

# FHNV19 series

## DC output LVDT

### Features

Range: 2 to 500mm

Power supply; 24V DC

DC current or voltage output

Linearity:  $\leq \pm 0.25\%$  FS, (0.1% optional)

In-Line Aviation Connector

Ingress Protection: IP 68

### Applications

Machine&tool positioning

Hydraulic axis positioning

Valve position measurement

Material tensionmeter

Automatic production line

Corrosive environments



ABEK FHNV19 series of hermetically sealed DC-powered LVDT position sensors are widely used in a variety of displacement measurement applications. The sensors are laser-welded in stainless steel housings, with hermetically sealed coils that are IP-68 rated. They are resistant to harsh environments and are suitable for a wide range of industrial applications.

The FHNV19 series LVDT has a built-in electronic module that retains the technical advantages of AC LVDTs (such as frictionless operation and high dynamic response) while combining ease of use and simplicity of construction. The DC output allows for easy use with PLCs, digital displays, A/D converters, and data collection systems.

The FHNV19 series are available in ranges from 2.5mm to 500mm and are characterized by high resolution, good repeatability and low latency.

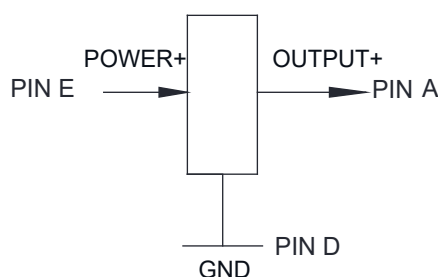
This series of radial connector type LVDTs has two major advantages. First, the overbore design allows access to either or both ends of the LVDT core, making it easy to provide mechanical support, core guidance, and easy to clean the inside of the sensor. The second is the shorter body size compared to axial connector products of the same range.

## General Specifications

Parameters	Specifications
Power Supply:	10-30V DC, 24V(Rated Value)
Output Type:	4-20mA, 0-5V, 0-10VDC(Optional)
Linearity Error:	<±0.25% of FSO, <0.1%(Optional)
Repeatability Error:	<0.01% of FSO
Hysteresis Error:	<0.01% of FSO
Operating Temperature:	-20°C to +85°C
Thermal Coefficient:	-0.02%/°C(Rated Value)
Frequency Response:	100 Hz(Rated Value)

## Electrical Connection

### 3-wire DC output



PT02A-10-6P  
Connector

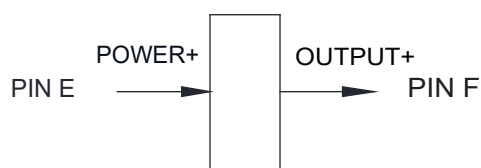
PIN wire color

Pin A **YELLOW**

Pin D **BLACK**

Pin E **RED**

### 2-wire Current output

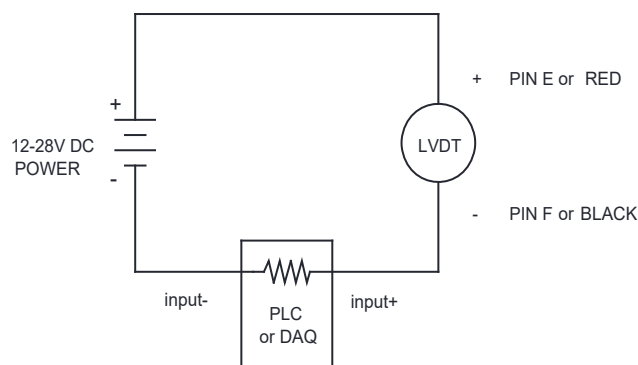


PT02A-10-6P  
Connector

PIN wire color

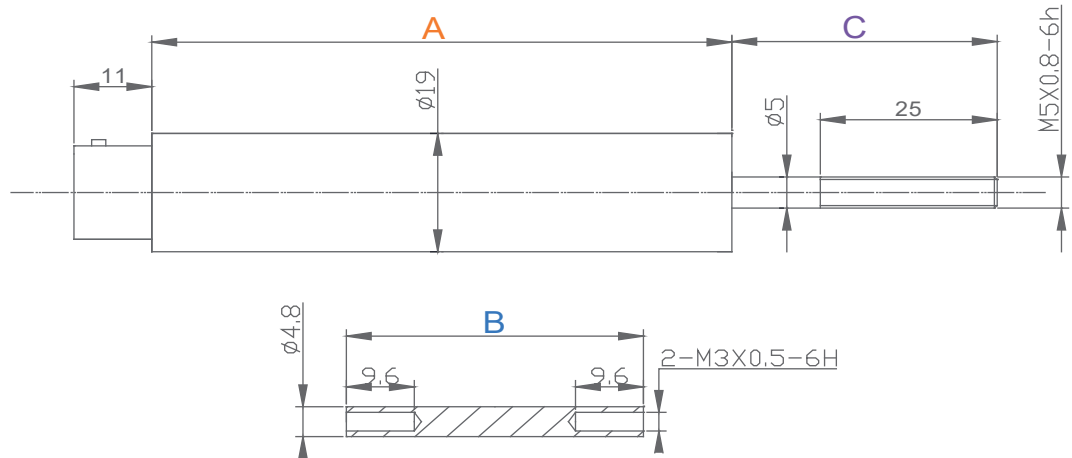
Pin E **RED**

Pin F **BLACK**



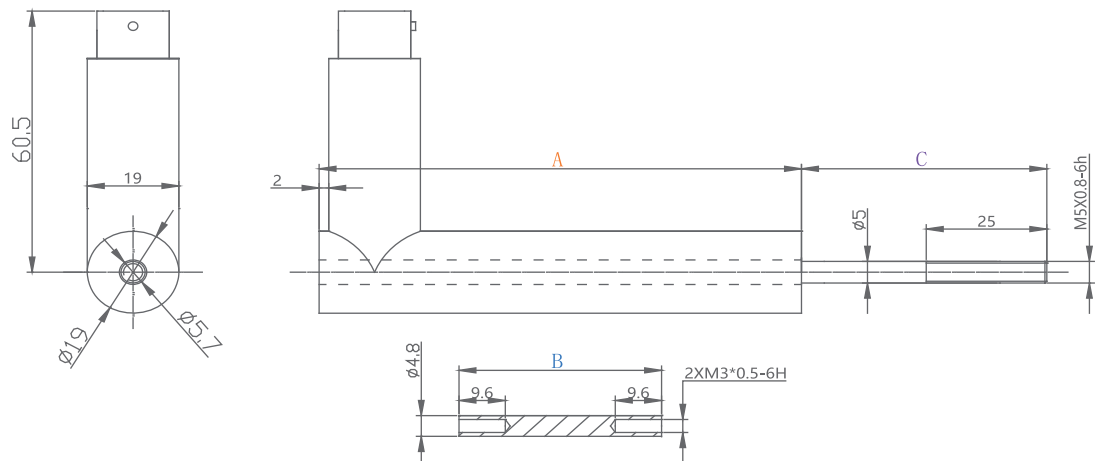
## Dimensions

### Axial Connector



Parameter	Range Code →	006	013	025	050	100	150	200	250	300	400	500
Range	mm	6	13	25	50	100	150	200	250	300	400	500
Body length "A"	mm	105	115	190	228	318	390	460	535	550	680	854
Core length "B"	mm	32	42	87.7	87.7	134.5	157.4	157.4	157.4	157.4	178	241
Core position "C"	mm	39	38	67	93	106	135	159	278	266	285	388

### Radial Connector



Parameter	Range Code →	006	013	025	050	100	150	200	250	300	400	500
Range	mm	6	13	25	50	100	150	200	250	300	400	500
Body length "A"	mm	68	82	148	187	277	346	411	474	501	626	804
Core length "B"	mm	32	42	87.7	87.7	134.5	157.4	157.4	157.4	157.4	178	241
Core position "C"	mm	39	38	67	93	106	135	159	278	266	285	388

## Ordering Guide

### Axial connector 0-10V output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19- 200625	0356-0064	0-200mm LVDT	FHNV19- 220025	0356-0070
0-13mm LVDT	FHNV19- 201325	0356-0065	0-250mm LVDT	FHNV19- 225025	0356-0071
0-25mm LVDT	FHNV19- 202525	0356-0066	0-300mm LVDT	FHNV19- 230025	0356-0072
0-50mm LVDT	FHNV19- 205025	0356-0067	0-400mm LVDT	FHNV19- 240025	0356-0073
0-100mm LVDT	FHNV19- 210025	0356-0068	0-500mm LVDT	FHNV19- 250025	0356-0074
0-150mm LVDT	FHNV19- 215025	0356-0069			

### Axial connector 0-5V output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19-100625	0356-0281	0-200mm LVDT	FHNV19-120025	0356-0299
0-13mm LVDT	FHNV19-101325	0356-0294	0-250mm LVDT	FHNV19-125025	0356-0261
0-25mm LVDT	FHNV19-102525	0356-0295	0-300mm LVDT	FHNV19-130025	0356-0301
0-50mm LVDT	FHNV19-105025	0356-0296	0-400mm LVDT	FHNV19-140025	0356-0302
0-100mm LVDT	FHNV19-110025	0356-0197	0-500mm LVDT	FHNV19-150025	0356-0303
0-150mm LVDT	FHNV19-115025	0356-0298			

### Axial connector 4-20mA output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19-400625	0356-0314	0-200mm LVDT	FHNV19-420025	0356-0138
0-13mm LVDT	FHNV19-401325	0356-0309	0-250mm LVDT	FHNV19-425025	0356-0305
0-25mm LVDT	FHNV19-402525	0356-0258	0-300mm LVDT	FHNV19-430025	0356-0306
0-50mm LVDT	FHNV19-405025	0356-0311	0-400mm LVDT	FHNV19-440025	0356-0307
0-100mm LVDT	FHNV19-410025	0356-0312	0-500mm LVDT	FHNV19-450025	0356-0308
0-150mm LVDT	FHNV19-415025	0356-0313			

### Radial connector 0-10V output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19R-200625	0356-0315	0-200mm LVDT	FHNV19R-220025	0356-0321
0-13mm LVDT	FHNV19R-201325	0356-0316	0-250mm LVDT	FHNV19R-225025	0356-0322
0-25mm LVDT	FHNV19R-202525	0356-0317	0-300mm LVDT	FHNV19R-230025	0356-0323
0-50mm LVDT	FHNV19R-205025	0356-0319	0-400mm LVDT	FHNV19R-240025	0356-0324
0-100mm LVDT	FHNV19R-210025	0356-0318	0-500mm LVDT	FHNV19R-250025	0356-0325
0-150mm LVDT	FHNV19R-215025	0356-0320			

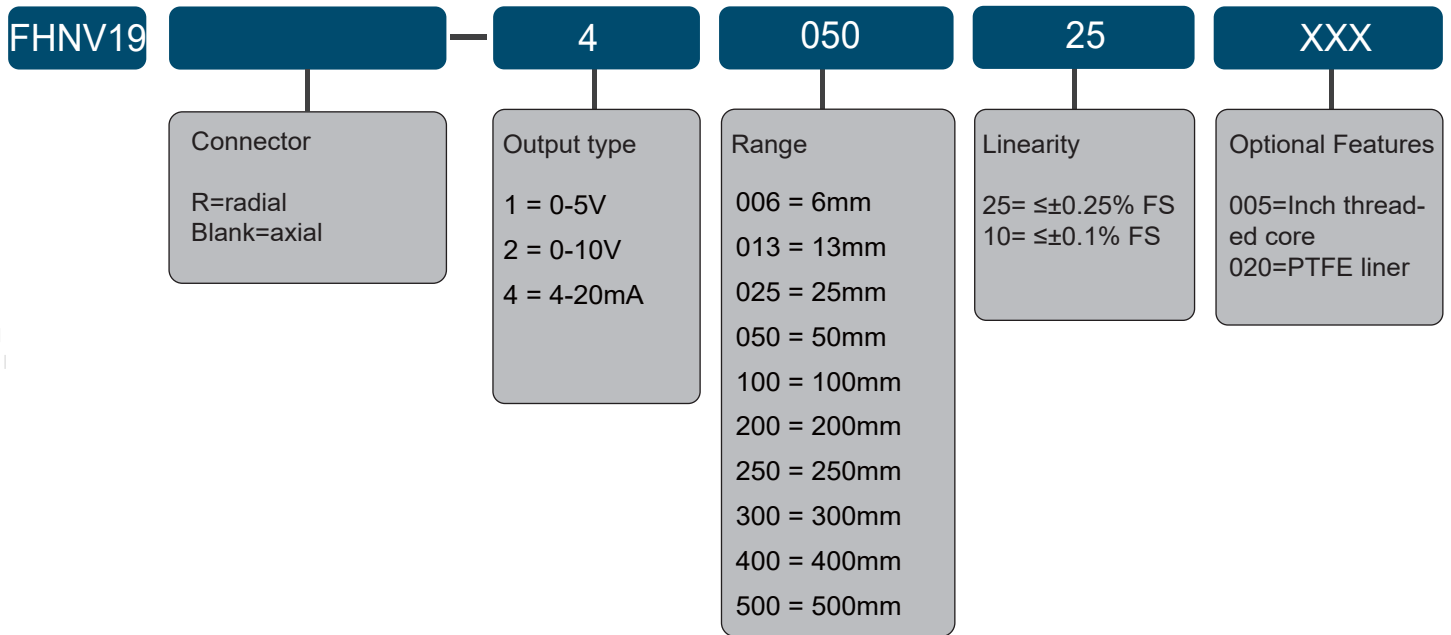
### Radial connector 0-5V output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19R-100625	0356-0326	0-200mm LVDT	FHNV19R-120025	0356-0332
0-13mm LVDT	FHNV19R-101325	0356-0327	0-250mm LVDT	FHNV19R-125025	0356-0333
0-25mm LVDT	FHNV19R-102525	0356-0328	0-300mm LVDT	FHNV19R-130025	0356-0334
0-50mm LVDT	FHNV19R-105025	0356-0329	0-400mm LVDT	FHNV19R-140025	0356-0335
0-100mm LVDT	FHNV19R-110025	0356-0330	0-500mm LVDT	FHNV19R-150025	0356-0336
0-150mm LVDT	FHNV19R-115025	0356-0331			

### Radial connector 4-20mA output

Range	Model	P/N	Range	Model	P/N
0-6mm LVDT	FHNV19R-400625	0356-0337	0-200mm LVDT	FHNV19R-420025	0356-0340
0-13mm LVDT	FHNV19R-401325	0356-0338	0-250mm LVDT	FHNV19R-425025	0356-0341
0-25mm LVDT	FHNV19R-402525	0356-0339	0-300mm LVDT	FHNV19R-430025	0356-0342
0-50mm LVDT	FHNV19R-405025	0356-0176	0-400mm LVDT	FHNV19R-440025	0356-0343
0-100mm LVDT	FHNV19R-410025	0356-0278	0-500mm LVDT	FHNV19R-450025	0356-0344
0-150mm LVDT	FHNV19R-415025	0356-0206			

## Ordering Guide



## Accessories

P/N	Part Name	Model	Description	Remark
0356-C4-0001	ST connector&cable	C-4-2M	PT06A+Green Sheathed Cable, 4-core, 2m	
0356-C4-0002	ST connector&cable	C-4-5M	PT06A+Green Sheathed Cable, 4-core, 5m	
0356-C4-0003	ST connector&cable	C-4-10M	PT06A+Green Sheathed Cable, 4-core, 10m	
20069388-4	Connector	PT06A-10-6S(SR)	without cable	
0355-001	Mounting Bracket	MTD-19	for body diameter 19mm LVDT	

## Contact us

Contact us for technical consultation or customization requests.

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