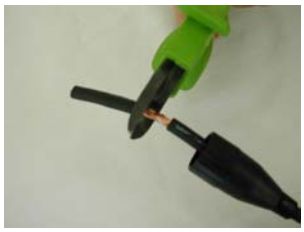
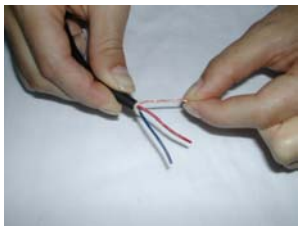
Amphenol

XLR Connector - IDC Cable Assembly Instructions

Step 1. Push cable through boot assembly.

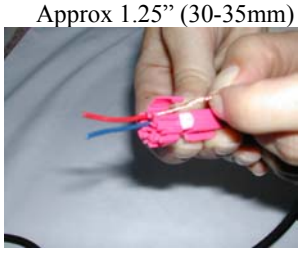


Step 2. Strip cable outer jacket Approx 1.25" (30-35mm)



Step 3. Twist the shield wire.

Step 4. Fit the cable into the "Jaws" cable clamp.



Step 5. Clip in place shield wire behind protection ground flap.

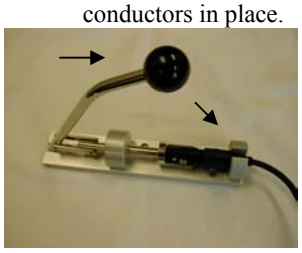
Step 6. Trim shield wire to ensure no contact is made with shell.

Step 7. Place conductors in correct keyways and track guide.

Step 8. Push boot on to "Jaws" clamp to hold conductors in place.

Step 9. Boot holding conductors in place.

Step 10. Fit shell assembly ensuring keyway is aligned.



Step 11. Terminate by screwing on the boot or popping on with the Amphenol Tool.

Step 12. Terminated IDC connector.

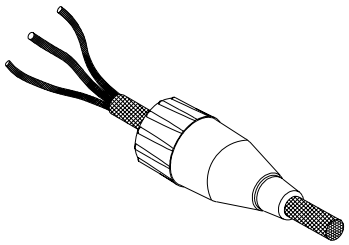
IDC Benefits - XLR Cable Connector

- **OH&S benefit - No soldering or fume extraction needed therefore reducing hazards.**
- **Cost benefit – No soldering equipment required.**
- **Training benefits – No special skills required.**
- **Quick and Easy to assemble – saves time, money, and energy, improving your bottom line.**
- **No power required – can be terminated and re-terminated several times anywhere.**
- **"Jaws" cable clamp Provides up to 110lbs retention.**
- **Gas Tight Termination of contacts eliminates conductor corrosion at the joint.**
- **Guaranteed consistent termination each time.**

Rev 1 – 09/2003

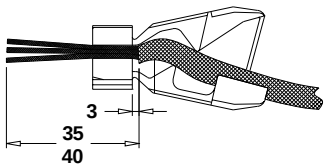
AC IDC SERIES CABLE ASSEMBLY INSTRUCTIONS

1



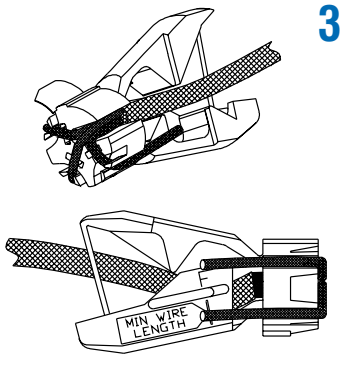
Push the cable through the boot assembly and strip the cable back 35 to 40 mm. Twist the shield wire.

2



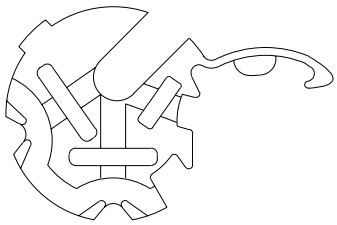
Fit the cable into the 'Jaws' cable clamp ensuring that the cable is pushed up to the neck of the clamp within 3mm.

3



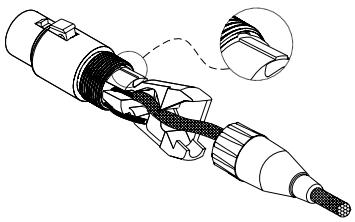
Pull back the conductors into their individual wire guidetracks. Note: Two spring fingers in the clamp will hold the conductors in position during subsequent operations. The ends of the two insulated wires must be on or past the minimum wire length mark.

4



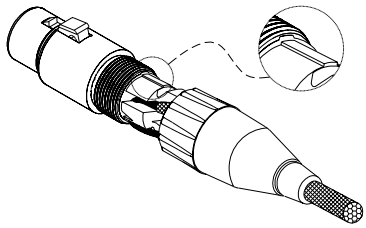
For ground protection the twisted shield wire is clipped in place with the ground protect flap.

5



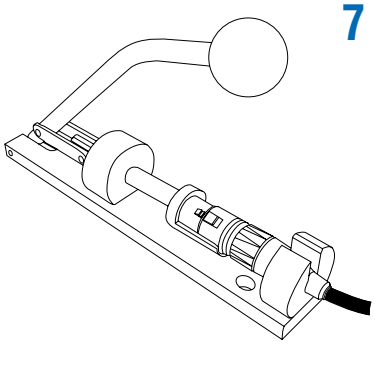
Trim back the shield wire, so there are no wires coming out of the flap and fit the 'Jaws' cable clamp into the shell assembly, ensuring the keyways are aligned.

6



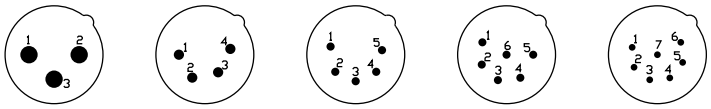
Close the cable clamp slightly and push the boot over the clamp ensuring the wires fit inside the boot.

7



Final assembly can be achieved either by manually screwing the boot on, or by using an Amphenol Australia T2860 termination tool.

STANDARD DATA AC CABLE CONNECTORS

		VALUE				
GENERAL CHARACTERISTICS	Number of contacts	3	4	5	6A	7
	AC Series Contact Arrangements (Front view of pin inserts)					
	Termination	IDC / SOLDER	SOLDER	SOLDER	SOLDER	SOLDER
	Max. Wire Gauge - Stranded wire:					
	IDC	24AWG	N/A	N/A	N/A	N/A
	Solder	14AWG	16AWG	18AWG	18AWG	20AWG
	Flammability rating of insulator plastics and housings	UL94V-0				
ELECTRICAL CHARACTERISTICS	Service Voltage RMS	133V [1]				
	Test Voltage AC RMS	1400V				
	Current carrying capacity:					
	IDC	1A	N/A	N/A	N/A	N/A
	Solder	15A	10A	7.5A	7.5A	5A
	Typicial Contact Resistance	≤ 3mΩ				
	Insulation Resistance	≥ 1GΩ				
CLIMATIC CHARACTERISTICS	Protection Class	IP40				
	Operating Temperature	-25˚C to +75˚C				
MECHANICAL CHARACTERISTICS	Insertion and Withdrawal force	≥ 10N - ≤ 30N				
	Weight - Metal [2]	36g (0.080lb)	37g (0.081lb)	38g (0.083lb)	38g (0.083lb)	38g (0.083lb)
	Weight - Thermoplastic [2]	18g (0.039lb)	19g (0.041lb)	20g (0.044lb)	20g (0.044lb)	20g (0.044lb)
	Typical Cable retention force	22Kg to 44Kg (50lb to 100lb) - Dependant on cable material and diameter.				
	Cable O.D. range - JAWS clamp					
	IDC	Max. Cable O.D. 5.85mm (0.23")				
	Standard solder	3mm to 6.5mm (0.118" to 0.255")				
	Large Solder	6.5mm to 8mm (0.255" to 0.314")				
	Mechanical Operations	1000 mating cycles				

[1] Not suitable for domestic applications above 50V

[2] Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.

STANDARD DATA AC CABLE CONNECTORS

		DETAILS
MATERIALS	Connector shell - Metal	Diecast Zinc Alloy
	Shell finish	Satin nickel or Black polyester
	Connector shell - Thermoplastic	Thermoplastic, UL94V-0 Modified PPE Resin
	Shell finish	Black
	Insulators	UL94V-0 PBT Resin or Modified PPE Resin
	Boot / Backshell	UL94V-0 Modified PPE Resin or Machined Brass
	Finish	Black, other colours available - see page 60
	Cable clamp	
	IDC Socket JAWS	UL94V-0 Modified PPO Resin (Pink)
	IDC Pin JAWS	UL94V-0 Modified PPO Resin (Blue)
	Standard Solder JAWS	UL94V-0 Modified PPO Resin (Black)
	Large Solder JAWS	UL94V-0 Modified PPO Resin (Purple)
	Cable Bushing	Thermoplastic Polyurethane
	Male Contact	
	Stamped - IDC / Plating	Phosphor Bronze / Silver or Gold (Optional)
	Stamped - Solder / Plating	Phosphor Bronze / Silver or Gold (Optional)
	Machined - Solder / Plating	Brass / Silver or Gold (Optional)
	Female Contact	
	Stamped - IDC / Plating	Phosphor Bronze / Tin or Gold (Optional)
	Stamped - Solder / Plating	Phosphor Bronze / Tin or Gold (Optional)
	Machined - Solder / Plating	Brass / Silver or Gold (Optional)
IDC RECOMMENDED CABLE DIMENSIONS		

A - Cable O.D.: Max. ⌀ 5.85mm (0.23").
B - Bare Copper Spiral Shield OD ⌀ 2.75⇒⌀ 3.00mm (0.11"⇒0.12")
C - OD⌀1.30⇒⌀1.50mm (0.05"⇒0.06")
D - 16/.005" (24 AWG stranded wire)