



AOK™ 501 ACTIVE ORBITAL KIT™

INTEGRATED SANDING SOLUTION FOR TEXTURE-FREE SURFACE TREATMENT

The AOK 501 is a finely tuned system package based on the Active Compliant Technology (ACT) and an orbital sander optimized for robot use. This integrated complete solution automates the industrial sanding process with individual control of all process parameters: rotation speed, contact force and feed rate. The FerRobotics AOK 501 offers the highest process quality from one source. The system design is compact and light. The enormously durable sander is designed for industrial use and delivers twice the output of standard devices, 24 hours a day, 7 days a week.

Surface treatment: Sanding, polishing, cleaning, deburring

All materials: Steel, aluminum, titanium, magnesium, carbon, plastic, wood, ceramic, coconut fiber...

PATENTED
TECHNOLOGY

FER
ROBOTICS
perfect feeling

AOK™ 501

ACTIVE ORBITAL KIT™

GLOBAL NOVELTY

GRINDING PACKAGE SOLUTION FOR INDUSTRY 4.0

- User-friendly industrial package solution
- Robot-compatible sander combined with all the benefits of the ACT system cooperation
- For all industries and materials

QUICK, FLEXIBLE, SAFE

- High performance and functionally optimized system for immediate integration
- Rapid job modulation directly by the end user
- Optimal functionality, productivity and process reliability

CONTROL OF ALL PROCESS PARAMETERS

- Contact force on the surfaces in an integrated system solution
- Feed rate of the robot
- Rotation speed of the orbital sander

TOP QUALITY

- Precisely even surface appearance thanks to a process-optimized package solution
- No post-processing
- The highest quality level 24 hours a day, 7 days a week

COMPACT AND SIMPLE

PRECISE APPLICATION OF FORCE

DEVICES ARE ARTIFICIALLY CONDITIONED



Control of the
feed rate

Control of the contact force
on surfaces by ACT

Orbital sander
with doubled output

Control of the
rotation speed

SPECIFICATIONS

| | |
|---|--|
| Ordercode | AOK/501 |
| Max. force (push/pull) [N] | 160 |
| Stroke [mm] | 35.5 |
| Dimensions [mm] | Max. 355 x 268 x 332 (at max. stroke) Bolt circle ISO 9409-1-80-6-M8 standard flange ø80 |
| Dead weight [kg] | ~ 11 |
| Power supply | • 24 V (DIN-track) • 380 - 500 V AC (frequency inverter) • ø8 mm air supply Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil & water free) |
| Max. speed [rpm] | 10,000 recommended 6,500 |
| Motor power (S1) [W] | 1,000 |
| Motor peak power (S2) [W] | 2,000 |
| Excentric stroke [mm] | 5 |
| Grinding disc | ø150 mm (ø6"), optional ø125 mm (ø5") |
| Air consumption [l/min] | 5 - 10 |
| Connection extraction [mm] | ø38 - NW 40 |
| Ambient temperature during operation [°C] | +5 ... +45 |
| Protection class | IP65 / if equipped with adequate filters |

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