

ELECYLINDER® Wire Cylinder

**EC-WER1
WEGR2**

POINT

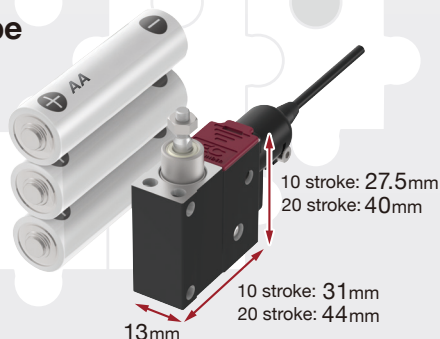
01 Motorized and yet tiny

Size/specs equivalent to
small-diameter air cylinder
(cylinder I.D. Ø6~8)

No speed controller, switch,
or air tube required,
saving even more space

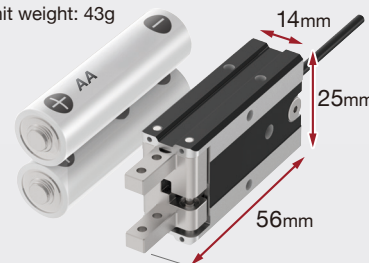
Rod Type

Unit weight
10 stroke: 32g
20 stroke: 48g



Gripper Type

Unit weight: 43g



POINT

02 An industry first! New drive system

Patented

Because the actuator and wire controller are separate...

The heat source can be separated

➔ **Less likely to be affected by heat**

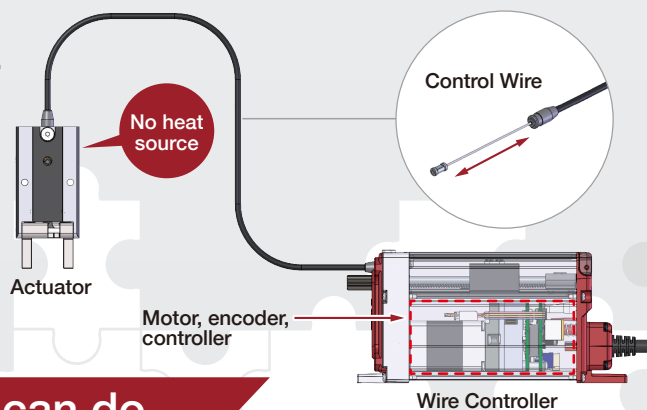
Wire controllers enable adjustment of

Position

Speed

Acceleration /
Deceleration

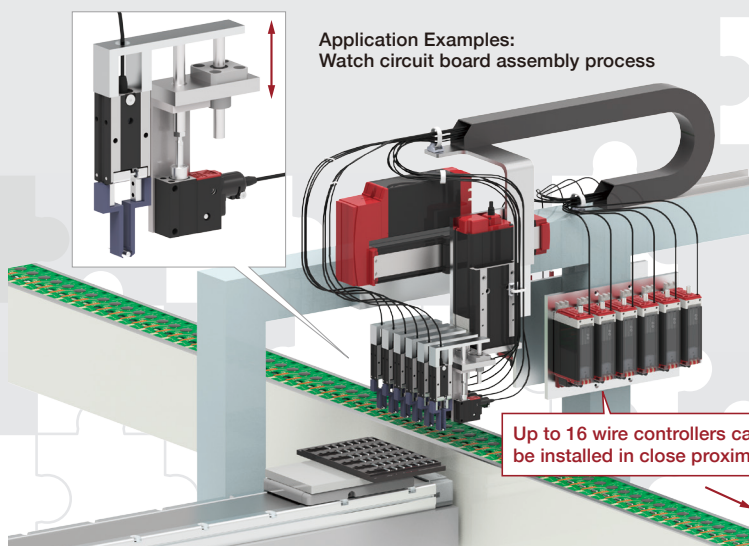
Push force /
Grip force



POINT

03 What motorization can do

Application Examples:
Watch circuit board assembly process



Numerical setting is possible: **Simple & Accurate**



Setting the push terminal position
enables push (grip) complete/idling decision



Wireless/wired teaching pendant TB-03



Video here ➔



intelligentactuator.com/wire-cylinder-video1

Up to 16 wire controllers can also
be installed in close proximity

Specifications

EC

-

①

-

②

-

③

-

④

-

⑤

-

⑥

-

(⑦)

Series

Type

Drive specifications
(Single-action specification)

Stroke

Control wire length

Actuator cable length

Power · I/O cable length

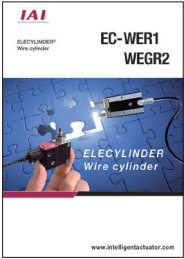
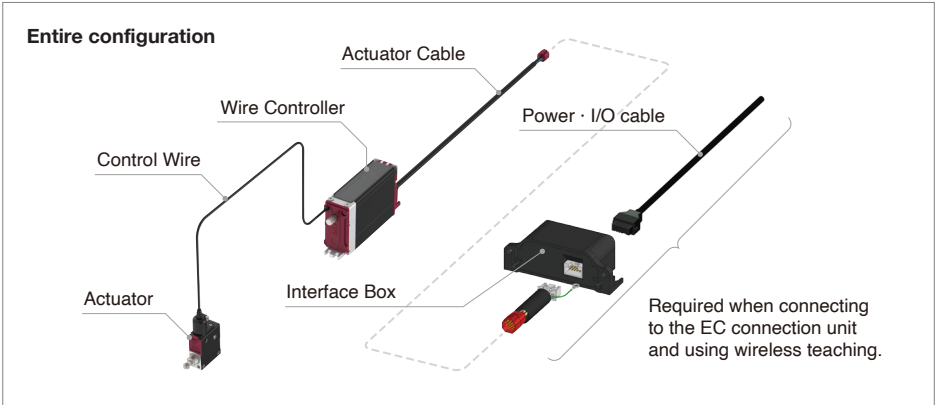
Options

The model number above is a set model number composed of actuator unit, control wire, and wire controller.

Rod Type					Gripper Type				
① Type			WER1		① Type			WEGR2	
② Drive specifications			SA		② Drive specifications			EG (O.D. grip specification) IG (I.D. grip specification)	
③ Stroke (mm)			10	20	③ Stroke (mm)			4 (One side 2)	
Horizontal	Max. payload (kg)		0.75		Max. grip force (N) (both sides)*2			10	
	Max. speed (mm/s)	Set value	100						
			Actual speed	91	87	Max. speed at approach (mm/s)	Set value	100	
Vertical	Max. payload (kg)		0.25		Actual speed				
	Max. speed (mm/s)	Set value	100		Positioning repeatability (mm)			±0.01	
			Actual speed	91					
Max. push force (N)*1			11.5	12.29	Static allowable moment (N·m)			Ma: 0.38 Mb: 0.38 Mc: 0.74	
Positioning repeatability (mm)			±0.01mm (pressure) ±0.3mm (non-pressure) ±0.05mm (backward end spring recovery)					Vertical allowable load (N)	

*1 Reference values with current limit value 100%, stroke end, wire routing length 1m, bending angle 360°, bending radius 25.
*2 Total values for both fingers with current limit value 100%, open/close stroke center, grip point distance L = 23mm, wire routing length 1m, bending angle 360°, bending radius 25.

Common Specifications			
④ Control wire length (m)		05 (0.5m) ~ 30 (3m) *every 0.5m	
⑤ Actuator cable length (m)		1 ~ 10 *every 1m (When connecting via the interface box, 9m is the maximum length available.)	
⑥ Power · I/O cable length (m)		0 (Without cable), (S)1 ~ (S)9 *every 1m, (S): 4-way connector cable (Make sure that the total length along with the actuator cable is 10m or less.)	
⑦ Options		Please refer to the catalog for more details.	
Wire Controller	Motor Specifications		Stepper motor □20
	Operation life		10 million reciprocal motions



Wire Cylinder Catalog

The product catalog is coming soon!

Demo units are Available!