



# 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
- **HT 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:** 100µ [2.54µ] min. matte Sn per ASTM B545-97(2004)e1 over 50µ min. Ni per ASTM AMS-QQ-N-290 -OR- 100µ [2.54µ] min. 93/7 Sn/Pb per SAE AMS-P-81728 over 50µ [1.27µ] 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 MΩ min. (standard) 100,000 mΩ (high-temp)
- **CONDUCTOR/CONTACT RESISTANCE (avg.):** 20 mΩ initial (max. 20 mΩ 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 ±0.002 [0.86 ±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



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

ALL DIMENSIONS: INCHES [MILLIMETERS]  
ALL TOLERANCES: ±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

PRINTOUTS OF THIS DOCUMENT MAY BE OUT-OF-DATE AND SHOULD BE CONSIDERED UNCONTROLLED



**ARIES**  
ELECTRONICS, INC.

2609 Bartram Road • Bristol, PA 19007-6810 USA  
TEL 215-781-9956 • FAX 215-781-9845  
WWW.ARIESELEC.COM • INFO@ARIESELEC.COM



11019  
Rev. 11.4  
1 of 2



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



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

ALL DIMENSIONS: INCHES [MILLIMETERS]  
 ALL TOLERANCES: ±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  
 PRINTOUTS OF THIS DOCUMENT MAY BE OUT-OF-DATE AND SHOULD BE CONSIDERED UNCONTROLLED



2609 Bartram Road • Bristol, PA 19007-6810 USA  
 TEL 215-781-9956 • FAX 215-781-9845  
 WWW.ARIESELEC.COM • INFO@ARIESELEC.COM

