


# CVA/CVC Series

## Valve Plug

### ■ Features

- Easy check operation using operation indicator(green)
- Excellent oil-resistance, abrasion resistance  
[Material: TPU(thermoplastic polyurethane)]
- IP67 protection structure(IEC standard)
- I type, L type connector and cable type help to apply various environment
- High connection reliability as screw mounting(connection)
- High reliability when connecting Autonics sensor distribution boxes (PT Series)

 Please read "Caution for your safety" in operation manual before using.



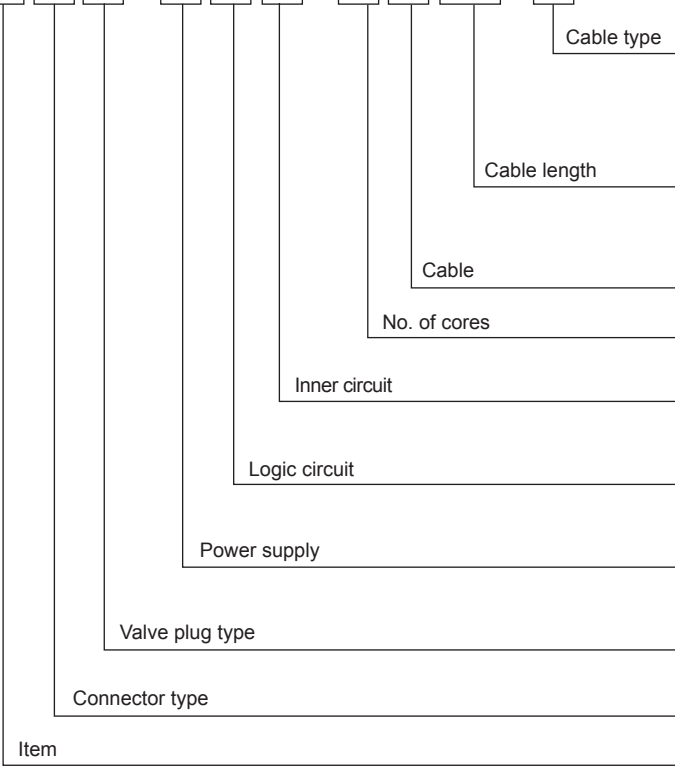
A type valve plug



C type valve plug

### ■ Ordering Information

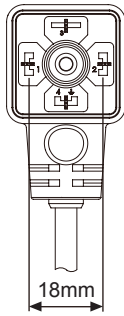
C V A - D N A - 3 H 020 - I



Cable type	No-mark	Cable
	I	I type connector
	L	L type connector
Cable length	010	1m
	020	2m
	050	5m
	100	10m
Cable	No-mark	Standard
	3	3C
No. of cores	A	LED+internal diode
	B	LED+internal zener diode
Inner circuit	N	NPN
	P	PNP
Logic circuit	D	24VDC
	DA	24VDC/VAC 50/60Hz
Power supply	A	A type
	C	C type
Valve plug type	V	Valve plug
	C	Connector cable
Connector type		
Item		

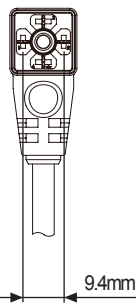
### ■ Valve Plug Type

A type valve plug



Terminal pitch

C type valve plug



Terminal pitch

## Specifications

Model		CVA-□□□□□□□□□□	CVC-□□□□□□□□□□
Power supply	AC/DC voltage	24VAC 50/60Hz, 24VDC	
	DC voltage	24VDC	
Rated current		Max. 2A	
Conductor resistance		Max. 60.12Ω/km (AWG22)	
Insulation resistance		Min. 1000MΩ (at 500VDC megger)	
Removable durability		Max. 200 operations	
Cable tension		10kgf (100N)	
Tightening		M3×0.5	
Tightening torque		4.0 to 6.1kgf·cm (0.4 to 0.6N·m <sup>※1</sup> )	
Dielectric strength		2000VAC 50/60Hz (for 1 min.)	
Vibration		1.0mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each X, Y, Z direction for 1 hour	
Shock		500m/s <sup>2</sup> (approx. 50G) in each X, Y, Z direction for 3 times	
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C	
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH	
Cable	Diameter	Ø5±0.2mm	
	Wire	3C×0.3mm <sup>2</sup> (AWG22-0.08×60)	
	Flexion	Over 1,000 operations	
Protection structure		IP67 (IEC standard)	
Material	Plug	Jacket	TPU
		Socket	MPPO
		Name plate	PC
		Bolt	SWCH 10A
		Pin	BRASS/NIKEL-PLATED
	Connector	Jacket	TPU
		Socket	PA6
		Pin	BRASS/NIKEL-PLATED
	Cable	PVC	
	Weight <sup>※2</sup>		Approx. 73.1g (approx. 68g)

※1: Tightening torque of M12 nut is 0.6 to 0.7N·m.

※2: The weight includes packaging. The weight in parentheses is for unit only.  
(based on CVA/CVC-□□□-3010-I type. add approx. 35g per 1m.)

※Environment resistance is rated at no freezing or condensation.

I/O Terminal Blocks

AFS(Interface Terminal Block)  
AFL/AFR(Interface Terminal Block)  
ACS(Common Terminal Block)  
AFE(Sensor Connector Terminal Block)  
ABS(Relay Terminal Block)  
ABL(Relay Terminal Block)  
Power Relay

I/O Cables

mitsubishi  
LSIS  
Autonics  
RS Automation  
YOKOGAWA  
FUJI  
KDT  
OMRON  
TELEMECANIQUE  
For SERVO  
Open Type Cables  
Cable Appearance

Remote I/O

ARD(DeviceNet Digital Standard Terminal Type)  
ARD(DeviceNet Digital Sensor Connector Type)  
ARD(DeviceNet Analog Standard Terminal Type)  
ARM(Modbus Digital Sensor Connector Type)

Others

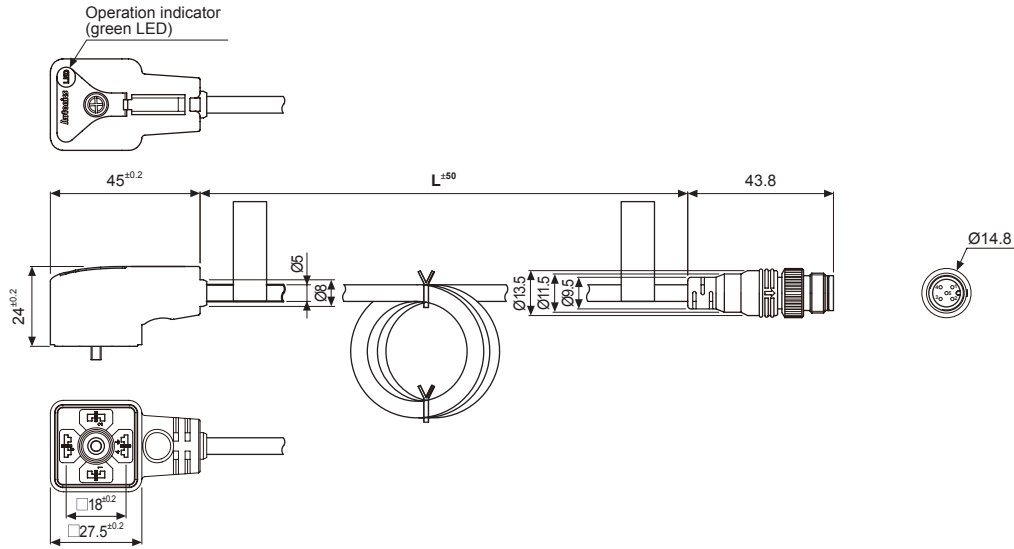
Sensor Connectors  
Sockets  
Sensor Distribution Boxes  
Valve Plugs  
Thumbwheel Switches

# CVA/CVC Series

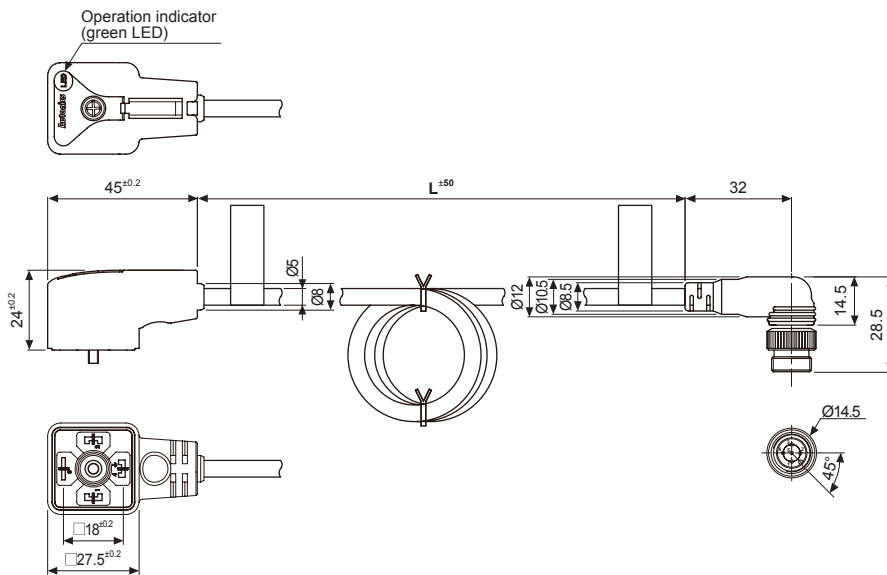
## Dimensions

### • CVA-□□□□□□-I (I type connector)

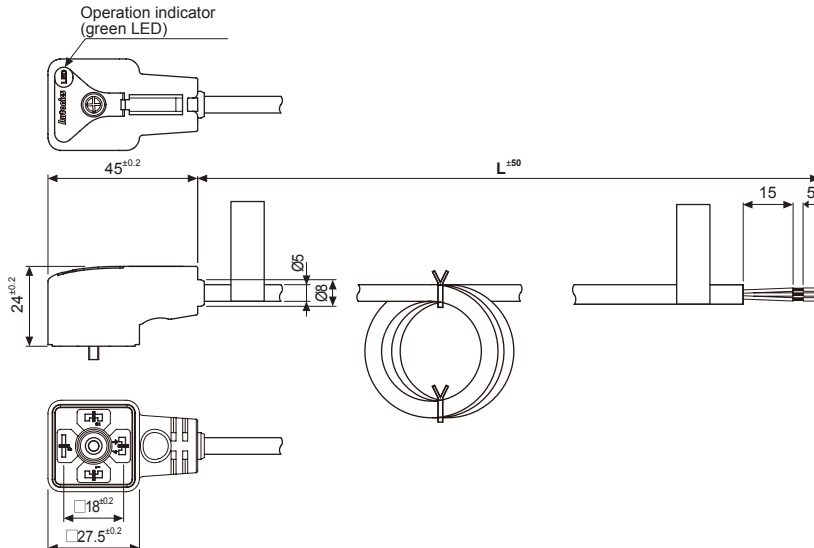
(unit: mm)



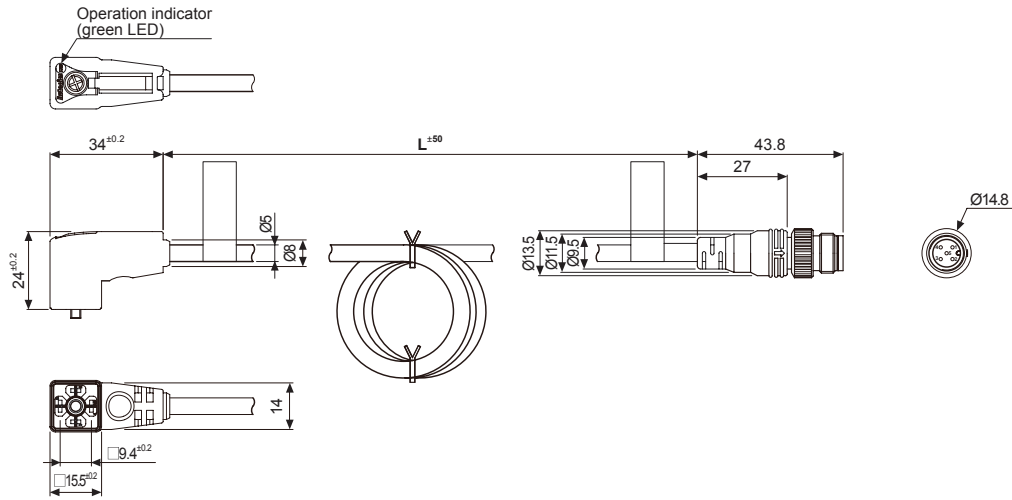
### • CVA-□□□□□□-L (L type connector)



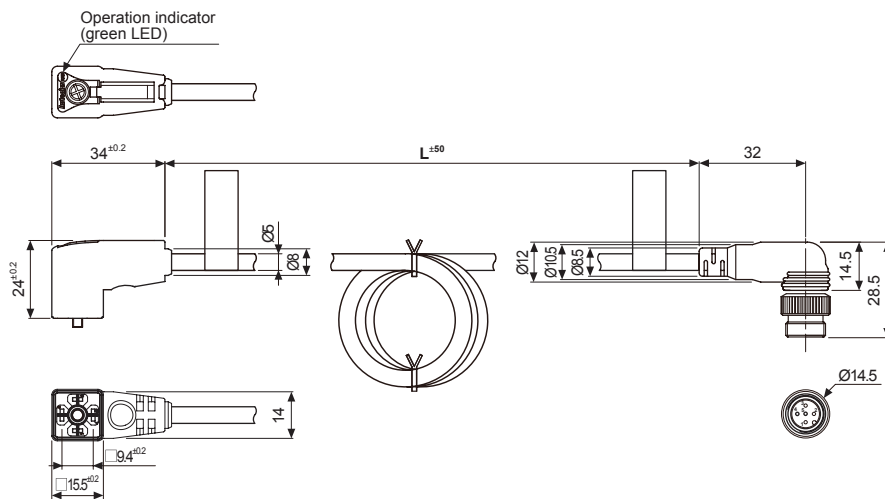
### • CVA-□□□□□□ (cable type)



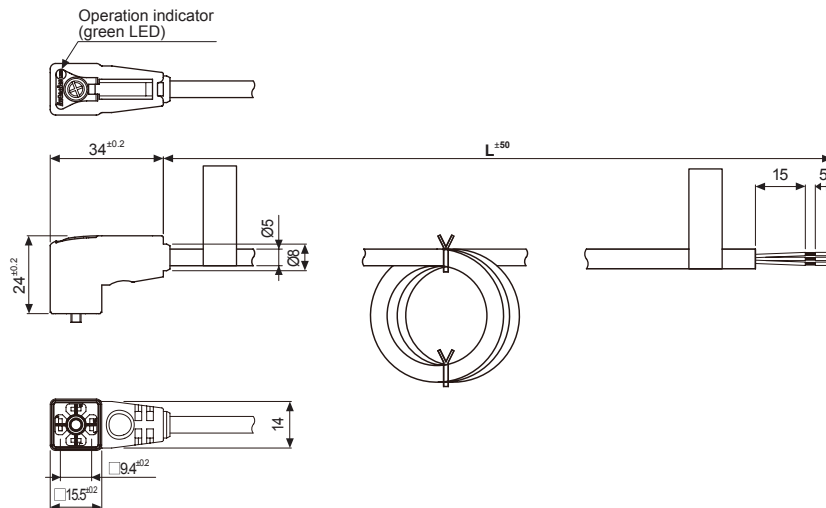
● CVC-□□□□□□-I (I type connector)



● CVC-□□□□□□-L (L type connector)



● CVC-□□□□□□ (cable type)



(unit: mm)

I/O Terminal Blocks

AFS(Interface Terminal Block)
AFJ/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay

I/O Cables

MITSUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance

Remote I/O

ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
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ARM(Modbus Digital Sensor Connector Type)

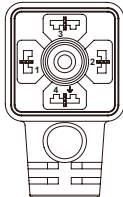







Others

Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

# CVA/CVC Series

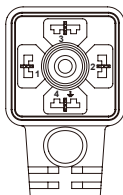
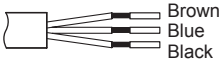

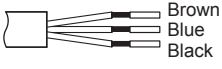
## ■ Connections

### ● I type/L type connector

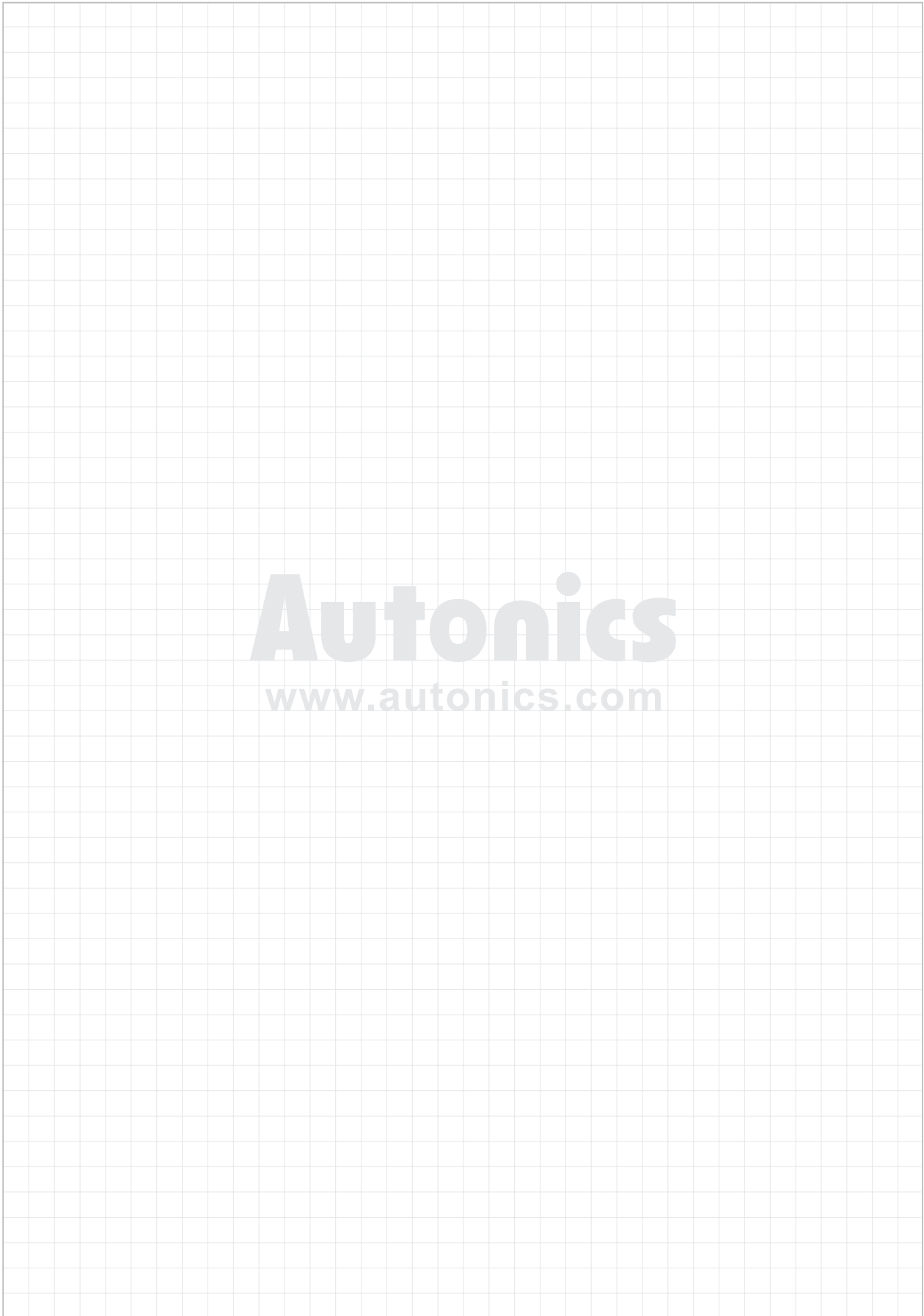
Model	Connections		Valve plug	M12 I type/L type connector	Output
	Valve plug	M12 I type /L type connector			
CVA-□N□-□□□□□□-I/L			1	1	VCC
			2	4	GND
			3	5	PE <sup>※1</sup>
			4		
CVA-□P□-□□□□□□-I/L			1	4	VCC
			2	3	GND
			3	5	PE <sup>※1</sup>
			4		
CVC-□N□-□□□□□□-I/L			1	1	VCC
			2	4	GND
			3	5	PE <sup>※1</sup>
			4		
CVC-□P□-□□□□□□-I/L			1	4	VCC
			2	3	GND
			3	5	PE <sup>※1</sup>
			4		

※1: PE is protective earth.

### ● Cable type

Model	Connection		Valve plug	Cable color	Output
	Valve plug	Cable			
CVA-□□□-□□□□□□			1	Brown	VCC
			2	Blue	GND
			3	Black	PE <sup>※1</sup>
			4		
CVC-□□□-□□□□□□			1	Brown	VCC
			2	Blue	GND
			3	Black	PE <sup>※1</sup>
			4		

※1: PE is protective earth.



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- TELEMECANIQUE
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- Sockets
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