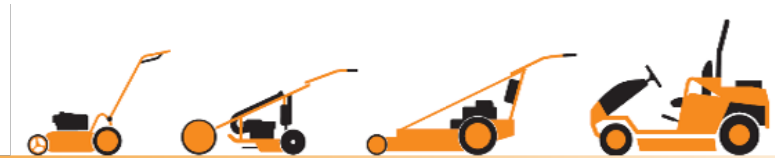




# AS-Motor Allmähers

Product Presentation – AS 65 / AS 73



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# AS 65 / AS 73 – table of contents



Tip: You can navigate in the document via mouse-over click – click page number and click [www.as-motor.de](http://www.as-motor.de) to return to the table of contents.

## AS 65 / AS 73 device concept

- Main features and main arguments p. 4
- Model overview p. 5
- Vehicle structure p. 6
- Application areas / target groups p. 7

## AS 65 / AS 73 engine

- Overview p. 9
- Engine technology p. 10
- Air filter / engine oil p. 13
- Fuel tank p. 14

## AS 65 / AS 73 drive

- Overview p. 16
- Rear axle p. 17
- Transmission and shifting p. 18
- Limited-slip differential / brake p. 19

## AS 65 / AS 73 mower deck

- Overview p. 21
- Blade system / grass placement p. 22
- Suspension / height adjustment p. 24
- Engagement mechanism / safety p. 26

## AS 65 / AS 73 operating elements

- Overview p. 28
- Overview of operating elements p. 29
- Second blade speed AS 73 p. 30

## AS 65 / AS 73 accessories / technical data

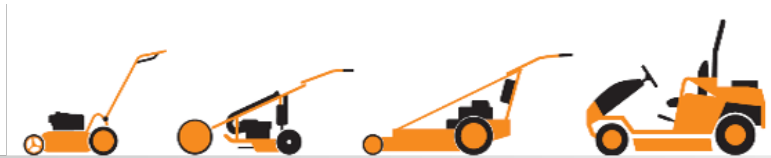
- Accessories p. 32
- Technical data p. 35

# AS 65 / AS 73 device concept

Main features and main arguments

Model overview / device structure

Application areas / target groups



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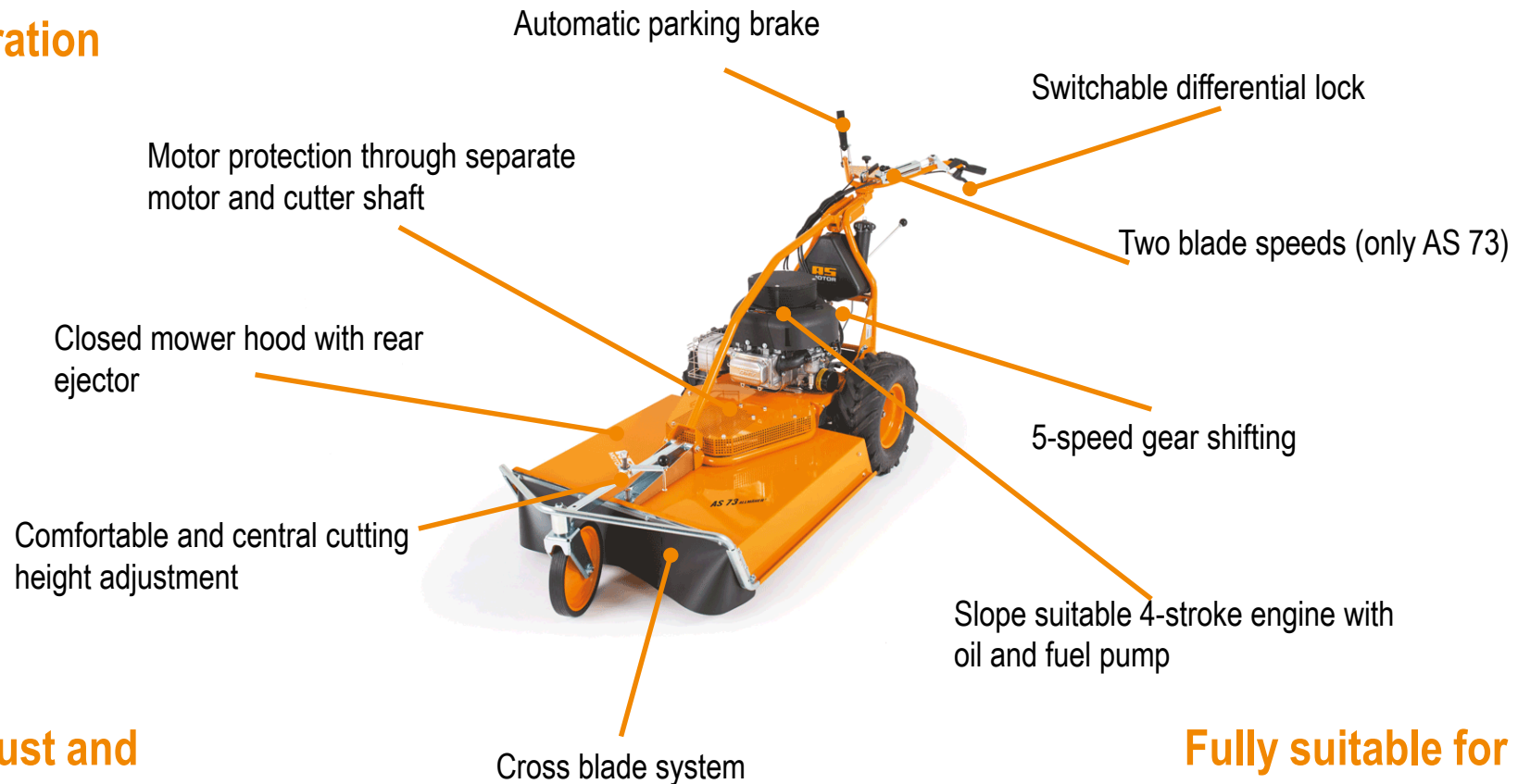
# AS 65 / AS 73 – device concept

Main features and main arguments 1/1



## Ergonomic operation

## Safe and comfortable



## Robust and durable

## Fully suitable for steep slopes

# AS 65 / AS 73 – device concept

## Model overview 1/1



- AS 65 2T ES with 2-stroke engine, 5-speed manual transmission, differential lock and cross blade system. Ideal for use on flat terrain and steep slopes with growth heights of up to 130 cm
- AS 65 4T B&S with 4-stroke engine and oil and fuel pump, 5-speed manual transmission, differential lock and cross blade system. Ideal for use on flat terrain and steep slopes with growth heights of up to 150 cm
- AS 73 4T B&S with 4-stroke engine and oil and fuel pump, 5-speed manual transmission, differential lock, cross blade system and two blade speeds. Ideal for use on flat terrain and on steep slopes with growth heights up to 150 cm or mowing areas with low growth which need to be finely chopped (fast blade speed)



# AS 65 / AS 73 – device concept

## Device structure 1/1

- Stable and lightweight tube frame with double function: Frame and engine protection
- Low weight: 114 kg (AS 65 2T ES), 125 kg (AS 65 4T B&S), 135 kg (AS 73 4T B&S)
- Cross-country mobility through perfect vehicle geometry, weight distribution and ground clearance
- Ideal balance between traction drive and mower deck pressure
- Central height adjustment on the pivot wheel
- Engine protection through separation of engine and blade shaft



- ✓ Mechanical protection of the engine through the shape of the square tubular frame in the front area.
- ✓ Weight optimisation and perfect device geometry (weight distribution) for maximum performance on slopes
- ✓ Central height adjustment for easy and fast adaptation of the cutting height
- ✓ No impact damage on the crankshaft of the engine.

# AS 65 / AS 73 – device concept

Application areas 1/1



AS PRODUCTS	Maximum work rate in m <sup>2</sup> /hour (V <sub>Max</sub> x cutting width)	Maximum undergrowth height in cm
AS 65 4T B&S	3.300	150
AS 65 2T ES	2.900	120
AS 73 4T B&S	3.700	150

AS PRODUCTS	Gradient suitability Level > rising > very steep	Professional use	Mowing deck	Drive
AS 65 4T B&S			Mulching with rear discharge	Rear wheel drive Vario
AS 65 2T ES			Mulching with rear discharge	Rear wheel drive Vario
AS 73 4T B&S			Mulching with rear discharge	Rear wheel drive 5-gear

Suitable

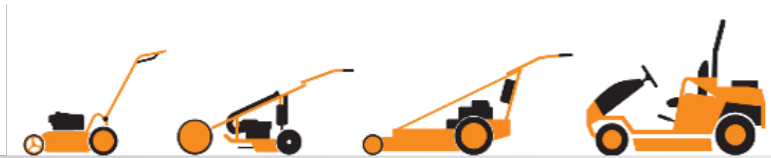
Recommended

## **AS 65 / AS 73 – engine**

Overview

Engine technology, air filter / engine oil

Fuel tank



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# AS 65 / AS 73 – engine

## Main features and main arguments 1/1



- AS 65 2T ES: AS-Motor 2-stroke, 1-cylinder ES engine with 5.4 hp (4.0 kW), 165 ccm displacement, rated power at 3800 rpm and EasyStart function
- AS 65 4T B&S and AS 73 4T B&S: Briggs & Stratton 4-stroke 1-cylinder, Series 3 Intek with 344 ccm displacement and 10.3 hp (7.6 kW) rated power at 3,300 rpm.



- ✓ Engine variants adapted to the respective requirement
- ✓ AS 2-stroke engine for high capacity – extremely well-suited for working on slopes with high torque and incredible power
- ✓ B&S Series 3 Intek Engine with abundant power for mowing and for use on rugged terrain

# AS 65 / AS 73 – engine

## Engine technology (AS 65 2T ES) 1/3



- AS 65 2T ES: AS-Motor 2-stroke, 1-cylinder ES engine with 6.0 hp (4.4 kW), max. power at 3800 rpm.
- Latest generation of the AS-Motor 2-stroke engine with innovative "EasyStart" function
- Pull forces required on the starter pull cord have been reduced by as much as 60% through decompression bore
- New digital ignition system (CDI) reduces the necessary start rpm by just under 50%
- Optimised air-fuel channels in the air filter and carburettor and adapted nozzle assembly.



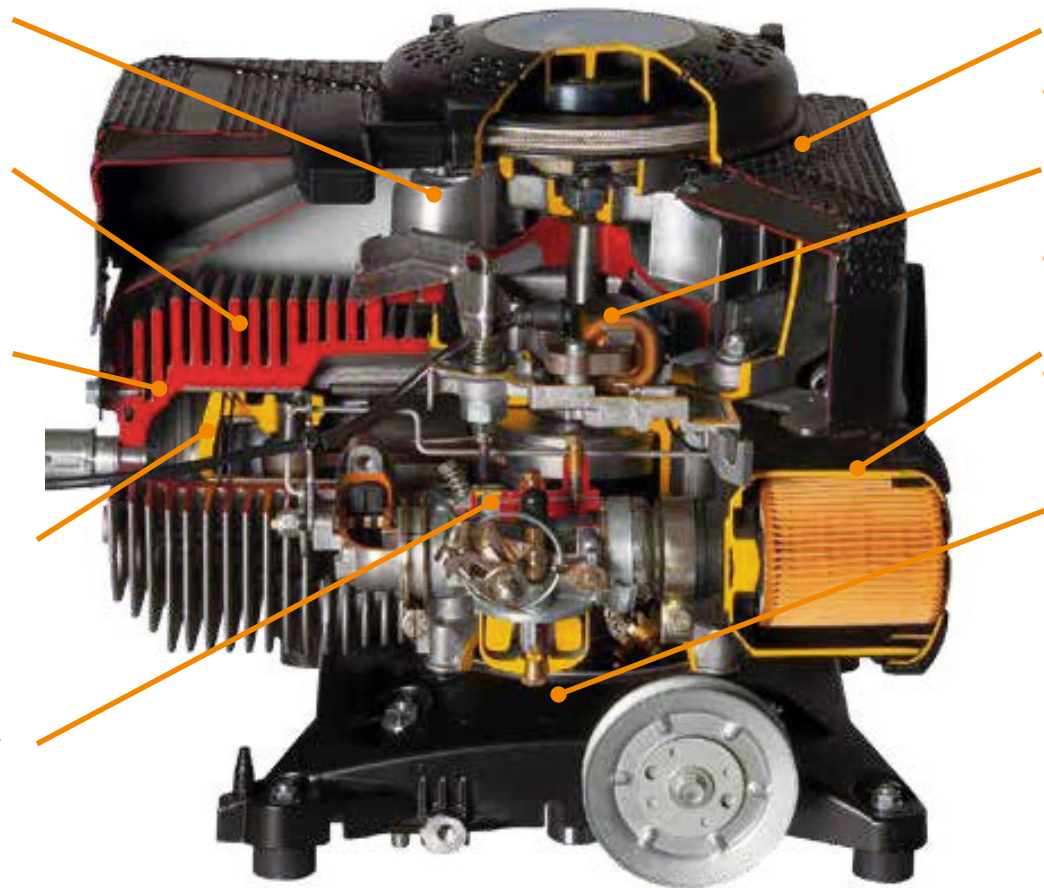
- ✓ Through the reduced start rpm, at engine start the necessary pull distance on the starter pull cord have also been reduced by half.
- ✓ Through the speed-dependent adjustment of the ignition time and the optimised carburettor, the engine adapts to all operating conditions.
- ✓ The only 2-stroke engine on the market

# AS 65 / AS 73 – engine

Engine technology (AS 65 2T ES) 2/3



- High-performance fan wheel for outstanding cooling
- Light alloy cylinder with grey cast iron liner for high mileage
- Piston with trapezoidal rings for reliable compression
- Forged and polished connecting rod with needle bearings for long service life
- Optimised carburettor design for maximum power at minimum consumption



- Extra-large intake area for optimal cooling
- Thermally protected install position of the ignition system for max. ignition performance
- AS special filter for cleaner intake air
- Tempered crankshaft with additional bearing for maximum stability in harsh continuous operation

# AS 65 / AS 73 – engine

Engine technology (AS 65 4T B&S / AS 73 4T B&S) 3/3



- AS 65 4T B&S and AS 73 4T B&S: Briggs & Stratton 4-stroke 1-cylinder Series 3 Intek and 13 hp (9.7 kW) maximum power at 3,600 rpm.
- Pressure lubrication with oil filter
- Grey cast iron cylinder sleeve for long service life and minimal oil consumption and OHV (OverHead Valve) technology
- Magnetron® electronic ignition system
- AVS® Anti-Vibration System – patented linear compensation system



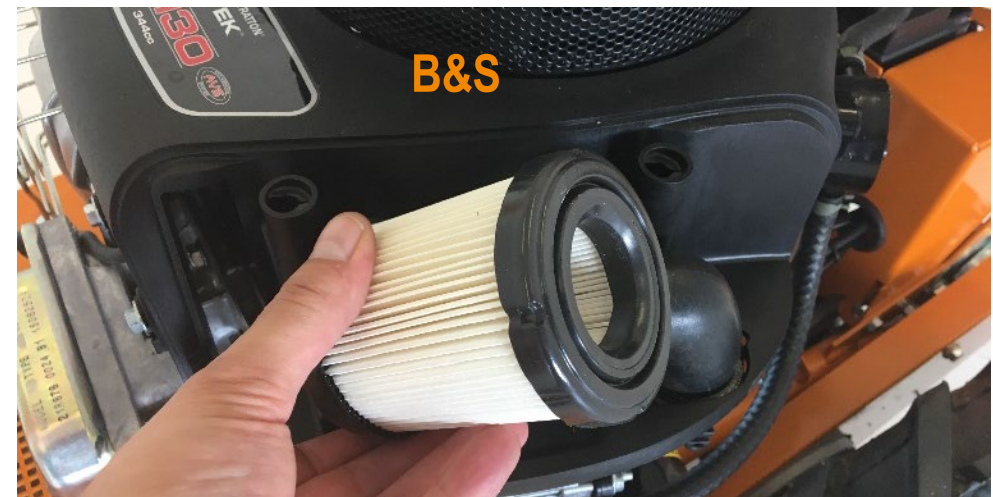
- ✓ Controlled feed of clean oil to the bearing surfaces in the crankcase for a long service life
- ✓ OHV – optimised performance, long engine service life and low fuel consumption
- ✓ Magnetron® – ensures easy start and it is maintenance-free
- ✓ Less vibration thanks to AVS®

# AS 65 / AS 73 – engine

Air filter / engine oil 1/1



- AS-Motor 2-stroke ES: Special filter for cleaner intake air with outstanding accessibility and engine lubrication via the fuel mixture
- B&S Series 3 Intek Paper air filter cartridge with easy accessibility for cleaning and replacement and high oil filler neck for easy maintenance
- B&S factory-standard with SAE 30 for low consumption (normal summer operation) or optional synthetic engine oil (5W30) for maximum performance even under 5° C



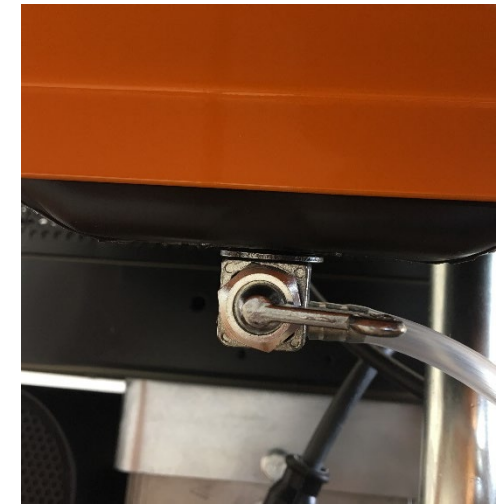
- ✓ Protection against contaminated air in the engine through professional filter systems
- ✓ B&S with different oils for different requirements

# AS 65 / AS 73 – engine

## Fuel tank 1/1



- 5-litre tank capacity (AS 2-stroke engine with 2-stroke mixture; B&S with regular petrol) – the engine's own tanks for B&S are not connected
- Withdrawal at the lowest point of the tank
- Positioning of the tank in the rear for ideal weight distribution
- Clear separation of tank and engine



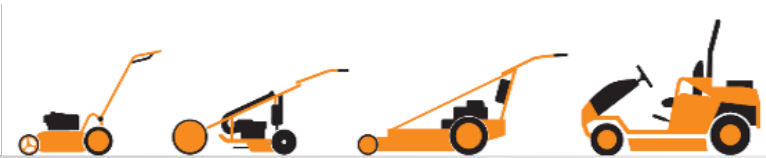
- ✓ Large tank volume for long deployments
- ✓ Special shape for complete use of the fuel and for high operational safety
- ✓ Optimal weight distribution through tank position for ideal handling on demanding terrain
- ✓ No heat load of the tank / fuel

## **AS 65 / AS 73 – drive**

Overview

Rear axle, transmission and shifting,

Limited slip differential / brake



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# AS 701 / 901 SM – drive

## Overview 1/1



- Robust rear axle with manual shift transmission, limited slip differential and AS tyres (field studs)
- Optional steel wheels for use on rough terrain (AS 65)
- Robust design manual shift transmission from the ride-on mower area with 5 forward gears and reverse gear
- Permanently blocked rear axle – however, differential can be switched off as needed
- Automatic safety brake when releasing the drive lever

- ✓ Robust design and high torque through mechanical drive for use in harsh conditions
- ✓ Lightweight transmission design compared to hydrostatic solutions
- ✓ Straight-ahead course on the slope via limited-slip differential and optimal control when turning by disengaging the limited-slip differential
- ✓ Device remains at a stop on the slope even without engine and with gear engaged, and nevertheless it can be moved



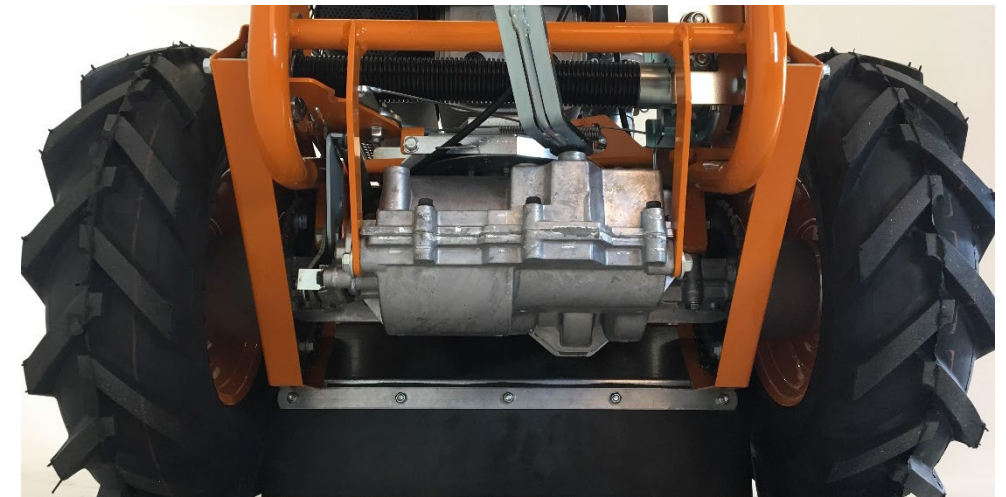


# AS 65 / AS 73 – drive

## Rear axle 1/1



- Robust rear axle with manual shift transmission, limited slip differential that can be switched off and with high ground clearance
- Tyre variants: AS (Acker-Stollen (field cleats)) 4.80/4.00-8
- Wheels within the mowing width protect grass for the next run
- Optional use of twin tires for all models
- Optional use of additional steel wheels (for the AS 65 models)



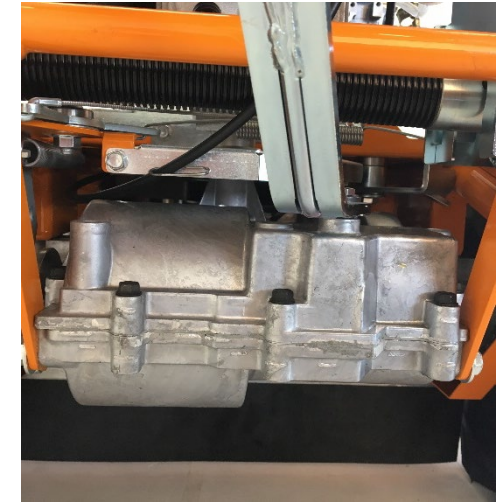
- ✓ Robust design and high torque through mechanical drive for use in harsh conditions
- ✓ Agricultural tread tyres for optimal lateral guidance when mowing transverse to the slope
- ✓ Optional steel wheels for maximum traction on slopes and rough terrain
- ✓ Standing grass is not run over at the next run

# AS 65 / AS 73 – drive

## Transmission and shifting 1/1



- Robust design, peerless ride-on mower – manual shift transmission with 5 forward gears and reverse gear
- Speeds, forward: 1.4 - 4.1 km/h (AS 65 2T), 1.6 - 5.1 km/h (AS 65 4T B&S / AS 73 4T B&S)
- Speeds, reverse: 1.9 km/h (AS 65 2T ES); 2.4 km/h (AS 65 4T B&S / AS 73 4T B&S)
- Low weight compared to hydrostatic drives with low operating forces
- Direct transmission of force via space-saving double chain drive



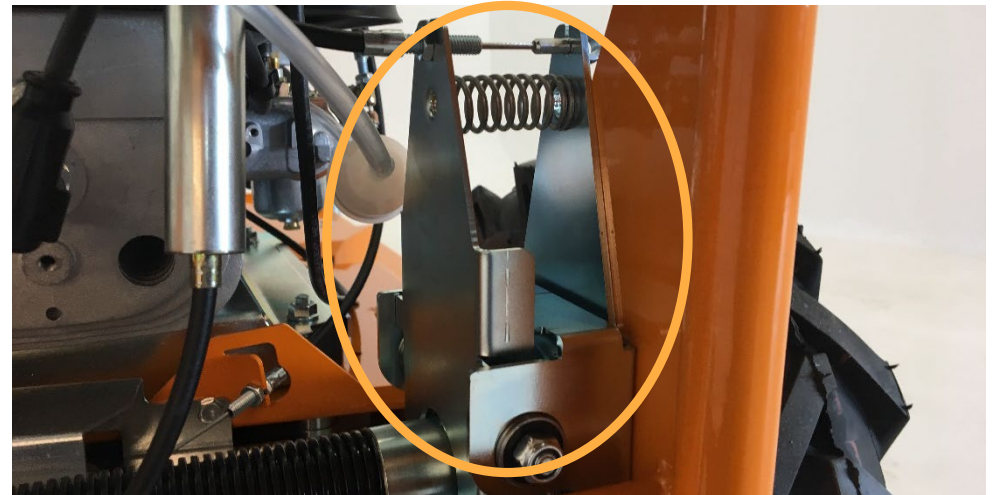
- ✓ Lightweight transmission design compared to hydrostatic solutions
- ✓ Problem-free continuous use, thanks to robust design
- ✓ Special traction drive developed for safety of the operator with easy operation with few activation levers
- ✓ High torque for maximum traction

# AS 65 / AS 73 – drive

## Differential / brake 1/1



- Permanently blocked rear axle for optimal propulsion on the slope and steep areas.
- Differential can be switched off as needed with the differential lever
- The parking brake is disengaged, through coupling of drive lever on the right side of the handlebar.
- Automatic safety brake when releasing the drive lever



- ✓ Limited-slip differential for optimal straight ahead operation even on slopes and high traction
- ✓ Easy manoeuvring thanks to easy unlock of the differential via lever on the left side of the handlebar
- ✓ Optimal suitability for working on slopes thanks to limited-slip differential and
- ✓ Device remains at a stop on the slope even without engine and with gear engaged, and nevertheless it can be moved

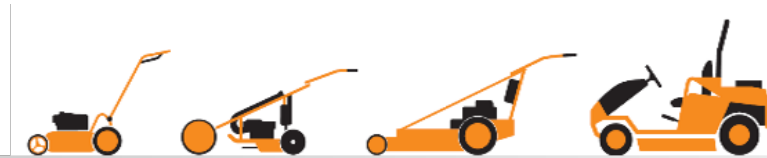
## **AS 65 / AS 73 – mower deck**

Overview

Blade system / grass placement

Suspension / height adjustment

Engagement mechanism / safety



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# AS 65 / AS 73 – mower deck

## Overview 1/1



- 65 cm (AS 65) or 73 cm (AS 73) cutting width with professional blade carrier, 3x professional blade bearing 25/30 mm shaft and AS cross-blade
- Closed mower deck with central grass placement between the wheels and running edge for additional protection if ground is uneven.
- Stable drive frame and central height adjustment
- High safety via mechanical shut-down, as well as limited-slip differential and parking brake

- ✓ Professional blade system with stable structure and double bearings in the lower area.
- ✓ Cuttings remain longer in the mow unit bonnet, are discharged to the rear and they remain between the wheels
- ✓ Safety precautions are functional even if the engine is not running, thanks to mechanical shut-off

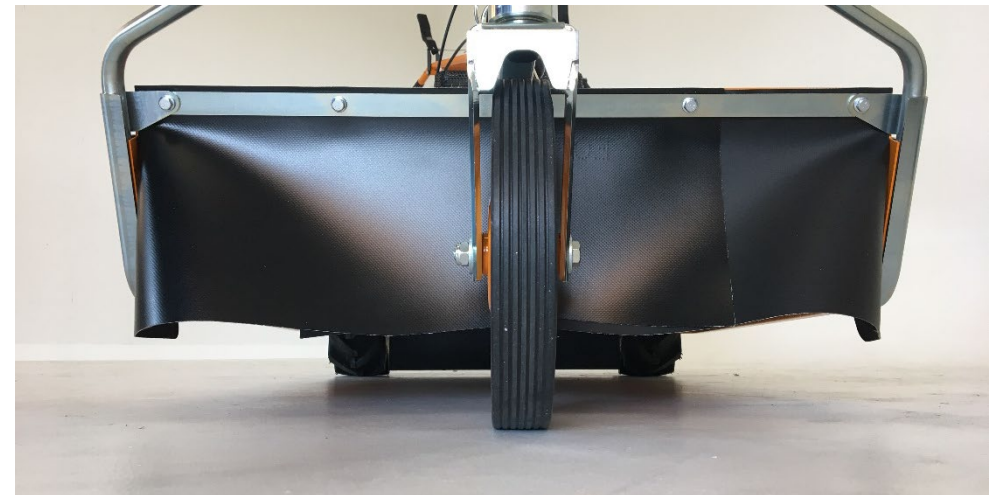
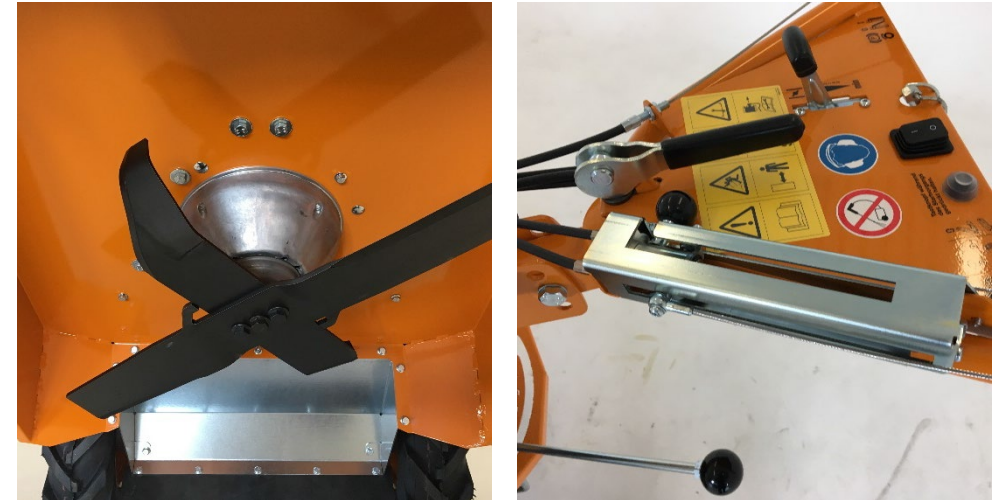


# AS 65 / AS 73 – mower deck

## Blade system / grass placement 1/2



- AS 65 with 65 cm cutting width, AS 73 with 73 cm cutting width
- Professional blade carrier, 3x blade bearing and stable shaft with additional wrap protection plate on the transition from blade holder to blade carrier
- AS cross-blade system with mulching blade at a 90-degree angle – upper blade additionally curved upward
- Special blade with gear reduction of 2:1 (engine / blade shaft) for even more torque on the blade
- AS 73 additionally with 2 blade speeds for every application



- ✓ Professional cross-blade system with triple bearing arrangement
- ✓ The AS cross-blade system chops reliably for impressive mowing and mulching results.
- ✓ High mowing speed and clean cutting pattern even in low grass
- ✓ Less noise, thanks to optimised, lower blade speed with high torque

# AS 65 / AS 73 – mower deck

## Blade system / grass placement 2/2



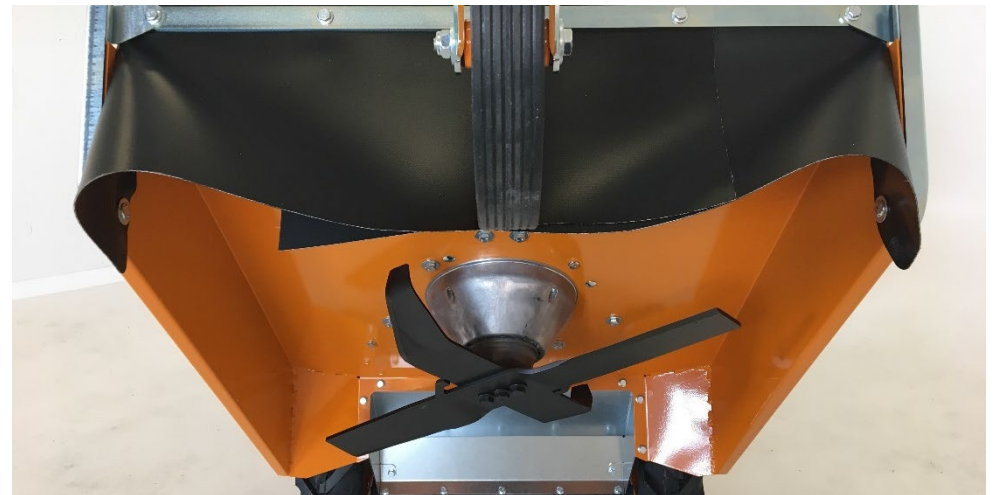
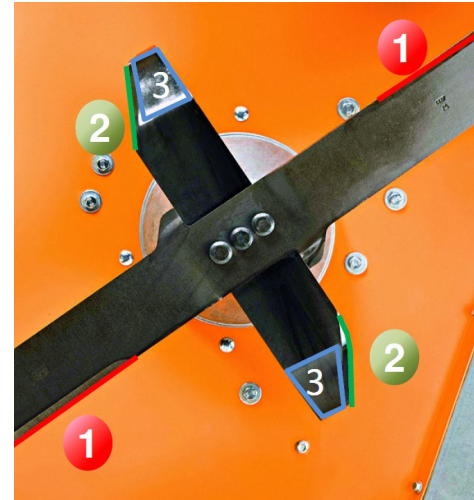
Cross-blade system with multiple cutting edges achieves ideal mulching result, even with high grass:

Edge 1: Cuts the grass

Edge 2: Defibrates the cuttings

Area 3: Generates air flow to clear out the mow unit bonnet

- Mowing deck 2 mm thick, enclosed from 3 sides
- Side skids for driving over hilltops



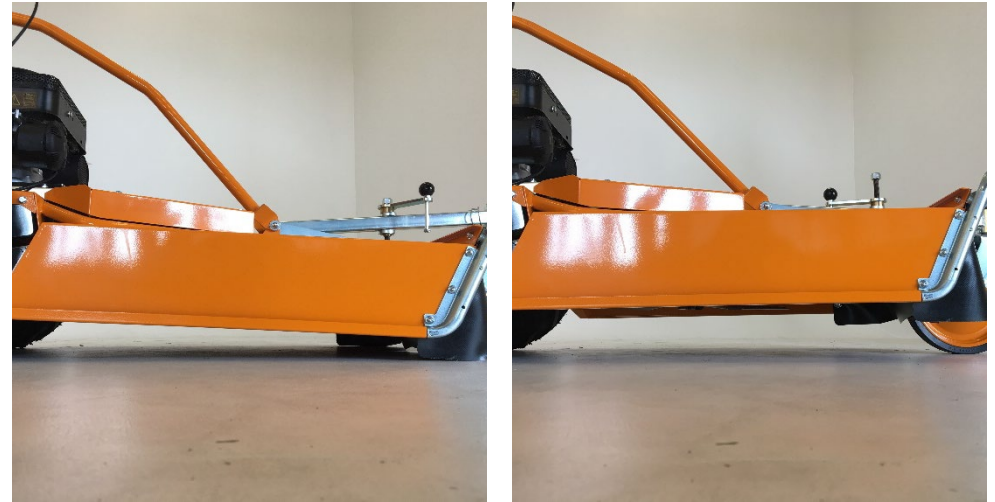
- ✓ Thanks to the cross-blade system the grass is cut several times and optimally mulched.
- ✓ The mulched grass is cleanly deposited between the wheels – no driving over cuttings = optimal traction
- ✓ High stability of the mow unit bonnet and additional protection if the ground is uneven.

# AS 65 / AS 73 – mower deck

## Suspension / height adjustment 1/2



- Easy central height adjustment
- Cutting height adjustment, variable (50-100 mm)
- Ease of motion adjustment through special kinematics
- The mower deck is supported via the drive frame and the pivot wheel
- Protective cloths front and rear ensure a high level of protection against rock impact



- ✓ Easy, and above all, toolless height adjustment
- ✓ Minimal grass compaction with a central and very narrow pivot wheel in the front





# AS 65 / AS 73 – mower deck

## Suspension / height adjustment 2/2

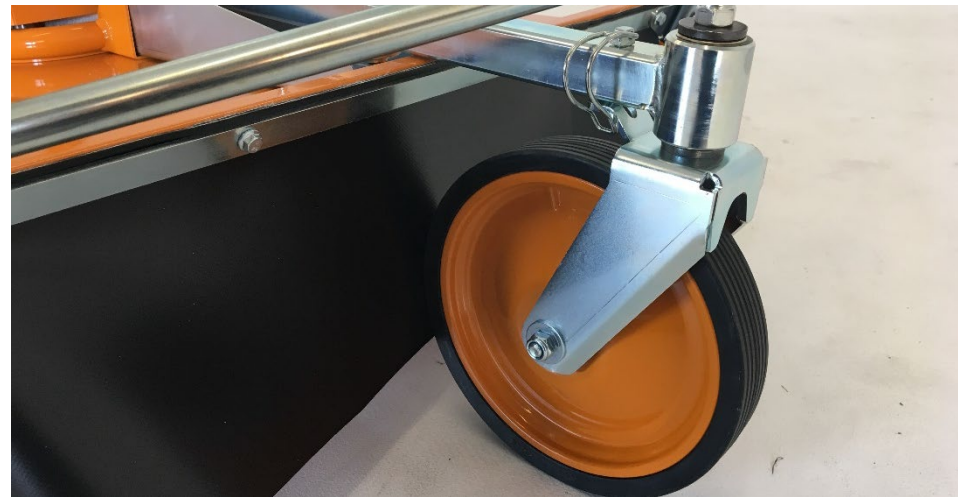


### Drive frame:

- Stable configuration of the drive frame with easy height adjustment
- Large, narrow and pivotable front wheel



- Drive frame with double function as bumper
- Minimal grass compaction through narrow design
- Wheel fork of Hardox material, extremely durable and stable



- Pivot wheel rotates freely: Remove cotter pin.
- Cotter pin can be fastened on the handlebar when pivot wheel is free
- Arrest pivot wheel: Position wheel for straight-ahead movement and secure it with the cotter pin

# AS 65 / AS 73 – mower deck

## Engagement mechanism / safety 1/1



- Engagement via blade clutch lever with additional lock button
- When releasing the blade clutch lever, the blade shaft comes to a standstill within a few seconds
- Device does not move faster downhill and brakes automatically when releasing the operating elements (drive lever) on the steering bar.
- Stone impact guard in the front area.



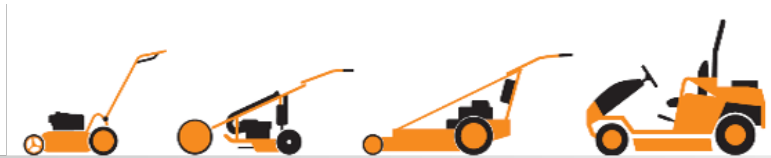
- ✓ Double protection when activating the blade shaft
- ✓ Effective blade brake for blade shut-down in seconds
- ✓ High safety on slopes thanks to automatic parking brake and constant downhill speed
- ✓ Stone impact guard for the best possible safety

# AS 65 / AS 73 – operating elements

Overview

Overview of operating elements

Second blade speed AS 73



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# AS 65 / AS 73 – operating elements

## Overview 1/2



- Optimal adjustment of the steering bar position – lateral adjustment and height adjustment
- V-handlebar offers the most natural grip position, angles and lever ratios are optimal.
- Logical and ergonomic arrangement of all operating elements
- Variable cutting height adjustment on the mower deck
- Second blade speed for AS 73

- ✓ High-level safety and driver protection through ergonomic arrangement of the operating elements
- ✓ Easy and logical handling of the device via a few, intuitively controlled levers
- ✓ Extremely manoeuvrable and safe on steep slopes with differential and brake
- ✓ Second blade speed (AS 73) for even more flexibility and adaptation to different groundcover

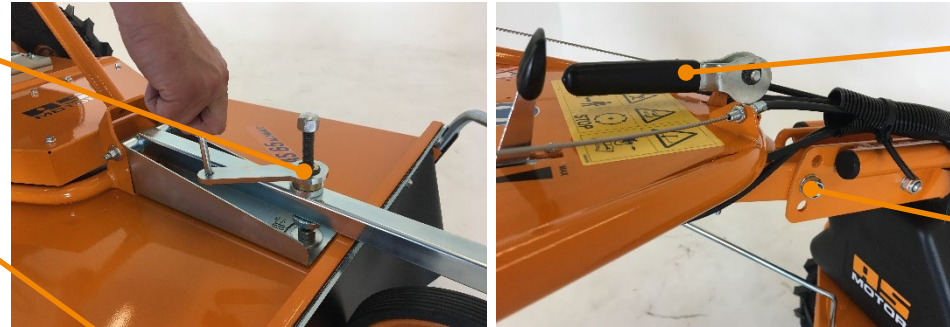


# AS 65 / AS 73 – operating elements

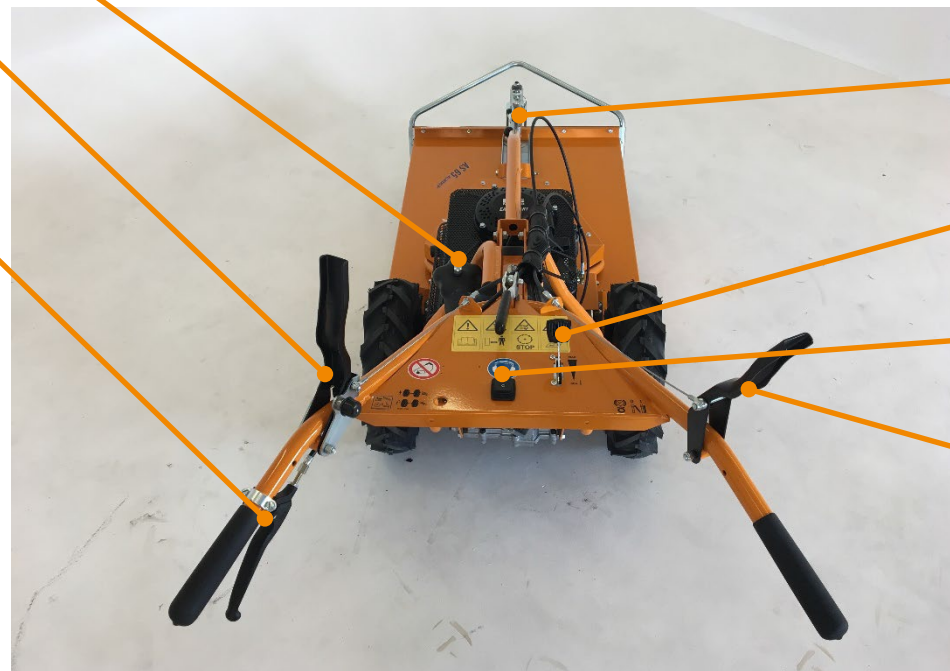
## Overview of operating elements 2/2



- Cutting height adjustment element
- Tank ventilation
- Blade clutch lever with locking button
- Limited-slip differential –  
On = release lever,  
Off = hold lever



- Handlebar lateral adjustment
- Handlebar height adjustment



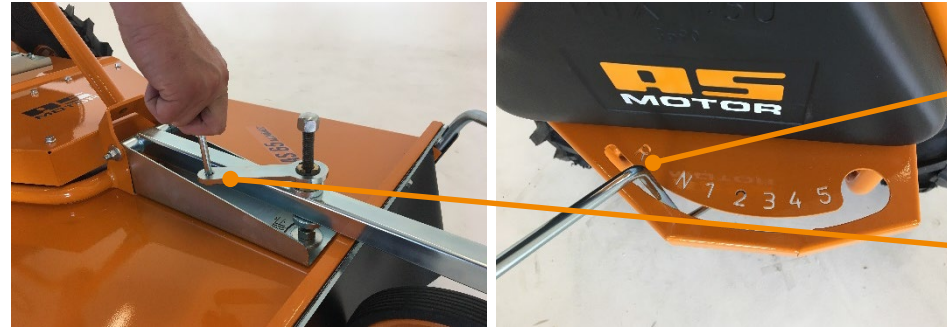
- Arrest – pivot wheel
- Throttle lever
- Engine stop switch
- Drive lever and parking brake

# AS 65 / AS 73 – operating elements



## Second blade speed AS 73 1/1

- Operating principle identical to that of the AS 65
- Additional, second blade speed via blade speed lever:
- Mow high and dense growth at low blade speed (equals high torque).
- Mow less dense and low growth at high blade speed (equals low torque)



- Gear change (R / N / 1-5)
- Cutting height adjustment – front

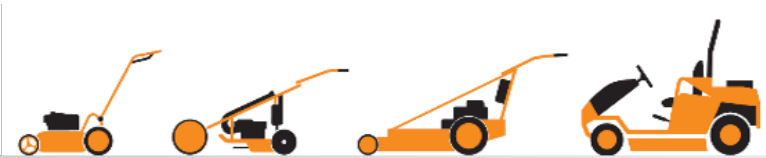


- Drive lever and parking brake
- Throttle lever with choke
- Engine stop switch
- Start button
- Blade clutch lever with locking button
- Limited-slip differential
- Blade speed lever

# AS 65 / AS 73 accessories / technical data

Accessories

Technical data



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# AS 65 / AS 73 – accessories

## Overview 1/3

- AS-Motor offers a variety of accessories for the AS 65 and AS 73 Allmähers
- For the most part, the accessories from AS-Motor are developed and built directly in the plant
- For example, twin wheels, branch deflector, steel hand guard, electric start and much more



- ✓ Individual adaptation and extension of the vehicle to meet the respective requirements
- ✓ 100% custom-tailored for the devices from AS-Motor

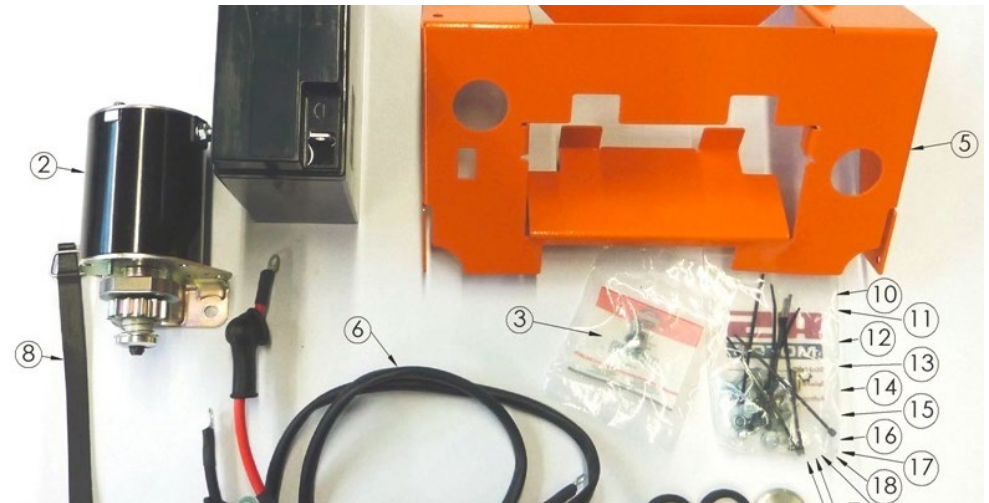


## AS 65 / AS 73 – accessories

### Electric start (AS 65 4T B&S / AS 73) 2/3



- The AS 65 4T B&S and the AS 73 can optionally be equipped with electric start
- The conversion kit must be purchased as an accessory via the Spare Parts organisation, and installed by the dealer
- The following items are included: Battery, starter, ignition lock, fastening material and cabling



- ✓ Increased convenience for easy starting and stopping of the device engine
- ✓ Single-source conversion kit with all necessary parts can be purchased via Parts and More

# AS 65 / AS 73 – accessories

Overview 3/3



Accessories	AS 65 2T ES	AS 65 4T B&S	AS 73 4T B&S
Branch deflector	X	X	X
Twin wheels	X	X	X
Operating hour meter	X	X	X
Steel hand guard set		X	X
Inclinometer	X	X	X
Electric start		X	X
Low-pressure tyres	X	X	series
Steel wheels with hub	X	X	
Grip heating		X	X
Air intake snorkel	X		
Liquide tyre Sealant "Plattfuss-Stop"	X	X	X
AS 2-stroke-oil „Titan 2T“	X		

# AS 65 / AS 73 – technical data

Engine / drive 1/3



Model	AS 65 2T ES	AS 65 4T B&S	AS 73 4T B&S
<b>Engine</b>			
Engine, design	1-cyl., 2-stroke	1-cyl., 4-stroke	1-cyl., 4-stroke
Manufacturer	AS-Motor	Briggs & Stratton	Briggs & Stratton
Type	AS 165	Series 3 Intek	Series 3 Intek
Displacement in cm <sup>3</sup>	165	344	344
Rated power (kW / hp)	4.0 / 5.4	7.6 / 10.3	7.6 / 10.3
Max. power (kW / hp)	4.4 / 6.0	9.7 / 13	9.7 / 13
Engine speed rated capacity in rpm	3800	3300	3300
Starting device	Rope start	Rope start	Rope start
<b>Drive</b>			
Traction drive, type	Rear wheel	Rear wheel	Rear wheel

# AS 65 / AS 73 – technical data

Drive / mower deck / dimensions 2/3



<b>Model</b>	<b>AS 65 2T ES</b>	<b>AS 65 4T B&amp;S</b>	<b>AS 73 4T B&amp;S</b>
Drive, rear	5-speed / 1R	5-speed / 1R	5-speed / 1R
Speed	1.4 - 4.1	1.6 - 5.1	1.6 - 5.1
Forward speed in km/h	Reverse: 1.9	Reverse: 2.4	Reverse 2.4
<b>Mower deck</b>			
Cutting device, type	Cross-blade	Cross-blade	Cross-blade
Cutting width in cm	65	65	73
Cutting height in mm	50 - 100	50 - 100	50 - 100
Number of levels (cutting height in mm/level)	Variable	Variable	Variable
Grass height up to approx. (cm)	130	150	150
<b>Dimensions and weights</b>			
Weight in kg	114	125	135
Operating dimensions L/W/H in cm	220 / 71 / 99	220 / 71 / 99	224 / 79 / 99

# AS 65 / AS 73 – technical data

Fill quantities / noise / vibration 3/3

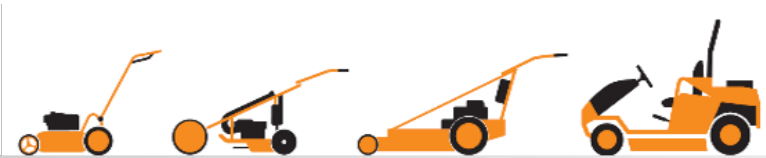


Model	AS 65 2T ES	AS 65 4T B&S	AS 73 4T B&S
<b>Fill quantities</b>			
Fuel tank (litres / type)	5	5	5
Engine oil (litres / type)	---	1.4 / SAE 30	1.4 / SAE 30
<b>Noise level</b>			
Measured sound power level L <sub>wA</sub> (dB in accordance with DIN EN 12733)	101.9	101.0	101.0
Sound power level at the operating station L <sub>pA</sub> (dB in accordance with DIN EN 12733)	91.7	91.0	91.0
Hand-arm vibration in m/s <sup>2</sup>	2.4	3.8	3.8
Measurement uncertainty U in m/s <sup>2</sup>	2.0	2.0	2.0



# AS-Motor Allmäher

Thank you for your attention!



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