



## 250LF Series

## Direct Mount Actuated Lead Free Brass Ball Valves



The 250 series automated ball valves are full port, lead free brass, automated ball valves. They have NPT Female, end connections and an ISO 5211 direct mount actuator mounting pad.

A full range of accessory items are available including limit switches, solenoid valves, positioners and manual override devices.

### END CONNECTIONS

NPT Threaded: 1/2" to 2"

### PRESSURE RANGE

29 inHg vacuum to 600 PSI

[\(see Pressure/Temperature Curve\)](#)

### TEMPERATURE RANGE

-4°F to 366°F

[\(see Pressure/Temperature Curve\)](#)



Certified to  
NSF/ANSI 61-G



### FEATURES

- Full port for unobstructed flow
- ISO5211 Direct Mount
- Investment cast 2-piece lead free brass body
- Bolw-out proof stem design
- Compact Assembly
- Locking device
- Adjustable stem packing
- 100% factory tested

### TYPICAL APPLICATIONS

- Potable water
- Food and Beverage
- Brewing, distilling, and wine making
- Bottling and dispensing
- Pharmaceutical chemical industry

### ACTUATORS

#### Manual

- [See 282 Series](#) for Manual Lead Free Brass Valves

#### Electric

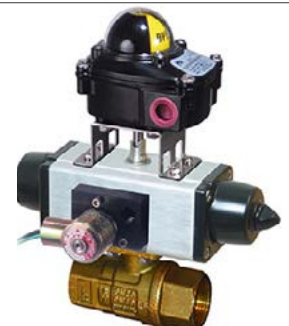
- **V4, R4, S4:** Weatherproof
- **B7:** Explosion Proof

#### Pneumatic

- **F series:** Rack and Pinion
- **P series:** Scotch Yoke
- Spring Return or Direct Acting

### ACCESSORIES

- **Limit switches**
- **Solenoid valves**
- **Positioners**
- **Feedback units**
- **Push fittings**
- **1/4" poly tubing**
- **Manual Override devices**





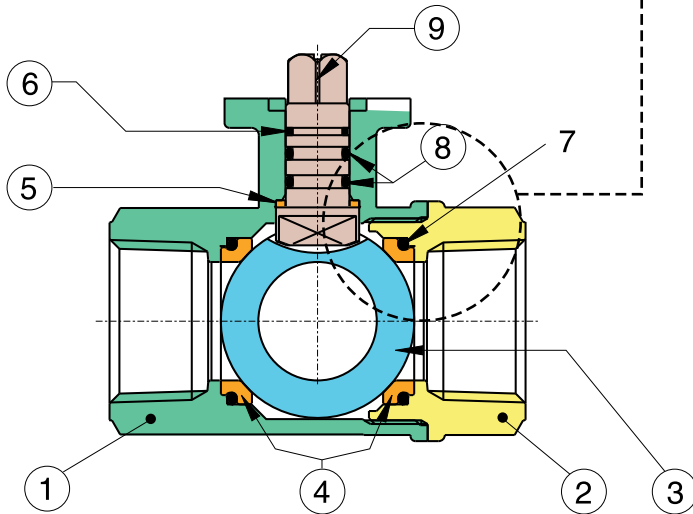
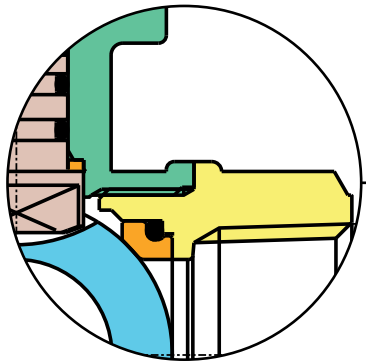
## 250LF Series



## Direct Mount Actuated Lead Free Brass Ball Valves

### MATERIALS OF CONSTRUCTION

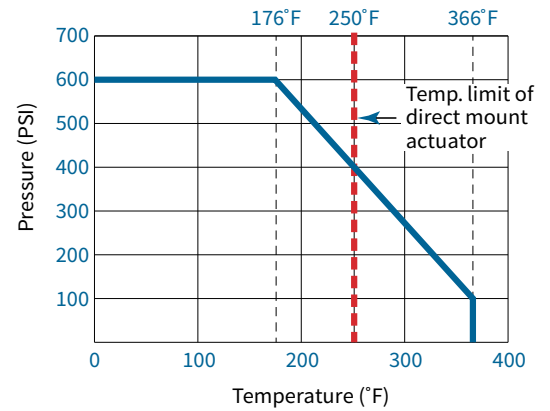
O-RING BACK P.T.F.E. SEAT



Item	Name	Material
1	Body	Low Lead Brass*
2	End Cap	Low Lead Brass*
3	Ball	Low Lead Brass* (TEA coated)
4	Ball Seat	PTFE
5	Thrust Washer	PTFE
6	Stem Seal	PTFE
7	O-ring	FKM
8	O-ring	EPDM
9	O-ring	FKM
10	Stem	Low Lead Brass*

\*Low Lead refers to wetted surface of pipe, fittings, and fixtures in potable water systems that have a weighted average lead content  $\leq 0.25\%$

### VALVE PRESSURE/TEMPERATURE



### Cv FACTORS

Size	Cv
1/2"	18.84
3/4"	34.10
1"	49.71
1 1/4"	102.89
1 1/2"	265.90
2"	306.36

### VALVE BREAK-TORQUES (in/lbs.)

Size	RPTFE
1/2"	17.70
3/4"	26.60
1"	26.60
1 1/4"	53.10
1 1/2"	88.50
2"	106.20



## 250LF Series



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### ACTUATORS AVAILABLE

A full range of actuators are available to choose from. All sizing is done by Assured Automation to make selecting your assembly easy. Any accessories ordered with the actuator will be installed and tested by our ISO certified facility.

### Pneumatic

#### P Series Dual Scotch Yoke



**Spring Return**  
fail position 1 or 2

[\(see P series web page\)](#)



**Double Acting**  
fail last place

#### F Series Rack and Pinion



**Spring Return**  
fail position 1 or 2

[\(see F series web page\)](#)



**Duble Acting**  
fail position 1 or 2

#### Accessories

- NAMUR direct mount solenoid valves
- Variety of limit switches
- Modulating positioners
- 1/4" NPT x 1/4" tube push fittings
- 1/4" NPT x 1/4" compression fittings
- SS and poly tubing

### Electric

#### Weatherproof

##### V4 Series



- 12 to 120 VAC/VDC**
- Manual override
  - NEMA-4/4X housing
  - External wire leads
  - High Strenght Gears

[\(see V4 series web page\)](#)

##### R4 Series



- 12 to 120 VAC/VDC**
- Compact Design
  - Thermally protected motor
  - Spur Gear Drive

[\(see R4 series web page\)](#)

##### S4 Series



- 12 to 240 VAC/VDC**
- Isolated end of travel limit switches
  - Manual override
  - Electronic torque limiter

[\(see S4 series web page\)](#)

#### Explosion Proof

##### B7 Series



- 24 VDC and 120 VAC**
- NEMA 4/4X/7 enclosure
  - Heater and thermostat installed in all actuators
  - Manual override on all units

[\(see B7 series web page\)](#)

### Manual

#### Manual Lever

For Lead free brass ball valves with manual levers see our [282LF series](#)



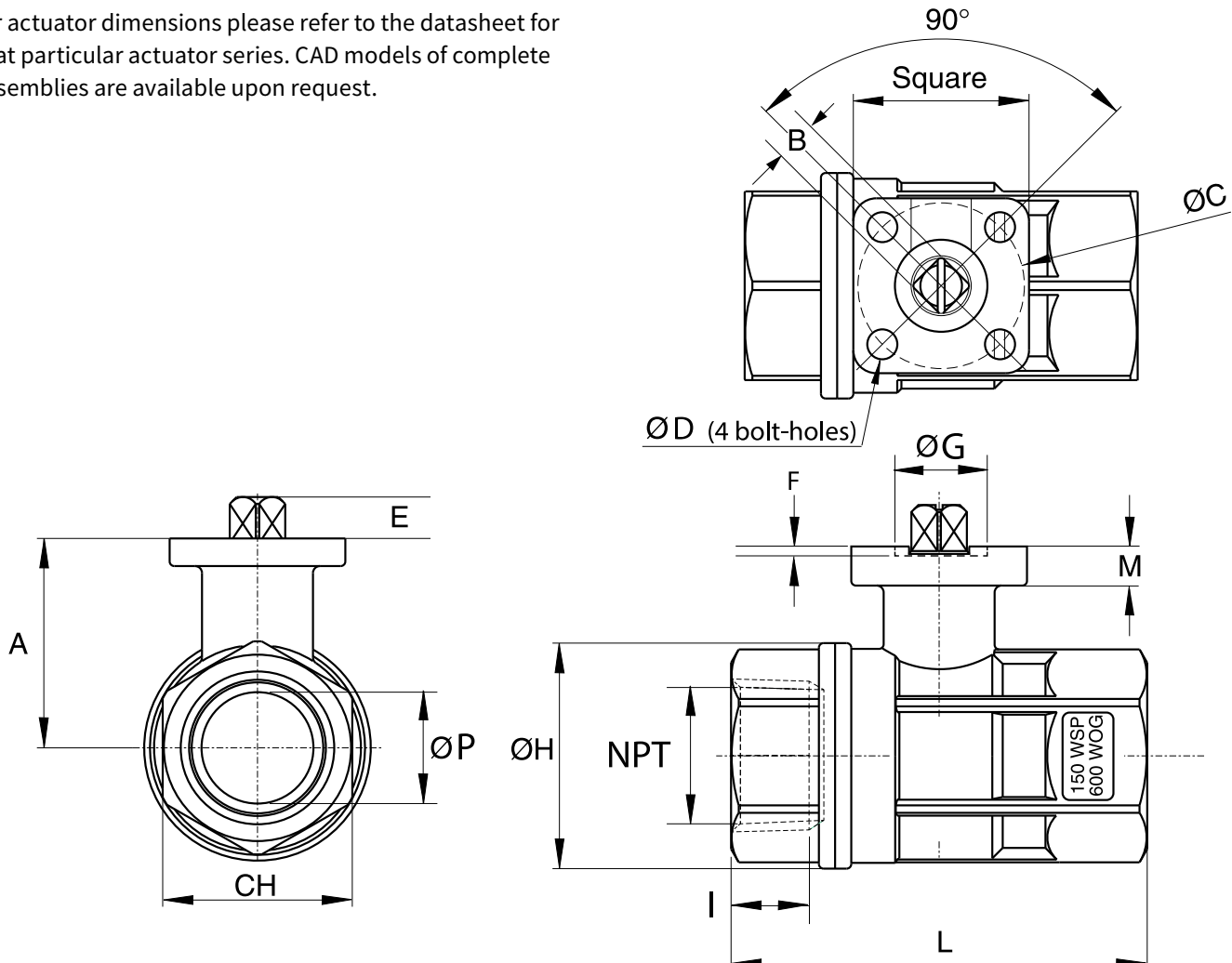
## 250LF Series



## Direct Mount Actuated Lead Free Brass Ball Valves

### VALVE BODY DIMENSIONS

for actuator dimensions please refer to the datasheet for that particular actuator series. CAD models of complete assemblies are available upon request.



Size	A	$\square B$ (mm)	$\varnothing C$ ISO 5211	$\varnothing D$	E	F	$\varnothing G$	$\varnothing H$	I	L	CH	M	$\varnothing P$	Weight (lbs.)
1/2"	1.28	9	1.42 (F03)	0.24	0.35	0.08	0.98	1.32	0.54	2.64	1.06	0.22	0.55	0.68
3/4"	1.36	9	1.42 (F03)	0.24	0.35	0.12	0.98	1.57	0.55	2.99	1.26	0.22	0.75	0.88
1"	1.79	9	1.42 (F03)	0.24	0.35	0.12	0.98	1.93	0.66	3.35	1.61	0.24	0.94	1.59
1 1/4"	1.93	9	1.42 (F03)	0.24	0.35	0.12	0.98	2.30	0.68	3.66	1.97	0.24	1.18	2.23
1 1/2"	2.52	11	1.97 (F05)	0.28	0.43	0.12	1.38	2.87	0.68	4.13	2.17	0.31	1.50	3.70
2"	2.88	11	1.97 (F05)	0.28	0.43	0.12	1.38	3.60	0.70	4.80	2.76	0.31	1.97	3.95



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To easily create a complete and correct model code, please visit our web site and use the configurator. Additional actuator accessories like solenoid valves and limit switches can also be easily added there.

**C** **250LF** **N** **F8SC**  
 Size Series Conn. Actuator

### VALVE BODY

Size: \_\_\_\_\_

- C** = 1/2"
- D** = 3/4"
- E** = 1"
- F** = 1 1/4"
- G** = 1 1/2"
- H** = 2"

Connection Type: \_\_\_\_\_

- N** = FNPT

Note: only one actuator may be chosen

### ACTUATOR

#### Pneumatic Actuator

Series: \_\_\_\_\_

- F** = F series Rack & Pinion
- P** = P series Scotch Yoke

Air Pressure: \_\_\_\_\_

- 6** = 60psi
- 8** = 80psi

Function: \_\_\_\_\_

- S** = spring return
- D** = double acting

Fail Safe Position: \_\_\_\_\_

- C** = fail to CLOSED
  - O** = fail to OPEN
- omit for direct acting*

**F** **8** **S** **C**  
 Series Air psi Func. Fail Pos.

#### Electric Actuator

Series: \_\_\_\_\_

- V4, R4** = weatherproof
- S4UV** = (multi-voltage) weatherproof
- B7** = explosion proof

Voltage: \_\_\_\_\_

- A** = 120vAC
  - B** = 24vDC
  - F** = 12vDC
- (omit for S4UV)*

**V4** **A**  
 Series Voltage

#### Manual Actuator

Series: \_\_\_\_\_

- M** = basic lever
- ML** = lockable lever
- MSR** = spring return "dead man's handle" manual lever

**ML**  
 Series



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## Direct Mount Actuated Lead Free Brass Ball Valves

### ACCESSORIES

#### Solenoid Valves

NAMUR solenoid valves for direct mount to the actuator. Various coil and connector options are available including weatherproof, explosion proof, corded, NPT conduit, and cable gland.

**3-way**  
for spring return models



**3/4-way for**  
for double acting models



[Solenoid valve web page](#)

#### Limit Switches (valve position indicators)

Used to communicate the position of the valve to a PLC, HMI, or simple remote indicator lamp. Various switch technologies are available. All include a local visual indicator as well.

**UA/UB Series**  
2x Solid state proximity switches; 1 for Open, 1 for Closed



**YF Series**  
2x SPDT mechanical switches; 1 for Open, 1 for Closed



**YE, YH, YO Series**  
2x Solid State Proximity Sensors or SPDT mechanical switches



Other limit switches are available [Limit switch web page](#)

#### Modulating Positioners

Add modulating control to either of our pneumatic actuator series. These positioners mount to the top of the actuator using the NAMUR standard mounting hole and stem pattern.

**Pneumatic**  
0-15 psi control signal



**Electro-pneumatic**  
4-20mA or 0-10VDC control signal



**With feedback unit**  
4-20mA or 0-10VDC feedback signal



[Positioner web page](#)