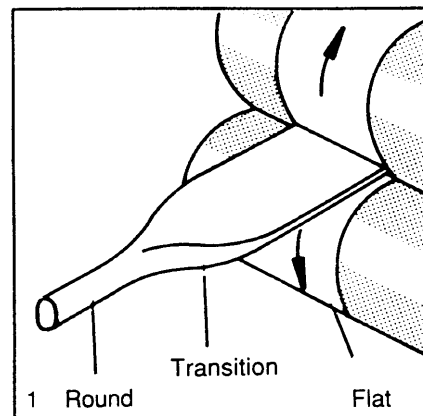


### PRODUCT DESCRIPTION

Round copper conductors are rolled flat to achieve maximum flex life.

FLEXSTRIP® Jumpers are manufactured with flat preplated conductors and transition to round contacts (Fig. 1).

FLEXSTRIP® Jumpers can be repeatedly flexed without failure and are highly vibration resistant.

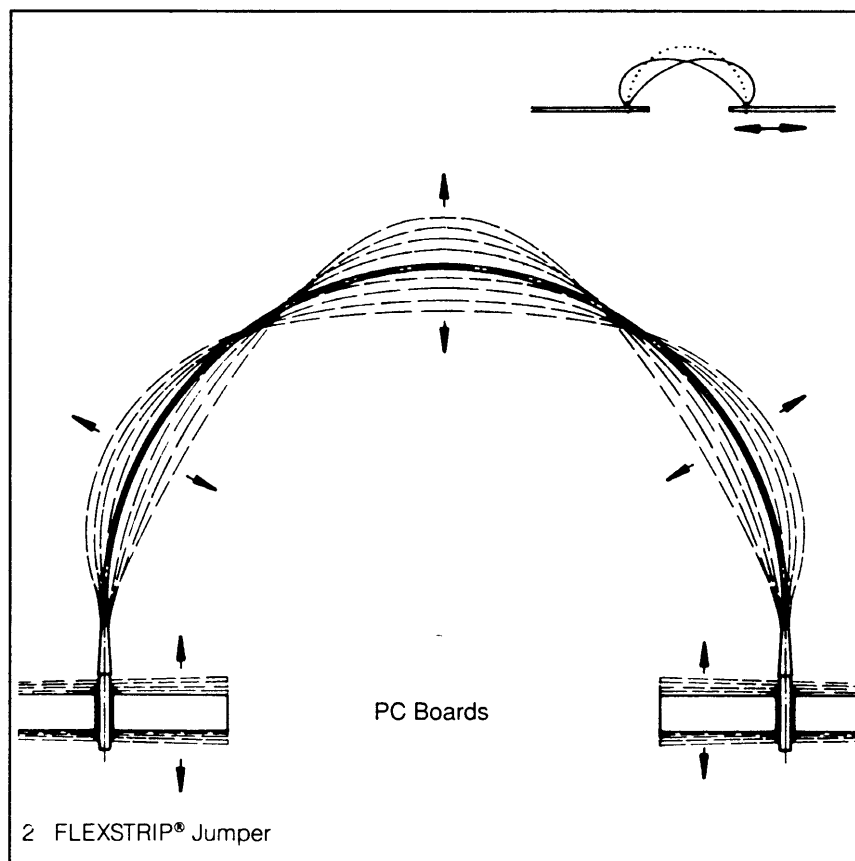


### VIBRATION RESISTANCE

Even in critical areas, the flexing stress is evenly distributed over the flat high flex conductors. The transition zone smoothly accommodates the stress before it reaches the solid round contacts.

- External vibration may act upon the assembly and may result in resonance (Fig. 2).

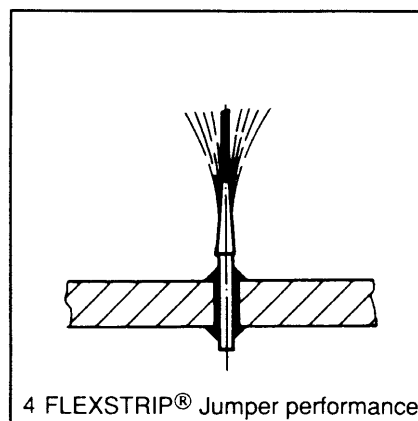
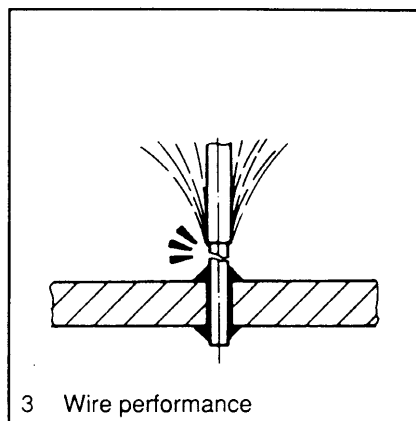
In this case, resonance is directly accepted in the jumper or is induced on the jumper from the vibrating PC board.



The resulting sequence of motions is identical in both cases:

- A reciprocating movement, i.e. alternating flexing stresses with small displacement\* and high frequency, which results in very heavy loading of the contacts (Fig. 3 and 4).

\* Displacement depends on acceleration.



## PRODUCT DESCRIPTION

Ansley FLEXSTRIP® Jumpers provide versatile, high-flex flat cable interconnections. FLEXSTRIP® Jumpers guarantee millions of flexing operations over short and medium distances in any application that requires flexible electronic interconnections.

### • Choice of 4 Insulations

#### NOMEX INSULATION

Opaque nylon insulation with excellent temperature capability.

Can be installed by conventional soldering techniques.

Recommended for use where variations in insulation resistance due to changes in humidity are not critical.

#### TEFLON INSULATION

A translucent film that has exceptional electrical and mechanical properties. Can be installed by most commonly used soldering techniques.

Resistant to damage by contact with a hot soldering iron.

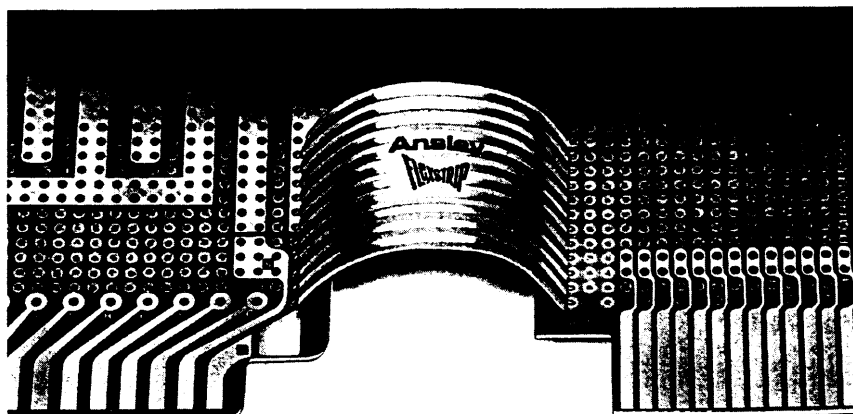
Most commonly used for high electrical and mechanical performance applications.

#### POLYESTER INSULATION

An insulation with excellent mechanical and electrical properties. Easily installed by controlled soldering techniques.

#### KAPTON INSULATION

A translucent amber film that will withstand all normal soldering methods.



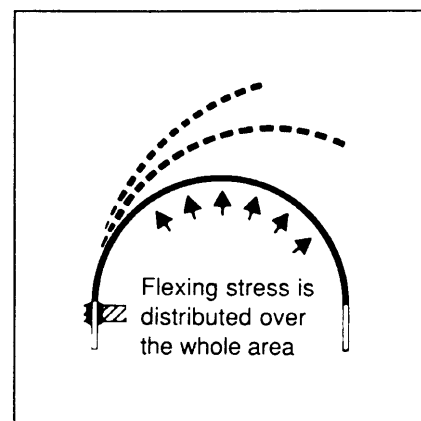
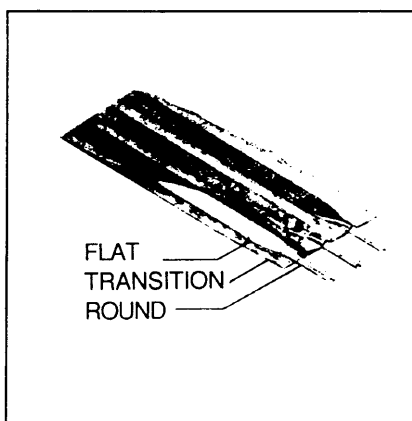
Unsurpassed mechanical properties, especially at elevated temperatures. Dimensionally stable over the full temperature and humidity range.

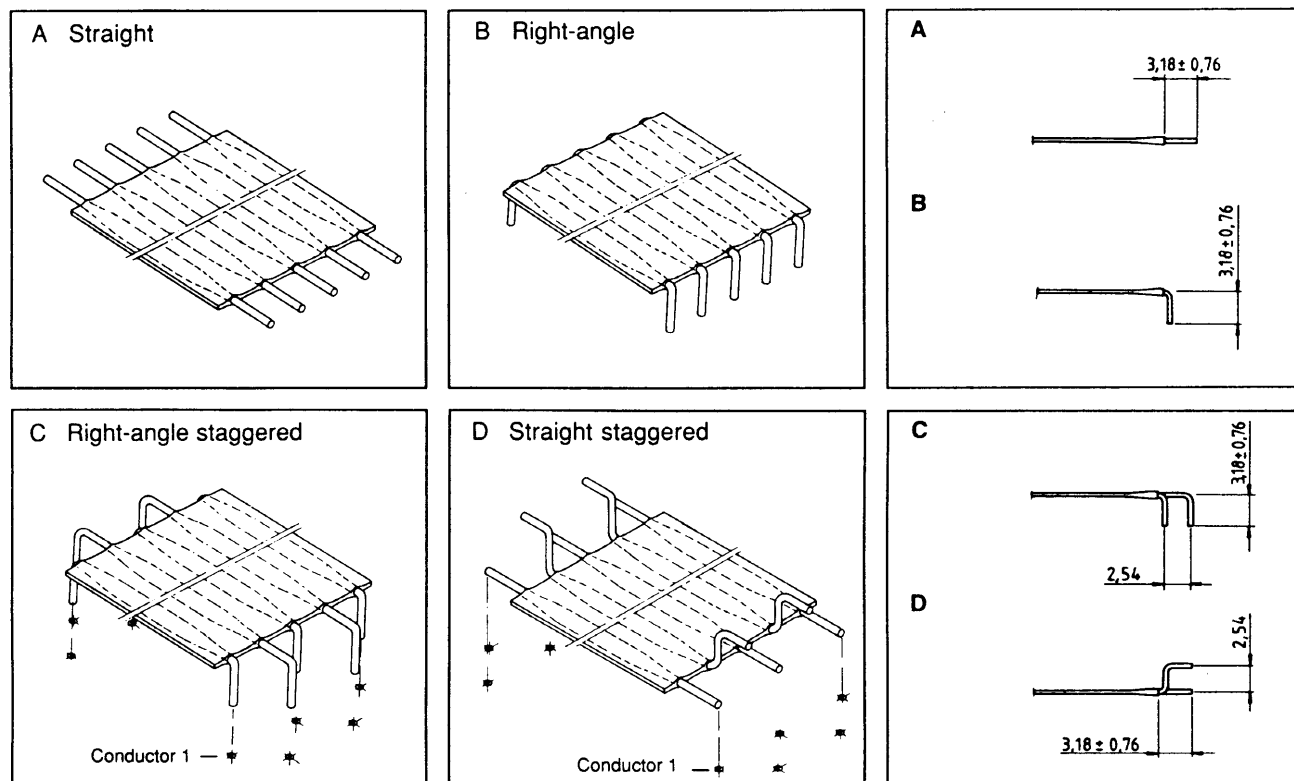
Not damaged by accidental contact with a hot soldering iron.

Used in the most exacting applications.

## PRODUCT ADVANTAGES

- Proven round-to-flat design: Stable round contacts can easily be inserted or soldered, while the flat and transition zones ensure maximum flexibility (see illustration).
- This design permits millions of flexing operations while maintaining
- vibration-proof reliability. Flexing stress is evenly distributed over the whole area (see illustrations).
- High dependability proven by millions of demanding applications in various industries.
- Interconnection of PC boards without time-consuming preparation. No wire stripping, cutting to length or solder preparation. Ready for insertion or soldering.
- Very easy to use, allows savings in labour and installation costs.
- Fast installation, e.g. simultaneous machine soldering of all contacts.
- The round contact ends of FLEXSTRIP® Jumpers allow one jumper end to be "connectorized" to mate with various female connectors (see pages 8 and 10 through 13).



**Available Pin Arrangements**

**PRODUCT CODE**
**F S N 1 2 A 2 0 \*\* V 1**

Product Group  
Insulation Material  
N = Nomex  
T = Teflon  
P = Polyester  
K = Kapton

Conductor Pitch  
1 = 1.27 mm  
2 = 2.54 mm  
3 = 3.18 mm  
4 = 3.81 mm  
5 = 5.08 mm

Insulation Length  
.5 = 12.7 mm  
\* .75 = 19.05 mm  
1 = 25.4 mm  
1.5 = 38.1 mm  
2 = 50.8 mm  
2.5 = 63.5 mm  
3 = 76.2 mm  
3.5 = 88.9 mm  
4 = 101.6 mm  
4.5 = 114.3 mm  
5 = 127.0 mm  
5.5 = 139.7 mm  
6 = 152.4 mm

Special insulation lengths:  
Additional lengths up to 24" in .5" increments.  
Length is defined in inches.  
1 inch = 25.4 mm

\* Only available in 2.54 mm pitch with Nomex insulation.

Number of Conductors  
Pin Arrangement for both ends:

A -- Straight pins  
B -- Right angle pins  
C -- Right angle staggered pins  
D -- Straight staggered pins

Combined Pin Arrangement  
e.g.:  
AB = straight / right-angle  
(left end / right end)

Pin Length  
Standard pin length is  
3.18 ± .76 mm.

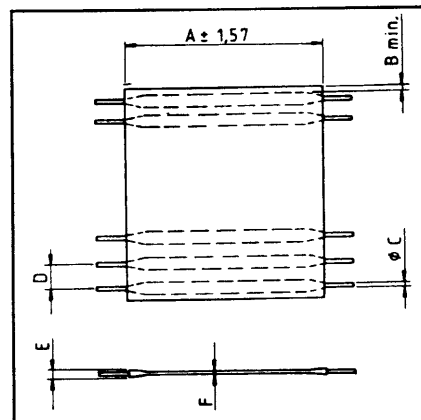
\*\* Special Pin Lengths

For jumper lengths up to 6" in 2.54 mm and 5.08 mm pitches:

V 1 = 2.85 mm	Tolerance + .3 - .2
V 5 = 3.1 mm	
V 2 = 3.4 mm	
V 3 = 4.1 mm	
V 4 = 6.5 mm	

**SPECIFICATIONS, Insulation**

	Nomex	Polyester	Teflon	Kapton
Dimension F	.25	.25	.4	.25
Temperature Range	-40°C to +105°C		-40°C to +150°C	
Solder Bath Temperature	250°C / 4 sec		260°C / 5 sec	
UL Style No.	5188	2639	2928	2927


**SPECIFICATIONS, General**

Pitch D	1.27	2.54	3.18	3.81	5.08
No. of Conductors max.	50	30	25	15	
Margin B min.	.2	.25	.5		
Wire Gauge	AWG 28		AWG 24		
Current Rating	1 A		2 A		
Dimension E max.	.64		.84		
Pin Diameter C	.3		.5		
Length A	.5" (12.7 mm) up to 6" (152.4 mm) in .5" increments				
Voltage Rating	300 V				
Conductor Material	Cu (QQ-W-343) tin-plated				

**SPECIAL TYPES:**

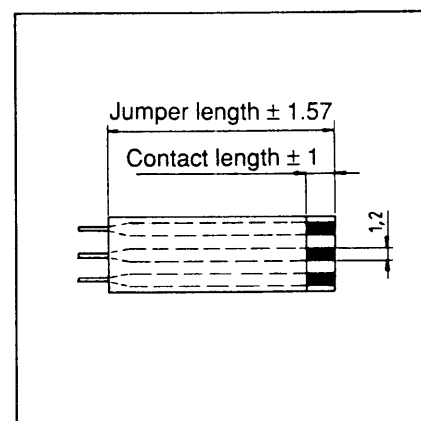
- FLEXSTRIP® Jumper with stripped flat conductors on one side. The stripped end can be used for through-hole interconnection of PC boards and LCDs.

**ORDERING EXAMPLE:**

**FSN 23 A 20 \* S**

\*S = Special Type.

Please submit dimensional drawing of desired stripped flat conductors.



- FLEXSTRIP® Jumper for surface mount (SMT) installation, with bent pins matching the PC board.

**ORDERING EXAMPLE:**

**FSN 23 X 20 \* S**

(FLEXSTRIP® Jumper with SMT pins on both sides)

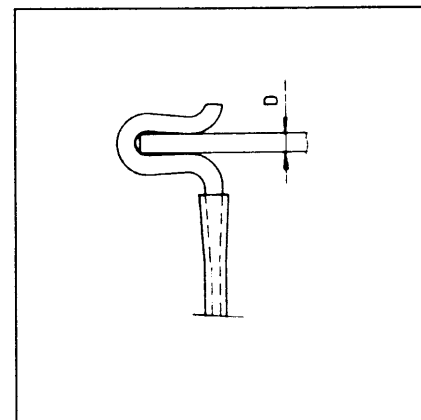
\* = Special Type.

Please specify PC board thickness "D" including tolerance.

Combined pin arrangement, e.g.

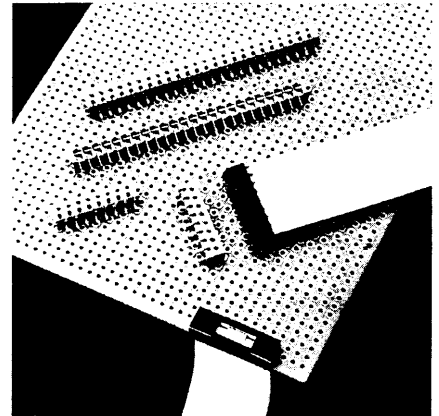
AX = straight / SMT

(left side / right side)



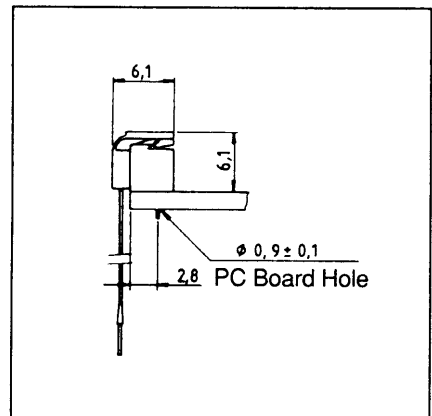
### PRODUCT DESCRIPTION

The FLEXSTRIP® Header and Socket System consists of a jumper with insert-moulded latching tab and a solderable socket strip. The two-piece system is ideally suited for connect/disconnect applications where high mechanical stresses are likely to occur.

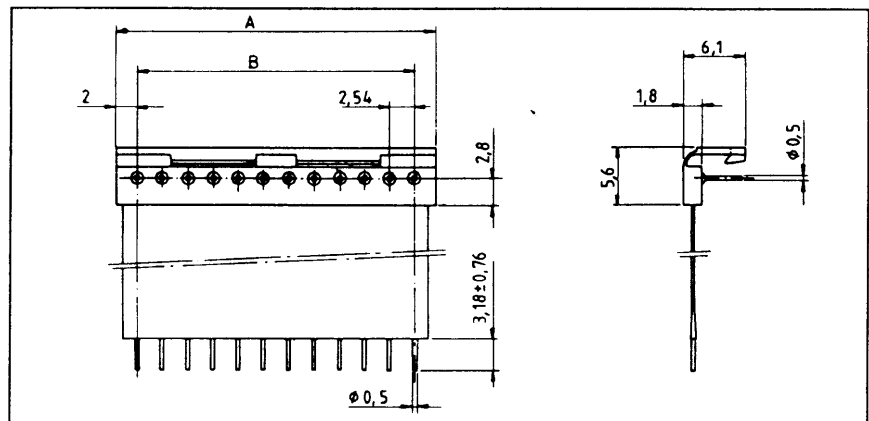


### PRODUCT ADVANTAGES

- 10 different numbers of conductors
- Standard pitch 2.54 mm and lengths from .75" to 24" in .5" increments
- 4 different insulation materials
- Extremely low space requirement
- High mechanical latching strength when mated



No. of Conductors	A	B
8	21.8	17.78
9	24.4	20.32
10	26.9	22.86
12	32.0	27.94
14	37.1	33.02
16	42.2	38.1
18	45.7	43.18
20	52.3	48.26
22	57.4	53.34
24	62.5	58.42



Material (latching tab): Polyamide  
Jumper specifications see Standard Jumper on page 5.