

# Nanocrystalline core for current transformer

## Performance characteristics:

High saturation magnetic sensitivity - strong anti-saturation

High magnetic permeability, high precision, high linearity, applicable accuracy range: 0.5~0.05class

High cost performance

Excellent high and low temperature characteristics, working range: -55 ~ 130°C

## Application areas:

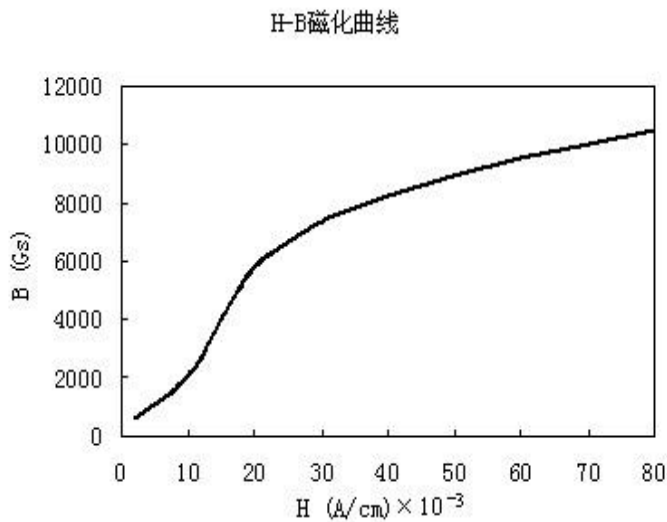
Transformer Substation measurement and over-current protection

Current transformer for electricity meter and power transmitter

## Performance:

Basic magnetic parameter	Nanocrystalline FUO-I	Permalloy
Strength of Saturation magnetic induction BS	1.2	0.7
Initial Magnetic permeability	50000~100000	50000~100000
Maximum Magnetic permeability	>300000	>200000
coercive force (A/m)	<1.6	<0.8
Density (g/cm <sup>3</sup> )	7.3	8.8
core filling coefficient	>0.70	>0.88

## Typical magnetization curve:



**Dimensional specifications and electrical parameters :**

No.	Core size ( mm ) ID*OD*H	Outline Dimensions ( mm ) ID*OD*H	Effective cross-sectional area (cm <sup>2</sup> )	Magnetic path length (cm)	Weight(g)
1	9.5×13×5	8.3×14.5×6.7	0.065625	3.5325	≥1.7
2	9.6×13.2×10	8.2×15.2×12.1	0.135	3.5796	≥3.5
3	12×19×6.5	10.5×21.1×8.0	0.065625	4.867	≥6.2
4	13×17.8×5	11.6×19.6×6.3	0.09	4.8356	≥3.3
5	13.2×21.5×10	11.6×21.3×13	0.31125	5.4479	≥13
6	14×19×8	11.9×22.5×10.4	0.165	5.2595	≥7
7	14×20×10	12.1×22×12.1	0.225	5.338	≥9.2
8	16×21×10	13.5×24.1×12.6	0.1875	5.809	≥9.2
9	16×21×10D	13.7×24.9×12.2	0.2472	5.9032	≥12
10	17×25×10	15.3×28×13	0.3	6.594	≥15
11	18×28×15	16.2×29.5×17.0	0.57	7.2	
12	20×30×15	17.8×33.1×17.5	0.57	7.9	
13	20×32×10	18.0×34.2×13.1	0.46	8.2	
14	25×40×10	22.5×42.5×13.0	0.57	10.2	
15	25×40×15	21.9×43.2×18.9	0.86	10.2	
16	32×50×15	29.0×53.2×18.2	1.03	12.9	
17	32×50×20	28.5×53.2×23.5	1.37	12.9	
18	40×60×20	37×63×24	1.52	15.7	
19	40×64×20	37×67×24	1.82	16.3	
20	40×70×20	37×73×24	2.28	17.3	
21	50×80×20	47×84×25	2.28	20.4	
22	50×80×25	47×84×29	2.85	20.4	
23	50×90×30	46×94×34	4.56	22	
24	50×100×25	46×104×29	4.75	23.6	
25	70×120×30	65×125×35	5.7	29.8	
26	80×120×25	75×125×30	3.8	31.4	
27	90×125×25	85×130×30	3.33	33.8	
28	90×130×30	85×135×35	4.56	34.5	
29	100×120×25	94×126×31	1.9	34.5	
30	100×140×25	94×146×31	3.8	37.7	
21	120×170×25	114×176×31	4.75	45.5	

**Note: Please refer to the common size specifications of our company, and can also be customized according to user requirements.**



