



|               |                  |
|---------------|------------------|
| JOB NAME:     | CONTRACTOR:      |
| JOB LOCATION: | APPROVAL:        |
| ENGINEER:     | CONTRACTOR P.O.: |
| APPROVAL:     | REPRESENTATIVE:  |

**EXM8E0720-00\* - EXM8E0721-00\* - EXM8E0722-00\***  
**FNPT THREADED                      SOCKET WELD                      BUTT WELD**

**720LL DIRECT MOUNT, 3-PC, 2-WAY STAINLESS STEEL, FULL PORT BALL VALVE IN NPT, SW OR BUTT WELD W CSA APPROVED EXPLOSION PROOF METAL ELECTRIC ACTUATOR**

**SIZES 1/4" TO 4"**

|                      |                     |                     |
|----------------------|---------------------|---------------------|
| *002 24 AC/DC ON/OFF | *003 110V DC ON/OFF | *004 220V DC ON/OFF |
| *022 POSITIONER      | *023 POSITIONER     | *024 POSITIONER     |

**SPECIFICATIONS**

The Bonomi EXM8E0720-EXM8E0721-EXM8E0722 series features a complete ISO direct mount with square stem, full port 3-piece ASTM A-351 type CF8M stainless steel ball valve, with TFM-1600 seats and a 1000 psi pressure rating. It also features a multiple V-ring style stem packing and Belleville washers for live loading.

The heavy duty industrial EXM series electric actuator features a direct mount CSA certified NEMA 4X,7,8, and 9 housing, with 2 auxiliary switches, 1/2" conduit connections, built in thermal overload protection, heater & thermostat, clutch-less manual override, and a temperature range of -22F to 156F.

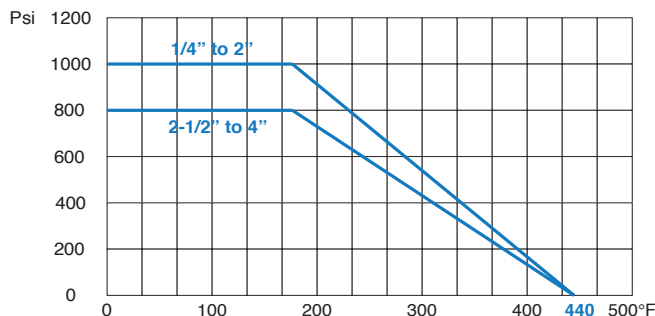
**ACTUATOR FEATURES**

- NEMA 4x, 7, 8 & 9 (CSA Approved)
- Enclosure conforms to IP68 with explosion-protected performance and 1/2" FNPT conduit connection
- Temperature range: -22°F to 158°F
- Clutch-less Manual Override
- Thermostatically controlled anti-condensation heater for working conditions
- Available in both ON/OFF (-00\*) or 4~20 mA MODULATING (-02\*)
- 30% Duty Cycle (ON/OFF) and 75% Duty Cycle (MODULATING)
- Continuous mechanical position indicator.
- Built-in thermal overload protection prevents motor burnout
- 2 auxiliary SPDT switches

**VALVE FEATURES**

- 3-piece CF8M body
- Full port, sizes 1/4" to 4"
- ISO 5211 mounting pad w/ square stem
- Pressure rating 1/4" to 2" 1000 psi, 2-1/2" to 4" 800 psi - 150 psi steam
- Temperature range -4°F to +400°F
- Blow out proof stem, multi-layer V-ring adjustable stem packing
- TFM-1600 seats, P.T.F.E. packing and thrust washer

**PRESSURE - TEMPERATURE CHART FOR SERIES 720LL/721LL/722LL**



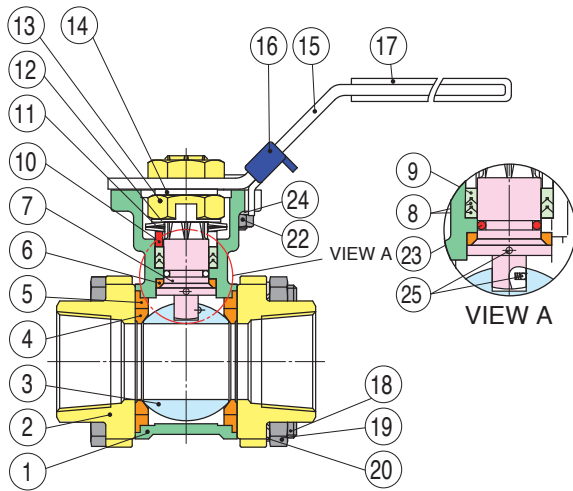
**CSA APPROVALS**

Class I, Division 1, Groups C, D, T4  
 Class II, Division 1, Groups E, F, G T130°C  
 Type 4x  
 Ex db IIB T4 Gb (For Canada)

Class I, Zone 1, AEx db IIB T4 Gb (For US)  
 Ex tb IIIC T130°C Db (For Canada)  
 Zone 21, AEx tb IIIC T130°C Db (For US)  
 IP68 (72h, 7m)



## BILL OF MATERIALS FOR 720LL / 721LL / 722LL

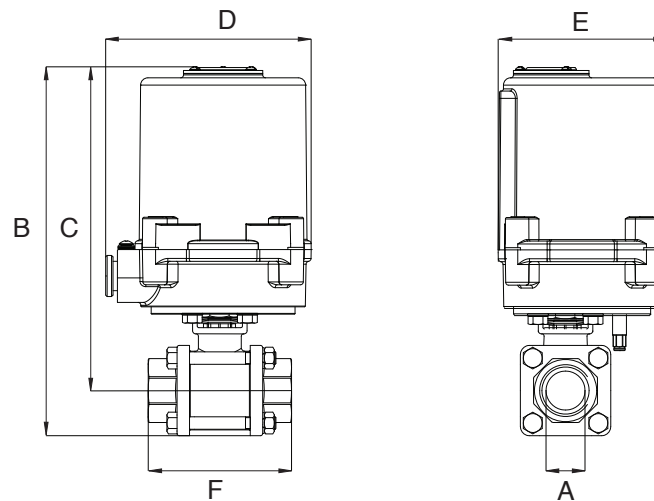


| N POS | PART NAME         | MATERIAL                  | N POS |
|-------|-------------------|---------------------------|-------|
| 1     | BODY              | CF8M                      | 1     |
| 2     | END CAP           | CF8M                      | 2     |
| 3     | BALL              | SS316                     | 1     |
| 4     | SEAT              | TFM-1600                  | 2     |
| 5     | JOIN GASKET       | P.T.F.E.                  | 2     |
| 6     | STEM SEAL         | R.T.F.E.                  | 1     |
| 7     | STEM              | SS316                     | 1     |
| 8     | STEM PACKING      | P.T.F.E.                  | 1     |
| 9     | STEM PACKING      | 25% FIBERGLASS + P.T.F.E. | *     |
| 10    | GLAND             | SS304                     | 1     |
| 11    | BELLEVILLE WASHER | SS304                     | 2     |
| 12    | LOCK SADDLE       | SS304                     | 1     |
| 13    | STEM NUT          | SS304                     | 2     |

| N POS | PART NAME          | MATERIAL | N POS |
|-------|--------------------|----------|-------|
| 14    | STEM WASHER        | SS304    | 1     |
| 15    | HANDLE             | SS304    | 1     |
| 16    | LOCKING DEVICE     | SS304    | 1     |
| 17    | HANDLE SLEEVE      | VINYL    | 2     |
| 18    | BOLT               | SS304    | *     |
| 19    | BOLT NUT           | SS304    | *     |
| 20    | BOLT WASHER        | SS304    | *     |
| 21    | STOP PIN           | SS304    | 1     |
| 22    | PIN NUT            | SS304    | 1     |
| 23    | O-RING             | VITON    | 1     |
| 24    | WASHER             | SS304    | 1     |
| 25    | ANTI-STATIC DEVICE | SS316    | 1     |
| 26    | SPRING             | SS316    | 1     |

\*VARIES WITH SIZE

## DIMENSIONS



| Size   | A    | B     | C     | D    | E     | F    | ACT.   |
|--------|------|-------|-------|------|-------|------|--------|
| 1/4"   | .250 | 9.19  | 8.27  | 5.51 | 4.43  | 2.23 | EAX035 |
| 3/8"   | .375 | 9.19  | 8.27  | 5.51 | 4.43  | 2.23 | EAX035 |
| 1/2"   | .500 | 9.19  | 8.27  | 5.51 | 4.43  | 2.59 | EAX035 |
| 3/4"   | .750 | 9.50  | 8.50  | 5.51 | 4.43  | 3.00 | EAX035 |
| 1"     | 1.00 | 9.95  | 8.84  | 5.51 | 4.43  | 3.39 | EAX035 |
| 1-1/4" | 1.25 | 10.31 | 8.95  | 5.51 | 4.43  | 4.05 | EAX035 |
| 1-1/2" | 1.50 | 14.36 | 12.81 | 5.39 | 4.45  | 4.70 | EAX045 |
| 2"     | 2.00 | 14.97 | 13.11 | 5.39 | 4.45  | 5.17 | EAX045 |
| 2-1/2" | 2.50 | 19.65 | 17.35 | 8.46 | 17.80 | 6.46 | EAX080 |
| 3"     | 3.00 | 20.42 | 17.70 | 8.46 | 17.80 | 7.19 | EAX080 |
| 4"     | 4.00 | 22.05 | 18.29 | 8.46 | 17.80 | 9.28 | EAX130 |

# ON/OFF WIRING DIAGRAM

24V DC, 24V AC, 110V AC & 220VAC



# POSITIONER WIRING DIAGRAM

24V DC, 24V AC, 110V AC & 220VAC

