

# roto

33.13 K  
30.16 K





# Roto K

*A new range of slewing handlers offering economy and high performance through Merlo's unique technology*



## Operator's cab

- '2 in 1' joystick controls. Dashboard fitted with: hour meter, rev counter/speedometer, fuse box, annunciator-warning panel (air filter blocked, hydrostatic oil temperature and level, engine oil pressure, engine coolant temperature, park brake). Central hydraulic pressure gauge. Heater and fan. Interior light

## Safety

- Load stability indicator system with visual and acoustic alarm and automatic motion locking, preventing any aggravating motion. Check valves on all cylinders. Reverse alarm. Seat belt. Fire extinguisher mounting.

## Boom

- Three section high yield steel boom, extending on anti-wear pads. Internally mounted extension cylinder.

## Carriage

- 'Tac-Lock' quick attachment fitting system hydraulically controlled from the cab. Two boom end mounted hydraulic lines, providing a double acting service.

## Axles

- Rigid rear axle, oscillating front axle automatic locking with upperstructure slewed more than 15°.

## Pallet forks

- 1200mm long with 130 x 45mm section. Manual adjustment of fork separation between 450 - 1050mm

## Stabilisers

- Four independently controlled hydraulic stabilisers

## Steering

- Four-wheel power assisted steering with automatic synchronisation when misaligned. Three steering modes:
  - four wheel steer
  - front wheel steer
  - crab steer

## Engine

- 4 cylinder Perkins direct injection, water-cooled 1004-4T turbo diesel, with emission levels conforming to 97/68/EC. Power output 80.4Kw/109 HP (ISO 3046/1) at 2400 rpm.

## Transmission

- Closed circuit hydrostatic transmission, with automatic and

continuous speed adjustment. Two speed electro-hydraulic selection drop box. Four wheel drive through axles with hub reduction and differentials. Rear axle pre-arranged to accept differential lock.

## Brakes

- Hydraulic disc service brakes on all 4 differential output shafts. Fail-safe automatic hydraulic park brake.

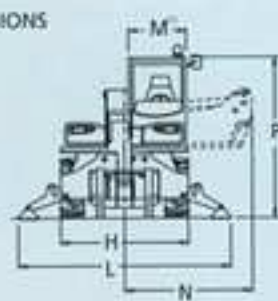
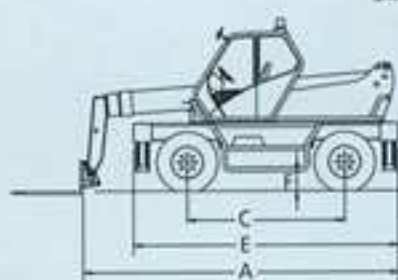
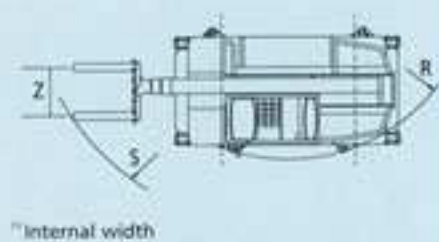
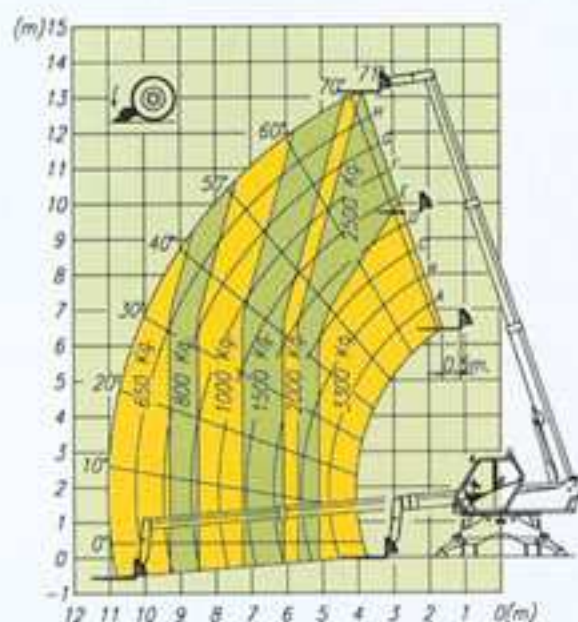
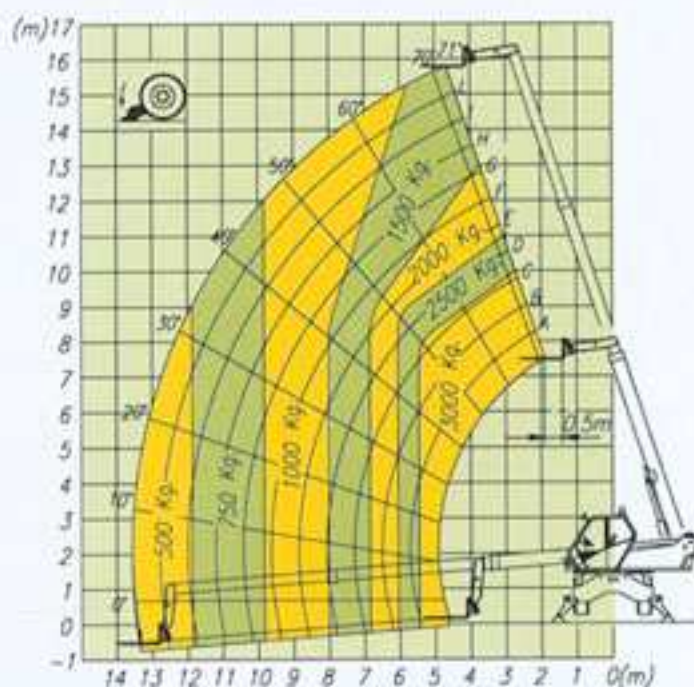
## Hydraulic system

- Single variable displacement axial piston pump with 'Load Sensing' control. Maximum flow 120 litres/min. Service pressure 210 bar. System filtration by 125 micron 'For Life' filter and 40 micron return strainer.



**ROTO 33.13 K 30.16 K**

A mm	5550	6370
C mm	2760	2760
E mm	4645	4645
F mm	350	350
H mm	2240	2240
L mm	3530	3530
M mm	940	940
N mm	2220	2220
P mm	2790	2790
R mm	3920	3920
S mm	5440	5230
Z mm	850	850

**DIMENSIONS**

**TURNING RADIUS**

**Lifting envelopes, fully slewed, stabilisers down**
**ROTO 33.13 K**

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**Electrical system**

- 12 volts, 110 Ah battery and 65 Ah alternator.
- Road lighting.
- Rotating beacon.

**Service Capacities**

- Hydraulic system: 130 litres
- Fuel tank: 155 litres
- Hydrostatic oil: 12 litres
- Engine oil: 8.5 litres
- Engine cooling: 12 litres

**Tyres**

- 400/70-20 14 PR on both axles.
- 8 stud fixing (DIN74361)

**Options**

- 18-19.5 16 PR tyres.
- '5 in 1' electronic joystick control.
- Roof window wash/wipe system.
- Air conditioning.
- Windscreen load guard.
- Pre-arrangement for concrete mixer attachment.

**MODEL**
**33.13 K30.16 K**
**Weight**

Operational weight (including forks)	kg	11.350	11.350
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**Performance**

Maximum rated capacity	kg	3300	3000
Maximum lift height	mm	13400	15810
Maximum forward reach	mm	11180	13500
Maximum lift height with rated load	mm	10000	10000
Maximum reach with rated load	mm	5300	5450
Lift capacity at full lift height	kg	2500	1500
Lift capacity at maximum forward reach	kg	650	500
Bucket tearout force (800 litre)	kg	4230	4230
Drawbar pull (dynamometer test)	kg	7800	7800
Carriage rotation	deg.	140	140
Upperstructure slew angle	deg.	400°	400°

**Travel speed**

Low range	kph	7	7
High range	kph	25	25



An enormous range of interchangeable attachments and options increase the versatility and performance of ROTO slewing handlers.

Jib with winch



Concrete skips  
500 - 700 litre



4 in 1 bucket



Fully-integrated aerial  
work platforms



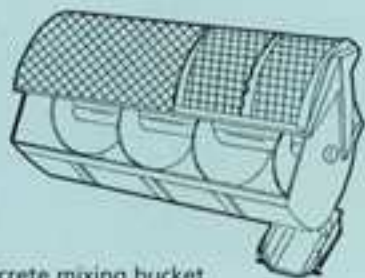
Jib cranes



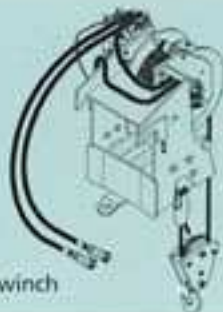
Glass and cladding panel  
mounting platform



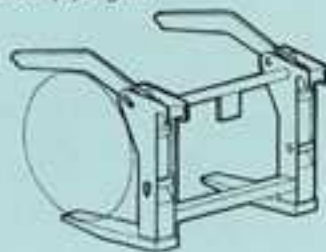
Concrete mixing bucket



'LIFT' winch



Concrete pipe grab



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