

®

## CSM300E Hall-effect Current Sensor Series

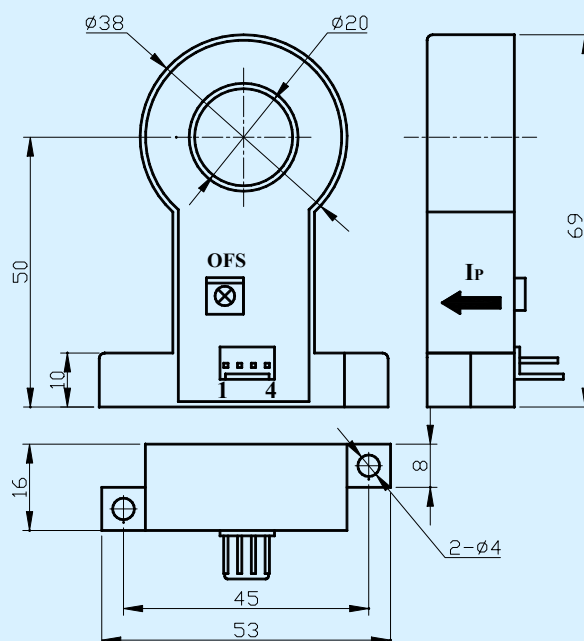


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

### Electrical characteristics

	Type	CSM050E	CSM100E	CSM200E	CSM300E	
$I_{PN}$	Primary nominal input current	50	100	200	300	A
$I_P$	Measuring range of primary current	0~±75	0~±150	0~±300	0~±350	A
$I_{SN}$	Secondary nominal output current	25	50	100	150	mA
$K_N$	Conversion ratio	1:1000	1:1000	1:2000	1:2000	
$R_M$	Measuring resistance ( $V_C=±15V/I_{PN}$ )	200(max)	200(max)	80(max)	50(max)	Ω
$V_C$	Supply voltage	±15(±5%)				V
$I_C$	Current consumption	$V_C=±15V$	10+ $I_S$			mA
$V_D$	Insulation voltage	AC/50Hz/1min			3	kV
$\epsilon_L$	Linearity	<0.1				%FS
X	Accuracy	$T_A=25^\circ C$				%
$I_0$	Zero offset current	$T_A=25^\circ C$				mA
$I_{OM}$	Residual current	$I_P \rightarrow 0$				mA
$I_{OT}$	Thermal drift of $I_0$	$I_P=0 \quad T_A=-25 \sim +85^\circ C$				mA
$T_R$	Response time	<1				μs
di/dt	di/dt accurately followed	>100				A/μs
f	Frequency bandwidth(-3dB)	DC~100				kHz
$T_A$	Ambient operating temperature	-25~+85				°C
$T_S$	Ambient storage temperature	-40~+100				°C
$R_S$	Secondary coil resistance( $T_A=25^\circ C$ )	12.5	12.5	27.5	27.5	Ω
m	Mass	43				g
	Standard	Q/320115QHKJ01-2013				

### Dimensions of drawing (mm)



Elucidation: 1:±15V 2:-15V 3: $I_{OUT}$  4:0V OFS:Zero adjustment

### Remarks

- Incorrect connection may lead to the damage of the sensor.  $I_{SN}$  is positive when the  $I_P$  flows in the direction of the arrow.
- Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.