

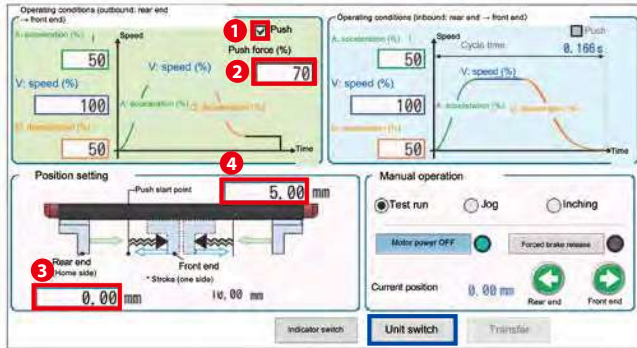


ELECYLINDER

ELECYLYNDER® GRIPPER TYPE

Easy setting

Teaching pendant [TB-03] simple data setting screen

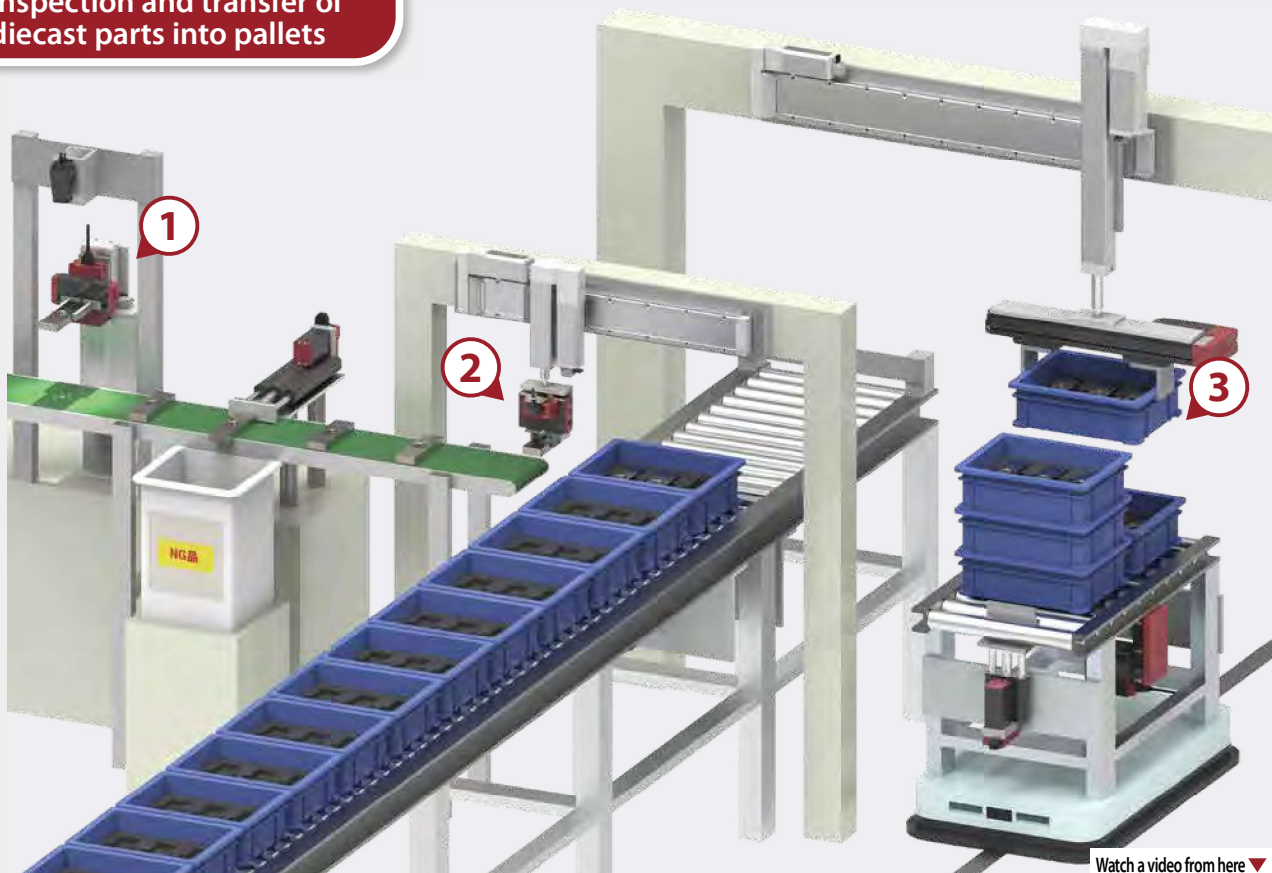


Setting complete in just 4 steps!

- Step 1** Check "Push" Gripping is done with push-motion operation.
- Step 2** Set grip force Setting by switching to Newton display (guideline value) with "Unit switch" is also possible.
- Step 3** Set standby position
- Step 4** Set grip start point

The precise numerical setting allows for gripping of easily deformable workpieces

Inspection and transfer of diecast parts into pallets



- ①: Inspection of front and back of the parts using a flat gripper and rotary combined.
- ②: Transfer of parts to the pallet using a vertical gripper installed on the rod tip.
- ③: The long-stroke gripper grabs the pallets and places them on an AGV.

Watch a video from here ▼



First in the industry!

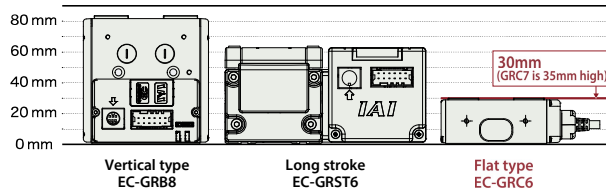
Flat type and long stroke type grippers with built-in controller are newly released.

NEW

Flat type

EC-GRC

Point Low profile, with heights of 30-35mm


1


Point Industry-leading performance

Model	GRC6	GRC7	
Lead	M Standard	M Standard	L High-thrust force
Max. gripping force (both sides)	36N	150N	350N
Max. speed when approaching	52.5mm/s	137.5mm/s	87.5mm/s
Main unit mass	0.32/0.4kg	0.4-0.96kg	

Vertical type

EC-GRB

Point Best suited for use in multiaxis systems

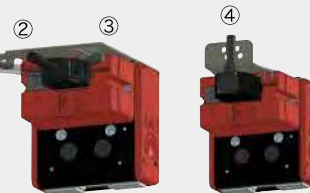
The vertical type is suitable for mounting on the Z-axis tip.

There is only one $\phi 7.2$ cable, making wiring easy.

The cable mounting bracket (optional) allows for easier wiring and cable routing.

1

Cable mounting bracket (optional)



Supports 4-way cable exit

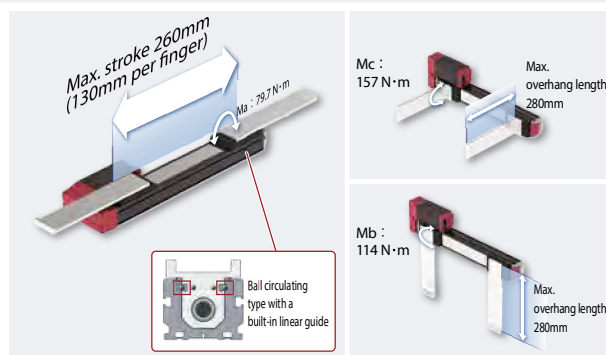
2

NEW

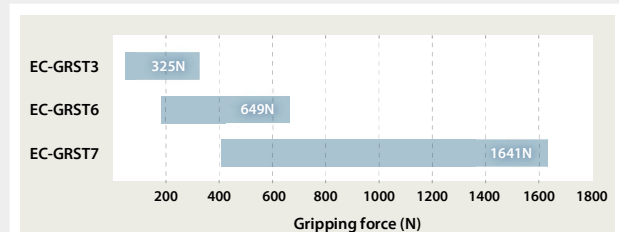
Long stroke

EC-GRST

Point Long stroke and high-rigidity


3


Point High gripping force up to 1641N (both sides)



Model Specification Items

ELECYLYNDER® Vertical gripper

*NPN specification is standard. PNP option is available.

EC

Series	Type	Deceleration ratio	Stroke (both sides)	Power·I/O cable length	Option	
GRB8	82mm wide					
GRB10	98mm wide					
GRB13	130mm wide					
<GRB8>						
M	Trapezoidal thread Lead 1.5mm Pulley Deceleration ratio 1.5					
<GRB10>						
M	Trapezoidal thread Lead 1.5mm Pulley Deceleration ratio 1.15					
<GRB13>						
M	Standard	Trapezoidal thread Lead 2mm Pulley Deceleration ratio 1.25				
L	High thrust force	Trapezoidal thread Lead 2mm Pulley Deceleration ratio 2.5				
			<GRB8>			
			20	20mm (10mm per finger)		
			<GRB10>			
			30	30mm (15mm per finger)		
			<GRB13>			
			40	40mm (20mm per finger)		
			0	No cable Power·I/O connector included *		
			(S) 1	1m		
			}	}		
			(S) 10	10m		
			(every 1 m)			
			(S): 4-way connector cable			
			* A Power·I/O connector is not included if RCON-EC connection specification (ACR) is selected.			
					Blank	Incremental encoder specification NPN specification, without option
					ACR	RCON-EC connection specification *1
					FST	Cable mounting bracket (front)
					NM	Closed homing specification
					PN	PNP specification *1
					TMD2	Split motor and controller power specification *1
					TST	Cable mounting bracket (top) *2
					WA	Battery-less absolute Encoder specification*3
					WL	Wireless communication specification
					WL2	Wireless axis operation specification
			*1 "PN" and "TMD2" cannot be selected when "ACR" is selected			
			*2 Can only be selected with the 4-way connector cable.			
			*3 Available only for GRB10/GRB13.			

ELECYLYNDER® Flat type gripper

*NPN specification is standard. PNP option is available.

EC

-

-

-

-

-

Series

Type

Deceleration ratio

Stroke (both sides)

Actuator cable length

Power·I/O cable length

Option

GRC6

60mm wide

GRC7

70mm wide

<GRC6>

M

Trapezoidal thread
Lead 1.5mm
Pulley Deceleration ratio 1.43

<GRC7>

M

Standard

Ball screw
Lead 2.5mm
Pulley Deceleration ratio 1.36

L

High thrust force

Ball screw
Lead 2.5mm
Pulley Deceleration ratio 2.14

<GRC6>

20

20mm
(10mm per finger)

30

30mm
(15mm per finger)

<GRC7>

20

20mm
(10mm per finger)

40

40mm
(20mm per finger)

60

60mm
(30mm per finger)

80

80mm
(40mm per finger)

1

1m

}

}

10

10m

(every 1m)

(Note) When using an interface box, the maximum actuator cable length is 9m.

0

No cable
Power·I/O connector included *

(S)1

1m

}

}

(S)9

9m

(every 1m)

(S): 4-way connector cable

* Choose "0" if RCON-EC connection specification (ACR) is selected.
Power·I/O cable is not included.

(Note) Select the cable so that the total length with the actuator cable is 10m or less.

Blank

Incremental encoder specification
NPN specification, without option

ACR

RCON-EC connection specification *1, *4

B

With brake *2

CJB

Cable exit orientation (bottom)

CJL

Cable exit orientation (left)

CJR

Cable exit orientation (right)

CJT

Cable exit orientation (top)

G1/G5

Specified grease specification *3

MJF1

Finger attachment mounting jig
(Open/close direction screw hole)

MJF2

Finger attachment mounting jig
(Side screw hole)

MJF3

Finger attachment mounting jig
(Open/close direction through hole)

NM

Closed homing specification

PN

PNP specification *1

TMD2

Split motor and controller power
specification *1

WA

Battery-less absolute
Encoder specification

WL

Wireless communication specification *4

WL2

Wireless axis operation specification *4

*1 When "ACR" is selected, "PN" and "TMD2" cannot be selected.

*2 Can only be selected with the 40/60/80 strokes of the GRC7.

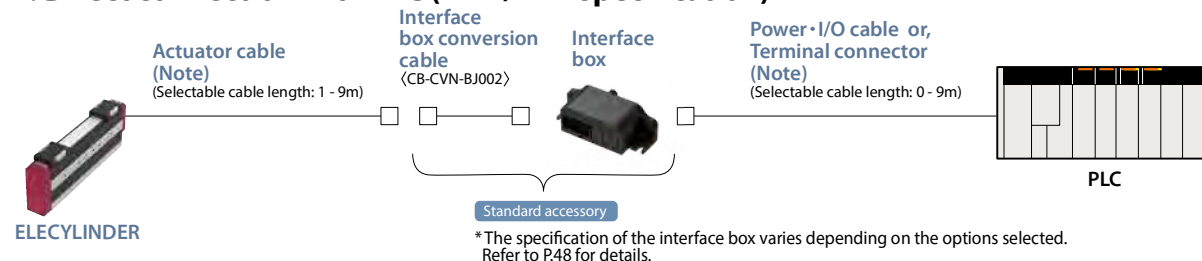
*3 Can only be selected with the GRC7.

*4 When "ACR" is selected, "WL" and "WL2" cannot be selected.
(For wireless communication, an interface box and cable must be ordered separately.)

Connection method with PLC

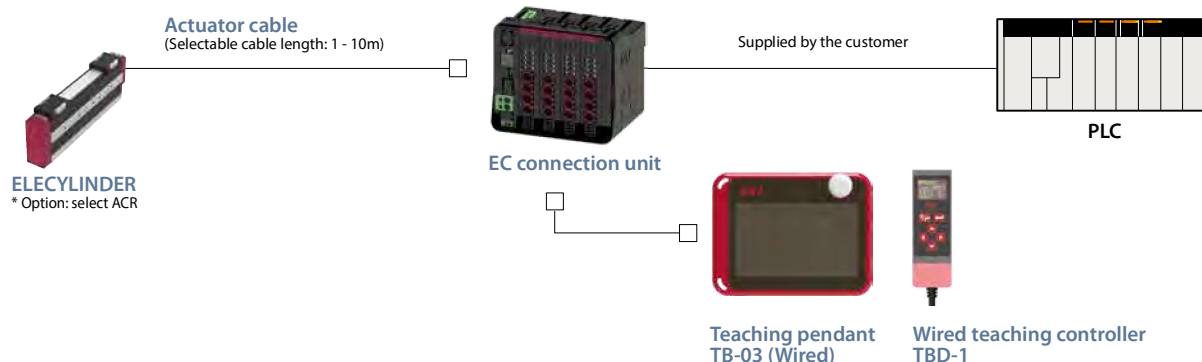
Three methods for the connection of EC-GRC6/GRC7/GRST3 and the PLC are as shown below.

1. Direct connection with PLC (NPN/PNP specification)



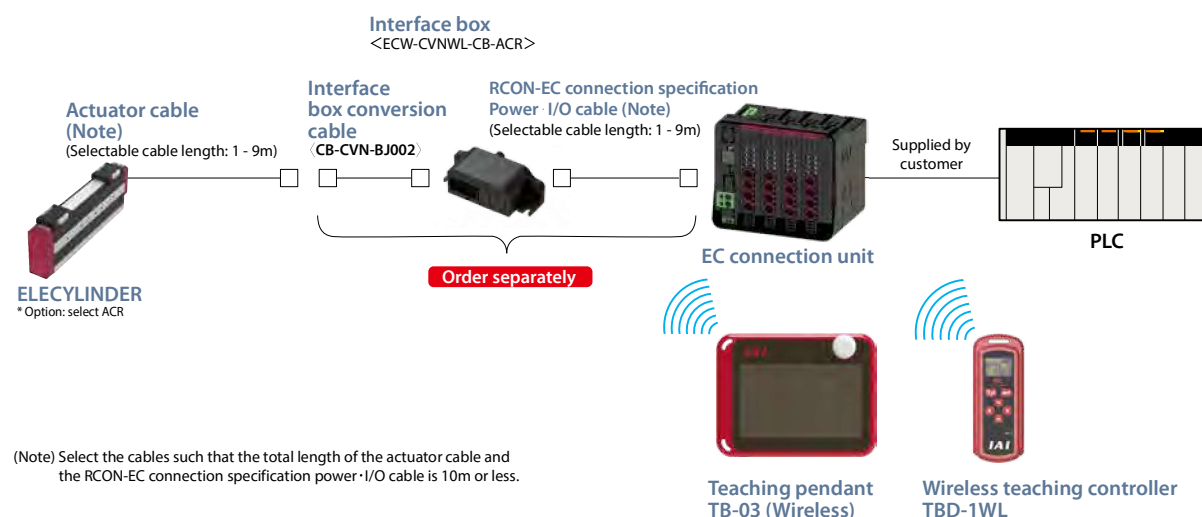
(Note) Select the cables such that the total length of the actuator cable and power I/O cable (In case of the terminal connector, the cable that the customer supplies) is 10m or less.

2. When connecting to PLC via EC connection unit (RCON-EC connection specification) [Wired connection of the teaching pendant]



3. When connecting to PLC via EC connection unit (RCON-EC connection specification) [Teaching pendant is connected wirelessly]

The configuration below shows the part numbers for the wireless communication specification (WL). For the wireless axis operation specification (WL2), contact IAI.



(Note) Select the cables such that the total length of the actuator cable and the RCON-EC connection specification power I/O cable is 10m or less.