

SGM-LS10

Stainless-steel rod level type

The stainless steel housing is suitable for liquid level measurement both outdoors and indoors.

Features

Secure and Reliable / oil- and dirt-resistant

Easy to Diagnose / LED real-time status display

Non-Contact Measurement / never wears out

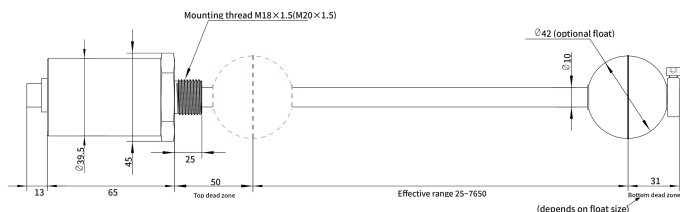
Modular Design / easy replacement

Absolute Position Output / no homing required

Low-Power Design / reduces system power consumption

High-Resolution 16-Bit D/A Analog Output

M12 connector



Outline (dimensions in mm)

Specifications

Product parameters - output types	
Analog output	0-10VDC / 0-5VDC / 4-20mA / 0-20mA
Digital output	RS485 (modbus RTU)
Performance	
Measuring range	25-8000 mm
Output signal	0-20mA(max/min load 0/500Ω) 4-20mA(max/min load 0/500Ω) 0-10V(min. load >5KΩ) RS485(MODBUS RTU)
Resolution	16-bit DA
Repeatability	±0.005mm
Update time	depending on range
Operating conditions	
Magnet speed	any
Operating temperature	-40~+85°C
Storage temperature	-55~+85°C
Humidity	90% humidity, no frost forming.
Temperature coefficient	<30ppm/°C

Orderable range as listed; longer ranges and special temperature or pressure versions on request.

Electrical connection

Analog connector pinout (4-pin)

1	+12V power supply
2	Power - (GND)
3	Analog output +
4	Analog output -

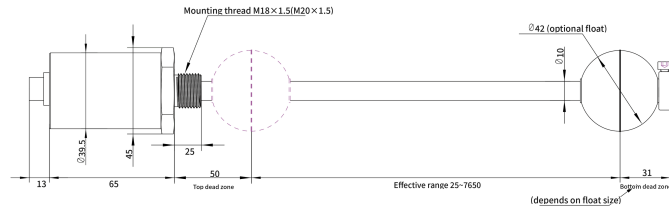
RS485 connector pinout (4-pin)

1	+12V power supply
2	Power - (GND)
3	RS485-A
4	RS485-B

Protection class	IP68
Mounting	
Mounting orientation	any
Mounting	M18*1.5 or customized by customers
Position magnet	Ring magnet or float
Electrical	
Electrical connection	M12*1 waterproof connector or direct cable exit
Supply voltage	24VDC (±20%)
Current consumption	varies with range
Reverse-polarity protection	Maximum -30VDC
Over-voltage protection	Maximum 36VDC
Insulation strength	500VDC
Materials	
Sensor head	304 stainless steel
Protective tube	304 stainless steel
Mounting flange	304 stainless steel

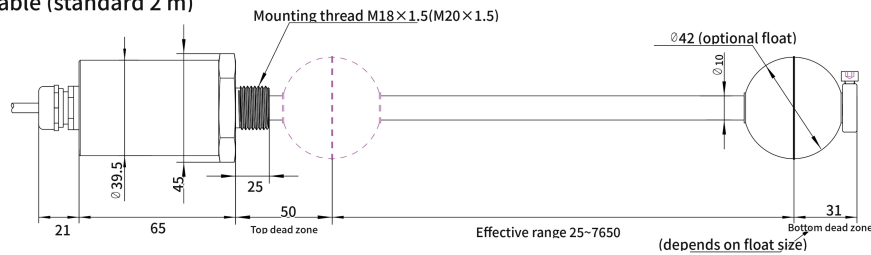
Dimensions (mm)

M12 connector



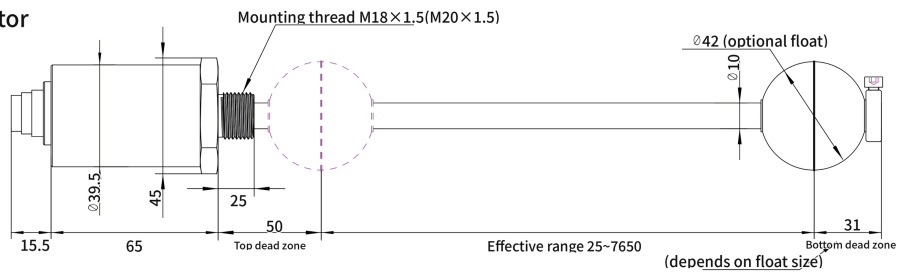
M12 connector version dimensions

Direct cable (standard 2 m)



Direct cable

D60 connector



D60 connector dimensions

Range figures in drawings are illustrative; the orderable range is given in the specifications.

Ordering code

SGM-LS10-<mounting>-<range>-<output>-<connection>[-options]

Mounting			
18	M18×1.5	V1R	0–10 V reversed (10–0 V), zero at head
XX	Custom thread	V2F	0–5 V, zero at rod end
Range		V2R	0–5 V reversed (5–0 V), zero at head
00025–08000	5 digits in mm, 5 mm steps	R4	RS485 (Modbus RTU)
Output		XX	Customer-specified output
I1F	4–20 mA, zero at rod end	Connection	
I1R	4–20 mA reversed (20–4 mA), zero at head	K12	M12 connector
I2F	0–20 mA, zero at rod end	C02 ... C99	Direct cable, number = length in m (C02 = 2 m)
I2R	0–20 mA reversed (20–0 mA), zero at head	...X	Suffix X: customer-specified cable
V1F	0–10 V, zero at rod end	Options	
		(none)	Series standard dead zones
		Z9	Customer-specified dead zones

Outputs or options listed in the specifications but not in the ordering code are available on request.

Ordering examples

SGM-LS10-18-01500-I1F-C05 1500 mm, 4–20 mA, 5 m cable

Specifications are subject to change; final values are confirmed with the order.