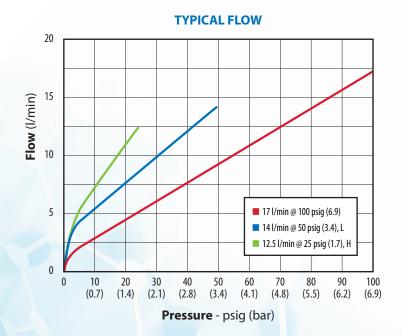
# **ES SERIES** ELECTRONIC VALVES



The ES series features large cross sectional o-rings, minimal leak points, and proven poppet designs. To reduce the possibility of contamination, all mounting hardware is located outside of the flow path and no internal parts are threaded during assembly. The ES has the best performance-to-price ratio for low leak valves. The compact footprint coupled with the long life, and exceptional leak resistance make the ES line suited to improve reliability in a wide range of applications.















| Coil Resistance                    | 36 (6V), 144 (12V), 576 (24V)   |
|------------------------------------|---|
| Connection                         | Top terminal pins or radial wire leads  |
| Current                            | 017A (6V), 0.083A (12V), 0.042A (24V)   |
| Cycle Life                         | Over 1 billion  |
| Filtration (recommended)           | 40 micron   |
| Function                           | 2-way bidirectional; 3-way normally-closed or universally ported                              |
| Leak Rate                          | 0.01 sccm   |
| Material, Body                     | ENP carbon steel, nickel iron alloy, 300 series stainless steel, glass-filled nylon housing   |
| Material, Seals                    | Nitrile standard; FKM and EPDM available  |
| Material, Spring                   | Nickel alloy  |
| Material, Wetted                   | Nickel alloy, stainless steel, ENP steel  |
| Max. Flow                          | 17 l/min @ 100 psig (7 bar)<br>14 l/min @ 50 psig (3.5 bar)<br>12.5 l/min @ 25 psig (1.7 bar) |
| Max. psig                          | 105 (7.2 bar)   |
| Medium                             | Clean, dry air and compatible gases   |
| Mount                              | Manifold  |
| Number of Ports                    | 2 or 3  |
| Operating Pressure                 | 28" Hg Vac. to 25, 50, or 105 psig<br>(700 mm Hg to 1.2, 3.4, or 7.2 bar)                     |
| Operating Temp. Range              | 32 to 150°F (0 to 65°C)   |
| Port, Exhaust                      | <b>3-Way:</b> #10-32 or M5  |
| Port, Inlet                        | No thread   |
| Port, Outlet                       | No thread   |
| Response Time                      | 5 to 10 ms (nominal)  |
| Thread                             | #4-40 or M3 (torque to 1-3 in-lb.)  |
| Voltage                            | 6, 12, or 24 VDC  |
|                                    | 90-120%   |
| Voltage Operating Range            | 70 12070  |
| Voltage Operating Range<br>Wattage | 1 watt (nominal)  |

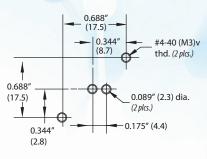
<sup>1</sup>Minimum order quantity required

Does your application have requirements beyond what is listed? Contact Clippard to discuss how this valve can be modified to meet your specific needs.

#### **Universally Ported Normally Closed** 3-Way with 2-Way or 3-Way with Terminal Pins or Wire Leads Terminal Pins or Wire Leads 3 (3-Way only) 3 (3-Way only) 0.86" (21.8) 0.86" (21.8) 0.92" 0.92 (23.4) (23.4)**Exhaust Port** #10-32 or M5 (3-Way only) 0.35" (8.9) 0.35" (8.9) 0.20" (5.1) 0.98" (24.9) 0.98" (24.9) #4-40 (M3) #4-40 (M3) thd. thd. 0.13" (3.3) 0.13" (3.3) The stainless steel mounting screws are located outside the flow path and tightened to 1-3 in-lb. They require a T-10 Torx wrench. 0.175" (4.4) 0.175" (4.4) 2 0.69" (17.5)

0.69" (17.5)

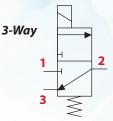
# **Mounting Interface**



2-Way

Dimensions shown are in inches (millimeters listed in parentheses).

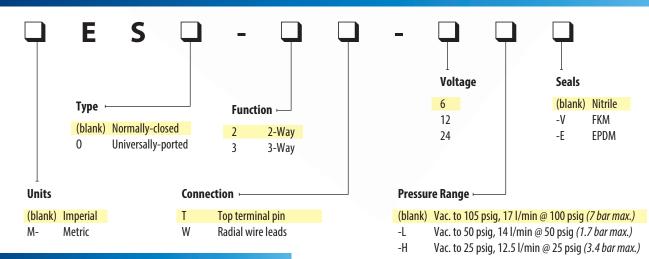
Visit clippard.com for more detailed 2D and 3D drawings.



- · Ideal for ultra low leak applications
- · No threads in flow path
- · No anaerobic sealant
- Fast response—5 to 10 ms, nominal
- Close mounting—7/8" (22) on center, <1" (25.4) tall

# ORDERING INFORMATION

0.69" (17.5)



# **ACCESSORIES**

C3-RXB18 Wire lead connector, 18" (457 mm), TE Connectivity #5-103956-2

ESM-CP Cover plate for unused manifold station

### **MANIFOLDS**

26090-1 Single-Station, Side Port26090-2 Single-Station, Bottom Port

26090-3 Double-Station

More manifolds available online

**Example Part Number:** 

ES-2T-6

For more info, scan the QR code or visit clippard.com/link/es-series



TDS ES-01, Rev. 081424 (2/2) **877-245-6247** | **clippard.com**