

## Varpol Male & Female Connectors:

**High Quality, Adaptable, and Robust** VarPol male and female connectors from ept offer a plethora of possibilities for connecting circuit boards. One or two rows, variable pin counts, different termination lengths, straight or angled – the choice is yours! The product also allows for seamlessly connecting sockets. In addition, Tcom press®, our tried and proven press-fit zone, allows you to eliminate the soldering process and greatly increase connection reliability.



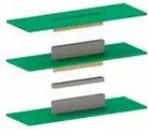
### Features

- A large selection of contact lengths and termination lengths
- A choice of performance levels: 50 and 250 mating cycles
- Sockets can be joined end-to-end
- Simple and inexpensive processing
- Tcom press® press-fit zone
- Varpol female connectors also in soldering technology
- Angled and straight, one and two rows

### Applications

- Board-to-board distances ranging from 11.45 mm to 35.45 mm
- Press-fit technology eliminates the soldering

VarPol male and female connectors offer endless possibilities. They are available in a one or two-row design and the number of pins can be customized from 2 to 108 contacts. All connectors are carefully designed, allowing for seamless connection. A wide range of termination lengths of up to 25 mm make it possible to stack circuit boards with board-to-board distances from 11.45 mm to 35.45 mm. Furthermore, the pin headers are also available in a right-angle design that allows for perpendicular connections in addition to parallel ones. Finally, all VarPol products come with a choice of two performance levels that guarantee a durability of either 50 or 250 mating cycles.



Application straight

Application angled



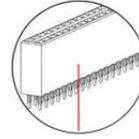
VarPol Female Connector  
detail overview



pitch  
2.54 mm



press-fit zone Tcom  
press®



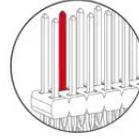
PBT



VarPol Pin header  
detail overview



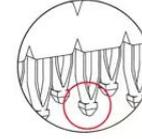
pitch  
2.54 mm



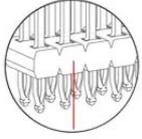
connection contacts  
from 5.2 mm to 25 mm



press-fit zone Tcom  
press®



transfer zone  
from 3.4 mm to 11 mm



PBT

A further advantage is how easy and inexpensive it is to process the press-fit technology. The male and female connectors feature the tried and tested Tcom press® press-fit system, which allows them to be pressed without soldering. Press-fitting results in a gas-tight and vibration-resistant connection, which in turn allows you to connect VarPol products to optimal circuit-board connectors for reliable mechanical and electrical connections even in harsh environments. ept offers the right tools that make it remarkably easy to carry out the press-fitting reliably for the male and female connectors. Additional guiding blocks support stable contact management when dealing with larger board-to-board distances and facilitate optimal stability during press-fitting.

#### Stacking with Varpol:

VarPol male and female connectors based on the press-fit system make it possible to connect circuit boards with one another in parallel.

- Board-to-board distances ranging from 11.45 mm up to 35.45 mm using various termination lengths of the multi-pin connector
- One or two rows
- Number of contacts is freely selectable (no upper limit, as the connectors can be arranged next to one another without the loss of a pitch)
- Rear mating zone as an option
- Female connector in soldering or press-fit technology

Connecting the connector with the circuit board using press-fit technology ensures a highly robust and resilient connection. High-quality press-fit connections, such as with the Tcom press® from ept, offer demonstrably better contact reliability than soldering connections. The cold welding between the contact and the circuit board hole resulting from press-in is highly



mechanically stable and of a high electrical quality. It is remarkably easy and reliable to process using the associated processing tools offered by ept.

It is also possible to vertically stack multiple circuit boards, whereby female connectors are used with the corresponding connecting contacts. Board-to-board distances ranging from 11.45 mm up to 19.35 mm can be achieved here. Using a guiding block on the underside of the upper circuit board also supports stable contact management and prevents mismatching.

Angled pin headers provide the option to implement right-angled connections with the same level of versatility and reliability, in addition to the parallel connection of circuit boards.

