

neunovità
nouveau new

LGW...A2

• RoHS 2002/95/EG

Differential pressure switch for air, flue and exhaust gases

DUNGS®
Combustion Controls

LGW...A2, LGW...A2P
5.13



Technical description

The differential pressure switches LGW...A2, LGW...A2P are adjustable differential pressure switches as per EN 1854 for automatic burner controls. Suitable for switching a circuit on, off or over on changes in actual pressure value relative to the set reference value. The reference value (switching point) is adjusted on a setting wheel provided with a scale. On LGW...A2P: test button integrated in lower part as standard.

Application

Differential pressure monitoring in firing, ventilation and air-conditioning systems. Suitable for air, flue and exhaust gases and other non-aggressive gases as differential pressure switches; not suitable for industrial combustion gases.

Approvals

EC type test approval as per EC Gas Appliance Directive:

LGW A2, A2P CE-0085 AQ 0673

EC type test approval as per EC Pressure Equipment Directive:

LGW A2, A2P CE0036

TÜV (German Technical Inspectorate) test as pressure switch; special construction type as per TRD 604 and VdTÜV leaflet, Edition 100/1, as well as Class "S" as per EN 1854.

Special designs for the North American market with UL, FM and CSA registrations.

Approvals in other important gas-consuming countries.

Specifications

Max. operating pressure	LGW 3 A2 - LGW 150 A2 LGW 3 A2P - LGW 150 A2P	500 mbar (50 kPa) 500 mbar (50 kPa)
Ranges	0.4 - 3 mbar 1 - 10mbar 2.5 - 50 mbar 30 - 150mbar	
Pressure connection	LGW A2: 4.6 mm dia. hosegland LGW A2P: G 1/4 tapered female thread for higher pressure on centre of housing underside, including test button and on the side 4.6 dia. test point; G 1/8 female thread for lower pressure	
Temperature range	Ambient temperature -15 °C to +70 °C Medium temperature -15 °C to +70 °C Storage temperature -30 °C to +85 °C	
Materials	Housing: polycarbonate Switch: polycarbonate Diaphragms: NBR Switching contact: standard: Ag optional: Ag gold-plated (AU); suitable for DDC applications: 24 V DC; 0.01 A	
Switching voltage	Ag contact: AC eff. min. 24 V max. 250V DC min. 24 V max. 48 V Au contact: DC min. 5 V max. 24 V	
Nominal current	Ag contact: AC eff. 10 A Au contact: DC 20 mA	
Switching current	Ag contact: AC eff. max. 6 A at cos φ 1 AC eff. max. 3 A at cos φ 0.6 AC eff. min. 20 mA DC min. 20 mA DC max. 1 A Au contact: DC min. 5 mA max. 20 mA	
Electrical connection	Standard: At screw terminals via M20x1.5 cable entry Special design: Plug connection for line sockets as per DIN EN 175 301-803, 3-pin	
Degree of protection	IP 54 as per IEC 529 (EN 60529), protection insulated	
Adjustment	Optionally adjustment for rising or falling pressure possible on site	
Setting tolerance	±15% switching point deviation referred to reference value, adjusted as pressure rises, vertical diaphragm position	

Installation position

Standard installation position with **vertically** upright diaphragm. When installed **horizontally**, the pressure switch switches at a pressure higher by approx. 0.5 mbar

When installed **horizontally overhead**, the pressure switch switches at a pressure lower by approx. 0.5 mbar

When installed in an **intermediate installation position**, the pressure switch switches at pressure deviating from the set reference value by max. ± 0.5 mbar.

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LGW...A2, LGW...A2P



Technical data

1mbar = 100 Pa = 0.1 kPa ≈ 10 mm WS

1 Pa = 0.01 mbar ≈ 0.1 mm WS

Type	Version [Ag-M-V9]	Order No.	Setting range [mbar]	Switching difference Δp [mbar]
LGW A2 Differential pressure switch	LGW 3 A2	107 409	0.4 - 3	≤ 0.3
	LGW 10 A2	107 417	1 - 10	≤ 0.5
	LGW 50 A2	107 425	2.5 - 50	≤ 1
	LGW 150 A2	107 433	30 - 150	≤ 3
	LGW 3 A2P	120 204	0.4 - 3	≤ 0.3
	LGW 10 A2P	120 212	1 - 10	≤ 0.5
	LGW 50 A2P	221 207	2.5 - 50	≤ 1
	LGW 150 A2P	120 238	30 - 150	≤ 3

Accessories for

LGW...A2, LGW...A2P pressure switches

Kit: G3 equipment plug, 3-pin without ground	231 770
Line socket, 3-pin + E, grey GDMW	210 318
KlimaSet accessories KS A2	214 828
G 1/8 screw-in gland	230 278
G 1/4 screw-in gland	230 279
Additional test button, complete PT 4	224 940
Attachment plate	230 301
Mounting kit glow lamp 230 V yellow	231 773
Mounting kit glow lamp 120 V yellow	231 772
Mounting kit display-LED 24 V yellow	231 774
Mounting kit glow lamp 230 V green	248 239
Mounting kit display-LED 24 V green	248 240

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