Rotating telehandlers

Regulatory area: EU

ROTO40.18

MERLO

Gallery

Comfort: The best workplace

Exclusive comfort

An unprecedented design guarantees maximum functionality and comfort; grouping the information provided to the driver and the controls of the various systems and devices for optimal ergonomics. The reverse shuttle on the steering wheel is also present on the joystick.

Cab entry

To ensure simple and easy access to the cab, the door of Merlo telehandlers can be opened by up to 180°. In addition, the inside of the door is equipped with a large handrail to help the operator when getting inside and outside of the cab.

Air-conditioning

Developed according to automotive standards, cutting the warm-up and cool-down times in half compared to a conventional air conditioning system. The inlet vent is placed on the side of the cab, away from potential sources of dust and dirt, while inside there are 8 vents.

Efficiency: Simpler and smarter

Transmission

In order to ensure a reduction in consumption and operating costs, Merlo telescopic handlers boast full electronic management of the transmission and engine, in order to minimise RPM and, consequently, fuel demand.

Steering Modes

The axles ensure the maximum steering angle to perform manoeuvres in tight spaces. Additionally, the operator can manage the steering of the machine with three different options according to the specific needs of the job.

Visibility

Merlo's improved visibility increases range of movement and safety for operators.

Performance: Everything at your fingertips

Transmission

The Merlo telehandlers have excellent braking capacity when the accelerator pedal is released, guaranteeing high torque to the wheels during material handling and transfers, as well as millimetric precision of movements when positioning the load.

Engines

All models feature a combustion engine in an original Merlo mounting layout, developed by Merlo with the invention of the panoramic visibility models, ensuring maximum accessibility to components in case of programmed and/or extraordinary maintenance.

Axles

The exclusively designed axles are manufactured and developed in-house by Merlo, and can be equipped with differential lock to ensure traction on any terrain, regardless of how unstable.

Safety: Not just feelings

Active safety

In order to remain fully compliant with regulations in frontal tipping prevention, Merlo handlers are equipped with features developed specifically to keep the operator safe from frontal tipping, without sacrificing performance, particularly of boom speed and lifting capacity.

Aerial work platform

The Merlo telehandlers can be configured with aerial work platform. This solution, complying with EN280 standard, assures an increased level of active and passive safety during work at heights, and enhances machine versatility.

Certified cab

All Merlo telehandlers have a metal structure above the glass roof on the outside of the cab to comply fully with FOPS Level II standard, the most stringent certification level in protecting the operator from falling objects.

Hotspot

1 - ASCS ROTO	The ASCS safety system: the ideal assistant! The system adjusts the speed and maximum extent of the movements based on the attachments in use, the load being handled and its position, thus eliminating the risk of overturning. Standard on the entire range with LS hydraulic system.
2 - ROTO GEOMETRIC LIMITS	Working in confined spaces can be difficult. The “geometric limits” function of the ASCS makes it possible to simplify and increase safety during repetitive work and in confined spaces, such as inside a warehouse.
3 - 400° ROTATION	The rotating turret system is able to cover the entire working area without having to reposition the machine, thanks to the 207° rotation on each side. Standard on ROTO40.16 and ROTO40.18 in all versions
4 - STABILISATION	Stabilising the machine is essential for safe working. Stabilisers remaining in the outline of the machine allow stabilisation even in the tightest spaces, while also ensuring excellent visibility when travelling. Standard on the entire range of Stabilised telehandlers.

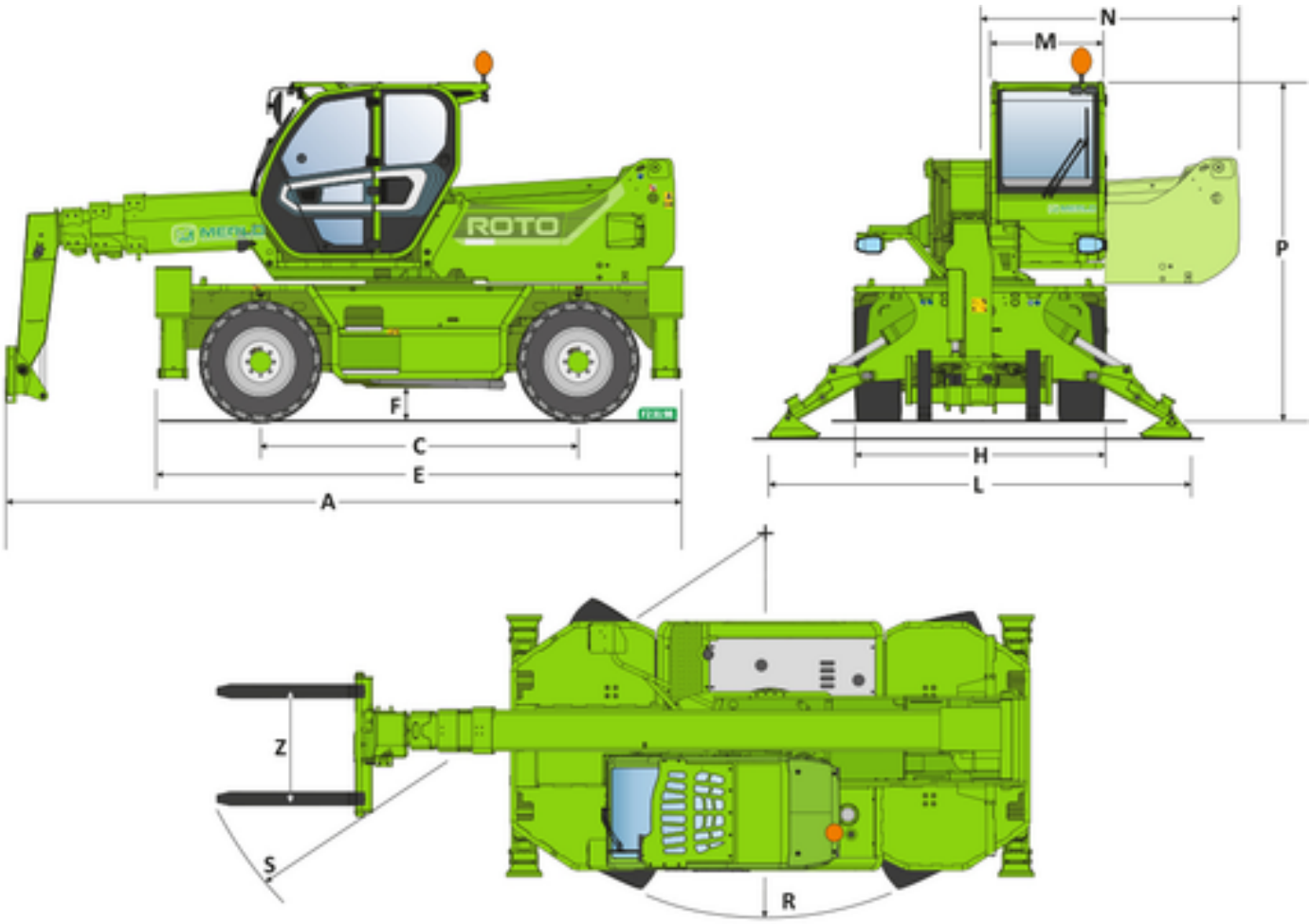
PERFORMANCE AND FEATURES	ROTO40.18	ROTO40.18S	
Performance			
Unladen weight (kg)	13500	13600	
Maximum load capacity (kg)	4000	4000	
Lift height (m)	17.7	17.7	
Maximum reach (m)	15	15	
Lift height at max. load capacity (m)	11.7	11.7	
Reach at max. load capacity (m)	5.5	5.5	
Load capacity at max. lift height (kg)	3000	3000	
Load capacity at max. reach (kg)	400	400	
Boom side-shift (mm)	—	—	
Frame levelling (%)	—	+/-12, +/-4	
Boom section	4	4	
Powertrain			
Engine	FPT F34	FPT F36	
Range/Cylinders (l)	3.4/4	3.6/4	
Engine power (kW/HP)	55.4/75	90/122	
Anti-pollution technology	Stage V - DOC + DPF	Stage V - DOC + DPF+ SCR	
Reversible Fan	—	—	
Maximum speed (km/h)	25	40	
Fuel tank capacity (l)	140	140	
Hydrostatic transmission EPD	●	●	
Electronic joystick	●	●	
Axles	Drop portal	Drop portal	
Reducers	RR 700	RR 700	
Brakes	Dry discs	Dry discs	
Automatic parking brake	●	●	
Hydraulic			
Hydraulic pump	LS + FS	LS + FS	
Delivery / pressure (bar-l/min)	103,5 - 250	103,5 - 250	
Hydraulic oil tank capacity (l)	162	162	
Auxiliary hydraulic service on boom	●	●	
Rear service line	—	—	
Cab			
Cab finishing	PREMIUM	PREMIUM	
ASCS	Full	Full	
FOPS Cab	●	●	
ROPS Cab	●	●	
Controls	Electronic joystick control	Electronic joystick control	
Tilting cab	—	—	
Double reverse shuttle	Dual reverse	Dual reverse	
Configuration			
Hydropneumatic Suspension CS Merlo	—	—	
Hydropneumatic Suspension BSS Merlo	—	—	
Hydropneumatic Suspension EAS Merlo	—	●	
Work lights on cab	○	○	
Sun-shade in the cab	●	●	
Tac-lock	●	●	
Pre-arrangement for aerial work platform	●	●	
Two floating forks	●	●	
Pedal Inching-Control	—	—	
Permanent four-wheel drive	●	●	
All wheel steering	●	●	
Three steering way	●	●	
Standard tyres	400/70-20"	400/70-20"	
OPT tyres	405/70-20"	405/70-20"	
Hydraulically controlled stabilizers	On/Off	On/Off	
Turret rotation	415°	415°	
Tractor type approval	—	—	
PNEUMATIC braking	—	—	
HYDRAULIC braking	—	—	
PTO	—	—	
3-point rear linkage	—	—	

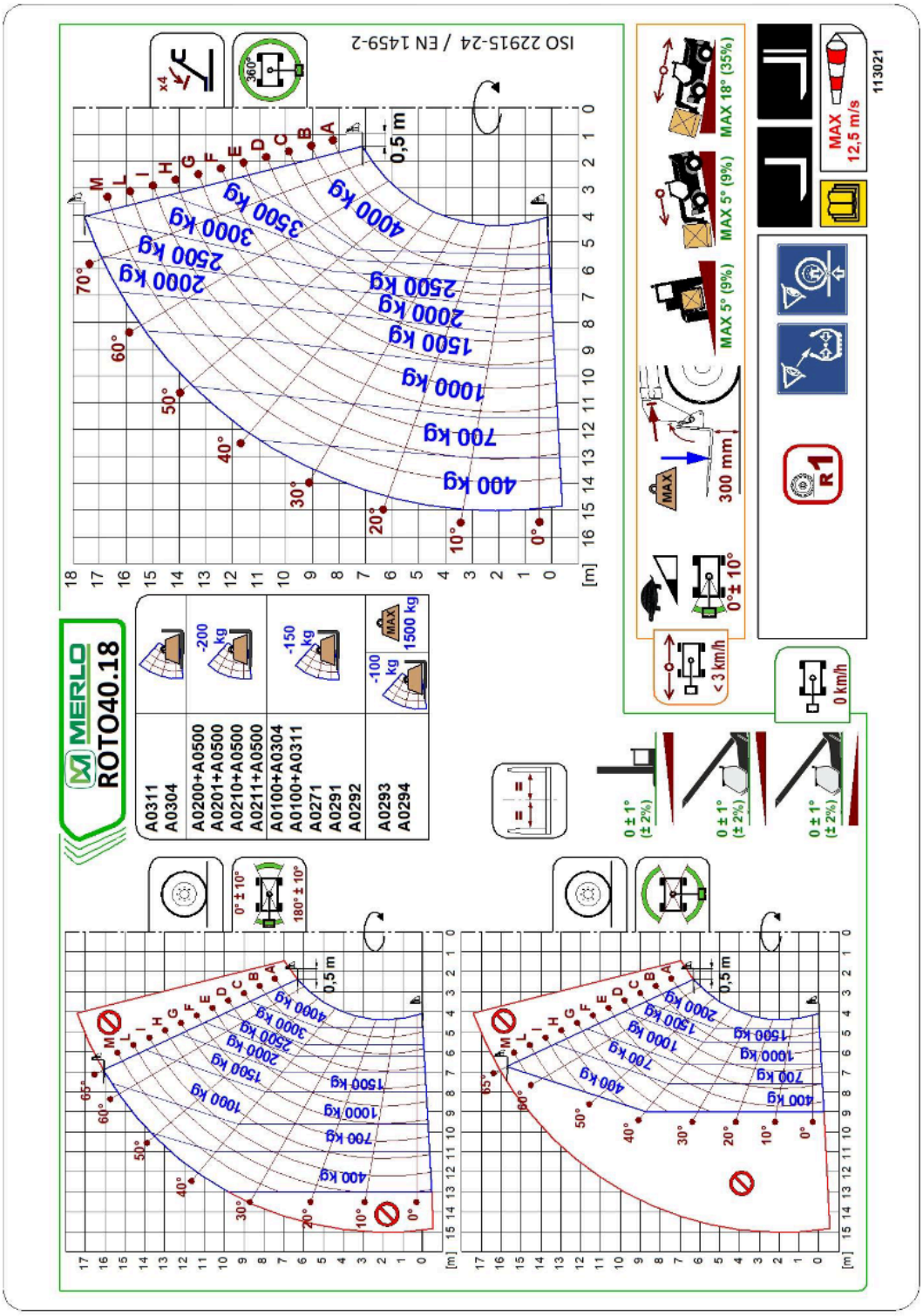
— not available
● standard
○ optional

Dimensions

	ROTO40.18	ROTO40.18S
A - Length	6030	6030
C - Wheelbase (mm)	2860	2860
F - Ground clearence	290	290
H - Width	2240	2240
M - Cab width (mm)	1010	1010
P - Height	2980	2980
R - Wheel turning radius (mm)	4000	4000
S - Fork steering range (mm)	5750	5750

Technical Details




ISO 22915-24 / EN 1459-2
MERLO
ROTO40.18
A0311
A0304
A0200+A0500
A0201+A0500
A0210+A0500
A0211+A0500
A0100+A0304
A0100+A0311
A0271
A0291
A0292
A0293
A0294
-200 kg
-150 kg
-100 kg
MAX 1500 kg
MAX 18° (35%)
MAX 5° (9%)
MAX 5° (9%)
300 mm
0° ± 10°
< 3 km/h
0 km/h
MAX 12,5 m/s
113021
R1
0,5 m
400 kg
700 kg
1000 kg
1500 kg
2000 kg
2500 kg
3000 kg
3500 kg
0 ± 1° (± 2%)
0° ± 10°
180° ± 10°

Your Merlo dealer

MERLO S.P.A.
Via Nazionale, 9
12010 S. Defendente di Cervasca,
(Cuneo) Italia
Tel. +39 0171 614111

info@merlo.com
www.merlo.com