# DELTA RL5-1610-3kg

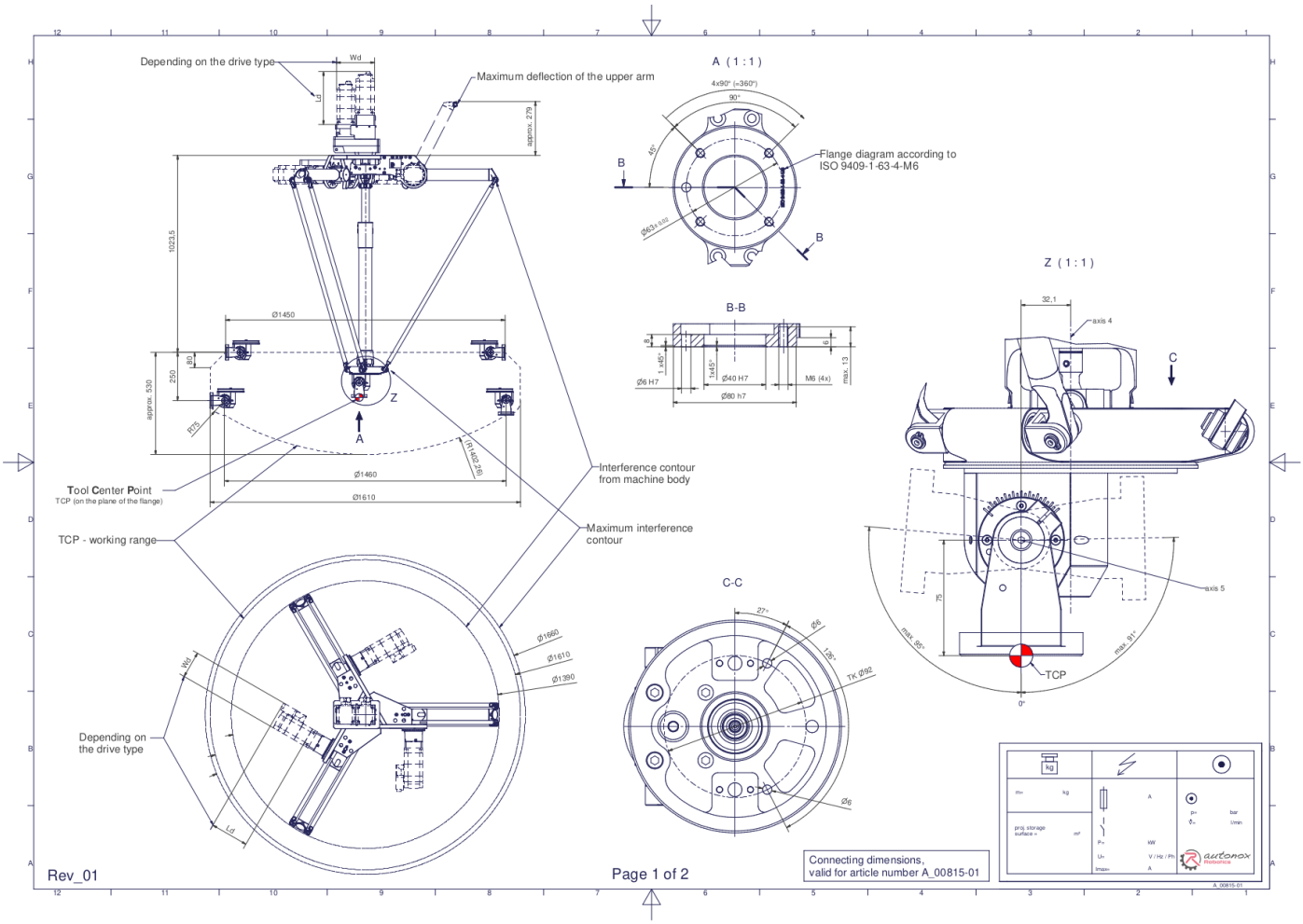
**Article number:** A_00815-01

**Lubricant variant:** Synthetic lubricants

**Description:**
This type of robot is based on the principle of parallel kinematics. All drives are mounted in a fixed position on the robot head. Motor cables are not moved. The robot has three (3) translational and two (2) rotational degrees of freedom.

**Scope of delivery:**
Robot mechanics incl. gearbox, Servo motor adapter, Threaded protection caps , Transport and packing instructions

**Connecting dimensions:**




**Downloads:** Connecting dimensions (PDF) 3D model (STP) 3D model (PDF)

## Technical specifications:

| | |
|---|---|
| **Field of application** | Standard (not hygienic) |
| **Kinematics** | Parallel |
| **Translatory Degrees of Freedom (X,Y,Z)** | 3 |
| **Rotational Degrees of Freedom (α,ß,γ)** | 2 |
| **Nominal payload [kg\|lbs] *** | 3 \| 6.6 |
| **Working area-diameter [mm\|in]** | 1610 \| 63.4 |
| **Working height outside [mm\|in]** | 250 \| 9.8 |
| **Working height center [mm\|in]** | 530 \| 20.9 |
| **Max. acceleration torque of the rotation α/β around X/Y at the output [Nm\|in.lbs]** | 16 \| 141.6 |
| **Nominal torque of the rotation α/β around X/Y at the output [Nm\|in.lbs]** | 16 \| 141.6 |
| **Max. speed of the rotation α/β around X/Y at the output [1/min]** | 82 |
| **Nominal speed of the rotation α/β around X/Y at the output [1/min]** | 82 |
| **Max. acceleration torque of the rotation γ around Z at the output [Nm\|in.lbs]** | 40 \| 354.0 |
| **Nominal torque of the rotation γ around Z at the output [Nm\|in.lbs]** | 40 \| 354.0 |
| **Max. speed of the rotation γ around Z at the output [1/min]** | 260 |
| **Nominal speed of the rotation γ around Z at the output [1/min]** | 160 |
| **Bearing type of the telescopic shaft(s)** | Roller bearing |
| **Bearing type of the arm joints** | Roller bearing |
| **Lubricants of the gearboxes** | Synthetic |
| **Cleaning** | No high pressure |
| **Ambient temperature [°C\|°F]** | 0 to +40 \| +32 to +104 |
| **Relative humidity level [%]** | 95 (free of condensation) |
| **Mounting position** | Floor, Ceiling, Wall (on request), Angle (on request) |
| **Robot weight without drive engineering (esp. drive) [kg\|lbs]** | 58,5 \| 129.0 |

* All given values are nominal values (nominal payload referred to a nominal performance) and can vary under realworld conditions depending on the application (tool specifications, load distances, reduction (partly) of the nominal performance when using food-grade lubricants, ...). Please consider our technical data sheets regarding the load capacity.

## Gearbox article number for this robot mechanics:

| Function | Article number | Document |
|---|---|---|
| Drive of the upper arms | MT_BGR00013366-xx | Operating manual gearbox type 3 (PDF) |
| Drive of the telescopic shaft for rotation γ around Z | MT_WST00064258-xx | Operating manual gearbox type 7 (PDF) |