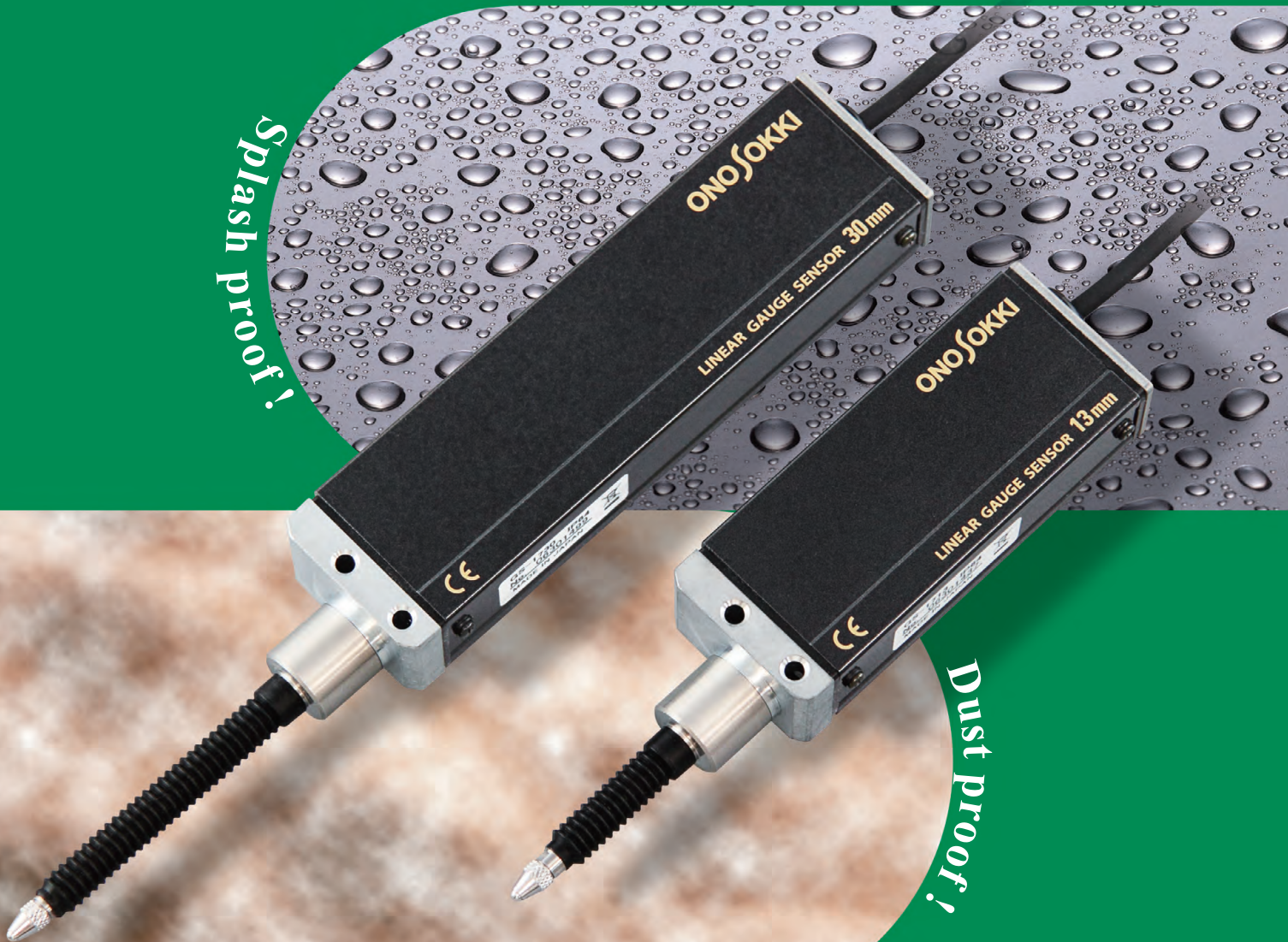


## Digital Linear Gauge

**GS-1713/1730** (10 $\mu$ m resolution)

**GS-1813/1830** (1 $\mu$ m resolution)

Splash proof!



Dust proof!

Introducing compact and lightweight digital linear gauges that are easily installed in current production equipment. With a dust-proof and splash-proof structure that conforms to protection class IP64, the gauges can withstand harsh environments. Suitable for use in dusty environments and areas subject to drips and splashes. Endurance testing shows all models may be used beyond 6.5 million sliding times. We have achieved high accuracy without sacrificing durability.

**ONOSOKKI**

Optimal for work in production lines

# Dust and splash proof

*New standard of linear gauge sensors*

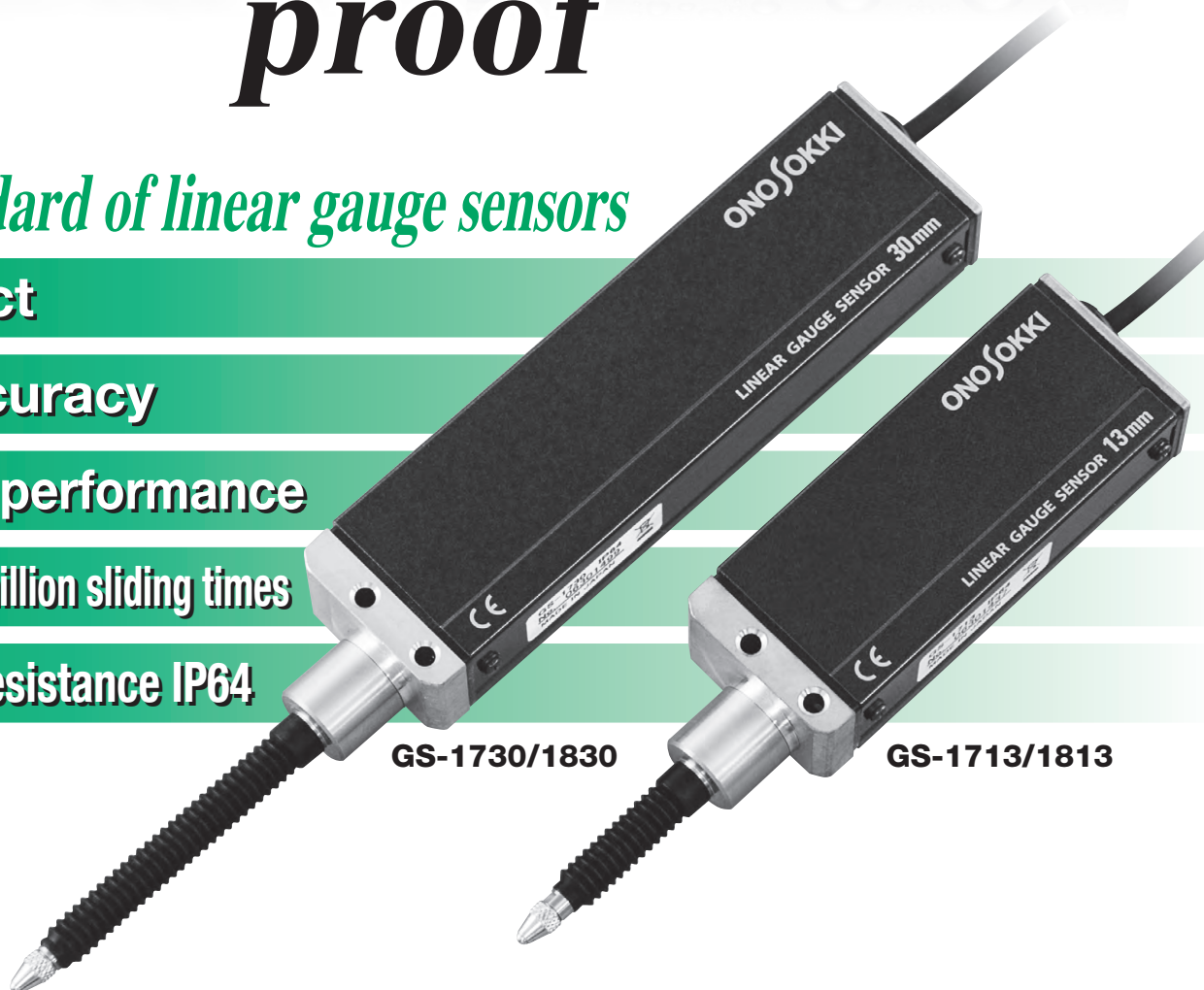
**Compact**

**High accuracy**

**High cost performance**

**More than 6.5 million sliding times**

**Environment resistance IP64**



GS-1730/1830

GS-1713/1813

## Features

- All models are dust and splash proof conforming to the protection class IP64 of environmental resistance.
- Compatible with all of our gauge counters.
- Can be connected to a PLC\* using 2-phase square wave output signal.

\*PLC: Programmable Logic Controller

## Compatible digital counters

### DG-4140

Comparator output  
(BCD, Color backlight)



### DG-4190

Comparator output  
(Analog, Color backlight)



### DG-4120

BCD output



### DG-4240

Comparator output  
(Upper & Lower)



### DG-4280

Comparator output  
(4-preset)



### DG-2310

2ch with multi function



## Specification

### ● Mechanical specification

Item	GS-1713	GS-1730	GS-1813	GS-1830
Measurement range	13mm	30mm	13mm	30mm
Resolution	10μm		1μm	
Accuracy (+20°C)	3μm		2μm	3μm
Maximum spindle velocity*1	1 (4) m/s		0.3 (1.2) m/s	
Measurement force*2 (downward)	1.7N or less	2.0N or less	1.7N or less	2.0N or less
Number of sliding times (proven in our endurance test)	6.5 million or more			
Protection class (excluding connector section)	IP64			

\*1 When used with Ono Sokki's Gauge Counter. The value within parentheses ( ) is the maximum spindle velocity used with the DG-4140/4190/5100.

\*2 An attachment may not return completely if it is facing upwards.

### ● Electrical specification

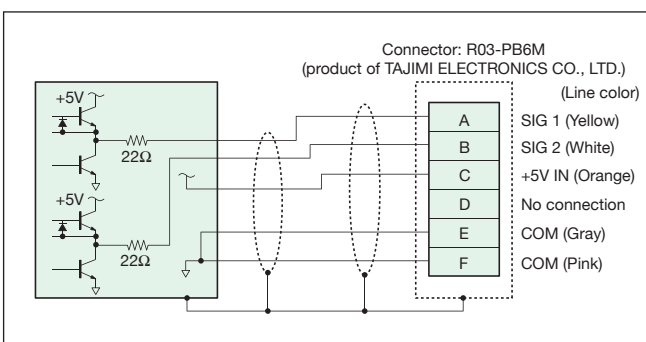
Item	GS-1713	GS-1730	GS-1813	GS-1830
Power requirement	4.5 to 5.5V DC			
Power consumption (when 5V DC)	120mA or less			
Signal output (when 5V DC)	Two-phase square wave Phase difference: 90° ±20° Output voltage: Hi=4.5V or more, Lo=0.4V or less			
Output impedance	Approx. 22Ω			

### ● General specification

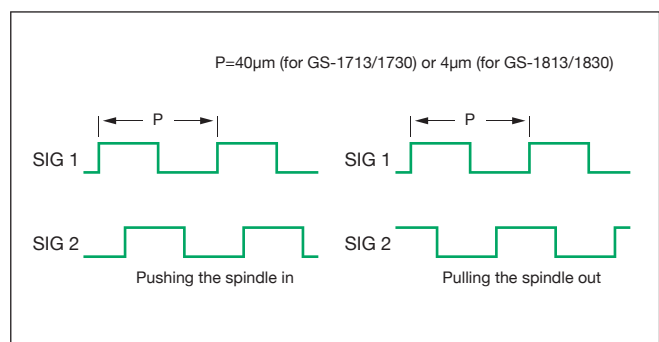
Operating temperature range	0 to +40°C
Storage temperature range	-10 to +55°C (with no condensation)
Cable length	Approx. 1.9m
Weight	GS-1713/1813: approx. 250g, GS-1730/1830: approx. 310g

## Output specification

Pin arrangement of output connector and output circuit



## Output signal

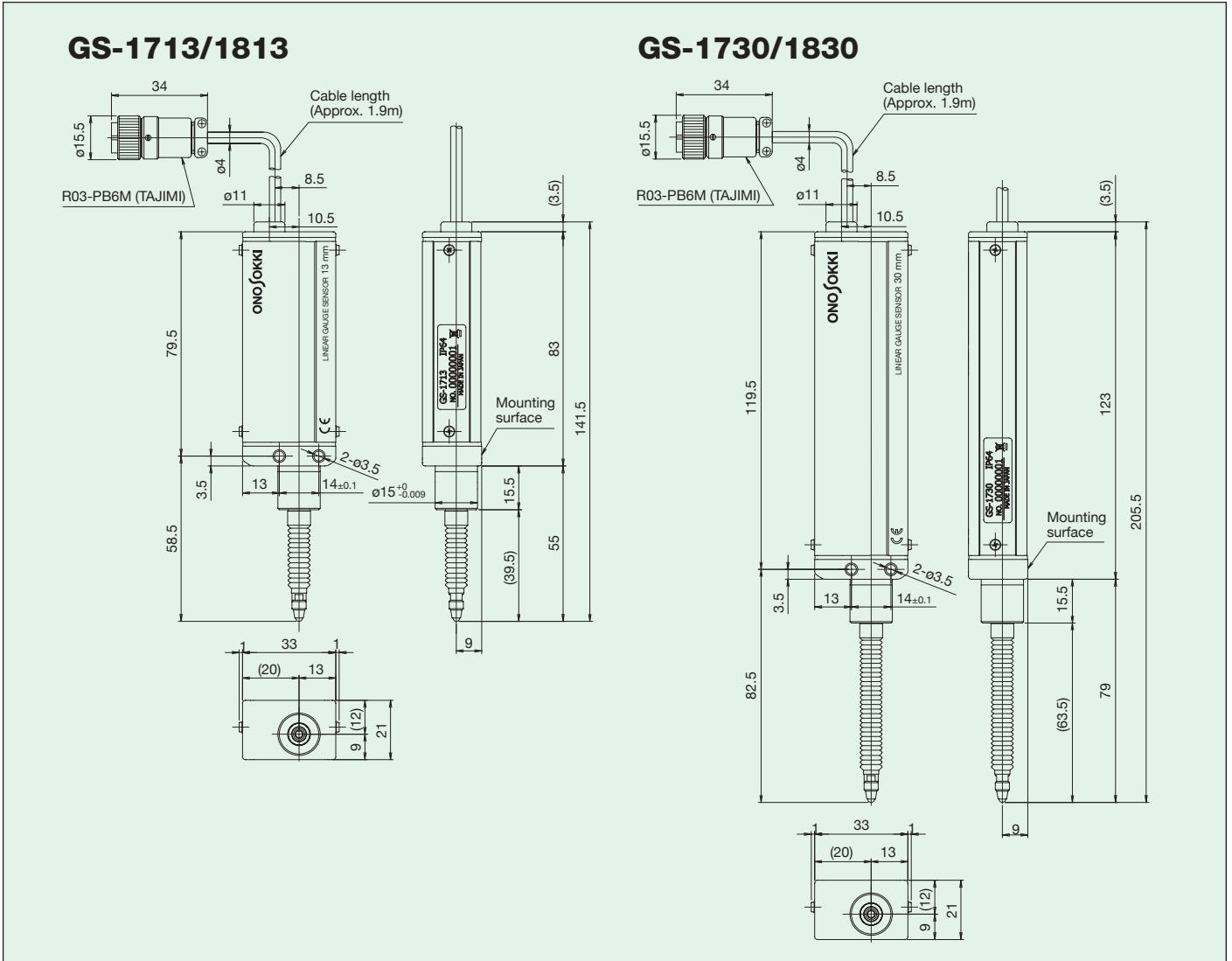


## Extension cable (option)

Model name	Product name	Cable length	Applicable sensor	Connector	Shape	Connector	Applicable counter	Recital
AA-8801	Extension signal cable	5m	BS/GS series	R03-JB6F (TAJIMI ELECTRONICS CO., LTD.)		R03-PB6M (TAJIMI ELECTRONICS CO., LTD.)	DG series counters for Linear gauge sensors	Can be extended up to 30m from sensor.
AA-8802		10m						
AA-8803		20m						
AA-8804		30m						

# Outer Dimension

(Unit: mm)

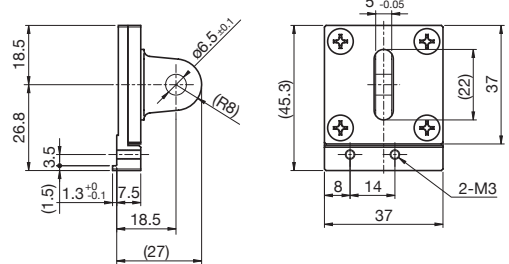


## Options (sold separately)

Finger lifter	AA-969
Gauge stand	ST-0230
Spare dust bellow	AA-4102 (13mm), AA-4103 (30mm)
Extension spindle	AA-844 (30mm), AA-845 (50mm)
Lug Back	AA-3310
Extension cable	AA-8801 (5m), AA-8802 (10m), AA-8803 (20m), AA-8804 (30m)

We also offer several other accessories not listed in this catalogue. For details, please contact your nearest distributor or send an e-mail to us; [overseas@onosokki.co.jp](mailto:overseas@onosokki.co.jp).

### AA-3310



**ONOSOKKI**

• Outer appearance and specifications are subject to change without prior notice.

URL: <http://www.onosokki.co.jp/English/english.htm>

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