



# 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 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
- **STD OPERATING TEMPERATURE:** -67 to 221°F [-55 to 105°C]
- **HT OPERATING TEMPERATURE:** -67 to 257°F [-55 to 125°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.



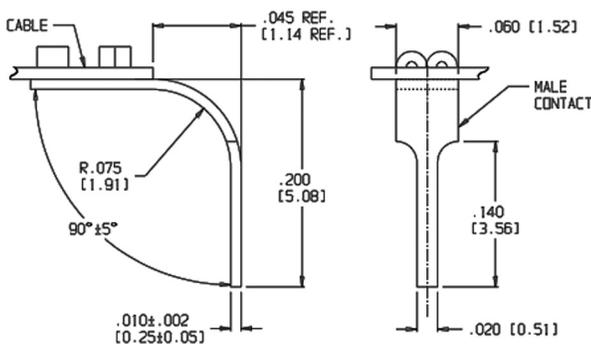
## ORDERING INFORMATION

**XX-XXXX-18X X XX XX**

- **Insulation Option**  
HT = High-temp cable insulation
- **Plating Option**  
TL = Sn/Pb **Special Order Only**
- **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)

**NOTE:** Please contact the factory for price and availability of any high-temp (HT) cable larger than 20 conductors.

## 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.

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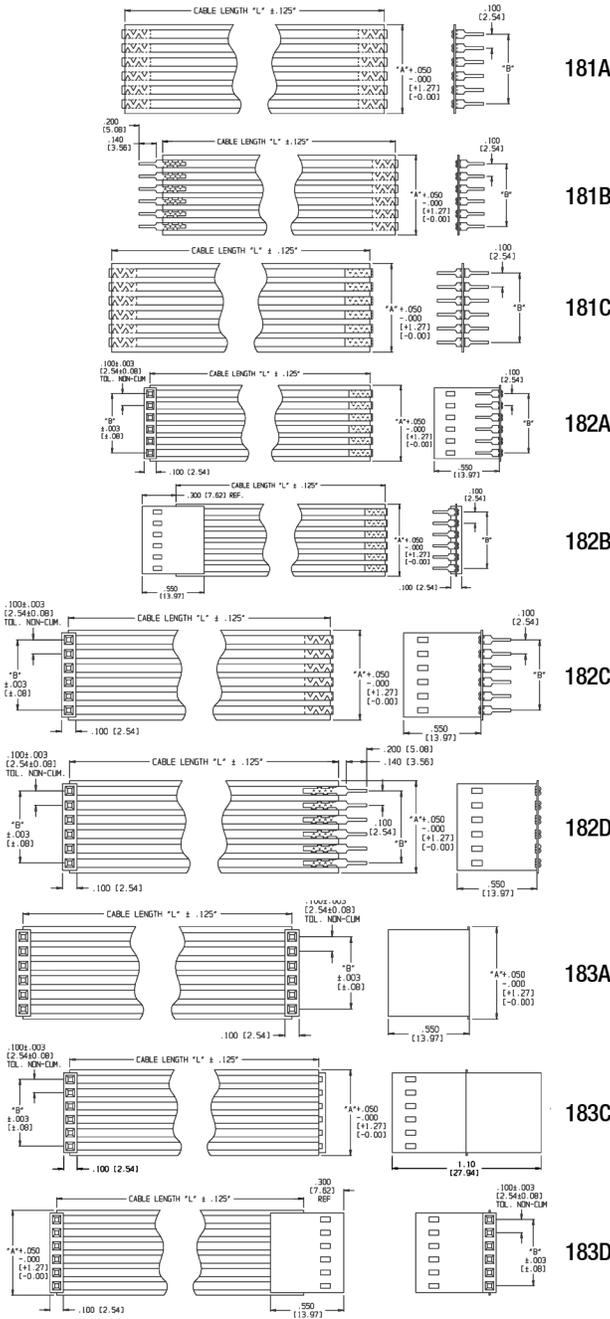
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11019  
Rev. 11.7  
1 of 2



# 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: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED  
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