

# RVP™

## C Series



# RV®

## Precision Reduction Gear RV™

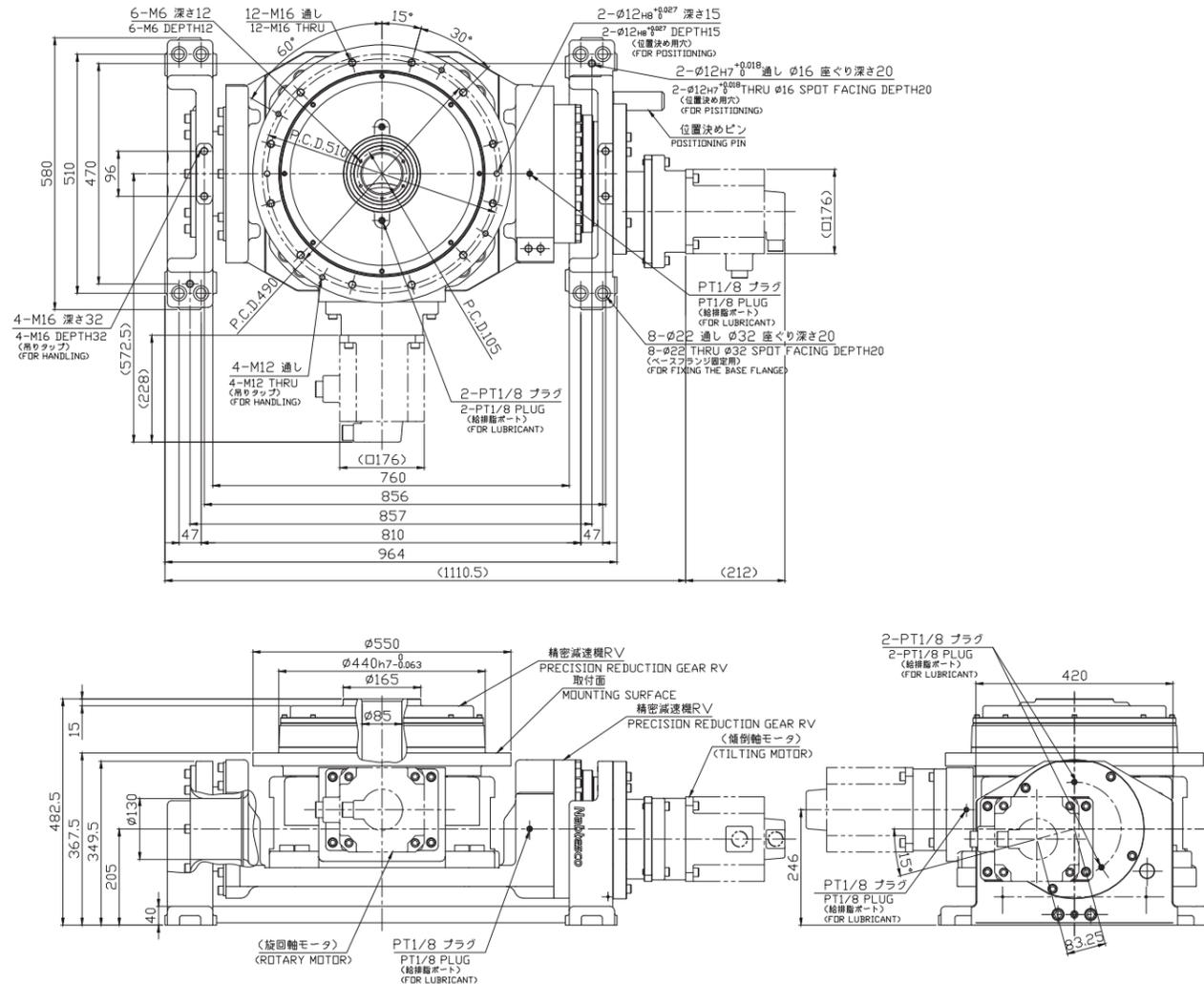
### Gearhead for Positioners

# RVP™

## C Series

**New Product**

### External Dimensions



# Nabtesco

Nabtesco Corporation

<https://precision.nabtesco.com/>



- Nabtesco, RV and RVP are registered trademarks or trademarks of Nabtesco Corporation.
- Specifications are subject to change without notice.
- Unauthorized reprinting, reproduction, copying, or translation of this catalog in whole or in part is strictly prohibited.

CAT.180831-Rev.003 (Issued on August 31, 2018)



### Europe and Africa

**Nabtesco Precision Europe GmbH** (Düsseldorf, Germany)  
 TEL: +49-211-173790 FAX: +49-211-364677  
 E-MAIL: [info@nabtesco.de](mailto:info@nabtesco.de)

### North and South America

**Nabtesco Motion Control Inc.** (MI, USA)  
 TEL: +1-248-553-3020 FAX: +1-248-553-3070  
 E-MAIL: [engineer@nabtescomotioncontrol.com](mailto:engineer@nabtescomotioncontrol.com)

### India

**Nabtesco India Private Limited** (Bangalore, India)  
 TEL: +91-80-4123-4901 FAX: +91-80-4123-4903

### Asia and others

**Nabtesco Corporation** (Japan)  
**Nagoya Office**  
 TEL: +81-52-582-2981 FAX: +81-52-582-2987

**Customer Support Center**  
 TEL: +81-59-237-4672 FAX: +81-59-237-4697

E-MAIL: [P\\_Information@nabtesco.com](mailto:P_Information@nabtesco.com)

## New turntable gearhead equipped with a variable height mechanism

# Nabtesco

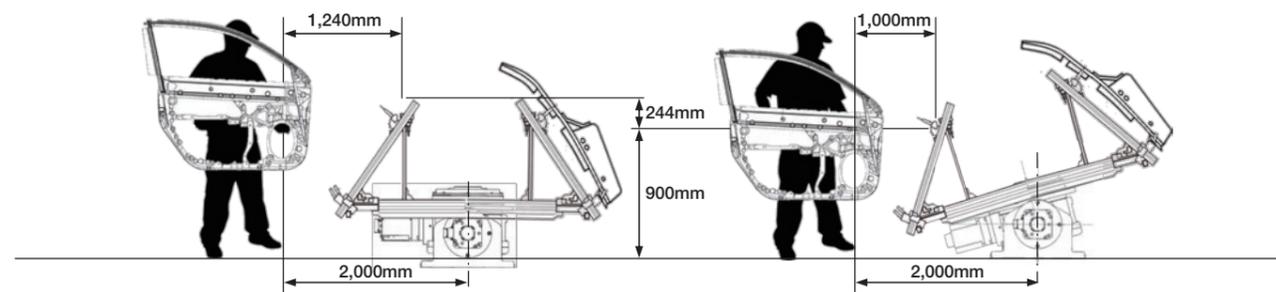


### Features

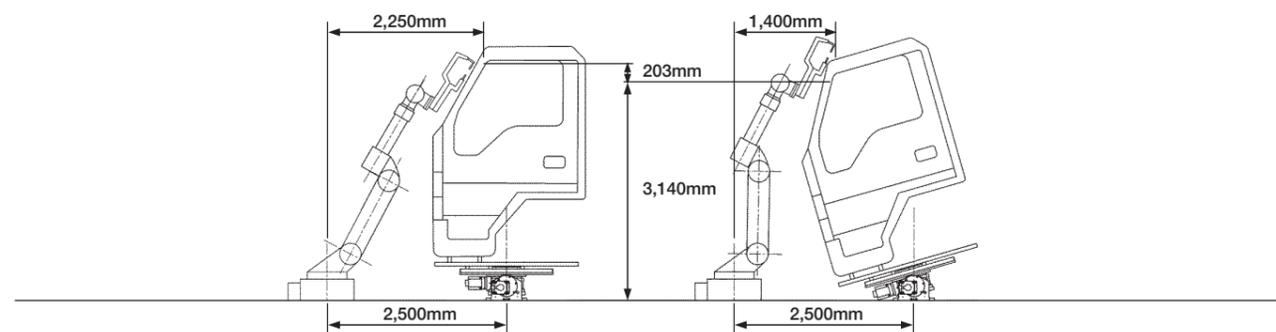
- A gearhead utilizing the industrial robot industry-proven Precision Reduction Gear RV™**  
 High accuracy, rigidity, and reliability → Improved welding quality
- A turntable equipped with a tilt axis**  
 Improved workability with human centered design → Reduction of the burden on workers • Faster setting times • Improved mixed model production  
 Area weldable by robot increased → Robot operating distance reduced → Shorter cycle and reduced production times
- Support for all major servo motor manufacturers**  
 Compatible for collaborative work using many different robots
- A wide variety of options are available (Mechanical stopper, origin positioning pin, mounting plate, etc.)**

### Application Example

Improved workability with human centered design • Faster setting times • Increased flexibility for mixed model production



By varying the height, areas that would normally be unreachable for the robot can be welded

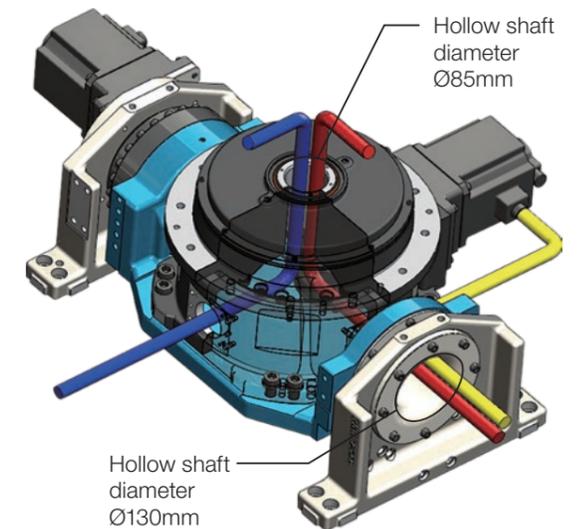


### Specification Table

Model		RVP-C40
Maximum allowable load		4,000kg
Maximum center of gravity height		500mm
Maximum tilt angle		±16deg *1
Hollow shaft diameter (Rotary axis/Tilt axis)		Ø85/Ø130
Allowable startup/stop torque	Rotary axis	7,840Nm
	Tilt axis	9,310Nm
Moment of inertia I (I=GD²/4) motor input conversion	Rotary axis	3.40×10 <sup>-3</sup> kg·m²
	Tilt axis	3.21×10 <sup>-3</sup> kg·m²
Backlash • Lost motion		1 arc.min.
Weight		609kg *2
Reduction ratio	Rotary axis	170
	Tilt axis	706.5
(Reference) Maximum output speed	Rotary axis	17.6rpm (1.78sec/180deg)
	Tilt axis	4.2rpm (1.78sec/16deg)

\*1 The maximum tilt angle is ±25 degrees, but may change depending on the load and the center of gravity of the load. For details, please refer to the figure below.  
 \*2 Weight of motor flange and input spline are not included.

### Cable Layout Example



### Center of Gravity Height and Allowable Load Range

\* Loading beyond this range will exceed the startup/stop torque and/or allowable moment of the reduction gear, and may damage the reduction gear.  
 \* Loads given are reference values.

