

**Industry  
Sectors**


Automotive



Food



Beverage



Retail



Manufacturing

# MO12C

## 1200kg Counterbalance Order Picker



### Requirement

Maximise flexibility in applications where the customer needs one truck for multiple tasks (stacking, picking, replenishment, pallet transport).

Also allows order picking activity with pallet at an ergonomic height.

### Solution

The Counterbalance Order Picker combines the frame of the Low Level Order Picker series with the mast of the Stacker series. This combination provides all the functionality required for order picking, as well as stacking.



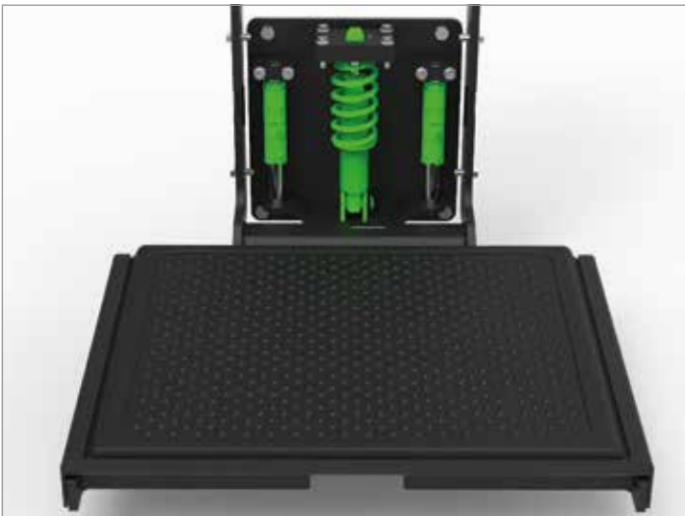
### Lift interrupt adjustable

The operator can pre-set the maximum lifting of the fork to the required picking height.

For those applications where the picking activities are predominant and there is no need to lift the load above 1.8m, this new model can be configured without Overhead Guard and with a 1 stage mast. The fork will lift up to 1745mm, allowing the operator to lift the load at the most ergonomic height for his/her picking operation. This configuration still allows to put away/retrieve pallets at first level of the shelf above ground.

### Proportional lifting joystick on fork side

Ergonomic feature that allows the operator to drive the truck with one hand and activate the lifting/lowering of the fork, **without using the scooter control while facing the shelves.**



### Additional options available

- Suspended platform improves operator comfort when driving for long distances or on uneven floors.
- Mast side joystick for lifting/lowering forks without using the scooter control while stacking.

### Optional lights

Pedestrian Awareness lights – Front and rear blue motion-activated spotlights alert pedestrians that the truck is travelling in the immediate area. Red zoning lights on either side of the truck indicate to pedestrians the required distance that should be kept from the truck when in motion.

# VDI 2198 – General Specifications

Technical features			Updated Oct-20	
Distinguishing mark	1.1	Manufacturer (abbreviation)		Yale
	1.2	Manufacturer's type designation		<b>MO12C</b>
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Battery
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Counterbalance Order-picker
	1.5	Rated capacity/Rated load	Q (t)	1.2
	1.6	Load centre distance	c (mm)	500
	1.8	Load distance, centre of drive axle to fork	x (mm)	1579
	1.9	Wheelbase	y (mm)	1470
	Weight	2.1	Service weight (a) (b)	(kg)
2.2		Axle loading, laden front/rear a)	(kg)	515 / 2950
2.3		Axle loading, unladen front/rear	(kg)	1045 / 1220
Tyres, chassis	3.1	Tyres: polyurethane, tophane, NDIIthane, front/rear		Tophane / Polyurethane
	3.2	Tyre size, front	ø (mm x mm)	254 x 90
	3.3	Tyre size, rear	ø (mm x mm)	200 x 100
	3.5	Wheels, number front/rear (x = driven wheels)		1x/2
	3.6	Tread, front	b 10 (mm)	-
	3.7	Tread, rear	b 11 (mm)	746
	Dimensions	4.2	Height, mast lowered b)	h 1 (mm)
4.4		Lift (b)	h 3 (mm)	4620
4.5		Height, mast extended (b)	h 4 (mm)	5386
4.8		Seat height relating to SIP/stand height	h 7 (mm)	152
4.9		Height drawbar in driving position min./max..	h 14 (mm)	1317
4.12		Coupling height	h 10 (mm)	-
4.14		Stand height, elevated	h 12 (mm)	-
4.15		Height, lowered	h 13 (mm)	45
4.17		Lengthwise	l 6 (mm)	1200
4.19		Overall length (c)	l 1 (mm)	2983
4.20		Length to face of forks	l 2 (mm)	1785
4.21		Overall width	b 1/b 2 (mm)	866
4.22		Fork dimensions	s/e/l (mm)	40/100/1200
4.25		Distance between fork-arms	b 5 (mm)	564
4.32		Ground clearance, center of wheelbase	m 2 (mm)	50
4.33		Load dimension b 12 x l 6 lengthwise	b 12 x l 6 (mm)	800 x 1200
4.34.2	Aisle width for pallets 800mm x 1200mm lengthwise (e)	A st (mm)	3135	
4.35	Turning radius	W a (mm)	1704	
Performance data	5.1	Travel speed, laden/unladen	km/h	8 / 8
	5.1.1	Travel speed, laden/unladen, backwards	km/h	6.5 / 6.5
	5.2.1	Lift speed, laden/unladen (Forks)(f)	m/s	0.15 / 0.25
	5.2.2	Lift speed, laden/unladen (Cab)	m/s	-
	5.3.1	Lowering speed, laden/unladen (Forks)(f)	m/s	0.31 / 0.36
	5.3.2	Lowering speed, laden/unladen (Cab)	m/s	-
	5.8	Max. gradeability, laden/unladen	%	12.6 / 20
	5.9	Acceleration time, laden/unladen	s	8.28 / 7.96
	5.10	Service brake		Electromagnetic
	Electric - engine	6.1	Drive motor, S2 60 min rating	kW
6.2		Lift motor S3 15% rating	kW	3
6.3		Battery according to DIN 43531/35/36 A,B,C, no		no
6.4		Battery voltage/nominal capacity K5	(V)/(Ah)	24 / 620
6.5		Battery weight (d)	kg	480
6.6		Energy consumption according to DIN EN 16796	kWh/h	1,147
6.6.1		Turnover output according to VDI 2198	t/h	1076
6.6.2		Turnover efficiency according to VDI 2198	t/kWh	0.58
8.1	Type of drive unit		AC-Controller	
10.7	Sound pressure level at the driver's seat	dB (A)	< 65	

a) Truck configured with 3stg FFL h3=4620mm mast and forks 1200x120x40mm

b) Accessories mounted on the overhead guard excluded.

c) Accessories mounted on the front bumper excluded

d) These values may vary of +/- 5%

e) Transfer aisle widths (lines 4.34.1 & 4.34.2) are based on the VDI standard calculation as shown on illustration.

The British Industrial Truck Association recommends the addition of 100 mm to the total clearance (dimension a) for extra operating margin at the rear of the truck.

f) These values may vary of +/- 15%

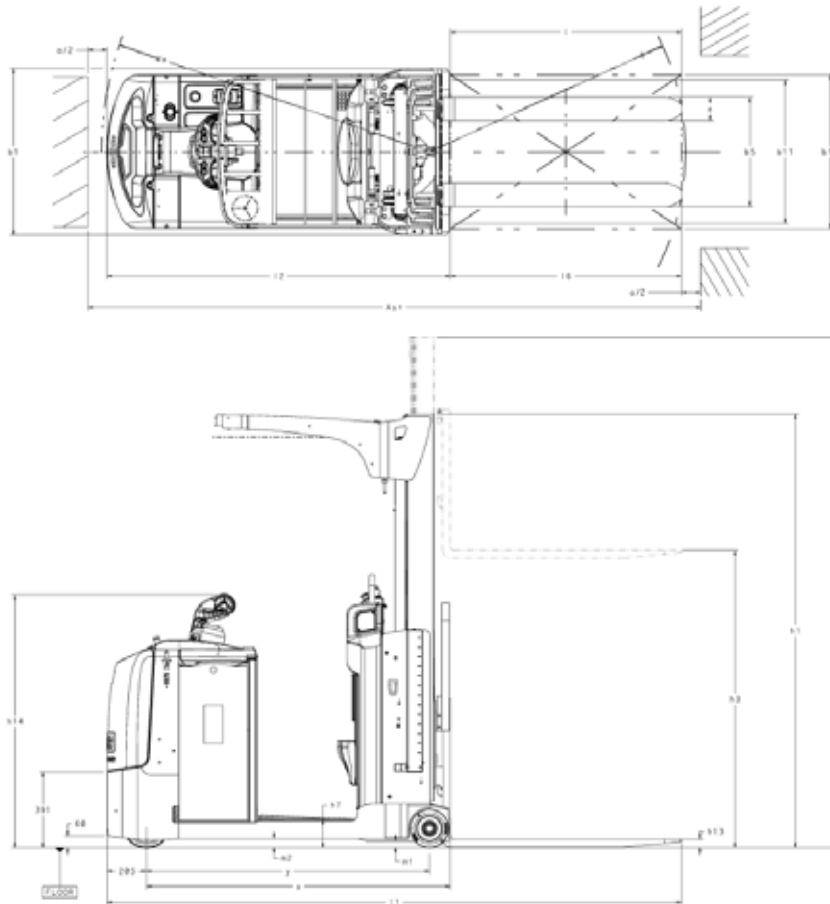
**All values are nominal values and they are subject to tolerances. For further information, please contact the manufacturer.**

**Yale products might be subject to change without notice.**

**Lift trucks illustrated may feature optional equipment.**

**Values may vary with alternative configurations.**

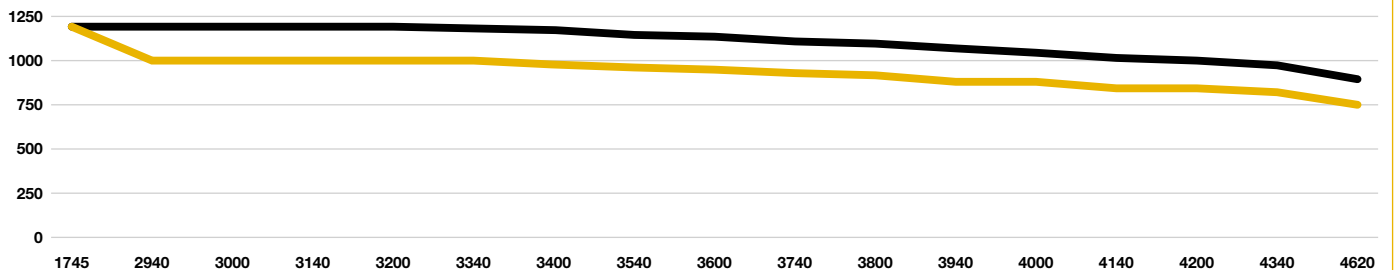
## Truck Dimensions



## Capacity Chart

Yale	Mast	Mast	Mast	Mast	Battery	Forks												
<b>E857</b>	1 stg FFL	2stg FFL	2stg NFL	3stg FFL	(Ah and kg)													
<b>MO12C</b>	<b>SPED</b> h3.max=1745	<b>B582</b> h3.max=4140	<b>B583</b> h3.max=4200	<b>B584</b> h3.max=4620	<b>620Ah</b>	FEM 2 forks 100x40x1200												
(mm)	h3	1745	2940	3000	3140	3200	3340	3400	3540	3600	3740	3800	3940	4000	4140	4200	4340	4620
	H	<b>1790</b>	<b>2,985</b>	<b>3,045</b>	<b>3,185</b>	<b>3,245</b>	<b>3,385</b>	<b>3,445</b>	<b>3,585</b>	<b>3,645</b>	<b>3,785</b>	<b>3,845</b>	<b>3,985</b>	<b>4,045</b>	<b>4,185</b>	<b>4,245</b>	<b>4,385</b>	<b>4,665</b>
<b>500</b>	kg	1,200	1,200	1,200	1,200	1,200	1,190	1,180	1,150	1,140	1,110	1,100	1,070	1,050	1,020	1,010	980	900
<b>600</b>	kg	1,200	1,000	1,000	1,000	1,000	990	980	960	950	930	920	890	880	850	840	820	750


For further information (i.e. capacities at different load centres or with attachments) please contact the Apps Solutions Team via Contact Management  
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**Safety:** This truck conforms to the current EU requirements. Specification is subject to change without notice.

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