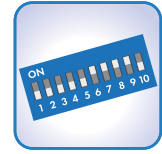


JUMPFLEX® Transducers

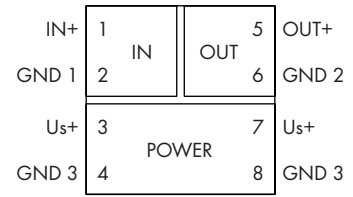
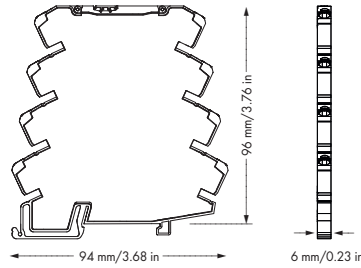
Isolation amplifier, with zero/span adjustment



Configuration via:



DIP Switches



Short description:

The configurable 857-400 Isolation Amplifier is used to convert, amplify, filter and electrically isolate analog standard signals.

Characteristics:

- Zero/span adjustment across the entire measuring range
- Calibrated scale switching
- Switchable max. operating frequency
- Safe 3-way isolation with 2.5kV test voltage to EN 61140

Description	Item No.	Pack. Unit
JUMPFLEX® transducers, for DIN 35 rail	857-400	1
Isolation amplifier, with zero/span adjustment		

Technical Data	
Configuration:	
Configuration	DIP switches
Input:	
Input signal	0 ... 20 mA, 4 ... 20 mA, 0... 5 V, 0 ... 10 V, 2 ... 10 V, 1 ... 5 V (calibrated switchable)
Input resistance	≤ 50 Ω (In = mA) ≥ 100 kΩ (In = V)
Output:	
Output signal	0 ... 20 mA, 4 ... 20 mA, 0... 5 V, 0 ... 10 V, 2 ... 10 V, 1 ... 5 V (calibrated switchable)
Load impedance	600 Ω (Out = mA) 2 kΩ (Out = V)
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 ($T_{10/90}$)	< 3.5 ms / < 100 μs
Transmission error	≤ 0.1 % of the full scale value
Temperature coefficient	≤ 0.01 % /K
Zero/span adjustment	± 3% of upper range value

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 mm² ... 2.5 mm² / AWG 28 ... 14 fine-stranded: 0.34 mm² ... 2.5 mm² / 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 36.8 g
Standards and approvals:	
Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
Shipbuilding	
Accessories	see pages 268 ... 271

DIP Switch Adjustability

● = ON

857-400

Dip Switch S1 (2-fold)

Dip Switch S2 (6-fold)

Input Signal		Output Signal					Max. Operating Frequency	
1	2	1	2	3	4	5	6	
●	0 ... 20 mA							0 ... 20 mA
					●			4 ... 20 mA
		●	●					0 ... 10 V
		●	●		●			2 ... 10 V
		●	●	●				0 ... 5 V
		●	●	●	●			1 ... 5 V
●	4 ... 20 mA					●		0 ... 20 mA
								4 ... 20 mA
		●	●				●	0 ... 10 V
		●	●					2 ... 10 V
		●	●	●			●	0 ... 5 V
		●	●	●				1 ... 5 V
●	0 ... 10 V					●		0 ... 20 mA
								4 ... 20 mA
		●	●					0 ... 10 V
		●	●		●			2 ... 10 V
		●	●	●				0 ... 5 V
		●	●	●	●			1 ... 5 V
●	2 ... 10 V					●		0 ... 20 mA
								4 ... 20 mA
		●	●				●	0 ... 10 V
		●	●					2 ... 10 V
		●	●	●			●	0 ... 5 V
		●	●	●				1 ... 5 V
	0 ... 5 V					●		0 ... 20 mA
								4 ... 20 mA
		●	●					0 ... 10 V
		●	●		●			2 ... 10 V
		●	●	●				0 ... 5 V
		●	●	●	●			1 ... 5 V
	1 ... 5 V					●		0 ... 20 mA
								4 ... 20 mA
		●	●				●	0 ... 10 V
		●	●					2 ... 10 V
		●	●	●			●	0 ... 5 V
		●	●	●				1 ... 5 V

Default Settings

Input	0 ... 20 mA
Output	0 ... 20 mA
Max. Operating Frequency	100 Hz