

# Tri-Wheelers

Logger | Cane Loader | Forklift | Versalift

Tier II Certified



**BELL**



# Evolutionary design

Bell Tri-Wheelers are derived from the successful Bell Cane Loaders and to this day remain the lowest cost solution to sorting, loading and moving both sugar cane and timber.

The Tri-Wheeler's simple design belies the brilliance of the concept and design. Irvine Bell developed the concept in the early 1960s with the intention of designing a machine that would duplicate the motion of a person walking up to a pile and picking it up.







He succeeded in blurring the interface between man and machine. While the concept has remained the same, the product has undergone a number of subtle but important improvements over the years. These improvements have evolved the Bell Tri-Wheeler into a product where beauty is way more than skin deep.

More importantly, the design team associated with the Tri-Wheeler has gained invaluable insights and experience throughout the 50 year journey and they appreciate the understatedness of this 'simple design'. They understand that in order to achieve simplicity in design an enormous amount of effort and mastery is required.

Copying is said to be the highest form of flattery, however, many attempts to copy the Bell Tri-Wheeler have failed. Perhaps it has something to do with failing to understand the essence of this machine?

Bell Equipment has built a solid reputation with this simple machine along with a foundational concept of building **STRONG RELIABLE MACHINES** and ensuring that this philosophy is reinforced by providing our customers with **STRONG RELIABLE SUPPORT**, once the sale is done.

## Frame

- ROPS & FOPS certified frame.
- Triangulation forms the basis of the frame structure, to distribute force evenly for durability.
- Ingenuity of design simply integrates the hydraulic tank into the frame of the F-series Tri-Wheelers.
- Layered sophistication allows the product to be built for the application.

## Design Philosophy

- Customer input is critical.
- Simplicity remains core.
- Lowest cost per tonne solutions through efficiency.
- Strong, reliable machines.



# Robust efficient driveline



Proven hydraulic components carried over from our A-series

## Engine

- The F-series engine has transitioned from air-cooled to a water-cooled Yanmar engine.
- Careful selection based on the rugged environment and operating conditions.
- Low fuel burn and low running costs reinforce the focus on lowest cost per tonne operations.
- Water cooled engine provides low noise, cool running operation.

## Transmission Pump

- The introduction of a robust cast iron design with a previous evolution means this drive train is proven to be reliable and robust.
- Robust components, chosen with the customer in mind, are tested extensively to protect the customer from unwanted downtime.
- Evolution - new developments that enhance productivity are continuously embraced.
- New developments have provided continuous opportunities to enhance operator productivity and safety.

## Wheel motors

- No maintenance and components with a high expected life.
- Well proven design combines selected hydraulic motors and braking system coupled to a Bell final drive.
- Fail to safe, spring applied hydraulically released SAHR brakes.





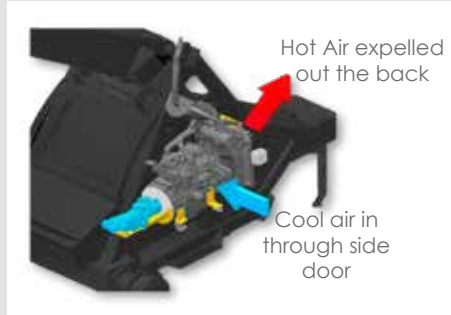
## Yanmar water cooled engine

### Standard - Yanmar 4TNV98:

- 45 kW @ 2 200 rpm
- 3.319 litre displacement
- Naturally aspirated

### Optional - Yanmar 4TNV98T:

- 57 kW @ 2 200 rpm
- 3.319 litre displacement
- Turbo Charged



## Cooling system

### Engine aluminium core radiator:

- Rubber mounted
- Robust fin design able to be pressure washed

### Hydraulic oil cooler:

- Side-by-side with the radiator and cooling fan
- Easy access for cleaning

### AC condenser (optional):

- RH engine bay door mounted condenser
- Swing out for easier cleaning



## Driveline

### Eaton transmission pump:

- Proven reliability on Tri-Wheelers for many years

### Bell Wheel motors:

- Rugged design
- Reliable and dependable





# Versatile workhorse

The agricultural industry requires farmers to be flexible and skilled in many fields. As a preferred equipment supplier to farmers, Bell Equipment appreciates that you need solutions to match your adaptability and expertise.



The Bell Versalift meets the many demands that the farm will throw your way, making easy work of cleaning, stockpiling, and loading. Built on the trusted F-series frame, and featuring the same hydrostatic drivetrain, you benefit from a machine that has been tried and tested to deliver reliability and high performance. Built with loading in mind, the Versalift is supplied with 1.5m Class 3B forks and a 1m<sup>3</sup> bucket, designed to the width of the wheelbase, as standard attachments.



The machine features a quick-attach cradle allowing the operator to effortlessly switch between attachments. The added ability of being able to accommodate most industry quick attachments expands the range of available tools, enhancing the



machine's versatility and your operation's efficiency. The forks can lift up to 1 930kg and reach a height of 3 250mm, with the specially designed loader frame ensuring the forks stay parallel to the floor while lifting for stability and precision in your handling tasks.



Whether it is forestry or agriculture, mining or construction, Bell Equipment focuses on giving customers what they require. Driven by providing lowest-cost-per-tonne solutions, Bell Tri-Wheelers cater for low to high levels of mechanisation. Variations of this versatile workhorse include the Caneloader, Logger, Forklift and the Versalift material handler with quick changing implements.



## ENGINE & ANCILLARIES

Yanmar TNV98

**Configuration**  
4 cylinder

**Aspiration**  
Naturally aspirated

**Emission Level**  
Tier II

**Governed Power**  
45 kW

**Governed Speed**  
2 200 rpm

**Displacement**  
3 319 cc

**Fuel Filter Type**  
In-line water separator with separate spin on fuel filter.

**Fuel Filter**  
5 µm

**Coolant Capacity (Engine only)**  
4 litres

**Radiator**  
Easy access and easy to clean. Agricultural spec fine dust tolerant - wide fin spacing.

**Fuel Tank**  
Secure, lockable ground level filling. Integrated into lower section of the frame to keep a low centre of gravity.

**Fuel Tank Capacity**  
100 litres

**Air Cleaner Type**  
Radial Seal 2-stage primary and secondary filters, both fed by a self cleaning pre-cleaner. The system has a dash mounted restriction indicator.

## HYDRAULIC SYSTEM

**Hydrostatic Drive System**  
Servo controlled Variable displacement closed loop system.

**Wheel Drive System**  
Robust, proven Bell planetary hub driven by high displacement radial piston motor with fail to safe spring applied hydraulically released multidisc wet brake.

**Wheel Drive Make & Model**  
Bell #29P

**Service Brake**  
Hydrostatic braking through the closed loop system.

**Hydraulic Implement Pump 1**  
**Maximum Flow at Engine**  
**Rated Speed**  
60,9 l/min

**Hydraulic Implement Pump 1**  
**Maximum Intermittent Pressure**  
241 bar

**Hydraulic Implement Pump 1**  
**Use**  
Boom lift & lower

**Hydraulic Implement Pump 2**  
**Maximum Flow at Engine**  
**Rated Speed**  
39,4 l/min

**Hydraulic Implement Pump 2**  
**Maximum Intermittent Pressure**  
280 bar

**Hydraulic Implement Pump 2**  
**Maximum Continuous Pressure**  
250 bar

**Hydraulic Implement Pump 2**  
**Use**  
Attachment - Grapple Open/Close, Tele Ext in/out and Rotator.

**Tank**  
Integrated within the tubular frame

**Tank Capacity**  
140 litres

**Tank Breather**  
Remote to filler cap, 3 micron rating, 0.75 bar pressure.

**Hydraulic Cooler Air Fin Spacing**  
Easy to clean wide fin spacing

## ELECTRICAL

**System**  
12 volt system with a single maintenance free battery mounted in the rear of the machine above the tail wheel.

**Alternator Output**  
12 v 80 Amp

**Starter Motor Rating**  
12 v 3,0 kW

**Fuse Box**  
Blade fuses located inside the cabin in the instrumentation box.

**Battery**  
Maintenance free gel filled battery 100 Amp Hour rating.

**Battery Isolator**  
Single pole type with lock out mounted onto the right hand side of the frame.

**Work Lights**  
8 lights in total. 4 Facing forwards, 2 facing rearwards, 1 facing side ways on each side of the frame.

**Strobe Light**  
Mounted on the rear of frame

**Interior lights**  
LED mounted inside the cab and inside the engine bay.

## ESTIMATED OPERATING WEIGHTS WITH STANDARD OPTIONS

**Unladen**  
Front: 4 118 kg  
Rear: 1 349 kg  
Total: 5 467 kg

**Laden**  
Front: 6 365 kg  
Rear: 375 kg  
Total: 6 740 kg

**Working Load Limit**  
1 273 kg

**Tipping Load**  
1 400 kg

## GRAPPLE

Bell LX36  
(Bell LX42 as an option)

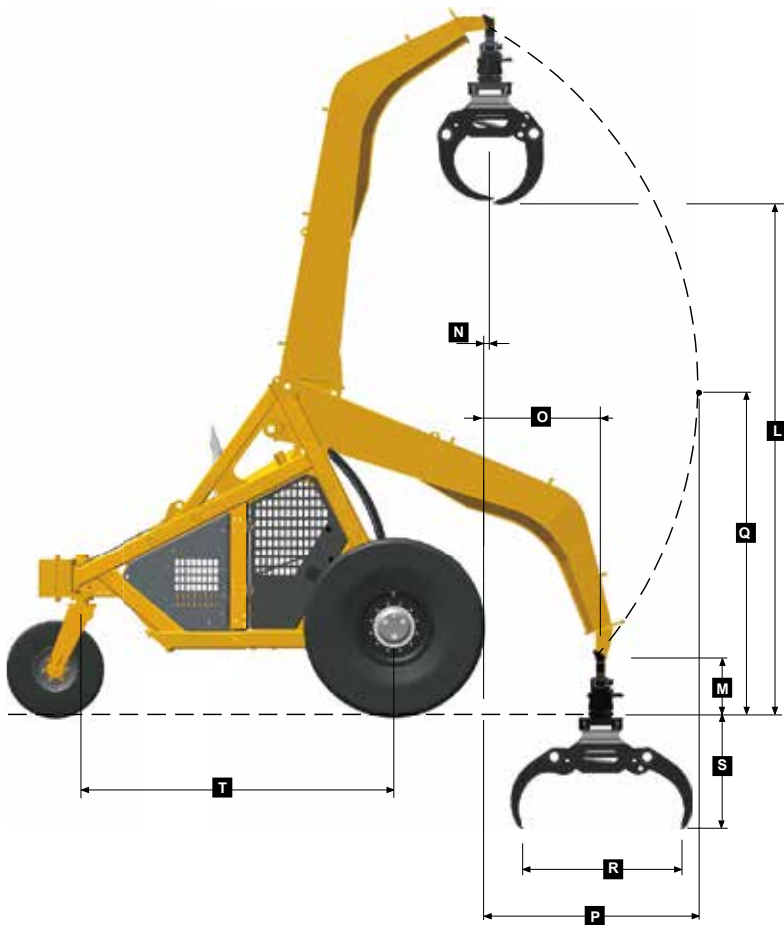
Note: Tyre sizes indicated represent available tyres at printing. Please ensure your choice is available at time of ordering.

- Low capital outlay
- Low operating cost due to few working parts
- Low fuel consumption
- Simple to maintain
- Multi-purpose unit
- Highly manoeuvrable

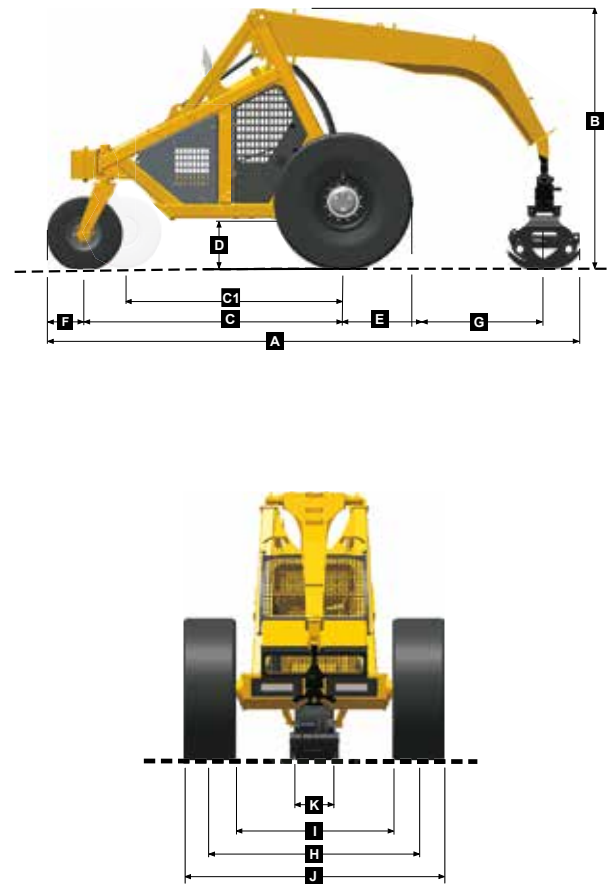


## Dimensions

### OPERATING POSITION



### TRANSPORT POSITION



### MACHINE DIMENSIONS

A	Length - Transport Position with LX36 Grapple Closed	6 240 mm	I2	18.4 x 26 (Option 1)	1 813 mm
A	Length - Transport Position with LX42 Grapple Closed	6 370 mm	I3	18.4/15 x 30 (Option 2)	1 846 mm
B	Height - Transport Position with Grapple closed	3 059 mm	I4	18.4 x 34 (Option 3)	1 851 mm
C	Front Axle Centre to Tailwheel Axle Centre	3 030 mm	I5	18.4 x 26 (Option 4-Dual Wheelset)	1 687 mm
C1	Front Axle Centre to Tailwheel Axle Centre	2 546 mm	J	Width over Tyres - Front	
D	Ground Clearance - Front Axle Box	578 mm	J1	18.4 x 30 (Std Wheelset)	2 982 mm
E	Front Tyre - Free Radius (Free Diameter)		J2	18.4 x 26 (Option 1)	2 746 mm
E1	18.4 x 30 (Std Wheelset)	807.5 mm ( <sup>0</sup> 1615)	J3	18.4/15 x 30 (Option 2)	2 778 mm
E2	18.4 x 26 (Option 1)	729 mm ( <sup>0</sup> 1458)	J4	18.4 x 34 (Option 3)	2 787 mm
E3	18.4/15 x 30 (Option 2)	774,5 mm ( <sup>0</sup> 1549)	J5	18.4 x 26 (Option 4-Dual Wheelset)	3 675 mm
E4	18.4 x 34 (Option 3)	837,5 mm ( <sup>0</sup> 1675)	K	Tyre Width - Tailwheel	
E5	18.4 x 26 (Option 4-Dual Wheelset)	729 mm ( <sup>0</sup> 1458)	K1	400 x 15.5 (Std Wheelset)	385 mm
F	Tailwheel - Free Radius (Free Diameter)		K2	18 x 15.5 (Option 1)	450 mm
F1	400 x 15.5 (Std Wheelset)	432 mm ( <sup>0</sup> 864)	L	Load Over Height - LX36 Grapple	4 586 mm
F2	18 x 15.5 (Option 1)	490 mm ( <sup>0</sup> 980)	L	Load Over Height - LX42 Grapple	4 480 mm
G	Reach - Grapple Pivot @ Ground Level - LX36 Grapple	1 545 mm	M	Grapple Pivot Height - Boom Down Position	529 mm
G	Reach - Grapple Pivot @ Ground Level - LX42 Grapple	1 600 mm	N	Reach-Grapple Pivot - Boom Up Position	44 mm
H	Track Width - Front		O	Reach-Grapple Pivot - Boom Down Position	1 036 mm
H1	18.4 x 30 (Std Wheelset)	2 382 mm	P	Maximum Reach - Grapple Pivot	1 948 mm
H2	18.4 x 26 (Option 1)	2 279,5 mm	Q	Height - Grapple Pivot @ Maximum Reach	2 964 mm
H3	18.4/15 x 30 (Option 2)	2 312 mm	R	LX36 Grapple Open	1 414 mm
H4	18.4 x 34 (Option 3)	2 319 mm	R	LX42 Grapple Open	1 577 mm
H5	18.4 x 26 (Option 4-Dual Wheelset)	2 681 mm	S	Maximum Reach - Below Ground - LX36 Grapple	1 001 mm
I	Inside Tyre Width - Front		S	Maximum Reach - Below Ground - LX42 Grapple	1 054 mm
I1	18.4 x 30 (Std Wheelset)	1 782 mm	T	Front Axle Centre to Tailwheel Pivot Centre	2 788 mm

NOTE: Please refer to 225F HP for Tele Logger option dimensions.

All dimensions are Unladen values based on the Standard Wheelsets and Grapple U.O.N.

Negative (-) dimension value denotes position below ground level or behind front of wheel, whichever is applicable.



## ENGINE & ANCILLARIES

Yanmar TNV98T

**Configuration**  
4 cylinder

**Aspiration**  
Turbo Charged

**Emission Level**  
Tier II

**Governed Power**  
57 kW

**Governed Speed**  
2 200 rpm

**Displacement**  
3 319 cc

**Fuel Filter Type**  
In-line water separator with separate spin on fuel filter.

**Fuel Filter**  
5 µm

**Coolant Capacity (Engine only)**  
4 litres

**Radiator**  
Easy access and easy to clean. Agricultural spec fine dust tolerant - wide fin spacing.

**Fuel Tank**  
Secure, lockable ground level filling. Integrated into lower section of the frame to keep a low centre of gravity.

**Fuel Tank Capacity**  
100 litres

**Air Cleaner Type**  
Radial Seal 2-stage primary and secondary filters, both fed by a self cleaning pre-cleaner. The system has a dash mounted restriction indicator.

## HYDRAULIC SYSTEM

**Hydrostatic Drive System**  
Servo controlled Variable displacement closed loop system.

**Wheel Drive System**  
Robust, proven Bell planetary hub driven by high displacement radial piston motor with fail to safe spring applied hydraulically released multidisc wet brake.

**Wheel Drive Make & Model**  
Bell #29P

**Service Brake**  
Hydrostatic braking through the closed loop system.

**Hydraulic Implement Pump 1**  
**Maximum Flow at Engine**  
**Rated Speed**  
60,9 l/min

**Hydraulic Implement Pump 1**  
**Maximum Intermittent Pressure**  
241 bar

**Hydraulic Implement Pump 1**  
**Use**  
Boom lift & lower

**Hydraulic Implement Pump 2**  
**Maximum Flow at Engine**  
**Rated Speed**  
39,4 l/min

**Hydraulic Implement Pump 2**  
**Maximum Intermittent Pressure**  
280 bar

**Hydraulic Implement Pump 2**  
**Maximum Continuous Pressure**  
250 bar

**Hydraulic Implement Pump 2**  
**Use**  
Attachment - Grapple Open/Close, Tele Ext in/out and Rotator.

**Tank**  
Integrated within the tubular frame

**Tank Capacity**  
140 litres

**Tank Breather**  
Remote to filler cap, 3 micron rating, 0.75 bar pressure.

**Hydraulic Cooler Air Fin Spacing**  
Easy to clean wide fin spacing

**ELECTRICAL**  
**System**  
12 volt system with a single maintenance free battery mounted in the rear of the machine above the tail wheel.

**Alternator Output**  
12 v 80 Amp

**Starter Motor Rating**  
12 v 3,0 kW

**Fuse Box**  
Blade fuses located inside the cabin in the instrumentation box.

**Battery**  
Maintenance free gel filled battery 100 Amp Hour rating.

**Battery Isolator**  
Single pole type with lock out mounted onto the right hand side of the frame.

**Work Lights**  
8 lights in total. 4 Facing forwards, 2 facing rearwards, 1 facing side ways on each side of the frame.

**Strobe Light**  
Mounted on the rear of frame

**Interior lights**  
LED mounted inside the cab and inside the engine bay.

## ESTIMATED OPERATING WEIGHTS WITH STANDARD OPTIONS

**Unladen**

Front:	4 309 kg
Rear:	1 656 kg
Total:	5 965 kg

Laden	Boom In	Boom Out
Front:	6 562 kg	6 293 kg
Rear:	955 kg	712 kg
Total:	7 517 kg	7 005 kg

**Working Load Limit**

1 568 kg	1 051 kg
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**Tipping Load**

1 725 kg	1 157 kg
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## GRAPPLE

Bell LX42  
(Bell LX36 as an option)

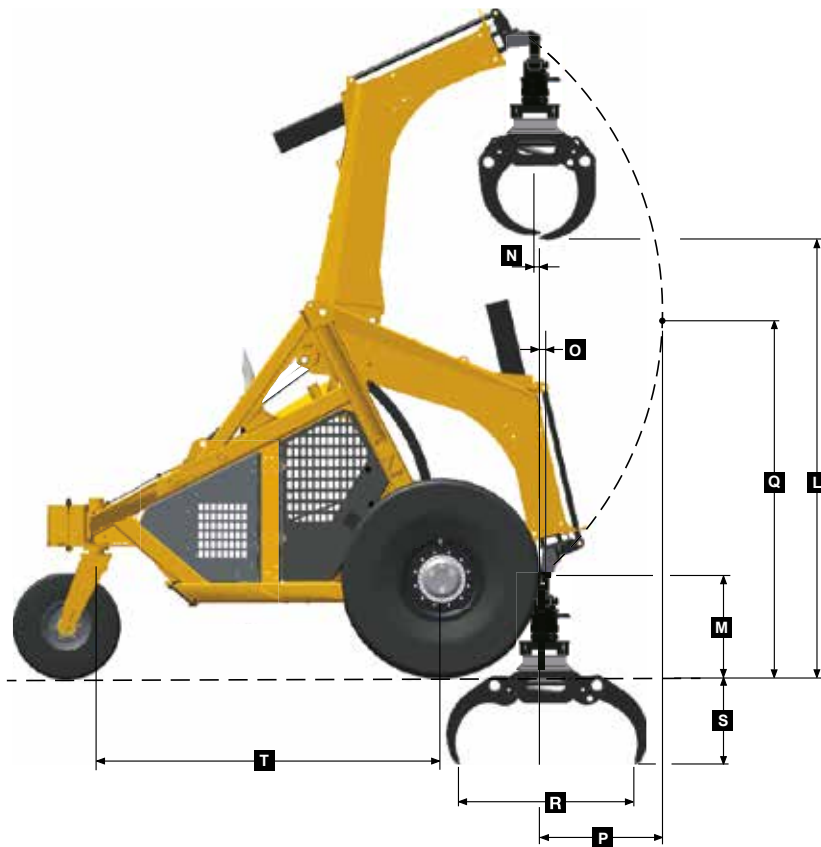
Note: Tyre sizes indicated represent available tyres at printing. Please ensure your choice is available at time of ordering.

- Low capital outlay
- Low operating cost due to few working parts
- Low fuel consumption
- Simple to maintain
- Multi-purpose unit
- Highly manoeuvrable

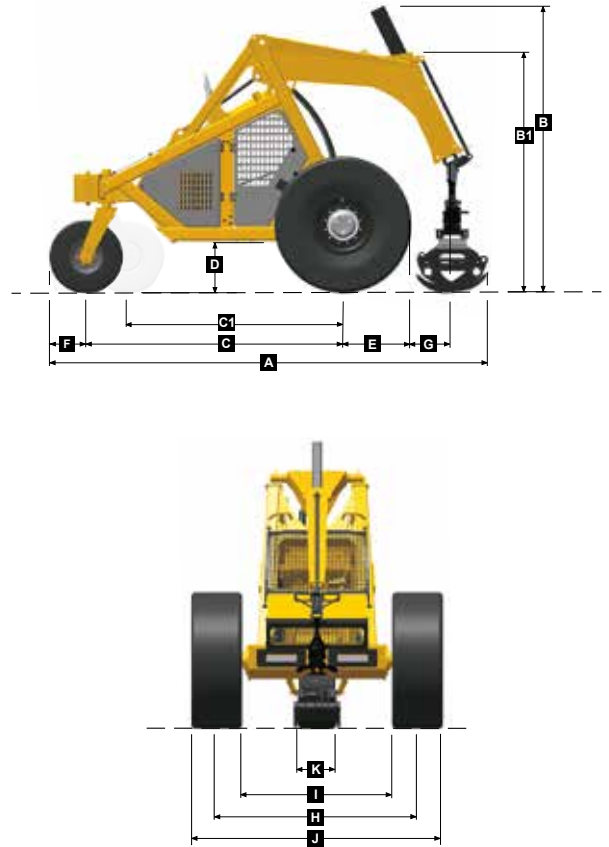


## Dimensions

### OPERATING POSITION



### TRANSPORT POSITION



### MACHINE DIMENSIONS

A	Length - Transport - LX36 Grapple Closed, Teleboom Retracted	5 175 mm	I3	18.4/15 x 30 (Option 2)	1 846 mm
A	Length - Transport - LX36 Grapple Closed, Teleboom Extended	6 232 mm	I4	18.4 x 34 (Option 3)	1 851 mm
A	Length - Transport - LX42 Grapple Closed, Teleboom Retracted	5 331 mm	I5	18.4 x 26 (Option 4-Dual Wheelset)	1 687 mm
A	Length - Transport - LX42 Grapple Closed, Teleboom Extended	6 363 mm	J	Width over Tyres-Front	
B	Height - Transport - LX36 Grapple Closed, Teleboom Retracted	3 397 mm	J1	23.1 x 26 (Std Wheelset)	2 982 mm
B1	Height - Transport - LX36 Grapple Closed, Teleboom Extended	3 367 mm	J2	18.4 x 26 (Option 1)	2 746 mm
B	Height - Transport - LX42 Grapple Closed, Teleboom Retracted	3 468 mm	J3	18.4/15 x 30 (Option 2)	2 778 mm
B1	Height - Transport - LX42 Grapple Closed, Teleboom Extended	3 426 mm	J4	18.4 x 34 (Option 3)	2 787 mm
C	Front Axle Centre to Tailwheel Axle Centre	3 030 mm	J5	18.4 x 26 (Option 4-Dual Wheelset)	3 675 mm
C1	Front Axle Centre to Tailwheel Axle Centre	2 546 mm	K	Tyre Width - Tailwheel	
D	Ground Clearance - Front Axle Box	578 mm	K1	400 x 15.5 (Std Wheelset)	385 mm
E	Front Tyre - Free Radius (Free Diameter)		K2	18 x 15.5 (Option 1)	450 mm
E1	23.1 x 26 (Std Wheelset)	807,5 mm (Ø1 615)	L	Load Over Height - LX36 Grapple, Teleboom Retracted	3 547 mm
E2	18.4 x 26 (Option 1)	729 mm (Ø1 458)	L	Load Over Height - LX36 Grapple, Teleboom Extended	3 955 mm
E3	18.4/15 x 30 (Option 2)	774,5 mm (Ø1 549)	L	Load Over Height - LX42 Grapple, Teleboom Retracted	3 441 mm
E4	18.4 x 34 (Option 3)	837,5 mm (Ø1 675)	L	Load Over Height - LX42 Grapple, Teleboom Extended	3 849 mm
E5	18.4 x 26 (Option 4-Dual Wheelset)	729 mm (Ø1 458)	M	Grapple Pivot Height - Boom Down Position, Teleboom Retracted	816 mm
F	Tailwheel - Free Radius (Free Diameter)		M	Grapple Pivot Height - Boom Down Position, Teleboom Extended	142 mm
F1	400 x 15.5 (Std Wheelset)	432 mm (Ø864)	N	Reach-Grapple Pivot - Boom Up Position, Teleboom Retracted	27 mm
F2	18 x 15.5 (Option 1)	490 mm (Ø980)	N	Reach-Grapple Pivot - Boom Up Position, Teleboom Extended	866 mm
G	Reach - Grapple Pivot @ Ground Level - LX36, Teleboom Retracted	481 mm	O	Reach-Grapple Pivot - Boom Down Position, Teleboom Retracted	39 mm
G	Reach - Grapple Pivot @ Ground Level - LX36, Teleboom Extended	1 538 mm	O	Reach-Grapple Pivot - Boom Down Position, Teleboom Extended	255 mm
G	Reach - Grapple Pivot @ Ground Level - LX42, Teleboom Retracted	561 mm	P	Maximum Reach - Grapple Pivot, Teleboom Retracted	1 042 mm
G	Reach - Grapple Pivot @ Ground Level - LX42, Teleboom Extended	1 593 mm	P	Maximum Reach - Grapple Pivot, Teleboom Extended	1 942 mm
H	Track Width - Front		Q	Height - Grapple Pivot @ Maximum Reach, Teleboom Retracted	2 964 mm
H1	23.1 x 26 (Std Wheelset)	2 382 mm	Q	Height - Grapple Pivot @ Maximum Reach, Teleboom Extended	2 964 mm
H2	18.4 x 26 (Option 1)	2 279,5 mm	R	LX36 Grapple Open	1 414 mm
H3	18.4/15 x 30 (Option 2)	2 312 mm	R	LX42 Grapple Open	1 577 mm
H4	18.4 x 34 (Option 3)	2 319 mm	S	Maximum Reach - Below Ground - LX36 Grapple, Teleboom Retracted	714 mm
H5	18.4 x 26 (Option 4-Dual Wheelset)	2 681 mm	S	Maximum Reach - Below Ground - LX36 Grapple, Teleboom Extended	1 672 mm
I	Inside Tyre Width - Front		S	Maximum Reach - Below Ground - LX42 Grapple, Teleboom Retracted	768 mm
I1	23.1 x 26 (Std Wheelset)	1 782 mm	S	Maximum Reach - Below Ground - LX42 Grapple, Teleboom Extended	1 725 mm
I2	18.4 x 26 (Option 1)	1 813 mm	T	Front Axle Centre to Tailwheel Pivot Centre	2 788 mm

NOTE: Please refer to 225F for Crank option dimensions.

All dimensions are Unladen values based on the Standard Wheelsets and Grapple U.O.N.

Negative (-) dimension value denotes position below ground level or behind front of wheel, whichever is applicable.



## ENGINE & ANCILLARIES

Yanmar TNV98

### Configuration

4 cylinder

### Aspiration

Naturally aspirated

### Emission Level

Tier II

### Governed Power

45 kW

### Governed Speed

2 200 rpm

### Displacement

3 319 cc

### Fuel Filter Type

In-line water separator with separate spin on fuel filter.

### Fuel Filter

5 µm

### Coolant Capacity (Engine only)

4 litres

### Radiator

Easy access and easy to clean. Agricultural spec fine dust tolerant - wide fin spacing.

### Fuel Tank

Secure, lockable ground level filling. Integrated into lower section of the frame to keep a low centre of gravity.

### Fuel Tank Capacity

100 litres

### Air Cleaner Type

Radial Seal 2-stage primary and secondary filters, both fed by a self cleaning pre-cleaner. The system has a dash mounted restriction indicator.

## HYDRAULIC SYSTEM

### Hydrostatic Drive System

Servo controlled Variable displacement closed loop system.

### Wheel Drive System

Robust, proven Bell planetary hub driven by high displacement radial piston motor with fail to safe spring applied hydraulically released multidisc wet brake.

### Wheel Drive Make & Model

Bell #24P

### Service Brake

Hydrostatic braking through the closed loop system.

### Hydraulic Implement Pump 1

#### Maximum Flow at Engine

#### Rated Speed

60,9 l/min

### Hydraulic Implement Pump 1

#### Maximum Intermittent Pressure

241 bar

### Hydraulic Implement Pump 1

#### Use

Mast lift & lower

### Hydraulic Implement Pump 2

#### Maximum Flow at Engine

#### Rated Speed

39,4 l/min

### Hydraulic Implement Pump 2

#### Maximum Intermittent Pressure

280 bar

### Hydraulic Implement Pump 2

#### Maximum Continuous Pressure

250 bar

### Hydraulic Implement Pump 2

#### Use

Attachment - Grab open/close and tilt.

### Tank

Integrated within the tubular frame

### Tank Capacity

140 litres

### Tank Breather

Remote to filler cap, 3 micron rating, 0.75 bar pressure.

### Hydraulic Cooler Air Fin Spacing

Easy to clean wide fin spacing.

## ELECTRICAL

### System

12 volt system with a single maintenance free battery mounted in the rear of the machine above the tail wheel.

### Alternator Output

12 v 80 Amp

### Starter Motor Rating

12 v 3,0 kW

### Fuse Box

Blade fuses located inside the cabin in the instrumentation box.

### Battery

Maintenance free gel filled battery 100 Amp Hour rating.

### Battery Isolator

Single pole type with lock out mounted onto the right hand side of the frame.

### Work Lights

8 lights in total. 4 Facing forwards, 2 facing rearwards, 1 facing side ways on each side of the frame.

### Strobe Light

Mounted on the rear of frame

### Interior lights

LED mounted inside the cab and inside the engine bay.

## ESTIMATED OPERATING WEIGHTS WITH STANDARD OPTIONS

### Unladen

Front:	3 764 kg
Rear:	1 206 kg
Total:	4 970 kg

Laden	Boom In	Boom Out
Front:	5 529 kg	5 784 kg
Rear:	533 kg	278 kg
Total:	6 062 kg	6 062 kg

### Working Load Limit

1 100 kg

### Tipping Load

1 210 kg

## GRAB

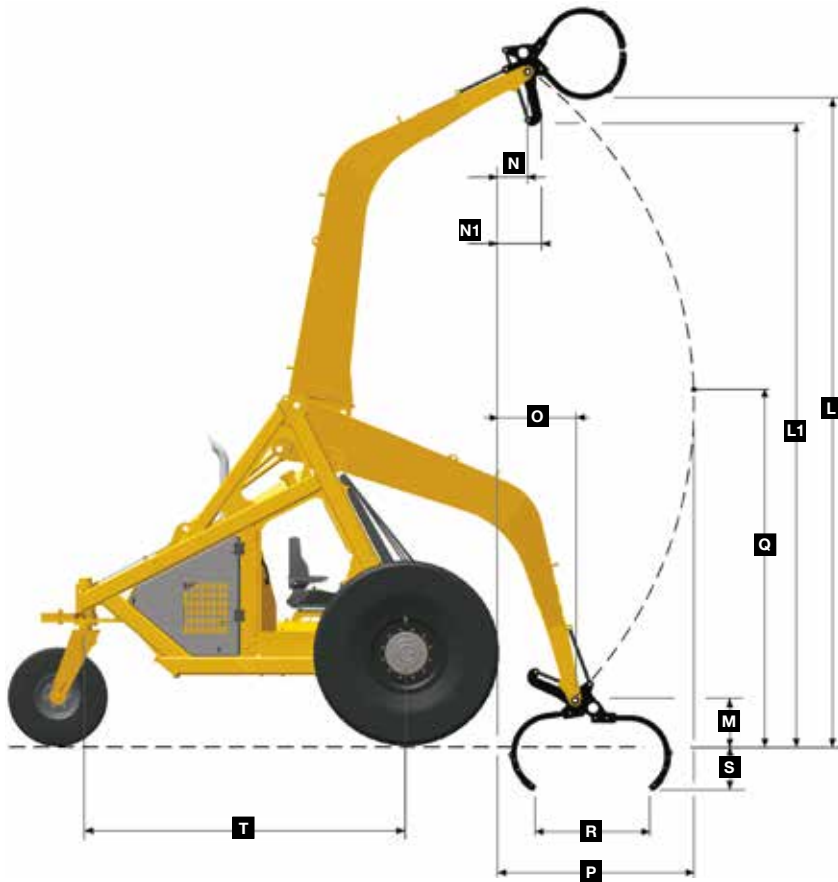
0,36 m² grab

Note: Tyre sizes indicated represent available tyres at printing. Please ensure your choice is available at time of ordering.

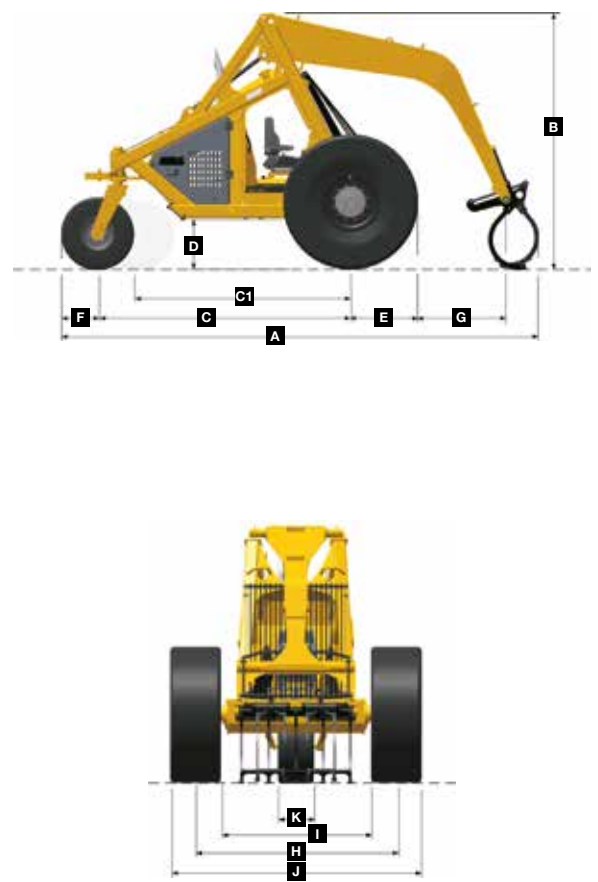
- Lowest cost per tonne solutions
- Low fuel consumption
- Low maintenance
- Designed for field and zone loading operations
- Efficient and productive loading

## I Dimensions

### OPERATING POSITION



### TRANSPORT POSITION



### MACHINE DIMENSIONS

A	Length - Transport Position with Grab Closed	5 720 mm	I3	18.4/15 x 30 (option 2)	1 846 mm
B	Height - Transport Position with Grab Closed	3 064 mm	I4	18.4 x 34 (Option 3)	1 851 mm
C	Front Axle Centre to Tailwheel Axle Centre	3 030 mm	I5	18.4 x 26 (Option 4 Dual Wheelset)	1 687 mm
C1	Front Axle Centre to Tailwheel Axle Centre	2 546 mm	J	Width over Tyres - Front	
D	Ground Clearance - Front Axle Box	582 mm	J1	18.4 x 26 (Std Wheelset)	2 746 mm
E	Front Tyre - Free Radius (Free Diameter)		J2	23.1 x 26 (Option 1)	2 746 mm
E1	18.4 x 26 (Std Wheelset)	(ø1 458) 729 mm	J3	18.4/15 x 30 (Option 2)	2 778 mm
E2	23.1 x 26 (Option 1)	(ø1 458) 729 mm	J4	18.4 x 34 (Option 3)	2 787 mm
E3	18.4/15 x 30 (Option 2)	(ø1 549) 774.5 mm	J5	18.4 x 26 (Option 4 Dual Wheelset)	3 675 mm
E4	18.4 x 34 (Option 3)	(ø1 675) 837.5 mm	K	Tyre Width - Tailwheel	
E5	18.4 x 26 (Option 4 Dual Wheelset)	(ø1 458) 729 mm	K1	400 x 15.5 (Std Wheelset)	385 mm
F	Tailwheel - Free Radius (Free Diameter)		K2	18 x 15.5 (Option 1)	450 mm
F1	400 x 15.5 (Std Wheelset)	(ø864) 432 mm	L	Load Over Height - Cane Grab Tines	5 629 mm
F2	18 x 15.5 (Option 1)	(ø980) 490 mm	L1	Load Over Height	5 399 mm
G	Reach-Grab Pivot @ Ground Level	1 061 mm	M	Grab Pivot Height - Boom Down Position	406 mm
H	Track Width - Front		N	Reach - Grab Pivot - Boom Up Position	245 mm
H1	18.4 x 26 (Std Wheelset)	2 279.5 mm	N1	Reach - Grab Boom Up Position	368 mm
H2	23.1 x 26 (Option 1)	2 279.5 mm	O	Reach - Grab Pivot - Boom Down Position	665 mm
H3	18.4/15 x 30 (Option 2)	2 312 mm	P	Maximum Reach - Grab Pivot	1 768 mm
H4	18.4 x 34 (Option 3)	2 319 mm	Q	Height - Grab Pivot @ Maximum Reach	2 969 mm
H5	18.4 x 26 (Option 4 Dual Wheelset)	2 681 mm	R	Grab Open	972 mm
I	Inside Tyre Width - Front		S	Maximum Reach - Below Ground	379 mm
I1	18.4 x 26 (Std Wheelset)	1 813 mm	T	Front Axle Centre to Tailwheel Pivot Centre	2 788 mm
I2	23.1 x 26 (Option 1)	1 813 mm			

NOTE: All dimensions are unladen values based on the Standard Wheelsets U.O.N  
Negative(-) dimension value denotes position below ground level or behind front of wheel, whichever is applicable.



## ENGINE & ANCILLARIES

Yanmar TNV98

### Configuration

4 cylinder

### Aspiration

Naturally aspirated

### Emission Level

Tier II

### Governed Power

45 kW

### Governed Speed

2 200 rpm

### Displacement

3 319 cc

### Fuel Filter Type

In-line water separator with separate spin on fuel filter.

### Fuel Filter

5 µm

### Coolant Capacity (Engine only)

4 litres

### Radiator

Easy access and easy to clean. Agricultural spec fine dust tolerant - wide fin spacing.

### Fuel Tank

Secure, lockable ground level filling. Integrated into lower section of the frame to keep a low centre of gravity.

### Fuel Tank Capacity

100 litres

### Air Cleaner Type

Radial Seal 2-stage primary and secondary filters, both fed by a self cleaning pre-cleaner. The system has a dash mounted restriction indicator.

## HYDRAULIC SYSTEM

### Hydrostatic Drive System

Servo controlled Variable displacement closed loop system.

### Wheel Drive System

Robust, proven Bell planetary hub driven by high displacement radial piston motor with fail to safe spring applied hydraulically released multidisc wet brake.

### Wheel Drive Make & Model

Bell #24P

### Service Brake

Hydrostatic braking through the closed loop system.

### Hydraulic Implement Pump 1

Maximum Flow at Engine

Rated Speed

60,9 l/min

### Hydraulic Implement Pump 1

Maximum Intermittent Pressure

241 bar

### Hydraulic Implement Pump 1

Use

Mast lift & lower

### Hydraulic Implement Pump 2

Maximum Flow at Engine

Rated Speed

39,4 l/min

### Hydraulic Implement Pump 2

Maximum Intermittent Pressure

280 bar

### Hydraulic Implement Pump 2

Maximum Continuous Pressure

250 bar

### Hydraulic Implement Pump 2

Use

Attachment - Mast tilt

### Tank

Integrated within the tubular frame

### Tank Capacity

140 litres

### Tank Breather

Remote to filler cap, 3 micron rating, 0.75 bar pressure.

### Hydraulic Cooler Air Fin Spacing

Easy to clean wide fin spacing.

## ELECTRICAL

### System

12 volt system with a single maintenance free battery mounted in the rear of the machine above the tail wheel.

### Alternator Output

12 v 80 Amp

### Starter Motor Rating

12 v 3,0 kW

### Fuse Box

Blade fuses located inside the cabin in the instrumentation box.

### Battery

Maintenance free gel filled battery 100 Amp Hour rating.

### Battery Isolator

Single pole type with lock out mounted onto the right hand side of the frame.

### Work Lights

8 lights in total. 4 Facing forwards, 2 facing rearwards, 1 facing side ways on each side of the frame.

### Strobe Light

Mounted on the rear of frame

### Interior lights

LED mounted inside the cab and inside the engine bay.

## ESTIMATED OPERATING WEIGHTS WITH STANDARD OPTIONS

### Unladen

Front: 4 567 kg

Rear: 2 211 kg

Total: 6 778 kg

### Laden

Front: 9 814 kg

Rear: 464 kg

Total: 10 278 kg

### Working Load Limit

3 500 kg

## FORKS

### Carriage

1,2 m wide

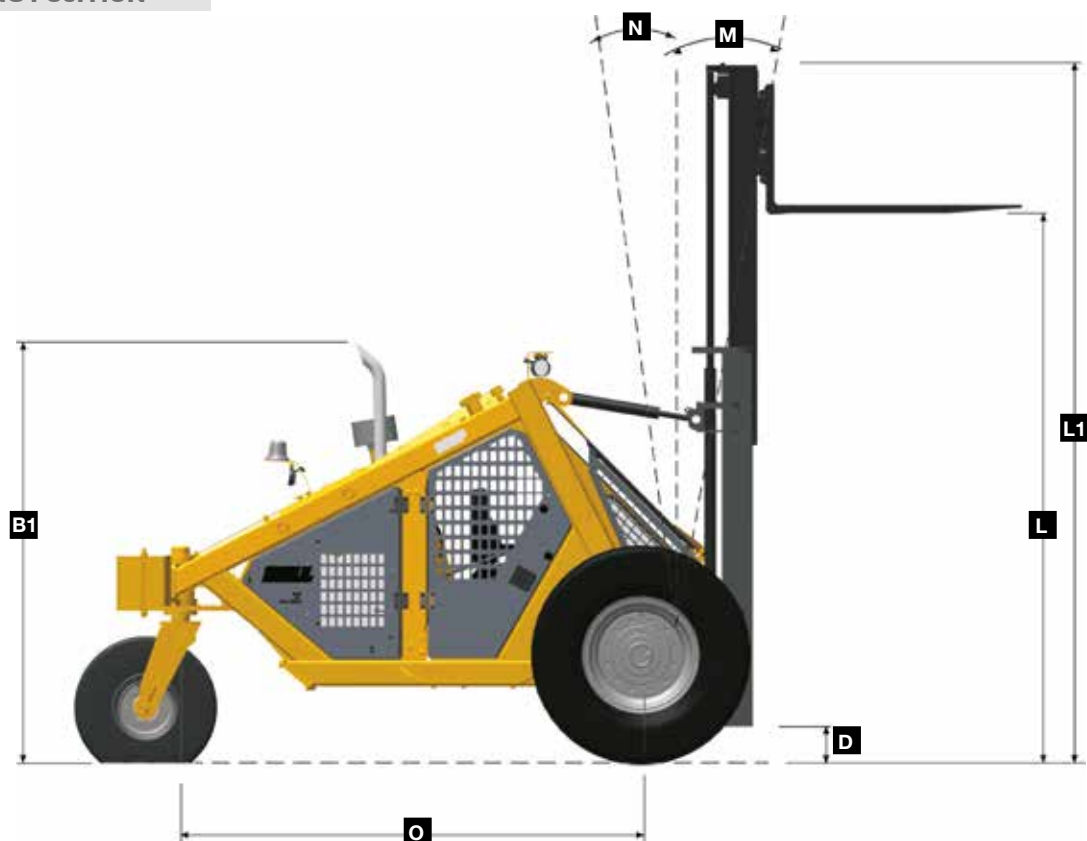
2,5 m wide (option)

Note: Tyre sizes indicated represent available tyres at printing. Please ensure your choice is available at time of ordering.

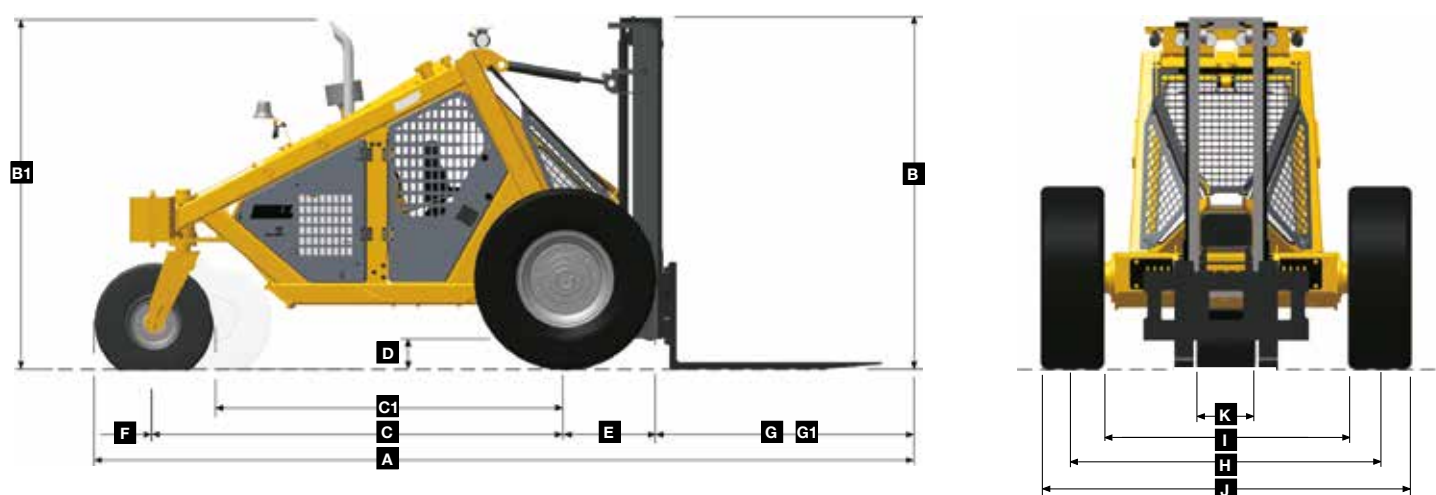
- 3.5 ton capacity
- Lowest cost per tonne solutions
- Low fuel consumption
- Low maintenance
- Designed for rough terrain operations
- Where agility and productivity are requirements

## I Dimensions

### OPERATING POSITION



### TRANSPORT POSITION



### MACHINE DIMENSIONS

A	Length-Transport Position - Standard Carriage	5 739 mm	G1	Reach - Wide Carriage	1 693 mm
A	Length-Transport Position - Wide Carriage	5 789 mm	H	Track Width - Front: 17.5 x 25	2 249 mm
B	Height - Mast - Transport Position	2 569 mm	I	Inside Tyre Width - Front: 17.5 x 25	1 787 mm
B1	Height - Exhaust - Transport Position	2 563 mm	J	Width over Tyres - Front: 17.5 x 25	2 711 mm
C	Front Axle Centre to Tailwheel Axle Centre	2 998 mm	K	Tyre Width - Tailwheel: 400 x 15.5	385 mm
C1	Front Axle Centre to Tailwheel Axle Centre	2 577 mm	L	Height - Fork Tines @ Maximum Reach	3 342 mm
D	Ground Clearance - Mast	231 mm	L1	Height - Mast @ Maximum Reach	4 238 mm
E	Front Tyre 17.5 x 25 - Free Radius (Free Diameter)	(1 348) 674 mm	M	Maximum Forward Tilt Angle	10°
F	Tailwheel: 400 x 15.5 - Free Radius (Free Diameter)	(864) 432 mm	N	Maximum Rearward Tilt Angle	7.5°
G	Reach-Standard Carriage	1 643 mm	O	Front Axle Centre to Tailwheel Pivot Centre	2 788 mm

NOTE: All dimensions are Unladen values based on the Standard Wheelsets U.O.N



## ENGINE & ANCILLARIES

Yanmar TNV98

### Configuration

4 cylinder

### Aspiration

Naturally aspirated

### Emission Level

Tier II

### Governed Power

45 kW

### Governed Speed

2 200 rpm

### Displacement

3 319 cc

### Fuel Filter Type

In-line water separator with separate spin on fuel filter.

### Fuel Filter

5 µm

### Coolant Capacity (Engine only)

4 litres

### Radiator

Easy access and easy to clean. Agricultural spec fine dust tolerant - wide fin spacing.

### Fuel Tank

Secure, lockable ground level filling. Integrated into lower section of the frame to keep a low centre of gravity.

### Fuel Tank Capacity

100 litres

### Air Cleaner Type

Radial Seal 2-stage primary and secondary filters, both fed by a self cleaning pre-cleaner. The system has a dash mounted restriction indicator.

## HYDRAULIC SYSTEM

### Hydrostatic Drive System

Servo controlled Variable displacement closed loop system.

### Wheel Drive System

Robust, proven Bell planetary hub driven by high displacement radial piston motor with fail to safe spring applied hydraulically released multidisc wet brake.

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Bell #24P

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Hydrostatic braking through the closed loop system.

### Hydraulic Implement Pump 1

#### Maximum Flow at Engine

#### Rated Speed

60,9 l/min

### Hydraulic Implement Pump 1

#### Maximum Intermittent Pressure

241 bar

### Hydraulic Implement Pump 2

#### Maximum Flow at Engine

#### Rated Speed

39,4 l/min

### Hydraulic Implement Pump 2

#### Maximum Intermittent Pressure

280 bar

### Hydraulic Implement Pump 2

#### Maximum Continuous Pressure

250 bar

### Tank

Integrated within the tubular frame

### Tank Capacity

140 litres

### Tank Breather

Remote to filler cap, 3 micron rating, 0.75 bar pressure.

### Hydraulic Cooler Air Fin Spacing

Easy to clean wide fin spacing

## ELECTRICAL

### System

12 volt system with a single maintenance free battery mounted in the rear of the machine above the tail wheel.

### Alternator Output

12 v 80 Amp

### Starter Motor Rating

12 v 3,0 kW

### Fuse Box

Blade fuses located inside the cabin in the instrumentation box.

### Battery

Maintenance free gel filled battery 100 Amp Hour rating.

### Battery Isolator

Single pole type with lock out mounted onto the right hand side of the frame.

### Work Lights

8 Lights in total

### Strobe Light

Mounted on the rear of frame

### Interior lights

LED mounted inside the cab and inside the engine bay.

## STANDARD FITTED

### OPTIONS

Cab doors

1 m³ G.P. bucket

Class 3 forks

Rear view mirrors

5 Counterweights

Q-fit system

## ESTIMATED OPERATING WEIGHTS WITH FORK OPTION

### Laden

Front: 8 339 kg

Rear: 133 kg

Total: 8 472 kg

### Unladen

Front: 4 330 kg

Rear: 2 066 kg

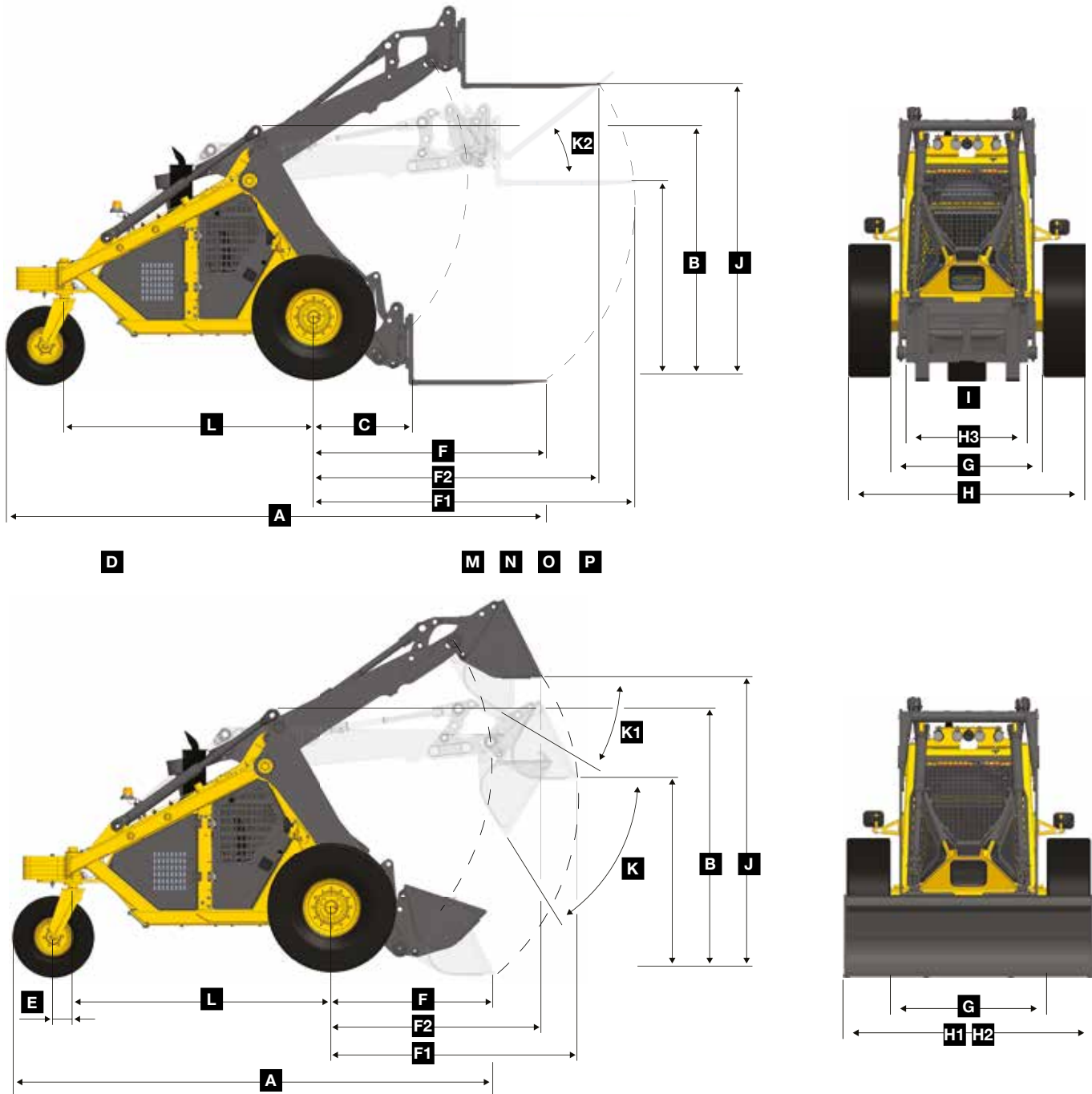
Total: 6396 kg

### Work Load Limit

1 930 kg

- Numerous job applications
- Excellent manoeuvrability
- Low fuel burn
- Low operating and maintenance costs
  - Low capital outlay
- Simple, strong & reliable
  - Pure parallel lift path
- ROPS/FOPS certified cabin
  - Quiet running
- Quick attach is compatible with popular attachment systems

## I Dimensions



### MACHINE DIMENSIONS

A	Length-Transport Position	5 175 mm	G	Inside Tyre Width - Front: 17.5 x 25	1 600 mm
A1	Length-Transport Position - forks	6 039 mm	H	Width over Tyres - Front: 17.5 x 25	2 570 mm
B	Height - Transport Position	2 780 mm	H1	Standard 1m <sup>3</sup> Shovel width	2 570 mm
C	Carriage from Axle centre	1 110 mm	H2	Optional 1m <sup>3</sup> Shovel width	2 150 mm
D	Front Tyre 17.5 x 25 - Free Radius (Free Diameter-1 348)	674 mm	H3	Fork carriage width	1 278 mm
E	Tailwheel: 400 x 15.5 - Free Radius (Free Diameter-864)	432 mm	I	Tyre Width - Tailwheel: 400 x 15.5	385 mm
F	Max reach @ ground level	1 744 mm	J	Load over height - Shovel	3 120 mm
	Max reach @ ground level - Forks	2 610 mm	J1	Load over height - Forks	3 250 mm
F1	Max reach	2 651 mm	K	Dump angle - Max reach	58°
	Max reach - Forks	3 597 mm	K1	Dump angle - Max height	31°
F2	Max reach @ Max lift	2 263 mm	K2	Tilt back angle - Forks	38°
	Max reach @ Max lift - Forks	3 196 mm	L	Front Axle Centre to Tailwheel Pivot Centre	2 788 mm

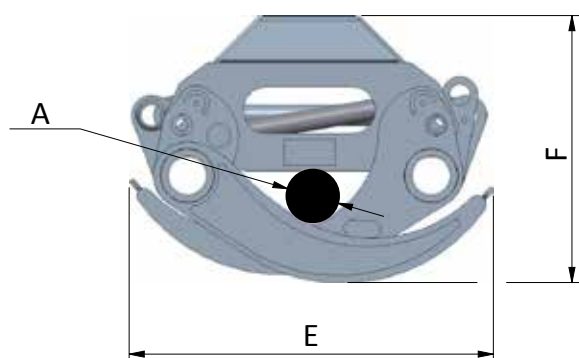
NOTE: All dimensions are Unladen values based on the Standard Wheelsets U.O.N



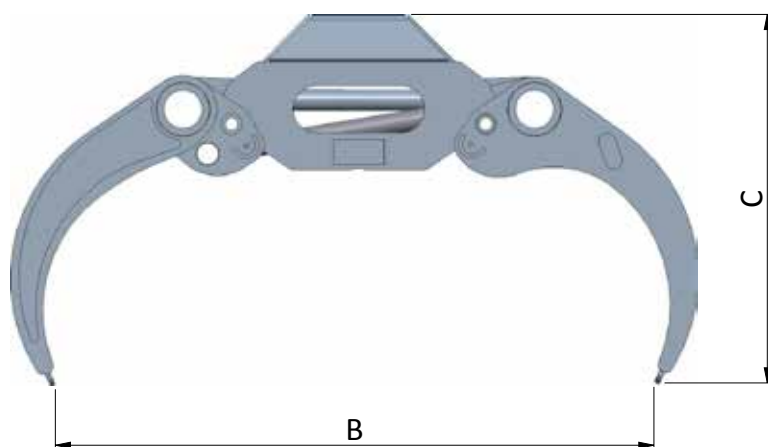
# Grapple Dimensions & Operating Weights

Bell Grapple Dimensions			
Dimensions in millimetres U.O.N			
		Bell LX36	Bell LX42
A	Min. Closed Diameter	106	111
B	Grapple Open	1 630	1 783
C	Grapple Height - Open	823	893
D	Grapple Height - Tip to Tip	983	1 066
E	Grapple Closed	948	1 040
F	Grapple Height - Closed	625	669
G	Width Outer Tines	448	448
Tip to Tip Area		0.36 m <sup>2</sup>	0.42 m <sup>2</sup>
Weight - No Damper		222 kg	247 kg

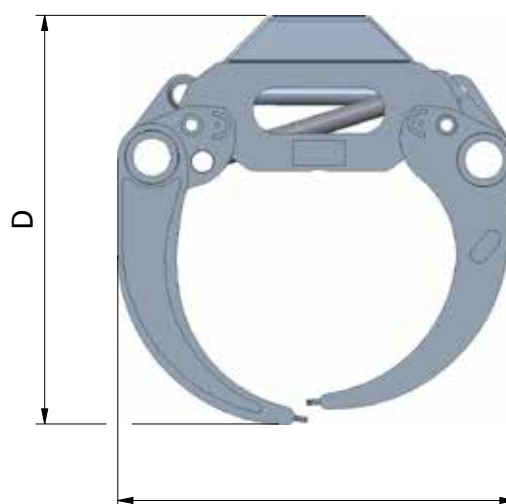
Operating Weights		
	Working Load Limit	Tipping Load
225F Crank Logger	1 273 kg	1 400 kg
225F HP Turbo Logger		
Boom In	1 568 kg	1 725 kg
Boom Out	1 051 kg	1 157 kg
125F Cane Loader	1 100 kg	1 210 kg
225F Forklift	3 500 kg	-
Versalift	1 930 kg	-



**GRAPPLE CLOSED POSITION**



**GRAPPLE OPEN POSITION**



**GRAPPLE TIP TO TIP POSITION**



225F Crank Logger	225F HP Turbo Logger	125F Cane Loader	225F Forklift	225F Versalift	CAB TRIM
●	▲	●	▲	▲	Basic option
▲	▲	▲	●	●	Cab doors (no glazing)
▲	▲	■	▲	▲	Windscreen & wiper/washer
▲	▲	■	▲	▲	Windscreen & wiper/washer with cab doors (no glazing in doors)
▲	●	■	▲	▲	Full Deluxe (full glazing)

- STANDARD
- ▲ OPTION
- NOT AVAILABLE



# Features and Options

● STANDARD ▲ OPTION - NOT AVAILABLE

225F Crank Logger	225F HP Turbo Logger	125F Cane Loader	225F Forklift	225F Versalift	
<b>FRONT WHEELSETS</b>					
●	▲	▲	▲	-	460/85-30 T410
▲	▲	●	▲	-	18.4 x 26 12 Ply
▲	▲	-	-	-	Dual, 18.4 x 26 12 Ply
▲	●	-	-	-	23.1-26 T418FS
-	-	-	●	●	17.5 x 25 Apollo Industrial
<b>REAR WHEELSETS</b>					
●	▲	●	▲	-	400/60-15.5 T404
▲	●	▲	-	-	18.0 x 15.5 EcoAgri
-	-	-	●	●	400/60-15.5 BKT TR822 14Ply
<b>SEAT</b>					
●	▲	●	●	●	Unsuspending Lap Belt
▲	●	▲	▲	-	Suspended
▲	▲	▲	▲	-	Unsuspending 4 Point Harness
<b>ATTACHMENT</b>					
●	▲	-	-	-	Bell LX36
▲	●	-	-	-	Bell LX42
-	-	●	-	-	Cane Grab
-	-	-	●	-	1.2m Carriage, 1.5m Forks Class B
-	-	-	-	●	Quick Attach Carriage, 1.5m Forks Class B
-	-	-	▲	-	2.5m Wide Carriage, 1.5m Forks Class B
-	-	POA	-	-	Fork-lift with Brick Clamp
-	-	POA	-	-	Fork-lift with Tyre Clamp
-	-	-	-	●	Quick Attach 1m³ Bucket, 2 570mm
-	-	-	-	▲	Quick Attach 1m³ Bucket, 2 150mm
<b>WORK LIGHTS</b>					
●	●	●	●	●	Halogen Lights
▲	▲	▲	▲	-	LED 1800L
▲	▲	▲	▲	-	LED 3500L
<b>BOOM</b>					
-	-	●	-	-	Cane Boom
●	▲	-	-	-	Crank Boom
▲	●	-	-	-	Tele Boom
▲	▲	-	-	-	Ext Tele Boom
-	-	-	-	●	Loader Frame
<b>COUNTER WEIGHT</b>					
▲	▲	●	▲	-	1 Weight
●	●	▲	▲	-	4 Weights
▲	▲	▲	▲	-	6 Weights
▲	▲	▲	●	-	7 Weights
-	-	-	-	●	5 Weights

225F Crank Logger	225F HP Turbo Logger	125F Cane Loader	225F Forklift	225F Versalift	
<b>MISCELLANEOUS</b>					
●	▲	●	●	●	Rear View Side Mirrors
▲	●	-	-	-	(Note: not available if Log Rest Option is selected)
▲	▲	▲	▲	▲	Log Rest
▲	▲	▲	▲	▲	Fire Extinguisher Bracket
<b>WARNING LIGHTS/INSTRUMENTATION</b>					
●	●	●	●	●	Hydraulic charge filter bypass
●	●	●	●	●	Engine oil pressure
●	●	●	●	●	Engine coolant temperature high
●	●	●	●	●	Hydraulic oil temperature high
●	●	●	●	●	Air cleaner blocked
●	●	●	●	●	Low fuel
●	●	●	●	●	Battery charge
●	●	●	●	●	Cold start
●	●	●	●	●	Park brake active
▲	▲	▲	▲	●	Reverse Camera
▲	▲	▲	▲	▲	Fleetm@tic®
<b>SWITCHES</b>					
●	●	●	●	●	Ignition (key)
●	●	●	●	●	Hour metre
●	●	●	●	●	Park brake
●	●	●	●	●	Horn
●	●	●	●	●	Interior lights
●	●	●	●	●	Cold start aid
●	●	●	●	●	Battery isolator
<b>SENSORS</b>					
●	●	●	●	●	Low fuel level
▲	▲	▲	▲	▲	Door open proximity switch (if doors are fitted)
●	●	●	●	●	Air cleaner blocked
●	●	●	●	●	Hydraulic charge filter bypass
●	●	●	●	●	Engine oil pressure
●	●	●	●	●	Engine coolant temp
●	●	●	●	●	Hydraulic oil temperature
▲	▲	▲	▲	▲	Reverse alarm
<b>CAB (see page 15 for details)</b>					
●	▲	●	▲	-	Basic option
▲	▲	▲	●	●	Cab doors (no glazing)
▲	▲	-	▲	▲	Windscreen and wiper/washer
▲	▲	-	▲	▲	Windscreen and wiper/washer with cab doors (no glazing in doors)
▲	●	-	▲	▲	Full deluxe (full glazing)
<b>LANGUAGE</b>					
●	▲	●	●	●	English
▲	▲	▲	▲	▲	French
▲	●	▲	▲	▲	Spanish


Please note that all information supplied in this brochure is intended to assist the customer in understanding the general applications of Bell Equipment's F-series machines.


Performance information is intended for estimating purposes only. Due to the many variables unique to individual operations such as weather, terrain, ground conditions, operator productivity, etc neither Bell Equipment Company nor its Dealers warrant that the machines described will perform as estimated.


Due to Bell Equipment's policy of constant product improvement, specifications are subject to change without notice.

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**Strong Reliable Machines  
Strong Reliable Support**

**BELL**