# HD-HP-190 DC Series
# High Pressure LVDT

The HD-HP-190 DC Series LVDTs are designed for high-pressure hydraulic applications. Fully sealed stainless steel body withstands 50MPa. 19 mm diameter with M22×1.5 mounting thread and ED seal for easy, leak-proof installation. Separate core and rod design simplifies field assembly and adjustment. Standard strokes from 12.7 mm to 50 mm (customizable). Dual shielding provides EMI immunity; innovative winding shortens length. Accuracy <0.3%, repeatability <0.1%. Multiple DC outputs (0-5 V, 0-10 V, ±5 V, ±10 V, 4-20 mA) available. Ideal for hydraulic actuators, vessels, valves, and cylinders.



## FEATURES

- Fully sealed structure, shock and vibration resistance
  Pressure upto 50MPa
- All stainless structure, strong corrosion resistance
- Separate core connecting rod design
- With M22X1.5 mounting thread
- ED sealing ring structure, good sealing effect
- Double magnetic shielding
- New winding design, shorter product length

## GREAT FOR

- Hydraulic actuators
- Hydraulic vessel
- Solenoid valve
- Hydraulic cylinder

## SPECIFICATIONS

### Performance

| Code | Stroke Range (mm) |
|---|---|
| HD-HP-190-127-XX | 12.7 |
| HD-HP-190-150-XX | 15 |
| HD-HP-190-200-XX | 20 |
| HD-HP-190-300-XX | 30 |
| HD-HP-190-400-XX | 40 |
| HD-HP-190-500-XX | 50 |

### Electrical

| | | |
|---|---|---|
| Power s Supply | ±15VDC | 13~28VDC |
| Output Singal | ±5V/±10V | 0-5V/0-10V/2-10V/4-20mA |
| Non-linearity (maximum) | <0.3% | |
| Repeatability | < 0.1% | |
| Operating Temperature | -20℃...85℃ | |
| TC of Sensitivity | < 0.015%℃ | |
| Structure | Separate structure | |
| Wiring | M12 connector and cable | |
| Shock | 1000g,11ms | |
| Vibration | 20g@2000Hz | |
| Working pressure | 50MPa | |

Note:

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

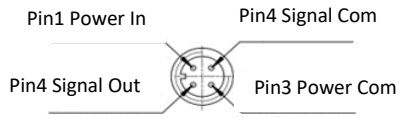
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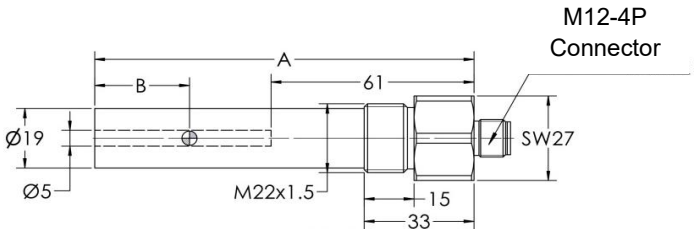
The information provided herein is, to the best of Hansensol's knowledge, true and accurate.
It is provided for guidance only, and all specifications are subject to change without prior notice.

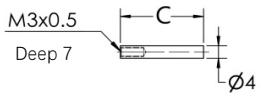
## Dimension [mm]

| Code | Dim "A" | Dim "B" | Dim "C" |
|---|---|---|---|
| HD-HP-190-127-XX | 94 | 18.5 | 16 |
| HD-HP-190-150-XX | 100 | 21.5 | 16.4 |
| HD-HP-190-200-XX | 114 | 28.5 | 25 |
| HD-HP-190-300-XX | 124 | 33.5 | 28.5 |
| HD-HP-190-400-XX | 139 | 41 | 28.5 |
| HD-HP-190-500-XX | 159 | 51 | 40 |

## Wiring

| Connector | Output Singal | Wiring |
|---|---|---|
| M12 | 0-5V/0-10V/2-10V/<br>4-20mA/<br>±5V/±10V | Pin 1 Brown<br>Pin2 White<br>Pin3 Blue<br>Pin4 Black |
| |  | |




## ORDERING INFORMATION

HD - HP 190 - 127 - 0-5V

| Structure | |
|---|---|
| HP | High Pressure Type |

| Outer Diameter | |
|---|---|
| 190 | 19mm |

| Stroke Range | |
|---|---|
| Code | Stroke |
| 127 | 12.7mm |
| 120 | 15mm |
| 200 | 20mm |
| 300 | 30mm |
| 400 | 40mm |
| 500 | 50mm |
| Customizable Range | |

| Output |
|---|
| 0-5V |
| 0-10V |
| 2-10V |
| ±5V |
| ±10V |
| 4-20mA |

Accessories

1.M12 connector and cable

2.Core connecting rod (Customizable)

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