

BOLTEC 235 UNDERGROUND DRILLS

TECHNICAL SPECIFICATION



A fully mechanized rock bolting rig for bolt lengths from 1.5–2.4 meters. Effective in roof heights up to 8.5 meters.

Standard features

» Control system

- Hydraulic, direct control system for drilling and bolting
- Anti-jamming function
- RPCF (Rotation Pressure Controlled Feed force)

» Bolting unit

- MBU bolting unit on a single feed system
- Magazine for 10 bolts

» Rock drill

- COP 1132 with hydraulic dual-damping system
- 11 kW impact power

» Hydraulic boom

- BUT 35 boom specially designed for scaling with direct, fast and accurate positioning

» Carrier

- Articulated steering, 4-wheel drive
- Fail-safe brakes
- Central lubricated chassis
- Four jacks for stable set-up

» General

- FOPS-approved protective roof
- Cable reel
- Search light, 1x70 W
- Bolt rack
- Water booster pump
- Compressor
- Air receiver
- Pump unloading function
- Working lights, 3x500 W halogen

Specifications

» Rock drill/drill system

- COP 1132
- Shank adapter R28, R32 (R25)
- Height over drill centre 77 mm
- Length 735 mm
- Impact power, max 11 kW
- Impact rate 100 Hz
- Hydraulic pressure, max 200 bar
- Rotation system separate rotation
- Rotation torque, max 225 Nm
- Lub. air consumption at 2 bar 6 l/s
- Weight 75 kg
- Sound level <106 dB(A)
- Rock drill lubrication warning kit
- Rock drill lubrication surveillance system
- Hole blowing kit

» Bolting unit

- Mechanical Bolt Unit, MBU
- Magazine capacity 10 bolts
- Max. size of face plates, rectangular 150x150 mm
- Max. size of face plates, round Ø 200 mm
- Bolt length 1.5–2.4 m
- Adapted for all commonly used bolt types on the market, see options
- Drill steel and coupling according to MBU, delivered with rig
- Chain feed adapted according to bolt length

» Boom

- BUT 35HBE
- Feed extension 0–1 000 mm
- Boom extension 1 600 mm
- Feed roll-over 360°
- Max. lifting angle +65°/-30°
- Max. swinging angle ±45°
- Weight, boom only 2 870 kg

» Hydraulic system

- Hydraulic pumps 1 unit
- Pumps unloaded at start
- System pressure 150–230 bar
- Hydraulic oil tank, volume max/min 160/132 l
- Low oil level indicator including shut down
- Oil temperature gauge on oil tank
- Filtration 16 µm
- Water-cooled oil cooler
- Mineral hydraulic oil
- Oil filter indicator

» Air system

- Compressor Atlas Copco LE75
- Capacity, max at 7 bar 12,5 l/s
- Hydraulic drive, axial piston motor 10 cc
- Air pressure gauge
- Air receiver 50 l

» Carrier

- Deutz D 914 L04, Tier 3/Stage III A (EPA III/COM III) approved, 4-stroke diesel engine with catalyzer
- Power rating at 2 300 rpm 58 kW (78 hp)
- Torque at 1 500 rpm 270 Nm
- Articulated steering, ±41° steering angle
- Transmission, Dana T12000
- Hydrodynamic transmission
- Four wheel drive
- Hydrostatic power steering system
- Front axle, Dana 176
- Rear axle, Dana 176 with ±8° oscillation
- Automatic differential lock on front axle, limited slip
- Service brakes, 2 separate circuits
- Emergency and parking brakes: SAHR (Spring Applied Hydraulic Release)
- Tyres front and rear, 12.00 R20
- Clearance outside axles 15°
- Hydraulic jacks, front, 2 extendable
- Hydraulic jacks, rear, 2
- Fuel tank, volume 60 l
- Electric system 24 V
- Batteries 2x 12 V, 70 Ah
- Trimming lights 8x70 W, 24 V
- Central lubrication system
- Fire extinguisher
- Spirit levels, one for longitudinal and one for sideways
- Horn
- Boltrack
- Gradeability at max load on drive wheels 1:4
- Beacon warning lamp
- Reverse alarm

» Electrical system

- Total installed power 66 kW
- Main motor 55 kW
- Compressor motor 7.5 kW
- Voltage 380–1 000 V
- Frequency 50–60 Hz
- Starting method star/delta
- Electronic overload protection
- Percussion hour meters in electrical cabinet
- Digital volt/ampere meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 4 kVA
- Working lights, halogen 3x500 W, 230 V or 2x500 W CSA
- Search light 1x70 W, 24 V
- Cable reel diameter 1 400 mm

» Water system

- Hydraulic driven water booster pump CR 5-13
- Capacity, max at 7 bar boost 80 l/min
- Min water inlet pressure 2 bar



Optional Equipment

» Rock drill/drill system

- Rock drill lubrication warning kit

» Bolting unit/Boom

- Swellex, Mn 12, Mn 16, Mn 24
- Split-Set, SS33, SS39, SS46
- Mechanical anchor bolts, CT, Kiruna, including boltrotator
- Split Wedge
- Rebar - manual resin / cement cartridge, including boltrotator
- Rebar - cement injection system, manual
- Hose injection system for resin cartridges
- Dual bolt lengths
- Dual bolt types
- Extension drilling kit

» Water system

- Water hose reel
- Dual controls for hose reel

» Carrier

- Fire suppression system
 - Manual release
 - Automatic (Checkfire)
 - Full Automatic
- High altitude setting of diesel engine
- Spot lights, extra

» Electrical system

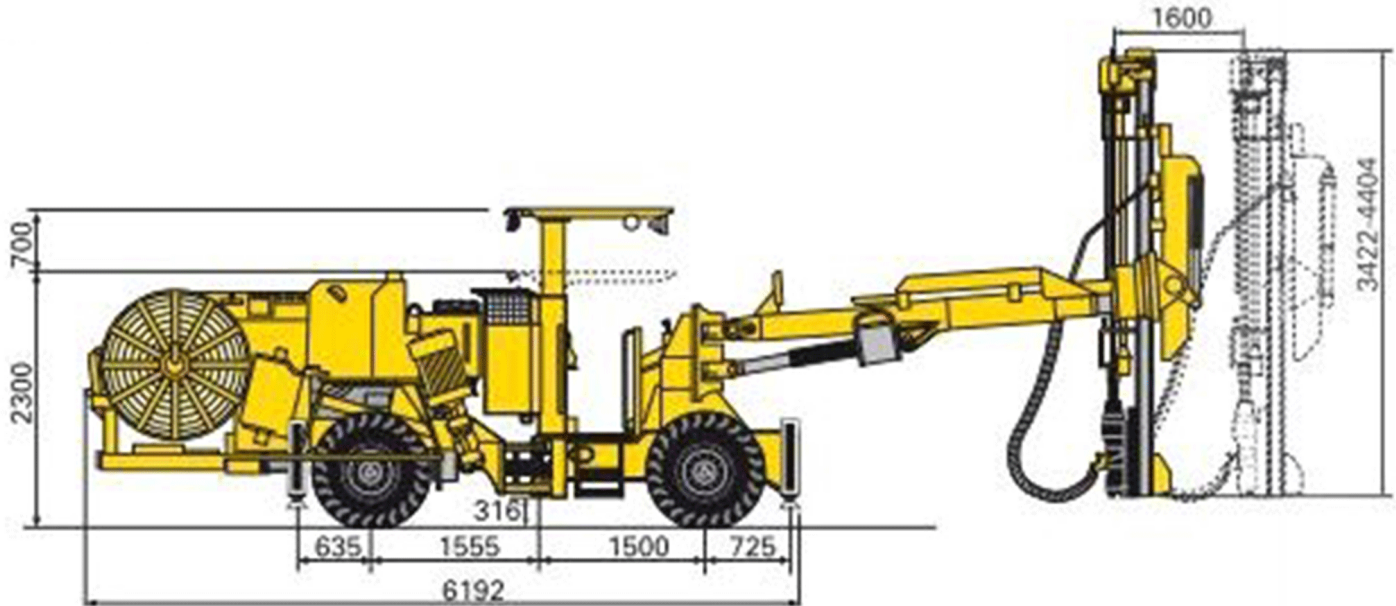
- Soft start
- Electrical system 1 000 V, direct start only
- Electric cable type H07 or Buxflex
- Dual controls for cable reel
- Limit switch for cable reel
- Electric plugs 380-1 000 V, max 250 A
- Plugs, socket, connector, switchgear
- Electric outlet for accessories, 16 A
- Extra transformer 3, 10 or 15 kVA
- CSA approved electrics (Canadian regulations), direct start only
- Australian electrics according to AUS 3000

» Hydraulic system

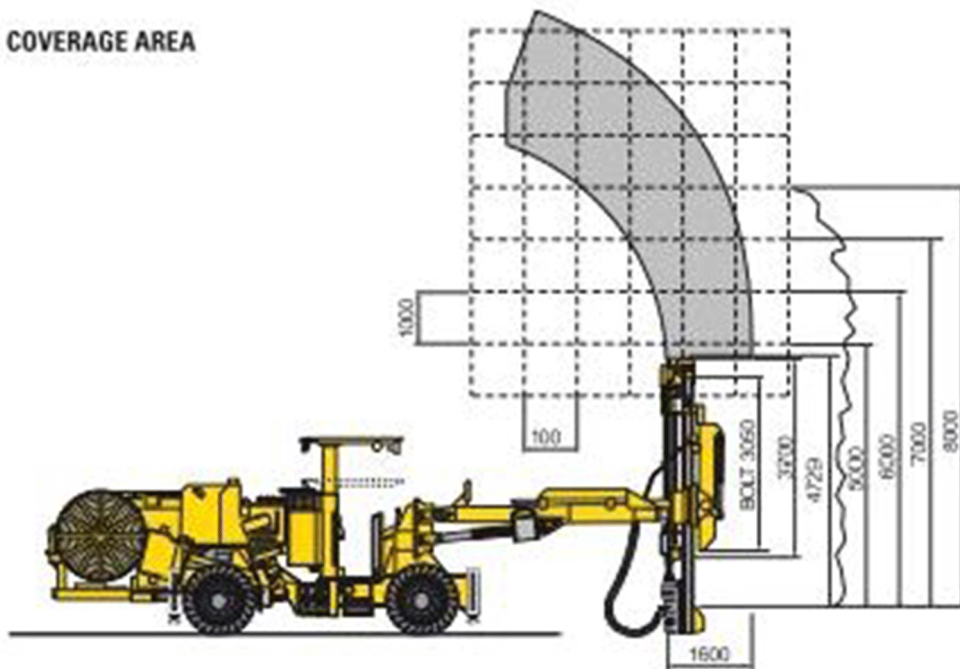
- Biodegradable hydraulic oil
- Electric oil filling pump

» Miscellaneous

- Boots washing arrangement
- Ni-Cr plated piston rods (limited selection)



COVERAGE AREA



RECOMMENDED CABLE SIZE AND LENGTH

Voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
400 V	H07RN-F	4G70	49	90
400 V	Buflex	3x95+3G16	42	125
440 V	H07RN-F	4G50	44	100
440 V	Buflex	3x70+3G16	37	145
480-500 V	H07RN-F	4G50	44	100
480-500 V	Buflex	3x70+3G16	37	145
500-550 V	H07RN-F	4G50	44	100
500-550 V	Buflex	3x70+3G16	37	145
650-700 V	H07RN-F	4G35	38	135
650-700 V	Buflex	3x50+3G10	32	210
1000 V	Buflex	3x35+3G5	28	270

Max length 90 m, fully rigid RDOF 33 with D=28.
Recommendations are given for normal operating temperature of 40°C.

DIMENSIONS

mm		
	Width, without bolt rack	1 930
	Height, carrier	2 300
	Length, excluding boom	6 192
	Ground clearance	316
	Turning radius, outer	5 800
	Turning radius, inner	3 000

WEIGHT

gross weight		
kg	Total	17 500
	Boom side	12 500
	Engine side	5 000

TRAMMING SPEED

km/h	On flat ground (rolling resistance 0.05)	> 14
	On incline 1:8	> 4.5