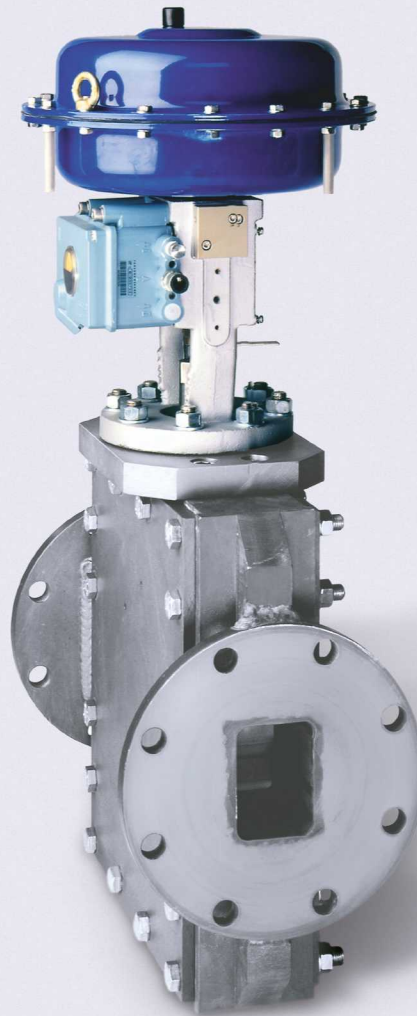


# COMPONENTS



## Adjustable laval nozzle - Type LDV

### Application

Adjustable laval nozzles are used for the optimization of the gas volume flow rates for different operating conditions in pneumatic conveying systems, especially for dense-phase conveying. The gas flow rates are adjusted for different products, conveying capacities, distances and pipe diameters, or to allow for optimum start-up and purging of the systems.

### Function

The laval nozzle uses the principle that the velocity of sound is reached at its smallest cross-section. The gas flow rate depends on the upstream pressure and is constant independent of the downstream conditions. The gas flow rate can be changed continuously by varying the cross-section of the adjustable laval nozzle.

### Design features

- optimizing conveying systems for different operating conditions
- fulfilling different functions by means of different actuators
  - a) Adjustment during commissioning of the gas flow rate
  - b) Setting of one gas flow rate for conveying and another one for purging
  - c) Automatic gas management system

### Versions

- different sizes for all pneumatic dense-phase and dilute-phase conveying systems
- individual sizing for special applications
- drill pattern of flanges according to DIN 2501 PN, ANSI 150# or client's standard

## Type designation

LDVC 70 / 150 AI

AI Aluminium  
 AC Aluminium, coated  
 SS Stainless steel

Nominal diameter mm

Width of nozzle mm

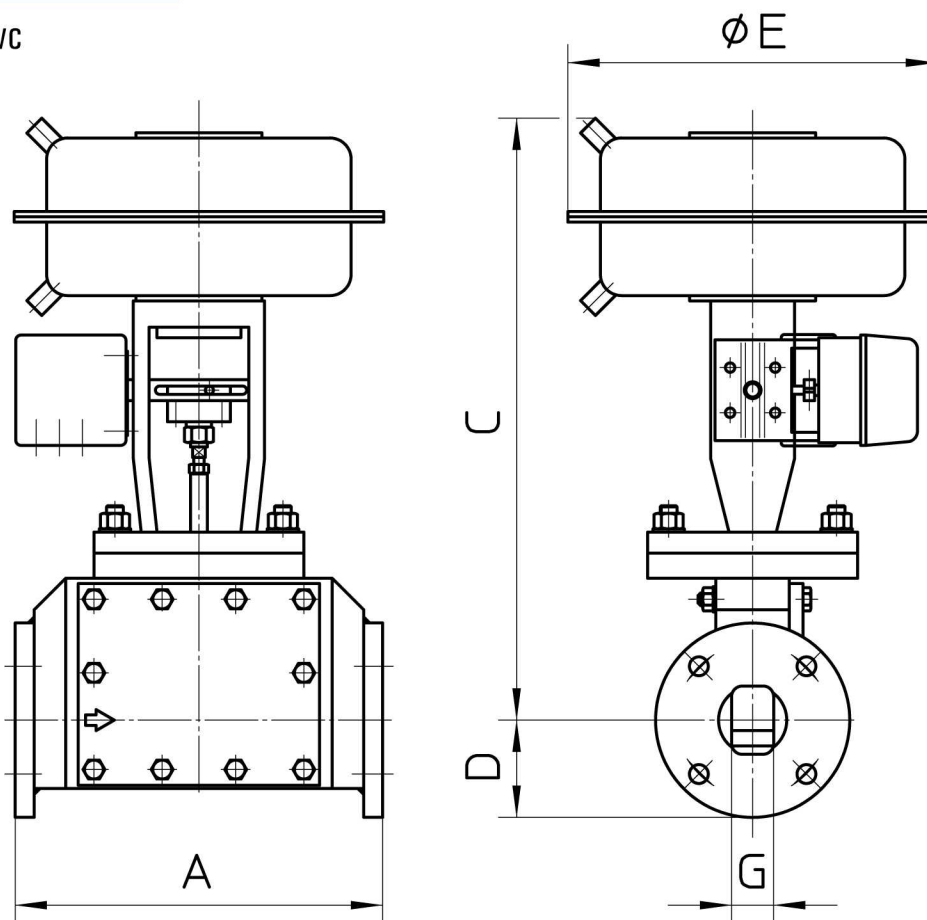
LDVH Manually operated laval nozzle

LDVP Pneumatically operated laval nozzle (2 positions)

LDVC Continuously pneumatically operated laval nozzle

## Sketch

Shown is Version LDVC



| Type           | DN  | A<br>mm | C<br>mm | D<br>mm | E<br>mm | G<br>mm | Weight<br>kg |
|----------------|-----|---------|---------|---------|---------|---------|--------------|
| LDVC 40/65 AC  | 65  | 350     | 573     | 92.5    | 352     | 40      | 65           |
| LDVC 70/150 AC | 150 | 550     | 655     | 139.5   | 352     | 70      | 97           |

Design changes reserved

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