

- The VF range of actuators are housed in a weatherproof IP67 polyamide A6 housing.
- VF actuators are ideal for the automation of ball valves and butterfly valves.
- The different models of actuator within the range are capable of operational torques ranging from 20 Nm to 300 Nm.
- ISO 5211 mount with star drive for various mounting options allow for easy installation.
- External DIN plugs eliminate the need to remove the cover to make an electrical connection.
- Conversion kits available to change the standard on/off operation of the actuator.
- VF actuators feature an electronic torque limiter preventing damage if max torque is exceeded.



Actuator Features		Specification	
Enclosure	Weatherproof IP67	Power Supply	24V to 240V AC / 24V to 110V DC
Limit Switches	4X SPDT microswitches (2 motor stop and 2 confirmations)	Cover, Body, Cams Material	Polyamide A6
Anti-Condensation Heater	3.5W	Duty Rating	75%
Connector	Large = EN175301-803 Form A Small = DIN 43650/C	Options:	<ul style="list-style-type: none"> <li>• Battery Failsafe</li> <li>• Digital Positioning System (4-20mA, 0-10V)</li> <li>• 180° and 270° operation</li> <li>• 12V AC/DC power supply</li> </ul>
Operating Temperature	-20°C to +70°C		
Manual Override	Declutching Handwheel		

### VF Range technical information

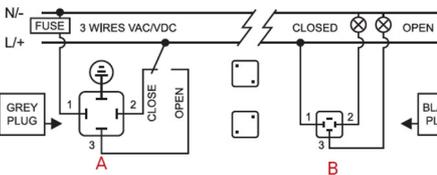
Measurement	Info	Models					
		VF-0S	VF-05S	VF-1S	VF-15S	VF-2S	VF-2+S
<b>Mounting</b>	<b>ISO5211</b>	F03/04/05 14mm	F03/04/05 14mm	F05/07 17mm	F05/07 17mm	F07/10 22mm	F07/10 22mm
<b>Weight</b>	<b>Kg</b>	1.8	1,9	2.4	3	5.2	5.2
<b>Operating Time (90°) +/- 10%</b>	<b>Seconds</b>	10	10	13	29	34	58
<b>Operating Torque</b>	<b>Nm</b>	20	35	55	85	140	300
<b>Maximum Torque Break</b>	<b>Nm</b>	25	38	60	90	170	350
<b>Consumption at maximum operational torque (+/- 5%) (A / W)</b>	<b>12V DC</b>	1.80 / 21.60	2.38 / 28.62	3.04 / 36.43	2.11 / 25.34	4.73 / 56.76	5.17 / 62.04
	<b>24V DC</b>	0.90 / 21.49	1.28 / 30.78	1.55 / 37.17	1.08 / 25.87	2.15 / 51.48	5.31 / 55.44
	<b>48V DC</b>	0.42 / 20.38	0.56 / 26.72	0.61 / 29.72	0.48 / 22.92	0.88 / 42.24	1.10 / 52.80
	<b>110V DC</b>	0.13 / 14.30	0.17 / 18.90	0.19 / 20.80	0.14 / 15.20	0.28 / 30.25	0.33 / 36.30
	<b>12V AC</b>	1.85 / 22.18	2.75 / 33	3.43 / 41.18	2.38 / 28.51	6.60 / 79.20	7.26 / 87.12
	<b>24V AC</b>	1.12 / 26.77	1.58 / 37.80	1.87 / 44.88	1.36 / 32.74	2.59 / 62.04	2.75 / 66
	<b>48V AC</b>	0.69 / 33.16	0.92 / 44.04	1.10 / 52.80	0.77 / 37.07	1.43 / 68.64	1.65 / 79.20
	<b>110V AC</b>	0.27 / 29.52	0.36 / 39.45	0.40 / 43.80	0.31 / 33.64	0.63 / 68.97	0.66 / 72.60
	<b>240V AC</b>	0.15 / 36.43	0.19 / 45.41	0.20 / 47.52	0.17 / 40.13	0.39 / 92.40	0.42 / 100.32

LED Status Indication		
No power	LED off	
Actuator Fully Closed	Red Led Solid	
Actuator Fully Open	Green Led Solid	
Moving Closed > Open	Red and Orange Flash	
Moving Open > Closed	Green and Orange Flash	
Torque lim. Engaged Open > Closed	Red Blinking	
Torque lim. Engaged Closed > Open	Green Blinking	
Manual Mode Engaged	Orange Blinking	
Battery Failsafe Activated Normally Open	Red Intermittent	
Battery Failsafe Activated Normally Closed	Green Intermittent	
Battery Failsafe Needs Charging	Orange Intermittent	
Digital Positioning System Stationary	Blue Solid	
Digital Positioning System Opening	Blue and Green Flash	
Digital Positioning System Closing	Blue and Red Flash	

### Standard Electrical Connections

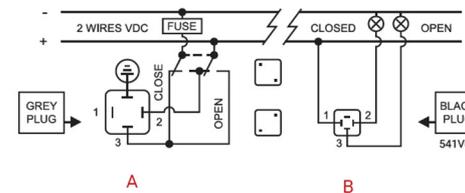
#### On - Off V AC

VF-0S - VF-15S

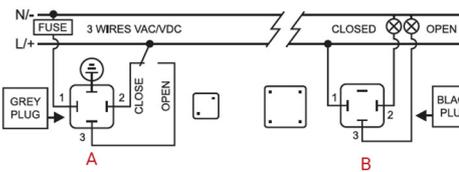


#### On - Off V DC

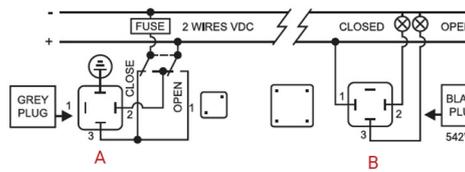
VF-0S - VF-15S



#### VF-2S - VF-2+S



#### VF-2S - VF-2+S

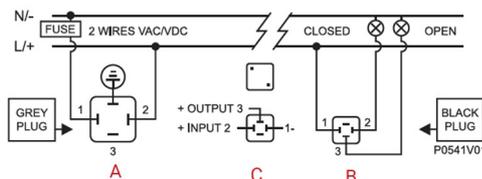


**A** = Power supply plug (Grey plug)  
 Neutral PIN 1 + Phase PIN 2 = Close Actuator  
 Neutral PIN 1 + Phase PIN 3 = Open Actuator  
 Earth/ground connection - Flat PIN

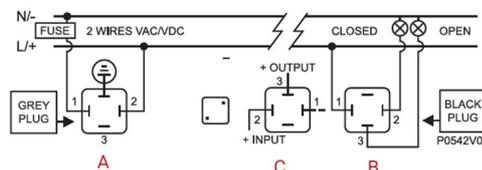
**B** = Volt free contact plug (Black Plug)  
 Common PIN 1 + PIN 2 = Close confirmation of position  
 Common PIN 1 + PIN 3 = Open confirmation of position

### Positioner V AC / DC

VF-0S - VF-15S



VF-2S - VF-2+S



**A** = Power supply plug (Grey plug)  
 Neutral/Negative PIN 1 + Phase/positive PIN 2 - Power Supply  
 Earth/ground connection - Flat PIN

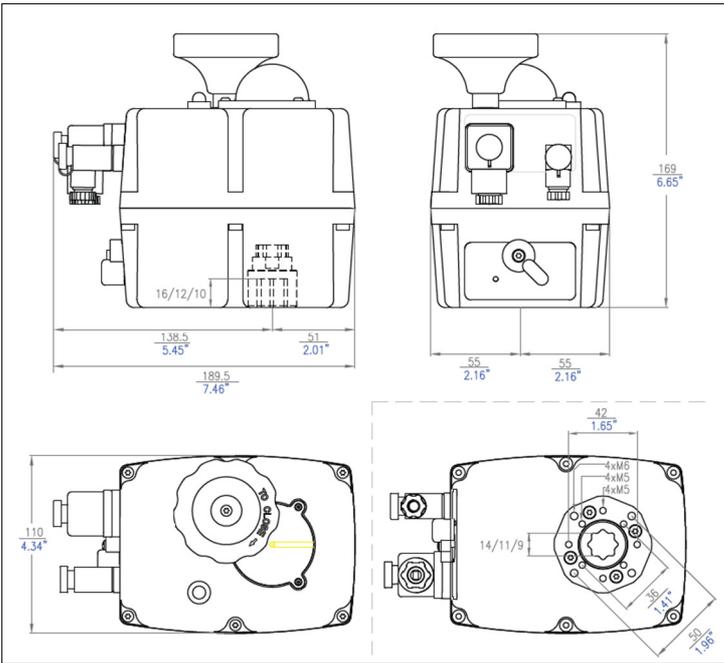
**B** = Volt free contact plug (Black Plug)  
 Common PIN 1 + PIN 2 = Close confirmation of position  
 Common PIN 1 + PIN 3 = Open confirmation of position

**C** = Input/output signal (Black plug)  
 Negative PIN 1 + positive PIN 2 = Input signal  
 Negative PIN 1 + positive PIN 3 = Output signal

**C** = Instrumentation signal **MAX 10V**

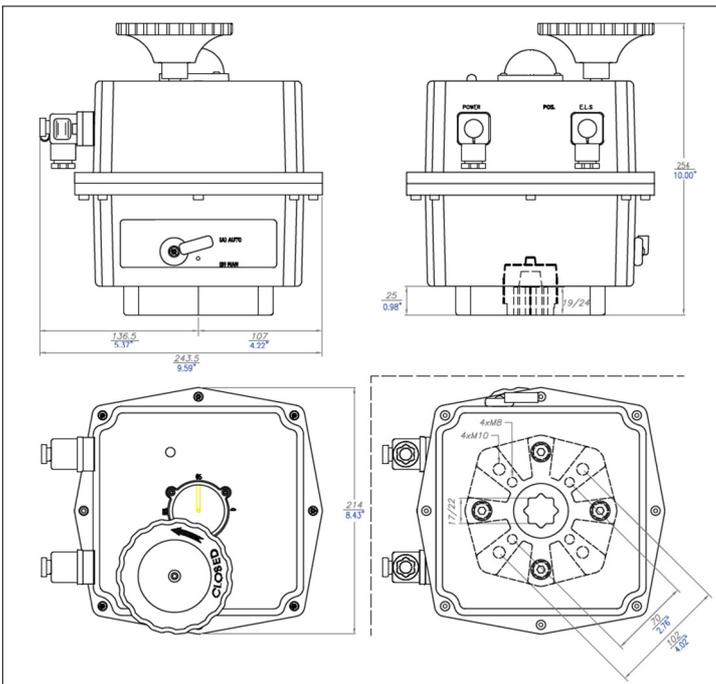
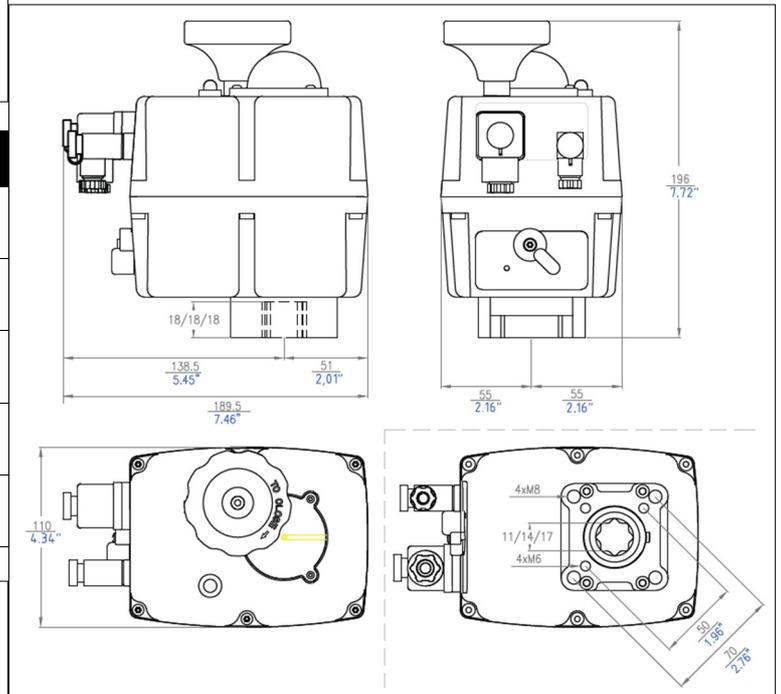
**Digital Positioner System:** Earth should not be connected to avoid self adjustment of the actuator position

### Dimensions and Specification



VF-0S & VF-05S		
Operating Torque	VF-0S	20 Nm
	VF-05S	35 Nm
Maximum Torque Break	VF-0S	25 Nm
	VF-05S	38 Nm
Operating Time (90°) +/-10%	10 seconds	
Weight	VF-0S	1.8 Kg
	VF-05S	1.9 Kg
Mounting	F03/04/05 14mm	

VF-1S & VF-15S		
Operating Torque	VF-1S	55 Nm
	VF-15S	85 Nm
Maximum Torque Break	VF-1S	60 Nm
	VF-15S	90 Nm
Operating Time (90°) +/-10%	VF-1S	13 seconds
	VF-15S	29 seconds
Weight	VF-1S	2.4 Kg
	VF-15S	3 Kg
Mounting	F05/07 17mm	



VF-2S & VF-2+S		
Operating Torque	VF-2S	140 Nm
	VF-2+S	300 Nm
Maximum Torque Break	VF-2S	170 Nm
	VF-2+S	350 Nm
Operating Time (90°) +/-10%	VF-2S	34 seconds
	VF-2+S	58 seconds
Weight	5.2 Kg	
Mounting	F07/10 22mm	