

CRAWLER EXCAVATOR

GW30

Miniature crawler excavator

Product Technology & Selection Manual

A miniature crawler excavator with a stated 2.78-ton operating weight, Yanmar 3TNV80F engine, 15.2 kW rated power, 0.068 m³ bucket capacity and 20 kN bucket digging force.

2.78 TONS

15.2 kW • 0.068 m³



MANUAL MAP

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KEY PRODUCT DATA

OPERATING WEIGHT / TONNAGE

2.78 tons

RATED POWER

15.2 kW

STANDARD BUCKET CAPACITY

0.068 m³

Product code EXC-1786005969491967

Technical Specifications 1

Core product and configuration data

OPERATING WEIGHT / TONNAGE

2.78 tons

RATED POWER

15.2 kW

BUCKET DIGGING FORCE

20 kN

STANDARD BUCKET CAPACITY

0.068 m³

GROUP	SPECIFICATION	VALUE
Machine	Product introduction	Backhoe-type mini crawler excavator
	Operating weight / tonnage	2.78 tons
	Working device configuration	Backhoe
Undercarriage	Track type	Rubber track
Engine	Engine brand	Yanmar
	Standard engine model	3TNV80F
	Rated power	15.2 kW
	Rated speed	2,500 rpm
	Engine displacement	1.267 L
Capacity	Fuel tank capacity	20 L
	Hydraulic oil tank capacity	18 L

Technical Specifications 2

Core product and configuration data

OPERATING WEIGHT / TONNAGE

2.78 tons

RATED POWER

15.2 kW

BUCKET DIGGING FORCE

20 kN

STANDARD BUCKET CAPACITY

0.068 m³

GROUP	SPECIFICATION	VALUE
Performance	Travel speed	2–3.5 km/h
	Swing speed	9.5 rpm
	Climbing ability	30°
	Bucket digging force	20 kN
	Bucket-rod digging force	13.5 kN
	Maximum tractive force	23 kN
	Ground contact pressure	27 kPa
Hydraulics	Hydraulic working pressure	24.5 MPa
	Hydraulic flow rate	70 L/min
Work Tool	Standard bucket capacity	0.068 m³

Dimensions & Working Range

Overall dimensions and working envelope



DIMENSION / RANGE	VALUE	SELECTION RELEVANCE
Transport length	4,100 mm	Compare with route length, staging and transport constraints.
Overall height	2,440 mm	Compare with overhead clearance and transport limits.
Maximum digging depth	2,590 mm	Compare with the required excavation depth.
Maximum digging radius	4,520 mm	Compare with the intended horizontal reach.
Maximum ground-level digging radius	4,640 mm	Compare with the required ground-level work radius.
Maximum digging height	4,370 mm	Compare with the required work height and site clearance.
Maximum unloading height	3,060 mm	Compare with the intended discharge interface.
Maximum vertical digging depth	2,110 mm	Compare with vertical-cut requirements.
Minimum turning radius	2,250 mm	Compare with available maneuvering space.
Maximum dozer-blade lift	260 mm	Review against grading and obstacle-clearance needs.
Maximum dozer-blade digging depth	300 mm	Review against blade-cut requirements.
Boom left swing angle	65°	Review for offset work to the left.
Boom right swing angle	50°	Review for offset work to the right.

Machine Overview

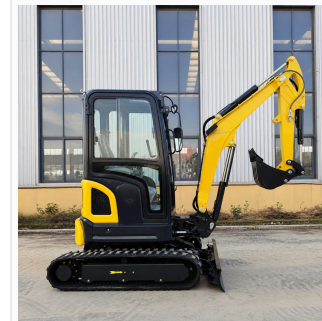
Complete machine profile and component details

Complete exact-product views show the relationship between the backhoe work group, upper structure, front blade and crawler undercarriage from complementary angles.



Right-front machine view

Complete right-front view for machine-form and component recognition.



Right-side machine view

Complete side view showing the relationship between work equipment, upper structure and crawler base.

Work Equipment & Crawler Systems

Visible work-group, hydraulic and undercarriage details



WORK EQUIPMENT

Boom and bucket group

BUCKET CAPACITY	0.068 m³
BUCKET FORCE	20 kN
BUCKET-ROD FORCE	13.5 kN



CRAWLER MOBILITY

Rubber-track undercarriage

TRACK TYPE	Rubber track
TRAVEL SPEED	2–3.5 km/h
GROUND PRESSURE	27 kPa



HYDRAULIC DATA

Hydraulic performance baseline

WORKING PRESSURE	24.5 MPa
FLOW RATE	70 L/min
HYDRAULIC TANK	18 L



MACHINE LAYOUT

Machine architecture

WORK GROUP	Backhoe
UPPER STRUCTURE	Visible assembly
MACHINE BASE	Crawler undercarriage

Application Fit

Application context and selection checkpoints

**LISTED APPLICATION****Drainage Trench Excavation****Depth and reach screen**

Compare the 2,590 mm digging depth and 4,520 mm digging radius with the required trench profile.

**LISTED APPLICATION****Foundation Edge Preparation****Force and capacity**

Compare 20 kN bucket force, 13.5 kN bucket-rod force and 0.068 m³ capacity with the material and task.

**LISTED APPLICATION****Landscape Bed Shaping****Mobility and blade range**

Review rubber-track mobility, 2–3.5 km/h travel speed and blade range against the surface and shaping task.

**LISTED APPLICATION****Narrow Utility Excavation****Length and height screen**

Use the 4,100 mm transport length and 2,440 mm overall height when screening staging space and overhead clearance.

Selection Summary

A practical product-configuration checklist

DECISION FACTOR	PRODUCT BASIS	USE IN SELECTION
Machine class	2.78 tons; rubber track	Compare stated weight and travel system with site conditions.
Engine identity	Yanmar 3TNV80F; 15.2 kW at 2,500 rpm	Use the stated engine identity and rated output for comparison.
Transport profile	4,100 mm length; 2,440 mm height	Compare with route, staging and overhead-clearance limits.
Digging envelope	2,590 mm depth; 4,520 mm radius	Compare the stated depth and radius with the work envelope.
Hydraulic baseline	24.5 MPa; 70 L/min	Use the stated pressure and flow for system comparison.
Work tool	20 kN; 13.5 kN; 0.068 m³	Compare digging-force and bucket-capacity values with the task.



CONFIGURE IN FOUR DECISIONS

- 01

Check access

Compare transport length and overall height with route and workspace limits.
- 02

Check work range

Review digging, unloading, blade and boom-swing ranges against the task.
- 03

Check output

Review engine identity, rated power, hydraulic pressure and flow.
- 04

Check task fit

Compare travel, digging-force and bucket data with ground and material demand.

WHY SELECT GW30

- 1

Specified engine and hydraulic data support direct technical comparison.
- 2

Thirteen unit-bearing dimension and working-range values support site screening.
- 3

Force, capacity, travel and ground-pressure data define a practical machine-selection screen.
- 4

Four listed application scenes provide task-specific visual context.