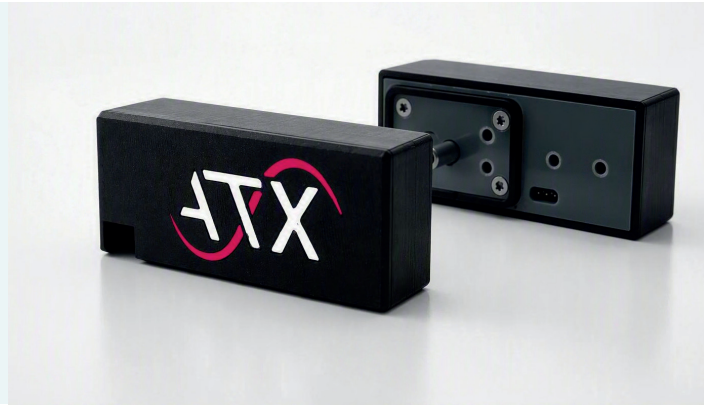


Bi-Levelmotor V2.0

Shifting unit

Art.-Nr. 542093



The Bilevel Motor V2.0 is a compact and robust shifting unit designed for precise switching between ICT and FCT test positions in PCB test fixtures.

Key Features

- No polarity reversal required for position switching
- Position sensing by Hall sensors
- Compact, low-profile design, especially suitable for HP 3070 applications
- Wide input voltage range
- Simple control via 200 ms drive pulse, TTL or DI/O
- Potential-free position output via Photo MOS relay

Mechanical specifications

Dimensions (L x W x H):	87 x 36 x 36 mm
Weight:	190 gr
Shaft:	Ø 8 × 12 mm
Lifetime:	> 1.000.000 cycles
Sealing:	Vacuum-tight

Electrical specifications

Supply voltage:	6 - 24 VDC
Current consumption:	max. 1 A
Digital inputs:	DRIVE: 5 - 24 VDC
Isolation:	Optocoupler, galvanically isolated

Pin assignment

Pin	Signal	Description
1	VCC	6-24 VDC supply
2	GND	Ground
3	GND	Reference for USIG
4	DRIVE	Drive command from tester (5-24 VDC, 200 ms pulse)
5	USIG / COM	Common reference for the FCT and ICT position outputs
6	FCT	Floating PhotoMOS output FCT, closed to USIG/COM in FCT position
7	+5V	5 V auxiliary output for position indication
8	ICT	Floating PhotoMOS output ICT, closed to USIG/COM in ICT position

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For practical wiring, FCT and ICT can be evaluated like floating feedback contacts. However, they are not conventional mechanical relay contacts.

When connecting the outputs, observe the permissible electrical ratings of the PhotoMOS output. As with semiconductor outputs, a small leakage current may occur.

The switching function is implemented by PhotoMOS relays. Therefore, there is no mechanical contact bounce and no mechanical contact wear.

The FCT and ICT outputs behave functionally like floating normally-open contacts, but they do not contain mechanical relay contacts.

Note on PhotoMOS outputs

Important: Pin 5 is not a separate position input. Pin 5 is the common contact (COM) of the floating position outputs. If the internal 5 V auxiliary supply is to be used, pin 7 (+5 V) can be bridged to pin 5 (USIG/COM). This provides a direct digital 5 V position signal at pin 6 or pin 8.

Depending on the current motor position, the internal PhotoMOS relay connects either pin 5 to pin 6 (FCT) or pin 5 to pin 8 (ICT).

The FCT (pin 6) and ICT (pin 8) position outputs are floating PhotoMOS outputs. Pin 5 (USIG/COM) serves as the common reference for both outputs.

Functional description of the position outputs

Pin	Signal	Function
1	VCC	6-24 V supply
2	GND	Supply-GND
3	GND	Reference for USIG
4	DRIVE	Driving command
5	UIG / COM	Common reference for ICT/FCT
6	FCT	PhotoMOS-output for FCT
7	+5V	5 V auxiliary voltage
8	ICT	PhotoMOS-output for ICT
	Option: Bridge Pin7 (+5 V) to Pin5 (USIG/COM) if galvanic isolation is not required. Note: FCT/ICT are PhotoMOS outputs, not mechanical relay contacts.	

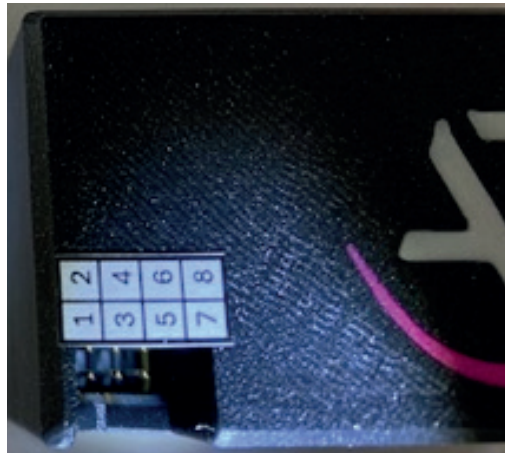
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Connector View (X1)

X1		
1	2	
VCC	●	GND
GND	●	DRIVE
USIG 5-24V	●	FCT
+5V	●	ICT
	7	8



Product View



Order options

Give us a call or simply send us an inquiry by email!

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