

ELECTRIC POWERED FORKLIFT

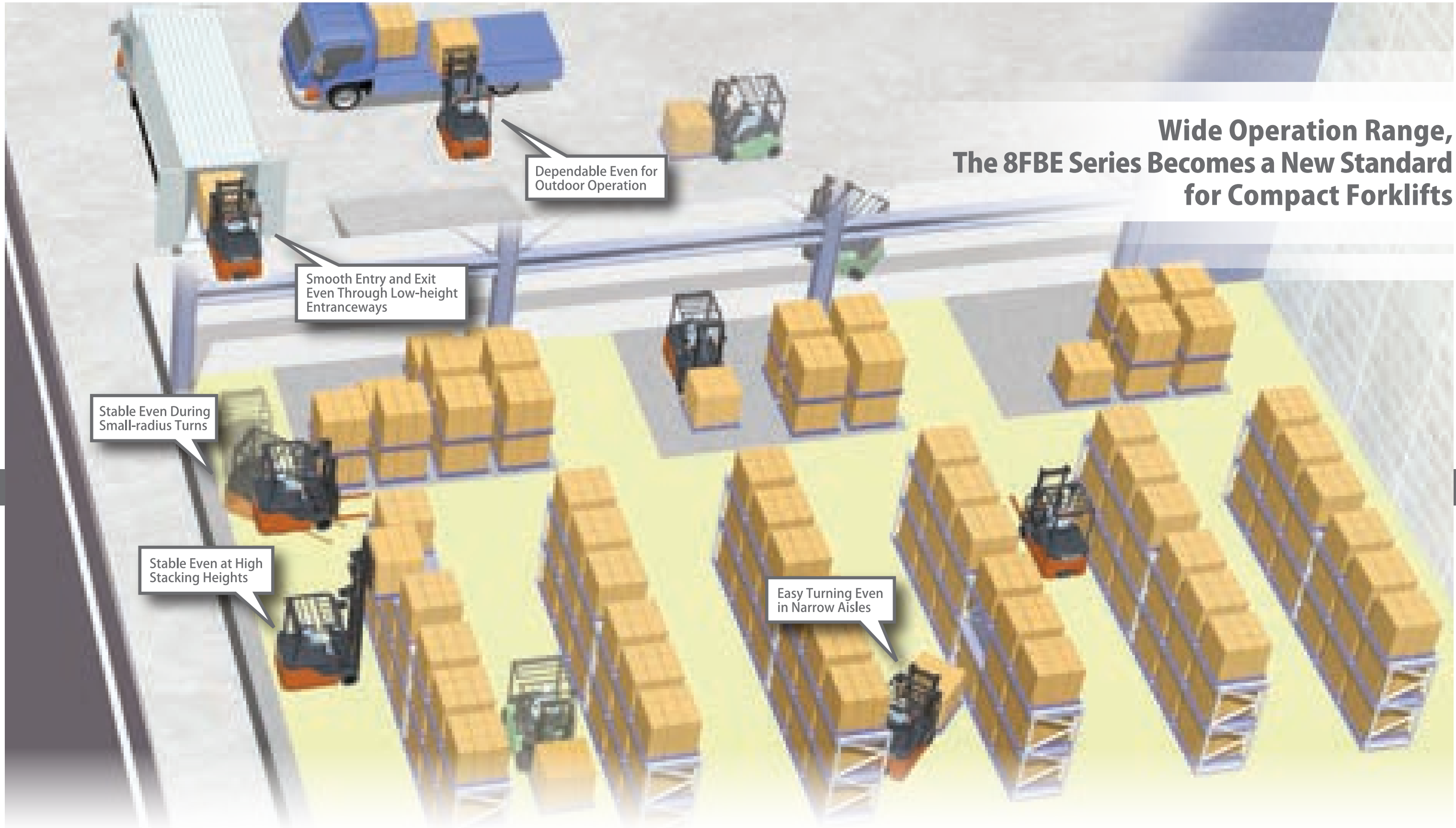
1.0 to 2.0 TON

# 8FBFE

## SERIES



 **TOYOTA**



# Wide Operation Range, The 8FBE Series Becomes a New Standard for Compact Forklifts

Dependable Even for  
Outdoor Operation

Smooth Entry and Exit  
Even Through Low-height  
Entranceways

Stable Even During  
Small-radius Turns

Stable Even at High  
Stacking Heights

Easy Turning Even  
in Narrow Aisles

02

03

# 8FBE SERIES

ELECTRIC POWERED FORKLIFT 1.0 to 2.0 TON

## Features of the 8FBE Series

LONGER  
OPERATING  
TIME

SAFETY

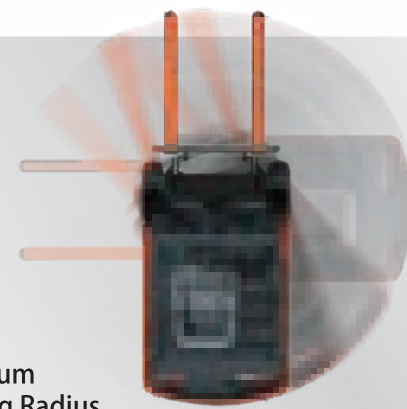
OPERABILITY

RELIABILITY



Pivot turning by the dual AC motors makes for easier operations in narrow aisles.

Features and equipment may vary depending on market.



### Minimum Turning Radius

The dual AC motor front wheel drive allows compact turns. Depending on steering angle, the system controls the motor output and motor rotating direction, enabling smooth pivot turning.

Model	Minimum Turning Radius
8FBE10	1,385mm
8FBE13	1,400mm
8FBE15	1,515mm (1,770mm)
8FBE18	1,550mm (1,780mm)
8FBE20	1,675mm (1,980mm)

\*( ) is 8FBN Series

## Compact Body and Turning Performance, Suitable Even in Narrow Worksites

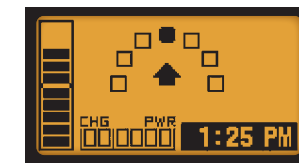
The compact body and turning performance all add up to superior operability in narrow worksites. This, together with great stability, makes for powerful support for material handling in a diverse range of applications.

### For Accurate Traveling Operations



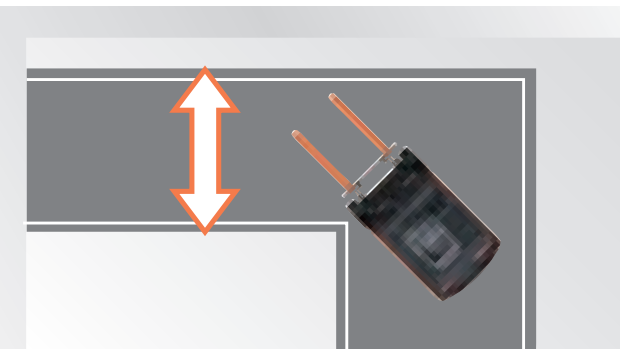
#### Direction Indicator / Wheel Indicator

These indicators on the Multifunction Display show the direction of travel before truck starts moving, therefore reducing the risk of damage to the goods and/or collision caused by operation mistake.



Outstanding tight-turn performance for effective warehouse operations.

Features and equipment may vary depending on market.



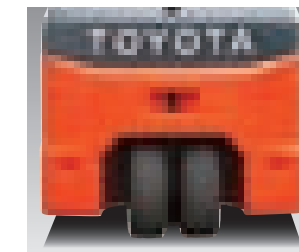
### Right-angle Aisle Width / Right-angle Stacking Aisle Width

The small turning radius achieved through the compact body and 3-wheel configuration makes possible an effective use of working space.

Model	Right-angle Aisle Width	Right-angle Stacking Aisle Width
8FBE10	1,580mm	1,730mm
8FBE13	1,600mm	1,750mm
8FBE15	1,680mm (1,800mm)	1,865mm (2,175mm)
8FBE18	1,695mm (1,815mm)	1,900mm (2,185mm)
8FBE20	1,790mm (1,895mm)	2,040mm (2,410mm)

\*( ) is 8FBN Series

### Stable Travel, Turning and Load Handling



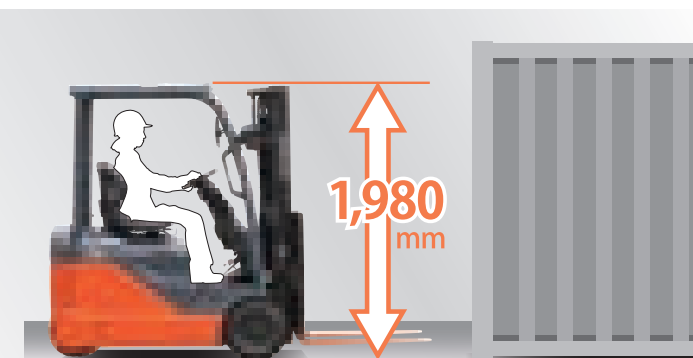
#### Double Rear Tires

Double rear tires achieve stability during travel and turning as well as greater rated load capacity at high mast heights.



Smooth entry and exit for containers or low-height entranceways.

Features and equipment may vary depending on market.



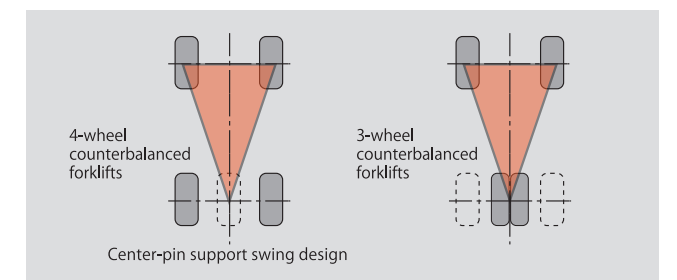
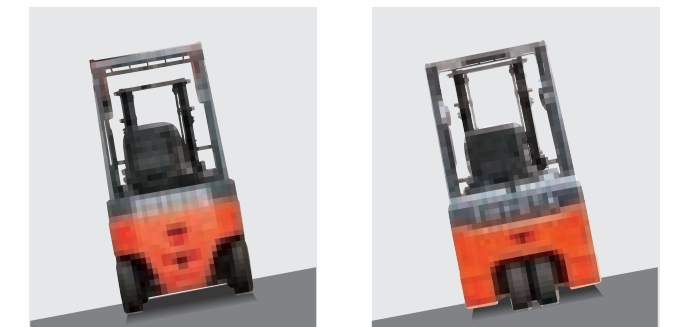
### Low-height Headguard

The overall height on all models is a low 1,980 mm, making it possible to enter and exit containers or low-height entranceways with ease and comfort.

Model	Overhead Guard Height
8FBE10	1,980mm
8FBE13	1,980mm
8FBE15	1,980mm (2,085mm)
8FBE18	1,980mm (2,095mm)
8FBE20	1,980mm (2,085mm)

\*( ) is 8FBN Series

### The Same Lateral Stability As 4-wheel Forklifts



Center-pin support swing design

**LONGER  
OPERATING  
TIME**

# Longer Operating Time

## Contributing to Better Work Efficiency

**8FBE  
SERIES**

New motors and drivers have been adopted in aims of improving operating time. This achieves operating time of 20% longer, contributing to a further enhancement of work efficiency.

### Best-in-class Energy Efficiency

#### High-efficiency New Motors and Motor-drivers

Newly developed motors and motor-drivers minimize energy loss, and minimized heat generation greatly reduces energy consumption. This increases the operating time by 20%.

#### Low Energy Consumption

Model	Energy Consumption
8FBE10	3.4 kWh/h
8FBE13	3.5 kWh/h
8FBE15	3.8 kWh/h
8FBE18	4.1 kWh/h
8FBE20	4.3 kWh/h

Energy Consumption (VDI 60 sec Cycle)

Operating Time  
**20%  
UP**

**7 h. 16 min.**  
7FBE Series

**8 h. 47 min.**  
8FBE Series

Comparison of operating times for 1.5-ton model with the same battery capacity measured by Toyota operating cycle test. Assumed that the forklift is actually operated in 55% of total working hours (100% discharge).



Features and equipment may vary depending on market.

### Easy Battery Exchanging



#### NEW Battery Side-out (OPT)

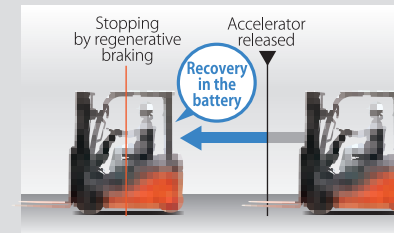
The battery with fork pockets can be taken out from the right side of the truck by using a forklift. In addition to 390Ah battery, the option is now available for 565Ah battery and Single Overall Electrolyte Filler Ports option. (Available for 8FBE15, 18, 20)



#### Battery Roll-out (OPT)

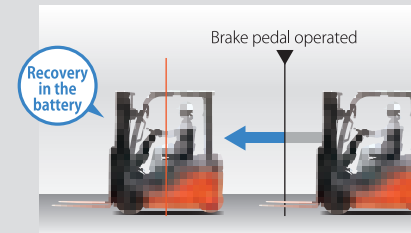
Exchange of the battery can be accomplished by extracting the battery by sliding it out.

### Regenerative Systems for Efficient Energy Recovery



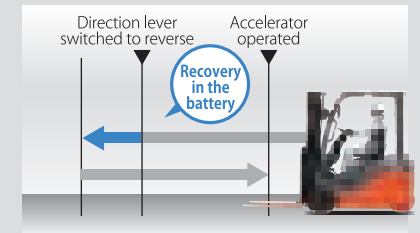
#### Accelerator-release Regeneration

When the accelerator is released, this collects energy in the battery. It also helps achieve smoother deceleration.



#### Brake Regeneration

When the brake is activated, the energy is recovered in the battery. This also helps to extend brake life.



#### Switchback Regeneration

During switchback, the energy is recovered in the battery. This also contributes to smooth and quick switchback operation.

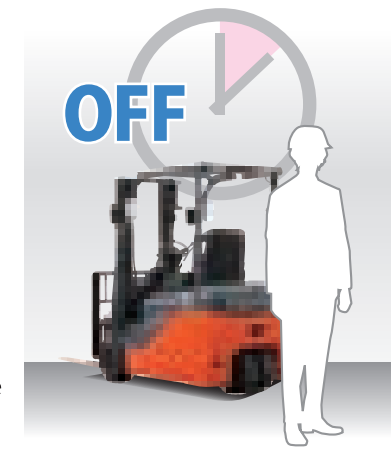
### Keeping High Performance Power-keep Function

This feature keeps load-handling and travel performance as the battery charge gets low, allowing continuing efficient operation.

Note: Not available in the H mode

### Preventing Useless Power Consumption Auto Power-off Function

This feature supports energy savings by automatically switching off the power after the operator leaves the forklift for a specific period of time.



### Selecting the Optimal Power Level

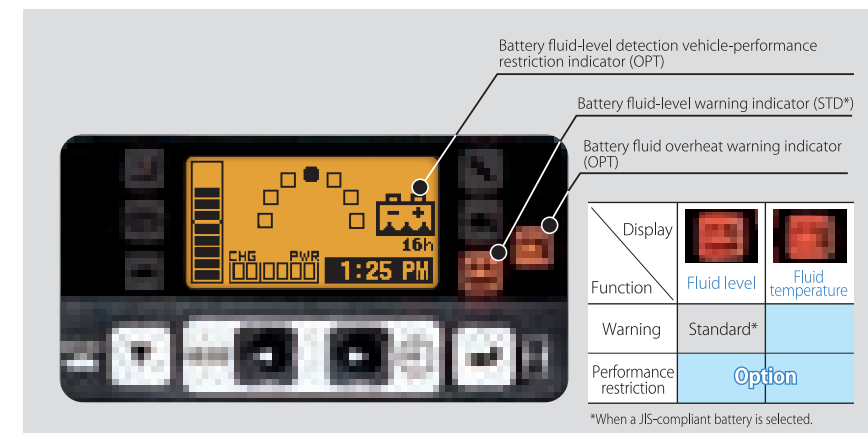


#### Power-select Function

Both travel and load-handling performance can be customized.\* This provides an optimal balance of performance and operating time.

\* The picture shows the selection screen for the multifunction display (option). With the standard display, you can select from among three power modes (S, P and H).

### Feature for Long Battery Life



#### NEW Battery Protecting Function (OPT)

When the battery fluid level is low or the fluid temperature is high, this informs the operator by an indicator and an audible warning, and also restricts travel performance. This helps prevent degradation of the battery and ensure a long life for the battery.

### Long Lasting LED Lights



#### LED Rear Combination Lights

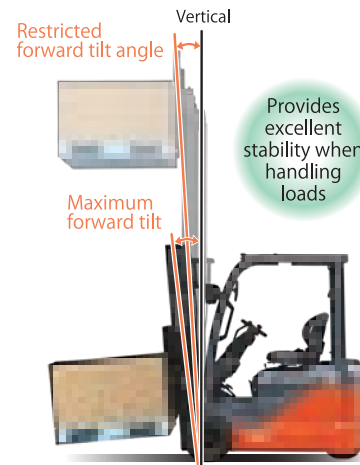
LED Rear Combination Lights are equipped as standard, providing longer life time and reducing the hassle of frequent changing of light bulbs.



# Support for Safe Operations

With SAS-ε and outstanding visibility, the New 8FBE Series supports safe operations. It also contributes to enhanced efficiency.

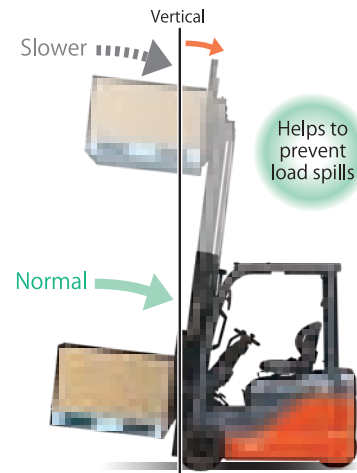
## SAS (System of Active Stability) - ε OPT



### Helping to Prevent Load Spills

#### Active Mast Front-tilt Angle Control

The angle of forward mast tilt is automatically controlled in accordance with the lift height and load weight, helping to prevent dropped loads or tip-over.



#### Active Mast Tilt Speed Control

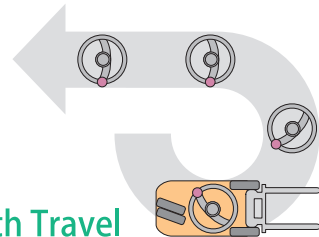
Automatic control of mast tilt speed at high mast heights helps to prevent load spills.



### Smooth Operation

#### Automatic Fork-leveling Control

Pressing a switch during forward tilt automatically stops the forks at a level position. This makes load-handling operations easier, helping to achieve high productivity.

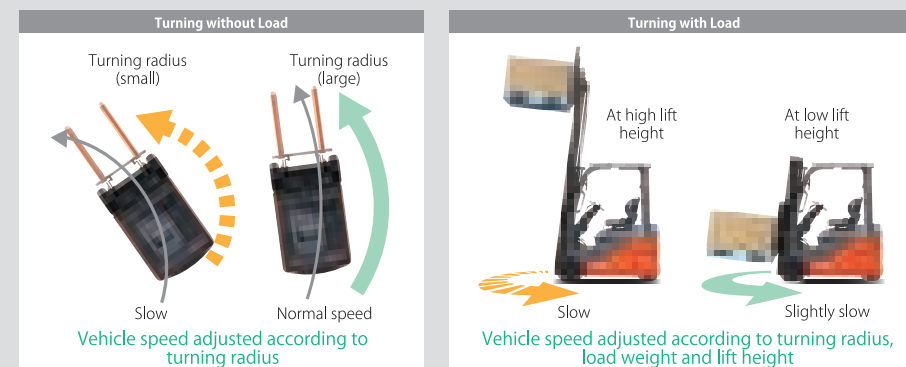


### Smooth Travel

#### Active Steering Synchronizer

This feature ensures that the angle of the steering wheel corresponds to the angle of the rear steered wheels.

### Stable Travel



#### **NEW** Automatic Vehicle-speed Control

This controls vehicle speed as well as acceleration and deceleration according to lift height and load weight, helping to ensure stable travel and prevent load spills.

#### **NEW** Automatic Turn-speed Control

This controls turn speed according to the lift height, load weight, and turning radius, providing stable turning matched to the state of operation.



Features and equipment may vary depending on market.

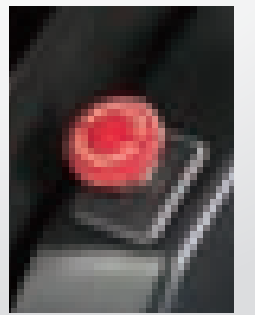
### Help Interrupt Unanticipated Load-handling and Traveling



#### Operator Presence Sensing System (OPS)

If the operator is not in the normal operating position, travel power is interrupted and load-handling operations are stopped.

Note: OPS does not operate the brakes. Always set the parking brake before leaving the forklift.



#### **NEW** Emergency Power Shut-down Button

In the event of an emergency, pressing this button switches off all power sources. A simple twist release allows the truck to restart.

### Outstanding Visibility



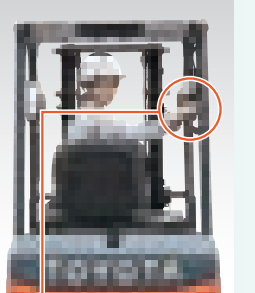
**Upward Visibility**  
A lattice-designed overhead guard provides good upward visibility.



**Forward Visibility**  
Optimal mast width and hose layout ensure a clear view through the mast.



**Visibility of Fork-tip**  
Equipped with a small-diameter steering wheel, optimally positioned display, and an angled lower stay of load backrest for excellent visibility of the fork tips.



#### **NEW** Rear-pillar Assist Grip OPT

This assist grip with horn button enhances reverse travel comfort and offers easy horn operation while travelling in reverse.

Features and equipment may vary depending on market.

# In Comfort – Ergonomically More Pleasing and Enjoyable

The operator friendly features of the 8FBE series provide you with comfortable and smooth operation.

- NEW Pencil and Tape Holder OPT**
- NEW Resin Roof (Gray-colored) OPT**
- NEW Rear-pillar Assist Grip OPT**
- ORs\* Seat \*Operator Restraint System**
- Large Assist Grip**
- Tilt steering adjusting lever**
- Low and Wide Step**
- NEW Foot-activated Parking Brake**
  - Activation
  - Release

Features and equipment may vary depending on market.

## Smooth Load Handling and Traveling Operation

- NEW Mini Lever OPT**  
The Mini Lever allows smooth operation. The design featuring an armrest also helps to reduce the operator's fatigue.
- NEW Joystick OPT**  
This makes it possible to perform lift and tilt simultaneously.
- NEW EZ Pedal OPT**  
This accelerator pedal can be used to change the direction of travel by pressing the left side for forward travel and the right side for reversing.

## High-visibility Display

**Standard Display**  
The indicators and warning lights keeps the operator informed of the forklift's status at a glance.

- OPS indicator
- Power-select function indicator
- Battery capacity indicator
- Hour-meter operation indicator
- Parking brake warning indicator
- Overheat warning indicator
- Diagnostic indicator
- Hour meter
- Battery fluid-level warning indicator
- Select switch

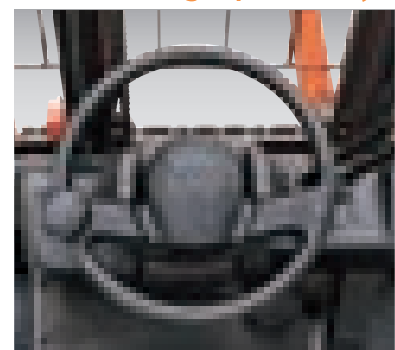
## Multifunction Display OPT

The Multifunction Display offers useful information for operators and managers.

- Digital speedmeter
- Power select function indicator
- Scheduled-maintenance hour indicator
- Clock/Calendar

\*This picture only shows all indicators. It is not an actual screen displayed during operation.

## Outstanding Operability and Comfort

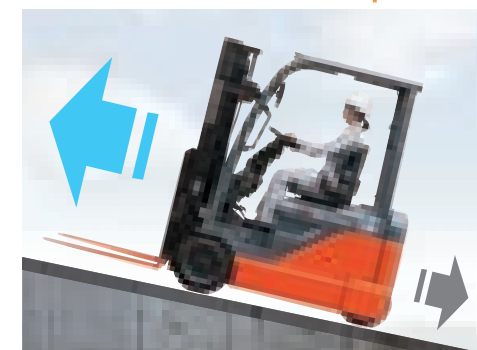


**Small-diameter Steering Wheel**  
The small-diameter steering wheel with the full hydraulic power steering system provides excellent maneuverability.



**ORS Seat** \*ORS: Operator Restraint System  
The ORS seat can be adjusted 150 mm forward and backward and supports a comfortable operating posture by means of side wings and a seat belt.

## Smooth Start Off on Slopes

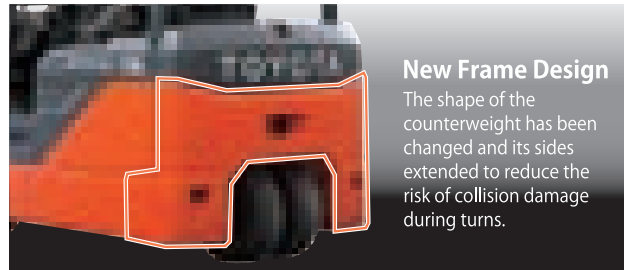


**Anti-rollback**  
When the accelerator or brake pedal is released while stopped on a grade, the forklift stops and then descends at a constant speed. This helps to ensure smooth operations on slopes.

## Main Display Screens

- Power Meter**
- Travel Hour Meter / Load Handling Hour Meter**
- Direction Indicator / Wheel Indicator**
- Maximum Speed Limiter Setting**
- Over Speed Alarm**
- Load Weight Indicator OPT (Multifunction Display Dx.)**

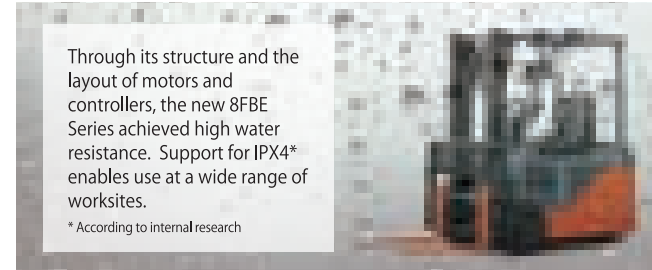
### Robust Body Design



#### New Frame Design

The shape of the counterweight has been changed and its sides extended to reduce the risk of collision damage during turns.

### High Water Resistance (IPX4)



Through its structure and the layout of motors and controllers, the new 8FBE Series achieved high water resistance. Support for IPX4\* enables use at a wide range of worksites.

\* According to internal research

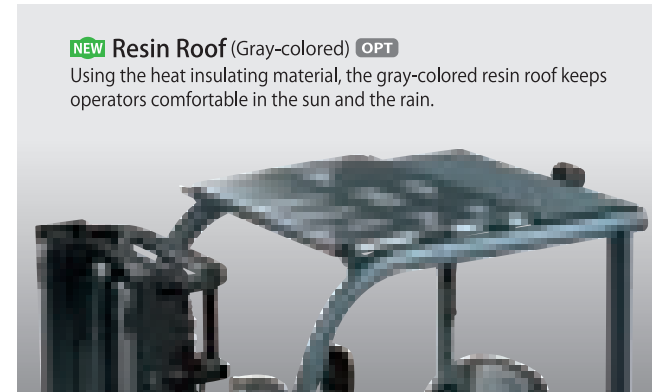
### Energy Savings, Long Life LED Lights

These economical LED lights offer long life and low energy consumption. Also able to withstand jolts and vibration to a high degree, they are resistant to broken elements even when traveling on bumpy surfaces.



**NEW** LED Headlights **OPT** **NEW** LED Rear Combination Lights **NEW** LED Rear Working Light **OPT** **NEW** LED Yellow Beacon **OPT**

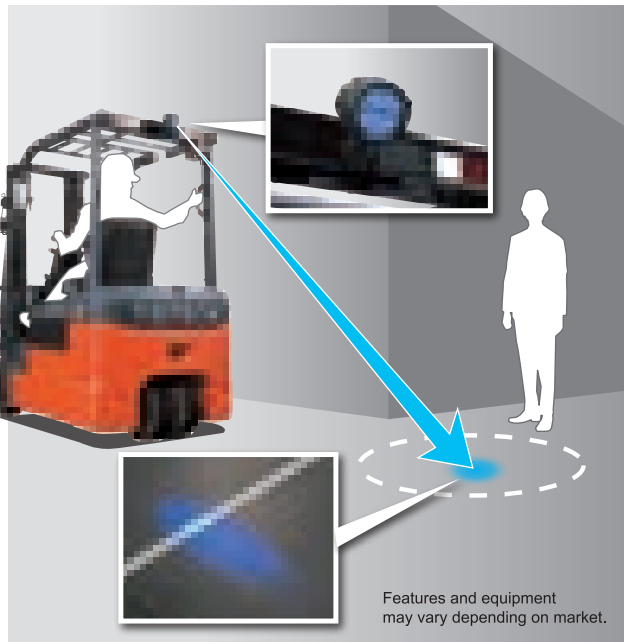
### For Comfortable Operation in the Sun



#### **NEW** Resin Roof (Gray-colored) **OPT**

Using the heat insulating material, the gray-colored resin roof keeps operators comfortable in the sun and the rain.

### For Safe Worksites



Features and equipment may vary depending on market.

#### **NEW** Blue Light **OPT**

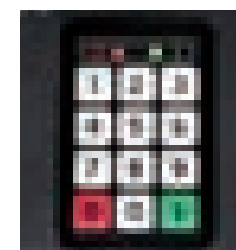
A blue beam of light appears on the ground to inform pedestrians of the forklift's presence, and helps prevent accidents.

### Encouraging Careful Operation



#### **NEW** Shock Sensor **OPT**

This detects collision impact on the forklift and warns by visual indicator and sound. (Warnings can be cleared only by a manager.) This helps to prevent overly harsh operation and helps reduce maintenance costs.



#### Help for Management

##### **NEW** PIN\*-code Entry System **OPT**

A code must be entered to start the forklift, preventing use by unauthorized persons. The vehicle settings can be registered, allowing preferred settings for different operators. This also provides keyless operation.

\*Personal Identification Number

## MAIN EQUIPMENT AND OPTIONS

○:Standard ●:Option

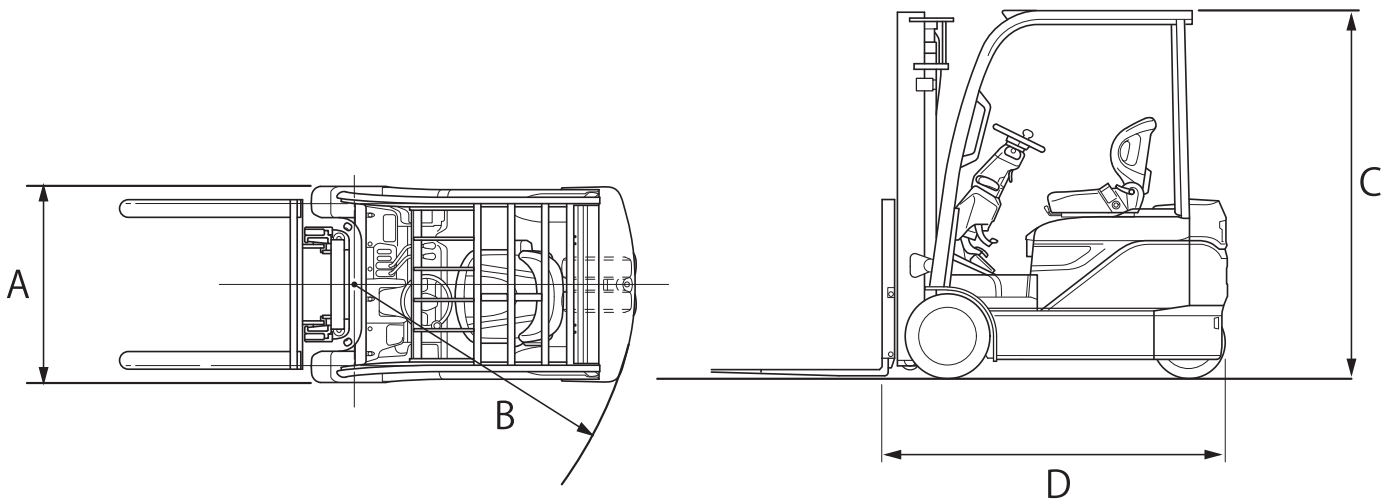
	ITEM	8FBE10	8FBE13	8FBE15	8FBE18	8FBE20	
Safety & Stability	SAS (System of Active Stability) -E	●	●	●	●	●	
	Active Steering Synchronizer	●	●	●	●	●	
	Emergency Power Shut-Down Button	○	○	○	○	○	
	Rear-View Mirrors, Right and Left Sides	●	●	●	●	●	
	Orange Seatbelt	●	●	●	●	●	
	Seatbelt Interlock System	●	●	●	●	●	
	LED Headlights	●	●	●	●	●	
	Front Combination Lights	●	●	●	●	●	
	LED Rear Combination Lights	○	○	○	○	○	
	LED Rear Working Light	●	●	●	●	●	
	Yellow Beacon	●	●	●	●	●	
	LED Yellow Beacon	●	●	●	●	●	
	Blue Light	●	●	●	●	●	
	Forward & Back-Up Chime	●	●	●	●	●	
	Back-Up Chime	●	●	●	●	●	
	Back-Up Buzzer	●	●	●	●	●	
	Adjustable-Volume Back-Up Buzzer	●	●	●	●	●	
	Forward Chime	●	●	●	●	●	
	Clamp Release Interlock 3rd Lever	●	●	●	●	●	
	Clamp Release Interlock 4th Lever	●	●	●	●	●	
Battery	Battery(Wet Cell)	●	●	●	●	●	
	Battery Charger (On-Truck Type)	●	●	●	●	●	
	Battery Charger (Off-Truck Type)	●	●	●	●	●	
	Single Overall Electrolyte Filler Ports	●	●	●	●	●	
	Battery Protecting Function	●	●	●	●	●	
	Battery Side-Out	-	-	●	●	●	
	Battery Roll-Out	-	-	●	●	●	
	Battery Carrier	-	-	●	●	●	
	12V Power Supply	●	●	●	●	●	
	Steering Wheel With Knob	○	○	○	○	○	
Operability & Comfort	Suspension Seat w/Damper	●	●	●	●	●	
	Overhead Guard Sheet	●	●	●	●	●	
	Resin Roof	●	●	●	●	●	
	Resin Roof (Gray-colored)	●	●	●	●	●	
	Front Windshield w/Wiper & Washer	●	●	●	●	●	
	Rear-Pillar Assist Grip	●	●	●	●	●	
	EZ Pedal	●	●	●	●	●	
	Mini-Lever	●	●	●	●	●	
	Joystick	●	●	●	●	●	
	Armrest Horn	●	●	●	●	●	
Service & Management	Cup Holder	●	●	●	●	●	
	Pencil and Tape Holder	●	●	●	●	●	
	Multifunction Display	●	●	●	●	●	
	Deluxe Multifunction Display	●	●	●	●	●	
	Key-Less Ignition Switch	●	●	●	●	●	
	PIN Code Entry System	●	●	●	●	●	
	Shock Sensor	●	●	●	●	●	
	Tilt Cylinder Boots	●	●	●	●	●	
	Tires	Rib-Lug Tire, Front	○	○	○	○	-
		J-Lug Tire, Front	●	●	●	●	-
J-Lug Non-Punk Tire, Front		●	●	●	●	●	
U-Lug Non-Punk Tire, Front		●	●	●	●	○	
Rib-Lug Tire, Rear		○	○	○	○	○	
J-Lug Tire, Rear		●	●	●	●	●	
Load Handling	J-Lug Non-Punk Tire, Rear	●	●	●	●	●	
	U-Lug Non-Punk Tire, Rear	●	●	●	●	●	
	Wide Visible Mast (V)	○	○	○	○	○	
	Full-Free Lift Three-Stage Mast (FSV)	●	●	●	●	●	
	Full-Free Lift Two-Stage Mast (FV)	●	●	●	●	-	
	Fully Oil Charged Lift Cylinder	●	●	●	●	●	
Special Edition	High Load Backrest (Flat Steel Type)	●	●	●	●	-	
	High Load Backrest (Angle Shape Type)	●	●	●	●	●	
	Mast Tilt Indicator	●	●	●	●	●	
	Sleeved Forks	●	●	●	●	●	
	Cold-Storage Model (Type 455)	●	●	●	●	●	
	Rust-Proof Model	●	●	●	●	●	
Rust-Proof Model (Fisherman Special)	●	●	●	●	●		
Body Color (602 Green)	●	●	●	●	●		

## MAIN SPECIFICATIONS

Model		8FBE10	8FBE13	8FBE15	8FBE18	8FBE20
Load Capacity	kg	1000	1250	1500	1750	2000
Load Center	mm	500	500	500	500	500
Overall Width	A mm	1075	1075	1075	1075	1075
Turning Radius (outside)	B mm	1385	1400	1515	1550	1675
Overhead Guard Height	C mm	1980	1980	1980	1980	1980
Length to Fork Face	D mm	1750	1755	1875	1905	2045

## BATTERY AND MOTOR SPECIFICATIONS

Model			8FBE10	8FBE13	8FBE15	8FBE18	8FBE20
Voltage/Capacity (5-hour ratings)	Min.	V/Ah	48/280	48/280	48/390	48/390	48/390
	Max.	V/Ah	48/370	48/370	48/565	48/565	48/645
Electric Motors	Drive	kW	4.9×2	4.9×2	4.9×2	4.9×2	4.9×2
	Load Handling	kW	9.2	9.2	9.2	9.2	9.2
Energy Consumption (VDI Cycle)		kWh/h	3.4	3.5	3.8	4.1	4.3



The data in this brochure was determined based on our standard testing condition. Operating performance may vary depending on the actual specifications and condition of the vehicle, as well as the conditions of the operating area.  
 Due to photography and printing, color of actual vehicle may vary from this brochure. Some photos have been computer-enhanced.  
 Availability and specifications are determined by market and are subject to change without notice.  
 Safe forklift operation is achieved by proper operator training and proper worksite rules. Please consult your Toyota representative regarding forklift selection and operator training.  
 Please consult your Toyota representative for details.

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