



USensor+	1	5	OUT +
IN	2	6	GND 2
GND 1	3	7	Us+
GND 1	4		
		POWER	

**Short description:**

The 857-421 HART Repeater Power Supply links SMART transmitters located in the field. It provides the power required and transmits the analog signals in an electrically isolated way.

**Characteristics:**

- HART communication
- Power supply to SMART transmitters
- Safe 3-way isolation with 2.5kV test voltage to EN 61140

**Technical Data****Input:**

Input signal	4 ... 20 mA
Input resistance	≤ 50 Ω
Transmitter supply	V <sub>s</sub> = 18 V at 30 mA
Max. Eingangsstrom	Max. Speisestrom

**Output:**

Output signal	4 ... 20 mA
Load impedance	230 - 600Ω
Offset	< 20 μA
Residual ripple	< 10mV eff

**General specifications:**

Voltage supply V <sub>s</sub>	24V DC
Supply voltage range	16.8 V ... 31.2 V
Current consumption at 24 V DC	≤ 45 mA
Max. operating frequency	100 Hz signal / ≥ 2.5 kHz HART
Response time (T <sub>10,90</sub> )	< 3.5 ms signal
Transmission error	≤ 0.1 % of the full scale value
Temperature coefficient	≤ 0.01 % /K

**Description**

**JUMPFLEX® transducers, for DIN 35 rail**

**Item No.**

**857-421**

**Pack. Unit**

**1**

Repeater power supply, HART

**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 <sup>2</sup> ... 2.5 mm <sup>2</sup> / AWG 28 ... 14 fine-stranded: 0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / 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	47.8 g

**Standards and approvals:**

Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
Shipbuilding	Ⓢ (pending)

**Accessories**

see pages 268 ... 271

