



## MULTIPIN CONNECTORS

Amphenol has an extensive range of circular and rectangular multi-pin connectors ideally suited to the entertainment industry. Featuring rugged housings and precision made contacts these connectors have proven themselves in the most demanding of applications. The extensive arrangement of different connector sizes and contact numbers ensure we can offer a solution to your multi-pin wiring applications.

### Applications

- Audio Cables and Snakes
- Lighting control
- Concert Touring Systems
- Outside Broadcast Systems

### Features / Options - MP-41 Series

- 13 to 200 pins
- Gold plated crimp contacts
- Synthetic inserts
- Environmental resistant
- Positive Bayonet locking
- PG cable gland

### Features / Options - MP-62 Series

- 39 or 61 pins
- Gold plated solder contacts
- Neoprene inserts
- Environmental resistant
- Positive Bayonet locking
- PG cable gland

### Features / Options - Socapex™

- 19 pin
- Gold plated machined solder contacts
- Closed entry socket contacts

- Two part backshell ensures simple wiring and maintenance
- Thermoset inserts
- Adaptable capacity cable clamp

### Features / Options - C146 Series Rectangular

- 3 to 244 pins
- Silver contact plating
- Zinc diecast aluminium housings
- Positive latch locking

[Request catalogue CAT-AMPHENOL359](#)

### Ordering Codes

We have listed the more common ordering codes in each section. For further options please contact us.

### 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 pins column to determine number of contacts.
- 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.




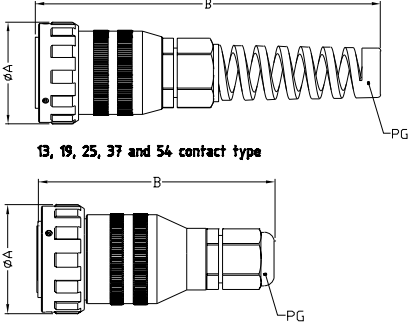
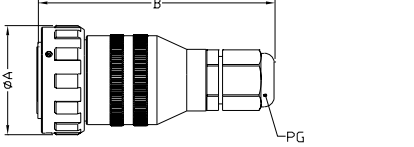

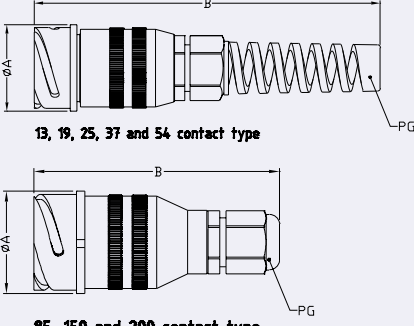
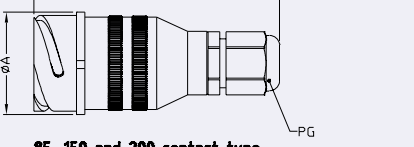
Amphenol's MP-41 series of multipin connectors utilise the same design principals of the rugged Mil-C-5015 military connectors. They can withstand high shock and vibration environments and are ideal for tough on-road applications. Featuring a quick mating bayonet coupling with an audible full mating feature ensures a positive connection every time. Available from 13 to 200 pins with gold plated crimp contacts supplied with each connector as standard.


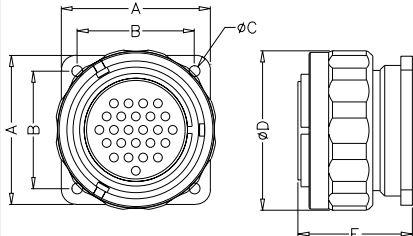

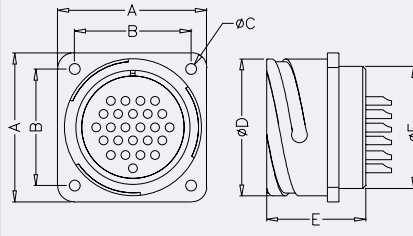

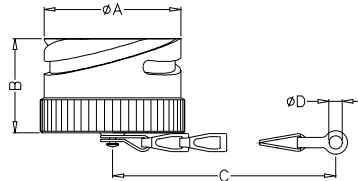

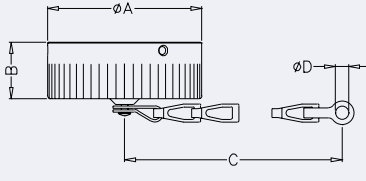
**Features:**

- 13 to 200 pins (4 to 66 channel)
- Gold plated crimp contacts
- Synthetic insert
- Protective dust caps
- Industry standard compatible
- Environmental resistant
- Black finish
- Positive bayonet locking
- PG cable glands
- IP67 rated



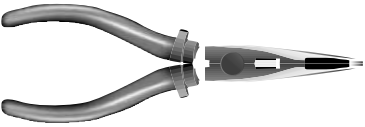
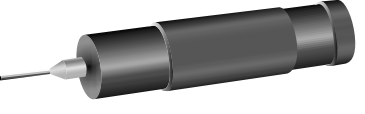



**Options:** Solder contacts available as a special. [Crimp Tooling: Page 78](#)

**Specifications: Page 79**   **Part Number Breakdown: Page 78**

PRODUCT - FIGURE	Dimensions in mm (Inches) DRAWING	Dimensions in mm (Inches)			PINS	PART NUMBER		
		A	B	PG				
	<p>Straight cable plug with socket contacts, Black finish, supplied complete with gold plated crimp contacts.</p>  <p><b>13, 19, 25, 37 and 54 contact type</b></p>  <p><b>85, 150 and 200 contact type</b></p>	39.9 (1.57)	160 (6.30)	11	13	MP-4106-13S		
		43.1 (1.69)	171 (6.73)	13.5	19	MP-4106-19S		
		46.6 (1.83)	193 (7.60)	16	25	MP-4106-25S		
		53.4 (2.10)	210 (8.26)	21	37	MP-4106-37S		
		60.1 (2.36)	210 (8.26)	21	54	MP-4106-54S		
		72.4 (2.85)	137 (5.40)	29	85	MP-4106-85S		
		72.4 (2.85)	145 (5.70)	36	150	MP-4106-150S		
		72.4 (2.85)	145 (5.70)	36	200	MP-4106-200S		
			<p>Cable connecting receptacle with pin contacts, Black finish, supplied complete with gold plated crimp contacts.</p>  <p><b>13, 19, 25, 37 and 54 contact type</b></p>  <p><b>85, 150 and 200 contact type</b></p>	37.5 (1.47)	160 (6.30)	11	13	MP-4101-13P
				40.5 (1.59)	171 (6.73)	13.5	19	MP-4101-19P
41.5 (1.63)	193 (7.60)			16	25	MP-4101-25P		
50 (1.96)	210 (8.26)			21	37	MP-4101-37P		
56.5 (2.22)	210 (8.26)			21	54	MP-4101-54P		
69 (2.71)	137 (5.40)			29	85	MP-4101-85P		
69 (2.71)	145 (5.70)			36	150	MP-4101-150P		
69 (2.71)	145 (5.70)			36	200	MP-4101-200P		

PRODUCT - FIGURE	Dimensions in mm (inches) <b>DRAWING</b>	Dimensions in mm (inches)						PINS	PART NUMBER		
		A	B	C	D	E	F				
	<p>Panel plug with socket contacts, Black finish, supplied complete with gold plated crimp contacts.</p> 	38 (1.49)	29.4 (1.15)	3.2 (0.13)	42.16 (1.66)	38.1 (1.5)	N/A	13	MP-4164-13S		
		41 (1.61)	31.8 (1.25)	3.2 (0.13)	44.95 (1.77)	38.1 (1.5)	N/A	19	MP-4164-19S		
		44.5 (1.75)	34.9 (1.37)	3.73 (0.14)	48.51 (1.91)	40.6 (1.60)	N/A	25	MP-4164-25S		
		50.8 (1.99)	39.7 (1.56)	3.73 (0.14)	52.9 (2.09)	41.3 (1.67)	N/A	37	MP-4164-37S		
		57 (2.24)	44.5 (1.75)	4.39 (0.17)	61.97 (2.44)	44.7 (1.76)	N/A	54	MP-4164-54S		
		69.8 (2.74)	55.5 (2.18)	4.39 (0.17)	73.91 (2.91)	44.7 (1.76)	N/A	85	MP-4164-85S		
		69.8 (2.74)	55.5 (2.18)	4.39 (0.17)	73.91 (2.91)	44.7 (1.76)	N/A	150	MP-4164-150S		
		69.8 (2.74)	55.5 (2.18)	4.39 (0.17)	73.91 (2.91)	44.7 (1.76)	N/A	200	MP-4164-200S		
			<p>Panel receptacle with pin contacts, Black finish, supplied complete with gold plated crimp contacts.</p> 	38 (1.49)	29.4 (1.15)	3.05 (0.12)	34.2 (1.34)	34.5 (1.35)	29 (1.14)	13	MP-4102-13P
				41 (1.61)	31.8 (1.25)	3.05 (0.12)	37.4 (1.47)	34.5 (1.35)	32.2 (1.26)	19	MP-4102-19P
44.5 (1.75)	34.9 (1.37)			3.73 (0.14)	40.9 (1.61)	35.7 (1.40)	35.3 (1.38)	25	MP-4102-25P		
50.8 (1.99)	39.7 (1.56)			3.73 (0.14)	46.7 (1.83)	35.7 (1.40)	41.4 (1.62)	37	MP-4102-37P		
57 (2.24)	44.5 (1.75)			4.39 (0.17)	53.4 (2.10)	37.3 (1.46)	47.8 (1.88)	54	MP-4102-54P		
69.8 (2.74)	55.5 (2.18)			4.39 (0.17)	65.5 (2.57)	37.3 (1.46)	59 (2.32)	85	MP-4102-85P		
69.8 (2.74)	55.5 (2.18)			4.39 (0.17)	65.5 (2.57)	37.3 (1.46)	59 (2.32)	150	MP-4102-150P		
69.8 (2.74)	55.5 (2.18)			4.39 (0.17)	65.5 (2.57)	37.3 (1.46)	59 (2.32)	200	MP-4102-200P		
	<p>Plug protective dustcap to suit MP-4106 type and MP-4164 type.</p> 			40.5 (1.59)	33 (1.29)	127 (4.99)	4.7 (0.18)	-	-	13	MP-25042-13
				43.50 (1.71)	33 (1.29)	127 (4.99)	4.70 (0.18)	-	-	19	MP-25042-19
		46.5 (1.83)	44 (1.73)	140 (5.51)	4.7 (0.18)	-	-	25	MP-25042-25		
		54 (2.12)	33 (1.29)	197 (7.75)	5.6 (0.22)	-	-	37	MP-25042-37		
		60 (2.36)	46 (1.81)	197 (7.75)	5.6 (0.22)	-	-	54	MP-25042-54		
		73 (2.87)	33 (1.29)	197 (7.75)	5.6 (0.22)	-	-	85	MP-25042-85		
		73 (2.87)	33 (1.29)	197 (7.75)	5.6 (0.22)	-	-	150	MP-25042-85		
		73 (2.87)	33 (1.29)	197 (7.75)	5.6 (0.22)	-	-	200	MP-25042-85		
			<p>Receptacle protective dustcap to suit MP-4101 and MP-4102 types</p> 	40.5 (1.59)	21.2 (0.83)	127 (4.99)	4.7 (0.18)	-	-	13	MP-25043-13
				43.5 (1.71)	21.20 (0.83)	127 (4.99)	4.7 (0.18)	-	-	19	MP-25043-19
47 (1.85)	21.2 (0.83)			140 (5.51)	4.7 (0.18)	-	-	25	MP-25043-25		
54 (2.12)	21.2 (0.83)			197 (7.75)	5.6 (0.22)	-	-	37	MP-25043-37		
60.5 (2.38)	21.2 (0.83)			197 (7.75)	5.6 (0.22)	-	-	54	MP-25043-54		
73 (2.87)	21.2 (0.83)			197 (7.75)	5.6 (0.22)	-	-	85	MP-25043-85		
73 (2.87)	21.2 (0.83)			197 (7.75)	5.6 (0.22)	-	-	150	MP-25043-85		
73 (2.87)	21.2 (0.83)			197 (7.75)	5.6 (0.22)	-	-	200	MP-25043-85		



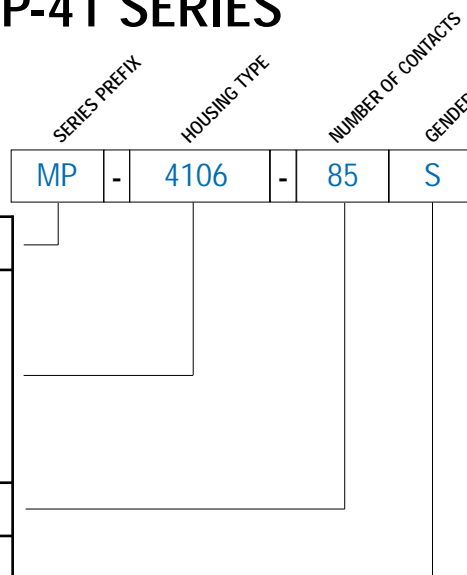
PRODUCT - FIGURE	DRAWING	DESCRIPTION	NO. OF PINS	PART NUMBER
	NOT APPLICABLE	Crimp Tool	All	M22520/1-01
	NOT APPLICABLE	Positioner / Turret	13-85	TH29-1
			150	ON REQUEST
			200	ON REQUEST
	NOT APPLICABLE	Insertion tool	13-85	MP-INS-16
			150	ON REQUEST
			200	ON REQUEST
	NOT APPLICABLE	Extraction tool	13-85	MP-EXT-16
			150	ON REQUEST
			200	ON REQUEST
	NOT APPLICABLE	Contact Pilot Pin	13-85	10-242758-16
	NOT APPLICABLE	Pin Contact	Crimp size 16	MP-108295
	NOT APPLICABLE	Socket Contact	Crimp size 16	MP-108457

**NOTE:** Complete instructions for providing reliable crimped wire to contact terminations and inserting proprietary crimp contacts in MP-41 Series connectors are available in publication PI523 located on our website [www.amphenol.com.au](http://www.amphenol.com.au).

## PART NUMBER BREAKDOWN MP-41 SERIES

### MULTIPIN CIRCULAR CONNECTORS

E. G. **MP-4106-85S**  
 Multipin, 4106 Cable Plug, 85 Contacts, S Female Socket Contacts,



<b>SERIES PREFIX</b>	MP	=	Series Prefix
<b>HOUSING TYPE</b>	4101	=	Inline cable connecting receptacle
	4102	=	Panel receptacle
	4106	=	Cable plug
	4164	=	Panel plug
	25042	=	Dustcap for plug
	25043	=	Dustcap for receptacle
<b>NO. OF CONTACTS</b>			13, 19, 25, 37, 54, 85, 150, 200
<b>GENDER</b>	P	=	Male pin contacts
	S	=	Female socket contacts

## STANDARD DATA MP-41 SERIES

		VALUE							
GENERAL CHARACTERISTICS	Number of contacts	13	19	25	37	54	85	150	200
	Number of channels	4	6	8	12	16	28	48	66
	Termination	Crimp							
	Wire Gauge - Stranded Wire	16AWG						18AWG	20AWG
ELECTRICAL CHARACTERISTICS	Operating Voltage at Sea level - DC	250V*						250V*	250V*
	Operating Voltage at Sea level - AC	200V*						200V*	200V*
	Test Voltage AC RMS	1000V						1000V	1000V
	Current Carrying Capacity	13A						7.5A	7.5A
	Typical Contact Resistance	3.46mΩ						11.25mΩ	11.25mΩ
	Insulation Resistance	3.46mΩ						11.25mΩ	11.25mΩ
CLIMATIC CHARACTERISTICS	Protection Class	IP67 (when mated)							
	Operating Temperature	-55°C to +125°C (-67°F to +257°F)							
MECHANICAL CHARACTERISTICS	Cable Retention	PG Gland							
	Mechanical Operations	500 mating cycles							
MATERIALS	Connector / Shell Finish	Aluminium Alloy / Black							
	Insert	Synthetic Insert to MIL-R-3065							
	Male pin contact / Plating	Brass / Gold flash plated							
	Female socket contact / Plating	Brass / Gold flash plated							
CLAMPING CHARACTERISTICS	PG Gland	11	13.5	16	21	29	36		
	Cable Clamping range	mm (inches)	4-10 (0.15"-0.39")	5-12 (0.19"-0.47")	9-14 (0.35"-0.55")	13-18 (0.51"-0.70")	14-25 (0.55"-0.98")	19-32 (0.74"-1.25")	

\* Not suitable for domestic applications above 50V





Amphenol's Multipin MP-62 series of circular connectors utilise the same design principles of the Mil-C-26482 military connectors. Featuring a three point quick mating bayonet coupling and five key polarisation ensuring a positive connection every time. Available in two contact pin layouts 39 and 61 with gold plated solder contacts fitted as standard.


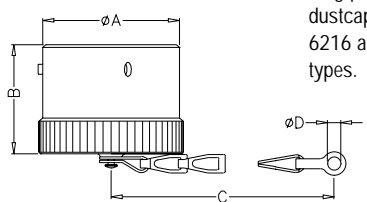

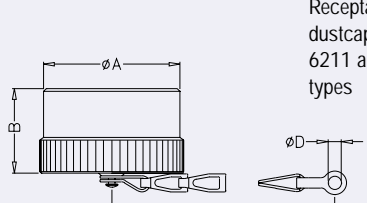

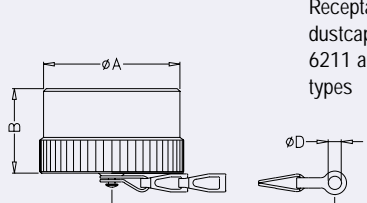

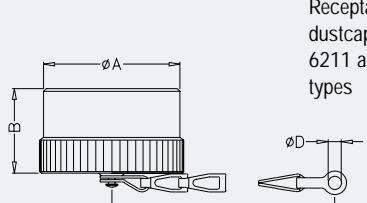
**Features:**

- 39 or 61 pins.
- Gold plated solder contacts.
- Neoprene insert.
- Protective dust caps
- Environmental resistant.
- Black finish.
- Positive bayonet locking
- PG cable glands

Specifications: [Page 81](#)    Wiring Info: [Page 89](#)

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	Dimensions in mm (inches)			PINS	PART NUMBER
			A	B	PG		
	<p>Straight cable plug with pin contacts, Black finish, Gold plated solder contacts.</p>		38.9	181.5	16	39	MP-6216-39P
			(1.53)	(7.15)			
	<p>Cable connecting receptacle with socket contacts, Black finish, Gold plated solder contacts.</p>		45.2	183.8	16	61	MP-6216-61P
			(1.78)	(7.24)			
	<p>Panel plug with pin contacts, Black finish, Gold plated solder contacts.</p>		36.7	181.5	16	39	MP-6211-39S
			(1.45)	(7.15)			
	<p>Panel receptacle plug with socket contacts, Black finish, Gold plated solder contacts.</p>		43.0	183.8	16	61	MP-6211-61S
			(1.70)	(7.24)			

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	Dimensions in mm (inches)						PINS	PART NUMBER
			A	B	C	D	E	F		
	<p>Panel plug with pin contacts, Black finish, Gold plated solder contacts.</p>		On Request						39	MP-6256-39P
			On Request						61	MP-6256-61P
	<p>Panel receptacle plug with socket contacts, Black finish, Gold plated solder contacts.</p>		36.7	29.36	3.05	31.8	22.3	30.1		
			(1.44)	(1.15)	(0.12)	(1.25)	(0.87)	(1.18)		39
	<p>Panel receptacle plug with socket contacts, Black finish, Gold plated solder contacts.</p>		43.0	34.93	3.74	38.1	22.3	36.4		
			(1.69)	(1.38)	(0.15)	(1.50)	(0.87)	(1.43)		61

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	Dimensions in mm (inches)				PINS	PART NUMBER
			A	B	C	D		
		Plug protective dustcap to suit MP-6216 and MP-6256 types.	40.50	33	127	4.70	39	MP-742-39
			(1.59)	(1.29)	(4.99)	(0.18)		
		Receptacle protective dustcap to suit MP-6211 and MP-6212 types	43.50	33	127	4.70	61	MP-742-61
			(1.71)	(1.29)	(4.99)	(0.18)		
		Receptacle protective dustcap to suit MP-6211 and MP-6212 types	40.50	21.20	127	4.70	39	MP-738-39
			(1.59)	(0.83)	(4.99)	(0.18)		
		Receptacle protective dustcap to suit MP-6211 and MP-6212 types	43.50	21.20	127	4.70	61	MP-738-61
			(1.71)	(0.83)	(4.99)	(0.18)		

## STANDARD DATA MP-62 SERIES

		VALUE		
GENERAL CHARACTERISTICS	Number of contacts	39	61	
	Number of channels	12	20	
	Termination	Solder		
	Wire Gauge - Stranded Wire	37 x 24AWG-20AWG 2 x 20AWG-16AWG	24AWG-20AWG	
ELECTRICAL CHARACTERISTICS	Operating Voltage at Sea level - DC	600V*		
	Operating Voltage at Sea level - AC	600V*		
	Test Voltage AC RMS	1500V		
	Current Carrying Capacity	37 x 7.5A 2 x 13A	7.5A	
	Insulation Resistance	5000MΩ		
CLIMATIC CHARACTERISTICS	Protection Class	IP67 (when mated)		
	Operating Temperature	-55°C to +125°C (-67°F to +257°F)		
MECHANICAL CHARACTERISTICS	Cable Retention	PG Gland		
	Mechanical Operations	500 mating cycles		
MATERIALS	Connector / Shell Finish	Aluminium Alloy / Black		
	Insert	Neoprene		
	Male pin contact machined - Plating	Brass / Gold flash plated		
	Female socket contact machined - Plating	Brass / Gold flash plated		
CLAMPING CHARACTERISTICS	PG Gland	Brass / Gold flash plated		
	Cable Clamping range mm (inches)	9-14 (0.35-0.55)		





\*Not suitable for domestic applications above 50V



Amphenol is the original manufacturer of the Socapex™ connector which is now accepted as the worldwide standard in the Lighting industry. A reliable "closed entry" socket contact design prevents any misalignment into the female insert even when the terminations are placed under stress by the cable. The housings are manufactured of aluminum alloy which provides excellent reliability and robustness. Please contact us for availability on other contact options.

**Features:**

- 19 pin
- Gold plated machined solder contacts.
- Closed entry socket contacts.
- Two part backshell ensures simple wiring and maintenance.
- Thermoset inserts.
- Adaptable capacity cable clamp

PRODUCT - FIGURE	DRAWING	DESCRIPTION	PART NUMBER
		Cable Plug, 19 pin contacts, Thermoset insert  Supplied with 3 sets of cable clamp adaptors: G. Dia. : 14-18mm 19-24mm 24-30mm	<a href="#">SLFMD419AR</a>
		Inline Socket receptacle, 19 socket contacts, Thermoset insert  Supplied with 3 sets of cable clamp adaptors: G. Dia. : 14-18mm 19-24mm 24-30mm	<a href="#">SLFFDR419AR</a>
		Panel plug, 19 pin contacts, Thermoset insert	<a href="#">SLEME419AR</a>
		Panel receptacle, 19 socket contacts, Thermoset insert	<a href="#">SLEF419AR</a>