

JUMPFLEX® Signal Conditioners

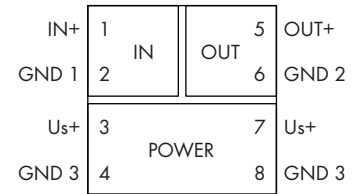
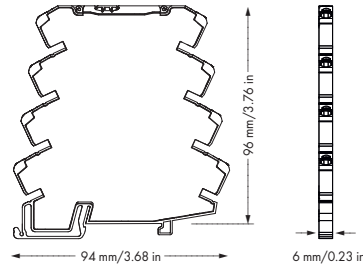
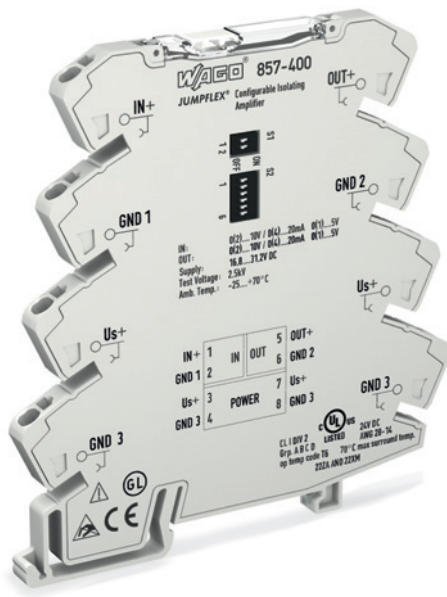
Isolation Amplifier, with Zero/Span Adjustment



Configuration via:



DIP switch



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

Technical Data

Configuration:

Configuration DIP switch

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 $\leq 50 \Omega$ (In = mA)
 $\geq 100 \text{ k}\Omega$ (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 k Ω (Out = V)

General specifications:

Nominal supply voltage V_s 24 VDC
Supply voltage range V_s -30 % ... +30 %
Current consumption at 24 VDC $\leq 25 \text{ mA}$
Max. operating frequency 100 Hz / 5 kHz
(switchable via DIP switch)

Response time ($T_{10/90}$) $< 3.5 \text{ ms} / < 100 \mu\text{s}$
Transmission error $\leq 0.1 \%$ of the full scale value
Temperature coefficient $\leq 0.01 \%$ /K
Zero/span adjustment $\pm 3 \%$ of upper range value

Description

JUMPFLEX® Signal Conditioner, for DIN 35 rail
Isolation Amplifier, with Zero/Span Adjustment

Item No.

857-400

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

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
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 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

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	5 kHz