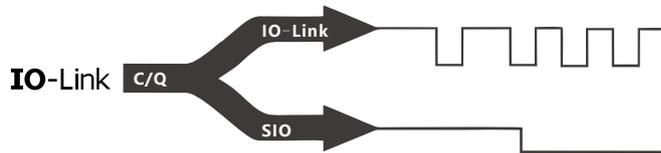
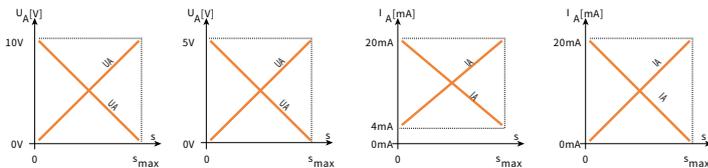


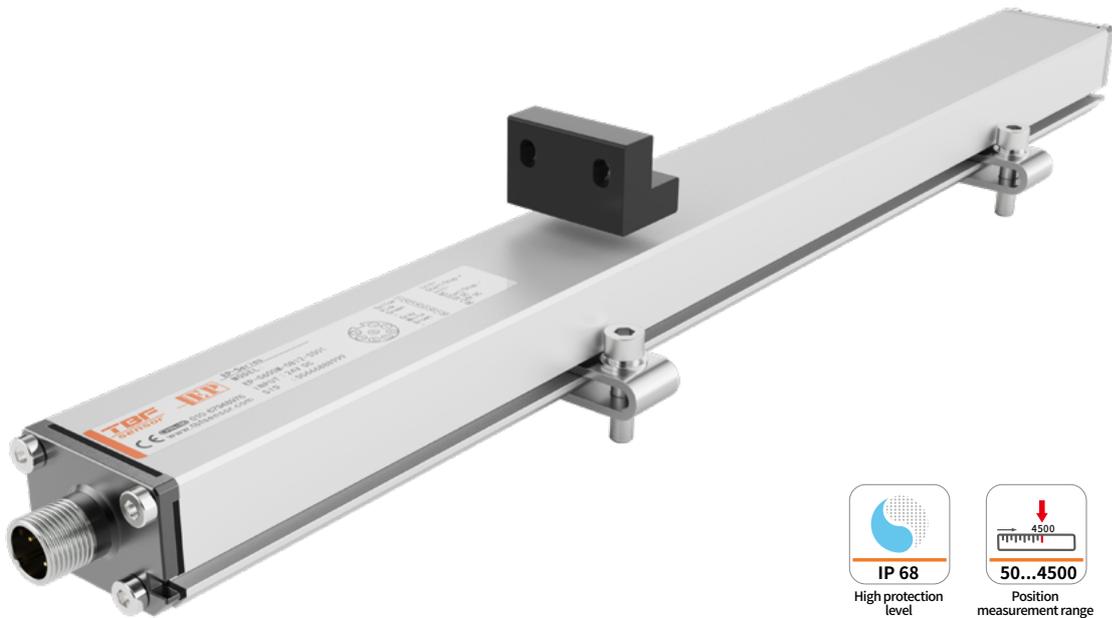


# EP2-Analog(+IO-Link)

## EP2-Series Data Sheet



- + Updated new generation: stronger performance
- + Easily installed: integrated design, no protruding electronics housing
- + Easy to use: standard signal output, maintenance free
- + Widely applied in forging, building materials, rubber and plastic machinery and other fields
- + Output Analog+IO-Link



 <b>IP 68</b> High protection level	 <b>50...4500</b> Position measurement range	 <b>-40...+85 °C</b> Wide range temperature
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 Double anti-interference	 High performance chip	 Reverse polarity protection	 Shock/vibration resistant
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## TECHNICAL PARAMETER

TECHNOLOGY PERCEIVES THE FUTURE

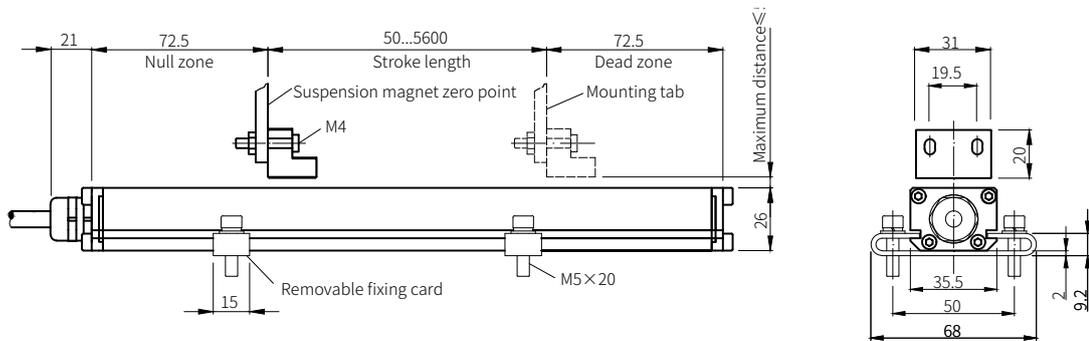
Input				
Measured data	Position/Speed			
Measurement range	50mm...5600mm			
Output				
Voltage	0...10VDC, 10...0VDC, 0...5VDC, 5...0VDC (Controller min. load impedance >5KΩ)+IO-Link			
Current	4...20mA, 20...4mA, 0...20mA, 20...0mA (min./max. load 0/750Ω)+IO-Link			
Transmission rate (IO-Link)	Rate(bit/s)	4800	38400	230400
	Port	COM1	COM2	COM3*
Resolution				
Position resolution	Analog	16 bit D/A		
	IO-Link	1/2/5*/10/20/50/100μm		
None-Linearity	< ±0.02%F.S. (min. ±50μm)			
Repeatability	< ±0.005%F.S. (min. ±20μm)			
Update time	Stroke length	≤ 1200mm	≤ 2400mm	≤ 5600mm
	Update time	0.5ms	1ms	2ms
Temperature coefficient	< 30ppm/°C			
Mounting				
Mounting direction	Any			
Fixation	Removable fixing card			
Design/Material				
Sensor cap	Aluminum alloy/Zinc alloy			
Sensor profile	Aluminum alloy			
Electrical connection				
Wiring connection	Straight out cable or aviation plug			
Operating voltage	+24VDC(-15/+20%)			
Polarity protection	Up to -36VDC			
Overvoltage protection	Up to +36VDC			
Power consumption	< 70mA (varies with range size)			
Dielectric strength	500 VDC (DC ground to machine ground)			
Operating conditions				
Magnet speed	Any			
Operating temperature	-40...85°C			
Humidity	90 % relative humidity, no condensation			
Ingress protection	IP67( when connector is fitted)			
Shock	100 g (single shock) IEC standard 60068-2-27			
Vibration	15g/10...2000 Hz, IEC standard 60068-2-6 (resonant frequencies excluded)			
EMC	Electromagnetic emission according to EN 61000-6-3			
	Electromagnetic immunity according to EN 61000-6-2			

Note: “\*” as default

**Straight out cable**

EP2- \_\_\_\_ - RP \_\_\_\_ - \_\_\_\_

EP2- \_\_\_\_ - RT \_\_\_\_ - \_\_\_\_



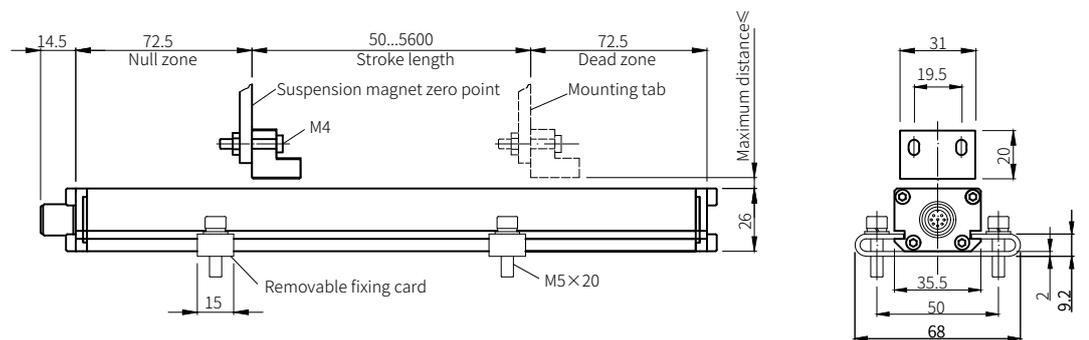
**FUNCTION**

Color	● Brown	○ White	● Yellow	● Red	● Green	● Pink*	● Gray*
Function	24VDC (-15/+20%)	GND	SGND 1	C/Q (communication line)	Signal output 1	Signal output 2*	SGND 2

"\*"adaptable for dual output signal connection

**8 pin M12 connector**

EP2- \_\_\_\_ - D812- \_\_\_\_



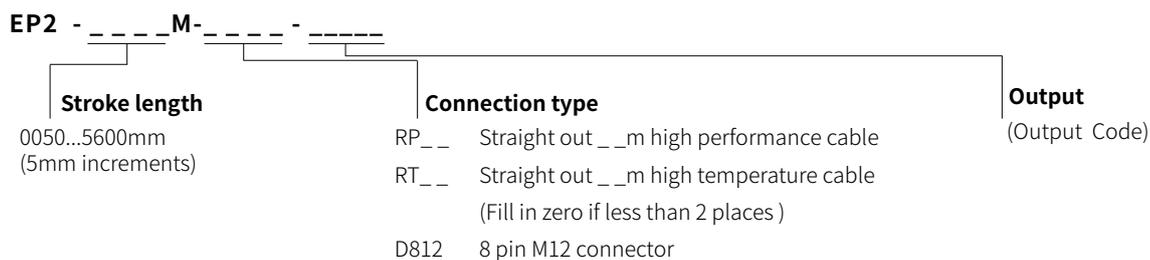
**FUNCTION**

PIN-male	1*	2	3*	4	5	6	7	8	
Function	SGND 2	SGND 1	Signal output 2*	C/Q (communication line)	Signal output 1	GND	24VDC (-15/+20%)	NC	View on sensor

"\*"adaptable for dual output signal connection

**ORDER CODE**

TECHNOLOGY PERCEIVES THE FUTURE



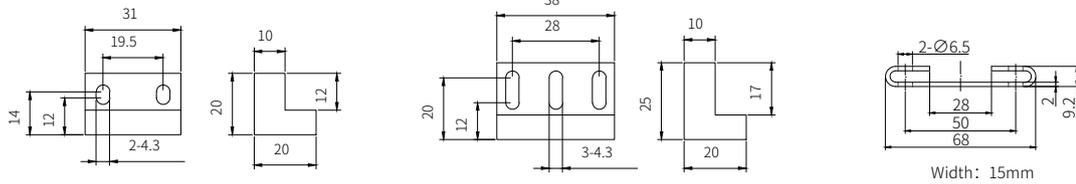
**Analog Output Code** | [1][2][3]-[4] [5][6]

[1] System	[2] Resolution	[3] Output	[4][5] Current/Voltage	[6] Magnet
L +IO-Link (COM3)	1 5µm*	1 Position	A0 4...20mA (forward) V0 0...10V (forward)	1 one magnet *
	2 2µm	2 Position and speed*	A1 20...4mA (reverse) V1 10...0V (reverse)	2 two magnets
	3 10µm	3 2 positions	A2 0...20mA (forward) V2 0...5V (forward)	
	4 50µm	4 2 positions and 2 speeds	A3 20...0mA (reverse) V3 5...0V (reverse)	
	5 100µm	5 Configurable outputs		
	7 20µm			
	8 1µm	(Speed : µm/s)		

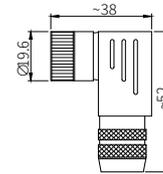
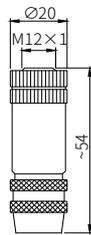
**Note:** forward, data grows larger when the magnet is distant from the electronics housing;  
reverse, data grows larger when the magnet approaches the electronics housing.

**Model selection** | Model: EP2-0600M-D812-L11-A01

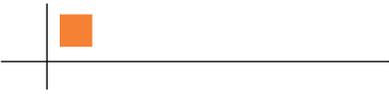
Explanation: EP2 type II generation, stroke length 600mm, 8pin M12 aviation plug, Interface Analog+IO-Link, IO-Link resolution 5µm, position measurement, analog output of 4..20mA (forward), single magnet.



Name	Suspension magnet 31x20	Suspension magnet 38x25	Removable fixing card
<b>Order code</b>	<b>12-1010</b>	<b>12-1009</b>	<b>11-1003</b>



Name	8 pin M12 female connector	8 pin M12 female connector (90 degree angle)
End view drawing		
Material	Galvanized nickel	
Fitting diameter	8...10mm	6...8mm
Connection	Threaded	
<b>Order code</b>	<b>18-5004</b>	<b>18-5005</b>



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