

UNICARRIERS®

□ FORKLIFT □

RPX Series



Walkie/Rider Pallet Trucks

24 Volt AC-Powered

6,000 & 8,000 lbs. Capacities

S P E C I F I C A T I O N S

MAIN TRUCK SPECIFICATIONS

CHARACTERISTICS	1	Manufacturer's Name		UniCarriers	UniCarriers	
	2	Model	Model designation	RPX60B	RPX80B	
	3	Long model code		RPXT2W2G60BV	RPXT2W2G80BV	
	4	Rated Load Capacity	Equally distributed load	lb (kg)	6000 (2720)	8000 (3630)
FORKS	5	Power Type	Electric		24v	24v
	6	Operator Type			Walkie / Rider	Walkie / Rider
	7	Tire Type	Drive tire		Solid Rubber	Solid Rubber
	8		Caster Wheels		Poly	Poly
DIMENSIONS	9		Load Wheels		Dyalon® A Poly	Dyalon® A Poly
	10	Wheels	Drive/caster/load	(x=driven)	1x / 2 / 2	1x / 2 / 2
	11	Fork Size	Outside spread	in (mm)	27 (685)	27 (685)
	12	Fork Height	Raised position	in (mm)	9.25 (235)	9.25 (235)
SPEED	13		Lowered position	in (mm)	3.25 (82.5)	3.25 (82.5)
	14	Individual Fork Width		in (mm)	9.25 (235)	9.25 (235)
	15	Overall Dimensions	Head length	in (mm)	42.7 (1085)	42.7 (1085)
	16	Width	Chassis	in (mm)	35.6 (905)	35.6 (905)
BATTERY	17	Tires / Wheels	Drive tire - dia. x width	in (mm)	10 x 5 (254 x 127)	10 x 5 (254 x 127)
	18		Caster wheels - dia. x width	in (mm)	5 x 2.5 (127 x 64)	5 x 2.5 (127 x 64)
	19		Load wheels - dia. x width	in (mm)	3.25 x 6 (83 x 152)	3.25 x 6 (83 x 152)
	20	Speed - Travel	No load	mph (kph)	9.1 (14.6)	9.1 (14.6)
BATTERY	21		Full load	mph (kph)	6.6 (10.6)	6.1 (9.8)
	22	Speed - Lift / Lower	No load	sec.	3.6 / 5.1	3.6 / 5.1
	23		Full load	sec.	5.1 / 4.8	6.1 / 4.7
	24	Compartment Size*	Length x Width x Height	in (mm)	31.8 x 13 x 31.6 (810 x 330 x 803)	
BATTERY	25	Amp Hr Capacity	Max (6-hr)	Ah	840	840
	26	Weight	Min / Max	lb (kg)	900 / 1500 (410 / 680)	900 / 1500 (410 / 680)
	27	Lead Length	Position "B"	in (mm)	20 (508)	20 (508)
	28	Connector		type	SB-175 Red	SB-175 Red
	29	Battery Roller (Option)	Height from floor (forks lowered)	in (mm)	7.9 (200)	7.9 (200)

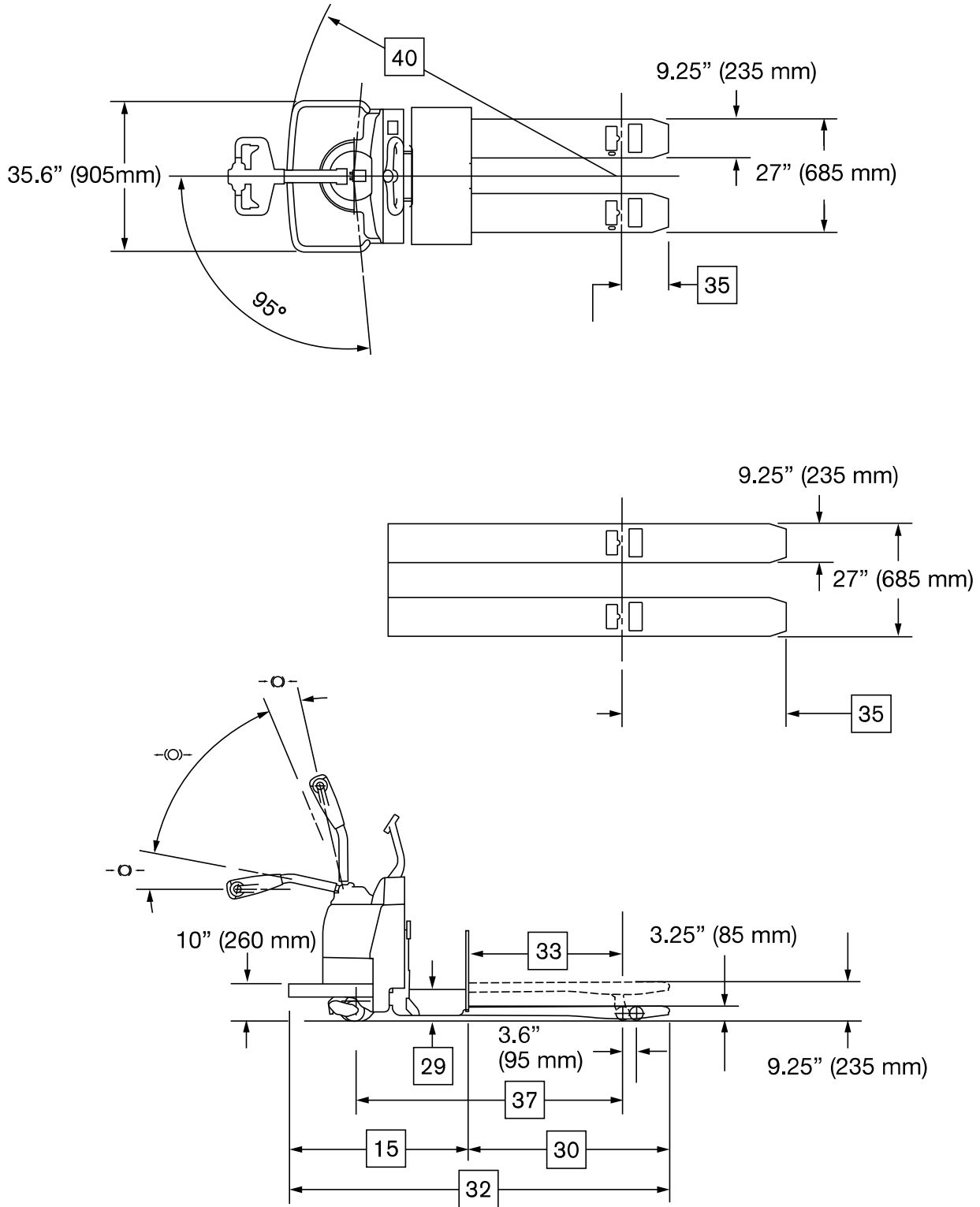
*Battery compartment size with adjustable retainers - 30.9 x 13 x 31.6 (785 x 330 x 803); With optional rollers and side gates: 31.1 x 13 x 32 (790 x 330 x 815)

AISLE SPECIFICATIONS

SPECIFICATIONS				Single Pallet			Double Pallet		
SPECIFICATIONS	30	Fork Length	Nominal	in (mm)	36 (915)	42 (1065)	48 (1220)	84 (2135)	96 (2440)
	31		Actual	in (mm)	36 (914)	42 (1067)	48 (1219)	84 (2135)	95.9 (2435)
	32	Over Truck Length		in (mm)	78.8 (2000)	84.8 (2155)	90.8 (2305)	126.8 (3220)	138.8 (3530)
	33	Face of Forks to Center	Forks raised	in (mm)	24.4 (620)	30.4 (770)	36.4 (925)	56.5 (1435)	56.5 (1435)
	34	of Load Wheel	Forks lowered	in (mm)	28.0 (710)	34.0 (865)	40.0 (1015)	60.1 (1525)	60.1 (1525)
	35	Center of Load Wheel	Forks raised	in (mm)	11.3 (290)	11.4 (290)	11.4 (290)	27.2 (690)	39.2 (995)
	36	to Tip of Forks	Forks lowered	in (mm)	7.7 (195)	7.7 (195)	7.7 (195)	23.6 (605)	35.6 (905)
	37	Wheelbase	Forks raised	in (mm)	51.6 (1310)	57.6 (1465)	63.6 (1615)	83.5 (2120)	83.5 (2120)
	38		Forks lowered	in (mm)	55.2 (1405)	61.2 (1555)	67.2 (1710)	87.1 (2215)	87.1 (2215)
	39	Grade Clearance	Forks raised (with pallet)	%	36.4	32.5	29.4	22.4	22.4
	40	Turning Radius		in (mm)	68.0 (1730)	73.9 (1875)	79.7 (2025)	99.5 (2530)	99.5 (2530)
	41	Right Angle Stacking Aisle*	40", 42", 48" Load Width	in (mm)	78.0 (1980)	84.0 (2130)	90.0 (2285)	128.0 (3230)	140.0 (3540)
	42	90° Equal Intersecting Area*	40" Load Width	in (mm)	66.2 (1685)	69.3 (1760)	72.4 (1840)	83.6 (2125)	84.7 (2155)
	43		42" Load Width	in (mm)	67.2 (1710)	70.3 (1785)	73.4 (1865)	84.6 (2150)	85.8 (2180)
	44		48" Load Width	in (mm)	70.3 (1785)	73.4 (1865)	76.2 (1945)	87.8 (2230)	88.9 (2260)
45	Truck Weight	No load, without battery	lb (kg)	1110 (505)	1140 (515)	1165 (530)	1305 (590)	1340 (610)	

*Add 6-8" for ease of operation. Includes 1" clearance on each side of load.

DIMENSIONS



STANDARD EQUIPMENT

- 24-volt electrical system
- Brushless AC drive motor and DC pump motor
- Electronic motor controller system with AC inverter
- Digital CAN-bus communications
- Cold storage conditioning
- Programmable performance parameters (requires service handset)
- Ergonomic control handle with thumb or fingertip actuated rotary travel speed and directional controls
- Fingertip control of electronic lift, lower, and horn buttons
- Cruise control with anti-tapedown
- Large operator platform with cushioned mat
- Electric horn
- Multi-function digital indicator
 - Battery discharge indicator with lift interrupt
 - Hour meter gauge: traction, lift, combined traction & lift
 - Fault code display
- On/off key switch
- Large reversing switch in handle
- Adjustable battery retainers
- SB-175 red battery connector
- Rubber drive tire (10" x 5") with string guard
- Heavy-duty, spring-loaded poly caster wheels (5" x 2½") with string guards
- Dyalon® "A" load wheels: 3¼" x 6" with string guards
- Regenerative braking
- Spring applied/electronically released brake system
- Sealed switches and controller for wet, cooler and freezer applications
- Return oil filter in hydraulic system
- Motor and controller thermal protection
- Powder-coat paint finish

OPTIONAL EQUIPMENT

- Multi-function LCD display with:
 - PIN access
 - Selectable performance modes
 - BDI and speedometer
 - On-board diagnostics and troubleshooting
- Magnetic mount convenience tray with stretch wrap holder
- Accessory pole available with single or dual LED work light, strobe, operator fan, accessory clamp, acrylic clipboard
- Manual coast control
- Sidetracker (requires coast control)
- Fork auto-lift function to 2½" height upon release of lower button
- On/off toggle switch¹
- Non-slip platform coating¹
- Extended skirt with cushioned or non-slip platform²
- Tilt-down load backrest (35°) with EZ release³
- Slip on/off load backrest³
- Weld-on or bolt-on load backrest³
- Battery compartment rollers with side gates
- Battery gate interlock switches
- Travel alarm
- Stainless steel axles and linkage pivot pins
- Water resistant package⁴ (electrical component protection)
- Vulkollan® load wheels
- Non-marking rubber, traction treaded rubber or flat poly drive tire options
- Lithium-Ion Battery and Charger Options Available

¹ Available at no charge.

² For use on level floors only. Ground clearance 2.3" (60mm)

³ Available in 48" (1220mm) or 60" (1525mm) height.

⁴ Does not protect against high pressure water spray.

ERGONOMICS & COMFORT

The light, spring-loaded design of our RPX Series' steer handle requires less effort, and allows operators to find their ideal operating position. A full 190° steering range enables smoother navigation within tight spaces.

Ergonomic layout of the truck's control head includes rotary-thumb travel speed controls, which can be operated from either side. Ergonomic placement of lift, lower and horn buttons provides intuitive fingertip control. Soft-touch switches also simplify load lifting and lowering.

Standard cruise control allows operator to maintain high-speed travel, without the need to continuously hold down button. Optional coast control allows operator to let the truck coast for more efficient order picking. Optional feature is actuated by a manual toggle lever at the base of the handle.

Rubber padded, intermediate high speed handrail features thick tubular construction for greater dependability. Large, sealed buttons provide operator with greater control of fork raise/lower and truck high speed travel commands, as well as horn functions. It's bolted to the truck frame for faster replacement or repair.

The RPX is designed with the largest operator platform in the industry. Combined with a compact hood design, operators have several comfortable positions, to reduce fatigue and promote sustained productivity. Soft, cushioned platform mat provides added comfort.

EFFICIENCY & CONTROL

Advanced motor controller/AC inverter electronically distributes power as needed to the AC drive motor or DC pump motor. System offers programmable regenerative neutral braking and proportional plugging. Its AC design eliminates forward and reverse contactors, with electronic travel speed control for precise, efficient performance.

An optional multi-function LCD includes three hour meters and Personal Identification Number (PIN) codes to restrict truck access for greater fleet control. It provides access to customized performance settings and displays a battery discharge indicator with graphic representation of the remaining battery charge. The optional feature also offers on-board diagnostics and troubleshooting without the need for a separate hand tool.

EFFICIENT PERFORMANCE & GREATER UPTIME

Heavy-duty 5.2 Hp, brushless, three phase AC drive motor, provides high power and torque to handle tough applications. Motor delivers peak performance throughout the battery range. Longer run times per battery charge are achieved by using less energy per cycle.

RPX includes an IP65 rated sealed controller. Sealed switches and logic boards allow operation in multiple environments including coolers, wet rooms and freezers down to -20°F (-28.9°C).

Digital CAN communication between the controller and control handle uses just four wires in the control handle harness to send multiple signals. Hall Effect speed and acceleration control sensor simplifies maintenance and limits downtime due to its non-contact design with fewer moving parts, and no mechanical wiping action, potentiometers, or heaters. Elimination of directional and lift contactors combined with enhanced thermal capabilities mean optimum performance and minimal downtime.

Electrical braking system uses regenerative motor torque prior to disc brake actuation, for less component wear and longer life. The spring-applied/electronically released disc brake system eliminates the need for adjustments. Brake actuation occurs when the handle is in the upper and lower braking range.

LITHIUM-ION BATTERY POWER OPTIONS AVAILABLE

Smart power solutions are designed to communicate directly with the truck for increased efficiency and results. Maintenance-free, which reduces the total cost of ownership and downtime from traditional lead-acid batteries. Lithium-ion batteries are covered by a 6-year, 3,600-cycle with 75% residual capacity.

RUGGED FORK ASSEMBLY

Forks are 9¼" wide, constructed from ¼" plate steel, and designed with a reinforced tip for extra durability. Tapered ¼" steel fork slides facilitate pallet entry and exit without the use of entry rollers or discs. Various lengths available for both double and single pallet fork options. All come with a standard 27" wide fork spread.

Steel push rods are constructed from 1½" x 1½" solid bar stock to absorb high impact shocks caused by dock boards and dock plates and never need replacing. Push-type design achieves full 6" of lift without tie rods extending beyond the fork plane, preventing the possibility of damage and reducing maintenance costs.

Tie rods are positively aligned and pinned, so no field adjustments are required. Full-length, angle iron reinforcements enhance strength to reduce torsion, for increased durability and longer life. Each fork extends under the battery box for greater strength.

DURABLE DESIGNS

The RPX Series is manufactured with a rugged frame for tough applications. Powder coat paint, inside and out, delivers a durable, high gloss, scratch resistant finish. Heavy-duty integrated lift system (DC motor, lift pump and fluid reservoir) includes a check valve and flow regulator. Lift limit switch is not needed since the controller cuts the pump. Return line filtering protects the system against environmental contaminants. A quiet, spiral beveled gear drive system with sealed ball bearings provides solid performance with low steer effort.

LOWER OPERATING COSTS

Brushless AC drive motor uses fewer components and requires less maintenance for lower operating costs. Easily accessible, rotation sensing encoder is externally mounted on the drive motor for simplified replacement. Motor and controller feature thermal protection system to slow or shut down truck in response to high temperatures.

Unique steer race and enclosed frame design help keep major components (such as drive motor, controller and hydraulic system) free from debris kicked up by the drive tire for less maintenance and longer life. Heavy-duty caster wheel design uses single-point height adjustment and angled side bracket to prevent plate hang-ups. Accessible grease fittings on swivel and axle promote routine maintenance.

One-piece cover with two-bolt removal makes access to the drive unit, and major components quick and easy. Five nut removal of the drive tire simplifies replacement when needed. All lubrication fittings are easily accessible with the truck upright and the battery in place.

Optional auto-lift feature ensures forks are lifted 2.5" during operation, providing ample clearance to reduce pallet and or load carry component damage.

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