Boomer S10

Technical specification

Single-boom face drilling rig for small drifts and tunnels with cross sections up to 33 m^2

Epiroc

Robust design for exceptional performance

The Boomer S10 face drilling rig is engineered for demanding mining and tunneling applications. Its highly durable design ensures precise positioning, rapid drilling cycles and reliable performance, even in challenging conditions. With the optional electric control system the operator enjoys user-friendliness and excellent performance. The Boomer S10 delivers seamless operation and productivity for modern mining operations.

Main benefits

Outstanding drill speed with rock drills that feature dual damping for excellent productivity and great drill steel economy

Safety and control thanks to a FOPS certified telescopic protective roof or an optional ROPS and FOPS certified cabin which ensures safety, excellent visibility and surveillance for the operator

Reliability thanks to the robust design which has been continuously improved and developed over time

Safe and comfortable operator environment with the optional ROPS and FOPS certified cabin.

Excellence in drill steel economy and productivity.

Reliability and robustness, with product development based on global mining application experience.

A cutting-edge rig for drifting and tunneling

The robust Boomer S10 is ideal for tunnels and drifts with cross sections up to 33 m² and is equipped with a heavy-duty feed for maximum durability. The drilling system incorporates rotation pressure controlled feed and an anti-jamming function for better drill steel economy and greater productivity.

+ Certified power and performance

The rig is powered by a 4-cylinder diesel engine that concurrently offers powerful performance and low emissions to reduce environmental impact. Engines are available with stage II, IIIA, V and Chinese IV certification to comply with emission standards in different markets.

+ Easy to operate and maintain

Time-proven direct control system, incorporated with collaring and anti-jamming functions, makes the rig easy to use under different rock conditions. The mature and well-matched hydraulic control system can ensure more accurate drilling, making the drilled holes straighter and more aligned, thereby achieving better blasting results and reducing overbreak and underbreak. The rig is designed to provide straightforward access to all service points for easy maintenance.

+ World-leading rock drill performance

The COP MD20 rock drill offers unmatched durability and performance. This next-generation rock drill delivers superior drill steel economy, reduced hose and RDT consumption and lower vibration levels. Its advanced hydraulic efficiency ensures a faster penetration rate than any competitor, while the recommended service interval of 1 000 impact hours guarantees extended uptime and increased productivity. The COP MD20 not only boosts operational efficiency but also significantly lowers running costs, making it the ultimate choice for modern mining operations.

A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Technical specifications

● = Standard ○ = Option

Drilling system

COP MD20	○
COP 1638HD+	○
COP 1838HD+	●
COP 2238HD+	○
Water mist flushing, external water and air supply (water or air oil cooler)	○
Water mist flushing, internal air and external water	○
Internal water mist flushing system with 250 l water tank	○
Hole blowing kit	○
Rock drill lubrication warning kit	●
Big hole drilling system	○
Drill stop*	○

*Mandatory for CE

Boom

BUT 29 HD	●
Manual centralized boom lubrication kit (rear part of the boom)	○
Automatic boom lubrication kit (rear part of the boom)	○
Boom suspension system	○

Feed

BMH 2000-series, from 3 090 mm to 4 920 mm	○
Telescopic feed BMHT 2000-series (max 4 310 mm)	○
Extension drilling set BSH 110 (BMH feeds only)	○
Extension drilling set BSH XS (BMHT feeds)	○
Bulk head style hose tree on feeds	●
Mining (heavy-duty) centralisers	○

Air/water system

Hydraulic water booster pump capacity at 12 bar, 66 l/m	○
Compressor: Epiroc GAR30*	○
Compressor: Epiroc LE5	●
Water hose reel, including water hose	○

*When equipped with COP 1838 a 95 kW powerpack is required

Hydraulic system

Low oil level indicator	●
Oil temperature meter	●
Filtration 10 µm	●
Oil filter indicator	●
Mineral hydraulic oil	●
Electric oil filling pump	●
Water/oil cooler	●
Air/oil cooler	○
Hydraulic oil thermostat	●
Ni-Cr plated piston rods (limitations exist)	○

Control system

Hydraulic pilot control system	●
Electric control system	○
Feed Angle Measurement with hole depth, FAM 3	○

Electrical system

Total installed power 60 kW (main motors 1x55 kW)*	●
Total installed power 80 kW (main motors 1x75 kW)*	○
Total installed power 100 kW (main motors 1x95 kW)	○
Voltage 380-1 000 V	●
Frequency 50 Hz or 60 Hz	○
Starting method star/delta 380–690 V, direct start 1000 V	●
Starting method – soft start (not for 1000 V)	○
Transformer 5 kVA	●
Electronic overload protection for electric motors	●
Percussion hour meter	●
Digital volt/ampere meter in electrical cabinet	●
Phase sequence and eart fault indicator	●
Battery charger	●
Dual controls for reels	●
Electrical cable	○
Connector	○
Plug PC4/PC5	○
Socket PC4/PC5	○
Electrical outlet 16A/32A plug size	○
Switch gear	○

*Larger powerpacks will be required at high altitude or with certain options.

Carrier

Deutz BF4L 914, Tier II, 72 kw	○
Deutz D914 L04, EPAIII/COM III, Stage IIIA/Tier 3, 55 kw	●
Deutz TCD3.6 L04, China IV, 60 kw	○
Deutz TD3.6 L04, Stage V, 55 kw	○
Articulated ±40° steering angle	●
Four wheel drive	●
Electrical system 24 V	●
Batteries 2x12 V, 70 Ah	●
Working lights, 100 lux in working area	●
Tramming lights, 10 lux in tramming movement	●
Illuminated stairs	●
Automatic differential lock on front axle	●
Tires, 9.00-20	●
Tires, 9.00 R20	○
Clearance outside axles rear 15°, gradebility, 14°	●
Front and rear hydraulic jacks	●
Fuel tank volume, 4 Cylinder engine: 60 l	●
Fire suppression system ANSUL (manual)	○
Fire suppression system ANSUL (auto)	○
Manual lubrication kit	○
Automatic central lubrication system	○
Rig washing kit	○
Boot washing kit	○
Hydraulic oil heater	○
1.2 kW heater (cabin)	○
Main electric motor heater	○
Diesel engine heater (water cooled engine)	○

Technical specifications

● = Standard ○ = Option

Cabin (Optional)

ROPS and FOPS certified air conditioned cabin, noise level <80 dB(A)	●
Joystick controlled spot light, 70 W (left side)	○
Air condition, cooling only	●
12 V outlet	●
Low profile cabin (2 655 mm, seated only)	○
Media player	○
Protection bars	○
Reversing camera with monitor	○
Swingable seat	○
Suspension seat*	○

* CE mandatory

Protective roof

12 V outlet	●
Swingable seat for drilling and tramming	○
Suspension seat*	○
Spotlight 70 W (left side)	○
Protection bars	○
Reversing camera with monitor	○

* CE mandatory

Drill rods

Dimension	Minimum hole diameter
R38-H35-R32	45 mm
R38-H35-SR35 Speedrod	45 mm
T38-H35-R32	45 mm
T38-H35-R32 Speedrod	45 mm
T38-H35-SR35	45 mm
T38-H35-R35	48 mm
T38-H35-R35 Speedrod	48 mm
T38-R39-R35	48 mm
T38-R39-SR35	45 mm
T38-R38-R35	48 mm

Extension rods for injection drilling

Dimension	Minimum hole diameter
R32 Speedrod	51 mm
T38 Speedrod	64 mm

Shank adapters

Thread	Diameter	Length
R38	38 mm	435 mm
T38	38 mm	435 mm
R32	38 mm	525 mm
T38	38 mm	525 mm

Couplings

Thread	Diameter	Length
R38	55 mm	170 mm
T38	55 mm	190 mm

Recommended cable sizes and lengths (59 kW)*

Voltage	Dimension, mm²	Diameter, mm	Length, m
380-400 V	3x50+3G10+2x1.5	33	150
440 V	3x50+3G10+2x1.5	33	150
500-525 V	3x35+3G6+2x1.5	29	200
550-575 V	3x35+3G6+2x1.5	29	200
660-690 V	3x35+3G6+2x1.5	29	200
1 000 V	3x35+3G6+2x1.5	29	200

Recommended cable sizes and lengths (79 kW)*

Voltage	Dimension, mm²	Diameter, mm	Length, m
380-400 V	3x70+3G16+2x1.5	39	110
440 V	3x70+3G16+2x1.5	39	110
500-525 V	3x70+3G16+2x1.5	39	110
550-575 V	3x50+3G10+2x1.5	33	150
660-690 V	3x35+3G6+2x1.5	29	200
1 000 V	3x35+3G6+2x1.5	29	200

Recommended cable sizes and lengths (99 kW)*

Voltage	Dimension, mm²	Diameter, mm	Length, m
380-400 V	3x95+3G16+2x1.5	39	80
440 V	3x95+3G16+2x1.5	39	80
500-525 V	3x70+3G16+2x1.5	39	110
550-575 V	3x70+3G10+2x1.5	39	110
660-690 V	3x50+3G10+2x1.5	33	150
1 000 V	3x35+3G6+2x1.5	29	200

* Recommendations are given for surrounding temperature of 40°C and altitude of 2 000 m

Gross weight (depending on configuration)

Total	12 800 kg
Boom side	8 350 kg
Engine side	4 500 kg

Noise and vibration

Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75±3 dB(A) re 20 uPa
Operator sound pressure level working close to machine, drilling, free field	103±6 dB(A) re 20 uPa
Sound power level (ISO 3747), drilling, free field	123 dB(A) re 1 pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB
Vibration levels seated, drilling (ISO 2631-1) cabin	0.07±0.07 m/s^2
Vibration levels seated, drilling (ISO 2631-1) canopy	0.15±0.15 m/s^2
Vibration levels standing, drilling (ISO 2631-1) cabin	0.07±0.07 m/s^2
Vibration levels standing, drilling (ISO 2631-1) canopy	0.15±0.15 m/s^2

Tramming speed

On flat ground (rolling resistance 0.05)	>15 km/h
On incline 1:8	>5 km/h

Technical specifications

Dimensions in millimeters

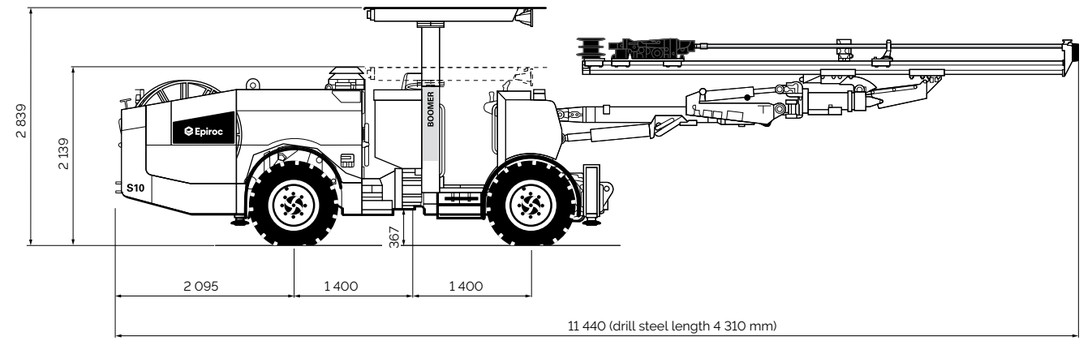
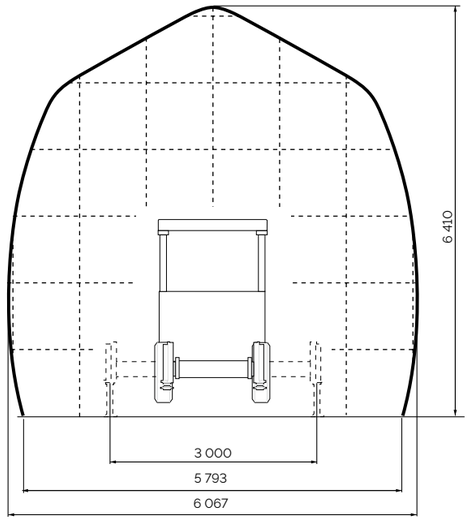
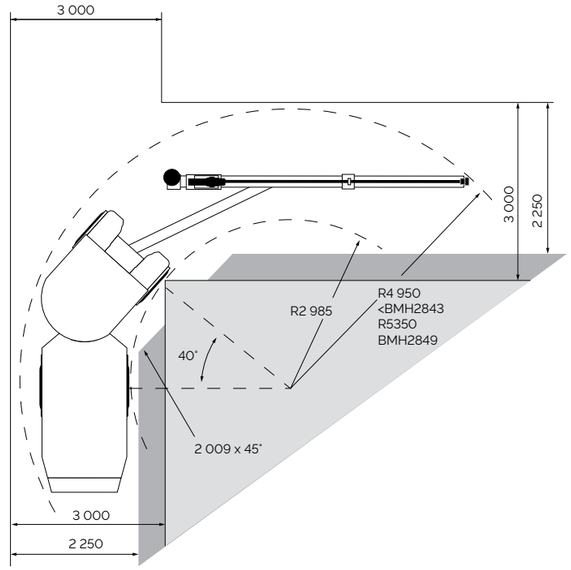


Illustration shows Boomer S10 in right side view.





Dimensions

Width	1 750 mm
Height, roof down	2 139 mm
Height, roof up	2 839 mm
Cabin height (Option)	2 800 mm
Length, tramming	11 440 mm (with 4 310 mm drill steel length)
Ground clearence	367 mm
Turning radius outer/inner (4 310 mm drill steel length)	4 950/2 985 mm

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

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