# DELTA RL4-1200-1kg

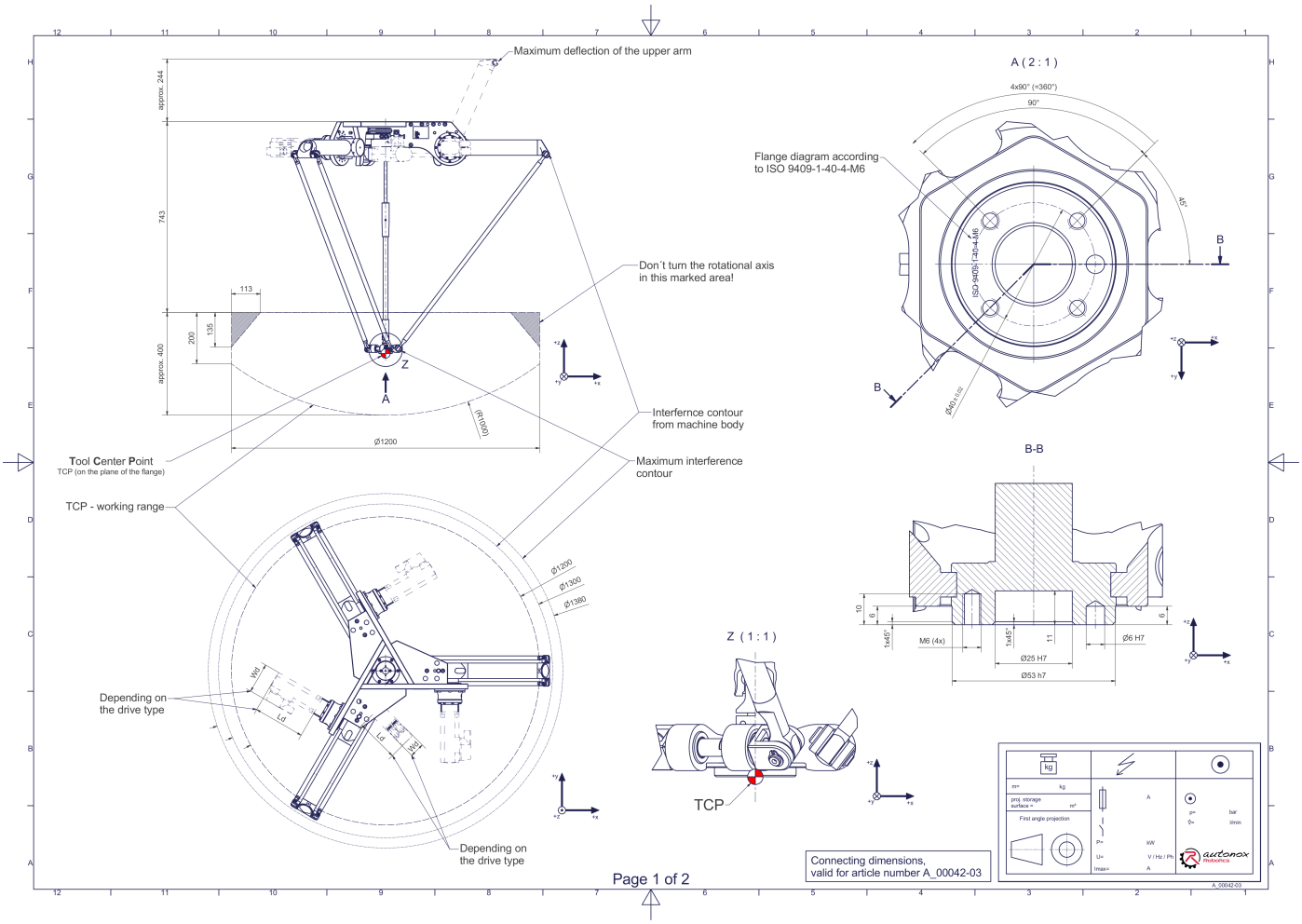
**Article number:** A_00042-03

**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 one (1) rotational degree(s) 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)** | 1 |
| **Nominal payload [kg\|lbs] *** | 1 \| 2.2 |
| **Working area-diameter [mm\|in]** | 1200 \| 47.2 |
| **Working height outside [mm\|in]** | 200 \| 7.9 |
| **Working height center [mm\|in]** | 400 \| 15.7 |
| **Max. acceleration torque of the rotation γ around Z at the output [Nm\|in.lbs]** | 7,2 \| 63.7 |
| **Nominal torque of the rotation γ around Z at the output [Nm\|in.lbs]** | 7,2 \| 63.7 |
| **Max. speed of the rotation γ around Z at the output [1/min]** | 500 |
| **Nominal speed of the rotation γ around Z at the output [1/min]** | 320 |
| **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]** | 33 \| 72.8 |
| **Special features** | All drives (gearbox, reduction gearing, ...) are located below the head plate.Advantages: Easily accessible, easy to maintain, compact |

* 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_BGR00009592-xx | Operating manual gearbox type 3 (PDF) |
| Drive of the telescopic shaft for rotation γ around Z | MT_BGR00011502-xx | Operating manual gearbox type 1 (PDF) |