

# Manual test fixture

## MA 2115/D/H/S-14

Item 116000



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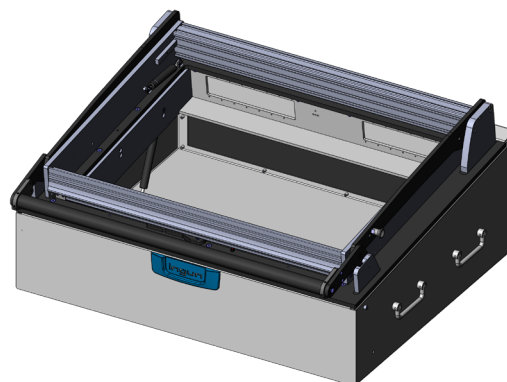
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Partner for Future Technology

### INGUN SELECTION

NEW

- Manual test fixture with parallel closing drive mechanism for testing medium quantities of printed circuit boards in the highest quality and small number of versions.
- Interchangeable set of test fixtures without preconfigured test system interface
- High housing with two foldable handles on each side for better carrying comfort
- Two gas springs in the housing, each with 300 N, support easy, safe opening and closing
- Anti-pinch protection on both sides increases operator safety
- Modular, configurable internal interface for up to 14 interface blocks
- Exchangeable kits which can be installed without tools and used without readjustment
- Maximum opening angle may vary due to the length tolerance of +/- 2 mm of the gas spring



### Application

The manual test fixture is used for contacting large PCBs with medium quantities (series testing) and a high number of versions. It is designed as an interchangeable kit system, is connected to an existing test system, and is operated with an exchangeable kit that is specially designed for the PCB to be tested.

The operation is manual. The drive unit serves as the opening, closing and contacting mechanism. It is used to perform the parallel contact stroke to ensure precise and reliable contacting.

#### Note:

The unpopulated internal interface is populated with SB-T interface blocks (test system side). The maximum permissible interface force of 1,870 N must be observed.

#### Note:

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

#### Note:

Expansion with function units, e.g. locking units, safety switches, is possible in accordance with the INGUN technical handbook.

### General data

Test system interface:	Not pre-wired
Product group:	Manual test fixtures (MA)
Main series:	MA xxxx
Subseries:	MA 21xx
Series:	MA 2115
Size:	xx15
Test fixture type:	Exchangeable test fixture
Contact stroke generation:	Manual
Housing type:	High desk housing
Max. interface signals:	1700
Interface blocks required:	Test system side
Max. internal interface blocks:	14
Contacting direction:	Single-sided (bottom)
Max. contact force:	2,000 N [7,193 ozf]
Approx. parallel contact stroke:	15 mm [.59 in]
Weight:	25 kg [55.1 lbs]
Min. temperature:	10 °C [50 °F]
Max. temperature:	60 °C [140 °F]
Low voltage:	No
ESD-compliant:	No
RoHS-compliant:	Yes

### Technical data

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:	600 N (300 N left/ 300 N right)
Pressure frame opening angle:	69 °
Standard version:	<p>Yes, with compatible exchangeable kit</p>
Useable area, standard (WxD):	600 x 450 mm [23.6 x 17.7 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):	600 x 450 mm [23.6 x 17.7 in]
Additional contacting unit (ZSK), top:	Yes, with suitable additional option
Outer dimensions, open (WxDxH):	830 x 666 x 878 mm [32.6 x 26.2 x 34.5 in]
Outer dimensions, closed (WxDxH):	830 x 728 x 375 mm [32.6 x 28.6 x 14.7 in]

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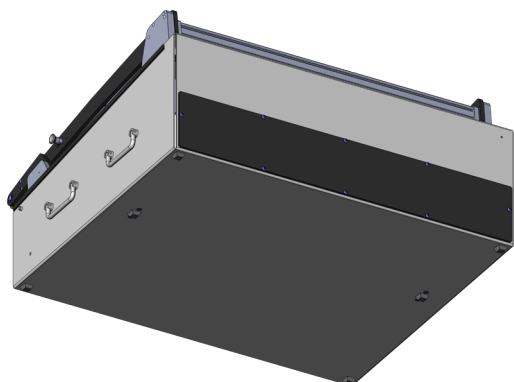
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## Exchangeable kit & accessories

Part no.	Designation	Version
Exchangeable kit		
114779-KIT	ATS MA15/S-14	Exchangeable kit
Accessories		
49316	GDF-185-60-300N-A6-A6-D	Gas pressure spring
9991	GDF-305-120-300N-A6-A6	Gas pressure spring
116613	EHZ-08-R-11-TR	Electric stroke counter
113481	FB-TWA	Alum-A transport bracket
20202	Micro switch	Check for open housing

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Prices and delivery times on request.  
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