



HML 23 Mobile Excavator

Power and state-of-
the-art engineering

Operating weight 6.8 t
Engine power 44 kW (60 HP)
Bucket capacities 65-270 l



HML 23 – The machine illustrated may include non-standard equipment

Technical data

Engine

Manufacturer	Deutz F4M 2011
Type	4-cylinder, diesel engine
Combustion	4-stroke, direct injection
Displacement	3100 cm ³
Power rating in compliance with ISO 9249 (DIN 70020) at 2400 rpm	44 kW (60 HP)
Cooling system	Oil cooling

Electrical system

Operating voltage	12 V
Battery	12 V / 105 Ah / 760 A

Power transmission

Hydrostatic travel drive with automatic adjustment of draw-bar pull and speed. 4-wheel drive from rear axle reduction gear and cardan shaft to front axle. Infinitely variable speed control forward and reverse in 2 speed ranges:

Working speed	0-6 km/h
Travel speed	0-20 km/h

Axles

Front axle: oscillating planetary drive axle, oscillating angle 14°. Rear axle: rigid planetary drive axle.

Tires

8.25-20, 12 PR as standard

Brakes

Service brake: hydraulic pump accumulator two-circuit brake, acting on oil-immersed multi-disc brakes of front and rear axles.

Excavator brake: acting on front and rear axles due to lockable service brake.

Auxiliary brake: Hydrostatic travel drive in closed circuit acting as non-wearing auxiliary brake.

Parking brake: Hydraulic spring-loaded brake, electrically operated.

Steering

Fully hydraulically controlled front axle with integrated steering cylinder.

Max. steering angle 35°

Swing system

Hydrostatic drive with 2-stage planetary gear and axial piston fixed displacement motor, simultaneously acting as low-wear brake. In addition, automatically controlled spring-loaded multi-disc brake acting as parking brake.

Swing speed 0-10 rpm

Hydraulic system

Travel hydraulics: Closed circuit, independent of working hydraulics.

Max. pump capacity 96 l/min at 420 bar

Working hydraulics: Dual axial piston variable-capacity pump with flow rate adjustment and pressure cut-off.

Max. pump capacities 2 x 62 l/min at max. 245 bar

Gear pump for all positioning functions and slewing.

Pump capacity 43 l/min

Control circuit for work attachments:

Working pressure 205 bar

Pump capacities: 43 l/min and 95 l/min adjustable

Two servo-assisted four-way control levers for excavator operations.

Operating data (standard equipment)

Operating weight	6800 kg
Total length, travel position, "TPA"*	3900 mm
Total length, loading position "TPA"*	5710 mm
Total height, travel position	3595 mm
Total width (twin tires)	2190 mm
Total height (cab roof)	2920 mm
Tread width	1682 mm
Wheel base	2125 mm
Ground clearance below cardan shaft	420 mm
Turning radius	6700 mm
Uppercarriage tail swing	1450 mm
Uppercarriage front swing	2750 mm
Slew circle 180°	4200 mm
Slew circle 360°	5500 mm
Breakout force in compliance with DIN 24086	38,000 N
Ripping force in compliance with DIN 24086	30,000 N
* two-piece articulated boom	

Knickmatik®

Lateral parallel adjustment at total digging depth.

Angle of articulation /Lateral adjustm. to the left 48°/735 mm

Angle of articulation /Lateral adjustm. to the right 72°/880 mm

Cab

Sound-insulated full-vision steel cab. Right-hand sliding window, safety glass, skylight. Front window supported by pneumatic springs, slideable under cab roof. Cab heating including windshield defroster through engine oil heat exchanger with three-speed fan. Choice between fresh air and recirculating air, fresh air filter.

Hydraulically cushioned comfort seat with armrests and longitudinal, height and tilt adjustments. Position of operator control levers adjustable in longitudinal direction. Telescopic and tilt adjustments of steering column. Instrument panel with safety module. Working floodlights Halogen E-3. Sound-power level L_{WA} 100 dB (A)

Measured in compliance with Dynamic Measurement Procedure 2000/14/EC.

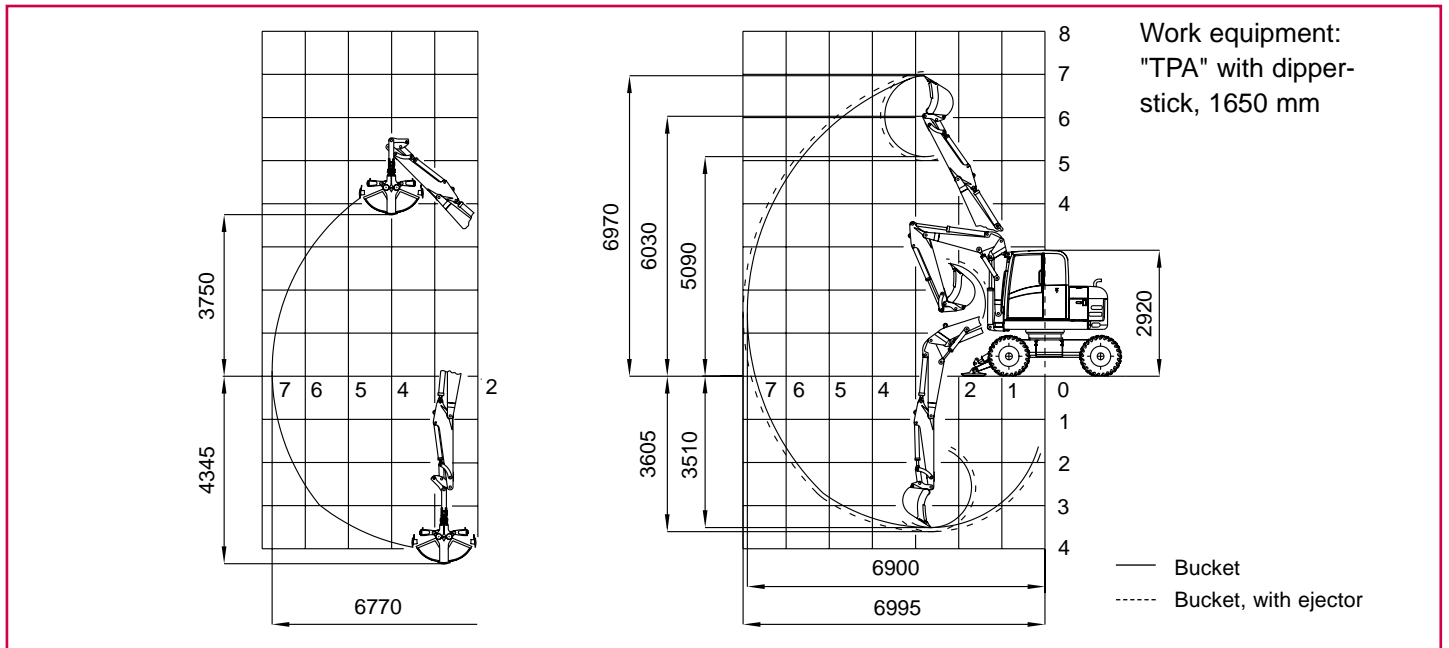
Fluid capacities

Diesel tank capacity 150 l

Hydraulic system (incl. tank) 180 l

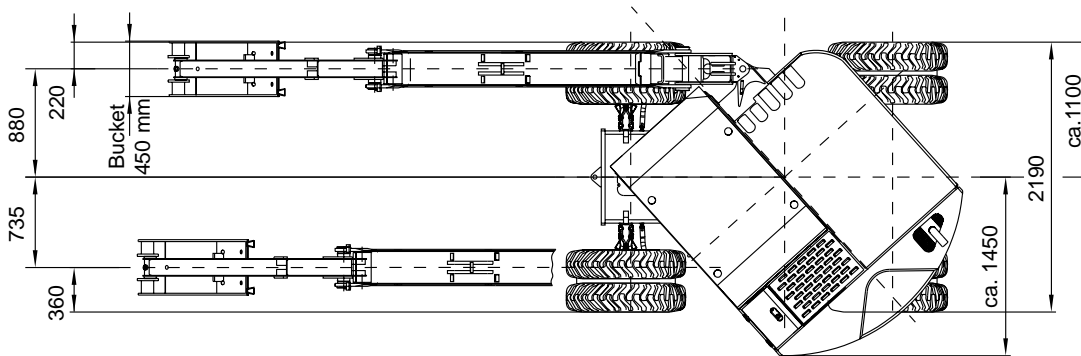
Digging envelope

HML 23 "TPA" (All dimensions refer to 8.25-20 tires)

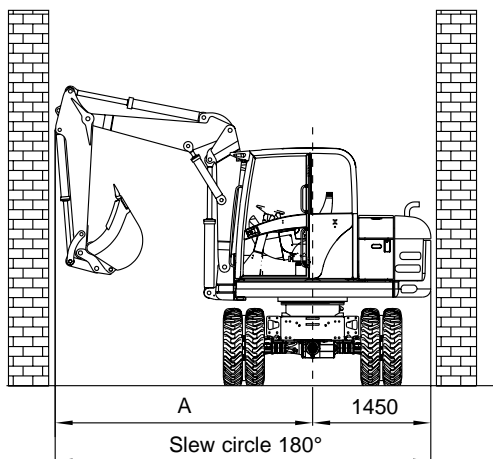


Dimensions

HML 23 "TPA" – Excavation within the entire width of the machine

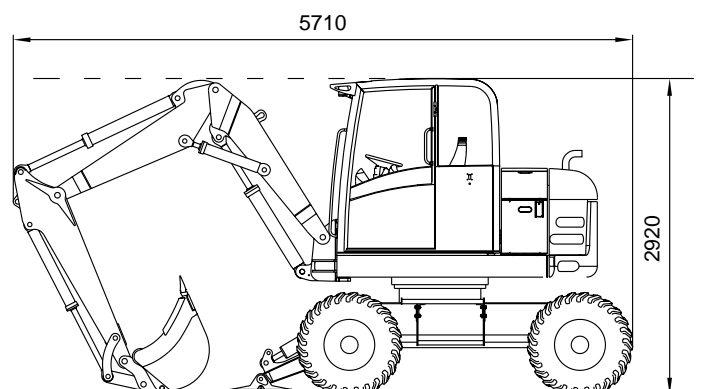


HML 23 Slew circle – Top view



"TPA"	
Dimension A*	2750
180° slew circle	4200
360° slew circle	5500

HML 23 Transport position



Carrying capacity

Load radius from centre of ring gear

Bucket hinge height		3,0 m		4,0 m		5,0 m		6,0 m	
		180°	90°	180°	90°	180°	90°	180°	90°
3,0 m	supported	1,52	1,31	1,30	1,09	1,07	0,89	0,96	0,67
	travelling	1,48	1,31	1,27	1,09	0,88	0,82	0,68	0,62
1,5 m	supported	1,79	1,47	1,35	1,16	1,20	0,84	0,96	0,65
	travelling	1,71	1,47	1,22	1,08	0,84	0,77	0,66	0,60
0 m	supported	2,40	1,75	1,68	1,14	1,22	0,84	0,94	0,69
	travelling	1,80	1,61	1,16	1,04	0,84	0,76	0,70	0,64
- 0,9 m	supported	2,37	1,69	1,68	1,10	1,17	0,83	0,90	0,72
	travelling	1,70	1,56	1,13	1,02	0,83	0,75	0,71	0,67

All values specified in tons (t) were determined in compliance with ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity, the smaller value being indicated in each case. All values were determined with load hook. If a bucket is attached, the difference weights bucket minus load hook must be deducted from the permissible payloads. When used for load hook applications, excavators must be equipped with hose-rupture valves and overload warning device in compliance with EN 474-5.

Work equipment: "TPA" (two-piece articulated boom), twin tires.

Additional equipment

Tires

500/45-20
365/70 R 18, narrow-track tires (< 2 m)

Operator's stand

Air-cushioned driver's seat
Independent diesel heating with timer
Air-conditioning

Buckets (quick-mounting)

Bucket, conical	290 mm / 95 l
Bucket, with ejector	290 mm / 65 l
Bucket, conical	350 mm / 115 l
Bucket, with ejector	350 mm / 85 l
Bucket, conical	450 mm / 160 l
Bucket with ejector	450 mm / 115 l
Bucket	600 mm / 195 l
Bucket	800 mm / 270 l
Cable-laying bucket	220 mm
Ditch-cleaning bucket	1250 mm / 150 l
Swing bucket, 2 x 40°	1250 mm / 180 l

Clamshell grabs

GM 2325	325 mm / 150 l
GM 2400	400 mm / 200 l

Grab transport lock (serrated pipe)

Hydraulic hammer

Type M 95 SMS, sound-insulated
Tools: pointed and flat chisels

Hydraulic transverse cutting unit

Type WS 15, 18 kW, operating weight 192 kg

Further options

High-speed version (30 km/h)
Additional control circuit for hydraulic hammer
Quick-change adapter for hydraulic hammer operations
Hose-rupture valves for intermediate boom and dipperstick respectively
Filling with biodegradable hydraulic oil, ester-based, VI 68
Electrical refuelling pump
Anti-theft device (immobilizer)
Lighting kit for cab (front & rear working floodlights)
Additional tool box

Further accessories and attachments on request

Subject to modification

