

AS-Motor Allmäher

Product Presentation – AS 63



HOCHGRAS PERFORMANCE MADE IN GERMANY

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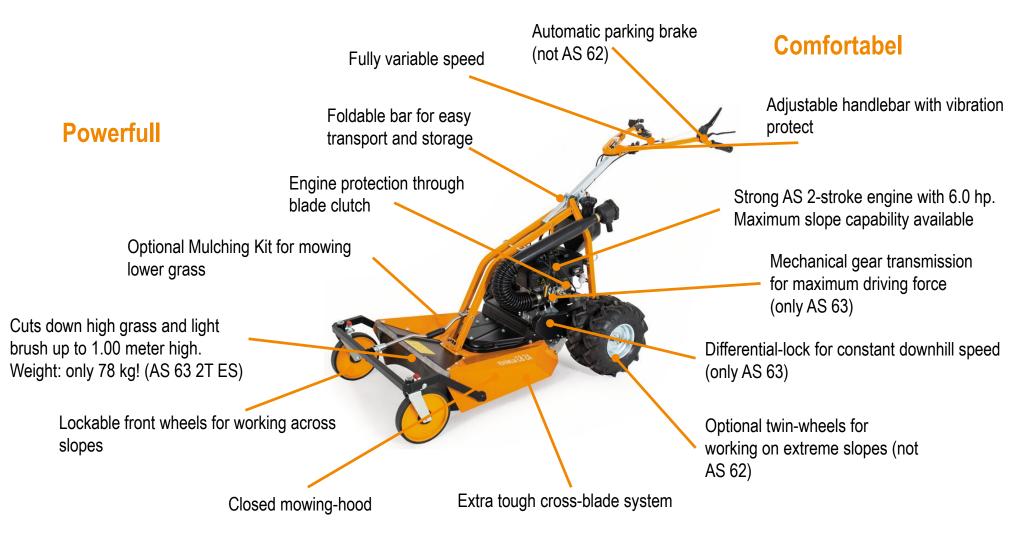
Main features and main arguments Model overview / vehicle structure Application areas / target groups



HOCHGRAS PERFORMANCE MADE IN GERMANY

Main features and main arguments 1/1





Full slope capability

Model overview 1/1

- Light and robust meadow mower in four model variants with different engines:
- AS 62 4T B&S with wheel freewheels for best propulsion with perfect manoeuvrability, ideal for angled, flat mowing areas and high vegetation
- AS 63 2T ES with differential lock, automatic parking brake, reduction gear and 2-stroke engine, ideal for steep slopes and high growths
- AS 63 4T B&S with differential lock, automatic parking brake, reduction gear and 4-stroke engine from Briggs & Stratton, ideal for medium steep slopes and high growth
- AS 63 4T Honda with differential lock, automatic parking brake, reduction gear and 4-stroke engine from Honda, ideal for low steep slopes and medium vegetation





Device structure 1/2

- Stable and lightweight squared tube with double function: Frame and engine protection
- Low total weight: 66 kg (AS 62 4T B&S), 78 kg (AS 63 2T), 74 kg (AS 63 4T B&S) and 82 kg (AS 63 Honda)
- Wheelbarrow principle with V-handlebar and all operating elements ergonomically pivotal
- Folding mono-bar with height adjustment
- Ideal balance between traction drive and mower deck pressure
- Mechanical protection of the engine through the shape of the square tubular frame in the front area.
- Weight optimisation through new technologies in frame construction – square-tube
- Ideally suited for working on slopes through low weight and 2-stroke engine with EasyStart
- Extreme suitable for working on slopes, thanks to perfect geometry



Device structure 2/2



- Engine protection through separation of engine and blade shaft
- 78 kg total weight (AS 63 2T ES) accompanied by 6.0 hp engine power.
- Low power-to-weight ratio of 13 kg/hp
- Less weight means less downhill push, slipping is optimally avoided
- Incredible approach angle in the rear thanks to the projecting tyres of the rear axle
- ✓ No impact damage on the crankshaft of the engine.
- ✓ Weight-optimised with ample power reserves.
- Terrain-optimized geometry, low centre of gravity for maximum cross-country mobility and safety.
- Low total weight for working slopes
- Steep approach angle enables driving onto steep slopes without high-centring



Application areas 1/1



AS PRODUCTS	Maximum work rate in m²/hour (V _{Max} x cutting width)	Maximum undergrowth height in cm
ALLMÄHER®		
AS 62 4T B&S	2.300	90
AS 63 2T ES	2.400	100
AS 63 4T Honda and B&S	2.300	80 (B&S 90)

AS PRODUCTS	Gradient suitability Level > rising > very steep	Professional use	Mowing deck	Drive
ALLMÄHER®				
AS 62 4T B&S			Mulching with rear discharge	Rear wheel drive Vario
AS 63 2T ES			Mulching with rear discharge	Rear wheel drive Vario
AS 63 4T Honda and B&S			Mulching with rear discharge	Rear wheel drive Vario

Suitable

Recommended



Main features and main arguments Engine technology, air filter / engine oil Fuel tank



HOCHGRAS PERFORMANCE MADE IN GERMANY

Overview 1/1



- AS 63 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 63 4T B&S, AS 62 4T B&S: Briggs & Stratton 4-stroke 1cylinder OHV engine, 850E Series I/C with 5.1 hp (3.7 kW) 190 ccm displacement, rated power at 3,600 rpm.
- AS 63 Honda: Honda 4-stroke, 1-cylinder OHV engine, 850E Series I/C with 4.3 hp (3.2 kW) 163 ccm displacement, rated power at 3,600 rpm.
- ✓ 3 engine variants adapted to respective requirement
- AS 2-stroke engine for maximum capacity extremely well-suited for working on slopes with high torque and incredible power
- B&S 850E Series: suitable for slopes under some conditions, with slower speed for lower growth
- Honda: suitable for slopes under some conditions, with slower speed for lower growth





Engine technology (AS 63 2T ES) 1/4

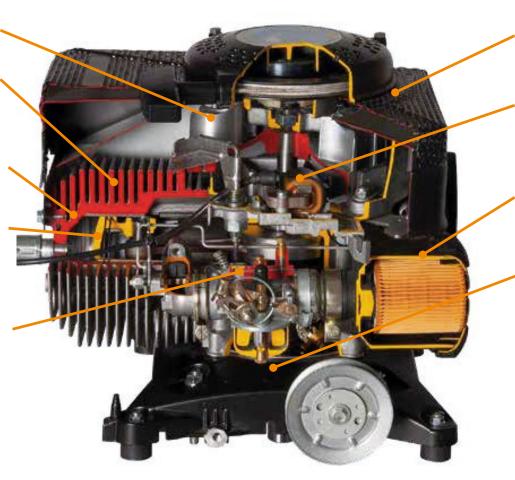


- AS 63 2T ES: AS-Motor 2-stroke, 1-cylinder ES engine with 5.4 hp (4.0 kW), max. power at 3800 rpm.
- Latest generation of the AS-Motor 2-stroke engine with innovative "EasyStart" function
- Pull forces required on the starter pull cord have been reduced by as much as 60 % through decompression bore
- 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



Engine technology (AS 63 2T ES) 2/4

- 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

Engine technology (AS 63 4T B&S & AS 62 4T B&S) 3/4



- AS 63 4T B&S and AS 62 4T B&S: Briggs & Stratton 4stroke 1-cylinder OHV engine, 850E Series I/C with 5.1 hp (3.7 kW) 190 ccm displacement, rated power at 3.600 rpm.
- Grey cast iron cylinder sleeve for long service life and minimal oil consumption and OHV (OverHead Valve) technology
- Magnetron
 e electronic ignition system + ReadyStart
- Performance muffler
- OHV optimised performance, long engine service life and low fuel consumption
- Magnetron

 electronic ignition system ensures easy start and it is maintenance-free
- Improved acoustic quality and reduced noise level
- Enables easy starting





Engine technology (AS 63 4T Honda) 4/4



- AS 63 Honda: Honda 4-stroke, 1-cylinder OHV engine, 850E Series I/C with 4.3 hp (3.2 kW) 163 ccm displacement, rated power at 3,600 rpm.
- Grey cast iron cylinder sleeve for long service life and minimal oil consumption and OHV (OverHead Valve) technology
- Mass balance with anti-vibration system
- High torque relative to the displacement
- Electronic ignition system
- OHV optimised performance, long engine service life and low fuel consumption
- Easy start thanks to an automatic decompression system
- Excellent performance through powerful torque
- Extremely pleasant operating experience with minimal vibration

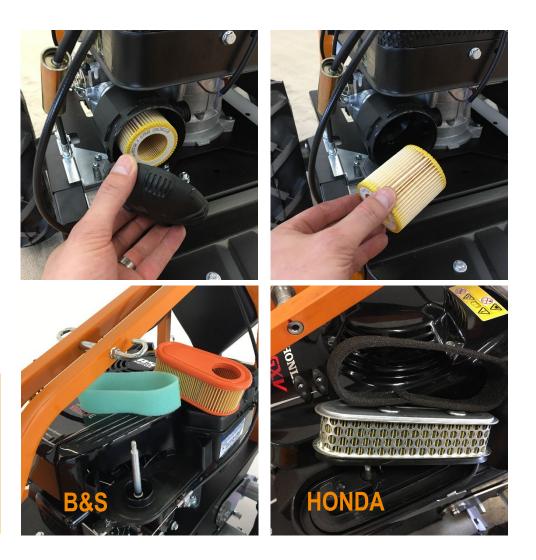




Air filter / engine oil 1/1

- AS-Motor 2-stroke ES: Special filter for cleaner intake air with outstanding accessibility and engine lubrication via the fuel mixture
- B&S 850E: Paper air filter (oval) with foam pre-filter offers high-level protection against contaminated air in the engine and high oil filler neck for easy maintenance
- Honda GXV160: Paper air filter (oval) with foam pre-filter offers high-level protection against contaminated air in the engine and high oil filler neck for easy maintenance
- B&S / Honda 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 and Honda with different oils for different requirements

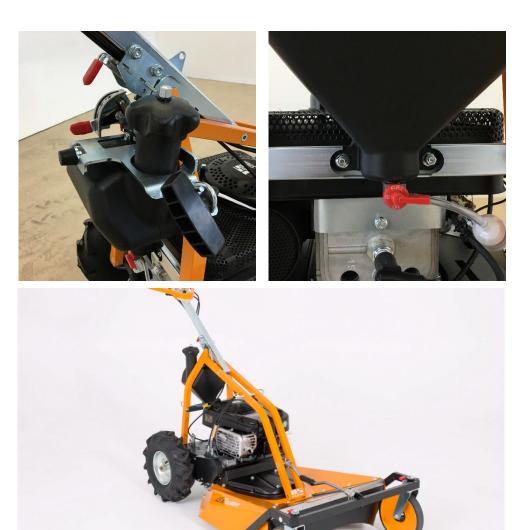




Fuel tank 1/1



- 3-litre tank capacity for AS 63 (AS 2-stroke engine with 2stroke mixture; B&S & Honda with regular petrol) – the engine's own tank for B&S and Honda are not connected, AS 62 with 1.0 litre tank volume
- Triangular shape and withdrawal at the lowest point of the tank with reserve function (reserve position)
- Positioning of the tank in the rear for ideal weight distribution
- Stable tank support with holder for starter rope and rubber element for the maintenance position (only AS 63)
- Clear separation of tank and engine (only AS 63)
- ✓ Large tank volume for long deployments
- Special shape and reserve function 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 62 / AS 63 - drive

Main features and main arguments Rear axle, transmission / Variomat Limited slip differential



HOCHGRAS PERFORMANCE MADE IN GERMANY

Overview 1/1



- Rear axle with variable drive, limited slip differential, parking brake, central height adjustment and AS (Acker-Stollen English field studs) inflatable tyres
- Reduction transmission with gear ratio of 1:13.44 for extreme uphill capacity and performance.
- 100% limited-slip differential at activated traction drive The differential effect is open without traction drive and enables better handling.
- Stable rear axle configuration with differential for reliable propulsion, even on difficult terrain.
- Permanent traction for reliable propulsion
- ✓ For mowing tasks on difficult, steep terrain
- Ideal tyres, even for wet substrates
- Force transmission via reduction gearing for high torques and minimal operating forces





Rear axle 1/1



- Rear axle with high ground clearance, variable drive, limited slip differential and central height adjustment
- Tyre variants: AS (Acker-Stollen, English field studs) inflatable tyres 3.50 6 with optional twin tyres
- The wheels (factory standard) run inside the mowing width
- Quick-change system for the factory standard wheels, as well as the optional twin tyres via hinged pins and push-on sleeves
- ✓ Stable configuration of the rear axle
- ✓ Permanent traction for reliable propulsion
- ✓ For mowing tasks on difficult, steep terrain
- Ideal tyres, even for wet substrates
- Quick-change system enables fast upgrade to twin tyres for extreme slopes





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Transmission / Variomat 1/2

- Transmission with upstream stepless Variomatic and speed adjustment while working
- Speeds: Forward: 2.0 4.0 km/h (AS 63 2T ES) and 1.8 3.8 km/h (AS 63 4T B&S / AS 63 4T Honda)
- Reduction transmission with gear ratio of 1:13.44 for extreme uphill capacity and performance.
- Maintenance-free closed transmission housing
- Enables comfortable driving, as well as variable \checkmark adjustment between slow or fast speed.
- Reduction transmission with integrated differential. \checkmark
- The encapsulated reduction transmission offers protection \checkmark against contamination. A clear advantage over chain drive.
- Controlled downhill speed. \checkmark







Transmission / Variomat 2/2

Function and force transmission

- 1. Drive via engine belt pulley (Variomatic) to the belt pulley of the angle gear unit, input side.
- 2. Within the angle gear via worm gear drive to the belt pulley, output side.
- 3. Via belt drive with the tensioning pulley to the tensioning lever, activated through drive lever.
- 4. Tensioning of the V-belt causes the slaving of the outer and inner part of the two-part belt pulley to the gears of the reduction transmission for the rear axle
- Force transmission via reduction gearing for high torques and minimal operating forces
- With traction drive engaged the machine drives downhill at the preselected drive speed, without accelerating.



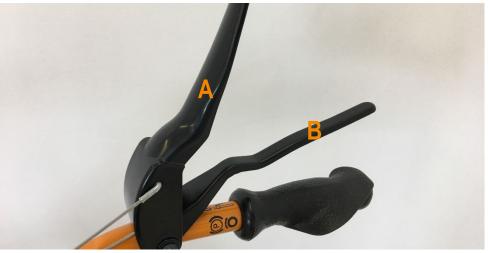


Differential / brake 1/1



- 100% limited slip differential at activated traction drive the differential effect is open without traction drive
- Separate brake lever for optimal manoeuvrability
- By coupling in the belt pulley via the drive lever the rigid connection two drive-trains occurs (differential)
- Due to the free-running of the gears on the intermediate shaft, a contra effect is possible in push mode.
- ✓ Wheels will only be locked under load, i.e. in drive mode.
- ✓ Separate activation of the levers A + B:
- Brake lever B releases the parking brake the mower can be navigated in all directions without wheel drive.
- If you press drive lever A to the bar the parking brake is released and the V-belt tensions the two-part belt pulley.



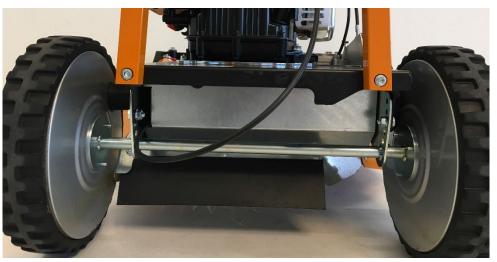


AS 62 - drive

Overview 1/1



- Rear axle with variable drive and freewheels for easy manoeuvring
- Glass-fibre reinforced wheels with 30 cm diameter and nonslip profile for optimum propulsion and long life
- Drive of both wheels with freewheel when travel drive is activated - Thanks to freewheel in the drive, the AS 62 can be manoeuvred easily and comfortably
- Stable rear axle design with drive of both wheels for reliable propulsion even on uneven terrain
- Permanent traction for reliable propulsion
- High driving force due to transmission ratio





AS 62 - drive

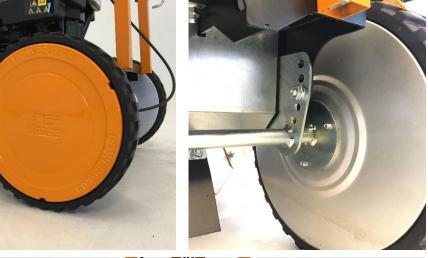
Rear axle 1/1

- Rear axle with high ground clearance, variable drive and drive of both wheels with freewheels
- Tyre variant: Glass-fibre reinforced wheels for long durability with 30 cm diameter and non-slip profile for optimum propulsion
- Fivefold height adjustment of the rear axle

- ✓ Stable rear axle design
- Permanent traction for reliable propulsion
- ✓ For mowing work on uneven, slightly sloping terrain
- ✓ Non-slip profile for best propulsion
- Freewheels for comfortable working









AS 62 - drive

Transmission / Variomat 1/1

- Infinitely variable Variomatic and speed adjustment during operation
- Speeds: Forward: 1.8 3.8 km/h
- Full manoeuvrability despite drive of both wheels thanks to special drive pinion driver geometry
- Dual bearing drive wheels
- Coupling of the travel drive by tensioning the travel drive belt
- ✓ Stepless adjustment between slow and fast speed
- ✓ Convenient manoeuvring despite drive of both wheels
- Low-maintenance drive unit via belt coupling







Main features and main arguments Blade system / grass placement Suspension / height adjustment Engagement mechanism / safety



HOCHGRAS PERFORMANCE MADE IN GERMANY

Overview 1/1

- 61 cm cutting width with professional blade carrier, 3x professional blade bearing 25/30 mm shaft and AS cross-blade
- Closed mower deck with conical bonnet shape and central grass placement between the wheels
- Running edge offers additional protection if the ground is uneven.
- Double / axle height adjustment for optimal cutting pattern and mulch setting
- Safety via mechanical shut-down
- Professional system with a design comparable that of the AS 940 Sherpa. Double bearing 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





Blade system / grass placement 1/2



- 61 cm cutting width with professional blade carrier, 3x professional blade bearing and 25/30 mm shaft
- Additional wrap protection on the transition from blade holder to blade carrier
- AS cross-blade system with mulching blade at a 90-degree angle on two planes (distance 20 mm)
- Special blade, flat shape with engine-blade gear reduction of 1:1.6 for greater torque on the blade
- Professional system with a design comparable that of the AS 940 Sherpa. Double bearing in the lower area.
- 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





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Blade system / grass placement 2/2

- Closed mower deck with conical bonnet shape and central grass placement between the wheels
- Optimal flow of the cuttings to the cross-blade, thanks to the conical, rearward tapering mower deck.
- Maximum stability through reinforced edges and inlay segment.
- Running edge offers additional protection if the ground is uneven.
- Cuttings remain longer in the mow unit bonnet, are discharged to the rear and they remain between the wheels
- ✓ The device does not run over the cuttings ideal traction
- High work rates up to 2400 m²/h and high growth to 100 cm are possible
- High stability and additional protection if the ground is uneven.







Suspension / height adjustment 1/2



- Double height adjustment / height adjustment by axle
- Front cutting height adjustment, variable (50-100 mm)
- Rear cutting height adjustment 4x (50-100 mm) for AS 63,
- Easy movement adjustment through special kinematics in the rear (AS 63) and lubricated motion link with lubricating nipple as indicator of the cutting height on the scale in front
- Mower deck is supported via drive frame and pivot wheels attached outside of the cutting width.
- Double height adjustment enables parallel mowing in all cutting ranges or also further opening of the bonnet in front for optimised mulching result
- Optimal, height adjustment of the mower deck by axle horizontal adjustment of the cross blade in all cutting heights is possible
- Less grass compaction with 4 wheels, strips are not formed in the middle



Suspension / height adjustment 2/2

Drive frame:

- Wrap protection element with conical shape, as well as pivoting and locking front wheels.
- Large, pivoting front wheels for optimal drive manoeuvring (220 mm Ø)
- Newly developed lightweight material for high flexibility and impact resistance







- Drive frame with double function as bumper
- Minimal grass compaction through narrow design
- Wheel fork of Hardox material, extremely durable and stable
- Release pivot wheel: Turn lever out of the guide
- Arrest pivot wheel: Place wheel straight and turn lever into the guide

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 7 seconds
- Device does not move faster downhill and brakes automatically when releasing the operating elements on the steering bar (only AS 63)
- 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 (only AS 63)
- Stone impact guard for the best possible safety







Main features and main arguments Overview of operating elements Seat and seat spring package Drive lever and throttle lever



HOCHGRAS PERFORMANCE MADE IN GERMANY

Main features and main arguments 1/2



- Optimal adjustment of the steering bar position lateral adjustment and height adjustment
- Logical and ergonomic arrangement of all operating elements plus Vibration Protect
- Optimally adjustable cutting-height adjustment in front (variable) and rear (4 levels)
- Foldable and adjustable (only AS 63 2T) for ideal cleaning and compact transport
- High-level safety and driver protection through ergonomic arrangement of the operating elements
- Easy and logical operation of all operating elements
- Extremely manoeuvrable and safe on steep slopes with differential and brake (only AS 63)
- Extremely compact transport dimensions with lashing points as standard equipment



Overview of operating elements 2/2



- Steering handlebar lateral adjustment
- Throttle lever with engine
 stop
- Arrest pivot wheel
- Steering handle lateral adjustment
- Blade clutch level with locking button
- Cutting height adjustment rear (only AS 63)



Steering handlebar adjustment and height adjustment 1/1



- Cutting height adjustment front and rear for ideal mowing results
- Lateral adjustment of the steering bar for working on obstructions and convenient use on the slope
- Height adjustment for ergonomic adaptation to the body height of the operator
- Vibration Protect and rubber bearing V-handlebar receptacle reduces vibration to a minimum



- Rear cutting height adjustment in 4 levels (AS 62 with screw)
- Front cutting height adjustment is variable with indicator
- Steering handle lateral adjustment
- Vibration Protect for minimal hand-arm vibrations

Transport eyes and transport position 1/1



- Stable eyes for lashing straps enable easy securing for transport
- Extremely compact transport dimensions
- Steering handle, steering bar and drive frame can be folded in
- Fits in the boot of a car



- Eye for lashing straps on the device frame in the rear
- Eye for lashing straps on
 the device frame in the front
- Device completely folded –
 placed upright on tank support (only AS 63)



AS 62 / AS 63 accessories / technical data

Accessories

Technical data



HOCHGRAS PERFORMANCE MADE IN GERMANY

AS 62 / AS 63 – accessories

Overview 1/3

AS 63 Allmäher



- AS-Motor offers a variety of accessories for the AS 62 and
- For the most part, the accessories from AS-Motor are • developed and built directly in the plant
- For example, twin tyres, snorkel filter (only AS 63), mulch kit and much more

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

AS 62 / AS 63 – accessories

Mulch kit 2/3

- Mulch kit as accessory for AS 62 and AS 63
- Mulch kit in two part, can be mounted without any tools via two high-quality hand screws
- High-quality galvanised sheet steel
- Grass heights up to max. 40 cm

- An even finer cutting pattern and mulching result can be achieved
- Improvement of the cutting pattern and extension of the use possibilities for grass-like areas with lower growth height





AS 62 / AS 63 – accessories

Overview 3/3



Accessories	AS 62 4T B&S	AS 63 2T ES	AS 63 4T B&S	AS 63 Honda
Twin tires		Х	Х	Х
Operating hour meter	Х	Х	Х	Х
Inclinometer	Х	Х	Х	Х
Tank protection and snorkel filter (model year 2016)		Х		
Tank protection (Standard equipment from 2017)			Х	Х
Air intake snorkel (from model year 2017)		Х		
Mulching kit (grass heights up to max. 40 cm)	Х	Х	Х	Х
Liquide tyre Sealant "Plattfuss-Stop"		Х	Х	Х
AS 2-stroke-oil "Titan 2T"		Х		

AS 62 / AS 63 – technical data

Engine / drive 1/3



Model	AS 62 4T B&S	AS 63 2T ES	AS 63 4T B&S	AS 63 Honda
Engine				
Engine, design	1 cyl. – 4 Takt	1 cyl. 2-stroke	1 cyl. 4-stroke	1 cyl. 4-stroke
Manufacturer	Briggs & Stratton	AS-Motor	Briggs & Stratton	Honda
Туре	850E-Series I/C	AS 165	850E-Series I/C	GXV 160
Displacement in cm ³	190	165	190	163
Rated power (kW / hp)	3,7 / 5,1	4,0 / 5,4	3.7 / 5.1	3.2 / 4.3
Max. power (kW / hp)	4,1 / 5,5	4,4 / 6,0	4.1 / 5.5	3.2 / 4.3
Engine speed rated capacity in rpm	3600	3800	3600	3600
Starting device	Rope start	Rope start	Rope start	Rope start
Drive				
Traction drive, type	Rear wheel	Rear wheel	Rear wheel	Rear wheel

AS 62 / AS 63 – technical data

Drive / mower deck / dimensions 2/3



Model	AS 62 4T B&S	AS 63 2T ES	AS 63 4T B&S	AS 63 Honda
Drive, rear	Vario	Vario	Vario	Vario
Speed Forward speed in km/h	1.8 – 3.8	2.0 - 4.0	1.8 - 3.8	1.8 - 3.8
Mower deck				
Cutting device, type	Cross-blade	Cross-blade	Cross-blade	Cross-blade
Cutting width in cm	61	61	61	61
Cutting height in mm	50 – 100	50 - 100	50 - 100	50 - 100
Number of levels (cutting height in mm/level)	Front variable Rear 4 levels (50, 65, 80, 100)			
Grass height up to approx. (cm)	90	100	90	80
Dimensions and weights				
Weight in kg	66	78	74	82
Operating dimensions L/W/H in cm	191 / 70 / 99	191 / 70 / 99	191 / 70 / 99	191 / 70 / 99

AS 63 – technical data

Fill quantities / noise / vibration 3/3



Model	AS 62 4T B&S	AS 63 2T ES	AS 63 4T B&S	AS 63 Honda
Fill quantities				
Fuel tank (litres)	1.2	3	3	3
Engine oil (litres)	0.65		0.65	0.7
Noise level				
Measured sound power level LwA (dB in accordance with DIN EN 12733)	95.0	102.2	94.9	96.1
Sound power level at the operating station LpA (dB in accordance with DIN EN 12733)	84.2	90.3	82.8	87.3
Measurement uncertainty k (dB (A))	3.0	3.0	3.0	3.0
Hand-arm vibration in m/s ²	4.2	3.1	3.0	2.7
Measurement uncertainty U in m/s²	2.0	2.0	2.0	2.0



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Thank you for your attention!



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