

Magnetostrictive linear sensor 15-7500 mm



The GYSE-sensor is very easy to mount and install in cylinders. It offer strokes up to 7500 mm and analogue or digital output.

The sensor also offer the possibility to exchange the sensor part inside the housing and probe without removing the complete sensor. This mean the hydraulic system can be pressurized during the exchange process.

The GY-series from Regal Components offer sensors that meet the highest demands on the market from one of the leading suppliers in Japan. Decades of experience ensures you highest quality. The GY-series are designed for mount in hydraulic and pneumatic cylinders but can also be used in other applications such as liquid level detection. The magnetostrictive principle, non-contact, offers very high performance and linearity combined with extreme long lifetime.

Electrical specification	GYSE-A (analogue)	GYSE-S (SSI)	GYSE-Q (incremental)
Supply voltage	24 VDC \pm 2V		
Linearity	< \pm 0.02% FS (min \pm 50 μ m)		
Resolution	16 bit (1/65536)	0.01 mm std (0.05, 0.005, 0.002, 0.001 mm)	
Repeatability	\pm 0.001%FS (min \pm 3 μ m)		
Output	0-10V / 4-20 mA	SSI, 24 bit Bin or Gray code	A, /A och B, /B RS422 line driver
Velocity output	\pm 10V or 4-20 mA	Not possible	
Alarm output	Open drain 50V 0.1A (Alarm signal for lost magnet)		
Response time	1kHz		
Mechanical specification	GYSE-A (analogue)	GYSE-S (SSI)	GYSE-Q (incremental)
Pressure	350 bar ~ 35 MPa		
Temperature, operation	-20°C to +80°C		
Temperature, storage	-40°C to +80°C		
Temperature drift	\pm 20ppmFS/°C	\pm 15ppmFS/°C	
Vibration	15 G (10-2000 Hz)		
Shock	100 G (single hit 2 msec)		
Protection	IP67		

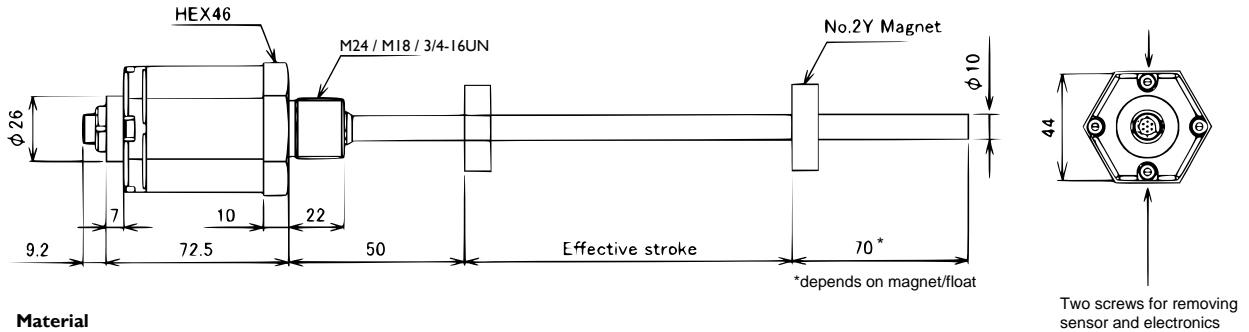


Specifications subject to change without notice.



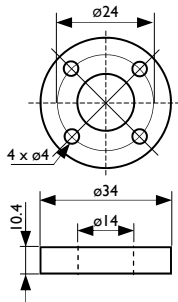
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Dimensions

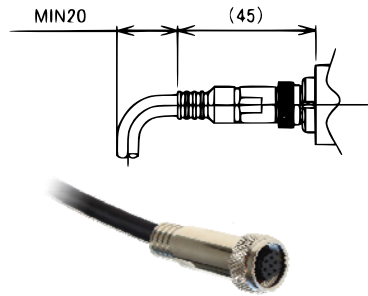


Material
Housing: Aluminium die cast
Sensor probe: Stainless steel SS304/SS2333

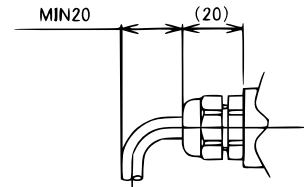
Magnet 2Y



Connector (std)



Pig tail (option)



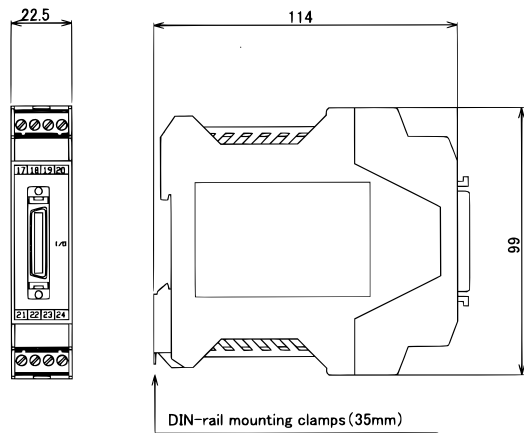
All dimensions in mm

Connections

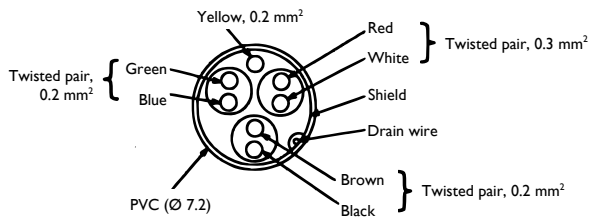
Cable colour	Connector pin number	GYSE-A	GYSE-S	GYSE-Q
Red	1	+24VDC	+24VDC	+24VDC
White	2	0V	0V	0V
Blue	3	Out 1	Data+	A+
Green	4	COM1	Data-	A-
Brown	5	Out2	CLK+	B+
Black	6	COM2	CLK-	B-
Yellow	7	Alarm	Alarm	Alarm

Accessories

DIN-controller SSPC-01 converting from SSI to parallel.
Standard: with mating connector 0136-3000PE.
Option: connector with 3 m cable
In case of interest, please contact for further information.



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Order information

- 1=** Stroke length (mm), 15 - 7500
- 2=** Thread M: M24x1.0
N: M18x1.5
U: 3/4-16UN
- 3=** Probe diameter 10: Ø10 mm (std)
8: Ø8 mm
14: Ø13.8 mm
- 4=** Cable connect CN: connector (std)
Gx: Pig tail, x = cable length (m)
- 5=** Analogue output (OUT1), see table beside
- 6=** Option: Analogue output (OUT 2)
Position output: see table beside
Velocity output
VAy ±10 V
WAY 4 - 20 mA
y = max velocity (1-999 mm/sec)
N: No option
- 7=** Resolution D2: 0.1 mm
D3: 0.05 mm
D4: 0.01 mm
D5: 0.005 mm
D7: 0.002 mm
D8: 0.001 mm
- 8=** Direction of output, when moving magnet from electronics
D: increase
R: decrease
- 9=** Output code B: Binary
G: Gray

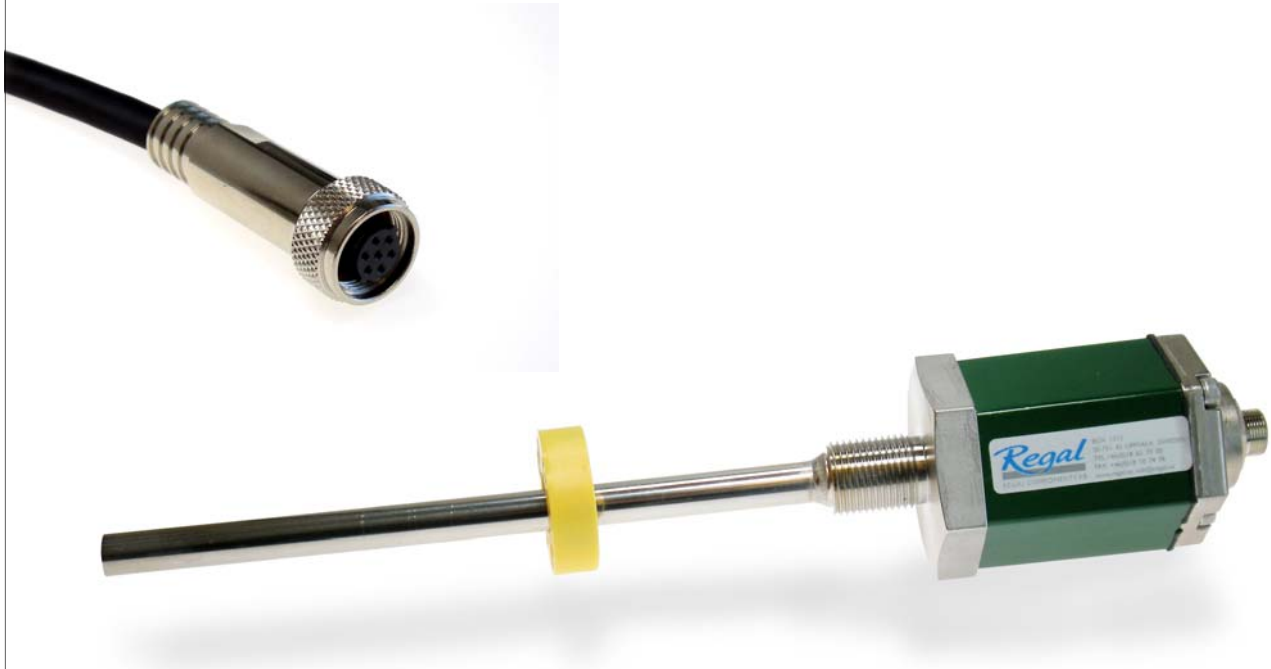
GYSE - A - □□□□ - □□ - □ - □/□ (Analogue)
① ②③ ④ ⑤ ⑥

GYSE - S - □□□□ - □□ - □ - □□ - □ (SSI)
① ②③ ④ ⑦⑧ ⑨

GYSE - Q - □□□□ - □□ - □ - □□ (Incremental)
① ②③ ④ ⑦⑧

Analogue output (OUT 1/OUT2)

AD	0-10 V
AR	10-0 V
BD	4-20 mA
BR	20-4 mA
CD or CR □□ Bipolar output example CD10 CR05	□□V - □□V -10 V ~ +10 V +5 V ~ -5 V
Zero/Full stroke adjustable	Customer request



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