DCbox LVDT PEN TYPE DISPLACEMENT SENSOR CVDT8

- Frictionless measurement
- Infinite mechanical life
- Infinite resolution
- Durable and sturdy
- High environmental adaptation
- High repeatability

SPECIFICATION

- ♦ Power supply: 12~24VDC
- ♦ Working current: Voltage output type supply current ≤ 12mA
  Two wire current output type.
  Supply current 4-20mA
- ♦ Displacement range: 2mm/ 5mm/ 10mm
- ♦ Output signal: 0-5V; 0-10V; 4-20mA; RS-485
- ♦ Linear error: Analog signal output: 0.25% FS
  Digital signal output: 0.1% FS
- ♦ Repetition error: ≦1 μm
- ♦ Resolution power: ≦0.1μm
- ♦ Dynamic characteristics: 10HZ
- ♦ Measuring force: 80g
- ♦ Working temperature: -25℃~+85℃
- ♦ Impact resistance: 250g/11ms
- ♦ Allowable vibration: 10g/2KHZ
- ♦ Temperature coefficient: Zero≦0.01%/℃
- ♦ Sensitivity: ≦0.25%/℃

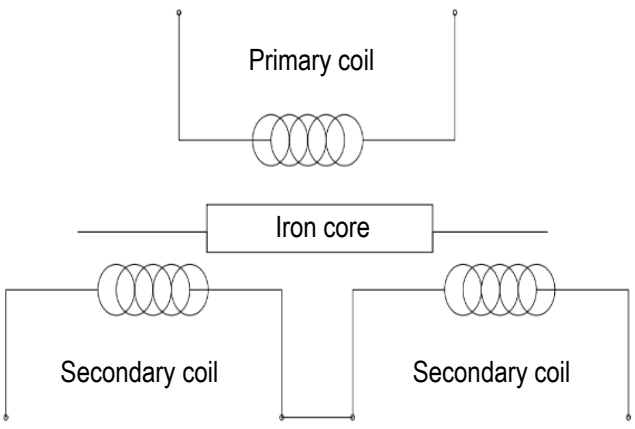
ORDER INFORMATION

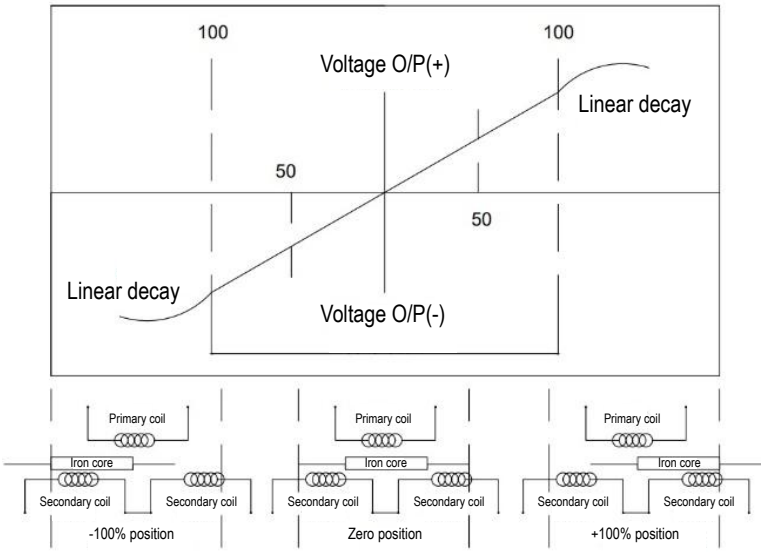
CVDT8- Code1 - Code2 - Code3

Code1	Measuring range(mm)	Code2	Output Signal	Code3	Wire Method
	2, 5, 10	V1	0~5V Voltage	S1	Direct
		V2	0~10V Voltage	S2	Side
		A	4~20mA Current		
		Y	RS-485		

WORKING PRINCIPLE

The structure of LVDT consists of iron core, armature, primary coil and secondary coil, as shown in the following figure.
The primary coil and the secondary coil are distributed on the bobbin, and there is a freely movable rod armature in the coil.
When the armature is in the middle position, the induced electromotive forces generated by the two secondary coils are equal, so that the output voltage is 0; When the armature coil moves inside and deviates from the center position,
The induced electromotive force generated by the two coils is not equal, and there is a voltage output, and its voltage depends on the displacement.





WIRING CONNECTION

The output voltage value of DC regulated power supply must be within the specified use range.

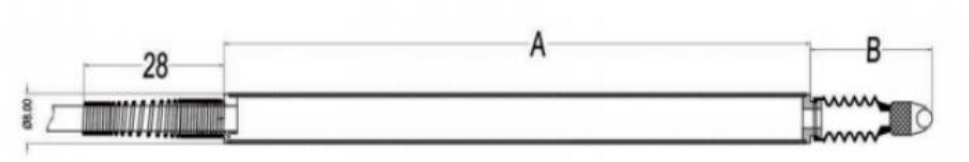
●Current signal output
Brown power supply (+) Current input (+)
Black power supply (-) Current output (-)

●Voltage signal output
Brown power supply (+)
Black voltage output (+)
Blue power supply (-) signal output (-)

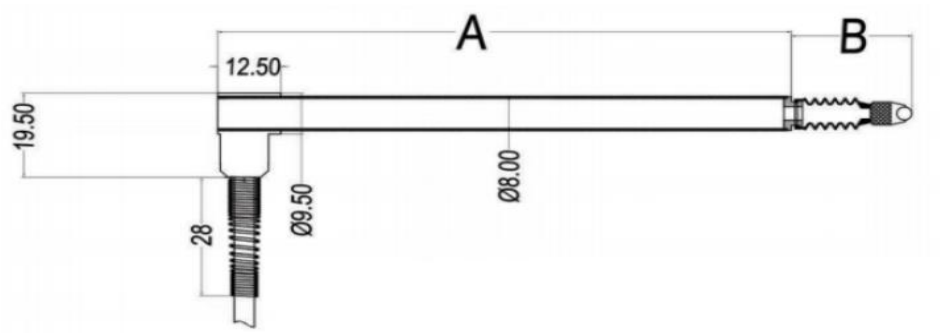
●RS485 output
Red power supply (+)
Black power supply (-)
Green RS-485 (A+)
White RS-485 (B -)

DIMENSION

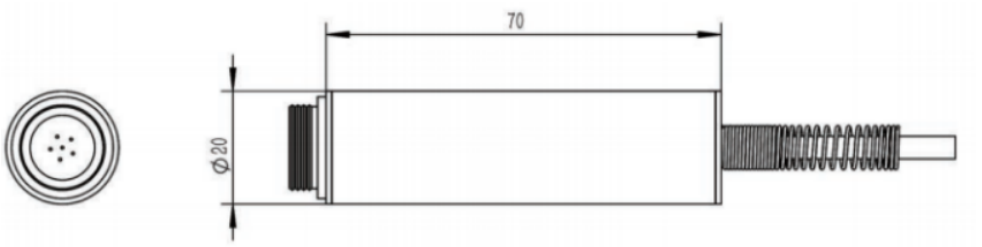
Dimension		
Range (mm)	Size A (mm)	Size B (mm)
2	103	20
5	113	23
10	119	30



Dimension		
Range (mm)	Size A (mm)	Size B (mm)
2	106	23
5	116	23
10	122	30



SIGNAL TRANSMITTER DIMRNSION



INSTALLATION FIXTURE SIZE