

PANTA[®] FIX JUMPER



PANTA FIX JUMPER are highly flexible PCB connectors. Due to the combination of PANTA round-flat-round technology, the copper wires are rolled flat in a defined manner in the area of the insulation and thus guarantee the highest requirements for vibration and bending resistance. The smooth and notch-free transition from

round to flat guarantees a break-proof connection point. The round conductors in the connection area guarantee fast and safe shoring. Polyester, aramid fiber, PEN (polyethylene naphthalate) or polyimide can be used for insulation.

FEATURES

- Tinned round conductor flat rolled
- Round pins for soldering in for THT (through-hole-technology)
- Combination with plug / connector system possible
- Wide range of connection types selectable
- Freely configurable length (12mm - 5,000mm)
- Different pitches available within one jumper (MIX)
- Short insulation lengths also as wire bridge (without flat rolled copper conductor)

CHARACTERISTICS

- High vibration and bending resistance
- Unbreakable and reliable connection
- Temperature-resistant insulation materials (-40°C to +125 °C)

CUSTOMER BENEFITS

- Low space requirement due to the overall height
- No setup effort for medium and small batch sizes
- Simple assembly design with multiple PCBs
- Boards in different geometric layers can be connected
- Combination with different connection technologies possible (Link IDC)
- Can be used for manual placement and automatic placement (on request)

Please ask for our processing instructions for PANTA[®] FIX JUMPER.

Pitch z. e. g. A= 2.54 mm see pitch wrench	Insulation material z.e.g.: P = Polyester N = Aramid E = PEN K = Polyimid	Connection forms z.e.g. A = equal on both sides AN = different see graphic, combinations on request
A 05 – N 051 – A – □		
Number of poles	Insulation length from 15-5000 mm Special lengths on request	Special Special designs on customer request, drawing required

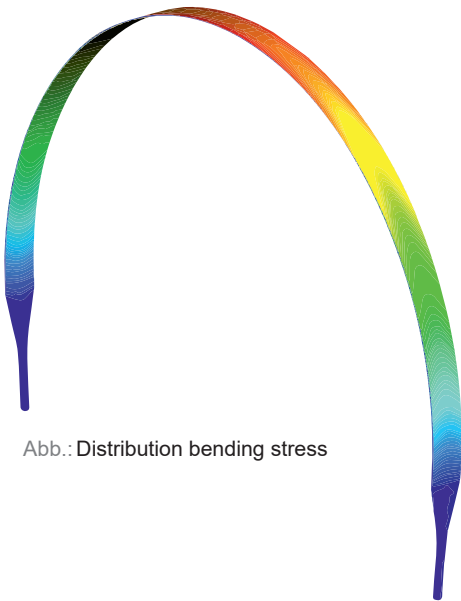
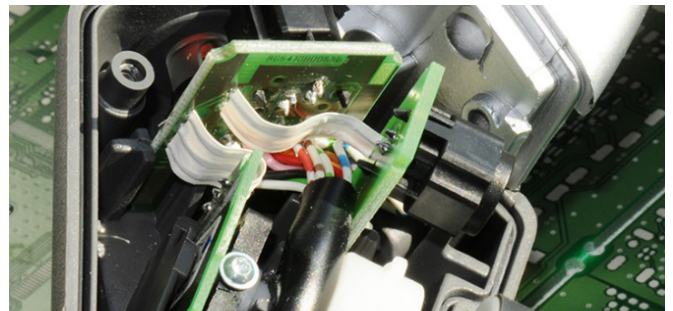
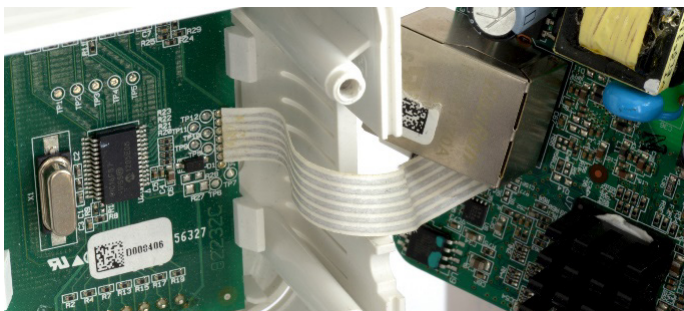


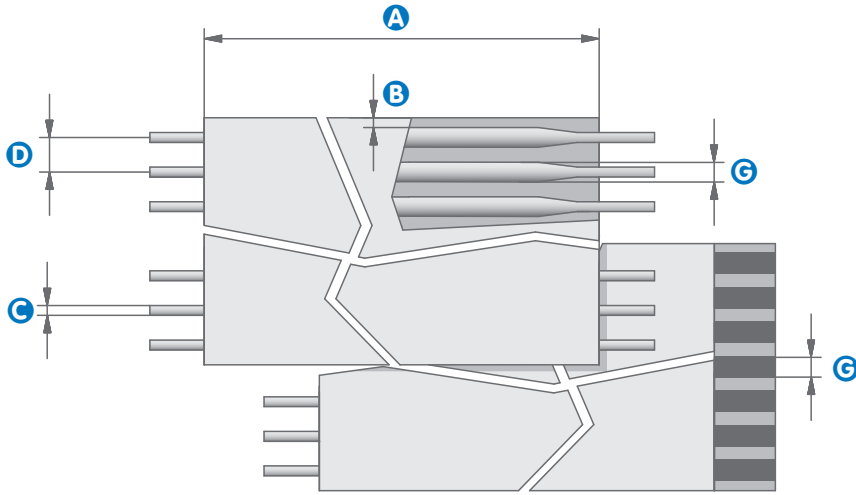
Abb.: Distribution bending stress

FLAT ROUND 180° - ANALYSIS

- Displacement of bending stress in the flexible area
- Reduction of bending stress in the connection area
- Relief soldering point
- Longer service life

EXAMPLE APPLICATIONS





TECHNICAL DATA

OrderCode	E	G	B	L	D	F	A	Z	P	R	C
D Pitch (mm)	1,00	1,25	1,27	1,90	2,00	2,50	2,54	3,18	3,50	3,81	5,08
Number of poles max.	32	32	32	32	32	32	32	25	23	20	16
A Bridging length (mm)											
Total length (mm)	15-5000										
B Edge insulation min. (mm)	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,5	0,5
C Pin diameter (mm)	0,32	0,32	0,32	0,40	0,40	0,51	0,51	0,51	0,51	0,51	0,51
G Wire size (AWG)	28	28	28	26	26	24	24	24	24	24	24
Conductor material	Cu according to DIN 40500; min. 1.5 µm ; tin-plated						2-3 µm tin plated				
Flat conductor width (mm)	0,7	0,75	0,75	1,35	1,35	1,5	1,5	1,5	1,5	1,5	1,5
Current carrying capacity at 20°C (A)	1,0	1,5	1,5	2,0	2,0	3,5	3,5	3,5	3,5	3,5	3,5
Rated voltage (V_{DC})	200	200	200	200	200	300	300	300	300	300	300
Dielectric strength (V_{DC/min})	700	700	700	1500	1500	1500	1500	1500	1500	1500	1500

INSULATION MATERIALS

Insulation	Polyester	Nomex	PEN	Polyimid
Insulation resistance (ground-signal-ground)	>10 ¹⁰			
Operating temperature (°C)	-40°C bis +105°C		-40°C bis +125°C	
Flammability	UL 94 V-0			
Soldering temperature (°C/s)	250/4		260/5	

Other versions on request.

*The temperature at the component must not exceed the max. operating temperature during the preheating phase and soldering phase. Mechanical loads during the soldering process are not permitted.

APPLICATION SPECIFICATION

Order Code	E	G	B	L	D	F	A	Z	P	R	C
Pitch (mm)	1,00	1,25	1,27	1,90	2,00	2,50	2,54	3,18	3,50	3,81	5,08
Min. bending radius (mm) when folding once	0,3	0,3	0,3	0,3	0,4	0,4	0,5	0,5	0,5	0,5	0,5
Recommended soldering profile	DIN EN 61760-1 / J-STD-020 THT solder profile and reflow solder profil										
Soldering temperature (°C/s)	see Technical data - Insulation materials										

CONNECTION FORMS

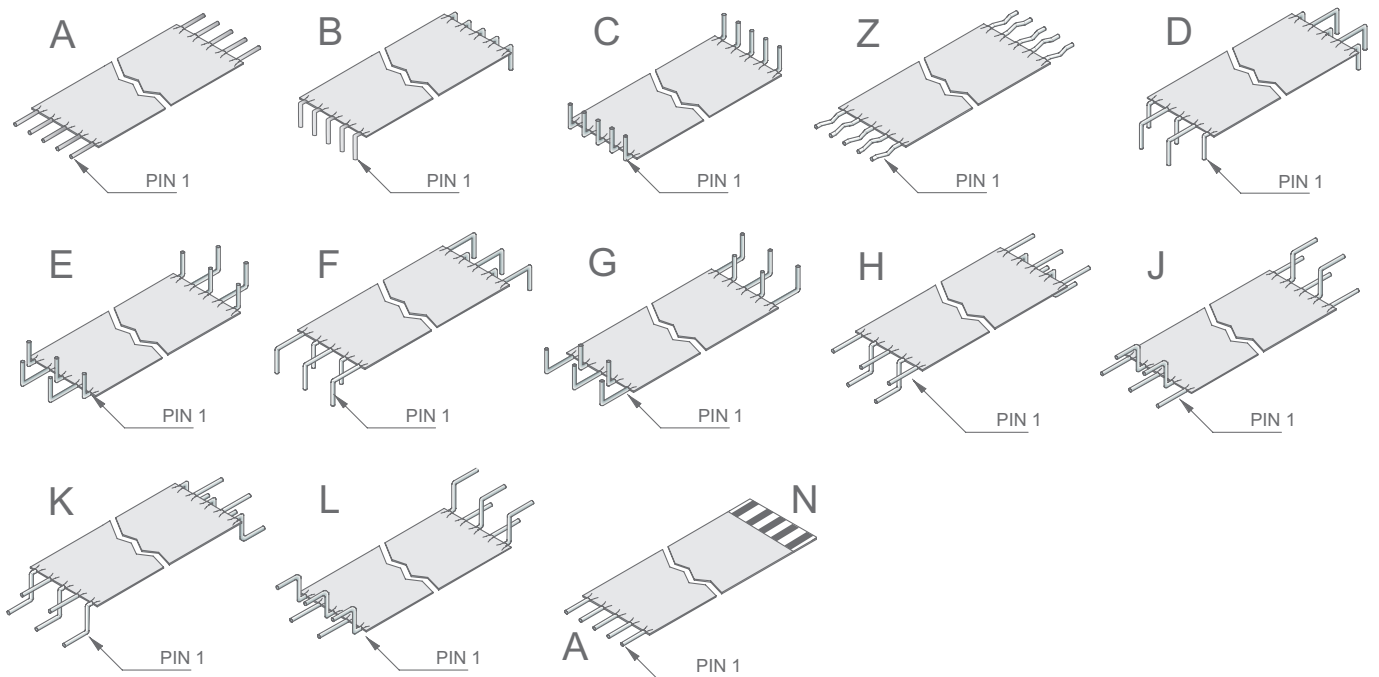


Abb.: The respective connection types can be selected separately and can also be combined with Panta® FLL, Panta® FIX CRIMP and Panta® ZIF as well as Panta® ZIF connections.