



AOK ACTIVE ORBITAL KIT

INTEGRATED SANDING SOLUTION FOR TEXTURE-FREE SURFACE TREATMENT

The AOK 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 AOK offers the highest process quality from a single 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

FERROBOTICS
perfect feeling

AOK

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

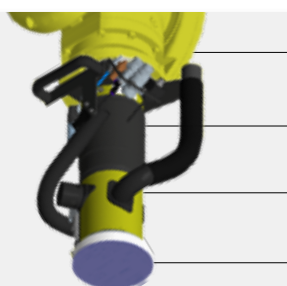
TOP QUALITY

- 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/201
Max. force (push/pull) [N]	160
Stroke [mm]	35.5
Dimensions [mm]	Max. 319 x 236 x 383 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80
Dead weight [kg]	~ 8.5
Power supply	<ul style="list-style-type: none"> • 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) • ø6 mm operated air supply of brake of grinding disc Max. 7 bar, 30µm, ISO 8573-1 KL.3 (oil & water free)
Max. speed [rpm]	10,000 recommended 6,500
Motor power (S3) [W]	700
Motor peak power (S2) [W]	1,500
Excentric stroke [mm]	5
Grinding disc	ø150 mm, optional ø125 mm, ø6", ø5"
Air consumption [l/min]	20 - 30
Connection extraction [mm]	ø38
Ambient temperature during operation [°C]	+5 ... +45
Protection class	IP65 / if equipped with adequate filters



AOK ACTIVE ORBITAL KIT

PLUG&PLAY GRINDING SOLUTION WITH ACTIVE FORCE CONTROL

Perfect grinding quality requires exact and consistent contact force all along the surface flow. Thus, the AOK/905 autonomously compensates for surface tolerances up to 35.5 mm with guaranteed consistent contact force. Unique performance by: Excentric grinder optimized for robot use combined with individual control of the rotation speed, contact force and feed rate. All AOK/905 system components are finely tuned.

The lightweight design is compact and robust. This reliable benefit package makes the AOK/905 the superior grinding solution. Profit from easy out-of-the-box integration, fast job modulation and perfect grinding quality. The AOK/905 was especially developed for the robot models UR10 and UR10E.

Surface treatment: Sanding, polishing, cleaning, deburring

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



UNIVERSAL ROBOTS+
Certified

FERROBOTICS
perfect feeling

AOK

ACTIVE ORBITAL KIT

GLOBAL NOVELTY

GRINDING PACKAGE SOLUTION FOR INDUSTRY 4.0

- User-friendly plug&play package solution
- robot-compatible grinder with integrated force control
- For all materials and complex shaped surfaces

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

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Control of the
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on surfaces by ACT

Control of the
rotation speed

SPECIFICATIONS

Ordercode	AOK/905
Max. force [N]	100
Stroke [mm]	35.5
Dimensions [mm]	205 x 160 x 320 Bolt circle ISO 9409-1-50-4-M6 standard flange ø50
Dead weight [kg]	~ 5.5
Power supply	<ul style="list-style-type: none"> • 24 V (DIN-track) • ø6 mm air supply Max. 7 bar, 30µm, ISO 8573-1 KL.3 (oil & water free) • ø12 mm operated air supply of excentric grinder Max. 6.2 bar
Max. speed [rpm]	12,000
Motor power [W]	209
Excentric stroke [mm]	5
Sanding disc	ø125 mm (ø5")
Air consumption flange [l/min]	5 - 10
Max. Air consumption excentric sander [l/min]	481
Ambient temperature during operation [°C]	+5 ... +45
Protection class flange	IP65 / if equipped with adequate filters



AOK XS ACTIVE ORBITAL KIT XS

INTEGRATED SANDING SOLUTION FOR FULLY AUTOMATED SPOT-REPAIR/FINESSE SANDING

The AOK XS 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 AOK XS is ideal for the surface finishing of small areas and offers the highest process quality from a single 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**

FERROBOTICS
perfect feeling

AOK XS

ACTIVE ORBITAL KIT XS

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/401	AOK/402
Max. force (push/pull) [N]	100	
Stroke [mm]	35.5	
Dimensions [mm]	Max. 220 x 194 x 279.6 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80	
Dead weight [kg]	~ 7	~ 7.2
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 (S3) [W]	597	
Motor peak power (S2) [W]	785	
Eccentric stroke [mm]	5	14
Sanding disc	up to ø3" (ø77mm), ø¼"-20UNC Thread	
Air consumption [l/min]	5 – 10	
Ambient temperature during operation [°C]	+5 ... +45	
Protection class	IP65 / if equipped with adequate filters	



AOK ACTIVE ORBITAL KIT HD

INTEGRATED SANDING SOLUTION FOR TEXTURE-FREE SURFACE TREATMENT OF LARGE SURFACES

The AOK HD is a finely tuned system package based on the Active Compliant Technology (ACT) and orbital sanders optimized for robot use and large surfaces. This integrated complete solution automates the industrial sanding process with individual control of all process parameters: rotation speed, contact force and feed rate. The AOK HD offers the highest process quality from a single source and the system design is compact and light. The eccentric mode can be switched from free-run mode to forced mode and the gimbal unit allows adapting flexibly to the surface. 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

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

PATENTED
TECHNOLOGY

FERROBOTICS
perfect feeling

AOK

ACTIVE ORBITAL KIT HD

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/601
Max. force (push/pull) [N]	500
Stroke [mm]	48
Dimensions [mm]	Max. 343 x 299 x 402 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80
Dead weight [kg]	~ 28
Power supply	<ul style="list-style-type: none"> • 24 V (DIN-track) • 400 - 480 V AC (frequency inverter) • ø8 mm air supply Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil & water free) • 4 x ø6 mm operated air supply for switching the eccentric mode and to block the gimbal unit Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil & water free)
Max. speed [rpm]	6,800 recommended 5,000
Motor power (S3) [W]	4,000
Motor peak power (S2) [W]	5,900
Excentric stroke [mm]	5
Grinding disc	3 x 150mm / 6" pad with fast fix
Forced eccentric mode	on/off
Air consumption [l/min]	15 - 30
Extraction connection [mm]	ø42
Ambient temperature during operation [°C]	+5 ... +45
Protection class	IP65 / if equipped with adequate filters

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