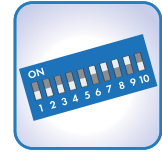
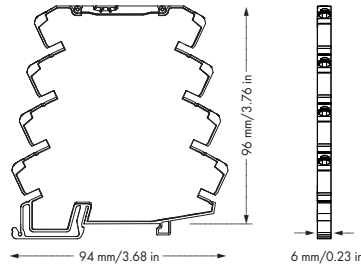




Configuration via:



DIP Switches



U+	1	IN U; I	OUT	5	OUT+
U-	2		U; I	6	OUT-
I+	3	POWER	7	8	Us+
I-	4				GND

Short description:

The 857-409 Bipolar Isolation Amplifier converts unipolar and bipolar standard signals and amplifies, filters and electrically isolates analog standard signals.

Characteristics:

- Overload protection of current input using reversible fuse
- Zero/span adjustment across the entire measuring range
- Calibrated scale switching
- Standard analog unipolar and bipolar signals, input/output
- Switchable max. operating frequency
- Clipping capability allows analog standard signal limitation to upper range values.
- Safe 3-way isolation with 2.5kV test voltage to EN 61140

Technical Data

Configuration:	
Configuration	DIP switches
Input:	
Input signal	Voltage: ± 5V, 0 - 5V, 1 - 5V, ± 10V, 0 - 10V, 2 - 10V Current: ± 10mA, 0 - 10mA, 2 - 10mA, ± 20mA, 0 - 20mA, 4 - 20mA
Input resistance	approx. 1MΩ (U input) approx. 50Ω (I input)
Output:	
Output signal	Voltage: ± 5V, 0 - 5V, 1 - 5V, ± 10V, 0 - 10V, 2 - 10V, Current: ± 10mA, 0 - 10mA, 2 - 10mA, ± 20mA, 0 - 20mA, 4 - 20mA
Load impedance	≤ 600 Ω (I output) ≥ 2 kΩ (U output)
Overload capacity	32 V / 50 mA
Residual ripple	< 10mV eff
General specifications:	
Voltage supply V _s	24V DC
Supply voltage range	16.8 V ... 31.2 V
Current consumption at 24 V DC	≤ 25 mA
Max. operating frequency	100 Hz / > 5 kHz (switchable via DIP switch)
Response time (T _{10,90})	< 3.5ms / < 60μs
Transmission error	≤ 0.1 % of upper range value
Temperature coefficient	≤ 0.01% /K
Zero/span adjustment	± 5 % of upper range value (adjustable via zero/span potentiometer)

Description	Item No.	Pack. Unit
JUMPFLEX® transducers, for DIN 35 rail Bipolar isolation amplifier	857-409	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	
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	
	Height from upper-edge of DIN 35 rail	
Weight	42 g	
Standards and approvals:		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	(pending)	
Shipbuilding	Ⓢ	
Accessories	see pages 268 ... 271	

DIP Switch Adjustability

● = ON

857-409

Dip Switch S1 (4-fold)

Dip Switch S2 (6-fold)

Input Signal				Output Signal					Max. Operating Frequency		
1	2	3	4	1	2	3	4	5	6		
●							●		●	± 20 mA	100 Hz
●	●					●	●			± 10 mA	> 5 kHz
●				●	●		●			± 10 V	
●	●			●	●	●	●			± 5 V	
										0 ... 20 mA	
		●						●		4 ... 20 mA	
	●					●				0 ... 10 mA	
	●	●				●	●			2 ... 10 mA	
				●	●					0 ... 10 V	
		●		●	●			●		2 ... 10 V	
	●			●	●	●				0 ... 5 V	
	●	●		●	●	●		●		1 ... 5 V	

Default Settings

Input	± 10 V
Output	± 10 V
Max. Operating Frequency	> 5 kHz