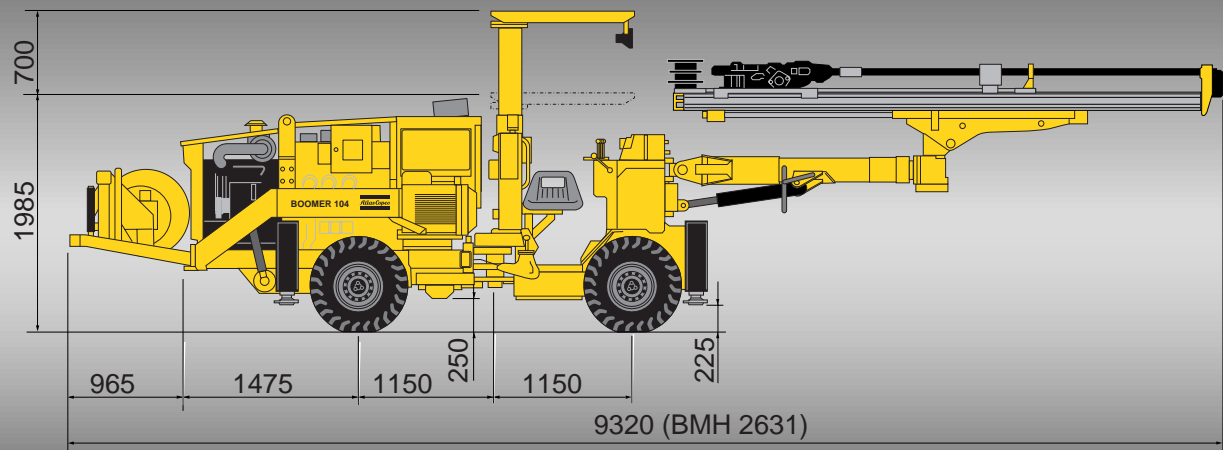


Boomer 104

Direct controlled hydraulic drill rig with one BUT 4 boom and COP 1432 rock drill for high speed drilling in narrow vein mining.

For cross sections up to 20 m²



Rig with optional equipment mounted. All dimensions in mm.

Features

- Specially designed drill rig for drifting, crosscuts, roofholes and drilling of uppers. All with visible rock drill for easy supervision of the drilling. Compact transport width of 1.22 m only.
- Direct controlled drilling system which incorporates excellent anti-jamming function RPCF (Rotation Pressure Controlled Feed force). Separate pumps for percussion/positioning, rotation and dampening for independent control and maximum output.
- COP 1432 rock drill, shortest in its class, with modern hydraulic reflex dampening giving genuine high speed drilling and excellent drill steel economy. Separately variable frequency and impact power can be adapted to certain drill steel/rock application.
- BMH 2600 heavy-duty aluminium hydraulic feeds with double bottom for high torsional resistance. Snap-on stainless steel sleeves and polymer contact pads for long life and low maintenance cost.
- BUT 4 heavy-duty booms for direct, accurate and fast positioning. Adjustable expanding shafts in all boom joints.

- Sturdy, articulated carrier with four wheel drive for easy manoeuvring in narrow tunnels and drifts. Power steering, fail-safe brakes and central lubricated chassis. Four jacks for stable set up.
- Basic rig includes telescopic FOPS-approved protective roof, cable reel, work lights (2 x 200 W halogen), water booster pump and pump unloading function for easier start with low voltage.

Main components

Rock drill	1 x COP 1432
Feed	1 x BMH 2600-series
Boom	1 x BUT 4
Drilling system	DCS14-104
Carrier	DC 4

Rock drill COP 1432

Shank adapter	R32, R38 or T38
Height over drill centre	88 mm
Impact power	14kW
Impact rate	65 Hz
Hydraulic pressure, max.	230 bar
Rotation system	separate rotation
Rotation speed	0-300 rpm
Rotation torque, max.	650 Nm
Lub. air consump. (at 3 bar)	5 l/s
Water consumption	0.8 l/s
Weight	170 kg
Sound level	<106 dB(A)

Feeds BMH 2600

	BMH 2625	BMH 2631	BMH 2637
Total length (mm)	3697	4287	4897
Drill steel length (mm)	2500	3090	3700
Hole depth (mm)	2180	2770	3380
Weight, incl. rock drill (kg)	435	455	480
Feed force, max. (kN)	15	15	15

Boom BUT 4

Feed extension	1500 mm
Boom extension	900 mm
Feed roll-over	360 degrees
Feed rotation	±98 degrees
Feed dump cylinder	+18 degrees -100 degrees
Max. swinging angle	±30 degrees
Weight, boom only	1000 kg

Hydraulic system

- Hydraulic pumps: 1 unit consisting of one variable pump for percussion and positioning, one constant flow pump for rotation and one for dampening.
- Pumps unloaded at start
- System pressure 230 bar
- Hydraulic oil tank, volume max 124 l
- Low oil level indicator (incl. shut down when power supply is connected)
- Oil temperature meter on oil tank
- Filtration, 20 µm absolute
- Oil filter indicator
- Water cooled oil cooler, stainless steel
- Mineral hydraulic oil
- One operator's control panel

Air system

- Atlas Copco LE22 compressor
- Capacity, max 4.4 l/s at 7 bar
- Air pressure gauge

Water system

- Water booster pump CR 4-100 (50 Hz) or CR4-80 (60 Hz)
- Capacity, max 75 l/min at 7.5 bar boost
- Min water inlet pressure 2 bar

Carrier DC 4

- Deutz 4-cylinder F4L 912W, 4-stroke prechamber diesel engine 42 kW (57 hp) at 2300 rpm, 149 Nm at 1550 rpm
- Fixed seat for tramping
- Articulated steering with +/- 40 degree steering angle
- Four wheel drive
- Hydrostatic power steering system
- Hydrodynamic transmission
- Hurth 171 boom-end axle
- Hurth 171 engine-end axle with +/-7 degree oscillation
- Tyres 8.25 R 15 Michelin XZR
- Clearance outside axles 15 degree
- Hydraulic jacks 2 (extendable) at front and 2 at rear
- Service brakes: Two separate circuits, hydraulically applied, fully enclosed wet disc brakes
- Emergency and parking brakes: SAHR (Spring Applied Hydraulic Released)
- Fuel tank, volume 60 l
- Electric system 24V
- Batteries 2 x 12V, 70Ah
- Working lights 2 x 200W 24V AC
- Tramping lights 4 x 70W 24V
- Spirit level
- Central lubrication system
- Fire extinguisher acc. to EN 791
- Gradeability 1:4 at max. load on drive wheels
- Max. tramping speed on flat ground 8 km/hr

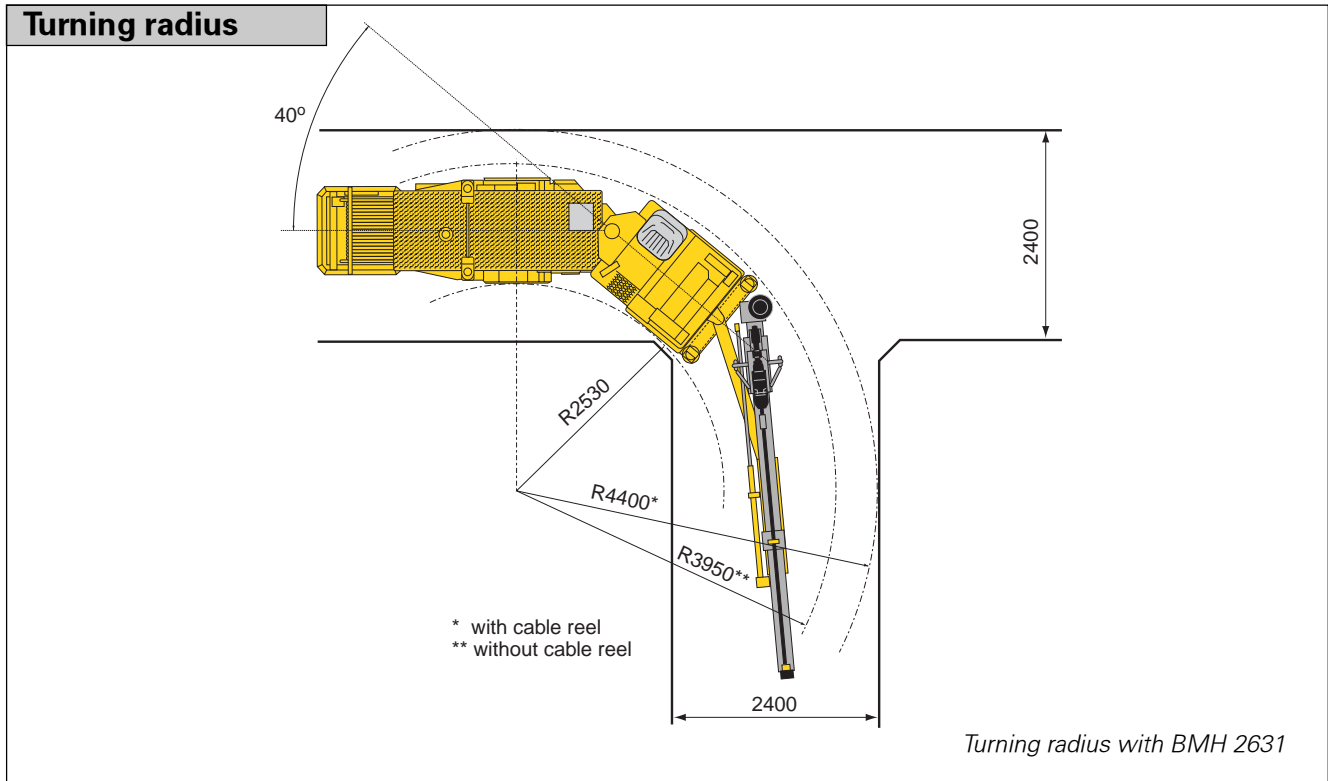
Electrical system

- Total installed power 63 kW
- Main motors 1 x 55 kW
- Voltage (as per customer specification) 380-1000 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method - star/delta (380 - 690 V) direct (1000V)
- Thermal overload protection for electric motors
- Percussion hour meters on A-panel
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 1.5 kVA
- Cable reel, inner/outer diameter Ø 500/740 mm

Recommended cable size

Voltage	Type	Dimension	Diameter
380-400 V	Buflex	3x50+3x10 mm ²	33 mm
440-550V	RDOT	4x35 mm ²	38 mm
660-690 V	RDOT	4x25 mm ²	34 mm
1000 V	Buflex	3x25+3x6 mm ²	26 mm

Max length 85m, fully wound RDOT 35 with D=38
Recommendations are given for surrounding temperature of 40°C.



Dimensions and weights

Width	1220 mm
Height roof down	1985 mm
roof up	2685 mm
Length (with BMH 2631 feeds)	9320 mm

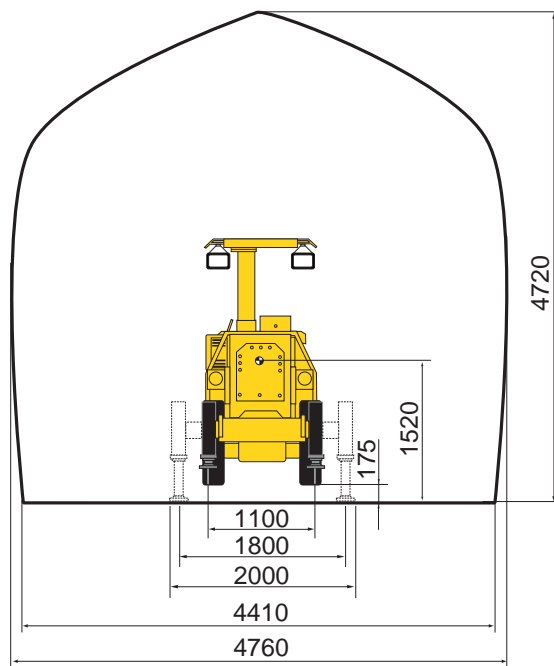
Ground clearance	250 mm
Gross weight (basic rig)	8400 kg

Optional equipment

- Hydraulic feeds BMHE 2000 and BMHS 2000
- Extension drilling set BSH 110 (only for BMH 2000)
APS 4 parallel holding
- Cabin
- Aircondition unit for cabin, electrical driven
- Heater for cabin, 1.2 kW
- High altitude setting
- Exhaust water scrubber
- Exhaust catalyser
- Working lights halogen 2 x 500W 230V AC
- Fire suppression system ANSUL
- Electric cable type RDOT or Buflex, see recommendations
- Plug for cable
- Power supply (incl. male plug)
- Electric outlet for accessories, 32 Amp (Voltage = main supply voltage if no extra transformer is chosen. Not for 1000 V.)
- Electrical system 1000 V, direct start only
- Electrical system CSA approved (Canadian regulations), direct start only
- Electrical system Australian approved acc. to AUS 3000
- Water flow guard
- Big hole drilling kit
- Hole blowing kit with external air
- Electric oil filling pump
- Rock drill lubrication warning kit
- Spare wheel
- Horn
- Beacon warning lamp
- Back-up alarm

Boomer 104

Coverage area



No scale

Drill steel equipment

Drifter rods

Dimension	Min. hole dia, mm
T38-Hex 35-R32	45
T38-Hex 35-R32 SPEEDROD	45
R38-Hex 35-R32	45
R38-Rnd 39- R32 SPEEDROD	45
T38-Hex 35-R35	48
T38-Hex 35-R35 SPEEDROD	48
T38-Rnd 39-R35	48
T38-Rnd 39-R35 SPEEDROD	48

Extension rods for injection drilling

Dimension	Min. hole dia, mm
T38 SPEEDROD	64
R32 SPEEDROD	51

Shank adapters

Thread	Dia, mm	Length, mm	Part No.
T38	38	435	7304 3652 01
R38	38	435	7804 3652 01
T38	38	525	7304 3656 01*
R32	38	525	7803 3656 01*

Couplings

Thread	Dia, mm	Length, mm	Part No.
T38	55	190	7314 3355 00
R38	55	170	7994 3655 00

* = Intended for roof drilling and extension drilling with BSH 110.

For other dimensions and more information please see Atlas Copco Rock Tools catalogue, printed matter No. 9851 1622 or Selection Guide for Tunnelling and Drifting, printed matter No. 9851 1637.

The manufacturer reserves the right to make modifications without prior notice. 2000.10

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