

DC Current transducer

HCZ- 0.02A~10000A(DC)

It is used to measure DC 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:

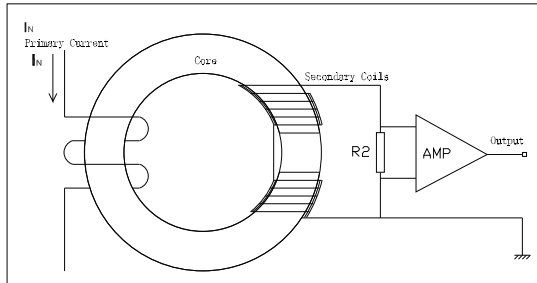
Test frequency:DC
 Response time: less than 350mS
 Linearity: 0.5%

No insertion loss measured

It is used to measure DC 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.

HCZ Series DC current transducer

Part No	Rated input current I _N (A)	f (HZ)	I _F (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.
HCZ-*AP/#	0.5/1/5/10/20/30	DC	I _N ×120%	#	0.5%	±30	24	90	2.5	-25~+85	240	PCB	89
HCZ-*AD/#	0.02/0.05/0.1/0.5/1/5/8/10	DC	I _N ×120%	#	0.5%	±30	24	90	2.5	-25~+85	240	terminal	01
HCZ-*AD/#	15/20/30	DC	I _N ×120%	#	0.5%	±30	24	90	2.5	-25~+85	240	terminal	05
HCZ-*S/#	5/20/50/100/200/300	DC	I _N ×120%	#	0.5%	±30	24	30	6	-25~+85	240	φ 20	50
HCZ-*G/#	50/100/200/400/500/600	DC	I _N ×120%	#	0.5%	±30	24	30	6	-25~+85	360	φ 35	45
HCZ-*T/#	100/200/300/500/1000	DC	I _N ×120%	#	0.5%	±30	24	30	6	-25~+85	900	φ 40	17
HCZ-*H/#	300/500/1000/1500	DC	I _N ×120%	#	0.5%	±30	24	30	6	-25~+85	700	φ 40	19
HCZ-*J/#	500/1000/1500/2000	DC	I _N ×120%	#	0.5%	±30	24	30	6	-25~+85	2800	φ 60	23

HCZ Series DC current transducer(split core)

Part No	Rated input current I _N (A)	f (HZ)	I _F (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.
HCZ-*Y31/#	100/200/400/600/800/1000	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	260	16x64	77
HCZ-*Y2/#	500/1000/2000/3000/3500	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	550	23x103.5	78
HCZ-*Y21/#	600/1000/2000/3000/6000	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	660	40x103.5	79
HCZ-*Y1/#	1000/1500/2000/3000/5000/6000/10000	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	800	50x165	80
HCZ-*Y11/#	1000/3000/6000/10000	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	1100	78x165	81
HCZ-*Y0/#	500/1000/2000/3000/3500	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	550	20.5x165	82
HCZ-*Y01/#	500/1000/2000/3000/4000	DC	I _N ×120%	#	1.0%	±30	24	30	5	-25~+85	1000	20.5x205	67

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

Output standard signal code

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

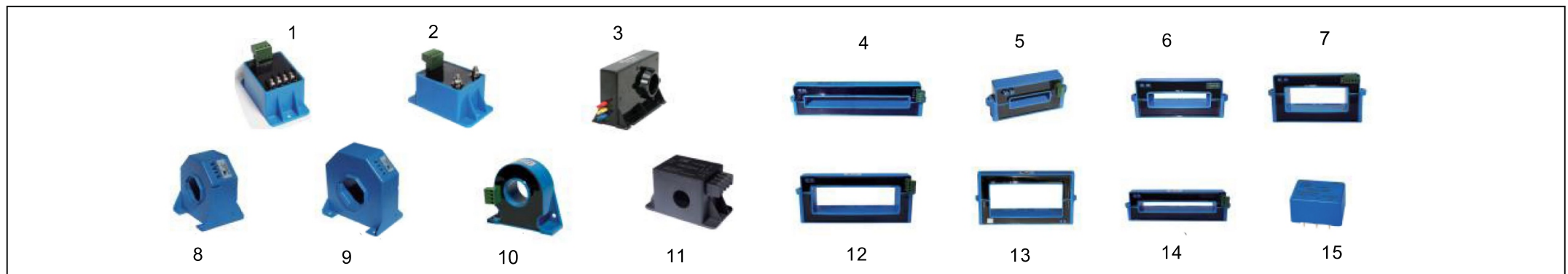


Fig. 1

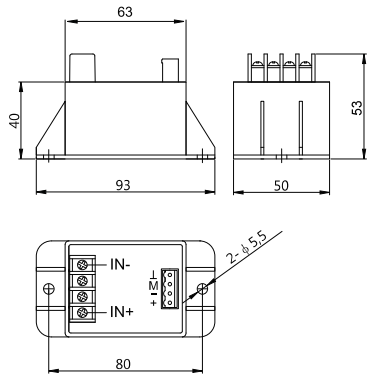


Fig. 2

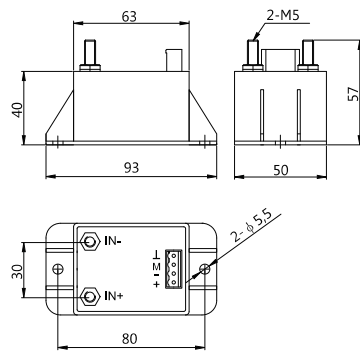


Fig. 3

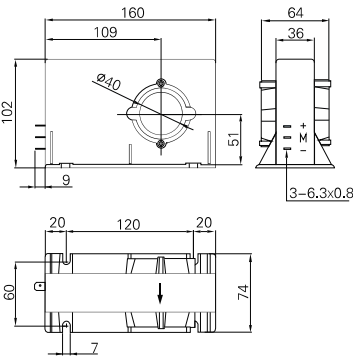


Fig. 4

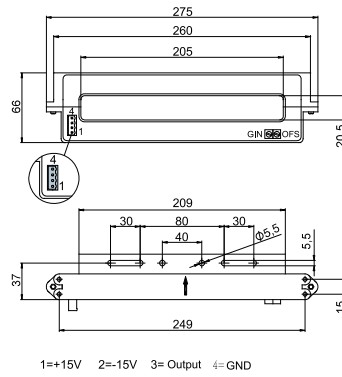


Fig. 5

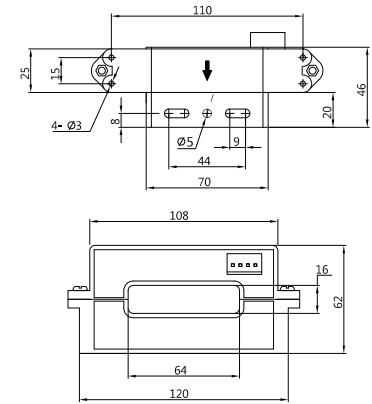


Fig. 6

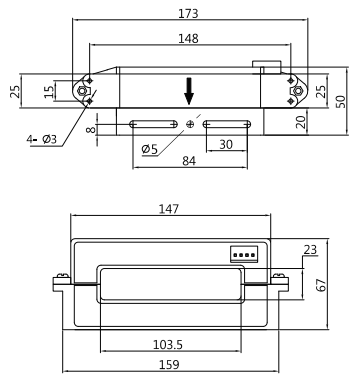


Fig. 7

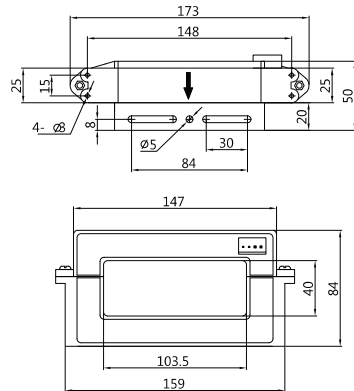


Fig. 8

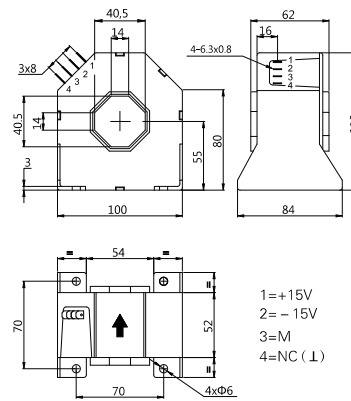


Fig. 9

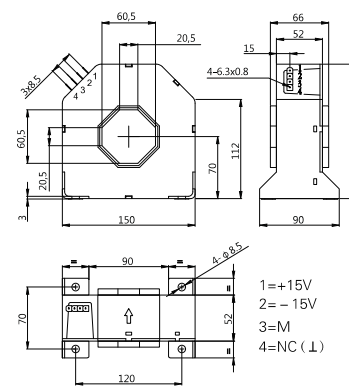


Fig. 10

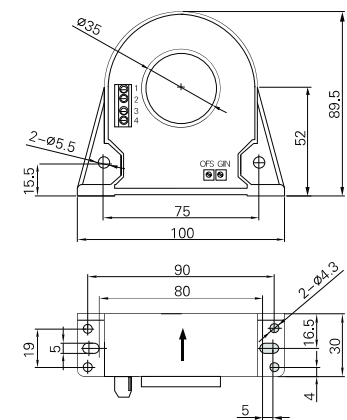


Fig. 11

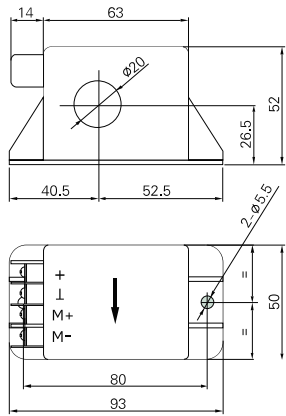


Fig. 12

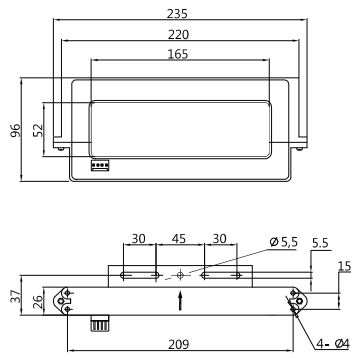


Fig. 13

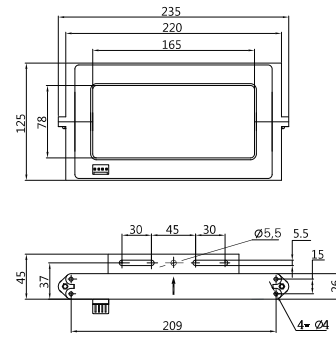


Fig. 14

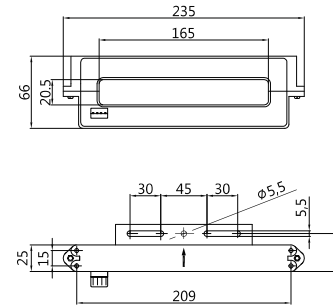
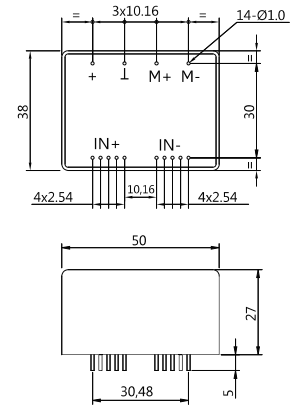


Fig. 15



I_N	Nominal current	V_{off}	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-