DCbox DISPLACEMENT SENSOR CVDT20

- 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: 5mm/ 10mm/ 25mm/ 50mm/
  100mm/ 250mm/ 500mm
- ♦Output signal: 0-5V; 0-10V; 4-20mA; RS-485
- ♦Linear error: Analog signal output: 0.25% FS
  Digital signal output: 0.1% FS
- ♦Repetitive error: ≦1 μm
- ♦Resolving power: ≦0.1μm
- ♦Dynamic characteristics: 200HZ
- ♦Measuring force: 80g
- ♦Working temperature: -25℃~+85℃
- ♦Impact resistance: 250g/11ms
- ♦Allowable vibration: 10g/2KHZ
- ♦Temperature coefficient: Zero≦0.01%/℃
- ♦Sensitivity: ≦0.25%/℃

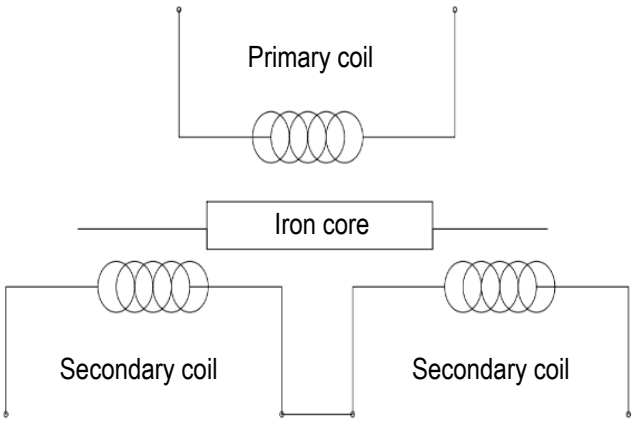
ORDER INFORMATION

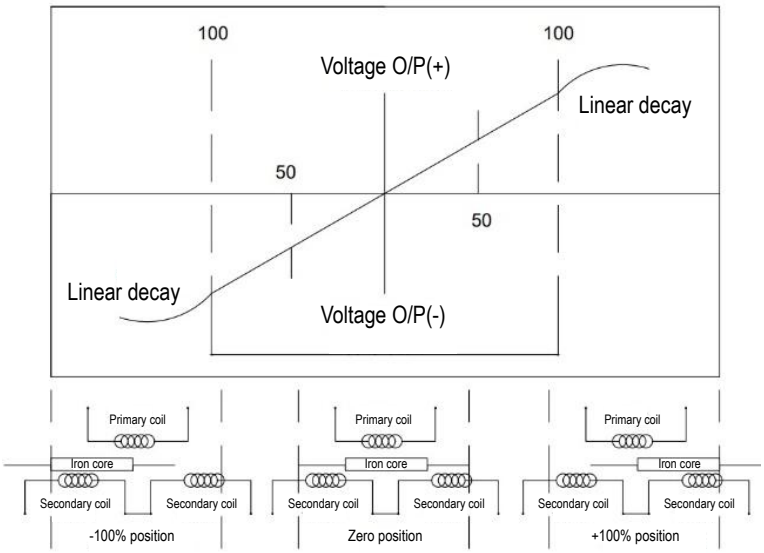
CVDT20- Code1 - Code2

Code1	Measuring range(mm)	Code2	Output Signal
	2, 5, 10	V1	0~5V Voltage
		V2	0~10V Voltage
		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

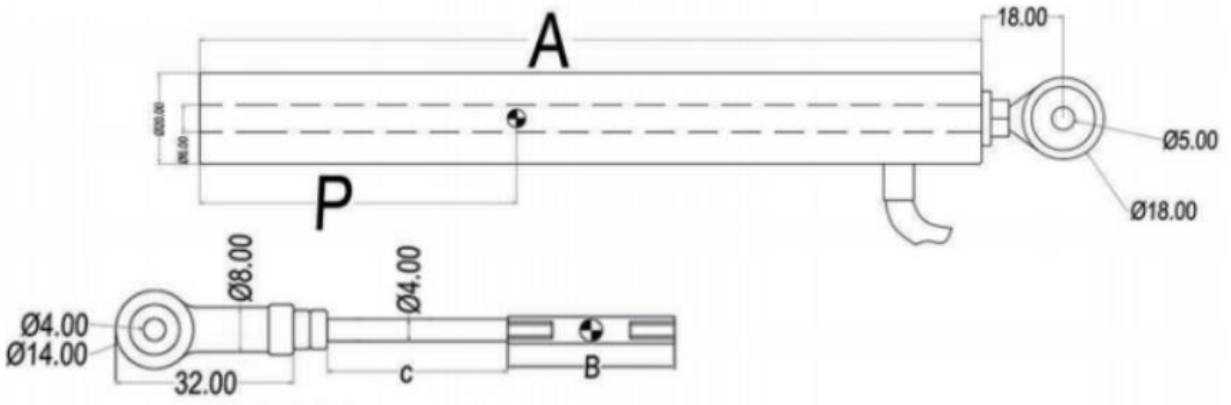
The output voltage value of DC regulated power supply must be within the specified use range.

●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					
Model	Working Range(mm)	Shell Size A(mm)	Core Length B(mm)	Electrical Zero Position P Connecting(mm)	Rod Length C (mm)
5	5	153	30	51	41
10	10	173	40	61	48.5
25	25	229	70	89	69
50	50	279	92	114	95.5
100	100	377	145	163	143
250	250	585	229	267	282.5
500	500	850	300	381	380

INSTALLATION FIXTURE SIZE