

# FlowCon BB Actuators

## *FlowCon Electrical Actuators*



### SPECIFICATIONS

**FlowCon BT000S / BT020S** (previously BBTS1000 / BBTS1021):

Supply voltage:	22-26V AC or 24-32V DC
Type:	Electrical, bi-directional motor
Power consumption:	6VA
Control signal:	Digital 3-point floating or 2-position
Feedback:	No
Failsafe function:	No
Auxiliary switches:	BT000S: No BT020S: Yes
Manual override:	Yes (do not press clutch, when actuator is powered)
Position indicator:	Yes
Operation time:	90-110 sec
Actuating force:	5.6 Nm at rated voltage
Angle of rotation:	0 to 90°, mechanically adjustable
Ambient temperature:	-30°C to +50°C (-22°F to +122°F)
Humidity rating:	5..95% rH, no condensation
Protection:	Standard: IP22 (NEMA 2) Optional watertight bushings: IP54 (NEMA 3R)
CE conformity:	Yes
Cable:	BT000S: Not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 BT020S: Power supply cable not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 Auxiliary cable fixed: 6 wires x 0.80 mm <sup>2</sup> , 1 meter / 6 wires x AWG18, 3.3 ft

## SPECIFICATIONS (...continued)

### **FlowCon BT200 / BT220** (previously BBTHV1200A / BBTHV1221A):

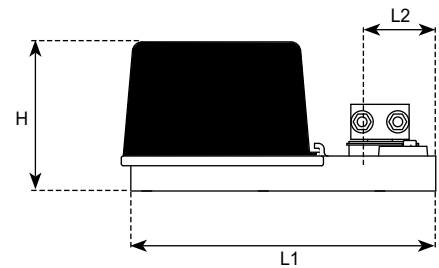
Supply voltage:	220-250V AC, 50/60 Hz
Type:	Electrical, bi-directional motor
Power consumption:	7W @ 240V AC
Control signal:	Digital 3-point floating or 2-position
Feedback:	No
Failsafe function:	No
Auxiliary switches:	BT200: No BT220: Yes
Manual override:	Yes (do not press clutch, when actuator is powered)
Position indicator:	Yes
Operation time:	20-30 sec
Actuating force:	5.6 Nm at rated voltage
Angle of rotation:	0 to 90°, mechanically adjustable
Ambient temperature:	-30°C to +50°C (-22°F to +122°F)
Humidity rating:	5..95% rH, no condensation
Protection:	Standard: IP22 (NEMA 2) Optional watertight bushings: IP54 (NEMA 3R)
CE conformity:	Yes
Cable:	BT200: Not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 BT220: Power supply cable not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 Auxiliary cable fixed: 6 wires x 0.80 mm <sup>2</sup> , 1 meter / 6 wires x AWG18, 3.3 ft

### **FlowCon BM000S / BM020S** (previously BBMS2000 / BBMS2021):

Supply voltage:	22-26V AC or 28-32V DC
Type:	Electrical, bi-directional motor
Power consumption:	6VA
Control signal:	Analog 2-10V DC or 4-20mA
Feedback:	No
Failsafe function:	No
Auxiliary switches:	BM000S: No BM020S: Yes
Manual override:	Yes (do not press clutch, when actuator is powered)
Position indicator:	Yes
Operation time:	90-110 sec
Actuating force:	5.6 Nm at rated voltage
Angle of rotation:	0 to 90°, mechanically adjustable
Ambient temperature:	-30°C to +50°C (-22°F to +122°F)
Humidity rating:	5..95% rH, no condensation
Protection:	Standard: IP22 (NEMA 2) Optional watertight bushings: IP54 (NEMA 3R)
CE conformity:	Yes
Cable:	BM000S: Not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 BM020S: Power supply cable not included: requires 3 wires x 0.80 mm <sup>2</sup> / 3 wires x AWG18 Auxiliary cable fixed: 6 wires x 0.80 mm <sup>2</sup> , 1 meter / 6 wires x AWG18, 3.3 ft

## DIMENSIONS AND WEIGHT (NOMINAL)

Actuator	L1	L2	D (depth)	H	Weight <sup>5</sup>
	mm (in)	mm (in)	mm (in)	mm (in)	kgs. (lb)
BT000S	168 (6.61)	68.1 (1.50)	82.8 (3.26)	76.4 (3.01)	1.4 (3.1)
BT020S					
BT200					
BT220					
BM000S					
BM020S				94.5 (3.72)	



## MODEL NUMBER SELECTION

Insert control type:

**T**=Digital 3-point floating or 2-position

**M**=Modulating 2-10V DC or 4-20mA

Insert supply voltage:

**0**=24V

**2**=220V

Insert auxiliary switch choice:

**00**=no auxiliary switches

**20**=two auxiliary switches

Insert speed:

**Leave blank** if 220 V (=20-30 sec)

**S**=slow (=90-110 sec) if 24V

Example: BM000S=electrical actuator 24V modulating without auxiliary switches

**B** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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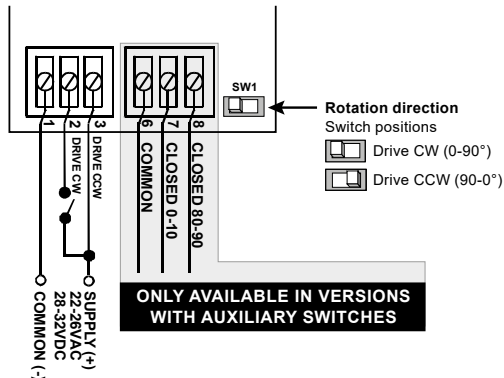
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## ACCESSORIES

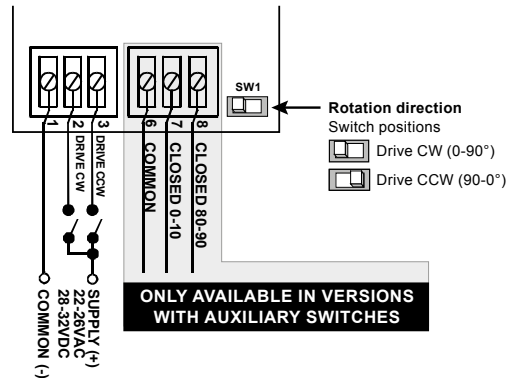
- 1C50006: Watertight bushing (for supply voltage wires)
- 1C50007: Watertight bushing (for auxiliary switch wires)

## WIRING INSTRUCTION

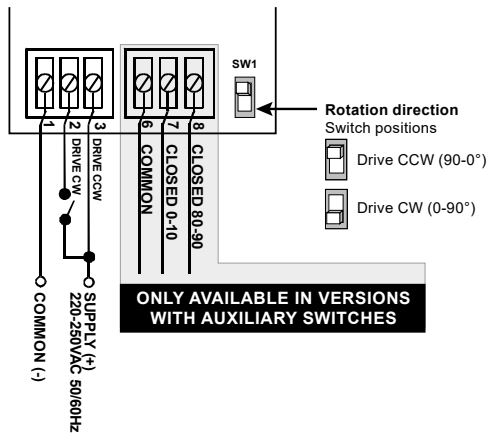
### 24VAC - 2-POSITION



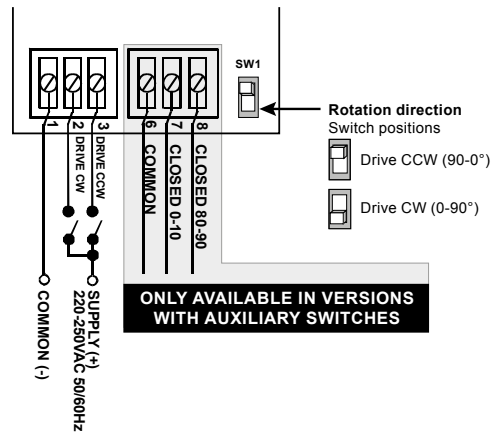
### 24VAC - 3-POINT-FLOATING



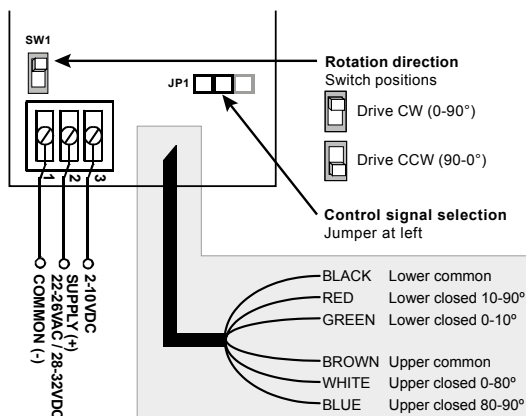
### 240VAC - 2-POSITION



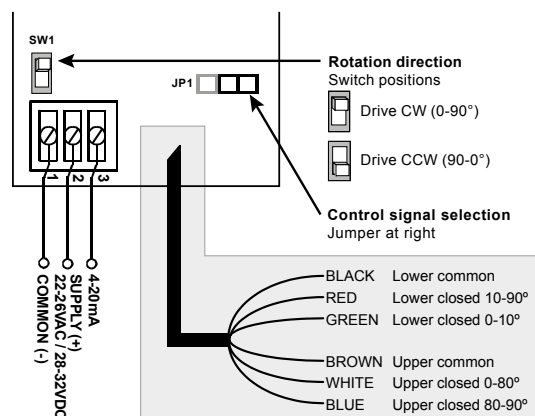
### 240VAC - 3-POINT-FLOATING



### 24V - MODULATING 2-10VDC



### 24V - MODULATING 4-20mA



## UPDATES

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

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