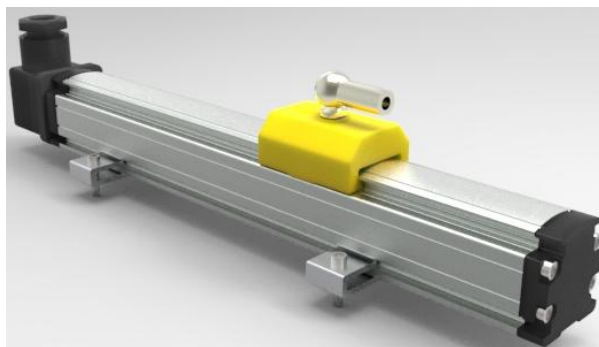




KYDM-LF Series Magnetostrictive Linear Displacement Sensors

Description

KYDM-LF series Magnetostrictive Linear Displacement Sensor (short for KYDM-LF) is a contactless linear position sensor providing high accurate absolute position measurement of displacements. Contactless sensing with highest durability, the extremely robust sensor, ideal for continuous operation under harshest industrial conditions is completely modular in mechanic and electronic design. Absolute output, no periodic re-calibration and maintenance, no need to re-zero. KYDM series of Magnetostrictive Linear-Displacement Sensor can support variety of signal outputs as voltage, current, pulse, SSI, ModBus, Profibus bus, and supports single sensor measuring two coaxial position. Magnetostrictive linear displacement sensor can completely replace electronic device or encoder used in injection molding machines moving parts, injection, ejection precise positioning.



Applications

Injection molding machine
Ceramic press machine
Extrusion machine
Hydraulic press

Features

Contactless Sensing with Highest Durability;
Double encapsulation ensures high operating safety and optimum EMC protection;
Absolute output, no periodic re-calibration and maintenance, no need to re-zero;
Easy installation, no maintenance.

Specifications

Measuring range	80~3000mm
Operating voltage	+24VDC $\pm 10\%$
Outputs	0~5VDC 0~10VDC 4~20mADC SSI
Non-linearity	$< \pm 0.05\%$ F.S. or 100um max.
Repeatability	$< \pm 0.002\%$ F.S.
Resolution	16bitD/A , 1um
Temperature coefficient	$< \pm 0.007\%$ F.S./ $^{\circ}\text{C}$
Load characteristics	Current output: Load Resistance 500 Ω (Max.)
	Voltage output: Load current 2mA(Max.)
Operating temperature	-40~+85 $^{\circ}\text{C}$
Storage temperature	-40~+100 $^{\circ}\text{C}$
Sealing	IP65

Note: The F.S. is short for Full Scale.

KYDM-LF 1 V0110-

0300M S 0 T

1 24 VDC (±10%)

2 15 VDC (±10%)

V [1][2]output [3]Magnet [4]Direction
01=0~10v 05=0~5v; 1=Single; 0=Positive⁽¹⁾
55=-5~+5v 11=-10~+10v; 1=Opposite⁽²⁾

A [1][2]output [3]Magnet [4]Direction
42=4~20Ma 1=Single; 0=Positive⁽¹⁾
2=Double 1=Opposite⁽²⁾

S [1] Data [2]Output [3] Resolution [4]Direction
Length Format
1=25 bits B=Single 1=5μm,5=20μm 0⁽³⁾
2=24bits G=Grey code 2=10μm,6=2μm 1⁽⁴⁾
3=26bits 3=50μm,7=1μm
4=100μm

Your range (mm)

30-3500mm or customized

C Cable

H Aviation connector (no cable)

S Hirschmann (no cable)

T Magnetic slider

F Suspension slider

(1) 0 point near the end

(2) 0 point near the top

(3) Forward-acting measurement

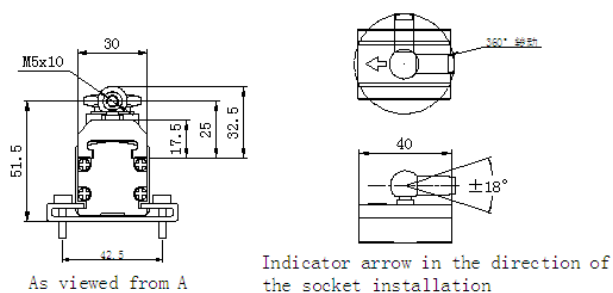
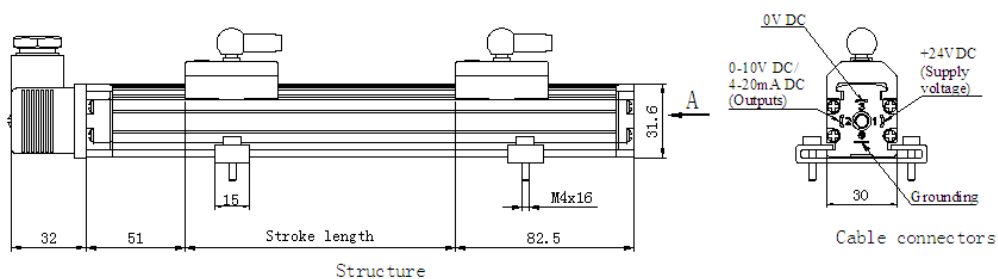
(4) Reverse-acting measurement



Application Overview:

KYDM series Magnetostrictive Linear-Displacement Sensor using non-contact magnetostrictive principle, with durability, and can be used in the injection molding machine mold, injection, transfer seat, the top of the displacement stroke detection.

Product Diagram:



Accessory		
NO.	Name	Count
1	Hirschmann connectors	1
2	M4x16 Socket head cap screw	4
3	Mounting foot	2

Application Picture:

