



1/4" PHONE CONNECTORS

Amphenol has introduced two ranges of 1/4" Phone plug connectors to satisfy the needs of the manufacturer and the end user. The PRO – a heavy duty on-road plug and the MUSICIAN - a solid performing general use plug. Both series offer different features and benefits and the most suitable type will be determined by application, budget and personal choice. The 1/4" Phone plug jacks range has been widened with the stackable (piggy back) OEM series, saving board space and manufacturing costs.

Applications

- Audio Cables and Snakes
- Amplifiers
- Speakers
- Mixing desks
- Rack mount equipment
- Patch panel

Features / Options – PRO RANGE 1/4" Phone Plug T-Series.

- Mono or Stereo (TRS)
- Stylised shell design with Ergonomic grip
- Nickel or Gold contact plating
- Keyed Shell
- Optional heavy duty metal backshell / boot
- Great solderability
- Increased solder area on ground contact
- "Jaws" Cable Clamp
- Precision machined contacts
- Coloured Grommet

Features / Options – MUSICIAN RANGE 1/4" Phone Plug

- Mono or Stereo (TRS)
- Compact Shell
- Straight or Right angle
- Stylish shell design
- Flexible grommet cable protection
- Nickel or Gold contact plating
- Satin Nickel or Black finish
- Diecast shell
- Coloured Grommet

Features / Options – OEM RANGE 1/4" Phone Jack

- Mono or Stereo (TRS)
- Stackable (Piggy back) mounting
- Vertical or Horizontal PCB mount
- Mono and Stereo switched contacts
- Solder contacts
- Combo contacts
- Metal nut
- Plastic nut

Features / Options – RCA Plug

- Red, Black, White, Yellow, Blue or Green shell colours
- Stylish shell design
- Flexible grommet cable protection
- Gold Plated Contacts

Jaws Cable Clamp Options for T-Series



Standard Jaws cable clamp (Black), Cable O.D 3mm to 6mm (0.118" to 0.236")



Large Jaws cable clamp (Purple), Cable O.D 6mm to 7.5mm (0.236" to 0.295")

Ordering Codes

We have listed the more common ordering codes in each section. Please contact us if you need any further assistance.

Applicable Patents

US Patent No. 5,439,388

Simple steps to guide you in using this catalogue

- 1) Identify the product group listed in Contents on Page 1 and go directly to that page number.
- 2) Each product group cover page then details information and options available.
- 3) Refer to the product detail pages and identify the product you require pictorially.
- 4) Read the product description column for the products standard features.
- 5) Use variations column to determine your choice.
- 6) Identify part number.
- 7) In the event the particular option you require is not listed please refer to the part number breakdown page at the end of each section.
- 8) Please contact us directly if you have any further problems.



Amphenol



1/4" PHONE PLUGS

T-SERIES (PRO RANGE)








Features:

- Mono or Stereo (TRS).
- Stylised shell design with Ergonomic grip.
- Robust diecast shell in Satin nickel or Black finish.
- Nickel or Gold contact plating.
- Keyed shell.
- Optional heavy duty metal backshell / boot.
- Great solderability.
- Increased solder area on ground contact.
- "Jaws" Cable Clamp.
- Precision machined contacts.
- Quick and easy assembly.

Options: Gold Contacts, Large or Small Jaws Cable Clamp, Black Shell, Metal Backshell / Boot, Bulk Pack. Coloured grommets (ordered separately)

Part Number Breakdown: Page 70 **Specifications:** Page 71

PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		1/4" (6.35mm \emptyset) Mono Phone plug, Jaws cable clamp, Thermoplastic backshell, Satin finish.	Standard	TM2P
			Gold Plated Contacts	TM2P-AU
			Large Cable Clamp	TM2PJ
			Bulk Pack	TM2P BULK
		1/4" (6.35mm \emptyset) Mono Phone plug, Jaws cable clamp, Thermoplastic backshell, Black finish.	Standard	TM2PB
			Gold Plated Contacts	TM2PB-AU
			Large Cable Clamp	TM2PBJ
			Bulk Pack	TM2PB BULK
		1/4" (6.35mm \emptyset) Stereo Phone plug, Jaws cable clamp, Thermoplastic backshell, Satin finish.	Standard	TS3P
			Gold Plated Contacts	TS3P-AU
			Large Cable Clamp	TS3PJ
			Bulk Pack	TS3P BULK
		1/4" (6.35mm \emptyset) Stereo Phone plug, Jaws cable clamp, Thermoplastic backshell, Black finish.	Standard	TS3PB
			Gold Plated Contacts	TS3PB-AU
			Large Cable Clamp	TS3PBJ
			Bulk Pack	TS3PB BULK

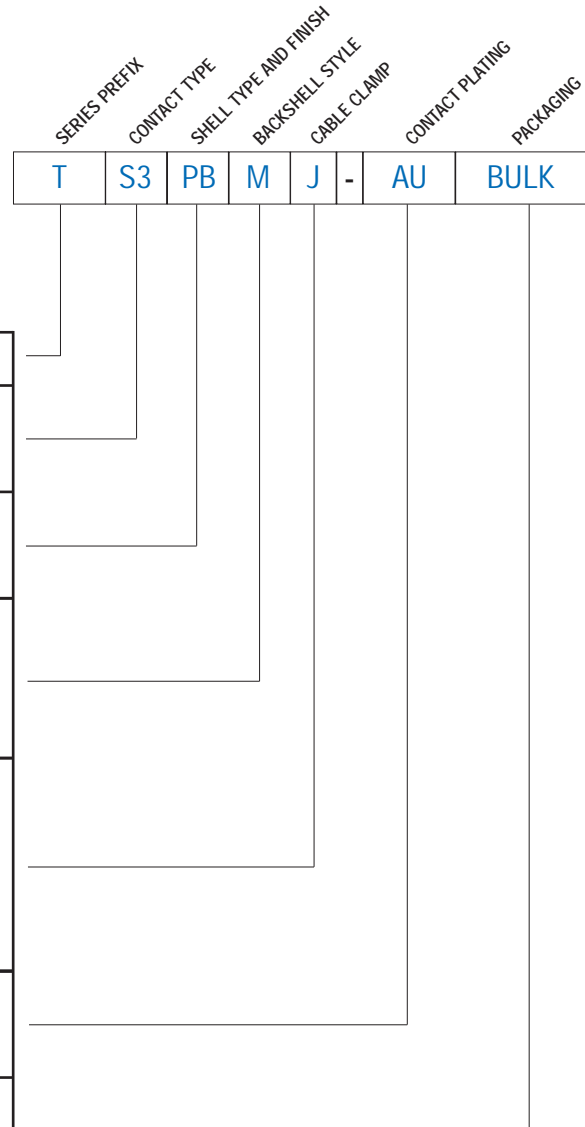
PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		<p>1/4" (6.35mmø) Mono Phone plug, Jaws cable clamp, Metal backshell, Satin finish.</p>	Standard	TM2PN
			Gold Plated Contacts	TM2PN-AU
			Large Cable Clamp	TM2PNJ
			Bulk Pack	TM2PN BULK
		<p>1/4" (6.35mmø) Mono Phone plug, Jaws cable clamp, Metal backshell, Black finish.</p>	Standard	TM2PBM
			Gold Plated Contacts	TM2PBM-AU
			Large Cable Clamp	TM2PBMJ
			Bulk Pack	TM2PBM BULK
		<p>1/4" (6.35mmø) Stereo Phone plug, Jaws cable clamp, Metal backshell, Satin finish.</p>	Standard	TS3PN
			Gold Plated Contacts	TS3PN-AU
			Large Cable Clamp	TS3PNJ
			Bulk Pack	TS3PN BULK
		<p>1/4" (6.35mmø) Stereo Phone plug, Jaws cable clamp, Metal backshell, Black finish.</p>	Standard	TS3PBM
			Gold Plated Contacts	TS3PBM-AU
			Large Cable Clamp	TS3PBMJ
			Bulk Pack	TS3PBM BULK
		<p>1/4" (6.35mmø) Phone plug, Jaws cable clamp, Black Metal backshell, Satin finish shell.</p>	Mono (Std. Clamp)	TM2PM
			Mono (Large Clamp)	TM2PMJ
			Stereo (Std. Clamp)	TS3PM
			Stereo (Large Clamp)	TS3PMJ



PART NUMBER BREAKDOWN

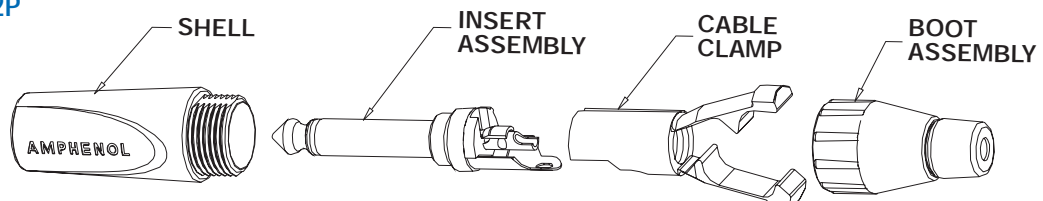
T-SERIES (PRO RANGE)

E. G. **TS3PBMJ-AU BULK**
T (Series Prefix), **S3**(Stereo), Plug **Black**, Metal Nut (Black), **J** (Large Jaws),
 - **AU** (Gold Plated Contacts), **Bulk** Packaged.



SERIES PREFIX	T	=	Series Prefix
CONTACT TYPE	M2	=	2 Pole (mono)
	S3	=	3 Pole, tip/ring/sleeve (stereo)
SHELL TYPE AND FINISH	P	=	Plug Satin Nickel
	PB	=	Plug Matt Black
BACKSHELL TYPE	Blank	=	Plastic Nut
	M	=	Metal Nut - Black
	N	=	Metal Nut - Satin Nickel
CABLE CLAMP	Blank	=	Standard Jaws 3mm to 6mm Cable O.D. (0.118"Ø to 0.236"Ø)
	J	=	Large Jaws 6mm to 7.5mm Cable O.D.(0.236"Ø to 0.295"Ø)
CONTACT PLATING	Blank	=	Nickel Plated Contacts (Standard)
	AU	=	Gold Plated Contacts
PACKAGING	Blank	=	Individual Bags
	BULK	=	Bulk Packed

ISO VIEW OF TM2P



1/4" PHONE PLUG TECHNICAL DATA

		VALUE
GENERAL CHARACTERISTICS	Number of Contacts	2 Pole (Mono) 3 Pole Tip Ring Sleeve (Stereo)
	Termination	Solder
	Max. Wire Gauge - Stranded Wire	2 Pole (Mono): AWG 16-1.5mm ² 3 Pole (Stereo): AWG 18-1mm ²
	Flammability rating of insulating plastics	UL94V-0
	Solderability, complies with	IEC 68-2-20
	Environmental	Complies with RoHS Directive 2002/95/EC
ELECTRICAL CHARACTERISTICS	Current Carrying Capacity	10A (Depends on Mating Connector and Cable)
	Typical Contact Resistance	Depends on Mating Connector
	Insulation resistance (initial)	>2GΩ
	After Damp Heat Test	≥ 1GΩ
	Dielectric Withstand Voltage	2 Pole : 1.5 kV dc 3 Pole : 1 kV dc
CLIMATIC CHARACTERISTICS	Protection Class	IP40
	Operating Temperature	-25°C to +75°C (-13°F to + 167°F)
MECHANICAL CHARACTERISTICS	Insertion and Withdrawal Force	≥ 10N - ≤ 30N
	Weight ¹⁾ - Thermoplastic Backshell	28g (0.061lb)
	Weight ¹⁾ - Metal Backshell	35g (0.077lb)
	Typical Cable Retention Force	22kg to 44kg (50lb to 100lb) - Dependent on cable material and diameter.
	Cable O.D. - Standard Jaw	3mm to 6mm (0.118" to 0.236")
	Cable O.D. - Large Jaw	6mm to 7.5mm (0.236" to 0.295")
MATERIALS	Connector Shell Material	Diecast Zinc Alloy EZDA No.3
	Shell Finish	Satin Nickel or Black Polyester
	Insulators	UL94 V-0 PBT Resin or Modified PPE Resin - Black
	Boot / Backshell	UL94 V-0 PBT Resin or Modified PPE Resin - Black or Metal CuZn ³⁹ Pb ³
	Cable Clamp	UL94 V-0 PBT Modified PPO Resin - Black
	Cable Bushing	Thermoplastic Polyurethane
	Contacts / Plating	Brass /Ni or Au over 2μm Ni

Rev 2 - 09/2005

¹⁾ Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.



Features:

- Mono or Stereo (TRS).
- Stylish shell design.
- Robust diecast shell in Satin nickel or Black finish.
- Nickel or Gold contact plating.
- Flexible grommet cable protection.
- Improved solderability.
- Precision machined contacts.
- Standard or Bulk packaging.

Options: Black Shell, Gold contacts.
Coloured grommets (ordered separately)

Specifications: Pages 75-76


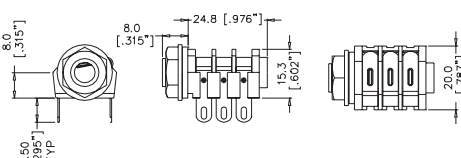

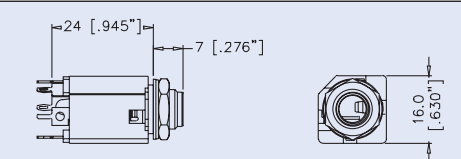

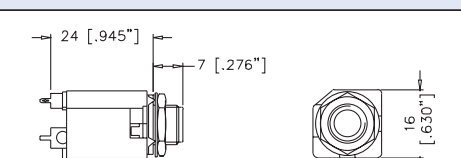
PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		1/4" (6.35mmø) Mono Phone plug, Diecast Shell, Satin finish, Flexible grommet.	Standard	ACPM-GN
			Gold Plated Contacts	ACPM-GN-AU
			Bulk Pack	ACPM-GN BULK
		1/4" (6.35mmø) Mono Phone plug, Diecast Shell, Black finish, Flexible grommet.	Standard	ACPM-GB
			Gold Plated Contacts	ACPM-GB-AU
			Bulk Pack	ACPM-GB BULK
		1/4" (6.35mmø) Stereo Phone plug, Diecast Shell, Satin finish, Flexible grommet.	Standard	ACPS-GN
			Gold Plated Contacts	ACPS-GN-AU
			Bulk Pack	ACPS-GN BULK
		1/4" (6.35mmø) Stereo Phone plug, Diecast Shell, Black finish, Flexible grommet.	Standard	ACPS-GB
			Gold Plated Contacts	ACPS-GB-AU
			Bulk Pack	ACPS-GB BULK
		1/4" (6.35mmø) Mono Phone plug, Right angle, Diecast Shell, Satin finish, Flexible grommet.	Standard	ACPM-RN
			Gold contacts	ACPM-RN-AU
			Bulk Pack	ACPM-RN BULK
		1/4" (6.35mmø) Mono Phone plug, Right angle, Diecast Shell, Black finish, Flexible grommet.	Standard	ACPM-RB
			Gold contacts	ACPM-RB-AU
			Bulk Pack	ACPM-RB BULK



PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	TYPE	PART NUMBER
			1/4" (6.35mmø) Stereo Phone plug, Right angle, Diecast Shell, Satin finish, Flexible grommet.	Standard	ACPS-RN
				Gold contacts	ACPS-RN-AU
				Bulk Pack	ACPS-RN BULK
			1/4" (6.35mmø) Stereo Phone plug, Right angle, Diecast Shell, Black finish, Flexible grommet.	Standard	ACPS-RB
				Gold contacts	ACPS-RB-AU
				Bulk Pack	ACPS-RB BULK
			1/4" (6.35mmø) Phone Jack, Horizontal Snap-fit PCB, Plastic housing, Metal nut and entry bore	Mono	ACJM - MHDR
				Stereo	ACJS - MHDR
			1/4" (6.35mmø) Dual Phone Jack (Piggyback) Horizontal Snap-fit PCB, Plastic housing, Metal nut and entry bore	Mono	ACJM - MHD*
				Stereo	ACJS - MHD*
			1/4"(6.35mmø) Dual Phone Jack (Piggyback) Shielding plate, Horizontal Snap-fit PCB, Plastic housing, Metal nut and entry bore	Mono	ACJM-MHDE*
				Stereo	ACJS-MHDE*
			1/4" (6.35mmø) Jack, Horizontal PCB mount, Plastic housing with metal insert	Mono - Plastic Nut	ACJM - PH
				Mono - Metal Nut	ACJM - MH
			1/4" (6.35mmø) Jack, Horizontal PCB mount, Plastic housing with metal insert	Stereo - Plastic Nut	ACJS - PH
				Stereo - Metal Nut	ACJS - MH
			1/4" (6.35mmø) Jack, Horizontal Snap-fit PCB mount, Plastic housing with metal insert	Mono - Plastic Nut	ACJM-PHR
				Mono - Metal Nut	ACJM-MHR
				Stereo - Plastic Nut	ACJS-PHR
				Stereo - Metal Nut	ACJS-MHR
			1/4" (6.35mmø) Jack, Combination Horizontal PCB and Solder lug, Plastic housing with metal insert	Mono - Plastic Nut	ACJM - PC
				Mono - Metal Nut	ACJM - MC
				Stereo - Plastic Nut	ACJS - PC
				Stereo - Metal Nut	ACJS - MC

* This product protected by U.S. Patent No. 6,116,959 and British Patent No. 2,314,464

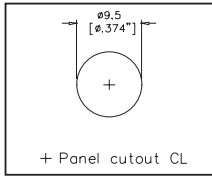


PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	TYPE	PART NUMBER
		1/4" (6.35mm) Jack, Solder Lug, Plastic housing with metal insert	Mono - Plastic Nut	ACJM-PHS
			Mono - Metal Nut	ACJM-MHS
			Stereo - Plastic Nut	ACJS-PHS
			Stereo - Metal Nut	ACJS-MHS
		1/4" (6.35mm) Jack, Vertical PCB mount, Needle eye contacts, Star washer, Metal nut and insert	Refer circuit schematic chart page 74	ACJM-MN-2
				ACJS-MN-3
				ACJM-MN-2S
				ACJS-MN-3S
				ACJS-MN-5
		1/4" (6.35mm) Jack, Vertical PCB mount, Metal nut and insert	Mono	ACJM-MV
			Stereo	ACJS-MV

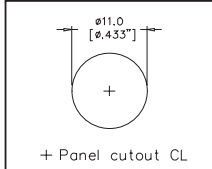


PANEL CUTOUTS

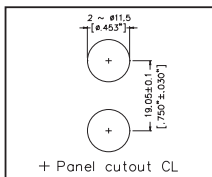
-FRONT VIEW



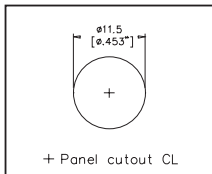
ACJM-MV
ACJS-MV
ACJM-MN-2
ACJS-MN-3
ACJM-MN-2S
ACJS-MN-3S
ACJS-MN-5



ACJM/S-PH
ACJM/S-MH
ACJM/S-PC
ACJM/S-MC
ACJM/S-PHR
ACJM/S-MHR
ACJM/S-PHS
ACJM/S-MHS



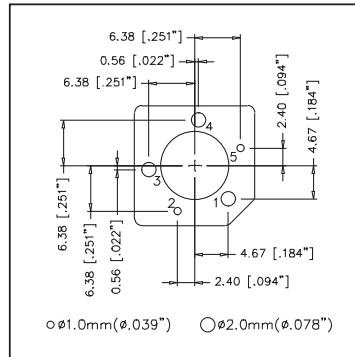
ACJM-MHD
ACJS-MHD



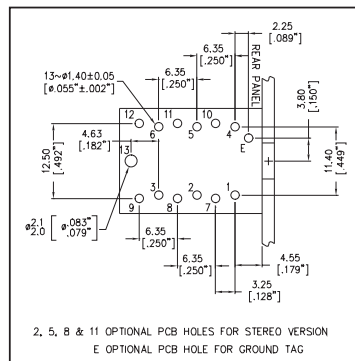
ACJM-MHDR
ACJS-MHDR

PCB FOOTPRINT

- CONNECTOR SIDE OF PCB

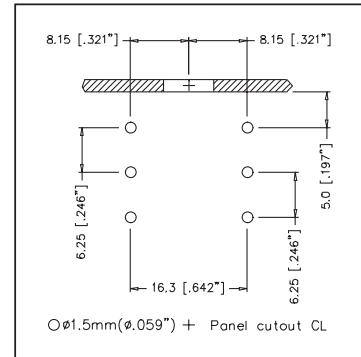


ACJM-MV
ACJS-MV
ACJM-MN-2
ACJS-MN-3
ACJM-MN-2S
ACJS-MN-3S
ACJS-MN-5

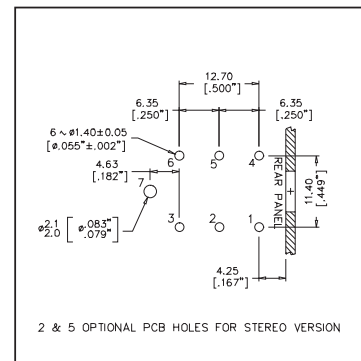


ACJM-MHD
ACJS-MHD
ACJM-MHDE
ACJS-MHDE

2, 5, 8 & 11 OPTIONAL PCB HOLES FOR STEREO VERSION
E OPTIONAL PCB HOLE FOR GROUND TAG



ACJM-PH
ACJM-MH
ACJS-PH
ACJM-MH
ACJS-MH
ACJM-PC
ACJM-MC
ACJS-PC
ACJS-MC
ACJM-PHR
ACJM-MHR
ACJS-PHR
ACJS-MHR



ACJM-MHDR
ACJS-MHDR

2 & 5 OPTIONAL PCB HOLES FOR STEREO VERSION

SCHEMATIC CHART

PART No.	ACJM-MN-2	ACJM-MN-2S	ACJS-MN-3	ACJS-MN-3S	ACJS-MN-5
SCHEMATIC					



PLUG AND JACKS TECHNICAL DATA

		VALUE
GENERAL CHARACTERISTICS	Number of Contacts	2 Pole (Mono) 3 Pole Tip Ring Sleeve (Stereo)
	Termination	Solder, PCB or Combo
	Max. Wire Gauge - Stranded Wire	2 Pole (Mono): AWG 16-1.5mm ² 3 Pole (Stereo): AWG 18-1mm ²
	Flammability rating of insulating plastics	UL94V-0
	Solderability, complies with	IEC 68-2-20
	Environmental	Complies with RoHS Directive 2002/95/EC
ELECTRICAL CHARACTERISTICS	Current Carrying Capacity	10A (Depends on Mating Connector and Cable)
	Typical Contact Resistance	Depends on Mating Connector
	Insulation resistance (initial)	> 2GΩ
	After Damp Heat Test	≥ 1GΩ
	Dielectric Withstand Voltage	2 Pole : 1.5 kV dc 3 Pole : 1 kV dc
CLIMATIC CHARACTERISTICS	Protection Class	IP40
	Operating Temperature	-25°C to +75°C (-13°F to + 167°F)
MECHANICAL CHARACTERISTICS	Insertion and Withdrawal Force	≥ 10N - ≤ 30N
	Cable O.D. (Plugs)	6mm (0.236")
MATERIALS	Connector Shell Material (Plugs)	Diecast Zinc Alloy EZDA No.3
	Connector Shell Material (Jacks)	UL94 V-0 PBT Modified PPO Resin - Black
	Connector Shell Finish	Satin Nickel, Nickel or Black Polyester
	Insulators	UL94 V-0 PBT Resin or Modified PPE Resin and fibreglass laminate
	Cable Bushing	Thermoplastic Polyurethane
	Contacts / Plating (Plugs) Contacts / Plating (Jacks)	Brass / Ni over Cu (Copper) Brass / Sn (Tin) over Cu (Copper)

¹⁾ Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.