

# YUTTAH



## Magnetostrictive Position Sensor

### PS40

[www.yuttah.com](http://www.yuttah.com)

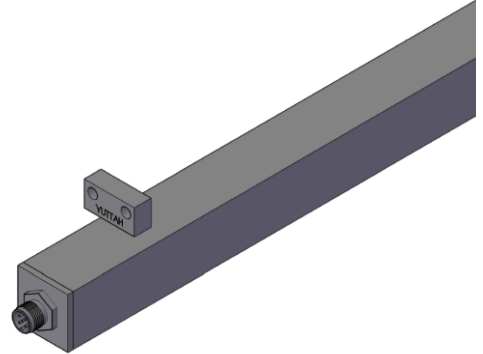
# Magnetostrictive Position Sensor PS40

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The magnetostrictive position sensor PS40 is developed for linear position measurement in industrial applications. The square-profile sensor can be used in many industrial applications.

## Technology

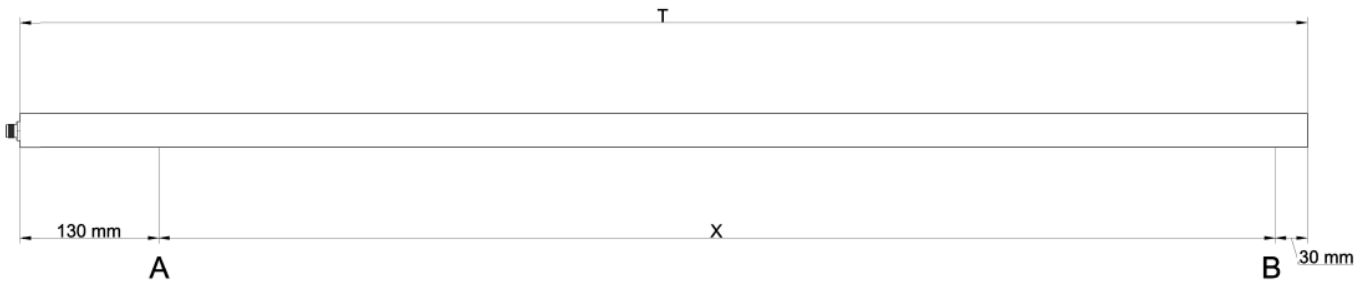
- High-precision linear position sensor
- Magnetostrictive sensor technology
- Measurement ranges up to 5.7 meters
- With an external contactless position magnet
- Available with Analog and Digital outputs
- Easy mounting and direct application



## Specifications

<b>Measurement ranges</b>	All ranges up to 5.7 Meter
<b>Output options</b>	Analog Output: 4 - 20 mA or 20 - 4 mA Digital output: RS485 Modbus
<b>Resolution</b>	0.3 mm
<b>Linearity</b>	±1 mm
<b>Supply Voltage</b>	Flexible 12 – 32 VDC
<b>Excitation Current</b>	max. 30 mA
<b>Protection Class</b>	IP67 / IP69
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Housing</b>	Anodized Aluminum
<b>Mounting</b>	Mounting clamps
<b>Weight</b>	As per length
<b>Shock</b>	DIN EN 60068-2-27:2010, 100 g/11 ms, 100 shocks
<b>Vibration</b>	DIN EN 60068-2-6:2008, 20 g 10 Hz-2 kHz, 10 cycles
<b>EMC</b>	DIN EN 61326-1:2013

## Drawings

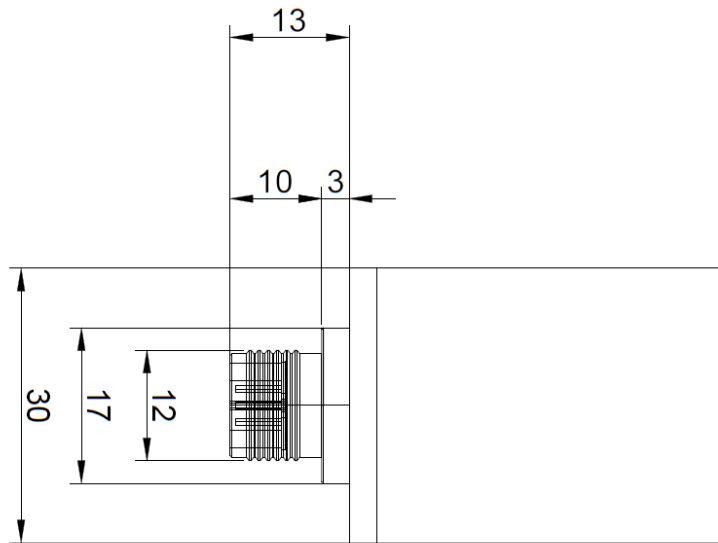
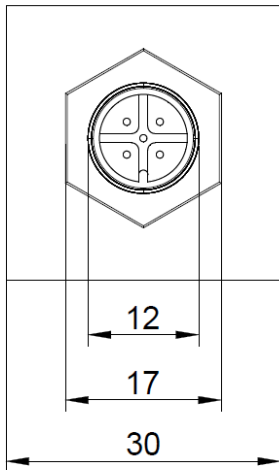


**A: Start position**

**B: End position**

**X: Measurement range (up to 5700mm)**

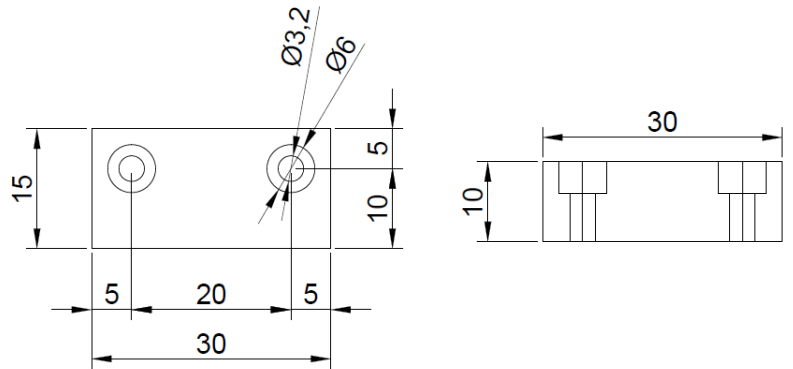
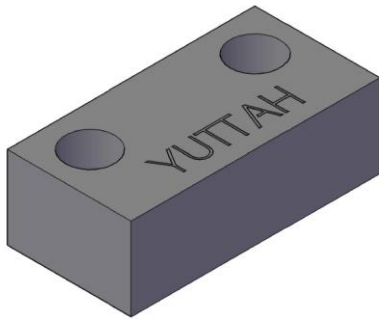
**T: Total length**



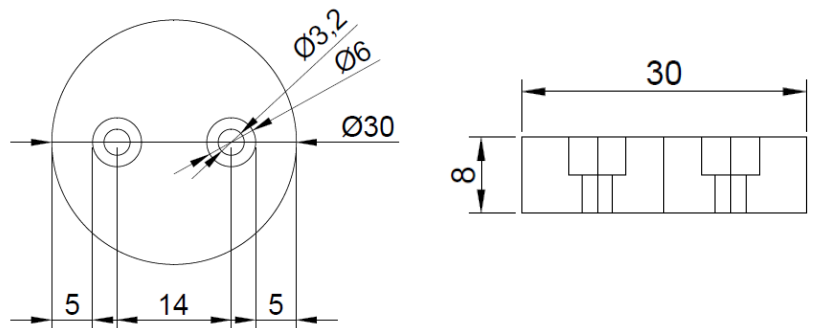
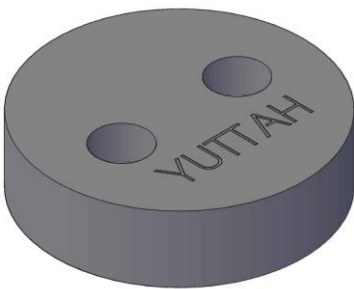
Dimensions in mm

## Position Magnet Options

### PMAG1



### PMAG3



- Customer customized magnets available on request.
- Dimensions in mm.

## Order Codes / Analog Output

PS40 - 2 - 3 - 4

1

**Model**

PS40

2

**Supply Voltage**

SV1: Flexible 12 – 32 VDC  
SV2: 24 VDC (+/- 5%)

3

**Output**

A1: 4 – 20 mA  
A2: 20 – 4 mA

4

**Measurement range**

X mm (up to 5700 mm)

Example: PS40 - SV1 - A1 - 2000

## Order Codes / Digital Output

PS40 - 2 - 3 - 4

1

**Model**

PS40

2

**Supply Voltage**

SV1: Flexible 12 – 32 VDC  
SV2: 24 VDC (+/- 5%)

3

**Output**

RS485 Modbus

4

**Measurement range**

X mm (up to 5700 mm)

Example: PS40 - SV1 - RS485/M - 2000

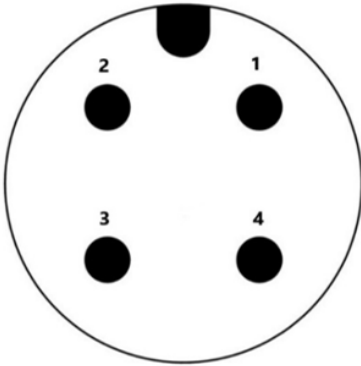
## PINOUT

### Analog Output

M12 male connector, 4 pin

Connector pin no.

Output signals



- 1
- 2
- 3
- 4

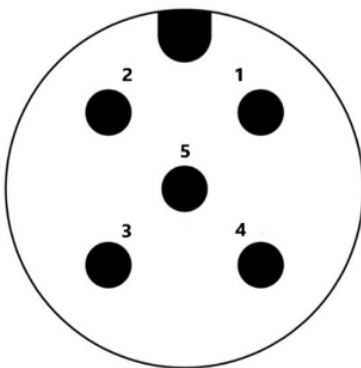
- Signal -
- Do not connect
- Signal +
- Do not connect

### RS485 Modbus Output

M12 Male connector, 5 pin

Connector pin no.

Output signals



- 1
- 2
- 3
- 4
- 5

- GND
- Do not connect
- +V (excitation voltage)
- TXD / D- / B
- RXD / D+ / A

## Advantages

- High precision
- Compact and robust
- High resistance against shocks and vibrations
- High protection class
- Non-contact technology
- Wear-free and maintenance-free
- Long lifetime
- Easy mounting and direct application
- Design flexibility

## Applications

- Industrial Applications
- Industrial Vehicles
- Communal Vehicles
- Material Handling
- Hydraulic cylinders
- Pneumatic cylinders
- Forest and Agriculture Machines
- Heavy duty applications
- Power and Energy
- Other Applications



# YUTTAH

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YUTTAH is a leading manufacturer of sensors, located in the United Arab Emirates. Our main product lines are: Position Sensors, Angle Sensors, Inclination Sensors, Acceleration Sensors, Vibration Sensors, Temperature Sensors, Pressure Sensors and Weight Sensors.

It is our main goal to help our customers to fulfil their needs. Our quality products are designed flexible to meet the application requirements of our customers. Our mission is to help our customers in the engineering phase to reach the wished results by providing customer customized sensor solutions. Our team is highly excited to help you in the stages of your development as well as providing a lifetime support. The combination of our know-how, quality products, flexible customized solutions, extensive lifetime support, and our experienced team is the right solution for you.

