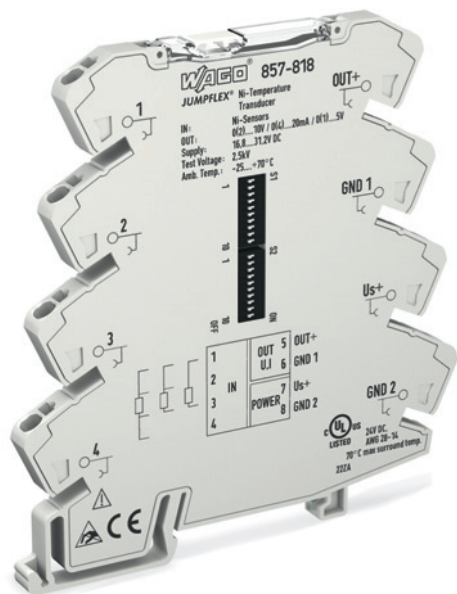
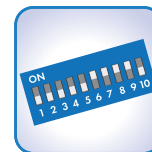


JUMPFLEX® Signal Conditioners

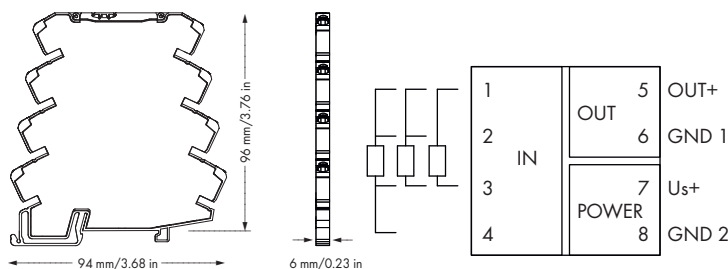
Ni Signal Conditioner for Ni 100, Ni 120, Ni 200, Ni 500, Ni 1000



Configuration via:



DIP switch



Short description:

The 857-818 Ni Signal Conditioner (Ni = nickel) records signals from Ni sensors featuring all standard characteristics. On the output side, the NI temperature signal conditioner converts the temperature signal into a standard analog signal.

Characteristics:

- For Ni100, Ni120, Ni200, Ni500 and Ni1000 sensors
- Calibrated scale switching
- Clipping capability allows analog standard signal limitation to upper range values
- Safe 3-way isolation with 2.5 kV test voltage to EN 61140

Technical Data

Configuration:

Configuration	DIP switch
Input:	
Input signal	Ni sensors
Max. input signal	± 31.2 VDC
Sensor types	Ni 100, Ni 120, Ni 200, Ni 500, Ni 1000
Sensor connection	2-wire, 3-wire, 4-wire (switchable)
Output:	
Output signal	0 ... 10 mA, 2 ... 10 mA, 0 ... 20 mA, 4 ... 20 mA, 0... 5 V, 1 ... 5 V, 0 ... 10 V, 2 ... 10 V
Load impedance	≤ 600 Ω (I output) ≥ 2 kΩ (U output)
Step response	< 60 ms at 2- and 4-conductor measurement < 120 ms at 3-conductor measurement
General specifications:	
Nominal supply voltage V_S	24 VDC
Supply voltage range	V_S -30 % ... +30 %
Current consumption at 24 VDC	≤ 40 mA
Transmission error	≤ 0.1 % of upper range value

Description

JUMPFLEX® Signal Conditioner, for DIN 35 857-818
Ni Signal Conditioner for Ni100, Ni120, Ni200, Ni500, Ni1000
with Temperature Coefficients: 6178 ppm/K (DIN 43760)
5000 ppm/K; 6720 ppm/K; 6370 ppm/K

Item No.

857-818

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 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 / 0.35 ... 0.39 in

Dimensions and weight:

Dimensions (mm) W x H x L	6 x 96 x 94
Weight	50 g

Standards and approvals:

Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
Shipbuilding	GL, PRS, 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

857-818

DIP Switch S1

Connection Technology		Temperature Coefficient		Sensor Type		
1	2	3	4	5	6	7
	2-conductor			6178 ppm/K		Ni 100
●	3-conductor	●		5000 ppm/K	●	Ni 120
	4-conductor		●	6720 ppm/K		Ni 200
		●	●	Reserve	●	Ni 500
						● Ni 1000

DIP Switch S1

Start Temperature				End Temperature																		
8	9	10	°C	1	2	3	4	5	T / °C	1	2	3	4	5	T / °C	1	2	3	4	5	T / °C	
●			-60	●					0	●	●			●	100	●			●		●	200
	●		-50		●				10				●	●	110		●	●			●	210
●	●		-40	●	●				20	●		●	●	120		●	●			●	220	
		●	-30			●			30		●	●	●	130					●	●	230	
●		●	-20	●		●			40	●	●	●	●	140		●			●	●	240	
	●	●	-10		●	●			50					150		●			●	●	250	
●	●	●	0	●	●	●			60	●				160		●	●		●	●	260	
							●		70		●			170				●	●	●	270	
				●			●		80	●	●			180		●		●	●	●	280	
					●		●		90			●		190			●	●	●	●	290	
																●	●	●	●	●	300	

DIP Switch S2

Output Signal					Measuring Range Underflow	Measuring Range Overflow	Wire Break	Short Circuit
6	7	8	9	10				
		0 ... 20 mA			Lower limit of output range -5 % **2	Upper limit of output range +2.5 %*2	Upper limit of output range 5 %*2	Lower limit of output range -12.5 % **2
●		4 ... 20 mA						
	●	0 ... 10 mA	●		Lower limit of output range	Upper limit of output range +2.5 %	Upper limit of output range 5 %	Lower limit of output range
●	●	2 ... 10 mA						
		0 ... 10 V		●	Lower limit of output range	Upper limit of output range	Upper limit of output range 5 %	Upper limit of output range 5 %
●	●	2 ... 10 V						
	●	0 ... 5 V	●	●	Lower limit of output range	Upper limit of output range	Lower limit of output range	Lower limit of output range
●	●	1 ... 5 V						

* but not when lower limit of output range = 0V or 0mA

**2 acc. to NAMUR NE 43

Default Setting

All DIP switches are in "OFF" position for delivery.	
Sensor connection	2-conductor
Sensor type	NI 100
Temperature coefficient	6178 ppm/K
Start temperature	0 °C
End temperature	100 °C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA
Short circuit	0 mA