



Direct Current Transducers: Split-Core, 420mA Output

5 Year
Warranty

H971 & EA20 Series


Hawkeye™


H971

DC Applications

FEATURES

All Models

- Self-gripping iris for easy installation
- Bracket can be installed in three different configurations...added flexibility
- Status LED ensures proper wiring...easy set up
- 5-year warranty

H971 Bi-directional Model

- Patented Pulse Reset Technology™ significantly increases accuracy...sensor is not affected by stray magnetic fields...minimize worry of magnetization from over-current faults
- User-adjustable span from $\pm 20A$ to $\pm 200A$
- Range can be factory-set per customer specifications (SP model)

EA20 Unidirectional Model

- Patented Pulse Reset Technology™ significantly increases accuracy...sensor is not affected by stray magnetic fields...minimize worry of magnetization from over-current faults
- 100, 150, & 200A span versions available...application flexibility

DESCRIPTION

Hawkeye DC Transducers provide accurate load level monitoring of DC loads. The H971 and EA20 use Pulse Reset Technology™ with field proven circuitry to provide a superior solution for DC applications with minimal risk of permanent magnetization, providing longer life and better accuracy.

The EA20 and the H971 have 4-20mA output only. The H971 also offers bi-directional sensing capability and a user-adjustable span to allow greater application flexibility.

SPECIFICATIONS

System Technology	Exclusive Pulse Reset Technology™
Amperage Range	H971: $\pm 200ADC$; EA20: 0-100ADC/0-150ADC/0-200ADC
Sensor Supply Voltage	12-24VDC*
Supply Current	35mA**
Insulation Class	H971: 600VDC, EA20: 1000VDC
Temperature Range	-30° to 60°C (-22° to 140°F)
Humidity Range	10-90% RH non-condensing
Output	H971: Bidirectional 4-20mA (adjust. span)***; EA20: Unidirectional 4-20mA
Terminal Block Wire Size	24-14 AWG (0.2 to 2.1 mm ²)
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)
Response Time	Less than 150 msec
Agency Approvals	CE: EN61010-1, CAT III, pollution degree 2, basic insulation
ACCURACY	
Accuracy at Ranges Below 100A	$\pm 0.5A$ (combined linearity, hysteresis, and repeatability)****
Accuracy at Ranges Above 100A	$\pm 0.5\%$ full scale (combined linearity, hysteresis, and repeatability)****
Withstand Current	25,000ADC

Do not use the LED status indicators as evidence of applied voltage.

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

** For H971, at zero monitored current: 35mA max.; at 200A monitored current: 55mA to 100mA depending on supply voltage and current polarity.

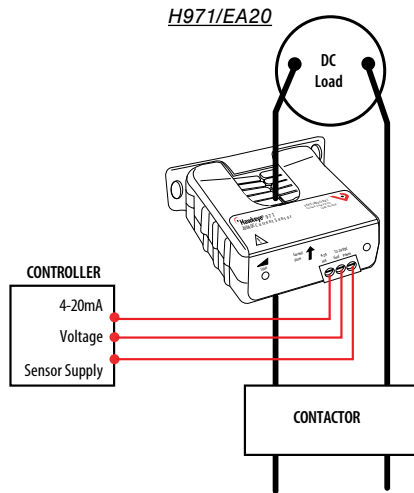
*** Unless factory set per customer specifications (H971SP only).

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

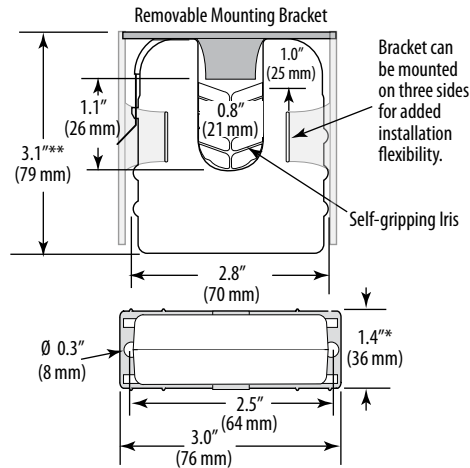
APPLICATIONS

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

WIRING DIAGRAM



DIMENSIONAL DRAWING

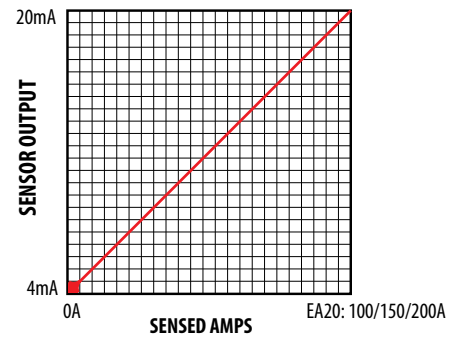


* Terminal block may extend up to 1/8" over the height dimensions shown.

** Slide switch may extend up to 1/4" over the height dimensions shown.

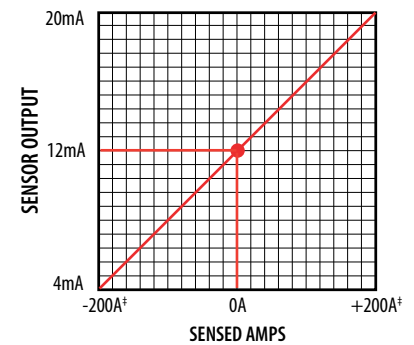
EA20 LINEAR OUTPUT

Scale software as shown



H971 BIDIRECTIONAL OUTPUT

Scale software as shown



[†]Field Adjustable from $\pm 20A$ to $\pm 200A$

(not applicable to customer-specified factory scaled models)

ORDERING INFORMATION



MODEL	PULSE RESET TECHNOLOGY	AMPERAGE RANGE (DC)	SENSOR OUTPUT	HOUSING	STATUS LED	UL	CE	RoHS
Hawkeye Series								
H971	●	0 - 200A	Bidirectional 4-20mA	Split-core	●	●	●	●
H971SP	●	0 - 200A [†]	Bidirectional 4-20mA	Split-core	●	●	●	●
EA Series								
EA20BB010	●	0-100A	Unidirectional 4-20mA	Split-core	●	● ^{††}	●	●
EA20BB015	●	0-150A	Unidirectional 4-20mA	Split-core	●	● ^{††}	●	●
EA20BB020	●	0-200A	Unidirectional 4-20mA	Split-core	●	● ^{††}	●	●

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

^{††}UL Recognized

ACCESSORIES

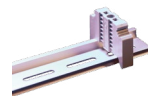
DIN Rail Clip Set (AH01)
DIN Rail (AV01) and DIN Stop Clip (AV02)



AH01



AV01



AV02