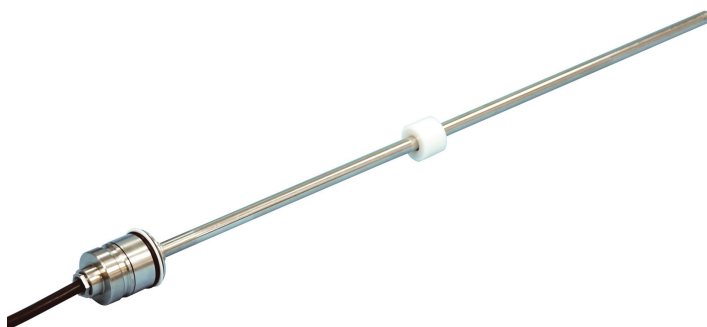


GYPD

Magnetostrictive cylinder sensor

GYPD is a magnetostrictive cylinder sensor with integrated electronics and compact design suitable for small hydraulic cylinders in for example mobile hydraulics or other applications where a compact design is important.

Measuring stroke between 30 and 1000 mm with a wide range of analog output signals and PWM output with high accuracy and excellent life-time.



ORDER INFORMATION

GYPD - - / - P - - -

Example: GYPD-0300-S/S-P-M3-RG5F-BD

1 Stroke length

Specify effective stroke length in [mm] between 30...1000 xxxx

2 Dead zone header

Standard 15 mm S

Other dead zone length, specify length in [mm] (min. 15mm) xxx

3 Dead zone rod tipp

Standard 70 mm S

Other dead zone length, specify length in [mm] (min. 70mm) xxx

4 Mount / Rod diameter

O-Ring / Rod Ø8 mm P8

5 Magnet

No. 2Pn M2PN

No. 3 M3

No. ØSPM M0SM

6 Electrical connection

Pigtail / free cable end
(Specify cable length in meters at [L], max. 10 m) RG[L]F

Pigtail / free cable with connector for relay
(Specify cable length in meters at [L], max. 10 m) RG[L]A

M12 receptacle type: H-Pin assignment
(Specify wire length in 0.01 meters at [L], max. 0.1 m) KV[L]H

M12 receptacle type: G-Pin assignment
(Specify wire length in 0.01 meters at [L], max. 0.1 m) KV[L]G

7 Output signal

0.25 - 4.75 VDC A1

4.75 - 0.25 VDC A2

0.5 - 4.5 VDC A3

4.5 - 0.5 VDC A4

4 - 20 mA BD

20 - 4 mA BR

PWM 1kHz 5V 5 - 95% PWM1

PWM 1kHz 5V 95 - 5% PWM2

- Compact design
- Intergrated electronics
- High accuracy
- Long life time

SPECIFICATIONS

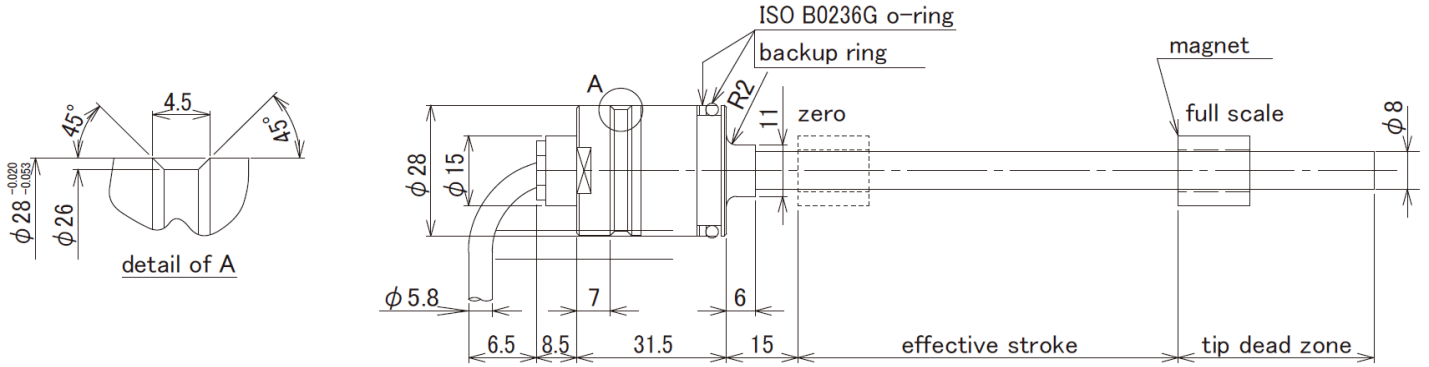
Supply voltage	8-36 VDC (< 0.8W) 0.25-4.75 VDC or 0.5-4.5 VDC and the reverse equivalent. (load Min.2k Ω)
Output Analog	4-20 mA and 20-4 mA (load Max.250 Ω)
Output PWM	1 kHz, 5V, 95-5% or 5-95 % (load Min.5k Ω)
Linearity	≤ ± 0.1 mm (30...250 mm) ≤ ± 0.04 % FS (251...1000mm)
Resolution	≤ 0.06 mm
Repeatability	≤ ±0.06 mm
Temperature drift	≤ ±0.006 % FS/°C 4 kHz (30-250 mm)
Sampling frequency	2 kHz (251-500 mm) 1 kHz (501-1000 mm)
Stroke length	30...1000 mm
Operating pressure	450 bar/ 45 MPa
Operating temperature	-20°C...+85°C
Storage temperature	-20°C...+85°C
Vibrations	20G (5-2000 Hz)
Shock	100G (2ms)
Ingress protection housing	IP67
Material header	SS304
Material rod	SS304
Material magnets	See specification in drawing of respective magnet type.

GYPD

Magnetostrictive cylinder sensor

DIMENSIONS

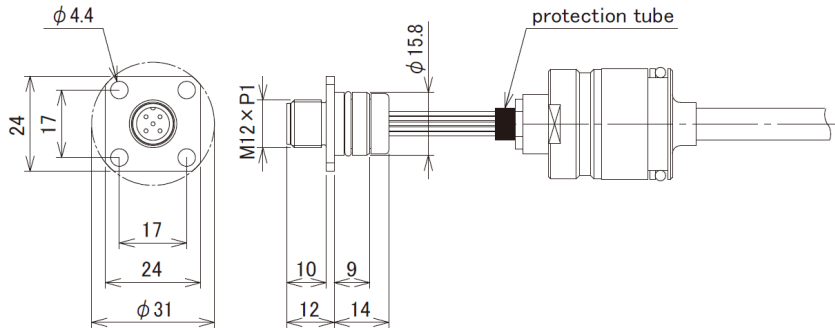
Probe with cable



OUTPUT CONNECTIONS - Cable

Lead	Function
Red	+12/24VDC
White	0V
Black	Output
Green	COM
Yellow	Parameter

M12 Contact



OUTPUT CONNECTIONS - M12

PIN	M12 H-PIN assignment	M12 G-PIN assignment
1	+12/24VDC	+12/24VDC
2	Output	COM
3	0V	0V
4	COM	Output
5	Parameter	Parameter

NOTE: If extension cable is used:

Voltage output : Sensor cable (m) + extension cable (m) < 10 m
Current output : Sensor cable (m) + extension cable (m) < 100 m

GYPD

Magnetostrictive cylinder sensor

MAGNETS

Magnet No. 3

	Material	Polyacetal	
	Weight	approx 8g	
	Install direction	Nil	

Magnet No. 2PN

	Material	Nylon 66	
	Weight	approx 10g	
	Install direction	Nil	

Magnet No. ØSPM

	Material	Polyacetal	
	Weight	No. Ø SPM: approx 5g	
	Install direction	Nil	

INSTALLATION EXAMPLE

