

POWERFUL SHAFT BORING RBR400-VF

With its modular design and powerful electric drive, PYBAR's RBR400 – VF rig is ideal for long raises and large reaming diameters.

The mechanised drill rod handling and wrench system offers safe and easy handling ensuring high efficiency.

- For long raises and large reaming diameters
- Robust and powerful design
- Mechanised wrench system and rod handling for improved work safety
- Highly efficient variable frequency drive
- Full capacity drilling is possible due to high maximum torque and thrust forces
- Designed for construction of shafts up to 6m in diameter to depths of 800m in hard rock.

AGILE.
EFFICIENT.
PROGRESSIVE.

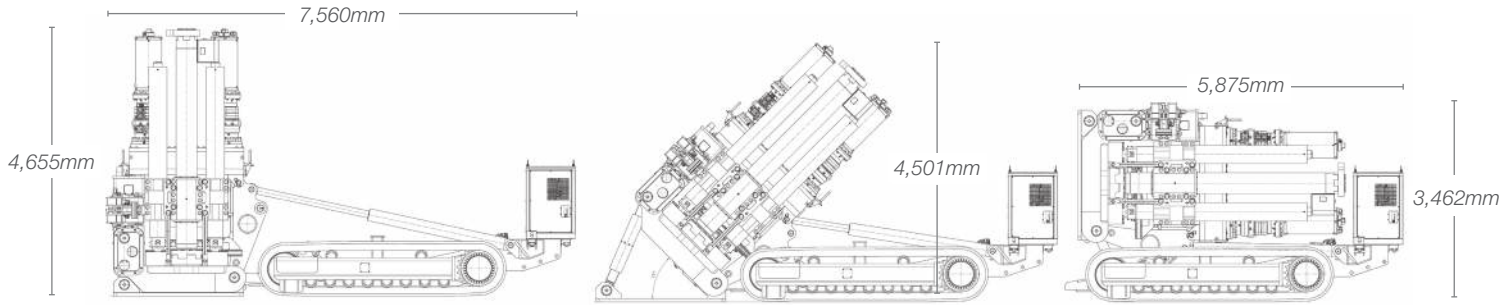
INTEGRATED UNDERGROUND MINING SERVICES:

- Mine development
- Production mining
- Cable bolting, production drilling and ITH drilling
- Raise boring and specialist boxhole boring
- Shotcreting and shaftlining
- Plant and equipment hire

PYBAR
MINING SERVICES
LEADERS IN UNDERGROUND MINING



RAISE BORING RIG RBR400-VF



RIG DIMENSIONS

Height retracted	4.85m (15.91 ft)
Height extended	6.60m (21.65 ft)
Width	2.26m (7.41ft)
Depth	2.37m (7.78ft)
Weight	39t (85,980lb)

Modular design for high degree of flexibility.

CRAWLER

Drive	Diesel powered hydraulic drive
Power	52kW (70hp)
Grade	Max. +25 %
Optional	Forklift equipment

Crawler for quick and easy movement and erection of the rig.

MAIN DRIVE UNIT

Installed power	360kW (483hp)
Drive	Electric (VF)
Number of motors	2

The powerful electric drive is ideal for long raises and large reaming diameters. Variable speed and torque limiting control.

HYDRAULIC POWER UNIT

Power	110kW (148hp)
Cooling	Water cooled

COOLING UNIT

Power	44kW
Cooling	Water cooled

TRANSFORMER UNIT

Input voltage	440V
Frequency	50/60Hz
Output voltage	440V

CONTROL STATION

Controls	Touch screen and control panel
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PIPE HANDLER

Load	1,000kg (2,205lb)
Handling system	Mechanised
Optional:	Axial drill rod adjustment

WRENCH SYSTEM

Handling system	Mechanised wrap around wrench
Optional	Fully hydraulically operated

Mechanised drill rod handling and wrench system for safe and easy handling.

DRIVEHEAD

Float	90 mm (3.54 inch)
Swivel	±1°
Optional	Active float system

Drivehead with swivel and float function saves drill rod threads. Active float to reduce weight on threads while make up and break out operation.

TECHNICAL SPECIFICATIONS

Drill rod	Diameter	327mm	12-7/8"
	Length s/s	1,524mm	60"
Pilot hole diameter	Diameter	349 - 381mm	13-3/4" - 15"
Raise diameter	Nominal	5.0m	16.4ft
	Range	2.4m - 6.0m	7ft - 20ft
Raise length	Nominal	600m	1,950ft
	Maximum	800m	2,625ft
Drill angle	(from horizontal)	0° - 45°	
Maximum torque	Reaming	452kNm	333,000lbf.ft
	Break-out	600kNm	442,000lbf.ft
Reaming thrust	Operating maximum	9,200kN	2,248,000lbf
RPM	Piloting	0 - 50 RPM	
	Reaming	0 - 13 RPM	
Traverse rate	Fast traverse rate	2.2m/min	7ft/min
	Feed rate	0.3m/min	1ft/min
Stroke		2.3m	7.55ft
Electrical	Power supply	400kW (0.8)	
	Voltage	440V	
	Frequency	50 60Hz	
	Power required	500kVA (50/60Hz)	
Bailing	Water	600l/min	159gal/min
	Air	18m³/min (7 bar)	636ft³/min (100psi)
Cooling water	At 25°C inlet temp.	160l/min	42gal/min

OPTIONAL EQUIPMENT

- Digital Drilling Report
- High pressure flushing pump
- Transformer
- Pipe Feeder
- Transport frame
- Control Cabinet
- Chiller system
- Flow meters
- Drilling tools
- Other tools on request

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SERVICE
RESPECT
RESULTS

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