

8 mm width LED Digital Pressure Sensor

8 mm width LED Digital Negative Pressure Sensor

⚠ Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)

VUS8A - **33** - **E** **N** - **C50** - **B**
(1) (2) (3) (4) (5) (6)

(1) 8 mm width LED Digital Pressure Sensor

(2) Connecting port type and size

Port type	Push-in fitting (mm)			Plug-in (mm)		Metric thread
Inline type code	180180	33	44	N4N4	N6N6	M5M5
Single port code	180	3	4	N4	N6	M5
Size	ø1.8	ø3	ø4	ø4	ø6	M5×0.8

(3) Pressure range

Code	E	ER	S	SR
Pressure range	Energy-saving type		2-point switch output type	
	Negative pressure type	Compound pressure type	Negative pressure type	Compound pressure type
	(-100 to 100kPa)	(-100 to 300kPa)	(-100 to 100kPa)	(-100 to 300kPa)

(4) Switch output type

Code	N	P
Switch output type	NPN open collector output	PNP open collector output

(5) Connector cable length

Code	No code	-C50	-C100*	-C200*	-C300*
Cable length (mm)	Without cable	500	1,000	2,000	3,000

* Connector cable length code: C100, C200 and C300 are make-to-order production.

(6) Bracket

Code	No code	-B
Bracket	Without bracket	With bracket

Model Designation of Bracket

VUS8B → (1) Bracket for VUS8A
(1)

* 2 inner hexagonal bolts (M3×12) and 2 hexagonal nuts are included.

Model designation of Connector Cable (Example)

FVUS008A10 - **C50** → (2) Connector cable length
(1) (2)

Code	No code	C50	C100*	C200*	C300*
Cable length (mm)	Without cable	500	1,000	2,000	3,000

* Connector cable length code: C100, C200 and C300 are make-to-order production.

(1) Connector cable for 8mm width LED Digital Pressure Sensor

Characteristics

Setting value (switch setting, display setting) of sensors can be copied to Max.10 sensors.

4 options for connector cable length

Connector cable length: 500, 1000, 2000, 3000 mm

Energy saving type, capable of reducing air consumption of vacuum generator, is selectable.

Use with the Energy saving type vacuum generators VK series, which have vacuum retention function (Unit code: H, K, M, S, T, W. See page ***) , can reduce air consumption greatly.

- Advantage of Energy saving type [In case of using with a vacuum generator at suction conveyance]

Operating conditions

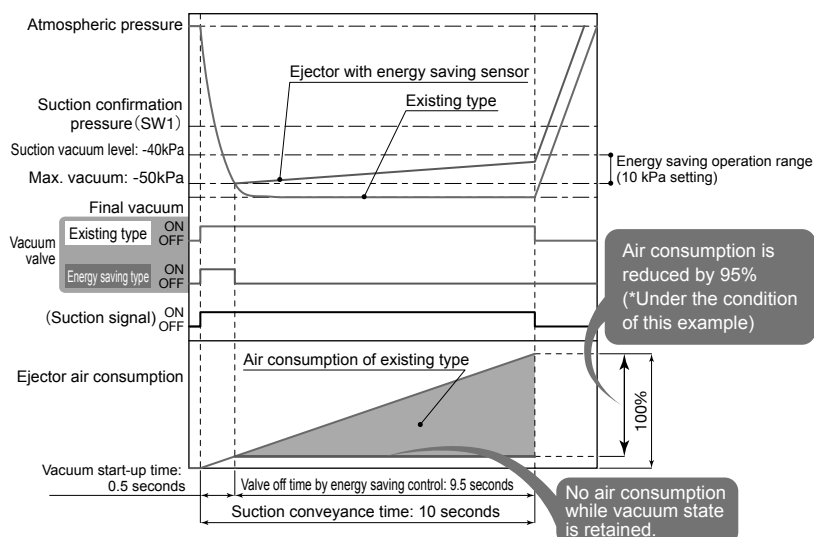
Suction conveyance time → 10 seconds

Vacuum level → on or above -40 kPa, max. -50 kPa

(Sensor setting: Max. vacuum -50kPa,

Energy saving operation range 10kPa)

- By using the energy saving, for example, if the vacuum level reaches -50 kPa (max. vacuum set) in 0.5 seconds, the sensor turns off the vacuum valve and switches to vacuum retention state simultaneously during transportation of workpiece (9.5 seconds), and enables to reduce 95% of air consumption. (In case of no pressure-drop to -40 kPa, the setting value)

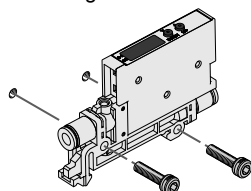


Super slim and light weight pressure sensor with a LED display.

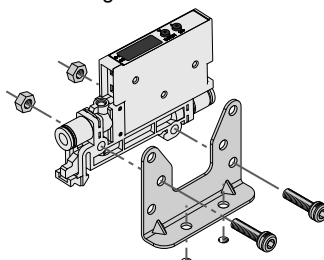
All settings are done by two push buttons.

3 mounting options.

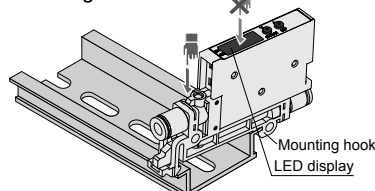
- Mounting with screws



- Mounting with a bracket

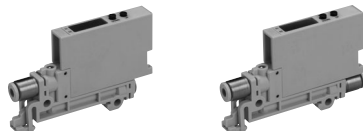


- Installing on a DIN rail



2 types for port lead-out selection.

- Single side Port
- In-line Port



Three port types are available.

- Push-in fitting
- Plug-in
- Female thread

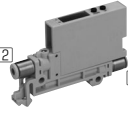
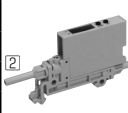
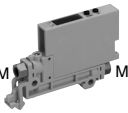


RoHS2 (2011/65/EU+EU2015/863) compliant

Single port type

Type	Model code VUS8A-[2]-[3][4]-[5]	Type	Model code VUS8A-[2]-[3][4]-[5]	Type	Model code US8A-M-[3][4]-[5]
Without bracket Push-in fitting VUS8 	VUS8A-[2]-[3][4] VUS8A-[2]-[3][4]-C50 VUS8A-[2]-[3][4]-C100 VUS8A-[2]-[3][4]-C200 VUS8A-[2]-[3][4]-C300	Without bracket Plug-in type VUS8 	VUS8A-[2]-[3][4] VUS8A-[2]-[3][4]-C50 VUS8A-[2]-[3][4]-C100 VUS8A-[2]-[3][4]-C200 VUS8A-[2]-[3][4]-C300	Without bracket Metric thread type VUS8 	VUS8A-M5-[3][4] VUS8A-M5-[3][4]-C50 VUS8A-M5-[3][4]-C100 VUS8A-M5-[3][4]-C200 VUS8A-M5-[3][4]-C300
With bracket Push-in fitting type VUS8 	VUS8A-[2]-[3][4]-B VUS8A-[2]-[3][4]-C50-B VUS8A-[2]-[3][4]-C100-B VUS8A-[2]-[3][4]-C200-B VUS8A-[2]-[3][4]-C300-B	With bracket Plug-in type VUS8 	VUS8A-[2]-[3][4]-B VUS8A-[2]-[3][4]-C50-B VUS8A-[2]-[3][4]-C100-B VUS8A-[2]-[3][4]-C200-B VUS8A-[2]-[3][4]-C300-B	With bracket Metric thread type VUS8 	VUS8A-M5-[3][4]-B VUS8A-M5-[3][4]-C50-B VUS8A-M5-[3][4]-C100-B VUS8A-M5-[3][4]-C200-B VUS8A-M5-[3][4]-C300-B

In-line type

Type	Model code VUS8A-[2]-[3][4]-[5]	Type	Model code VUS8A-[2]-[3][4]-[5]	Type	Model code US8A-MM-[3][4]-[5]
Without bracket Push-in fitting VUS8 	VUS8A-[2]-[3][4] VUS8A-[2]-[3][4]-C50 VUS8A-[2]-[3][4]-C100 VUS8A-[2]-[3][4]-C200 VUS8A-[2]-[3][4]-C300	Without bracket Plug-in type VUS8 	VUS8A-[2]-[3][4] VUS8A-[2]-[3][4]-C50 VUS8A-[2]-[3][4]-C100 VUS8A-[2]-[3][4]-C200 VUS8A-[2]-[3][4]-C300	Without bracket Metric thread type VUS8 	VUS8A-M5M5-[3][4] VUS8A-M5M5-[3][4]-C50 VUS8A-M5M5-[3][4]-C100 VUS8A-M5M5-[3][4]-C200 VUS8A-M5M5-[3][4]-C300
With bracket Push-in fitting type VUS8 	VUS8A-[2]-[3][4]-B VUS8A-[2]-[3][4]-C50-B VUS8A-[2]-[3][4]-C100-B VUS8A-[2]-[3][4]-C200-B VUS8A-[2]-[3][4]-C300-B	With bracket Plug-in type VUS8 	VUS8A-[2]-[3][4]-B VUS8A-[2]-[3][4]-C50-B VUS8A-[2]-[3][4]-C100-B VUS8A-[2]-[3][4]-C200-B VUS8A-[2]-[3][4]-C300-B	With bracket Metric thread type VUS8 	VUS8A-M5M5-[3][4]-B VUS8A-M5M5-[3][4]-C50-B VUS8A-M5M5-[3][4]-C100-B VUS8A-M5M5-[3][4]-C200-B VUS8A-M5M5-[3][4]-C300-B

Options

Type	Model code	Type	Model code
Bracket VUS8B 	VUS8B	Connector Cable FVUS 	FVUS008A10-C50 FVUS008A10-C100 FVUS008A10-C200 FVUS008A10-C300



Notes

* Please select a code of connecting port type and size for [2] in model code, select a pressure range code for [3], and select a code for switch output type for [4], referring to the Model Designation (Example) on page 180.



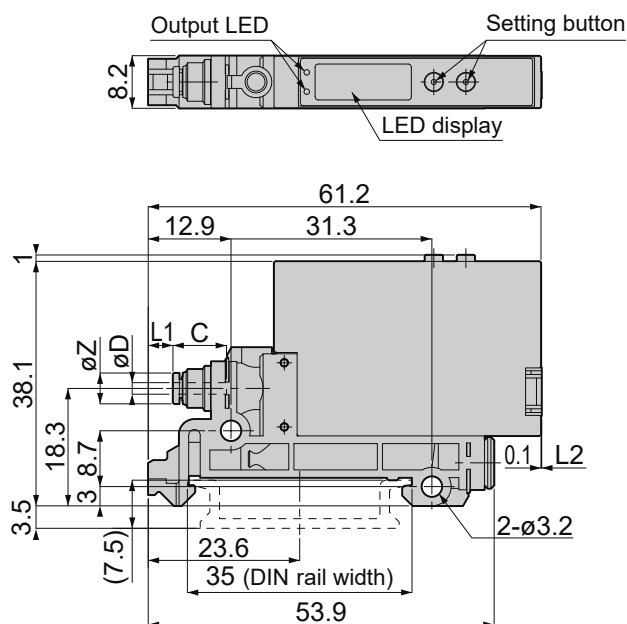
CAD data is available
at PISCO website.



Packaging specifications
1 pc. / bag

Dimensional Drawings

VUS8A Single port, Without bracket, Push-in fitting type



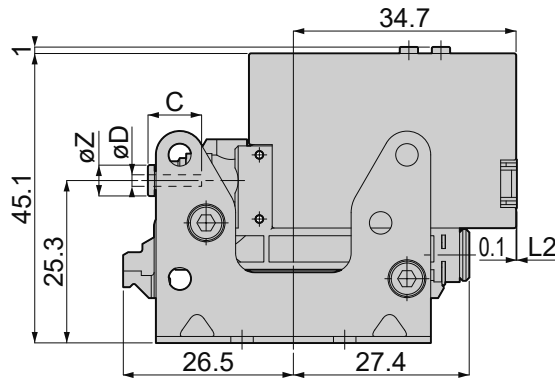
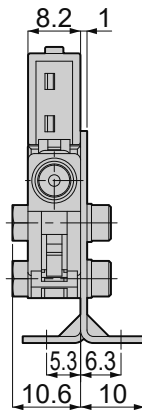
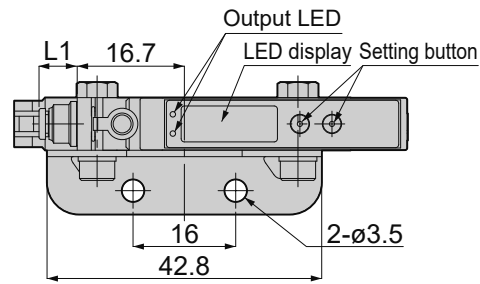
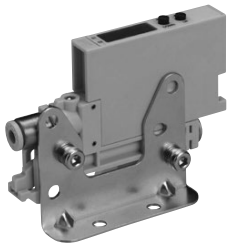
*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Tube O.D. øD	Release-ring O.D. øZ	L1	Cable length L2	Tube end C	Orifice bore (ø mm)	Weight (g)
VUS8A-180- 3 4	1.8	4.8	3.9	-	8.4	1.2	15
VUS8A-180- 3 4 -C50				Approx. 500			20
VUS8A-180- 3 4 -C100				Approx. 1,000			24
VUS8A-180- 3 4 -C200				Approx. 2,000			32
VUS8A-180- 3 4 -C300				Approx. 3,000			41
VUS8A-3- 3 4	3	7.8	-	-	12.9	2.5	16
VUS8A-3- 3 4 -C50				Approx. 500			21
VUS8A-3- 3 4 -C100				Approx. 1,000			25
VUS8A-3- 3 4 -C200				Approx. 2,000			33
VUS8A-3- 3 4 -C300				Approx. 3,000			42
VUS8A-4- 3 4	4	7.8	-	-	10.9	2.5	16
VUS8A-4- 3 4 -C50				Approx. 500			21
VUS8A-4- 3 4 -C100				Approx. 1,000			25
VUS8A-4- 3 4 -C200				Approx. 2,000			33
VUS8A-4- 3 4 -C300				Approx. 3,000			42

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A Single port, With bracket, Push-in fitting type

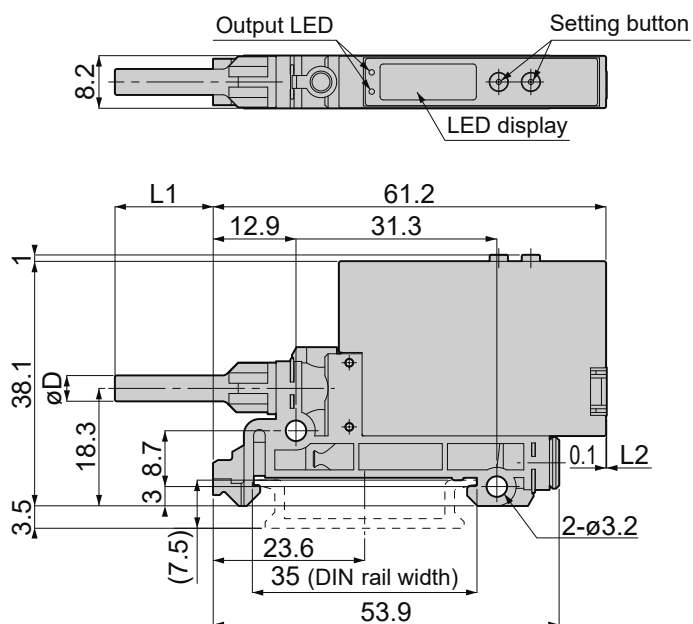
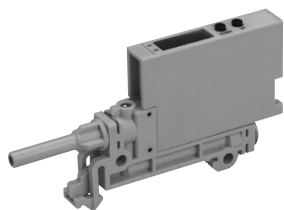


Unit: mm

Model code	Tube O.D. øD	Release-ring O.D. øZ	L1	Cable length L2	Tube end C	Orifice bore (ø mm)	Weight (g)
VUS8A-180- 3 4 -B	1.8	4.8	6	-	8.4	1.2	28
VUS8A-180- 3 4 -C50-B				Approx. 500			33
VUS8A-180- 3 4 -C100-B				Approx. 1,000			37
VUS8A-180- 3 4 -C200-B				Approx. 2,000			45
VUS8A-180- 3 4 -C300-B				Approx. 3,000			54
VUS8A-3- 3 4 -B	3	7.8	9.8	-	12.9	2.5	29
VUS8A-3- 3 4 -C50-B				Approx. 500			34
VUS8A-3- 3 4 -C100-B				Approx. 1,000			38
VUS8A-3- 3 4 -C200-B				Approx. 2,000			46
VUS8A-3- 3 4 -C300-B				Approx. 3,000			55
VUS8A-4- 3 4 -B	4	7.8	9.8	-	10.9	2.5	29
VUS8A-4- 3 4 -C50-B				Approx. 500			34
VUS8A-4- 3 4 -C100-B				Approx. 1,000			38
VUS8A-4- 3 4 -C200-B				Approx. 2,000			46
VUS8A-4- 3 4 -C300-B				Approx. 3,000			55

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A Single port, Without bracket, Plug-in type



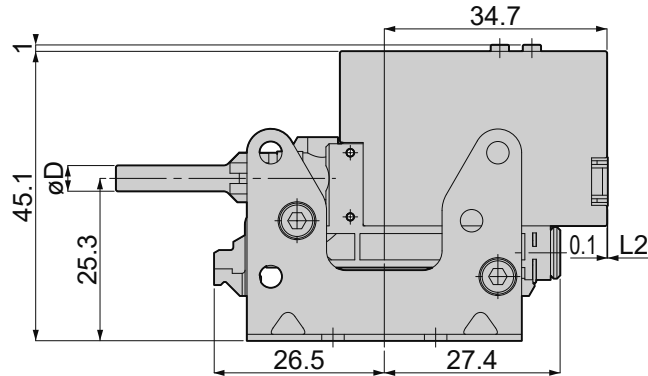
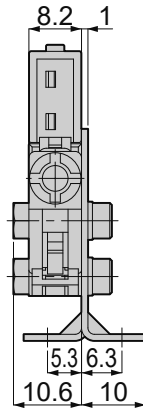
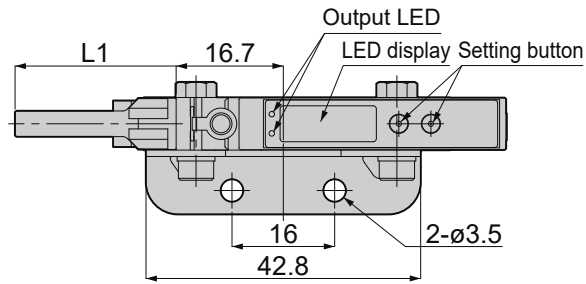
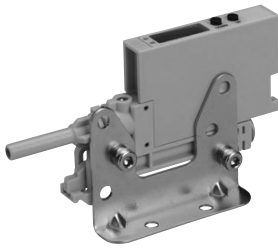
*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Connecting port size øD	L1	Cable length L2	Orifice bore (ø mm)	Weight (g)
VUS8A-N4- 3 4	4	15.3	-	2.5	14
VUS8A-N4- 3 4 -C50			Approx. 500		19
VUS8A-N4- 3 4 -C100			Approx. 1,000		23
VUS8A-N4- 3 4 -C200			Approx. 2,000		31
VUS8A-N4- 3 4 -C300			Approx. 3,000		40
VUS8A-N6- 3 4	6	17.3	-	2.5	14
VUS8A-N6- 3 4 -C50			Approx. 500		19
VUS8A-N6- 3 4 -C100			Approx. 1,000		23
VUS8A-N6- 3 4 -C200			Approx. 2,000		31
VUS8A-N6- 3 4 -C300			Approx. 3,000		40

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A Single port, With bracket, Plug-in type

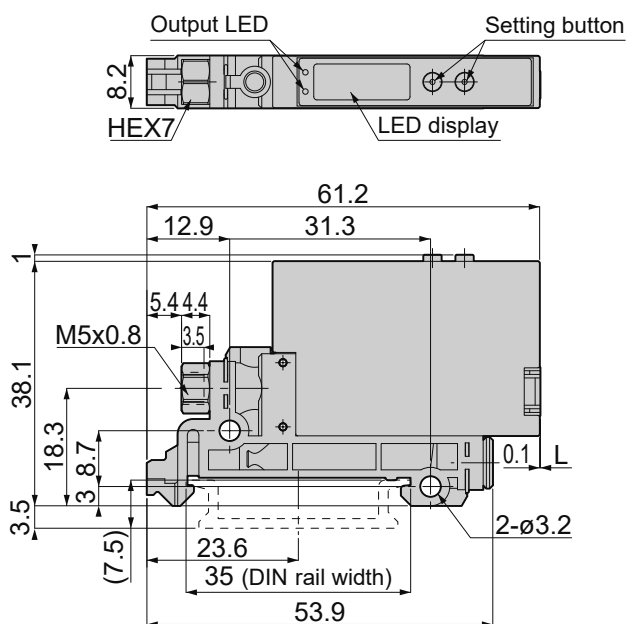


Unit: mm

Model code	Connecting port size øD	L1	Cable length L2	Orifice bore (ø mm)	Weight (g)
VUS8A-N4- 3 4 -B	4	25.1	-	2.5	27
VUS8A-N4- 3 4 -C50-B			Approx. 500		32
VUS8A-N4- 3 4 -C100-B			Approx. 1,000		36
VUS8A-N4- 3 4 -C200-B			Approx. 2,000		44
VUS8A-N4- 3 4 -C300-B			Approx. 3,000		53
VUS8A-N6- 3 4 -B	6	27.1	-	2.5	27
VUS8A-N6- 3 4 -C50-B			Approx. 500		32
VUS8A-N6- 3 4 -C100-B			Approx. 1,000		36
VUS8A-N6- 3 4 -C200-B			Approx. 2,000		44
VUS8A-N6- 3 4 -C300-B			Approx. 3,000		53

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A Single port, Without bracket, Metric thread type

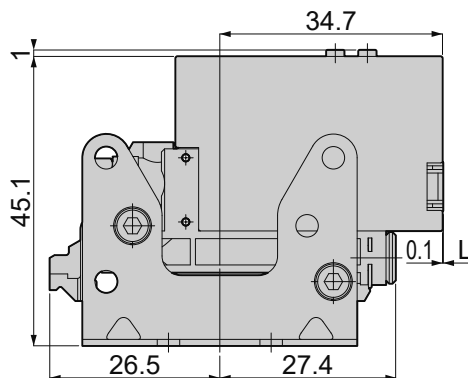
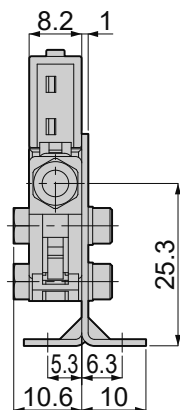
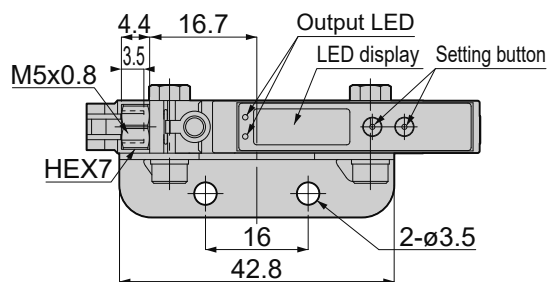


*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Cable length L	Orifice bore (ø mm)	Weight (g)
VUS8A-M5- 3 4	-	2.5	15
VUS8A-M5- 3 4 -C50	Approx. 500		20
VUS8A-M5- 3 4 -C100	Approx. 1,000		24
VUS8A-M5- 3 4 -C200	Approx. 2,000		32
VUS8A-M5- 3 4 -C300	Approx. 3,000		41

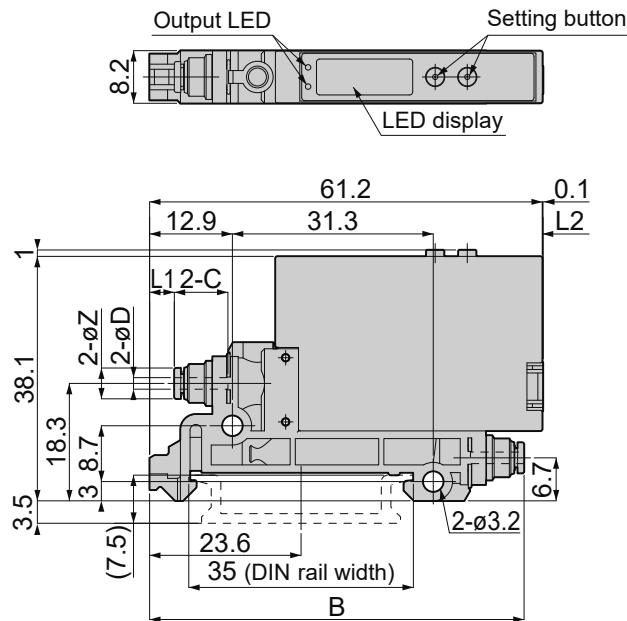
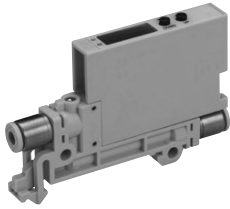
*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.



Model code	Cable length L	Orifice bore (ø mm)	Weight (g)
VUS8A-M5-314-B	-	2.5	28
VUS8A-M5-314-C50-B	Approx. 500		33
VUS8A-M5-314-C100-B	Approx. 1,000		37
VUS8A-M5-314-C200-B	Approx. 2,000		45
VUS8A-M5-314-C300-B	Approx. 3,000		54

*For [3] in the model code, please select a code for the pressure range and for [4], please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, Without bracket, Push-in fitting type



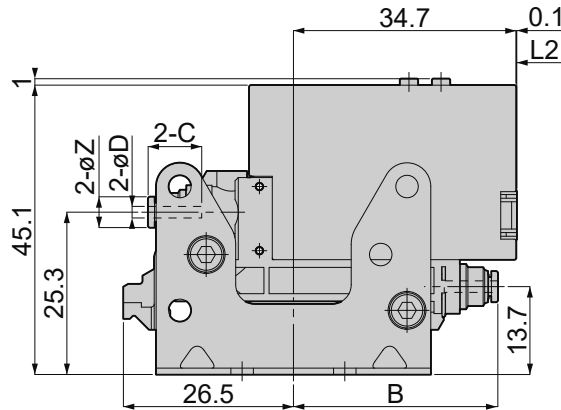
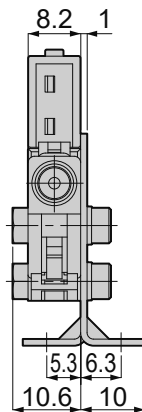
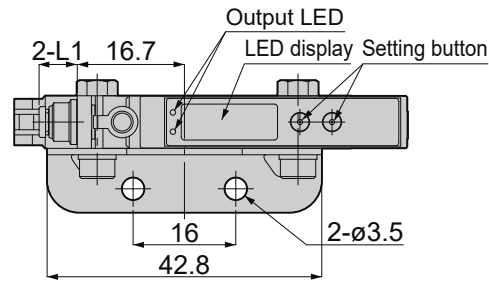
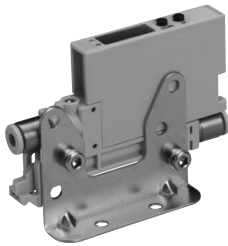
*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Tube O.D. øD	Release-ring O.D. øZ	B	L1	Cable length L2	Tube end C	Orifice bore (ø mm)	Weight (g)
VUS8A-180180- 3 4	1.8	4.8	58.4	3.9	-	8.4	1.2	16
VUS8A-180180- 3 4 -C50					Approx. 500			21
VUS8A-180180- 3 4 -C100					Approx. 1,000			25
VUS8A-180180- 3 4 -C200					Approx. 2,000			33
VUS8A-180180- 3 4 -C300					Approx. 3,000			42
VUS8A-33- 3 4	3	7.8	62.2	-	-	12.9	2.5	18
VUS8A-33- 3 4 -C50					Approx. 500			23
VUS8A-33- 3 4 -C100					Approx. 1,000			27
VUS8A-33- 3 4 -C200					Approx. 2,000			35
VUS8A-33- 3 4 -C300					Approx. 3,000			44
VUS8A-44- 3 4	4	7.8	62.2	-	-	10.9	2.5	18
VUS8A-44- 3 4 -C50					Approx. 500			23
VUS8A-44- 3 4 -C100					Approx. 1,000			27
VUS8A-44- 3 4 -C200					Approx. 2,000			35
VUS8A-44- 3 4 -C300					Approx. 3,000			44

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, With bracket, Push-in fitting type

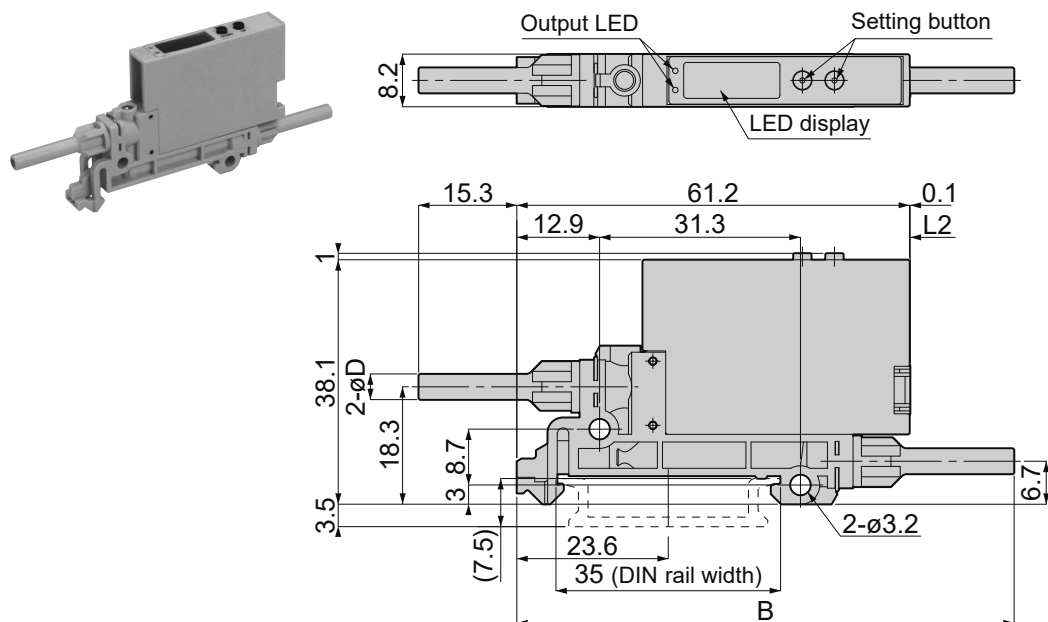


Unit: mm

Model code	Tube O.D. øD	Release-ring O.D. øZ	B	L1	Cable length L2	Tube end C	Orifice bore (ø mm)	Weight (g)
VUS8A-180180- 3 4 -B	1.8	4.8	31.9	6	-	8.4	1.2	29
VUS8A-180180- 3 4 -C50-B					Approx. 500			34
VUS8A-180180- 3 4 -C100-B					Approx. 1,000			38
VUS8A-180180- 3 4 -C200-B					Approx. 2,000			46
VUS8A-180180- 3 4 -C300-B					Approx. 3,000			55
VUS8A-33- 3 4 -B	3	7.8	35.7	9.8	-	12.9	2.5	31
VUS8A-33- 3 4 -C50-B					Approx. 500			36
VUS8A-33- 3 4 -C100-B					Approx. 1,000			40
VUS8A-33- 3 4 -C200-B					Approx. 2,000			48
VUS8A-33- 3 4 -C300					Approx. 3,000			57
VUS8A-44- 3 4 -B	4	7.8	35.7	9.8	-	10.9	2.5	31
VUS8A-44- 3 4 -C50-B					Approx. 500			36
VUS8A-44- 3 4 -C100-B					Approx. 1,000			40
VUS8A-44- 3 4 -C200-B					Approx. 2,000			48
VUS8A-44- 3 4 -C300-B					Approx. 3,000			57

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, Without bracket, Plug-in type



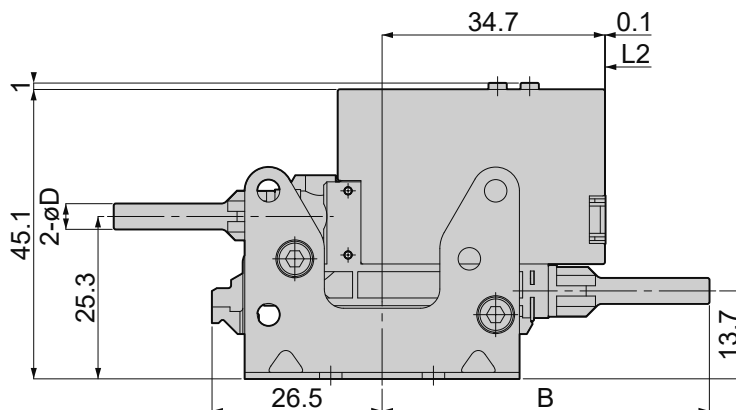
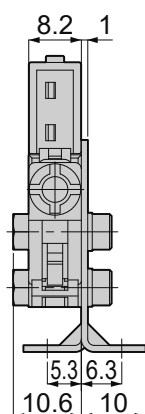
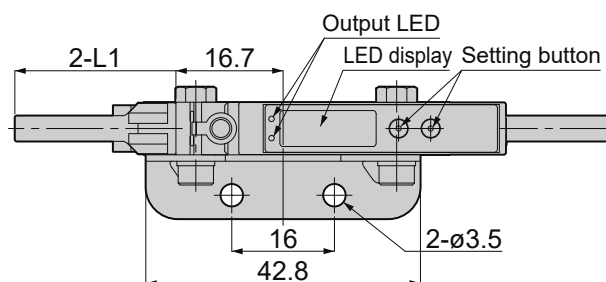
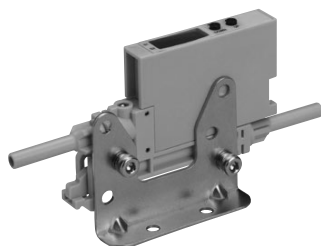
*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Connecting port size øD	B	L1	Cable length L2	Orifice bore (ø mm)	Weight (g)
VUS8A-N4N4- 3 4	4	77.5	15.3	-	2.5	15
VUS8A-N4N4- 3 4 -C50				Approx. 500		20
VUS8A-N4N4- 3 4 -C100				Approx. 1,000		24
VUS8A-N4N4- 3 4 -C200				Approx. 2,000		32
VUS8A-N4N4- 3 4 -C300				Approx. 3,000		41
VUS8A-N6N6- 3 4	6	79.5	17.3	-	2.5	15
VUS8A-N6N6- 3 4 -C50				Approx. 500		20
VUS8A-N6N6- 3 4 -C100				Approx. 1,000		24
VUS8A-N6N6- 3 4 -C200				Approx. 2,000		32
VUS8A-N6N6- 3 4 -C300				Approx. 3,000		41

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, With bracket, Plug-in type

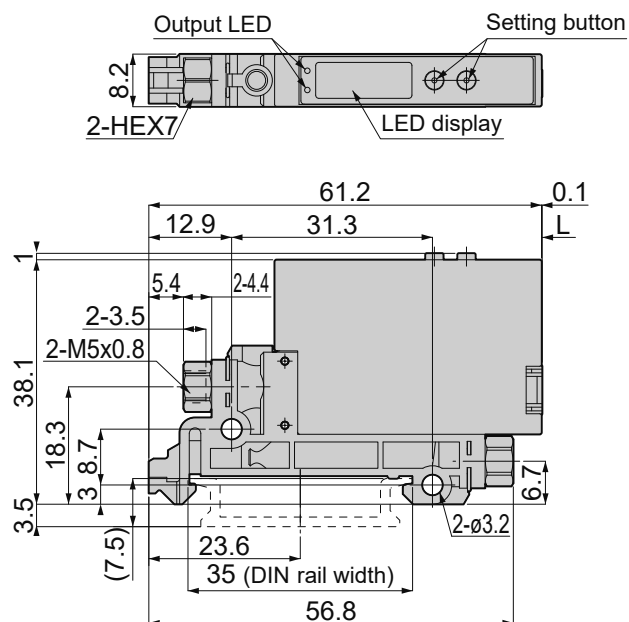


Unit: mm

Model code	Connecting port size øD	B	L1	Cable length L2	Orifice bore (ø mm)	Weight (g)
VUS8A-N4N4- 3 - 4 -B	4	51	25.1	-	2.5	28
VUS8A-N4N4- 3 - 4 -C50-B				Approx. 500		33
VUS8A-N4N4- 3 - 4 -C100-B				Approx. 1,000		37
VUS8A-N4N4- 3 - 4 -C200-B				Approx. 2,000		45
VUS8A-N4N4- 3 - 4 -C300-B				Approx. 3,000		54
VUS8A-N6N6- 3 - 4 -B	6	53	27.1	-	2.5	28
VUS8A-N6N6- 3 - 4 -C50-B				Approx. 500		33
VUS8A-N6N6- 3 - 4 -C100-B				Approx. 1,000		37
VUS8A-N6N6- 3 - 4 -C200-B				Approx. 2,000		45
VUS8A-N6N6- 3 - 4 -C300-B				Approx. 3,000		54

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, Without bracket, Metric thread type



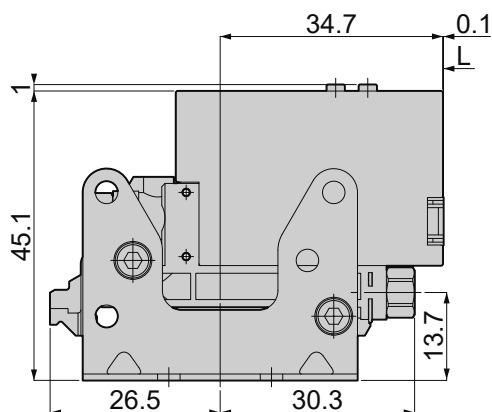
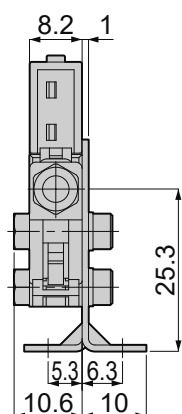
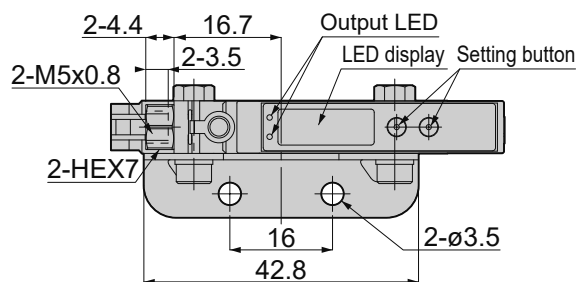
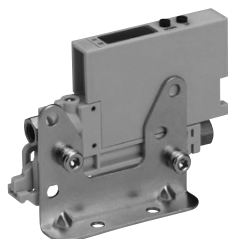
*The dimensions given above are for DIN rail height of 7.5 mm.

Unit: mm

Model code	Cable length L	Orifice bore (ø mm)	Weight (g)
VUS8A-M5M5- 3 4	-	2.5	16
VUS8A-M5M5- 3 4 -C50	Approx. 500		21
VUS8A-M5M5- 3 4 -C100	Approx. 1,000		25
VUS8A-M5M5- 3 4 -C200	Approx. 2,000		33
VUS8A-M5M5- 3 4 -C300	Approx. 3,000		42

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.

VUS8A In-line, With bracket, Metric thread type



Unit: mm

Model code	Cable length L	Orifice bore (ø mm)	Weight (g)
VUS8A-M5M5- 3 4 -B	-	2.5	29
VUS8A-M5M5- 3 4 -C50-B	Approx. 500		34
VUS8A-M5M5- 3 4 -C100-B	Approx. 1,000		38
VUS8A-M5M5- 3 4 -C200-B	Approx. 2,000		46
VUS8A-M5M5- 3 4 -C300-B	Approx. 3,000		55

*For 3 in the model code, please select a code for the pressure range and for 4, please select a code for the switch output type, referring to the Model Designation (Example) of 8 mm width LED Digital Pressure Sensor.