Enhance switch quality with MP85A-S EASYswitch

Highly efficient testing of switches and locking systems

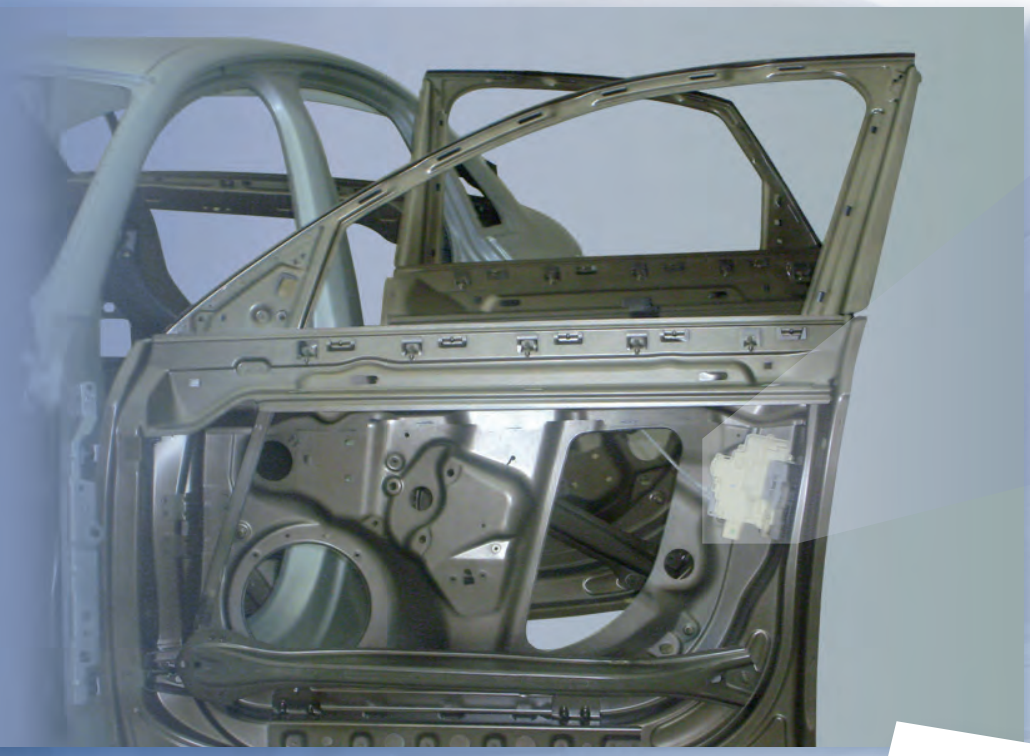
...exclusively featuring

FASTpress Suite

...powered by HBM Industrial Software

HBM

100% safety for your production



Door-locking systems

Switches are amongst the world's simplest control units. Their correct functionality is essential at all times.

Switches and locking systems make the handling of complex high-technology products easy and reliable. The quality of your switches is therefore of paramount importance.
The MP85A-S EASYswitch process controller monitors the functioning of your switches during production – using powerful evaluation algorithms, exactly matched to the special characteristics of your switches.

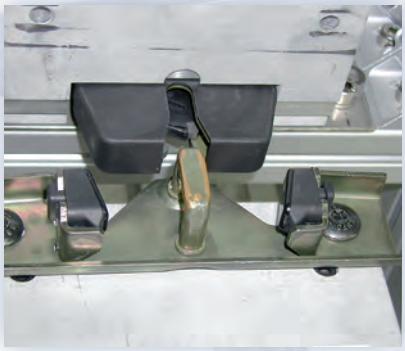
For example:

- Locking and control systems in cars
- In high-quality consumer products
- In electronic switching systems.

All features at a glance. Enhance your switch quality now!

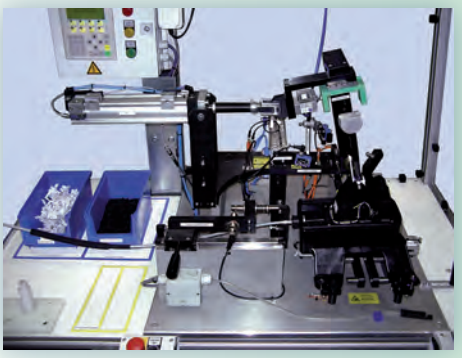
- Simultaneous or sequential electronic checking of up to five switches
- Acquisition and analysis of switching point and switch-back point, actuation and reverse movement
- Control signals for start-stop limit value switch-off through digital inputs, Ethernet or Profibus interface (optional)
- Up to 999 test programs can be stored on and loaded from internal MMC card or PC
- Easy integration into modern machine designs.

# of switches and locking systems

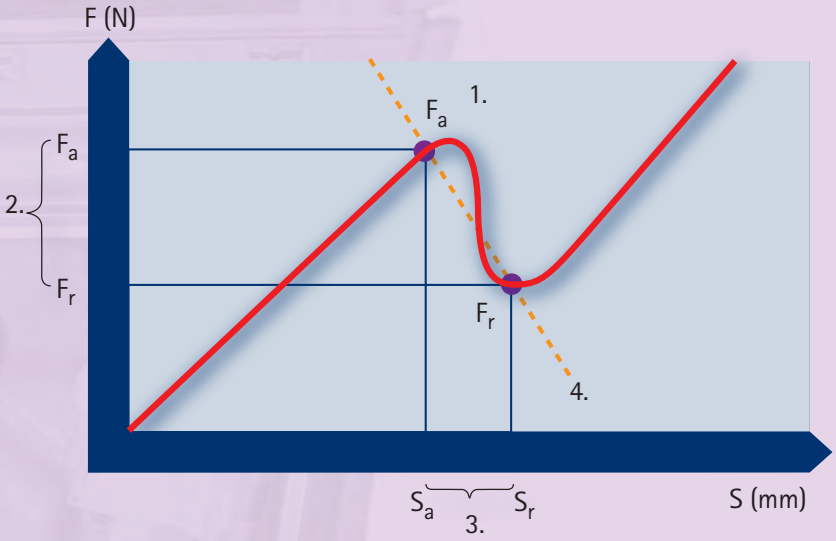


Trunk locks

Gearshift levers



Test stands



Force-displacement monitoring curve during the haptic sensory test of a locking system.

Perfectly matched to your production processes

MP85A-S EASYswitch analyzes the typical force-displacement and torque-angle of rotation curves as well as the electric switching points – and immediately signals variations, if these occur outside permissible tolerances.

You instantly get a clear OK/NOK evaluation. This is important to optimize production control and to minimize downtimes. Alarm limits in the production process ensure optimum machine protection. EASYswitch records all measurement curves and results – online, reliably, and instantaneously.

Evaluation criteria:
1. Force at mechanical switching peak F_a
2. Force drop after mechanical switching peak F_a - F_r
Therefore: Click ratio $((F_a-F_r) / F_a) \cdot 100\%$
3. Difference movement S_r-S_a
4. Force-displacement ratio $(F_a-F_r) / (S_r-S_a)$

Your complete measurement

Integrated digital inputs enable up to 5 switching events to be electrically checked, either simultaneously or sequentially:

- Position of the switching point or switching process in the switch test window
- Direction of switching (break/make contact)
- Actuation force and moment
- Repetitions.

Force

Displacement

TEDS by HBM™

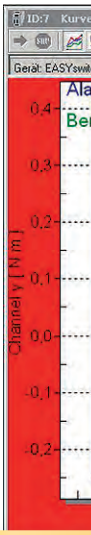
Torque, angle of rotation
... including SSI encoder

MP85A-S EASYswitch

Fast Ethernet

PROFIBUS

CANopen



FASTpress
...powered by HBM

Fast Ethernet

PROFIBUS

CANopen

TEDS by HBM™

Immediately ready for use: Connect your transducers in a few seconds

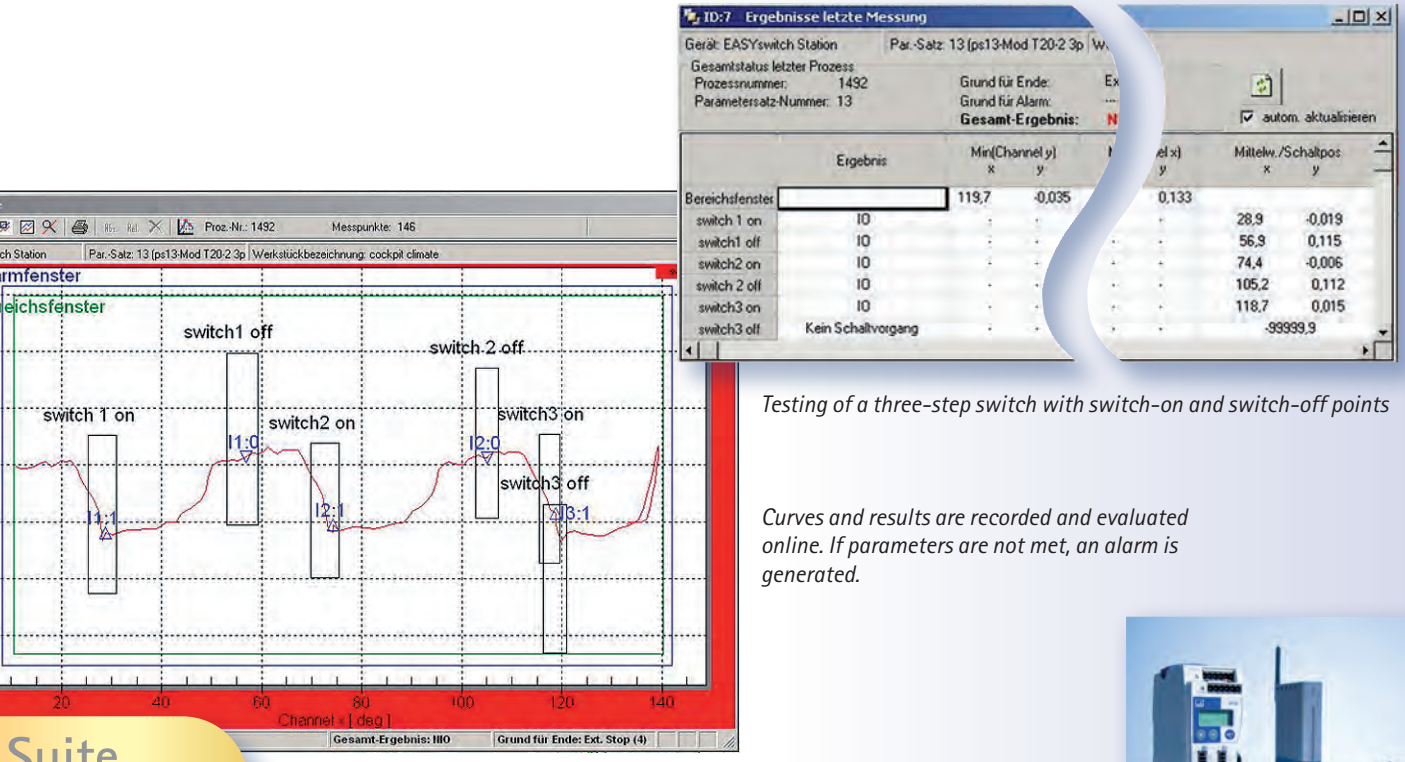
MP85A-S EASYswitch is the first industrial amplifier ever to automatically identify all TEDS sensors.

Data transfer through Fast Ethernet: All production data is immediately available

The Fast Ethernet interface enables the MP85A-S EASYswitch to be directly connected to any computer. Additionally, PROFIBUS or CANopen interfaces are available for connection to automation environments.

chain for switch testing

EASYswitch comprises all functions required for full control and provides easy-to-handle software to enable you to configure variable test sequences without any extensive programming knowledge.



Testing of a three-step switch with switch-on and switch-off points

Curves and results are recorded and evaluated online. If parameters are not met, an alarm is generated.

Suite

ndustrial Software

Your data at a glance
Benefit from many options for visualization

MP85A-S EASYswitch gives you the choice of where and how to visualize your production data... on your PDA, on external monitors or on your production PC.

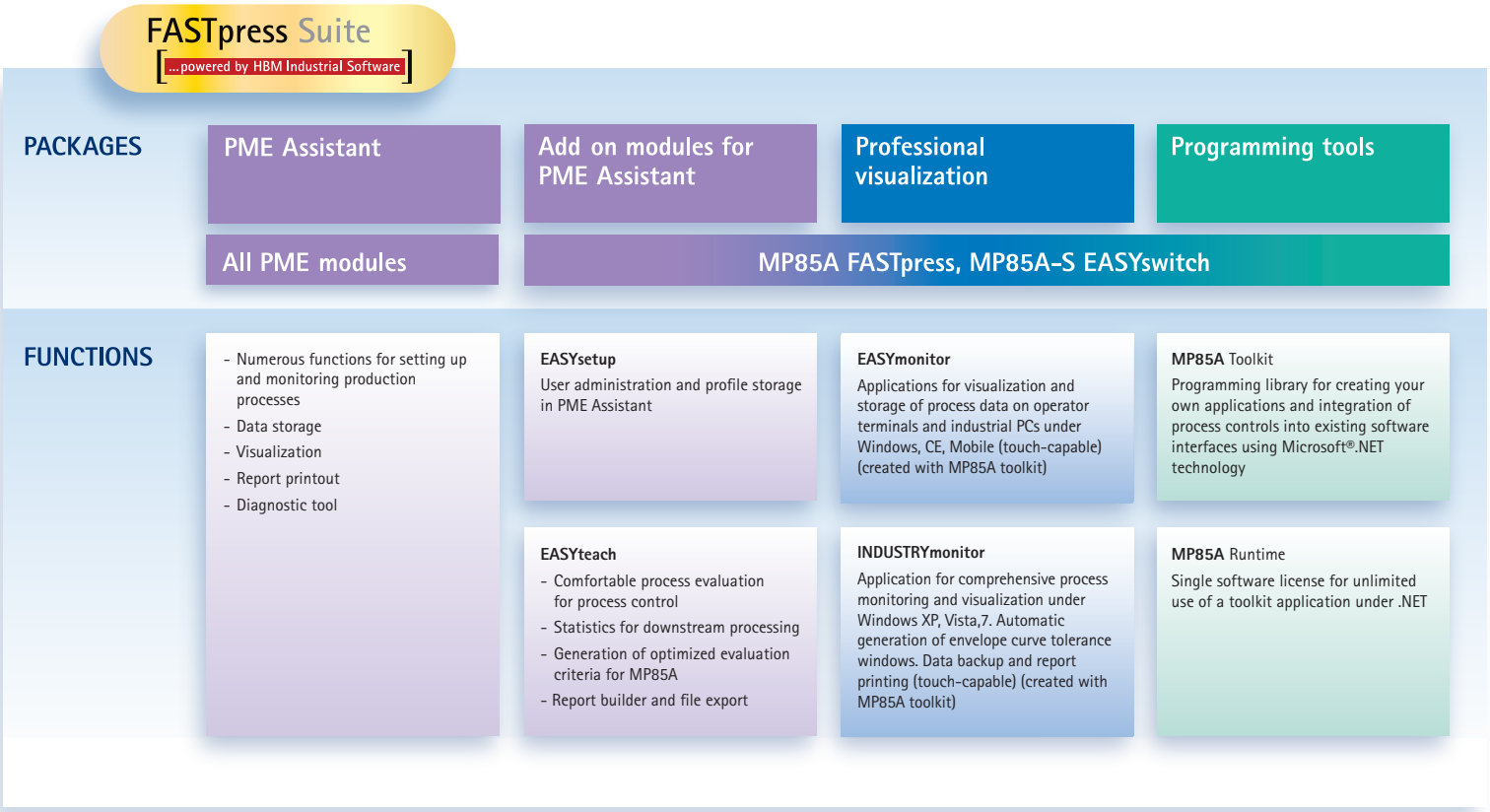
Well documented
Your production data is safe

MP85A-S EASYswitch enables you to back up your production data on an MMC/SD memory card. You can save tens of thousands of curves and results. Up to 1000 measurement programs can be stored. Benefit from consistent documentation of your process data, even if MP85A-S EASYswitch is used as a stand-alone unit without a PC.

Professional tools for even more security

User-friendly, powerful: HBM software for industrial applications

Specially developed for use in process control: the powerful "HBM Industrial Software" supplies you with valuable professional tools for your production tasks.
HBM's software not only supports you with a complete set of essential standard functions but also allows individual customizing of the software, thanks to its modular structure, to meet your production line requirements.



FASTpress Suite... – powered by HBM Industrial Software

The star in the HBM Industrial Software range: "FASTpress Suite", ideal in combination with the MP85A FASTpress industrial amplifier and MP85A-S EASYswitch.
FASTpress Suite is a complete software package for your process control.

Visualization, evaluation, further processing:

FASTpress Suite offers you exactly the performance that you require for your process control.

PME Assistant

For simple setup and reliable monitoring of production systems

Add-on modules

With extra tools for automatic optimization of your evaluation criteria, for statistical process control and for simplified user administration.

Programming tool

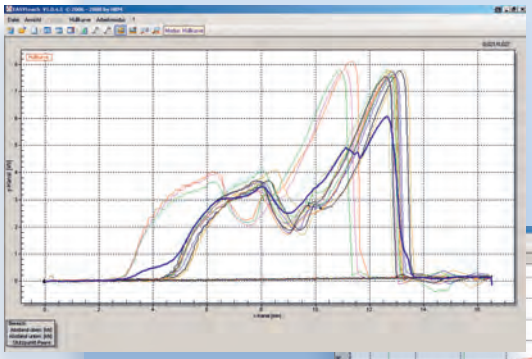
The solution for system integrators – with a programming tool for individual customization of the operating and control software.

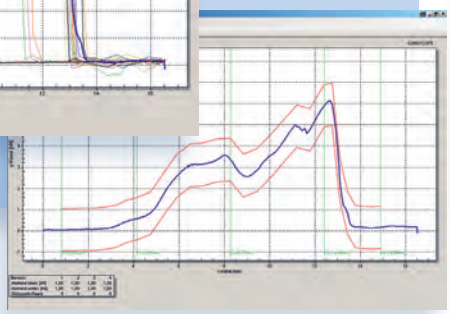
Process optimization with EASYteach

EASYteach ... Rapid process analysis

With EASYteach, you can analyze and optimize your production process in just a few seconds.
Your advantage: The production processes are perfectly tailored to the relevant task.

- ___ Process analysis of up to 10,000 processes
- ___ Automatic generation of envelope curves and tolerance windows
- ___ Report builder and file export





EASYteach ...
... with automated creation of envelope curves

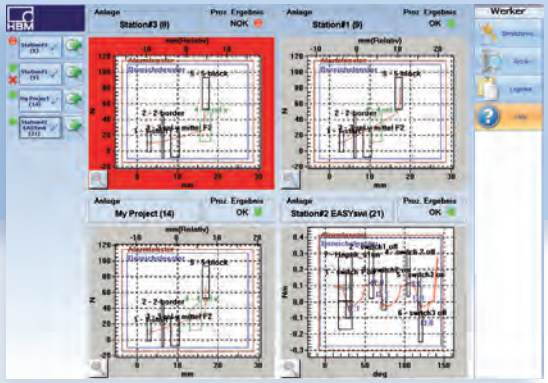
Process control and visualization directly on the machine control

INDUSTRYmonitor ... the production software

From works employee to service technician to administrator - the INDUSTRYmonitor software serves to process data acquisition, visualization and data storage, supporting your production employees in diverse areas.

Benefit from:

- ___ Process monitoring and process data storage
- ___ Simple touch operation
- ___ Transparent display
- ___ Up to 3 individually controllable user levels
- ___ I-P.M. quality data connection
- ___ Additional functions through plug-ins



INDUSTRYmonitor with 4 MP85A

Process control on mobile operating units

Always in the picture about your production

You want to access the actual key data of your production line at any time? Regardless of where you are: HBM Industrial Software is also available for mobile end units such as handheld computers.

Switch to quality now...

... with MP85A-S EASYswitch

– Immediately ready for use: Connect your TEDS transducers in a few seconds

– Many evaluation criteria and analysis options for your production processes

– Well documented: Stand-alone backup of your production data on memory card

– All data at a glance: Many options for visualization – for pocket PC and PDA, too

– Data transport through Fast Ethernet: Access your production data directly from your PC

... rely on HBM's superior technology – and benefit from the vast range of services offered by the market leader. Our measurement professionals provide you with maintenance and support in over 60 countries worldwide.

At your service 24/7...

– Worldwide service and support

– Phone hotline for personal contact

– Application engineering

ePLAN

Planning with HBM

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