# **LCPVEK Solenoid Operation Isolation valves**



Edwards' aluminum right angle LCPVEK valves are designed for vacuum applications which need a compact, simple, solenoid operation valve to control gas flow. These economical valves are ideal for a number of duties ranging from simple laboratory pump isolation to OEM vacuum system integration and design. Their versatility makes them effective both in vacuum pipelines and in chamber admittance applications.

Careful design of the solenoid power control and vacuum isolation components delivers efficient magnetic actuation with optimum vacuum performance at an affordable price. This facilitates the use of an electrically actuated valve in many applications where previously this had been uneconomic.



#### Features & Benefits

- Economical design can be used in low budget applications
- Electrical actuation
- Low power requirements
- Electronic boost power supply
- Efficient magnetic design

#### **Dimensions**



### **Technical Data**

Valve actuation type
Single acting, electrically opened, spring return

Molecular conductance
3 ls<sup>-1</sup>

Pressure range
1 x 10<sup>-6</sup> - 1000 mbar / 7.5 x 10<sup>-7</sup>

- 750 Torr

Max pressure differential (open/close)
1000 mbar / 750 Torr

Time to open 60 ms
Time to close <20 ms
Max cycle frequency 1800 h<sup>-1</sup>

Leak rate  $< 1 \times 10^{-6} \text{ mbar Is}^{-1} /$  $< 7.5 \times 10^{-7} \text{ Torr Is}^{-1}$ 

Power consumption

Open 95 W for 60 ms
Hold 2.5 to 4 W
Reliability (MTTF) 500000 cycles
Operating temperature range 5 to 45 °C

Weight

 LCPV16EK
 810g / 28oz

 LCPV25EK
 840g / 29oz

 Enclosure rating
 IP67

Voltage
230V ±10%
110V -10% +15%
24V a.c/d.c. -10% +15%

Construction materials

Body Aluminium, stainless steel

Seals Fluoroelastomer

## **Ordering Information**

<b>Product Description</b>	Order No.
LCPV16EKA, 24V ac,dc, aluminium	C41751200
LCPV16EKA, 110V, 50/60Hz, aluminium	C41751100
LCPV16EKA, 230V 50/60Hz aluminium	C41751000
LCPV25EKA, 24V ac,dc, aluminium	C41752200
LCPV25EKA, 110V 50/60Hz, aluminium	C41752100
LCPV25EKA, 230V, 50/60Hz, aluminium	C41752000