

• Precision differential pressure switch

- Monitoring of air, flue gas and other non-aggressive gases
- High switching point stability
- Switching point selection via hand wheel
- Screw terminals or AMP plugs for electrical connections
- Flexible mounting options
- All connections accessible from one side
- EC type-tested and certified
- UL listed, FM, UR and AGA approved
- Certified pursuant to GOST-R







Application

Pressure switches for air DL..K can be used as positive pressure switches, vacuum sensors or differential pressure switches for air, flue gas and other non-aggressive gases. They monitor extremely low pressure differentials and trigger switch-on, switch-off or switchover operations if a set value is reached.

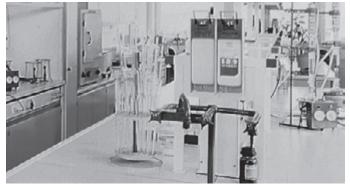
Fields of application include fan monitoring on calorific value boiler units or on atmos-

screws

pheric wall-mounted units with flue gas fan, fan monitoring and filter monitoring on intake and extract ventilation systems, on airconditioning systems, in laboratories and in kitchens and closed-loop control of butterfly valves for air and fire dampers for instance. The pneumatic and electrical connections are

accessible from the same side in order to ensure space-saving and easy-to-fit installation.

Examples of application



Fan monitoring in laboratories

Simple mounting



Simple front mounting.

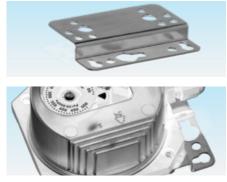
The securing clip S allows the pressure switch to be easily installed and removed. Only two holes in the mounting plate or air duct are

required for secure mounting. Securing clip S.

Mounting without the need for tools or

Rugged, locked mounting





The L-shaped or Z-shaped angle bracket offers diverse mounting options, even with only one screw, and fast installation and removal. The angle bracket increases the distance between the pressure switch and warm boiler walls. Fastening set





Mounting directly on the fan motor





The pressure switch can be installed in a space-saving manner using the motor flange adapter. It is not necessary to drill holes for mounting. Motor flange adapter.

Protection against pressure surges



The damping nozzle compensates for pressure fluctuations and pressure surges. A brief pressure surge occurs in the air supply line when igniting a burner, for example. Damping nozzle.

Clearer handling in complex installations





In order to facilitate reading for pressure switches with the same switching point setting, for example, a scale mark can be used. The scale mark can simply be plugged on and is available in different colours as a colour coordination set.

Tube set with diverse possible applications





Duct connection flanges and angle connectors connect the pressure switch and pressure test point with no kinks.







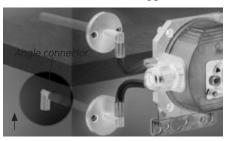




Either a red or a blue pilot lamp, or a redgreed LED (24 V/230 V) indicates the switching status of the pressure switch,



Using the extension, the pressure switch can be used on insulated and lagged ducts.



The angle connector reinforces the Δp signal if it is too low for the pressure switch adjusting range.

Technical data

Adjusting range, switching hysteresis

	Adjusting range			
Туре	Pa		"WC	
	min.	max.	min.	max.
DL 3,3 K	20	330	0.08	1.3
DL 3,5K	30	350	0.12	1.4
DL 4,5K	30	500	0.12	2.0
DL 5,1 K	100	510	0.4	2.0
DL 8K	50	800	0.2	3.2
DL 11K	100	1100	0.4	4.4
DL 16K	400	1600	1.6	6.4
DL 24K	200	2400	0.8	9.6
DL 40K	500	4000	2.0	16.0

Gas types: air or flue gas, no flammable gases, no aggressive gases.

Micro switch to EN 61058-1, switching capacity:

- DL..K: 24 V (min. 0.05 A) to 250 V AC (max. 5 A, with $\cos \phi$ 0.6 = 1 A)
- DL..KG: 12 V (min. 0.01 A) to 250 V AC (max. 5 A, with cos φ 0.6 = 1 A) 12 V (min. 0.01 A) up to 48 V DC (max. 1 A)
- DL..KT: 30–240 V AC; 50/60 Hz 5 A resistive or 0.5 A inductive (cos ϕ 0.6)
- DL..KTG: < 30 V AC/DC
 - 0.1 A resistive or

0.05 A inductive ($\cos \varphi$ 0.6)

If the DL..KG (DL..KTG) has switched a voltage > 24 V (> 30 V) and a current > 0.1 A at $\varphi = 1$ or > 0.05 A at $\varphi = 0.6$ once, the gold plating on the contacts will have been burnt through. It can then only be operated at this power rating or higher power rating. Contact gap < 3 mm (µ).

Line entrance: $M16 \times 1.5$,

Cable diameter: 4.5 to 10 mm.

DL..KT: 1/2" NPT conduit connection.

Enclosure to IEC 60529: IP 54.

Safety class II to VDE 0106-1.

Diaphragm:

tempered LSR diaphragm system.

Max. inlet pressure p_u or differential pressure: 5000 Pa (20.07 "WC).

Permitted ambient temperature in operation:

DL..K: -15 to +85°C (+5 to +185°F), DL..KT: -40 to +60°C (-40 to +140°F).

Storage and transport temperature: -40 to +85°C (-40 to +185°F).

Weight: 200 g (7.05 oz).

Type code

1700 0000	
Code	Description
DL	Air pressure switch
3,3 3,5 4,5 5,1 8 10 11 16 24 40	Adjusting range 20-330 Pa 30-350 Pa 30-500 Pa 100-510 Pa 50-800 Pa 100-1000 Pa 100-1100 Pa 400-1600 Pa 200-2400 Pa 500-4000 Pa
К	Tube connection and hand wheel for adjustment
Т	T-product
G	Gold contacts
-1 -3	AMP plug connection Electrical connection via screw terminals
K2 N T T2	Red/green pilot LED 24 V DC/AC Blue pilot lamp 120 V AC Blue pilot lamp 230 V AC Red/green pilot LED 230 V AC

Electrical connection



DL..K-1 for wiring with an AMP plugs



DL..K-3 for wiring with screw terminals

Detailed information on this product

www.docuthek.com→Elster Kromschröder Search term: DL..K Kind of document: Technical information

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