

I/O Cables



CO Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.



Features

- Diverse cables available for connection to various PLCs and controller
- Diverse cable lengths for various user requirements

Ordering Information

This is only for reference.
For selecting the specified model, follow the Autonics website.
Check PLC / SERVO Connector, Cable Appearance, Cable Selection and Connection to order a product. Optional specifications, needed to contact Autonics
If there is no items you are looking for, please contact Autonics.

CO ① - ② ③ - ④

- ① **No. of connector pins**
Number: Number of connector pins
- ② **PLC (SERVO) connector**
HP: Hirose plug
FP: Fujitsu plug
DP: D-sub plug
DS: D-sub socket
MP: 3M plug (latch)
MQ: 3M plug (bolt)
- ③ **Cable length**
005: 0.5 m
010: 1 m
015: 1.5 m
020: 2 m
025: 2.5 m
030: 3 m
040: 4 m
050: 5 m
- ④ **PLC (SERVO) connector direction**
R: Right 
L: Left 

Specifications

Series	CO Series
Cable connector	Hirose 20-pin / 40-pin socket, Fujitsu 40-pin socket, D-sub 37-pin socket / plug, MDR (latch) 20-pin / 26-pin / 50-pin socket, MDR (bolt) 26-pin socket
Wire ⁰¹⁾	UL 20276 TWIST 20C / 26C / 40C / 50C
Conductor characteristics	7 / 0.127 mm (AWG 28) × 20P, 7 / 0.127 mm (AWG 28) × 13P, 7 / 0.127 mm (AWG 28) × 10P, 7 / 0.127 mm (AWG 28) × 25P
Insulation diameter	0.12 mm ²
Cable diameter	∅ 6.3 mm (26C) / ∅ 7.2 mm (40C) / ∅ 8.9 mm (50C)
Rated current	≤ 1 A
Conductor resistance ⁰²⁾	≤ 0.223 Ω/m
Insulation voltage	500 VAC ~ 50/60Hz for 1 min
Insulation resistance	≥ 15 MΩ/km
Ambient temperature	-15 to 55 °C, storage : -25 to 65 °C (no freezing or condensation)
Ambient humidity	35 to 85 %RH, storage : 35 to 85 %RH (no freezing or condensation)

01) Color is black.

02) Conductor resistance value is rated at 20 °C.

■ Unit weight: PLC cable

- It excludes the package weight (+ 5 g). Unit weight is different depending on the cable length.

Type	No. of pin	Model	Weight
Hirose plug	20-pin	CO20-HP□-□	≈ 33 to 294 g
	40-pin	CO40-HP□-□	≈ 33 to 324 g
	50-pin	CO50-HP□-□	≈ 102 to 414 g
Fujitsu plug	40-pin	CO40-FP□-□	≈ 83 to 360 g
D-Sub plug	37-pin	CO37-DP□-□	≈ 88 to 365 g
D-Sub socket	37-pin	CO37-DS□-□	≈ 88 to 365 g

■ Unit weight: SERVO cable

- It excludes the package weight (+ 5 g). Unit weight is different depending on the cable length.

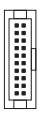
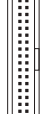
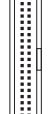
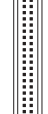
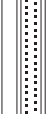

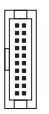
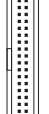

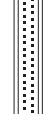
Type	No. of pin	Model	Weight ⁰¹⁾
3M plug (latch)	20-pin	CO20-MP□-□	≈ 50 to 311 g
	26-pin	CO26-MP□-□	≈ 62 to 279 g
	50-pin	CO26-MQ□-□	≈ 64 to 281 g
3M plug (screw)	26-pin	CO50-MP□-□	≈ 110 to 422 g

01) It excludes the package weight (+ 5 g). Unit weight is different depending on the cable length.

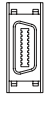
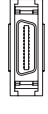

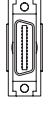
Connectible Connectors

- These are shape and direction of connectors in PLC / SERVO to which CO series cable can be connected.
- These images stand for the direction of cable running down.

■ PLC connector

Direction	Right (R) ▶						Left (L) ◀			
Type	Hirose plug			Fujitsu plug	D-Sub plug	D-Sub socket	Hirose plug	Fujitsu plug	D-Sub plug	
No. of pin	20-pin	40-pin	50-pin	40-pin	37-pin	37-pin	20-pin	40-pin	40-pin	37-pin
Shape										

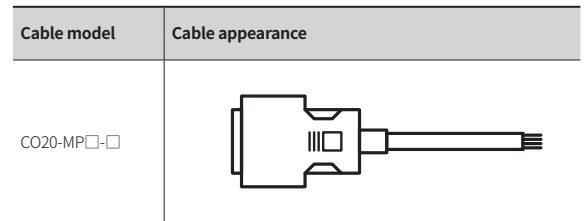
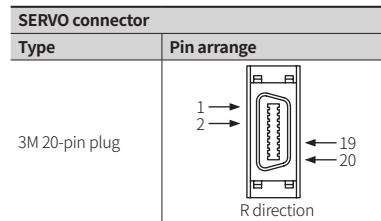
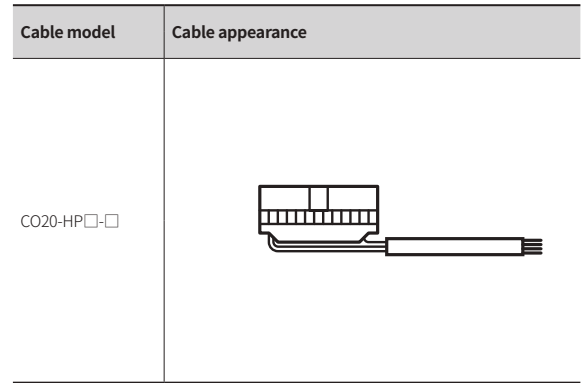
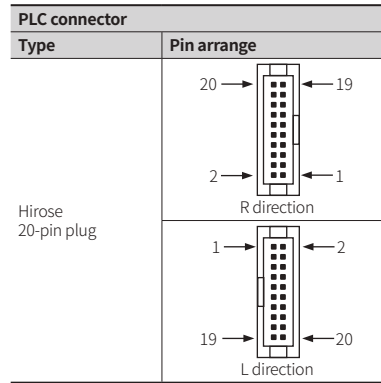
■ SERVO connector

Direction	Right (R) ▶			
Type	3M plug (latch)			3M plug (screw)
No. of pin	20-pin		26-pin	50-pin
Shape				

Cable Color Table

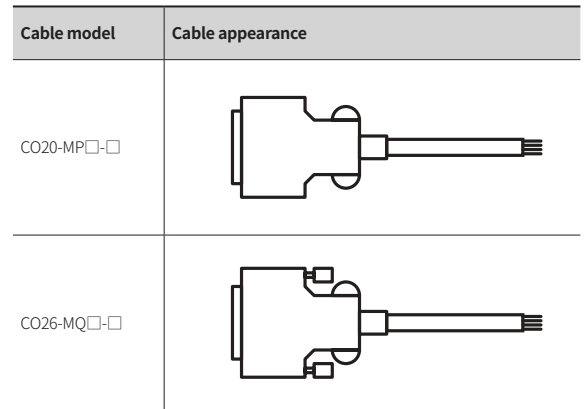
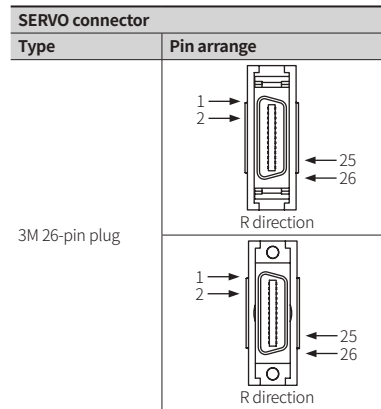
■ 20-pin

Connector pin no.	Conductor color	Point color	No. of points
1	Yellow	Black	1
2	Yellow	Red	1
3	Yellow	Black	2
4	Yellow	Red	2
5	Yellow	Black	3
6	Yellow	Red	3
7	Yellow	Black	4
8	Yellow	Red	4
9	Yellow	Black	5
10	Yellow	Red	5
11	White	Black	1
12	White	Red	1
13	White	Black	2
14	White	Red	2
15	White	Black	3
16	White	Red	3
17	White	Black	4
18	White	Red	4
19	White	Black	5
20	White	Red	5



■ 26-pin

Connector pin no.	Conductor color	Point color	No. of points
1	Orange	Black	1
2	Orange	Red	1
3	Orange	Black	2
4	Orange	Red	2
5	Orange	Black	3
6	Orange	Red	3
7	Orange	Black	4
8	Orange	Red	4
9	Orange	Black	Consecutive
10	Orange	Red	Consecutive
11	Yellow	Black	1
12	Yellow	Red	1
13	Yellow	Black	2
14	Yellow	Red	2
15	Yellow	Black	3
16	Yellow	Red	3
17	Yellow	Black	4
18	Yellow	Red	4
19	Yellow	Black	Consecutive
20	Yellow	Red	Consecutive
21	White	Black	1
22	White	Red	1
23	White	Black	2
24	White	Red	2
25	White	Black	3
26	White	Red	3



■ 37-pin

Connector pin no.	Conductor color	Point color	No. of points
1	Orange	Black	1
2	Yellow	Black	1
3	White	Black	1
4	Gray	Black	1
5	Pink	Black	1
6	Orange	Black	2
7	Yellow	Black	2
8	White	Black	2
9	Gray	Black	2
10	Pink	Black	2
11	Orange	Black	3
12	Yellow	Black	3
13	White	Black	3
14	Gray	Black	3
15	Pink	Black	3
16	Orange	Black	4
17	Yellow	Black	4
18	White	Black	4
19	Gray	Black	4
20	Orange	Red	1
21	Yellow	Red	1
22	White	Red	1
23	Gray	Red	1
24	Pink	Red	1
25	Orange	Red	2
26	Yellow	Red	2
27	White	Red	2
28	Gray	Red	2
29	Pink	Red	2
30	Orange	Red	3
31	Yellow	Red	3
32	White	Red	3
33	Gray	Red	3
34	Pink	Red	3
35	Orange	Red	4
36	Yellow	Red	4
37	White	Red	4

PLC connector		Cable model	Cable appearance
Type	Pin arrange		
D-sub 37-pin plug	<p>R direction</p>	C037-DP□-□	
	<p>L direction</p>		
D-sub 37-pin socket	<p>R direction</p>	C037-DS□-R	

■ 40-pin

Connector pin no.	Conductor color	Point color	No. of points
1	Orange	Black	1
2	Orange	Red	1
3	Orange	Black	2
4	Orange	Red	2
5	Orange	Black	3
6	Orange	Red	3
7	Orange	Black	4
8	Orange	Red	4
9	Yellow	Black	1
10	Yellow	Red	1
11	Yellow	Black	2
12	Yellow	Red	2
13	Yellow	Black	3
14	Yellow	Red	3
15	Yellow	Black	4
16	Yellow	Red	4
17	White	Black	1
18	White	Red	1
19	White	Black	2
20	White	Red	2
21	White	Black	3
22	White	Red	3
23	White	Black	4
24	White	Red	4
25	Gray	Black	1
26	Gray	Red	1
27	Gray	Black	2
28	Gray	Red	2
29	Gray	Black	3
30	Gray	Red	3
31	Gray	Black	4
32	Gray	Red	4
33	Pink	Black	1
34	Pink	Red	1
35	Pink	Black	2
36	Pink	Red	2
37	Pink	Black	3
38	Pink	Red	3
39	Pink	Black	4
40	Pink	Red	4

PLC connector		Cable model	Cable appearance
Type	Pin arrange		
Hirose 40-pin plug	<p>R direction</p>	CO40-HP□-□	
	<p>L direction</p>		
Fujitsu 40-pin plug	<p>R direction</p>	CO40-FP□-□	
	<p>L direction</p>		

■ 50-pin

Connector pin no.	Conductor color	Point color	No. of points
1	Orange	Black	1
2	Orange	Red	1
3	Orange	Black	2
4	Orange	Red	2
5	Orange	Black	3
6	Orange	Red	3
7	Orange	Black	4
8	Orange	Red	4
9	Orange	Black	5
10	Orange	Red	5
11	Yellow	Black	1
12	Yellow	Red	1
13	Yellow	Black	2
14	Yellow	Red	2
15	Yellow	Black	3
16	Yellow	Red	3
17	Yellow	Black	4
18	Yellow	Red	4
19	Yellow	Black	5
20	Yellow	Red	5
21	White	Black	1
22	White	Red	1
23	White	Black	2
24	White	Red	2
25	White	Black	3
26	White	Red	3
27	White	Black	4
28	White	Red	4
29	White	Black	5
30	White	Red	5
31	Gray	Black	1
32	Gray	Red	1
33	Gray	Black	2
34	Gray	Red	2
35	Gray	Black	3
36	Gray	Red	3
37	Gray	Black	4
38	Gray	Red	4
39	Gray	Black	5
40	Gray	Red	5
41	Pink	Black	1
42	Pink	Red	1
43	Pink	Black	2
44	Pink	Red	2
45	Pink	Black	3
46	Pink	Red	3
47	Pink	Black	4
48	Pink	Red	4
49	Pink	Black	5
50	Pink	Red	5

PLC connector		Cable model	Cable appearance
Type	Pin arrange		
Hirose 50-pin plug		CO50-HP□-R	

SERVO connector		Cable model	Cable appearance
Type	Pin arrange		
3M 50-pin plug		CO50-MP□-R	