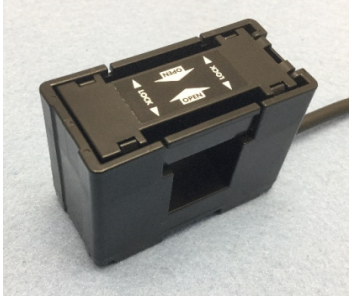
Split servo type DC current sensor

Split type DC current sensor with small temperature drift

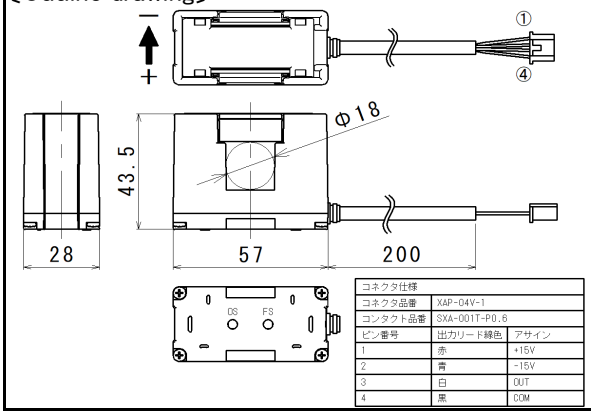


Model HCS-18-50SC-CL

〔Features〕

- ●Split setting type with unification of sensor and amplifier
- ●Corresponding to ±15V control power supply
- ●Built-in shield case as standard for decreasing the influence of output magnetic field
- ●Very small residual voltage temperature coefficient ±0.3mV/℃ typ (Refer "Residual voltage temperature coefficient")
- ●Very small output voltage temperature coefficient ±30ppm/℃ typ (Refer "Output voltage temperature coefficient")
- ●Patented for case structure

〔Outline drawing〕



コネクタ仕様		
コネクタ品番	XAP-04V-1	
コンタクト品番	SXA-001T-P0.6	
ピン番号	出力リード線色	アサイン
1	赤	+15V
2	青	-15V
3	白	OUT
4	黒	COM

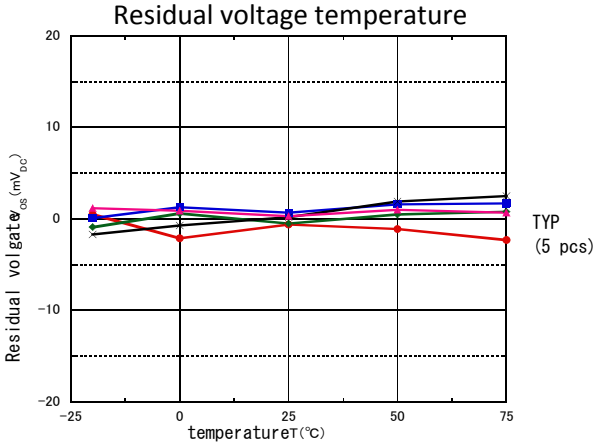
〔Specification〕 Ta=25°

Model	HCS-18-50SC-CL
Rating current (FS)	±50A
Output voltage	±4V／Rating current
Maximum current	±100A
Recommended load resistor	≧10kΩ (within rating current)
Residual voltage	Within ±30mV (no load)
Residual voltage temperature coefficient	±0.3mV/℃ (Typ, no load, operating condtion Ta≠25℃)
Hysteresis (FS->0)	Within ±3mV
Noise level	Less than 10mV$_{P-P}$ (Typ, no load)
Accuracy	Within ±1% (FS)
Linearity	Within ±0.2% (within FS)
Output voltage temperature coefficient	±30ppm/℃ (Typ, FS, operating condition Ta≠25℃)
Frequency characteristic	DC～400Hz (refer "Frequency characteristics")
Response time	Less than 200μs (at di/dt=FS/2μs, 10-90%)
Power supply	DC±15V／±5% ※(30mA+Io/3000 Typ) bi-polar power supply
Insulation resistance	DC500V, ≧100MΩ (between aperture and output connector terminal in a lump)
Withstand voltage	AC2000V, 1min (between aperture and output connector terminal in a lump)
Operating temperature	-20℃～+60℃, ≦85%RH, no condensation
Storage temperature	-30℃～+90℃, ≦85%RH, no condensation
Mass	approximately 130g

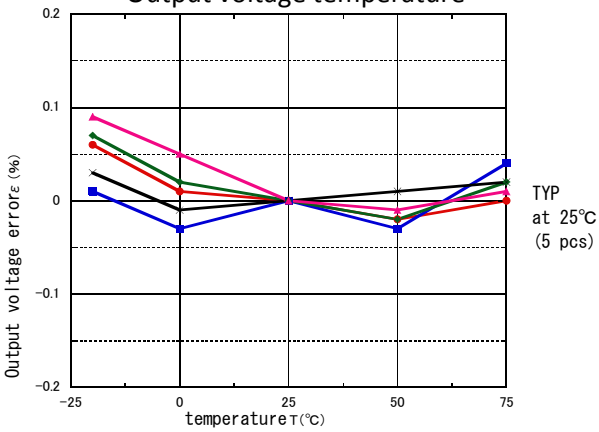
(Remark)

- ●Offset voltage will be change rationally with over current input above maximum current according to core's hysterisis.
- ●Recommed to use in the range with enough margin because output includes the various varification factors.
- ●There is possibility of heating by core loss for the application of high frequency and high current including ripple.
- ●Impossible to use in outdoor exposure
- ●Selling the fixing board as option

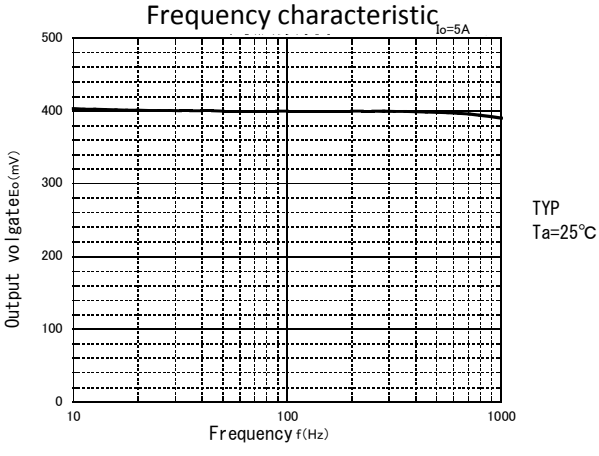
Residual voltage temperature



Output voltage temperature



Frequency characteristic Io=5A



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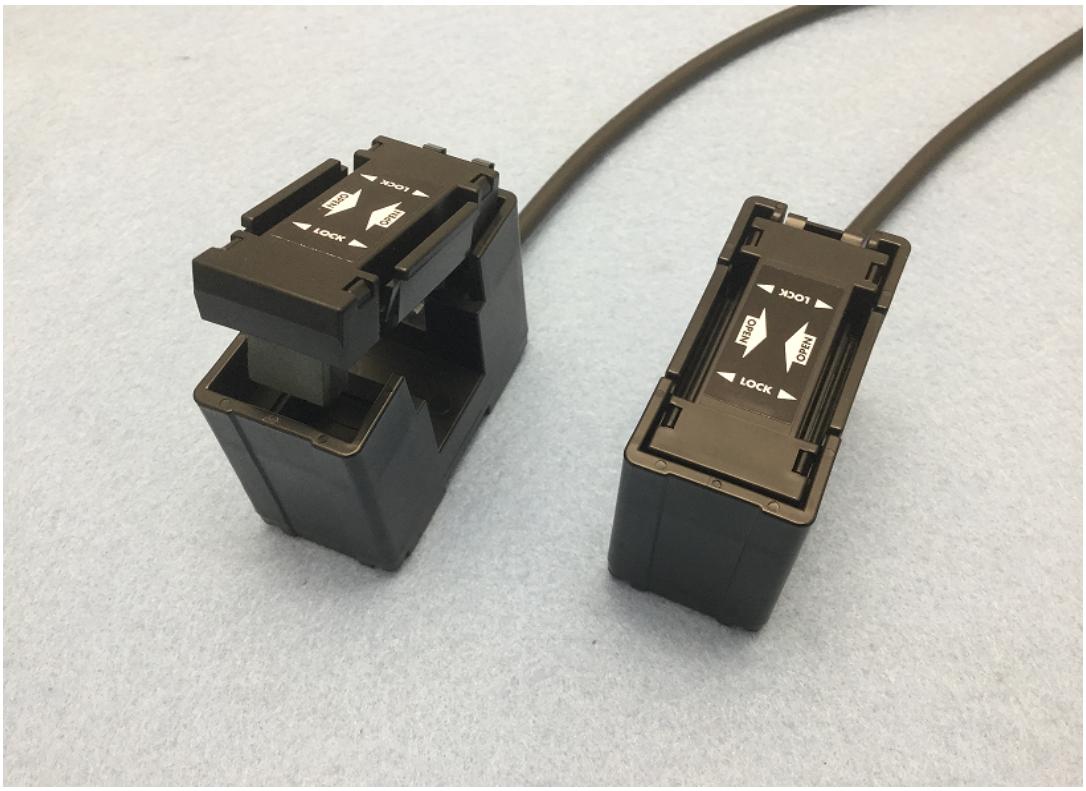
HCS-18-50SC-CL



●The specifications may be changed without prior notice, due to performance improvement.
●It is possible for customized product. Please ask.

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