

The EX2 is an electrically driven expansion valve designed for use with R-12, R-22, R-134a, R-404A, R-407C, and R-502.

### Features

- Pulse width modulation provides very precise temperature control
- Dampened plunger reduces noise and effects of “water hammer”
- Shut off function eliminates the necessity of a separate solenoid valve

### Options

- One valve body can be combined with 6 orifices to make 6 capacity ranges up to 2.7 tons R-22.



### Specifications

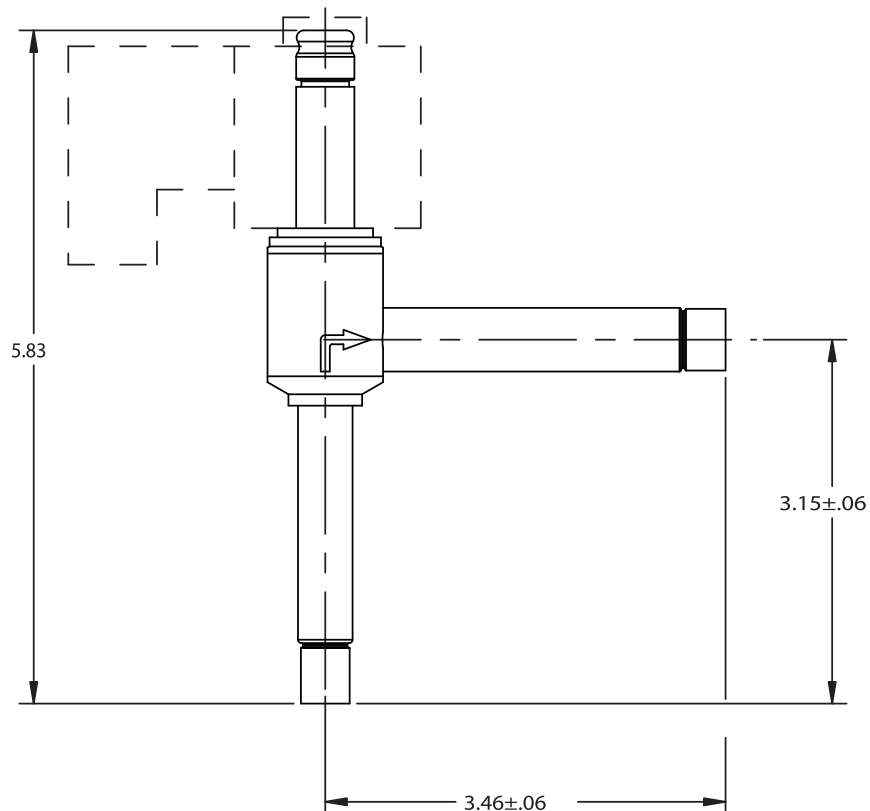
- Designed for 15 year life or 80 million cycles at 15 sec. duty cycle
- Maximum Working Pressure: 400 psig MOPD, 500 psig
- ASC2X Coils: 24V/60Hz, 120V/60Hz
- UL/CUL file number: MP604

**NOTE:** This valve requires a ASC2X type coil assembly. ASC2X type coil requires cable assembly PCN:059261.

### Nomenclature example: EX2 1/4 x 3/8 EXO-001 ASC2X 120V

| EX2          | 1/4              | 3/8               | EXO-001 | ASC2X 120V |
|--------------|------------------|-------------------|---------|------------|
| Valve Series | Inlet Connection | Outlet Connection | Orifice | Coil       |

### Dimensional Data



## Ordering Information

| Device                     | Description   | PCN    |
|----------------------------|---------------|--------|
| Electronic Expansion Valve | EX2 3/8 x 1/2 | 064497 |
| 24V/60Hz Coil              | ASC2X 24/60   | 064503 |
| 120V/60Hz Coil             | ASC2X 120/60  | 064504 |

The liquid capacity table below quotes capacities at 100% duty cycle (i.e. the valve is open continuously). However, it is recommended to operate the valve at partial load (50-80%) to allow for system load fluctuations. The valve operates with a 6 second pulse width cycle. Partial capacity can be calculated by proportioning the actual pulse time relative to 6 seconds (i.e. 3 second pulse width cycle time = 50% valve capacity).

### Liquid Capacity Table in Tons @ 100% Duty Cycle

| PCN    | Orifice #       | R-134a<br>Tons (kW) | R-22<br>Tons (kW) | R-404A / R-507<br>Tons (kW) | R-407C<br>Tons (kW) | R-744<br>Tons (kW) |
|--------|-----------------|---------------------|-------------------|-----------------------------|---------------------|--------------------|
| 064570 | EXO-00X         | 0.2 (0.7)           | 0.2 (0.9)         | 0.17 (0.6)                  | 0.28 (1.0)          | 0.51 (1.8)         |
| 064569 | EXO-000         | 0.3 (1.2)           | 0.4 (1.6)         | 0.3 (1.1)                   | 0.48 (1.7)          | 0.94 (3.3)         |
| 064499 | EXO-001         | 0.7 (2.5)           | 0.9 (3.2)         | 0.65 (2.3)                  | 1.0 (3.5)           | 1.85 (6.5)         |
| 064500 | EXO-002         | 0.9 (3.3)           | 1.2 (4.3)         | 0.85 (3.0)                  | 1.34 (4.7)          | 2.47 (8.7)         |
| 064501 | EXO-003         | 1.6 (5.6)           | 2.0 (7.2)         | 1.45 (5.1)                  | 2.22 (7.8)          | 4.15 (14.6)        |
| 064502 | EXO-004         | 2.4 (8.5)           | 3.1 (10.9)        | 2.19 (7.7)                  | 3.36 (11.8)         | 6.31 (22.2)        |
| 064497 | No Orifice Used | 3.7 (13.3)          | 4.8 (17.2)        | 3.44 (12.1)                 | 5.32 (18.7)         | 9.95 (35.0)        |

Nominal capacities shown in this table are based on 40°F evaporating temperature, 100°F condensing temperature and 100 psig pressure drop across the valve.