



# HR 11 Mini Excavator

Power and state-of-the-art engineering

Operating weight 1.4-1.5 t  
Engine output 13.3 kW (18 HP)  
Bucket capacities 21-61 l



HR 11 - The machine illustrated may include non-standard equipment

# Technical data

## Engine

Manufacturer	Mitsubishi
Type	3-cylinder diesel engine, EPA
Combustion	4-stroke cycle, swirl chamber injection
Power rating acc. to ISO 9249 (DIN 70020) at 2400 rpm	13.3 kW (18 HP)
Displacement	952 cm <sup>3</sup>
Cooling system	Water

## Electrical system

Nominal voltage	12 V
Battery	12 V / 74 Ah
Starter	12 V / 1.7 kW
Alternator	12 V / 40 A

## Power transmission

Hydrostatic drive with axial piston motor and reduction gear, fully enclosed. "Straight Travel" function. Brake valve for downhill drive.

Travel speed, forward/reverse	0-2.7 km/h
Max. gradability	60 %
Drawbar pull	1160 daN

## Undercarriage

Torsion-proof welded design. Crawler unit carriers in sloped design for dirt outlet.

Width (outer edge of crawlers)	990 mm
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## Crawler gear

Maintenance-free crawler-type undercarriage. Idler suspension with hydraulic crawler tensioning.

Rubber crawlers / Steel crawlers	230 mm
Total length (sprocket-idler)	1130 mm
Total length	1490 mm
Track width	760 mm

## Dozer blade

Independent of drive train, sensitive control via hand lever.

Width x height	1000 x 240 mm
Lift below ground	160 mm
Lift above ground	200 mm
Slope angle	25 deg.

## Steering

Independent individual control of crawlers, also counter-wise via 2-circuit hydraulic system. Sensitive control via hand levers, combined with foot pedals. Foot rests, left and right, on pedal console.

## Swing system

Hydrostatic drive, also acting as low-maintenance brake. Internally toothed ring gear.

Swing speed of uppercarriage	0-10 rpm
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## Hydraulic system

Dual fixed displacement pump with power switch. Load-independent flow division (LUDV) for all work functions and travel drive. Simultaneous independent control of 3 movements.

Working pressure	165 bar
Pump capacities	33.6+19.2 l/min
Tank-immersed return filter with electric contamination indicator. Block hydraulic oil radiator provided as standard.	
Boom, dipperstick and articulated cylinders with end-position damping on both sides. All functions can be activated proportionally. Two servo-assisted four-way control levers for excavator operations. Safety cut-off of all functions as soon as driver leaves cab.	

## Operating data, standard equipment

Operating weight (rubber crawlers)	1465 kg
Operating weight (steel crawlers)	1535 kg
Overall length in travel position	2500 mm
Overall length (trailer transport position)	3750 mm
Total height in travel position	2390 mm
Total width	1000 mm
Working envelope 180°	2370 mm
Working envelope 360°	2500 mm
Ground clearance	170 mm
Breakout force acc. to DIN 24086	13,300 N
Ripping force acc. to DIN 24086	9300 N
Specific ground pressure (rubber)	0.23 daN/cm <sup>2</sup>
Specific ground pressure (steel)	0.24 daN/cm <sup>2</sup>

## Knickmatik®

Lateral parallel adjustment at full digging depth.

Angle of articulation / Lat. adj. to the left	60° / 420 mm
Angle of articulation / Lat. adj. to the right	60° / 550 mm

## Canopy / Operator's stand

Robust steel pipe construction with 4 vertical support members and bolted-on nicely designed plastic roof. (Free spaces acc. to EN 23411), ROPS (acc. to ISO 3471), FOPS (acc. to ISO 3449) and TOPS (acc. to ISO 12117) certified.

Glove box. Instrument panel on the right side of the operator's seat with visual & acoustic warning device as well as lockable panel vandal cover.

Hydraulically cushioned comfort seat with artificial leather covering, height-adjustable armrests, height, tilt and weight adjustments. Working floodlight Halogen H-3.

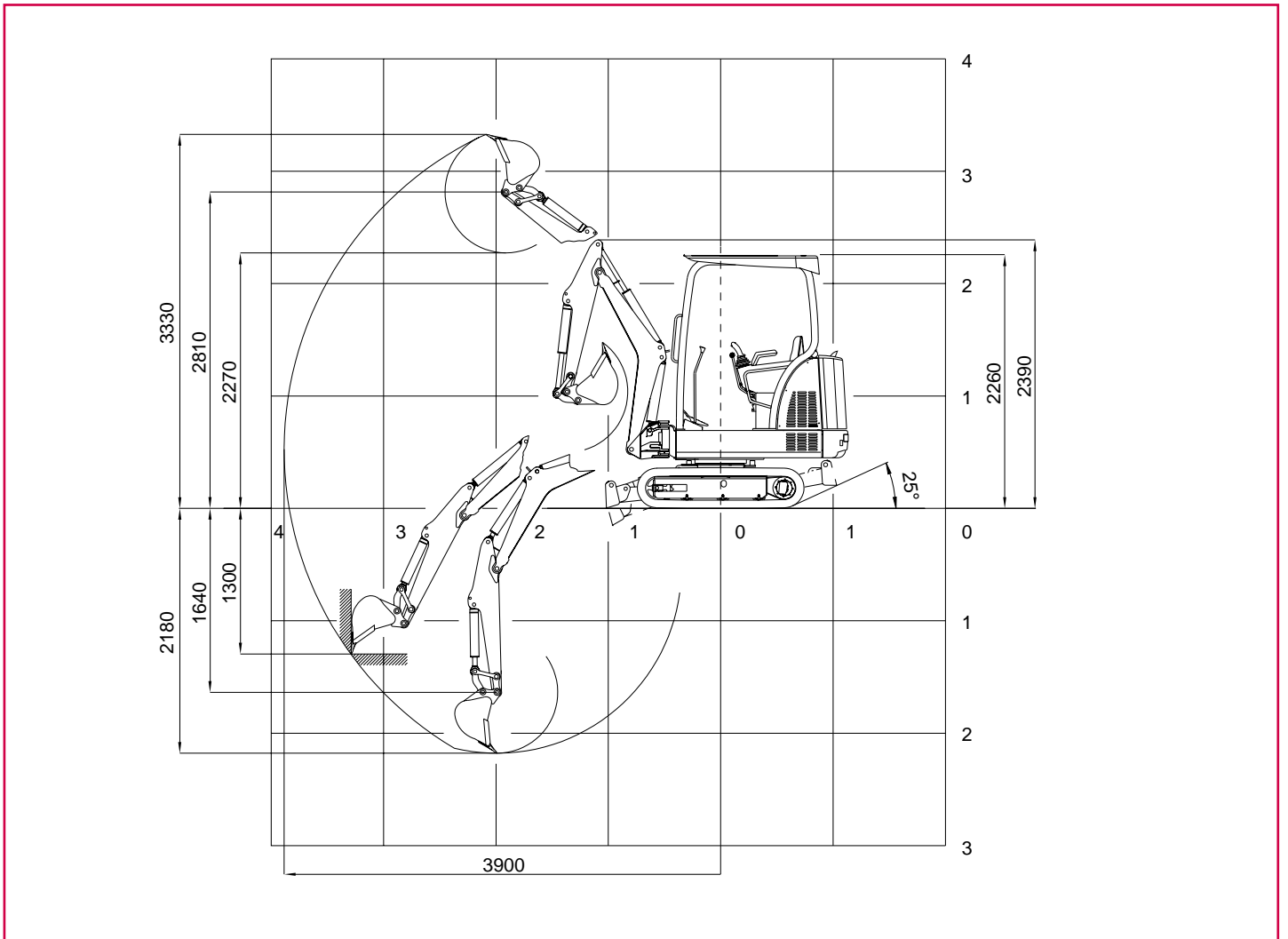
Noise emission ambience L <sub>WA</sub>	94 dB (A)
Noise emission cab L <sub>PA</sub>	79 dB (A)
Measured in dynamic measuring cycle acc. to EEC-directive 2000/14.	

## Fluid capacities

Fuel tank	30 l
Hydraulic oil (tank 25 l)	35 l

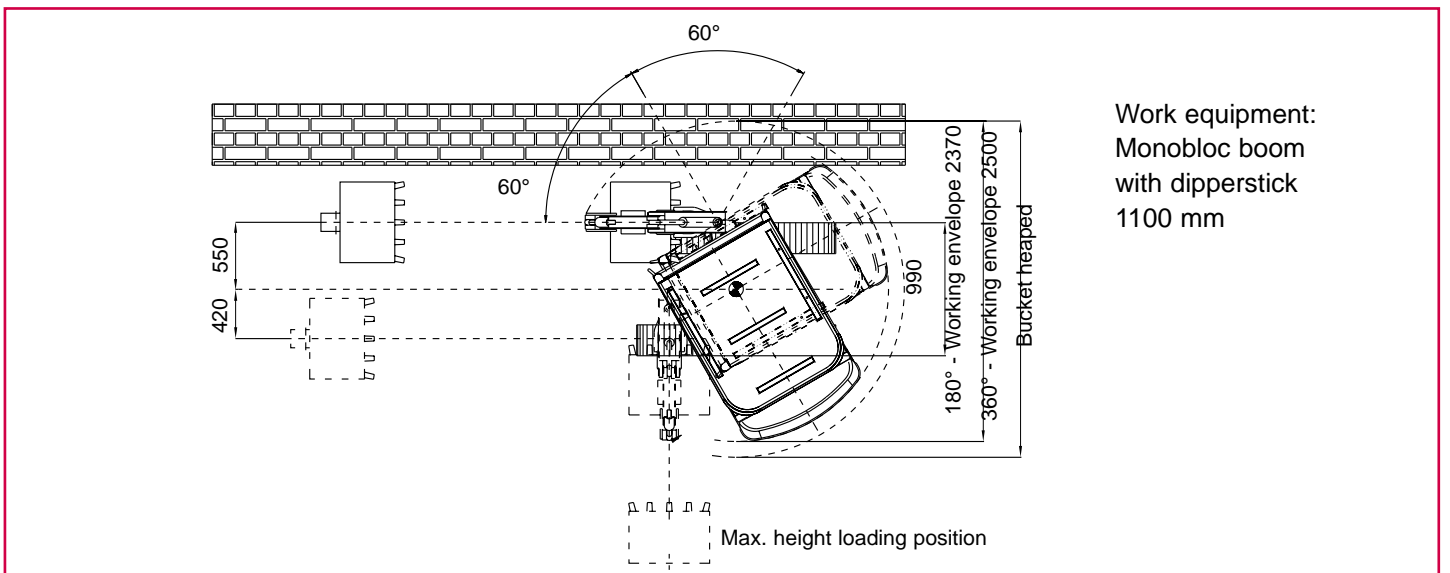
# Digging envelope

HR 11 Monobloc boom



# Dimensions

HR 11 Top view / Working envelope



# Carrying capacity

## Load radius from the center of the ring gear

Bucket hinge pin height Dipperstick 1100 mm		1.5 m		2.0 m		2.5 m		3.0 m	
		180°	90°	180°	90°	180°	90°	180°	90°
2.0 m	Supported by blade	-	-	0.56	0.32	0.54	0.24	-	-
	Traveling	-	-	0.34	0.30	0.28	0.23	-	-
1,0 m	Supported by blade	0.89	0.56	0.70	0.34	0.56	0.23	0.47	0.17
	Traveling	0.57	0.54	0.36	0.30	0.24	0.22	0.18	0.16
0 m	Supported by blade	0.92	0.41	0.64	0.28	0.44	0.21	0.31	0.17
	Traveling	0.44	0.39	0.29	0.26	0.22	0.20	0.17	0.16
- 0.75 m	Supported by blade	0.64	0.38	0.46	0.28	0.33	0.20	0.22	0.16
	Traveling	0.39	0.36	0.29	0.26	0.21	0.19	0.17	0.15

All values in tons (t) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. All values were determined but without bucket. In case of mounted-on work attachments, the deadweights of the work attachments must be deducted from the permissible payloads.

Working equipment: Rubber crawlers.

## Additional equipment

### Optional accessories

Mechanical quick-attach system for work tools (QAS)  
 Boom-mounted working floodlight  
 Yellow beacon  
 Crane lifting beam  
 Track shoes with "Felasto" tiles  
 Filling with biodegradable hydraulic oil, ester-based VI 68  
 Additional control circuit "work attachments"  
 Additional control circuit "hydraulic hammer"  
 Quick-change adapter for hydraulic hammer

### Buckets (direct mounting)

Bucket, with ejector 220 mm / 21 l  
 Bucket 220 mm / 21 l  
 Bucket 300 mm / 29 l  
 Bucket 400 mm / 40 l  
 Bucket 600 mm / 61 l  
 Ditch-cleaning bucket 850 mm / 72 l  
 Ditch-cleaning bucket 1000 mm / 85 l  
 Swing bucket, 2 x 45 deg. 850 mm / 47 l

### Buckets (QAS)

Bucket, with ejector (QAS) 250 mm / 25 l  
 Bucket (QAS) 250 mm / 22 l  
 Bucket (QAS) 300 mm / 26 l  
 Bucket (QAS) 400 mm / 38 l  
 Bucket (QAS) 500 mm / 49 l  
 Bucket (QAS) 600 mm / 60 l  
 Ditch-cleaning bucket (QAS) 1000 mm / 65 l

Further attachments available on request  
 Subject to change without further notice