

# Program

**DUNGS**<sup>®</sup>  
Combustion Controls

5.0

Pressure switches

Pressure limiters

Differential pressure switches

for

Gas and air

Flue gas and waste gas

Klima-Set

ATEX

Special gas, Biogas



# Product line overview

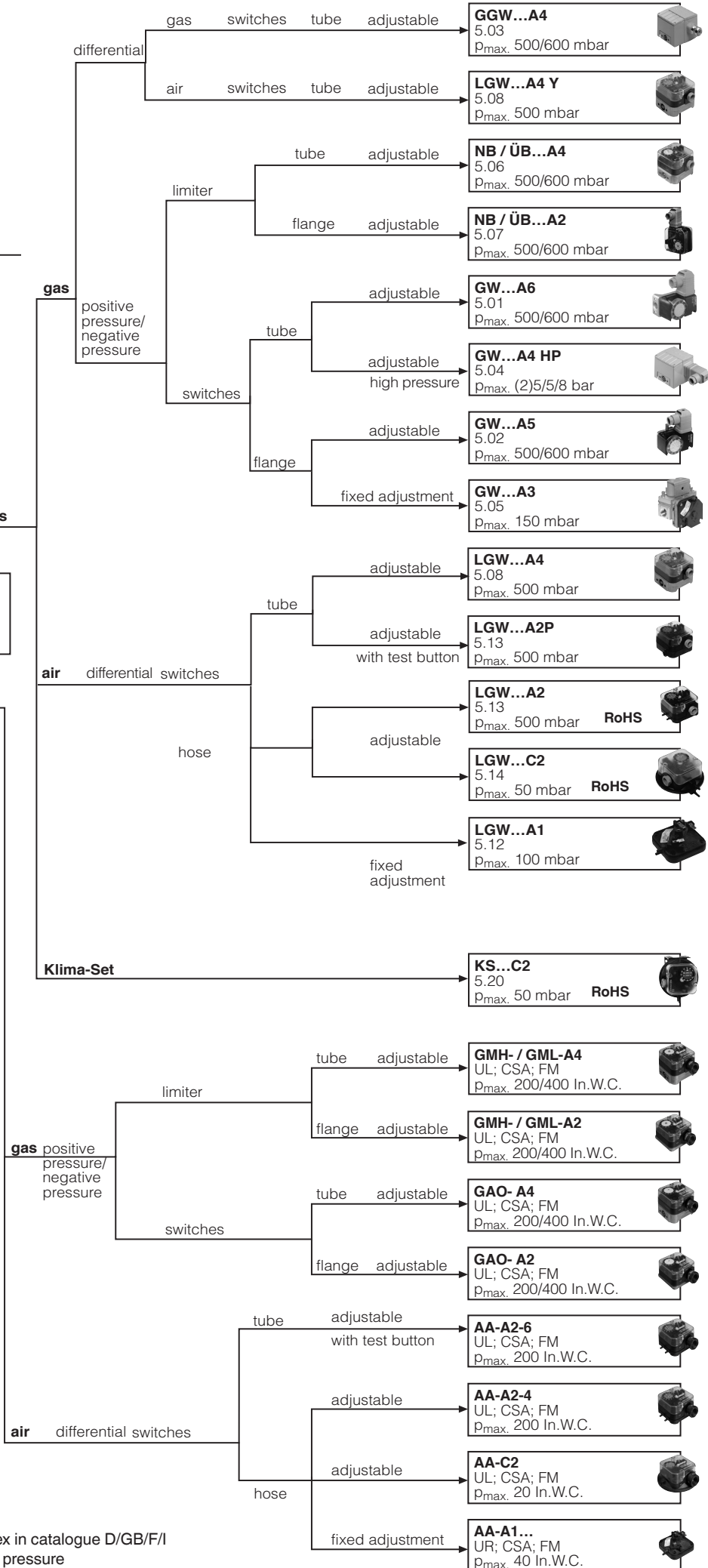
**Biogas, Special gas**  
see data sheet  
256 383 (D)  
256 882 (GB)

CE-Approvals

## Pressure switches

UL-/UR-Approvals

**ATEX II 3 GD EEx nC IIB T 75 °C**  
-15 °C ≤ Ta ≤ 70 °C  
see data sheet  
253 566 (D)  
253 567 (GB)



Type  
**GGW...A4**  
 5.03 — Datasheet-Index in catalogue D/GB/F/I  
 p<sub>max</sub>. 500 — Max. operating pressure

## Setting range and switching difference CE-Approvals

Designation	Setting range [mbar]	switching difference [mbar]								
		LGW-A1	LGW-A2 LGW-A2P	LGW-A4 LGW-A4Y	LGW-C2 KS-C2	GW-A6 GW-A5	GGW-A4	GW-A3	NB/ÜB-A2 NB/ÜB-A4	GW-A4HP
1,5	0,3 - 1,5	0,20			0,18					
3	0,4 - 3	0,35	0,30	0,30	0,20		0,30			
3	0,7 - 3					0,70				
5	0,3 - 5,0				0,25					
6	0,7 - 6,0				0,30					
10	1,0 - 10	0,50	0,50	0,50	0,40		0,50	1,00		
10	2,0 - 10					1,00				
30	3,0 - 30		0,80		0,80					
50	2,5 - 50	1,0	1,00	1,00			1,00	2,50	•	
50	5,0 - 50					2,50				
100	20 - 100							8,00		
150	5 - 150					5,00				
150	30 - 150		3,00	3,00			3,00		•	
500	100 - 500					15,00			•	≤ 30
2000	400 - 2000									≤ 100
6000	1000 - 6000									≤ 300

## Setting range and switching difference UL-/UR-Approvals

Designation	Setting range [In.W.C]	switching difference [In.W.C]						
		GAO-A4	GMH-A4 GML-A4	GAO-A2	GMH-A2 GML-A2	AA-A2-4 AA-A2-6	AA-C2	AA-A1
-1	0,08 - 0,60						0,18	
-2	0,16 - 1,20	0,12		0,12		0,12	0,12	0,14
-3	0,40 - 4,00	0,20		0,20		0,20	0,16	0,20
-4	1,00 - 20,0		•		•			0,40
-5	2,00 - 20,0	0,40		0,40		0,40		
-6	12,0 - 60,0	1,20	•	1,20	•	1,20		
-8	40,0 - 200,0	4,00	•	4,00	•			

### Brief technical data

### Pressure switch for gas and air

### Differential pressure switch for air

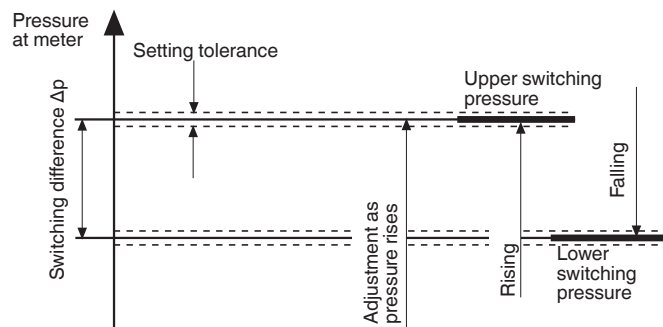
<b>Max. operating pressures</b>	Refer to product line overview	Refer to product line overview
<b>Temperature ranges (minimum values)</b>	Ambient temperature, Medium temperature (min.): -15 °C to +70 °C <b>Important: Make sure that no condensate can enter into the pressure switch. Icing may occur at temperatures below zero and may lead to a malfunction or failure of the equipment.</b>	Ambient temperature, Medium temperature (min.): -15 °C to +70 °C
<b>Materials</b>	Gas-conveying housing: aluminium die casting Diaphragms: NBR basis/Viton/Stainless steel Protective hood: polycarbonate, for .../2 design hood made of die-cast aluminium Switching contacts: silver Special design: gold-plated silver	Housing: polycarbonate Diaphragms: NBR Switching contacts: silver or gold-plated silver
<b>Electrical connection</b>	At terminal screws via M20 x 1,5 cable gland, for 7 mm dia. to 12.5 mm dia. cables or plug connection with angle connector as per DIN EN 175 301-803, 3-pin and protective contact.	At terminal screws via M20 x 1,5 cable gland, for 7 mm dia. to 12.5 mm dia. cables or PG 9 For LGW...A1 and LGW...C3, flat-type connector for 6.3 mm plug-in sleeves as per DIN 46 244 or plug connection with angle connector as per DIN EN 175 301-803, 3-pin and protective contact.
<b>Degree of protection</b>	Standard IP 54 (Option IP 65)	IP 00 - IP 54

Conversion table for pressure units

Unit	Name	Pa	bar	mbar	µbar	N/mm <sup>2</sup>	lbf/in <sup>2</sup>
1Pa = 1 N/m <sup>2</sup>	Pascal	1	10 <sup>-5</sup>	0,01	10	10 <sup>-6</sup>	0,00014
1 bar	Bar	10 <sup>5</sup>	1	1000	10 <sup>6</sup>	0,1	14,5037
1 mbar	Millibar	100	10 <sup>-3</sup>	1	1000	10 <sup>-4</sup>	0,0145
1µbar	Microbar	0,1	10 <sup>-6</sup>	10 <sup>-3</sup>	1	10 <sup>-7</sup>	0,000014
1 N/mm <sup>2</sup>	Newton per mm <sup>2</sup>	10 <sup>6</sup>	10	10 <sup>4</sup>	10 <sup>7</sup>	1	145,03
1lbf/in <sup>2</sup> (psi)	pound per square inch	6894,76	0,06895	68,95	68948	0,00689	1

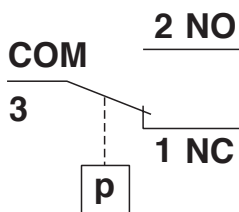
**Definition of switching difference Δp**

The switching difference Δp is the pressure difference between the upper and lower switching pressure.



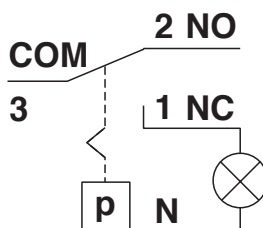
**GW, LGW switching function**

**As pressure rises:**  
1 NC opens, 2 NO closes.  
**As pressure falls:**  
1 NC closes, 2 NO opens



**NB switching function**

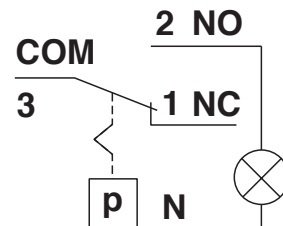
**As pressure falls:**  
2 NO opens, 1 NC closes.  
Glowlamp on, locked.



Operating state

**ÜB switching function**

**As pressure rises:**  
1 NC opens, 2 NO closes.  
Glowlamp on, locked.



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

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