

**Climate
Control**

IMI TA

TA-Lite 120



Actuators

Motorized push actuator - 120 N

TA-Lite 120

Motorized actuator available for On-off or 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.

Key features

Reliability

IP54 for secure operations at any installation positions, and has been thoroughly tested according to IMI test standards.

Compatible with IMI PIBCVs

TA-Lite fits TA-Nano/TA-Nano Plus models, available with equal-percentage (EQM) or linear (LIN) characteristics.



Technical description

Functions:

On-off version:

On-off control

LED position indicator

0-10 VDC version:

Proportional control

LED position indicator

0-10 VDC I/O version:

Proportional control

LED position indicator

Output signal

Feedback signal

0-10 VDC Fail-safe version:

Proportional control

LED position indicator

Fail-safe function (actuator's stem extended on power failure, valve close fully)

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

Feedback signal

Supply voltage:

24 VAC/VDC $\pm 15\%$

On-off:

24 VAC/VDC $\pm 15\%$

230 VAC $\pm 15\%$; Frequency 50-60 Hz

Power consumption:

Operation: 2 W

Standby: 0.5 W

Charging: 2 W

Input signal:

0-10 VDC, I/O, Fail-safe, I/O Fail-safe:

0-10 VDC

Output signal:

0-10 VDC, I/O, Fail-safe, I/O Fail-safe:

0-10 VDC

Characteristics:

0-10 VDC, I/O, Fail-safe, I/O Fail-safe:

Linear or EQM 0.25

Control speed:

10 s/mm

Adjusting force:

120

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 all directions

(according to EN 60529)

Protection class:

Class II (according to EN 61140)

Cable:

0.5, 2 or 5 m.

On-off 24 VAC/VDC: 2x0,75 mm²

On-off 230 VAC: 2x0,5 mm²

0-10 VDC, Fail-safe: 3x0,5 mm²

0-10 VDC I/O, I/O Fail-safe: 4x0,5 mm²

Halogen free as option, fire class

B2_{ca} – s1a, d1, a1 according to EN 50575.

Stroke:

6 mm

Noise level:

Max. 30 dBA

Weight:

0.17 kg, 0,5 m cable.

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.

Swivelling nut (on-off): PC + 20GF

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.

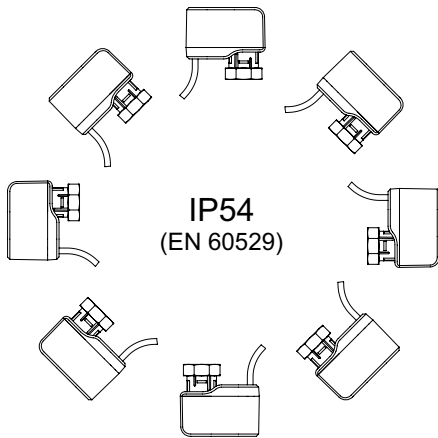
EMC-D. 2014/30/EU: EN 60730-1.

RoHS-D. 2011/65/EU: IEC 62321.

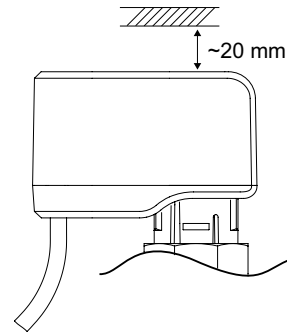
Product standard:

EN 60730

Installation



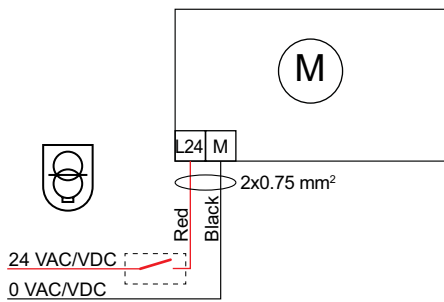
Note!



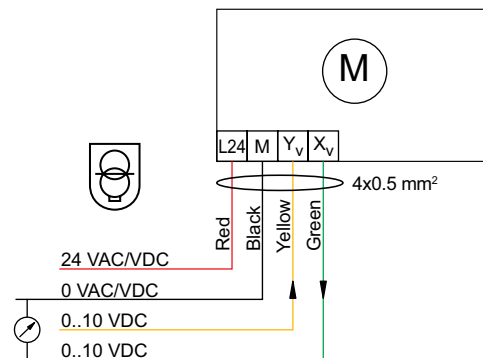
Connection diagram

24 VAC/VDC

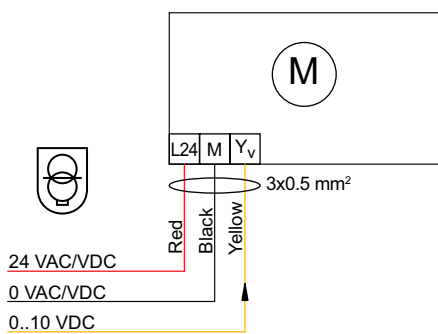
On-off



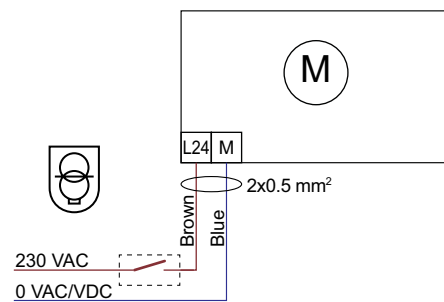
0-10 VDC I/O / I/O Fail-safe



0-10 VDC / Fail-safe



230 VAC

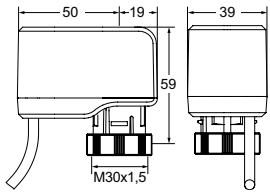


Terminal	Description
L24	Power supply 24 VAC/VDC or 230 VAC
M	Neutral for power supply 24 VAC/VDC or 230 VAC and signals
Y _v	Input signal for proportional control 0-10 VDC, 47 kΩ
X _v	Output signal 0-10 VDC, max. output current ≥10 mA, min. load resistance 1 kΩ



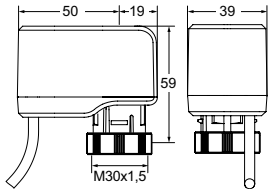
24 VAC/VDC operating only with safety transformer according to EN 61558-2-6.

Articles – TA-Lite 120, On-off



24 VAC/VDC

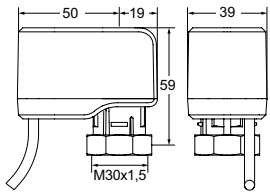
Cable length [m]	EAN	Article No
PVC		
0,5	5902276826702	322233-10011
2	5902276826719	322233-10012
5	5902276826726	322233-10013



230 VAC

Cable length [m]	EAN	Article No
PVC		
0,5	5902276826733	322233-20011
2	5902276826740	322233-20012
5	5902276826757	322233-20013

Articles – TA-Lite 120, 0-10 VDC

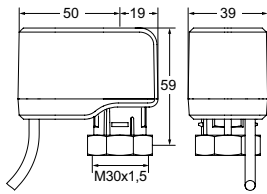


24 VAC/VDC

Input signal: 0-10 VDC

Cable length [m]	Characteristics	EAN	Article No
PVC			
0,5	LIN	5902276826764	322233-11011
2	LIN	5902276826771	322233-11012
5	LIN	5902276826788	322233-11013
0,5	EQM	5902276826825	322233-13011
2	EQM	5902276826832	322233-13012
5	EQM	5902276826849	322233-13013
With halogen free cable			
0,5	LIN	5902276826887	322233-11021
2	LIN	5902276826894	322233-11022
5	LIN	5902276826900	322233-11023
0,5	EQM	5902276826948	322233-13021
2	EQM	5902276826955	322233-13022
5	EQM	5902276826962	322233-13023

Articles – TA-Lite 120 I/O, 0-10 VDC

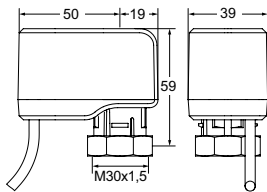


24 VAC/VDC

Input signal: 0-10 VDC with feedback signal

Cable length [m]	Characteristics	EAN	Article No
PVC			
0,5	LIN	5902276826795	322233-12011
2	LIN	5902276826801	322233-12012
5	LIN	5902276826818	322233-12013
0,5	EQM	5902276826856	322233-14011
2	EQM	5902276826863	322233-14012
5	EQM	5902276826870	322233-14013
With halogen free cable			
0,5	LIN	5902276826917	322233-12021
2	LIN	5902276826924	322233-12022
5	LIN	5902276826931	322233-12023
0,5	EQM	5902276826979	322233-14021
2	EQM	5902276826986	322233-14022
5	EQM	5902276826993	322233-14023

Articles – TA-Lite 120 Fail-safe, 0-10 VDC



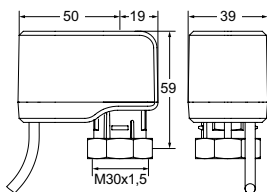
24 VAC/VDC

Actuator's stem extended on power failure, valve close fully.

Input signal: 0-10 VDC

Cable length [m]	Characteristics	EAN	Article No
With halogen free cable			
0,5	EQM	5902276827235	322233-13121
2	EQM	5902276827242	322233-13122
5	EQM	5902276827259	322233-13123

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 feedback signal

Cable length [m]	Characteristics	EAN	Article No
PVC			
0,5	LIN	5902276827143	322233-12111
2	LIN	5902276827150	322233-12112
5	LIN	5902276827167	322233-12113
0,5	EQM	5902276827174	322233-14111
2	EQM	5902276827181	322233-14112
5	EQM	5902276827198	322233-14113
With halogen free cable			
0,5	LIN	5902276827204	322233-12121
2	LIN	5902276827211	322233-12122
5	LIN	5902276827228	322233-12123



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