



VG-200S Series



## ■ Product Specifications

Model	VG-211S		VG-221S	
F.S. measurement range	133.32 Pa (A)	1.3332 kPa (A) 13.332 kPa (A) 133.32 kPa (A)	133.32 Pa (A)	1.3332 kPa (A) 13.332 kPa (A) 133.32 kPa (A)
Sensor temperature	Amb. (Non-self temperature control type)		55 °C/100 °C *1	
Accuracy *2	0.5 %R.S.	0.25 %R.S.	0.5 %R.S.	0.25 %R.S.
Resolution	0.03 %F.S.	0.01 %F.S.	0.03 %F.S.	0.01 %F.S.
Zero temperature coefficient	0.01 %F.S./°C	0.005 %F.S./°C	0.005 %F.S./°C	0.0025 %F.S./°C
Span temperature coefficient	0.05 %R.S./°C	0.03 %R.S./°C	0.03 %R.S./°C	0.02 %R.S./°C
Response time	< 60 msec			
Operating temperature *3	10-50 °C			
Wetted materials	SUS316L			
Pressurization limit	300 kPa (A)	350 kPa (A)	300 kPa (A)	350 kPa (A)
Output signal	0-10 VDC Load resistance: 10 kΩ or more			
I/O connector	D-Sub 15pin			
Power supply voltage	+15 VDC±5 %, 0.1 A max15 VDC±5 %, 0.1 A max.		+15 VDC±5 %, 0.6 A max15 VDC±5 %, 0.6 A max.	
	24 VDC±5 %, 2.4 W max.		24 VDC±5 %, 14.4 W max.	
Warm-up time	15 minutes		60 minutes (55 °C temperature. control type)	
			120 minutes (100 °C temperature. control type)	
Open collector output	Rated voltage: 30 V Rated current: 50 mA			
Re-Zero input *4	Non-voltage contact input Contact open voltage: 13 V Maximum contact current: 1.3 mA			
Standard fitting *5	KF16, 1/2 inch VCR Female, ICF34, 1/4 inch VCR Female			

<sup>\*1</sup> The sensor temperature is indicated on the nameplate. Please specify the sensor temperature when ordering. \*2 Linearity, hysteresis, and repeatability are included.(at the ambient temperature of 25°C)

### Electrical connection

Connector type: D-subminiature 15-contact-pin connector (with #4-40 UNC inch screws)

Pin No.	Signal name		
1	Re-Zero input (+)		
2	Pressure output signal: 0-10 VDC / 0-F.S. pressure (Load resistance: 10 kΩ or more)		
3	Re-Zero input (-)		
4	NPN open-collector output (warming up Status)		
5	Power common		
6	Power input -15 VDC *1		
7	Power input +15 VDC / 24 VDC		
8	Un-used (Do not connect anything to this pin.)		
9	Un-used (Do not connect anything to this pin.)		
10	Un-used (Do not connect anything to this pin.)		
11	Un-used (Do not connect anything to this pin.)		
12	Pressure output signal: Common		
13	Un-used (Do not connect anything to this pin.)		
14	Un-used (Do not connect anything to this pin.)		
15	Un-used (Do not connect anything to this pin.)		

<sup>\*1</sup> When using a single power supply of 24V, do not connect anything to the pin 6.

#### e.g. VG-211S-10T 000 KF16 Selecting a model VG-221S-13T 055 8CB

VG-211S VG-221S	F.S. measurement range	10T: 133.32 Pa (A)(1 Torr) 11T: 1.3332 kPa (A)(10 Torr) 12T: 13.332 kPa (A)(100 Torr) 13T: 133.32 kPa (A)(1000 Torr)	
	Sensor temperature	000: Amb. *1 055: 55 °C *2 100:100 °C *2	
	Fitting	KF16: KF16 4CR: 1/4 inch VCR Female 8CR: 1/2 inch VCR Female CF34: ICF34	

<sup>\*1</sup> Only VG-211S can be selected. \*2 Only VG-221S can be selected.



The HORIBA Group adopts IMS (Integrated Management System) which integrates Quality Management System ISO9001, Environmental Management System IS014001, and Occupational Health and Safety Management System ISO45001.

We have now integrated Business Continuity Management System ISO22301 in order to provide our products and services in a stable manner, even in emergencies.



Applying to the EU RoHS Directive: This products is compliant with the restriction of the designated 10 hazardous substances(\*).

(\*) lead , cadmium , mercury , hexavalent chromium , polybrominated biphenyls (PBB) , polybrominated diphenyl ethers (PBDE) bis (2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP)

Using lead-free soldering: Lead-free soldering is used for mounting components of printed circuit boards.

- Many countries consider the reinforcement of regulations concerning the risk caused by lead to human body and the environment
- The contents of this catalog are subject to change without prior notice, and without any subsequent liability to this company.
   It is strictly forbidden to copy the content of this catalog in part or in full.
- All brand names, product names and service names in this catalog are trademarks or registered trademarks of their respective companies.

# HORIBASTEC HORIBA STEC, Co., Ltd.

horiba.com/semiconductor



Please read the operation manual before using this product to ensure safe and proper handling of the product.

#### HEAD OFFICE

11-5, Hokotate-cho, Kamitoba, Minami-ku, Kyoto, 601-8116 Japan Phone: (81) 75-693-2300 Fax: (81) 75-693-2350

HORIBA Instruments Incorporated

**Sunnyvale Office**Phone: (1) 408-730-4772 Fax: (1) 408-730-8975 **Austin Office** Phone: (1) 512-836-9560 Fax: (1) 512-836-8054

**Portland Office** Phone: (1) 503-624-9767 Fax: (1) 503-968-3236

HORIBA Reno Technology Center Phone: (1) 775-358-2332 Fax: (1) 775-358-0434

### SINGAPORE

HORIBA Instruments (Singapore) Pte Ltd.
Phone: (65) 6-745-8300 Fax: (65) 6-745-8155

KORFA

HORIBA STEC KOREA, Ltd.
Phone: (82) 31-8025-6599
Fax: (82) 31-8025-6599

TAIWAN

HORIBA Taiwan, Inc.
Phone: (886) 3-560-0606 Fax: (886) 3-560-0550

Tainan Office Phone: (886) 6-583-4592 Fax: (886) 6-583-2409

HORIBA Instruments (Shanghai) Co., Ltd. Phone: (86) 21-6952-2835 Fax: (86) 21-Fax: (86) 21-6952-2823

**HORIBA (China) Trading Co., Ltd.**Phone: (86) 21-6289-6060 Fax: (86) 21-6289-5553

**Beijing Office**Phone: (86) 10-8567-9966 Fax: (86) 10-8567-9066 **Guangzhou Office** Phone: (86) 20-3878-1883 Fax: (86) 20-3878-1810

**Shanghai Technical Center**Phone: (86) 21-6289-6060 Fax: (86) 21-6289-5553

HORIBA Technology (Suzhou) Co., Ltd. Phone: (86) 0512-3306-6388

HORIBA UK Limited
Phone: 44 (0) 1604 542500 Fax: 44 (0) 1604 542699
Mail: semisupport.huk@horiba.com

Oberursel Office Phone: (49) 6172 1396-0

**Dresden Office** Phone: (49) 351/889 68 07

Bulletin:VG2S-BE Printed in Japan 2302SK00

<sup>\*3</sup> Under the specified environmental conditions, when there are heat sources around the product or when some products are placed in close formation, the ambient temperature may exceed the specified ambient temperature \*4 The adjustable range of the zero point is ± 5%. \*5 Please specify the fitting when ordering.