

PN bus series

Linear Position Sensor



Features

Non-contact measurement, real-time monitoring by LED lights, and fault indication.
The repeatability accuracy is less than 0.001%F.S and the nonlinearity is less than 0.01%F.S
Digital technology, robust and durable, stable and reliable.
Linear measurement, absolute position output
The maximum measurable stroke is 5500 mm

Tech Parameter:

- Data Protocol Profile and Encoder Profile4.1
 - Interface Profinet IORT
- The maximum transmission speed is 100Mbit/s
- Resolutions: 1, 2, 5, 10, 20, 50, 100 μm
- Nonlinearity < $\pm 0.01\%$ of full scale, minimum $\pm 50 \mu\text{m}$
Repeatability is less than $\pm 0.001\%$ of full scale, with a minimum of $\pm 1 \mu\text{m}$
Update time: 1 KHZ (range $\leq 1 \text{ M}$)
500 HZ (1 M < range $\leq 2 \text{ M}$)
250 HZ (2 M < range $\leq 3 \text{ M}$)
 - Lag

The temperature coefficient is less than 15 ppm/ $^{\circ}\text{C}$
Operating temperature: -40°C to $+85^{\circ}\text{C}$

 - Protection grade: IP65P aluminum formed shell/IP67H stainless steel pressure-resistant tube
 - Humidity/Dew point: 90% humidity, no condensation

Impact standard GB /T2423.5 100g (6 ms)
Vibration standard GB /T2423.10.20g /10-2000 HZ
EMC test GB /T17626.2/3/4/6/8, Grade 4/3/4/3/3, Class A

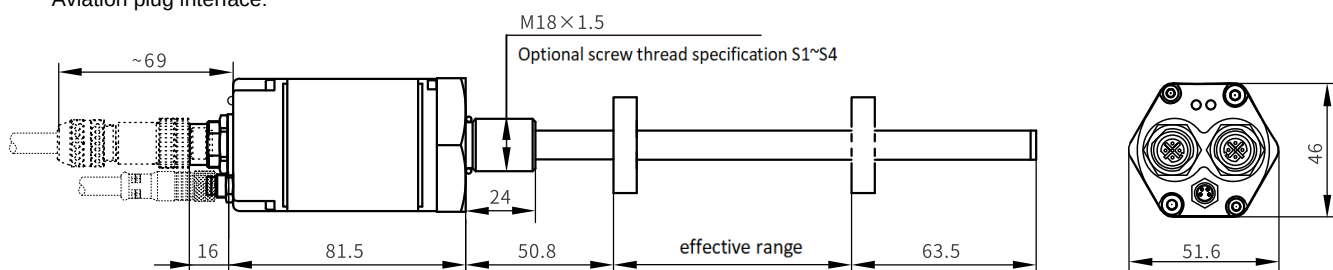
Details:

- The measuring rod is made of aluminum alloy and 304 stainless steel
 - Threaded interface M18*1.5 (optional)
 - Aluminum alloy IP67 for the electronic compartment
 - Outer pipe pressure: 35MPa (continuous), 70MPa(peak) \ n
 - Outlet method: Direct cable or aviation plug
- Standard magnetic rings for position magnets and various ring-shaped magnets
- Threaded interfaces: M18*1.5, M20*1.5 (customizable)

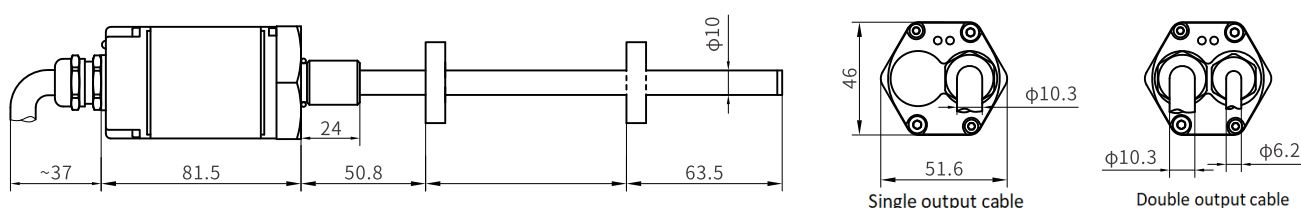
- Input voltage: 24 V DC ($\pm 20\%$)
- Working current < 90 mA (varying with the measurement range)
- Maximum polarity protection -30 V DC
- The maximum overvoltage protection is 36 V DC
- Insulation resistance > 10 M Ω
- Insulation strength: 500 V

TIP series 101 structure:

Aviation plug interface:

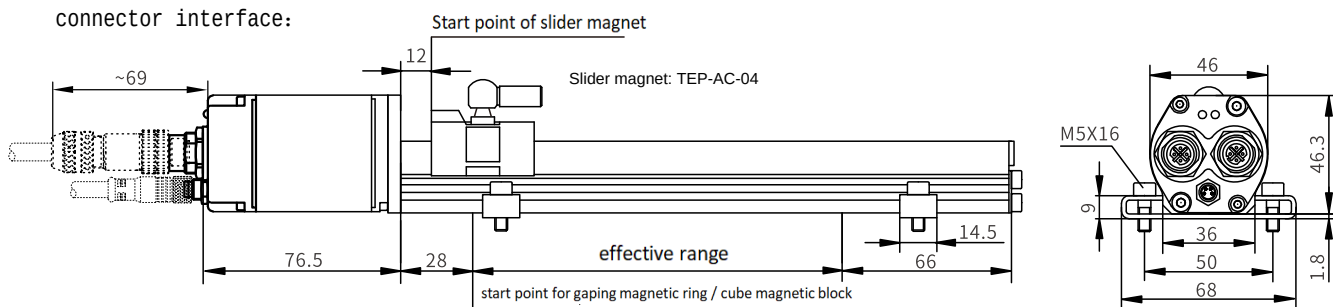


Straight out cable interface:

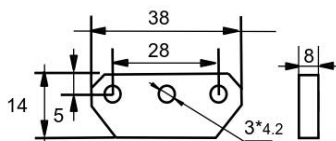
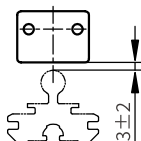
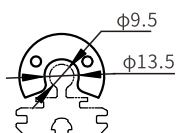
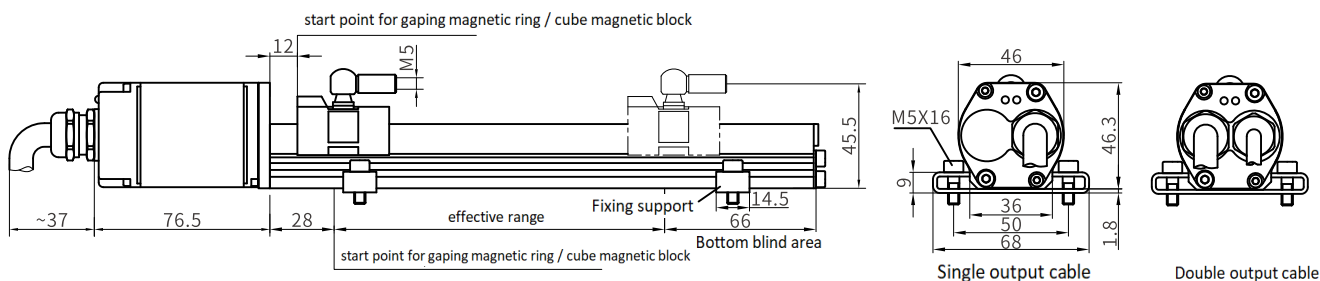


TEP series 103 structure

connector interface:



cable interface:



gaping magnetic ring: TEP-AC-03

suspending magnet: TEP-AC-05

suspending strong magnet: TEP-AC-06

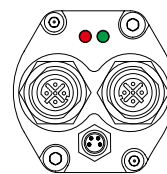
PROFINET OUTPUT

wiring instructions for aviation connector

interface 1,2	pin	color	function
	1	yellow	T x +
	2	white	R x +
	3	orange	T x -
	4	blue	R x -

interface 3	pin	color	function
	1	brown	+ 24 V d c
	2	white	N U L L
	3	blue	C O M
	4	black	N U L L

status indicate and trouble shooting



green	red	function
shine	off	working
shine	shine	network cable no connected
shine	flash	configuration
flash	×	faulty

single straight output wiring instructions

pin	wire color1	function
1	yellow	T x +
2	white	R x +
3	orange	T x -
4	blue	R x -
5	red	24 V d c
6	black	C O M

double straight output wiring instructions

pin	wire color1	wire color2	function
1	yellow	yellow	T x +
2	white	white	R x +
3	orange	orange	T x -
4	blue	blue	R x -
5	red		24 V d c
6	black		C O M

remark	* wire color 1: light green, PUR cover, 6 poles, -40°C~85°C
	* wire color 2: light green, PUR cover, 4 poles, -40°C~85°C

cable mode selection instructions

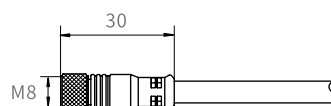
name and type

Materials and Description

4pin aviation female connector



type: EEM33-52-N

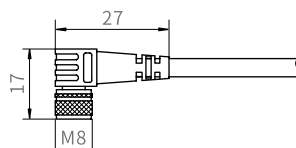


remark: optional cable length(m): 2, 5, 10, 15.

4pin elbow aviation female connector



type: EEM33-53-N



EEM33 - 23 - N + cable length

EEM33 - 53 - N + cable length

Industrial Ethernet cable



type: EEM33-44-N

connector type: two 4-pin bent male connector (M12)

cable cover: PVC light blue

working temperature: -40°C~80°C

Industrial Ethernet cable



type: EEM33-45-N

connector type: RJ45, 4-pin bent male connector (M12)

cable cover: PVC light blue

working temperature: -40°C~80°C

remark: optional cable length(m) 3, 5, 8, 10, 15.

EEM33 - 44 - N + cable length

EEM33 - 45 - N + cable length

EEM33 - 46 - N + cable length

EEM33 - 47 - N (M12 4pole metal connector)

Industrial Ethernet cable



type: EEM33-46-N

connector type: RJ45, 4-pin straight male connector (M12)

cable cover: PVC light blue

working temperature: -40°C~80°C



instructions:

