HD-180 Series
LVDT for Valves

Designed for proportional/servo valve spool feedback, the HD-180 Series LVDT features a split press-fit pressure tube and rod for easy installation in tight valve bodies. The one-piece machined pressure tube with press-fit construction withstands up to 42 MPa with zero leakage risk. Stainless steel housing and built-in shielding ensure reliable operation in harsh hydraulic environments. Available in 6–50 mm strokes, <0.6% linearity, <0.1% repeatability, with standard (155°C) and high-temperature (240°C) options. Ideal for proportional valves, servo valves, die-casting machines, and injection molding machines.



FEATURES

- Stainless steel housing
- Ultra-light core, weight-sensitive
- Compact design, space-saving
- Innovative winding, shorter length
- Tight coupling, high sensitivity
- Magnetic shielding, strong anti-interference
- Full/half bridge (LVDT/LVRT) available

GREAT FOR

- Robotics
- Miniature pumps
- Medical equipment
- Hydraulic cylinders
- Linear actuator assemblies
- Space-limited and weight-sensitive installations

SPECIFICATIONS

Performance

Code	Stroke Range (mm)	Sensitivity,mV/V/mm
HD-180-060-XX-AC	6	63
HD-180-150-XX-AC	15	60
HD-180-200-XX-AC	20	50
HD-180-300-XX-AC	30	32
HD-180-400-XX-AC	40	25
HD-180-500-XX-AC	50	20

All values are nominal unless otherwise noted. Dimensions are in mm unless otherwise noted

FR: Full Range is the stroke range, end to end; FR= S for 0 to S stroke range

FRO (Full Range Output): Algebraic difference in outputs measured at the ends of the range

Electrical

Input	3 V rms(1~7V rms Optional)
Input frequency	5KHz (400~10KHz Optional)
Zero point voltage	< 20mV
Non-linearity	<0.6%
Repeatability	< 0.1%
Operating Temperature	Common type: -50℃~ +155℃
	High temperature type: -50℃~ +240℃
TC of sensitivity	< 0.01%FS/℃
Structure	Split Structure
Wiring	Teflon wire
Shock survival	1000g,11ms
Vibration tolerance	20g@2000Hz
Operating Pressure	42MPa

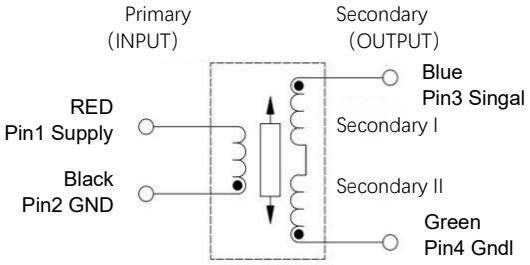
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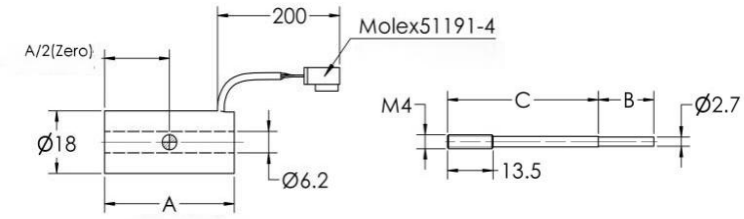
The information provided herein is, to the best of Hansensol's knowledge, true and accurate.
It is provided for guidance only, and all specifications are subject to change without prior notice.

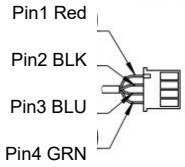
Dimension [mm]

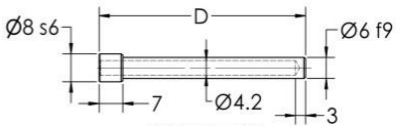
Code	Dim "A"	Dim "B"	Dim "C"	Dim "D"
HD-180-060-XX-AC	30	16	Custom sizes available	63
HD-180-150-XX-AC	39	16.4		60
HD-180-200-XX-AC	54	20		50
HD-180-300-XX-AC	70	28.5		32
HD-180-400-XX-AC	79	30		25
HD-180-500-XX-AC	90	35		20

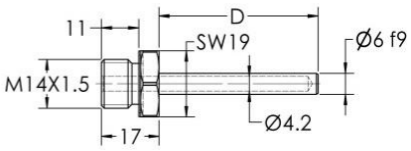
Wiring

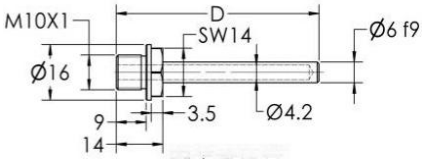












ORDERING INFORMATION

HD - 180 - 060 - YZ - AC

Outer Diameter	
180	18mm

Output	
AC	AC output

Stroke Range	
Code	Stroke
060	6
150	15
200	20
300	30
400	40
500	50
Customizable Range	

Mounting Type	
YZ	Press-fit
M10	M10×1
M14	M14×1.5

Accessories

1.Mounting block

2.Core connecting rod (Customizable)

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