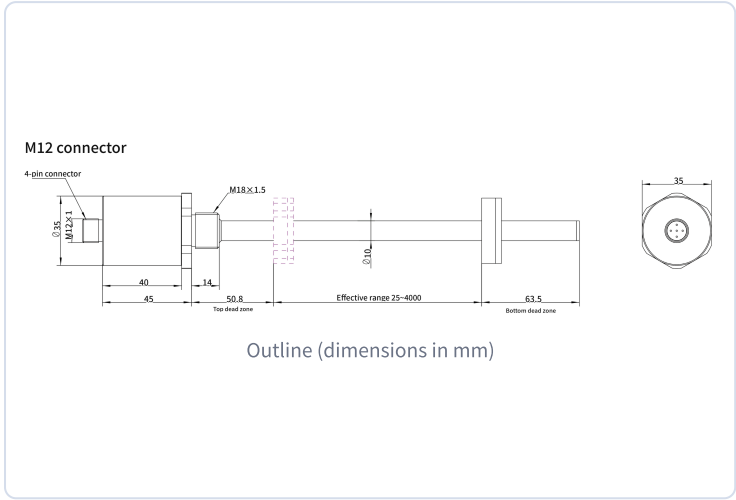


SGM-PR40 Compact cylindrical-head rod type



Pressure-resistant outer tube with high protection rating, measuring range 25-4000mm, analog/RS485 output, 35MPa(continuous) 70MPa(peak).

Features

Secure and Reliable – oil- and dirt-resistant

Easy to Diagnose – LED real-time status display

Non-Contact Measurement – never wears

Modular Design – easy replacement

Absolute Position Output – no re-homing required

Low-Power Design – reduces system power consumption

High-Resolution 16-Bit D/A Analog Output

Specifications

Performance	
Measuring range	25–4000 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 D/A
Repeatability	±0.005mm
Update time	<5ms(depending on range) / 1ms(1m<range<2m) / 2ms(2m<range<3m) / 5ms(3m<range<4m)
Operating conditions	
Magnet speed	Any
Operating temperature	-40~+85°C
Storage temperature	-55~+85°C
Humidity	90 % PR10, non-condensing
Temperature coefficient	<30ppm/°C
Protection class	IP68

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

Electrical connection

Analog connector pinout (4-pin)

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

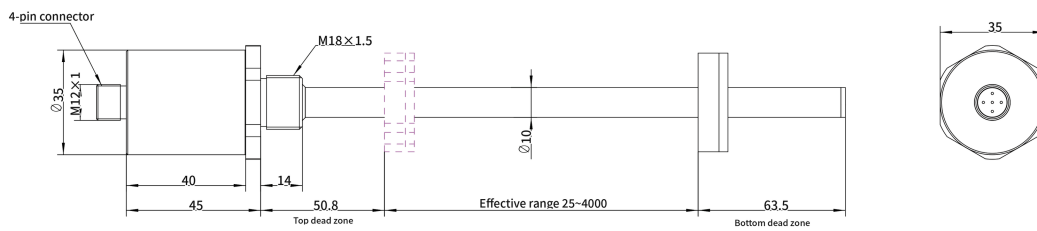
Mounting	
Mounting orientation	Any
Mounting	M18*1.5 or custom
Position magnet	Ring magnet or float
Electrical	
Electrical connection	M12*1 waterproof connector or direct cable
Supply voltage	24VDC (±20%)
Current consumption	<60mA(depends on range)
Reverse-polarity protection	Max. -30VDC
Over-voltage protection	Max. 36VDC
Insulation strength	500VDC
Materials	
Sensor head	304 stainless steel
Protective tube	304 stainless steel
Mounting flange	304 stainless steel

RS485 connector pinout (4-pin)

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

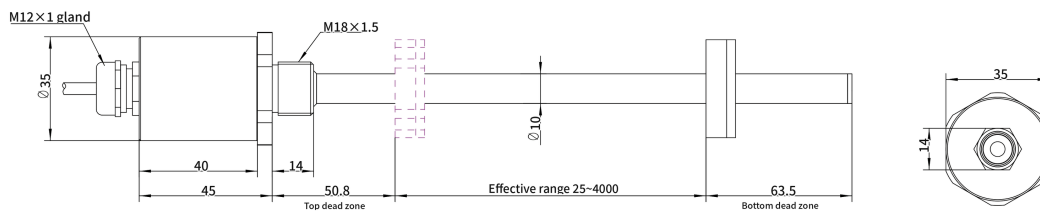
Dimensions (mm)

M12 connector



Technical drawing: M12 connector

Direct cable (standard 2 m)



Technical drawing: direct cable

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

Ordering code

SGM-PR40-<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
		V2R	0–5 V reversed (5–0 V), zero at head
		R4	RS485 (Modbus RTU)
		XX	Customer-specified output
Range		Connection	
00025–04000	5 digits in mm, 5 mm steps	K12	M12 connector
		C02 ... C99	Direct cable, number = length in m (C02 = 2 m)
		...X	Suffix X: customer-specified cable
Output		Options	
I1F	4–20 mA, zero at rod end	(none)	Series standard dead zones
I1R	4–20 mA reversed (20–4 mA), zero at head	Z9	Customer-specified dead zones
I2F	0–20 mA, zero at rod end		
I2R	0–20 mA reversed (20–0 mA), zero at head		
V1F	0–10 V, zero at rod end		

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

Ordering examples

SGM-PR40-18-00400-I1F-K12 400 mm, 4–20 mA, M12 connector

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