



# Series 181 thru 183 90° Pin-Staked Flex Jumper

## FEATURES

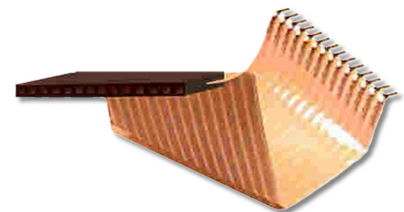
- Combination of Thin, Flexible, Solid Cu Conductors embedded between layers of Tough, Flexible, Flame-retardant Insulation

## GENERAL SPECIFICATIONS

- STANDARD CABLE INSULATION:** White UL VW-1, Style 2643 Flame-retardant Polyester (Mylar) adhesive
- CABLE INSULATION:** High-temp, Flame retardant Polyimide (Kapton) with acrylic adhesive
- CABLE CONDUCTORS:** Solid Cu with a cross-sectional area equivalent to that of 26-gauge AWG
- FEMALE HOUSING:** Black UL 94V-0 glass-filled Stanyl 4/6 Nylon
- CRIMP-ON PINS:** Spring-tempered Cu 510
- PIN PLATING:** 100 $\mu$  [2.54 $\mu$ ] min. matte Sn per ASTM B545-97(2004)e1 over 50 $\mu$  min. Ni per ASTM AMS-QQ-N-290 –OR– 100 $\mu$  [2.54 $\mu$ ] min. 93/7 Sn/Pb per SAE AMS-P-81728 over 50 $\mu$  [1.27 $\mu$ ] min. Ni per SAE AMS-QQ-N-290B
- CABLE CURRENT RATING:** 3 amps
- CABLE VOLTAGE RATING:** 300V
- CABLE DIELECTRIC STRENGTH:** 2500V/mil, min. (standard) 4000V/mil, min. (high-temp)
- CABLE INSULATION RESISTANCE:** 1000 M $\Omega$  min. (standard) 100,000 m $\Omega$  (high-temp)
- CONDUCTOR/CONTACT RESISTANCE (avg.):** 20 m $\Omega$  initial (max. 20 m $\Omega$  increase) based on a 2" cable at 20°C
- OPERATING TEMPERATURE:** 67 to 257°F [-55 to 105°C]
- ACCEPTS LEADS (female housing):** 0.024-0.030 [0.61-0.76] square, 0.150 [3.81] long min.

## MOUNTING CONSIDERATIONS

- SUGGESTED PCB HOLE SIZE:** 0.033  $\pm$  0.002 [0.86  $\pm$  0.05] dia.

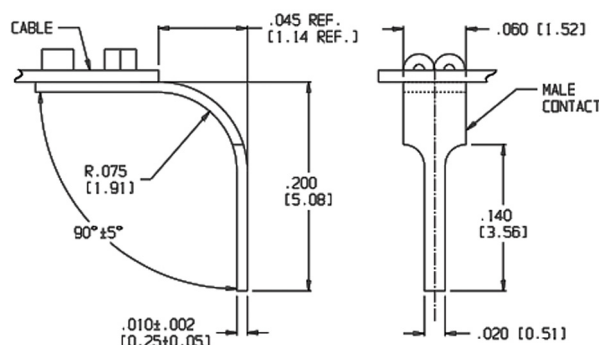


## ORDERING INFORMATION

XX-XXXX-18X X X XX XX

- Insulation Option**  
HT = High-temp cable insulation
- Plating Option**  
TL = Sn/Pb
- Polarization Option**  
P = Polarization stripe
- Bend Option**  
A = Both ends bent 90°, same direction  
B = One male end bent 90°  
C = Both ends bent 90°, opposite direction  
D = One female end bent 90°
- Series**  
181 = Male, both ends  
182 = Male/Female (Sn)  
183 = Female, both ends (Sn)
- Cable Length "L" (inches)**  
2" = 002 (min)  
2.5" = 002.5  
2.25" = 002.25  
2.125" = 002.125
- No. of Conductors**  
(4 thru 40)

## BENT MALE CONTACT DETAIL



ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES:  $\pm$ 0.005 [0.13] UNLESS OTHERWISE SPECIFIED

MAY SHIP WITH OR WITHOUT POLARIZATION STRIPE UNLESS SPECIFIED

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

CUSTOMIZATION: ARIES SPECIALIZES IN CUSTOM DESIGN AND PRODUCTION. SPECIAL MATERIALS, PLATINGS, SIZES, AND CONFIGURATIONS CAN BE FURNISHED, DEPENDING ON QUANTITY.

ARIES RESERVES THE RIGHT TO CHANGE PRODUCT GENERAL SPECIFICATIONS WITHOUT NOTICE

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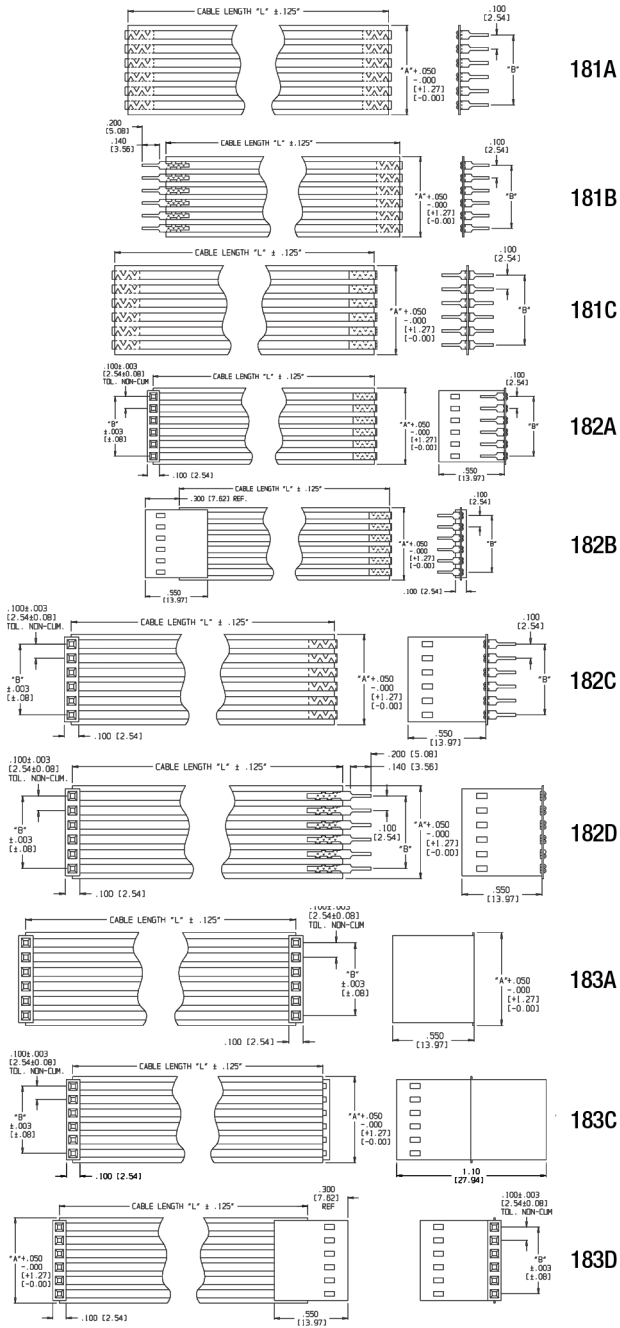


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# Series 181 thru 183

## 90° Pin-Staked Flex Jumper



"A" = NO. OF CONDUCTORS x 0.100 [2.54]

"B" = (NO. OF CONDUCTORS - 1) x 0.100 [2.54]

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ALL TOLERANCES:  $\pm 0.005$  [0.13] UNLESS OTHERWISE SPECIFIED

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