

# DELTA ROBOT

DR





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DR

- **EXTREME DYNAMICS**
- HIGHLY FLEXIBLE
- **EASY INTEGRATION**



## DELTA ROBOT **DR**



#### **Stunningly fast**

Delta robots are lightweight and fast. They are the champions of high-speed assembly and handling. The speed and precision with which they can pick and place objects are highly in demand for automated applications in the packaging and electronics industry.

WEISS Delta Robots DR are a perfect addition to the existing product range of rotary tables, linear transfer systems, linear motor axes and pick & place units. The preconfigured WEISS Control Package makes it possible to easily integrate the delta robots into any production system and to put them into operation immediately — without any in-depth programming knowledge.

### BENEFITS

- · Ideal for high-speed assembly and handling
- · High speed and acceleration attainable
- · Gentle product handling
- · Precise positioning
- · Extremely lightweight robot arms
- · Low space requirement
- · Highly flexible
- · Optimized energy balance via stationary motors and drives

### **FEATURES**

- · Easy integration
- · Intuitive programming
- · Large number of product types
- · For use in many industries and applications
- · Robot control, PLC and safety in one central control system
- · Very low maintenance costs
- · Designed for high availability (e.g. 3-shift operation)
- · Quality made in Germany



Our delta robots are always equipped with the **WEISS Control Package**. This turns your delta robot into a complete mechatronic system consisting of WEISS components, electronics, and software.

Not only are the cables and drive controllers preassembled and ready-to-connect, the software is also preconfigured with the most important settings. Plug in, turn on, and put into operation.









ELECTRONICS SOFT

#### **TECHNICAL DATA SHEET**

	DR3040-4	DR3090-4	DR3120-4	DR3140-4
Number of translational axes	3	3	3	3
Number of rotational axes	1	1	1	1
Diameter of operating range (mm)	400	900	1200	1400
Height of operating range (mm)	100	200	200	350
Nominal load (kg)	0,5	1/3/6	1/3/6	6/12
Weight (kg)	9,7	24	33	100
Installation position	ceiling	ceiling	ceiling	ceiling
Protection rating	IP65 (head area)	IP65 (head area)	IP65 (head area)	IP65 (head area)
Min. repeatability (mm)  Depending on the application	±0.05	±0.1	±0.1	±0.1

## **OUSTOM-FIT FOR ANY REQUIREMENT**

With our wide product range we cover almost all your requirements:

· Nominal load: 0.5 kg - 50 kg

 $\cdot$  Operating range: 200 mm - 1400 mm

· Performance: Up to 200 ISO cycles per minute!

· Number of axes: 3-5 axes

· Media supply: internal + external

· Hygienic design









## **AUGMENTED REALITY**



DR2125



DR3090

You can learn how this works at: https://bit.ly/2lyXaq4



# **WEISS CONTROL PACKAGE**

## THE PREMIUM SOLUTION

A complete package of hardware and software components that is unparalleled in terms of intuitive operation and easy startup. It includes the respective automation components, custom-fit motor and encoder cables, as well as matching drive controllers.

The WEISS Application Software (W.A.S.) is the integral component. It makes commissioning a breeze and provides application-related services. Numerous interfaces and standards ensure excellent system connectivity.





#### **WEISS PRODUCT**

#### **ELECTRONICS**

In addition to the Safe Torque Off (STO) function up to SIL3, the drive controllers also offer a Safe Motion function. Motor and encoder cables are tailored precisely to the system and your requirements. Coded, marked, and cut to the right length.



#### **THIRD-PARTY DRIVES**

The system openness of our solution is virtually without limits. It is even possible to integrate third-party drives into the package.



With the **W.A.S.**, we have created a software that reduces the complexity of the control system to such an extent that commissioning can be done without any special knowledge. You will not have to spend much time with details on the drive hardware or programming the drive programs. The most important mechanical data and control settings are preconfigured.

- · Fast commissioning
- · Maximum ease of operation
- Preconfigured and designed for use with automation hardware
- Application-related data at the touch of a button
- Integrated maintenance and diagnostic functionalities



#### **FIELDBUS INTERFACES**

PROFIBUS DP | PROFINET IO | EtherCAT
Ethernet / IP | Ethernet Powerlink
Modbus / TCP | Ethernet / UDP
The openness of the system goes even
further with the integration of the interoperable OPC UA interface. This interface
allows you to transfer functionalities to
external systems quickly and easily —
without a detour through the superordinate
control level.



#### **SMART SERVICES TODAY**



#### **CONDITION MONITORING**

Predict errors before they occur. The power consumption of the motor is analyzed constantly using PCM (Permanent Current Monitoring). If it changes, the machine can be checked and unexpected production downtimes avoided.



#### **AUTO-TUNING**

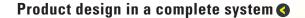
When existing components are placed in a new context, the associated controller usually does not work anymore. With "auto-tuning", the necessary readjustment can be done quickly, easily, and at the touch of a button. The W.A.S. independently determines the new optimum control parameters and adjusts the drive controllers accordingly.



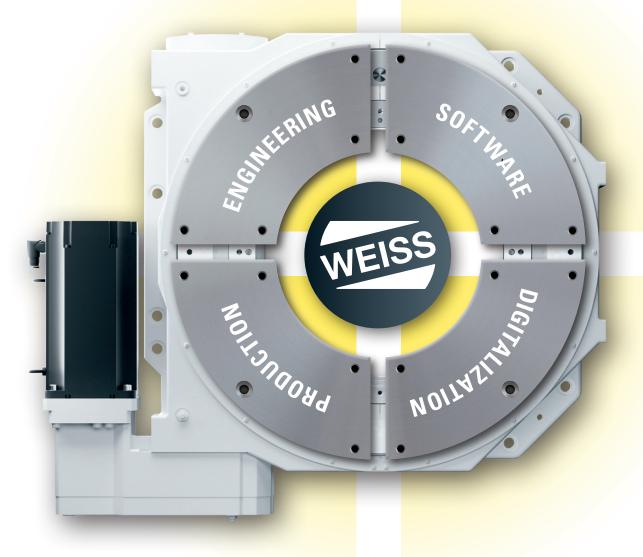
#### DIAGNOSTIC REPORTS

Cryptic error messages are now a thing of the past. Our messages are tailored to the application, easy to understand, and provide specific handling recommendations that you can implement directly.

# WEISS EXPERTISE COMPLETE MECHATRONIC SYSTEMS



- Application development with customers (
  - Validation and service life testing 3
- Tailored electronics packages
- Intuitive operating software
- Open and compatible with other systems



Own production of cams, bearings, and guides 4

Highest production quality 3

High level of in-house production

**● IoT** (Internet of Things)

**♦ Al** (Artificial intelligence)

Cloud Computing



#### INSPIRING PEOPLE GREAT SOLUTIONS







ANDROID

iOS

WINDOWS PC: www.weiss-gmbh.de/arWin