Improved and Relaunched

All eight models

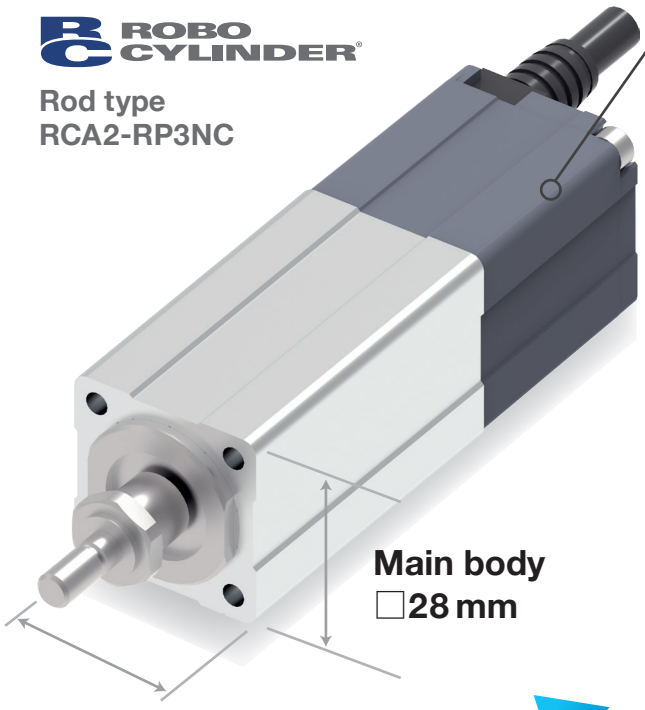
Mini ROBO Cylinder RCA2

Battery-less absolute encoders, standard across many IAI product lines, are now available on the Mini Series.
These models successfully combine compactness with functionality.

IAI
Quality and Innovation

ROBO CYLINDER

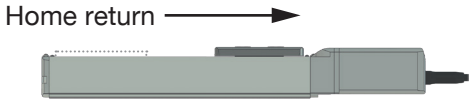
Rod type
RCA2-RP3NC



Equipped with battery-less absolute encoders

The current position can be obtained from the positional relationship of the three gears installed in the encoder.

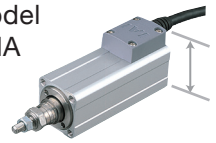
☑ Home return not necessary



☑ Battery not necessary

☑ Dimensions have been reduced!

Previous model
RCA2-RP3NA



Details of products

Rod type
RP3NC/RP4NC

Double guide rod type
GD3NC/GD4NC

Compact table type
TC3NC/TC4NC

Wide table type
TW3NC/TW4NC

Type	Rod RP / Double guide GD / Table TC / Wide table TW Body width 30 mm	Rod RP / Double guide GD / Table TC / Wide table TW Body width 40 mm
Maximum payload (horizontal)	12 kg	15 kg
Maximum speed	300 mm/s	550 mm/s
Stroke	50 mm	50 mm
Positioning repeatability	±0.01 mm	±0.01 mm

POINT 1

Increased Payload Capacity

Driven by a high-output motor, maximum horizontal payload increases to 12 kg - 4x higher than previous models.

- Despite its compact body, the actuator ensures stable transfer of heavy workpieces.

Previous model
Table type
RCA2-TC3NA
10W motor

New
Table type
RCA2-TC3NC
20W motor

POINT 2

Enhanced Maximum Speed

Combining a high-output motor with an added 10 mm lead boosts maximum speed to 550 mm/s, 1.8x faster than the previous model.

- Balances speed and stability to significantly shorten transfer cycle times.

Previous model
Rod type
RCA2-RP4NA
10W motor

New
Rod type
RCA2-RP4NC
20W motor Lead10mm

POINT 3

5× Higher Acceleration Performance

With higher motor output and added 10 mm lead, maximum acceleration/deceleration reaches 1.5 G - a 5x improvement over previous models.

- Rapid acceleration/deceleration minimize movement delays, significantly reducing overall cycle times.

Previous model
Double guide rod type
RCA2-GD4NA
10W motor

New
Double guide rod type
RCA2-GD4NC
20W motor Lead10mm

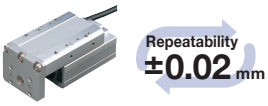
POINT 4

Improved Positioning Accuracy

Upgraded encoder resolution delivers twice the positioning repeatability of the previous model (±0.01 mm vs. ±0.02 mm).

- Ideal for transfer applications such as inspection and assembling that need high accuracy!

Previous model
Double guided type
RCA2-TWA3NA



New
Double guided type
RCA2-TWA3NC

Contact IAI for the detailed specifications. The Product catalog is coming soon.

IAI America, Inc.

USA Headquarters & Western Region (Los Angeles): 2690 W. 237th Street, Torrance, CA 90505 (310) 891-6015
Midwest Branch Office (Chicago): 110 East State Parkway, Schaumburg, IL 60173 (847) 908-1400
Southeast Branch Office (Atlanta): 1220 Kennestone Circle, Suite 108, Marietta, GA 30066 (678) 354-9470

IAI Group Headquarters and Main Factory:
1210 Iharacho, Shimizu-ku, Shizuoka-shi, Shizuoka, 424-0114, JAPAN

IAI Industrieroboter GmbH
Ober der Röth 4,
D-65824 Schwalbach am Taunus, Germany

IAI Robot (Thailand) Co., Ltd.
825 Phairojkijja Tower 7th Floor, Debaratana Rd.,
Bangna Nuea, Bangna, Bangkok 10260, Thailand

IAI (Shanghai) Co., Ltd.
SHANGHAI JIAHUA BUSINESS CENTER A8-303,
808 Hongqiao Rd. Shanghai 200030, China

The information contained in this product brochure may change without prior notice due to product improvements.