

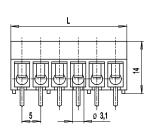
# PCB connector for THR 970-THR(-DS)

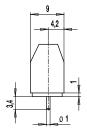
Screw connection

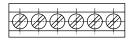




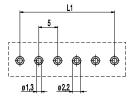








## **PCB Layout**



L1 = (No. of poles - 1) x pitch Solder paste thickness: 0,15 - 0,2 mm Solder pad diameter: Ø 2,2 mm

The PCB connector 970-THR with a pitch of 5 mm is available in 2- to 12-pole design.

Is has been designed for the soldering process in Through-Hole-Reflow technology.

The soldering paste is applied to the plated through holes and the pins are placed in the circuit board and soldered by a reflow oven.

The terminal mouldings are made of heat-resistant material. The stand-offs on the base ensures there is enough room for the soldering paste and facilitates good heat circulation for optimum soldering and enables the soldering joint to be visually inspected.

The solder pin projects very slightly with a circuit board thickness of 1,6 mm and creates a solder point on both sides and thus guarantees a secure mounting. The position of the solder pins enables an equally minimal allocation area on the circuit board as with wave soldering.

This connector is also available with enlarged clamping size.

## Part Numbers

No. of poles	970-THR	970-THR-DS	Length	PU
2	10.879.202	20.879.202	11,00	250
3	10.879.203	20.879.203	16,00	250
4	10.879.204	20.879.204	21,00	200
5	10.879.205	20.879.205	26,00	100
6	10.879.206	20.879.206	31,00	100
8	10.879.208	20.879.208	41,00	100
10	10.879.210	20.879.210	51,00	100
12	10.879.212	20.879.212	61,00	100

#### General Information

Pitch	5 mm
No. of poles	2 - 12

## Technical Data

Clamping Range	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
without wire protector				
with wire protector				
Rated Cross Section	2,5 mm <sup>2</sup>			
Wire Stripping Length	6,5 mm ± 0,5 mm	ı		
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	24 A			
Soldering process	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG  0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG  2,5 mm²  6,5 mm ± 0,5 mm			
Hole in PCB	ø 1,3 mm			
PCB thickness		t. 1,6 mm; reflow	solder 1,6 - 3,2	
Torque	0,5 Nm			

#### Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 120°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

#### Approvals

	Current	Voltage	Group	AWG	Nm	
<b>71</b> ®	20	300	В	22-12 [1]	0,51	
<b>⊕</b> ®	10 20 10	300 300 300	D B D, E	22-12 [1] 26 - 12 26 - 12	0,51 0,51 0,51	

# Options / Accessories

- Consecutive numbering / Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [2]
- · Other solder pin lengths on request

## Part Numbers: Tape-on-Reel

No. of poles	970-THR	970-THR-DS	Tape Width	Tape Height	PU
2		20.879.202.A00	32 mm	18,8 mm	225
4		20.879.204.A00	32 mm	18,8 mm	225
further number of poles on request					

[1] No. 26 AWG min for factory-wiring only

[2] To be fitted after reflow soldering process

further number of poles on request