

CODA-PIN[®]

Benchtop Test Jigs and Accessories



Robust, easily customised, standalone kits for testing a variety of PCBs such as those containing conventional and surface mount circuitry. There are three versions - basic hinged-top, cam operated pusher plate or advanced cam-operated gate with fully adjustable pusher-fingers.

Typical examples of their usage are:

- Repair and calibration stations
- Low to medium volume testing of PCBs - such as power supplies and control boards
- Functional testing and alignment of modules & sub-assemblies
- Probing of both sides of the PCB is possible

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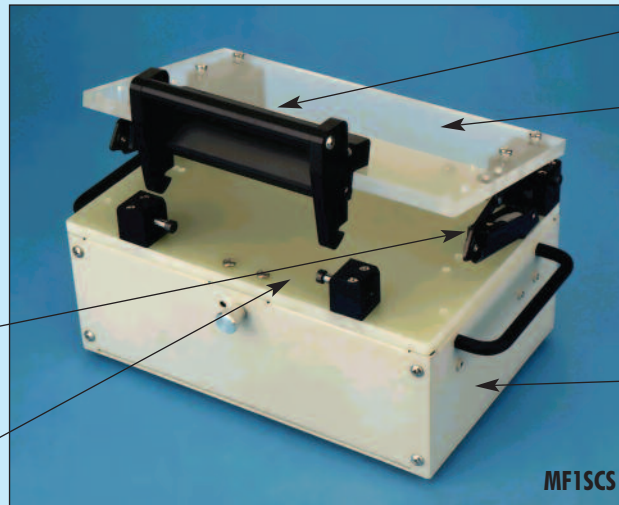
Uncomplicated test jig, using a hinged lid for compression - self customisation.

The MF series is designed to test simpler PCBs, such as those containing low density conventional circuitry. Typical examples of their usage are:

- Repair and calibration stations.
- Testing PCBs such as power supplies, control boards.
- Modules & sub-assembly alignment.
- Supplied with 14 push fingers.

Two Carlson springs allow the top plate to remain open at any position. (except MF0SC)

Probe plate will open on hinges, allowing access to pan.



Robust handle and latch assembly.

Clear perspex lid allows visibility of UUT.

All sides and base plate can be removed for drilling. 100mm deep pan as standard.

MF1SCS

This series has a hinged perspex top plate which, when latched closed, and using the provided pusher rods, puts a downward force onto the PCB and the test probes. For jig customisation components such as tooling pins or guide plates, available options and guidance as to which type of spring probes to use - please see the sections below.

Coda part no.	Base box size W x L x D (mm)	Max U.U.I. (mm)	Max node count (6oz probes)	Notes
MF0SC	100 x 150 x 65	75 x 75	25	MF1SC & upwards feature side handles and carlson springs (which allow the top plate to remain open at any position).
MF1SC	200 x 300 x 100	150 x 150	150	
MF1SCS	300 x 200 x 100	230 x 100	150	
MF2SC	300 x 400 x 100	250 x 250	200	MF1SCS, MF2SCS and MF3SCS have the latch on the longest side.
MF2SCS	400 x 300 x 100	330 x 170	200	
MF3SC	400 x 500 x 100	350 x 350	250	
MF3SCS	500 x 400 x 100	430 x 250	250	

MF series extra options

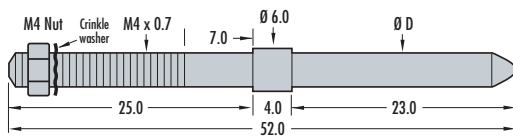
- Shallow pan, 65mm deep
- Pan & probe board only (no hinged lid); for open access to the unit under test
- Riser block sets - for PCBs with taller components

- Sloping pan, so that the probe plate faces you a little more (available for MF2SCS and MF3SCS)
- Extra pusher fingers: PFI

See www.coda-systems.co.uk for quotations, availability & ordering

Fixture customisation accessories suitable for MF series

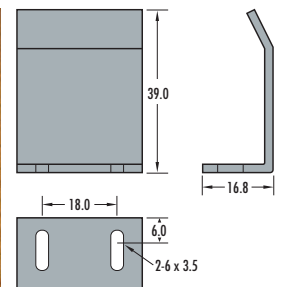
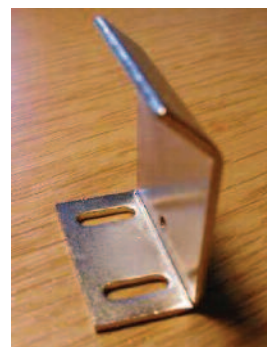
Rigid tooling pins (pegs for locating PCB guide holes)



Long length tooling pins, with an M4 thread, suitable for loaded board testing. M4 nuts & washers included. Bullet nose tip. **Drill hole size:** 3.95 - 4.00mm

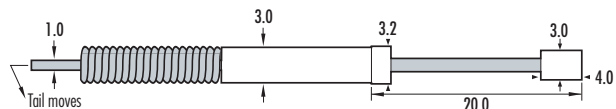
Coda part no.	Ø D (mm)	Pin tip shape
RLTP1.95	1.95	short taper 3mm
RLTP2.45	2.45	short taper 3mm
RLTP2.95	2.95	short taper 3mm
RLTP3.15	3.15	short taper 3mm
RLTP3.45	3.45	long taper 3mm
RLTP3.75	3.75	long taper 10mm
RLTP3.85	3.85	long taper 10mm
RLTP3.95	3.95	long taper 10mm

Guide plates for guiding the edge of the PCB nearer and to giving some protection to the tooling pins & probes.



GPW1

Floating pins for keeping the PCB raised away from the probes until the top plate is lowered.



PJ2FP3.0/20

Drill hole size: 3.00mm

Qty: 4+ suggested

Series	test centres
LPA2	1.91mm
PA4	2.54mm
PA5	3.2mm
PA6	4.75mm

Recommended Coda-Pin™ probes for the MF series

- HD-PA4 to HD-PA6 series for high current applications.
- Switching probes, such as PS3 and PS6, for presence detection applications.

See www.coda-systems.co.uk for our extensive range of test probes.

Robust test jig using a cam-operated horizontal probe plate. Ideal for self customisation.

The CMF series uses fixed position push fingers and is designed to test low to medium density PCBs, such as those containing conventional and surface mount circuitry.

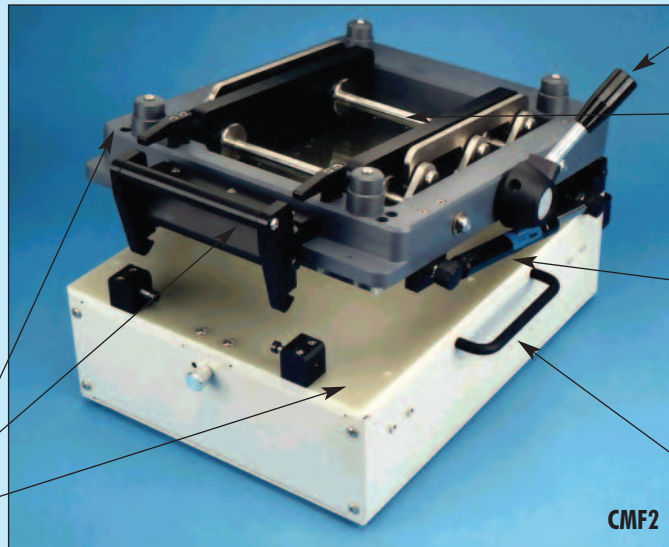
Typical examples of their usage are:

- Repair and calibration stations.
- Low to medium volume testing of PCBs - such as power supplies and control boards.
- Double-sided probing of the PCB is possible with this design.

Sturdy framework keeps top plate stable.

Robust handle and latch for the lid.

Base probe plate will open on hinges to allow access to the pan.



Handle to operate the cam system and lock the lid down.

Cam operation ensures a true linear motion of the top plate.

Two gas springs prevent the lid falling down.

All sides and base plate will remove for customisation. 100mm deep pan as standard.

This series has a cam-operated FR4 top plate fitted onto a hinged lid. When the lid is latched closed the handle will then push down the top plate, with the provided pusher rods, ensuring a true linear downward motion onto the PCB. Test probes can be fitted into both the base pan's probe plate and, to a limited extent, on the top plate allowing some double-sided probing.

For jig customisation components such as tooling pins or guide plates, available options and guidance as to which type of spring probes to use - please see the section at the bottom.

Coda part no.	Base box size W x L x D (mm)	Max U.U.T. (mm)	Max node count (6oz probes)	Notes
CMF1	200 x 300 x 100	140 x 220	300	'S' suffix means that the latch is on the long side of the pan. Width (W) is the latch/hinge side. Depth (D) is the pan's internal depth.
CMF1S	300 x 200 x 100	240 x 110	300	
CMF2	300 x 400 x 100	225 x 300	600	
CMF2S	400 x 300 x 100	340 x 220	550	
CMF3	400 x 500 x 100	340 x 400	600	
CMF3S	500 x 400 x 100	440 x 310	600	
CMF4S	600 x 500 x 100	550 x 420	800	

NOTE: The cam system may differ visually from that illustrated depending on part no.

MF series extra options

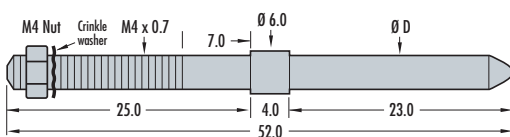
- Shallow pan 65mm deep
- Sloping pan so that the probe plate faces you a little more (available for CMF2S & CMF3S)
- Perspex/acetyl transparent top plate - for PCB visibility

- Riser block sets - for PCBs with taller components
- Extra pusher fingers: PF1
- Dual-well version

See www.coda-systems.co.uk for quotations, availability & ordering

Fixture customisation accessories suitable for CMF series

Rigid tooling pins (pegs for locating PCB guide holes)

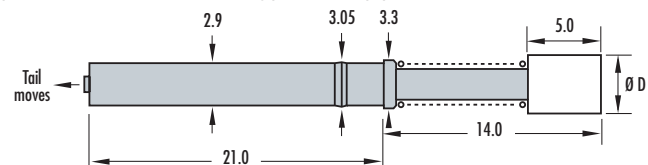


Long length tooling pins, with an M4 thread, suitable for loaded board testing. M4 nut & washer included. Bullet nose tip. **Drill hole size:** 3.95 - 4.00mm

Note: You may need to drill the top plate to allow the tooling pin to pass through.

Coda part no.	Ø D (mm)	Pin tip shape
RLTP1.95	1.95	short taper 3mm
RLTP2.45	2.45	short taper 3mm
RLTP2.95	2.95	short taper 3mm
RLTP3.15	3.15	short taper 3mm
RLTP3.45	3.45	long taper 3mm
RLTP3.75	3.75	long taper 10mm
RLTP3.85	3.85	long taper 10mm
RLTP3.95	3.95	long taper 10mm

Floating pins for keeping the PCB raised away from the test probes until the top plate is lowered. Also useful for leveling pressure in unpopulated areas.



Drill hole size: 2.88 - 2.89mm

FPI-35 300gm spring force, tip diameter 3.5mm

FPI-60 300gm spring force, tip diameter 6.0mm

Recommended Coda-Pin™ probes for the CMF series

Series	test centres
LPA2	1.91mm
PA4	2.54mm
PA5	3.2mm
PA6	4.75mm

See www.coda-systems.co.uk for our extensive range of test probes.

- HD-PA4 to HD-PA6 series for high current applications.
- Switching probes, such as PS3 and PS6, for presence detection applications.

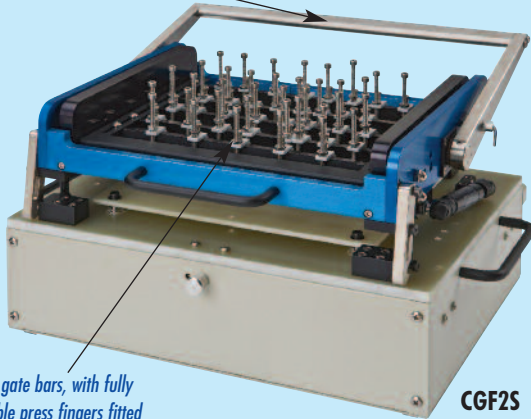
Advanced test jig, using a cam-operated gate, with fully adjustable push fingers. Ideal for self customisation.

The CGF series uses adjustable position push fingers and is designed to test low to medium density PCBs, such as those containing conventional and surface mount circuitry.

Typical examples of their usage are:

- Repair and calibration stations.
- Low to medium volume testing of PCBs such as power supplies and control boards.
- Double-sided probing of the PCB is possible with this design.

Robust handle and latch assembly with interlock



Several gate bars, with fully adjustable press fingers fitted

CGF2S

Anti-slam gas springs

CGF2S

Optional stripper plate

100mm deep pan

All sides and base plate can be removed for customisation

Hinged probe plate allowing access to pan

This series has a cam-operated gate fitted onto the hinged lid. When the lid is latched closed, the handle will then push down the gate, pressing the PCB into position upon the probe field. This will ensure a true linear downward motion onto the PCB.

Coda part no.	Base box size W x L x D (mm)	Max U.U.I. (mm)	Max node count (6oz probes)	Notes
CGF1	220 x 300 x 100	120 x 185	300	'S' suffix means that the latch is on the long side of the pan.
CGF2S	400 x 300 x 100	250 x 200	550	
CGF3S	500 x 400 x 100	350 x 275	600	

CG series extra options

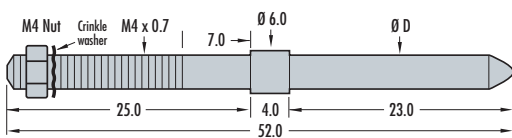
- Riser block sets - for PCBs with taller components
- Sloping pan on CGF2S & 3S
- Hanger probe bracket kits for opens express electronics or presence detection applications
- Top head unit available separately for use with an existing probe plate

- Top head unit and probe plate available separately for use with an existing pan or test system
- Stripper plate, above the probe plate, supports PCB and protects the probe field. Can be used for guided probe applications.

See www.coda-systems.co.uk for quotations, availability & ordering

Fixture customisation accessories suitable for CGF series

Rigid tooling pins (pegs for locating PCB guide holes)

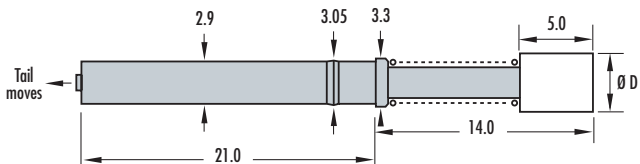


Long length tooling pins, with an M4 thread, suitable for loaded board testing. M4 nut & washer included. Bullet nose tip. **Drill hole size:** 3.95 - 4.00mm

Note: You may need to drill the top plate to allow the tooling pin to pass through.

Coda part no.	Ø D (mm)	Pin tip shape
RLTP1.95	1.95	short taper 3mm
RLTP2.45	2.45	short taper 3mm
RLTP2.95	2.95	short taper 3mm
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RLTP3.45	3.45	long taper 3mm
RLTP3.75	3.75	long taper 10mm
RLTP3.85	3.85	long taper 10mm
RLTP3.95	3.95	long taper 10mm

Floating pins for keeping the PCB raised away from the test probes until the top plate is lowered. Also useful for leveling pressure in unpopulated areas.



Drill hole size: 2.88 - 2.89mm

FP1-35 300gm spring force, tip diameter 3.5mm
FP1-60 300gm spring force, tip diameter 6.0mm

Recommended Coda-Pin probes for the CGF series

Series	test centres
LPA2	1.91mm
PA4	2.54mm
PA5	3.2mm
PA6	4.75mm

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- HD-PA4 to HD-PA6 series for high current applications.
- Switching probes, such as PS3 and PS6, for presence detection applications.

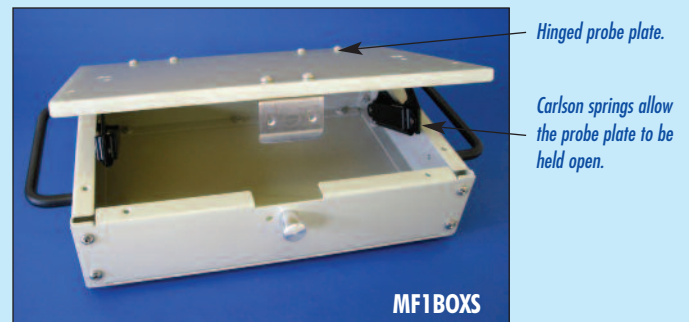
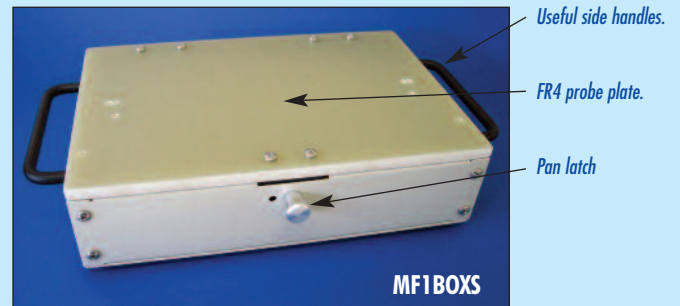
Jig Parts

Essential components for jig builders and customisers such as guide plates, latches and tooling pins. You can also build your own jig with our test boxes.

Desktop test boxes

Jig base, consisting of a pan and a hinged probe plate, allows you to construct a simple but effective benchtop test station. Available in two sizes and having a 65mm deep pan - allowing some room for any supporting electronics, power supply and wiring.

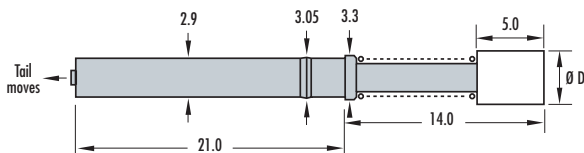
See www.coda-systems.co.uk for quotations, availability & ordering



Coda part no.	Base box size W x L x D (mm)	Max U.U.I. (mm)	Max probe count (6oz probes)	Notes
MF1BOXS	300 x 200 x 65	230 x 100	50	All of the side plates remove for easy customisation.
MF2BOXS	400 x 300 x 65	300 x 170	60	Deeper pans are available (100mm)

Floating pins

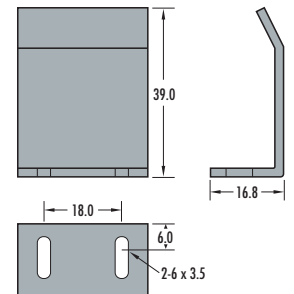
Floating pins for keeping the PCB raised away from the test probes until the top plate is lowered. Also useful for leveling pressure in unpopulated areas.



Drill hole size: 2.88 - 2.89mm
 FP1-35 300gm spring force, tip diameter 3.5mm
 FP1-60 300gm spring force, tip diameter 6.0mm

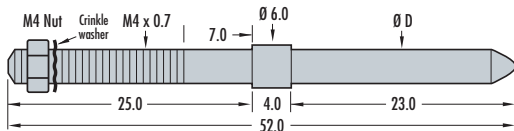
Guide plates

Guide plates to ensure the alignment of the PCB and to give some protection to the tooling pins & probes.



GPW1

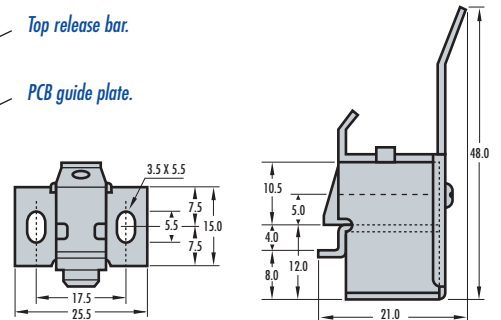
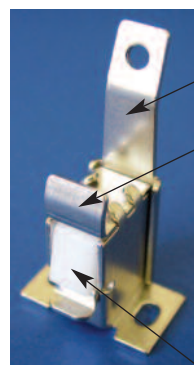
Rigid tooling pins (pegs for locating PCB guide holes)



Long length tooling pins, with an M4 thread, suitable for loaded board testing. M4 nuts & washers included. Bullet nose tip. Drill hole size: 3.95 - 4.00mm

Coda part no.	Ø D (mm)	Pin tip shape
RLTP1.95	1.95	short taper 3mm
RLTP2.45	2.45	short taper 3mm
RLTP2.95	2.95	short taper 3mm
RLTP3.15	3.15	short taper 3mm
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RLTP3.75	3.75	long taper 10mm
RLTP3.85	3.85	long taper 10mm
RLTP3.95	3.95	long taper 10mm

Single latch: top release



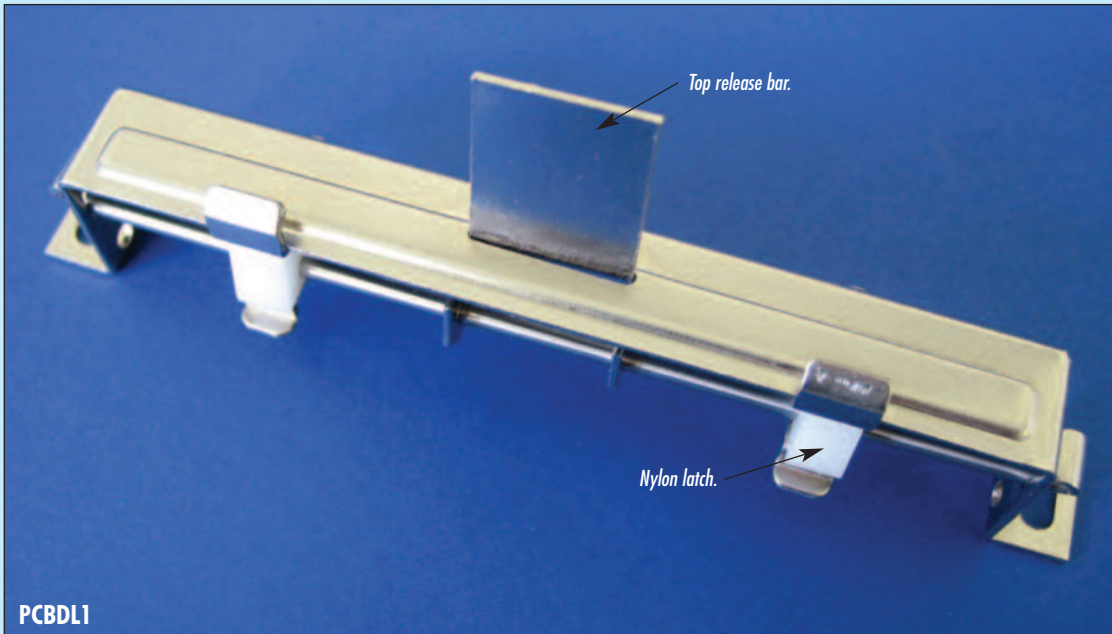
PCBL1

Guidelines for single latches

- Ideal for use with PA4 to PA6 probe ranges.
- Suitable for smaller sized PCBs.
- Receptacles should be mounted into the probe plate, raised high enough so that the probe is suitably compressed when the PCB is latched in place.

See www.coda-systems.co.uk for our extensive range of test probes.

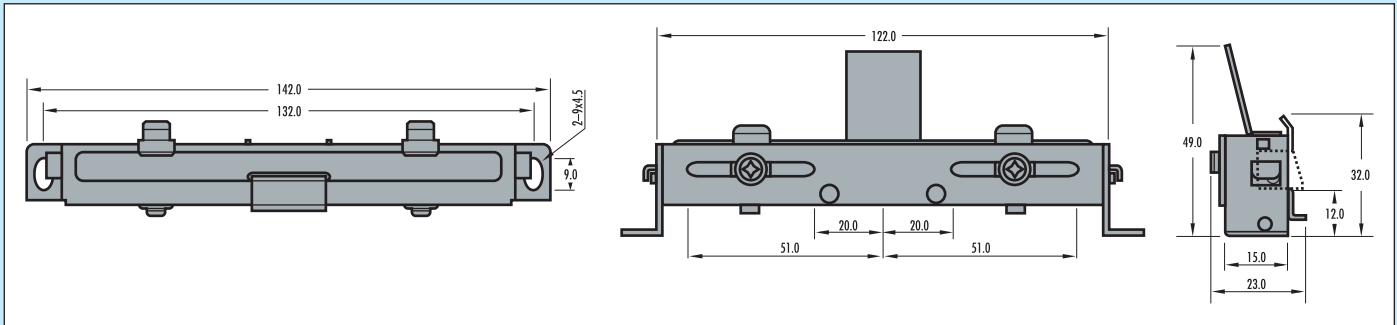
Double latch: Top release suitable for open-topped test boxes



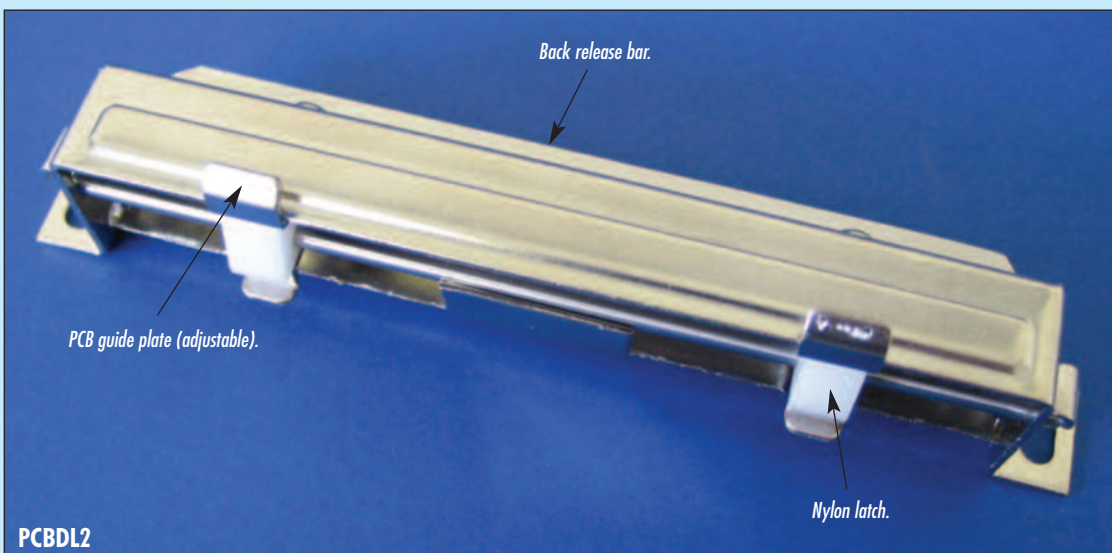
Guidelines for double latches

- Adjustable position of both latches.
- Suitable for larger PCB sizes.
- Ideal for use with PA4 to PA6 probe ranges.
- Receptacles should be mounted into the probe plate, raised high enough to that the probe is suitably compressed when the PCB is latched in place.

See www.coda-systems.co.uk for our extensive range of test probes.



Double latch: Back release suitable for open-topped test boxes



Guidelines for double latches

- Adjustable position of both latches.
- Suitable for larger PCB sizes.
- Ideal for use with PA4 to PA6 probe ranges.
- Receptacles should be mounted into the probe plate, raised high enough to that the probe is suitably compressed when the PCB is latched in place.

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