

# Direct Current Transducers: Split-Core, Bi-Directional mA Output

## DC Applications

### APPLICATIONS

- Solar applications
- Battery chargers
- Motor armature current
- Motor field current
- Automotive loads
- Marine equipment
- Telecom

### FEATURES

#### Full-featured product maximizes versatility

- New patented Pulse Reset Technology™ significantly increases accuracy...sensor is not affected by stray magnetic fields...no worry of magnetization from over-current faults
- User-adjustable span from ±20A to ±200A (H971 only)
- Self-gripping iris for easy installation
- Status LED ensures proper wiring...easy set up
- Mounting bracket can attach to housing in three places...installation flexibility
- Bracket is compatible with the AH01 DIN rail clip...mount product onto standard DIN rail
- 5-year limited warranty
- Range can be factory-set per customer specifications

H971



U.S. Pat. #6,160,697; 6,522,517; 7,242,157



### DESCRIPTION

The Hawkeye 971 Series provides accurate load level monitoring of DC current loads. Using new Pulse Reset Technology™ with proven transducer circuitry, the H971 provides a superior solution for applications involving DC currents. It has no risk of permanent magnetization, ensuring longer life than traditional Hall Effect sensors.

The H971 has a user-adjustable span to allow greater application flexibility. The H971SP comes factory calibrated at a customer-specified fixed span for maximum accuracy.



### SPECIFICATIONS

<b>System Technology</b>	Exclusive Pulse Reset Technology™
<b>Amperage Range</b>	±200 ADC
<b>Sensor Supply Voltage</b>	12-24VDC*
<b>Supply Current</b>	35mA max.**
<b>Insulation Class</b>	600VDC
<b>Temperature Range</b>	-30° to 60°C (-22° to 140°F)
<b>Humidity Range</b>	10-90% RH non-condensing
<b>Output</b>	Bi-polar 4-20mA (adjustable span)***
<b>Accuracy Below 100A</b>	±0.5A (combined linearity, hysteresis, and repeatability)****
<b>Accuracy Above 100A</b>	±0.5% full scale (combined linearity, hysteresis, and repeatability)****
<b>Withstand Current</b>	25,000ADC
<b>Response Time</b>	Less than 150 msec

\* For currents over 120A, supply voltage must be at least 15V.

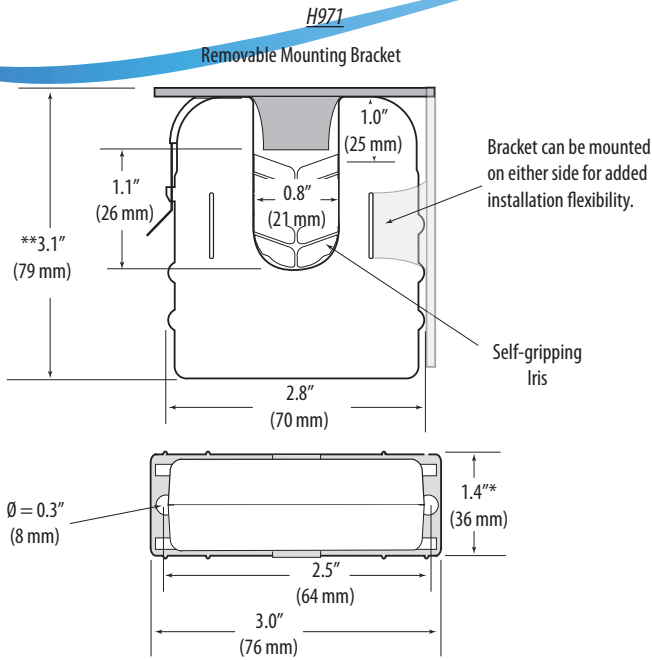
\*\* At zero load current: 35mA max.; at 200A load current: 55mA to 100mA depending on supply voltage and current polarity.

\*\*\* Unless factory set per customer specifications.

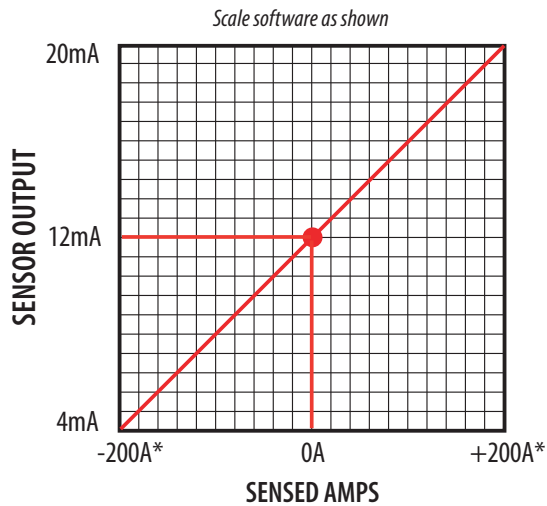
\*\*\*\* For single conductor through product (no wraps).

**DIMENSIONAL DRAWING**

**APPLICATION/WIRING DIAGRAMS**



**H971 LINEAR OUTPUT**



\*Field Adjustable from  $\pm 20A$  to  $\pm 200A$   
(not applicable to customer-specified factory scaled models)

**ORDERING INFORMATION**

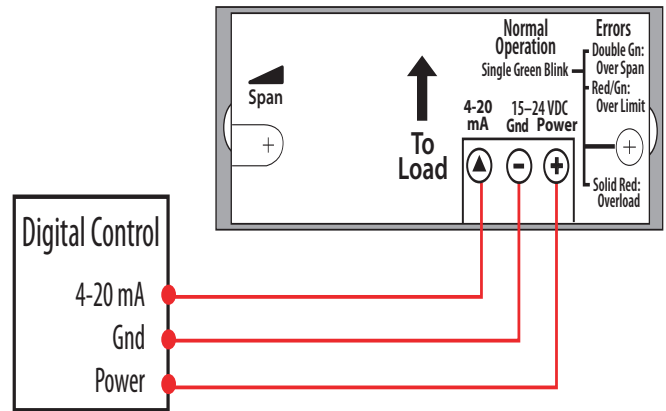
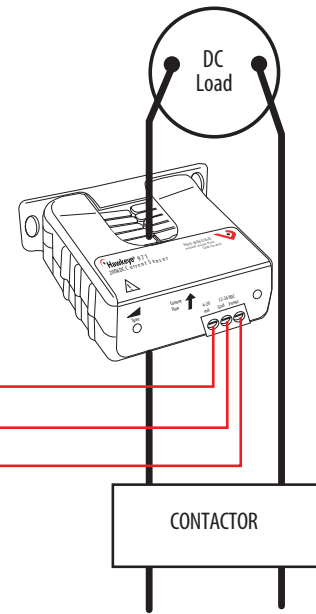


MODEL	AMPERAGE RANGE	SENSOR OUTPUT	HOUSING	STATUS LED	UL	CE	RoHS
H971	0 - 200 ADC	Bi-polar 4-20mA	Split-core	●	●	●	●
H971SP	0 - 199 ADC*	Bi-polar 4-20mA	Split-core	●	●	●	●

\* Range set in factory per customer specified value from 0 to  $\pm 20A$  through 0 to  $\pm 199A$ .

**ACCESSORIES**

DIN Rail Clip Set (AH01)  
DIN Rail (AV01) and DIN Stop Clip (AV02)



CURRENT MONITORING