

Single-stage air solenoid valves

LV-D/4
LV-D/5

6.50

DUNGS®
Combustion Controls



Technical description

The DUNGS air solenoid valve LV-D/4, LV-D/5 is a single-stage automatic shut-off valve for cold-air operation in industrial burners:

- Max. operating pressure up to 200 mbar (20 kPa)
- normally closed
- fast opening
- Main volume adjustable
- DC solenoid, rectifier wiring with radio interference suppression in terminal box with PG screw union
- Mountable closed position signal contact to monitor closed position of valve (.../5)
- Pipe thread as per ISO 7/1
- Flange connection as per DIN EN 1092-1
- Reliable function, rugged and maintenance-free

- On request, design without non-ferrous metals

Application

The solenoid valve is used for securing, limiting, shutting off and releasing air supply to industrial burners.

LV-D/4 Range of application: for large breaking capacities, e.g. pulsed firing.

The LV-D must not be used for inflammable gases; only non-inflammable inert media are allowed!

LV-D/4, LV-D/5 Single-stage solenoid valve, normally when closed, fast opening, fast closing, manual limitation of flowing air volume by adjusting main volume.

Specifications

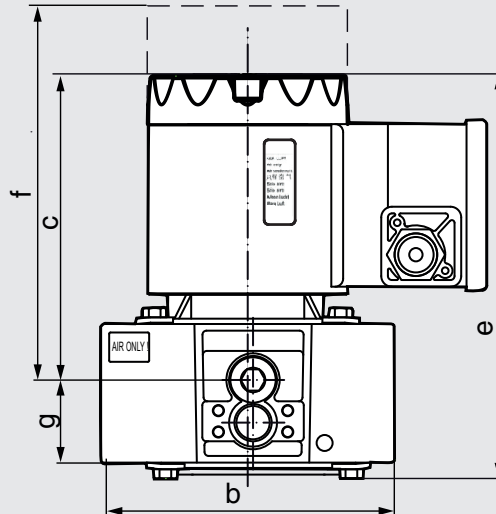
Nominal diameters	1 1 ½ 2 2 ½
Pipe thread as per ISO 7/1, Rp	Connection flange (PN 16) as per DIN EN 1092-1
Flange	
Max. operating pressure	up to 200 mbar (20 kPa)
Closing time	< 1 s
Opening time	< 1 s
Main volume	adjustable
Materials of gas-conveying parts	Housing: aluminium, steel, brass Seals: NBR basis
Voltage/frequency	230 V AC (+10 % -15 %); 50-60 Hz - other voltages on request
Rating / power consumption	Refer to type overview
Switch-on duration	100 %
Degree of protection	IP 54
Electrical connection	At screw terminals via PG* 11 cable gland (* = heavy-gauge conduit thread) Plug connection as per DIN 175 0301-803 can be retrofitted
Switching rate	max. 1000/h
Measuring/ignition gas connection	G 1/4 ISO 118, on both sides in inlet section
Ambient temperature	-15 °C to + 60 °C
Installation position	Solenoid from vertically upright to horizontally lying
Closed position signal contact	mountable
Valve proving system	Type VDK 200 A S02, mountable via G 1/4 test connection, Type VPS 504, mountable with adapter up to Rp 2 1/2
Accessories	K01 closed position signal contact, see Datasheet 12.01 211 202 Equipment plug for line socket, DIN 175301-803 215 733

Type	p _{max.}	Rp	Sole-noid No.	Order No.	P _{max.} [VA]	I _{max.} ~ (AC) 230 V	Opening time	Dimensions [mm]							Weight [kg]
								a	b	c	d	e	f	g	
LV-D 210/4	200	Rp 1	200	256 437	25	0.15	< 1 s	75	110	135	90	151	200	30	2.45
LV-D 215/4	200	Rp 1 ½	280	256 861	60	0.26	< 1 s	80	150	170	116	200	255	45	4.30
LV-D 220/5	200	Rp 2	300	257 036	60	0.30	< 1 s	95	170	175	130	225	265	50	5.90
LV-D 225/5	200	Rp 2 ½	400	257 037	100	0.48	< 1 s	115	230	220	165	280	325	55	10.90

f = Space requirement for solenoid changing

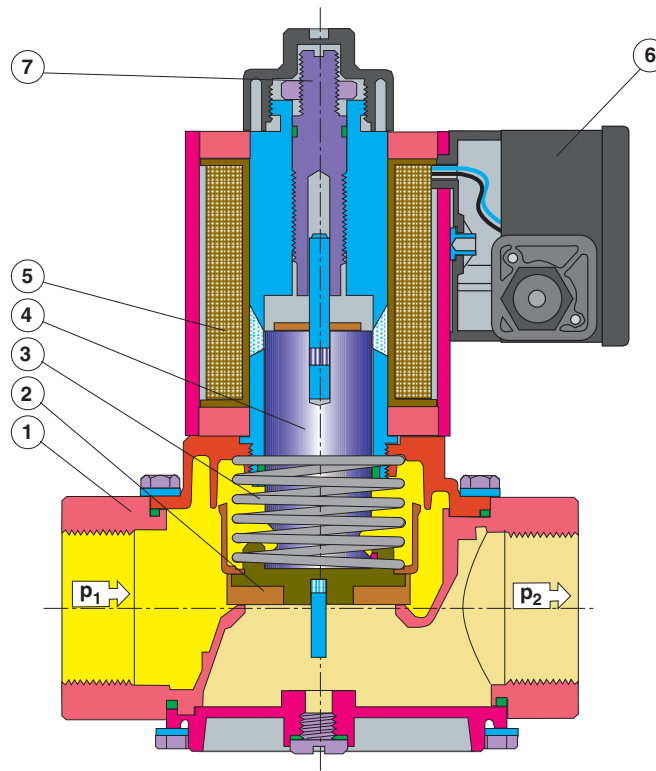
d = largest width

Dimensions [mm]
 LV-D 210 - 215/4
 LV-D 220 - 225/5



d = largest width

Type LV-D



- 1 Housing
- 2 Valve plate
- 3 Closing spring

- 4 Armature
- 5 Solenoid coil
- 6 Electrical connection

- 7 Setting - Main volume

Functional description

The DUNGS air solenoid valve is an automatic shut-off valve operated with auxiliary power.

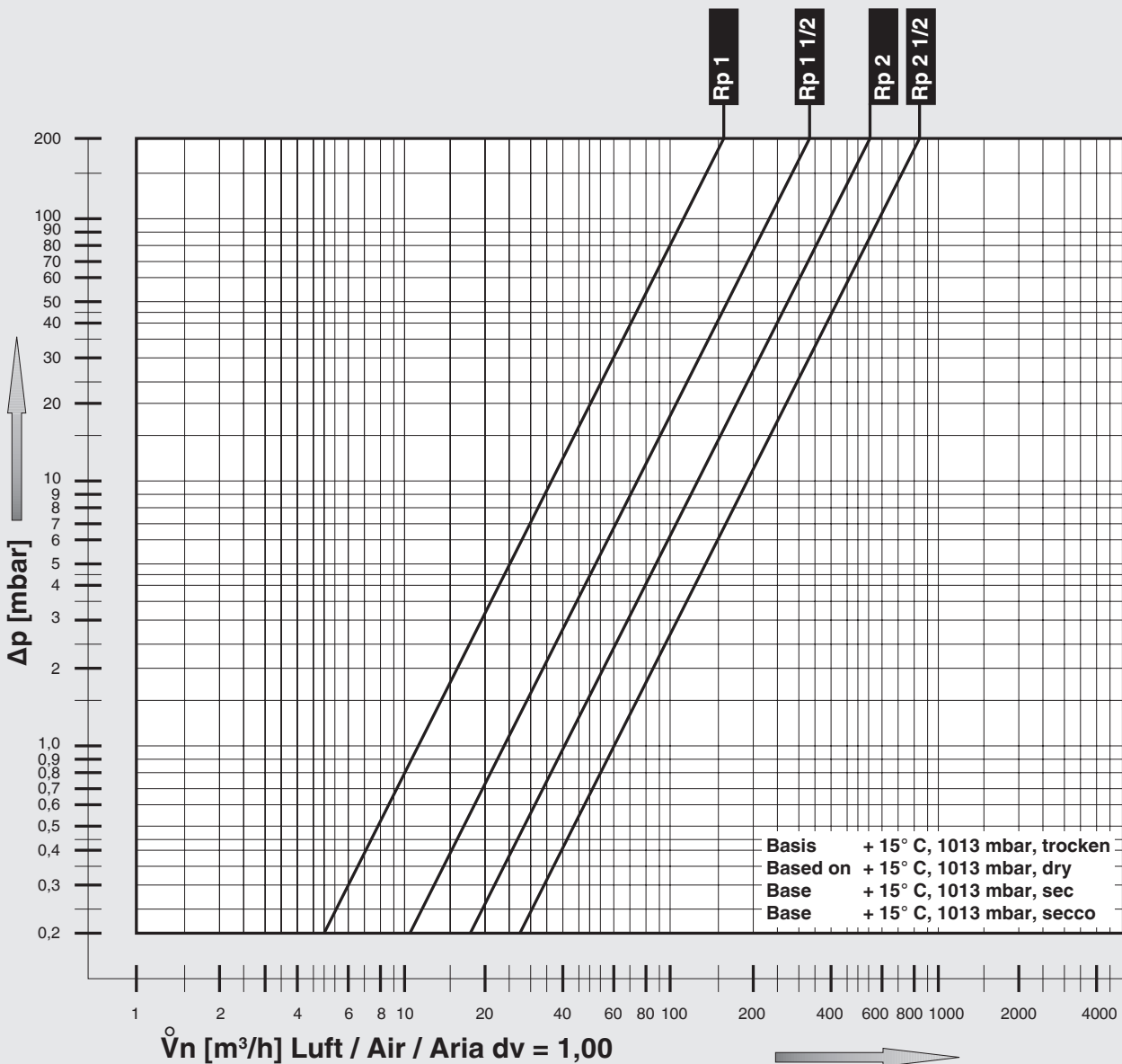
The electromagnetic drive opens 3 ... 4 against the force of the closing spring 3.

The stroke of armature 4 can be limited by the setting screw 7.

If the auxiliary power is interrupted (operating voltage), closing spring 3 closes the valve within 1 second.

The closed position of the valve can be monitored by a mountable closed position signal contact.

Flow diagram



We reserve the right to make any changes in the interest of technical progress.

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