



ÇAKIR SONDAJ
Jeotermal, Petrol Arama ve
Mühendislik Hizmetleri A.Ş.

Atatürk Mh. 652 Sk. No:25 Salihli / Manisa
(+90) 236 712 49 49

Description of LF™ 90D



LF™ 90D

Manufacturer: Boart Longyear

Rig Horsepower: 220 HP

Rig Type: Surface Coring Drill

Max Rod diameter: 114.3 mm (4.5 in)

Max. Capacity: 11.3 ton pullback with 6 m rod pull.

DRILL MAST and FEED SYSTEM

Feed Stroke	3.35 m 11 ft
Max Pull Capacity	167.7 kN 37,700 lbf
Max Thrust Capacity	88.4 kN 19,880 lbf
Rod Pull	3 or 6 m 10 or 20 ft
Mast Dump (Crowd)	2.34 m 7.7 ft
Mast Telescope	3.35 m 11 ft

Drilling Angle 45° o horizontal to 90° vertical down

DRAW WORKS

Main Line Hoist Single speed motor

Hook Load (single part line) 71.2 kN 16,000 lbf

Hoisting Speed (single part line) 0.35 m/min 1.15 ft/s

Main Hoist Cable 15 mm 0.59 in Minimum **Breaking Strength** 226.0 kN 50,800 lb

HYDRAULIC SYSTEM

Primary Pump

Axial piston, variable displacement load sensing, pressure compensated with low pressure standby.

Max Flow 165 L/m 43.5 gpm

Max Pressure 31 MPa 4,500 psi

Secondary Pump

Max Flow 64 L/m 17 gpm

Max Pressure 21 MPa 3,000 psi

Auxiliary Pump

Axial piston, variable displacement, pressure compensated

Max Flow 42 L/m 11 gpm

Max Pressure 14 MPa 2,000 psi

DRILL HEAD

Rotation Motor Rexroth hydraulic motor - variable/reversible

Head Opener

Patented Nitro Chuck™

Hydraulically opened, nitrogen gas spring closed Axial holding capacity of 222 400 N (50,000 lbf)

Drilling Depth Guidelines

BRQ / BQ	1385 m
NRQ / NQ	1064m
NRQ V-WALL™	1193m
HRQ / HQ	722m
HRQ V-WALL™	898m
PHD / PQ	476m
PHD V-WALL™	637m

PRIME MOVER

Cummins QSB 6.7 L

Liquid cooled, turbo charged, after cooled,diesel engine

Maximum power 153 kW (220 hp)

(at 2200 RPM)

Displacement 6,7L

TORQUE and RPM RATINGS

1st Gear	122 - 199 RPM	5322 - 3254 Nm
2nd Gear	1246 - 400 RPM	2648 - 1620 Nm
3rd Gear	439 - 714 RPM	1486 - 908 N
4th Gear	769 - 1,250 RPM	849 - 519 Nm