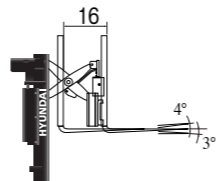
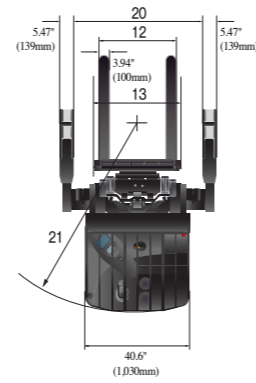
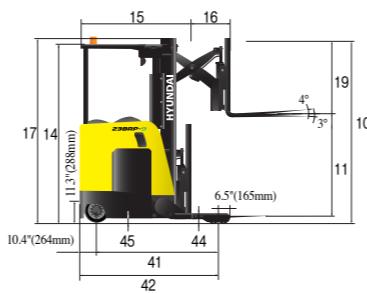
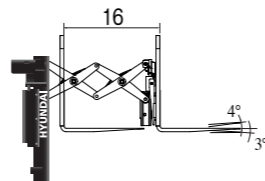


Technical Data for 15/18/20/23BRP-9

| General Information | | | | | | | |
|---------------------|---------------------------|--------------------------------------|----------------------------|-----------------------|-------------------|-----------------------|-------------------|
| 1 | Manufacturer | | HYUNDAI | HYUNDAI | HYUNDAI | HYUNDAI | |
| 2 | Model | Manufacturer's Designation | 15BRP-9 | 18BRP-9 | 20BRP-9 | 23BRP-9 | |
| 3 | Load Capacity * (1) | Max. | 1,361(3,000) | 1,588(3,500) | 1,814(4,000) | 2,041(4,500) | |
| 4 | Load Center | Fork Face to Load CG | in(mm) | 24(610) | 24(610) | 24(610) | 24(610) |
| 5 | Power Unit | Type | Volt | 36 | 36 | 36 | 36 |
| 9 | Operator Type | Stand, Double/Single Reach | Stand, D/ Reach | | | | |
| 7 | Tire Type | Load/Drive / Caster | Poly. / Poly. / Poly. | | | | |
| 8 | Wheels (x=driven) | Number, Load/Drive / Caster | 4 / 1x / 2 | 4 / 1x / 2 | 4 / 1x / 2 | 4 / 1x / 2 | |
| Basic Dimensions | | | | | | | |
| 10 | Lift Height | See Chart | in(mm) | 210(5,335) | 210(5,335) | 210(5,335) | 210(5,335) |
| 11 | Free Lift Height | See Chart | in(mm) | 47(1,196) | 47(1,196) | 47(1,196) | 47(1,196) |
| 12 | Overall Fork Width | Min. - Max. | in(mm) | 13-30(330-760) | 13-30(330-760) | 13-30(330-760) | 13-30(330-760) |
| | Fork Dimensions | TxWxL | in(mm) | 1.57x4(40x100x1050) | | 1.75x4(45x100x1050) | |
| 13 | Carriage Width | in standard | in(mm) | 33.7(856) | 33.7(856) | 33.7(856) | 33.7(856) |
| 14 | Overhead Guard Height | Length | in(mm) | 94.5(2,400) | 1,050 | 1,050 | 1,050 |
| 15 | Length to Fork Face * (3) | Battery Compartment * Type A* | in(mm) | 59.2(1,504) | 51.9(1,318) *(4) | N/A | N/A |
| | | Battery Compartment * Type B* | in(mm) | 61.2(1,555) | 53.9(1,369) | 53.9(1,369) *(4) | 53.9(1,369) |
| | | Battery Compartment * Type C* | in(mm) | 63.0(1,599) *(4) | N/A | 55.6(1,413) | 55.6(1,413) *(4) |
| | | Battery Compartment * Type D* | in(mm) | 65.7(1,669) | N/A | N/A | 58.4(1,483) |
| 16 | Reach (Pantograph) | Stroke | in(mm) | 42.8(1,087) | 23.3(592) | 23.3(592) | 23.3(592) |
| 17 | Overall Height * (2) | Lowered, See Chart | in(mm) | 95.1(2,415) | 95.1(2,415) | 95.1(2,415) | 95.1(2,415) |
| | | Lifted, See Chart | in(mm) | 258(6,554) | 258(6,554) | 258(6,554) | 258(6,554) |
| 19 | Load Backrest Height | | in(mm) | 48(1,219) | 48(1,219) | 48(1,219) | 48(1,219) |
| 20 | Outrigger ID | in 2" increments(34"-50") | in(mm) | 42(1,067) | 42(1,067) | 42(1,067) | 42(1,067) |
| 21 | Turning Radius | Battery Compartment * Type A* | in(mm) | 70.8(1,799) | 66.5 *(4) | N/A | N/A |
| | | Battery Compartment * Type B* | in(mm) | 72.8(1,849) | 68.5(1,740) | 68.5(1,740) *(4) | 71.3(1,810) |
| | | Battery Compartment * Type C* | in(mm) | 74.5(1,892) *(4) | N/A | 70.2(1,783) | 73.0(1,853) *(4) |
| | | Battery Compartment * Type D* | in(mm) | 77.2(1,961) | N/A | N/A | 75.7(1,922) |
| 22 | Battery Compartment * (4) | Length | in(mm) | 18.0(457) | 14.3(362) | 16.3(413) | 18.0(457) |
| Performance | | | | | | | |
| 24 | Travel Speed | loaded/unloaded | mph(kph) | 7.3(11.8) / 7.3(11.8) | | 7.3(11.8) / 7.3(11.8) | |
| 26 | Lift Speed | loaded/unloaded | fpm(m/s) | 63(0.32)/89(0.45) | 61(0.31)/89(0.45) | 57(0.29)/57(0.46) | 53(0.27)/57(0.46) |
| 28 | Lowering Speed | loaded/unloaded | fpm(m/s) | 98(0.50) / 89(0.45) | | 98(0.50) / 89(0.45) | |
| Weights | | | | | | | |
| 34 | Service weight | Including battery, standard | lb(kg) | 8,781(3,983) | 7,408(3,360) | 7,727(3,505) | 8,600(3,901) |
| 35 | Axle loading | loaded front | lb(kg) | 7,143(3,240) | 7,031(3,189) | 7,762(3,521) | 8,576(3,890) |
| | | loaded rear | lb(kg) | 4,639(2,104) | 3,878(1,759) | 3,964(1,798) | 4,524(2,052) |
| | | unloaded front | lb(kg) | 3,512(1,593) | 2,879(1,306) | 3,045(1,381) | 3,406(1,545) |
| | | unloaded rear | lb(kg) | 5,269(2,390) | 4,528(2,054) | 4,683(2,124) | 5,194(2,356) |
| Chassis | | | | | | | |
| 40 | Wheel Size | Front, Load Wheels | in(mm) | ø5x4(ø127x101) | | ø5x4(ø127x101) | |
| | | Rear, Drive Wheel(Steer) | in(mm) | ø13.5x5.5(ø345x140) | | ø13.5x5.5(ø345x140) | |
| | | Rear, Caster Wheel | in(mm) | ø7x2.87(ø178x73) | | ø7x2.87(ø178x73) | |
| 41 | Wheelbase | Battery Compartment * Type A* | in(mm) | 59.4(1,510) | 55.1(1,399) *(4) | N/A | N/A |
| | | Battery Compartment * Type B* | in(mm) | 61.5(1,561) | 57.1(1,450) | 57.1(1,450) *(4) | 59.9(1,521) |
| | | Battery Compartment * Type C* | in(mm) | 63.2(1,605) *(4) | N/A | 58.8(1,494) | 61.6(1,565) *(4) |
| | | Battery Compartment * Type D* | in(mm) | 65.9(1,675) | N/A | N/A | 64.4(1,635) |
| 42 | Overall Length | in standard battery compartment | in(mm) | 80.1(2,034) | 72.0(1,828) | 74.0(1,879) | 78.5(1,994) |
| 44 | Ground Clearance | With 5" diameter load wheels | in(mm) | 2.0(51) | 2.0(51) | 2.0(51) | 2.0(51) |
| 45 | Battery Roller Height | With 5" diameter load wheels | in(mm) | 6.5(165) | 6.5(165) | 6.5(165) | 6.5(165) |
| 46 | Service Brake | Type | Electric Disc Brake | | | | |
| 47 | Parking Brake | Type | Automatic Electric release | | | | |
| | Steering | Type | Electric Steering | | | | |
| Electric | | | | | | | |
| 48 | Battery | Type | Lead Acid | | | | |
| | | Max. Amp -standard | Ah | 1,085 | 775 | 930 | 1,085 |
| | | Min. Weight -standard | lb(kg) | 2,280(1,034) | 1,598(725) | 1,878(852) | 2,280(1,034) |
| 49 | Motors, Controls | Drive Motor, 60 Min Rating | kw | 6.8 | 6.8 | 6.8 | 6.8 |
| | | Hydraulic Motor, 15% Rating | kw | 16.0 | 16.0 | 16.0 | 16.0 |
| | | Drive & Hydraulic Motor control Type | | AC | AC | AC | AC |



•18/20/23BRP-9



•15BRP-9

15/18/20/23BRP-9

Electric Reach Trucks

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES



*(1) Contact factory. Capacity may be subject to derating at height.
*(3) Add 65mm with option side shift

*(2) Spec data is based on the standard mast (TF530, maximum fork height 5,335mm)
*(4) Standard battery compartment (type A: 18BRP-9, type B: 20BRP-9, type C: 15/23BRP-9)



PLEASE CONTACT

www.hyundai-ce.com

2017. 03 Rev. 2



Your satisfaction is our priority!

Hyundai introduces a new line of **9-series** battery forklift trucks.
The newly designed reach trucks provide every operator
comfortable driving, increased productivity and easy maintenance.

Compact forklift with proven AC technology

- Maximum performance
- Comfortable operating room
- Curve control system
- Load indicator (optional)
- Camera(optional)
- Height indicator (optional)



■ Some of the photos may include optional equipment.

Superior Power & Optimal Performance

Smooth running, efficient and ergonomically designed, **15/18/20/23BRP-9** series are built to meet your needs.

■ Some of the photos may include optional equipment.



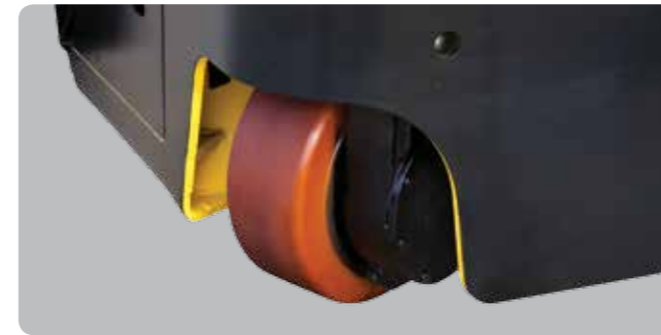
Minimum Turning Radius

Compact design suitable for narrow aisle operation guarantees work efficiency and maximum space utilization.



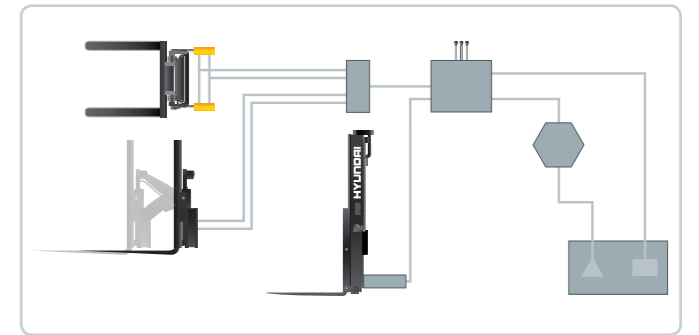
Versatile Reach Stroke

Multi-roller reach assembly provides a smooth, controlled and safe load handling system, and shows unsurpassed versatility during extended reach.



Automatic Center Position at Starting

When the key is turned to the on position, the steering sensor detects the position of the drive wheel and automatically returns the wheel to the center position.



State-of-the-art Hydraulic System

The latest large-capacity hydraulic system reacts quickly during operation and the low noise control valve increases both efficiency and durability.



Energy Efficiency

H(High) mode : 100%
N(Normal) mode : 110%
E(Economic) mode : 120%

High Technology ZAPI Controller

The efficient, almost noiseless, 8kHz(high frequency) controller provides smooth quiet operation and protection for low & high voltage, overheating and fault recording.



Drive Motor & Pump Motor

AC motors are designed for optimum reliability and efficiency while providing low noise levels. The AC motors are equipped with temperature sensors to ensure long motor life.



Excellent Gradeability Operation & Anti Roll Back

A powerful drive motor and four wheel configuration provide for exceptional stability and excellent gradeability. When restarting after stop on a slope, an anti-roll back function ensure operational safety.

| | Travel Speed (MAX) | Gradeability (MAX) | |
|---------|--------------------|--------------------|--------|
| | | unloaded | loaded |
| 15BRP-9 | 11.8 Km/h | 22% | 13% |
| 18BRP-9 | 11.8 Km/h | 15% | 13% |
| 20BRP-9 | 11.8 Km/h | 15% | 12% |
| 23BRP-9 | 11.8 Km/h | 20% | 11% |

Optimised Ergonomics & Advanced Safety

A design based on human engineering relieves fatigue and increases operator's efficiency.

15/18/20/23BRP-9



■Some of the photos may include optional equipment.



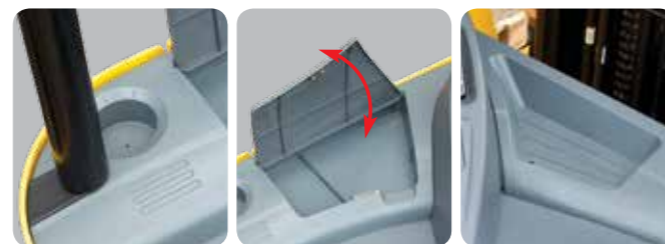
Steering Control

A steering control coupled with our Electric Power Steering system gives the operator exceptionally smooth and controlled steering for tight spaces.



Joystick Lever

Minimal operator effort is required for precise, safe and productive control. The lever's contoured design and cushion armrest provide added comfort during operation.



Cup Holder, Console Box & Storage Space

Additional storage compartments are located inside the operating space for operator's convenience.



New High Visibility for Safe Operation

The operator is able to work with increased safety and accuracy due to a wider mast view.



Strong Overhead Guard

The safety overhead guard meets ISO 6055 and ANSI regulations and protects the operator during hazardous work.



Adjustable Backrest

A large and soft cushion pad is applied for operator's safety and comfort.



Non Slip Floor Mat

A heavy, vibration dampening, floor mat reduces operator fatigue and provides increased productivity.



Protection Fence

Protection fence installed between mast and operator room for safety. *Tempered Glass Fence(Optional)



Camera & LCD monitor (optional)

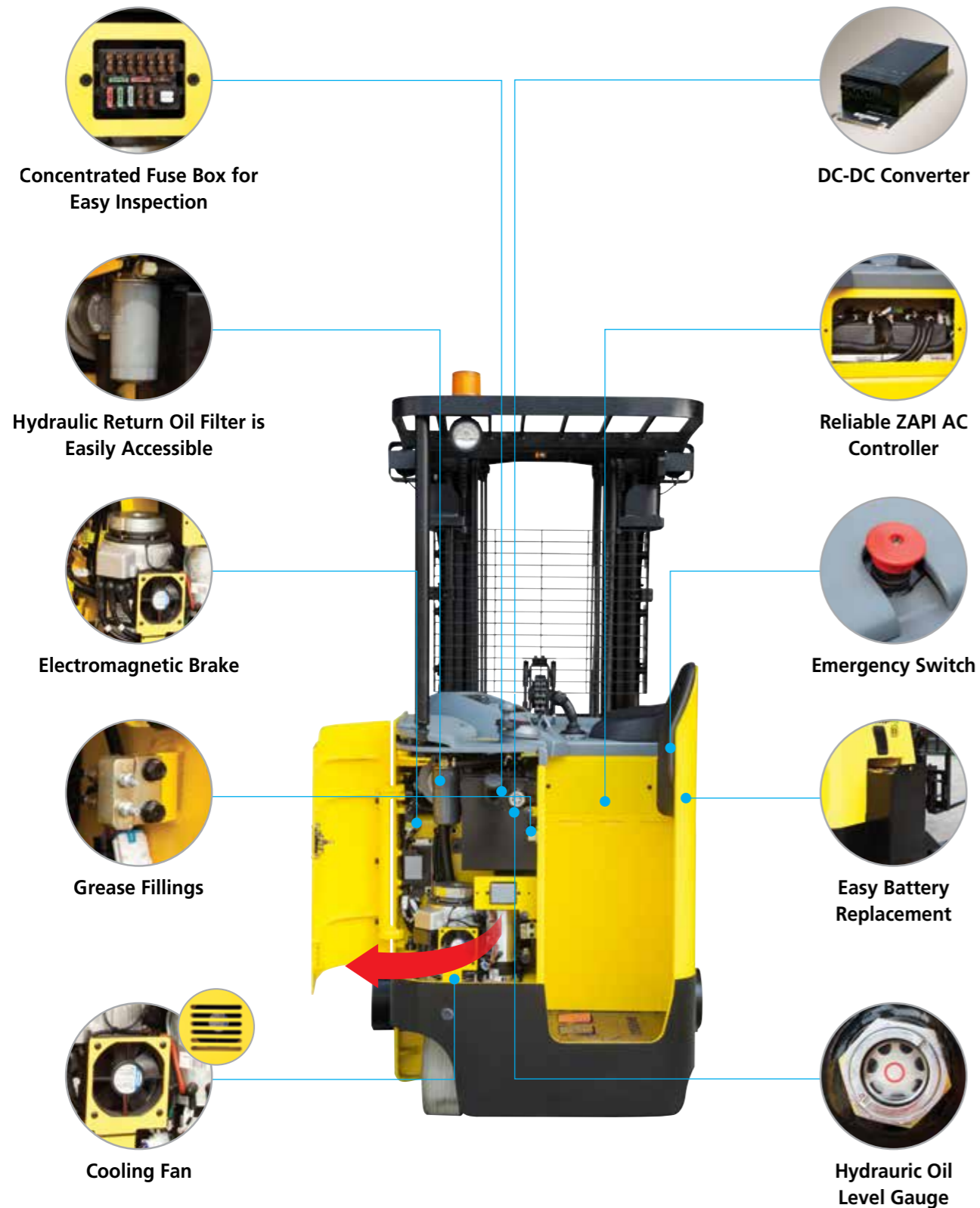
A camera installed on fork side provides the operator with another excellent visibility. (apply to mast over TF700)



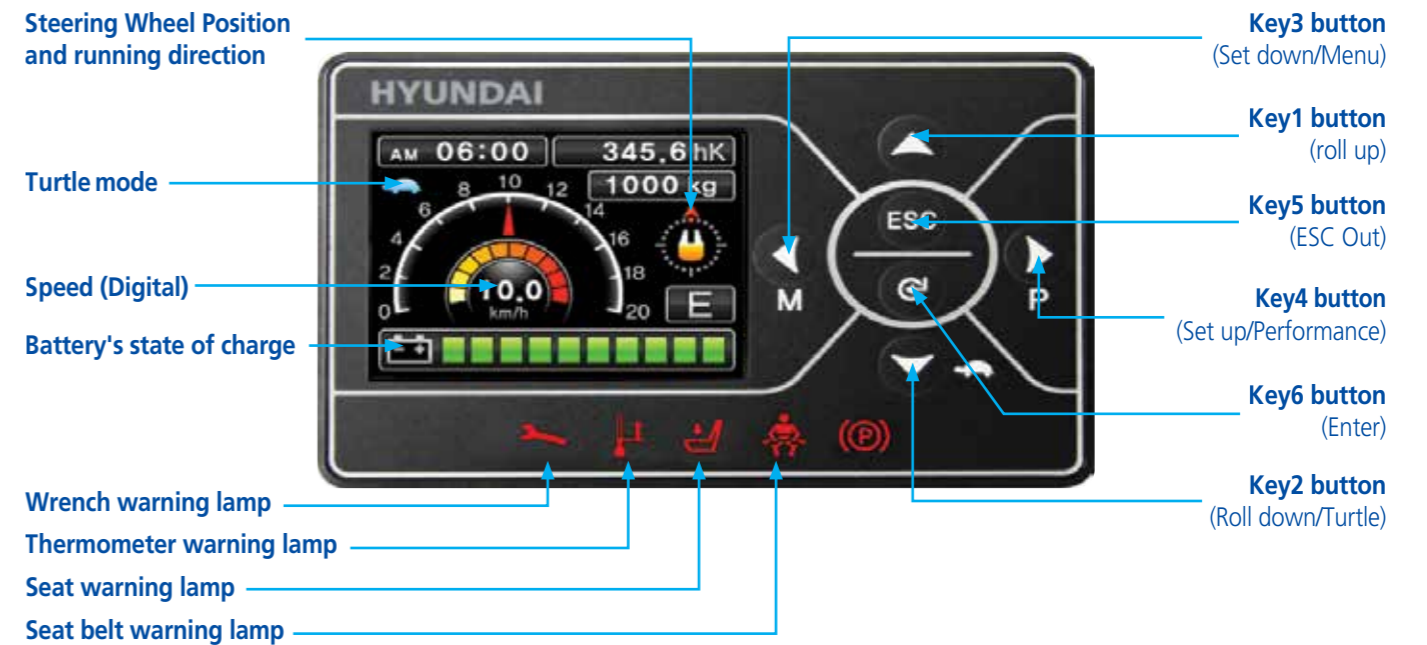
Durability, Easy Maintenance

An ideal arrangement of component parts ensures easy access and convenience for maintenance.

15/18/20/23BRP-9



Advanced LCD Monitor



H (High) mode **N** (Normal) mode **E** (Economic) mode
Turtle mode

The LCD color monitor with 3.5 inch graphic smart display allows the operator to easily and efficiently control the machine. The monitor provides information about speed & accelerator level, steer angle & travel direction, battery discharge indicator, hour meter & working mode. The optional load indicator displays the load weight and the height of fork in the monitor. The operator can select various performance modes to meet all working conditions. It is available multi-languages (maximum 11) for operator. The monitor also displays information about operation error, system fault, battery level, hour meter plus other various functions. It enables the operator to maintain the forklift in optimum operating condition.



Monitor for load& height indicator (optional)

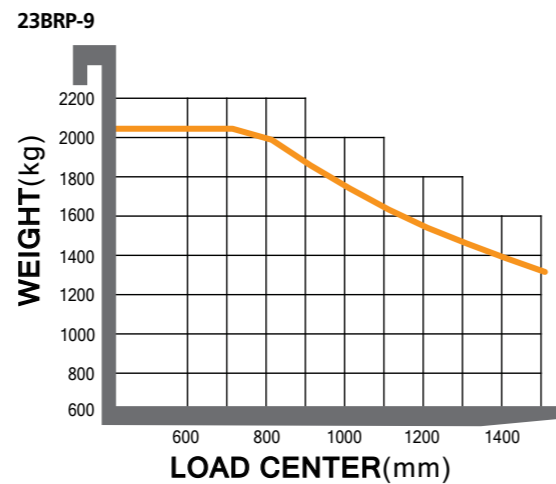
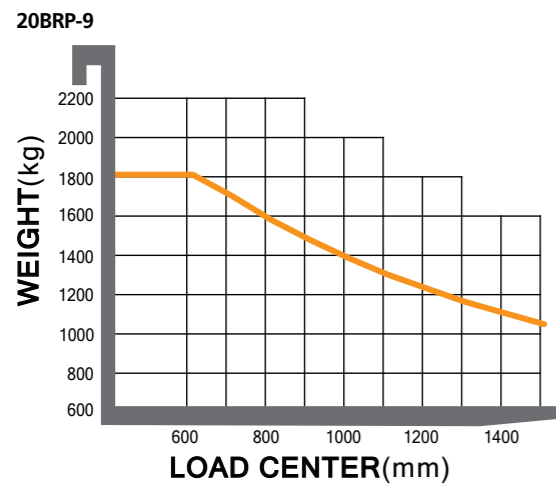
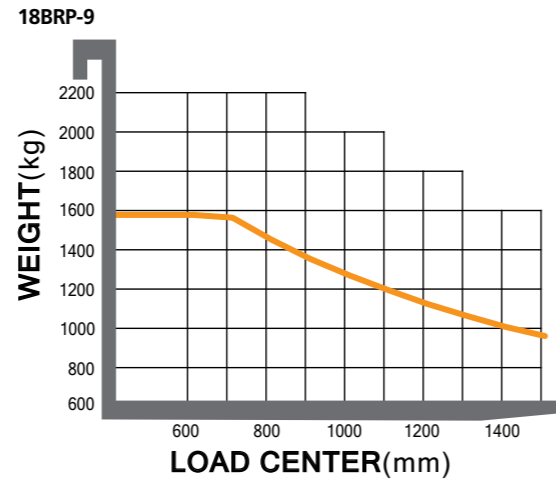
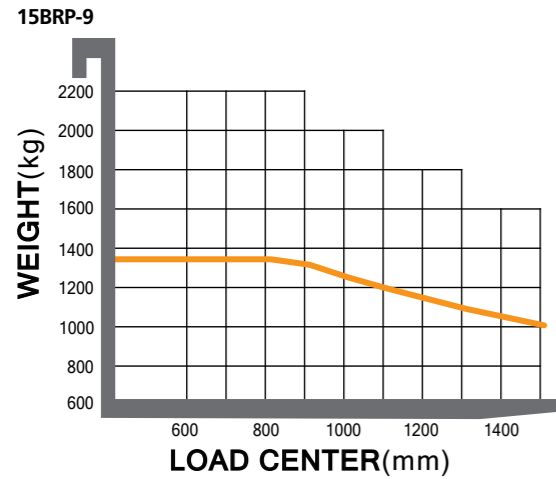
The optional load indicator displays the load weight in the monitor. The load sensor reduces the time to check loaded weight and the alarm alerts the driver when overloaded. The optional indicator displays the height of fork in the monitor.

New 9 Series

15/18/20/23BRP-9

Load Capacity

| MODEL | MAST | BATTERY TYPE | OUTTRIGGER-I.D |
|---------|-------|--------------|----------------|
| 15BRP-9 | TF530 | C | 1066mm (42in) |
| 18BRP-9 | TF530 | A | 1066mm (42in) |
| 20BRP-9 | TF530 | B | 1066mm (42in) |
| 23BRP-9 | TF530 | C | 1066mm (42in) |



Mast Specification (15/23BRP-9)

| Mast Type | Maximum Fork Height | Overall Height (Lowered) | Overall Height (Lifted) (With Backrest) | Free Lift Height (With Backrest) | Over Headguard Height | Min. Outtrigger -I.D | Truck Weight - w/o Battery | | | | | | | |
|-----------|---------------------|--------------------------|---|----------------------------------|-----------------------|----------------------|----------------------------|---------|----------------------------|---------|----------------------------|---------|----------------------------|---------|
| | | | | | | | "A" Type B.C 14.5" (362mm) | | "B" Type B.C 16.5" (413mm) | | "C" Type B.C 18.3" (457mm) | | "D" Type B.C 21.1" (527mm) | |
| | | | | | | | 15BRP-9 | 23BRP-9 | 15BRP-9 | 23BRP-9 | 15BRP-9 | 23BRP-9 | 15BRP-9 | 23BRP-9 |
| TF500 | 5,011 | 2,260 | 6,230 | 1,041 | 2,240 | 864 | 2,870 | - | 2,888 | 2,805 | 2,902 | 2,820 | 2,925 | 2,843 |
| *TF530 | 5,335 | 2,415 | 6,554 | 1,196 | 2,395 | 864 | 2,918 | - | 2,935 | 2,853 | 2,949 | 2,867 | 2,972 | 2,890 |
| TF610 | 6,095 | 2,720 | 7,314 | 1,501 | 2,395 | 864 | 3,077 | - | 3,095 | 3,012 | 3,109 | 3,027 | 3,132 | 3,050 |
| TF685 | 6,859 | 3,025 | 8,078 | 1,806 | 2,395 | 864 | - | - | 3,186 | 3,104 | 3,201 | 3,119 | 3,224 | 3,142 |
| TF760 | 7,621 | 3,325 | 8,840 | 2,106 | 2,395 | 864 | - | - | 3,278 | 3,196 | 3,293 | 3,210 | 3,316 | 3,233 |
| TF815 | 8,155 | 3,555 | 9,374 | 2,336 | 2,395 | 864 | - | - | 3,350 | 3,267 | 3,364 | 3,282 | 3,387 | 3,305 |
| TF865 | 8,661 | 3,785 | 9,880 | 2,566 | 2,395 | 1,016 | - | - | - | - | 3,443 | 3,360 | 3,466 | 3,383 |
| TF930 | 9,301 | 4,065 | 10,520 | 2,846 | 2,395 | 1,067 | - | - | - | - | - | - | 3,551 | 3,469 |
| TF1010 | 10,161 | 4,370 | 11,380 | 3,151 | 2,395 | 1,118 | - | - | - | - | - | - | 3,662 | 3,580 |

* STANDARD

Mast Specification (18/20BRP-9)

| Mast Type | Maximum Fork Height | Overall Height (Lowered) | Overall Height (Lifted) (With Backrest) | Free Lift Height (With Backrest) | Over Headguard Height | Min. Outtrigger -I.D | Truck Weight - w/o Battery | | | | | | | |
|-----------|---------------------|--------------------------|---|----------------------------------|-----------------------|----------------------|----------------------------|---------|----------------------------|---------|----------------------------|---------|---------|---------|
| | | | | | | | "A" Type B.C 14.5" (362mm) | | "B" Type B.C 16.5" (413mm) | | "C" Type B.C 18.3" (457mm) | | | |
| | | | | | | | 18BRP-9 | 20BRP-9 | 18BRP-9 | 20BRP-9 | 18BRP-9 | 20BRP-9 | 18BRP-9 | 20BRP-9 |
| TF500 | 5,011 | 2,260 | 6,230 | 1,041 | 2,240 | 864 | 864 | 2,597 | - | 2,615 | 2,615 | - | 2,629 | |
| *TF530 | 5,335 | 2,415 | 6,554 | 1,196 | 2,395 | 864 | 864 | 2,635 | - | 2,653 | 2,653 | - | 2,667 | |
| TF610 | 6,095 | 2,720 | 7,314 | 1,501 | 2,395 | 864 | 864 | 2,776 | - | 2,793 | 2,793 | - | 2,807 | |
| TF685 | 6,859 | 3,025 | 8,078 | 1,806 | 2,395 | 864 | 864 | - | - | 2,882 | 2,882 | - | 2,896 | |
| TF760 | - | 3,325 | 8,840 | - | 2,395 | - | 864 | - | - | - | - | - | 2,970 | |
| TF815 | - | 3,555 | 9,374 | - | 2,395 | - | 864 | - | - | - | - | - | 3,027 | |

* STANDARD

Battery Table

| Battery Type | Battery Compartment Size (Length) | Battery Voltage | Max. Capacity (6 Hour Rate) | Battery Dimensions | | | | | | Battery Weight | | |
|--------------|-----------------------------------|-----------------|-----------------------------|--------------------|------|------------|------|------------|------|----------------|------|------|
| | | | | Width (W) | | Length (L) | | Height (H) | | Min. Weight | | |
| | | | | in | mm | in | mm | in | mm | | | lb |
| Type A | 14.3 | 362 | 36 | 775 | 38.4 | 975 | 14.0 | 355 | 31.0 | 787 | 1598 | 725 |
| Type B | 16.3 | 413 | 36 | 930 | 38.4 | 975 | 16.0 | 406 | 31.0 | 787 | 1878 | 852 |
| Type C | 18.0 | 457 | 36 | 1085 | 38.4 | 975 | 17.7 | 450 | 31.0 | 787 | 2280 | 1034 |
| Type D | 20.7 | 527 | 36 | 1240 | 38.4 | 975 | 20.5 | 520 | 31.0 | 787 | 2601 | 1180 |

Load Tire Option Table

| Mast Type | 15BRP-9 | 18BRP-9 | 20BRP-9 | 23BRP-9 |
|-----------|---------------------|------------------------|---------------------|------------------------|
| | ø5x4" (ø127x 101mm) | ø10.5x4" (ø267x 101mm) | ø5x4" (ø127x 101mm) | ø10.5x4" (ø267x 101mm) |
| TF500 | ● | - | ● | ● |
| TF530 | ● | - | ● | ● |
| TF610 | ● | - | ● | ● |
| TF685 | ● | - | ● | ● |
| TF760 | ● | - | - | ● |
| TF815 | ● | - | - | ● |
| TF865 | ● | - | - | ● |
| TF930 | ● | - | - | ● |
| TF1010 | ● | - | - | ● |

Optional Items

Outrigger I.D (mm)

- 864, 914, 965, 1016, 1118, 1168, 1219, 1270

Integral Sideshift

- Max. 120mm

UL

- UL " EE "

Beacon Lamp

- Amber, Blue, Red

Rear Work Lamp

- Fork Length (mm)

- 15/18BRP: 900, 950, 1000, 1150, 1200, 1350, 1500, 1600

- 20/23BRP: 900, 1000, 1200, 1350, 1500, 1650, 1800

Fence

- Wire net type (STD)

- Tempered glass type (OPT)

Tire

- Vulkollan

Height Indicator

Cold Storage

Battery

- 600AH, 700AH, 800AH

Charger 3P

- 220/380V, 410V, 440V

Right Angle Aisle Stacking - Zero Clearance

| 362 Battery Compartment and 1,067 Outtrigger I.D | | | | | | 362 Battery Compartment and 1,067 Outtrigger I.D | | | | | | 413 Battery Compartment and 1,067 Outtrigger I.D | | | | | |
|--|-------------------|-------|-------|-------|-------|--|-------------------|-------|-------|-------|-------|--|-------------------|-------|-------|-------|-------|
| Pallet Length (mm) | 15BRP-9 | | | | | Pallet Length (mm) | 18/20BRP-9 | | | | | Pallet Length (mm) | 23BRP-9 | | | | |
| | Pallet Width (mm) | | | | | | Pallet Width (mm) | | | | | | Pallet Width (mm) | | | | |
| | 838 | 914 | 1,016 | 1,118 | 1,219 | | 838 | 914 | 1,016 | 1,118 | 1,219 | | 838 | 914 | 1,016 | 1,118 | 1,219 |
| 914 | 2,333 | 2,326 | 2,317 | 2,307 | 2,298 | 914 | 2,137 | 2,129 | 2,117 | 2,106 | 2,094 | 914 | 2,217 | 2,208 | 2,196 | 2,196 | 2,171 |
| 1,016 | 2,447 | 2,441 | 2,434 | 2,426 | 2,418 | 1,016 | 2,255 | 2,248 | 2,239 | 2,230 | 2,221 | 1,016 | 2,337 | 2,330 | 2,321 | 2,321 | 2,302 |
| 1,118 | 2,558 | 2,553 | 2,546 | 2,539 | 2,533 | 1,118 | 2,368 | 2,363 | 2,355 | 2,348 | 2,340 | 1,118 | 2,452 | 2,446 | 2,438 | 2,438 | 2,422 |
| 1,219 | 2,665 | 2,661 | 2,655 | 2,649 | 2,643 | 1,219 | 2,477 | 2,472 | 2,466 | 2,460 | 2,453 | 1,219 | 2,561 | 2,556 | 2,550 | 2,550 | 2,536 |

• Add 51mm for 413mm Battery Compartment
• Add 89mm for 457mm Battery Compartment
• Add 152mm for 527mm Battery Compartment

• Add 51mm for 413mm Battery Compartment
• Add 89mm for 457mm Battery Compartment

• Add 51mm for 457mm Battery Compartment
• Add 102mm for 527mm Battery Compartment