

# VERTICAL ARTICULATED ROBOT **RV16-1600**

## HIGHLY DYNAMIC 6-AXIS ARTICULATED ARM ROBOT FOR PRECISE INDUSTRIAL APPLICATIONS

The REIS **RV16-1600** is a highly developed 6-axis articulated arm robot that offers exceptional precision and dynamics with a nominal payload of 16 kg. The **RV16** is ideally suited for testing & measuring tasks as well as handling and laser applications. With its minimal footprint, it is also ideally suited for installation in systems with very limited space.

### Top class technology top class

Equipped with six rotary axes, the **RV16-1600** offers full freedom of movement (6DoF: three translational and three rotational degrees of freedom), making it a versatile solution for complex industrial applications.

### Perfect coordination with the control system

In combination with the advanced REIS ROBOTstar VII robot controller, the **RV16-1600** unfolds its full potential. The precise path control technology of the REIS ROBOTstar VII, in combination with the SINAMICS hardware and control technology, ensures optimum management of the complete servo drive technology, including powerful servomotors.



### Maximum performance thanks to high-quality materials

The REIS RV series sets new standards in its class through the use of precise high-performance gearboxes and mechanics designed for maximum rigidity, natural frequency

and damping. The construction includes innovative material combinations of steel, aluminum, magnesium and carbon fiber composites to ensure maximum stability with minimum weight.



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## Technical data

Nominal load capacity	kg	16
Additional load A1	kg	30
Additional load A2	kg	20
Additional load A3	kg	10
Max. additional load A2+A3	kg	20
Position repeatability	mm	± 0.05
Number of axes		6
Average power consumption	kVA	1.6
Electrical connected load	kVA	2.5
Weight of basic unit (without control unit)	kg	220

## Speeds

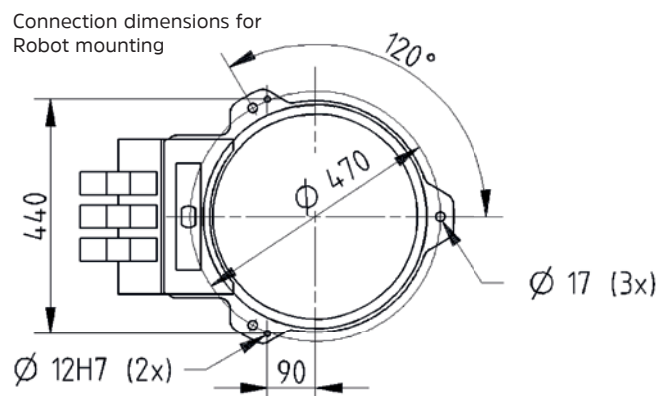
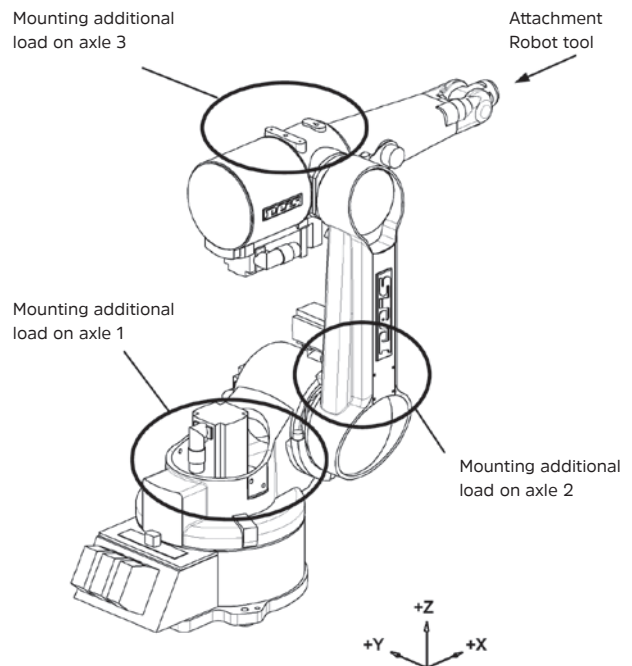
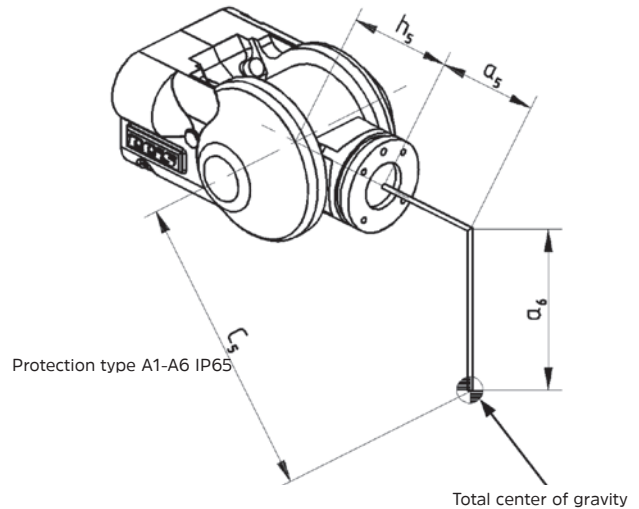
A1	°/s	200
A2	°/s	165
A3	°/s	150
A4	°/s	450
A5	°/s	450
A6	°/s	500

## Swivel range of traversing axis Axis 1 to 6

Swivel range A1	°	± 180
Swivel range A2	°	+ 70 / - 135
Swivel range A3	°	+ 150 / - 120
Swivel range A4	°	± 210
Swivel range A5	°	± 123
Swivel range A6	°	± 360

## Foundation load

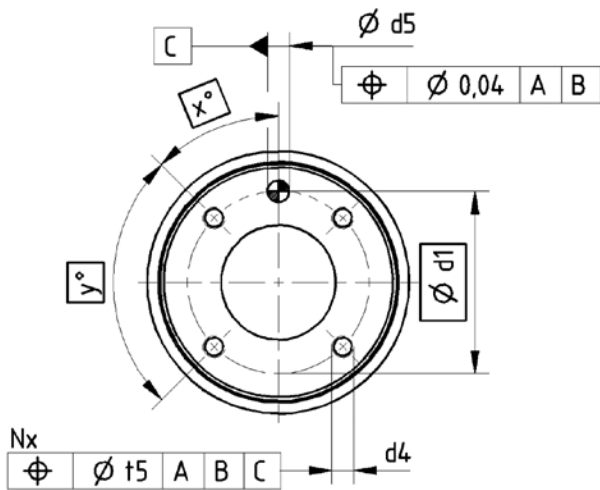
Fxy	kN	± 5.5
Fz	kN	- 8.5
Mxy	kNm	± 8.5
Mz	kNm	± 2.5



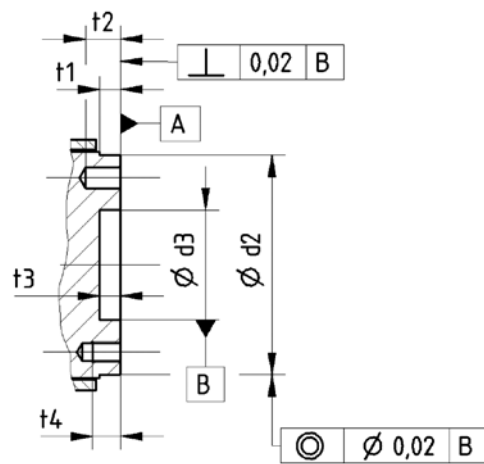
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## MECHANISCHE SCHNITTSTELLE

Type	nach	d <sub>1</sub>	d <sub>2</sub> h8	d <sub>3</sub> H <sup>7</sup>	d <sub>4</sub>	N	d <sub>5</sub> H <sup>7</sup>	x	y	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	t <sub>4</sub>	t <sub>5</sub>	M*
	DIN9409-1-d1-N-d4	mm	mm	mm	mm		mm	°	°	mm	mm	mm	mm	mm	Nm
<b>RV16-1600</b>	DIN9409-1-63-4-M6	63	80	40	M6	4	6	45	90	8	6	6	8	0.2	10



A dowel pin is required in addition to the internal or external centering to fix the position

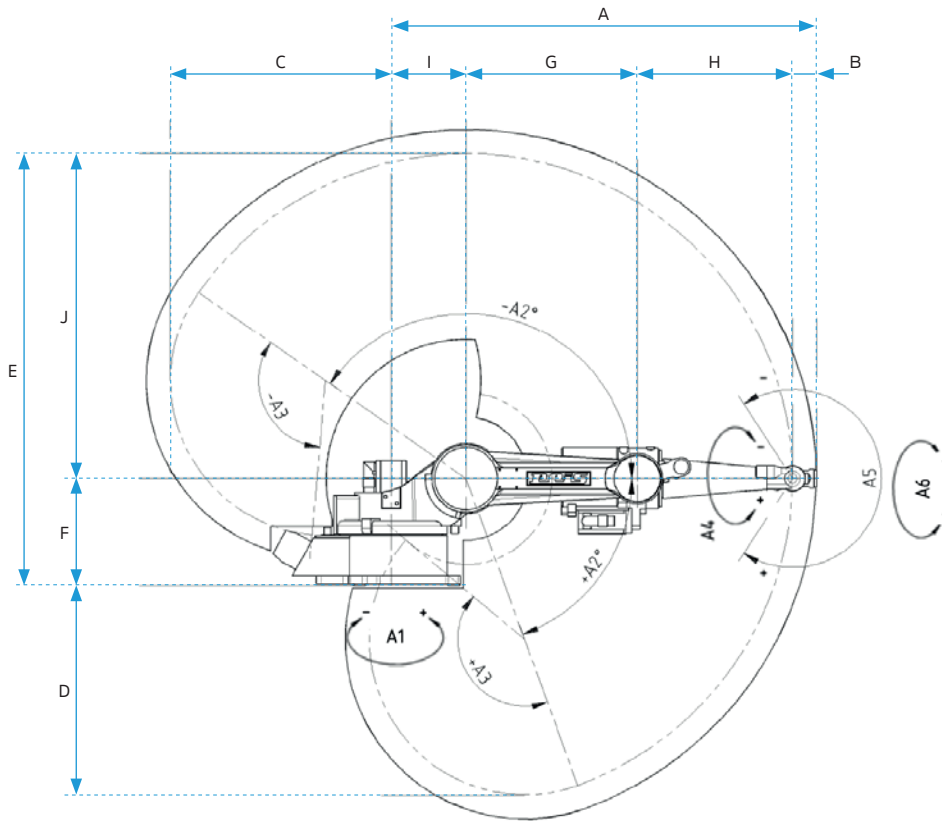


From the position shown, a rotation range of  $\pm 360^\circ$  is possible.

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## RV16-1600

### WORKSPACE



### Workspace

<b>A</b>	mm	1,600	<b>F</b>	mm	400
<b>B</b>	mm	100	<b>G</b>	mm	640
<b>C</b>	mm	753	<b>H</b>	mm	580
<b>D</b>	mm	781	<b>I</b>	mm	280
<b>E</b>	mm	1,620	<b>J</b>	mm	1,220

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