

**Climate  
Control**

**IMI TA**

## TA-Lite 120



### **Actuators**

Motorized push actuator modulating control - 120 N

## TA-Lite 120

Motorized actuator available for modulating control compatible with TA-Nano/TA-Nano Plus valves. It will be mainly used for small hydronic applications such as fan coil, chilled beams and zone valves.



### Technical description

#### Functions:

0-10 VDC version:  
Proportional control  
LED position indicator

0-10 VDC I/O version:  
Proportional control  
LED position indicator  
Output signal

0-10 VDC I/O Fail-safe version:  
Proportional control  
LED position indicator  
Fail-safe function (actuator's stem extended on power failure, valve close fully)  
Output signal

**Supply voltage:**  
24 VAC/VDC  $\pm 15\%$

**Power consumption:**  
Operation: 2 W  
Standby: 0.5 W  
Charging: 2 W

**Input signal:**  
0-10 VDC, I/O, I/O Fail-safe: 0-10 VDC

**Output signal:**  
I/O, I/O Fail-safe: 0-10 VDC

**Characteristics:**  
Linear or EQM 0.25

**Control speed:**  
10 s/mm

**Adjusting force:**  
120 N

**Temperature:**  
Media temperature: max. 120°C  
Operating environment: 0°C – +50°C  
(5-95%RH, non-condensing)  
Storage environment: -20°C – +70°C  
(5-95%RH, non-condensing)

**Ingress protection:**  
IP54/40 depending on position  
(according to EN 60529)

**Protection class:**  
Class II (according to EN 61140)

**Cable:**  
2 or 5 m. 0.5 m on request.  
0-10 VDC: 3x0,5 mm<sup>2</sup>  
0-10 VDC I/O, I/O Fail-safe: 4x0,5 mm<sup>2</sup>  
Halogen free as option, fire class  
B2<sub>ca</sub> – s1a, d1, a1 according to EN 50575.

**Stroke:**  
6 mm

**Noise level:**  
Max. 30 dBA

**Weight:**  
0.17 kg, 0,5 m cable (on request)  
0.22 kg, 2 m cable  
0.30 kg, 5 m cable

**Connection to valve:**  
Swivelling nut M30x1,5.

**Material:**  
Cover: PC + ABS  
Housing: PC + 20GF  
Swivelling nut: Nickel-plated brass  
CW614N.  
Cable: PVC or Halogen free

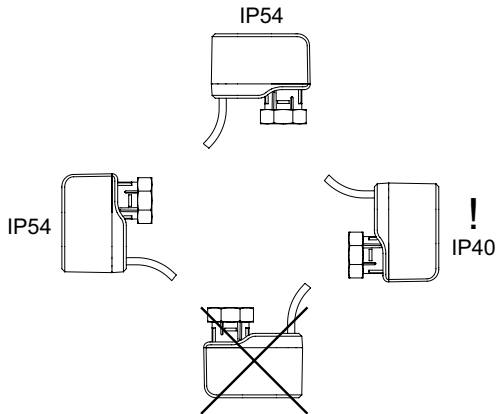
**Colour:**  
Purple RAL 310 2023, grey RAL 7047.

**Marking:**  
IMI, CE, product name, article No. and technical specification.

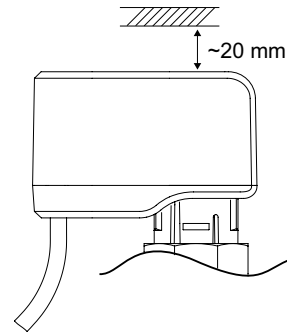
**Certification CE:**  
LV-D. 2014/35/EU: EN 60730-1.  
EMC-D. 2014/30/EU: EN 60730-1.  
RoHS-D. 2011/65/EU: IEC 62321.

**Product standard:**  
EN 60730

## Installation



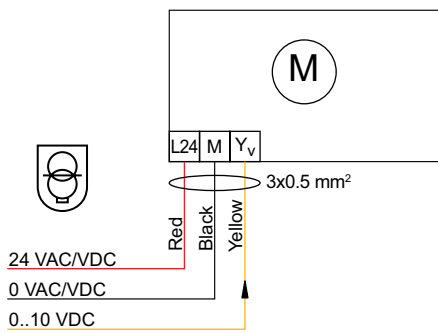
### Note!



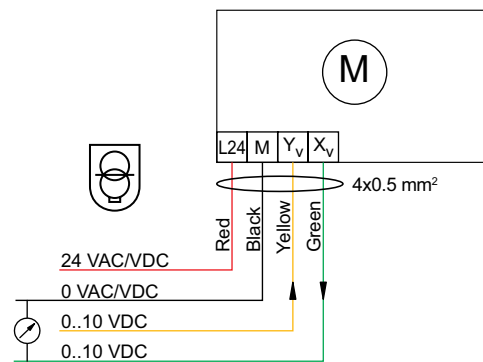
## Connection diagram

### 24 VAC/VDC

#### 0-10 VDC



#### 0-10 VDC I/O / I/O Fail-safe

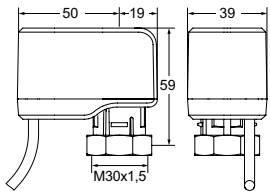


| Terminal       | Description   |
|----------------|---|
| L24            | Power supply 24 VAC/VDC   |
| M              | Neutral for power supply 24 VAC/VDC and signals                               |
| Y <sub>v</sub> | Input signal for proportional control 0-10 VDC, 47 kΩ                         |
| X <sub>v</sub> | Output signal 0-10 VDC, max. output current ≥10 mA, min. load resistance 1 kΩ |



24 VAC/VDC operating only with safety transformer according to EN 61558-2-6.

## Articles – TA-Lite 120, 0-10 VDC

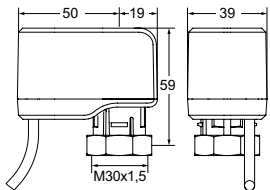


### 24 VAC/VDC

Input signal: 0-10 VDC

| Cable length [m]               | Characteristics | EAN           | Article No   |
|--------------------------------|-----------------|---------------|--------------|
| <b>PVC</b>                     |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             | 5902276826771 | 322233-11012 |
| 5                              | LIN             | 5902276826788 | 322233-11013 |
| 0,5                            | EQM             |               | on request   |
| 2                              | EQM             | 5902276826832 | 322233-13012 |
| 5                              | EQM             | 5902276826849 | 322233-13013 |
| <b>With halogen free cable</b> |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             |               | on request   |
| 5                              | LIN             |               | on request   |
| 0,5                            | EQM             |               | on request   |
| 2                              | EQM             |               | on request   |
| 5                              | EQM             |               | on request   |

## Articles – TA-Lite 120 I/O, 0-10 VDC

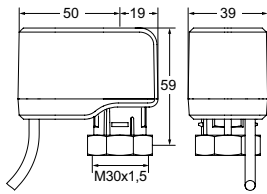


### 24 VAC/VDC

Input signal: 0-10 VDC with output signal

| Cable length [m]               | Characteristics | EAN           | Article No   |
|--------------------------------|-----------------|---------------|--------------|
| <b>PVC</b>                     |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             | 5902276826801 | 322233-12012 |
| 5                              | LIN             | 5902276826818 | 322233-12013 |
| 0,5                            | EQM             |               | on request   |
| 2                              | EQM             | 5902276826863 | 322233-14012 |
| 5                              | EQM             | 5902276826870 | 322233-14013 |
| <b>With halogen free cable</b> |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             |               | on request   |
| 5                              | LIN             |               | on request   |
| 0,5                            | EQM             |               | on request   |
| 2                              | EQM             |               | on request   |
| 5                              | EQM             |               | on request   |

## Articles – TA-Lite 120 I/O Fail-safe, 0-10 VDC



### 24 VAC/VDC

Actuator's stem extended on power failure, valve close fully.  
Input signal: 0-10 VDC with output signal

| Cable length [m]               | Characteristics | EAN           | Article No   |
|--------------------------------|-----------------|---------------|--------------|
| <b>PVC</b>                     |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             | 5902276827150 | 322233-12112 |
| 5                              | LIN             | 5902276827167 | 322233-12113 |
| 0,5                            | EQM             |               | on request   |
| 2                              | EQM             | 5902276827181 | 322233-14112 |
| 5                              | EQM             | 5902276827198 | 322233-14113 |
| <b>With halogen free cable</b> |                 |               |              |
| 0,5                            | LIN             |               | on request   |
| 2                              | LIN             |               | on request   |
| 5                              | LIN             |               | on request   |



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