HD-T080 DC Series
Spring-loaded Ultra-precision LVDT

The HD-T080 DC Series spring-loaded gaging probes are DC-powered LVDTs offering excellent linearity, ultra-high accuracy (up to 0.5 µm), and infinite resolution. Construction consists of a stainless steel probe assembly and an 8 mm diameter housing rated to IP-65. Designed for a wide range of position measurement and dimensional gaging applications, they are available in stroke ranges of 1 mm, 2 mm, 5 mm, 10 mm, and 15 mm.
The HD-T080 DC Series features ultra-precision linear ball bearings for smooth, stiction-free probe movement, a triple-shielded LVDT design for EMI protection, and an optional split structure that facilitates installation in tight spaces. Multiple DC output options (0-5 V, 0-10 V, ±5 V, ±10 V, 4-20 mA) are available to suit various control systems.



FEATURES

- Ultra-precision measuring tip，Upto 0.5µm accuracy
- Precision linear bearing spring-loaded mechanism, smooth, no stuck
- Triple-shielded LVDT design for EMI protection
- Polyurethane cable rated for long-term use in drag chains
- Fluoroelastomer sheath offering high temperature and chemical resist
- Standard M2.5 threaded tip for easy replacement
- The split structure is optional and facilitates installation.

GREAT FOR

- Flatness inspection
- Thickness inspection
- Automotive glass inspection
- Automotive parts inspection
- Bearing runout inspection

SPECIFICATIONS

Performance

Code	Stroke Range (mm)
HD-T080-010-X-X-XX	1
HD-T080-020-X-X-XX	2
HD-T080-050-X-X-XX	5
HD-T080-100-X-X-XX	10
HD-T080-150-X-X-XX	15

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

Power s Supply	±15VDC	9~28VDC
Output Singal	±5V/±10V	0-5V/0-10V/2-10V/4-20mA
Non-linearity (maximum)	<0.25%	
Repeatability	< 0.1%	
Operating Temperature	-20℃...85℃	
TC of Sensitivity	< 0.01%℃	
Structure	Springback	
Wiring	6-core Teflon cable or wire	
Shock	1000g,11ms	
Vibration	20g@2000Hz	
Displacement Cycle	> 10^6 cycles	
Springback Force	70g±20% @ Midpoint position of the travel distance	
Mechanical Response	10Hz~200Hz@20℃	
IP Grade	IP65	

Version | 01.2026

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.

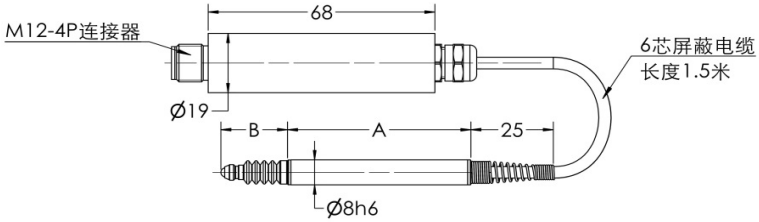
Dimension [mm]

Code	Integrated		Split	
	"A"	"B"	"A"	"B"
HD-T080-010-X-X-XX	45	15	35	15
HD-T080-020-X-X-XX	45	20	35	20
HD-T080-050-X-X-XX	55	29	48	29
HD-T080-100-X-X-XX	77	36	70	36
HD-T080-150-X-X-XX	85	43	78	43

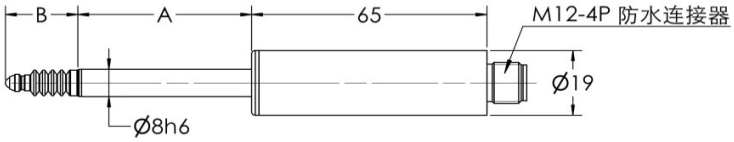
Wiring

Output	Output Singal	Wiring
DC	0-5V/0-10V/2-10V/ 4-20mA/ -5V~5V/-10V~10V	Pin 1棕色（电源+） Pin2白色（信号） Pin3 蓝色（电源地） Pin4黑色（信号地）

Integrated



Split



ORDERING INFORMATION

HD - T - 080 - 100 - X - 1 - 0-5V

Structure	
T	Spring-loaded

Outer Diameter	
080	8mm

Stroke Range	
Code	Stroke
010	1mm
020	2mm
050	5mm
100	10mm
150	15mm
Customizable Range	

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

Structure	
1	Integrated
2	Split

Direction of wiring	
X	Axial outlet
Y	90° outlet

Optional accessories
1. Installation bracket
2. Iron core connecting rod (customizable)

Version | 01.2026