

APPLICATION

The Solo 5-5V is a highly versatile single boom electro-hydraulic long-hole drilling jumbo for small and medium scale production drilling in underground mines. The rig is capable of drilling several lines of parallel holes, up and down, up to 23 m depth, from a single machine position over the width of 5.5 m.

The 360° rotation in full parallel coverage area and wide tilt angle ranges forward and backward make the robust universal telescopic boom suitable to various drilling applications. The long reach of the boom also allows safe access to unsafe or narrow places such as vein drilling or raise drilling.

The jumbo layout is designed for good visibility and balance, this and the powerful four-wheel-drive articulated carrier ensure fast and safe manoeuvring in narrow drifts.

The high performance drilling system allows high drilling performance with good drill rod economy and high machine reliability.

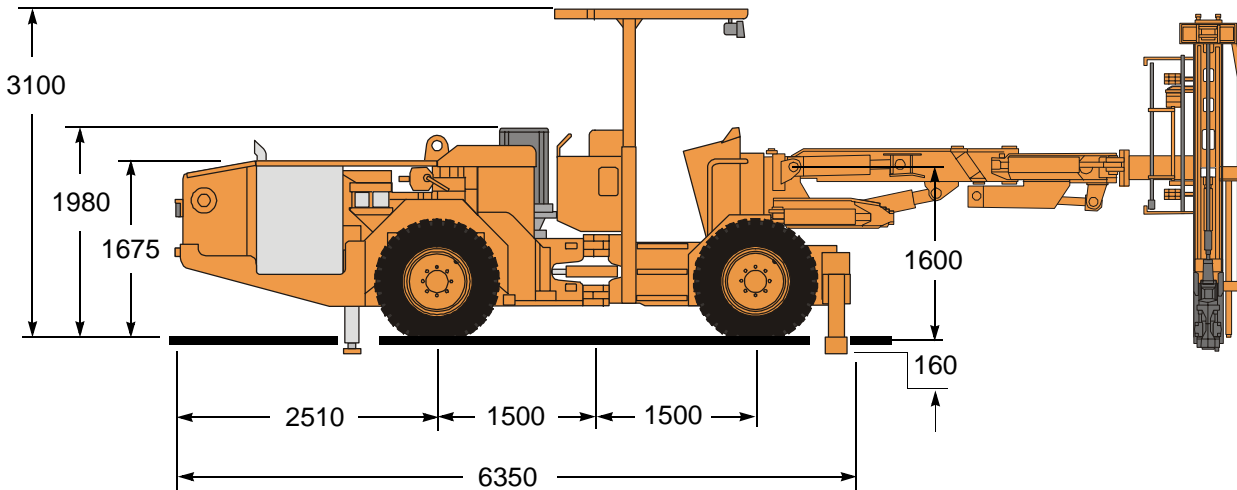
The operator environment and added automatic functions allow the operator to concentrate on safe, fast and accurate drilling.

The new carrier is designed for better access to the daily service points.

MAIN SPECIFICATIONS

Carrier	1 x TC 5
Safety canopy	1 x FOPS / ROPS
Rock drill	1 x HLX5
Feed	1 x LHF 2000-5
Rod handler (optional)	1 x ERHC 12
Boom	1 x B 26 LC
Control system	1 x THC 560 LH
Powerpack	1 x HP 560 (55 kW)
Shank lubrication device	1 x KVL 10-1
Air compressor	1 x CT 10
Water pump	1 x WBP 2
Main switch	1 x MSE 10
Cable reel	1 x TCR 1
Length	9 550 mm
Width	1 900 mm
Height	2 100 / 3 100mm
Weight (without options)	14 600 kg
Tramming speed	
- Horizontal	12 km/h
- 14% = 1:7 = 8°	5 km/h
Gradeability	28 % = 1:3.5 = 15°
Noise level (EN791)	Free field condition
- Operator's platform	LpA = 102 dB
- Emitted	LwA = 124 dB

GENERAL DIMENSIONS



All dimensions in mm

HLX5 ROCK DRILL

Weight		210 kg
Length		955 mm
Profile height		87 mm
Percussion power		15 kW
Max working pressure	- Percussion	190 bar
	- Rotation	175 bar
Max torque (125 ccm motor)		625 Nm
Hole size		51 - 64 mm
Shank adapter		R32 / T38 / T45
Flushing water pressure		10 - 20 bar

LHF 2000-5 FEED

Extension rod	Round 32 / 39 / 46
Feed force	20 kN

	LHF 2004	LHF 2005	LHF 2006
Total length (mm)	2790	3095	3400
Extension rod length (mm)	1220	1525	1830
Mini operating dimension(mm)	2900	3200	3500
Net weight (kg)	760	775	790

ERHC 12 ROD CARROUSEL

Capacity	MF rods R32	12+1
	MF rods T38	11+1
	MF rods T45	10+1

B 26 LC BOOM

Type	Parallel holding, multi-directional
Weight (with hoses)	1 900 kg
Feed roll-over	360°
Boom extension	1 200 mm
Feed extension	1 200 mm

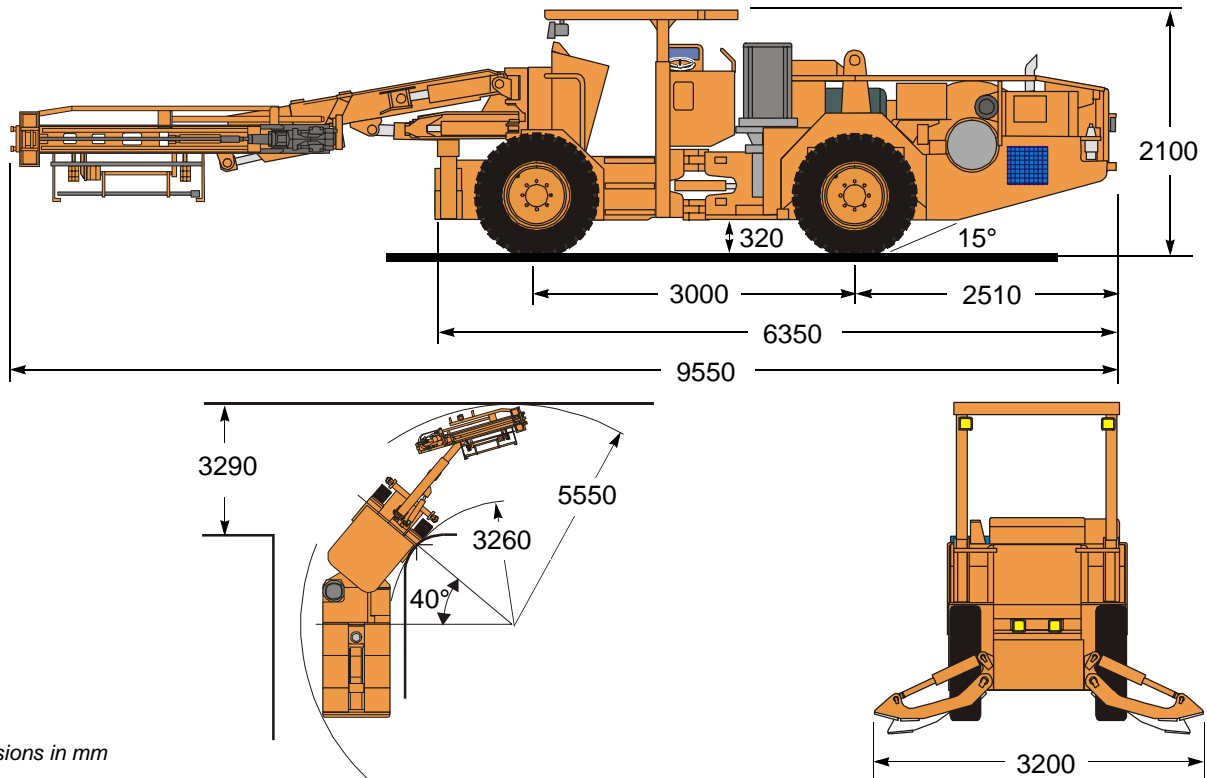
THC 560 LH CONTROL SYSTEM

Power control	Adjustable full power
	Adjustable collaring power
Rotation control	Adjustable rotation speed
	Reversible rotation
Automatic functions	Collaring
	Feed controlled percussion
	Anti-jamming
	Flushing
Boom controls	Fully proportional

HP 560 POWER PACK

Electrical motor	1 x 55 kW (75 hp)
	3-phase motor
Pump types	
- Percussion, feed & boom	Axial piston
	1 x 130 l/min variable displacement
- Rotation	1 x 60 l/min gear pump
Filtration	- Pressure 1 x 20 micron
	- Return 1 x 10 micron
Hydraulic tank volume	180 liters

TRAMMING DIMENSIONS



All dimensions in mm

CARRIER

Model	TC 5
Diesel engine	Deutz BF4L 2011, 55 kW (74hp)
- Exhaust	Catalyser
Transmission	Hydrostatic, automotive
Transfer case	Drop gear Clark-Hurth
Axles, Front & Rear	Case New Holland, D45
- Oscillation	Rear axle, 2 x 10°
- Tyres	12.00 - 20 PR 20
Steering	Frame steering, 2 x 40°
Brakes	
- Service	Hydrostatic transmission+positive braking
- Emergency & parking	Hydraulic oil immersed multiple disc brakes on both axles
Stabilizers	2 hydraulic outriggers, front 2 hydraulic jacks, rear
Safety canopy	Hydraulic, FOPS-ROPS
- Lowering capability	1 000 mm
Fuel tank	80 liters
Hydraulic tank	55 liters

AIR CIRCUIT

Compressor	C.T. 10, screw type
- Capacity	1000 l/min at 7 bar
Electric motor	7.5 kW (10 hp)
Shank lubrication device	1 x KVL 10-1
- Air consumption	250-350 l/min
- Oil consumption	180-250 g/h

WATER CIRCUIT

Water pump type	1 x WBP 2 (4 kW)
- Capacity	100 l/min (12 bar)
	With 2 bar inlet pressure
- Inlet pressure	2 - 7 bar (while drilling)
Inlet water pressure control valve	1 x WP 70
Oil cooler	OW 30, water-actuated counterflow
- Cooling capacity	30 kW

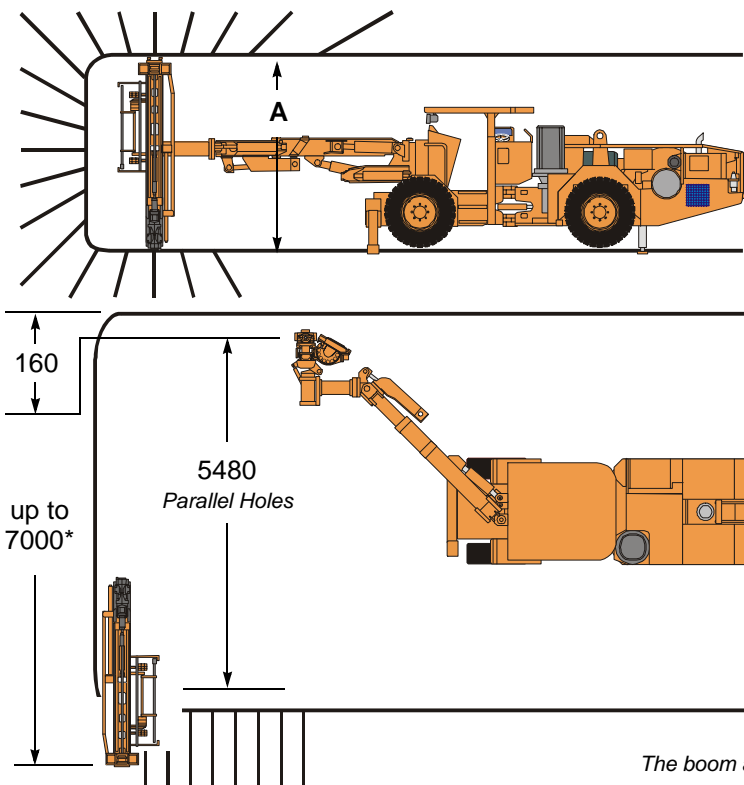
ELECTRICAL SYSTEM

Total installed power	70 kW
Main switch	MSE 10
Standard voltages	380...690 V / 50 or 60 Hz
Voltage fluctuation	Max ±10 %
Starting method	Direct start
Cable reel	1 x TCR 1
- Capacity (rubber cable)	200 m - 33 mm O.D
Lighting - Working lights (24 VDC)	2 x 35 W HID, front 2 x 70 W, rear
- Driving lights (24 VDC)	2 x 70 W, front 2 x 70 W, rear
Positioning lights	2 x Laser type

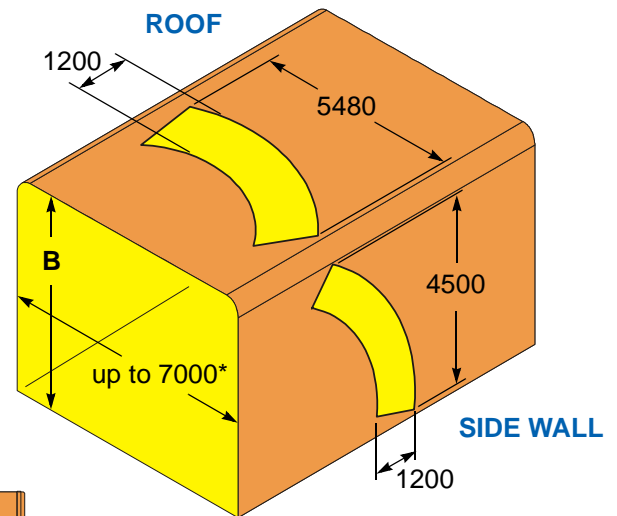
FULL DIESEL VERSION OPTIONAL

Water-cooled engine	Deutz BF4M 2012C
- Max. rating at 2300 rpm	93 kW (125 hp)
Fuel tank capacity	240 liters
Compressor & water pump driven by hydraulic motors	
Total machine weight	10 500 kg

COVERAGE AREA



All dimensions in mm.



Sections Height			
Feed	Rod	Mini A	Maxi* B
LHF 2004	1220	2900	4000
LHF 2005	1525	3200	4300
LHF 2006	1830	3500	4600

* Maxi section with standard rear anchor.

The boom allow to reach width up to 7000 mm and height (B) up to 4800 mm.
Please note that an additional anchoring system is needed.

OPTIONAL EQUIPMENT

DRILLING SYSTEM

- Drill angle measuring instrument TIS D / TIS DDS.
- Front stinger (needed for downholes).
- Cuttings collector CC 1014.
- *) SLU 1 shank lubricating device.
- 2 x 60 l air receivers.
- *) CT 16 compressor.
- Air cleaner IP5 plus auxiliary connection for mine air network.
- *) Air mist flushing with outside air supply.
- *) Drilling on both electric and Diesel.
- Combi kit (HLX5 + TFX 6/10 + boom NV kit).
- Combi kit (HLX5 + TF500-12 + boom NV kit).

ELECTRICAL SYSTEM

- *) 1 000 V electric power supply.
- Ground fault and overcurrent unit VYK
- Electric cable rubber ou PUR.
- *) Star-Delta electric starting method (380...690 V only).
- 2 x 35 W High Intensity Discharge (HID) extra working lights.

CARRIER

- Complete spare wheel.
- Hand pump for manual brake release.
- *) Stainless steel 350 l water tank.
- *) Exhaust scrubber.
- *) Deutz BF4M 2012 Diesel engine (74 kW).
- *) 2 telescopic hydraulic jacks, front.

OTHER OPTIONAL EQUIPMENT

- Fire extinguisher (bottle only).
- Manual fire suppression system ANSUL, 6 nozzles.
- Pressure cleaning system (10 bar) with reel.
- *) Electric filling pump for oil.
- Greasing reel with pump and nozzle.
- Centralized greasing.
- Automatic lubrication system (Lincoln).
- Biodegradeable oils.
- Fast filling and evacuation system (Wiggins) for fuel.
- Fast filling and evacuation system (Wiggins) for fuel, transmission, engine and hydraulic oil.
- *) EU, UL, CSA, AUS norms package.
- Manuals other than French/English language.

*) replaces standard component.