# 15/18/20BT-9U

3,000/3,500/4,000 lbs capacities Electric  $\cdot$  Three Wheel  $\cdot$  Pneumatic







# Get more of what you're looking for: THE BT-9U FROM HYUNDAI

The BT-9U Series of three wheel forklifts is designed to deliver outstanding maneuverability and performance in narrow aisles and cramped spaces. Beyond this, the BT-9U features outstanding operator comfort and wide array of innovative productivity and safety features. Thanks to its ZF drive package and Electric Power Steering (EPS) system it also offers greater energy efficiency that not only cuts downtime but operating costs. All of this comes in a rugged, durable machine engineered to deliver years of reliable service.

If you're looking for a forklift that can lift your entire business, check out the Hyundai BT-9U.



# MULTIFUNCTION CLUSTER OPTIMIZES PERFORMANCE

This advanced LCD monitor clearly displays essential operational information in real time, including speed, travel direction, and operating hours. There's also a load indicator that displays the load weight for greater safety, and more:

- Operators can select performance modes, including High, Normal and Economy, to meet differing work conditions
- This unique system also includes key warnings such as low brake oil and high temperature to safeguard the machine



# HIGH-PERFORMANCE LITHIUM-ION BATTERY

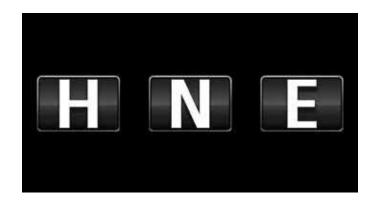
The optional Li-ion battery offers rapid charging in just 2 hours and opportunity charging that eliminates the need to swap batteries at shift changes, all while delivering outstanding performance, lower costs, and no daily maintenance, plus:

- Savings on your energy bills, more uptime, and reduced infrastructure costs
- Fast lifting and travel speeds at all levels of discharge while helping to reduce truck component wear



# RELIABLE, DURABLE ZF DRIVE PACKAGE

Renowned for its dependability, ZF is a global leader in the manufacturing of powertrains. The BT-9U features a ZF dual drive system that delivers excellent drawbar pull and a short turning radius. The brushless AC motors are virtually maintenance free, and the automatic electric parking brake brings a higher level of safety and require no physical operation.



# THREE OPTIMIZED PERFORMANCE MODES

To help you maximize performance and operating efficiency, the BT-9U offers three operating modes—High, Normal, and Economy—that can be set via the digital cluster. The High Performance mode offers fast driving and lifting speeds. The Normal Mode delivers balanced performance and energy consumption. The Economy Mode helps you maximize battery life.



# SPACIOUS OPERATOR COMPARTMENT

Operators will discover a compartment designed for greater comfort shift after shift along with controls that minimize fatigue and maximize productivity. Features include a suspension seat that adjusts to the operator's weight, optional fingertip controls, a turtle mode for working in narrow and congested spaces, and optional directional control on the lift lever for quick, precise maneuvering.



# **HI-MATE MANAGEMENT SYSTEM**

Hi-Mate is one of the industry's most advanced remote management system. With continuous data collection, Hi-Mate delivers more communication, control, and ability to track, monitor, maintain, and manage your forklift fleet. It is the proven way to efficiently coordinate both your equipment and human resources.

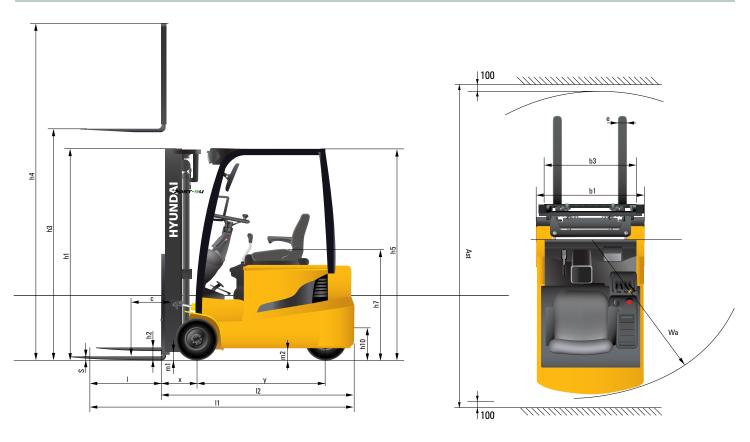
# The BT-9U Series brings you even more advantages.

- Electric Power Steering system operates only when the steering wheel is turned, reducing energy consumption and noise
- ZAPI AC controllers deliver superior driving performance
- Auto fork leveling system helps protect loads and improves productivity
- The BT-9U features easy battery replacement and mounting to reduce downtime

- Load weight indicator offers real-time data on the weight of loads and includes an overload warning for greater safety
- The Operator Presence Sensing System (OPSS) prevents driving, lifting, and tilting when the operator leaves the seat
- Anti-rollback system prevents the machine from rolling back after coming to a stop on inclines or slopes
- Curve control limits travel speed based on the turning radius for smooth, precise operation and greater security for the driver and the load
- Additional safety features include a strong overhead guard, LED lighting package, and an auto parking brake

3

# Dimensions



		Various Attachments		
Side Shift	Hinged Fork	Hinged Bucket	RotatingFork	PushPull
Rotating Roll Clamp	Load Stabilizer	Carton Clamp	Pallet Invert	Drum Clamp
Bale Clamp	Load Extender	Fork Positioner		

	Specifications								
denti	fication								
1.1	Manufacturer				Hyundai				
1.2	Manufacturer's Type Designation			15BT-9U	18BT-9U	20BT-9U			
1.3	Drive: Electric (Battery or Mains), Diesel, Petrol, Fuel Gas, Manual			Electric	Electric	Electric			
1.4	Type Of Operation : Hand, Pedestrian, Standing, Seated, Order-Picker			Seated	Seated	Seated			
1.5	Load Capacity / Rated Load	Q	lb	3,000	3,500	4,000			
1.6	Load Center Distance	С	in	24	24	24			
1.8	Load distance, center of front axle to fork	X	in	14.96	14.96	14.96			
1.9	Wheelbase	у	in	53	56.3	56.3			
Neigh		,			30.3	30.3			
2.1	Service Weight		lb	6,874	7,511	7,809			
2.2	Axle Loading, Loaded Front / Rear		lb	8,842 / 1,032	9,748 / 1,263	10,572 / 1,237			
2.3	Axle Loading, Unloaded Front / Rear		lb	3,646/3,228	3,838/3,673	3,804/4,005			
	s, Chassis		ID	3,040 / 3,220	3,03073,073	3,804/4,003			
3.1	Tires: Solid Rubber(V), Superelastic(SE), Pneumatic(P), Polyurethane(PE)			SE	SE	SE			
3.2	Tires Size, Front (Φ X Width)			18 x 7-8	200/50-10	200/50-10			
3.3	Tires Size, Rear (Φ X Width)			15 x 4.5-8	15 x 4.5-8	15 x 4.5-8			
3.5	Wheels, Number Front Rear (x=Driven Wheels)			2x/2	2x/2	2x/2			
3.6	Track Width, Front	b10	In	35.2	35.6	35.6			
3.7	Track Width, Rear	b11	in	7.24	7.24	7.24			
asic	Dimensions								
4.1	Mast/Fork Carriage Tilt Forward / Backward		deg	5/7	5/7	5/7			
4.2	Lowered Mast Height	h1	ln	83.5	83.5	83.5			
4.3	FreeLift	h2	In	1.5	1.5	1.5			
4.4	Lift Height	h3	In	131.1	131.1	131.1			
4.5	Extended Mast Height	h4	In	170.07	170.07	170.07			
4.7	Overhead Load Guard (Cab) Height	h5	In	81.29	81.29	81.29			
4.8	Seat Height / Standing Height	h7	In	42.91	42.91	42.91			
4.12	Coupling Height	h10	In	20.5	20.5	20.5			
4.12		III0	in	110.24	113.8				
	Overall Length					114.56			
4.20	Length to Face of Forks	12	In .	78.35	78.3	79.72			
4.21	Overall Width	b1	in	42.28	43.5	43.5			
4.22	Fork Dimensions	H×W×L	in	1.6 x 4.35 x 41.3	1.6 x 4.35 x 41.3	1.6 x 4.35 x 41.3			
4.23	Fork Carriage ISO 2328, Class / Type A,B			II/A	II/A	II/A			
4.24	Fork-Carriage Width (with backrest)	b3	in	39.6	39.6	39.6			
4.31	Ground Clearance, Under Mast	m1	in	3.5	3.5	3.5			
4.32	Ground Clearance, Center of Wheelbase	m2	In	3.74	3.74	3.74			
4.33	Aisle Width for Pallets 1000x1200 Crossways	Ast	in	127	130.55	131.92			
4.34	Aisle Width for Pallets 800x1200 Lengthways	Ast	in	131.88	135.43	136.81			
4.35	Turning Radius	Wa	in	60.62	64.17	65.35			
erfo	rmance Data								
5.1	Travel Speed, Loaded / Unloaded		mph	9.9 / 9.9	9.9 / 9.9	9.9 / 9.9			
5.2	Lift Speed, Loaded / Unloaded		ft/min	78.7 / 108.3	78.7 / 108.3	78.7 / 108.3			
5.3	Lowering Speed, Loaded /Unloaded		ft/min	108.3 / 88.6	108.3 / 88.6	108.3 / 88.6			
5.6	Max. Drawbar Pull, Loaded / Unloaded		lb	3,395 / 3,318	3,415 / 3,306	3,229.7 / 3,156			
5.8	Max. Gradient Performance, Loaded / Unloaded		%	29.5 / -	27.5 / -	24.5/-			
5.10	Service Brake		70	hydr.	hydr.	hydr.			
	& Battery			11301.	IIyan	nyan.			
	a Datter y		L	17.22	17.2 2	17.22			
61	Drive Motor Dating 52 60min	1	hp	17.3 x 2	17.3 x 2	17.3 x 2			
	Drive Motor Rating S2 60min		, 1	20.2	20.2				
6.2	Lift Motor Rating at S3 15%		hp	20.3	20.3	20.3			
6.2 6.4	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5		V/Ah	48 / 440	48 / 510	48 / 510			
6.4 6.5	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5  Battery Weight (min.)		V/Ah lb	48 / 440 1,742	48 / 510 2,094	48 / 510 2,094			
6.2 6.4 6.5	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5	L/W/H	V/Ah	48 / 440	48 / 510	48/510			
6.2 6.4 6.5 6.7	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5  Battery Weight (min.)	L/W/H	V/Ah lb	48 / 440 1,742	48 / 510 2,094	48 / 510 2,094			
6.2 6.4 6.5 6.7	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5  Battery Weight (min.)  Battery Compartment Dimensions	L/W/H	V/Ah lb	48 / 440 1,742	48 / 510 2,094	48 / 510 2,094			
6.2 6.4 6.5 6.7	Lift Motor Rating at S3 15%  Battery Voltage, Nominal Capacity K5  Battery Weight (min.)  Battery Compartment Dimensions  on Data	L/W/H	V/Ah lb	48 / 440 1,742 38.7 / 21.8 / 25.6	48 / 510 2,094 38.7 / 25.1 / 27.6	48 / 510 2,094 38.7 / 25.1 / 27.6			

	15BT-9U										
Mast Type		Maximum	Overall	Free Lift Height			Mas An	t Tilt gle	Load capacity without Sideshift	Load capacity with Sideshift	Tours le Walland
		Fork Height	Height (Lowered)	With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd	24in LC	24in LC	Truck Weight (Unloaded)
		in	in	in	in		deg	deg	lb	lb	lb
	V270	107.5	71.7				5	7	3,000	3,000	7,467
	V300	119.3	77.6				5	7	3,000	3,500	7,509
	V330	131.1	83.5				5	7	3,000	3,500	7,555
2-Stage Limited	V350	139	87.5	1.4	1.4	1.4	5	7	3,000	3,500	7,584
Free Lift	V370	146.9	91.4	14	1	1.4	5	7	3,000	3,500	7,610
	V400	158.7	97.3				5	7	2,950	3,410	7,665
	V450	178.3	111.1				5	5	2,840	3,500	7,813
	V500	198	120.9				5	5	2,750	3,500	7,888
2-Stage Full	VS300	119.3	77.6	38.3	59.3	51.6	5	5	3,000	3,500	7,595
Free Lift	VS330	131.1	83.5	44.2	59.3	51.6	5	5	3,000	3,500	7,641
	TF370	147.2	69.8	30.4	47.0	42	5	5	3,000	3,410	7,765
	TF400	159.1	73.7	34.3	51.3	45.8	5	5	2,930	3,320	7,809
	TF430	170.9	77.6	38.3	55.3	49.8	5	5	2,840	3,260	7,853
	TF450	178.7	81.6	42.2	61.2	55.7	5	5	2,800	3,190	7,895
	TF470	186.6	83.5	44.2	61.2	55.7	5	5	2,750	3,130	7,919
	TF500	198.4	87.5	48.1	59.6	59.6	5	5	2,640	3,060	7,963
	TF550	218.1	95.4	56.0	75	69.5	5	5	2,550	2,860	8,049
	TF600	237.8	103.2	63.9	82.8	77.3	5	5	2,420	2,310	8,190
3-Stage Full	TF650	257.5	111.1	71.7	89.9	84.5	3	3	1,850	2,090	8,287
Free Lift	TF700	277.2	119	79.6	97	91.5	3	3	1,340	1,580	8,373
	TS430	170.9	77.6	38.3	51.4	44.8	5	5	2,840	3,260	7,853
	TS450	178.7	81.6	42.2	57.3	50.6	5	5	2,800	3,190	7,895
	TS470	186.6	83.5	44.2	57.3	50.6	5	5	2,750	3,130	7,919
	TS500	198.4	87.5	48.1	61.3	54.6	5	5	2,640	3,060	7,963
	TS550	218.1	95.4	56.0	71.1	64.5	5	5	2,550	2,860	8,049
	TS600	237.8	103.2	63.9	79.0	72.3	5	5	2,420	2,310	8,190
	TS650	257.5	111.1	71.9	86.0	79.4	5	5	1,850	2,090	8,287
	TS700	277.2	119	79.6	93.0	86.5	5	5	1,340	1,580	8,373

 $Note: TS-Mast: Wide\ Visible\ 3-Stage\ Full\ Free\ Lift\ Mast\ with\ 2\ Free\ Lift\ Cylinders.$ 

Note: Standard

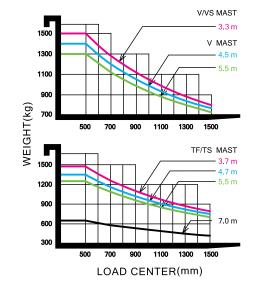
18BT-9U											
		Maximum	Overall	Free Lift Height			Mast Tilt Angle		Load capacity without Sideshift	Load capacity with Sideshift	Truck Weight
Mast Ty	Mast Type		Height (Lowered)	WithLoad Backrest Backrest (3/4-SPOOL)		Fwd	Bwd	24in LC	24in LC	(Unloaded)	
		in	in	in	in		deg	deg	lb	lb	lb
	V270	107.5	71.8				5	7	3,500	3,500	7,467
	V300	119.3	77.7				5	7	3,500	3,500	7,509
	V330	131.1	83.6				5	7	3,500	3,500	7,555
2-Stage	V350	139	87.6	4.			5	7	3,500	3,500	7,584
Limited Free Lift	V370	146.9	91.5	1.4	1.4	1.4 1.4	5	7	3,500	3,500	7,610
	V400	158.7	97.4				5	7	3,500	3,410	7,665
	V450	178.3	111.2				5	5	3,500	3,500	7,813
	V500	198	121				5	5	3,500	3,500	7,888
2-Stage Full	VS300	119.3	77.7	38.6	58.2	52.7	5	5	3,500	3,500	7,595
Free Lift	VS330	131.1	83.6	44.5	58.2	58.6	5	5	3,500	3,500	7,641
	TF370	147.2	69.8	30.7	47.4	41.9	5	5	3,500	3,410	7,765
	TF400	159.1	73.8	34.7	47.4	45.9	5	5	3,460	3,320	7,809
	TF430	170.9	77.7	38.6	47.4	49.8	5	5	3,370	3,260	7,853
	TF450	178.7	81.7	42.5	61.2	55.7	5	5	3,320	3,190	7,895
	TF470	186.6	83.6	44.5	61.2	55.7	5	5	3,260	3,130	7,919
	TF500	198.4	87.6	48.5	65.2	59.5	5	5	3,170	3,060	7,963
	TF550	218.1	95.4	56.3	75	69.5	5	5	2,970	2,860	8,049
	TF600	237.8	103.3	64.2	82.9	77.4	5	5	2,420	2,310	8,190
3-Stage Full	TF650	257.5	111.2	72.1	90.0	84.4	3	3	2,180	2,090	8,287
Free Lift	TF700	277.2	119.1	80	98.4	92.9	3	3	1,670	1,580	8,373
	TS430	170.9	77.7	38.6	51.5	44.8	5	5	3,370	3,260	7,853
	TS450	178.7	81.7	42.6	57.4	50.7	5	5	3,320	3,190	7,895
	TS470	186.6	83.6	44.5	57.4	50.7	5	5	3,260	3,130	7,919
	TS500	198.4	87.6	48.5	61.3	54.6	5	5	3,170	3,060	7,963
	TS550	218.1	95.4	56.3	71.1	64.4	5	5	2,970	2,860	8,049
	TS600	237.8	103.3	64.2	79.0	72.3	5	5	2,420	2,310	8,190
	TS650	257.5	111.2	72.1	86.1	79.4	5	5	2,180	2,090	8,287
	TS700	277.2	119.1	80.0	93.2	86.5	5	5	1,670	1,580	8,373

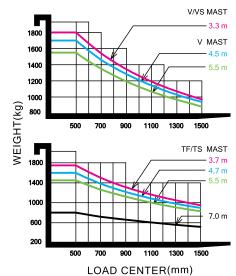
	20BT-9U										
Mast Type		Maximum	Overall	Free Lift Height			Mast Tilt Angle		Load capacity without Sideshift	Load capacity with Sideshift	Truck Waight
		Fork Height	Height (Lowered)	With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd	24in LC	24in LC	Truck Weight (Unloaded)
		in	in	in	in		deg	deg	lb	lb	lb
	V270	107.5	71.8				5	7	4,000	3,900	7,762
	V300	119.3	77.7				5	7	4,000	3,900	7,804
	V330	131.1	83.6				5	7	4,000	3,900	7,851
2-Stage Limited	V350	139	87.6	1.6	1.6	1.6	5	7	4,000	3,900	7,879
Free Lift	V370	146.9	91.5	1.0	1.0	1.0	5	7	4,000	3,900	7,906
	V400	158.7	97.4				5	7	3,960	3,810	7,961
	V450	178.3	111.2				5	5	3,770	3,630	8,108
	V500	198	121				5	5	3,660	3,540	8,183
2-Stage Full	VS300	119.3	77.7	38.8	59.7	52.9	5	5	4,000	3,900	7,890
Free Lift	VS330	131.1	83.6	44.7	59.7	58.8	5	5	4,000	3,900	7,937
	TF370	147.2	69.8	30.9	47.6	42.1	5	5	3,960	3,830	8,060
	TF400	159.1	73.8	34.9	51.6	46.1	5	5	3,880	3,720	8,104
	TF430	170.9	77.7	38.8	55.5	50.0	5	5	3,770	3,660	8,148
	TF450	178.7	81.7	42.8	61.4	55.9	5	5	3,720	3,590	8,190
	TF470	186.6	83.6	44.7	61.4	55.9	5	5	3,680	3540	8,214
	TF500	198.4	87.6	48.7	65.4	59.8	5	5	3,720	3,460	8,258
	TF550	218.1	95.4	56.5	75.2	69.7	5	5	3,480	3,370	8,344
	TF600	237.8	103.3	64.4	83.1	77.6	5	5	3,200	3,080	8,485
3-Stage Full	TF650	257.5	111.2	72.3	90.2	84.6	3	3	2,645	2,535	8,582
Free Lift	TF700	277.2	119.1	80.2	98.6	93.1	3	3	2,180	2,110	8,668
	TS430	170.9	77.7	38.8	51.7	45.0	5	5	3,770	3,660	8,148
	TS450	178.7	81.7	42.8	57.6	50.9	5	5	3,720	3,590	8,190
	TS470	186.6	83.6	44.7	57.6	50.9	5	5	3,680	3,540	8,214
	TS500	198.4	87.6	48.7	61.5	54.8	5	5	3,570	3,460	8,258
	TS550	218.1	95.4	56.5	71.3	64.6	5	5	3,480	3,370	8,344
	TS600	237.8	103.3	64.4	79.2	72.5	5	5	3,200	3,080	8,485
	TS650	257.5	111.2	72.3	86.3	79.6	3	3	2,645	2,535	8,582
	TS700	277.2	119.1	80.2	93.4	86.7	3	3	2,180	2,110	8,668

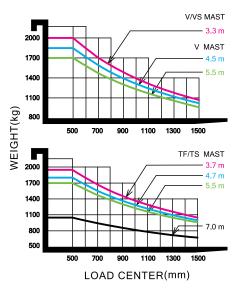
 $Note: \ TS-Mast: Wide\ Visible\ 3-Stage\ Full\ Free\ Lift\ Mast\ with\ 2\ Free\ Lift\ Cylinders.$ 

Note: Standard

Load Capacity						
15BT-9U	18BT-9U	20BT-9U				







# **Options**

# Carriage

Integral Sideshift

# Fork Length (in)

 • 35.4 (std)
 • 47.2

 • 37.4
 • 53.2

 • 39.4
 • 59.1

 • 41.3
 • 63

• 45.3

### Fork

· Auto Fork Leveling

#### Leve

Fingertip Control

· Direction Switch on Lever

### Tire

• Non-marking / Wide tire [(15BT-9U) : Front tire (200 / 50-10)]

Cold Storage for -30° cold working environments

### MCV

- · 2-Spool (STD)
- · 3-Spool
- · 4-Spool

# UL

- · ES
- · EE

# Beacon Lamp

Load Indicator

Cabin







