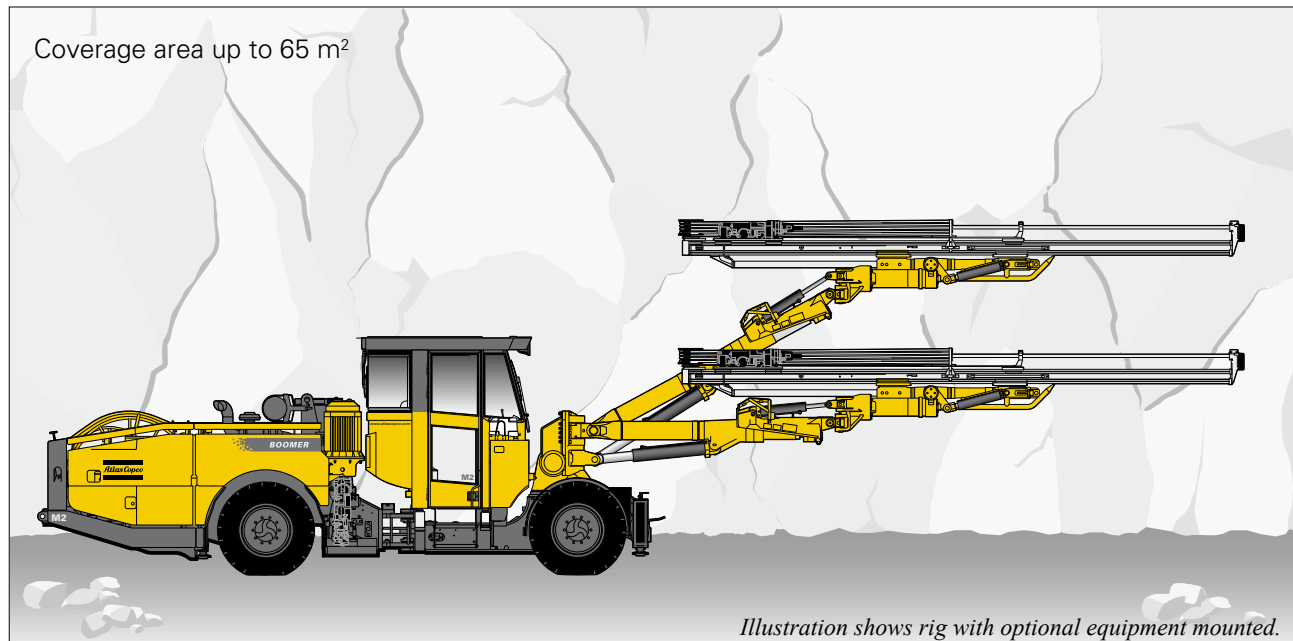


Boomer M2 C

Equipped with COP 3038



Two boom hydraulic tunnelling and mining rig with an advanced Rig Control System for high accuracy and productivity. COP 3038 rock drills for superior productivity.

Standard features

» Rock drill

- High-frequency COP 3038 rock drills with dual-damping system for optimal consumable life
- Pressurized housing and mating surfaces to reduce internal contamination of the rock drill

» Hydraulic boom

- BUT 35 SL heavy-duty boom with double tripod suspension for accurate hydraulic parallel holding in all directions

» Hydraulic feed

- BMH 6000-series heavy-duty aluminium feed with high bending and torsional resistance for maximum durability
- Snap-on stainless steel sleeves and polymer contacts

» Control system

- Advanced Rig Control System (RCS) allowing several levels of automation to suit customer requirements
- Standard functions include soft collaring and the anti-jamming function Rotation Pressure Controlled Feed (RPCF)
- Integrated diagnostic and event logging system to assist in equipment maintenance
- Interactive operator panel with full-colour display

» Carrier

- Sturdy, articulated carrier with four-wheel drive
- Powered by a 4-cylinder, EPA III/COM III (Tier 3/Stage IIIA) approved diesel engine
- Four jacks for stable set up

» General

- FOPS-approved telescopic protective roof
- Cable reel
- Hydraulically driven compressor
- Hydraulically driven water booster pump
- Working lights

Specifications

ROCK DRILL

	COP 3038
Shank adapter	TC45
Height over drill centre	84 mm
Length without shank	970 mm
Impact power	30 kW
Impact rate	102 Hz
Hydraulic pressure	200 bar
Rotation system	Separate rotation
Rotation speed	0–380 rpm
Rotation torque, max	190 Nm
Lub. air consump. at 4 bar	5 l/s
Flushing water	20–30 bar
Water consumption, max	130–190 l/min*
Weight	165 kg
Sound level	<106 dB(A)

*Depending on drill steel

FEED

	BMH 6900	BMH 6914	BMH 6916	BMH 6918
Total length	5 988 mm	6 598 mm	7 208 mm	7 208 mm
Drill steel length	4 310 mm	4 920 mm	5 530 mm	5 530 mm
Hole depth	4 043 mm	4 668 mm	5 268 mm	5 268 mm
Weight, incl. drill	666 kg	700 kg	731 kg	731 kg
Feed force	22.0 kN	22.0 kN	22.0 kN	22.0 kN

» Boom

- BUT 35 SL
- Feed extension 1 800 mm
- Boom extension 1 600 mm
- Parallel holding complete
- Feed roll-over 360°
- Max. lifting angle +65°/-30°
- Max. swinging angle ±45°
- Weight, boom only 2 900 kg

» Air system

- Hydraulically driven screw compressor... Atlas Copco GAR 5
- Capacity, max at 9 bar 26 l/s
- Adjustable speed
- Air pressure gauge
- Hole blowing kit with 80 l air receiver

» Water system

- Hydraulically driven water booster pump Johnson MCVS16-7
- Water booster pump max capacity at 30 bar 400 l/min
- Min water inlet pressure at 200 l/min, 2 bar
- Water pressure gauge
- Water flow guard

» Control system

- Rig Control System (RCS) – versatile and upgradeable to a higher degree of automation
- One adjustable, electronic control panel with colour display
- USB-port for transfer of data and backup settings
- Integrated diagnostic system

» Electrical system

- Total installed power 198 kW
- Main motors 2 x 95 kW
- Voltage 380–1 000 V
- Frequency 50–60 Hz
- Starting method star/delta (1 000 V direct start)
- Electronic overload protection for electric motors
- Percussion hour meter on operator display
- Digital voltmeter/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 8 kVA
- Cable reel, diameter 1 600 mm
- Dual controls for cable reel

» Hydraulic system

- Hydraulic pumps 2 separate units, one for each boom
- Pumps unloaded at start
- System pressure, max 250 bar
- Hydraulic oil tank, volume max/min 390/290 l
- Low oil level indicator
- Oil temperature gauge on oil tank
- Electrical oil filling pump
- Oil filter indicator
- Water cooled oil
- Filtration 16 µm
- Mineral hydraulic oil
- Big hole drilling system

» Carrier

- Deutz 4-cylinder, TCD 2013 L04, EPA III/COM III (Tier 3/ Stage IIIA) approved 4-stroke prechamber diesel engine
- Power rating at 2 300 rpm 120 kW (160 hp)
- Torque at 1 600 rpm 618 Nm
- Articulated steering ±41° steering angle
- Fixed seat for tramming
- Four-wheel drive
- Hydrostatic power steering system
- Hydrodynamic transmission Clark 24000
- Front axle Dana 123/90
- Rear axle Dana 123/90, ±8° oscillation
- Automatic differential lock on front axle, limited slip
- Tyres 12.00 x R24
- Clearance outside axles 22° front, 13° rear
- Hydraulic jacks, front 2 extendable
- Hydraulic jacks, rear 2
- Service brakes 2 separate circuits
- Emergency and parking brakes SAHR
- Fuel tank, volume 110 l
- Exhaust catalyser
- Silencer
- Electric system 24 V
- Batteries 2 x 12 V, 125 Ah
- Tramming lights 6 x 40 W LED + 2 x 70 W halogen, 24 V
- Working lights 4 x 35 W HID, 24 V DC
- Brake lights
- Illuminated stairs for platform 2 x 70 W
- Fire extinguisher
- Central lubrication system
- Spirit level one for longitudinal, one for sideways
- Gradeability at max. load on drive wheels 1:4
- Horn, beacon and reverse alarm
- Shelf for drill bits and tools

Specifications

DRIFTER RODS

Dimension		Min. hole diameter
mm	SR35-H35-T38	45
	SR35-R39-T38	45

COUPLINGS

Thread	Diameter	Length
mm	T38/TC45	175

SHANK ADAPTERS

Thread	Diameter	Length
mm	TC45*	45
	TC45	435

*Intended for RAS and extension drilling with BSH 110

EXTENSION RODS FOR INJECTION DRILLING/RAS

Dimension	Min. hole diameter
mm	R39 Speedrod
	64

GUIDE TUBE FOR INJECTION DRILLING

Dimension	Min. hole diameter
mm	R46
	64

Optional equipment

» Feed

- Telescopic feed BMHT 6000-series (max 18 ft)
- Extension drilling set BSH 110 (BMH feeds only)
- Feed prepared for RAS
- Rod Adding System, RAS
- Water spraying kit on cradle

» Boom

- Automatic boom lubrication kit, rear part of boom

» Automation

- ABC Basic
- ABC Regular
- ABC Total
- Rig prepared for ABC Total
- Electronic parallel holding (ABC Regular)
- Rig prepared for Measure While Drilling (MWD) logging and analyzing drill data
- Measure While Drilling (MWD)
- Bolt view (ABC Regular and Total)
- Rig Remote Access (RRA) – LAN or WLAN connection
- RRA server

» Protective roof

- Mounting height -80 mm/+30 mm/+310 mm
- Manual spotlight, left and/or right
- Swingable seat for drilling and tramping (one operator panel only)
- Two operator panels for standing operation only

» Cabin

- FOPS-approved cabin, noise level <80 dB(A), height 3 044 mm including:
 - Air conditioning unit
 - Fixed seat
 - CD-changer
 - Boot washing kit
- Cabin body made of stainless steel
- Front window, 24 mm
- Heating function for air conditioning (water transferred)
- Electrical heater, 1.2 kW, 230 V (CE)

- Joystick-controlled spotlights left and/or right
- Swingable seat for drilling and tramping (one operator panel only)
- Two operator panels (for standing operation only)

» Air system

- Compressor, GAR 30

» Water system

- Water hose reel

» Hydraulic system

- Biodegradable hydraulic oil
- Heater kit for hydraulic oil tank, diesel engine and electric motors

» Carrier

- Deutz engine, TCD 2015 L06 2V
- Exhaust system: particle filter
- Fire suppression system ANSUL (manual or Checkfire)
- Fire suppression system FORREX (manual or automatic)
- Large plates for boom frame hydraulic jacks

» Electrical system

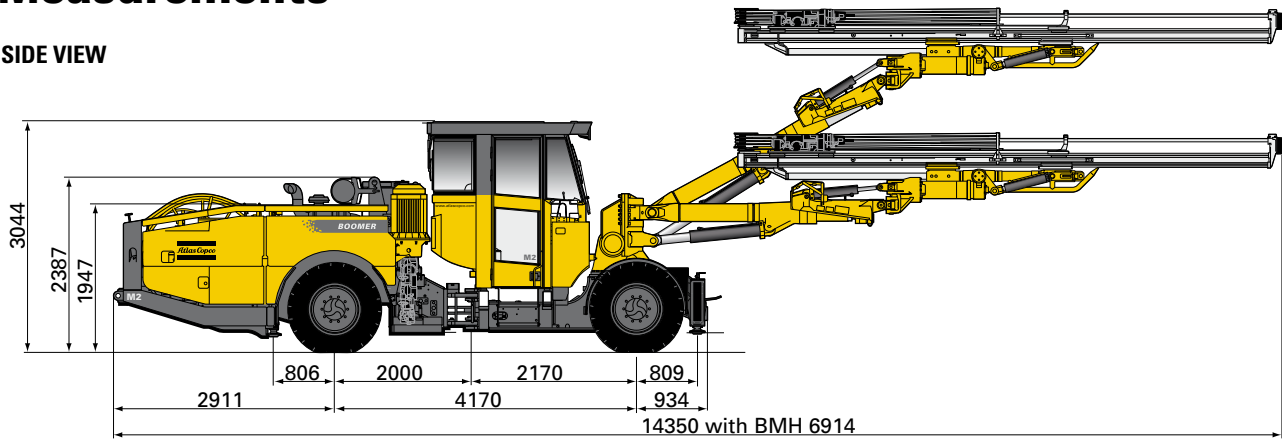
- Stainless steel electrical enclosure
- Electric cable type Buxflex, 690/1 000 V
- Plug for cable
- Switch gear
- Electrical outlet voltage 16 A 3-phase (CE and not for 1 000 V)
- Extra transformer, 3-phase, 15 kVA (230/400 V)

» Miscellaneous

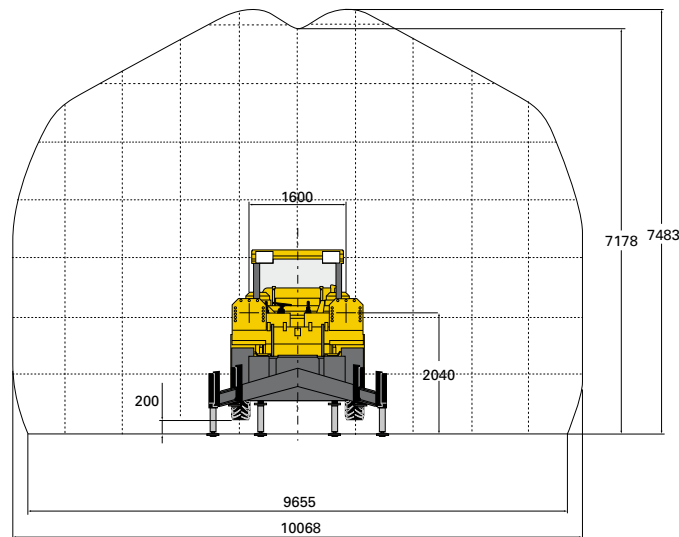
- Hose/cable guiding at water/cable reel
- Hydraulic Swellex pump type H1 for manual installation
- Manual lubrication kit
- Rig washing kit
- Boot washing kit
- Ni-Cr plated piston rods (limitations exist)
- Hydraulic outlet for charging with Mini SSE

Measurements

SIDE VIEW



COVERAGE AREA



DIMENSIONS

mm		
	Width	2 245
	Height with cabin	3 044
	Height roof up/down	3 019/2 387
	Length with BMH 6914 feeds	14 350
	Ground clearance	262
	Turning radius outer/inner	7 200/4 400

TRAMMING SPEED

km/h		
	On flat ground (rolling resistance 0.05)	>14
	On incline 1:8	> 6

WEIGHT

gross weight, depending on configuration		
kg	Total	23 500–27 000
	Boom side	17 500–19 000
	Engine side	6 000–8 000

NOISE AND VIBRATION

Operator sound pressure level in canopy, drilling, free field (ISO 11201)	104±6 dB(A) re 20uPa
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75± 3 dB(A) re 20uPa
Operator sound pressure level working close to machine, drilling, free field	104±6 dB(A) re 20uPa
Sound power level (ISO 3744), drilling, free field	131 dB(A) re 1pW
Vibration levels standing, canopy (ISO 2631-1)	0.1± 0.15 m/s ²
Vibration levels standing, cabin (ISO 2631-1)	0.07± 0.15 m/s ²
Vibration levels seated, cabin (ISO 2631-1)	0.07± 0.07 m/s ²

RECOMMENDED CABLE SIZE AND LENGTH

Voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
660–690V	H07RN-F	4X120	60	75
	Buflex	3x150+3G25	52	100
1 000 V	Buflex	3x95+3G16	45	155

Recommendations are given for surrounding temperature of 40 °C and up to a height of 2 000 m.