

## SDVN Series

### ■ General Purpose LVDT

The new generation LVDT SDVN has been designed to sensor displacement, oscillation, thickness variation of workpiece. It is intended for widely application in aerospace, machinery, construction, textile, railway, coal mine, metallurgy, plastic, chemical industry and academic research.

The pneumatic driving DC-LVDT performs excellently with a maximum measuring range of 50mm by 0.3Mpa-0.7Mpa air pressure input. It operates from a single-ended 9-28 DC power supply, output standard signal of 0-5 DC or 4-20 mA to be identified by computer or PLC. The sensor probe shaft is constructed entirely of anti-friction chromium tool steel, and electrical circuit is rugged hermetically sealed in SUS 304 stainless steel sleeve to resist hostile environment of damp and dust,etc.

### ■ Features

- SUS 304, Pneumatic driving.
- Operated from single-ended, 9-28 VDC supply, built-in excellent signal demodulator
- Output voltage 0-5V or 0-10V(3 wire), output current 4-20 mA (2 wire)
- Standard range from 0mm-15mm, high resolution, excellent repeatability
- Contactless operation,long life.

### ■ Applications

- Glass surface flatness measurement
- Fabricated Metal Products Gaging
- Gap controlling in rolling mill
- Cylinder Position Sensing



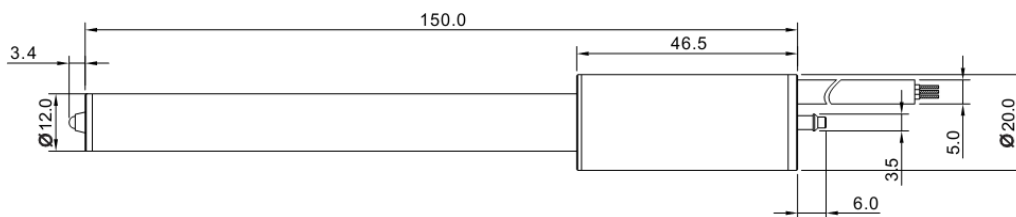
# SDVN Series

## ■ Specifications

<b>Input Voltage</b>	DC 9V-28V, AC 5V
<b>Input Current</b>	input current $\leq 12\text{mA}$ (Voltage output type) input current 4-20mA (2 wire, Current output type)
<b>Measuring Stroke</b>	0-15mm
<b>Output Signal</b>	0.5-4.5VDC( 5V DC input voltage )
	0-5VDC( 9V-28V DC input voltage)
	0-10VDC( 15V-28V DC input voltage )
	4-20 mA( 2 wire, 15V-28V DC input voltage)
<b>Ripple</b>	Less than 15mVrms or 25 $\mu$ Arms
<b>Linearity</b>	$\pm 0.25\%$ , $\pm 0.5\%$ optional
<b>Repeatability</b>	$< 0.01\%$ of FS
<b>Operating Temperature</b>	-2 5 $^{\circ}\text{C}$ ~ +85 $^{\circ}\text{C}$
<b>Thermal Coefficient of Scale Factor</b>	Null point $\leq 0.01\%/^{\circ}\text{C}$ Sensitivity $\leq 0.025\%/^{\circ}\text{C}$

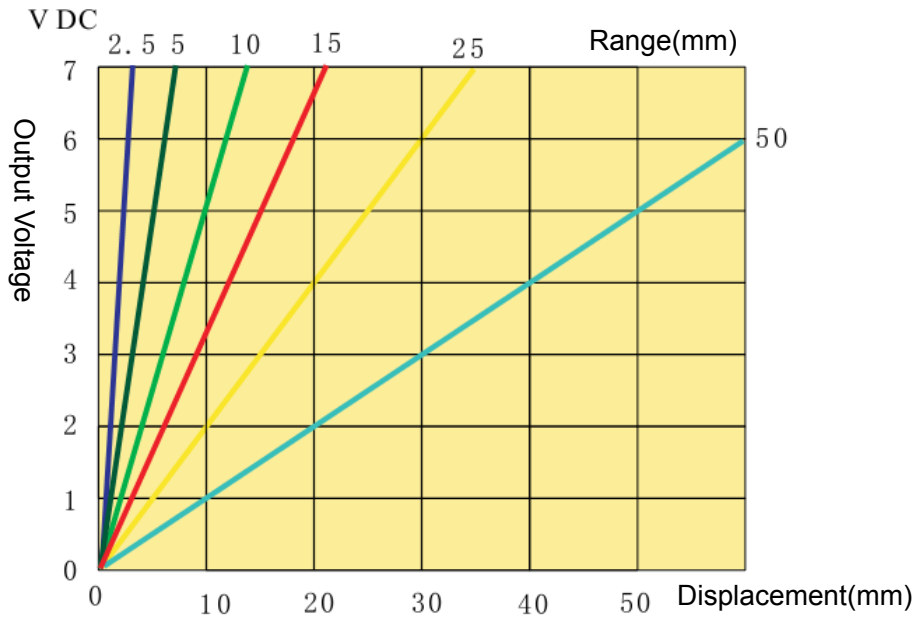
## ■ Mechanical Specifications

Pneumatic driving DC- LVDT SDVN series mechanical specification:

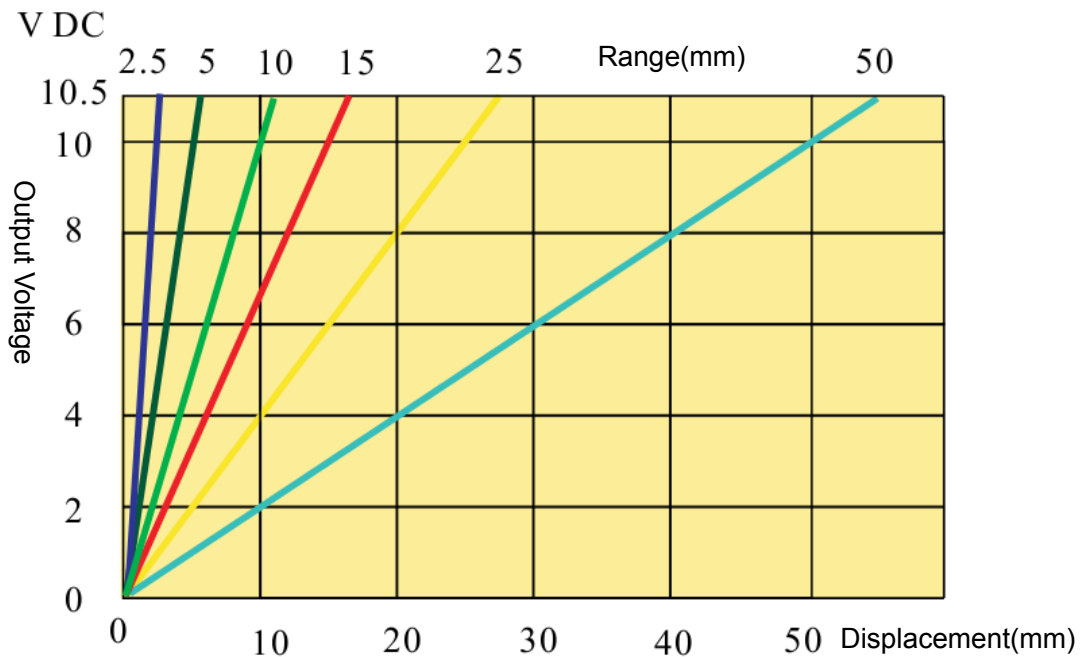


### ■ Output Characteristics

Relations of output voltage(0~5V) and displacement for available measuring ranges  
(Input voltage 9- 28VDC, 12VDC is recommended)

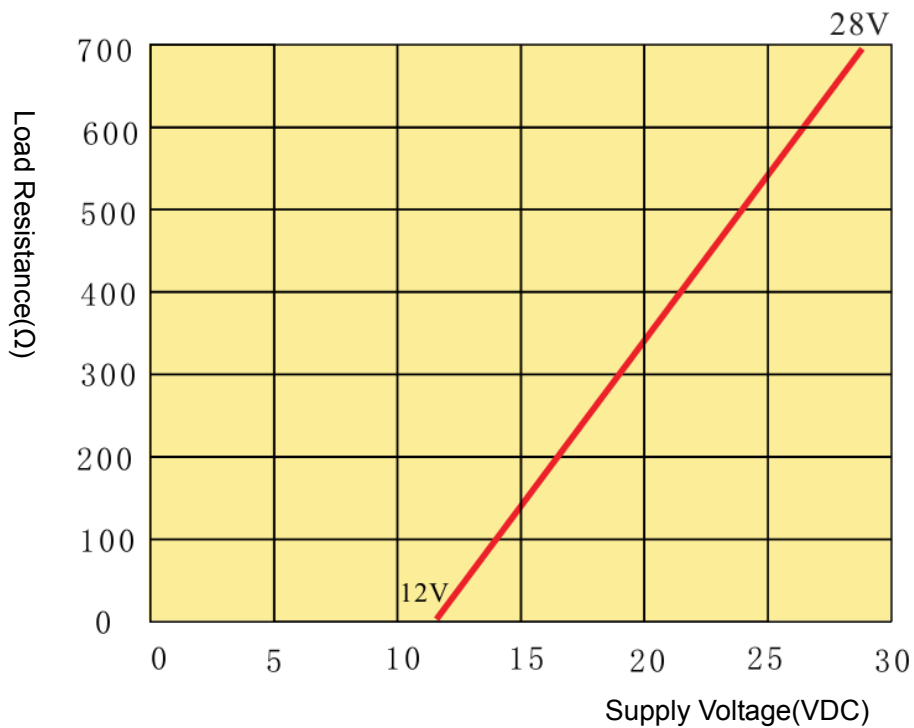


Relations of output voltage 0~10V and displacement for available measuring ranges  
(Input voltage 15- 28VDC, 15VDC is recommended)



# SDVN Series

Relations between the Max loop impedance and input voltage (Current output Model)  
 (Input voltage 15~28VDC, 24VDC is recommended, Load impedance 500Ω)



## ■ Wiring

The input voltage must be within the scope of specifications.

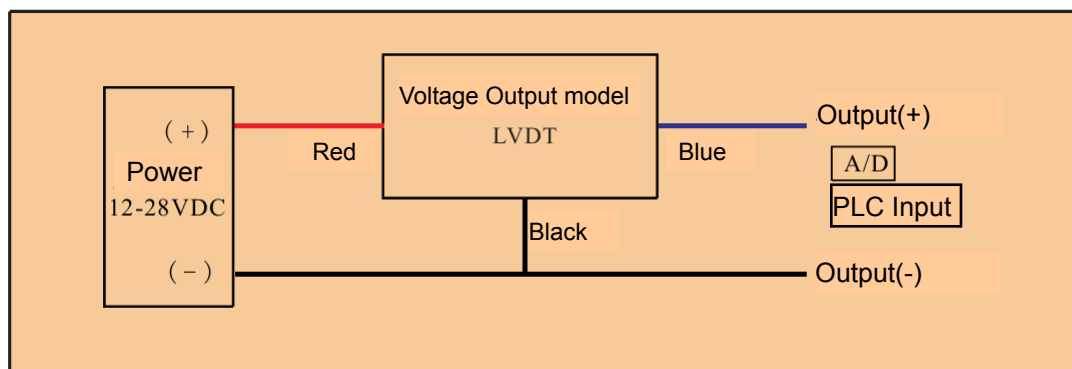
The wiring diagram as below;

Red wire —Power ( + )

Black wire —Power ( - )、 Output of signal ( - )

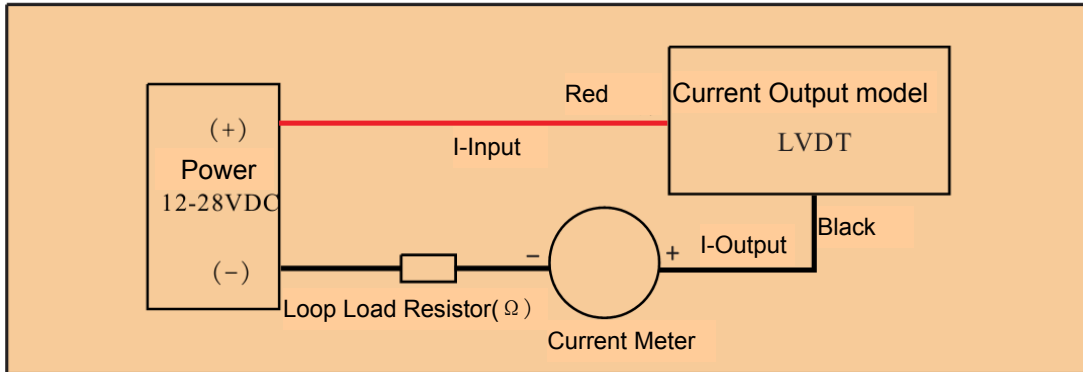
Blue wire —Signal output

**Diagram for Voltage Output Model:**

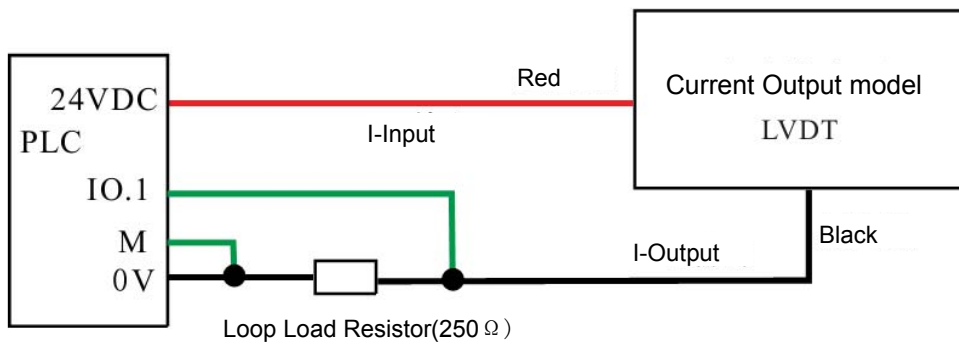


## SDVN Series

### Two Wires Current Output Wiring:



### PLC Wiring (Two Wires Current Output):



### ■ Mounting Blocks

LVDT Installations require a convenient method to mount the units, Constructed of reinforced phenolic and other nonconductive materials with a low- temperature coefficient of expansion. Ready- made mounting blocks are available for all LVDT Series in our catalog; mounting blocks are convenient inexpensive and fast solution for LVDT Installation.

