

# Program

**DUNGS®**  
Combustion Controls

**5.0**

**Pressure switches**

**Pressure limiters**

**Differential pressure switches**

**for**

**Gas and air**

**Flue gas and waste gas**

**Klima-Set**

**ATEX**



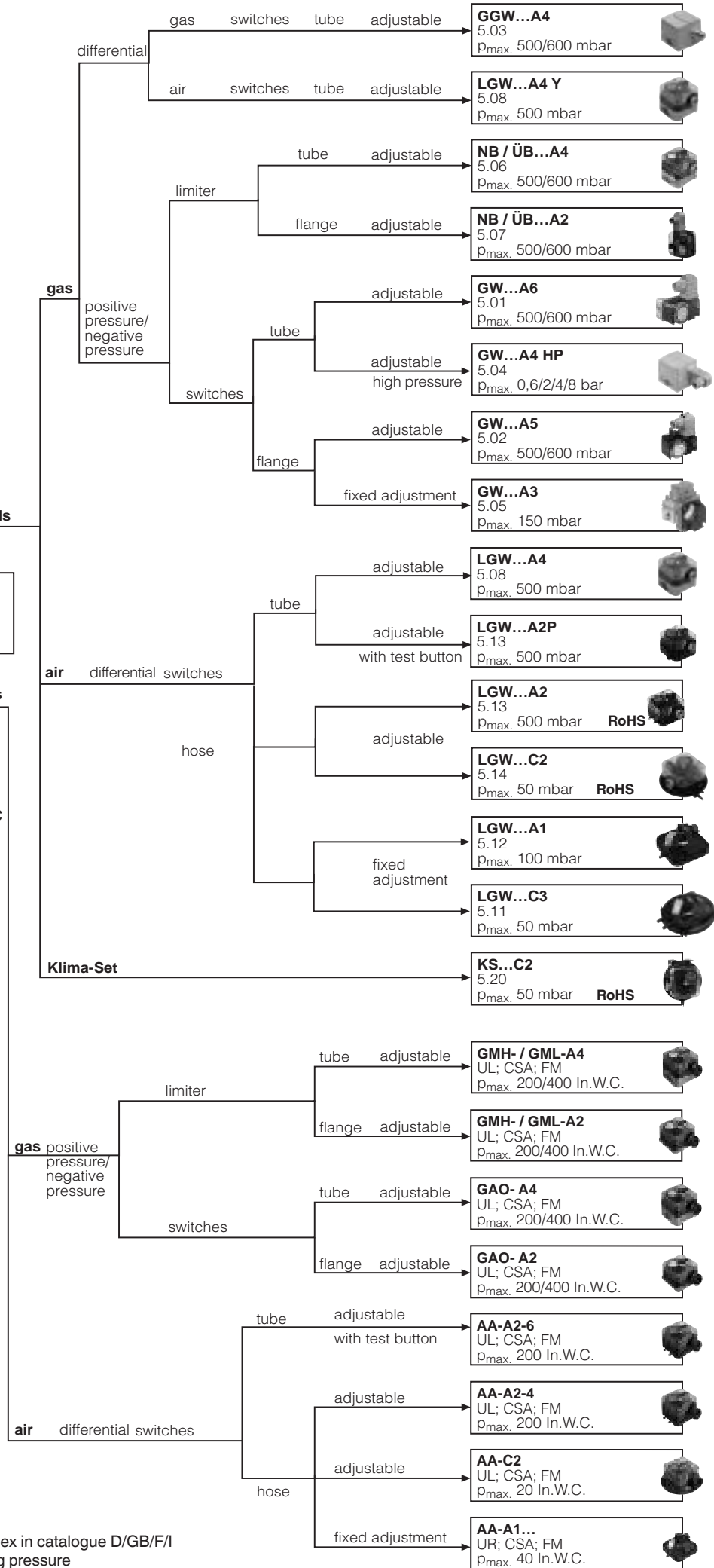
# Product line overview

**Pressure switches**

CE-Approvals

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 p<sub>max.</sub> 500

— Datashheet-Index in catalogue D/GB/F/I

— 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	LGW-C3	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	0,07 - 0,30					
3	0,4 - 3	0,35	0,30	0,30	0,20	0,12 - 0,40		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	0,20 - 0,60		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		•	
2000	400 - 2000									10/30	
6000	1000 - 6000									50	
										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

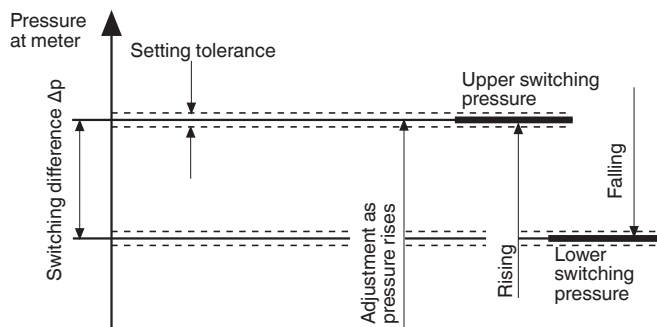
<b>Max. operating pressures</b>	Refer to product line overview	Refer to product line overview
<b>Temperature ranges (minimum values)</b>	Ambient temperature, Medium temperature (min.): -15 °C to +70 °C <b>Important: Make sure that no condensate can enter into the pressure switch. Icing may occur at temperatures 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 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>
1 Pa = 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
1 μbar	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
1 lbf/in <sup>2</sup> (psi)	pound per square inch	6894,76	0,06895	68,95	68948	0,00689	1

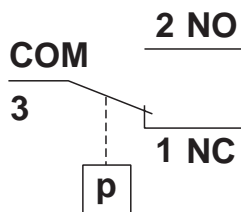
**Definition of switching difference Δp**

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



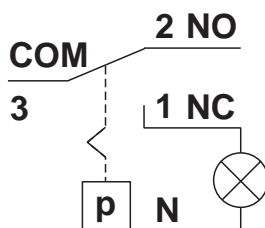
**GW switching function**

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



**NB switching function**

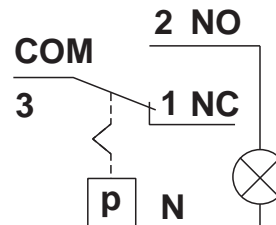
**As pressure falls:**  
2 NO opens, 1 NC closes.  
Glowlamp on, locked.



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.

**Head Offices and Factory**  
Karl Dungs GmbH & Co. KG  
Siemensstraße 6-10  
D-73660 Urbach, Germany  
Telefon +49 (0)7181-804-0  
Telefax +49 (0)7181-804-166

**Postal address**  
Karl Dungs GmbH & Co. KG  
Postfach 12 29  
D-73602 Schorndorf, Germany  
e-mail info@dungs.com  
Internet www.dungs.com