

# Manual test fixture

## MA 2013/D/H

Item 48620



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Partner for Future Technology

### INGUN SELECTION

- Manual test fixtures with parallel closing drive mechanism for testing medium PCB quantities with the highest quality and precision
- Stand-alone test fixtures with and without pre-configured test system interface
- Integrated, non-exchangeable kits in standard, ESD and RF versions that can be used without readjustment
- Direct, hard-wired signal transmission
- Detailed accompanying documents (e.g., customising guidelines)
- Maximum opening angle may vary due to the length tolerance of +/- 2 mm of the gas spring

**Note:**

By replacing the gas springs, an additional weight of 3 kg can be loaded onto the pressure frame for every 100 N increase.



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### General data

Test system interface:	Not pre-wired
Product group:	Manual test fixtures (MA)
Main series:	MA xxxx
Subseries:	MA 20xx
Series:	MA 2013
Size:	xx13
Test fixture type:	Stand-alone test fixture
Contact stroke generation:	Manual
Housing type:	Desk housing
Max. interface signals:	1700
Interface blocks required:	No
Max. internal interface blocks:	0
Contacting direction:	Single-sided (bottom)
Max. contact force:	2,000 N [7,193 ozf]
Approx. parallel contact stroke:	15 mm [.59 in]
Weight:	22 kg [48.5 lbs]
Min. temperature:	10 °C [50 °F]
Max. temperature:	60 °C [140 °F]
Low voltage:	Yes, with suitable additional option
ESD-compliant:	No
RoHS-compliant:	Yes

### Technical data

Pushrod length:	60 mm [2.36 in]
Test probe installation height, top:	16 mm [.629 in]
Test probe installation height, bottom:	10.5 mm [.413 in]
Test probe installation height, dual-stage, bottom:	16 mm [.629 in]
Free space above PCB:	58 mm [2.28 in]
Force of gas pressure springs:	400 N (L: 200 N / R: 200 N)
Pressure frame opening angle:	69 °
Standard version:	Yes
Useable area, standard (WxD):	440 x 310 mm [17.3 x 12.2 in]
ESD version:	No
Radio frequency version:	No
Rigid pin version:	No
Dual-stage version:	<p>Yes, with compatible additional option</p>
Useable area, dual-stage (WxD):	440 x 310 mm [17.3 x 12.2 in]
Additional contacting unit (ZSK), top:	Yes, with suitable additional option
Outer dimensions, open (WxDxH):	647 x 532 x 656 mm [25.4 x 20.9 x 25.8 in]
Outer dimensions, closed (WxDxH):	647 x 584 x 270 mm [25.4 x 22.9 x 10.6 in]

### INGUN Prüfmittelbau GmbH

Max-Stromeyer-Straße 162  
78467, Constance, Germany  
Phone +49 7531 8105-0  
Customer hotline +49 7531 8105-888  
Fax +49 7531 8105-65  
info@ingun.com



Prices and delivery times on request.  
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Manual test fixtures (MA)



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