Direct Current Transducers: Split-Core, 420mA Output

H971 & EA20 Series

pulse reset technology™
U.S. Pat. #6,160,697; 6,522,517; 7,242,157

UNSURPASSED ACCURACY & RELIABILITY

Hawkeye™

H971

5 Year Warranty

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 ±20A to ±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***: ±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	±0.5A (combined linearity, hysteresis, and repeatability)****
Accuracy at Ranges Above 100A	±0.5% full scale (combined linearity, hysteresis, and repeatability)****
Withstand Current	25,000ADC

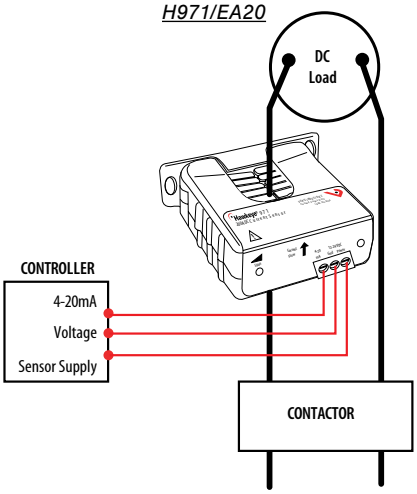
Do not use the LED status indicators as evidence of applied voltage.
** For currents over 120A, supply voltage must be at least 15V.*
*** For H971, at zero monitored current: 35mA max.; at 200A monitored current: 55mA to 100mA depending on supply voltage and current polarity.*
**** Unless factory set per customer specifications (H971SP only).*
***** For single conductor through product (no wraps).*

APPLICATIONS

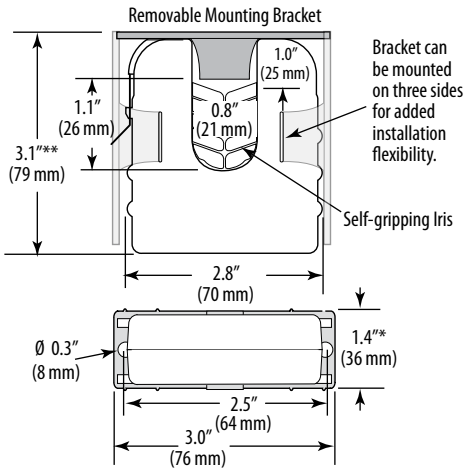
- *Battery chargers*
- *Motor armature current*
- *Motor field current*
- *Automotive loads*
- *Marine equipment*
- *Solar energy applications*
- *Telecom*
- *Electroplating*

WIRING DIAGRAM

H971/EA20



DIMENSIONAL DRAWING

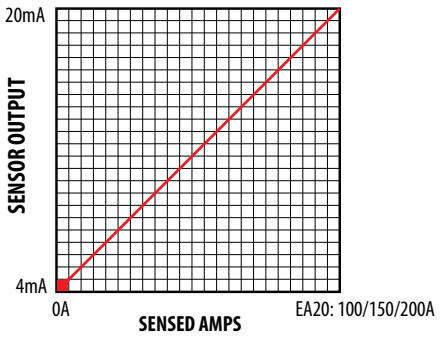


** Terminal block may extend up to 1/8" over the height dimensions shown.*

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

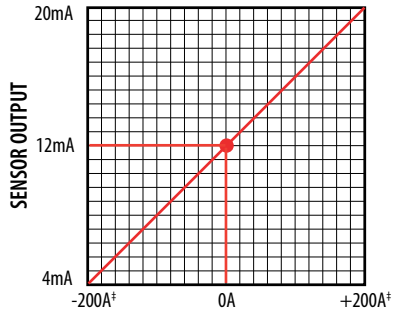
EA20 LINEAR OUTPUT

Scale software as shown



H971 BIDIRECTIONAL OUTPUT

Scale software as shown



‡Field Adjustable from ±20A to ±200A
(not applicable to customer-specified factory scaled models)

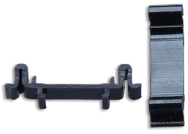
ORDERING INFORMATION

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 ±20A through 0 to ±199A.
††UL Recognized

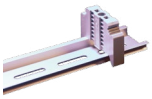
ACCESSORIES

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



AH01

AV01



AV02