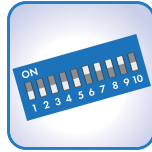


Configuration via:



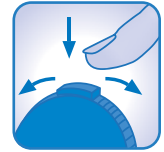
DIP Switches



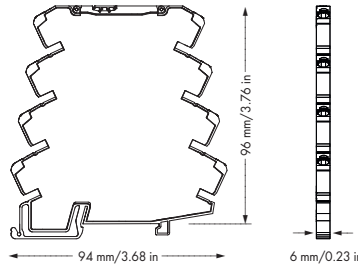
PC Configuration Software



Smartphone App



Push/Slide Switch



DO	1	DO	IN	5	IN+
	2		U,I	6	GND 1
	3		POWER	7	Us+
	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 switches, push/slide switch, PC configuration software, smartphone app
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 (U _{IN}), 100 mA (I _{IN}))
Output:	
Output - Relay	
Contact type	1 changeover contact
Max. switching voltage	250 V AC
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
Voltage supply V _s	24 V DC
Supply voltage range	16.8 V ... 31.2 V
Current consumption at 24 V DC	≤ 25 mA
Transmission error	≤ 0.1 % of upper range value
Temperature coefficient	≤ 0.01 %/K

Description	Item No.	Pack. Unit
JUMPFLEX® transducers, for DIN 35 rail	857-531	1
Threshold value switch with analog input, changeover relay output and digital output		
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	
Connection and type of mounting:		
Wire connection	CAGE CLAMP® S	
Cross sections	solid: 0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14 fine-stranded: 0.34 mm ² ... 2.5 mm ² / AWG 22 ... 14	
Strip lengths	9 ... 10 mm / 0.37 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	(pending)	
Shipbuilding	Ⓢ	
Accessories	see pages 268 ... 271	
(* Additional setting options via PC configuration software or smartphone app)		

DIP Switch Adjustability

● = ON

857-531

DIP Switch S1

Input signal limits ± 0.25 V; ± 0.5 mA				Hysteresis	
1	2	3	4	5	
					±10 V
●				●	5 mV; 10 μA
	●				10 mV; 20 μA
		●			2 ... 10 V
●	●				0 ... 5 V
			●		1 ... 5 V
●			●		± 5 V
		●	●		0 ... 15 V
●	●	●			0 ... 30 V
●					± 20 mA
●	●				0 ... 20 mA
●		●			4 ... 20 mA
●	●	●			0 ... 10 mA
●			●		2 ... 10 mA
●	●		●		± 10 mA

DIP Switch S1

Configurable rise/fall delay time in sec.			Digital output DO Signaling	
6	7	8	9	10
				DO not active
●			●	GND → U _N (switching)
	●		●	U _N → GND (switching)
●	●			
		●		
●		●		
	●	●		
●	●	●		

Default Settings

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

Input

Input range ± 10 V

Hysteresis 5 mV

Output

Configurable rise/fall delay time 0 s

Digital output DO not active

Push/Slide Switch Operation

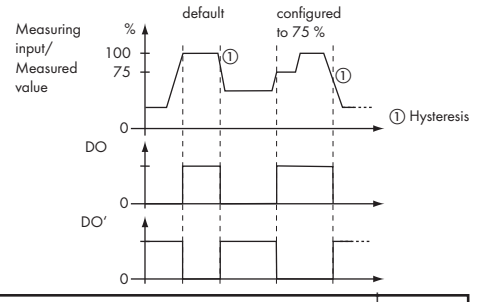


Digital Output DO/Signaling

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

In order to increase the switching current of the DO, the latter may be expanded by a relay. Thanks to the contour uniformity of Series 857, for example, a 857-304 Relay can be snapped in next to it. This output can be quickly and easily expanded to a switching current of 6A by simply using an adjacent jumper (859-402).

Switching Behavior, Digital Output (DO)



Switching Behavior	Configuration				Press for 1 sec.	Yellow LED flashes	Red LED flashes briefly	No flashing LED
	Number of Switching Thresholds	Values for Switching Thresholds	Switching Threshold 1, Relay	Switching Threshold 2, Relay				
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	-	-	-	-				