



Four-way Reach Truck

R20 – R25 F

Load capacity 2.0 t – 2.5 t | Series 8923

PB

Nimble long load transporters

- Four-way reach truck for narrow aisles and long loads
- Movement in four directions enables high degree of flexibility
- Adjustable forks with width of up to 2 m for extra-long loads
- Lift heights up to 9.65 m allow for use in high bay warehouses
- High nominal capacity for handling heavy goods in building materials, steel stock holding and manufacturing sectors

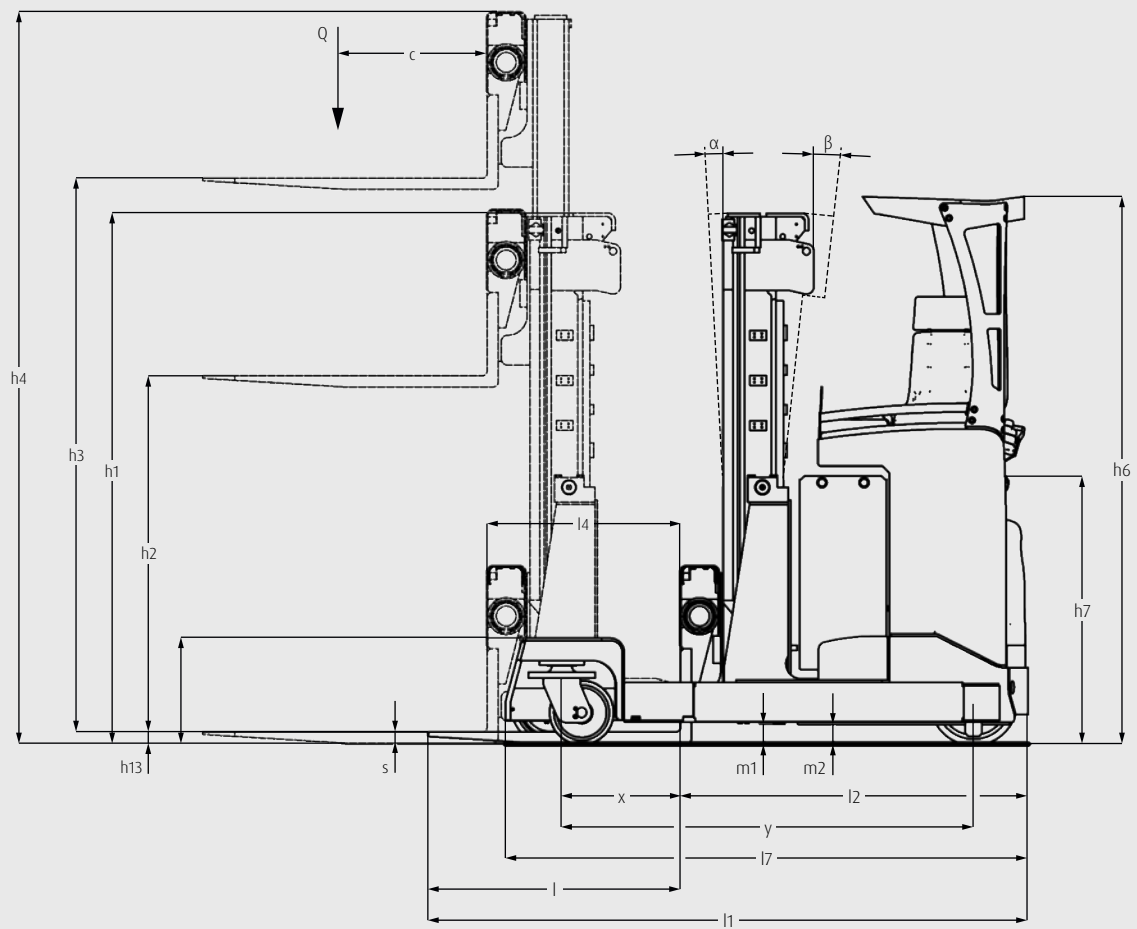
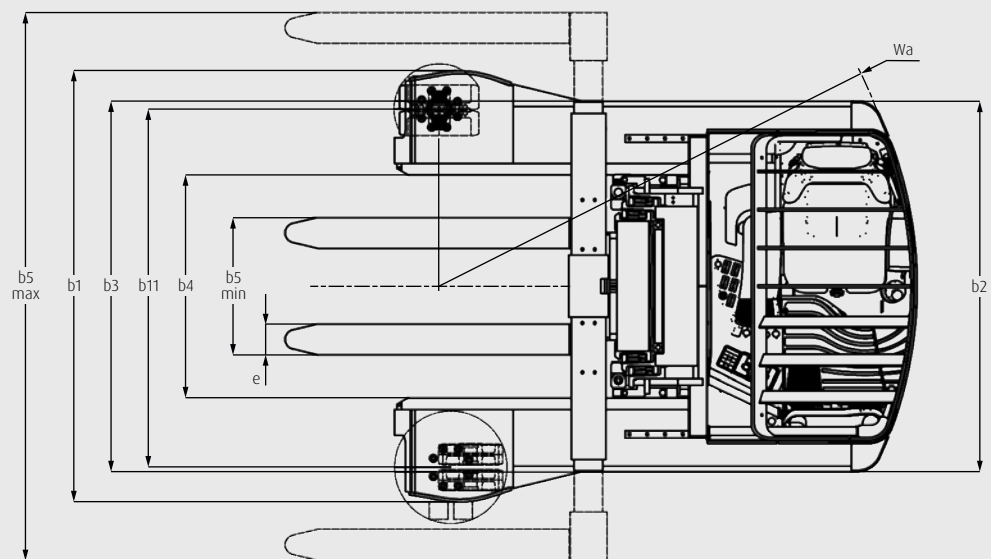
TECHNICAL DATA (according to VDI 2198)

Characteristics	1.1	Manufacturer (abbreviation)		Linde MH	Linde MH
	1.2	Manufacturer's type designation		R20 F	R25 F
	1.2a	Series		8923	8923
	1.3	Drive		Battery	Battery
	1.4	Operation		Seated	Seated
	1.5	Rated capacity/rated load	Q (t)	2.0	2.5
	1.6	Load centre distance	c (mm)	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	449 ¹⁾	527 ¹⁾
Weight	1.9	Wheelbase	y (mm)	1505	1665
	2.1	Service weight	kg	4360	4960
	2.3	Axle loading, unladen front/rear	kg	2550/1810	2880/2080
	2.4	Axle loading, fork advanced, laden front/rear	kg	800/5560	660/6800
Tyres/chassis	2.5	Axle loading, fork retracted, laden front/rear	kg	2349/4011	2770/4690
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane
	3.2	Tyre size, front		Ø 355 × 155	Ø 355 × 155
	3.3	Tyre size, rear		Ø 320 × 100/Ø 260 × 85	Ø 320 × 100/Ø 260 × 85
	3.5	Wheels, number front/rear (x = driven wheels)		1x/4	1x/4
Dimensions	3.7	Tread, rear	b11 (mm)	1444	1444
	4.1	Mast/fork carriage tilt, forward/backward	α/β (°)	1.5/3.5 1.0/3.0 1.0/1.0 ²⁾	1.5/3.5 1.0/3.0 1.0/1.0 ²⁾
	4.2	Mast height, lowered	h1 (mm)	2800	3367
	4.3	Free lift	h2 (mm)	2070	2637
	4.4	Lift	h3 (mm)	6250	7500
	4.5	Mast height, extended	h4 (mm)	7000	8250
	4.7	Height of overhead guard (cabin)	h6 (mm)	2215	2215
	4.8	Seat height relating to SIP/stand height	h7 (mm)	1087	1087
	4.10	Height of wheel arms	h8 (mm)	430	430
	4.15	Height, lowered	h13 (mm)	50	50
	4.19	Overall length	l1 (mm)	2473 ³⁾	2555 ³⁾
	4.20	Length to fork face	l2 (mm)	1323 ³⁾	1405 ³⁾
	4.21	Overall width	b1/b2 (mm)	1744/1498	1744/1498
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	45/125/1150	45/125/1150
	4.24	Fork carriage width	b3 (mm)	1500/2170	1500/2170
	4.25	Fork spread	b5 (mm)	556-1555/556-2220	556-1555/556-2220
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	903	903
	4.28	Reach distance	l4 (mm)	704 ³⁾	782 ³⁾
	4.31	Ground clearance, laden, below mast	m1 (mm)	81	81
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	80	80
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	2787 ³⁾	2896 ³⁾
	4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast (mm)	2823 ³⁾	2915 ³⁾
	4.35	Turning radius	Wa (mm)	1772	1932
	4.37	Length across wheel arms	l7 (mm)	1942	2102
Performance	5.1	Travel speed, laden/unladen	km/h	13/13	13/13
	5.2	Lifting speed, laden/unladen	m/s	0.33/0.55	0.32/0.53
	5.3	Lowering speed, laden/unladen	m/s	0.54/0.47	0.53/0.53
	5.4	Reaching speed, laden/unladen	m/s	0.2/0.2	0.2/0.2
	5.8	Max. gradeability, laden/unladen	%	10.0/15.0	9.0/14.0
	5.9	Acceleration time, laden/unladen	s	5.7/5.0	6.2/5.2
	5.10	Service brake		electrical/mechanical	electrical/mechanical
Electric-engine	6.1	Drive motor rating S2 60 min	kW	7.2	7.2
	6.2	Lift motor rating at S3 15%	kW	15	15
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		43 531 C	43 531 C
	6.4	Battery voltage/nominal capacity K5	(V)/(Ah) or kWh	48/465	48/620
	6.5	Battery weight (±5%)	kg	712	892
Drive/lifting mechanism	8.1	Type of drive unit		electronic/stepless	electronic/stepless
Additional data	10.1	Operating pressure for attachments	bar	150	150
	10.2	Oil flow for attachments	l/min	25	25
	10.7	Sound pressure level LpAZ (at the operator's seat)	dB(A)	59.7	59.7

1) Different battery capacities will result in changes to stated data

2) 1/1 from lift heights greater than 6750 mm

3) Including a = 200 mm safety distance



MAST TABLES

TRIPLEX MAST (in mm)

Lift	h3: 4300	h3: 4900	h3: 5200	h3: 5800	h3: 6250	h3: 6700	h3: 6750
Height measurements	h1: 2165 h2: 1437 h4: 5063	h1: 2365 h2: 1637 h4: 5663	h1: 2465 h2: 1737 h4: 5963	h1: 2665 h2: 1937 h4: 6563	h1: 2815 h2: 2087 h4: 7013	h1: 2965 h2: 2237 h4: 7463	h1: 2982 h2: 2254 h4: 7513
Manufacturer's type designation							
R20 F	○	○	○	○	○	○	○

Lift	h3: 7450	h3: 7950	h3: 8450
Height measurements	h1: 3215 h2: 2487 h4: 8213	h1: 3382 h2: 2654 h4: 8713	h1: 3548 h2: 2820 h4: 9213
Manufacturer's type designation			
R20 F	○	○	○

Lift	h3: 4450	h3: 4750	h3: 5350	h3: 5800	h3: 6300	h3: 7000	h3: 7500
Height measurements	h1: 2365 h2: 1637 h4: 5213	h1: 2465 h2: 1737 h4: 5513	h1: 2665 h2: 1937 h4: 6113	h1: 2815 h2: 2087 h4: 6563	h1: 2982 h2: 2254 h4: 7063	h1: 3215 h2: 2487 h4: 7763	h1: 3382 h2: 2654 h4: 8263
Manufacturer's type designation							
R25 F	○	○	○	○	○	○	○

Lift	h3: 8000	h3: 8450	h3: 8950	h3: 9300	h3: 9650
Height measurements	h1: 3548 h2: 2820 h4: 8763	h1: 3698 h2: 2970 h4: 9213	h1: 3865 h2: 3137 h4: 9713	h1: 3982 h2: 3254 h4: 10063	h1: 4098 h2: 3370 h4: 10413
Manufacturer's type designation					
R25 F	○	○	○	○	○

○ Optional equipment

h1: Mast height, lowered **h2:** Free lift **h3:** Lift **h4:** Mast height, extended

STANDARD AND OPTIONAL EQUIPMENT

	Manufacturer's type designation/equipment	R20 – R25 F
Safety	Linde Curve Assist automatic speed reduction with steering angle	●
	Truck energised via PIN code or key switch	●
	Rear-view mirror	●
	Automatic parking brake	●
	Electromagnetic brake on drive wheel and electric load wheel brakes	●
	Protective polycarbonate screen between operator and mast	●
	Automatic slowdown at end of lift and reach motion to avoid load instability	●
	Automatic creep speed when battery unlocked	●
	Lift height-dependent travel speed	●
	Lift limitation with or without override button	○
	Interlock to stop mast retraction below 600 mm with override button	○
	Protective grille on overhead guard protects operator from small falling objects	○
	Acoustic battery discharge warning	○
	Configurable timed ignition shutdown	○
	Maintenance interval indicator	○
	Traction control	○
	Camera and monitor fitted to side (not available in combination with rear-view after mirror)	○
	Panoramic mirror	○
Service	Battery discharge indicator	●
	Lateral battery change on rollers (not for Li-ION)	○
	Chill store option - down to +1 °C	●
Operation/load handling	Individual lever operation for precise load handling	●
	Mini steering wheel mounted on adjustable armrest	○
	360° steering with steering angle display	●
	Single accelerator pedal with direction switch	●
	Load weight display +/- 100 kg	●
	Lift height display above free lift	●
	Max. travel speed - 13 km/h	●
	Multifunction switch	○
Elec- tronics	12 V socket	○
	Radio/CD and MP3 player	○
	Intercom	○
Workplace	Multifunction colour display	●
	Battery discharge indication	●
	Tilting, fabric covered suspension seat	●
	Height-adjustable armrest	●
	Integrated control console with 60 mm horizontal adjustment	●
	Floor plate with powered adjustment from 550 to 620 mm height	●
	Clipboard	○
	Radio Data Terminal holster	○
	Seat heating	○
	All weather, heated cabin	○
	Fresh air vent in cabin door	○
Mast	Triplex tilting mast offering excellent all-round visibility	●
Attach- ments/ forks	Hydraulic fork adjustment	●
	Manual fork adjustment	○
Axles and tyres	Polyurethane drive and load wheel tyres	●
Drive and brake system	Maintenance-free, 7.2 kW AC traction motor	●
	Hydraulic pump motor - 15 kW	●
Lighting	2x headlights in direction of forks	○
	Flashing warning light on overhead guard	○
	Flashing warning light on cabin	○
Energy	High-performance 48 V batteries from 420 Ah to 930 Ah	●

● Standard equipment

○ Optional equipment

CHARACTERISTICS



Side camera for safe transverse travel in reverse

Safety

- Automatic parking brake for security on ramps and gradients
- Electromagnetic brakes on drive and load wheel for effective braking
- Damage prevention thanks to end position damping during mast forward reach and lifting movements
- Optional lift height-dependent creep speed for safe load deposit
- Speed is automatically reduced in curves thanks to Linde Curve Assist
- Travel speed adjustable depending on travel direction, load weight and lift height



Power height-adjustable foot platform

Ergonomics

- Individually adjustable operator's seat for fatigue-free working
- Adjustable control console and floor plate for optimum comfort
- Intuitive, ergonomically arranged controls
- Low cabin entry height with grab handle for easy on/off access
- Ergonomic concept supports effective operation



Safe handling of long materials

Handling

- Intuitive, progressive 360° steering provides optimum manoeuvrability
- High degree of flexibility thanks to adjustable fork spread
- Fast lift and travel speeds for efficient working
- Load weight and lift height display for precise handling
- Low centre of gravity enables high residual load capacities



Fast service access

Service

- Maintenance-free lift and AC traction motors
- Easily accessible components for quick maintenance
- Central readout of all vehicle data via service interface (laptop)
- Modern CAN bus connection for efficient troubleshooting

Subject to modification in the interest of progress. Illustrations and technical specifications could include options and are not binding for actual constructions. All dimensions subject to usual tolerances.

Presented by:



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