

# SDVE28 DC Explosion Proof Linear Position Sensors

### Introduction

The linear variable differential transformer (LVDT) has been widely used in applications such as power turbines, hydraulics, automation, aircraft, satellites, nuclear reactors, and many others. These transducers have low hysteresis and excellent repeatability.

DC-operated LVDTs are rugged hermetically sealed sensors, constructed entirely of stainless steel 304 intended for environments with high humidity, dust and other harsh ones.



### Benefits

- SS304 construction, Explosion proof
- DC operated, internal signal conditioner within
- 3-wire voltage output 0–5V or 0–10V  
2-wire current output 4–20mA
- Ranging from 0mm to 15mm, high resolution and repeatability
- Contactless, Long lifespan

### Applications

- Petrochemical and natural gas industry
- Combustible and explosive environment
- Military weapons manufacture
- Hazardous areas with explosive dust and gas

### Parameter

SDVE28 Explosion Proof Linear Position Sensors	
Input Power	9 ~28V DC
Operating Current	Current of voltage output ≤12mA
	2-wire current output of 4~20mA Output of 4~20mA
Range of displacement	0-15mm
Output Signal	0 ~ 5V (9 ~28V DC Input )
	0 ~ 10V (15 ~28V DC Input )
	4 ~20mA (2-wire, 15 ~28V DC Input )
	Digital Output RS485 (9 ~12V DC Input )
Linearity Error	Analog Output 0.25%, 0.5% Optional ; Digital Output 0.25%, 0.1% etc. Optional
Repeatability Error	≤0.01% of F.S.
Resolution	≤0.1um(Max), Digital Output 16 bit
Dynamical property	Standard 50Hz ( Option )
Operating temperature	-77°F ~ 185°F (-25°C ~ +85°C)
Thermal coefficient	Null Position ≤0.01% F.S./ °C
	Sensitivity ≤0.025% F.S./ °C