

DGW 4.

# DGW 4. Digital Multi-Channel DGW 6. Limit Switch

**Features:**

*universal sensor inputs I, U, Pt 100,  
0...100V, 0...50 mV*

*thermocouples*

*serial programming connection*

*integrated feeding of measuring  
transducer*

*scalable analog output*

*4 or 6 relays with alternating  
contacts*

*display and operation for para-  
meterization on site*

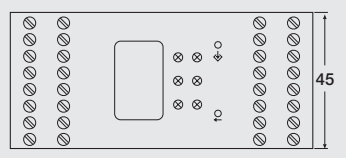
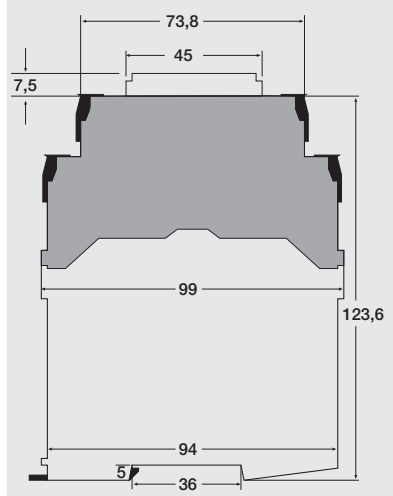
*flexible limit value monitoring  
and signal transformation*



## Digital Multi-Channel Limit Switch

The DGW 4.   G is used for the control of limiting values of different standard inputs. An integrated two-lined and eight-digit display enables the parameterization and the indication of the actual measured value. The switching points and, if necessary, more parameters are integrated by the 2 multifunctional keys on front side; optionally adjustable via serial interface.

Up to two analog input signals can be connected potentially separated. The device is available with up to 6 relay- or transistor outputs whereby up to 12 limiting values are able to define. The adjustment of rise and fall times as well as free scaling of the 2 x eight-digit actual value indication is possible. The conditions of the relay are signalled by LED.





**Inputs:**

Impressed direct current: 0(4)...20 mA  
 Input resistance: 10Ω  
 or voltage (optional): 0(2)...10V  
 Input 17, 18: 0...100 mV, ...2,1 V DC  
 Input 25, 27: 0...5 V, ...100V  
 Input resistance: 1 MΩ  
 Resistance: Pt 100  
 Temperature error: < 30 ppm/°C  
 Thermocouples type J, K, L, S, T, U, B, C, D, E, N, R  
 Linearity: 01, %  
 change up to 18 bit

**Outputs:**

Contact: 4 alternating contacts/2NO contacts  
 Max. switching current: 8 A (ohmic load)  
 Max. switching voltage: 250V AC  
 Contact lifetime: 10<sup>5</sup> cycles 8 A/230V AC (ohmic load)  
 Mechanical lifetime: 30 x 10<sup>6</sup> cycles  
 Transistor outputs: up to 6  
 -optional- max. 50 V, max. 50 mA

**Auxiliary power:**

Low voltage power supply:  
 alternating current voltage: 230V (90...250V) AC/DC (50...60Hz)

**Mounting details:**

**Housing for top hat rail**  
 Type of protection: IP 40 housing/IP 10 clamps  
 Width: 45 mm  
 Rail-mounting fixed according to EN 50022-35 x 7,5mm  
 Weight : 330 gm

First voltage range power supply:  
 direct current voltage: 18...40V AC/DC  
 Power consumption: < 6 VA  
 Influence of auxiliary power: < 0,001 %  
 Other voltage on request

**Electromagnetic compatibility law**

Germany in accordance with  
 EMC Directive: 2004/18/EG\*  
 Low-Voltage Directive: 2006/95/EG

**Environmental conditions:**

Storage temperature: -40...+70°C  
 Operating temperature: 0...55°C  
 Isolation voltage: > 4kV auxiliary voltage – signal voltage  
 > 1 kV inputs-outputs  
 > 4kV contact outputs

**Ordering information:**

Type: DGW □.□□G (see table)  
 Input details: in clear text (e.g. 0...10V)  
 Auxiliary power: low voltage;  
 or first voltage range,  
 additional indication for order information DC

**Functions:**

Digital Multi-Channel Limit Switch DGW...	4.00				4.20			
function	description							
input measuring signal <b>input I</b>	input Pt 100 in 2-, 3-, 4-wire switching	X			X			
	input signal I (0...20 mA, 4...20 mA, 20...4 mA, 20...0 mA, range 0...50 mA)	X			X			
	input signal U (0...10V, 10...0V, 2...10V, 0...1V, range 0...100V)	X			X			
input measuring signal <b>input II</b>	input Pt 100 in 2-, 3-, 4-wire switching				X			
	input signal I (0...20 mA, 4...20 mA, 20...4 mA, 20...0 mA, range 0...50 mA)				X			
output for sensor feeding	integrated feeding of measuring transducer for supply of connected transmitter	X			X			
analog output scalable	output signal I (0...20 mA, 4...20 mA, 20...4 mA, 20...0 mA, range 0...20 mA)	X			X			
	output signal U (0...10V, 10...0V, 2...10V, 0...1V, range 0...10V)	X			X			
parameter interface	optional, in preparation							
calculation of	addition, subtraction, functions, logging of characteristics via support points				X			
controller function	PID				X			
display + operation for parameterization on site		X			X			
limiting value contacts	2 relays with alternating contacts 250 V AC, 8 A							
	4 limiting value contacts with relay 250 V AC, 8 A	X			X			
	transistor outputs				available			
<b>type: DGW 6...</b>	6 limiting value contacts with Relay 250 V AC, 8 A	<b>6.00</b>				<b>6.20</b>		

input details: in clear text (e.g. 0...10V)  
 auxiliary power: low voltage; or first voltage range, additional indication for order information DC

