



















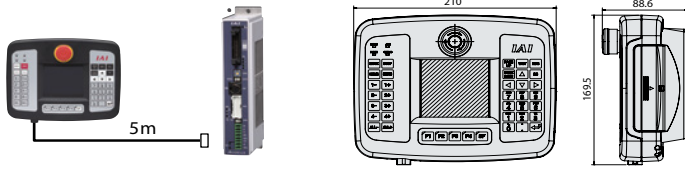


## Teaching pendant

■ Summary A teaching device that has position input, test operation, monitoring function, etc.

■ Model **TB-01-□**

■ Setting



Specifications

Rated voltage	24 VDC
Power consumption	3.6 W or less (150 mA or less)
Ambient operating temperature	0 to 50°C
Ambient operating humidity	20 to 85%RH (Non-condensing)
Environmental resistance	IP40 (initial state)
Weight	507 g (TB-01 only)

■ Types This teaching pendant supports all of the controllers listed below, but the cable(s) must be selected according to each controller.  
Model kit: teaching pendant + cable set (model number of teaching pendant: TB-01-N-ENG)

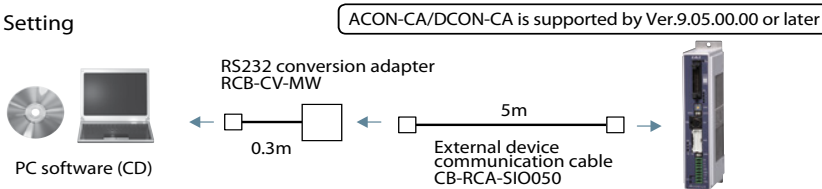
Model kit	Supplied cable	Applicable controller
TB-01-SC-ENG	Position controller cable	Position controller
	Program controller cable + conversion cable	PSEL, ASEL, SSEL, XSEL-K/P/Q/R/S, TT, TTA
TB-01-C-ENG	Position controller cable	Position controller

## PC software (Windows only)

■ Summary A startup support software for inputting positions, performing test runs, and monitoring. With enhancements for adjustment functions, the startup time is shortened.

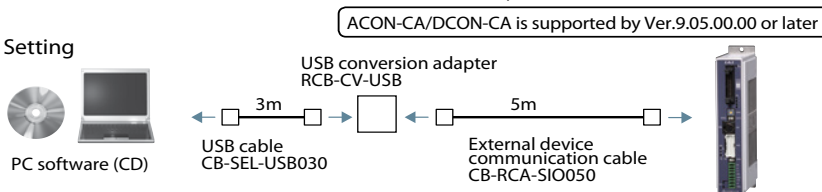
■ Model **RCM-101-MW-ENG** (External device communication cable + RS232 conversion unit)

■ Setting



■ Model **RCM-101-USB-ENG** (External device communication cable + USB converter adaptor + USB cable)

■ Setting



## Absolute Battery Unit

■ Summary Battery unit that comes with a simple absolute controller, used to back up the current controller position.

■ Model **SEP-ABU** (DIN rail mounting specification)

**SEP-ABUS** (screw fastening specification)

■ Specifications

Item	SEP-ABU / SEP-ABUS
Operating ambient temperature, humidity	0 to 40°C (desirably around 20°C), 95% RH or below (non-condensing)
Operating ambience	Free from corrosive gases
Absolute battery	Model: AB-7 (Ni-MH battery / Life: ca. 3 years)
Controller / absolute battery unit link cable	Model: CB-APSEP-AB005 (Length: 0.5m)
Mass	Battery box: 140g or less Battery: 140g or less

■ External Dimensions (Refer to P.9)

## Replacement battery (simple absolute specification)

■ Summary The replacement battery for the simple absolute specification type

■ Absolute data retention time Up to 20 days

■ Model **AB-7**



## Replacement battery (standard absolute specification)

■ Summary The replacement battery for the standard absolute specification type

■ Absolute data retention time Up to 2 years

■ Model **AB-5**



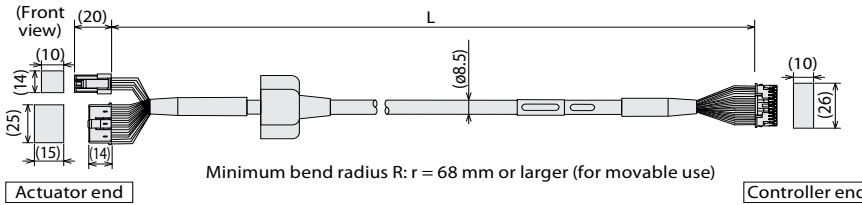
Maintenance parts

Integrated Motor-Encoder Robot Cable for [RCA]-[ACON-CA] Connection

Model **CB-ASEP2-MPA**□□□

\* The default specification of this cable is robot cable.

\* Please indicate cable length (L) in □□□, maximum 20m. Example: 080=8m



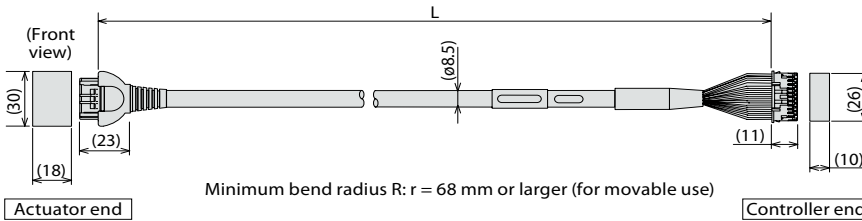
Actuator end Pin number		Controller end Pin number
1	Red [U]	1
2	Yellow [V]	2
	NC	3
	NC	4
3	Black [W]	5
	NC	6
18	Orange [BK+]	7
17	Gray [BK-]	8
7	Black [LS+]	9
16	Brown [LS-]	10
1	White [A+]	11
2	Yellow [A-]	12
3	Red [B+]	13
4	Green [B-]	14
10	Black (identification tape) [Z+]	15
11	Brown (identification tape) [Z-]	16
14	White (identification tape) [VCC]	17
13	Yellow (identification tape) [VPS]	18
15	Red (identification tape) [GND]	19
6	Green (ident. tape) [Preparation]	20
5	NC	21
8	NC	22
12	NC	23
9	Shield [FG]	24

Integrated Motor-Encoder Robot Cable for [RCA2/RCL]-[ACON-CA] Connection

Model **CB-APSEP-MPA**□□□

\* The default specification of this cable is robot cable.

\* Please indicate cable length (L) in □□□, maximum 20m. Example: 080=8m

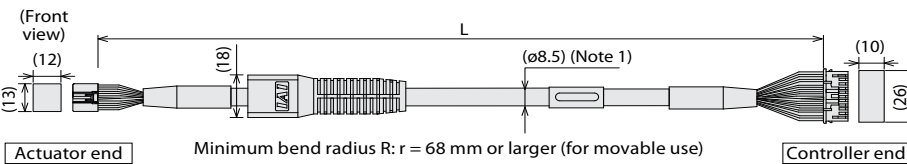


Actuator end Pin number		Controller end Pin number
A1	(PCON) (ACON)	1
B2	Black [ØA] (U)	2
A2	White [VMM] (V)	3
B3	Brown [ØA] (W)	4
A3	Green [ØB] (-)	5
B4	Yellow [VMM] (-)	6
A4	Red [ØB] (-)	7
B5	Orange [LS+] [BK+]	8
A5	Gray [LS-] [BK-]	9
B6	White [-] [A+]	11
A6	Yellow [-] [A-]	12
B7	Red [A+] [B+]	13
A7	Green [A+] [B-]	14
B8	Black [B+] [Z+]	15
A8	Brown [B+] [Z-]	16
B9	Black (identification tape) [BK+] [LS+]	17
A9	Brown (identification tape) [BK-] [LS-]	18
B10	Green (identification tape) [GND] [GND] [VPS]	19
A10	Red (identification tape) [VPS] [VPS]	20
B11	White (identification tape) [VCC] [VCC]	21
A11	Yellow (identification tape) [GND] [GND]	22
B11	NC	23
	Shield [FG] (FG)	24

Integrated Motor-Encoder Cable / Integrated Motor-Encoder Robot Cable for [RCD]-[DCON-CA] Connection

Model **CB-CAN-MPA**□□□ / **CB-CAN-MPA**□□□-RB

\* Please indicate cable length (L) in □□□, maximum 20m. Example: 080=8m



\* Robot cables are cables resistant to flexing forces. If the cable must be guided in a cable track, use a robot cable.

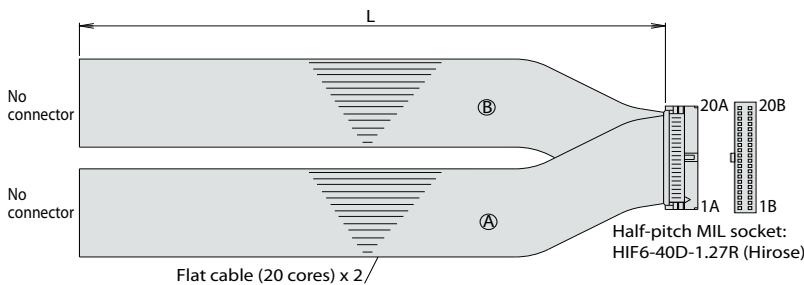
Pin no.	Signal name	Pin no.	Signal name
3	øA/U	1	øA/U
5	VMM/V	2	VMM/V
10	øA/W	3	øA/W
9	øB/-	4	øB/-
4	VMM/-	5	VMM/-
15	øB/-	6	øB/-
8	LS+/BK+	7	LS+/BK+
14	LS-/BK-	5	LS-/BK-
12	-/A+	11	-/A+
17	-/A-	12	-/A-
1	A+/B+	13	A+/B+
6	A-/B-	14	A-/B-
11	B+/Z+	15	B+/Z+
16	B-/Z-	16	B-/Z-
13	BK+/LS+	9	BK+/LS+
2	BK-/LS-	10	BK-/LS-
20	LS_GND	17	LS_GND
7	VPS	19	VPS
15	VCC	15	VCC
13	GND	20	GND
19	---	22	---
22	---	21	---
23	---	23	---
24	FG	24	FG

(Note 1) If the cable length is 5 m or more, the diameter of the non-robot cable becomes ø9.1, while that of the robot cable becomes ø10.

I/O Flat Cable

Model **CB-PAC-PIO**□□□

\* Please indicate cable length (L) in □□□, maximum 10m. Example: 080=8m



HIF6-40D-1.27R

No.	Signal name	Cable color	Wiring	No.	Signal name	Cable color	Wiring
1A	24V	Brown-1		18	OUT0	Brown-3	
2A	24V	Red-1		2B	OUT1	Red-3	
3A	Pulse	Orange-1		3B	OUT2	Orange-3	
4A	Input	Yellow-1		4B	OUT3	Yellow-3	
5A	IN0	Green-1		5B	OUT4	Green-3	
6A	IN1	Blue-1		6B	OUT5	Blue-3	
7A	IN2	Purple-1		7B	OUT6	Purple-3	
8A	IN3	Gray-1		8B	OUT7	Gray-3	
9A	IN4	White-1		9B	OUT8	White-3	
10A	IN5	Black-1		10B	OUT9	Black-3	
11A	IN6	Brown-2		11B	OUT10	Brown-4	
12A	IN7	Red-2		12B	OUT11	Red-4	
13A	IN8	Orange-2		13B	OUT12	Orange-4	
14A	IN9	Yellow-2		14B	OUT13	Yellow-4	
15A	IN10	Green-2		15B	OUT14	Green-4	
16A	IN11	Blue-2		16B	OUT15	Blue-4	
17A	IN12	Purple-2		17B	Pulse	Purple-4	
18A	IN13	Gray-2		18B	input	Gray-4	
19A	IN14	White-2		19B	0V	White-4	
20A	IN15	Black-2		20B	0V	Black-4	