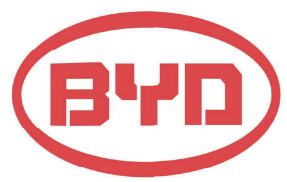


ECB20

COUNTER BALANCE
FORKLIFT SERIES



BYD FORKLIFT



AVAILABLE FEATURES

Safety

- Electric braking system
- Slope protection
- Multi-functional seat with safe belt
- Operator Presence Sensing (OPS)
- Programmable automatic speed limit
- Cylinder lowering speed limit
- Charger protection
- Overload protection
- High loading position protection
- Strobe light and reversing alarm
- LED headlights and rear combination lights

Performance

- Iron-phosphate Battery
- AC drive system
- AC hydraulic lift system
- Small turning radius
- Battery rapid charging & opportunity charging
- Programmable performance
- Digital (LCD) multifunction display
 - Time & date
 - OPS time accumulator
 - Battery capacity indicator
 - Over-discharge warning (lift interrupt)
 - Parking brake indicator
- Direction indicator
- Maintenance indicator
- Overload indicator
- Built-in analyzer
- Self-diagnostics

Operability & Ergonomics

- Strategically configured instrument
- Front & rear operator assist grips
- Automatic fork-leveling control
- Hydraulic directional shift control
- Seat-mounted Mini dual joystick
- Heavy-duty slip-resistant floor mat
- Bay with USB port
- Bay with Cup holder
- Parking brake alarm

Serviceability

- AC drive motor (no brushes or commutator)
- AC hydraulic motor (no brushes or commutator)
- Charging port analyzing connection
- Easy-access no-tools floorboard
- Maintenance-free battery case
- Easy-lift battery hood
- Hydraulic fluid level check
- Easy-access controllers
- CAN-bus controller wiring

OPTIONAL EQUIPMENT

Load Handling (Wide visible mast)

- Standard lift 2-stage mast (Duplex standard)
- Full free-lift 2-stage mast (Duplex FFL)
- Full free-lift 2-stage 2-cylinder mast (Duplex FFL)
- Lifting buffer
- Standard lift 3-stage mast (Triplex standard)
- Full free-lift 3-stage 3-cylinder mast (Triplex FFL)
- Full free-lift 3-stage 4-cylinder mast (Triplex FFL)
- Lifting speed limit
- Other customized fork
- High-load backrest
- Other customized load backrest

Load Handling (Hose & Valve Assembly)

- 4-way valve (no 3rd & 4th function hosing)
- 4-way valve (with 3rd function hosing)
- 4-way valve (with 3rd & 4th function hosing)
- Hydraulic DV10 fitting on 3rd lever
- Hydraulic DV10 fitting on 4th lever
- Cascade hang-on side shifter
- Integral side shifter
- Fork positioners
- Clamps
- Rotators
- Load pushes
- Multiple load handlers
- Mobile weighing
- Layer pickers
- Hose reels

Lights & Indicators

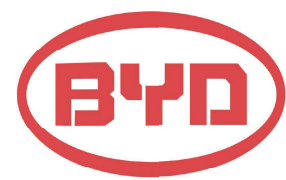
- Front headlights
- Rear combination lights
- LED Distance Warning spot Light
- LED Distance Warning Laser Light
- Strobe light, yellow (on top of OHG)
- Back up buzzer
- Armrest horn

Body

- Operator Presence Sensing Unit
- Fork camera
- Reversing radar
- Reversing camera
- Fan
- Fire extinguisher
- Overload protection
- Parking brake alarm
- Rearview mirrors (left & right sides)
- Flat internal rearview mirror
- Panoramic rearview mirror
- Rear assist grip with horn button
- Orange seatbelt
- Cabin without woors (Includes windshield with wiper, roof & rear glass)
- Full sealing cabin (Includes windshield with wiper & roof)
- Front windshield with wiper & Roof
- Synchronous steering
- Special key
- Bay with USB inlet
- Fork sleeves
- Overhead guard sheet
- Double accelerator pedal (One on each side of brake pedal)

Wheels & Tires

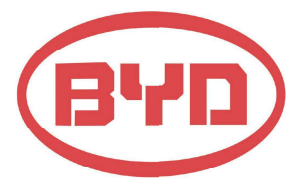
- Solid
- Non-marking solid
- Pneumatic



BYD FORKLIFT

COUNTER BALANCE FORKLIFT SPECIFICATIONS

Characteristic	Manufacturer				BYD		BYD	
	Model				ECB20B/ECB20C		ECB20D/ECB20E	
	Power Unit				Electric		Electric	
	Operation				Seat		Seat	
	Load Capacity	Q	lbs	kg	4409	2000	4409	2000
	Load Centre	c	in	mm	20	500	20	500
	Axle Centre To Fork Face	x	in	mm	17	425	17	425
	Wheel Base	y	in	mm	59	1505	59	1505
Weights	Service Weight		lbs	kg	7937	3600	7981	3620
	Axle Load With Load, Front/rear		lbs	kg	10805/1541	4901/699	10847/1543	4920/700
	Axle Load Without load, Front/rear		lbs	kg	3686/4250	1672/1928	3726/4255	1690/1930
Wheels	Tyre Rubber, SE, Pneumatic, Polyurethane				SE		SE	
	Tyre Size, Front				21x8-9		21x8-9	
	Tyre Size, Rear				18x7-8		18x7-8	
	Wheels, Number Front/rear (x = driven)				2x/2		2x/2	
	Track Width, Front	b10	in	mm	39	1000	38	970
	Track Width, Rear	b11	in	mm	38	955	38	955
Dimensions	Mast/fork Carriage Tilt, Forward/backward	α/β	°	°	5/8		5/9	
	Height Of Mast, Lowered	h1	in	mm	80	2030	78	1990
	Free Lift	h2	in	mm	6	140	6	150
	Lift	h3	in	mm	118	3000	118	3000
	Height Of Mast, Extended	h4	in	mm	159	4040	159	4040
	Height Of Overhead Guard (Cabin)	h6	in	mm	86	2195	86	2195
	Height Of Seat/stand On Platform	h7	in	mm	43	1100	43	1100
	Towing Coupling Height	h10	in	mm	13	333	13	333
	Overall Length	l1	in	mm	133	3375	133	3375
	Length To Fork Face	l2	in	mm	91	2305	91	2305
	Overall Width	b1	in	mm	47	1195	48	1220
	Fork Dimensions	s/e/l	in	mm	2/4/42	40/100/1070	2/4/42	40/100/1070
	Fork Carriage To ISO 2328, Class/type A, B				2A		2A	
	Width Of Fork Carriage	b3	in	mm	43	1085	43	1085
	Ground Clearance, Below Mast	m1	in	mm	4	95	4	95
	Ground Clearance, Centre Of Wheelbase	m2	in	mm	4	105	4	100
	Aisle Width With Pallet 1000 x 1200 Across Forks	Ast	in	mm	144	3646	144	3646
	Aisle Width With Pallet 800 x 1200 Along Forks	Ast	in	mm	151	3845	151	3845
	Turning Radius	Wa	in	mm	80	2020	80	2020
	Minimum Pivoting Point Distance	b13	in	mm	22	555	22	555
Performance	Travel Speed, With/without Load		mph	Km/h	10/10	20/20	9/9	15/15
	Lifting Speed, With/without Load		ft/min	mm/s	83/89	420/450	83/89	420/450
	Lowering Speed, With/without Load		ft/min	mm/s	94/89	500/400	98/79	500/400
	Tractive Force, With/without Load		KN	KN	12.7/9.0		12.7/9.0	
	Climbing Ability, With/without Load		%	%	20/20		15/20	
	Acceleration Time, With/without Load		s	s	4.9/4.3		4.9/4.3	
	Service Brake				Hydraulic		Hydraulic	
Drive	Drive Motor, 60 Minute Rating		HP	kW	10.7x2	8x2	11	8.5
	Lift Motor, Rating at S3 15%		HP	kW	28	20.7	28	20.7
	Battery Voltage/Rated Capacity		V/Ah	V/Ah	80/270		80/270	
	Battery Weight		lbs	kg	772	350	772	350
Others	Type Of Drive Control				AC		AC	
	Operating Pressure For Attachments		Mpa	Mpa	14.2		14.2	
	Noise Level At Operator's Ear		dB(A)	dB(A)	≤75		≤75	
	Traction Pin Connections				PIN		PIN	

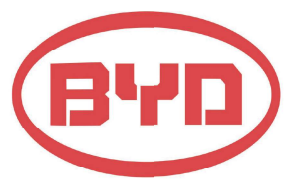


BYD FORKLIFT

MAST SPECIFICATIONS

ECB20B / ECB20C	Maximum Fork Height (h3)	With Standard Load backrest (h2)	Without Standard Load backrest (h2)	Lowered (h1)	Extended with standard Load backrest (h4)	h8	FWD(α)	BWD(β)	Load capacity at 20 inch (510mm) load center	Load capacity at 24 inch (610mm) load center
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lbs (kg)	lbs (kg)
Standard Mast	118(3000)	6(140)	6(140)	80(2030)	157(3990)	37(950)	5°	8°	4590(2082)	4255(1930)
	130(3300)	6(140)	6(140)	86(2180)	169(4290)	37(950)	5°	8°	4449(2018)	4131(1874)
	138(3500)	6(140)	6(140)	90(2280)	177(4490)	37(950)	5°	8°	4352(1974)	4048(1836)
	157(4000)	6(140)	6(140)	102(2580)	196(4990)	37(950)	5°	8°	4092(1856)	3814(1730)
	177(4500)	6(140)	6(140)	111(2830)	216(5490)	37(950)	5°	5°	3790(1719)	3543(1607)
	197(5000)	6(140)	6(140)	123(3130)	236(5990)	37(950)	5°	5°	3591(1629)	3364(1526)
Two-stages Fully Free Mast	118(3000)	44(1110)	58(1472)	81(2060)	157(3990)	37(950)	5°	8°	4590(2082)	4255(1930)
	130(3300)	50(1260)	64(1622)	87(2210)	169(4290)	37(950)	5°	8°	4449(2018)	4131(1874)
	138(3500)	54(1360)	68(1722)	91(2310)	177(4490)	37(950)	5°	8°	4352(1974)	4048(1836)
	157(4000)	63(1610)	78(1972)	101(2560)	196(4990)	37(950)	5°	8°	4092(1856)	3814(1730)
Three- Stages Fully Free Mast (4 cylinders)	157(4000)	39(1000)	54(1362)	77(1950)	196(4990)	37(950)	5°	5°	4092(1856)	3814(1730)
	177(4500)	46(1160)	60(1522)	83(2110)	216(5490)	37(950)	5°	5°	3790(1719)	3543(1607)
	189(4800)	50(1260)	64(1622)	87(2210)	228(5790)	37(950)	5°	5°	3653(1657)	3419(1551)
	197(5000)	52(1325)	66(1687)	90(2275)	236(5990)	37(950)	5°	5°	3591(1629)	3364(1526)
	217(5500)	59(1510)	74(1872)	97(2460)	256(6490)	37(950)	5°	5°	3362(1525)	3155(1431)
	236(6000)	68(1720)	82(2082)	105(2670)	275(6990)	37(950)	5°	5°	3164(1435)	2976(1350)
	256(6500)	74(1880)	88(2242)	111(2830)	295(7490)	37(950)	5°	5°	2306(1046)	2577(1169)
Three- Stages Fully Free Mast (3 cylinders)	157(4000)	38(975)	53(1337)	76(1925)	196(4990)	37(950)	5°	5°	4092(1856)	3814(1730)
	177(4500)	45(1135)	59(1497)	82(2085)	216(5490)	37(950)	5°	5°	3790(1719)	3543(1607)
	189(4800)	49(1235)	63(1597)	86(2185)	228(5790)	37(950)	5°	5°	3653(1657)	3419(1551)
	197(5000)	51(1295)	65(1657)	88(2245)	236(5990)	37(950)	5°	5°	3591(1629)	3364(1526)
	217(5500)	59(1495)	73(1857)	96(2445)	256(6490)	37(950)	5°	5°	3362(1525)	3155(1431)
	236(6000)	67(1705)	81(2067)	105(2655)	275(6990)	37(950)	5°	5°	3164(1435)	2976(1350)
	256(6500)	73(1865)	88(2227)	111(2815)	295(7490)	37(950)	5°	3°	2306(1046)	2577(1169)
	276(7000)	82(2085)	96(2447)	119(3035)	315(7990)	37(950)	3°	3°	\	\
	295(7500)	90(2285)	103(2620)	127(3235)	334(8490)	37(950)	3°	3°	\	\

ECB20D / ECB20E	Maximum Fork Height (h3)	With Standard Load backrest (h2)	Without Standard Load backrest (h2)	Lowered (h1)	Extended with standard Load backrest (h4)	h8	FWD(α)	BWD(β)	Load capacity at 20 inch (510mm) load center	Load capacity at 24 inch (610mm) load center
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lbs (kg)	lbs (kg)
Standard Mast	118(3000)	6(140)	6(140)	78(1990)	167(4240)	47(1200)	5°	9°	4590(2082)	4255(1930)
	138(3500)	6(140)	6(140)	90(2290)	187(4740)	47(1200)	5°	9°	4352(1974)	4048(1836)
	157(4000)	6(140)	6(140)	100(2540)	206(5240)	47(1200)	5°	9°	4092(1856)	3814(1730)
	177(4500)	6(140)	6(140)	112(2840)	226(5740)	47(1200)	5°	6°	3790(1719)	3543(1607)
	197(5000)	6(140)	6(140)	122(3090)	246(6240)	47(1200)	5°	6°	3591(1629)	3364(1526)
	118(3000)	33(840)	57(1447)	80(2040)	167(4240)	47(1200)	5°	9°	4590(2082)	4255(1930)
Two-stages Fully Free Mast	138(3500)	43(1090)	67(1697)	90(2290)	187(4740)	47(1200)	5°	9°	4352(1974)	4048(1836)
	157(4000)	53(1340)	77(1947)	100(2540)	206(5240)	47(1200)	5°	9°	4092(1856)	3814(1730)
	157(4000)	29(743)	53(1350)	76(1943)	206(5240)	47(1200)	5°	6°	4092(1856)	3814(1730)
	177(4500)	35(893)	59(1500)	82(2093)	226(5740)	47(1200)	5°	6°	3790(1719)	3543(1607)
Three- Stages Fully Free Mast (3 cylinders)	189(4800)	39(993)	63(1600)	86(2193)	238(6040)	47(1200)	5°	6°	3653(1657)	3419(1551)
	197(5000)	43(1093)	67(1700)	90(2293)	246(6240)	47(1200)	5°	6°	3591(1629)	3364(1526)
	209(5300)	46(1163)	70(1770)	93(2363)	257(6540)	47(1200)	5°	6°	\	\
	217(5500)	51(1293)	75(1900)	98(2493)	265(6740)	47(1200)	5°	6°	3362(1525)	3155(1431)
	236(6000)	59(1493)	80(2040)	106(2693)	285(7240)	47(1200)	5°	6°	3164(1435)	2976(1350)
	256(6500)	65(1643)	89(2250)	112(2843)	305(7740)	47(1200)	5°	3°	2306(1046)	2577(1169)



BYD FORKLIFT

