

SP/EP/AP SERIES HIGH POWER / LOUDSPEAKER CONNECTORS

The SP Series are available in 2 or 4 pole chassis mount connectors. The durable thermoplastic housings are fitted with high power contacts to ensure optimal current carrying capacity. Completely intermatable with industry standard loudspeaker connections.

The EP Series incorporates a rugged zinc diecast shell to give it maximum durability when used in demanding situations. The EP cable connector cable flex relief design minimises cable bend stress at point of entry into the connector housing.

The AP Series Shell is manufactured from tough, durable thermoplastic, and ideal for fixed indoor installations. Both the EP and AP Series utilise the same contact and insulator components.

Features

- High current contacts for distortion free signal.
- Tough, durable zinc diecast shell for the EP series.
- Cost effective durable thermoplastic shell for the AP and SP series.
- EP series available in 3, 4, 5, 6 and 8 contact arrangements
- AP series available in 4, 5, 6, and 8 contact arrangements.
- SP series available in 2 and 4 contact arrangements.
- SP Series with overmolded cable support boot or PG gland with or without cable support strain relief.
- EP series cable clamp capable of supporting cables from 9mm (0.35") to 16mm (0.63") in diameter.
- Quick release, vibration resistant latch lock.
- AP & EP series are completely intermatable.

Options

- Solder termination / Tab or Printed Circuit Board versions, Screw Terminals (SP Series)
- Nickel Plated Zinc Alloy shell (EP/SP Series)
- Black finished Zinc Alloy shell (EP/SP Series)
- Precision machined contacts
- Thermoplastic shell (AP/SP Series)

Ordering Codes

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

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

SP SERIES LOUDSPEAKER CONNECTORS

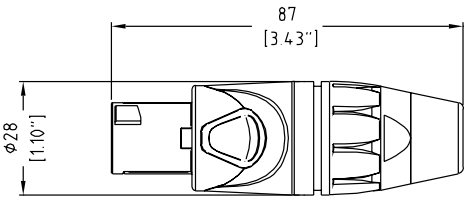
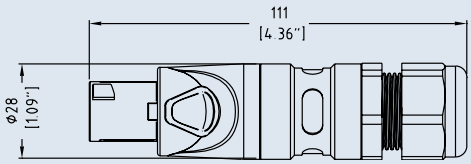
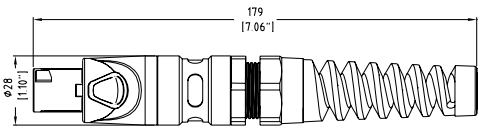
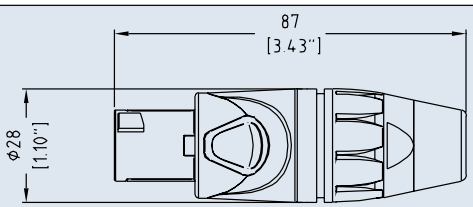
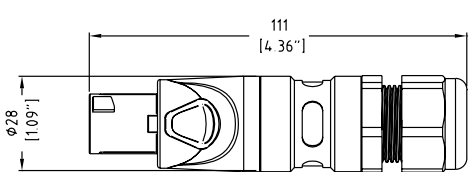
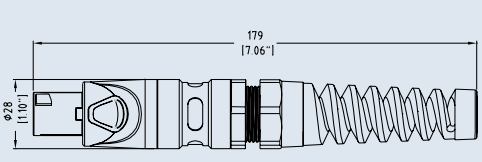


Amphenol's range of loudspeaker connectors have been further enhanced with the introduction of the SP Series. Designed to complement the popular EP/AP Series, we now offer a range of loudspeaker connectors to suit most applications. SP Series chassis connectors are available in industry standard PCB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

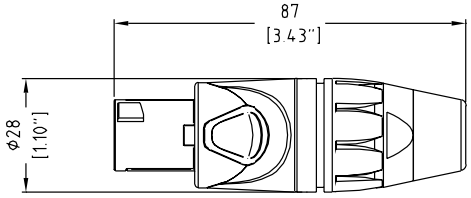
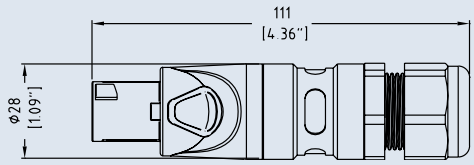
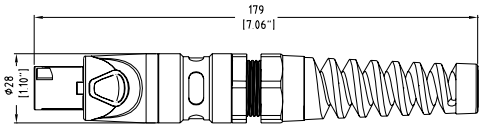
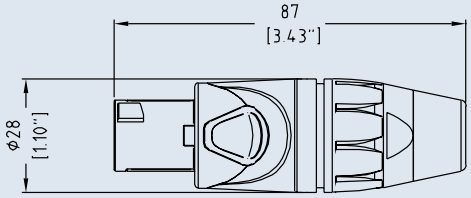
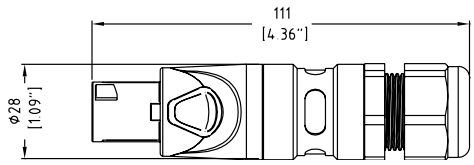
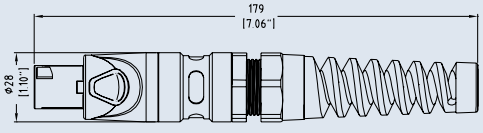
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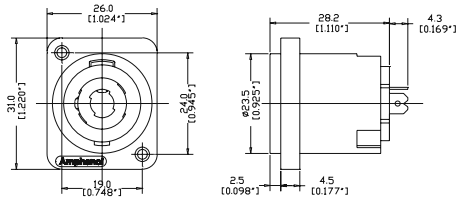
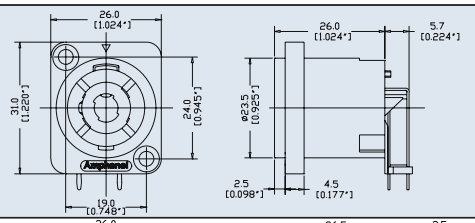
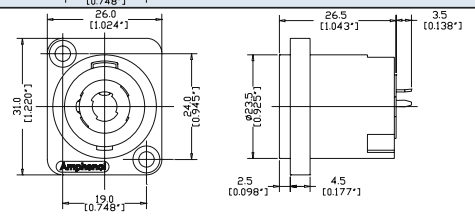
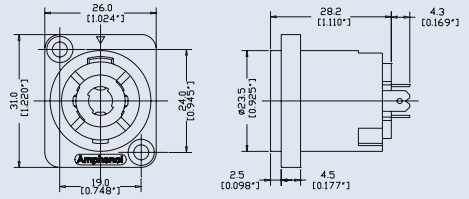
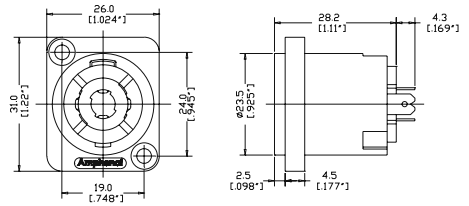
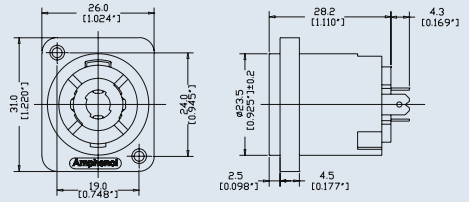
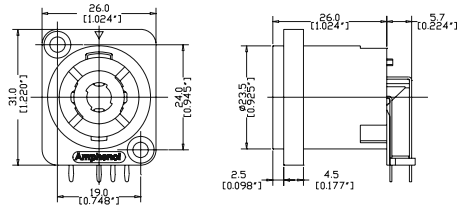
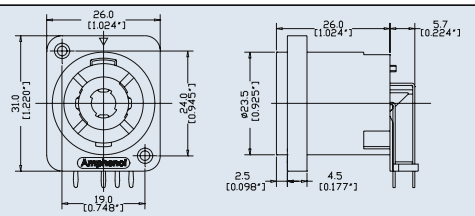
- 2 or 4 pole
- Solder tabs, PCB Contacts, Solder or Screw Terminals
- Chuck type or PG Gland cable clamp
- Various mounting hole options
- 30A Current rating
- Thermoplastic or Metal housing (Cable Plugs)
- Industry standard mating

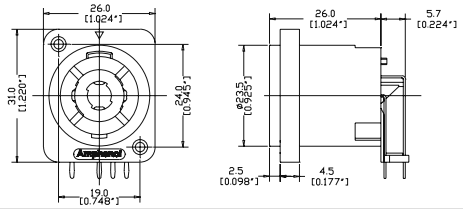
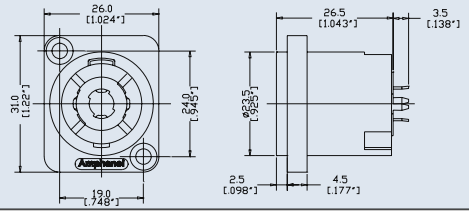
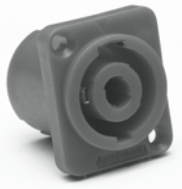
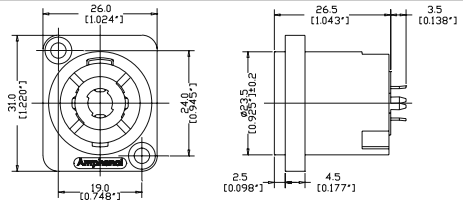
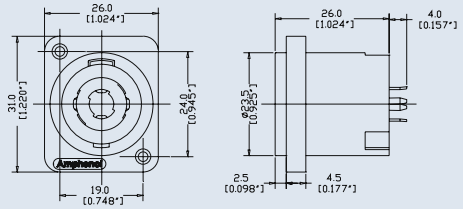
Part Number Breakdown: Page 73/74 Specifications: Page 76
PCB Footprints: Page 75

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	CONTACT TYPE	SHELL COLOUR	PART NUMBER
		2 pole, Cable connector, Thermoplastic shell, Blue sleeve	Screw	Black	SP-2-F
			Solder	Black	SP-2-FS
		2 pole, Cable connector, Thermoplastic shell, Blue sleeve, PG Gland	Screw	Black	SP-2-FG
			Solder	Black	SP-2-FSG
		2 pole, Cable connector, Thermoplastic shell, Blue sleeve, PG Gland strain relief	Screw	Black	SP-2-FL
			Solder	Black	SP-2-FSL
		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
		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
		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

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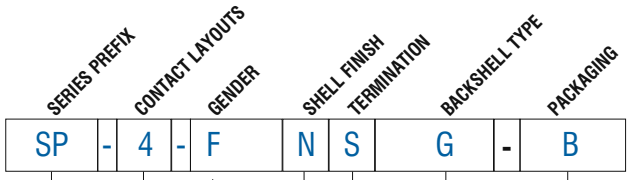
PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	CONTACT TYPE	SHELL COLOUR	PART NUMBER
		4 pole, Cable connector, Thermoplastic black shell, Blue sleeve	Screw	Black	SP-4-F
			Solder	Black	SP-4-FS
		4 pole, Cable connector, Thermoplastic black shell, Blue sleeve, PG Gland	Screw	Black	SP-4-FG
			Solder	Black	SP-4-FSG
		4 pole, Cable connector, Thermoplastic black shell, Blue sleeve, PG Gland strain relief	Screw	Black	SP-4-FL
			Solder	Black	SP-4-FSL
		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
		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
		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

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

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

PART NUMBER BREAKDOWN

SP SERIES - CABLE CONNECTORS

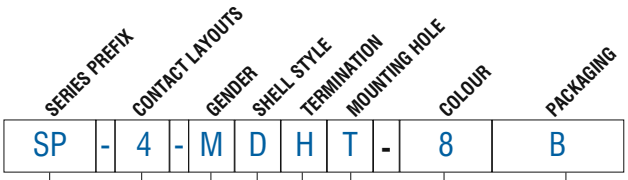


E. G . **SP-4-FNSG**
SP (Series Prefix), **4** contacts, **F** (Cable Connector), **N** (Metal Shell Nickel Finish), **S** (Solder Terminals), **G** (PG Gland)

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 BACK-SHELL COLOUR	1	=	Brown
	2	=	Red
	3	=	Orange
	4	=	Yellow
	5	=	Green
	6	=	Blue
	7	=	Violet
	8	=	Grey
	9	=	White
PACKAGING	Blank	=	Individual Bags
	B	=	Bulk Packed

PART NUMBER BREAKDOWN

SP SERIES - CHASSIS CONNECTORS

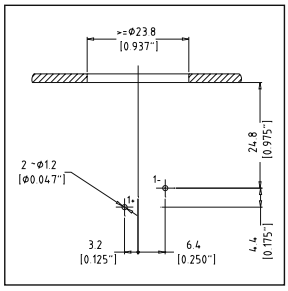


E. G . **SP-4-MDHT-8B**
SP (Series Prefix),**4** contacts, **M**(Chassis Connector), **D** (D Shell), **H**orizontal Printed Circuit Board, Self Tapping mounting holes - **8** (Grey), **B**ulk Packaged.

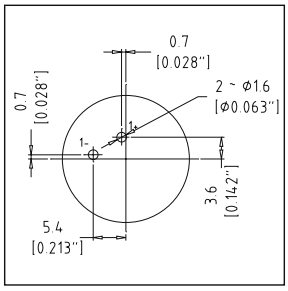
SERIES PREFIX	SP	=	Series Prefix
CONTACT LAYOUT	2	=	2 Contacts
	4	=	4 Contacts
GENDER	M	=	Chassis Connector
SHELL STYLE	D	=	Standard 'D' Type flange
TERMINATION	Blank	=	Solder tabs - 3/16" terminals
	V	=	Vertical Printed Circuit Board
	H	=	Horizontal Printed Circuit Board
MOUNTING HOLE	Blank	=	Thru Hole
	T	=	Self Tapping
CONTACT PLATING	Blank	=	Black
	2	=	Red
	8	=	Grey
PACKAGING	Blank	=	Individual Bags
	B	=	Bulk Packed

SP SERIES

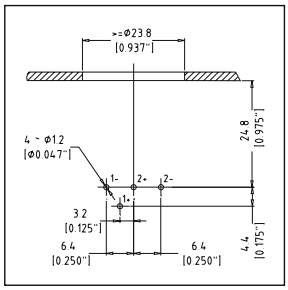
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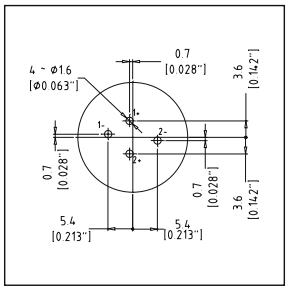
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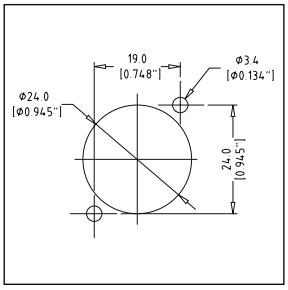
SP-4-MDH
SP-4-MDHT-8
SP-4-MDHT



SP-4-MDV
SP-4-MDV-2
SP-4-MDVT-8



SP SERIES
PANEL CUTOUT



STANDARD DATA SP SERIES CHASSIS 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
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	 9-14mm (0.35" - 0.55") 8-14mm (0.31" - 0.55") 10-14mm (0.39" - 0.55")
	Mechanical Operations	5000
	Fastening (Chassis Self Tapping)	M3 screw
MATERIALS	Connector Shell / Finish - Chassis - Cable Plug Thermoplastic - Cable Plug Metal	 PA66 GF20 / Black 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	PA6 15GF
	Contact Chassis - Material / Plating Contact Cable Plug - Material / Plating	 Phosphor Bronze / Silver Brass / Silver

Rev 3-11/2011

**Approximate weight in grams not including packaging. Please contact us for exact weight for shipping purposes.

[1)] Not suitable for domestic applications above 50V

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Amphenol:

SP-2-F SP-2-FB SP-2-FBG SP-2-FBL SP-2-FBS SP-2-FBSG SP-2-FBSL SP-2-FG SP-2-FL SP-2-FN SP-2-FNG SP-2-FNL SP-2-FNS SP-2-FNSG SP-2-FNSL SP-2-FS SP-2-FSG SP-2-FSL SP-4-F SP-4-FB SP-4-FBG SP-4-FBL SP-4-FBS SP-4-FBSG SP-4-FBSL SP-4-FG SP-4-FL SP-4-FN SP-4-FNG SP-4-FNL SP-4-FNS SP-4-FNSG SP-4-FNSL SP-4-FS SP-4-FSG SP-4-FSL SP-4-MC SP-4-MCT