

# whirlwind

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## Punchdown XLR Instructions and Specifications

The Whirlwind PD series of chassis mount XLRs employ punchdown technology for reliable, gas-tight connections. Following are the instructions and specifications for the connectors and punchdown tool.

### Part Numbers:

**WC3FPDL** - Chassis female XLR, with locking tab

**WC3MPD** – Chassis male XLR, locking

**PDTOOL** – 110 style punchdown tool, tip NOT included

**PDKTIP** – Krone style tip for PDTOOL

**PD110TIP** – 110 style tip for PDTOOL



WC3FPDL

WC3MPD

PDTOOL with PDKTIP

### INSTRUCTIONS:

#### Assemble the tool:

The PDKTIP has two ends, one that only punches and one that punches and cuts in one operation. The end for punching and cutting is labeled “CUT” and features a sharp cutting nib at the tip. (See Fig. 1 below.)



(Fig. 1)

Place the PDKTIP into the PDTOOL with the “CUT” end exposed and rotate ¼ turn until it locks into place. (NOTE: The opposite non-cutting end of the tip may be used if you will be trimming the excess wire manually.)

To remove the tip from the tool, rotate the tip in the opposite direction. Tip may be stored inside the tool by inserting it into the bottom of the tool while rotating the “RELEASE BLADE” thumbwheel in the direction of the arrows. Remove the tip by reversing this procedure.



### **Set Impact:**

There is a thumbwheel on the tool labeled “IMPACT, LO HI”. This adjusts the PDTOOL spring force. Most applications will work satisfactorily in the LO position. We recommend starting out in the LO setting and adjusting up to HI if more force is required.

### **Punch Wires:**

The rear of the connector has 3 slots for accepting 22AWG – 26AWG wire. Up to two wires can be punched in each slot. It is recommended that clear tubing be placed over any bare conductors prior to punchdown. This will result in a more secure connection.



Place the wire over the slot in the rear of the XLR leaving about 1/8” excess past the slot. **IMPORTANT: When using the “CUT” end of the PDKTIP, the wire MUST be placed with the waste end opposite the locking tab on the connector or damage to the connector will result.** (See Fig. 2 below.) When using the non-cutting end of the PDKTIP, the wire may be placed in either direction but the waste will have to be trimmed manually after punching.

Place the PDKTIP directly on top of the wire. When using the “CUT” end, be sure to have the cutter placed at the waste end of the wire.

With one positive motion, press the tool straight down into the slot with enough force to compress the tool's internal spring until the pressure releases and hammers the wire home. One or two punches on each wire should be sufficient to seat the wire in the slot and cut off the excess. If one or two punches do not seat the wire properly, turn the impact to "HI" and repeat. (Note: It may be necessary to clip some of the excess waste manually if the tool does not cut it completely.)

The result should be as pictured at right in Fig. 2.



(Fig. 2)

### Specifications:

#### Electrical

Number of contacts	3
Rated current	6A
Contact resistance	< 5mΩ

Insulation resistance	> 1000MΩ
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Dielectric strength	1500VDC
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#### Mechanical

Lifetime	> 1000
Insertion/withdrawal force	< 20N
Wire specification	Stranded wire 7x34 – 7x30, AWG 26 - 22
Numbers of wires max	2
Wire O.D.	1.0 - 1.6mm

#### Environmental

Temperature range	-30°C to +80°C
Flammability	UL94HB
Solderability	Complies with IEC 68-2-20

#### Materials

Housing	PA 6.6 30%GR
Front plate	PA 6.6 30%GR or ZnAl4Cu1
Male contact	Brass CuZn39Pb3
Female contact	Bronze CuSn6
Contact surface	Gold 0.2μm Au hard alloy over 2μm Ni
Latch look and spring	Ck67 steel