Amphenol

SP SERIES LOUDSPEAKER CONNECTORS

Amphenol's range of loudspeaker connectors have been further enhanced with the introduction of the SP Series. Designed to complement the popular EP/AP Series, we now offer a range of loudspeaker connectors to suit most applications. SP Series chassis connectors are available in industry standard PCB footprints with solder tabs. SP Series cable plugs are available with screw or solder terminals.

Features:
- Quick release, vibration resistant latch lock
- 2 or 4 pole
- Solder tabs, PCB Contacts, Solder or Screw Terminals
- Chuck type or PG Gland cable clamp
- Various mounting hole options
- 30A Current rating
- Thermoplastic or Metal housing (Cable Plugs)
- UL, cUL recognized components (File no. E339831)
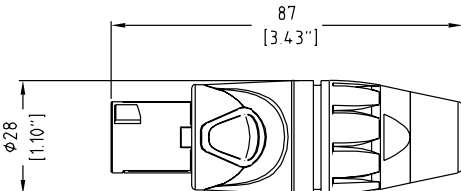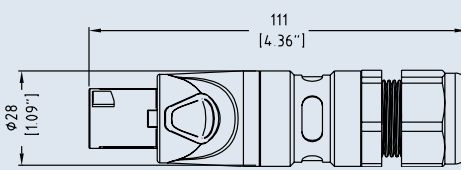- Industry standard mating
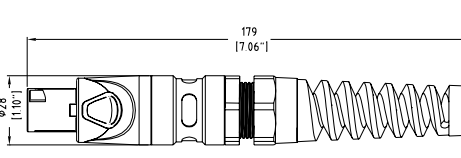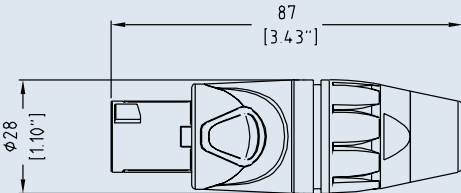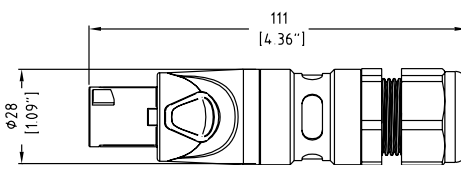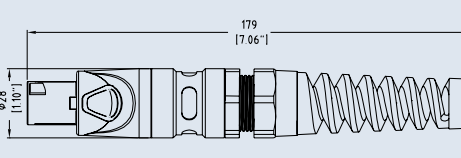
c **UL** US

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	CONTACT TYPE	SHELL COLOUR	PART NUMBER
	87 [3.43"] Ø28 [1.10"]	2 pole, Cable connector, Thermoplastic shell, Blue sleeve	Screw	Black	SP-2-F
			Solder	Black	SP-2-FS
	111 [4.36"] Ø28 [1.09"]	2 pole, Cable connector, Thermoplastic shell, Blue sleeve, PG Gland	Screw	Black	SP-2-FG
			Solder	Black	SP-2-FSG
	179 [7.06"] Ø28 [1.10"]	2 pole, Cable connector, Thermoplastic shell, Blue sleeve, PG Gland strain relief	Screw	Black	SP-2-FL
			Solder	Black	SP-2-FSL
	87 [3.43"] Ø28 [1.10"]	2 pole, Cable connector, Metal shell, Blue sleeve	Screw	Nickel	SP-2-FN
			Solder	Nickel	SP-2-FNS
			Screw	Black	SP-2-FB
			Solder	Black	SP-2-FBS
	111 [4.36"] Ø28 [1.09"]	2 pole, Cable connector, Metal shell, Blue sleeve, PG Gland	Screw	Nickel	SP-2-FNG
			Solder	Nickel	SP-2-FNSG
			Screw	Black	SP-2-FBG
			Solder	Black	SP-2-FBSG
	179 [7.06"] Ø28 [1.10"]	2 pole, Cable connector, Metal shell, Blue sleeve, PG Gland strain relief	Screw	Nickel	SP-2-FNL
			Solder	Nickel	SP-2-FNSL
			Screw	Black	SP-2-FBL
			Solder	Black	SP-2-FBSL

ENTERTAINMENT INTERCONNECT CATALOGUE - Amphenol Australia Pty Ltd Telephone 61 3 8796 8888 Fax 61 3 8796 8801   www.amphenolaudio.com

59

Amphenol

SP LOUDSPEAKER CONNECTORS
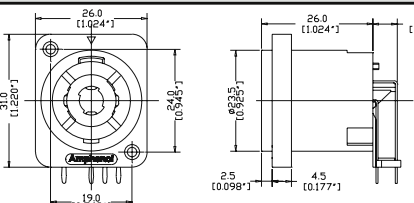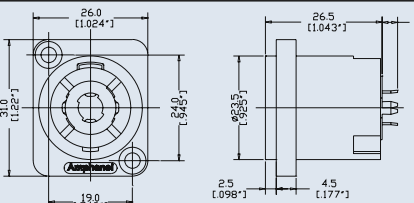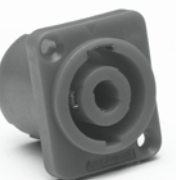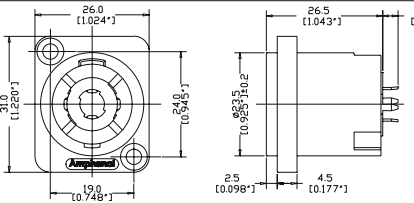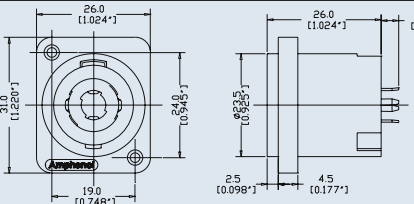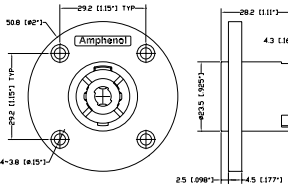
PRODUCT - FIGURE	DRAWING	DESCRIPTION	CONTACT TYPE	SHELL COLOUR	PART NUMBER
	87 [3.43"] Ø28 [1.10"]	4 pole, Cable connector, Thermoplastic black shell, Blue sleeve	Screw	Black	SP-4-F
			Solder	Black	SP-4-FS
	111 [4.36"] Ø28 [1.09"]	4 pole, Cable connector, Thermoplastic black shell, Blue sleeve, PG Gland	Screw	Black	SP-4-FG
			Solder	Black	SP-4-FSG
	179 [7.06"] Ø28 [1.10"]	4 pole, Cable connector, Thermoplastic black shell, Blue sleeve, PG Gland strain relief	Screw	Black	SP-4-FL
			Solder	Black	SP-4-FSL
	87 [3.43"] Ø28 [1.10"]	4 pole, Cable connector, Metal shell, Blue sleeve	Screw	Nickel	SP-4-FN
			Solder	Nickel	SP-4-FNS
			Screw	Black	SP-4-FB
			Solder	Black	SP-4-FBS
	111 [4.36"] Ø28 [1.09"]	4 pole, Cable connector, Metal shell, Blue sleeve, PG Gland	Screw	Nickel	SP-4-FNG
			Solder	Nickel	SP-4-FNSG
			Screw	Black	SP-4-FBG
			Solder	Black	SP-4-FBSG
	179 [7.06"] Ø28 [1.10"]	4 pole, Cable connector, Metal shell, Blue sleeve, PG Gland strain relief	Screw	Nickel	SP-4-FNL
			Solder	Nickel	SP-4-FNSL
			Screw	Black	SP-4-FBL
			Solder	Black	SP-4-FBSL

Amphenol

SP LOUDSPEAKER CONNECTORS

PRODUCT - FIGURE	DRAWING — Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		2 pole, D flange, Thru holes, Solder tabs 3/16"	Black	SP-2-MD
		2 pole, D flange, Thru holes, Horizontal PCB	Black	SP-2-MDH
		2 pole, D flange, Thru holes, Vertical PCB	Black	SP-2-MDV
		4 pole, D flange, Thru holes, Solder tabs 3/16"	Black	SP-4-MD
		4 pole, D flange, Thru holes, Solder tabs 3/16"	Grey	SP-4-MD-8
		4 pole, D flange, Self Tapping holes, Solder tabs 3/16"	Black	SP-4-MDT
		4 pole, D flange, Thru holes, Horizontal PCB	Black	SP-4-MDH
		4 pole, D flange, Self Tapping holes, Horizontal PCB	Grey	SP-4-MDHT-8

ENTERTAINMENT INTERCONNECT CATALOGUE - Amphenol Australia Pty Ltd Telephone 61 3 8796 8888 Fax 61 3 8796 8801   www.amphenolaudio.com

61

Amphenol

SP LOUDSPEAKER CONNECTORS

PRODUCT - FIGURE		DESCRIPTION	VARIATIONS	PART NUMBER
		4 pole, D flange, Self Tapping holes, Horizontal PCB	Black	SP-4-MDHT
		4 pole, D flange, Thru holes, Vertical PCB	Black	SP-4-MDV
		4 pole, D flange, Thru holes, Vertical PCB	Red	SP-4-MDV-2
		4 pole, D flange, Self Tapping holes, Vertical PCB	Grey	SP-4-MDVT-8
		4 pole, EP flange, Thru holes, Solder tabs 3/16"	Black	SP-4-MC

Amphenol

EP / AP / SP / HP SERIES

SP LOUDSPEAKER CONNECTORS

PART NUMBER BREAKDOWN

SP SERIES - CABLE CONNECTORS

SERIES PREFIX | CONTACT LAYOUTS | GENDER | SHELL FINISH | TERMINATION | BACKSHELL TYPE | PACKAGING

SP - **4** - **F** **N** **S** **G** - **B**

E. G . **SP-4-FNSG**
SP (Series Prefix), **4** contacts, **F** (Cable Connector), **N** (Metal Shell Nickel Finish), **S** (Solder Terminals), **G** (PG Gland)

SERIES PREFIX	SP	=	Series Prefix
CONTACT LAYOUT	2	=	2 Contacts
	4	=	4 Contacts
GENDER	F	=	Cable Connector
SHELL FINISH	Blank	=	Thermoplastic - Black
	N	=	Metal - Nickel Finish
	B	=	Metal - Black Finish
TERMINATION	Blank	=	Screw Terminals
	S	=	Solder Terminals
BACKSHELL TYPE	Blank	=	Standard
	G	=	PG Gland
	L	=	PG Gland Strain Relief
PACKAGING	Blank	=	Individual Bags
	B	=	Bulk Packed

Amphenol
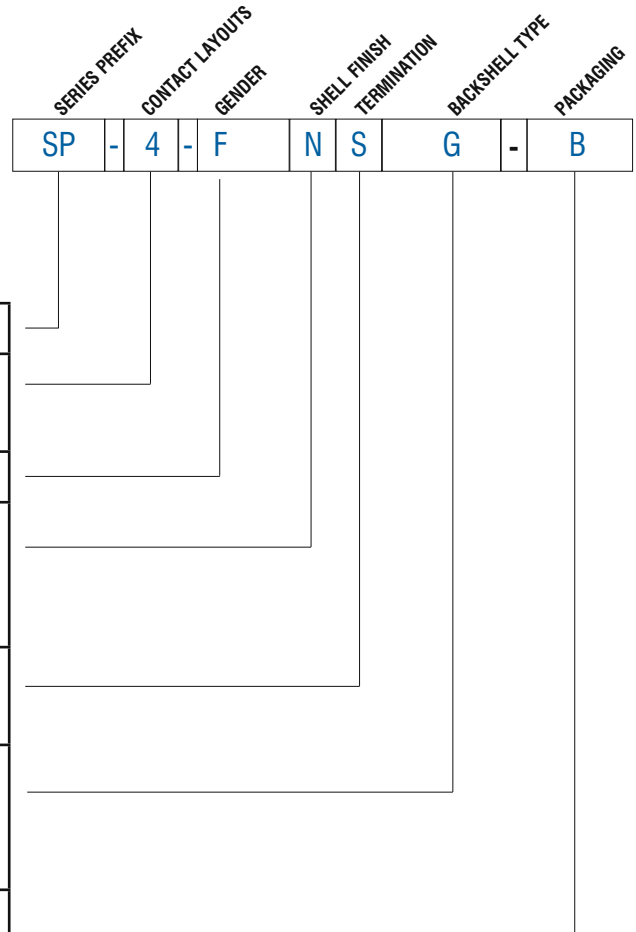
PART NUMBER BREAKDOWN

SP SERIES - CHASSIS CONNECTORS

SERIES PREFIX · CONTACT LAYOUTS · GENDER · SHELL STYLE · TERMINATION · MOUNTING HOLE · COLOUR · PACKAGING

SP - **4** - **M** **D** **H** **T** - **8** **B**

E. G . **SP-4-MDHT-8B**
SP (Series Prefix),**4** contacts, **M**(Chassis Connector), **D** (D Shell), **H**orizontal Printed Circuit Board, Self **T**apping mounting holes - **8** (Grey), **B**ulk Packaged.
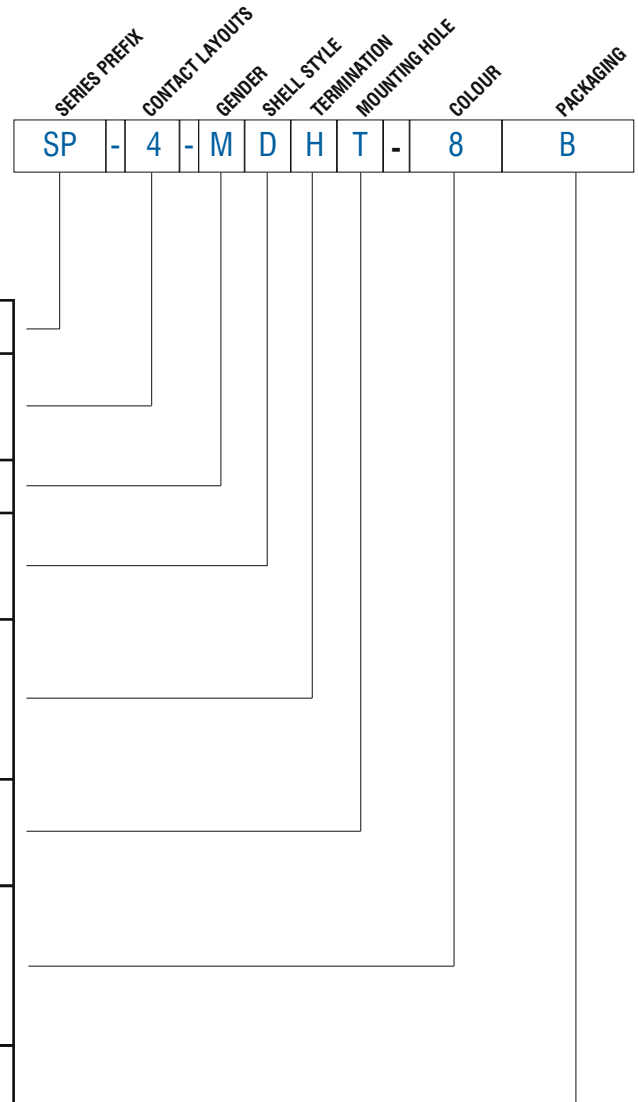
SERIES PREFIX	SP	=	Series Prefix
CONTACT LAYOUT	2	=	2 Contacts
	4	=	4 Contacts
GENDER	M	=	Chassis Connector
SHELL STYLE	D	=	Standard 'D' Type flange
	C	=	EP Series Circular flange
TERMINATION	Blank	=	Solder tabs - 3/16" terminals
	V	=	Vertical Printed Circuit Board
	H	=	Horizontal Printed Circuit Board
MOUNTING HOLE	Blank	=	Thru Hole
	T	=	Self Tapping
SHELL COLOUR	Blank	=	Black
	2	=	Red
	8	=	Grey
PACKAGING	Blank	=	Individual Bags
	B	=	Bulk Packed

EP
AP

Amphenol
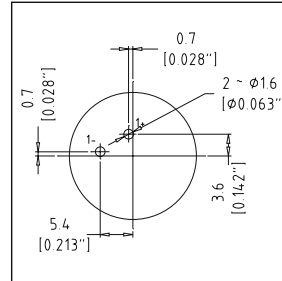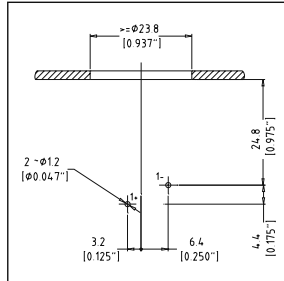
SP SERIES

SP-2-MDH

SP-2-MDV

SP-4-MDH
SP-4-MDHT-8
SP-4-MDHT
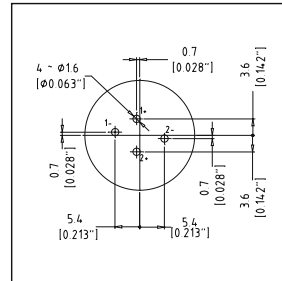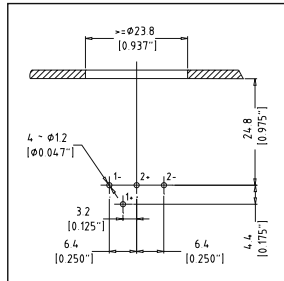
SP-4-MDV
SP-4-MDV-2
SP-4-MDVT-8

SP SERIES PANEL CUTOUT

SP-2-MD_**_***
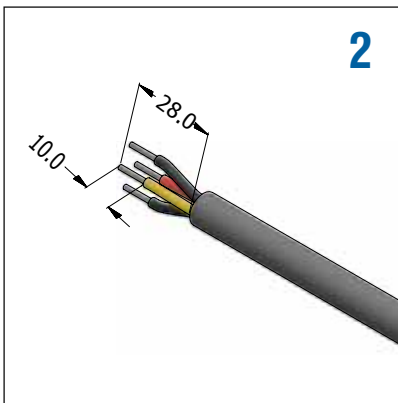**SP-4-MD**_**_***

SP-4-MC

Amphenol
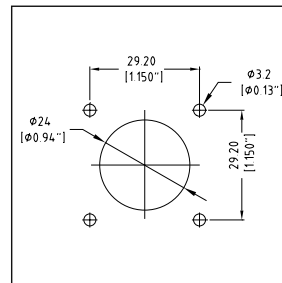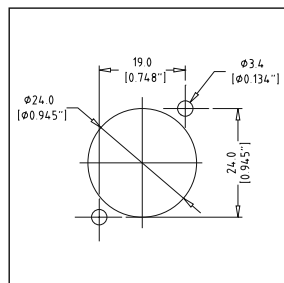
PI 1070 ASSEMBLY INSTRUCTIONS
SP SERIES CABLE CONNECTOR

1

Slide the nut onto the cable

2

28.0

10.0

Strip the cable and twist the conductors.

3

2.5 MAX
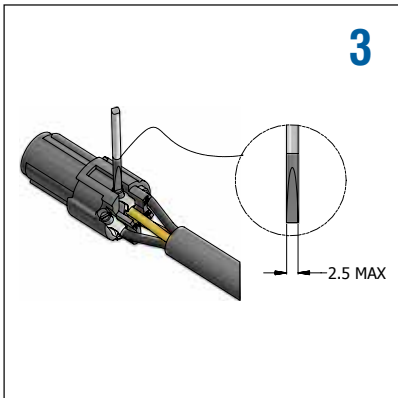
Insert the conductors into the rear of contacts on the insert. Tighten the screws to 0.35Nm (3.0 lb-in) using a flat screwdriver with tip width of 2.5mm max.

4
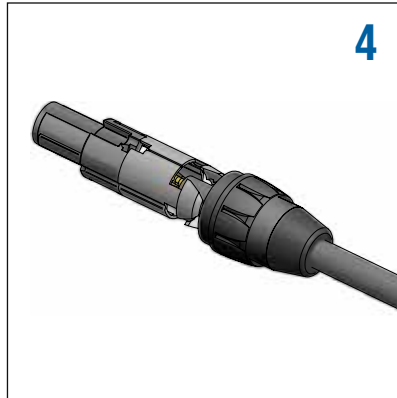
Install the cable clamp, flush to the insert making sure to align the slot as shown in the picture.

5
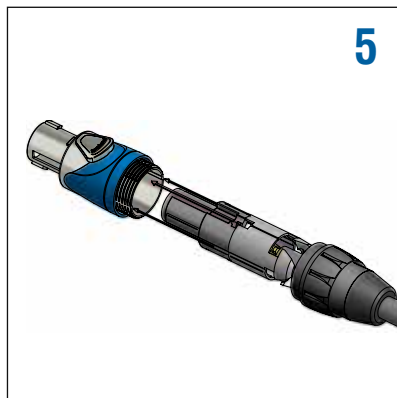
Orientate the insert and cable clamp as shown then push all together into the shell.

6
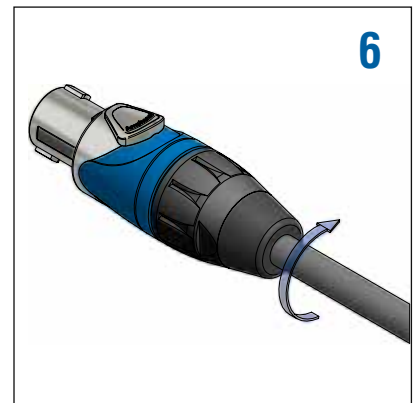
Thread the nut onto the shell to activate the cable clamp and close the connector assembly.

Rev 1 - 07/2014

66

ENTERTAINMENT INTERCONNECT CATALOGUE - **Amphenol Australia Pty Ltd** Telephone 61 3 8796 8888 Fax 61 3 8796 8801   www.amphenolaudio.com

Amphenol

STANDARD DATA SP SERIES CONNECTORS

		VALUE	
GENERAL CHARACTERISTICS	Number of contacts	2 or 4	
	Termination (Chassis)	Printed Circuit Board (PCB) or Solder Tabs 3/16"	
	Termination (Cable Plugs)	Screw or Solder Terminals	
	Flammability	UL94HB	
	Environmental	Complies with EU RoHS 2 Directive 2011/65/EU	
ELECTRICAL CHARACTERISTICS	Service Voltage RMS	133V [1)]	
	Test Voltage AC RMS	1500V	
	Current carrying capacity	30A	
	Typical Contact Resistance	≤3mΩ	
	Insulation Resistance (initial)	≥2GΩ	
	Insulation Resistance (after damp heat test)	≥1GΩ	
CLIMATIC CHARACTERISTICS	Protection Class	IP54	
	Operating Temperature	-25˚C to +75˚C (-13°F to +167°F)	
MECHANICAL CHARACTERISTICS	Weight** - Chassis Connectors	12g (0.026lb)	
	Weight** - Cable Plug - Thermoplastic - Metal	44g (0.097lb) 65g (0.143lb)	
	Weight** - Cable Plug PG - Thermoplastic - Metal	44g (0.097lb) 65g (0.143lb)	
	Weight** - Cable Plug PG S/Relief - Thermoplastic - Metal	68g (0.150lb) 89g (0.196lb)	
	Typical Cable retention force	200N (Subject to cable material and O.D.)	
	Cable O.D range - Chuck Clamp - PG16 Gland - PG16 Gland S/Relief	2 pole 5-10mm (0.19" - 0.39") 6-12mm (0.23" - 0.47") 9-14mm (0.35" - 0.55")	4 pole 9-14mm (0.35" - 0.55") 8-14mm (0.31" - 0.55") 9-14mm (0.35" - 0.55")
	Conductor Size - Screw Terminals - Solder Bucket	1.5mm² - 4mm² (AWG16 - AWG12) 1.5mm² - 6mm² (AWG16 - AWG10)	
MATERIALS	Connector Shell / Finish - Cable Plug Thermoplastic - Cable Plug Metal	PA66 GF30 / Black Diecast Zinc Alloy / Nickel or Black	
	Insulators - Chassis - Cable Plugs	PA66 GF20 PA66 GF30	
	Cable Boot / Backshell	Santoprene / PA6 GF 15	
	Cable Clamp (Chuck)	P.O.M	
	Cable Clamp (PG)	Polyemide / EPDM	
	Sleeve	PBT	
	Contact Chassis - Material / Plating Contact Cable Plug - Material / Plating	Phosphor Bronze / Silver Brass / Silver	

EP AP

Rev 5 - 03/2013

**Approximate weight in grams not including packaging. Please contact us for exact weight for shipping purposes.
[1] Not suitable for domestic applications above 50V