

Technical Description Crawler Tractor

PR 722 B
Litronic®

Engine output 132 HP/97 kW
Operating weight 29,500 – 35,500 lb/13.4 – 16.1 t
Hydrostatic travel drive with electronic steering control



Litronic® – A system comprised of intelligent electronics and functional hydraulics – monitors, controls, regulates and coordinates all key systems of the tractor's hydrostatic travel drive.

Economical – The robust Liebherr Diesel engine for construction machinery with its long service life assures high performance output at lower operating costs.

Powerful – The hydrostatic travel drive allows travel and steering functions at constant positive power to both tracks and agility through turns and counterrotation.

Versatile – Due to the innovative track design with planetary gears and oil motors integrated within the track frame, the undercarriage can be matched to any job situation. A wide selection of front and rear mounted attachments is available.

Safe to operate – Protection of all drive components from overload due to automatic adjustment of travel speed to required push power.

Easy to operate – Simple and precise control of all travel and steering movements with only one joystick lever. The resiliently mounted track idler frames on pivot shaft and equalizer bar assures quiet travel behavior and absorbs vibration and shock loads.

Environmentally friendly – Low exhaust and noise emission due to the economical Liebherr Diesel engine. Maintenance-free bearing points on the attachments require no lubricants.

Easy to service – All maintenance points are easily accessible on the right hand side of the engine. Grease fittings could be reduced to a minimum.

LIEBHERR

The Better Machine.



Engine

Liebherr-Diesel Engine _ D 924 T-E

Rating per
DIN/ISO 3046 _____ 132 HP (97 kW) at 2000 RPM

Displacement _____ 6.7 l (409 cu.in)

Bore/Stroke _____ 122/142 mm (4.8/5.6 in)

Design _____ 4 cylinder in-line engine, watercooled, turbocharged

Injection _____ direct fuel injection with injection pump, mechanical governor

Fuel filter _____ pre-cleaner with water separator and fine filters

Lubrication _____ pressurized lube system with full flow filter and integrated oil cooler, deep oil pan for inclinations, engine lubrication to an inclination of up to 45° to each side

Operating voltage _____ 24 V

Alternator _____ 55 Amp.

Starter _____ 5.4 kW



Travel Drive

Design _____ independent hydrostatic drive of travel gear

Pump flow _____ max. 154 l/min (40.5 gpm)

Max. pressure _____ adjusted to 420 bar (6090 PSI)

Travel speed _____ 0 - 11 km/h (0 - 6.8 mph) infinitely variable, forward and reverse

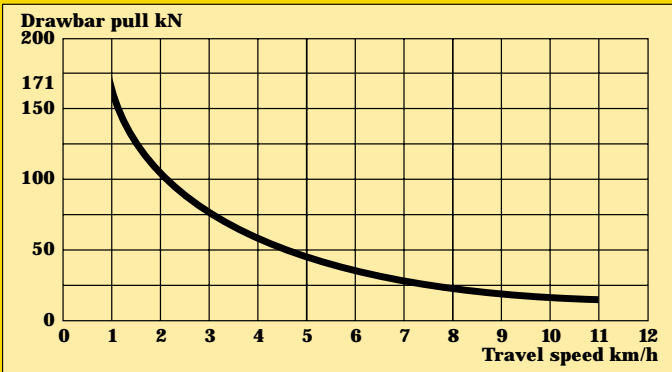
Steering _____ hydrostatic

Service brake _____ hydrostatic

Parking/emergency brake _____ automatic multi disc brake in final drives

Cooling system _____ hydraulic oil cooler with separate cooling circuit with gear pump and front mounted cooler

Filter system _____ cartridge fine filters in the cooling circuit



Final Drive

Drive concept _____ 2 stage planetary reduction gear with hydraulic travel motor directly flanged to travel gear

Design _____ compact unit, protected and integrated into the track roller frame



Track Frame

Design _____ maintenance-free standard or long (L) or low ground pressure (M) tractor-type track frames

Mount _____ elastic components at a separate pivot shaft and an oscillating equalizer bar, oscillation $\pm 3^\circ$

Chains _____ sealed or lubricated, track chain tension via grease tensioner and hydraulic cylinders, single grouser pads

Chain links _____ 43 (47 on PR 722 B and PR 722 B-M)

Sprockets _____ 9 replaceable segments

Track rollers _____ 7 (8 on PR 722 B-L and PR 722 B-M)

Carrier rollers _____ 1 (2 on PR 722 B-L and PR 722 B-M)



Travel Control

1 joystick lever _____ with electronic control for all travel functions: travel direction, speed, steering and counter-rotation

Low speed range _____ 0 - 5 km/h (0 - 3.1 mph)

High speed range _____ 0 - 11 km/h (0 - 6.9 mph)

Engine speed sensing control _____ electronic regulation assures constant balance between travel speed and necessary drawbar pull through engine speed sensing avoiding engine overload, even in partial load range

Straight line travel _____ electronically controlled

Parking/emergency brake _____ automatically applied after the joystick lever is put in neutral position

Safety lever _____ inactivates complete travel and working hydraulic circuit and automatically activates parking brake

Emergency shut off _____ push button on instrument panel immediately activates parking and emergency brake



Attachment Hydraulics

Hydraulic system _____ load sensing proportional pump flow control, variable flow swash plate piston pump and pressure compensation

Pump flow _____ max. 156 l/min (41 gpm)

Pressure limitation _____ max. 160 bar (2300 PSI)

Control valve _____ 2 spool control block, can be expanded to 5 circuits

Filter system _____ return filter with magnetic rod in hydraulic tank

Control _____ single servo-assisted joystick lever for blade hoist and tilt functions, electrically controlled blade float and quick drop



Attachments

Front side _____ straight blade or 6-way-blade

Rear side _____ ripper, hydraulic winch or swinging drawbar

Pivot points _____ with hardened and polished pins and bushings



Operator's Compartment

Cab _____ resiliently mounted, with integrated ROPS (Roll Over Protective Structure, SAE J 1040/ISO 3471) and FOPS (Falling Objects Protective Structure, SAE J 231/ISO 3449), can be tilted with handpump to 40° to the rear for accessibility to machine components, diagonally arranged doors, all around safety glass

Operator's seat _____ fully adjustable, suspended swing seat, adjustable to operator weight

Instrument panel _____ comprehensive instrument panel on the right side of the operator's seat

Ventilation _____ pressurized filtered air ventilation, 3 stage blower, 8 air nozzles, sliding windows on both sides and in the rear

Heater _____ hot water heater

Noise level _____ 82 dB(A) on job location, conforms to EG Standard 86/662/EWG



Refill Capacities

Fuel tank _____ 310 l/82 gal

Cooling system _____ 52 l/14 gal

Engine oil _____ 18 l/5 gal

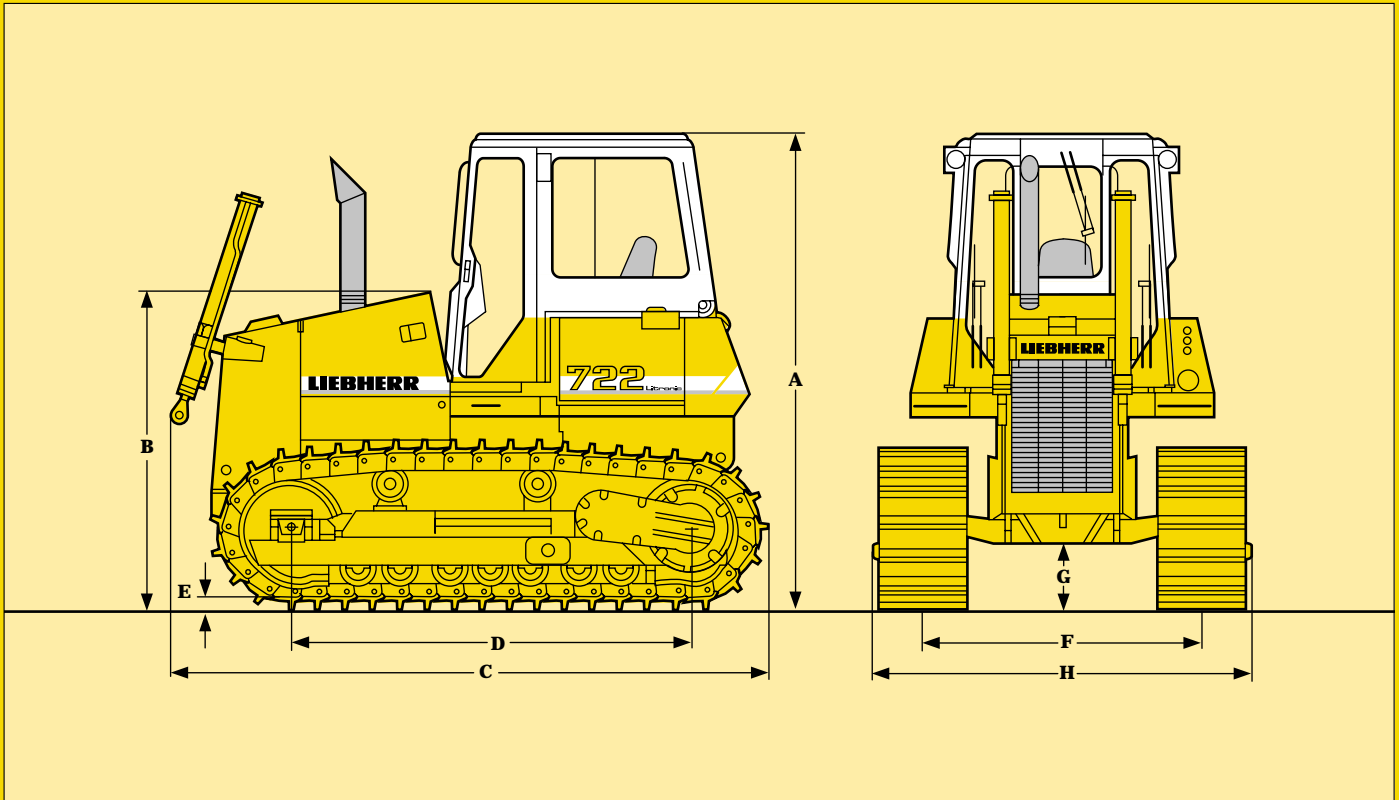
Splitterbox _____ 2.5 l/0.6 gal

Hydraulic tank _____ 178 l/47 gal

Final drive, each _____ 13 l/3.4 gal

Technical Description

Basic Machine



	PR 722 B	PR 722 B-L	PR 722 B-M
	ft-in/mm	ft-in/mm	ft-in/mm
A Height over cab	10' 2"/3100	10' 2"/3100	10' 2"/3100
B Height over engine cover	6' 11"/2100	6' 1"/2100	6' 1"/2100
C Overall length without attachments	12' 9"/3890	12' 10"/3910	12' 10"/3910
D Distance idler/sprocket center	8' 5"/2575	9' 7"/2925	9' 7"/2925
E Height of grouser	2 ³ / ₁₆ "/56	2 ³ / ₁₆ "/56	2 ³ / ₁₆ "/56
F Track gauge	5' 11"/1800	5' 11"/5' 6"/1800/1680*	6' 10"/2084
G Ground clearance	1' 3"/ 370	1' 3"/ 370	1' 3"/ 370
H Width over frame mounting trunions	8' 8"/2648	8' 8"/8' 3"/2648/2528*	10' 8"/3248
Overall width with pad size			
20"/508 mm	7' 9"/2366	7' 9"/7'/2366/2246*	-
22"/560 mm	-	7' 4"/2246*	-
24"/610 mm	7' 11"/2410	7' 11"/2410	-
28"/711 mm	-	-	9' 2"/2795
32"/812 mm	-	-	9' 6"/2896
36"/914 mm	-	-	9' 10"/2998
Ground contact area at track pad width			
20"/508 mm	28.2 sq.ft./2.62 m ²	31.9 sq.ft./2.97 m ²	-
22"/560 mm	-	35.3 sq.ft./3.28 m ²	-
24"/610 mm	33.8 sq.ft./3.14 m ²	38.4 sq.ft./3.57 m ²	-
28"/711 mm	-	-	44.7 sq.ft./4.16 m ²
32"/812 mm	-	-	51.1 sq.ft./4.75 m ²
36"/914 mm	-	-	57.6 sq.ft./5.35 m ²

* only for PR 722 B-L with 6 way blade and outside mounted C-frame

Dimensions

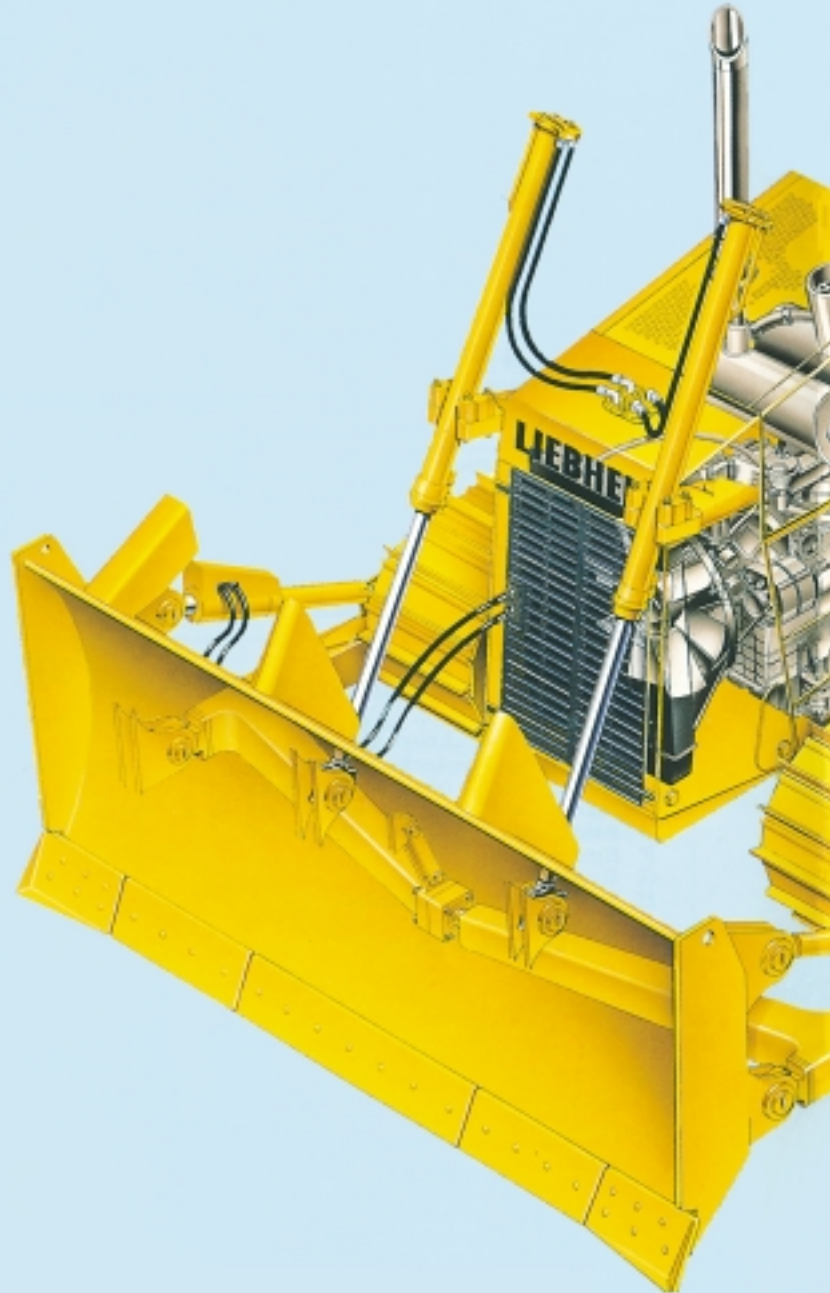
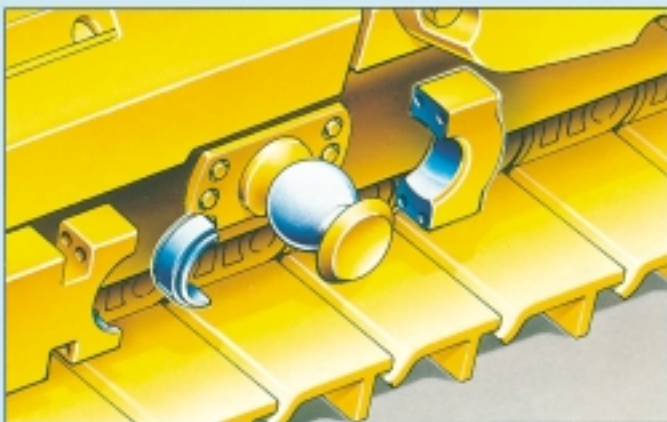


Liebherr Diesel engine

The robust, water-cooled, turbo-charged Liebherr Diesel engine was specifically developed to assure long service life in severe construction machinery applications. Superior power reserves and maximum engine torque assure continuous high output in all job situations. The low engine speed lowers fuel consumption and emission. All serviceable components are easily accessible on the right hand side of the engine. Cooling fan and water pump are maintenance-free and guarantee high operating safety. The electronic engine speed sensing regulation, which operates independent of ambient temperature influences, guarantees maximum utilization of available engine horsepower and protects all drive components from overload.

Working hydraulic and attachments

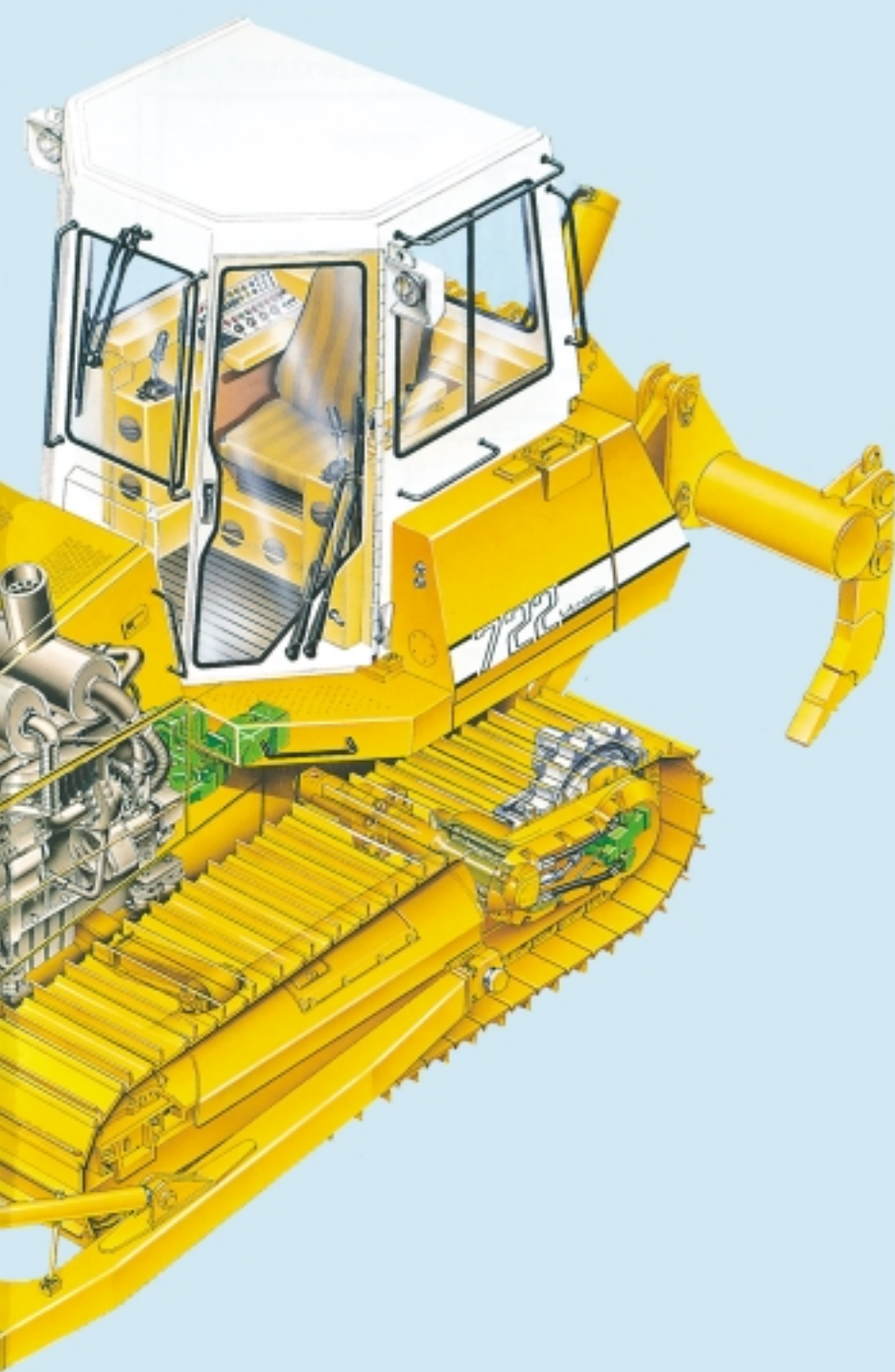
The sensitive fine control of the working attachment is a result of the load sensing, on-demand control of the attachment hydraulics. The axial piston pump supplies only the amount of oil, which has been preselected by the operator via the servo assisted control, resulting in excellent fine control range and quicker working cycles. The dozer blades and rear mounted attachments have been perfectly matched in shape and robust design to the machine's performance requirements. The number of lubrication points could be reduced to a minimum.



Hydrostatic travel drive

The hydrostatic travel drive is the most efficient drive system for construction machinery. Each track is independently driven by an electronically controllable oil pump and an electronically controllable oil motor, they are linked in a closed loop circuit. The steplessly regulated travel speed and its agility to turning on the spot result in high productivity. Power is perfectly transferred, even in curve travel, due to permanent power to both tracks. The state-of-the-art compact design and long life components result in reduced time for maintenance and service.

More Benefits Through Advanced Technology.



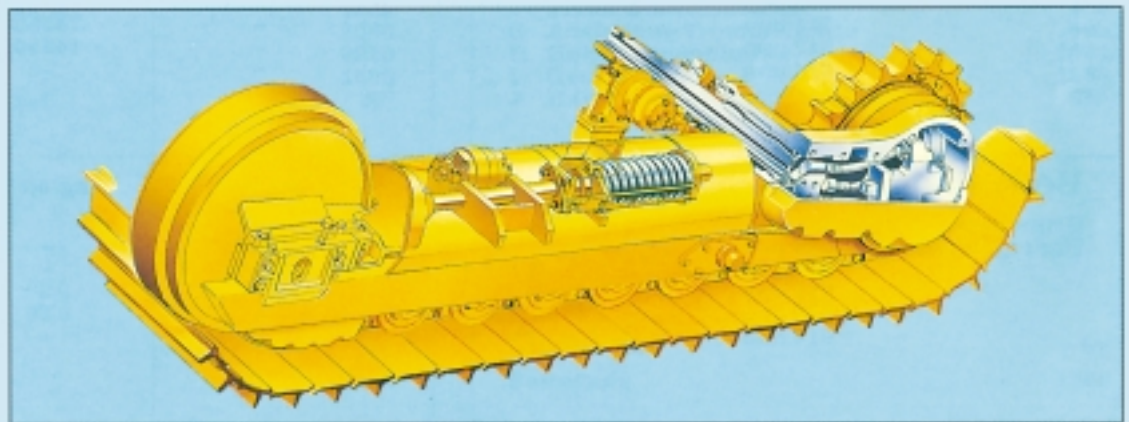
Operator comfort

The comfort cab offers the operator a comfortable place to work as well as exemplary protection from noise and vibrations and excellent all-around visibility. All travel and working functions can be handled with only two ergonomically positioned joysticks - precise and fatigue free due to electronic and hydraulic servo-assisted control.

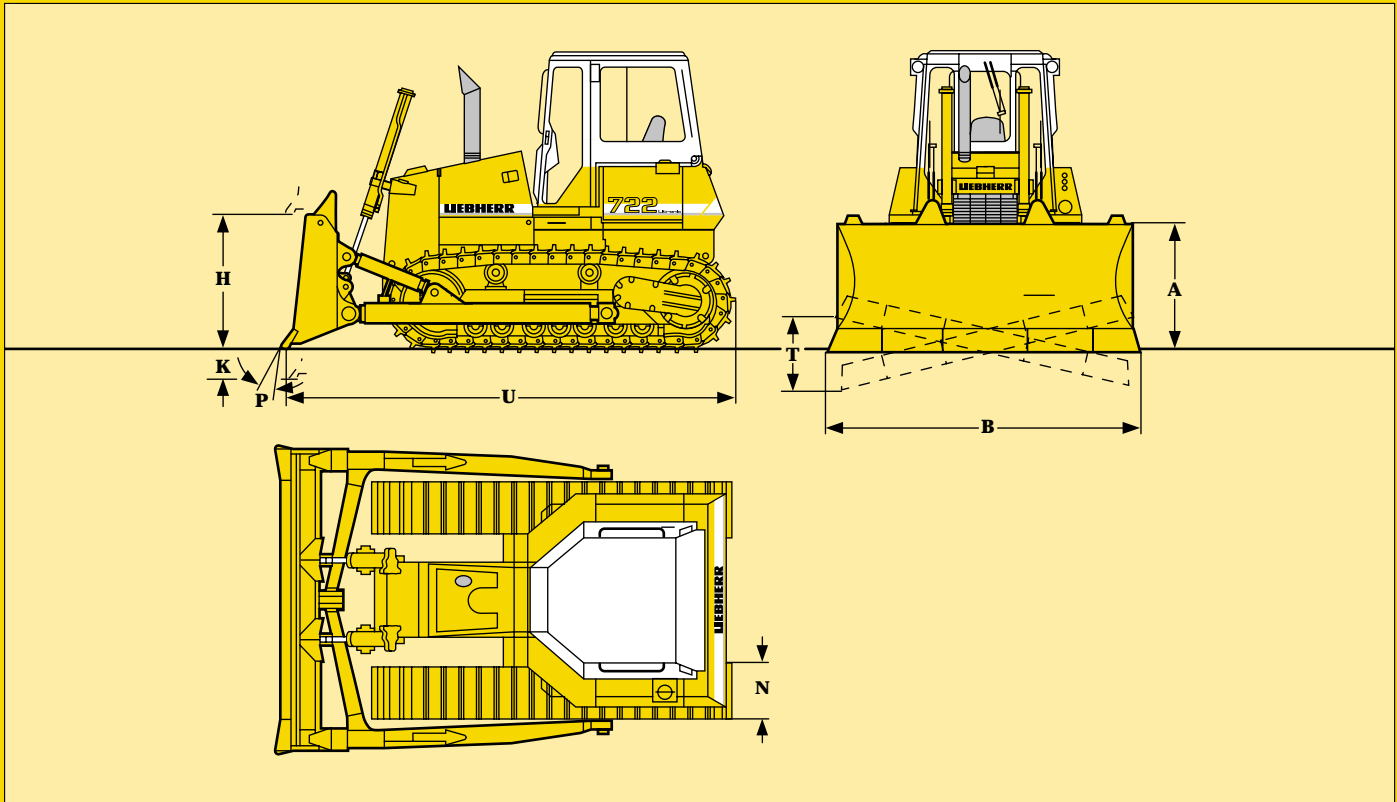


Travel gear design

Due to the compact design, the final drive was integrated into the track frame for best protection. The 2-stage planetary gear with wet multi-disc brake and variable flow hydraulic motor form one single and easily accessible unit; evenly distributed power transfer extends life expectancy. Completely new for construction machines is the Liebherr-developed shock-mounted track suspension. Elastic components at the pivot shafts and equalizer bar efficiently absorb shock loads, resulting in a smoother operation, which reduces stress for both the machine and the operator.



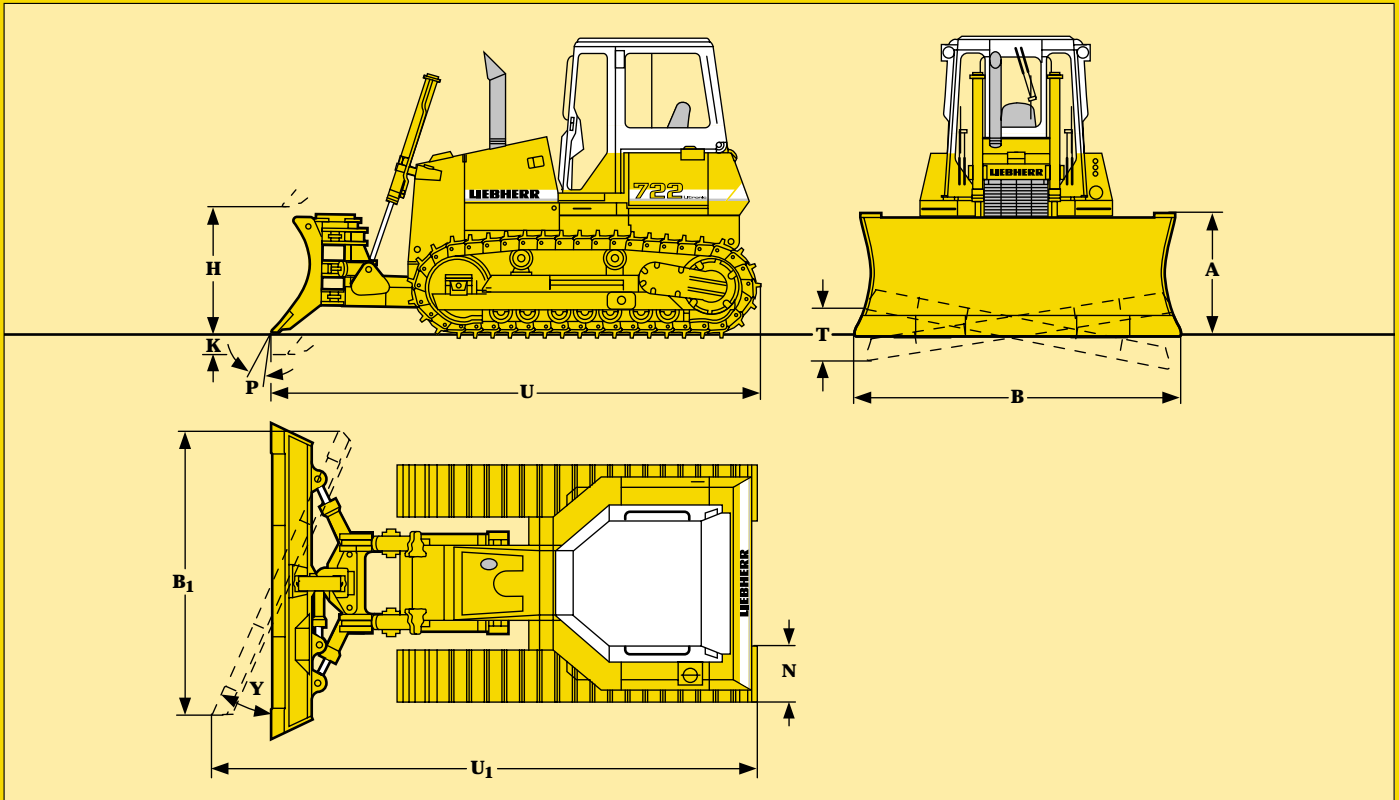
Straight Blade



	PR 722 B	PR 722 B-L	PR 722 B-M	
Blade capacity	3.7 cuyd/2.85 m ³	3.7 cuyd/2.85 m ³	3.9 cuyd/3.04 m ³	4.1 cuyd/3.13 m ³
Dimensions	ft-in/mm	ft-in/mm	ft-in/mm	ft-in/mm
A Blade height	3' 7"/1100	3' 7"/1100	3' 5"/1050	3' 5"/1050
B Blade width	9'10"/3000	9'10"/3000	11' 6"/3500	11'10"/3600
H Blade lifting height	3' 2"/ 950	3' 2"/ 960	3' 2"/ 960	3' 2"/ 960
K Blade drop below ground	1' 6"/ 445	1' 6"/ 450	1' 6"/ 450	1' 6"/ 450
P Max. blade pitch	10°	10°	10°	10°
T Max. blade tilt	1'11"/ 580	1'11"/ 580	1'10"/ 570	1'10"/ 570
U Overall length	15' 5"/4695	16' 7"/5045	16' 7"/5045	16' 7"/5045
N Track pad width	20"/508/24"/610	20"/508/24"/610	28"/711/32"/812	28"/711/32"/812/ 36"/914
Operating Weights	lb/kg	lb/kg	lb/kg	lb/kg
Basic machine with blade and track pad width of 20"/508 mm	29,400/13,350	30,300/13,750	-	-
24"/610 mm	29,900/13,550	30,900/14,000	-	-
28"/711 mm	-	-	31,600/14,350	31,700/14,400
32"/812 mm	-	-	32,100/14,550	32,200/14,600
36"/914 mm	-	-	-	32,700/14,850
Ground Pressure	PSI/kg/cm ²	PSI/kg/cm ²	PSI/kg/cm ²	PSI/kg/cm ²
Basic machine with blade and track pad width of 20"/508 mm	7.25/0.51	6.54/0.46	-	-
24"/610 mm	6.11/0.43	5.54/0.39	-	-
28"/711 mm	-	-	4.83/0.34	4.97/0.35
32"/812 mm	-	-	4.26/0.30	4.41/0.31
36"/914 mm	-	-	-	3.98/0.28

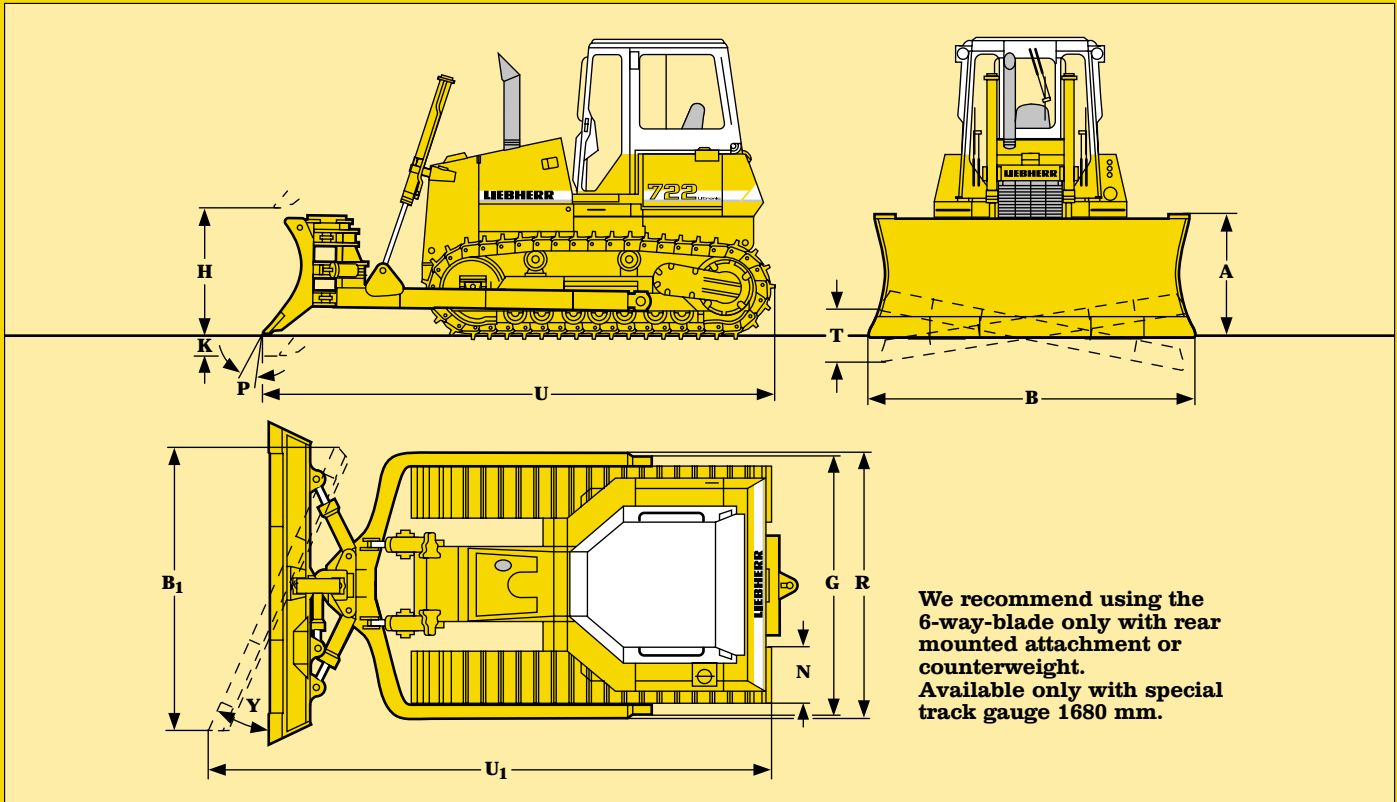
Attachments

6-Way-Blade With Inside Mounted U-frame



	PR 722 B-L	PR 722 B-M
Blade capacity	4.1 cuyd/3.10 m ³	4.1 cuyd/3.11 m ³
Dimensions	ft-in/mm	ft-in/mm
A Blade height	3' 9"/1150	3' 5"/1050
B Blade width	10' 6"/3200	12' 5"/3790
B1 Width with blade angling	9' 8"/2950	11' 5"/3490
H Blade lifting height	3' 6"/1060	3' 6"/1060
K Blade drop below ground	1' 7"/ 480	1' 7"/ 480
T Max. blade tilt	1' 7"/ 475	1'10"/ 560
P Max. blade pitch	5°	5°
Y Blade angle	23°	23°
U Overall length, blade straight	17' 2"/5220	17' /5190
U1 Overall length w. blade angled	19' 1"/5805	19' 4"/5895
N Track pad width	20"/508/24"/610	28"/711/32"/812/36"/914
Operating Weights	lb/kg	lb/kg
Basic machine with blade and track pad width of 20"/508 mm	30,400/13,800	-
24"/610 mm	31,000/14,050	-
28"/711 mm	-	31,500/14,300
32"/812 mm	-	32,100/14,550
36"/914 mm	-	32,600/14,800
Ground Pressures	PSI/kg/cm ²	PSI/kg/cm ²
Basic machine with blade and track pad width of 20"/508 mm	6.54/0.46	-
24"/610 mm	5.54/0.39	-
28"/711 mm	-	4.83/0.34
32"/812 mm	-	4.41/0.31
36"/914 mm	-	3.98/0.28

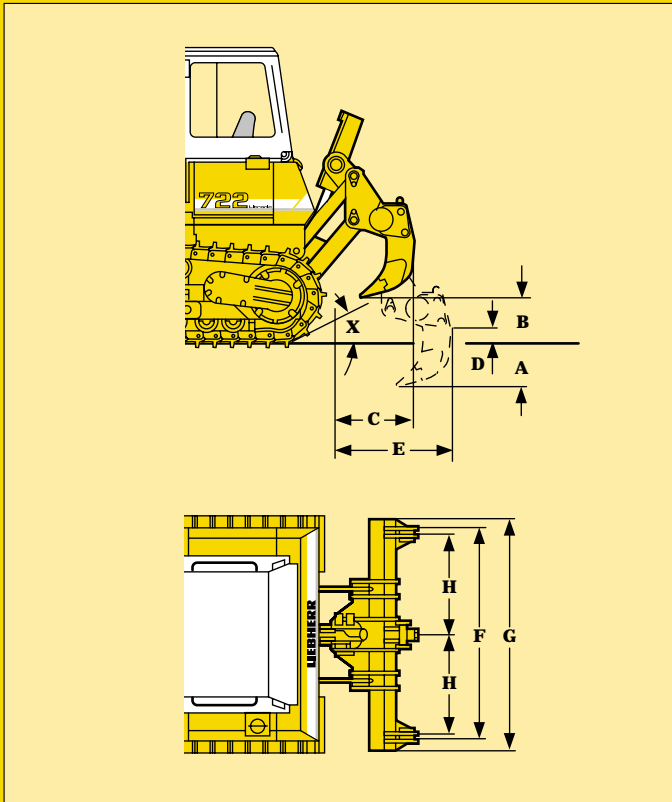
6-Way-Blade With Outside Mounted C-frame



	PR 722 B-L
Blade capacity	4.1 cu.yd/3.10 m³
Dimensions	ft-in/mm
A Height of blade	3' 9"/1150
B Width of blade	10' 6"/3200
B1 Width with blade angled	9'10"/3000
H Blade lifting height	4' 2"/1260
K Blade drop below ground	1' 8"/ 515
P Max. blade pitch	5°
Y Blade angled	21°
T Max. blade tilt	1' 7"/ 475
R Width over C-frame	8' 6"/2595
U Overall length, blade straight	18' 1"/5505
U1 Overall length, with blade angled	19'11"/6065
I Counterweight extension	3' 1"/ 945
N Track pad width	20"/508/22"/560
Operating Weight	lb/kg
Basic machine with blade, canopy and track pads 20"/560 mm	33,700/15,300
and track pads 22"/560 mm	34,000/15,400
Ground Pressure	PSI/kg/cm²
Basic machine with blade, canopy and track pads 20"/560	7.40/0.52
and track pads 22"/560	6.69/0.47

Angle Blade

Ripper



3-shank rigid type

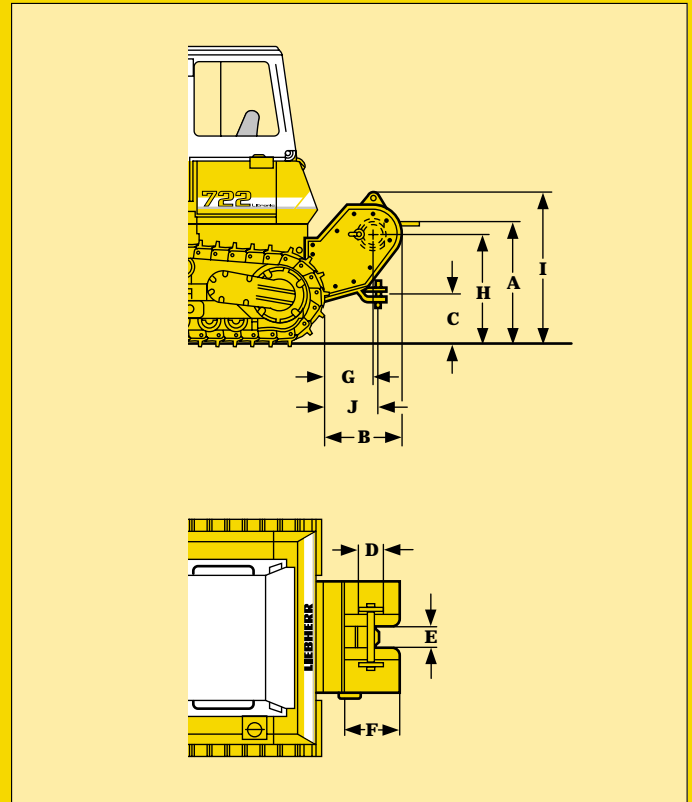
Dimensions

	ft-in/mm
A Ripping depth	1'6" / 445
B Lifting height	1'9" / 525
C Overall length attachment raised	3'1" / 945
D Ground clearance below toolbar	5 1/2" / 143
E Overall length attachment lowered	4'1" / 1235
F Ripping width	6'9" / 2060
G Toolbar width	7'3" / 2220
H Distance between teeth	3'3" / 1000
X Slope angle	30°

Weight

	lb/kg
Ripper complete	2425/1100

Winch



Max. line pull: 67,400 lb/300 kN (30,6 t)
 Max. line speed: 0 - 315 ft/min; 0 - 96 m/min.
 Cable size: 7/8" / 22 mm
 Cable length: 164 ft / 50 m

Dimensions

	ft-in/mm
A Height, cable exit	3'9" / 1140
B Overall length	2'1" / 635
C Height drawbar	1'9" / 530
D Drum diameter	8 1/2" / 210
E Coiling width	9" / 230
F Flange diameter	1'6" / 460
G Distance to center of drum	1'4" / 405
H Height to drum center	3'4" / 1025
I Total height	4'5" / 1355
J Overall length of drawbar	1'6" / 465

Weight

	lb/kg
Winch complete	2650/1200

Standard Equipment*

Diesel Engine:

- Fuel system with pre-filter and fuel filter and water separator and 2 fine filters
- Pre-cleaner with automatic dust ejector
- Dry type air cleaner with main and safety element
- Glow plug cold starting aid
- Alternator, 55 Amp
- Starter motor 5.4 kW
- Electrically activated battery master switch
- HD cold start batteries - 110 Ah

Track Components:

- Maintenance-free track components, sealed and lubricated rollers, idlers and sprockets
- Segmented, bolted sprocket rims

Travel Drive:

- Hydrostatic drive with electronic control
- Automatic parking brake

Attachment Hydraulics:

- Two function attachment hydraulic circuit
- Electronically actuated blade quick drop and float position

Operator's Compartment:

- Cab with integrated ROPS/FOPS, hot water heater, pressurized and filtered ventilation
- Fully adjustable suspension seat with seatbelt
- Windshield wipers on front, rear and doors
- Windshield washer system
- Dome light, rear view mirror, sun shade
- Sliding windows on the side and rear
- Safety glass
- Preparation kit to install fire extinguisher and beacon
- Lockable doors
- Two front and rear working lights
- Lighted instrument panel with engine oil pressure and engine coolant temperature gauge and air cleaner service indicator, hour meter and fuel gauge

Basic Machine:

- Hinged reinforced radiator guard
- Lockable engine side doors and battery box
- Tool kit
- Front tow hook
- Rear drawbar hitch

* Standard equipment may vary from country to country.

Optional Equipment

- Perforated engine side covers
- Backup alarm
- Tinted glass
- Air conditioner
- Radio
- Fire extinguisher
- Beacon
- Rear cab protection screen
- Power adjustable, air suspension seat
- Electric refueling pump
- Full length track guard
- Track guide, center
- Extra hydraulic controls
- Fixed drawbar, swinging drawbar
- Fairleads for winch
- Lugs to lift machine
- Remote radio control
- Landfill package
- Forestry package
- Special paint, one or two tone
- Special blades
- Lifting lugs

Other optional items on request.