# Pico-SPOX 1.50mm Wire-to-Board Connector System

### molex

Ideal for compact applications, the Pico-SPOX 1.50mm Wire-to-Board Connector System provides electrical and mechanical reliability in a high-temperature design that meets several industry requirements

#### **Features and Advantages**

#### Readily available tooling

Use of popular terminals makes it easy to access the crimp applicators as they are widely available in the market



Provides better mating retention of header and harness



## Vertical and right-angle single-row header with unique positive lock

Provides latch protection. Secures terminal retention



### Polarization keys Prevents mis-mating during assembly

SMT-type plug header

Allows automatic assembly

#### 1.50mm-pitch connector

Delivers secure mating retention without sacrificing compactness. 30% space saving compared to 2.00mm wire-to-board connector system

### **Applications**

#### **Industrial Automation**

Automation equipment

#### Consumer

White goods

Gaming machines

Drones

Air conditioners

Laser printers

Vacuum cleaners

Desktop PCs

Power tools

#### Medicals

In-room / Patient monitoring equipment

Medical devices



Gaming Machines



White Goods



Steering Wheel Switches

# Pico-SPOX 1.50mm Wire-to-Board Connector System



#### **Specifications**

#### REFERENCE INFORMATION

Reference Information Packaging: Reel (Terminal) Tray (Header Assembly) Bag (Receptacle Housing)

Mates With: Pico-SPOX Connectors (87347/87438/202705/202706) Use with: 87439 (Receptacle Housing)

Used with: 87421 (Terminal)
Designed In: Millimeters

RoHS: Yes

Low Halogen: No for Nylon Vertical Header

#### **ELECTRICAL**

Voltage (max.): 250V Current (max.):2.5A max. (24 AWG) Contact Resistance (max.): 20 milliohms Dielectric Withstanding Voltage:500V AC (1 minute) Insulation Resistance (min.): 1000 Megohms

#### **MECHANICAL**

Crimp Terminal Insertion Force (max.): 7kg (15P) Crimp Terminal Retention Force (min.): 1k Pin Retention Force (min.): 9.8N

Durability (max.): 10 Cycles

#### **PHYSICAL**

Housing:

Receptacle – Nylon (87439) Header – Nylon (87437) Contact: Phosphor Bronze Plating (Receptacle): Contact Area — Pre-Tin

Plating (Header): Brass Contact Area –

> Tin over Nickel for 87437/87348 Gold over Nickel for 202705/202706

Operating Temperature: -55 to +105°C

#### **Ordering Information**

Series No.	Pitch (mm)	Component	Circuits	Rows	Color
<u>87421</u>	1.50	Female Receptacle Terminal	24-30 AWG	-	-
87439		Receptacle Housing (Nylon)	2-15	Single	Natural
<u>87437</u>		Plug Vertical Header (Nylon)			
<u>87438</u>		Plug Right-Angle Header (Nylon)			
202705		Plug Vertical Header (Nylon)	4-15		Beige
202706		Plug Right-Angle Header (Nylon)			