## CERTIFICATIONS

Conformity to Atex Standards	EN 60079-0:2012 Explosive atmospheres – Equipment – General requirements
	EN 60079-1:2014 Explosive atmospheres – Equipment protection by flameproof enclosures “d”
	EN 60079-31:2014 Explosive atmospheres – Equipment dust ignition protection by enclosures “t”
Conformity to IECEx Standards	IEC 60079-0:2012 Explosive atmospheres – Equipment – General requirements
	IEC 60079-1:2014 Explosive atmospheres – Equipment protection by flameproof enclosures “d”
	IEC 60079-31:2013 Explosive atmospheres – Equipment dust ignition protection by enclosures “t”
Atex Certification	ITS16ATEX101535X
IECEX Certification	ITS 16.0070X
Atex Protection Type	II 2 G Ex db IIC T6 Gb
	II 2 D Ex tb IIIC T85°C Db
	Tamb: -20°C to +60°C
IECEX Protection Type	Ex db IIC T6 Gb
	Ex tb IIIC T85°C Db
	Tamb: -20°C to +60°C
Markings and homologations	CE  IEC IECEx

## GENERAL TECHNICAL SPECIFICATIONS

Operational ambient temperature	-20°C/+60°C
Protection degree	IP 65
Cable entry*	1 NPT ANSI/ASME B1.20.01
	Cable camp M20x1.5 or M25x1.5 or M32x1.5, tolerance medium 6H/6g, complying with Standards ISO 965-3 and ISO 965-1
	Cable camps complying with Standards IEC 60079-0, EN 60079-1, (Ex-d); EN 60079-31: 2009 (Tb version)

## TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

Rated operational current	Max 250 Vdc / 1.1 A
	Max 240 Vac / 3 A
Rated frequency	50/60 Hz
Microswitch type	Two speed switches with NO or NC contacts (All NC contacts are of the positive opening operation type  )
Wires	Min 0.75 mm <sup>2</sup> - Max 2 mm <sup>2</sup> (ATEX and IEC Ex)
Anti-moisture heater (optional)	Maximum power 24W
Markings and homologations	CE

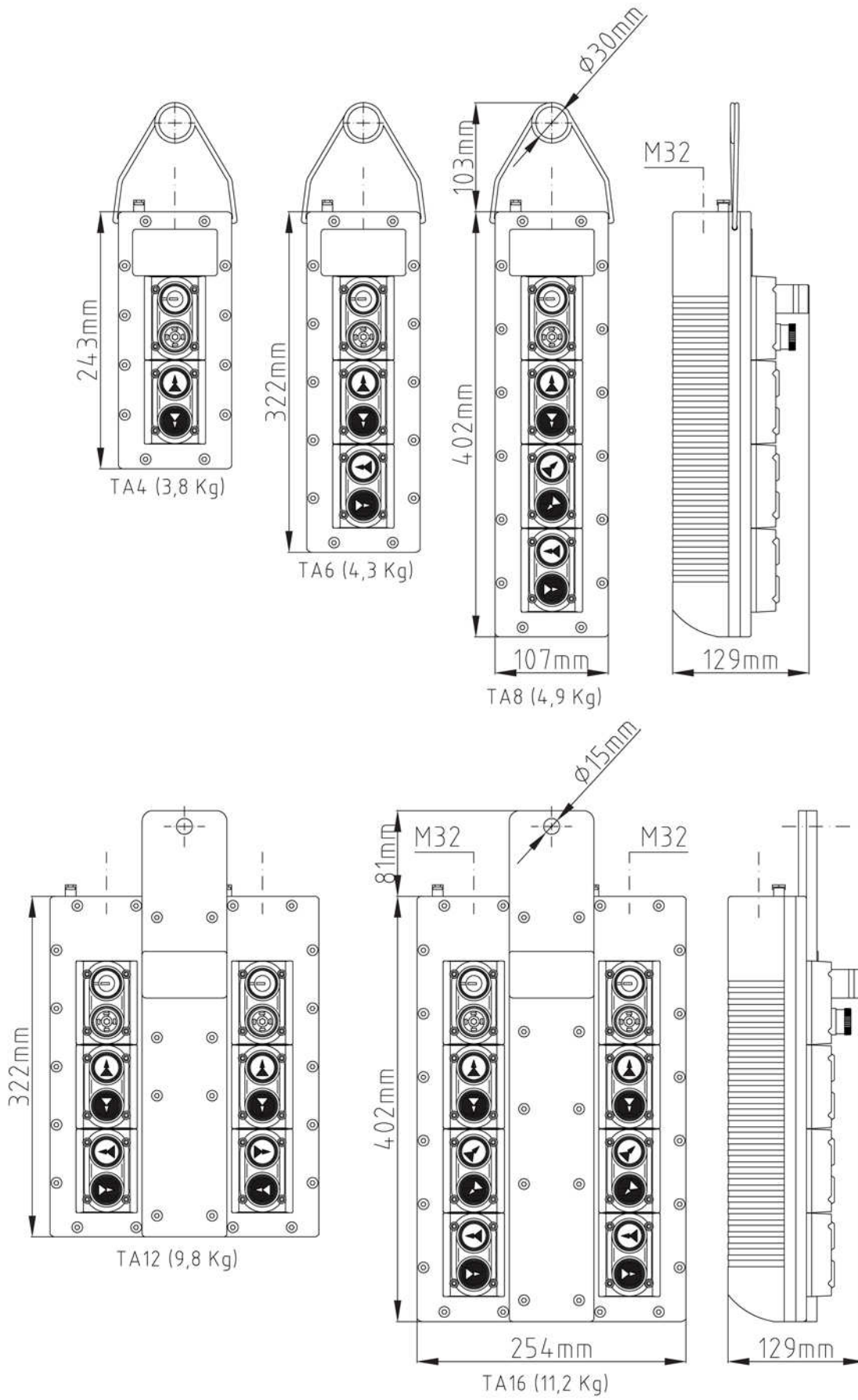
## OPTIONAL

Optional	Anti-condensation heater
	Green start button
	Special painting
	Connecting bridges

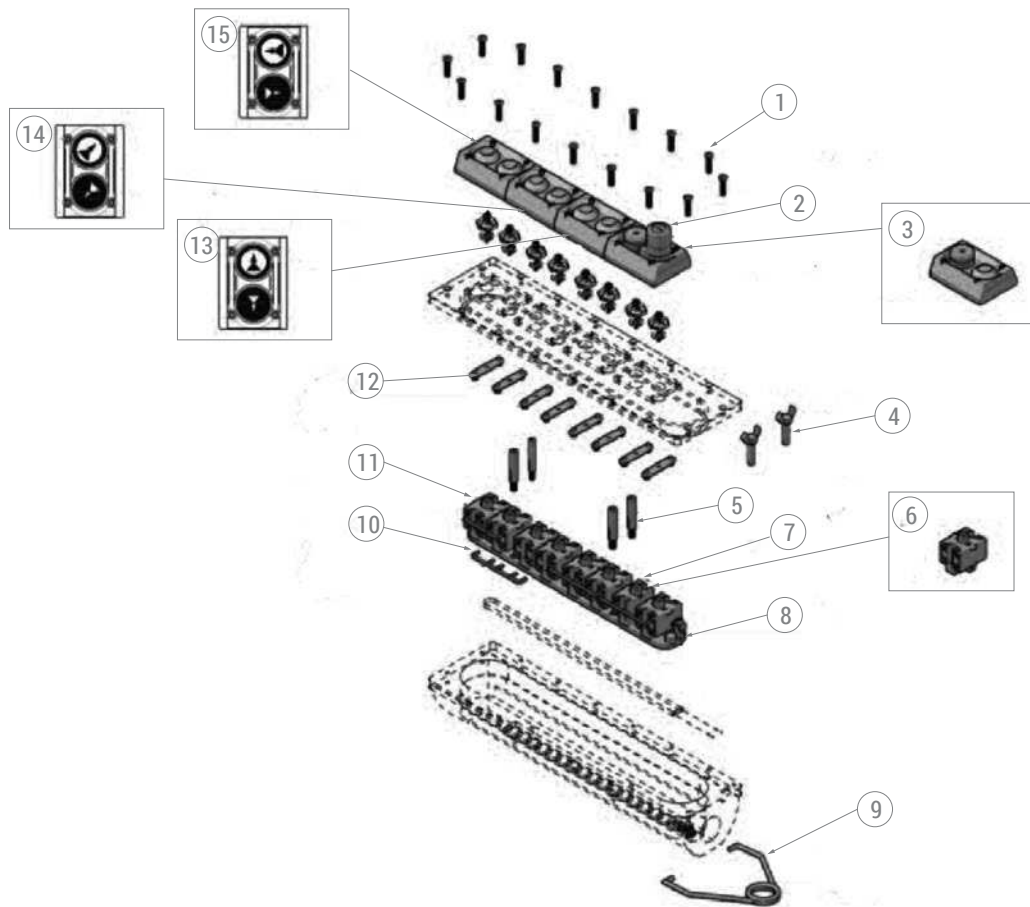
\* Threading must guarantee minimum 5 complete threads.

All the devices for cable entry (conduits, cable gland, adapters) must be certified with minimum certification level as per valid certification of the pendant station.

OVERALL DIMENSIONS (mm)



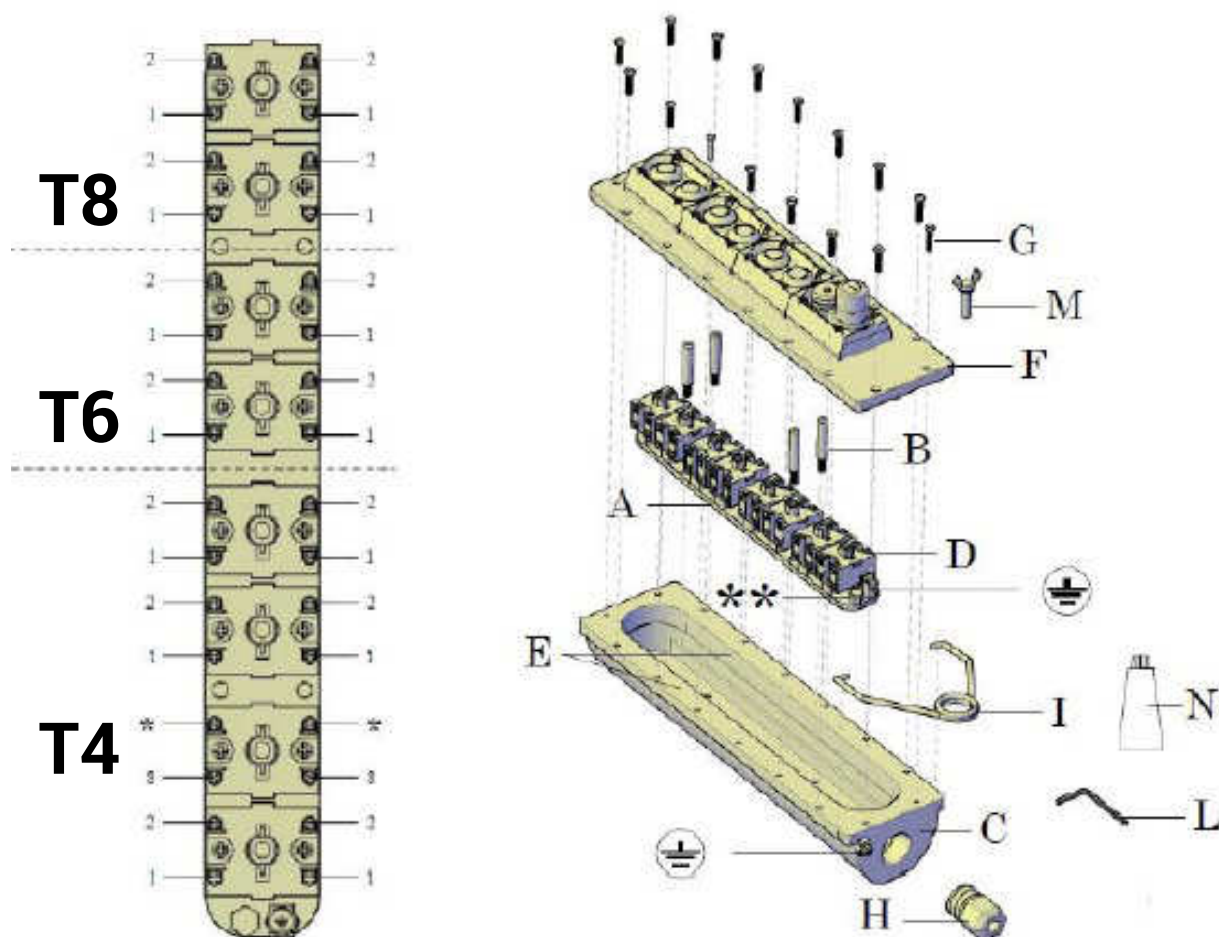
## EXPLODED DRAWING



## COMPONENTS

Ref.	Description
1	Locking screws
2	Key selector switch
3	Section with Start and Emergency pushbuttons
4	Wing screws
5	Switch layer locking pins
6 - 7	NO switch with heater
8	Switch layer
9	Hook
10	Connecting bridges
11	NO switch
12	Silicon locked pins
13 - 14 - 15	Section with two pushbuttons

## INSTALLATION INSTRUCTIONS - SINGLE ROW UNIT



### Description

T4 = 2 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.

T6 = 4 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.

T8 = 6 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.

Contacts 1 and 2 are NO.

Contact 1 is activated by the first step of the pushbutton.

Contact 2 is activated by the second step of the pushbutton.

Contact 3 is NC.

\* Terminals without switches to be used to connect the anti-condensation heater (if equipped). Tightening torque: 1 Nm.

\*\* Thermal protector PTO to prevent overheating of anti-condensation heater (if equipped).

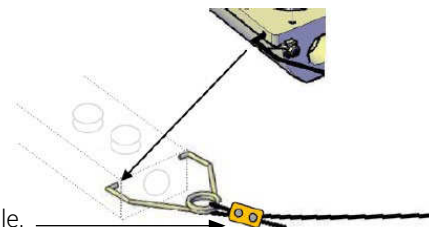
### Installation

- Loosen screws M to open cover F.
- Use the key L supplied with the pendant station to unscrew pins B.
- Extract the switch layer A.
- Insert the cable through the conduit or cable clamp H (not supplied) and through hole C.
- Connect the wires to switches D and tighten the screws with a torque of 1 Nm.
- Fix back the switch layer A into the enclosure and tighten pins B with a torque of 4,5 Nm.
- Put the lithium grease N on the lamination junction of enclosure E.
- Place back cover F.
- Close by tightening screws G with a torque of 6.3 Nm.
- Assemble hook I onto the enclosure.
- Connect the external ground terminal.
- Fix the steel holding cable to the hook.\*\*\*

Note: for wiring of cETLus versions, follow the NFPA70 art. 500 and subsequent articles. "Cord-connected equipment employing a packing gland requiring dismantling during cord replacement shall be marked or provided with instructions regarding its installation and replacement."

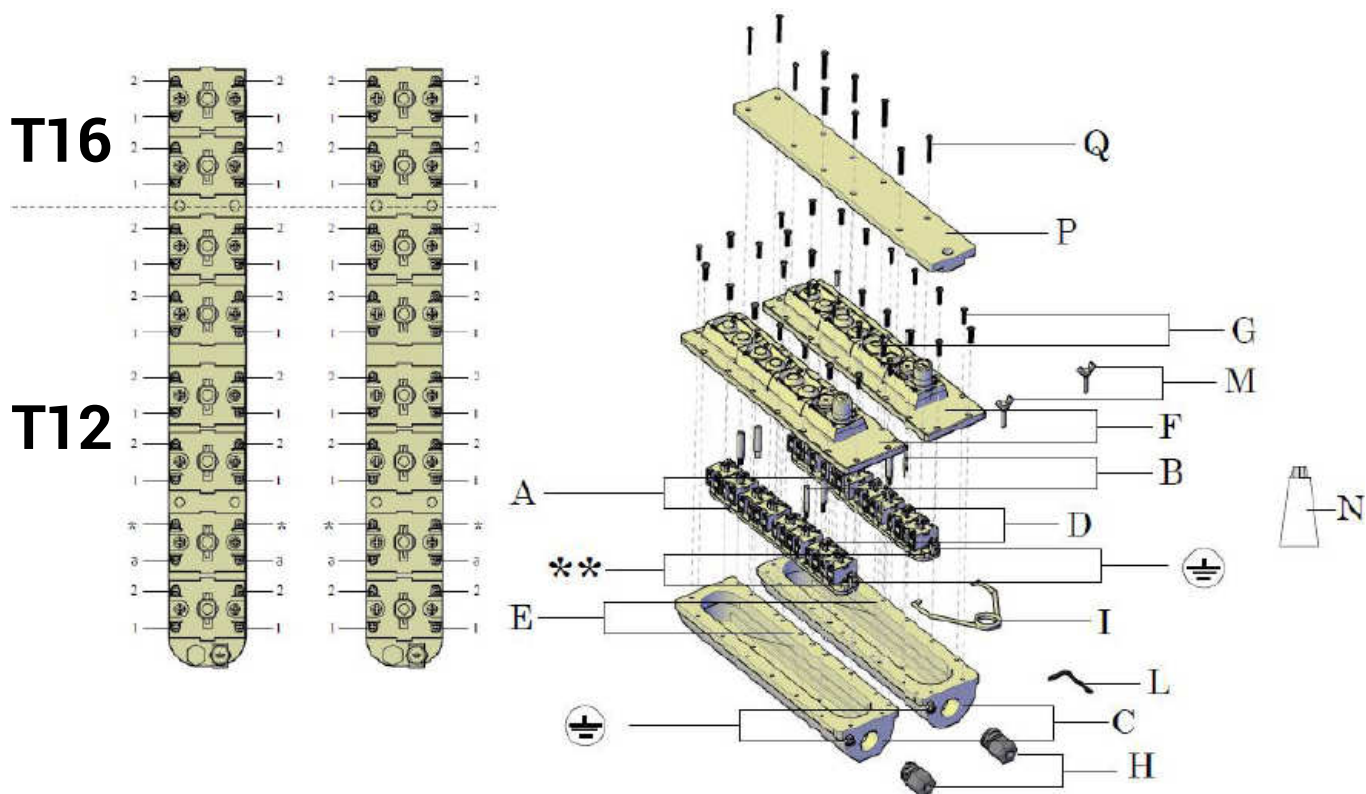
\*\*\* The holding cable must be 5 cm shorter than the power supply cable in order to avoid stress on the cable.

The weight of the pendant station must be supported by the steel holding cable only.



Use a metal clamp to lock the steel cable.

## INSTALLATION INSTRUCTIONS - DOUBLE ROW UNIT

**Description**

T12 = 8 double speed pushbuttons + 2 key selector switches + 2 emergency pushbuttons.

T16 = 12 double speed pushbuttons + 2 key selector switches + 2 emergency pushbuttons.

Contacts 1 and 2 are NO.

Contact 1 is activated by the first step of the pushbutton.

Contact 2 is activated by the second step of the pushbutton.

Contact 3 is NC.

\* Terminals without switches to be used to connect the anti-condensation heater (if equipped). Tightening torque: 1 Nm.

\*\* Thermal protector PTO to prevent overheating of anti-condensation heater (if equipped).

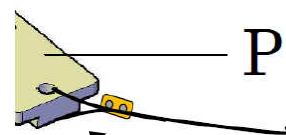
**Installation**

- Loosen screws Q and remove the junction plate P.
- Loosen screws M to open covers F.
- Use the key L supplied with the pendant station to unscrew pins B.
- Extract the switch layers A.
- Insert the cable through the conduit or cable clamp H (not supplied) and through hole C.
- Connect the wires to switches D and tighten the screws with a torque of 1 Nm.
- Fix back the switch layers A into the enclosure and tighten pins B with a torque of 4,5 Nm.
- Put the lithium grease N on the lamination junction of enclosures E.
- Place back covers F and junction plate P.
- Close by tightening screws G and Q with a torque of 6.3 Nm.
- Assemble hook I onto the enclosure.
- Connect the external ground terminal.
- Fix the steel holding cable to the holding hole on plate P\*\*\*

Note: for wiring of cETLus versions, follow the NFPA70 art. 500 and subsequent articles. "Cord-connected equipment employing a packing gland requiring dismantling during cord replacement shall be marked or provided with instructions regarding its installation and replacement."

\*\*\* The holding cable must be 5 cm shorter than the power supply cable in order to avoid stress on the cable.

The weight of the pendant station must be supported by the steel holding cable only.



Use a metal clamp to lock the steel cable.

# MIKE-X - REQUEST FORM FOR PENDANT STATION

## Pendant station model

Simple (4 - 8 actuators)

Double (12 - 16 actuators)

## Symbols



## Optional

Anti-condensation heater

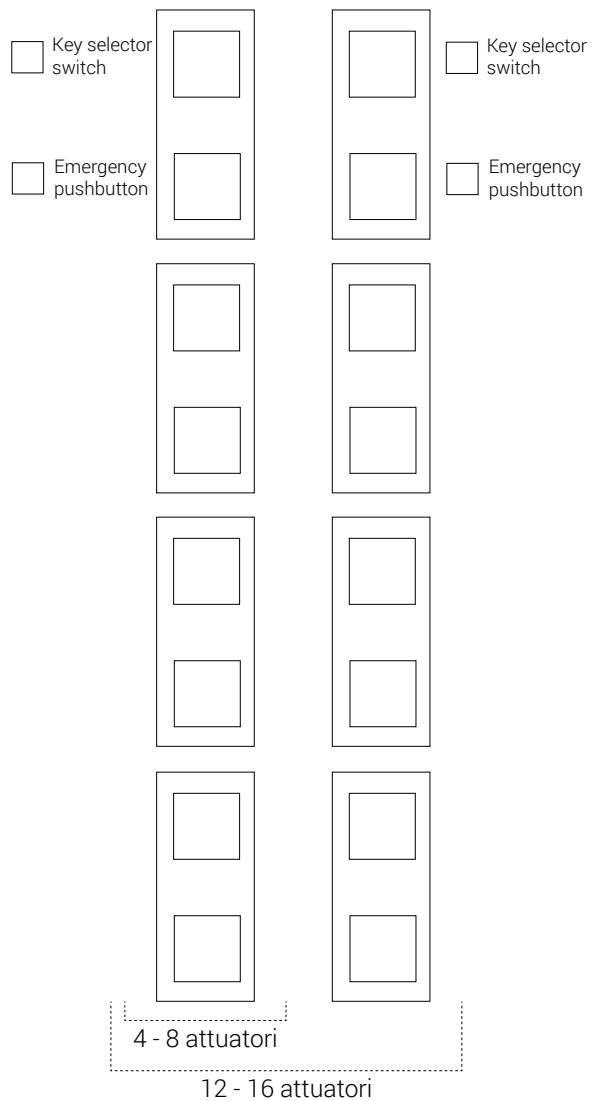
Green start button

Special painting

Connecting bridges

## Instructions

- Tick the box corresponding to the pendant control station model required.
- Enter the number corresponding to the symbol required for each control element.
- If the key selector switch and the emergency pushbutton are required, tick the box corresponding to the right position.
- When the pendant control station is the double row model, complete both the columns.
- Attention: opposite commands (i.e: up – down) are vertically coupled on columns.
- Tick the box corresponding to the optional required.



## Remarks

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