

AC Current transducer

HCY-0.5A~8000A(AC)

It is used to measure AC current and output DC standard signal.
The measured current on the primary side is electrically isolated from the output signal on the secondary side.

Feature:

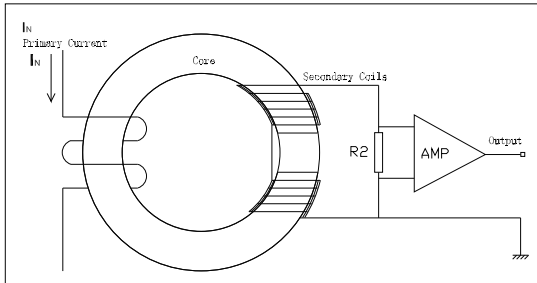
Test frequency: 50KHz(400Hz)
Response time: less than 350mS
Linearity: 0.5%

No insertion loss measured

It is used to measure AC current and output DC standard signal.

The primary current is highly isolated from the secondary output signal

Low power consumption, single power supply, wide range of power supply



Working principle:

When the measured current flows through the conductor, a magnetic field in direct proportion to the current is generated around the conductor. The magnetic field is measured by the secondary coil, and its output voltage is proportional to the measured current. It is amplified and filtered by the electronic circuit and calibrated to the required standard signal, which accurately reflects the effective value of the primary current.

HCY Series AC current transducer

Part No	Rated input current I _N (A)	f (HZ)	I _r (A)	V _m (V)orI _m (mA)	T _a =25°C	V _{off} (mV)	V _c (V)	I _c (mA)	V _i (KV)	T _a (°C)	W (g)	Input hole mm	Fig. No.
HCY-*AP/#	0.5/1/3/5	AC	I _N x120%	#	0.5%	±30	24	30	3	-25~+85	240	PCB	17
HCY-*AS/#	5/50/100/200/300/400	AC	I _N x120%	#	0.5%	±30	24	30	6	-25~+85	240	φ 20	1
HCY-*AF/#	5/50/100/200/300	AC	I _N x120%	#	0.5%	±30	24	30	3	-25~+85	105	φ 20	10
HCY-*AG/#	5/50/100/200/300/500	AC	I _N x120%	#	0.5%	±30	24	30	6	-25~+85	360	φ 35	11
HCY-*AR/#	50/100/200/400/600/1000/2000	AC	I _N x120%	#	0.5%	±30	24	30	5	-25~+85	290	φ 40	9
HCY-*AT/#	100/200/300/500/1000/1500	AC	I _N x120%	#	0.5%	±30	24	30	6	-25~+85	900	φ 40	2
HCY-*AH/#	300/500/1000	AC	I _N x120%	#	0.5%	±30	24	30	6	-25~+85	700	φ 40	3
HCY-*AJ/#	200/500/1000/1500/2000	AC	I _N x120%	#	0.5%	±30	24	30	6	-25~+85	1800	φ 60	4
HCY-*Y31/#	200/400/600/800/1000	AC	I _N x120%	#	0.5%	±30	24	30	5	-25~+85	260	16x64	6
HCY-*Y2/#	500/1000/2000/3000/3500	AC	I _N x120%	#	0.5%	±30	24	30	5	-25~+85	550	23x103.5	7
HCY-*Y21/#	1000/2000/3000	AC	I _N x120%	#	0.5%	±30	24	30	5	-25~+85	660	40x103.5	8
HCY-*Y1/#	1000/3000/5000/8000	AC	I _N x120%	#	1.0%	±30	24	30	5	-25~+85	800	50x165	14
HCY-*Y11/#	1000/3000/6000	AC	I _N x120%	#	1.0%	±30	24	30	5	-25~+85	1100	78x165	15
HCY-*Y0/#	1000/2000/3000	AC	I _N x120%	#	1.0%	±30	24	30	5	-25~+85	600	20.5x165	16
HCY-*Y01/#	500/1000/2000/3000/4000	AC	I _N x120%	#	1.0%	±30	24	30	5	-25~+85	600	20.5x205	5

HCY Series AC current transducer(two-wire system 4~20mA output)

Part No	Rated input current I _N (A)	f (HZ)	I _r (A)	V _m (V)orI _m (mA)	T _a =25°C	V _{off} (mV)	V _c (V)	I _c (mA)	V _i (KV)	T _a (°C)	W (g)	Input hole mm	Fig. No.
HCY-*AF/A4	5/50/100/200/300	AC	I _N x120%	4~20mA	0.5%	± 0.2	24	30	3	-25~+85	105	φ 20	10
HCY-*AG/A4	5/50/100/200/300/500	AC	I _N x120%	4~20mA	0.5%	± 0.2	24	30	6	-25~+85	360	φ 35	11

HCY Series AC current transducer(passive)

Part No	Rated input current I _N (A)	f (HZ)	I _r (A)	V _m (V)orI _m (mA)	T _a =25°C	V _{off} (mV)	V _c (V)	I _c (mA)	V _i (KV)	T _a (°C)	W (g)	Input hole mm	Fig. No.
HCY-*AE	5/10/30/50/100	AC	I _N x120%	5V	1.0%	0	--	--	1	-25~+85	20	φ12	12
HCY-*AF	5/50/100/200/300	AC	I _N x120%	5V	0.5%	0	--	--	3	-25~+85	105	φ20	13
HCY-*AG	5/50/100/200/300/500	AC	I _N x120%	5V	0.5%	0	--	--	6	-25~+85	360	φ35	11

* : Rated input current # : Rated output current or voltage

Output DC standard signal code

#	A0	A1	A2	V0	V1	V2
Output	0~20mA	4~20mA	0~10mA	0~5V	1~5V	0~10V

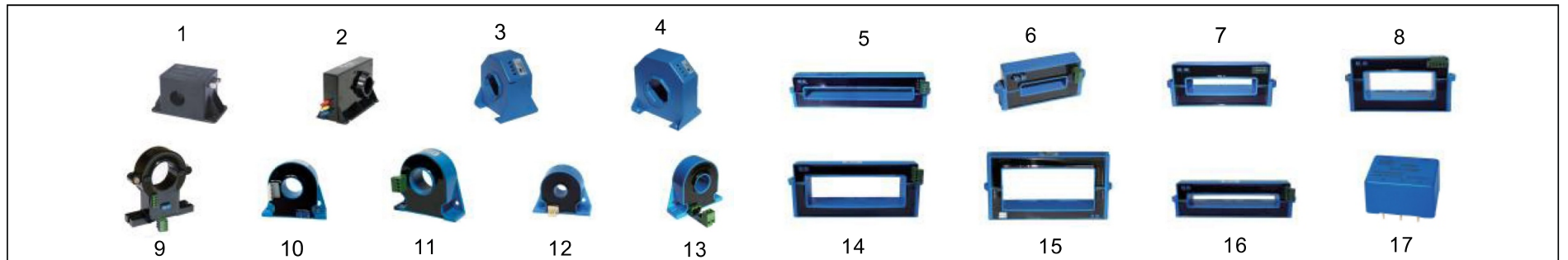


Fig. 1

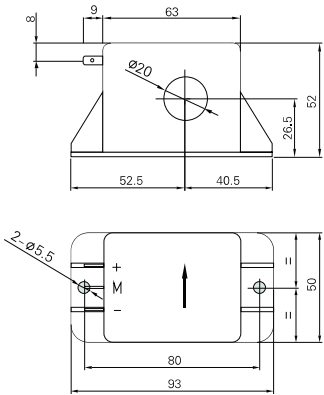


Fig. 2

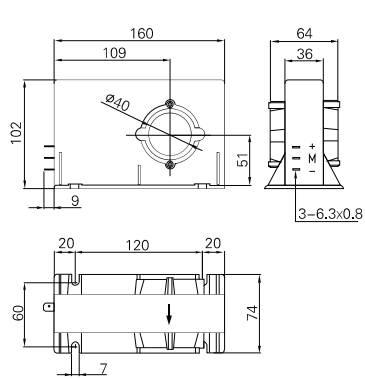


Fig. 3

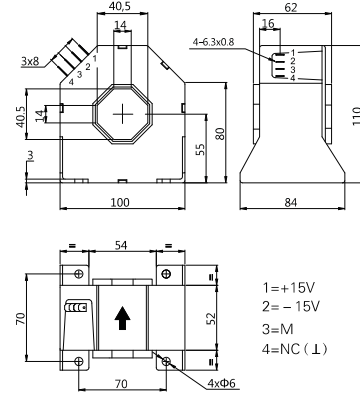


Fig. 4

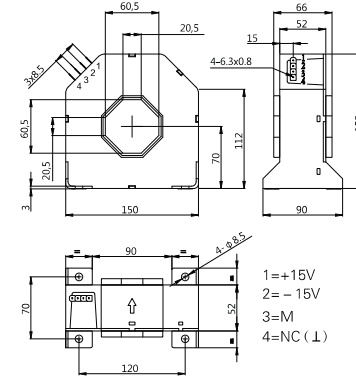


Fig. 5

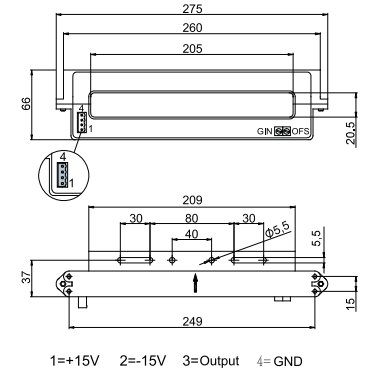


Fig. 6

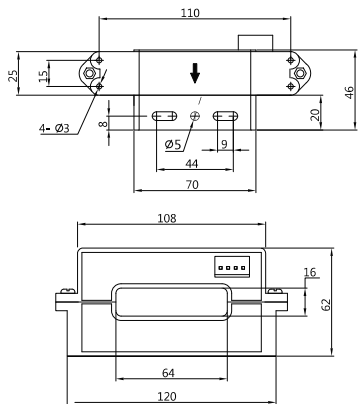


Fig. 7

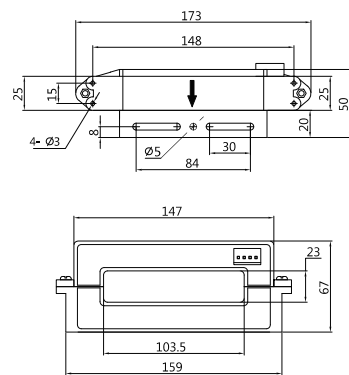


Fig. 8

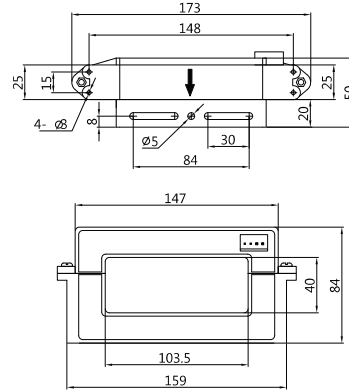


Fig. 9

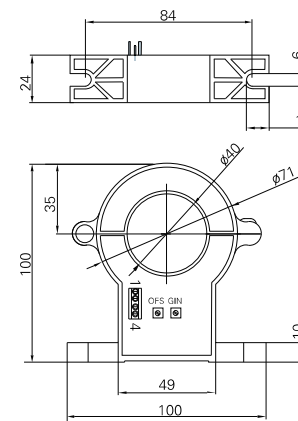


Fig. 10

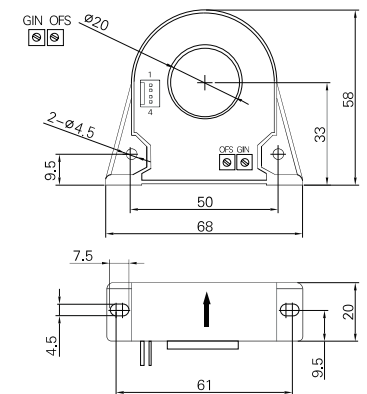


Fig. 11

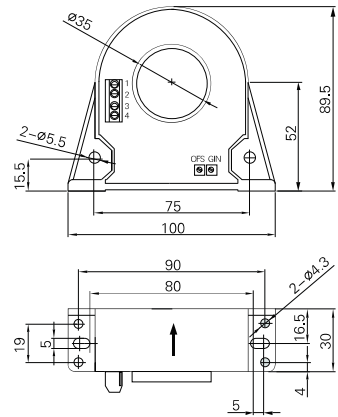


Fig. 12

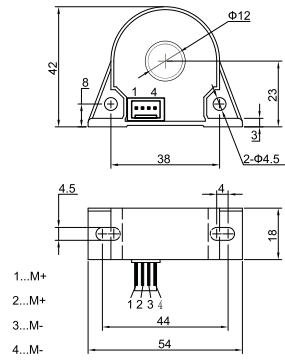


Fig. 13

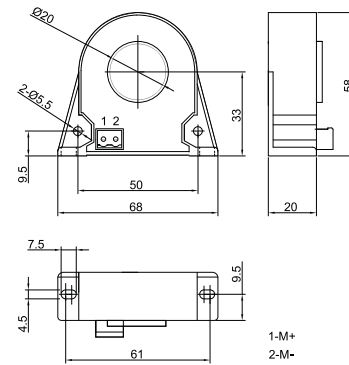


Fig. 14

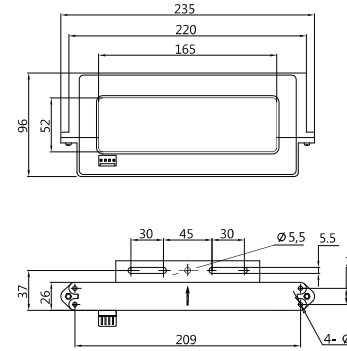


Fig. 15

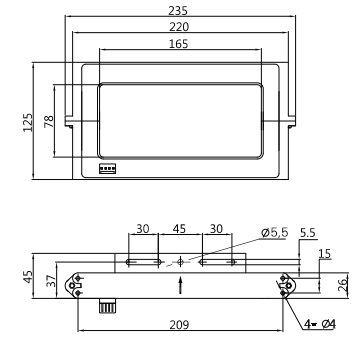


Fig. 16

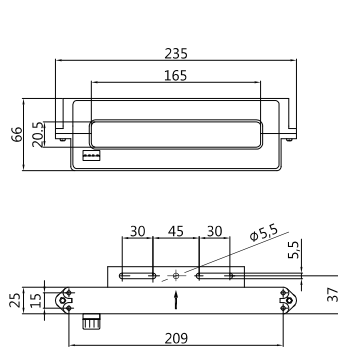
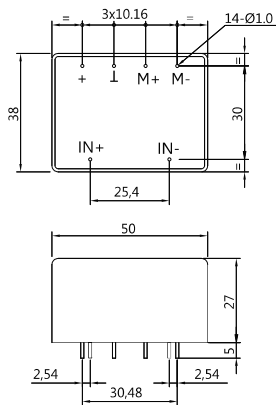


Fig. 17



IN	Nominal current	Voff	Offset voltage
V _N	Nominal voltage	T _d	Temperature drift
I _p	Measuring range	L	Linearity
R _M	Measuring resistance	T _r	Response time
I _M	Output current	f	Frequency bandwidth
V _M	Output voltage	T _a	Operating temperature
K _N	Turns ratio	T _s	Storage temperature
X	Accuracy	I _c	Current consumption
V _c	Supply voltage	R _s	Secondary resistance
V _i	Isolation voltage	R _N	Primary resistance
I _{off}	Offset current	W	Weight

M	Output
M+	Output+
M-	Output-
NC	NO
IN	Input
IN+(+HT)	Input+
IN-(-HT)	Input-
+VN	Input voltage+
-VN	Input voltage-