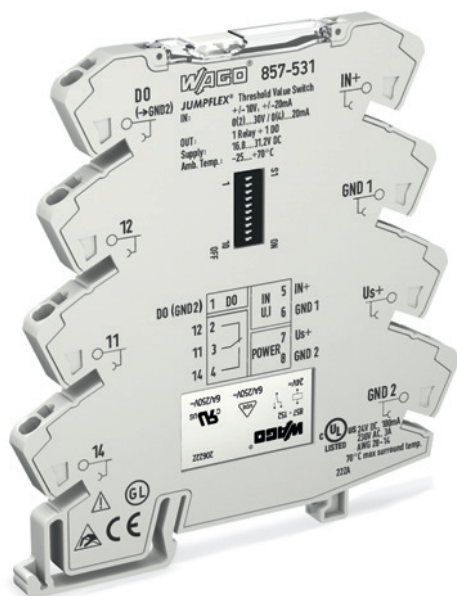
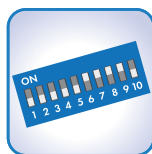


# JUMPFLEX® Signal Conditioners

Threshold Value Switch with Analog Input and Changeover Relay Output



Configuration via:



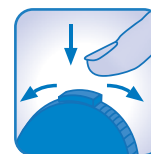
DIP switch



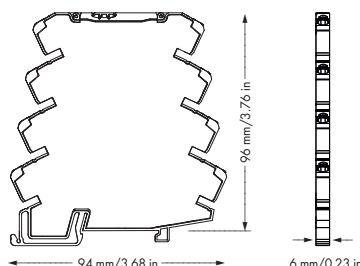
Interface configuration software



Interface configuration app



Push/Slide Switch



DO	1	DO	IN	5	IN+
12	2	U,I	6	GND 1	
11	3	POWER	7	Us+	
14	4		8	GND 2	

## Short description:

The threshold value switch for analog signals monitors analog standard signals and reports signals exceeding a preset threshold.

## Characteristics:

- PC configuration interface
- Digital switching output
- Changeover contact relay output
- Calibrated scale switching
- Threshold value configuration via DIP switches and teach-in function via push/slide switch
- Safe 3-way isolation with 2.5kV test voltage to EN 61140

## Technical Data

### Configuration:

Configuration	DIP switch, push/slide switch, interface configuration software, interface configuration app
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### Input:

Input signal	-10...+10V, -20...+20mA, 0...+30V *
Input resistance	≤ 200 Ω (I input) > 100 kΩ (U input)
Max. input signal	31.2 V (V <sub>IN</sub> ) 100 mA (I <sub>IN</sub> )

### Output:

#### Output - Relay

Contact type	1 changeover contact
Max. switching voltage	250 VAC
Max. continuous current (terminal blocks in a row)	max. 6 A (to 60 °C), 2 A (60 to 70 °C)
Max. Switching power (resistive)	1250 VA AC
Anzahl der Schaltschwellen	1 or 2 (adjustable) *
Configurable rise and fall delay time	0 ... 10 s (via DIP switch), 0 ... 30 s *

#### Output - Digital

Max. switching voltage	Supply voltage applied
Max. continuous current	500 mA (to 60 °C) 100 mA (60 to 70 °C)

### General specifications:

Response time	≤ 16ms
Nominal supply voltage V <sub>S</sub>	24 VDC
Supply voltage range	V <sub>S</sub> -30 % ... +30 %
Current consumption at 24 VDC	≤ 25 mA
Transmission error	≤ 0.1 % of upper range value
Temperature coefficient	≤ 0.01 %/K

## Description

**JUMPFLEX® Signal Conditioner, for DIN 35 rail**  
Threshold Value Switch with Analog Input,  
Changeover Relay Output and Digital Output

Item No.

857-531

Pack. Unit

1

## Technical Data

### Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C

### Safety and protection:

Test voltage (input/output/supply)	2.5 kV AC, 50 Hz, 1 min
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### Connection and type of mounting:

Wire connection	Push-in CAGE CLAMP®
Cross sections	solid: 0.08 mm² ... 2.5 mm² / AWG 28 ... 14 fine-stranded: 0.34 mm² ... 2.5 mm² / AWG 22 ... 14
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in

### Dimensions and weight:

Dimensions (mm) W x H x L	6 x 96 x 94
Weight	Height from upper-edge of DIN 35 rail 49 g

### Standards and approvals:

Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
Shipbuilding	GL, PRS, NKK, DNV, BV
EMC immunity of interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

### Accessories

see pages 226 ... 236

( \* Additional setting options via PC configuration software or smartphone app)

## DIP Switch Adjustability

● = ON

857-531

DIP Switch S1

Input signal limits $\pm 0.25 \text{ V}; \pm 0.5 \text{ mA}$				Hysteresis	
1	2	3	4	5	
					$\pm 10 \text{ V}$
●				●	5 mV; 10 $\mu\text{A}$
	●				10 mV; 20 $\mu\text{A}$
		●			
			●		
●	●				
		●	●		
			●		
	●	●			
	●	●	●		
●					
●	●				
●		●			
●	●	●			
●			●		
●	●		●		

DIP Switch S1

Configurable rise/fall delay time in sec.			Digital output DO Signaling	
6	7	8	9	10
●				
	●		●	
●	●		●	●
		●		
●				
	●	●		
●	●	●		
●	●	●		

### Default Settings

All DIP switches are in „OFF“ position for delivery.

#### Input

Input range  $\pm 10 \text{ V}$

Hysteresis 5 mV

#### Output

Configurable rise/fall delay time 0 s

Digital output DO not active

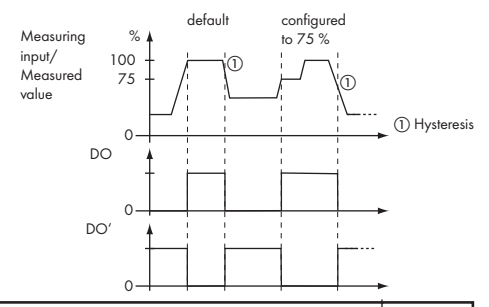
### Push/Slide Switch Operation



### Digital Output DO/Signaling

The digital output (DO) signals error messages and can be configured as follows: 24 V  $\rightarrow$  0 V/0 V  $\rightarrow$  24 V.

### Switching Behavior, Digital Output (DO)



Switching Behavior	Configuration						
	Number of Switching Thresholds	Values for Switching T thresholds	Switching Threshold 1, Relay	Switching Threshold 2, Relay	Press for 1 sec.	Yellow LED flashes	Red LED flashes briefly
1 	1	S1	„On“	–			
2 	1	S1	„Off“	–			
3 	2	S1 < S2	„On“	„Off“			
4 	2	S1 < S2	„Off“	„On“			
5 	2	S1 > S2	„On“	„Off“			
6 	2	S1 > S2	„Off“	„On“			
Leave param. mode without storing a value	–	–	–	–			