

BAUER BG 15 H

Drilling Rig
Base Carrier BT 50



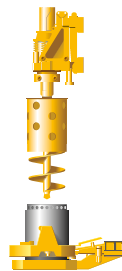
The BAUER drilling rigs stand for multifunction equipment for a variety of foundation construction systems. The selection between two model ranges allows an optimum choice for differing project or transportation requirements.

Specific highlights of the drilling rigs are:

- High safety standards
- Environmental sustainability, economic efficiency and performance
- Easy to transport and short rigging time
- High quality standard
- Long lifetime and excellent resale value



Kelly Drilling



Cased Kelly Drilling
Casing Installation with Oscillator



CFA
Continuous Flight
Auger Method

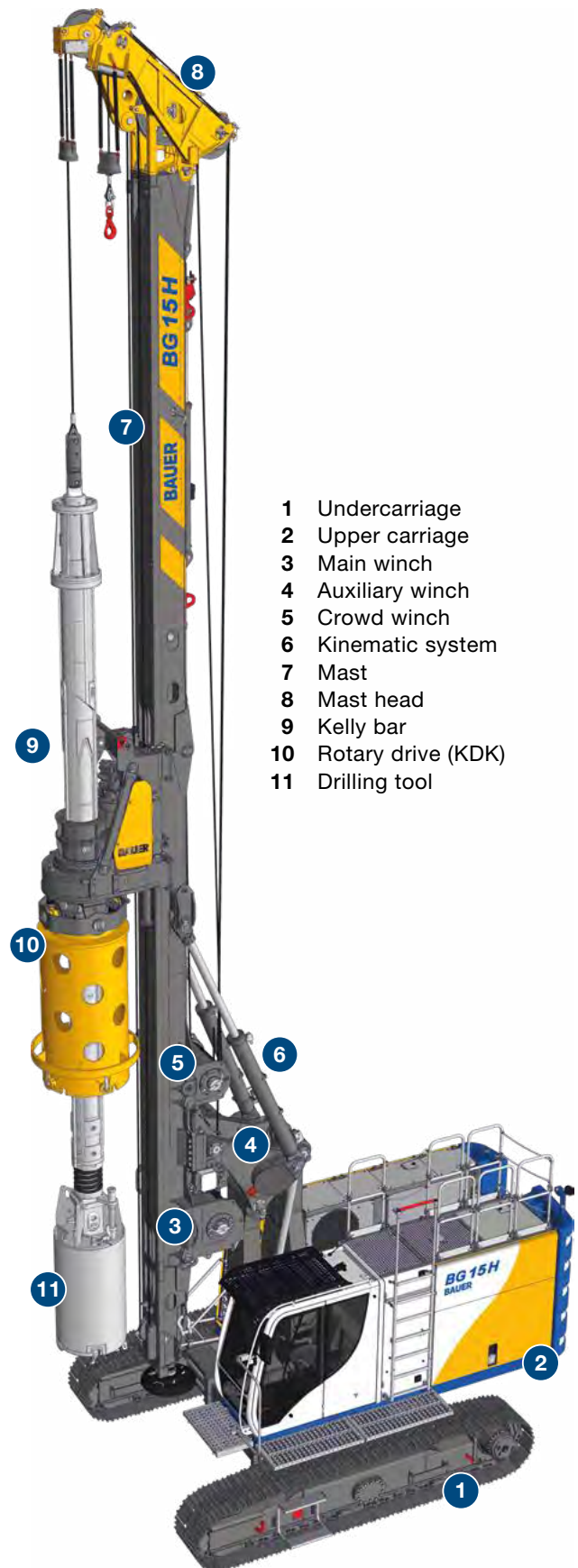


FDP
Full Displacement Piling
(Standard or Lost Bit)



Drilling Rig BG 15 H (BT 50)

Max. drilling diameter Crowd cylinder:	1,500 mm
Max. drilling diameter Crowd winch:	1,300 mm
Max. drilling depth:	44.5 m
Max. torque:	155 kNm
Max. height:	18.0 m
Engine:	CAT C 7.1 - 186 kW

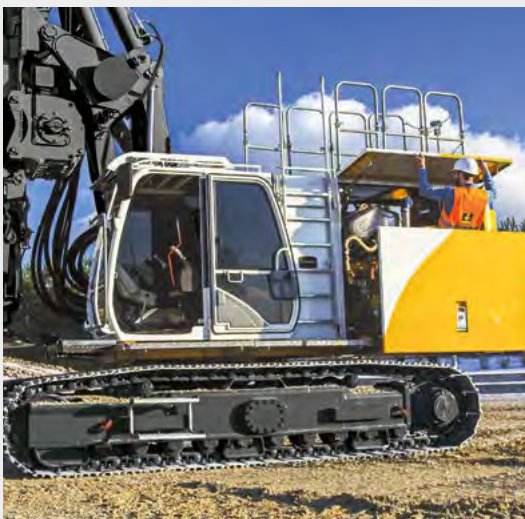



Modern, ergonomic operator cab

- FOPS compliant with additional protective roof guard
- Premium operator seat, air-sprung
- Joystick controls with high functionality

Powerful CAT engines

- C 7.1 (186 kW UN/ECE R96* or EU Stage V, EPA/CARB Tier 4 final)
- Diesel particulate filter in exhaust emission standard EU Stage V, EPA/CARB Tier 4 final
- Low noise emission
- Worldwide CAT-service partners


Safety equipment

- Integrated service platforms in the upper carriage for easy and safe maintenance work
- Hinged grating on side of cab
- Guardrails on the upper carriage (foldable for transport)
- Cameras for rear area monitoring

* emission standard equivalent to EPA Tier 3 and EU Stage III A

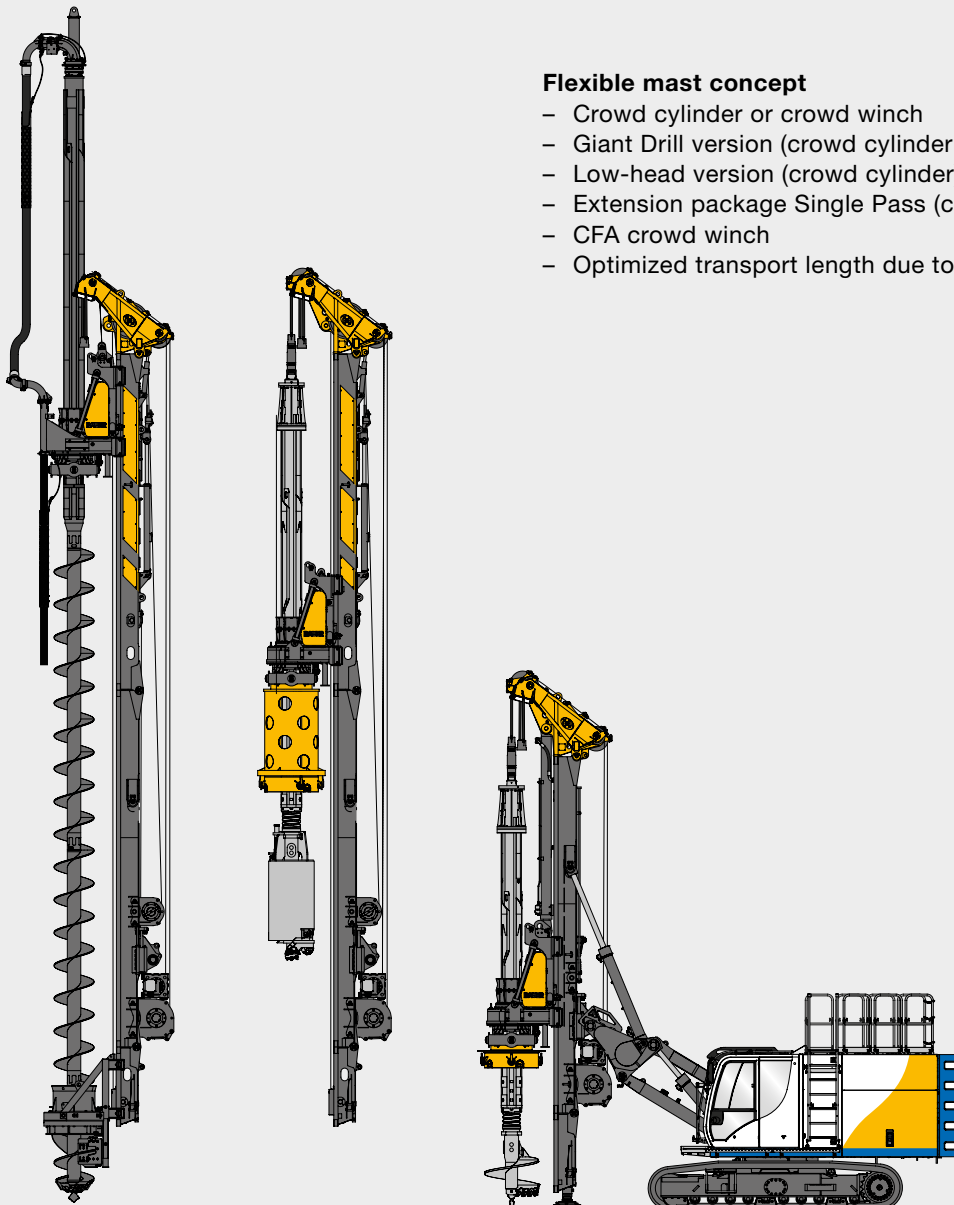
Compact, powerful and manoeuvrable

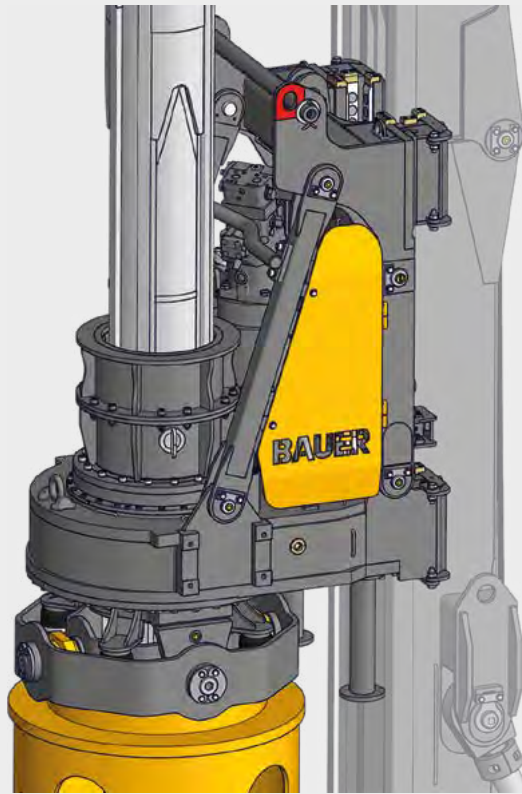
- Fast mobilization and easy moving of the machine
- Transport with attached rotary drive and Kelly bar possible
- Flexible and efficient operation, even on confined jobsites



Flexible mast concept

- Crowd cylinder or crowd winch
- Giant Drill version (crowd cylinder and crowd winch)
- Low-head version (crowd cylinder)
- Extension package Single Pass (crowd winch)
- CFA crowd winch
- Optimized transport length due to foldable masthead





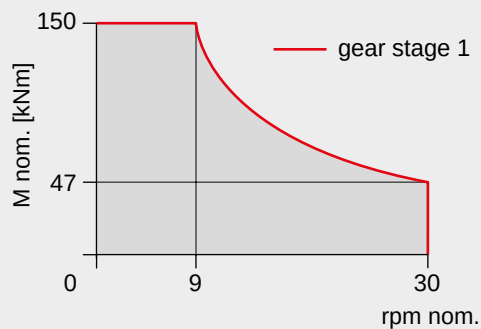
Rotary drive

- Optional single gear drive or multi gear drive
- Max. torque 155 kNm
- Max. speed 60 rpm
- Various modes of operation, speed and torque partially freely selectable

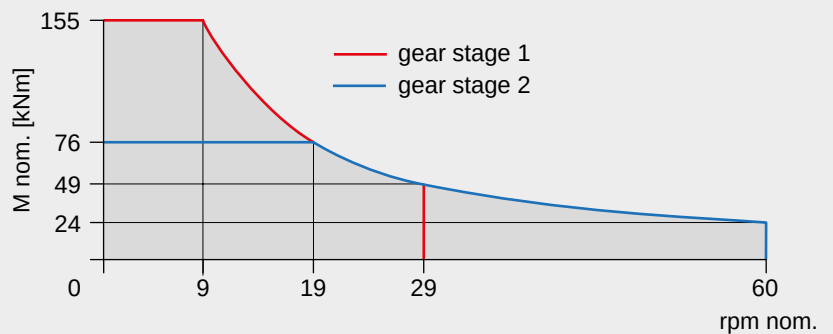
Kelly equipment with long guidance and integrated damping system

- Increase of drilling performance
- Reduction of wear at Kelly bar and drive keys

KDK 150 KL



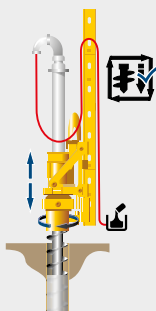
KDK 150 SL





Kelly drilling assistant

Saves the current crowd speed and the speed of the rotary drive. It enhances drilling performance with simultaneous hands-free operation. Drilling parameters can be adjusted during the automated drilling procedure.



Drilling and extraction control for single pass process

The control records the current drilling and/or extraction speed of the crowd system and enables a hands-free operation.

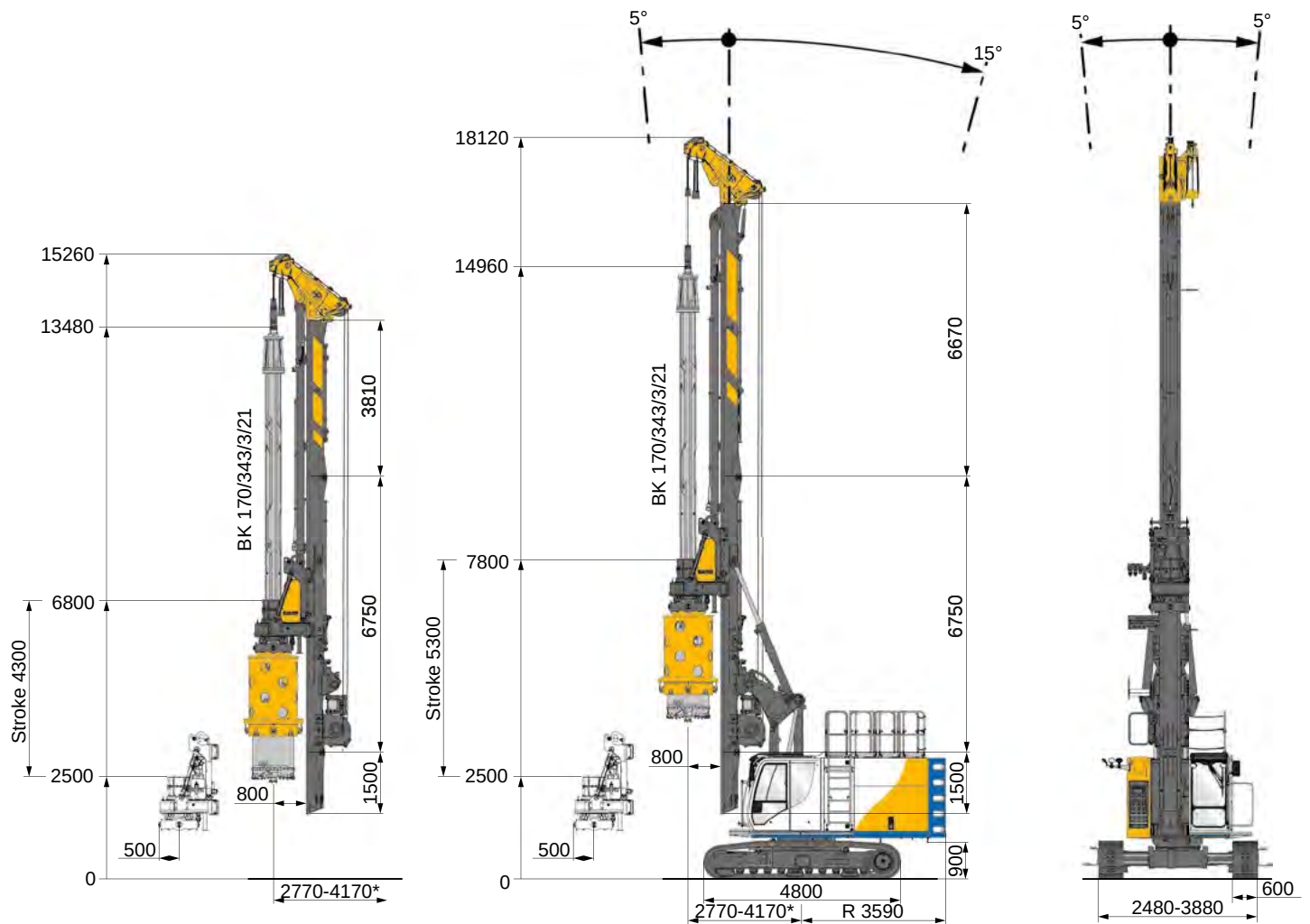
The BAUER B-Tronic M is your entrance to the BAUER device networking. Keep track of all your machines and projects with the help of the B-Tronic M systems. Reduce downtime by rapid evaluation of messages (including email messages) and utilize our state-of-the-art tools.

- 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



Rotary drive (selectable)	KDK 150 KL	KDK 150 SL
Torque nom. for casing at 350 bar	150 kNm	155 kNm
Max. speed	30 rpm	60 rpm
Crowd Cylinder		
Max. sledge stroke		
with upper mast section 3.8 m	4,300 mm	
with upper mast section 6.7 m	5,300 mm	
Crowd force push and pull, effective/nominal	250 / 275 kN	
Speed (down / up)	5.0 / 5.0 m/min	
Fast speed (down / up)	15 / 20 m/min	
Main winch		
	M6 / L3 / T5	
Line pull (1st layer) effective / nominal	140 / 175 kN	
Rope diameter	22 mm	
Max. winch speed	80 m/min	
Auxiliary winch		
Line pull (1st layer) effective / nominal	43 / 54 kN	
Rope diameter	16 mm	
Max. winch speed	28 m/min	
Base carrier		
	BT 50	
Engine	CAT C 7.1	
Rated output ISO 3046-1	186 kW @ 1,850 rpm	
Exhaust emission	UN/ECE R96*	EU Stage V
	-	EPA/CARB Tier 4 final
Diesel tank capacity / AdBlue tank	500 l / –	500 l / 32 l
Sound pressure level in the cabin (EN 16228, Annex B)	LP _A 80 dB (A)	
Sound power level - silent mode (2000/14/EC u. EN 16228, Annex B)	LW _A 104 dB (A)	
Sound power level - silent mode (2000/14/EG & EN 16228, Annex B)	LW _A 101 dB (A)	
Hydraulic pressure	350 bar	
Hydraulic oil tank capacity	450 l	
Flow rates	2 x 220 + 1 x 135 l/min	
Undercarriage		
	UW 50	
Crawler type	B 60	
Traction force effective / nominal	340 / 400 kN	
Transport width	2,500 mm	

* emission standard equivalent EPA Tier 3 and EU Stage III A

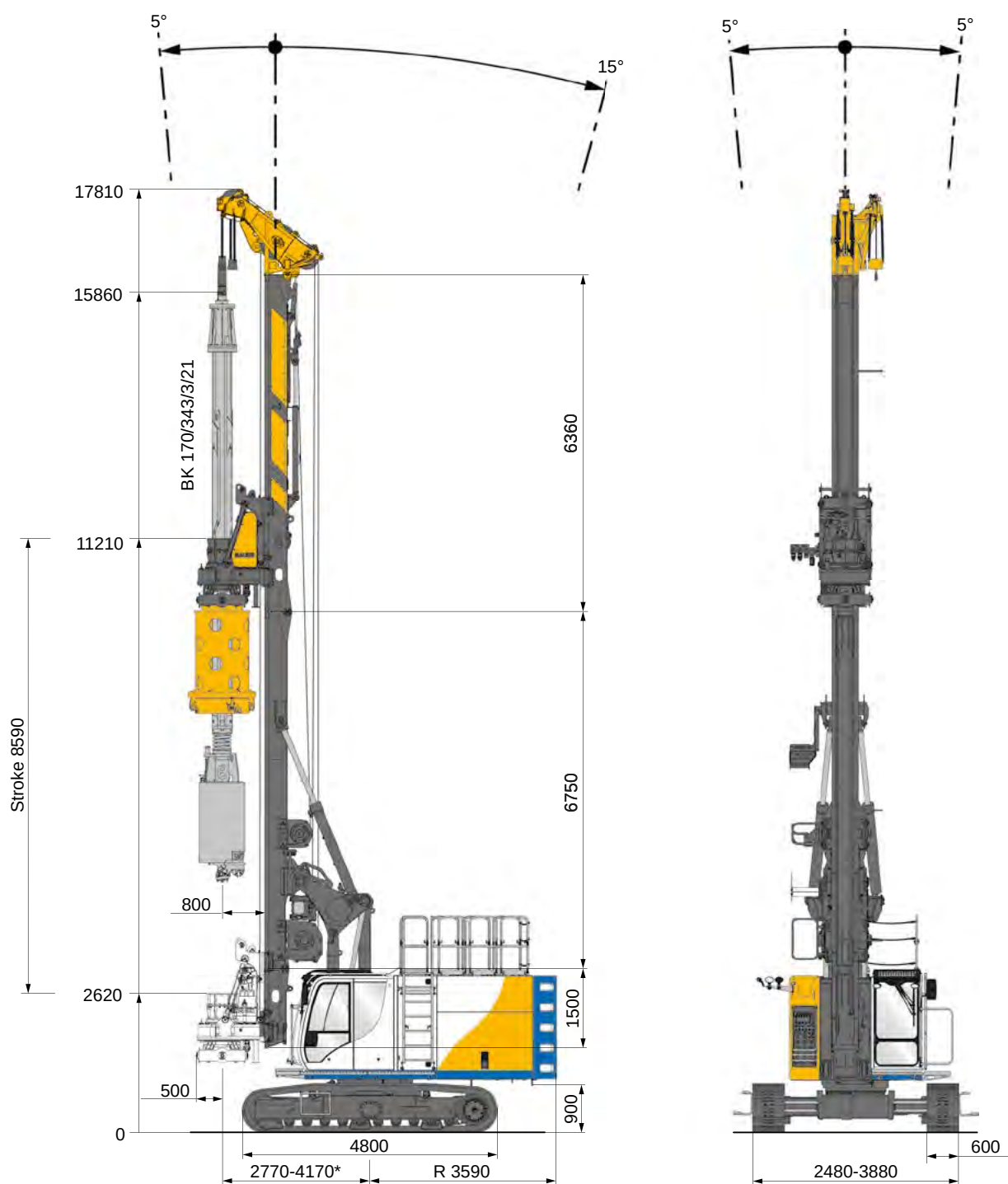


Operating weight with upper mast section 3.8 m 50.5 t
 Operating weight with upper mast section 6.7 m 51.2 t

* depending on equipment (3620 - 4170 extended mast reach)

Rotary drive (selectable)	KDK 150 KL	KDK 150 SL
Torque nom. for casing at 350 bar	150 kNm	155 kNm
Max. speed	30 rpm	60 rpm
Crowd winch		
Max. sledge stroke	8,590 mm	
Crowd force push and pull, effective/nominal	200 / 256 kN	
Rope diameter	22 mm	
Speed (down / up)	10,0 / 6,0 m/min	
Fast speed (down / up)	35 / 30 m/min	
Main winch	M6 / L3 / T5	
Line pull (1st layer) effective / nominal	140 / 175 kN	
Rope diameter	22 mm	
Max. winch speed	80 m/min	
Auxiliary winch		
Line pull (1st layer) effective / nominal	43 / 54 kN	
rope diameter	16 mm	
Max. winch speed	28 m/min	
Base carrier	BT 50	
Engine	CAT C 7.1	
Rated output ISO 3046-1	186 kW @ 1.850 rpm	
Exhaust emission	UN/ECE R96*	EU Stage V
	-	EPA/CARB Tier 4 final
Diesel tank capacity / AdBlue tank	500 l / –	500 l / 32 l
Sound pressure level in the cabin (EN 16228, Annex B)	L _{PA} 80 dB (A)	
Sound power level - silent mode (2000/14/EC & EN 16228, Annex B)	L _{WA} 105 dB (A)	
Sound power level - silent mode (2000/14/EG & EN 16228, Annex B)	L _{WA} 102 dB (A)	
Hydraulic pressure	350 bar	
Hydraulic oil tank capacity	450 l	
Flow rates	2 x 220 + 1 x 135 l/min	
Undercarriage	UW 50	
Crawler type	B 60	
Traction force effective / nominal	340 / 400 kN	
Transport width	2,500 mm	

* emission standard equivalent EPA Tier 3 and EU Stage III A



Operating weight 51.0 t
(as shown)

* depending on equipment (3620 - 4170 extended mast reach)

Base carrier BT 50

Standard

- Gratings on side and in front of cab
- Cameras for rear area surveillance
- Integrated service platforms
- Comfort Handling Package

Optional

- Compressor 1,000 l/min
- Cab space heater with timer
- Arctic kit
- Remote control Basic
- Electric generator

Drilling rig attachment

Standard

- Mast head foldable for transport
- Upper mast section 3.8 m
- Lower mast extension
- Crowd cylinder
- Main winch with hydraulic freewheeling control
- Swivel for main rope

Optional

- Mast support
- Upper mast section 6.7 m
- Crowd winch
- Single Pass Paket (CFA / FDP) (with crowd winch only)
- Concrete pressure and concrete quantity control (with crowd winch only)

Rotary drive

Standard

- Rotary drive KDK 150 KL (single-gear drive)
- Selectable modes of operation
- Kelly drive adapter for outer Kelly tube 343 mm
- Quick-release hydraulic couplers

Optional

- Rotary drive KDK 150 SL (multi-gear)

Measuring and control system

Standard

- B-Control screen with integrated diagnostic function
- Automatic mast control (automatic vertical alignment)
- Electric rope load measuring at main and auxiliary rope
- Electronic mast reach limiter
- Crowd stroke monitoring
- Casing assistant
- Slewing angle display upper carriage

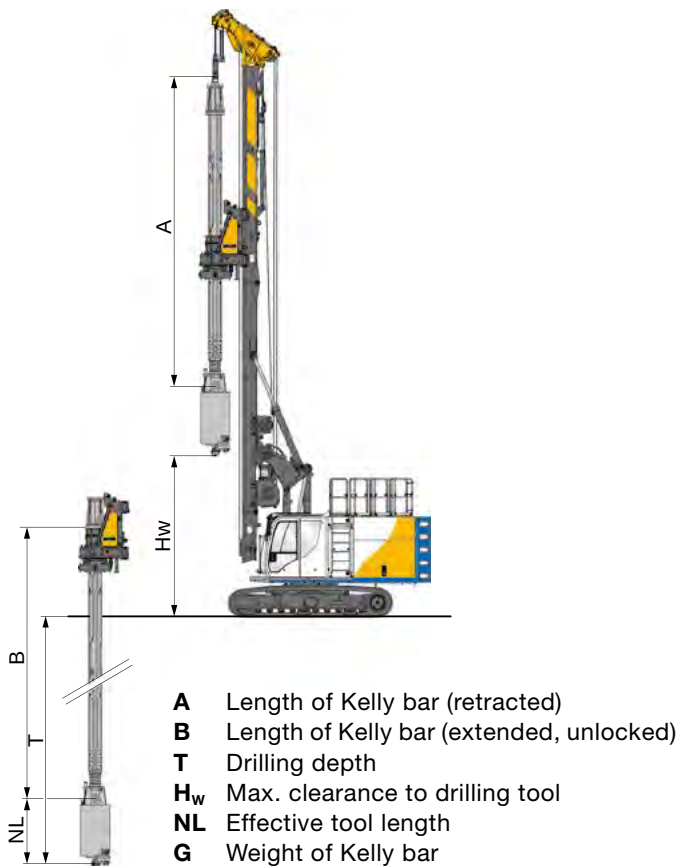
Optional

- B-Tronic M
- BAUER Enhanced CAN Interface (BECI)
- Limitation of rope speed main winch
- Automatic drilling and extraction control for Single Pass method
- Software modules for CFA and FDP

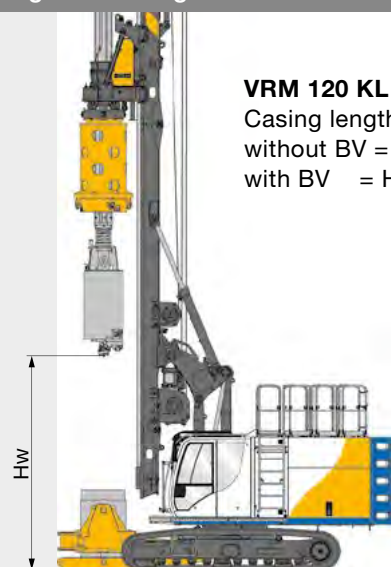
Drilling depths – uncased									
	Crowd winch					Crowd cylinder upper mast section 3.8 m		Crowd cylinder upper mast section 6.7 m	
3-part Kelly bar	A (m)	B (m)	G (kg)	HW (m)	T (m)	HW (m)	T (m)	Hw (m)	T (m)
BK 170/343/3/12	6.1	13.3	2.400	7.2	12.1	2.8	12.3	3.8	12.3
BK 170/343/3/15	7.1	16.3	2.700	6.7	15.1	2.8	15.3	3.8	15.3
BK 170/343/3/18	8.1	19.3	3.000	5.7	18.1	2.8	18.3	3.8	18.3
BK 170/343/3/21	9.1	22.3	3.300	4.7	21.1	2.3	21.3	3.8	21.3
BK 170/343/3/24	10.1	25.3	3.600	3.7	24.1	1.3	24.3	3.8	24.3
BK 170/343/3/27	11.1	28.3	3.950	2.7	27.1	0.3	27.3	3.3	27.3
BK 170/343/3/30	12.1	31.3	4.250	1.7	30.1	-	-	2.3	30.3
4-part Kelly bar	A (m)	B (m)	G (kg)	HW (m)	T (m)	HW (m)	T (m)		
BK 130/343/4/20	7.1	21.6	3.350	6.7	20.5	2.8	20.6	3.8	20.6
BK 130/343/4/24	8.1	25.6	3.800	5.7	24.5	2.8	24.6	3.8	24.6
BK 130/343/4/28	9.1	29.6	4.200	4.7	28.5	2.3	32.6	3.8	28.6
BK 130/343/4/32	10.1	33.6	4.750	3.7	32.5	1.3	36.6	3.8	32.6
BK 130/343/4/36	11.1	37.6	5.200	2.7	36.5	3.3	40.6	3.3	36.6
BK 130/343/4/40	12.1	41.6	5.650	1.7	40.5	-	-	2.3	40.6
BK 130/343/4/44	13.1	45.6	6.050	-	44.5	-	-	1.3	44.6

Drilling data as shown are based on tool length NL = 1.5 m, minimum horizontal mast reach and using BAUER attachment. Drilling depth is increased by 0.15 m when using maximum horizontal mast reach.

Further drilling depths, diameters and other Kelly types on request.

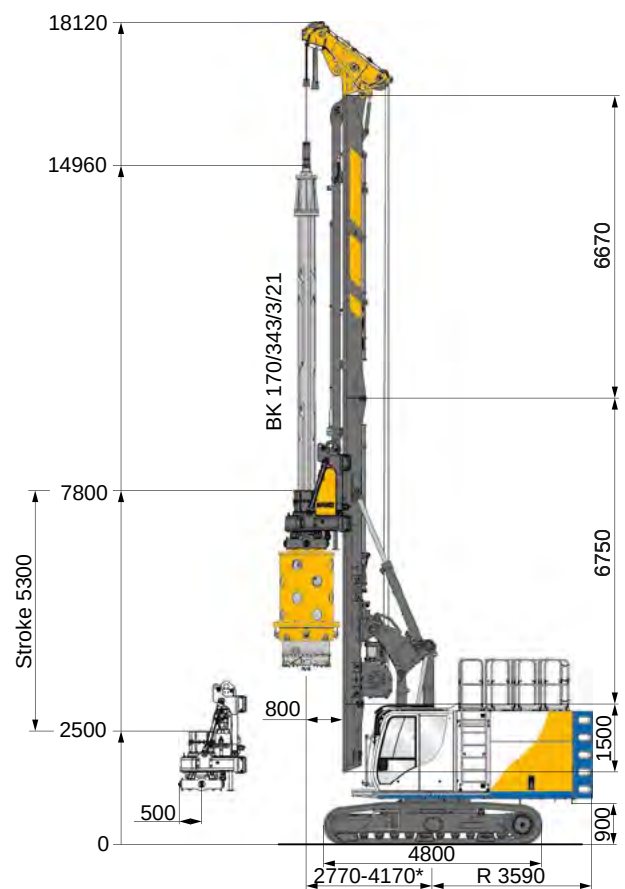
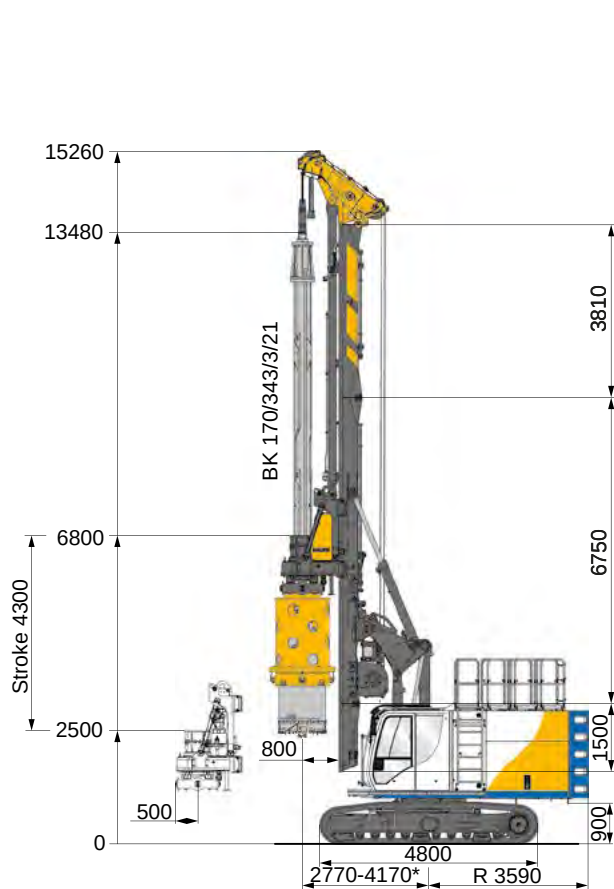


Kelly Drilling with casing oscillator BV



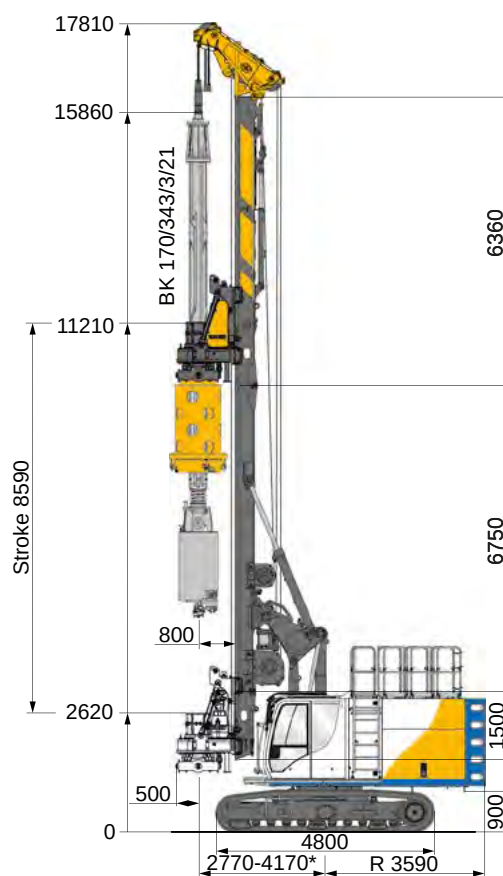
VRM 120 KL

Casing lengths
 without BV = $H_w - 0.5$ m
 with BV = $H_w - 1.6$ m



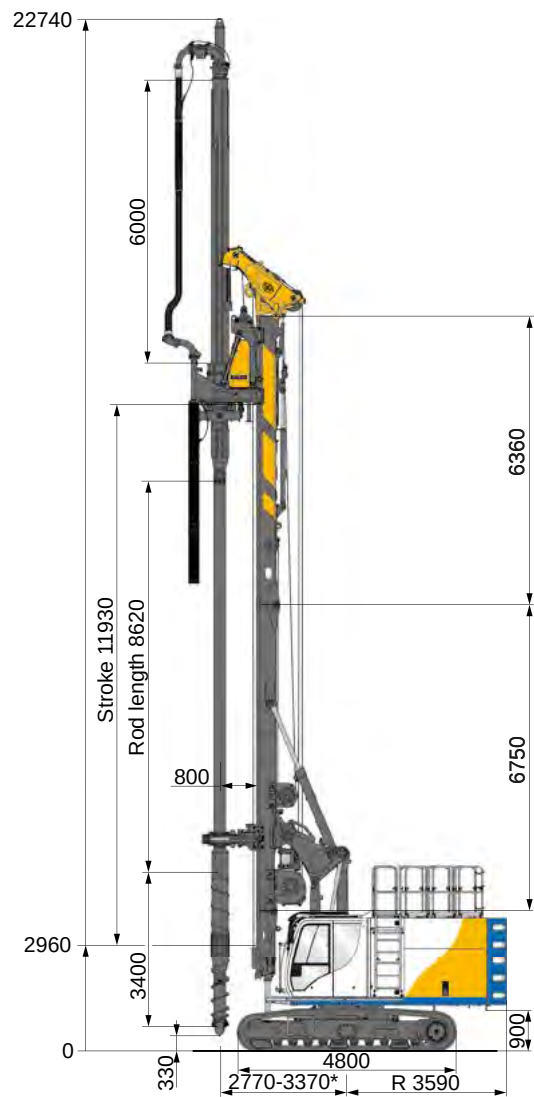
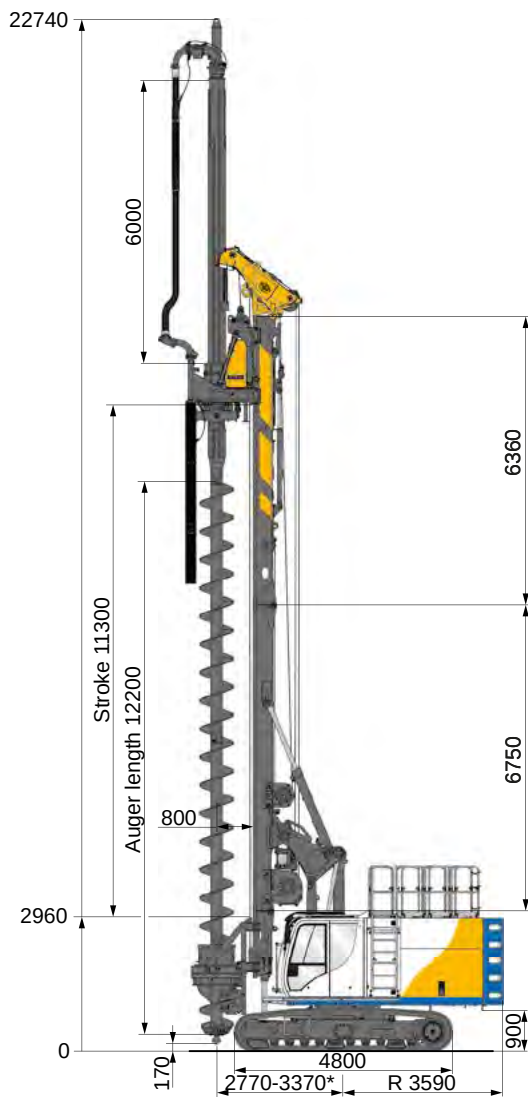
	3.8 m	6.7 m
Upper mast section	3.8 m	6.7 m
Max. drilling diameter uncased	1,500 mm	1,500 mm
cased	1,180 mm	1,180 mm
Operating weight approx. with Kelly BK 170/343/...	50.5 t	51.2 t
with casing drive adapter	3/21	3/21
with bucket	1,180 mm	1,180 mm
with counterweight *	1,060 mm	1,060 mm
	5.0 t	5.0 t

* depending on equipment



Kelly Drilling	
Upper mast section	6.4 m
Max. drilling diameter uncased	1,300 mm
cased	1,000 mm
Operating weight approx. with Kelly BK 170/343/...	51.0 t
with casing drive adapter	3/21
with bucket	1,000 mm
with counterweight *	900 mm
	5.0 t

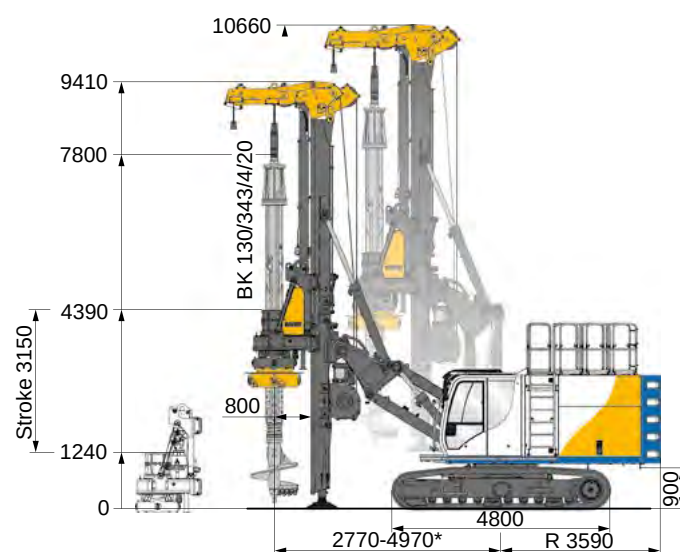
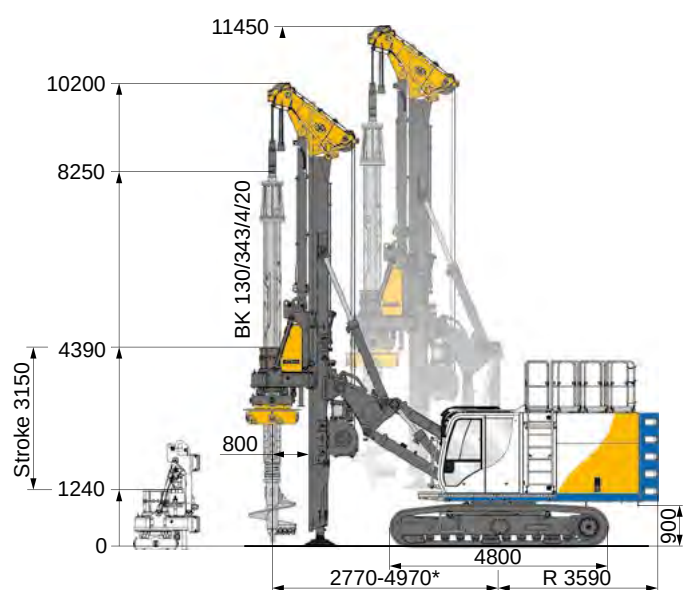
* depending on equipment



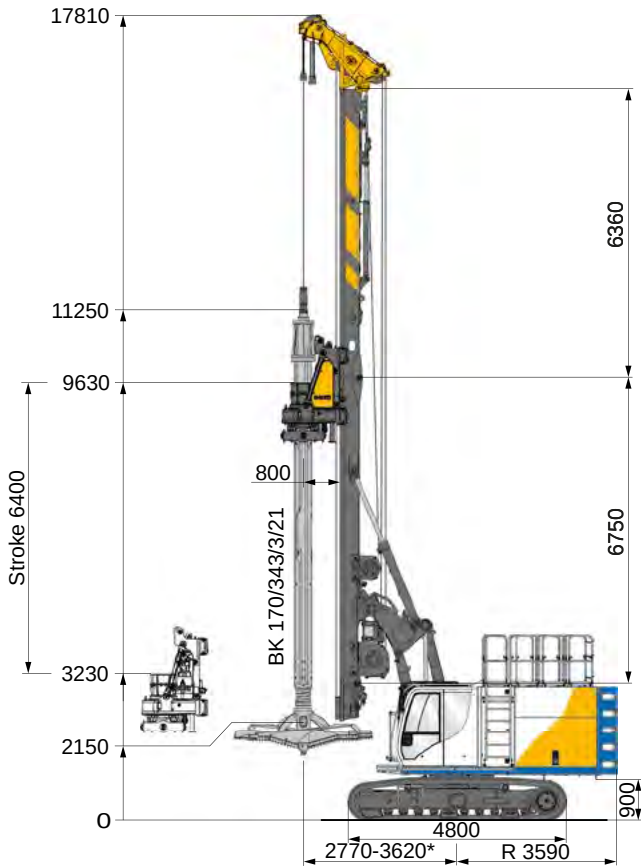
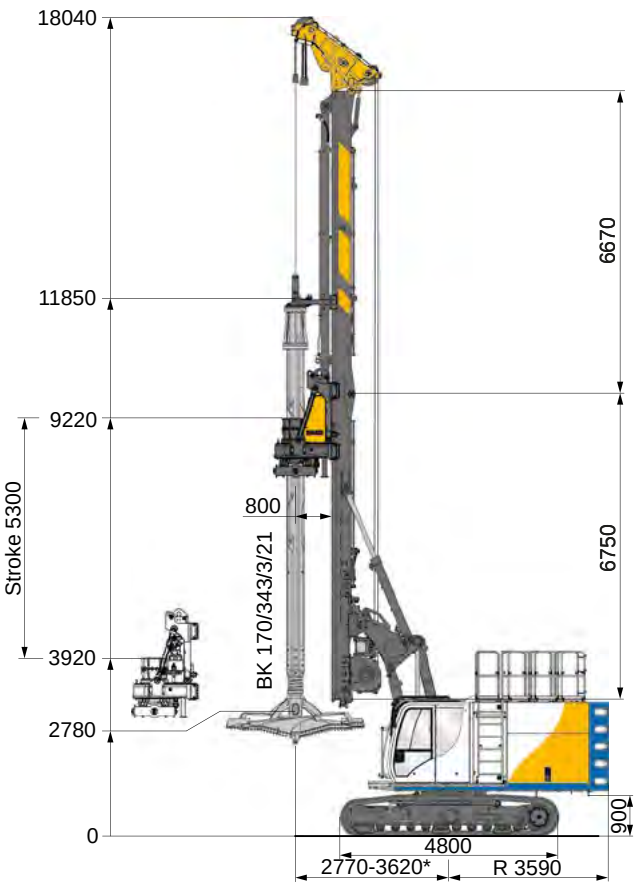
	CFA Drilling	FDP Drilling
Max. drilling diameter	750 mm	750 mm
Drilling depth with auger cleaner	11.0 m ¹⁾ 17.0 m ²⁾	11.3 m ¹⁾ 17.3 m ²⁾
Max. traction force with crowd and main winch (effective)	340 kN	340 kN
with counterweight	5.0 t	5.0 t

1) without Kelly extension

2) with Kelly extension 6.0 m



	Low Head with standard mast head	Low Head with special mast head
Lower mast extension	with	with
Max. drilling diameter		
uncased	1,500 mm	1,500 mm
cased	1,180 mm	1,180 mm
Max. drilling depth	20.0 m	20.0 m



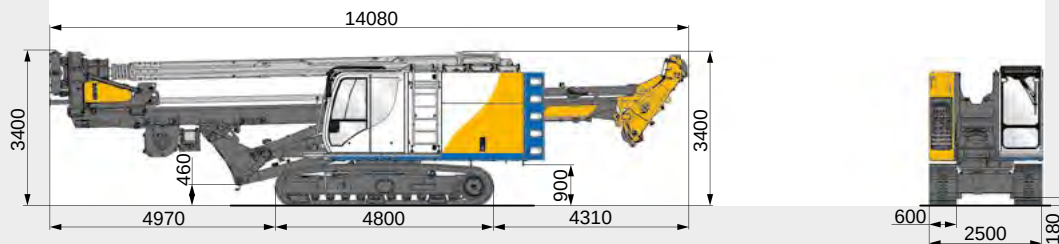
	Giant Drill Crowd cylinder	Giant Drill Crowd winch
Lower mast extension	without	with (short version)
Max. drilling diameter uncased	3,000 mm	3,000 mm
cased	-	-
Max. drilling depth	21.0 m	21.0 m

G = weight
B = width

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

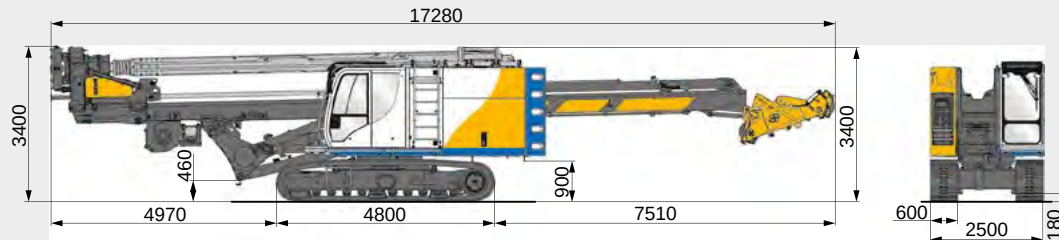
With Crowd cylinder, upper mast section 3.8 m and Kelly bar BK 170/343/3/21

G = 47.4 t with 5.0 t counterweight and Kelly bar
G = 44.1 t with 5.0 t counterweight without Kelly bar
B = 2,500 mm



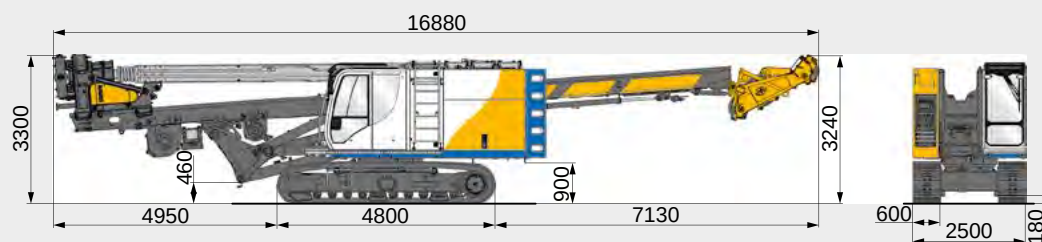
With Crowd cylinder, upper mast section 6.7 m and Kelly bar BK 170/343/3/21

G = 48.1 t mit 5.0 t counterweight and Kelly bar
G = 44.8 t mit 5.0 t counterweight without Kelly bar
B = 2,500 mm



With Crowd winch and Kelly bar BK 200/368/3/21

G = 48.7 t with 5.0 t counterweight and Kelly bar
G = 45.4 t with 5.0 t counterweight without Kelly bar
B = 2,500 mm



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24/7



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