Atlas Copco Hydraulic rock drills

COP 1838MUX/HUX

Technical specification



High-speed, hydraulic rock drills for long-hole drilling in the hole range 51–89 (102) mm. High penetration rates and excellent drill steel life.

Features and benefits

- Efficient, hydraulic dual-damping system absorbs and dissipates the shockwaves from the rock, as well as establishing the best possible contact between the drill bit and the rock. This feature makes it possible to transmit maximum power to crush the rock without risking non-tightening of threads in the drill string.
- Impact piston design matches the size of the drill steel. This feature gives minimum drill steel stress.
- Built-in powerful hydraulic extractor unit which further improves drilling capacity and economy by practically eliminating the risk of loosing the drill string if it gets stuck.
- External sealed-off water flushing for pressures up to 25 bar. This ensures efficient removal of cuttings and better bit life.
- Powerful, stepless variable and reversible rotation motor gives high torque for efficient drilling, and minimizes the risk for jamming.
- Separate lubrication of fronthead and driver together with pressurized and lubricated mating surfaces and sidebolts for the best protection against wear and corrosion.
- Two nitrogen-charged accumulators plus one accumulator for the return oil, levels out pressure peaks in the hydraulic systems. This reduces vibrations and wear on hydraulic components.



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DIMENSIONS AND WEIGHT

	COP 1838MUX	COP 1838HUX
Weight, kg	225	228
Length without shank adapter, mm	1 206	1 296
Width including connectors, mm	251	316
Height, mm	257	257
Height over drill center, mm	122	122

ROTATION MOTORS

	COP 1838MUX/HUX	
	07 (160 cc)	09 (250 cc)
Rotation range, rpm	0–215	0–140
Torque, max, Nm	1 000	1 100
Working pressure, max, bar	210	175
Oil consumption, I/min	75	

IMPACT RATINGS

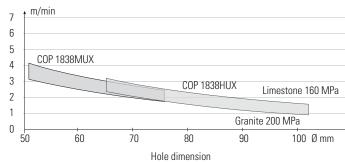
	COP 1838MUX	COP 1838HUX
Impact power, max, kW	18	19
Input power to rock drill, max, kW	32	32
Hydraulic pressure, max, bar	220	220
Flow rate, I/min	75–92	71–90
Impact frequency, Hz	60	42–50
Impact energy, Nm	330	360

FLUSHING FLOW AND PRESSURE

	COP 1838MUX	COP 1838HUX
Flushing water pressure, max, bar	25	25
Lubricating air consumption at 2 bar, I/s	5	5
Flushing water consumption, I/min*	55–120	105–165

*Flushing water consumption depends strongly on hole diameter, bit type, drill rod size and rock hardness. The figures above are typical values for spherical button bits in granite, 200 MPa.

Penetration rate COP 1838MUX/HUX



Laboratory test results

OVERHAUL KITS

	COP 1838MUX	COP 1838HUX
Seal kit	3115 9156 93	
Seal kit extractor	3115 9156 94	
400 impact hours kit	3115 9156 95	
Overhaul kit	3115 9156 96	3115 9156 98
Overhaul kit extractor	3115 9156 97	

SHANK ADAPTERS

	COP 1838MUX	COP 1838HUX
T38	435-12305,10	435-12305,10
T45	436-12305,10	436-12305,10

