Linear Displacement Sensor Models LH and LHS

This is a low cost replacement for DC- LVDT`s and other linear motion sensors, consisting of a tubular housing and a permanent magnet core free to move inside it. No windings, no coils, no signal conditioning electronics needed. Patent pending.

The sensor is available in a single supply / differential output version, and a double supply/single ended output version.

Some of its outstanding features:

- ❖ Wide temperature range
- ❖ Small size
- ❖ Excellent environmental resistance
- ❖ No output ripple
- ❖ No need for signal conditioning electronics
- ❖ No need for regulated supply
- ❖ DC to 10 kHz frequency range

SPECIFICATIONS	LH MODEL	LHS MODEL
Non-linearity error*	0. 5%FR , typ.	
Supply (nominal)	12 VDC, 20mA	±12 VDC, 20mA
Output regulation	0.2% /V, Vex = 10 to 18V	0.2 %/ V, Vex = ±10 to ±17V
Full scale output	±1 to ±2V differential	±5VDC single ended
T.C of zero	0.01 to 0.03% FR /°C typ. , depending on range	
T.C of span	0.03%/°C typ. , - 20 to 70°C	
Temperature range*	- 55 to 125°C	-55 to 95°C
Frequency response	0 to 10 kHz	
Housing material	Stainless steel	

* Non-linearity error defined as maximum deviation from the best straight line, in percents of the full measuring range.

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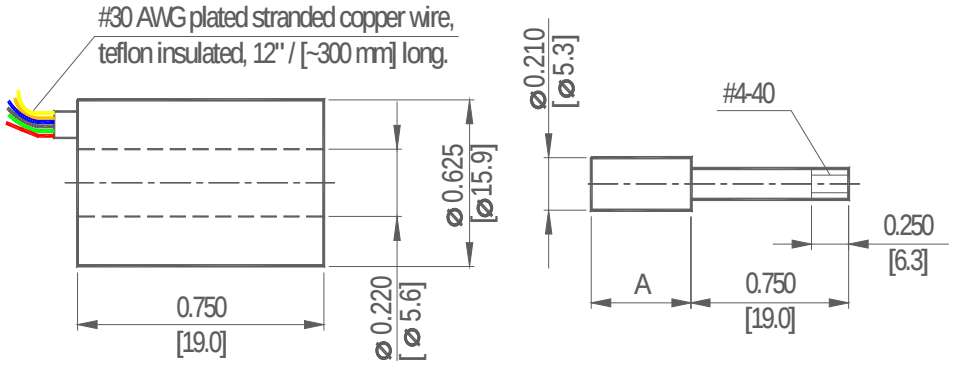
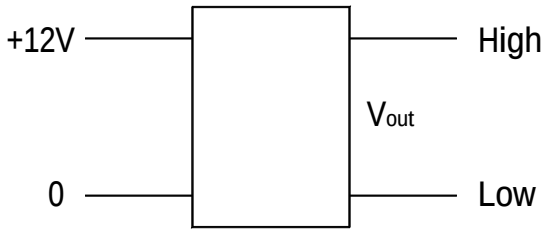
Dimensions (inch / [mm])



MODEL	LINEAR RANGE (inch[mm])	A (inch[mm])	WEIGHT (GRAM)
LH.05, LHS.05	±0.050 [±1.27]	0.500 [12.7]	3.0
LH.1, LHS.1	±0.100 [±2.54]	0.625 [15.9]	3.5
LH.2, LHS.2	±0.200 [±5.08]	0.750 [19.0]	4.0

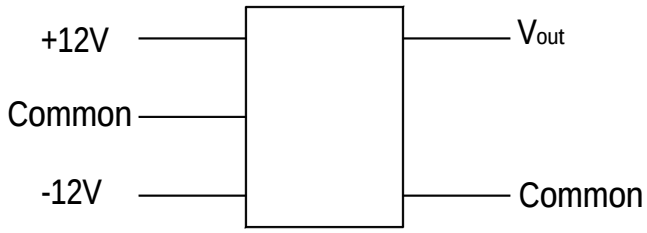
Wiring

MODEL LH



RED	+12V
WHITE	0
GREEN	V out High
BLUE	V out Low

MODEL LHS



RED	+12V
WHITE	Common
BLACK	-12V
GREEN	V out

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