



MS16S SERIES

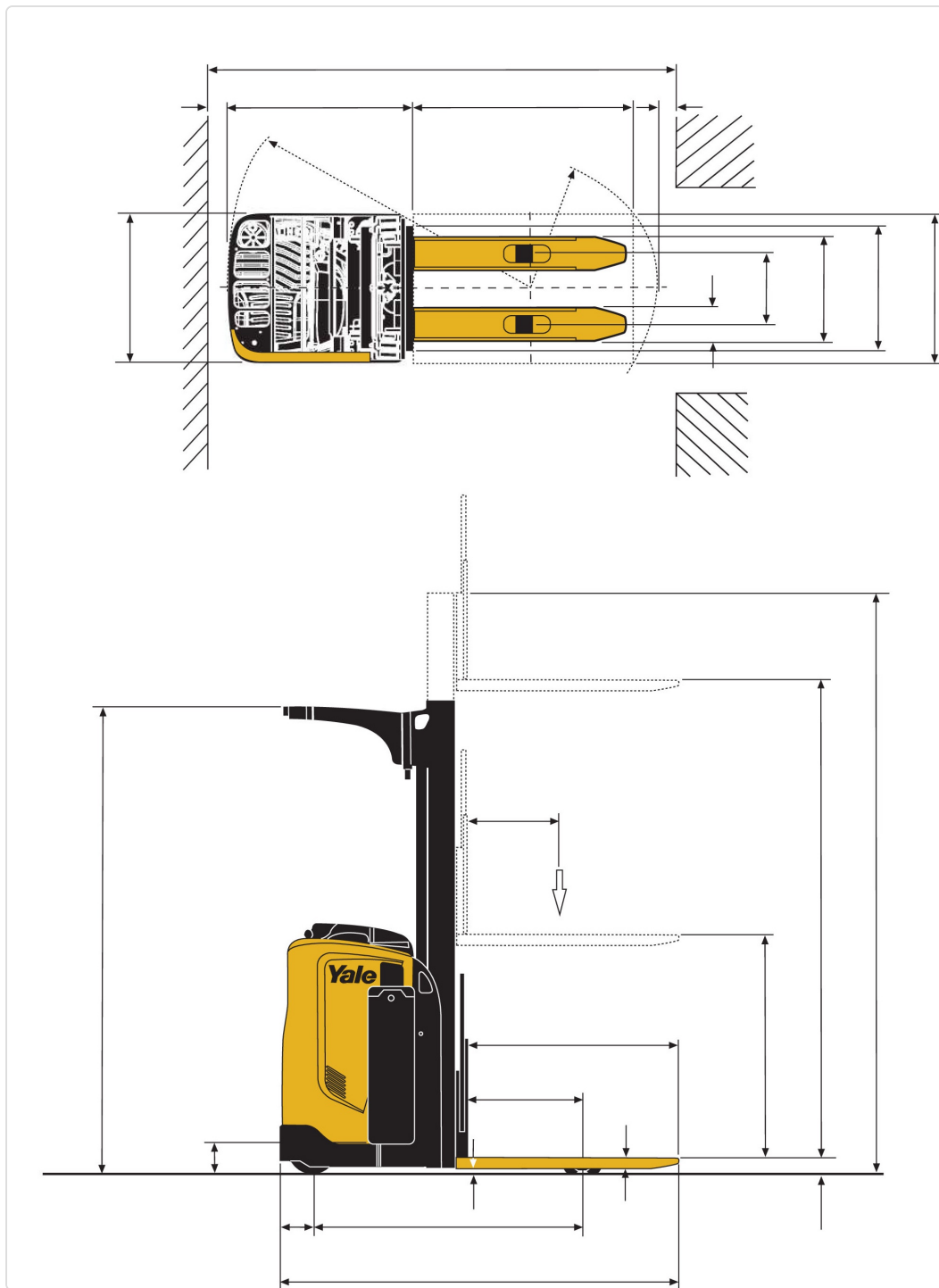
RIDER HIGH LIFT STACKER

PRODUCT TECHNICAL GUIDE



C855 V1R0 28/08/2026

TRUCK DIAGRAM



TECHNICAL DATA

Specifications Table

	1.2	MODEL DESIGNATION		MS16S
General	1.1	Manufacturer		Yale
	1.3	Drive		Electric (battery)
	1.4	Operator type		Stand / seated
	1.5	Rated capacity/Rated load	Q (t)	1.6
	1.6	Load centre distance (1)	c (mm)	600 (2)
	1.8	Load distance, centre of drive axle to fork (1)	x (mm)	674
	1.9	Wheelbase (1)	y (mm)	1463
Weight	2.1	Service weight	kg	1643
	2.2	Axle loading, laden front/rear	kg	1153 / 2090
	2.3	Axle loading, unladen front/rear	kg	1088 / 555
Tyres	3.1	Tyres front/rear		Vulkollan
	3.2	Tyre size, front	ø (mm x mm)	254 x 90
	3.3	Tyre size, rear	ø (mm x mm)	85 x 66
	3.4	Additional wheels (dimensions)	ø (mm x mm)	150 x 79
	3.5	Wheels, number front/rear (x = driven wheels)		1x + 1 / 4
	3.6	Tread, front	b10 (mm)	475
	3.7	Tread, rear	b11 (mm)	400
Dimensions	4.2	Height, mast lowered (3)	h1 (mm)	2300
	4.3	Free lift (3)	h2 (mm)	100
	4.4	Lift (3)	h3 (mm)	3600
	4.5	Height, mast extended (3)	h4 (mm)	4128
	4.7	Height of overhead guard (3)	h6 (mm)	2245
	4.8	Height of seat / platform	h7 (mm)	935 / 297
	4.1	Height of wheel arms	h8 (mm)	85
	4.15	Height, lowered	h13 (mm)	90
	4.19	Overall length (1)	l1 (mm)	2159
	4.2	Length to face of forks (1)	l2 (mm)	993
	4.21	Overall width	b1 (mm)	798
	4.22	Fork dimensions (1) (4)	s/e/l (mm)	55 / 185 / 1150
	4.24	Fork-carriage width	b3 (mm)	673
	4.25	Distance between fork-arms (1)	b5 (mm)	570
	4.31	Ground clearance, laden, below mast	m1 (mm)	25
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	25
	4.33	Load dimension b12 x l6 crossways (1)	b12 x l6 (mm)	800 x 1200
	4.34.1	Aisle width for pallets 1000mm x 1200mm crossways (1) (5)	Ast (mm)	2523
	4.34.2	Aisle width for pallets 800mm x 1200mm lengthwise (1) (5)	Ast (mm)	2501
	4.35	Turning radius (1)	Wa (mm)	1640
Performance	5.1	Travel speed, laden/unladen	km/h	9
	5.1.1	Travel speed, laden/unladen, backwards	km/h	9
	5.2	Lift speed, laden/unladen	m/s	0.14 / 0.28
	5.3	Lowering speed, laden/unladen	m/s	0.40 / 0.35
	5.7	Gradeability, laden/unladen	%	0.9 / 3.4
	5.8	Max. gradeability, laden/unladen	%	8.0 / 13.0
	5.1	Service brake		Electro Magnetic
Electric	6.1	Drive motor S2 60 minute rating	kW	2.6
	6.2	Lift motor, S3 15% rating	kW	3.0 (6)
	6.3	Battery according to DIN 43531/35/36 A,B,C, no		no
	6.4	Battery voltage/nominal capacity K5	(V) / (Ah)	24 / 465
	6.5	Battery weight (7)	kg	366 (7) (8)

	1.2	MODEL DESIGNATION		MS16S
	6.6	Energy consumption according to VDI cycle	kWh/h @ no of cycles	1.26
	8.1	Type of drive unit		AC Controller
	10.7	Sound pressure level at the driver's seat	dB (A)	72.14

MAST DIMENSIONS

Specifications Table

	H3 (MM)	H2 (MM)	H1 (MM)	H4 (2) (MM)	H6 (MM)	WEIGHT (3) (MM)
2-Stage No Free-Lift (NFL) Mast	3400	100	2200 (1)	2200 (1)	2145	369
	3600	100	2300 (1)	2300 (1)	2245	382
	3800	100	2400 (1)	2400 (1)	2345	395
	4000	100	2500 (1)	2500 (1)	2445	409
	4200	100	2600 (1)	2600 (1)	2545	422
2-Stage Full Free-Lift (FFL) Mast	3340	1718	2150	2150	2145	380
	3540	1818	2250	2250	2245	393
	3740	1918	2350	2350	2345	406
	3940	2018	2450	2450	2445	419
	4140	2118	2550	2550	2545	432
3-Stage Full Free-Lift (FFL) Mast	4900	1618	2150	2150	2145	518
	5180	1718	2250	2250	2245	537
	5460	1818	2350	2350	2345	556
	5740	1918	2450	2450	2445	575
	6020	2018	2550	2550	2545	594

BATTERIES AND CHARGER

Specifications Table

FORK LENGTH (1) L (MM)	LOAD CENTRE DISTANCE C (MM)	WHEELBASE Y (MM)	OVERALL LENGTH L1 (MM)	LENGTH TO FACE OF FORKS (2) L2 (MM)	LOAD DISTANCE (1) (MM)	TURNING RADIUS WA (MM)	DISTANCE BETWEEN FORK ARMS B5 (MM)	L6 (MM)	B12 (MM)	PALLET POSITION	AISLE WIDTH AST (MM)
1000	500	1463	1966	966	674	1640	570	1000	1200	Crossways	1000
								1200	800	Lengthwise	
1150	600	1463	2116	966	674	1640	570	1000	1200	Crossways	1150
								1200	800	Lengthwise	
1000	500	1463	2009	1009	631	1640	570	1000	1200	Crossways	1000
								1200	800	Lengthwise	

- 1

2-stage only: less 27mm with a load backrest fitted.
- 2

2-stage only: add 27mm with a load backrest fitted.

OPTIONS TABLE

Available Options

OPERATOR COMPARTMENT	STANDARD	OPTION
Grab handle	x	
Seat with seat/lean system	x	
Multifunctional display	x	
Keyless access		x
Mini lever hydraulic control	x	
Foot rest		x
Standard steering	x	
Reverse steering		x
TRAVEL	Standard	Option
Travel speed 9 km/h reverse, forks trailing	x	
Travel speed 9 km/h, forks leading	x	
Speed slow down on cornering	x	
LIFT PERFORMANCE	Standard	Option
2 stage NFL mast	x	
2 stage FFL mast		x
3 stage FFL mast		x
Mast guard, Lexan	x	
Mast guard, wire mesh grid		x
Overhead guard protection, Lexan		x
Overhead guard protection, metal grid		x
Audible alarm (choice of forks leading, forks trailing, both travel directions)	x	
Electrical horn	x	
Error codes on display		x
APPLICATION ENVIRONMENT	Standard	Option
Multipurpose bar		x
Multipurpose clamp (1 or 2 pcs.)		x
Beverage holder and document tray		x
A4 clipboard		x
Stretch film roll holder		x
Cold store protection - 30° C		x
Single battery change station (fixed)		x
Twin battery change station (fixed)		x
Side battery change - include on board battery rollers	x	
Extension cable		x
Tandem polyurethane load wheels		x
Vullokolan drive tyre	x	
Topthane PU75 drive tyre		x
Conductive drive tyre		x
Castor wheel	x	
DC/DC converter 12V 2,5A		x
Load backrest (H=1000 mm TOF)		x
Hyster Tracker – Monitoring		x
Hyster Tracker – Access		x
Hyster Tracker – Verification		x
CHASSIS / BATTERY SIZES	Standard	Option
Chassis width (max) 798 mm	x	
Fork Carriage widths (see Forks table) 570 mm		x
Fork Carriage lengths 1000 mm		x

OPERATOR COMPARTMENT	STANDARD	OPTION
Fork Carriage lengths 1150 mm	x	
Battery sizes 792x212x814 mm	x	



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