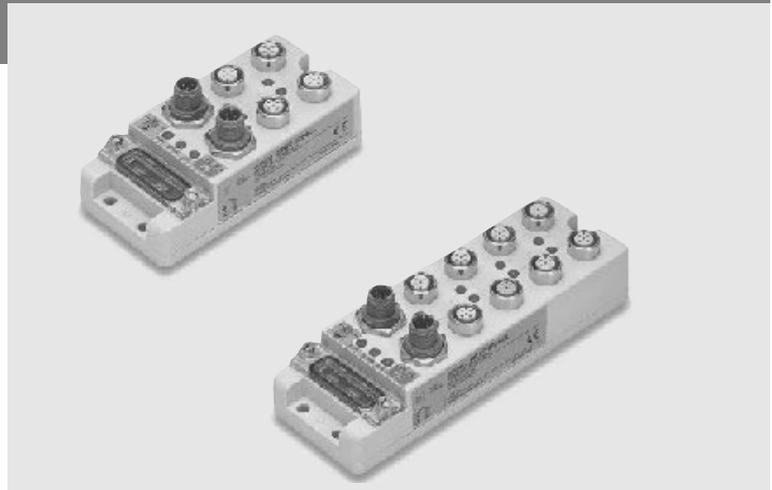


SRT2-□D0□CL(-1)

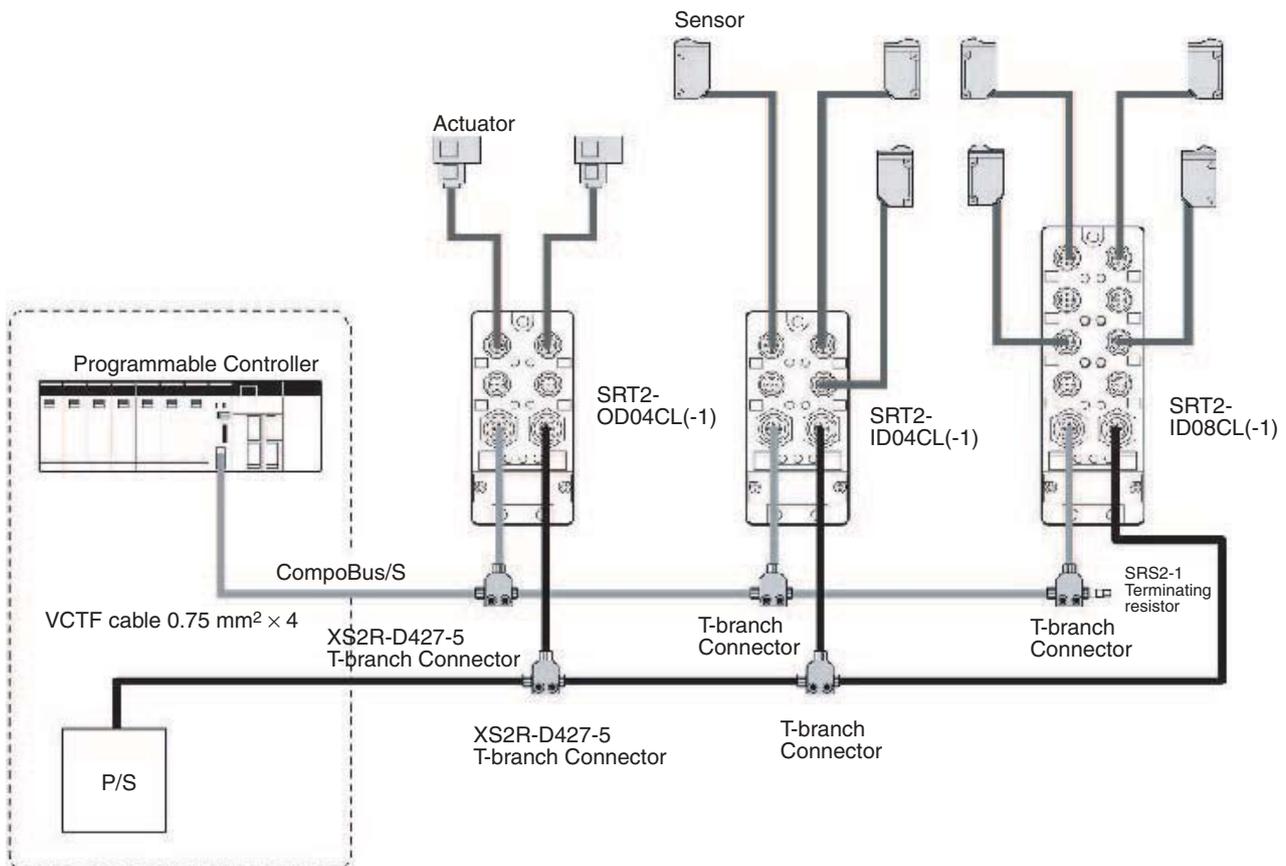
Waterproof Terminals

**IP67 rated I/O terminals.
Compact and waterproof.**

- **Reduced Labor**
The use of standard connectors reduces the installation time
- **Reduced Wiring**
The I/O terminal can be mounted closer to sensors and other devices.
- **Easier Maintenance**
Significant reductions not only in setup time but also maintenance time.
- **Reduced Space, Improved Operability**
Compact design (160 x 54 mm (W x H))
(8-point models)
Settings and connections can be performed using the switch and connectors on the front side of the Terminal.



System Configuration



Ordering Information

Input/Output	Internal I/O circuit common	I/O points	I/O connections method	Rated voltage for I/O power supply	Model
Inputs	NPN (+ common)	4 points	Sensor I/O connector	24 V DC	SRT2-ID04CL
		8 points			SRT2-ID08CL
	PNP (- common)	4 points			SRT2-ID04CL-1
		8 points			SRT2-ID08CL-1
Outputs	NPN (- common)	4 points			SRT2-OD04CL
		8 points			SRT2-OD08CL
	PNP (+ common)	4 points			SRT2-OD04CL-1
		8 points			SRT2-OD08CL-1

Specifications

General Specifications

Item	SRT2-ID04CL SRT2-ID04CL-1 SRT2-OD04CL SRT2-OD04CL-1	SRT2-ID08CL SRT2-ID08CL-1 SRT2-OD08CL SRT2-OD08CL-1
Communications power supply voltage	14 to 26.4 V DC (supplied via communications connectors)	
I/O power supply voltage	20.4 to 26.4 V DC (24 V DC -15% / $+10\%$)	
Communications current consumption	15 mA max.	20 mA max.
Ambient temperature	Operating: -10°C to 55°C (with no icing) Storage: -25°C to 65°C	
Ambient humidity	Operating: 25% to 85% (with no condensation) Storage: 25% to 85% (with no condensation)	
Connector tightening torque	0.39 to 0.49 Nm	
Enclosure rating	IEC IP67	
Mounting method	Mounted using M5 screws	
Weight	Approx. 180 g	Approx. 240 g

Communications Media/Distances

Communications medium	4-conductor cable (VCTF, 0.75 mm ² x 4)
Communications distance	High-speed Communications Mode 4-conductor VCTF cable: Main line length: 30 m max. Branch line length: 3 m max. Total branch line length: 30 m max. (When 4-conductor VCTF cable is used to connect fewer than 16 Slaves, the main line can be up to 100 m long and the total branch line length can be up to 50 m.)
	Long-distance Communications Mode 4-conductor VCTF cable: Variable branch wiring (total cable length 200 m max.) (There are no limits on the branching format or main, branch, or total line lengths. The terminator must be connected to the point in the system farthest from the master.)

Note: Use in combination with two-conductor VCTF cables and special flat cables is not possible.

Input Specifications

Item	SRT2-ID04CL SRT2-ID04CL-1	SRT2-ID08CL SRT2-ID08CL-1
Input current	For input voltage of 24 V DC: 6 mA max. per point For input voltage of 17 V DC: 3 mA min. per point	
Input impedance	4.4 kΩ	
ON delay time	1.5 ms max.	
OFF delay time	1.5 ms max.	
ON voltage	15 V DC min.	
OFF voltage	5 V DC max.	
OFF current	1 mA max.	
Number of circuits	4 points with 1 common	8 points with 1 common

Output Specifications

Item	SRT2-OD04CL SRT2-OD04CL-1	SRT2-OD08CL SRT2-OD08CL-1
Rated output current	0.5 A per point (2 A per common)	0.5 A per point (2.4 A per common)
Residual voltage	1.2 V max.	
Leakage current	0.1 mA max.	
ON delay time	0.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits	4 points with 1 common	8 points with 1 common

Applicable Connectors

Power Supply Connectors

Model	Specification
XS2C-D4□□	Assembling-type connector (crimp, soldering, or screw) socket
XS2W-D42□-□□□-□	Cable with connector on each end
XS2F-D42□-□80-□	Cable with connector at one end (socket end)
XS2R-D427-5	T-branch connector

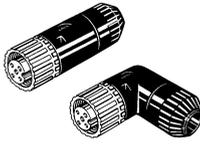
I/O Connectors

Model	Specification
XS2G-D4□□	Assembling type connector (crimp, soldering, or screw) Socket
XS2H-D421-□□□-□	Cable with connector at one end (plug end)
XS2W-D42□-□□□-□	Cable with connector on each end
XS2Z-12	Waterproof cover
XS2Z-15	Dust cover

Communications Connector

Model	Specification
XS2R-D427-5	T-branch connector
SRS2-1	Connector with terminating resistor (plug)
XS2G-D4S7	Assembling-type connector (for 4-conductor VCTF cable) plug (See note.)
XS2C-D4S7	Assembling-type connector (for 4-conductor VCTF socket) socket (See note.)

Assembling-type Connector Socket
Power Supply and Communications

Model	Applicable cable external dia.	Cable pull-out direction	No. of poles	Connection method		
				Crimp	Solder	Screw
	6 dia. (5 to 6 dia.)	Straight	4	XS2C-D4C1	XS2C-D421	XS2C-D4S1
		L-shaped		XS2C-D4C2	XS2C-D422	XS2C-D4S2
	5 dia. (4 to 5 dia.)	Straight		XS2C-D4C3	XS2C-D423	XS2C-D4S3
		L-shaped		XS2C-D4C4	XS2C-D424	XS2C-D4S4
	3 dia. (3 to 4 dia.)	Straight		XS2C-D4C5	XS2C-D425	XS2C-D4S5
		L-shaped		XS2C-D4C6	XS2C-D426	XS2C-D4S6
	7 dia. (7 to 8 dia.)	Straight		---	---	XS2C-D4S7 (see note)

Note: Only the XS2C-D4S7 with a diameter of 7 mm can be used for communications.

Assembling-type Connector Plug

Power Supply and Communications

Appearance	Applicable cable external dia.	Cable pull-out direction	No. of poles	Connection method		
				Crimp	Solder	Screw
	6 dia. (5 to 6 dia.)	Straight	4	XS2G-D4C1	XS2G-D421	XS2G-D4S1
		L-shaped		---	XS2G-D422	XS2G-D4S2
	5 dia. (4 to 5 dia.)	Straight		XS2G-D4C3	XS2G-D423	XS2G-D4S3
		L-shaped		---	XS2G-D424	XS2G-D4S4
	3 dia. (3 to 4 dia.)	Straight		XS2G-D4C5	XS2G-D425	XS2G-D4S5
		L-shaped		---	XS2G-D426	XS2G-D4S6
	7 dia.	Straight		---	---	XS2G-D4S7 (see note)

Note: Only the XS2G-D4S7 with a diameter of 7 mm can be used for communications.

Connectors with Cables (Single-end Socket Each)

Power Supply

Appearance	Cable pull-out direction	No. of cable conductor	Cable length (m)	Standard cable	Robot cable (vibration resistive)
	Straight	4	1	XS2F-D421-C80-A	XS2F-D421-C80-R
			2	XS2F-D421-D80-A	XS2F-D421-D80-R
			5	XS2F-D421-G80-A	XS2F-D421-G80-R
			10	XS2F-D421-J80-A	XS2F-D421-J80-R
	L-shaped	4	1	XS2F-D422-C80-A	XS2F-D422-C80-R
			2	XS2F-D422-D80-A	XS2F-D422-D80-R
			5	XS2F-D422-G80-A	XS2F-D422-G80-R
			10	XS2F-D422-J80-A	XS2F-D422-J80-R

Connectors with Cables (Sockets and Plugs)

Power Supply and I/O

Appearance	Cable pull-out direction	No. of cable conductor	Cable length (m)	Standard cable	Robot cable (vibration resistive)
	Straight/Straight	4	1	XS2W-D421-C81-A	XS2W-D421-C81-R
			2	XS2W-D421-D81-A	XS2W-D421-D81-R
			5	XS2W-D421-G81-A	XS2W-D421-G81-R
			2	XS2W-D422-D81-A	---
	L-shaped/L-shaped		5	XS2W-D422-G81-A	---
			2	XS2W-D423-D81-A	---
	Straight/L-shaped		5	XS2W-D423-G81-A	---
			2	XS2W-D424-D81-A	---
	L-shaped/Straight		5	XS2W-D424-G81-A	---

Connectors with Cables (Single-end Connector Each) I/O

Appearance	Cable pull-out direction	No. of cable conductor	Cable length (m)	Standard cable
	Straight	3	0.3	XS2H-D421-AC0-A
		4		XS2H-D421-A80-A
		3	1	XS2H-D421-CC0-A
		4		XS2H-D421-C80-A

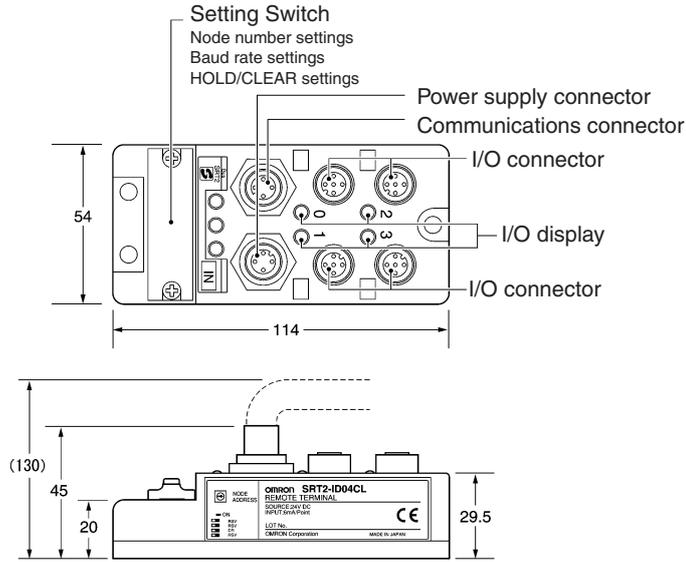
Connector Covers

Appearance	Product	Model	Application
	T-branch Connector	XS2R-D427-5	Branching communications lines and power lines
	Connector Terminator (plug)	SRS2-1	Waterproof terminator
	Waterproof cover	XS2Z-12	Covers for unused I/O connectors
	Dust cover	XS2Z-15	

Dimensions

Note: All units are in millimeters unless otherwise indicated.

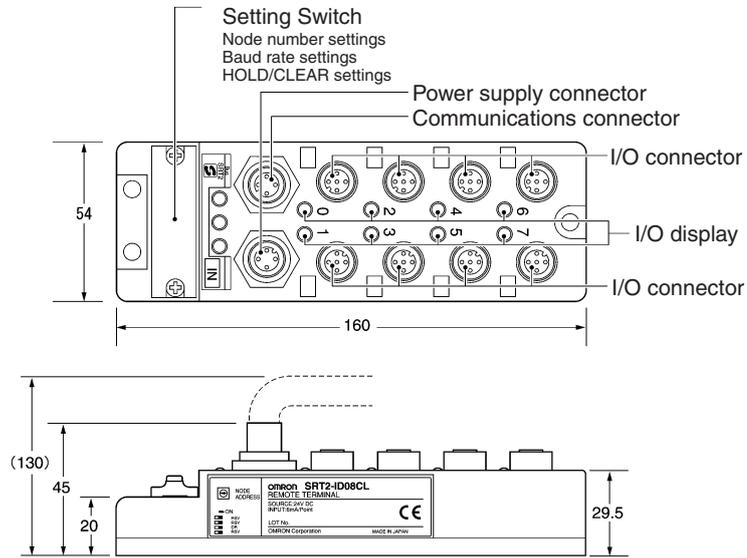
Models with 4 points
 SRT2-ID04CL/SRT2-ID04CL-1
 SRT2-OD04CL/SRT2-OD04CL-1



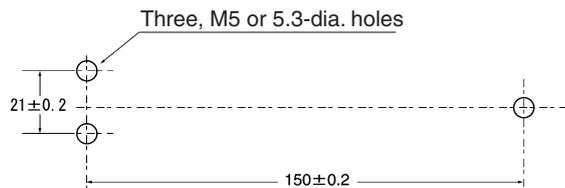
Mounting Dimensions



Models with 8 points
 SRT2-ID08CL/SRT2-ID08CL-1
 SRT2-OD08CL/SRT2-OD08CL-1



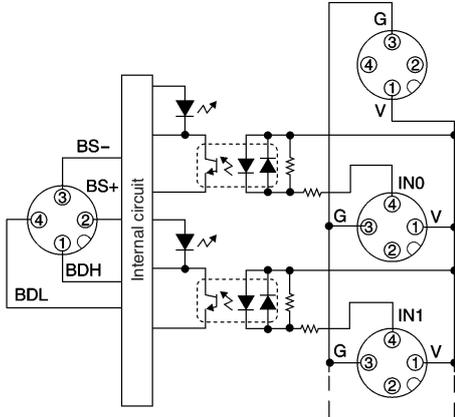
Mounting Dimensions



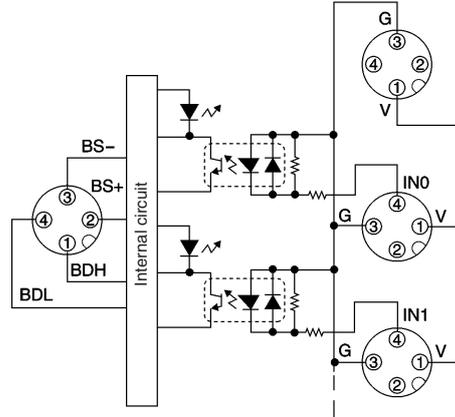
Installation

Internal Circuit Diagrams

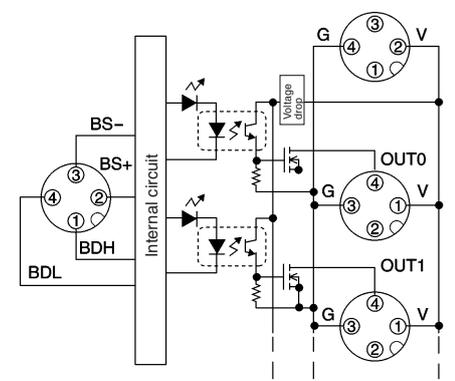
SRT2-ID0□CL (NPN)



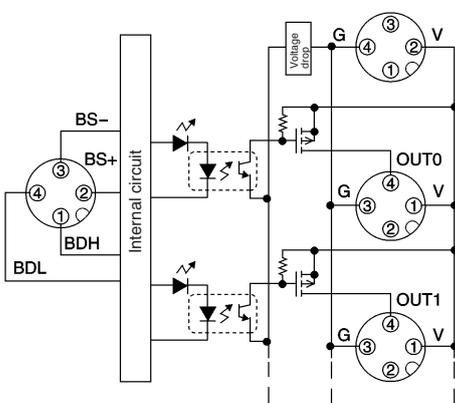
SRT2-ID0□CL-1 (PNP)



SRT2-OD0□CL (NPN)

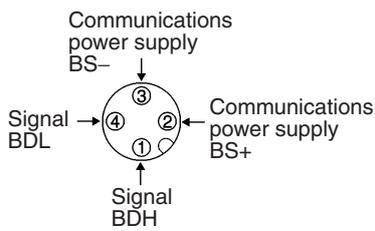


SRT2-OD0□CL-1 (PNP)

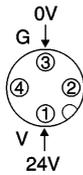


Connections Diagrams for Connectors

Communications Connector



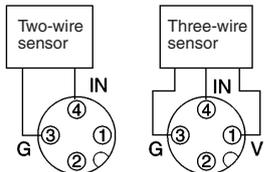
ID0□(-1) Power Supply Connector



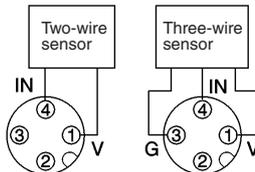
OD0□(-1) Power Supply Connector



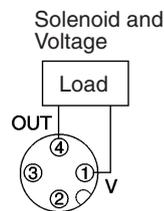
ID0□ Input Connector (NPN)



ID0□-1 Input Connector (PNP)



OD0□ Output Connector (NPN)



OD0□ Output Connector (PNP)

