

# FCNA19

## General-purpose LVDT position sensors

The FCNA19 series of general-purpose LVDT displacement sensors from Abek Sensors is a cost-effective LVDT sensor that is widely used in a wide range of measurement fields.

This series of LVDT sensors has the technical advantages of high resolution, good repeatability, low impedance, high sensitivity, good linearity, environmental adaptability and high reliability. The maximum linearity error is not more than  $\pm 0.25\%$ .

In addition to the options already provided in the selection table, the FCNA19 series can also be customized according to the customer's requirements, including Teflon core gasket, thread specification, cable outlet, joint type and many other mechanical structure requirements; As well as the adaptation of many special application environments such as high pressure resistance, high temperature resistance, radiation resistance, etc.

In order to facilitate the actual application of the customer, we also supply a variety of accessories to match the sensor, the series of related mounting fixtures, signal processing equipment, cables and other accessories, please contact us for information.



### ● Features

Diameter 19mm  
 Range:  $\pm 1.25\text{mm} \sim \pm 250\text{mm}$   
 $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$   
 Stainless steel housing  
 Sealing Rating: ICE IP61

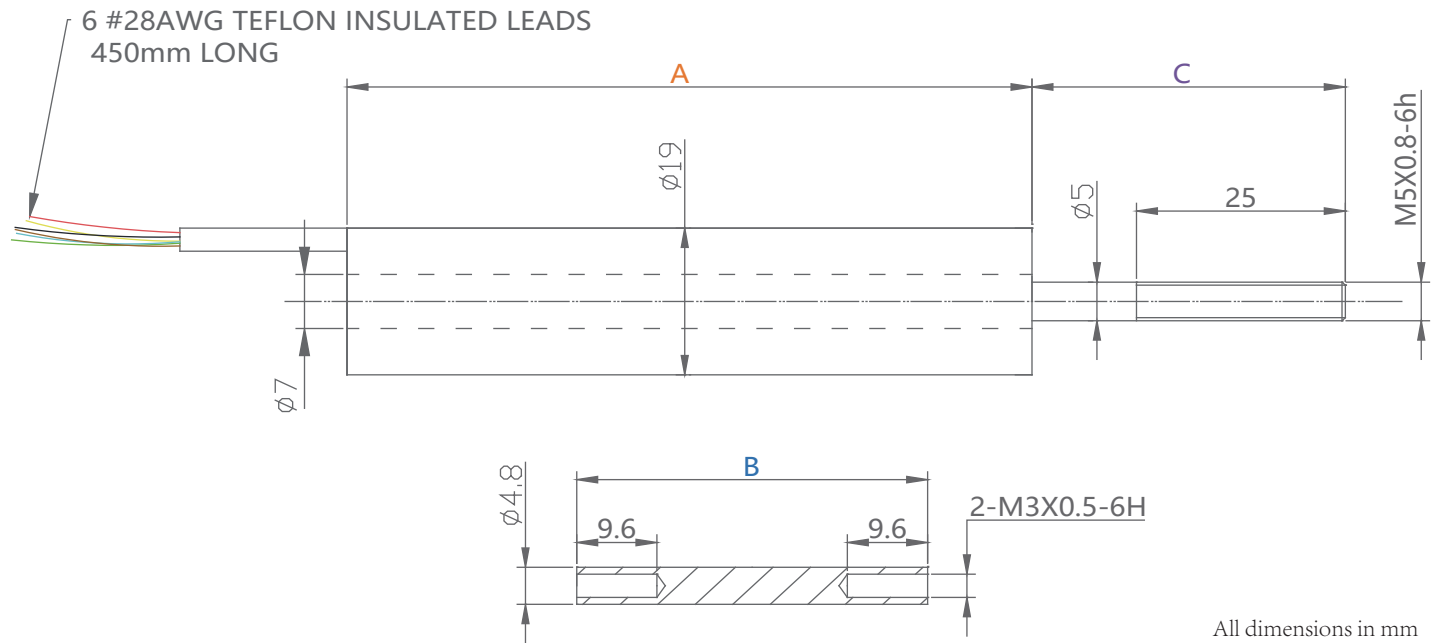
### ● Applications

Machine tool and tool positioning  
 Testing machines  
 Valve position measurement  
 Medical equipment  
 Cylinder position measurement  
 Oil/gas well monitoring  
 Automatic detection of the device

**● General Specifications**

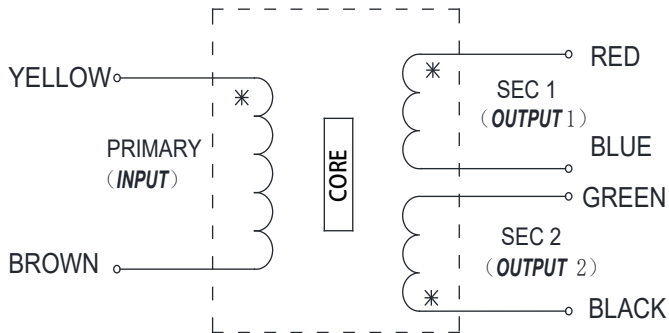
Parameter	Description
Input Voltage:	1to 12V AC, 3V rms
Input Frequency:	400 to 10k Hz, 2.5 kHz (rms)
Linearity Error:	<±0.25% (Full Range Typical)
Repeatability Error:	<0.01% (Full Range Typical)
Hysteresis Error:	<0.01%(Full Range Typical)
Operating Temperature:	-55°C to +105°C
Thermal Coefficient	-0.02%/°C (nominal)
Vibration:	20g, 2 kHz

**● Axial connector**



Parameter	Model ↗	FCNA19-000625	FCNA19-001325	FCNA19-002025	FCNA19-005025	FCNA19-010025	FCNA19-015025	FCNA19-020025	FCNA19-025025	FCNA19-030025	FCNA19-040025	FCNA19-050025
Range	mm	±3	±6.5	±12.5	±25	±50	±75	±100	±125	±150	±200	±250
Dimension "A"	mm	49	67	127	163	259	319	391	451	487	607	775
Dimension "B"	mm	32	42	87.7	87.7	134.5	157.4	157.4	157.4	157.4	178	241
Dimension "C"	mm	41.5	37.5	67	93	1.3	139	163	283.5	165.5	335.5	393
Sensitivity	mV/V/mm	90	80	25	24	15	9.8	6.7	4.9	4.5	4.3	3.1
Primary Impedance	$\Omega$	≥325	≥1400	≥1200	≥1250	≥2150	≥2150	≥420	≥600	≥600	≥775	≥620

## Wiring Information



CONNECT BLUE AND GREEN FOR DIFFERENTIAL OUTPUT

## Ordering information

Description	Model	Part Number
±3mm LVDT	0356-0032	FCNA19-000625
±6.5mm LVDT	0356-0033	FCNA19-001325
±12.5mm LVDT	0356-0034	FCNA19-002525
±25mm LVDT	0356-0035	FCNA19-005025
±50mm LVDT	0356-0036	FCNA19-010025
±75mm LVDT	0356-0037	FCNA19-015025

Description	Model	Part Number
±100mm LVDT	0356-0038	FCNA19-020025
±125mm LVDT	0356-0039	FCNA19-025025
±150mm LVDT	0356-0040	FCNA19-030025
±200mm LVDT	0356-0041	FCNA19-040025
±250mm LVDT	0356-0042	FCNA19-050025

### OPTIONS

#4-40 UNC-2B threaded Core	All models	XXXX-XXXX-005
Teflon bore liner	All models	XXXX-XXXX-020
Mild Radiation resistant	All models	XXXX-XXXX-080

## Contact us

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