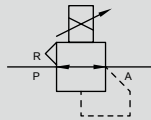


# EVS2 Series



JIS symbol



## Overview

Compact, lightweight and high performance electro pneumatic regulator. Ideal for controlling pilot regulators, pressure and fine speed cylinders in the semiconductor and precision assembling fields.

## Features

- Compact/lightweight**  
20% smaller and 35% lighter than the conventional model. Downsize and lighten your equipment with this model.
- Longer service life**  
Three times that of our previous model.
- High precision/high responsiveness**  
High precision and high-speed response control of fluid pressure using electric signals. Provides 0.3% F.S. repeatability, 0.1% F.S. resolution, 0.1 sec. response time (without load).
- 2-color display of the operational status**  
On the 2-color operation indicator, green means the pressure is within the set value and red means the pressure is outside the set value or an error status.
- Easy to pipe/wire**  
Push-in cartridge fitting and M12 connector have improved work efficiency.

## Specifications

1 MPa = 10 bar

Descriptions		EVS2-100	EVS2-500
Working fluid		Clean compressed air (JIS B 83921-1: 2012 (ISO 8573-1: 2010) [1:3:2] or equivalent)	
Max. working pressure		200 kPa (≈29 psi, 2 bar)	0.7 MPa (≈100 psi, 7 bar)
Min. working pressure		Set pressure + max. control pressure x 0.1	
Proof pressure	Inlet	300 kPa (≈44 psi, 3 bar)	1.05 MPa (≈150 psi, 10.5 bar)
	Output side	150 kPa (≈22 psi, 1.5 bar)	0.75 MPa (≈110 psi, 7.5 bar)
Pressure control range (*1)		1 (≈0.2 psi) to 100 kPa (≈15 psi)	0.005 (≈0.73 psi) to 0.5 MPa (≈73 psi)
Power supply voltage		24 VDC ± 10% (stabilized power supply with ripple rate of 1% or less)	
Current consumption		0.1 A or less (0.6 A rush current when power is ON)	
Input signal (input impedance)	0	0 to 10 VDC (6.7 kΩ)	
	1	0 to 5 VDC (10 kΩ)	
	2	4 to 20 mADC (250 Ω)	
	3	0 to 20 mADC (250 Ω)	
Analog output (connecting load impedance)	AV	1 to 5 VDC (50 kΩ)	
	AA	4-20 mADC (300 Ω or less)	
Accuracy (*2)	Hysteresis	0.4% F.S. or less	
	Linearity	±0.5% F.S. or less	
	Resolution	0.1% F.S. or less	
	Repeatability	0.3% F.S. or less	
Temperature characteristics	Zero point fluctuation	0.12% F.S./°C or less	
	Span fluctuation	0.07% F.S./°C or less	
Max. flow rate (*3)		2 l/min (ANR)	8 l/min (ANR)
Step response (*4)	No load	0.1 s or less	
	15 cm <sup>3</sup> Load	0.5 s or less	
Operating ambient temperature, fluid temperature		0 (32°F) to 50 (122°F)°C	
Storage ambient temperature		-20 (-4°F) to 60 (140°F)°C	
Operating ambient humidity		45 to 90% RH (no condensation)	
Storage ambient humidity		96% RH or less	
Mounting orientation		Free	
Boundary dimension		W30×D50×H39	
Port size	H4	φ4 Push-in fitting	
	H6	φ6 Push-in fitting	
Weight		90 g	

\*1: 1% F.S. or less input signal cannot be controlled.

\*2: The characteristics are: 24.0±0.1 VDC power supply voltage, 25±3°C ambient temperature, within the working pressure. and 10% to 100% of set pressure range.

\*3: Working pressure: Maximum working pressure, Control pressure: Maximum control pressure.

\*4: Working pressure: Max. working pressure, step amount: 

50% F.S. → 100% F.S.
50% F.S. → 60% F.S.
50% F.S. → 40% F.S.

\*5: The specification values above are obtained in a static state only. The control pressure may differ if air is consumed on the output side.

## Example of applications

● Chemical liquid discharge control	● Micro position control
<p style="text-align: center;">Pilot Regulator (for chemical liquids)</p> <p style="text-align: center;">Tank</p>	<p style="text-align: center;">Bellows</p>

### How to order

**EVS2** - **100** - **1** **H4** **AV** - **C11** - **3**

Model No.

**A** Pressure control range

**B** Input signal

**C** Port size

**D** Analog output

**E** Cable option

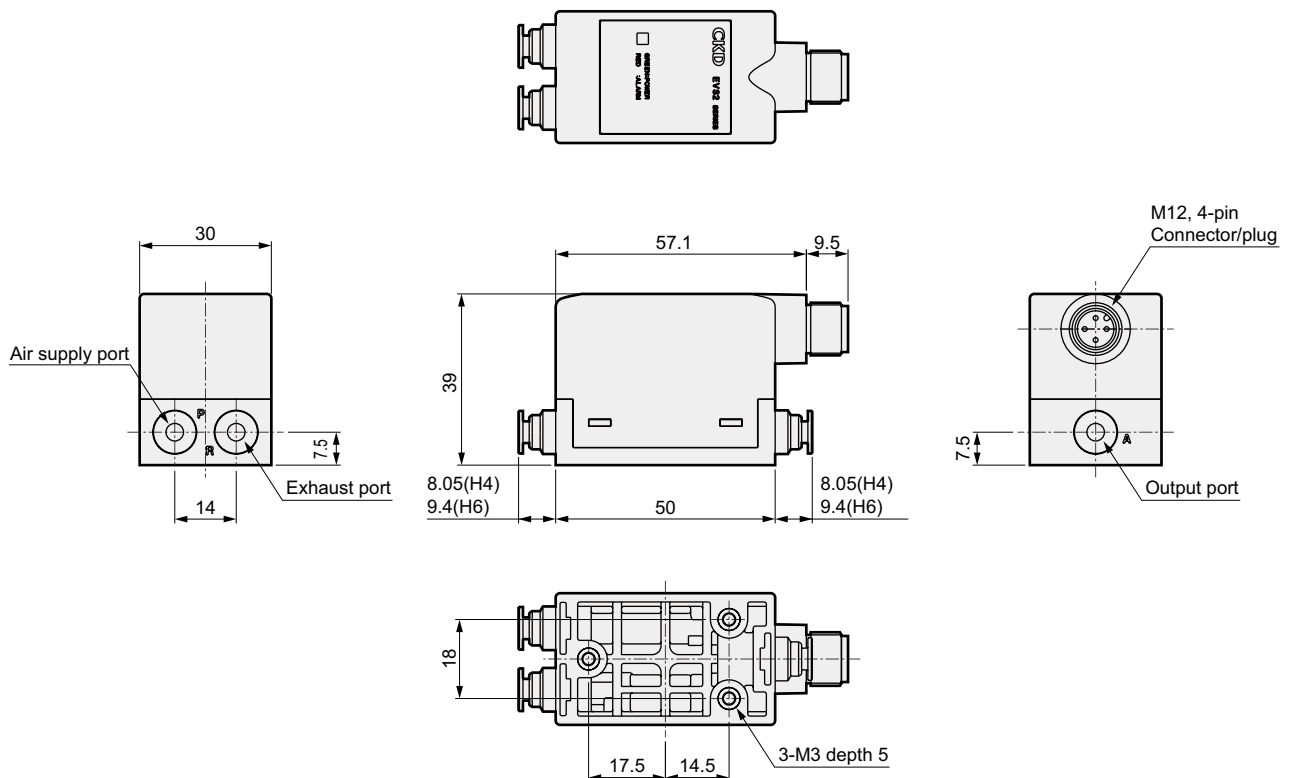
Code	Content
<b>A Pressure control range</b>	
<b>100</b>	1 to 100 kPa
<b>500</b>	0.005 to 0.5 MPa
<b>B Input signal</b>	
<b>0</b>	0 to 10 VDC
<b>1</b>	0 to 5 VDC
<b>2</b>	4 to 20 mADC
<b>3</b>	0 to 20 mADC
<b>C Port size</b>	
<b>H4</b>	Push-in fitting $\phi 4$
<b>H6</b>	Push-in fitting $\phi 6$
<b>D Analog output</b>	
<b>AV</b>	1 to 5 V
<b>AA</b>	4 to 20 mA
<b>E Cable option</b>	
<b>Blank</b>	None
<b>C11</b>	1 m (straight connector)
<b>C13</b>	3 m (straight connector)

### ⚠ Precautions for model No. selection

Note: How to order an option only:

**EV2000** - Cable option code

### Dimensions

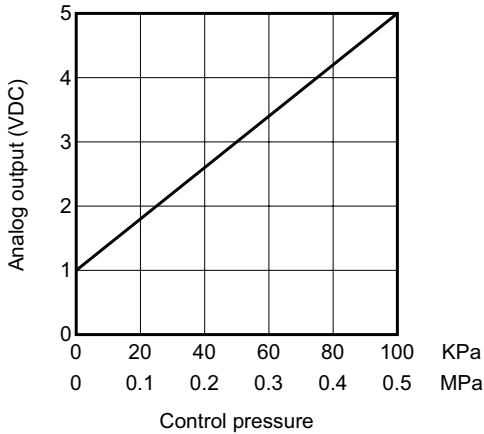


- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FimResistFR
- Oil-ProhR
- MedPresFR
- No Cu/ PTFE FRL
- Outdrs FR
- F.R.L (Related)
- CompFRL
- LgFRL
- PrescR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/ other
- Jnt/tube
- AirUnt
- PrescCompn
- Mech/ ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/ Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

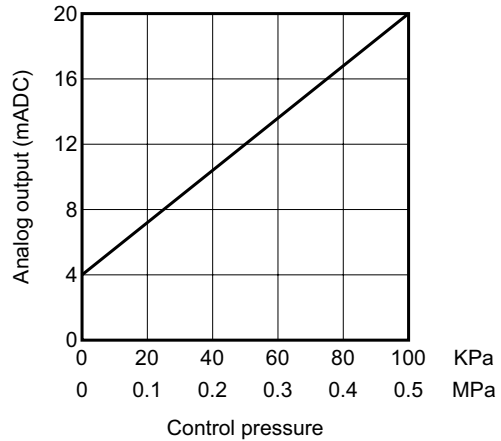
- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FilmResistFR
- Oil-ProhR
- MedPresFR
- No Cu/PTFE FRL
- Outdrs FR
- F.R.L (Related)
- CompFRL
- LgFRL
- PrecsR
- VacFR
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

## Analog output

● When selecting voltage output (AV)

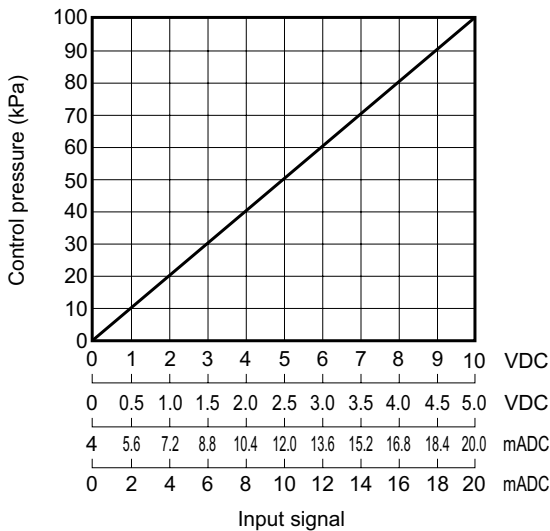


● When selecting current output (AA)

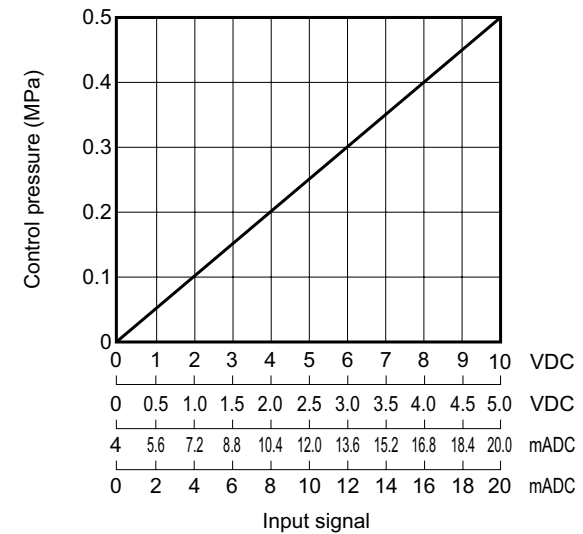


## I/O characteristics

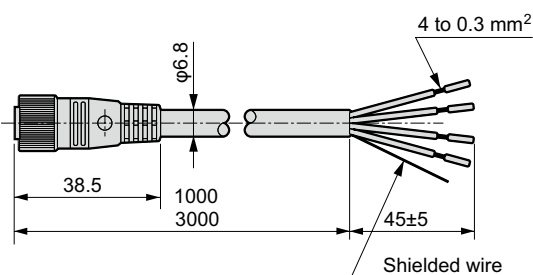
● EVS2-100



● EVS2-500



## Cable option



-C1\* Shielded cable connector

* Pin No.	Insulator color	Applications	Type of input signal				Weight
			0 to 10 V	0 to 5 V	4 to 20 mA	0 to 20 mA	
1	Red	Power supply ⊕	24 V				C11:79 C13:212
2	Green	-	Analog output				
3	Black	Common	0 V				
4	White	Input signal	0 to 10 V	0 to 5 V	4 to 20 mA	0 to 20 mA	

If a cable option is not used, the following recommended cable sockets can be used. Use a shielded wire cable.

Screw fixing type	ELW1KA4012 Correns (Hirschmann)
Straight (solder)	XS2C-D421 OMRON
L type (solder)	XS2C-D422 OMRON