



Contact confirmation switch (digital gap switch) single unit

GPS3 Series

● Port size: Rc1/8



Specifications

Descriptions	Short range GPS3-E	Wide range GPS3
Working fluid	Compressed clean air (after 5 µm filter, lubrication not possible)	
Working pressure	kPa 50 to 200	
Proof pressure	kPa 600	
Detection range	mm 0.02 to 0.15	mm 0.03 to 0.4
Reference value display range	10 to 200 (display unit 1)	20 to 500 (display unit 1)
Repeatability	mm ±0.01	±0.01 (detection range min to 0.1)
Hysteresis	Variable (reference value variable from 1 in increments of 1. Factory default 10)	
Temperature characteristics (base temperature +25°C)	0.015	0.030 mm or less (detection distance min to 0.3 mm) 0.1 mm or less (detection distance 0.3 to 0.4 mm)
Detection nozzle	Single hole nozzle φ1.5	
Power supply voltage	V 24 DC ±10% (18 to 30 DC) *1, ripple P-P 10% or less (with reverse connection protection)	
Current consumption	mA 25 or less (35 or less) *1	
Output/communication supported	2-point output (NPN, PNP open collector)*2	
Output rating	30 VDC, 100 mA or less	
Internal voltage drop	V 2 or less (using 100 mA)	
Short-circuit protection circuit *3	Equipped	
Display	Reference value, thresholds (2-point), output status indicators (2-point), detection side pressure, blockage indication	
Insulation resistance	No failure after 1 minute of 1,000 VAC application	
Withstand voltage	10 MΩ and over at 500 VDC megger	
Ambient temperature	°C 0 to 50 (no freezing or condensation)	
Degree of protection	IP67 equivalent	
Port size	Supply port: Rc1/8, detection port: push-in fitting φ6	
Wiring	*4 M12 connector, 4-pin	
Weight	g 128 (excluding cable)	
Air consumption	L/min Less than 9	Less than 22

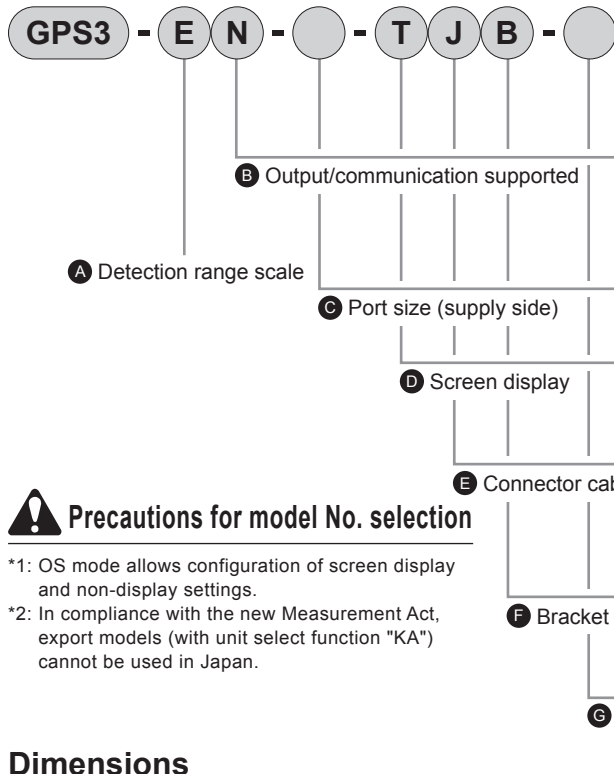
*1: Values in () are when communication support option L is selected

*2: Refer to page 15 for communication specifications.

*3: This product's protection circuit is effective only for specific misconnections and load short-circuits. It does not provide protection for all misconnections.

*4: Tighten M12 connectors at 0.5 N·m torque or less.

How to order



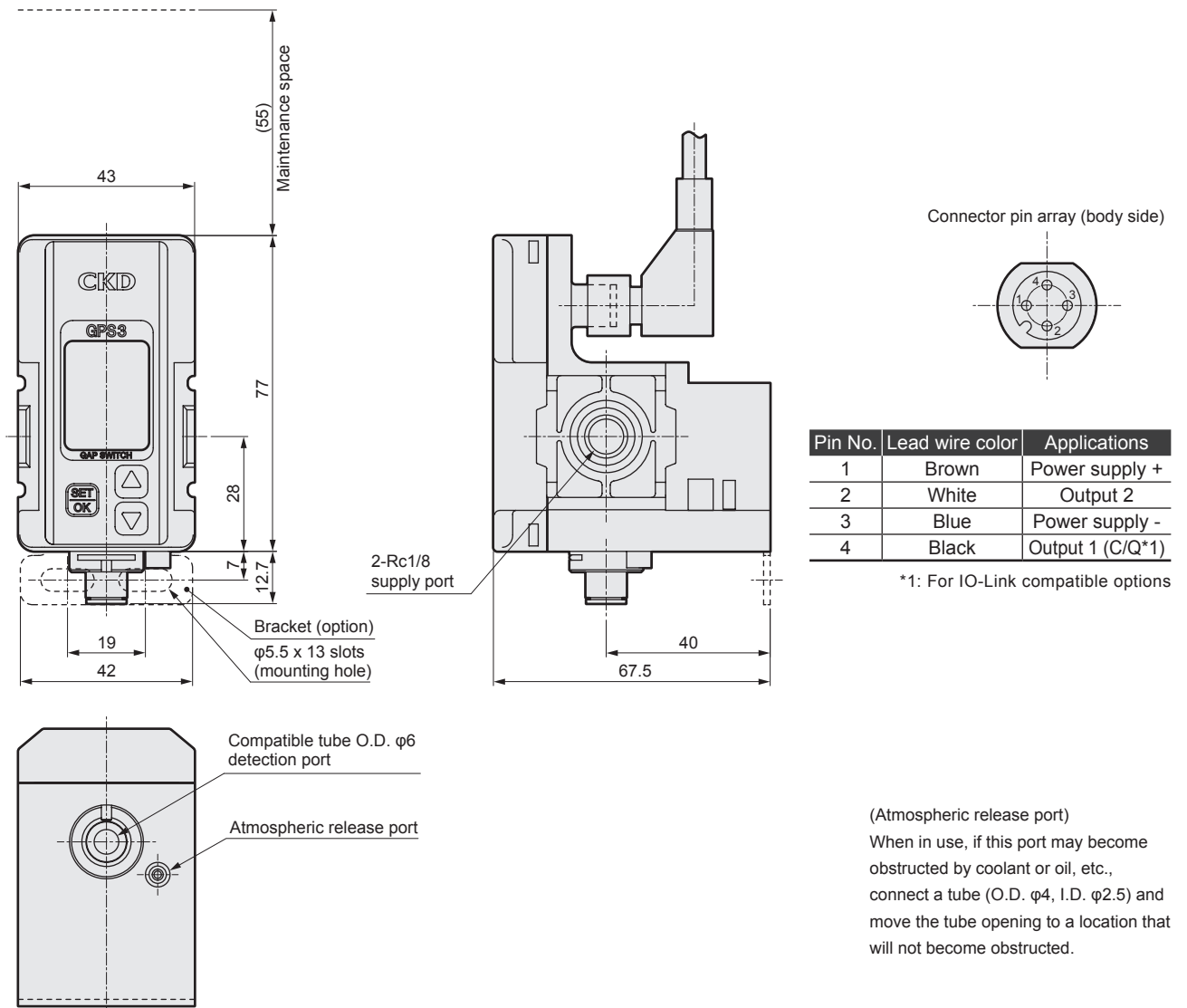
! Precautions for model No. selection

*1: OS mode allows configuration of screen display and non-display settings.

*2: In compliance with the new Measurement Act, export models (with unit select function "KA") cannot be used in Japan.

Code	Content
A Detection range scale	
Blank	0.03 to 0.4
E	0.02 to 0.15
B Output/communication supported	
N	NPN open collector (2-point)
P	PNP open collector (2-point)
L	IO-Link communication
C Port size (supply side)	
Blank	Rc1/8
D Screen display *1	
Blank	Displayed (factory default)
T	Non-displayed (factory default)
E Connector cable	
Blank	5 m connector cable attached (One side elbow)
D	5 m connector cable attached (Both sides elbows/straight)
J	Without connector cable
F Bracket	
Blank	Without bracket
B	With bracket
G Pressure display unit *2	
Blank	SI units only (domestic model)
KA	With unit switching function (export model)

Dimensions





Gap switch manifold

MGPS3 Series

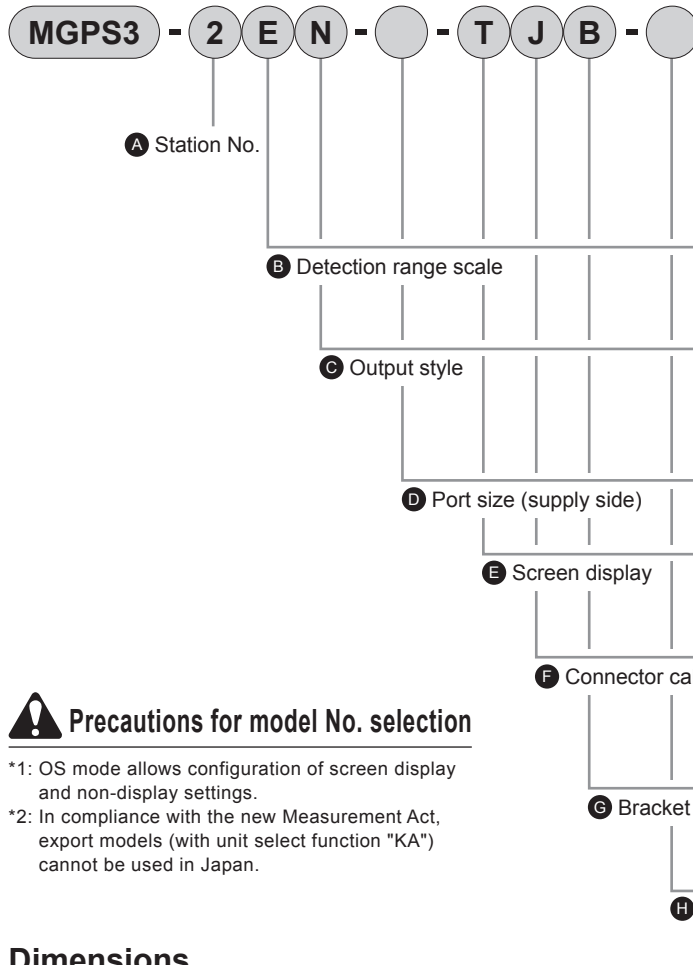
● Station No.: 2 to 6 stations



Specifications

Basic specifications are the same as the single units on page 1.

How to order



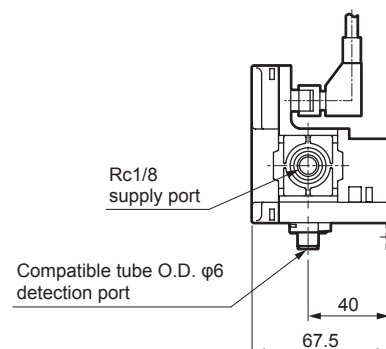
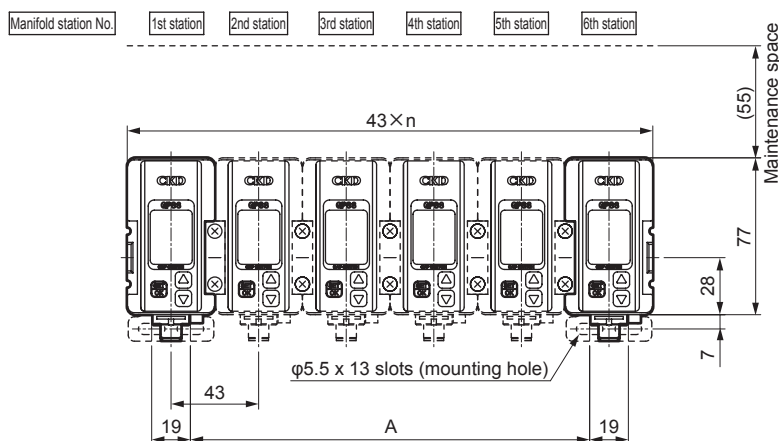
Code	Content
A Station No.	
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
B Detection range scale	
Blank	0.03 to 0.4
E	0.02 to 0.15
C Output style	
N	NPN open collector (2-point)
P	PNP open collector (2-point)
L	IO-Link communication
D Port size (supply side)	
Blank	Rc1/8
E Screen display *1	
Blank	Displayed (factory default)
T	Non-displayed (factory default)
F Connector cable	
Blank	5 m connector cable attached (One side elbow)
D	5 m connector cable attached (both sides elbows/straight)
J	Without connector cable
G Bracket	
Blank	Without bracket
B	With bracket
H Pressure display unit *2	
Blank	SI units only (domestic model)
KA	With unit switching function (export model)

Precautions for model No. selection

*1: OS mode allows configuration of screen display and non-display settings.

*2: In compliance with the new Measurement Act, export models (with unit select function "KA") cannot be used in Japan.

Dimensions



	Station No. n				
	2	3	4	5	6
Dimension A	24	67	110	153	196



Gap switch unit

UGPS3 Series

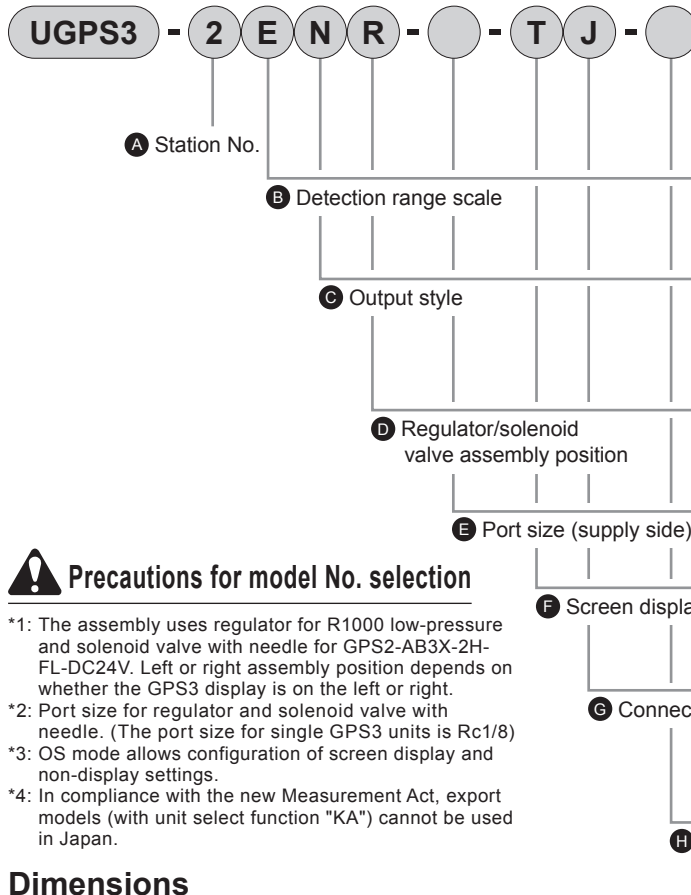
- General purpose unit integrating solenoid valve with needle and regulator



Specifications

Basic specifications are the same as the single units on page 1.

How to order



Precautions for model No. selection

- *1: The assembly uses regulator for R1000 low-pressure and solenoid valve with needle for GPS2-AB3X-2H-FL-DC24V. Left or right assembly position depends on whether the GPS3 display is on the left or right.
- *2: Port size for regulator and solenoid valve with needle. (The port size for single GPS3 units is Rc1/8)
- *3: OS mode allows configuration of screen display and non-display settings.
- *4: In compliance with the new Measurement Act, export models (with unit select function "KA") cannot be used in Japan.

Code	Content
A Station No.	
1	1 station
2	2 stations
3	3 stations
4	4 stations
5	5 stations
6	6 stations
B Detection range scale	
Blank	0.03 to 0.4
E	0.02 to 0.15
C Output style	
N	NPN open collector (2-point)
P	PNP open collector (2-point)
L	IO-Link communication
D Regulator/solenoid valve assembly position *1	
R	Right-side assembly (supply port on right)
L	Left-side assembly (supply port on left)
E Port size (supply side) *2	
Blank	Rc1/4
F Screen display *3	
Blank	Displayed (factory default)
T	Non-displayed (factory default)
G Connector cable	
Blank	5 m connector cable attached (One side elbow)
D	5 m connector cable attached (both sides elbows/straight)
J	Without connector cable
H Pressure display unit *4	
Blank	SI units only (domestic model)
KA	With unit switching function (export model)

Dimensions

