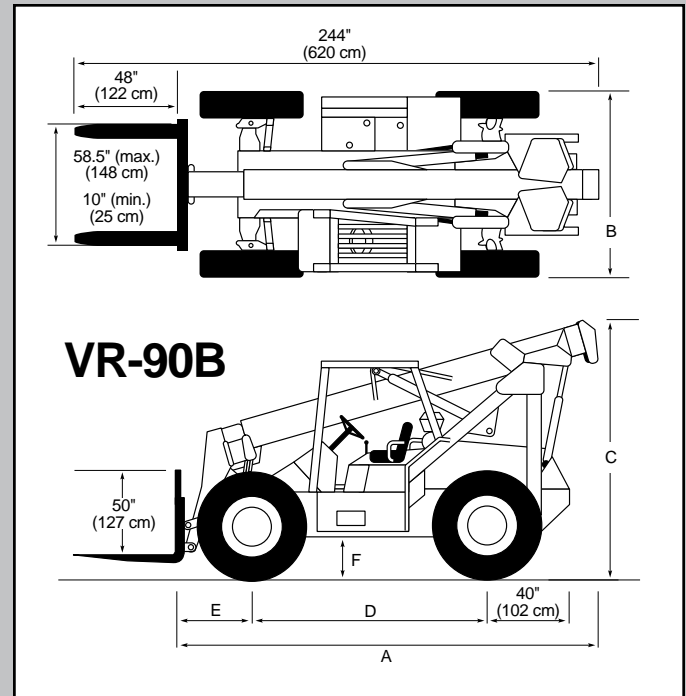


# INGERSOLL-RAND®

## VR-90B Telescopic Material Handlers

### Specifications

Overall length (less forks)	<b>A</b>	196.0"	(498 cm)
Overall width	<b>B</b>	97.5"	(248 cm)
Overall height	<b>C</b>	113.0"	(287 cm)
Wheelbase	<b>D</b>	108.0"	(274 cm)
Reach:			
Drive axle to carriage front	<b>E</b>	36.0"	(91 cm)
Ground clearance	<b>F</b>	16.0"	(40 cm)
Tread width		83.0"	(211 cm)
Frame leveling		±12° each side	
Shipping weight		22,350 lbs.	(10,147 kg)
Turning radius:			
Inside		89.0"	(226 cm)
Outside		179.0"	(455 cm)
Steering wheel turns:			
Stop to stop			4 turns
Top travel speeds:			
Range 1		0–3.1 mph	(0–5.0 kph)
Range 2		0–5.6 mph	(0–9.0 kph)
Range 3		0–15.9 mph	(0–25.6 kph)



### Standard Equipment

<b>ENGINE:</b>			
Perkins 1004-4T		Turbo diesel	
4 cylinder		284 cu. in. (3982 cu. cm)	
Horse power		108 @ 2400 rpm	
Torque (ft-lb.)		284 @ 1400 rpm	
<b>TRANSMISSION:</b>			
Type		3-speed Powershift with inching	
Range		3 speeds forward and reverse	
<b>DRIVE AXLES:</b>			
Front & Back		All wheel drive	
Type		Planetary steering	
<b>BRAKES:</b>			
Service		4-wheel enclosed wet disc	
Parking		Disc, hand applied	
<b>TIRES:</b>			
Front		13.00 x 24, 12 ply	
Rear		13.00 x 24, 12 ply	
<b>ELECTRICAL:</b>			
Negative ground		12 volts	
Alternator		65 amps	
Battery		1000 amps	
Backup alarm		102 dBA audible	
<b>STEERING:</b>			
3 modes		2-wheel, crab and coordinated	
<b>SYSTEMS CAPACITIES:</b>			
Cooling		24 qt.	(20.2 l)
Crankcase		9 qt.	(8.5 l)
Transmission		28 qt.	(17.4 l)
Drive axle		15.2 qt.	(12.3 l)
Planetary end (1 end)		1 qt.	(.95 l)
Fuel tank		36 gal.	(136.3 l)
Hydraulic system		26 gal.	(98.4 l)
<b>HYDRAULIC SYSTEM:</b>			
Pump, variable displacement piston		29 gpm @ 2650 psi	
<b>GAUGES:</b>			
Oil pressure		Water temperature	Fuel level
Voltmeter		Transmission oil temp.	Hourmeter
<b>INDICATORS/ACCESSORIES:</b>			
Low pressure brake (light)		Air cleaner restriction	
Frame level indicator		Boom angle indicator	
Back up alarm		Horn & seat belt	
Park brake light		Oil filter light	

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# VR-90B Specifications

## RATED LOAD CAPACITY:

Boom retracted (at max. angle)	9000 lbs.	(4082 kg)
Boom extended (at max. angle)	8000 lbs.	(3628 kg)
Boom extended (at max. reach)	2250 lbs.	(1020 kg)
Max. boom angle	65°	
Side leveling	21%	

Note: Capacities are to ASME B56.6-92.

## OPERATING SPECIFICATIONS:

Max. lift capacity	9000 lbs.	(4082 kg)
Max. lift height	37'	(9.40 m)
Max. forward reach (from front of tires)	21' 5"	(6.53 m)
Boom extension	19'	(5.79 m)
Max. vert. reach below grade	4' 11"	(1.50 m)
Max. reach at max. ht. (from front of tires)	4' 8"	(1.42 m)

## BOOM:

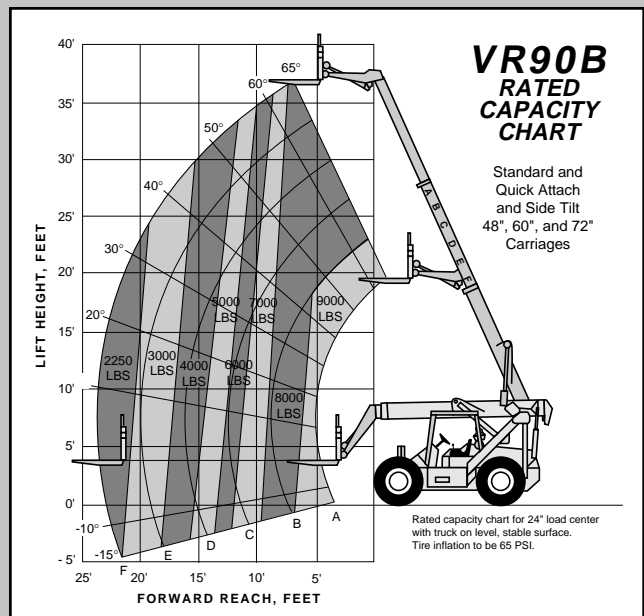
Boom type		3 stage
Boom angles	Up: 65°	Down: 15°
Extend speed		15.2 sec.
Retract speed		8.9 sec.
Boom raised		9.1 sec.
Boom lowered		12.6 sec.
Carriage tilt	Forward: 84°	Back: 28°

## CARRIAGES:

Pin diameter	2.0"	(5.08 cm)
Standard	60" with load backrest	
Option	48" with load backrest	
Option	72" with load backrest	
Option	48" with 6° side tilt	
Option	72" with 6° side tilt	

## FORKS:

Standard	2" x 5" x 48" floating pin
Option	2" x 7" x 48" floating pin
Option	2" x 7" x 60" floating pin
Option	2" x 5" x 60" floating pin
Option	2" x 1.5" x 45.5" block forks (set of 6)



## Options

- 1.3 cu. yd. bucket
- Front & rear headlights
- Tilt carriage
- All weather cab
- Outriggers
- Right hand front fender
- Windshield washer
- Front & rear windshield wiper
- Engine block heater
- Cab dome light
- Wide carriage
- Auxiliary hydraulics
- Turn signals/4-way flashers
- 12' 2,000 lb. truss boom

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