

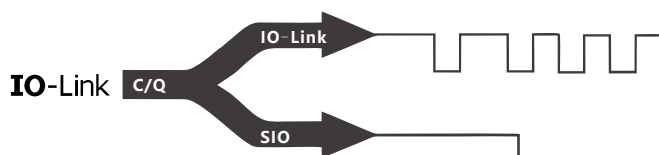
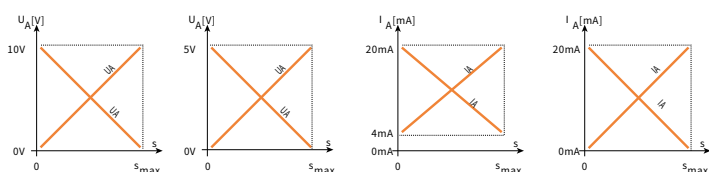
EP

EP2-Series

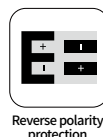
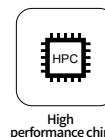
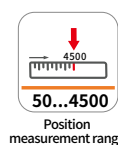
EP2-Analog(+IO-Link)

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



TECHNICAL PARAMETER

TECHNOLOGY PERCEIVES THE FUTURE

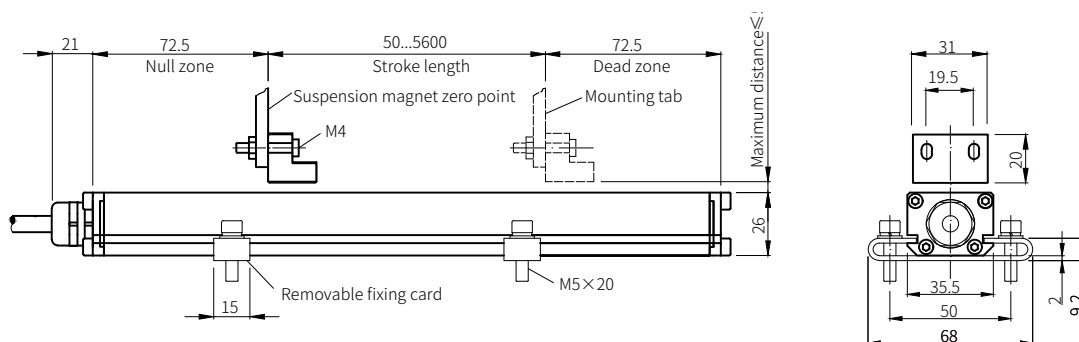
Input				
Measured data	Position/Speed			
Measurement range	50mm...5600mm			
Output				
Voltage	0...10VDC, 10...0VDC, 0...5VDC, 5...0VDC (Controller min. load impedance >5KΩ)+IO-Link			
Current	4...20mA, 20...4mA, 0...20mA, 20...0mA (min./max. load 0/750Ω)+IO-Link			
Transmission rate (IO-Link)	Rate(bit/s)	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 ____ - ____



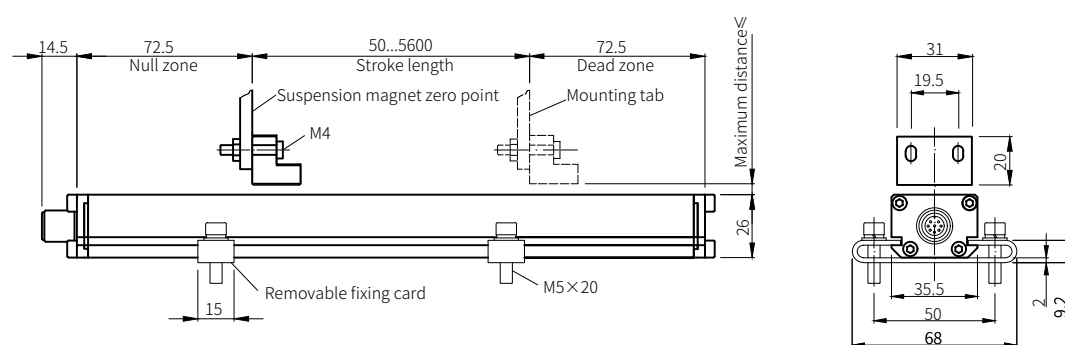
FUNCTION

Color	● Brown	○ White	● Yellow	● Red	● Green	● Gray*	● Pink*
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

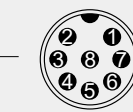
8 pin M12 connector

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

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Stroke length	Connection type	Output (Output Code)
0050...5600mm (5mm increments)	RP__ Straight out __m high performance cable RT__ Straight out __m high temperature cable (Fill in zero if less than 2 places) D812 8 pin M12 connector	

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)		

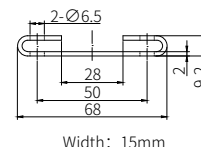
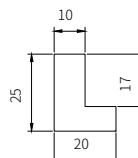
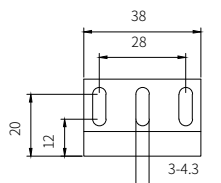
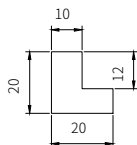
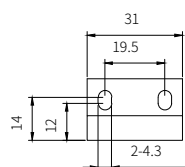
Note: forward, data grows larger when the magnet is distant from the electronics housing;
reverse, data grows larger when the magnet approaches the electronics housing.

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

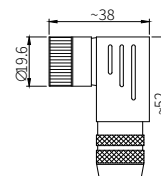
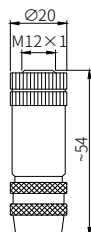
Explanation: EP2 type II generation, stroke length 600mm, 8pin M12 aviation plug, Interface Analog+IO-Link, IO-Link resolution 5μm, position measurement, analog output of 4..20mA (forward), single magnet.

PARTS SELECTION

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



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	
Order code	18-5004	18-5005



Building 6, Dazhu Enterprise Bay,
8th yard of Liangshuihe 2nd street, BDA P.R.China

Tel: +86 10-67948976 67948916
Fax: +86 10-67948979



Beijing Tebeifu Electronic Technology Co., Ltd.
www.tbfsensor.com

