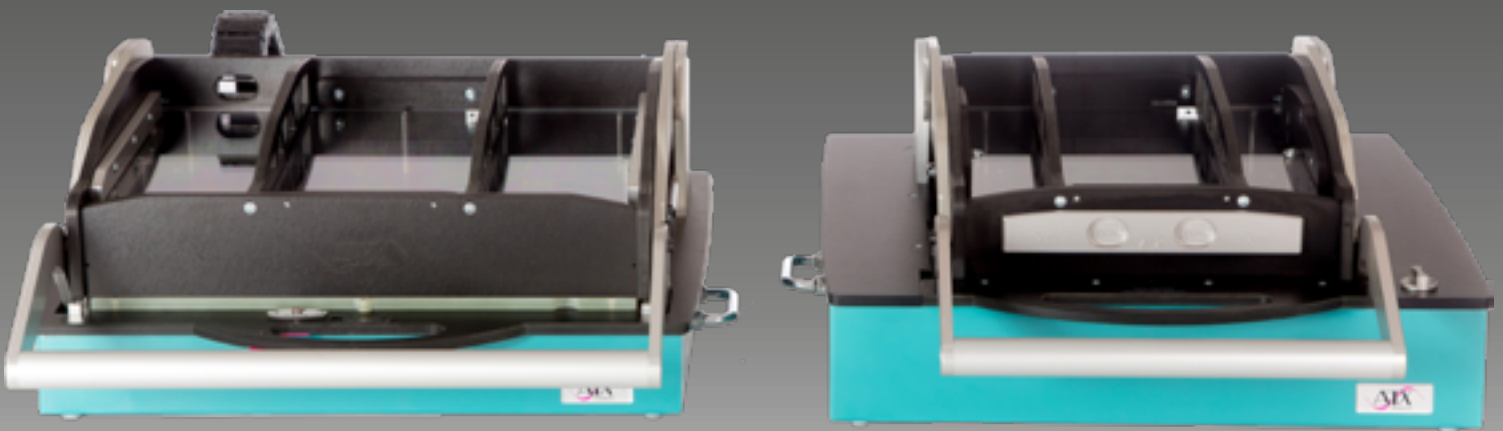


ERGONOMIC

MECHANICAL

FIXTURES



MMI - Standalone

MMIW - Exchangeable System



SPECIALIST FIXTURE SOLUTIONS

LEVER MECHANISM

A new concept in a nutshell



H I G H L I G H T S

- Maximum ease of use
- Ergonomic
- Robust & durable

The MMI is optimally adjust to the operator

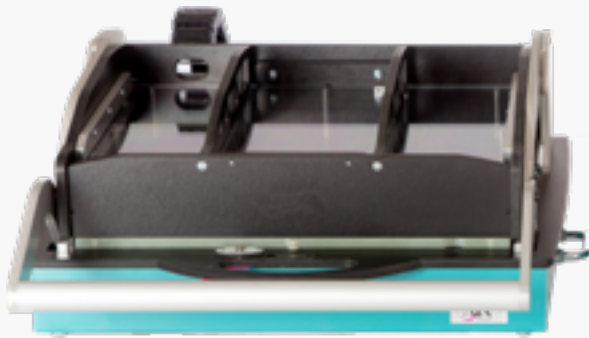
The MMI is the reliable mechanical fixture system developed by ATX. With our new design, we adapt perfectly to the interaction between man and machine. This property was also the inspiration for the name: Man Machine Interface.

Its new lever mechanism, which has been filed as a utility patent, is specially adapted to the movement of the human hand and enables lightweight, ergonomic work for the operator. The all-new lever drive brings the control lever into an easily accessible position as soon as the fixture is fully open. This ensures a natural position while working, both standing and sitting. A sophisticated guide mechanism ensures low operating forces even at high probe forces and allows fatigue-free operation, especially with high volumes of units.



MECHANICAL STANDALONE FIXTURE

MMI - Man Machine Interface



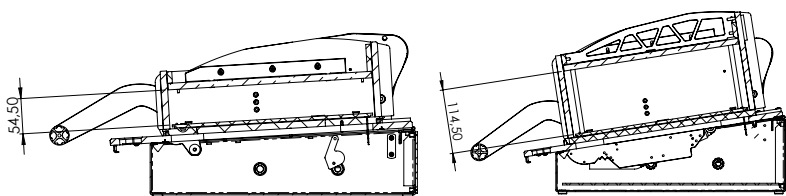
More outstanding features of the MMI

With the MMI from ATX, you have the ideal fixture solution for function test, final test and ICT applications for up to 1600N (approximately 800 needles at 2N). Our new system combines optimal ergonomics with high performance, durability and precision, ensuring your investment over the long term.

The new mechanism allows free access to the moving plate, because on the frame plate there is no front structure. We facilitate the operator in loading the test object.

Through the precentered hold-down plate a more accurate hit pattern of the top-sided removal is generally conveyed. This allows more precise hold-downs in closely mounted assemblies.

Another benefit of the MMI - it is prepared for a safety switch with guard locking, and an electrical interlock.



MMI-Standard height

MMI-Special height

Standalone unit

Standard - 1200 N (max. 600 probes á 2N)

Order number	Designation	Moving plate	Housing
100683	MMI-A	185 x 310	E01-00145
100639	MMI-B	275 x 310	E01-00115
100640	MMI-C	445 x 310	E01-00117
100694	MMI-CI	445 x 310	E01-00117
100668	MMI-D	550 x 330	E01-00125
100232	MMI-E	890 x 330	E01-00032

special height - 1200 N (max. 600 Nadeln á 2N)

Order number	Designation	Moving plate	housing
100691	MMI-CH	445 x 310	E01-00117

Amplified - 1600 N (max. 800 probes á 2N)

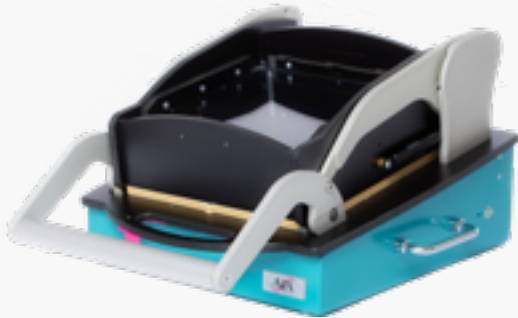
Order number	Designation	Moving plate	Housing
100642	MMI-BV	275 x 310	E01-00115
100641	MMI-CV	445 x 310	E01-00117
100669	MMI-DV	530 x 330	E01-00125
100687	MMI-GV	545 x 400	E01-00132

Tandem fixture with 2 mechanisms in one housing

Order number	Designation	Moving plate	Housing
100659	MMI-A-DO	185 x 310	E01-00117

MECHANICAL STANDALONE FIXTURE

MMI-L - Man Machine Interface Light Version



MMI-L Light Version

The MMI-L is the ATX developed mechanical fixture for smaller PCB's with few probes. The favorable price of the light version gives the possibility to create an ergonomic fixture also for price sensitive small projects. It comes with a compact shape and can be used where work space is limited tightly.

Standalone unit

Order no.	Designation	Moving plate	Housing
100660	MMI-L	255 x 255	E01-00001

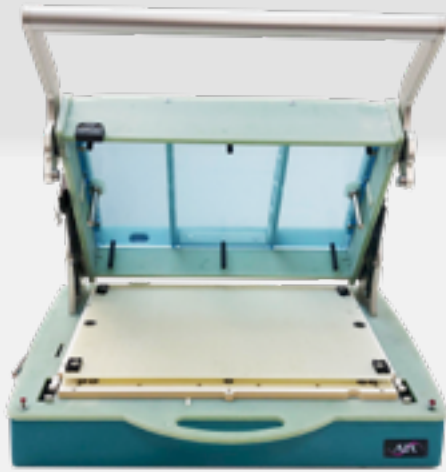
Simple but efficient. Your Benefits:

- Cost effective
- Ergonomic operation
- For max. 200 probes (a 2N total 400N)
- Stroke 23mm
- Moving plate 255 x 255 mm
- Back panel for connector mounting
- 2x ESD Pin
- 1x fixture down
- Housing: E01-00001

The light version does not include the new locking system for the moving plate, the stiffening bars for the push plate and the floating push plate. For double side access we recommend MMI-B.

MECHANICAL EXCHANGEABLE CASSETTE SYSTEM

MMI-C Isoliert



MMI-C isolated

Solenoid interlock and grounding package included.

The MMI-CI is a good basis for fixtures with higher voltages. The MMI-CI is made of NON-DARK plate material and can therefore be used in the low voltage range (up to 1000V AC/ 1500V DC).

The included grounding package is an important component. Because the housing grounding, the grounding connection as well as the grounding test ensure that the safety standards are met.

The solenoid interlock and the safety switch ensure access protection. The optional safety box (safety switch relay) has the order number: **120498**

Simply isolated. Your advantages:

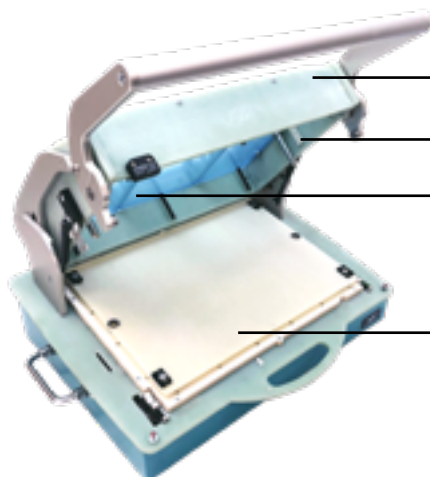
- Ergonomic operation
- Adaptation possible on both sides
- For max. 600 needles à 2N (1200N)
- Linear stroke 23mm
- Moving plate 445 x 310 mm
- Cover in the rear panel (made of aluminium) for plug mounting
- Plastic hold-down clamp
- 1x Fixture down detection
- inclusive grounding package
- inclusive Safetylocking and Safetyswitch
- housing: E01-00117

Basic Unit

Order number	Designation	Boardträger	housing
100694	MMI-CI	445 x 310	E01-00117

You can find suitable safety relays here:

[Safety packages](#)



insulating sheet material

Cover for conductive parts leading to the outside

insulating plexiglass

insulating moving plate

MECHANICAL EXCHANGEABLE CASSETTE SYSTEM

MMIW - Man Machine Interface exchangeable cassette system



Compact exchangeable cassette system MMIW

The MMIW mechanical exchangeable cassette system consisting of the MMIWG basic unit and the MMIWK cassette provides you with even more convenience and efficiency. In your testing centre the low-cost cassette solution based on the MMI mechanism is ideal for frequently changing products. In switching between products you save time because no tools are required, while also benefiting from minimal maintenance requirements and short retooling times thanks to the additional hard-wearing interface.

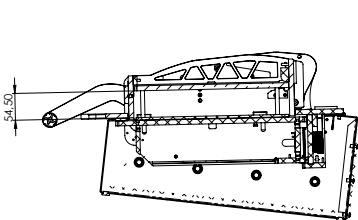
For the change system we use a pylon block interface that individually transfers the signals with 170-pin signal blocks, power and coaxial blocks as needed, as well as blocks for fibre optic cables and compressed air.

Basic unit suitable for MEWK-cassette

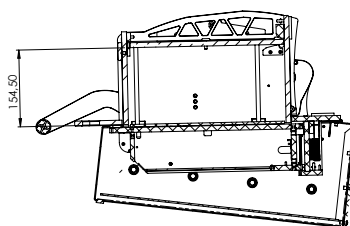
Order number	Designation	Moving plate	Housing
100646	MMI-MEWG-A	275 x 240	E01-00115
100647	MMI-MEWG-B	445 x 240	E01-00117

Exchangeable cassette

Order number	Designation	Moving plate
100767	MEWK-A	275 x 240
100768	MEWK-B	445 x 240



MMIW-Standard height



MMIW-Special height

Basic unit

Order no.	Designation	Moving plate	Housing
100637	MMIWG-A	294 x 310	E01-00124
100697	MMIWG-A-VPC	294 x 310	E01-00124
100636	MMIWG-B	424 x 310	E01-00125
100663	MMIWG-C	554 x 310	E01-00132

Basic unit with special height

Order no.	Designation	Moving plate	housing
100692	MMIWG-CH	554 x 310	E01-00132

Exchangeable cassette

Standard - 1200 N (max. 600 probe á 2N)

Order no.	Designation	Moving plate	Interface block
100638	MMIWK-A	294 x 310	6 block
100698	MMIWK-A-VPC	294 x 310	-
100998	MMIWK-B	424 x 310	10 block
100661	MMIWK-C	554 x 310	12 block

Special height - 1200 N (max. 600 probe á 2N)

Order no.	Designation	Moving plate	housing
100693	MMIWK-CH	554 x 310	E01-00132

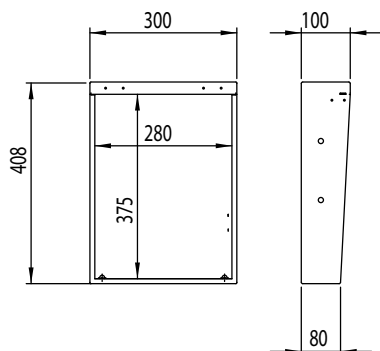
Amplified - 1600 N (max. 800 probe á 2N)

Order no.	Designation	Moving plate	Interface block
100643	MMIWK-AV	294 x 310	6 block
100999	MMIWK-BV	424 x 310	10 block
100662	MMIWK-CV	554 x 310	12 block

AVAILABLE HOUSING TYPES

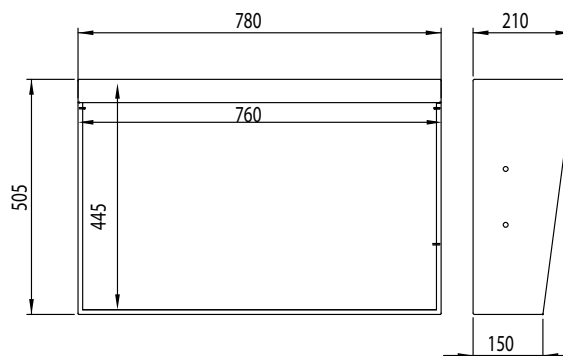
Ensuring that MMI and MMIW adapt flexibly to your test

Housing with back panel (connectors can be mounted as required)



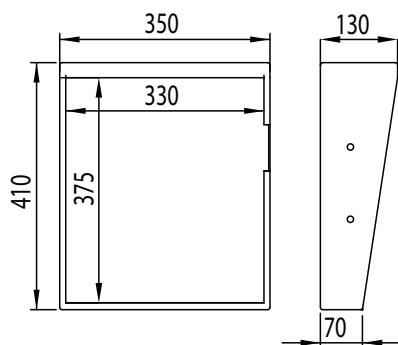
E01-00145

Standard housing for MMI-A



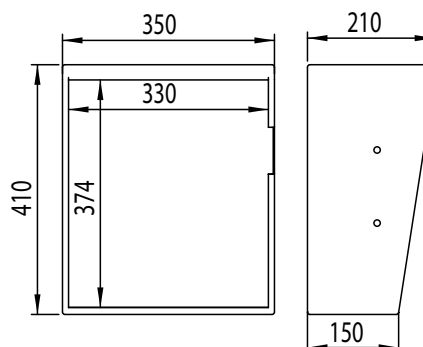
E01-00132

Standard housing for MMIWG-C



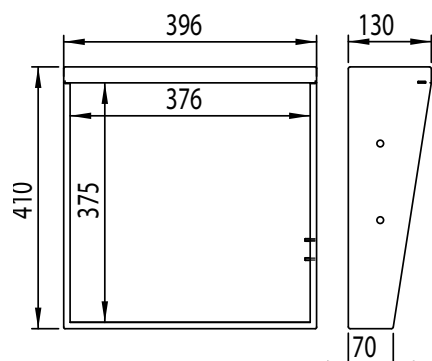
E01-00001

Standard housing for MMI-L light



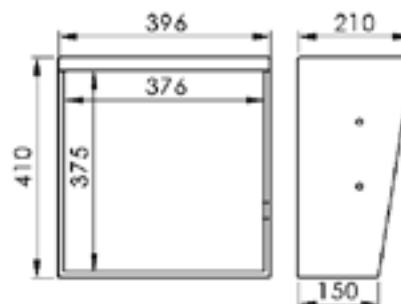
E01-00012

High housing for MMI-L light



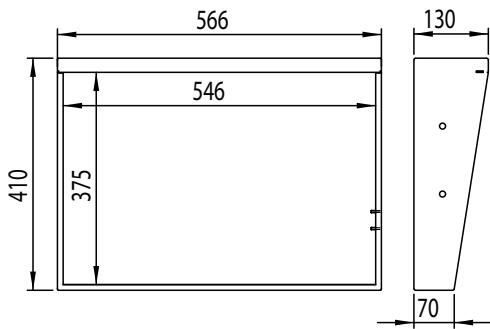
E01-00115

Standard housing for MMI-B und MMIW-MEWG-A



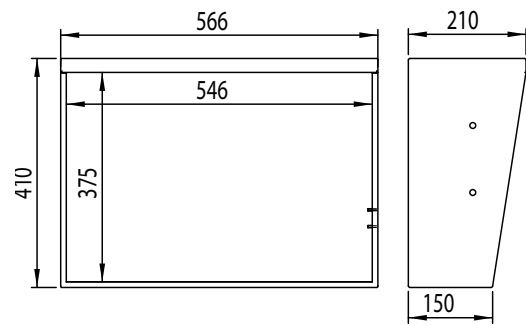
E01-00116

High housing for MMI-B und MMI-MEWG-A



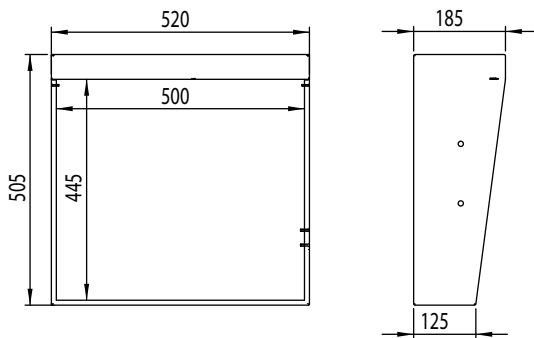
E01-00117

Standard housing for MMI-C, MMI-A DO und MMI-MEWG-B



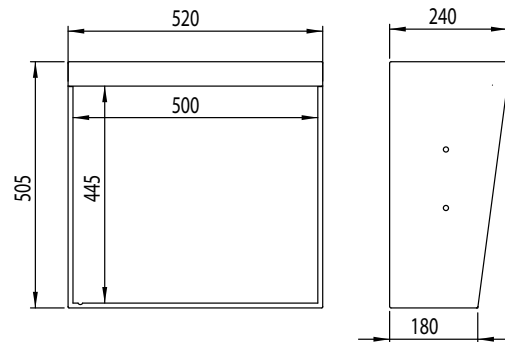
E01-00118

High housing for MMI-C und MMI-MEWG-B



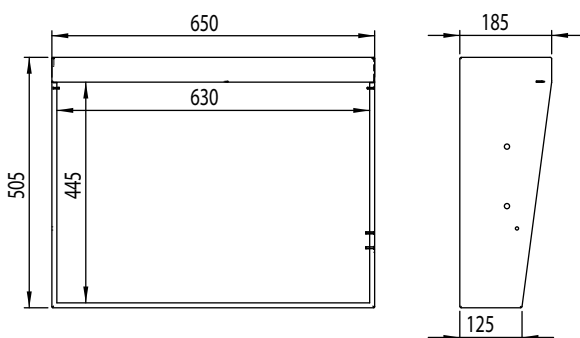
E01-00124

Standard housing for MMIWG-A



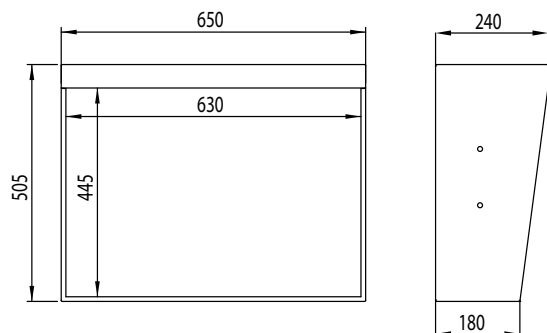
E01-00123

High housing for MMIWG-A



E01-00125

Standard housing for MMI-D and MMIWG-B



E01-00133

High housing for MMI-D and MMIWG-B

Additional forms of housing are available upon request.

Our housings are available in the following colors:

Turquoise	RAL5018
Light gray	RAL7035

Additional colors upon request.

INTERFACE

Possibility of mounting an interface on the rear wall



Interface Housing	CEM1 Aperture	Pylon	VPC G12	VPC G12X	VPC G20	VPC G25	ODU Blackline	Hatec-19 Zoll	Reinhardt
E01-00001	x								
E01-00012	x								
E01-00115	x								
E01-00116	x								
E01-00117	x	x	x	x	x	x	x	x	x
E01-00118	x	x	x						
E01-00123	x	x	x						
E01-00124	x	x	x						
E01-00125	x	x	x	x		x			
E01-00132	x	x							
E01-00133	x	x	x	x		x			
E01-00145	x								

The assignments shown above are standard designs. However, due to our high variety of housings, special designs can be made after consultation.

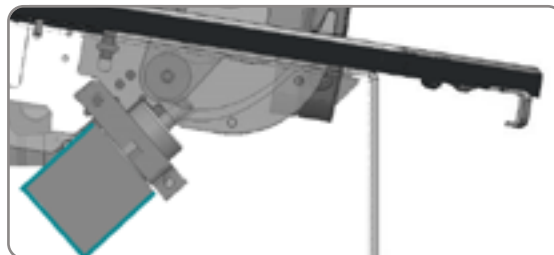
SPARE PARTS FOR THE MMI

Interlocks for manual test stations and basic units

These interlocks are not used as solenoid interlocks for safety-relevant projects.

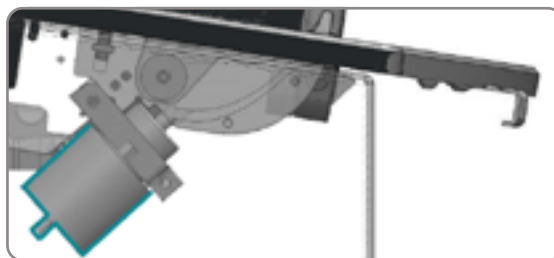
Electrical interlocks for MMI-B/C/D - locked -

Order number	Designation
269001	electr. interlocks left, 24V currentless, locked
269002	electr. interlocks right, 24V currentless, locked
269029	electr. interlocks left, 12V currentless, locked
269030	electr. interlocks right, 12V currentless, locked



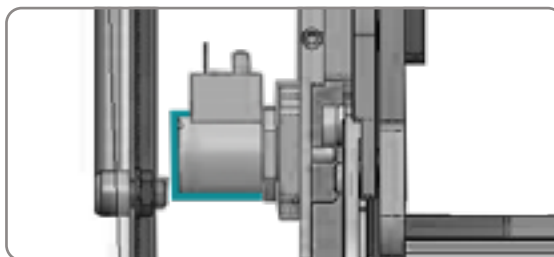
Elektrische Verriegelungen für MMI-B/C/D - open -

Order number	Designation
269027	electr. interlocks left, 24V currentless, open
269028	electr. interlocks right, 24V currentless, open
269031	electr. interlocks left, 12V currentless, open
269032	electr. interlocks right, 12V currentless, open



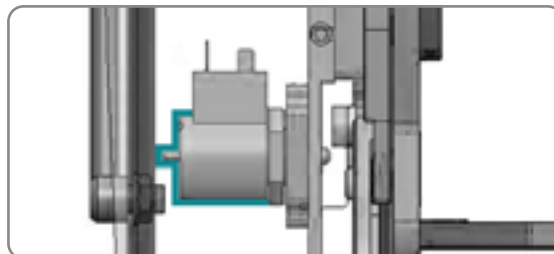
Elektrische Verriegelungen für MMIWG - locked -

Order number	Designation
269011	electr. interlocks left, 24V currentless, locked
269033	electr. interlocks right, 24V currentless, locked
269034	electr. interlocks left, 12V currentless, locked
269035	electr. interlocks right, 12V currentless, locked



Elektrische Verriegelungen für MMIWG - open -

Order number	Designation
269036	electr. interlocks left, 24V currentless, open
269037	electr. interlocks right, 24V currentless, open
269038	electr. interlocks left, 12V currentless, open
269039	electr. interlocks right, 12V currentless, open



Pneumatic interlocks

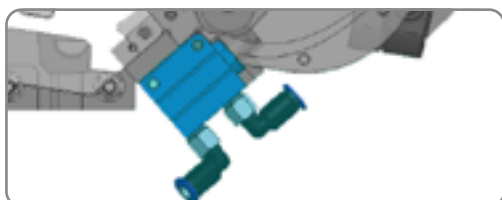
Order number	Designation
269021	pneumatic lock for MMI-B/C/L

Order number	Designation
269022	pneumatic lock for MMIWG-A/B/C

The pneumatic locking system includes the following accessories, which are supplied fully assembled:

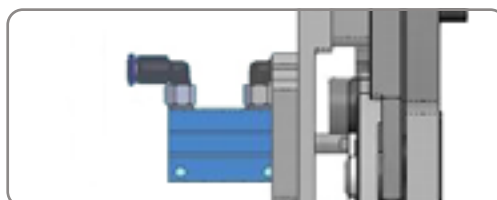
pneumatic interlock | MMI-B/C/L

- 2x compact cylinder CDUJB10-6D
- 1x 3/2-way valve SYJ1314M-5LOU-Q
- 2x signal transmitter D-F8P



pneumatic interlock | MMIWG-A/B/C

- 2x compact cylinder CDUJB6-6S
- 1x 3/2-way valve SYJ1314M-5LOU-Q
- 2x signal transmitter D-F8P



SPARE PARTS FOR THE MMI

Transfer Optionen

Order number	Designation
100861	Drag chain for cable routing from the hood into the housing
+ 498011 498012	Armoured conduit for laying cables from the hood into the housing



Drag chain



Armoured conduit

Auto-Open-Function

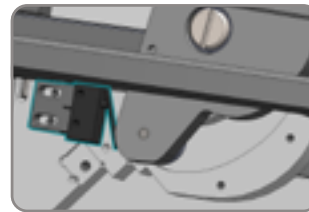
limited for customized fixtures up to 400N or ca. 200 probes!

Order number	Designation
100679	Automatic opening for MMI-A/B (1x pneumatic cylinder)
100681	Automatic opening for MMI-C/D (2x pneumatic cylinders)

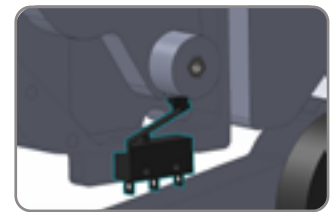


Micro Switch

Order number	Designation
269006	Micro switch left/right for MMI
269016	Micro switch left/right for MMIWG



MMI-Variant

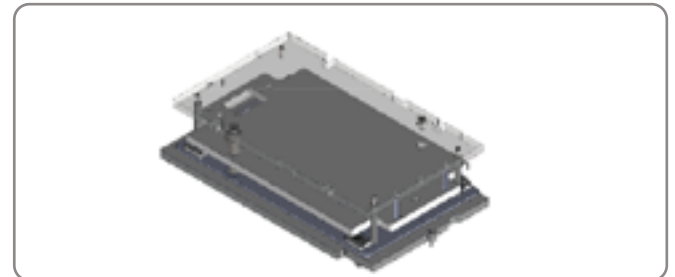


MMIWG-Variant

Set of plates

Set of plates - MMI versions

Order number	Designation	Boardträger
100685	MMI-A Set of plates	185 x 310
100649	MMI-B Set of plates	275 x 310
100648	MMI-C Set of plates	310 x 445
100671	MMI-LS floating	255 x 255
100672	MMI-L notfloating	255 x 255



Expansion Tensions

Our adapters guarantee safety as standard for voltages below 25 V AC (effective value) and 60 V DC (harmonic-free). For higher voltages, we therefore recommend a safety package that upgrades our adapters accordingly.

You can find the different security packages here: [SECURITY PACKAGES](#)

Spare Parts for all mechanical fixtures

You can find all the spare parts in our brochure: [ACCESSORIES/ SPARE PARTS](#)

Contact us



Would you like to find out more about us or get in touch with the appropriate contact person? You'll find the direct line on our website - together with your personal sales expert:

www.atx-hardware.de ▶ Contact

We are committed to finding the optimal technical solution for you. Why not put us to the test!

ATX Hardware GmbH West **Subsidiary of ATX Hardware GmbH**

Pürgen branch

Am Kornfeld 8
86932 Pürgen, Deutschland/Germany

Phone: +49 81 96 / 93 04 - 0
Telefax: +49 81 96 / 93 04 - 19

Email: projekte@atx-hardware.de
Web: www.atx-hardware.de

Weil branch

Carl-Zeiss-Straße 5/1
71093 Weil im Schönbuch, Deutschland/Germany

Phone: +49 81 96 / 9304 - 345 oder 349
Telefax: +49 81 96 / 93 04 - 359

Email: projekte@atx-hardware.de
Web: www.atx-hardware.de