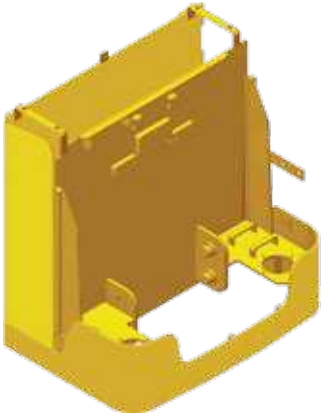


Electric Stacker



1 Heavy Duty Chassis Construction

- 8 mm thick carbon steel chassis protects the drive train, hydraulic pack and controller from any damage during operations



2 Fully-integrated AC Traction System (ACTS)

- The AC control system and ruggedness of the drive train provides smooth direction changes and allows you to change direction instantaneously
- ACTS also enables the operator to precisely and accurately position the machine to pick and place pallets
- Motor torque control provides braking force, dramatically reducing the need for electromagnetic brake operation. This minimises brake pad wear saving maintenance time and cost.

3 Programmable Performance Equipment

- Programmable Microprocessor based MOSFET controller enables the equipment to be set to work at the required speeds as well as set required braking distances
- Controller provides the appropriate torque to speed ratio to meet the demands of the application based on constant feedback from the encoder
- The controller increases the life of the motor and enables the battery to last longer by up to 5%
- Superior control of motor characteristics enhances the life of the motor, besides enabling upto 5% additional operating hours in each charge cycle

7 reasons

why Godrej Electric Stacker
is the right choice to improve
productivity and safety
of your material handling
operations





Operator never has to leave the handle during application making operations stable and safe

4 Full Function Control Handle

- Thanks to the full function control handle, the operator can manage all functions (Forward/Reverse/Braking/Lifting/Lowering) with one hand
- Full function handle eliminates all distraction, allows operator to focus solely on the handling task
- The machine can be handled with either left or right hand due to symmetrical design of the handle



5 Superior Mast Design affords better Visibility and Industry Leading Lifting Capacity

- I section with interlocking construction ensures sufficient rigidity & stability to lift loads up to 6.3 meters height
- This also enables industry leading 650 kg lifting capacity available at 6.3 metre with ESW model



6 Energy Efficient and Precise Fork Control through Electronically Controlled Hydraulics

- Proportional control valve enables operator to align the forks smoothly and accurately with the pallet
- Jerk-free lifting and lowering ensures safety and stability of handling
- Electronic control generates only the power required to lift a particular load, saving energy, allowing the battery to run longer on every charge

7 Safety with Improved Productivity

- Attachments like load back rest improves safety while handling loosely stacked pallets
- Other safety features are stated in page 5 and 6





Godrej **Electric** Stacker

Built to promise uptime...





Easy battery rollout



Best-in-class stability



Ease of maneuvering

Productivity... Enhanced!

Clear through mast visibility at all heights



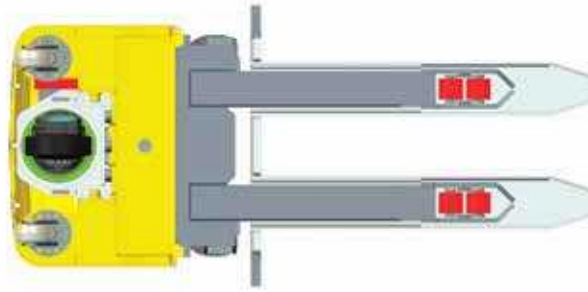
Higher travel speed with platform



Godrej Safety Features



Clear Visibility at all Heights



1 Five point wheel configuration

- Spring suspension for the drive unit ensures the contact of the wheel drive with the ground at all times while reducing the effort to steer the machine. Equipment automatically adjusts travel speeds to suit different operating conditions.

2 Different speeds to meet the requirements of the application while ensuring safe operation of the equipment

- Castors on either side of the drive wheel guarantee stability of the truck all the way upto 6.3 meters fork height. Controller ensures that the load is safely positioned at the lowest possible height while travelling by automatically reducing the machine speed to 2.5 kmph when:
 - The forks are raised 300 mm above the ground. This also ensures slower and precise movement while placing or picking pallets from the rack.
 - Raising the operator platform automatically reduces the travel speed to 2.5 kmph, putting it in pedestrian mode. Operator platform is raised for operating in pedestrian mode.



Flashing Beacon with Travel Alarm (Optional)



Emergency Switch and Battery Discharge Indicator



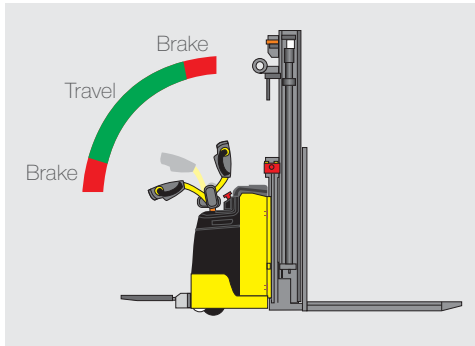
Side Restraint for Operator Support





3 Fail-safe Braking System

- Electromagnetic brake acts directly on the motor. It acts automatically in case of any form of power failure in the equipment.
- The electromagnetic brake also operates as a ramp hold, preventing the stacker from running away if left unattended on a slope
- The extreme horizontal & vertical positions of the tiller handle activate the electromagnetic brake. This ensures that the handle is always held in a convenient and safe zone while travelling. A spring automatically returns the tiller handle to a vertical position, immediately activating the electromagnetic brake and holding the stacker safely.
- The braking distance is programmable to suit the application, working conditions and operator skill



Operating mode with brake zone



4 Anti-pinning Button at the end of the control handle

- If the operator accidentally gets trapped between the stacker and the wall/rack, the anti-pinning button presses against the operator. This immediately moves the machine a few inches away from the operator, before coming to a halt.



5 Battery Discharge Indicator (BDI) with lift lock out

- The BDI visually indicates the battery status at all times. The lift lock out disables lift function when the battery is discharged to 80% of its full capacity, preventing deep discharge of the battery through further use.

6 Emergency stop switch

- The mushroom button instantly cuts power to all functions and operates the electromagnetic brake whenever it is struck in emergency

Performance Enhancing Options:

- 324 Ah battery in lieu of standard 225 Ah battery
- Travel alarm
- Flashing beacon
- Side restraints
- Overhead guard (Only with limited mast configuration)
- Load backrest
- Non-standard fork spread or straddle dimensions
- Battery changing trolley
- Fork height restrictor with manual over-ride*

*Special design sanction required

General Specification - GFES 15

Characteristics	Manufacturer		-	Godrej	Godrej
	Model Designation		-	ES 15	ES 15W
	Power Source		-	Battery	Battery
	Operation Type		-	Pedestrian	Pedestrian
	Load Capacity	Q	Kg	1500	1500
	Load Centre	c	mm	600	600
	Load Distance	x	mm	707	707
	Wheelbase	y	mm	1409	1409
Wheels & Tyres	Wheels	Drive wheel	-	PU (Polyurethane)	PU (Polyurethane)
		Load wheel	-	PU (Polyurethane)	PU (Polyurethane)
		Caster wheel	-	PU (Polyurethane)	PU (Polyurethane)
	Wheel size	Drive wheel	mm	Ø230 x 70	Ø230 x 70
		Load wheel	mm	Ø85 x 75	Ø85 x 75
		Caster wheel	mm	Ø135 x 60	Ø135 x 60
	No. of wheels	Drive wheel	-	1	1
		Load wheel	-	4	4
		Caster wheel	-	2	2
	Track width, Caster wheel	b ₁₀	mm	614	614
Track width, Load wheel	b ₁₁	mm	400	560	
Basic Dimensions	Height of Mast, lowered	h ₁	mm	Refer Table no. 2	Refer Table no. 2
	Free lift	h ₂	mm	Refer Table no. 2	Refer Table no. 2
	Lift Height	h ₃	mm	Refer Table no. 2	Refer Table no. 2
	Height of Mast, extended	h ₄	mm	Refer Table no. 2	Refer Table no. 2
	Over head guard height	-	-	NA	NA
	Height of tiller (Min.)	h ₁₄ min.	mm	1135	1135
	Height of tiller (Max.)	h ₁₄ max.	mm	1316	1316
	Lowered Forks Height	h ₁₃	mm	90	90
	Overall Length (without footboard)	l ₁	mm	2021	2021
	Overall Length (with footboard)	l ₁	mm	2527	2527
	Length to Face of forks (2 Stage CV / 3 Stage CV)	l ₂	mm	871/846	871/846
	Overall width	b ₁	mm	850	850
	Fork dimension	Length (l)	mm	1150	1150
		Width (e)	mm	190	190
		Thickness (s)	mm	65	65
	Fork carriage Class		-	NA	NA
	Fork Carriage width	b ₃	mm	764	924
	Max. width across forks	b ₅	mm	590	750
	Ground clearance centre of wheelbase	m ₂	mm	25	25
	Right angle Aisle width (1200W x 1200L pallet) (w.o / w platform)	Ast	mm	2575/3060 ¹⁾	2575/3060 ¹⁾
Right angle Aisle width (1000W x 1200L pallet) (w.o / w platform)	Ast	mm	2500/2986 ¹⁾	2500/2986 ¹⁾	
Right angle Aisle width (800W x 1200L pallet) (w.o / w platform)	Ast	mm	2432/2920 ¹⁾	NA	
Turning Radius (without footboard)	Wa	mm	1600	1600	
Turning Radius (with footboard)	Wa'	mm	2095	2095	
Performance	Travel speed	with load	Km/h	5.5	5.5
		without load	Km/h	6.5	6.5
	Lift speed	with load	m/sec	0.11	0.11
		without load	m/sec	0.15	0.15
	Lowering speed	with load	m/sec	0.17	0.17
		without load	m/sec	0.17	0.17
Max. gradeability	with load	%	7	7	
	without load	%	15	15	
Service brake		-	Elect-magnetic	Elect-magnetic	
Power Unit	Drive motor, S2 60 min rating		Kw	1.3	1.3
	Lift motor, S3 10% rating	-	Kw	3	3
	Battery	Voltage	V	24	24
		Capacity (@ 5hrs. Rate)	Ah	225 ²⁾	225 ²⁾
	Battery weight	-	Kg	211 ± 5%	211 ± 5%
	Drive control	-	-	AC-MOSFET	AC-MOSFET
	Steering motor	-	Kw	NA	NA
	Steering system	-	-	Tiller handle	Tiller handle
Steering angle	-	Degree	175	175	

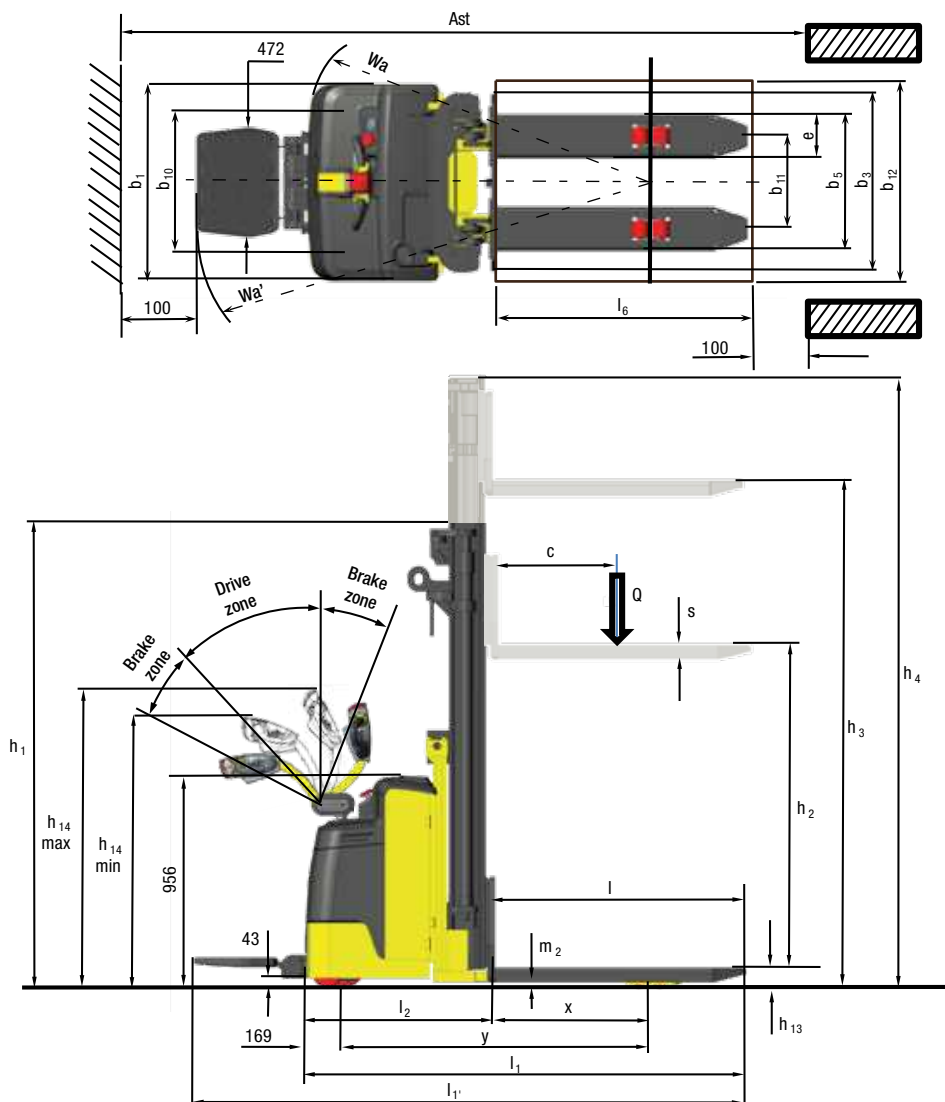
1) Aisle width calculated considering safety clearance of 200 mm 2) Higher capacity battery can be offered for extensive application.

NOTE: All dimensions and specifications indicated above are subject to a variation of +/-15%. Godrej products and specifications are subject to improvement or change without notice. The colour of the product reflecting in this brochure is indicative and may vary in actual supply.

Model	Mast Type	Maximum Fork Height (MFH) (h3 (mm))	Overall Height Lowered (OAHL) (h1 (mm))	Free Lift (h2 (mm))	Overall Height Raised* (OAHR) (h4 (mm))	Capacity at MFH (Kg)
ES 1530 / ES 1530 W	2 stage CVM	3000	2110	0	3500	1200
ES 1533 / ES 1533 W	2 stage CVM	3300	2260	0	3800	1000
ES 1536 / ES 1536 W	2 stage CVM	3660	2440	0	4160	900
ES 1546 / ES 1546 W	2 stage CVM	4600	2910	0	5100	500
ES 1536 / ES 1536 W	3 stage CVT with FL	3600	1739	1230	4100	850
ES 1545 / ES 1545 W	3 stage CVT with FL	4500	2039	1530	5000	500

*ADD 500mm if LBR is offered.

NOTE: ES VARIANT CAN LIFT 1500Kg UPTO FORK HT. OF 2500mm.



Standard Features:

- 1.3 KW AC traction motor
- Series wound, high speed 3 KW DC pump motor
- Electro-magnetic brakes with FBS technology
- Battery discharge indicator with lift lock out
- Mushroom button for emergency shut down
- Operator platform
- Anti-pinning button at the end of the control arm
- Key switch
- Horn
- Battery compartment rollers
- Fully welded steel chassis, optimally designed on Pro E & validated by finite element analysis (FEA)
- High visibility 2-stage and 3-stage masts
- Fully integrated suspended drive unit with ACTS traction motor, gear box and drive wheel
- Polyurethane drive and load wheels supported by side castors
- Centre mounted control arm with full function control handle
- Programmable MOSFET traction controller
- 24V electrical system
- 225 Ah traction battery



General Specification - GFES 15

Characteristics	Manufacturer		-	Godrej	Godrej
	Model Designation		-	ESW 15	ESW 15W
	Power Source		-	Battery	Battery
	Operation Type		-	Pedestrian	Pedestrian
	Load Capacity	Q	Kg	1500	1500
	Load Centre	c	mm	600	600
	Load Distance	x	mm	707	707
	Wheelbase	y	mm	1409	1409
Wheels & Tyres	Wheels	Drive wheel	-	PU (Polyurethane)	PU (Polyurethane)
		Load wheel	-	PU (Polyurethane)	PU (Polyurethane)
		Caster wheel	-	PU (Polyurethane)	PU (Polyurethane)
	Wheel size	Drive wheel	mm	Ø230 x 70	Ø230 x 70
		Load wheel	mm	Ø85 x 75	Ø85 x 75
		Caster wheel	mm	Ø135 x 60	Ø135 x 60
	No. of wheels	Drive wheel	-	1	1
		Load wheel	-	4	4
		Caster wheel	-	2	2
	Track width, Caster wheel	b ₁₀	mm	1086	1086
Track width, Load wheel	b ₁₁	mm	400	560	
Basic Dimensions	Height of Mast, lowered	h ₁	mm	Refer Table no. 2	Refer Table no. 2
	Free lift	h ₂	mm	Refer Table no. 2	Refer Table no. 2
	Lift Height	h ₃	mm	Refer Table no. 2	Refer Table no. 2
	Height of Mast, extended	h ₄	mm	Refer Table no. 2	Refer Table no. 2
	Over head guard height	-	-	Optional	Optional
	Height of tiller (Min.)	h ₁₄ min.	mm	1135	1135
	Height of tiller (Max.)	h ₁₄ max.	mm	1316	1316
	Lowered Forks Height	h ₁₃	mm	90	90
	Overall Length (without footboard)	l ₁	mm	2021	2021
	Overall Length (with footboard)	l _{1'}	mm	2527	2527
	Length to Face of forks (2 Stage CV / 3 Stage CV)	l ₂	mm	871/846	871/846
	Overall width	b ₁	mm	1344	1344
	Fork dimension	Length (l)	mm	1150	1150
		Width (e)	mm	190	190
		Thickness (s)	mm	65	65
	Fork carriage Class		-	NA	NA
	Fork Carriage width	b ₃	mm	764	924
	Max. width across forks	b ₅	mm	590	750
	Ground clearance centre of wheelbase	m ₂	mm	25	25
	Right angle Aisle width (1200W x 1200L pallet) (w.o / w platform)	Ast	mm	2575/3060 ¹⁾	2575/3060 ¹⁾
Right angle Aisle width (1000W x 1200L pallet) (w.o / w platform)	Ast	mm	2500/2986 ¹⁾	2500/2986 ¹⁾	
Right angle Aisle width (800W x 1200L pallet) (w.o / w platform)	Ast	mm	2432/2920 ¹⁾	NA	
Turning Radius (without footboard)	Wa	mm	1600	1600	
Turning Radius (with footboard)	Wa'	mm	2095	2095	
Performance	Travel speed	with load	Km/h	5.5	5.5
		without load	Km/h	6.5	6.5
	Lift speed	with load	m/sec	0.11	0.11
		without load	m/sec	0.15	0.15
	Lowering speed	with load	m/sec	0.17	0.17
		without load	m/sec	0.17	0.17
	Max. gradeability	with load	%	7	7
		without load	%	15	15
Service brake		-	Elect-magnetic	Elect-magnetic	
Power Unit	Drive motor, S2 60 min rating		Kw	1.3	1.3
	Lift motor, S3 10% rating	-	Kw	3	3
	Battery	Voltage	V	24	24
		Capacity (@ 5hrs. Rate)	Ah	225 ²⁾	225 ²⁾
	Battery weight	-	Kg	211 ± 5%	211 ± 5%
	Drive control	-	-	AC-MOSFET	AC-MOSFET
	Steering motor	-	Kw	NA	NA
	Steering system	-	-	Tiller handle	Tiller handle
Steering angle	-	Degree	175	175	

1) Aisle width calculated considering safety clearance of 200 mm 2) Higher capacity battery can be offered for extensive application.

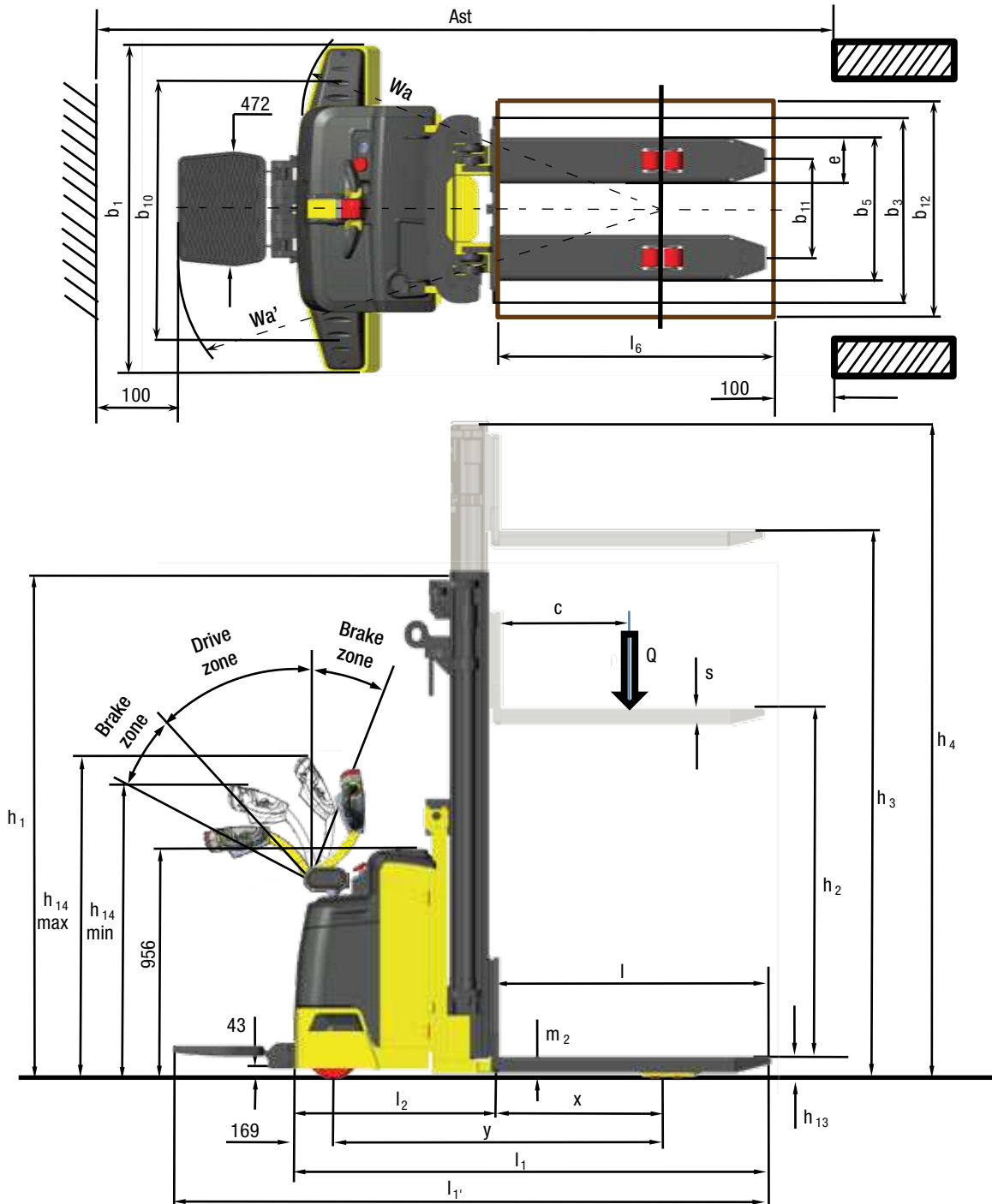
Note: Optional OHG can only be provided with mast 5500, 6000 & 6300MFH only.

NOTE: All dimensions and specifications indicated above are subject to a variation of +/-15%. Godrej products and specifications are subject to improvement or change without notice.

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Model	Mast Type	Maximum Fork Height (MFH) (h1 (mm))	Overall Height Lowered (OAHL) (h3 (mm))	Free Lift (mm)	Overall Height Raised* (OAHR) (h3 (mm))	Capacity at MFH (Kg)
ESW 1530 / ESW 1530 W	2 stage CVM	3000	2105	0	3495	1500
ESW 1533 / ESW 1533 W	2 stage CVM	3300	2255	0	3797	1430
ESW 1536 / ESW 1536 W	2 stage CVM	3660	2435	0	4155	1350
ESW 1546 / ESW 1546 W	2 stage CVM	4600	2905	0	5095	1100
ESW 1536 / ESW 1536 W	3 stage CVT with FL	3600	1739	1230	4100	1350
ESW 1545 / ESW 1545 W	3 stage CVT with FL	4500	2039	1530	5000	1100
ESW 1550 / ESW 1550 W	3 stage CVT with FL	5000	2307	1696	5500	1040
ESW 1555 / ESW 1555 W	3 stage CVT with FL	5500	2467	1864	6000	980
ESW 1560 / ESW 1560 W	3 stage CVT with FL	6000	2637	2030	6500	850
ESW 1563 / ESW 1563 W	3 stage CVT with FL	6300	2737	2130	6800	650

*ADD 500mm if LBR is offered.



General Specification - GFES 15

Characteristics	Manufacturer		-	Godrej	Godrej	
	Model Designation		-	EST 15	EST 15W	
	Power Source		-	Battery	Battery	
	Operation Type		-	Pedestrian	Pedestrian	
	Load Capacity	Q	Kg	1500	1500	
	Load Centre	c	mm	600	600	
	Load Distance	x	mm	707	707	
	Wheelbase	y	mm	1409	1409	
Wheels & Tyres	Wheels	Drive wheel	-	PU (Polyurethane)	PU (Polyurethane)	
		Load wheel	-	PU (Polyurethane)	PU (Polyurethane)	
		Caster wheel	-	PU (Polyurethane)	PU (Polyurethane)	
	Wheel size	Drive wheel	mm	Ø230 x 70	Ø230 x 70	
		Load wheel	mm	Ø85 x 75	Ø85 x 75	
		Caster wheel	mm	Ø135 x 60	Ø135 x 60	
	No. of wheels	Drive wheel	-	1	1	
		Load wheel	-	4	4	
		Caster wheel	-	2	2	
	Track width, Caster wheel	b ₁₀	mm	614	614	
Track width, Load wheel	b ₁₁	mm	1009	1400		
Basic Dimensions	Height of Mast, lowered	h ₁	mm	Refer Table no. 2	Refer Table no. 2	
	Free lift	h ₂	mm	Refer Table no. 2	Refer Table no. 2	
	Lift Height	h ₃	mm	Refer Table no. 2	Refer Table no. 2	
	Height of Mast, extended	h ₄	mm	Refer Table no. 2	Refer Table no. 2	
	Over head guard height	-	-	Optional	Optional	
	Height of tiller (Min.)	h ₁₄ min.	mm	1135	1135	
	Height of tiller (Max.)	h ₁₄ max.	mm	1316	1316	
	Lowered Forks Height	h ₁₃	mm	40	40	
	Overall Length (without footboard)	l ₁	mm	2040	2040	
	Overall Length (with footboard)	l _{1'}	mm	2527	2527	
	Length to Face of forks (2 Stage CV / 3 Stage CV)	l ₂	mm	888/915	888/915	
	Overall width	b ₁	mm	1148	1540	
		Length (l)	mm	1150	1150	
		Width (e)	mm	80	80	
	Fork dimension	Thickness (s)	mm	40	40	
		Fork carriage Class	-	-	Class-2	Class-2
		Fork Carriage width	b ₃	mm	857	857
	Baseleg opening width	b ₄	mm	870	1261	
	Max. width across forks	b ₅	mm	833	833	
	Ground clearance centre of wheelbase	m ₂	mm	25	25	
	Right angle Aisle width (1200W x 1200L pallet) (w.o / w platform)	Ast	mm	NA	2620/3120 ¹⁾	
	Right angle Aisle width (1000W x 1200L pallet) (w.o / w platform)	Ast	mm	NA	2620/3120 ¹⁾	
Right angle Aisle width (800W x 1200L pallet) (w.o / w platform)	Ast	mm	2460/2950 ¹⁾	2620/3120 ¹⁾		
Turning Radius (without footboard)	Wa	mm	1645	1645		
Turning Radius (with footboard)	Wa'	mm	2140	2140		
Performance	Travel speed	with load	Km/h	5.5	5.5	
		without load	Km/h	6.5	6.5	
	Lift speed	with load	m/sec	0.11	0.11	
		without load	m/sec	0.15	0.15	
	Lowering speed	with load	m/sec	0.17	0.17	
		without load	m/sec	0.17	0.17	
	Max. gradeability	with load	%	7	7	
		without load	%	15	15	
Service brake	-	-	Elect-magnetic	Elect-magnetic		
Power Unit	Drive motor, S2 60 min rating	-	Kw	1.3	1.3	
	Lift motor, S3 10% rating	-	Kw	3	3	
	Battery	Voltage	V	24	24	
		Capacity (@ 5hrs. Rate)	Ah	225 ²⁾	225 ²⁾	
	Battery weight	-	Kg	211 ± 5%	211 ± 5%	
	Drive control	-	-	AC-MOSFET	AC-MOSFET	
	Steering motor	-	Kw	NA	NA	
	Steering system	-	-	Tiller handle	Tiller handle	
Steering angle	-	Degree	175	175		

1) Aisle width calculated considering safety clearance of 200 mm 2) Higher capacity battery can be offered for extensive application

Note: Optional OHG can only be provided with mast 5500, 6000 & 6300MFH only.

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