

ZB21

Hydraulic bolter



Safety



Reliability



Productivity



Drilling equipment

Bolter hydraulics	Variable displacement piston pumps with load-sensing, for bolter head and boom movements
Controls	Intelsense control system incorporating these features: collaring, anti-jamming, control levers for operating percussion/rotation/feed, and optional auto return to start position following hole completion

Drilling equipment

Boom (Quantity 1)		
Boom coverage (height)	6 900 mm	22'7"
Boom coverage (width)	7 700 mm	25'3"
Boom extension	1 400 mm	4'7"
Feed extension	427 mm	1'4"
Stinger extension	452 mm	1'5"
Guide rollover		360 deg
Carousel capacity		9 bolts
Available bolt lengths		
5	1 524 mm	5'
6	1 829 mm	6'
7	2 134 mm	7'
8	2 438 mm	8'
Bolter position		Inline
Drill		
Montabert	JZD08 (8 kW), JZD10 (10 kW), or JZD12 (12kW)	
Leveling jacks		
Front (standard with unit)		2
Rear (standard with unit)		2

Drilling electrics

JZD08	One 56 kW(75 hp) TEFC electric motor (voltage as per application) NEMA 4 panels	
JZD10	One 56 kW(75 hp) TEFC electric motor (voltage as per application) NEMA 4 panels	
JZD12	One 56 kW(75 hp) TEFC electric motor (voltage as per application) NEMA 4 panels	
Power requirements	Configuration dependant	
380 V	64.4 kW minimum	106.1 kW maximum
440 V	66.0 kW minimum	106.1 kW maximum
480 V	64.4 kW minimum	106.1 kW maximum
525 V	64.4 kW minimum	106.1 kW maximum
575 V	64.4 kW minimum	106.1 kW maximum
Cable reel capacity	Voltage dependant	
Minimum	75 m	246'
Maximum	110 m	360'

Weights

Operating weight (base unit)	14 900 kg	32,849 lbs.
Operating weight (fully optioned)	17 100 kg	37,699 lbs.

Driving speeds forward and reverse

1st gear (0% grade)	5.0 kph	3.1 mph
2nd gear (0% grade)	10.0 kph	6.3 mph
Base unit tram speed (14%+ grade)	3.0 kph	1.9 mph

Powertrain

General	
Exhaust system	Diesel Oxidation Catalyst
Exhaust system (optional)	Diesel Particulate Filter
Transmission	Dana T12000 series with integrated torque converter
Transmission controller	Dana
Shifting	Powershift
Speeds	2 forward/2 reverse
Axles	
Front and rear	Dana 112
Differential	No-spin
Brakes - service	Enclosed wet disc
Brakes - parking	Hydraulically-released/spring-applied
Oscillation angle	+/- 7°
Tires	
Size	Solid, lugged 12 - 20

JZD12 or JZD08 Drifter

Bolting head size	Operating height	Drill depth	Bolt head length	Bolt head length (with 200mm x 200 mm plate option)	Drill steel length in R32M
5' (base for JZD 08)	2 880 mm 9'5"	1 630 mm 5'4"	2 694 mm 8'10"	2 762 mm 9'1"	1 870 mm 6'2"
6'	3 178 mm 10'5"	1 935 mm 6'4"	2 998 mm 9'10"	3 066 mm 10'1"	2 175 mm 7'2"
7'	3 471 mm 11'5"	2 240 mm 7'4"	3 303 mm 10'10"	3 371 mm 11'1"	2 476 mm 8'2"
8'	3 779 mm 12'5"	2 545 mm 8'4"	3 608 mm 11'10"	3 676 mm 12'1"	2 784 mm 9'2"

JZD10 Drifter

Bolting head length	Operating height	Drill depth	Bolt head length	Bolt head length (with 200mm x 200 mm plate option)	Drill steel length
5'	3 084 mm 10'1"	1 630 mm 5'4"	2 694 mm 8'10"	2 762 mm 9'1"	1 870 mm 6'2"
6'	3 378 mm 11'1"	1 935 mm 6'4"	2 998 mm 9'10"	3 066 mm 10'1"	2 175 mm 7'2"
7'	3 683 mm 12'1"	2 240 mm 7'4"	3 303 mm 10'10"	3 371 mm 11'1"	2 476 mm 8'2"
8'	3 979 mm 13'1"	2 545 mm 8'4"	3 608 mm 11'10"	3 676 mm 12'1"	2 784 mm 9'2"

Carrier hydraulics

General	Variable displacement piston pumps with load sense	
Oil tank volume	180 L	48 US gal
Tank filling	Mechanical pump	
Tank filling optional	Electric pump and/or Wiggins	
Steering hydraulics	Variable displacement piston pumps with load sense, driving two double-acting steer cylinders	
Brake system	Totally enclosed service brake is hydraulically-applied, spring-released on front and rear axles with automatic brake application	

Carrier electrics

Alternator	24 V/60 A
Batteries	2 x 12 V
Starter	24 V heavy duty
Tram lights	2 front/2 rear
Drill lights	4 front

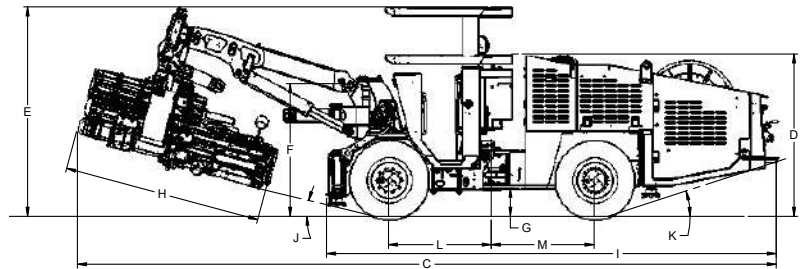
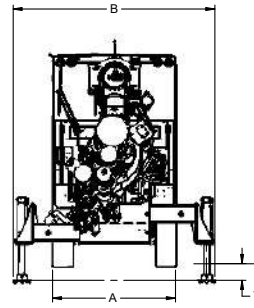
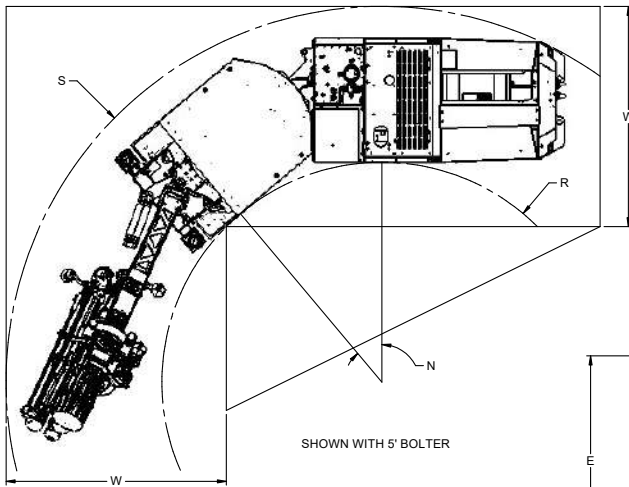
Operator console

Canopy	FOPS/ROPS certified - ISO 3449 (2005) and ISO 3471 (2008)
Cabin (optional)	FOPS/ROPS certified enclosed cabin - ISO 3449 (2005) and ISO 3471 (2008)
Seat	Mechanical suspension seat

Engine specifications

Engine	Cummins QSB3.3
Certification	EPA Tier 3, MSHA
Ventilation	OSHA@100 cfm/HP = 9,900 cfm MSHA-07-ENA110017 = 1,000 cfm
Displacement	3.3 L
Output	74 kW (99 HP) @2,600 rpm
Maximum torque	415 Nm (306 ft.-lbs.) @1,600 rpm
Cooling type	Water cooled, charge air cooled

General specifications



Overall dimensions (base machine)

A	Maximum width	1 680 mm	5'6"
B	Maximum width with outriggers extended	2 747 mm	5'9"
C	Total length	Configuration dependant	
	Minimum	9 515 mm	31'2"
	Maximum	9 981 mm	32'8"
D	Height with canopy in collapsed position	2 210 mm	7'3"
E	Height with canopy in drill/tram position	2 852 mm	9'4"
F	Height to boom center	1 810 mm	5'11"
G	Ground clearance	381 mm	1'3"
H	Bolter length	Configuration dependant	
	Minimum	2 686 mm	8'9"
	Maximum	3 607 mm	11'10"
I	Carrier length	6 123 mm	20'1"
J	Approach angle	14 deg/25% grade	
K	Departure angle	18 deg/32% grade	
L	Articulation to front axle	1 400 mm	4'7"
M	Articulation to rear axle	1 400 mm	4'7"
T	Jack lift	210 mm	8"

Minimum mine dimensions

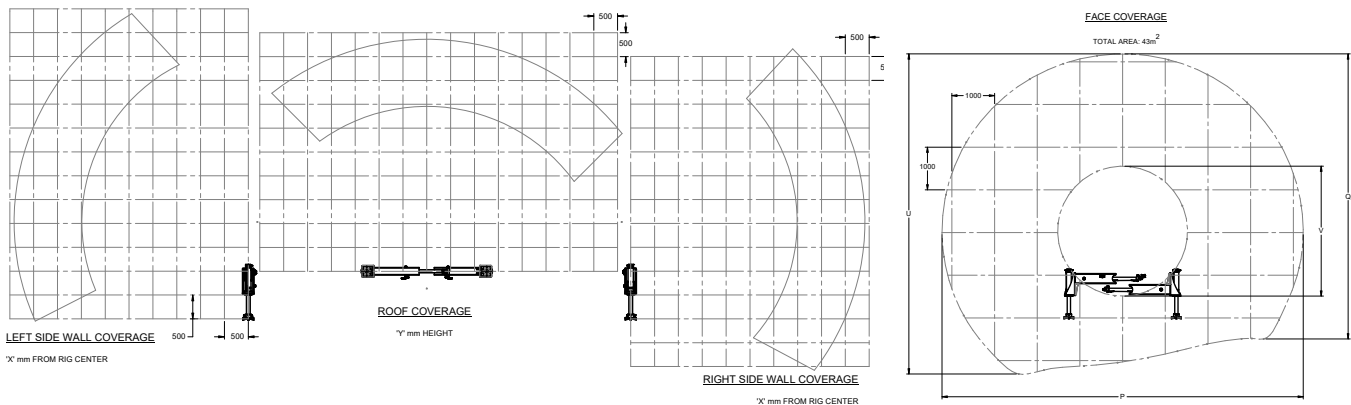
W	90 degree isle	3 000 mm	9'10"
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Turning radius

R	Inner	2 995 mm	9'9"
S	Outer	5 118 mm	16'9"
N	Turning angle	40 deg	

Coverage dimensions

P	Boom coverage width	8 463 mm	27'9"
	Boom coverage height		
Q	Minimum	6 677 mm	21'10"
U	Maximum	7 498 mm	24'7"
V	Boom coverage dead zone diameter	3 044 mm	9'11"
X	Sidewall coverage distance from rig center	Configuration dependant	
	Minimum	1 519 mm	4'11"
	Maximum	2 000 mm	6'6"
Y	Roof coverage height for given bolter length	Configuration dependant	
	Minimum	3 519 mm	11'6"
	Maximum	4 000 mm	13'1"



Standard and optional features

standard ● optional ○

LCD dash	●
ROPS/FOPS-certified canopy	●
Mechanical suspension seat	●
Joystick boom/drill controls	●
LED working lights	●
Parking brake	●
Articulation lock brace mounted to machine	●
5 foot bolter head	●
Friction bolt 39 mm	●
Montabert JZD08 drifters	●
Fixed centralizers	●
5.5 kW air compressor	●
Water pump	●
Cable reel	●
Mechanical fill for hydraulic tank	●
Outriggers	●
Intelsense drill control	●
Single fire extinguisher (10 pound)	●
Back-up alarm	●
Water flushing	●
Centralized carrier lubrication station	●

standard ● optional ○

Montabert JZD10 drifters	○
Montabert JZD12 drifters	○
Various voltages: 380 V/50 Hz, 440 V/60 Hz, 480 V/60 Hz, 525 V/50 Hz, 575 V/60 Hz	○
Cab (FOPS/ROPS certified) - ISO 3449 (2005) and ISO 3471 (2008) with climate control	○
Rearview camera	○
Hydraulic centralizers	○
Resin injection system	○
Adjustable carousel for two bolt lengths	○
Mesh handler	○
Centralized greasing for boom	○
11 kW air compressor	○
85 meter hose reel	○
Fire suppression with checkfire system	○
Fire suppression system (manually activated)	○
Cartridge resin/cement injection system (23 mm; 25mm; 28 mm; 30 mm; 32 mm)	○
Friction bolt options in: 33 mm & 46 mm	○
Hydro expanding bolt unit*	○
Chemical bolt installation kit with square, hex and hangar bolt driver options available	○
Mechanical bolt installation option in both hex and square drivers covering: #5; #6; #7 bolts	○
Pressure washer with 20 meter reel (standard finish)	○
Pressure washer with 20 meter reel (stainless steel finish)	○
Secondary fire extinguisher (20 pounds)	○
Electric fill pump for hydraulic tank	○
Wiggins fill for hydraulic tank and/or fuel tank	○
Beacon light kit	○
Automatic carrier lubrication system	○
Grease station with hose reel and drum pump	○
Wheel chocks with bracket	○
Specialized environment packages*	○
Air blast flushing	○
Air mist flushing	○
Electronic safety curtain	○
Rear reel controls	○
Electrical trailing cable (length configuration dependent)	○
Drill on diesel*	○

*Please contact your Komatsu service representative to learn more about these options and other optional offerings

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