

# TECHNOLOGY THIS SPECIALIZED CAN'T MEET ALL REQUIREMENTS.

YES IT CAN.

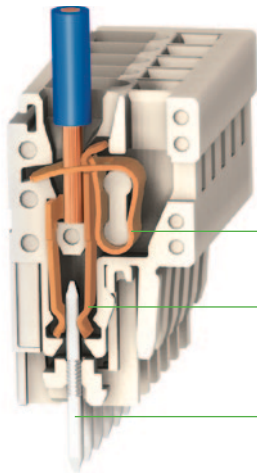


*pico*MAX® – The Pluggable Connection System

**WAGO**®  
INNOVATIVE CONNECTIONS

*picoMAX*<sup>®</sup>, the pluggable connection system that is unlike anything you've ever seen before.

### TRADITIONAL DESIGN



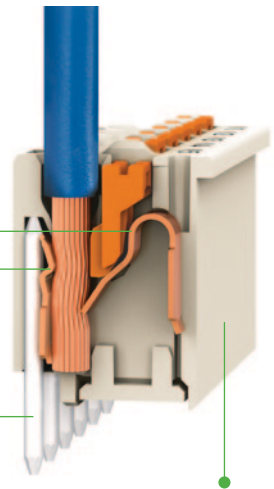
● Spring ●

● Contact bridge ●

● Socket ●

● Header pin ●

### NEW DESIGN – *picoMAX*<sup>®</sup>



●  
Insulation material made of durable, high-performance, heat-resistant, glass-fiber-reinforced polyphthalamide (PPA)

# SUCH A SMALL COMPONENT CAN'T POSSIBLY HAVE SUCH A GREAT IMPACT ON YOUR PRODUCT DEVELOPMENT.

## BUT IT HAS.

*picoMAX*<sup>®</sup> makes double use of the contact force of a single Cr-Ni stainless steel spring: For clamping the conductor and connecting the header pin.

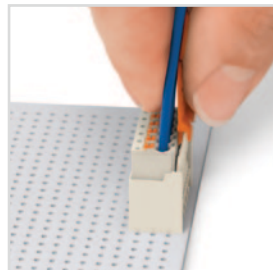
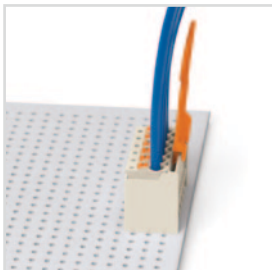
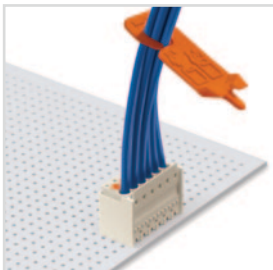
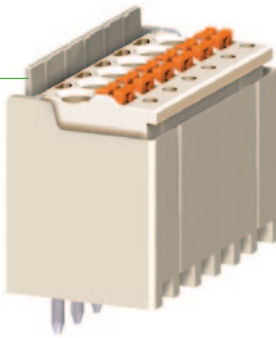
The combination of our special design, the innovative Spring Pressure Connection Technology and new insulation material guarantees absolute contact reliability even at high temperatures.

The very short contact bridge separates the termination unit from the header pin. This extremely short current path minimizes contact resistance.

The female connector is fully shrouded by the male header and locks into place via integrated latches for vibration-resistance up to 20 g!

Learn more about *picoMAX*<sup>®</sup>, and try it for yourself right now! Experience the impact of our revolutionary design.

Locking latch ●



Easy disconnection of male header and female connector via unlocking tool.

# PACKED WITH INNOVATION, *picoMAX*<sup>®</sup> SHOULD BE MUCH BIGGER. BUT IT ISN'T.

The *picoMAX*<sup>®</sup> pluggable connection system is extremely compact:

- Reduces space by up to 30%
- Minimal space requirements when mated
- The female connector is fully shrouded by the male header's housing.

The *picoMAX*<sup>®</sup> design yields extremely short female connectors. Male headers are equipped with an integrated locking latch.

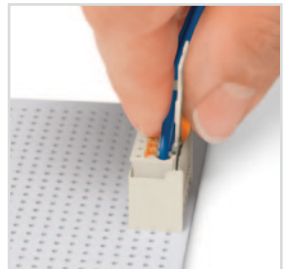
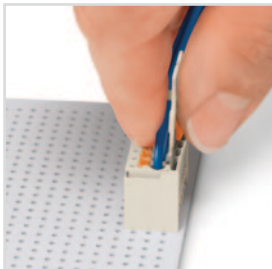
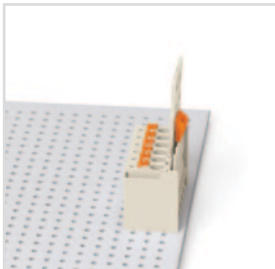
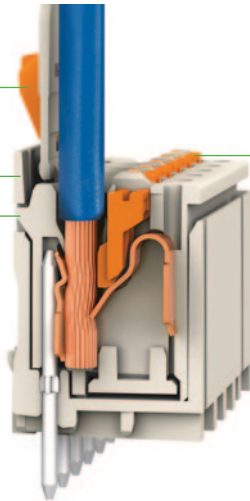
Disconnecting this very compact connector is performed via unlocking tool. The tool is plugged into the locking latch of the male header.

Gripping plate with sliding  
connector release for fast  
and tool-free disconnection

Locking latch

Locking latches

Integrated  
push-buttons



Integrated sliding connector release for intuitive disconnection of male header and female connector.

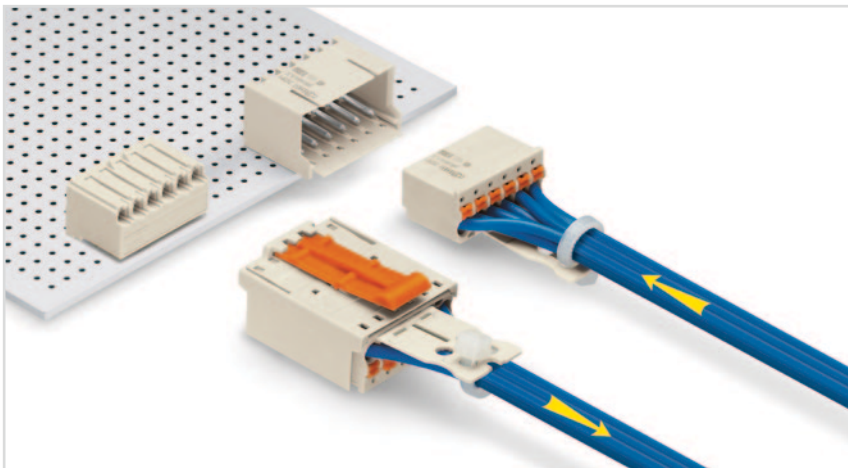
# VIBRATION-PROOF UP TO 20 g. NO PLUGGABLE CONNECTOR CAN BE SO SAFE.

## YES IT CAN.

The *picoMAX*® pluggable connection system is extremely resistant to vibrations:

- Female connector is fully shrouded by the male header
- The protruding locking latch of the male header interlocks with the locking latches of the female connector, for a secure connection
- The clamping point of the terminated conductor and the contact point of the inserted header pin are facing each other, allowing for uniform mass distribution
- The contact force automatically adjusts to the conductor size.

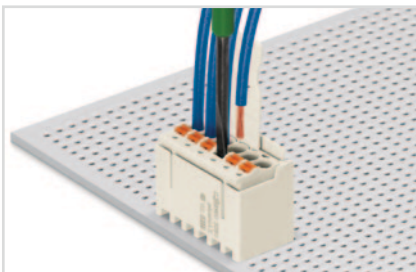
Mass concentration of conductor, contact bridge and header pin within the pin housing turns *picoMAX*® into the new standard for vibration-proof pluggable connector systems – providing “wire-to-board” connections with vibration-resistance up to 20 g.



Easy-to-identify PCB inputs and outputs.



Inserting fine-stranded conductor into unmated female connector via push-button.



Inserting fine-stranded conductor into mated female connector via push-button.



# A PLUGGABLE CONNECTION SYSTEM FEATURING SUCH INNOVATIVE TECHNOLOGIES CAN'T BE USED UNIVERSALLY.

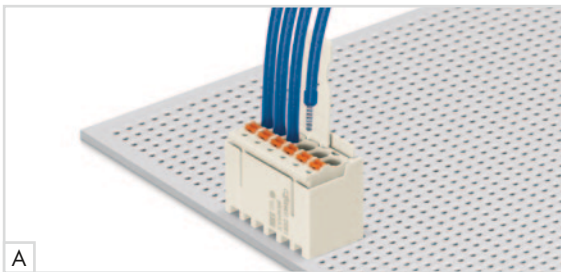
## YES IT CAN.

UNIVERSAL

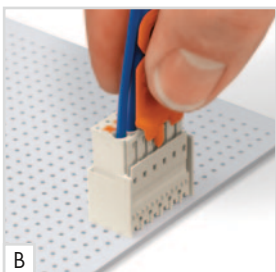
The *picoMAX*® pluggable connection system can be used universally:

- Available in 3.5 mm (0.138 in), 5.0 mm (0.197 in) and 7.5 mm (0.295 in) pin spacing
- CAGE CLAMP® S connection for all conductor types
- Push-in termination of solid and ferruled conductors
- Ability to wire female connectors while mated or unmated
- Intuitive design with integrated push-buttons does not require specialty tools.

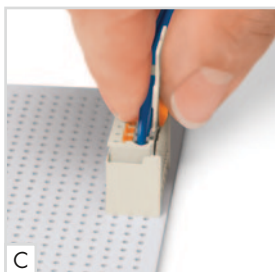
*picoMAX*® features both universal connection technology and universal application possibilities, while providing intuitive handling for worldwide users. Numerous connection options, such as “wire-to-board”, “wire-to-wire” and “board-to-wire”, as well as feedthrough connections allow the pluggable connection system to be used for all applications.



A



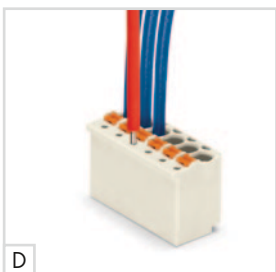
B



C



E



D



F

# WITH SO MANY COMBINATION POSSIBILITIES, *picoMAX*<sup>®</sup> MUST BE DIFFICULT TO USE.

## BUT IT ISN'T.

The *picoMAX*<sup>®</sup> pluggable connection system is intuitive and easy to use:

### **Fast conductor termination [A]**

- Push-in termination of solid or ferruled conductors
- Easy push-button actuation when terminating a fine-stranded conductor or when removing any conductor type

### **Integrated locking latches**

- Prevent accidental disconnection of male header and female connector

### **Easy disconnection**

- Using convenient unlocking tool for applications without gripping plate [B]
- Via easy-to-use gripping plate's sliding connector release [C]

### **Efficient testing option [D]**

- Via test slot, parallel to conductor entry – even when wired

### **Assembling connectors without losing any poles [E]**

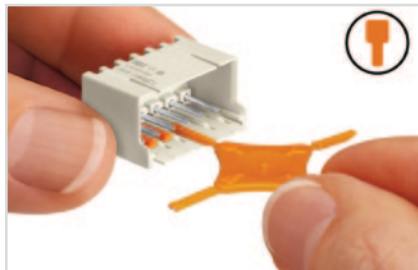
- Within a male header's housing

### **Easy panel feedthrough connections [F]**

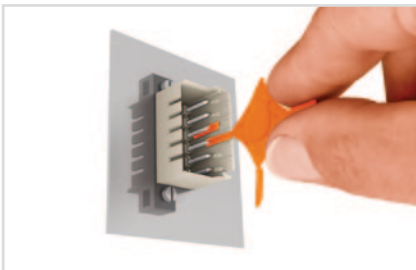
- E.g., for extensions with plug-in option on both sides



Coding a female connector (via coding key carrier and two keys for female connector, see symbol).



Coding a male header (via coding key carrier and two keys for male header, see symbol).



Coding for panel feedthrough connections.



Coded male header and female connector.

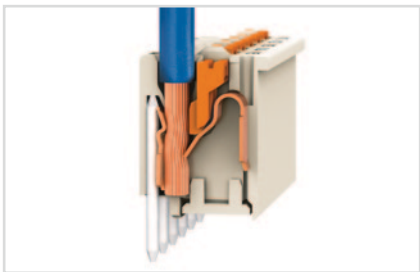
# CODING FEEDTHROUGH CONNECTIONS CAN'T BE PERFORMED SAFELY AND QUICKLY.

## YES IT CAN.

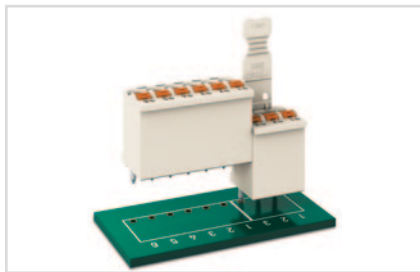
The *picoMAX*® pluggable connection system provides easy coding:

- Coding option within male header
- Efficient protection against mismatching
- Internal coding is suitable for panel feedthrough connections
- Subsequent coding is easy and reliable.

*picoMAX*® coding system prevents mismatching of male headers and female connectors. Especially for device manufacturers, codable pluggable connectors play an important role in quality assurance. The special benefit of the *picoMAX*® system is the subsequent coding option.



picoMAX® eCOM



Placing and soldering female connectors as marked on the PCB.



Female connectors with terminated conductors.



During maintenance, pull out and replace the female connector like a pluggable connector.

# GETTING A PLUGGABLE CONNECTOR AT A REASONABLE PRICE MEANS TO MAKE COMPROMISES.

## NO, IT DOESN'T.

The **picoMAX**<sup>®</sup> pluggable connection system is highly economical:

- Innovative pluggable connector concept with radically simplified contact system for highest contact reliability
- Double use of a single Cr-Ni stainless steel spring
- Reduced contact bridge made of electrolytic copper replaces the socket contact
- Integrated locking latches for all connector versions

Greater efficiency is possible – with the **picoMAX**<sup>®</sup> **eCOM** system:

- The PCB terminal block that can also be used as pluggable connector
- Even more compact version without pin housing
- For stationary installations
- Best price/performance ratio

**picoMAX**<sup>®</sup> : Highly economical system.

**picoMAX**<sup>®</sup>  
The Pluggable Connection System



More information on  
**picoMAX**<sup>®</sup> in the video or  
at [www.picomax.info](http://www.picomax.info)

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INNOVATIVE CONNECTIONS