

Boomer XL1 D

Equipped with COP 1440, COP 1838, COP 2238 rock drill



Hydraulically controlled mining and tunnelling face drilling rig with one BUT 35 Light boom. Available with a variety of rock drills.

Standard features

» Rock drill

- COP 1440, COP 1838 or COP 2238 rock drill 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 L 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

- Hydraulically controlled drilling system which incorporates the anti-jamming function Rotation Pressure Controlled Feed (RPCF)

» Carrier

- Sturdy, articulated carrier with four-wheel drive
- Powered by a 4-cylinder Deutz F4L 912 W approved diesel engine
- Four jacks for stable set-up

» General

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

Specifications

ROCK DRILL	COP 1440	COP 1838	COP 2238
Shank adapter	R32/R38/T38	R32/R38/T38	R32/R38/T38
Height over drill centre	88 mm	88 mm	88 mm
Length without shank	1 002 mm	1 008 mm	1 008 mm
Impact power	20 kW	18 kW	22 kW
Impact rate	70 Hz	60 Hz	73 Hz
Hydraulic pressure	230 bar	230 bar	250 bar
Rotation system	Separate rotation	Separate rotation	Separate rotation
Rotation speed	0–340 rpm	0–340 rpm	0–340 rpm
Rotation torque, max	640 Nm	640 Nm	640 Nm
Lub. air consump. at 2 bar	6 l/s	6 l/s	6 l/s
Water consumption	1.1 l/s	1.1 l/s	1.1 l/s
Weight	151 kg	170 kg	170 kg
Sound level	<106 dB(A)	<106 dB(A)	<106 dB(A)

FEED

BMH 6800	BMH 6812	BMH 6814	BMH 6816	BMH 6818	BMH 6820
Total length	5 287 mm	5 882 mm	6 505 mm	7 102 mm	7 697 mm
Drill steel length	3 700 mm	4 315 mm	4 920 mm	5 530 mm	6 100 mm
Hole depth	3 443 mm	4 043 mm	4 668 mm	5 268 mm	5 838 mm
Weight, incl. drill	601 kg	631 kg	665 kg	696 kg	730 kg
Feed force	15.0 kN	15.0 kN	15.0 kN	15.0 kN	15.0 kN

» Boom

- BUT 35 Light
- Feed extension 1 250 mm
- Boom extension 1 450 mm

ELECTRICAL SYSTEM

INSTALLED POWER	COP 1440	COP 1838	COP 2238

- Parallel holdingcomplete
- Feed roll-over360°
- Max. lifting angle+65°/-30°
- Max. swinging angle±35°
- Weight, boom only2 750 kg

» Air system

- CompressorAtlas Copco LE7.....5,5Kw
- Capacity at 1,500 rpm11.7 l/s at 7 bar
- Air pressure gauge

Total installed power	85 kW	85 kW	85 kW
Main motor	75 kW	75 kW	75 kW
Voltage	380–1 000 V	380–1 000 V	380–1 000 V
Frequency	50–60 Hz	50–60 Hz	50–60 Hz
Transformer	4 kVA	4 kVA	4 kVA
Cable reel, diameter	1 300 mm	1 300 mm	1 300 mm

Starting method star/delta 380–690 V, direct start 1 000 V

Thermal overload protection for electric motors

Percussion hour meters

Digital volt/amperage meter in electrical cabinet

Phase sequence indicator

Earth fault indicator

Battery charger

Cable reel

Dual controls for cable reel

» Hydraulic system

- Hydraulic pumps 1 unit
- Pumps unloaded at start
- Hydraulic oil tank, volume, max 145 l
- Low oil level indicator
- Oil temperature meter on oil tank
- Oil filter indicator
- Oil/water cooler in stainless steel
- Filtration16 µm
- Mineral hydraulic oil
- Manual oil filling pump
- One operator control panel
- Rock drill lubrication warning kit

» Water system

- Water booster pump Franklyn Electric EV06/20.....3Kw
- Water booster pump max capacity at 16 bar, l/s1.1
- Min water inlet pressure, bar3
- Water flow guard

» Carrier

- Deutz 4-cylinder, F4L 912 W Catalytic PTX Silenced approved 4-stroke prechamber diesel engine
- Power rating at 2 300 rpm44 kW
- Torque at 1 500 rpm40 kN
- Articulated steering± 40° steering angle
- Fixed seat for tramming
- Four-wheel drive

- Hydrostatic power steering system
- Hydrostatic transmission
- Front axleHamworthy 1750
- Rear axleHamworthy 1750 oscillation +/-10
- Automatic differential lock on front axle
- Tyres8.25 15 PR 14
- Clearance outside axles15°
- Hydraulic jacks, front 2
- Hydraulic jacks, rear2
- Service brakes2 separate circuits
- Emergency and parking brakesHydraulic fail safe

- Fuel tank, volume140 l
- Exhaust catalyser
- Electric system24 V
- Batteries2x12 V, 70 Ah
- Trimming lights6x48 W 24 V LED
- Working lights2x500W 240 V slim V TAC
- Brake lights
- Fire extinguisher
- Gradeability at max. load on drive wheels 1:3,5
- Horn, beacon and reverse alarm

DRIFTER RODS

Dimension		Min. hole diameter
mm	R38-HEX 35-R32	45
	T38-HEX 35-R32	45
	T38-HEX 35-R32 Speedrod	45
	R38-HEX 35-SR35 Speedrod	45
	T38-HEX 35-SR35	45
	T38-Rnd 39-SR35	45
	T38-HEX 35-R35	48
	T38-HEX 35-R35 Speedrod	48
	T38-Rnd 39-R35	48
	T38-Rnd 39-R35 Speedrod	48

SHANK ADAPTERS

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

Specifications

**Intended for extension drilling with BSH 110*

EXTENSION RODS FOR INJECTION DRILLING/RAS

Dimension		Min. hole diameter
mm	R32 Speedrod	51
	T38 Speedrod	64

COUPLINGS

Thread		Diameter	Length
mm	R38	55	170
	T38	55	190

Optional equipment

» Rock drill

- Big hole drilling system
- Water mist flushing, external water and air supply
 - Hydraulic oil cooled by water
 - Hydraulic oil cooled by air fan
- Hole blowing kit with 50 l air receiver
- External air supply for hole blowing kit
- Dry drilling system with dust collector

» Feed

- Telescopic feed BMHT 2000-series (max 14 ft)
- Extension drilling set BSH 110 (BMH feeds only)
- Bulk head style hose tree on feeds
- Mining (heavy-duty) centralisers

» Boom

- Feed Angle Measurement, FAM 1
- Feed Angle Measurement with hole depth, FAM 2
- Automatic boom lubrication kit, rear part of boom
- Boom suspension system

» Water system

- Water hose reel

» Hydraulic system

- Biodegradable hydraulic oil
- Hydraulic oil thermostat
- Heater kit for hydraulic oil tank

» Carrier

- Deutz 6-cylinder F6L 912, 6-stroke turbo diesel engine, (72 kW, 96 hp at 2500 rpm, 355 Nm at 1600 rpm, 14 km/h on flat ground, 9 km/h on incline 1:8)
- Fire suppression system ANSUL(manual or Checkfire)

- Hand throttle
- Illuminated stairs for platform/cabin

» Protective roof

- Manual spotlight, left and/or right
- 12 V outlet for communication radio
- Swingable seat for drilling and tramming

» Cabin

- FOPS-approved cabin, noise level <80 dB(A), height 2,800 mm including:
 - Air conditioning unit
 - Fixed seat
- Cabin body made of stainless steel
- Front window, 24 mm
- Electrical heater, 1.2 kW, 230 V (CE)
- Joystick-controlled spotlights left and/or right
- Swingable seat for drilling and tramming
- CD-player/radio
- 12 V outlet for communication radio

» Electrical system

- Stainless steel electrical enclosure
- Electric cable type H07RN-F or Buflex
- Plug for cable
- Switch gear
- Electric outlet for accessories, 16 A
- Starting method – soft start (not for 1000 V)

» Miscellaneous

- Manual lubrication system
- Rig washing kit
- Boots washing arrangement
- Ni-Cr plated piston rods (limitations exist)

Measurements

Length : 12.000 mm with BMH 2843

Width: 1.500 mm

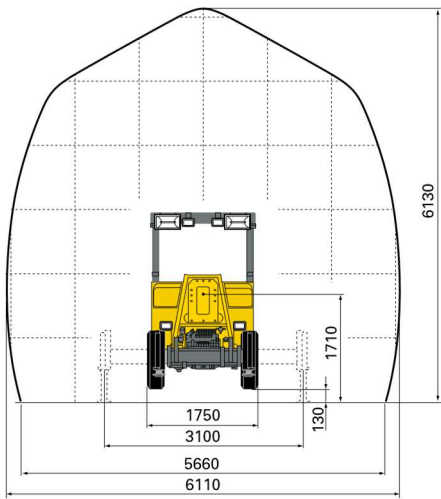
Ground clearance: 365 mm

Height: 3.200 mm (2.400 mm with retracted canopy in tramming position)

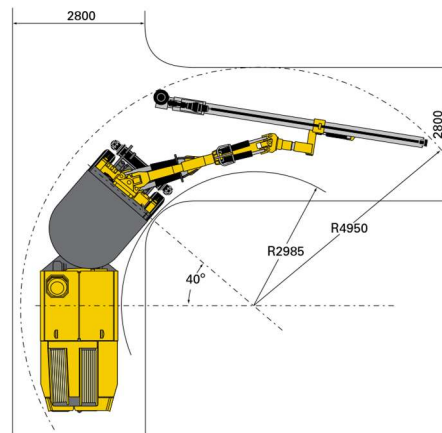
Interax between axle: 2.800 mm

Max speed: 4,7 km/h

Coverage Area



Turning Radius



DIMENSIONS

mm	Width	1 750
	Height roof down	2 100
	Height roof up	2 800
	Length with BMH 2843 feeds	11 355
	Ground clearance (with std tires)	365

TRAMMING SPEED

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

COP 1838/2238: RECOMMENDED CABLE SIZE AND LENGTH

voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
380–400 V	H07RN-F	4G70	49	70
	Buflex	3x95+3G16	45	100
440 V	H07RN-F	4G70	49	70
	Buflex	3x95+3G16	45	100
500–525 V	H07RN-F	4G50	44	90
	Buflex	3x70+3G16	39	135
550–575 V	H07RN-F	4G50	44	90
	Buflex	3x70+3G16	39	135
660–690 V	H07RN-F	4G35	38	110
	Buflex	3x50+3G10	33	160
1,000 V	H07RN-F	N/A	N/A	N/A
	Buflex	3x35+3G6	29	200

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

WEIGHT

gross weight		
kg	Total	12 000
	Boom side	7 100
	Engine side	3 900

COP 1440: RECOMMENDED CABLE SIZE AND LENGTH

voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
380–400 V	H07RN-F	4G70	49	70
	Buflex	3x90+3G16	45	100
440 V	H07RN-F	4G70	49	70
	Buflex	3x95+3G16	45	100
500–525 V	H07RN-F	4G35	38	110
	Buflex	3x50+3G10	33	160
550–575 V	H07RN-F	4G35	38	110
	Buflex	3x50+3G10	33	160
660–690 V	H07RN-F	4G35	38	110
	Buflex	3x50+3G10	33	160
1,000 V	H07RN-F	N/A	N/A	N/A
	Buflex	3x35+3G6	29	200

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