

## DELTA RL4-TS1-ATS-1600-20kg

Article number: A\_00067-TS1-ATS-02

Lubricant variant: Synthetic lubricants



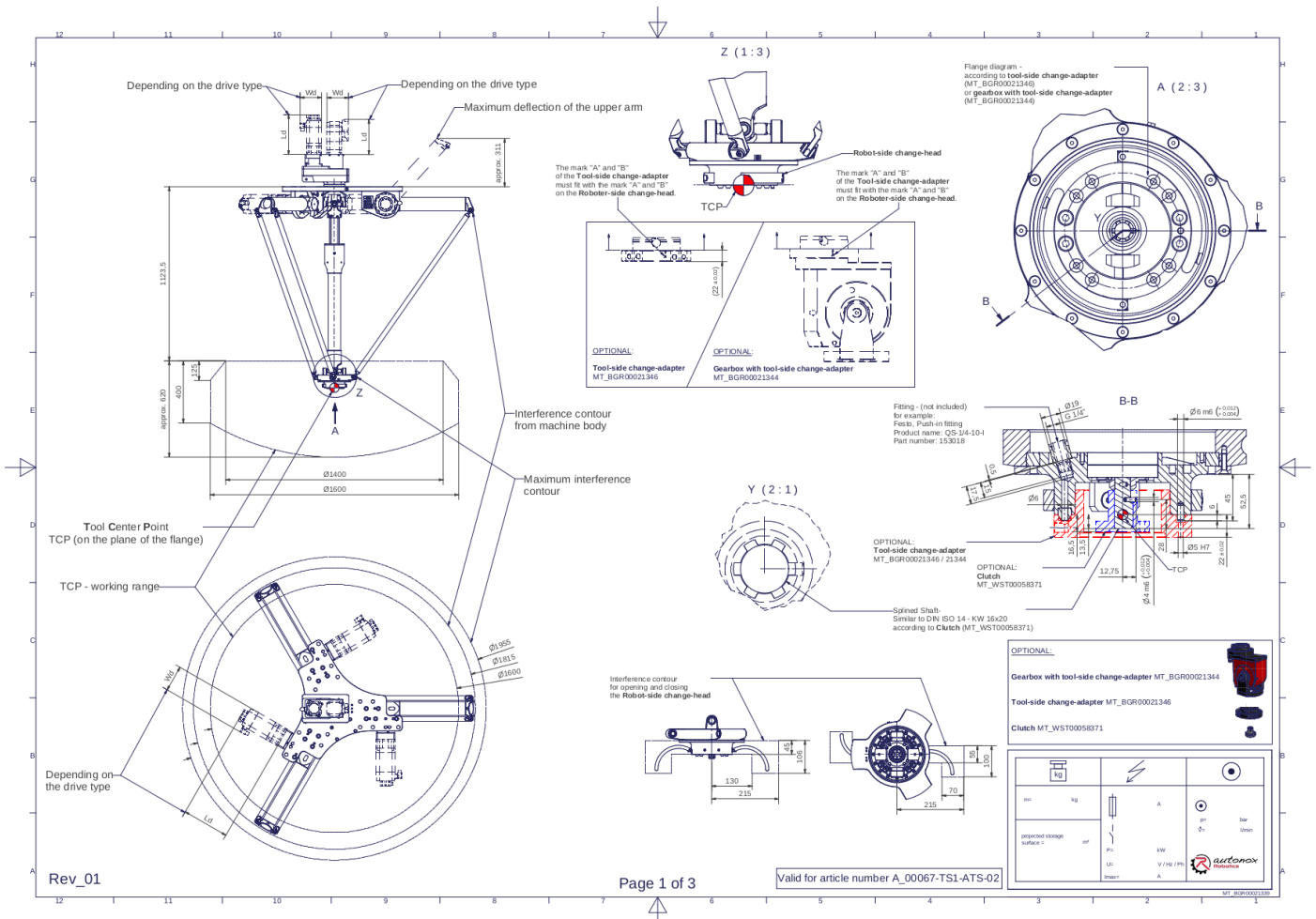
### Description:

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 \(PDF\)](#)

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## Technical specifications:

Field of application	Standard (not hygienic)
Kinematics	Parallel
Translatory Degrees of Freedom (X,Y,Z)	3
Rotational Degrees of Freedom ( $\alpha, \beta, \gamma$ )	1
Nominal payload [kg   lbs] *	20   44.1
Working area-diameter [mm   in]	1600   63.0
Working height outside [mm   in]	400   15.7
Working height center [mm   in]	620   24.4
Output type of the tool actuation	Shaft (TS)
Number of the tool actuation (telescopic shaft(s))	1
Manual tool changing system ATS	Eightfold media transmission (Compressed air 6 bar   87.0 psi / vacuum -850 mbar   -12.3 psi / min. inner- $\varnothing$ : 6 mm   0.24 in)
Max. acceleration torque of the rotation $\gamma$ around Z at the output [Nm   in.lbs]	240   2124.2
Nominal torque of the rotation $\gamma$ around Z at the output [Nm   in.lbs]	240   2124.2
Max. speed of the rotation $\gamma$ around Z at the output [1/min]	177
Nominal speed of the rotation $\gamma$ around Z at the output [1/min]	124
Max. acceleration torque of the tool actuation T/TS1 at the output [Nm   in.lbs]	7   62.0
Nominal torque of the tool actuation T/TS1 at the output [Nm   in.lbs]	7   62.0
Max. speed of the tool actuation T/TS1 at the output [1/min]	1500
Nominal speed of the tool actuation T/TS1 at the output [1/min]	1500
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]	124   273.4
Special features	Increased speed but reduced torque of the tool shaft

\* 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.

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**Gearbox article number for this robot mechanics:**

Function	Article number	Document
Drive of the upper arms	MT_BGR00017292-U-xx	Operating manual gearbox type 3 (PDF)
Drive of the telescopic shaft for rotation $\gamma$ around Z	MT_BGR00018858-xx	Operating manual gearbox type 7 (PDF)