

# FlowCon FNP Actuator

## *FlowCon Electrical Actuator*



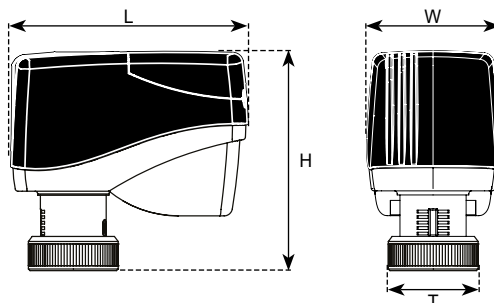
### SPECIFICATIONS

Supply voltage:	24V AC/DC $\pm 15\%$ , 50/60 Hz
Type:	Electrical, Bi-directional synchronous motor
Power consumption:	24V AC: 0.9VA standby / 2.5VA operating / 4.7VA max. 24V DC: 0.75W standby / 1.2W operating / 2.2W max.
Inrush current:	8A (peak)
Control signal:	Analog 0(2)-10V DC, $<0.5\text{mA}$
Resolution:	1:100 (0-10V) and 1:80 (2-10V)
Feedback:	No
Failsafe function:	Fail in place
Electrical override:	Yes
Position indicator:	Yes
Operation time:	22 sec/mm
Actuating force:	160N -10N/+70N
Stroke:	5.8 mm / 0.23 in (compensated)
Ambient temperature <sup>1</sup> :	0°C to +50°C / +32°F to +122°F
Media temperature:	0°C to +120°C / +32°F to +248°F
Humidity rating:	0..85% rH, no condensation
Protection:	IP54, class III, including upside-down, indoor use only
CE conformity:	EN 60730
Cable:	Fixed, 3 wires x 0.50 mm <sup>2</sup> , 1.5 meter Fixed, 3 wires x AWG20, 4.9 ft
Closing point adjustment:	During operation the actuator will self-adjust according to the closing point and stroke length of the valve.

Note 1: Including +5°C self-generated heat based on UL requirements.

## DIMENSIONS AND WEIGHT (NOMINAL)

Actuator	L mm (in)	W mm (in)	H mm (in)	T	Weight kg (lb)
FNP.0.2	86.5 (3.41)	48.5 (1.91)	80 (3.15)	M30x1.5	0.25 (0.55)



FlowCon FNP

## MODEL NUMBER SELECTION

Actuator force:

**0** = Medium

Control signal:

**2** = 24V modulating

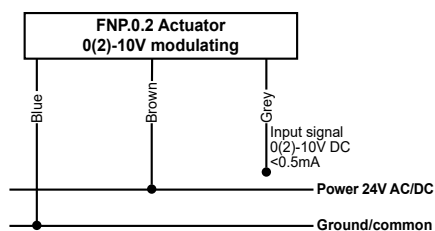
**FNP . 0 . 2**

Example:

**FNP.0.2** = FlowCon FNP actuator 24V modulating, medium actuating force without feedback.

## WIRING INSTRUCTION

### ANALOG



## VALVE FUNCTION

The valve functions are adjusted with the DIP switches under the connection cover.

### **Switch #1:** Auto cycle ON/OFF

If the plant specifications permit it, the auto cycle can be activated during commissioning. Auto cycle prevents the valve from jamming when the valve is not moved for a longer period of inactivity, e.g. for heating systems during the summer.

When the auto cycle is activated, the actuator will perform 50% stroke cycle if no stroke movement has occurred during a 3-week period.

Factory setting = OFF.

### **Switch #2:** Analog 2-10V DC / 0-10V DC

Setting control range by the continuous actuating signal 0-10V DC or 2-10V DC.

Factory setting = 0-10V DC.

### **Switch #3:** Normally open / Normally closed

Setting actuating direction with 10V DC control signal to “valve open” or “valve closed” as well as the position feedback.

Factory setting = Normally closed; 0V DC = valve closed.

### **Switch #4:** Equal % control / Linear control

Setting of actuating control curve either equal percentage or linear control.

Factory setting = Linear control.

### **Switch #5:** No function.

### **Switch #6:** Electrical override

Setting override function to ON and the actuator will open valve fully. When set to OFF again, the actuator will re-calibrate and thereafter go into normal operation mode.

Factory setting = OFF.



## UPDATES

**For latest updates please see [www.flowcon.com](http://www.flowcon.com)**

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