

PowerROC D60

Surface drill rig for mining and quarrying

Hole diameter: 110–178 mm (4.3–7")



When bigger is better

PowerROC D60, a hydraulic down-the-hole drill rig, perfectly meets the needs of open-pit mines and quarries when it comes to drilling big holes. Thanks to its reliable performance, it effectively improves production capability. It is suitable not only for drilling production holes, but also other auxiliary operations at the jobsite.

There are now Tier 3 and Tier 4 Final versions available. The hydraulic pilot system and straightforward electronic system make PowerROC D60 easy to operate and easy to service, resulting in more reliable performance. The 5+1 Rod Handling System (RHS) makes it possible to drill holes down to a depth of 30 m. The aluminum feed beam combined with dual breakout table ensure the

straightness of the borehole. The powerful DHR 6H rotary unit ensures that PowerROC D60 can operate reliably in all types of rock conditions. The highly-efficient dust collection system ensures that the work environment is kept clean and meets the environmental protection requirements for green mines.



Excellent combination of value and drilling capacity

PowerROC D60 is a drill rig with a high level of productivity and performance when it comes to drilling big holes ranging from 110 mm to 178 mm.

+ Main benefits

High performance thanks to well-proven Epiroc technology and extensive experience

High reliability due to high-quality components

A straightforward design makes the machine **easy to operate and easy to maintain**

A partner you can trust

The PowerROC D60 hydraulic down-the-hole drill rig is safe, environmentally friendly and powerful, helping you increase production capability. With its ease of maintenance and repair, the rig ensures high availability, performance and productivity day in and day out.



+ Safety always in focus

The air-conditioned FOPS and ROPS certified cabin ensures operator safety at all times. It provides a comfortable experience and a broad view when drilling or changing rods. If the system detects a reduction or loss of hydraulic pressure due to the operator leaving the seat in the cabin, the rig will stop drilling in order to prevent injury to others at the jobsite. PowerROC D60 stops immediately if one of the four emergency stop switches distributed around the machine is operated.



+ High performance ensuring high productivity

PowerROC D60 is built with the proven Epiroc rotary unit, providing great power to daily production. Equipped with an onboard Atlas Copco two-stage screw compressor, PowerROC D60 delivers up to 428 l/s of air at a maximum pressure of 25 bar, thereby ensuring a high penetration rate. The straightness of the aluminum feed beam ensures drilling is steady and smooth. A robust chain feed ensures that PowerROC D60 has lower running costs and a longer service life.



+ Easy and convenient maintenance

PowerROC D60 provides easy access to vital service points through centralized access. All air filters and oil filters can be changed and all oil levels checked at one single spot. In addition, the hydraulic valve blocks have been positioned to allow for easy adjustment and inspection. The feed beam can be positioned horizontally, which enables toe-hole drilling and makes for easy inspection and maintenance.



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

Main components

- Track frames with triple grouser pads and cleaning holes, hydraulic track oscillation and two speed traction
- Cummins turbo-charged Tier III diesel engine/ CAT turbo-charged Tier 4 Final diesel engine
- Atlas Copco two stage screw type compressor for high pressure
- Air-conditioned cabin, ROPS and FOPS certified
- Standard boom
- Dry type dust collector with pre-seperator

- Aluminum feed beam and chain feed system powered by hydraulic motor
- Dual break-out table
- Rod Handling System (RHS)
- Thread lubrication, spray system
- Back-up alarm

Engine

Cummins turbo-charged, diesel engine QSZ13-C500, Tier III/Stage 3	Metric	US
Power rating at 1 800 rpm	379 kW	505 hp
CAT turbo-charged, diesel engine C13B, Tier 4 Final/Stage V		
Power rating at 1 800 rpm	370 kW	496 hp

Compressor

Atlas Copco, two-stage screw type compressor	Metric	US
Maximum working pressure	25 bar	363 psi
FAD, at normal working pressure	428 l/s	906 cfm

Hydraulic system

Hydraulic oil cooler	Metric	US
Maximum ambient temperature	52°C	125.6°F

Dust collector DCT 320

	Metric	US
Filter area	32 m ²	344 sq.ft
Number of filter elements	32 pcs	32 pcs
Cleaning air pressure, max	8.0 bar	116 psi
Cleaning air consumption	2-4 l/pulse	0.06-0.12 cu.ft/pulse

Volumes

Hydraulic oil tank	380 l	100 US gal
Hydraulic system, total	470 l	124 US gal
Compressor oil	80 l	21.1 US gal
Diesel engine oil (Tier 3)	45 l	11.9 US gal
Diesel engine oil (Tier 4 Final)	36 l	9.5 US gal
Diesel engine, cooling water	60 l	15.9 US gal
Diesel engine, fuel tank	760 l	200 US gal
Traction gear	3 l	0.8 US gal
Lubrication tank (HECL)	20 l	5.3 US gal

Rotary head

Rotary head	Connection thread	Hole range	Max rpm	Max torque	Suitable for DTH hammer
DHR 6H 56 - 1	API 2 3/8" REG, box	110-152 mm	107 rpm	3 900 Nm (2 867 lbf-ft)	4' - 5'
DHR 6H 68 - 3	API 3 1/2" REG, box	152-178 mm	68 rpm	5 100 Nm (3 761 lbf-ft)	6'

Feed

Chain feed with dual drill rod support	Metric	US
Feed extension	1 900 mm	74.8'
Feed rate, max	0.85 m/s	170 ft/min
Feed force, max	24 kN	5 394 lbf
Tractive pull, max	30 kN	6 743 lbf
Total length	9 400 mm	370'
Travel length	5 400 mm	212.6'

Electrical system

Voltage	24 V
Batteries	2 x 12 V, 200 Ah
Alternator	28 V, 110 A
Work lights, front	3 x 70 W
Work lights, rear	1 x 70 W
Work lights, feed	2 x 70 W

Down-the-hole hammer (to be ordered separately)

Down-the-hole hammer	Top sub thread	Hole range
4'	API 2 3/8" REG pin	110-130 mm (4.3-5.1')
5'	API 3 1/2" REG pin	130-152 mm (5.1-6')
6'	API 3 1/2" REG pin	152-178 mm (6-7')

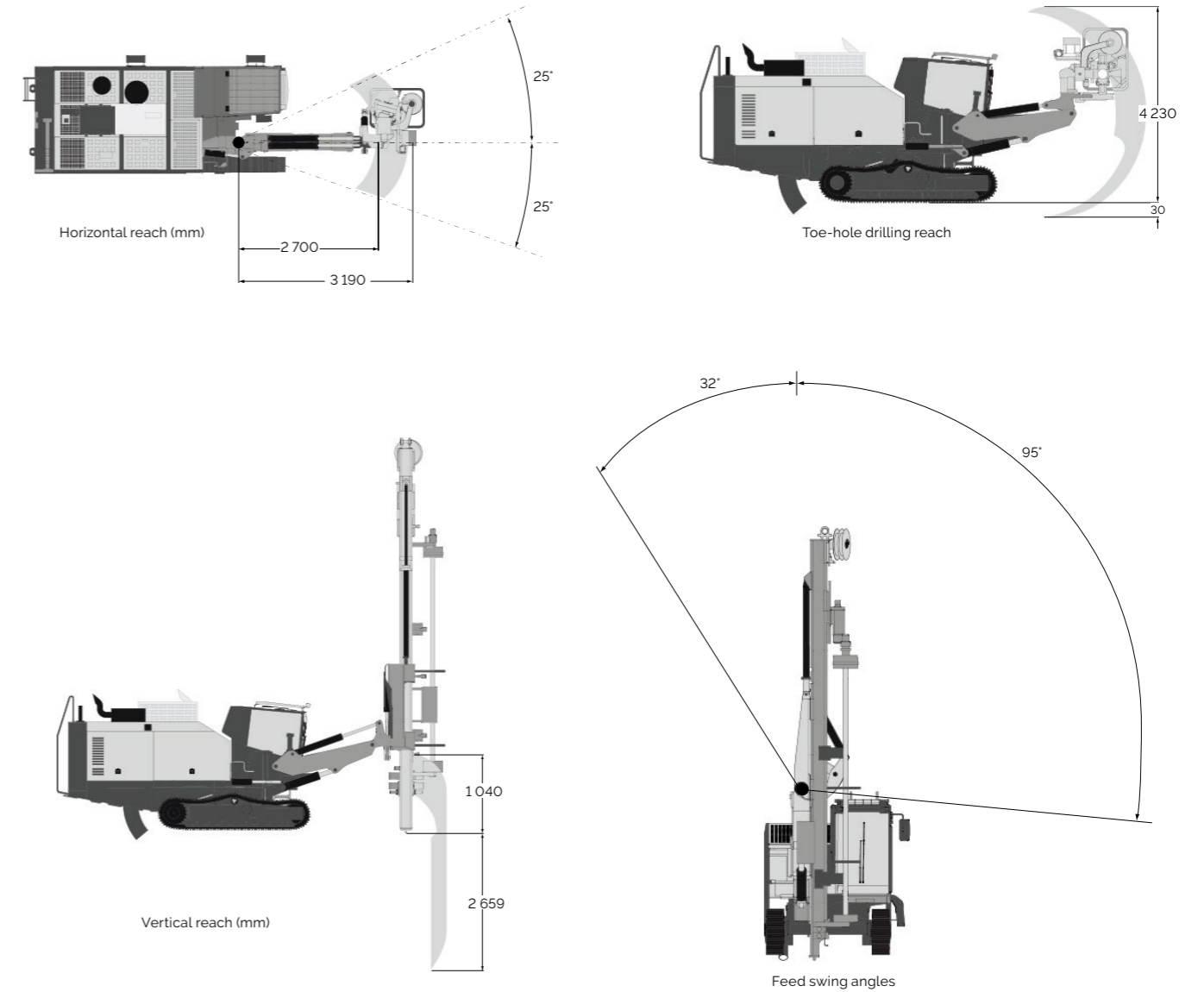
Hole range & depth (recommended)

Recommended DTH hammers and hole range			
PowerROC D60	4' 5' 6'	110-178 mm (4.3-7')	
Hydraulic rod handling system for max hole depth, with 5m tubes			
PowerROC D60	Ø 102 mm, Ø 114 mm rod	30 m	98.5'
	Ø 140 mm rod	25 m	82'
Single pass drilling, max hole depth			
PowerROC D60		5 m	16.4'



Transport dimensions

	Metric	US
Height (H1)	3 500 mm	138"
Length (L1)	11 350 mm	447"
Feed height (H)	9 400 mm	370"
Weight	20 800 kg	45 856 lb



Selection of options

Safety cabin

- 2D angle indicator, electronic
- 3D angle indicator, electronic
- Combined warning sound and warning light
- Reversing camera
- Radio

Carrier

- Hydraulic support leg
- Electrical refueling fuel pump
- Electrical refueling hydraulic oil pump
- Service lamps in canopy
- Cold weather kit, diesel engine pre-heater and compressor regulation heating kit
- Tie down point on top of canopy
- Heavy duty air intake filters for engine and compressor (Tier 3 only)

Lubrication oil, lubrication system and water mist system

- Central lubrication system (CLS)
- Artic hydraulic oil, VG 32
- Tropical hydraulic oil, VG 68
- Biological hydraulic oil, VG 46
- Water mist system, with water pump and 400 l water tank

Feed

- Dimension kit for 76 mm, 89 mm, 102 mm, 114 mm or 140 mm rod
- Wide feed foot
- Service winch with jib boom mounted on the feed

