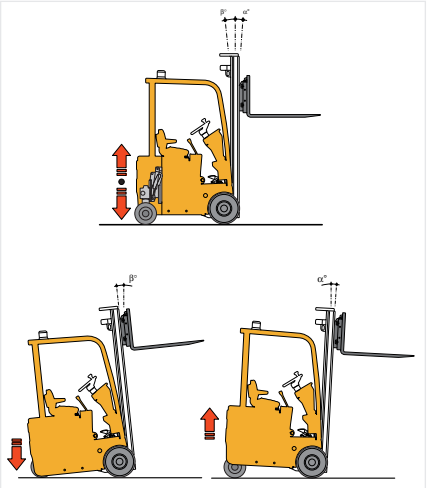
Counterbalanced
Fork Lift

Ergos III 8-10 TA3 ac



T.O.S. Tilting **O**MG **S**ystem

The new Ergos III 8-10 TA 3 ac are equipped with two power alternated current motors which have compact dimensions, high performance and excellent manoeuvrability. Ideal for working in very tight spaces, the turning circle is less than 1.200 mm, and a standard feature is the exclusive tilting system called T.O.S. (Tilting OMG System). This system offers a considerable increase in residual capacities as the centre of gravity of the truck is not affected by the mast tilt (usually a limiting factor for this category of product). The battery compartment is accessible by opening the side panel of the truck. A standard feature is the lateral battery removal system on rollers, facilitating replacement for heavy duty use over several work shifts.

Chassis
The monobloc construction ensures maximum stability and superior mechanical strength in all traction and stacking situations, maintaining high residual capacities even at maximum height. The battery compartment is easily accessible by simply lifting the seat support, facilitating daily and periodical battery checks and recharging.

Drive
Reliable sensor less three phase current traction drive motors able to meet the most demanding performance requirements, delivering the necessary power under all load conditions as the traction speed exactly depends on the position of accelerator pedal.

Steering
Hydraulically-operated power steering for safe and precise steering which is highly responsive and ensures truck control at all times. Height and depth adjustable steering wheel offering unique driving comfort.

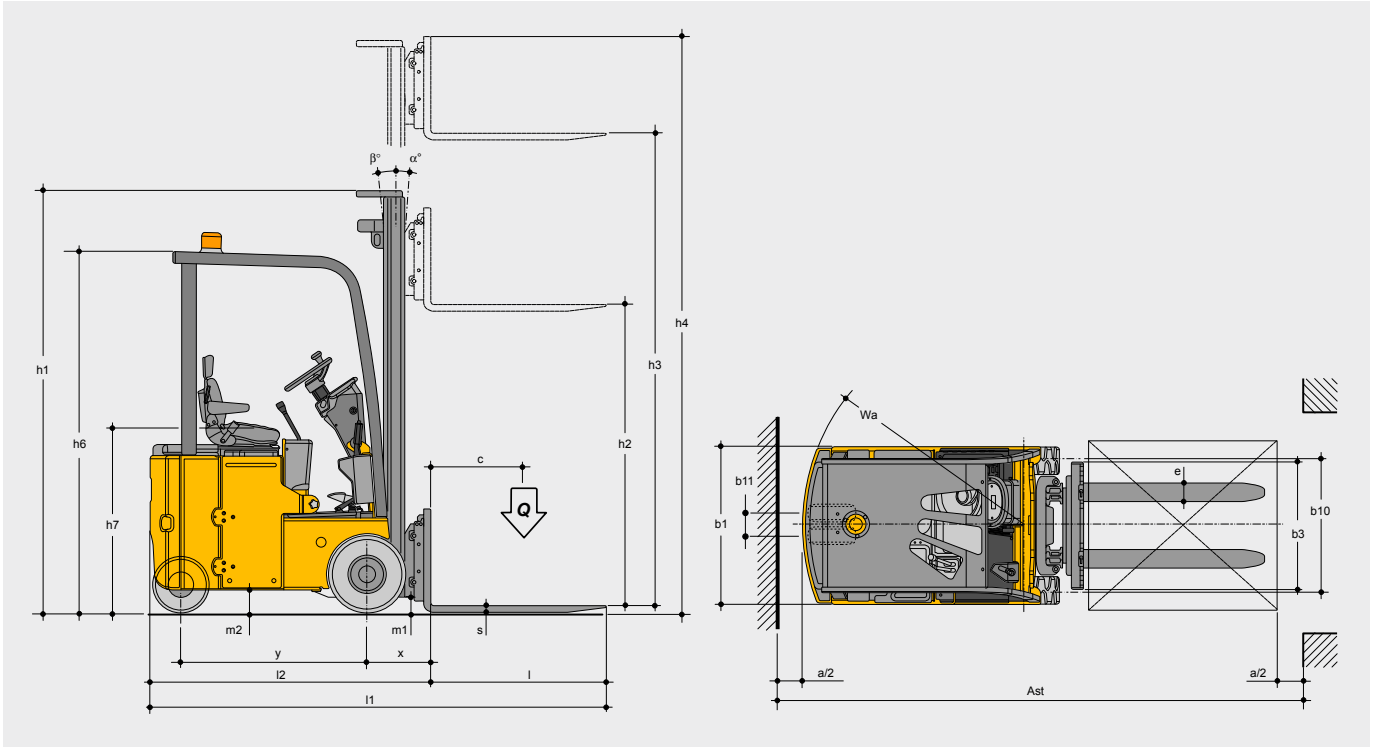
Hydraulic functions
Powerful and noiseless lift motor offering the highest performance.
All the hydraulic functions are microprocessor controlled and ensure precise and safe load handling for the operator.

Characteristics	1.1	Manufacturer			OMG S.r.l.	
	1.2	Model			**Ergos III 8 TA3 ac**	**Ergos III 10 TA3 ac**
	1.3	Drive			electric	
	1.4	Operator type			seat	
	1.5	Load capacity / rated load	Q	t	0.8	1.0
	1.6	Load centre distance	c	mm	500	
	1.8	Load distance (centre of load axle to fork face)	x	mm	350	
	1.9	Wheelbase	y	mm	1.015	
Weights	2.1	Service weight incl. battery (see line 6.5)		kg	1.950	2.295
	2.2	Axle loading, laden front / rear		kg	2.720 / 370	3.045 / 245
	2.3	Axle loading, unladen front / rear		kg	1.250 / 1.040	
Wheels Chassis	3.1	Tires			super elastic	
	3.2	Tire size, front			16x6-8	
	3.3	Tire size, rear			4.00 - 4	
	3.5	Wheels, number front / rear (x = driven wheels)		N°	2x / 2	
	3.6	Track width, front	b_{10}	mm	725	
	3.7	Track width, rear	b_{11}	mm	195	
Basic dimensions	4.1	Mast tilt forward /backward	α/β	°	3 / 6	
	4.2	Mast lowered height	h_1	mm	2.195	
	4.3	Free lift	h_2	mm		
	4.4	Lift height	h_3	mm	3.170	
	4.5	Mast extended height	h_4	mm	3.730	
	4.7	Overhead load guard (cab) height	h_6	mm	1.970	
	4.8	Seat height	h_7	mm	950	
	4.12	Coupling height	h_{10}	mm		
	4.19	Overall length	l_1	mm	2.670	
	4.20	Length to face of forks	l_2	mm	1.520	
	4.21	Overall width	b_1/b_2	mm	850	
	4.22	Forks dimensions	s/e/l	mm	30 / 100 / 1.150	
	4.23	Fork carriage ISO 2328, class /type A, B			II A	
	4.24	Fork carriage width	b_3	mm	800	
	4.25	Width over forks	b_5	mm	750	
	4.31	Ground clearance under mast, laden	m_1	mm	90	
	4.32	Ground clearance, centre of wheelbase	m_2	mm	120	
	4.33	Aisle width for pallets 1000 x 1200 crossways	Ast	mm	2.820	
	4.34	Aisle width for pallets 800 x 1200 lengthways	Ast	mm	2.920	
	4.35	Turning radius	W_a	mm	1.170	
Performances	5.1	Travel speed laden / unladen		km/h	10 / 11.5	
	5.2	Lifting speed laden / unladen		m/s	0.30 / 0.45	0.28 / 0.45
	5.3	Lowering speed laden / unladen		m/s	0.45 / 0.38	
	5.5	Drawbar pull, laden / unladen		N	3.000 / 7.300	
	5.7	Max gradient performance laden / unladen S2 30 min		%	7 / 15	6 / 14
	5.8	Max gradient performance laden / unladen S2 5 min		%	10 / 20	14 / 19
	5.9	Acceleration time, laden /unladen		s	7.0 / 6.0	
	5.10	Service brake			hydraulic	
Electric Motor	6.1	Traction motor, rating S2 60 min		kW	3 x 2	
	6.2	Lift motor, rating S3 15%		kW	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 / 460	24 / 500
	6.5	Battery weight		kg	400	452
		Battery dimensions L / B / H		mm	820x320x610	
	6.6	Energy consumption according to VDI cycle		kW/h	3.8	3.9
Others	8.1	Type of drive control			inverter ac	
	8.2	Operating pressure for attachments		bar	150	
	8.3	Oil volume for attachments		l/min	15	
	8.4	Sound level at driver's ear according to EN 12 053		dB(A)	< 70	
	8.5	Towing coupling, type DIN				
					* option	

Technical specification according to VDI 2198, technical values are referred to the standard product. Different masts, different tires, additional equipment, etc. could produce other values. Information and data are given for information only, OMG S.r.l. will have the sole right for technical changes and improvements without giving any notice.

Standard masts								Capacity	
Denomination		Mast lowered height	Lift height	Total lift height	Mast extended eight	Free lift	Mast tilt forward/ backward	with side-shift (t) c=500 mm	
		h_1	h3	h_{3+s}	h_4	h_2	α/β (°)	**Ergos III 8 TA3 ac**	**Ergos III 10 TA3 ac**
Duplex	mm	2.195	3.170	3.200	3.730		3 / 6	0.8	1.0
	mm	2.445	3.670	3.700	4.230		3 / 6	0.8	1.0
	mm	2.595	3.970	4.000	4.530		3 / 6	0.7	0.9
	mm	2.920	4.570	4.600	5.155		3 / 6	0.6	0.8
Triplex-FFL	mm	2.040	4.370	4.400	4.970	1.460	3 / 6	0.6	0.8
	mm	2.240	4.970	5.000	5.570	1.660	3 / 6	0.5	0.7
	mm	2.490	5.570	5.600	6.170	1.910	3 / 6	0.4	0.6
	mm	2.740	6.170	6.200	6.770	2.160	3 / 6	0.4	0.6

* option



Accessories and special executions			
full free lift for duplex masts	■	forward / reverse by double pedal	■
full free lift for triplex masts	■	backwards light	■
tilting on chassis T.O.S.	■	front working lamps	■
integrated side-shift	■	front / rear working lights	■
battery side extraction	■	half cabin (front and rear glass with wind screen wiper) PVC doors	■
single battery stand with wheels	■	no-marking tires	■
flashing beacon with reverse buzzer	■	load protection guard	■
super elastic wheels	■	additional hydraulic function	■
anti roll-back system	■	lexan protection on the roof	■
electronic speed control	■	battery 24V 575Ah with charger 24V 100A	■
electronic brake system	■	battery 24V 625Ah with charger 24V 100A	■

standard ■ option ■

Masts
The masts are constructed from wrap around external section to ensure torsional and bending rigidity, and are available with the following characteristics:
• duplex and triplex with full free lift and lifting heights available from 3.300 up to 6.000 mm;
• braking system on lift cylinders for linear movement without jolts, thus improving load stability;
• integrated side-shift to avoid forward movement of the centre of gravity and maintain optimum residual capacities at all lifting heights.

Brakes
Independent braking systems throughout the range:
• electric braking with energy recovery on reversal of direction of travel;
• electric braking with energy recovery on release of the accelerator pedal;
• manual parking brake with drive inhibition;
• hydraulic braking on the load wheels.

Electronic system
Ergos range is equipped with energy recovery system achieved by:
• releasing the accelerator pedal;
• reversing the direction of travel;
• pressing the brake pedal.

These controls monitor all the machine's functions and allow many adjustments to optimise the performance of the machine, adapting it to the type of work it has to carry out. All the parameters relating to drive, braking and hydraulic functions are electronically adjustable in accordance with the customer's requirements.

Operator's driving position

- seat with longitudinal adjustment;
- longitudinally adjustable steering wheel;
- anti slippery operator's feet platform;
- LCD display showing the following necessary data for the manoeuvre:
  - parking brake indicator,
  - warning lights (neutral position, controller overheating, motor overheating);
  - operating hours indicator;
  - speedometer,
  - "ON"indicator for the slow traction (turtle push button);
  - different power output ways E/S/H, E=economy S=standard H=super;
  - battery charge indicator.

Battery side extraction
The standard battery side extraction facilitate its replacement for heavy applications and different working shifts.

OMG S.r.l.
Legal Seat:
Corso Buenos Aires,18 - 20124 Milano
Seat:
Via dell'Artigianato, 12 - 46023 Gonzaga (MN) Italy Tel. +39 0376 526011 Fax +39 0376 588008
www.omgindustry.com - info@omgindustry.com