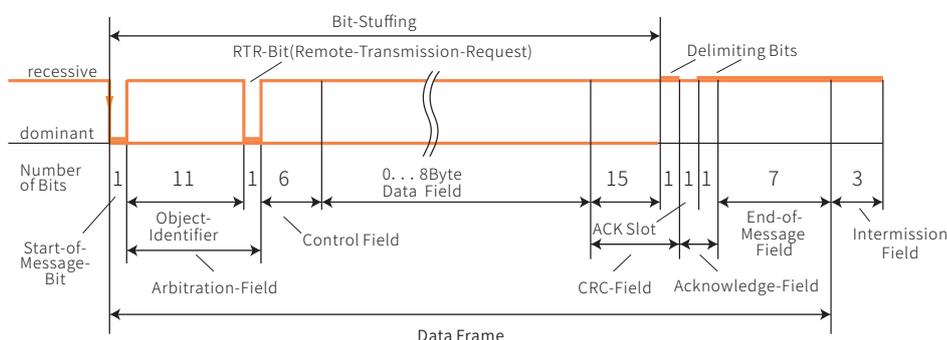




GR-CANopen

GR - External Aluminum Housing -type sensor



- + Easy to install: push-pull rod type, quick installation
- + Linear measurement, absolute value output without zeroing
- + Easy to use, standard singal output, maintenance -free
- + Widely used: printing, papermaking, rubber and plastic machinery and other fields



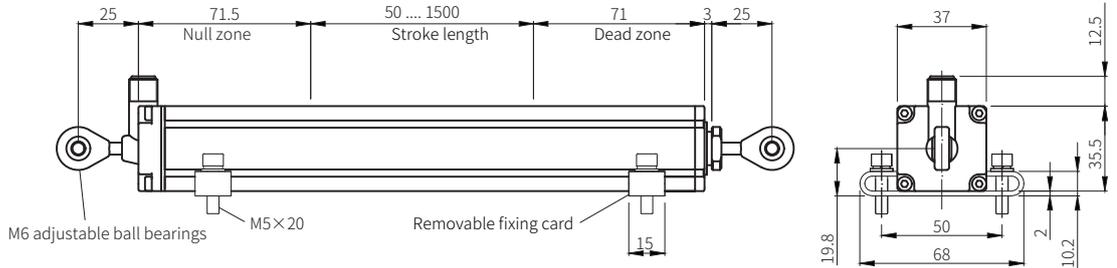
Document Number:
GR-C (V1.1)-EN

TECHNICAL PARAMETER

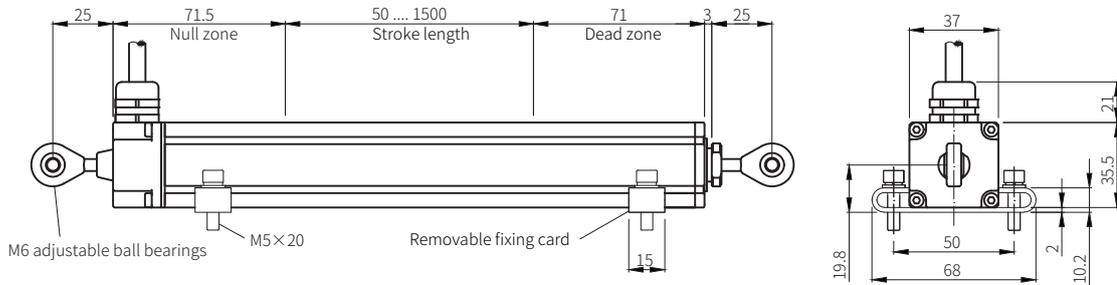
Input											
Measured data	Position										
Measurement range	50mm...1500mm										
Output											
Communication protocols	CAN bus system protocol, ISO11898 CAN open CIA standard DS-301 V3.0 encoder profile DS-406 V3.1										
Transmission rate	<table border="1"> <tr> <td>Rate (kbit/s)</td> <td>1000</td> <td>500</td> <td>250</td> <td>125</td> </tr> <tr> <td>Cable length (meter)</td> <td>< 25</td> <td>< 100</td> <td>< 250</td> <td>< 500</td> </tr> </table>	Rate (kbit/s)	1000	500	250	125	Cable length (meter)	< 25	< 100	< 250	< 500
Rate (kbit/s)	1000	500	250	125							
Cable length (meter)	< 25	< 100	< 250	< 500							
Resolution											
Position resolution	2/5/10/20/50/100µm										
None-Linearity	< ±0.02%F.S. (min. ±50µm)										
Repeatability	< ±0.005%F.S. (min. ±20µm)										
Update time	<table border="1"> <tr> <td>Stroke length</td> <td>≤ 1200mm</td> <td>≤ 1500mm</td> </tr> <tr> <td>Update time</td> <td>0.5ms</td> <td>1ms</td> </tr> </table>	Stroke length	≤ 1200mm	≤ 1500mm	Update time	0.5ms	1ms				
Stroke length	≤ 1200mm	≤ 1500mm									
Update time	0.5ms	1ms									
Temperature coefficient	< 30ppm/°C										
Mounting											
Mounting position	Any										
Installation type	M6 ball bearings, Removable fixing card										
Design/Material											
Sensor shell	Aluminum alloy										
Push-pull rods	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)										
Insulation strength	500 VDC (DC ground to machine ground)										
Terminal resistance	120Ω (Software-adjustable on and off)										
Operating conditions											
Magnet movement speed	≤ 5m/s										
Operating temperature	-40...85°C										
Humidity	90 % relative humidity, no condensation										
Ingress protection	P65										
Shock	100 g (single shock) IEC standard 60068-2-27										
Vibration	5g/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										

TECHNICAL DRAWING

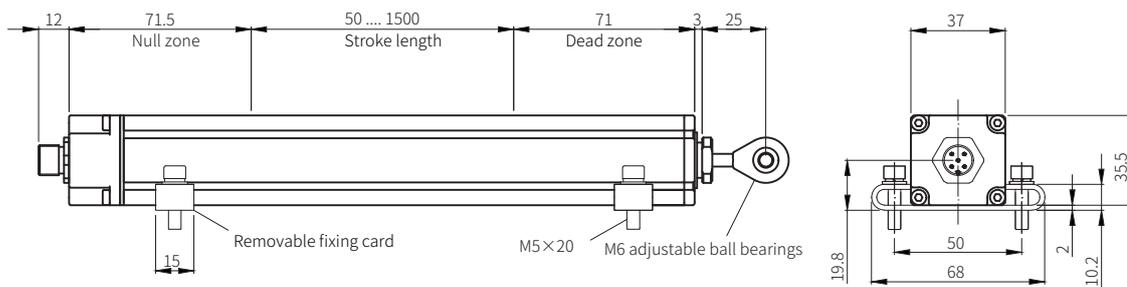
Radial outlet, 5 pin M12 connector



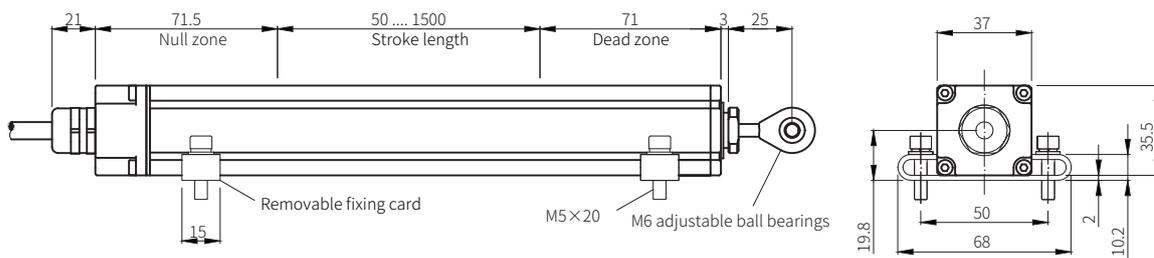
Radial outlet, Straight out cable



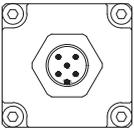
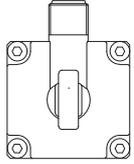
Axial outlet, 5 pin M12 connector

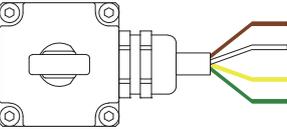
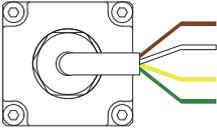


Axial outlet, Straight out cable



Wiring

5 pin M12 connector		PIN	Function
			
		1	NC
		2	+24VDC (-15/+20%)
		3	GND
		4	CAN H
		5	CAN L

Side outgoing cable	Straight out cable	Color	Function
		Brown	+24VDC (-15/+20%)
		White	GND
		Yellow	CAN H
		Green	CAN L

ORDER CODE

GR - - - - M- - - - C 304 - - - -

Outgoing direction	Stroke length	Connection type	Output (Output Code)
R Radial	0050...1500mm	RP/T__ Straight out __m high performance /high temperature cable	
A Axial	(5mm increments)	D5P/T__ 5 pin M12 connector, with __m high performance /temperature cable	
		D5P0 5 pin M12 connector	

(If the cable length is less than two digits, add zeros in front.)

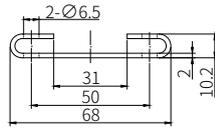
CANopen Output Code		C304[1][2][3]-[4][5]		
[1] Baud rate	[2] Resolution ratio	[3] PDO cycle	[4][5]Node-ID	
1 1000kBit/s	1 5µm	1 1ms	Hexadecimal	
2 500kBit/s	2 2µm	2 10ms	01...7F	
3 250kBit/s	3 10µm	3 100ms		
4 125kBit/s	4 50µm	4 Customizable (1-65535ms)		
	5 100µm			
	7 20µm			

Model selection	Model: GR-R-0600M-D5P0-C304132-7F
	Explanation: GR series, Radial outlet, stroke length 600mm, 5 pin M12 connector, CANopen output, baud rate 1000kBit/s, Position resolution10µm, PDO cycle 10ms, node id 7F.

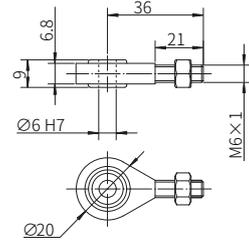


ACCESSORIES

CANopen



Width:15mm



Name	Removable fixing card	M6 fish eyeball head bearing
Order code	11-1009	11-1007

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please contact us.

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