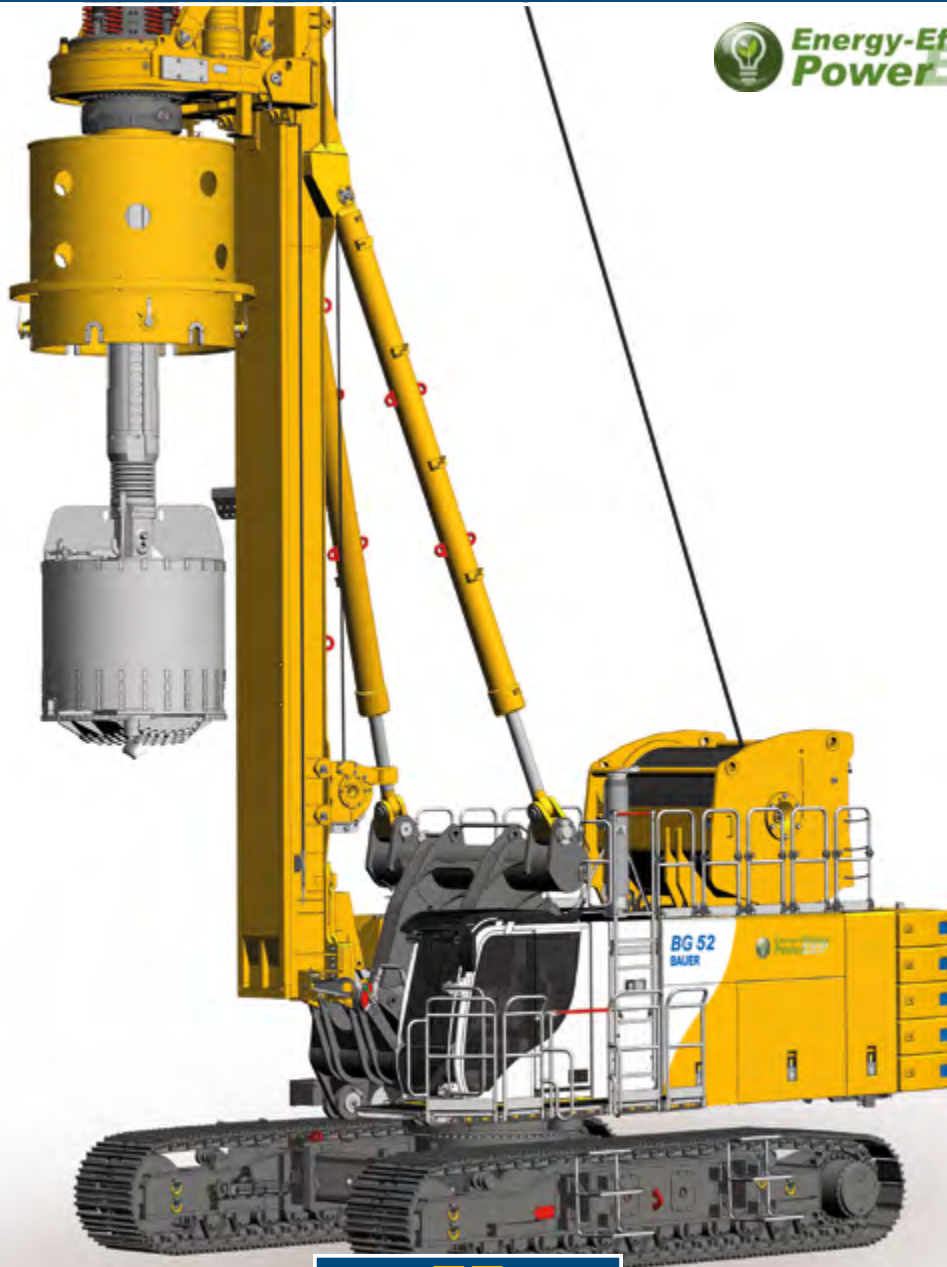


BAUER BG 52

Drilling Rig Base Carrier BT 160

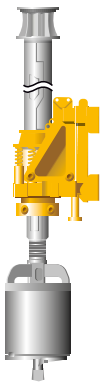
KellyLine



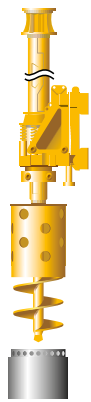
BAUER Drilling Rigs KellyLine

*Perfection is achieved
when there is nothing left to take away.* Antoine de Saint-Exupéry

You are drilling uncased deep boreholes stabilized by drilling fluid, or cased boreholes either with installing casings by the rotary drive or by a hydraulic casing oscillator? If Kelly drilling is your task, then the drilling rig KellyLine is your solution. The machines of the KellyLine are specifically adapted to no other purpose than Kelly drilling - and that perfectly.



Kelly Drilling

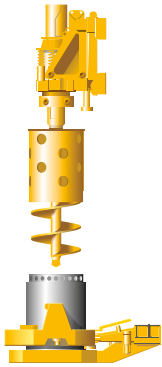


**Cased Kelly
Drilling**



The Drilling Rig BG 52 KellyLine (BT 160)

Max. drilling diameter: 3,100 mm
Max. drilling depth: 125 m
Max. torque: 550 kNm
Max. height: 35.7 m
Engine: Volvo TAD/TWD 16 565 / 585 kW

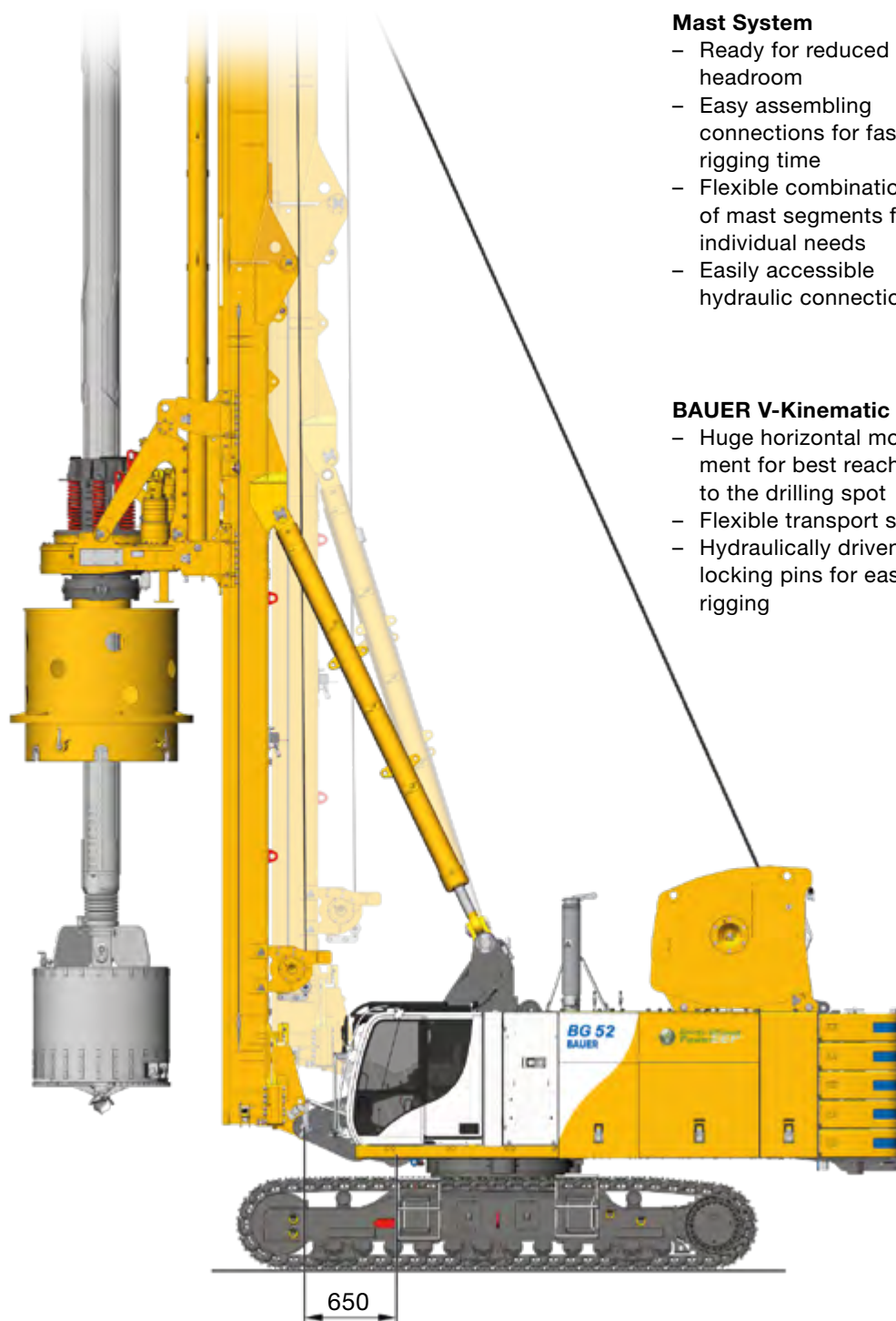


Cased Kelly Drilling
Installation with Oscillator



Rotary Drive

- Very robust rotary head
- BAUER Kelly damping system



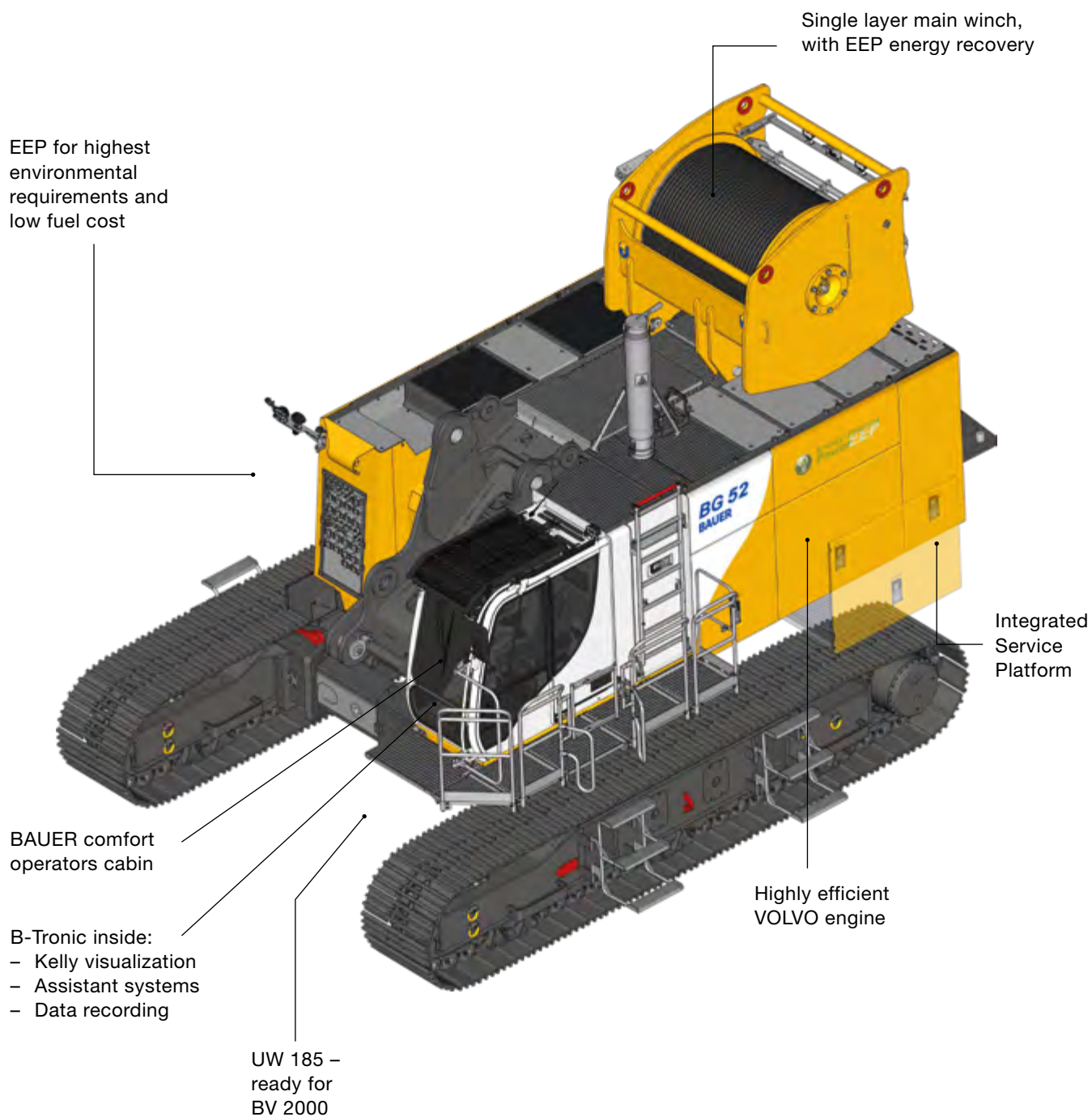
Mast System

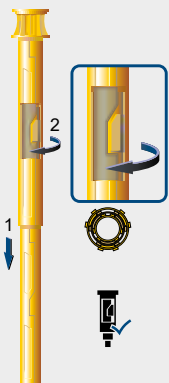
- Ready for reduced headroom
- Easy assembling connections for fast rigging time
- Flexible combination of mast segments for individual needs
- Easily accessible hydraulic connections

BAUER V-Kinematic

- Huge horizontal movement for best reach to the drilling spot
- Flexible transport system
- Hydraulically driven locking pins for easy rigging

The BT 160 base carrier





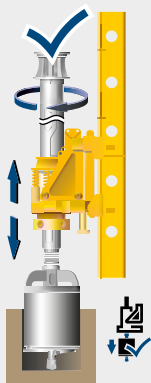
Kelly Visualization

Kelly visualization makes working with the Kelly bar intuitive and transparent. It displays the locking recesses, the Kelly sections, the distance to the next section, and the spring travel – all in real time. The rapid approach of the locking position results in a significantly enhanced drilling performance. In addition, the wear on the Kelly bar and the drive keys is considerably reduced.



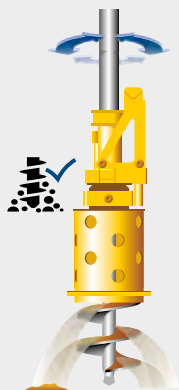
Adaptive Kelly Speed Assistant

The Adaptive Kelly speed assistant takes over the extension and retraction of the Kelly bar almost automatically. It independently reduces the speed at the segment transitions, protects the equipment from damage, minimizes wear, and lowers noise emissions.



Kelly Drilling Assistant

The Kelly Drilling Assistant maintains a constant crowd force and Kelly drive rotation speed, ensuring consistent drilling progress. Drilling parameters can be adjusted flexibly even during automated drilling, providing increased drilling performance while enabling hands-free operation and reducing operator workload.



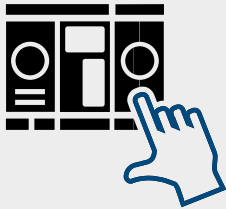
Bi-Directional Spoil Discharge Assistant

The Bi-Directional Spoil Discharge Assistant automatically empties the drilling tool by means of an alternating, shock-like rotational movement of the rotary drive – quickly and efficiently. The discharge frequency can be adjusted continuously, ensuring thorough tool cleaning and smooth, uninterrupted operation.

B-Tronic

The BAUER B-Tronic system allows completion of construction tasks in a reliable and accurate manner, even under extreme operating conditions.

- The high-resolution touchscreen display ensures excellent user-friendliness.
- The display can be optimally adapted to the operating situation and the amount of light present by changing the brightness level, the color scheme and the day/night mode.
- The main parameters such as pump pressure, torque and drilling depths can be viewed at a glance.



Assist!

- Kelly visualization
- Kelly drilling assistant
- Spoil discharge assistant
- Adaptive Kelly speed assistant (optional)



Operate!

- B-Tronic display
- Remote control for rigging process
- Operators cabin with streamline concept



Manage!

WEB BGM online portal:

- Fleet management system
- Fuel consumption recording
- Production data recording



- Reduction of fuel consumption by up to 30%
- Increased productivity through improved efficiency
- Significantly reduced noise levels
- Tried and proven suitability for practical application
- Optimized parallel operation of main and auxiliary consumers

Base carrier

Standard

- Removable counterweight
- Walkway at the side and in front of the cabin
- Cameras for rear view and main winch monitoring
- BAUER comfort operators cab (FOPS compliant)
- Air conditioning system
- Comfort handling package
- Central Lubrication System
- Integrated service platform
- Remote Control Basic
- Hydraulic locking device for support trestle

Optional

- Air compressor
- Generator
- Arctic kit
- Cab space heater with automatic timer
- Foldable guard rails on top of upper carriage
- Quick-release couplings for removable crawler side frames

BG attachment

Standard

- Crowd speed fast and slow mode
- Swivel for main rope
- Pivoted anchor point for main rope and auxiliary rope
- Transport supports for upper and lower mast sections
- Mast extension 5.4 m
- Main winch with hydraulically operated freewheeling and single-layer rope operation

Optional

- Swivel for auxiliary rope
- Mast extension 7.7 m
- Upper Kelly guide
- Add-on kit for casing oscillator usage up to BV 2000
- Add-on kit for casing oscillator usage, enabling casing diameter of up to 2,500 mm
- Reduced Headroom package

KDK rotary drive

Standard

- Integrated Kelly damping system
- Rotary drive KDK 550 S multi gear drive
- Quick-release couplers on hydraulic hoses
- Cardanic joint
- Kelly drive adapter outer Kelly Tube 559 mm

Optional

- Kelly drive adapter outer Kelly Tube 470/640/720 mm

Measuring and control equipment

Standard

- BAUER B-Tronic
- Automatic mast alignment
- Hydraulic load sensing on auxiliary winch
- Kelly visualisation

Optional

- Electronic load sensing on auxiliary rope
- Bauer Enhanced CAN Interface (BECI)
- Adaptive Kelly speed assistant

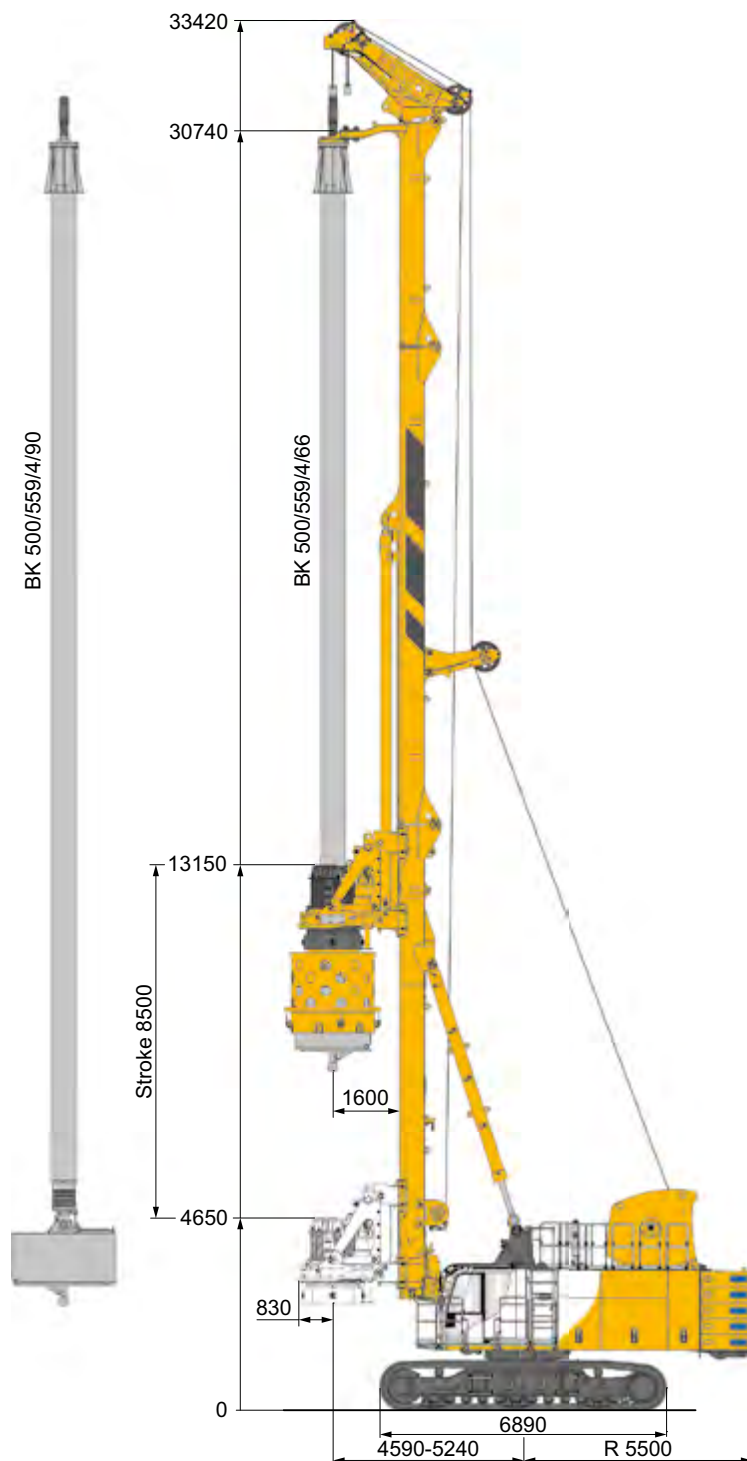
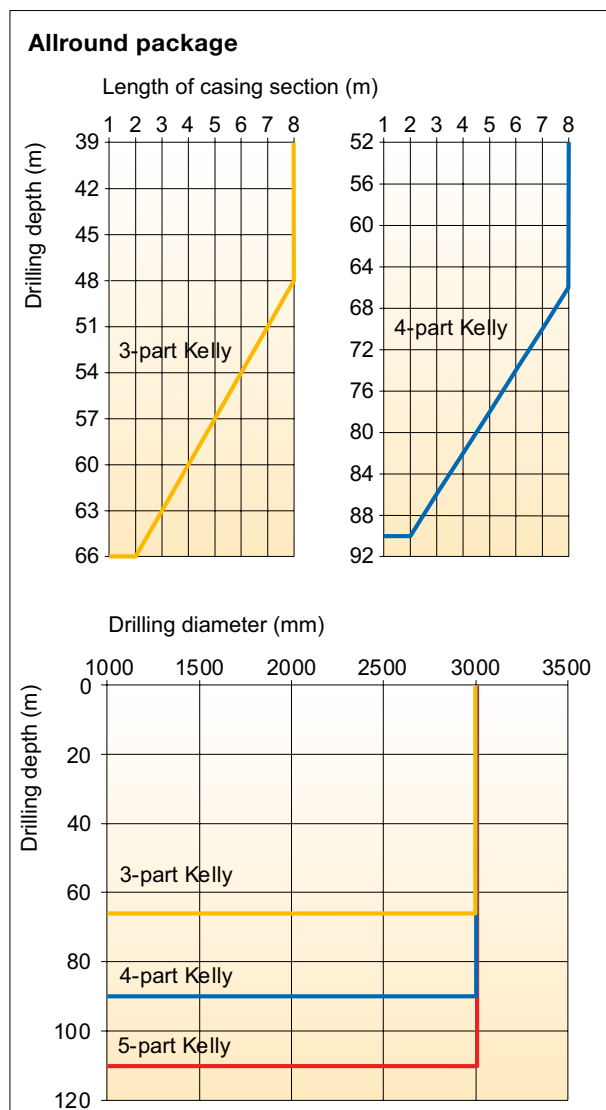
Rotary drive		KDK 550 S
Torque (nominal) at 350 bar		550 kNm
Speed of rotation (max.)		47 rpm
Crowd Cylinder System		
Stroke of sledge		8,500 mm
Crowd force push effective / nominal		407 kN / 442 kN
Crowd force pull effective / nominal		407 kN / 442 kN
Crowd force pull with boost effective / nominal		602 kN / 658 kN
Speed (down / up)		5.2 / 7.3 m/min
Fast speed (down / up)		17 / 21 m/min
Main winch		Single-layer
Winch classification		M6 / L3 / T5
Single line pull effective / nominal		452 kN / 574 kN
Rope diameter		40 mm
Line speed max.		65 m/min
Auxiliary winch (selectable)		
Single line pull effective / nominal		100 kN / 127 kN
Rope diameter		20 mm
Line speed max.		55 m/min
Base carrier (EEP)		BT 160
Engine	Volvo TAD 16	Volvo TWD 16
Rated output ISO 3046-1	565 kW @ 1,700 rpm	585 kW @ 1,700 rpm
Engine conforms to	UN ECE R96*	EU Stage V EPA / CARB Tier 4 final
Diesel tank / AdBlue tank capacity	1015 l / -	1015 l / 160 l
Sound pressure level in cabin (EN 16228, Annex B)		80 dB (A)
Sound power level (2000/14/EG and EN 16228, Annex B)		115 dB (A)
Hydraulic pressure		350 bar
Hydraulic oil tank capacity		1370 l
Flow rates		3 x 440 + 1 x 565 + 1 x 330 l/min
Undercarriage		UW 185
Crawler type		B8
Traction force effective / nominal		883 kN / 1038 kN

Applications – Recommended Rig Configurations				
	Allround	Allround – BV	Deep Drilling	Reduced Headroom
Counterweight	26.4 t	26.4 t	31.2 t	without
Mast extension	5.4 m	5.4 m	7.7 t	without upper mast
Operating weight *	166 t	166 t	174 t	119 t
Max. Kelly bar length ("A")	26.1 m	26.1 m	28.4 m	8.15 m
Max. depth x diameter	110 m x 3.0 m	90 m x 2.5 m	120 m x 2,8 m 115 m x 3,0 m	20 m x 3.0 m

* without Kelly, tool and casing oscillator

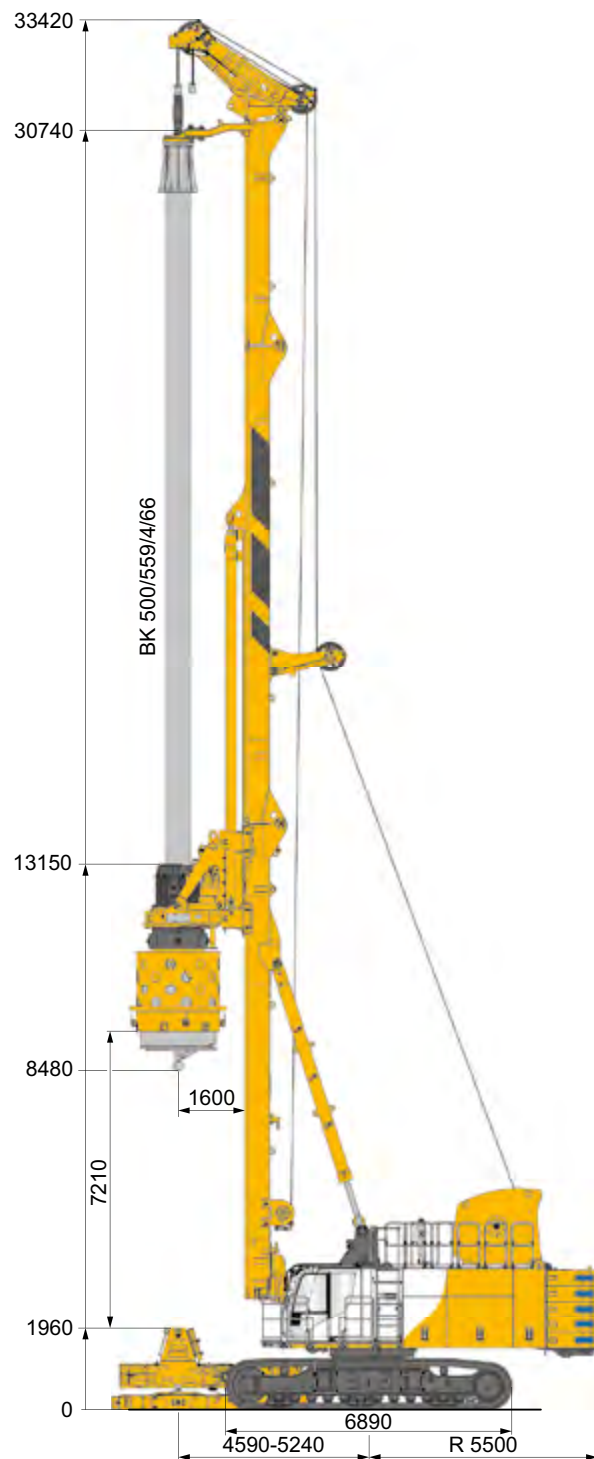
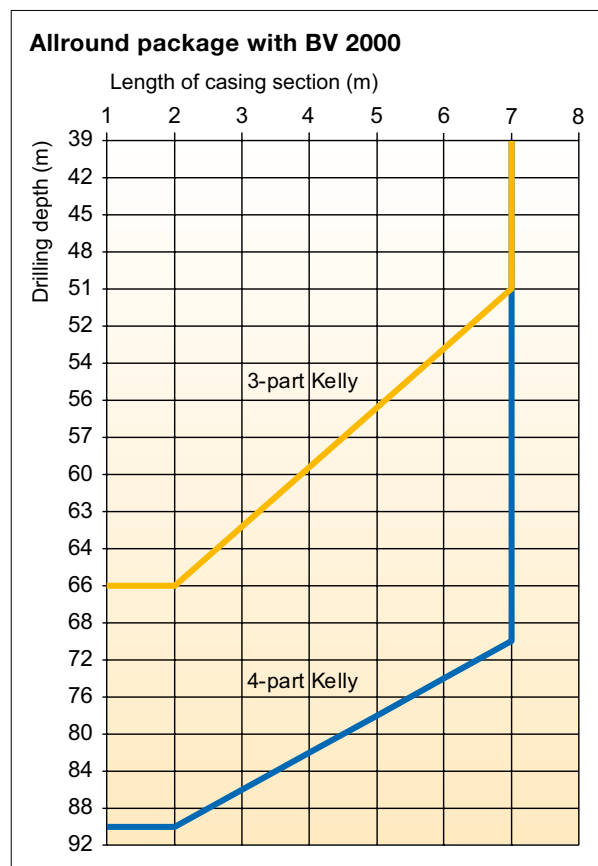
Drill axis	1,600 mm
Counterweight	26.4 t
Mast extension	5.4 m
Operating weight*	166 t
Horizontal reach	650 mm
Cylinder stroke	8,500 mm
Max. Kelly bar length ("A")	26.1 m
Max. depth x diameter	110 m x 3.0 m

* incl. Kelly BK 500/559/4/66, without tool / casing drive adapter



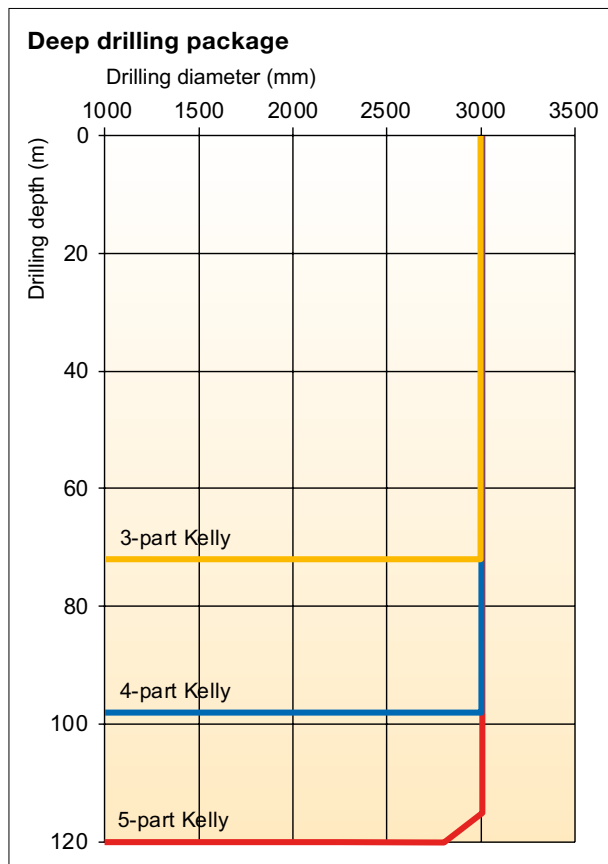
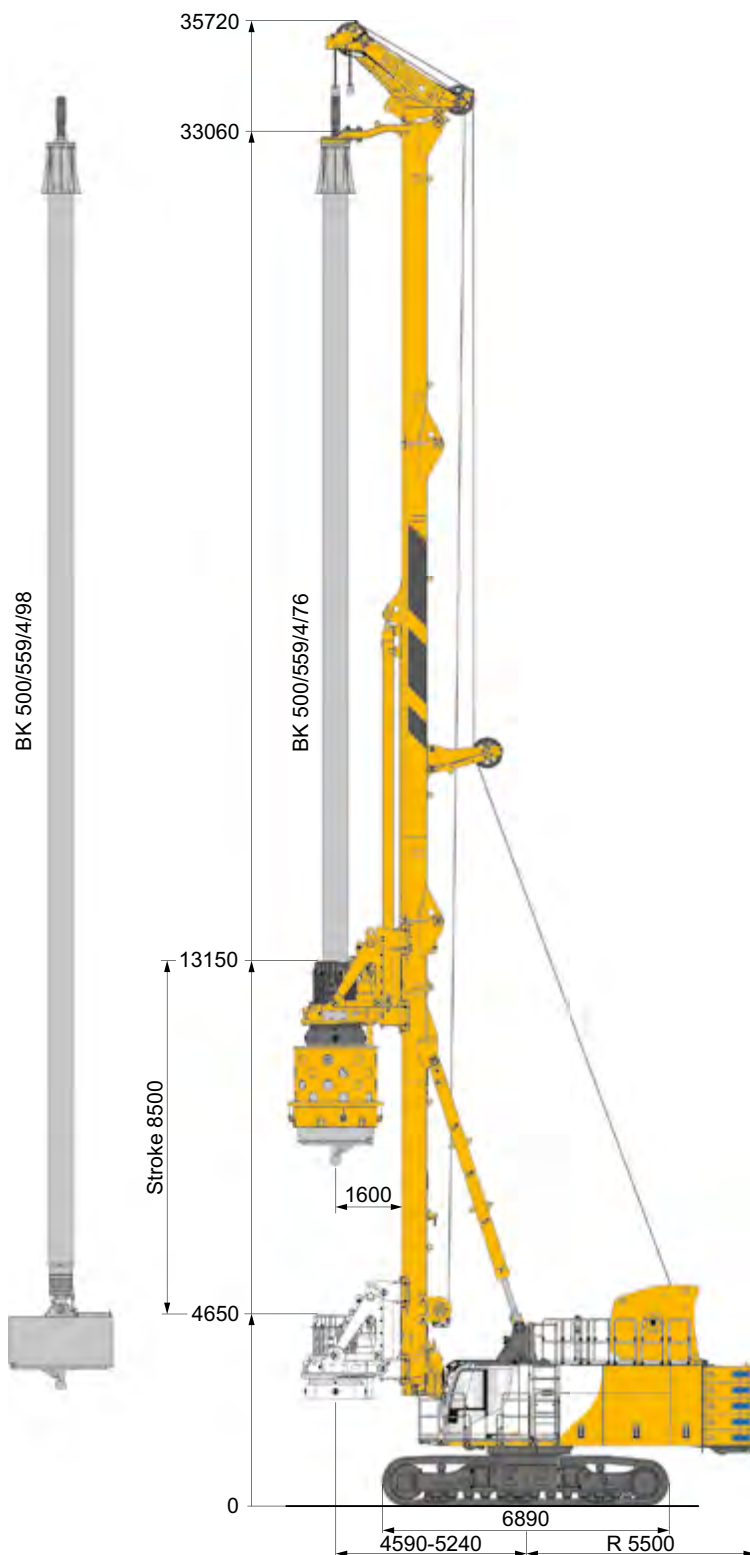
Drill axis	1,600 mm
Counterweight	26.4 t
Mast extension	5.4 m
Operating weight*	166 t
Horizontal reach	650 mm
Cylinder stroke	8,500 mm
Max. Kelly bar length ("A")	26.1 m
Max. depth x diameter	90 m x 2.5 m
Casing Oscillator	BV 2000

* incl. Kelly BK 500/559/4/66, without tool, without casing drive adapter, without BV



Drill axis	1,600 mm
Counterweight	31.2 t
Mast extension	7.7 m
Operating weight*	174 t
Horizontal reach	650 mm
Cylinder stroke	8,500 mm
Max. Kelly bar length ("A")	28.4 m
Max. depth x diameter	115 m x 3.0 m
	120 m x 2.8 m

* incl. Kelly BK 500/559/4/76 without tool, without casing drive adapter



Drill axis	1,600 mm
Counterweight	without
Mast extension	without upper mast
Operating weight*	119 t
Horizontal reach	650 mm
Cylinder stroke	5,200 mm
Max. Kelly bar length ("A")	8.15 m
Max. depth x diameter	20 m x 3.0 m

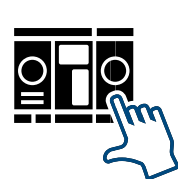
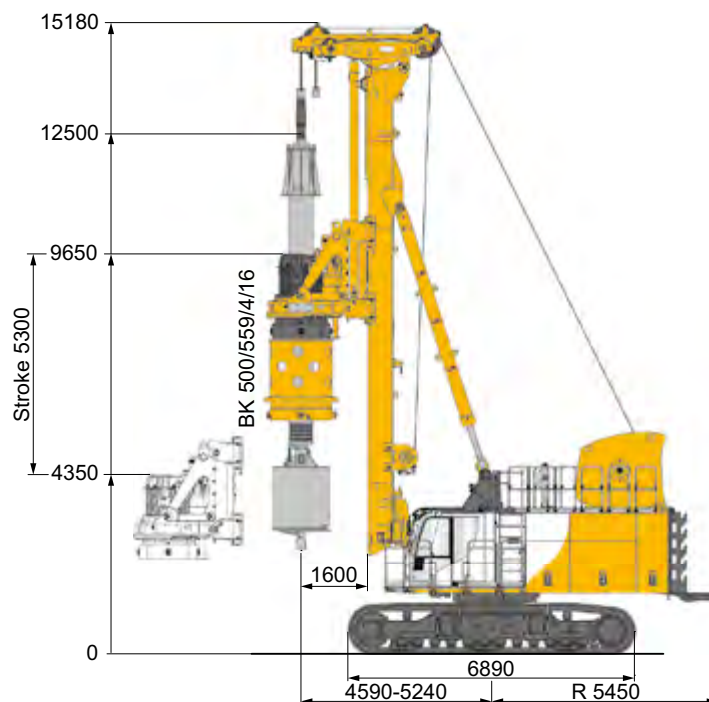
* incl. Kelly BK 500/559/4/16, without tool, without casing drive adapter

Reduced Headroom Configuration

The configuration shown represents the minimum possible operating height of the BG 52 mounted on the BT 160 in reduced-headroom mode. Depending on the project requirements, greater operating heights can be achieved by using different mast extension sections. For example, operating heights of 16.5 m, 18.8 m, and 21.9 m can be realized. This allows the machine to be flexibly adapted to the available site conditions and the specific requirements of each project.

The conversion kit for the configuration shown includes:

- Reduced headroom crowd cylinder
- Reduced headroom mast head
- Reduced headroom main rope
- Reduced headroom auxiliary rope



G = Weight
B = Width, overall

Weights shown are approximate values; optional equipment may change the overall weight and dimensions.

Transport

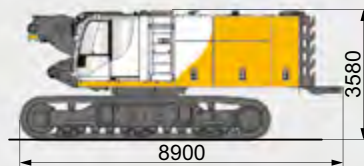
Base carrier with lower mast section

G = 87 t



Base carrier

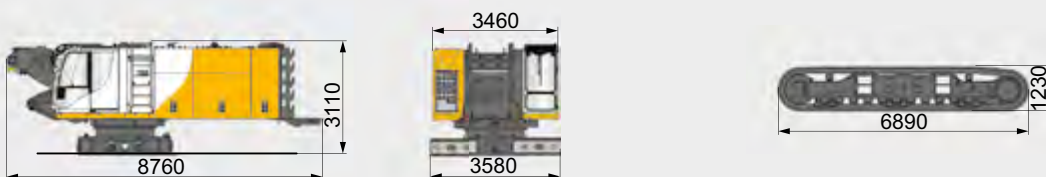
G = 69 t
B = 3,580 mm



Base carrier without crawlers

G = 43 t

G = 2 x 13.1 t
B = 1,300 mm



Upper mast section without mast head

G = 5.5 t
B = 1,600 mm



Mast head

G = 1.7 t
B = 1,500 mm



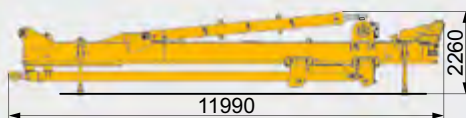
Counterweight

G = 4.8 t oder 7.2 t
B = 3,500 mm



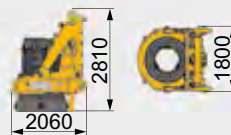
Lower mast section

G = 19.5 t
B = 2,300 mm



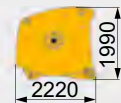
Rotary drive

KDK 550 S
G = 10.8 t



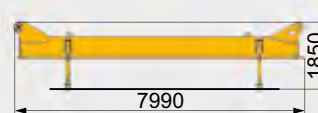
Main winch

G = 11.0 t with rope
B = 3,000 mm



Mast extension (optional)

5.4 m Mast extension, G = 1.9 t
B = 1,600 mm
7.7 m Mast extension, G = 2.5 t
B = 1,600 mm



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+800 1000 1200***

**+49 8252 97-2888
BMA-Service@bauer.de**

*toll-free number, where available

24/7



KellyLine



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