

Amphenol

MULTIPIN CONNECTORS

MP-41 SERIES



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 150 pins with contacts supplied with each connector as standard.

Features:


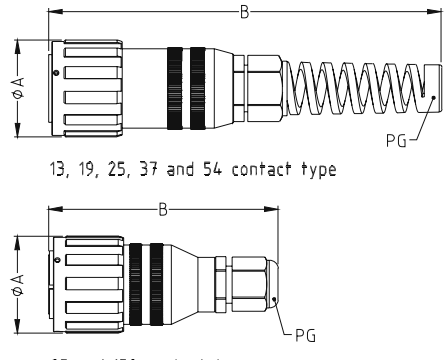

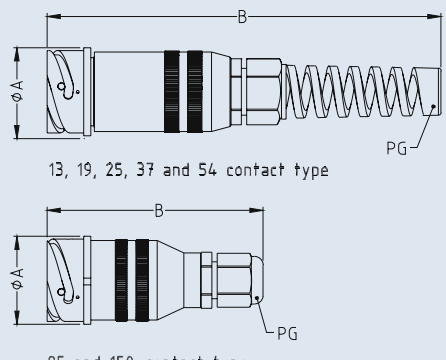
- 13 to 85 pins with Crimp/Solder bucket contacts
- 150 pins with Crimp contacts only
- 4 to 48 channels
- Gold plated contacts
- Synthetic insert
- Protective dust caps
- Industry standard compatible
- 2000 mating cycles
- Black finish
- Positive bayonet locking
- PG cable glands
- IP67 rated

Options: NPT threaded backshells.

Crimp Tooling: Page 126

Specifications: Page 127

Part Number Breakdown: Page 126

PRODUCT - FIGURE	Dimensions in mm (inches) DRAWING	Dimensions in mm (inches)			PINS	PART NUMBER	PART NUMBER With Dustcap
		A	B	PG			
 <p>Straight cable plug with socket contacts, Black finish, supplied complete with contacts.</p> <p>13, 19, 25, 37 and 54 contact type</p> <p>85 and 150 contact type</p>		40.5 (1.60)	160 (6.30)	11	13	MP-4106-13S	MP-4106-13S-C
		44 (1.73)	171 (6.73)	13.5	19	MP-4106-19S	MP-4106-19S-C
		46.6 (1.83)	193 (7.60)	16	25	MP-4106-25S	MP-4106-25S-C
		54.3 (2.14)	210 (8.26)	21	37	MP-4106-37S	MP-4106-37S-C
		60.1 (2.36)	210 (8.26)	21	54	MP-4106-54S	MP-4106-54S-C
		73.3 (2.88)	137 (5.40)	29	85	MP-4106-85S	MP-4106-85S-C
		73.3 (2.88)	145 (5.70)	36	150	MP-4106-150S	MP-4106-150S-C
 <p>Cable connecting receptacle with pin contacts, black finish, supplied complete with contacts.</p> <p>13, 19, 25, 37 and 54 contact type</p> <p>85 and 150 contact type</p>		37.8 (1.49)	160 (6.30)	11	13	MP-4101-13P	MP-4101-13P-C
		41.1 (1.62)	171 (6.73)	13.5	19	MP-4101-19P	MP-4101-19P-C
		41.5 (1.63)	193 (7.60)	16	25	MP-4101-25P	MP-4101-25P-C
		51 (2.00)	210 (8.26)	21	37	MP-4101-37P	MP-4101-37P-C
		57.1 (2.25)	210 (8.26)	21	54	MP-4101-54P	MP-4101-54P-C
		70 (2.75)	137 (5.40)	29	85	MP-4101-85P	MP-4101-85P-C
		70 (2.75)	145 (5.70)	36	150	MP-4101-150P	MP-4101-150P-C


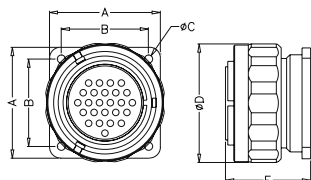

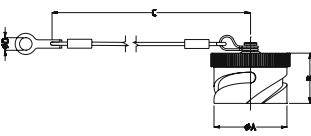
Note: NPT threaded backshells available on request. Please contact us.


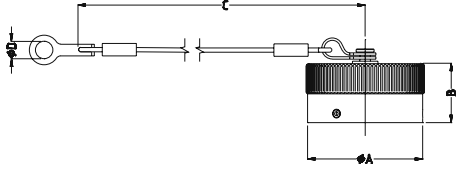

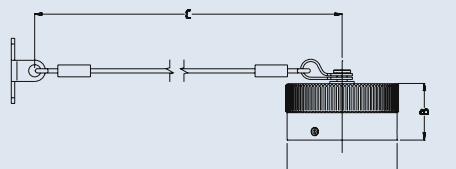


Amphenol

MULTIPIN CONNECTORS

MP-41 SERIES

PRODUCT - FIGURE	Dimensions in mm (inches) DRAWING	Dimensions in mm (inches)						PINS	PART NUMBER	PART NUMBER With Dustcap
		A	B	C	D	E	F			
 	Panel plug with socket contacts, black finish, supplied complete with contacts.	38 (1.49)	29.4 (1.15)	3.2 (0.13)	40.5 (1.60)	38.8 (1.53)	N/A	13	MP-4164-13S	MP-4164-13S-C
		41 (1.61)	31.8 (1.25)	3.2 (0.13)	44 (1.73)	38.8 (1.53)	N/A	19	MP-4164-19S	MP-4164-19S-C
		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	MP-4164-25S-C
		50.8 (1.99)	39.7 (1.56)	3.73 (0.14)	54.3 (2.14)	42 (1.65)	N/A	37	MP-4164-37S	MP-4164-37S-C
		57 (2.24)	44.5 (1.75)	4.39 (0.17)	60.8 (2.40)	45 (1.77)	N/A	54	MP-4164-54S	MP-4164-54S-C
		69.8 (2.74)	55.5 (2.18)	4.39 (0.17)	73.3 (2.88)	45 (1.77)	N/A	85	MP-4164-85S	MP-4164-85S-C
		69.8 (2.74)	55.5 (2.18)	4.39 (0.17)	73.3 (2.88)	45 (1.77)	N/A	150	MP-4164-150S	MP-4164-150S-C
		38 (1.49)	29.4 (1.15)	3.23 (0.13)	34.2 (1.34)	34.5 (1.35)	29 (1.14)	13	MP-4102-13P	MP-4102-13P-C
		41 (1.61)	31.8 (1.25)	3.23 (0.13)	37.4 (1.47)	34.5 (1.35)	32.2 (1.26)	19	MP-4102-19P	MP-4102-19P-C
		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	MP-4102-25P-C
50.8 (1.99)	39.7 (1.56)	3.73 (0.14)	46.7 (1.83)	36.5 (1.44)	41.4 (1.62)	37	MP-4102-37P	MP-4102-37P-C		
57 (2.24)	44.5 (1.75)	4.30 (0.17)	53.4 (2.10)	38.5 (1.52)	47.8 (1.88)	54	MP-4102-54P	MP-4102-54P-C		
69.8 (2.74)	55.5 (2.18)	4.30 (0.17)	65.5 (2.57)	38.5 (1.52)	59 (2.32)	85	MP-4102-85P	MP-4102-85P-C		
69.8 (2.74)	55.5 (2.18)	4.30 (0.17)	65.5 (2.57)	38.5 (1.52)	59 (2.32)	150	MP-4102-150P	MP-4102-150P-C		
 	Plug protective dustcap to suit MP-4164 type.	34.16 (1.35)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	13	MP-25042-13S	-
		37.36 (1.47)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	19	MP-25042-19S	-
		40.87 (1.61)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	25	MP-25042-25S	-
		46.68 (1.84)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	37	MP-25042-37S	-
		53.36 (2.10)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	54	MP-25042-54S	-
		65.48 (2.58)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	85	MP-25042-85S	-
		65.48 (2.58)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	150	MP-25042-150S	-
		38.8 (1.53)	20.7 (0.81)	255 (8.07)	-	-	-	13	MP-25042-13L	-
41.6 (1.64)	20.7 (0.81)	255 (8.07)	-	-	-	19	MP-25042-19L	-		
45.3 (1.78)	20.7 (0.81)	255 (8.07)	-	-	-	25	MP-25042-25L	-		
52.15 (2.05)	20.7 (0.81)	255 (8.07)	-	-	-	37	MP-25042-37L	-		
58.6 (2.30)	20.7 (0.81)	255 (8.07)	-	-	-	54	MP-25042-54L	-		
70.7 (2.78)	20.7 (0.81)	255 (8.07)	-	-	-	85	MP-25042-85L	-		
70.7 (2.78)	20.7 (0.81)	255 (8.07)	-	-	-	150	MP-25042-150L	-		

PRODUCT - FIGURE	Dimensions in mm (inches) DRAWING	Dimensions in mm (inches)						PINS	PART NUMBER
		A	B	C	D	E	F		
	Plug protective dustcap to suit MP-4102 types. 	34.16 (1.35)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	13	MP-25043-13S
		37.36 (1.47)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	19	MP-25043-19S
		40.87 (1.61)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	25	MP-25043-25S
		46.68 (1.84)	31.5 (1.24)	110 (4.33)	4.7 (0.18)	-	-	37	MP-25043-37S
		53.36 (2.10)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	54	MP-25043-54S
		65.48 (2.58)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	85	MP-25043-85S
		65.48 (2.58)	31.5 (1.24)	110 (4.33)	5.5 (0.22)	-	-	150	MP-25043-150S
			Receptacle protective dustcap to suit MP-4101 types. 	38.8 (1.53)	20.7 (0.81)	255 (8.07)	-	-	-
41.6 (1.64)	20.7 (0.81)			255 (8.07)	-	-	-	19	MP-25043-19L
45.3 (1.78)	20.7 (0.81)			255 (8.07)	-	-	-	25	MP-25043-25L
52.15 (2.05)	20.7 (0.81)			255 (8.07)	-	-	-	37	MP-25043-37L
58.6 (2.30)	20.7 (0.81)			255 (8.07)	-	-	-	54	MP-25043-54L
70.7 (2.78)	20.7 (0.81)			255 (8.07)	-	-	-	85	MP-25043-85L
70.7 (2.78)	20.7 (0.81)			255 (8.07)	-	-	-	150	MP-25043-150L



Amphenol

MULTIPIN CONNECTORS

ACCESSORIES

PRODUCT - FIGURE	DRAWING	DESCRIPTION	NO. OF PINS	PART NUMBER
	N/A	Crimp Tool	All	M22520/1-01
	N/A	Positioner / Turret	All	TH29-1
	N/A	Insertion tool	13-85	MP-INS-16
			150	MP-INS-18
	N/A	Extraction tool	All	MP-EXT-16/18
	N/A	Contact Pilot Pin	13-85	MP-GUIDE-16
			150	MP-GUIDE-18
	N/A	Solder/Crimp Pin Contact	13-85 (Size 16)	MP-108400
		Crimp Pin Contact (Soldering of this contact is not recommended)	150 (Size 18)	MP-108300
	N/A	Solder/Crimp Socket Contact	13-85 (Size 16)	MP-108600
		Crimp Socket Contact (Soldering of this contact is not recommended)	150 (Size 18)	MP-108500

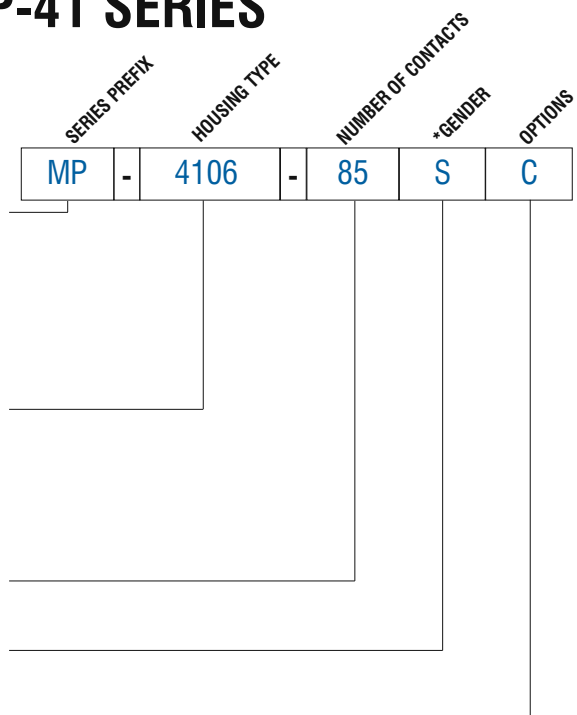
NOTE: Complete instructions for providing reliable crimped wire to contact terminations and inserting proprietary contacts in MP-41 Series connectors are available in publication Pi523 located on our website www.amphenolaudio.com.

PART NUMBER BREAKDOWN MP-41 SERIES

MULTIPIN CIRCULAR CONNECTORS

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

SERIES PREFIX	MP	=	Series Prefix
HOUSING TYPE	4101	=	Inline cable connecting receptacle
	4102	=	Panel receptacle
	4106	=	Cable plug
	4164	=	Panel plug
	25042S	=	Dustcap for panel plug
	25042L	=	Dustcap for cable plug
	25043S	=	Dustcap for panel receptacle
25043L	=	Dustcap for cable receptacle	
NO. OF CONTACTS			13, 19, 25, 37, 54, 85, 150
GENDER *Not required for dustcap part numbers	P	=	Male pin contacts
	S	=	Female socket contacts
OPTIONS	C	=	Supplied with Dustcap



STANDARD DATA MP-41 SERIES

		VALUE						
GENERAL CHARACTERISTICS	Number of contacts	13	19	25	37	54	85	150
	Number of channels	4	6	8	12	16	28	48
	Termination	Solder / Crimp "Combo"						Crimp
	Wire Gauge - Stranded Wire	16AWG - 20AWG						18AWG
	Environmental	Complies with RoHS Directive 2002/95/EC						
ELECTRICAL CHARACTERISTICS	Operating Voltage at Sea level - DC	250V*						250V*
	Operating Voltage at Sea level - AC	200V*						200V*
	Test Voltage AC RMS	1000V						1000V
	Current Carrying Capacity	13A						7.5A
	Typical Contact Resistance	3.46mΩ						11.25mΩ
	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	2000 mating cycles						
MATERIALS	Connector / Shell Finish	Aluminium Alloy / Black						
	Insert	Synthetic Insert to MIL-R-3065						
	Male pin contact / Plating	Brass / Gold plated						
	Female socket contact / Plating	Brass / Gold plated						
CLAMPING CHARACTERISTICS	PG Gland	11	13.5	16	21	29	36	
	Cable Clamping range	mm	4-10	5-12	9-14	13-18	14-25	19-32
	(inches)	(0.15"-0.39")	(0.19"-0.47")	(0.35"-0.55")	(0.51"-0.70")	(0.55"-0.98")	(0.74"-1.25")	

*Not suitable for domestic applications above 50V

Rev 1 - 09/2005

