

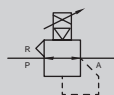

Pneumatic, Vacuum and Auxiliary Components
Catalog No. CB-024SA

Digital electro-pneumatic regulator

EVD-1000 Series

Analog/parallel

JIS symbol



US LISTED



Specifications

Item		EVD-1100- ⁰⁸ Analog output (*...0/1/2)	EVD-1100-P08 Parallel	EVD-1500- ⁰⁸ Analog output (*...0/1/2)	EVD-1500-P08 Parallel	EVD-1900- ⁰⁸ Analog output (*...0/1/2)	EVD-1900-P08 Parallel
Working fluid		Clean compressed air (JIS B 8392-1: 2012 Grade 1.3.2 or equivalent)					
Max. working pressure		160 kPa		700 kPa		1000 kPa	
Min. working pressure		Set pressure +50 kPa		Set pressure +100kPa			
Proof pressure	Inlet	240 kPa		1050 kPa		1500 kPa	
	Output side	150 kPa		750 kPa		1350 kPa	
Pressure control range *1		0 to 100 kPa		0 to 500 kPa		0 to 900 kPa	
Power supply voltage		24 VDC ± 10% (stabilized power supply with ripple rate 1% or less)					
Current consumption		0.15 A or less (0.6 A or less rush current when the power is turned ON)					
Input signal (input impedance)		0-10 VDC (6.7kΩ) 0-5 VDC (10kΩ) 4-20mA DC (250Ω)	10bit	0-10 VDC (6.7kΩ) 0-5 VDC (10kΩ) 4-20mA DC (250Ω)	10bit	0-10 VDC (6.7kΩ) 0-5 VDC (10kΩ) 4-20mA DC (250Ω)	10bit
Preset input		8 points	No	8 points	No	8 points	No
Output signal *2		Output accuracy: ±6% F.S. or less, analog output: 1 to 5 VDC (connecting load impedance 500 kΩ and over)over) Switch output: NPN or PNP open collector output, 30 V or less and 50 mA or less, voltage drop 2.4 V or less, PLC/relay compatiblecompatible					
Error output signal		NPN or PNP open collector output, 30 V or less and 50 mA or less, voltage drop 2.4 V or less, PLC/relay compatiblerelay compatible					
Direct memory setting		1 to 100 kPa (Min. setting width 1 kPa/setting resolution 1 kPa)		5 to 500 kPa (Min. setting width 1 kPa/setting resolution 1 kPa)		9 to 900 kPa (Min. setting width 1kPa/setting resolution 2kPa)	
Pressure display	Display method	7-segment LED 3 digits, indicator accuracy: ±2% F.S. or less					
	Display range	0 to 100 kPa		0 to 500 kPa		0 to 900 kPa	
	Display resolution	1 kPa		1 kPa		1 kPa	
Hysteresis *3		0.5% F.S. or less					
Linearity *3		±0.3% F.S. or less					
Resolution *3		0.2% F.S. or less					
Repeatability *3		0.3% F.S. or less					
Temperature	Zero point fluctuation	±0.15% F.S./°C or less					
characteristics	Span fluctuation	±0.07% F.S./°C or less					
Max. flow rate (ANR) *4		60ℓ/min		400ℓ/min			
Step response *5	No load	0.2 sec. or less					
Vibration resistance		98m/s ² or less					
Ambient temperature		5 to 50°C					
Fluid temperature		5 to 50°C					
Port size		Rc1/4					
Mounting orientation		Free					
Weight		280 g					
Protection circuit		Power reverse connection protection, switch output reverse connection protection, switch output load short-circuit protection					

*1: There is 1% F.S. or less residual pressure when the input signal is 0%. (EVD-1100: 1 kPa, EVD-1500: 5 kPa, EVD-1900: 9 kPa)

*2: Select the analog output or switch output.

*3: The characteristics above are: 24 \pm 0.1 VDC power supply voltage, 25 \pm 3 $^{\circ}$ C ambient temperature, no load, EVD-1100 working pressure; Max. control pressure +50kPa/EVD-1500, 1900; the maximum control pressure is +100kPa and the control pressure is 10 to 90%. In addition, when the secondary side is a closed circuit, pressure fluctuations will occur if the product is used for blowing or for similar applications.

*4: The characteristics where working pressure is maximum and control pressure is maximum are shown.

*5: The characteristics above show the max. working pressure and the step amount at $\left\{ \begin{array}{l} 50\% \text{ F.S.} \rightarrow 100\% \text{ F.S.} \\ 50\% \text{ F.S.} \rightarrow 60\% \text{ F.S.} \\ 50\% \text{ F.S.} \rightarrow 40\% \text{ F.S.} \end{array} \right.$

How to order

EVD-1 **500** - **0** **08** **AN** - **C1L11** - **3** - **P4**

A Pressure control range

B Input signal

C Port size

D Output signal

● Discrete option (cable) model No.

EVD- **C1**

E Option

● Discrete option (bracket) model No.

EVL- **L11**

E Option

Compatibility table by variation

	EVD-1100/1500/1900
Port size	Rc1/4
P4	●

*: The bracket option of EVD-1*00*-P4 is blank or L11 (L type, wall mounted for exhaust fitting). Standard B1 and L1 types cannot be selected.

●: Applicable models ○: Semi-applicable models
▲: Contact CKD for details. □: Not applicable

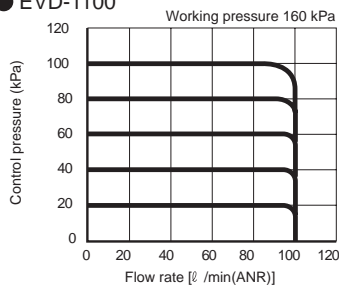
F Power supply voltage

Code	Description
A Pressure control range	
100	0 - 100 kPa
500	0 - 500 kPa
900	0 - 900 kPa
B Input signal	
0	0 - 10 VDC
1	0 - 5 VDC
2	4 to 20 mADC
P	Parallel 10 bit
C Port size	
08	Rc1/4
D Output signal	
AN	1-5 VDC analog, error (NPN)
AP	1-5 VDC analog, error (PNP)
SN	Switch (NPN), error (NPN)
SP	Switch (PNP), error (PNP)
E Option	
Cable option	
Blank	No
C1	Analog 9-conductor, 1 m cable
C3	Analog 9-conductor, 3m cable
P1	Parallel 15-conductor, cable 1 m
P3	Parallel 15-conductor, 3m cable
Bracket is an included option	
Blank	No
L11	L-bracket, wall mounted type for exhaust fitting
F Power supply voltage	
3	24 VDC

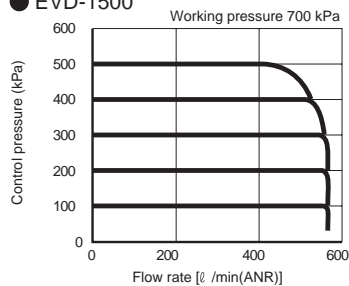
*1: The bracket option of EVD-1*00*-P4 is blank or L11 (L type, wall mounted for exhaust fitting). Standard B1 and L1 types cannot be selected.

Flow characteristics

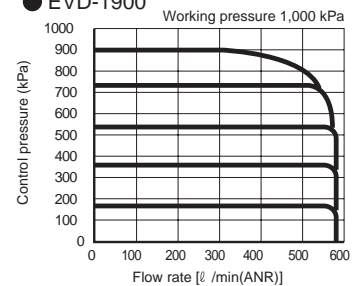
● EVD-1100



● EVD-1500

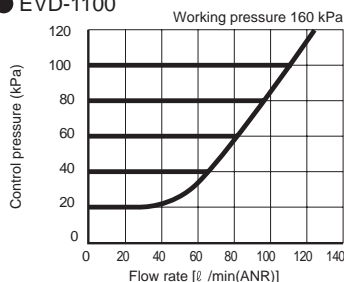


● EVD-1900

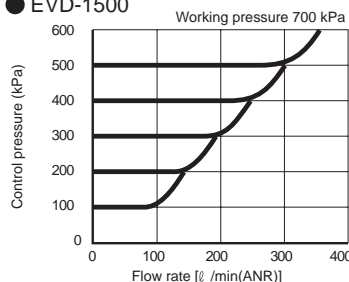


Relief characteristics

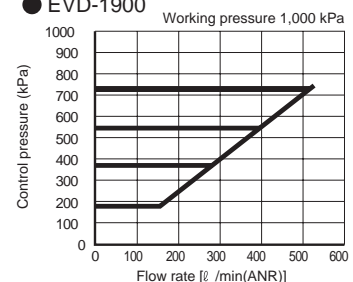
● EVD-1100



● EVD-1500



● EVD-1900



P4
Series

Pneumatic, Vacuum and Auxiliary Components
Catalog No. CB-024SA

JIS symbol

US LISTED

Compatibility table by variation

	EVD-3100/3500/3900
Port size	Rc1/4, Rc3/8
P4	●

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

How to order

EVD-3 500 - 0 08 AN - C1B3 - 3 - P4

A Pressure control range

B Input signal

C Port size (IN, OUT)

D Output signal

E Option

F Power supply voltage

● Discrete option (cable, bracket) model No.

EVD- C1

E Option

Code	Description
A Pressure control range	
100	0 - 100 kPa
500	0 - 500 kPa
900	0 - 900 kPa
B Input signal	
0	0 - 10 VDC
1	0 - 5 VDC
2	4 to 20 mADC
P	Parallel 10 bit
C Port size (IN, OUT)	
08	Rc1/4
10	Rc3/8
D Output signal	
AN	1-5 VDC analog, error (NPN)
AP	1-5 VDC analog, error (PNP)
SN	Switch (NPN), error (NPN)
SP	Switch (PNP), error (PNP)
E Option	
Cable option	
Blank	No
C1	Analog 9-conductor, 1 m cable
C3	Analog 9-conductor, 3m cable
P1	Parallel 15-conductor, cable 1 m
P3	Parallel 15-conductor, 3m cable
Bracket is an included option	
Blank	No
B3	B-bracket, floor mounted
L3	L-bracket, wall mounted
F Power supply voltage	
3	24 VDC

P4
Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components
Speed controller

Pneumatic auxiliary components
Fitting
Auxiliary valve
Silencer
Tube

Gas generator

Fluid control components

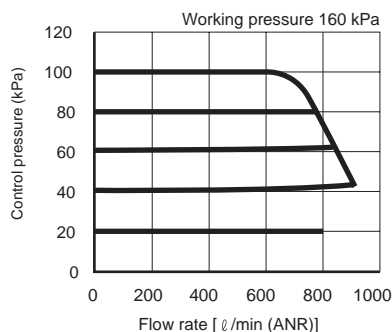
Electric actuator
Motor specification
Motorless specifications

EVD-3000 Series

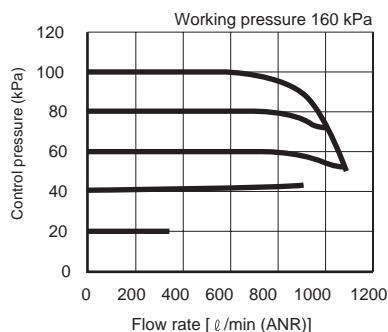
P4
Series

Flow characteristics

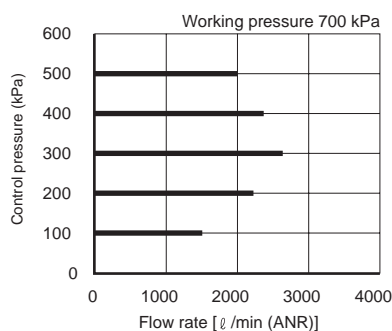
● EVD-3100-□08



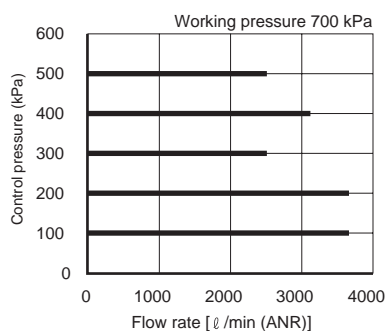
● EVD-3100-□10



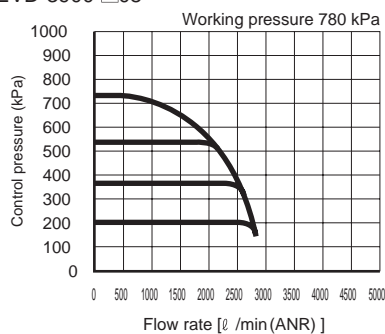
● EVD-3500-□08



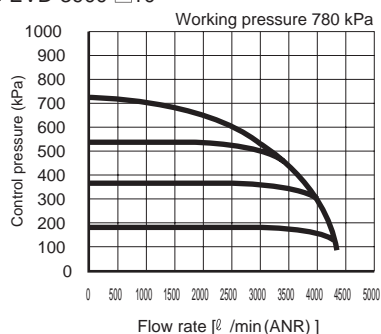
● EVD-3500-□10



● EVD-3900-□08

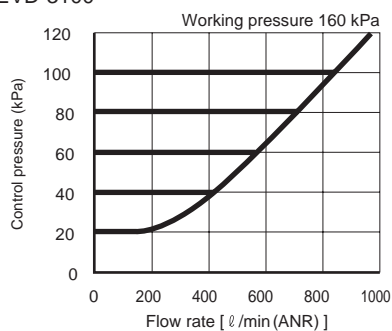


● EVD-3900-□10

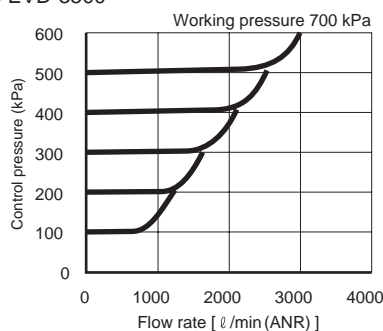


Relief characteristics

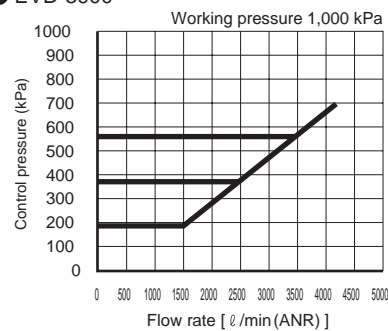
● EVD-3100

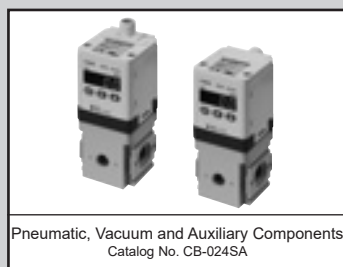


● EVD-3500



● EVD-3900



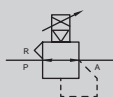


Digital electro-pneumatic regulator

EVD-1000 Series

IO-Link

JIS symbol



P4
Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch
Vacuum components
Pneumatic valves
Clean air components
Pneumatic auxiliary components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube
Gas generator
Fluid control components
Electric actuator
Motor specification

Specifications

Item			EVD-1100-C[*2][*3]	EVD-1500-C[*2][*3]	EVD-1900-C[*2][*3]
Working fluid			Clean compressed air (ISO 1.3.2 or equivalent)		
Max. working pressure			160 kPa	700 kPa	1000 kPa
Min. working pressure			Set pressure +50 kPa	Set pressure +100kPa	
Proof pressure	Inlet		240 kPa	1050 kPa	1500 kPa
	Output side		150 kPa	750 kPa	1350 kPa
Pressure control range *1			0 to 100 kPa	0 to 500 kPa	0 to 900 kPa
Power supply voltage			24 VDC±10% (stabilized power supply with ripple rate 1% or less)		
Current consumption *2			0.15A or less (0.6A or less starting current when power is ON) (Port type A)		
Input signal			IO-Link		
Preset input			8 points (IO-Link)		
Pressure display	Display method		7-segment LED 3 digits, indicator accuracy: ±2%F.S. or less		
	Display range		0 to 100 kPa	0 to 500 kPa	0 to 900 kPa
	Display resolution		1 kPa	1 kPa	1 kPa
Direct memory setting			1 to 100 kPa (Min. setting width 1kPa /setting resolution 1kPa)	5 to 500 kPa (Min. setting width 1kPa /setting resolution 1kPa)	9 to 900 kPa (Min. setting width 1kPa /setting resolution 2kPa)
Hysteresis *3			0.5% F.S. or less		
Linearity *3			±0.3% F.S. or less		
Resolution *3			0.2% F.S. or less		
Repeatability *3			0.3% F.S. or less		
Temperature characteristics	Zero point fluctuation		±0.15% F.S./°C or less		
	Span fluctuation		±0.07% F.S./°C or less		
Max. flow rate (ANR) *4			60L/min	400L/min	
Step response *5	No load		0.2 sec. or less		
Vibration resistance			98m/s²or less		
Ambient temperature			5 to 50°C		
Fluid temperature			5 to 50°C		
Port size [*2]			Port size option 08...Rc1/4		
Unit change [*3] *6	Blank		No unit change function		
	KA		Unit change kPa / psi / bar (Attachment: Unit seal psi / bar)		
Mounting orientation			Free		
Weight (body)			280g		
Protection circuit			Power reverse connection protection		

*1: There is 1% F.S. or less residual pressure when the input signal is 0%. EVD-1100:1kPa or less, EVD-1500:5kPa or less, EVD-1900:9kPa or less)

*2: Use a IO-Link master that has sufficient power supply per port.

*3: The conditions for the values above are: 24 VDC±0.1V power supply voltage, EVD-1100 working pressure: maximum control pressure +50kPa/ EVD-1500, 1900: maximum control pressure +100kPa, and 10 to 90% control pressure. (No load, ambient temperature 25±3°C) When the secondary side is a closed circuit, pressure fluctuations will occur if the product is used for blowing or for similar applications.

*4: The characteristics where working pressure is maximum and control pressure is maximum are shown.

*5: The characteristics above show the max. working pressure and the step amount at

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

*6: The unit change function KA type is available only outside Japan.

EVD-1000 Series

P4
Series

How to order

EVD-1 500 - C 08 KA - MS - 3 - P4

A Pressure control range

B Input signal

C Port size

D Unit change

E Option

● Discrete option (cable) model No.

EVD- MS3

Code	Description
Cable option	
MS3	Straight (female), straight (male) 3 m
ML3	L type (female) / straight (male) 3 m
MM3	One side straight (female) 3 m

● Discrete option (bracket) model No.

EVL- L11

E Option

F Power supply voltage

Code	Description
A Pressure control range	
100	0 -100 kPa
500	0 -500 kPa
900	0 -900 kPa
B Input signal	
C	IO-Link
C Port size	
08	Rc1/4
D Unit change *1	
Blank	No Unit Switching
KA	Unit change: Yes
E Option	
Cable option	
Blank	None
MS	IO-Link Straight (female), straight (male) 3 m
ML	IO-Link L type (female) / straight (male) 3 m
MM	IO-Link One side straight (female) 3 m
Bracket option	
Blank	None
L11	L-bracket, wall mounted
F Power supply voltage	
3	24 VDC

*1: The unit change function KA type is only available outside Japan.

Compatibility table by variation

	EVD-1100/1500/1900
Port size	Rc1/4
P4	●

Note: The bracket option of EVD-1*00-*-P4 is blank or L11 (L type, wall mounted for exhaust fitting). Standard B1 and L1 cannot be selected.

●: Applicable models ○: Semi-applicable models
▲: Contact CKD for details. □: Not applicable

Pneumatic actuator

Pneumatic valves

Pneumatic auxiliary components

Gas generator

Electric actuator

Pneumatic cylinders

Hand/Chuck

Related products

Cylinder Switch

Vacuum components

Clean air components

Speed controller

Fitting

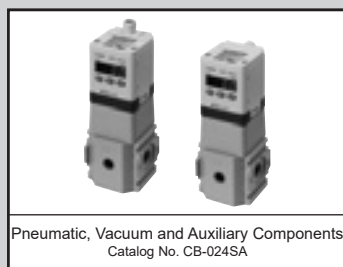
Auxiliary valve

Silencer

Tube

Fluid control components

Motor specifications

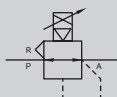


Digital electro-pneumatic regulator

EVD-3000 Series

IO-Link

JIS symbol



P4
Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components

Pneumatic auxiliary components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube

Gas generator

Fluid control components

Electric actuator
Motor specification
Motorless specifications

Specifications

Item		EVD-3100-C[*2][*3]	EVD-3500-C[*2][*3]	EVD-3900-C[*2][*3]
Working fluid		Clean compressed air (ISO 1.3.2 or equivalent)		
Max. working pressure		160 kPa	700 kPa	1000 kPa
Min. working pressure		Set pressure +50 kPa	Set pressure +100kPa	
Proof pressure	Inlet	240 kPa	1050 kPa	1500 kPa
	Output side	150 kPa	750 kPa	1350 kPa
Pressure control range *1		0 to 100 kPa	0 to 500 kPa	0 to 900 kPa
Power supply voltage		24 VDC±10% (stabilized power supply with ripple rate 1% or less)		
Current consumption *2		0.15A or less (0.6A or less starting current when power is ON) (Port type A)		
Input signal		IO-Link		
Preset input		8 points (IO-Link)		
Pressure display	Display method	7-segment LED 3 digits, indicator accuracy: ±2% F.S. or less		
	Display range	0 to 100 kPa	0 to 500 kPa	0 to 900 kPa
	Display resolution	1 kPa	1 kPa	1 kPa
Direct memory setting		1 to 100 kPa (Min. setting width 1kPa /setting resolution 1kPa)	5 to 500 kPa (Min. setting width 1kPa /setting resolution 1kPa)	9 to 900 kPa (Min. setting width 1kPa /setting resolution 2kPa)
Hysteresis *3		0.5% F.S. or less		
Linearity *3		±0.3% F.S. or less		
Resolution *3		0.2% F.S. or less		
Repeatability *3		0.3% F.S. or less		
Temperature characteristics	Zero point fluctuation	±0.15% F.S./°C or less		
	Span fluctuation	±0.07% F.S./°C or less		
Max. flow rate (ANR) *4		700L/min	1500L/min	
Step response *5	No load	0.2 sec. or less		
Vibration resistance		98m/s ² or less		
Ambient temperature		5 to 50°C		
Fluid temperature		5 to 50°C		
Port size [*2]	IN, OUT port	Port size option 08...Rc1/4, 10...Rc3/8		
	EXH port	Rc3/8		
Unit change [*3]	Blank	No unit change function		
*6	KA	Unit change kPa / psi / bar (Attachment: Unit seal psi / bar)		
Mounting orientation		Free		
Weight (body)		470g		
Protection circuit		Power reverse connection protection		

*1: There is 1% F.S. or less residual pressure when the input signal is 0%. (EVD-1100:1kPa or less, EVD-1500:5kPa or less, EVD-1900:9kPa or less)

*2: Use a IO-Link master that has sufficient power supply per port.

*3: The conditions for the values above are: 24VDC±0.1V power supply voltage, EVD-1100 working pressure: maximum control pressure +50kPa/ EVD-1500, 1900: maximum control pressure +100kPa, and 10 to 90% control pressure. (No load, ambient temperature 25±3°C) When the secondary side is a closed circuit, pressure fluctuations will occur if the product is used for blowing or for similar applications.

*4: The characteristics where working pressure is maximum and control pressure is maximum are shown.

*5: The characteristics above show the max. working pressure and the step amount at

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

*6: The unit change function KA type is available only outside Japan.

How to order

EVD-3 500 - C 08 KA - MS - 3 - P4

A Pressure control range

B Input signal

C Port size

D Unit change

E Option

● Discrete option (cable, bracket) model No.

EVD- MS3

Code	Description
Cable option	
MS3	Straight (female), straight (male) 3 m
ML3	L type (female) / straight (male) 3 m
MM3	One side straight (female) 3 m
Bracket option	
B3	B-bracket, floor mounted
L3	L-bracket, wall mounted

Code	Description
A Pressure control range	
100	0 -100 kPa
500	0 -500 kPa
900	0 -900 kPa
B Input signal	
C	IO-Link
C Port size	
08	Rc1/4
10	Rc3/8
D Unit change *1	
Blank	No Unit Switching
KA	Unit change: Yes
E Option	
Cable option	
Blank	None
MS	IO-Link Straight (female), straight (male) 3 m
ML	IO-Link L type (female) / straight (male) 3 m
MM	IO-Link One side straight (female) 3 m
Bracket option	
Blank	None
B3	B-bracket, floor mounted
L3	L-bracket, wall mounted
F Power supply voltage	
3	24 VDC

F Power supply voltage

*1: The unit change function KA type is only available outside Japan.

Compatibility table by variation

	EVD-3100/3500/3900
Port size	Rc1/4, Rc3/8
P4	●

●: Applicable models ○: Semi-applicable models
▲: Contact CKD for details. □: Not applicable

Precautions for use (common to EVD-1000 Series, EVD-3000 Series)

⚠ WARNING

- Application, load current, voltage, temperature, impact, environment, etc., outside the specifications will result in damage or operation faults. Use the device as instructed in the specifications.
- Never use this product in an explosive gas atmosphere. Never use in an explosive gas atmosphere as explosions or fires could result.
- Static
Do not use this product where electrostatic discharge could occur.
Failure to do so may result in breakdown or malfunction of the system.