

# Split type DC current sensor

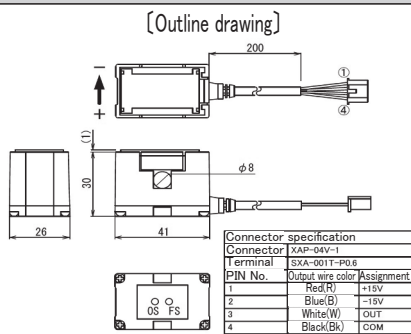
## Split type DC current sensor with small drift



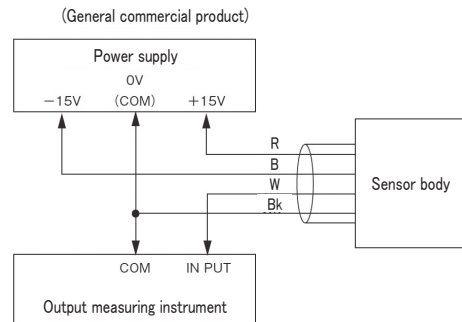
**Model** HCS-8-20AP-CL

### [Features]

- Corresponding to  $\pm 15V$  control power supply
- Possible to discriminate the direction by  $0 \pm 4V$  output
- Possible to measure with isolation
- Split setting type with unification of sensor and amplifier
- Residual voltage temperature characteristic (OS)  $\pm 0.3mV/^{\circ}C$  typ
- Output voltage temperature characteristic (FS)  $\pm 0.05\%/^{\circ}C$  typ



### [Connection]

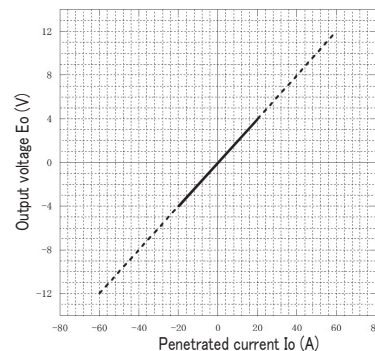


### [Specification] $T_a=25^{\circ}C$

Model	HCS-8-20AP-CL
Rating current (FS)	$\pm 20A$
Maximum current	$\pm 60A$
Output voltage	$\pm 4V$ /Rating current (Recommended load resistor $\geq 10k \Omega$ )
Residual voltage	Within $\pm 40mV$ (no load)
Noise level	Less than $20mV_{p-p}$ (no load)
Accuracy	Within $\pm 1.5\%FS$
Linearity	Within $\pm 1\%FS$
Hysteresis(FS $\rightarrow$ 0)	Within $\pm 10mV$
Response time	Less than $500 \mu s$ (at $di/dt = FS/2 \mu s$ )
Output voltage temperature coefficient	$\pm 0.05\%/^{\circ}C$ typ
Residual voltage temperature coefficient	$\pm 0.3mV/^{\circ}C$ typ
Frequency characteristic	DC $\sim 200Hz$
Power supply	DC $\pm 15V \pm 5\%$ (35mA typ) bi-polar power supply
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output connector terminal in a lump)
Insulation resistance	DC500V, $\geq 500M \Omega$ (between aperture and output connector terminal in a lump)
Operating temperature	$-20^{\circ}C \sim +60^{\circ}C$ , $\leq 85\%RH$ , no condensation
Storage temperature	$-30^{\circ}C \sim +65^{\circ}C$ , $\leq 85\%RH$ , no condensation
Secondary wire	Vinyl wire (AWG26 3C $\times$ 200 $\Omega$ )
Output connector	Socket contact : SXA-001T-P0.6 Plug housing : XAP-04V-1(JST)
Mating connector	Pin contact : SXAM-001T-P0.6 Receptacle housing : XARR-03VF (JST) (Not included)
Mass	approximately 48g

- [Remark]**
- (1) After overcurrent more than rating current, offset drift occur by proportional to that current, with hysteresis of core.
  - (2) Recommend to use more than 5% of nominal for practical range, because output includes various variation factors.
  - (3) Do not beyond rating current for continuous use
  - (4) There is possibility of heating by core loss for the application of high frequency and high current. Please check by contacting us.

### [Output voltage characteristic]



### [Frequency characteristic]

