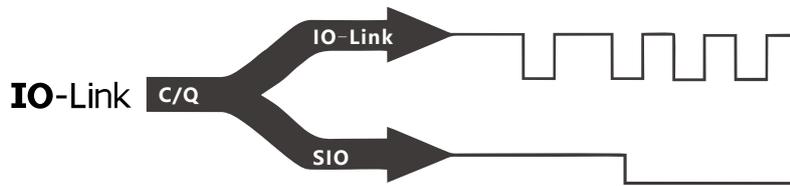




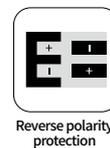
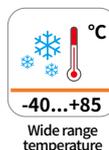
GP2-IO-Link

GP2-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
- + IO-Link signal output



TECHNICAL PARAMETER

TECHNOLOGY PERCEIVES THE FUTURE

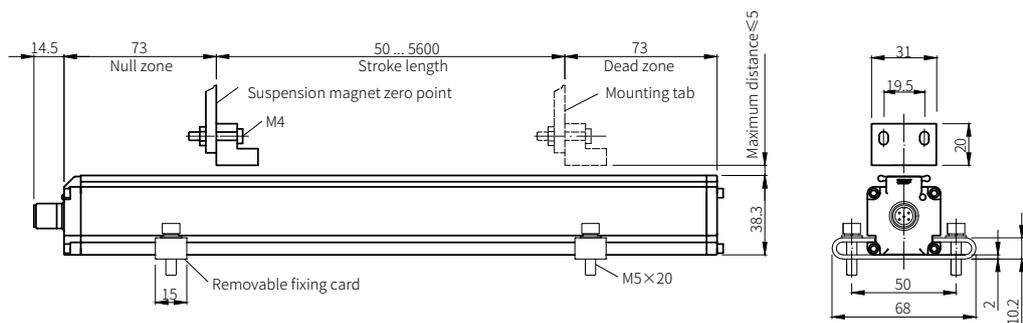
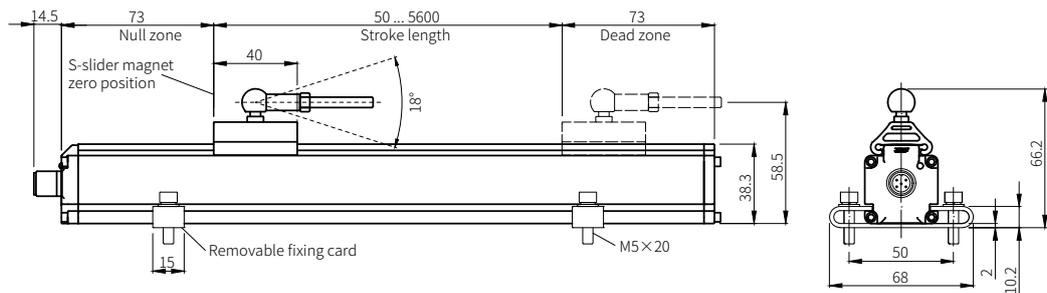
Input	Measured data	Position/Speed			
	Position measurement range	50mm...4500mm			
	Speed measurement range	0.01...10m/s			
Output	Interface	IO-Link 1.1			
	Data format	32-bit signed			
	Process data Master – Device	0 Byte			
	Transmission rate	Rate(bit/s)	4800	38400	230400
		Port	COM1	COM2	COM3*
Resolution	Position resolution	1/2/5*/10/20/50/100µm			
	None-Linearity	< ±0.01%F.S. (min. ±50µm)			
	Repeatability	< ±0.002%F.S. (min. ±10µm)			
	Update time	Stroke length	≤ 1200mm	≤ 2400mm	≤ 5600mm
		Update time	0.5ms	1ms	2ms
	Temperature coefficient	< 30ppm/°C			
Mounting	Mounting position	Any			
	Fixation	Removable fixing card			
Design/ Material	Sensor cap	Aluminum alloy/Zinc alloy			
	Sensor profile	Aluminum alloy			
Electrical connection	Wiring connection	5 pin M12 connector			
	Operating voltage	+24VDC(-15/+20%)			
	Polarity protection	Up to -36VDC			
	Overvoltage protection	Up to +36VDC			
	Power consumption	< 40mA (varies with range size)			
	Dielectric strength	500 VDC (DC ground to machine ground)			
Operating conditions	Magnet speed	Slider magnet ≤ 10m/s; suspension magnet, any.			
	Operating temperature	-40...85°C			
	Humidity	90 % relative humidity, non- 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			

ITEM	CATEGORY	PARAMETER
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Note: “*” as default

5 pin M12 connector

GP2- ____ - D512- ____



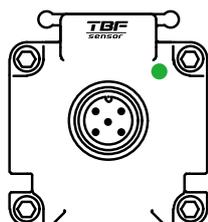
FUNCTION -IO-Link

PIN-male	1	2	3	4	5
Function	+24VDC(-15/+20%)	NC	GND	C/Q (communication line)	NC



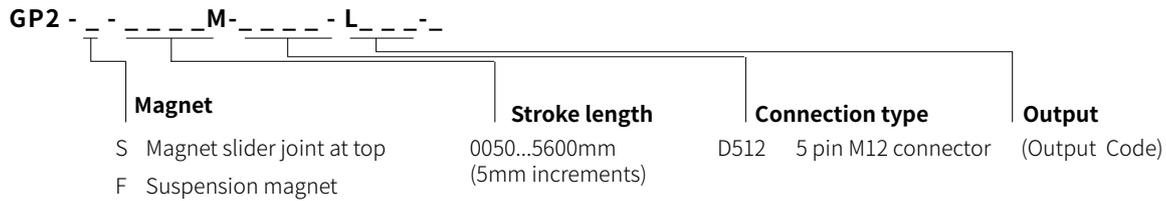
View on sensor

Enhanced monitoring and diagnostic functions



light	Function
Red	Magnet cannot be measured, nor magnet number is correct
Green	Normal work
OFF	Communication exception

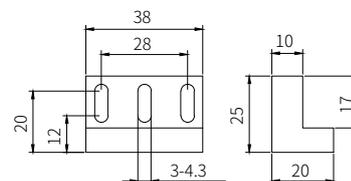
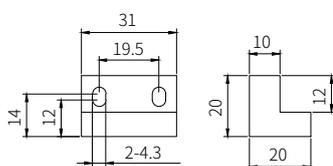
The built-in LED indicator light provides basic fault feedback and fault alarm of the sensor.



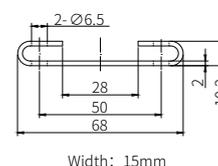
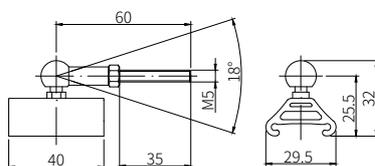
IO-Link Output Code	L [1][2][3]-[4]			
L Interface	[1] Resolution	[2] Output	[3] IO-Link version	[4] Magnet number
L IO-Link	1 5µm*	1 Position	1 V1.1, COM 1	1 one magnet *
	2 2µm	2 Position and speed*	2 V1.1, COM 2	2 two magnets
	3 10µm	3 2 positions	3 V1.1, COM 3*	
	4 50µm	4 2 positions and 2 speeds		
	5 100µm	5 Configurable outputs		
	7 20µm			
	8 1µm	(Speed : µm/s)		

Note: “*” as default

Model selection	Model: GP2-F-0600M-D512-L123-1
	Explanation: GP2 type II generation, suspension magnet, stroke length 600mm, 5 pin M12 connector, IO-Link output, resolution 5µm, position and speed measurement, V1.1, COM3, single magnet.



Name	Suspension magnet 31x20	Suspension magnet 38x25
Operating temperature	-40...105°C	
Order code	12-1010	12-1009



Width: 15mm

Name	Magnet slider S, joint at top	Removable fixing card
Operating temperature	-40...105°C	/
Order code	12-1116	11-1060



Connector	5 pin M12 female connector	5 pin M12 female connector (90 degree angle)
Name	Integral cable	Integral cable
Cable	5 wire 0.25mm ² shielded cable	5 wire 0.25mm ² shielded cable
Color/Diameter	Orange/ Ø 6	Orange/ Ø 6
Plug surface		
Length	5...30M	5/10/15/20/30M
Order code	16-1035	16-1040

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