



LDV 1000



LDV 2000



LDV 3000

- Condensate Sensing Type
- Zero Air Loss
- Design Patented
- Noise Free
- Fault tolerant system



Automatic Drain Valves

**Series LDV**



## The LDV Series

Trident's condensate sensing type automatic drain valve is the latest advancement in drain valve technology. These valves sense the condensate level for activation, ensuring absolutely no loss of compressed air and hence results in enormous energy saving. Trident condensate sensing type drain valves are highly efficient and reliable. Fault tolerant system is switching over into timer mode automatically while LDV fails to operate due to sensor failure. Timing cycle is every 2 mins for a period of 2 seconds.

## Technical Specifications

| Item code                                                                          | PL009                   | PL010                   | PL011                   | PL012         | PL013         | PL014         |
|------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|---------------|---------------|---------------|
| Model                                                                              | LDV 1000                | LDV2000                 | LDV3000                 | LDV1030       | LDV2030       | LDV 3030      |
| Input voltage (AC/DC)                                                              | 85 to 300VAC<br>50/60HZ | 85 to 300VAC<br>50/60HZ | 85 to 300VAC<br>50/60HZ | 24VDC         | 24VDC         | 24VDC         |
| Avg. power consum. (watts)                                                         | 12                      | 12                      | 12                      | 12            | 12            | 12            |
| Min. working pressure<br>(Kg/cm <sup>2</sup> (g))                                  | 2                       | 4                       | 4                       | 2             | 4             | 4             |
| Max. working pressure<br>(Kg/cm <sup>2</sup> (g))                                  | 10                      | 10                      | 10                      | 10            | 10            | 10            |
| Valve orifice (mm)                                                                 | 4                       | 15                      | 15                      | 4             | 15            | 15            |
| End connection Inlet                                                               | 1/2" BSP(F)             | 1/2" BSP(M)             | 1/2" BSP(M)             | 1/2" BSP(F)   | 1/2" BSP(M)   | 1/2" BSP(M)   |
| End connection outlet                                                              | 6mm Hose barb           | 1/2" BSP(F)             | 1/2" BSP(F)             | 6mm Hose barb | 1/2" BSP(F)   | 1/2" BSP(F)   |
| Environmental Protections                                                          | IP 54                   | IP 54                   | IP 54                   | IP 54         | IP 54         | IP 54         |
| Max. fluid Temperature (°C)                                                        | 75                      | 75                      | 75                      | 75            | 75            | 75            |
| Dimension LxBxH (mm)                                                               | 141x60x127              | 225x127x164             | 385x183x229             | 141x60x127    | 225x127x164   | 385x183x229   |
| Weight (Kg)                                                                        | 1.25                    | 3.2                     | 7.0                     | 1.25          | 3.2           | 7.0           |
| Maximum condensate<br>discharge quantity at<br>7Kg/cm <sup>2</sup> (g) (Liters/hr) | 50                      | 185                     | 675                     | 50            | 185           | 675           |
| Air compressor after<br>cooler (m <sup>3</sup> /hr)                                | 850                     | 1019 to 3398            | 4248 & above            | 850           | 1019 to 3398  | 4248 & above  |
| Wet Air receiver (m <sup>3</sup> )                                                 | 2                       | 4 to 10                 | 12 & above              | 2             | 4 to 10       | 12 & above    |
| Prefilter (m <sup>3</sup> /hr)                                                     | 6796                    | 8495 to 27184           | 30582 & above           | 6796          | 8495 to 27184 | 30582 & above |
| Refrigeration dryer (m <sup>3</sup> /hr)                                           | 1699                    | 2209 to 6796            | 8495 & above            | 1699          | 2209 to 6796  | 8495 & above  |
| After filter (m <sup>3</sup> /hr)                                                  | 6796                    | 8495 to 27184           | 30582 & above           | 6796          | 8495 to 27184 | 30582 & above |
| Dry Air receiver (m <sup>3</sup> )                                                 | 2                       | 4 to 10                 | 12 & above              | 2             | 4 to 10       | 12 & above    |

Condensate discharge for any other pressure (P) multiply the flow given for 7 Kg/cm<sup>2</sup> (g) by  $\sqrt{\frac{P}{2.6}}$



## Features

- The electronic level control ensures proper draining of condensate and avoids unnecessary loss of air.
- All the functions of the valve are accurately indicated by the Yellow LED.
- Test switch (or) manual drain allows function test at anytime.
- Intelligent Controller detects probe failure and indicates Red LED for potential free relay NO change to NC.
- Noise free, as air is not discharged.
- Inbuilt fault tolerant system ensures continues operation of drain valves.
- Incase of level probe failure drain valve gets ON 0.5 sec at every 6 minutes.