



## EV Electronic Valves

### A-EC-3M-12-L



Clippard's original EV series valve design is a deceptively simple arrangement featuring a remarkably quiet, low power operation. The Clippard "spider" armature spring is the only moving part, and its motion to operate the valve is a mere 0.007" travel. As a result, this valve features an exceptionally long life—proven to last more than 1,000,000,000+ cycles! Low voltage DC inputs move the spider, generating extremely fast response times of 5 to 10 milliseconds while using only 0.67 watts of power. The EV series is cool running and its compact, lightweight design makes it easy to mount in small spaces.

|                                    |                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2D Drawings</b>                 | <a href="#">2D Files</a>                                                                                                                                                                   |
| <b>Accessories</b>                 | Installation Socket Torque Tool <a href="#">30215</a>                                                                                                                                      |
| <b>Coil Resistance</b>             | 218                                                                                                                                                                                        |
| <b>Connection</b>                  | Terminal Pin, 0.025"                                                                                                                                                                       |
| <b>Connector</b>                   | <a href="#">C2-RB18</a>                                                                                                                                                                    |
| <b>Current</b>                     | 0.05A                                                                                                                                                                                      |
| <b>Cycles</b>                      | Over 1 Billion                                                                                                                                                                             |
| <b>Data Sheets</b>                 | <a href="#">Standard</a> , <a href="#">High Pressure</a> , <a href="#">Oxygen Clean</a> , <a href="#">Analytical</a> , <a href="#">Corrosion-Resistant</a> , <a href="#">N.O. Manifold</a> |
| <b>Filtration</b>                  | 40 micron (recommended)                                                                                                                                                                    |
| <b>Function</b>                    | 3-Way Normally-Closed                                                                                                                                                                      |
| <b>Leak Rate</b>                   | 0.1 sccm                                                                                                                                                                                   |
| <b>Length</b>                      | 1.56                                                                                                                                                                                       |
| <b>Manifolds</b>                   | <a href="#">Single &amp; Multi-Station</a> , <a href="#">Specialized</a>                                                                                                                   |
| <b>Material, Seals</b>             | FKM (O2 Clean/Analytical)                                                                                                                                                                  |
| <b>Material, Spring</b>            | Nickel Alloy                                                                                                                                                                               |
| <b>Material, Wetted</b>            | ENP brass, nickel alloy, stainless steel, ENP steel                                                                                                                                        |
| <b>Max PSI</b>                     | 105 (7.2 bar)                                                                                                                                                                              |
| <b>Medium</b>                      | Clean, Dry Air & Compatible Gases                                                                                                                                                          |
| <b>Mount</b>                       | Manifold                                                                                                                                                                                   |
| <b>Operating Pressure</b>          | 50 psig (14 l/min @ 50 psig)                                                                                                                                                               |
| <b>Operating Temperature Range</b> | 32 to 180°F (0 to 82°C)                                                                                                                                                                    |
| <b>Operating Voltage Range</b>     | 90 to 150%                                                                                                                                                                                 |
| <b>Poppet Travel</b>               | 0.007"                                                                                                                                                                                     |
| <b>Product Line Brochure</b>       | <a href="#">Spider Valves</a>                                                                                                                                                              |
| <b>Response Time</b>               | 5 to 10 milliseconds (nominal)                                                                                                                                                             |
| <b>Type</b>                        | Analytical                                                                                                                                                                                 |
| <b>Unit</b>                        | Imperial                                                                                                                                                                                   |
| <b>Voltage</b>                     | 12 VDC                                                                                                                                                                                     |
| <b>Wattage</b>                     | 0.67 Watts (nominal)                                                                                                                                                                       |
| <b>Weight (lbs.)</b>               | 0.1700                                                                                                                                                                                     |
| <b>Wire Connector</b>              | AMP #103959-1                                                                                                                                                                              |

