

# Split core clamp type sensor

## Very small clamp type AC current sensor ( $\phi 7 / 40\text{Arms}$ )



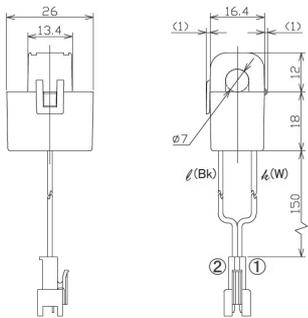
Model CTL-7-CLS

### [Features]

- The smallest model of clamp type sensor
- Nylon spring, one touch clamp type for easy mounting to existing equipment
- Corresponding to current until 40A max, though very small size
- Suitable to detect presence or absence of current
- Possible to apply also to the measurement of the secondary side (5A) of CT

AC current sensor

### [Outline drawing]



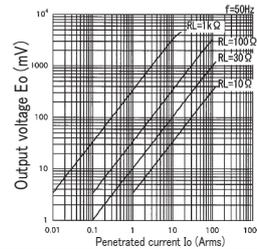
(mm)

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

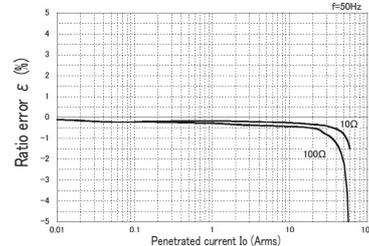
Model	CTL-7-CLS
Primary current	0.01 ~ 40Arms (50 / 60Hz)、 $R_L \leq 10 \Omega$
Maximum primary current	50Arms continuous (50/60Hz sine wave)
Output characteristics	100mV $\pm 1\%$ / 30A (50/60Hz, $R_L=10 \Omega$ )
Phase shift	$+2.5 \pm 1^\circ$ / 30A (50/60Hz, $R_L=10 \Omega$ )
Current ratio	3000 : 1
Secondary windings resistance	500 $\Omega$ (reference)
Open circuit protection	Built in 7.5Vp clamped device
Withstand voltage	AC1000V(50/60Hz), 1min(between core and output connector terminal in a lump)
Insulation resistance	DC500V, $\geq 100M \Omega$ (between aperture and output connector terminal in a lump)
Operating temperature	$-10^\circ\text{C} \sim +50^\circ\text{C}$ , $\leq 80\%RH$ , no condensation, for indoor assembly, free direction for setting
Storage temperature	$-30^\circ\text{C} \sim +90^\circ\text{C}$ , $\leq 80\%RH$ , no condensation
Structure	Nylon case simple closing type Ferrite core in case with clamping structure Nylon hinge and spring method
Fitting repeatability	$\approx 100$ times
Output wire	UL1007 Vinyl wire(AWG22X150L)
Output connector	Pin contact : SYM-001T-P0.6 Receptacle housing : SMR-02V (JST)
Mating connector	Socket contact : SHF-001T-0.8BS Plug housing : SMP-02V-BC, NC (JST) (Not included)
Mass	approximately 24g

- Remark (1) With impacted force on joint surface, there are breakage of ferrite core  
 (2) No tension to wire more than 1kg  
 (3) Preparing extension wire as separately selling for extension of output wire  
 (4) In the contents of product specification, inspection, and so on, it is based on the measurement in conditions of standard temperature, humidity, and no abnormality and no vibration, in the case of no special description.  
 (5) Impossible to use in outdoor exposure.  
 (6) Though voltage clamped  $\pm 7.5Vp$  with open protection device in the case of wiring during hot line condition accidentally, it is not the acceptance of wiring during open condition, but it is for secondary electrical shock protection.

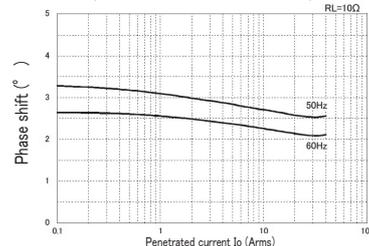
### [Output voltage characteristics]



### [Ratio error characteristics]



### [Phase shift characteristics]



### [Frequency characteristics]

