



The GYGS probe is a series of which sensor head is extremely thin (20mm thick) adopting new method of detecting magnetostrictive phenomena. Applying to hydraulic cylinder, its total length becomes space saving. GYGS probe is used in combination with the GYGSC controller, which provides analogue output, 0-10V or 4-20mA, and can also be used in combination with GYHC or GYDC-05 controller, which provides velocity output or digital output.

CONNECTION

Pin	1	2	3	4	5	6	7	8	9
Terminal	SHLD	GND	24 V	W	B	R	COM	I	V
Wiring / cable	Shield of probe	0 V	+ 24 V	With from sensor	Black from sensor	Red from sensor	COM	Current output	Voltage output (pin 7 to 9)

SPECIFICATIONS

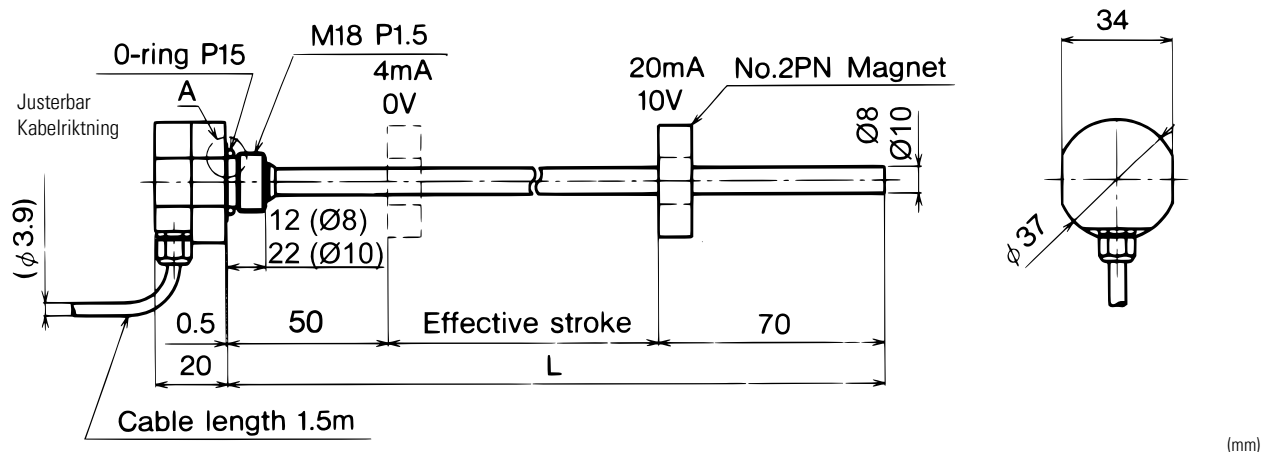
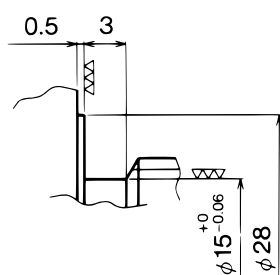
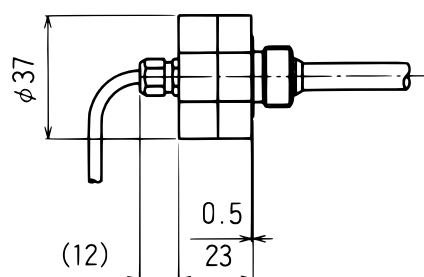
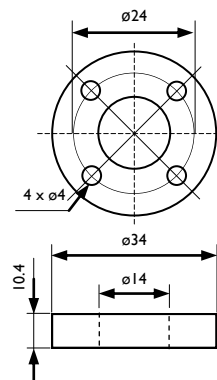
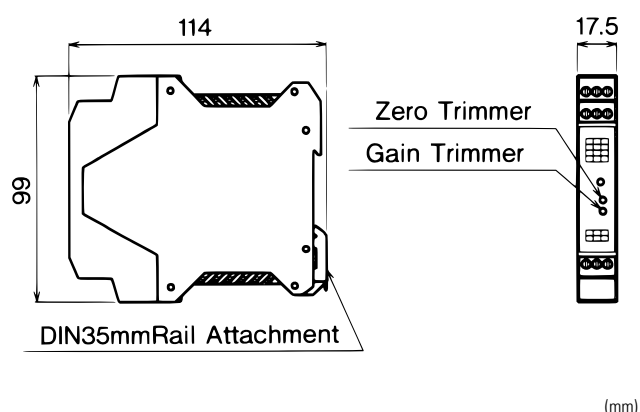
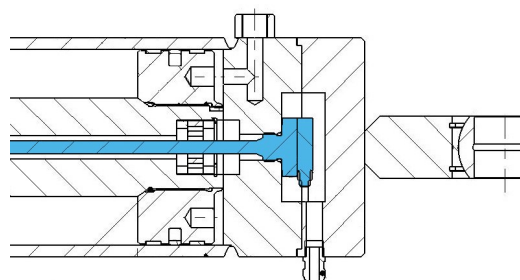
Power supply	24 VDC $\pm$ 2 (100 mA)
Output	
Voltage output	0-10 V
Current output	4-20 mA
Non-linearity	$\pm$ 0.025% FS
Resolution	< 0.01 %FS
Repeatability	< $\pm$ 0.01 %FS
Temp. Drift	
Sensor	$\pm$ 40ppmFS/°C
Electronics	$\pm$ 50ppmFS/°C
Sampling frequency	1 kHz (std)
Stroke	15-3000 mm
Temperature	
Sensor temp.	-20°C...+80°C
Electronics temp.	-0°C...+60°C
Storage temp.	-40°C...+80°C
Material	
Probe head	Stainless steel SS304
Probe rod	Stainless steel SS304
Vibrations	6G (40Hz 2mmPP)
Shock	50G (2 ms)
IP grade	IP67
Working pressure	350 bar
Max. cable length to controller	20 m

* Applies to sensors with an effective stroke of 300 mm or more.

ORDER INFORMATION

GYGS - □□□□-□/□-□-□-□	Sensor
1 2 3 4 5 6	
GYGSC-01 - □-Z□-□-□-24S	Electronics
1 2 5 7	
1 Effective stroke (15-3000 mm)	
2 Thread dead zone	
	S: 50 mm (std)
3 Tip dead zone	
	S: 70 mm/90 mm/100 mm (std), Depends on the magnet
4 Thread / Rod diameter	
	N8: M18xP1.5, Ø 8 mm (std) N: M18 x P1.5, Ø 10 mm (thread length = 20 mm)
5 Magnet	
	M2PN: No.2PN (std) Please see GY-magnets for more options, group GG
6 Cable connection	
	Radial direction
	GnLF: Cable (n=length in meter)
	GnLA: Cable with connector (n=length in meter)
	Cable length: Std=1,5 m (Max.=5 m)
	Axial direction
	GnSF: Cable (n=length in meter)
	GnSA: Cable with connector (n=length in meter)
	Cable length: Std=1,5 m (Max.=5 m)
7 Position output, when magnet moves toward tip	
	AD: 0-10 V
	AR: 10-0 V
	BD: 4-20 mA (std)
	BR: 20-4 mA
Other alternatives available. Please contact Regal Components for more information.	

2016-04-22, specifications subject to change without notice

GYGS**Magnetostrictive linear sensor 15-3000mm****GYGS****GYGS - DETAIL A****AXIAL OUTPUT (OPTION)****MAGNET 2PN (STD)****GYGSC-01 ELECTRONIC BOX (INCLUDED)****MOUNTING SUGGESTION**

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ISO 9001
BUREAU VERITAS
Certification



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Regal