C & C HYDRAULICS LTD

Chassis Conversion Specialists

PRODUCT DATASHEET

WACKER PLATE LIFT KIT

24 V DC electro-hydraulic kit that lowers a plate compactor to ground level and raises it back into a locked stowage position.

The Wacker Plate Lift Kit is built around a 50 mm bore × 400 mm stroke double-acting lift cylinder, a 0.8 kW DC micro power pack and a Wraptor hydraulic locking cylinder that secures the plate whenever the system is at rest. Everything is controlled from a 2-button pendant. Pilot-operated check valves hold the cylinder when the pendant is released, and an adjustable flow control valve sets the lowering speed. Hydraulic system designed by C & C Hydraulics Ltd.



WACKER PLATE LIFT KIT — STOWAGE FRAME

24 V DC	0.8 kW	160 bar	400 mm
Supply voltage, approx. 25 A	Motor power, S3 duty	Relief setting, 200 bar component rating	Cylinder stroke, Ø50 bore

KEY FEATURES

- Complete kit: lift cylinder, power pack, valve, lock, pendant, check and flow control valves
- Wraptor lock releases when the motor runs and re-applies by spring when it stops
- 2-button pendant with 3 m spiral cable and quick-connect plug
- Lowers in 25–30 s (adjustable) and raises in 20 s
- Dual pilot-operated check valve holds the plate when the pendant is released
- Theoretical lifting force 20.1 kN at 160 bar

Ready to spec your lift kit?

Talk to us about sizing, fitment, lead times and pricing.

CALL 01535 617880
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Kit Overview

Key specifications and the seven hydraulic items supplied in the kit.

KEY SPECIFICATIONS

Parameter	Value
Supply voltage	**24 V DC**
Motor rating	**0.8 kW, S3 intermittent duty**
Power required in operation	**0.6 kW, approx. 25 A**
Max operating pressure (relief valve setting)	**160 bar**
Max working pressure (component rating)	**200 bar**
Lowering time (cylinder extends)	**25–30 s, adjustable via flow control valve**
Raising time (cylinder retracts)	**20 s**
Oil to extend cylinder (full bore)	**0.785 L**
Oil to retract cylinder (annulus)	**0.502 L**
Oil displaced by rod	**283 cc**
Reservoir capacity	**2.0 L (plastic tank)**
Pump displacement	**0.8 cc/rev gear pump**
Control	**2-button pendant (raise / lower), 3 m spiral cable**
Load holding	**Dual PO check valve + Wraptor mechanical lock**

HYDRAULIC PARTS LIST

Item	Stock code	Description	Qty
1	**702.400THO-CC**	50 × 30 × 400 stroke double-acting lift cylinder	1
2	**YBZ5-E0.8Z2T4/UVUAT1**	24 V DC micro power pack, 0.8 kW motor, 2 L tank	1
3	**4DWG46/DC24NZ5L**	CETOP 2 directional valve, PTO connected, A & B blocked	1
4	**STS.LOCKING KIT**	Wraptor locking system (spring-applied locking cylinder)	1
5	**RCA-2B4L3M-1**	2-button hand control, 3 m spiral cable, quick-connect plug	1
6	**ARDP6-750**	Dual pilot-operated check valve assembly, banjo mounted	1
7	**FRV8**	1/4" BSP flow control valve (between valve port B and the PO check valve)	1

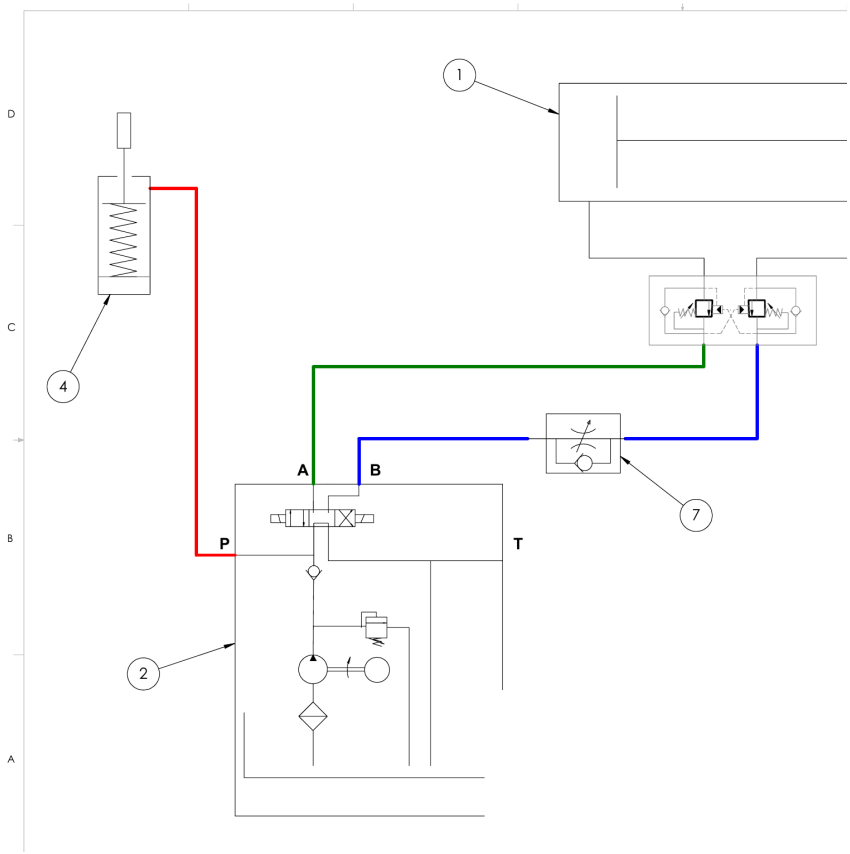
Cylinder force. Theoretical force at 160 bar: 31.4 kN pushing (extend) and 20.1 kN pulling (retract, i.e. lifting the plate), calculated from bore and rod diameters before losses.

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Hydraulic Circuit

The pump feeds the CETOP 2 valve and, on the same pressure line, the Wraptor lock — so the lock releases whenever the motor runs and re-applies by spring when it stops.

HYDRAULIC SCHEMATIC — ITEMS 1–7



Port A feeds the cylinder cap end to extend (lower); port B feeds the rod end through the FRV8 flow control to retract (raise). The dual PO check valve holds both sides when the valve centres.

OPERATING SEQUENCE

1 — TO LOWER

1. Press and hold the LOWER button.
2. The power pack starts and solenoid coil A shifts the spool.
3. The locking cylinder retracts, releasing the plate.
4. The lift cylinder extends, lowering the plate (25–30 s). If too fast, adjust the FRV8 to slow it.
5. Release: the spool centres, the lock deploys and the cylinder holds position.

2 — TO RAISE

1. Press and hold the RAISE button.
2. The power pack starts and solenoid coil B shifts the spool the other way.
3. The locking cylinder retracts.
4. The lift cylinder retracts, lifting the plate into stowage (approx. 20 s).
5. Release: the lock deploys and the cylinder holds position.

Each movement runs only while its button is held.

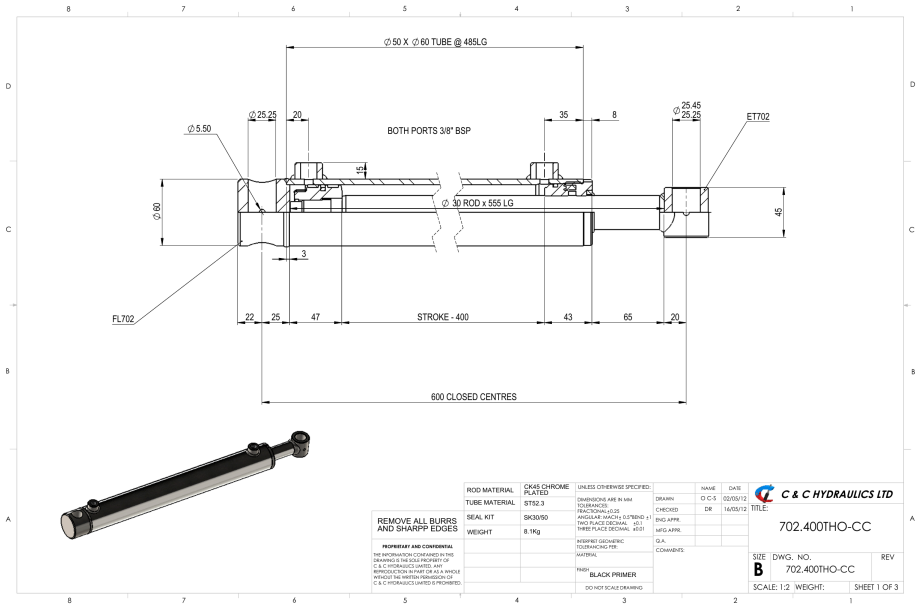
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702.400THO-CC Lift Cylinder

50 mm bore, 30 mm rod, 400 mm stroke double-acting cylinder at 600 mm closed centres. All dimensions in millimetres.

Ø50 mm	Ø30 mm	400 mm	8.1 kg
Bore	Rod	Stroke	Weight

GENERAL ARRANGEMENT — 702.400THO-CC



CYLINDER SPECIFICATION

Reference	Dimension	Notes
Bore × rod × stroke	**Ø50 × Ø30 × 400 mm**	Double acting
Closed centres	**600 mm**	
Extended centres	**1000 mm**	600 + 400 stroke
Tube	**Ø50 ID × Ø60 OD × 485 mm**	ST52.3
Rod	**Ø30 × 555 mm**	CK45 chrome plated
Ports	**2 × 3/8" BSP**	
Base end fitting	**FL702**	Ø25.25 mm pin bore
Rod end fitting	**ET702**	Ø25.25–25.45 mm pin bore, 45 mm eye
Seal kit	**SK30/50**	
Max working pressure	**200 bar**	
Finish	**Black primer**	

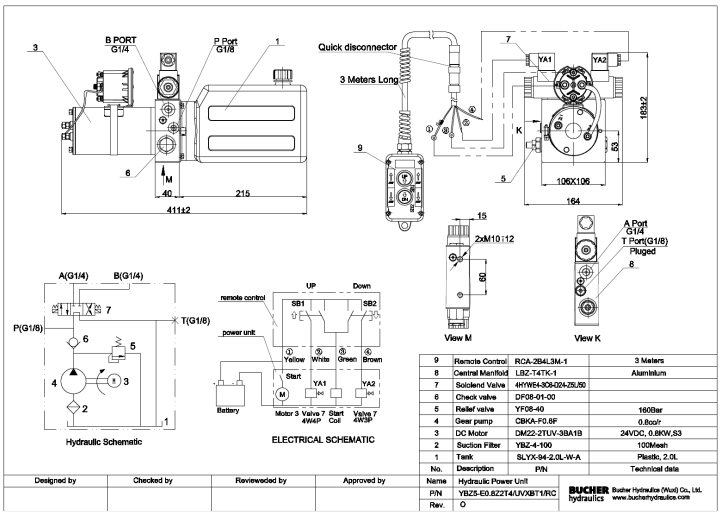
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YBZ5-E0.8 Power Pack

YBZ5-E0.8Z2T4/UVXBT1/RC — Bucher Hydraulics 24 V DC micro power pack, approx. 411 × 163 × 164 mm.

24 V DC	0.8 kW	0.8 cc/r	160 bar
Motor voltage	Motor power	Pump displacement	Relief setting

GENERAL ARRANGEMENT, HYDRAULIC & ELECTRICAL SCHEMATIC



KIT SPECIFICATION

No.	Component	Part number	Technical data
1	Tank	SLYX-94-2.0L-W-A	Plastic, 2.0 L
2	Suction filter	YBZ-4-100	100 mesh
3	DC motor	DM22-2TUV-3BA1B	24 V DC, 0.8 kW, S3
4	Gear pump	CBKA-F0.8F	0.8 cc/rev
5	Relief valve	YF08-40	160 bar
6	Check valve	DF08-01-00	
7	Solenoid valve	4HYWE4-3C6-D24-Z5L/50	24 V DC coils YA1 / YA2
8	Central manifold	LBZ-T4TK-1	Aluminium
9	Remote control	RCA-2B4L3M-1	3 m cable, SB1 (up) / SB2 (down)

PORTS & MOUNTING

P G1/8, A G1/4, B G1/4, T G1/8 (plugged). 2 × M10 tapped holes, 12 mm deep, at 60 mm centres on the manifold.

PENDANT WIRING

Four cores — yellow (1), white (2), green (3), brown (4) — via a quick-disconnect plug. Each button starts the motor and energises its valve coil.

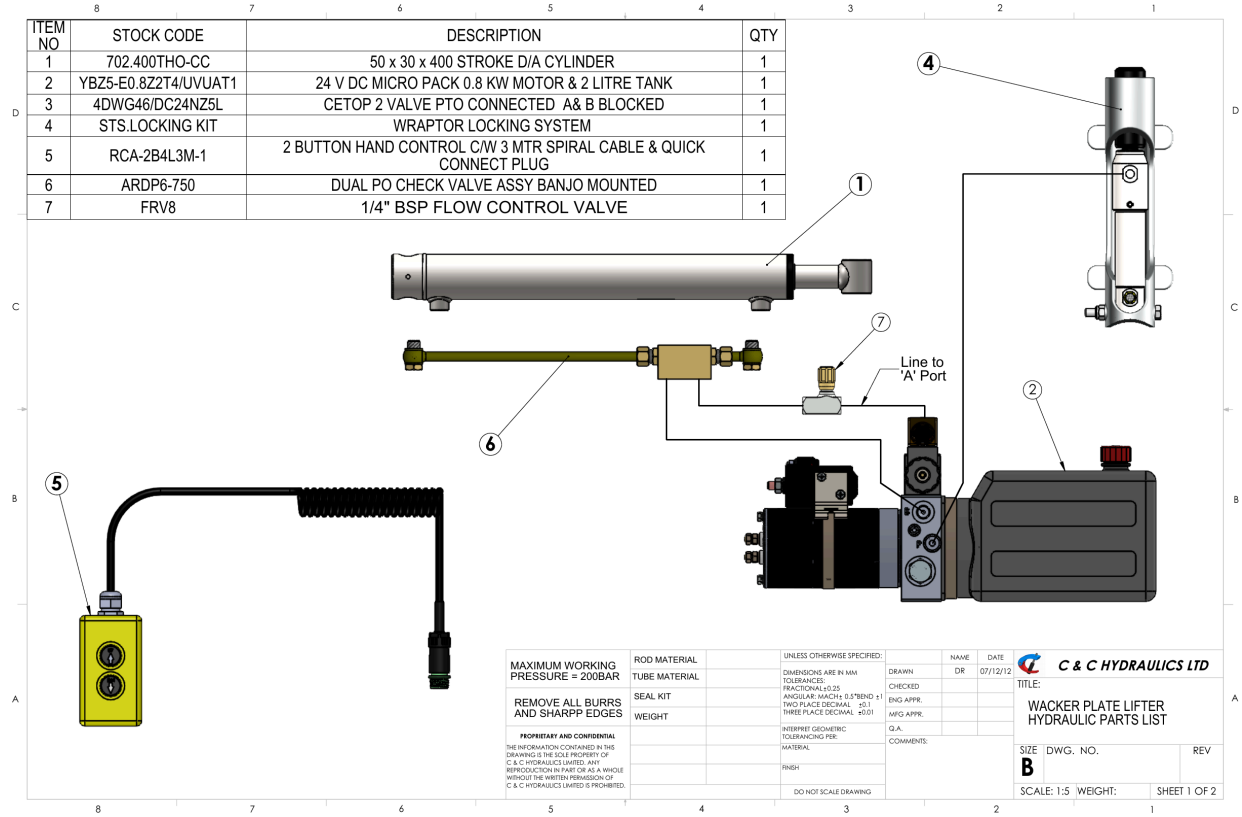
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Installation & Safety

Adjustment, electrical and safety notes for installers, with the kit parts list drawing.

HYDRAULIC PARTS LIST — C & C HYDRAULICS, SHEET 1 OF 2

ITEM NO	STOCK CODE	DESCRIPTION	QTY
1	702.400THO-CC	50 x 30 x 400 STROKE D/A CYLINDER	1
2	YBZ5-E0.8Z2T4/UVUAT1	24 V DC MICRO PACK 0.8 KW MOTOR & 2 LITRE TANK	1
3	4DWG46/DC24NZ5L	CETOP 2 VALVE PTO CONNECTED A& B BLOCKED	1
4	STS.LOCKING KIT	WRAPTOR LOCKING SYSTEM	1
5	RCA-2B4L3M-1	2 BUTTON HAND CONTROL C/W 3 MTR SPIRAL CABLE & QUICK CONNECT PLUG	1
6	ARDP6-750	DUAL PO CHECK VALVE ASSY BANJO MOUNTED	1
7	FRV8	1/4" BSP FLOW CONTROL VALVE	1



INSTALLER NOTES

- **Speed adjustment:** lowering speed is set at the FRV8 flow control valve on the rod-end (B) line; nominal lowering time is 25–30 s.
- **Oil level:** the tank level drops by about 283 cc with the plate lowered. Check the level with the plate stowed.
- **Electrical:** supply must deliver 24 V DC at approx. 25 A; fuse and cable to suit.
- **Pressure:** the relief valve is factory set at 160 bar; do not exceed the 200 bar component rating.
- **Duty:** the motor is rated S3 intermittent; avoid holding a button after the cylinder reaches end of stroke.
- **Assembly:** remove all burrs and sharp edges before fitting hydraulic lines.

Keep clear of the plate while it moves. The dual pilot-operated check valve holds the cylinder and the Wraptor lock deploys automatically when the buttons are released. Dimensions on the supplied drawings take precedence over this sheet.

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