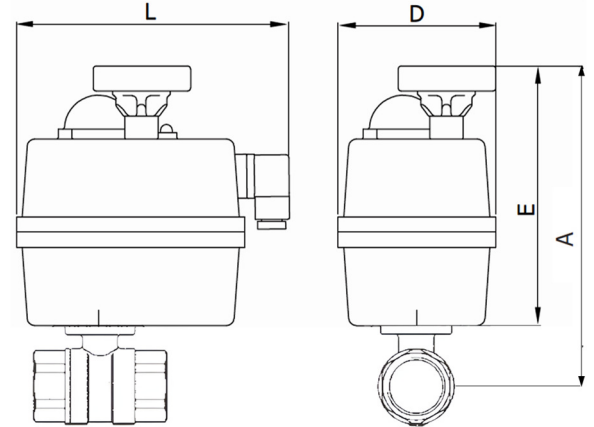


### VFE-160 - Electrically Actuated 2 Way Brass Ball Valve

Actuator	VF-0S								VF-1S		
	DN	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
<b>A</b>	198	198	198	202	206	211	227	233	286	296	
<b>E</b>	169	169	169	169	169	169	169	169	196	196	
<b>L</b>	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	
<b>D</b>	110	110	110	110	110	110	110	110	110	110	
<b>Operating Time</b>	10s	10s	10s	10s	10s	10s	10s	10s	10s	13s	13s

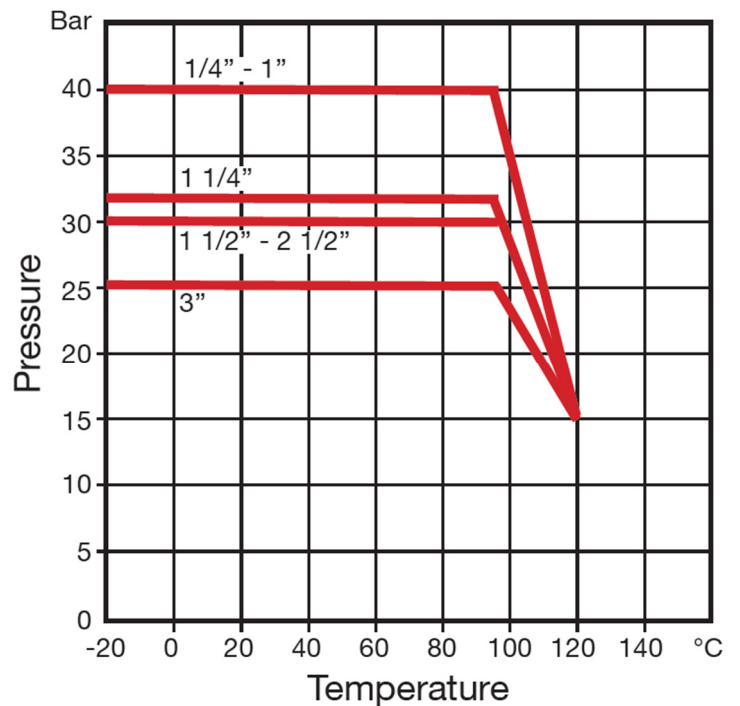


Actuator Specification	
Enclosure	Weatherproof IP67
Power	24V to 240V AC / 24V to 110V DC
Limit Switches	4X SPDT microswitches (2 motor stop and 2 confirmations)
Anti-Condensation Heater	3.5W
Connector	Large = EN175301-803 Form A / Small = DIN 43650/C
Operating Temperature	-20°C to +70°C
Manual Override	Declutching Handwheel
Cover, Body, Cams Material	Polyamide A6
Options:	Battery Failsafe Digital Positioning System (4-20mA, 0-10V) 180° and 270° operation 12V AC/DC power supply

Valve Specification	
Body	Chrome Plated Brass CW617N
Seats	PTFE
Seals	PTFE / Viton
Connection	Screwed BSP Taper
Maximum Pressure	1/4" - 1" - 40 Bar 1 1/4" - 32 Bar 1 1/2" - 2 1/2" - 30 Bar 3" - 25 Bar
Valve Operating Temperature	-20°C to +120°C
Ambient Temperature	-10°C to +50°C
Bore	Full Bore



Pressure / Temperature:

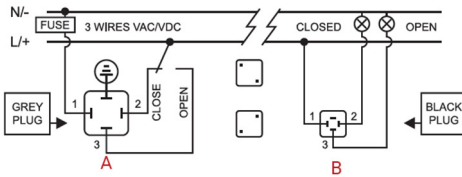


LED Status Indication		
No power	LED off	
Actuator Fully Open	Red Led Solid	
Actuator Fully Closed	Green Led Solid	
Moving Open > Closed	Red and Orange Flash	
Moving Closed > Open	Green and Orange Flash	
Torque lim. Engaged Open > Closed	Red Blinking	
Torque lim. Engaged Closed > Open	Green Blinking	
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

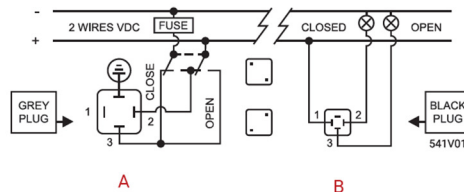
### On - Off V AC

VF-0S - VF-1S



### On - Off V DC

VF-0S - VF-1S



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

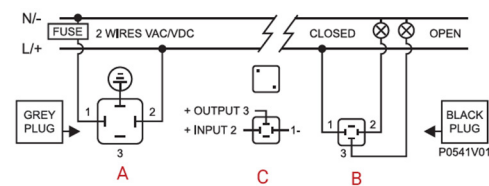
B = Volt free contact plug (Black Plug)

Common PIN 1 + PIN 2 = Close confirmation of position

Common PIN 1 + PIN 3 = Close confirmation of position

### Positioner V AC / DC

VF-0S - VF-1S



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 = Close 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