

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 85 pins with Crimp / Solder bucket contacts
- · 150 pins with Crimp contacts only
- 4 to 48 channel
- Gold plated contacts
- Synthetic inserts
- · Environmental resistant
- · Positive Bayonet locking
- PG cable gland
- · 2000 mating cycles
- Bayonet wear pins
- Extended coupling ring
- · Metal Housings

Features / Options - MP-62 Series

- 39 or 61 Solder bucket contacts
- Gold plated contacts
- Neoprene inserts
- Environmental resistant
- Positive Bayonet locking
- PG cable gland or NPT thread
- Metal Housings

Ordering Codes

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

MULTIPIN CONNECTORS

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.
- 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.

MP-41 Series



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
- Metal housings

Options: NPT threaded backshells. Crimp Tooling: Page 129 Specifications: Page 130 Part Number Breakdown: Page 129 Wiring Information: Page 141

	Dimensions in mm (inches)	Dimensio	ns in mm (iı	ıches)	PINS		PART NUMBER
PRODUCT - FIGURE	DRAWING	A	B	PG	1113	PART NUMBER	With Dustcap
	Straight cable plug with socket	40.5	160				
•	contacts, Black finish, supplied	(1.60)	(6.30)	11	13	MP-4106-13S	MP-4106-13S-C
See.	complete with contacts.	44	171				
CONCERNING OF THE SECOND	R R	(1.73)	(6.73)	13.5	19	MP-4106-19S	MP-4106-19S-C
		46.6	193				
1.100		(1.83)	(7.60)	16	25	MP-4106-25S	MP-4106-25S-C
		54.3	210				
111	13, 19, 25, 37 and 54 contact type	(2.14)	(8.26)	21	37	MP-4106-37S	MP-4106-37S-C
		60.1	210				
		(2.36)	(8.26)	21	54	MP-4106-54S	MP-4106-54S-C
		73.3	137				
		(2.88)	(5.40)	29	85	MP-4106-85S	MP-4106-85S-C
	85 and 150 contact type	73.3	145				
		(2.88)	(5.70)	36	150	MP-4106-150S	MP-4106-150S-C
	Cable connecting receptacle with	37.8	160				
	pin contacts, black finish, supplied	(1.49)	(6.30)	11	13	MP-4101-13P	MP-4101-13P-C
all the second s	complete with contacts.	41.1	171				
and the second second		(1.62)	(6.73)	13.5	19	MP-4101-19P	MP-4101-19P-C
TRA	B B	41.5	193				
		(1.63)	(7.60)	16	25	MP-4101-25P	MP-4101-25P-C
		51	210				
1111/	13, 19, 25, 37 and 54 contact type	(2.00)	(8.26)	21	37	MP-4101-37P	MP-4101-37P-C
	is, is, zs, st and s4 contact type	57.1	210				
		(2.25)	(8.26)	21	54	MP-4101-54P	MP-4101-54P-C
		70	137				
		(2.75)	(5.40)	29	85	MP-4101-85P	MP-4101-85P-C
	•G 85 and 150 contact type	70	145				
		(2.75)	(5.70)	36	150	MP-4101-150P	MP-4101-150P-C

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

MP-41 Series

	Dimensions in mm (inches)	Dimensions in mm (inches)						DING		PART NUMBER
PRODUCT - FIGURE	DRAWING	A	В	C	D	E	F	PINS	PART NUMBER	With Dustcap
	Panal plug with apply a patents	38	29.4	3.2	40.5	38.8				
C C	Panel plug with socket contacts, black finish, supplied complete	(1.49)	(1.15)	(0.13)	(1.60)	(1.53)	N/A	13	MP-4164-13S	MP-4164-13S-C
6/10	with contacts.	41	31.8	3.2	44	38.8				
	with contacts.	(1.61)	(1.25)	(0.13)	(1.73)	(1.53)	N/A	19	MP-4164-19S	MP-4164-19S-C
90000		44.5	34.9	3.73	48.51	40.6	,			
Careford and a second		(1.75)	(1.37)	(0.14)	(1.91)	(1.60)	N/A	25	MP-4164-25S	MP-4164-25S-C
	B B C	50.8	39.7	3.73	54.3	42	14/74	20	111 1101 200	
		(1.99)	(1.56)	(0.14)	(2.14)	(1.65)	N/A	37	MP-4164-37S	MP-4164-37S-C
111		57	44.5	4.39	60.8	45	14/74	01		
11.		(2.24)	(1.75)	(0.17)	(2.40)	(1.77)	N/A	54	MP-4164-54S	MP-4164-54S-C
		69.8	55.5	4.39	73.3	45	14/74	04	MI 1101 010	
		(2.74)	(2.18)	(0.17)	(2.88)	(1.77)	N/A	85	MP-4164-85S	MP-4164-85S-C
		69.8	55.5	4.39	73.3	45	N/A	00	WIF -4104-033	
							NI/A	150	MD 4104 1500	MP-4164-150S-C
		(2.74)	(2.18)	(0.17)	(2.88)	(1.77)	N/A	150	MP-4164-150S	WIF -4104-1303-0
	Panel receptacle with pin contacts,	38	29.4	3.23	34.2	34.5	29			MD 4100 10D 0
1	black finish, supplied complete with	(1.49)	(1.15)	(0.13)	(1.34)	(1.35)	(1.14)	13	MP-4102-13P	MP-4102-13P-C
GAC DA	contacts.	41	31.8	3.23	37.4	34.5	32.2			MD 4100 100 0
8 1 15		(1.61)	(1.25)	(0.13)	(1.47)	(1.35)	(1.26)	19	MP-4102-19P	MP-4102-19P-C
15 68		44.5	34.9	3.73	40.9	35.7	35.3			
		(1.75)	(1.37)	(0.14)	(1.61)	(1.40)	(1.38)	25	MP-4102-25P	MP-4102-25P-C
	μ	50.8	39.7	3.73	46.7	36.5	41.4			
		(1.99)	(1.56)	(0.14)	(1.83)	(1.44)	(1.62)	37	MP-4102-37P	MP-4102-37P-C
1111/		57	44.5	4.30	53.4	38.5	47.8			
		(2.24)	(1.75)	(0.17)	(2.10)	(1.52)	(1.88)	54	MP-4102-54P	MP-4102-54P-C
		69.8	55.5	4.30	65.5	38.5	59			
		(2.74)	(2.18)	(0.17)	(2.57)	(1.52)	(2.32)	85	MP-4102-85P	MP-4102-85P-C
		69.8	55.5	4.30	65.5	38.5	59			
		(2.74)	(2.18)	(0.17)	(2.57)	(1.52)	(2.32)	150	MP-4102-150P	MP-4102-150P-C
		34.16	31.5	110	4.7					
	Plug protective dustcap to suit MP-	(1.35)	(1.24)	(4.33)	(0.18)	-	-	13	MP-25042-13S	-
	4164 type.	37.36	31.5	110	4.7					
		(1.47)	(1.24)	(4.33)	(0.18)	-	-	19	MP-25042-19S	-
2000 F.		40.87	31.5	110	4.7					
1 go 2304 has	_	(1.61)	(1.24)	(4.33)	(0.18)	-	-	25	MP-25042-25S	-
1 .		46.68	31.5	110	4.7					
		(1.84)	(1.24)	(4.33)	(0.18)	-	-	37	MP-25042-37S	-
		53.36	31.5	110	5.5					
Ŕ		(2.10)	(1.24)	(4.33)	(0.22)	-	-	54	MP-25042-54S	-
		65.48	31.5	110	5.5					
		(2.58)	(1.24)	(4.33)	(0.22)	-	-	85	MP-25042-85S	-
		65.48	31.5	110	5.5			· ·		
		(2.58)	(1.24)	(4.33)	(0.22)	-	-	150	MP-25042-150S	-
		38.8	20.7	255	()					
	Receptacle protective dustcap to	(1.53)	(0.81)	(8.07)	-	-	-	13	MP-25042-13L	-
	suit MP-4106 types.	41.6	20.7	255						
		(1.64)	(0.81)	(8.07)	_	_	-	19	MP-25042-19L	-
		45.3	20.7	255					20012102	
1 Com		(1.78)	(0.81)	(8.07)	_	-	_	25	MP-25042-25L	-
	¢	52.15	20.7	255				20		
		(2.05)	(0.81)	(8.07)	_	_	_	37	MP-25042-37L	-
		58.6	20.7	255	-		-	51	WII -20042-07L	
\bigcirc		(2.30)	(0.81)	(8.07)	_	-	_	54	MP-25042-54L	_
	ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا	(2.30)	20.7	(8.07)	-	-	-	J4	WF-20042-04L	-
		1						05	MD 25040 951	
		(2.78)	(0.81)	(8.07)	-	-	-	85	MP-25042-85L	-
		70.7	20.7	255				150		
		(2.78)	(0.81)	(8.07)	-	-	-	150	MP-25042-150L	-

Multipin Connectors MP-41 Series

PRODUCT - FIGURE	Dimensions in mm (inches)		Di	mensions		DING	PART NUMBER		
	DRAWING		В	C	D	E	F		
		34.16	31.5	110	4.7				
	Plug protective dustcap to suit MP-	(1.35)	(1.24)	(4.33)	(0.18)	-	-	13	MP-25043-13S
	4102 types.	37.36	31.5	110	4.7				
		(1.47)	(1.24)	(4.33)	(0.18)	-	-	19	MP-25043-19S
		40.87	31.5	110	4.7				
and the second s		(1.61)	(1.24)	(4.33)	(0.18)	-	-	25	MP-25043-25S
E R		46.68	31.5	110	4.7				
		(1.84)	(1.24)	(4.33)	(0.18)	-	-	37	MP-25043-37S
10 miles	8	53.36	31.5	110	5.5				
		(2.10)	(1.24)	(4.33)	(0.22)	-	-	54	MP-25043-54S
	L	65.48	31.5	110	5.5				
		(2.58)	(1.24)	(4.33)	(0.22)	-	-	85	MP-25043-85S
		65.48	31.5	110	5.5				
		(2.58)	(1.24)	(4.33)	(0.22)	-	-	150	MP-25043-150S
		38.8	20.7	255					
	Receptacle protective dustcap to	(1.53)	(0.81)	(8.07)	-	-	-	13	MP-25043-13L
	suit MP-4101 types.	41.6	20.7	255					
		(1.64)	(0.81)	(8.07)	-	-	-	19	MP-25043-19L
-		45.3	20.7	255					
all forman		(1.78)	(0.81)	(8.07)	-	-	-	25	MP-25043-25L
1 2		52.15	20.7	255					
		(2.05)	(0.81)	(8.07)	-	-	-	37	MP-25043-37L
O O		58.6	20.7	255					
<u> </u>	· · · · · · · · · · · · · · · · · · ·	(2.30)	(0.81)	(8.07)	-	-	-	54	MP-25043-54L
		70.7	20.7	255					
		(2.78)	(0.81)	(8.07)	-	-	-	85	MP-25043-85L
		70.7	20.7	255					
		(2.78)	(0.81)	(8.07)		-	-	150	MP-25043-150L

MP-41 Series

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
	IN/ A		150	MP-GUIDE-18
	N1/A	Solder/Crimp Pin Contact	13-85 (Size 16)	MP-108400
	N/A	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
	IN/ <i>I</i> A	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

www.ernfcomfects SERIES PREIN HOUSING TIPE OPTIONS *GENDER E.G. MP-4106-85S Multipin, 4106 Cable Plug, 85 Contacts, S Female Socket Contacts, S MP 4106 85 С **SERIES PREFIX** MP Series Prefix = **HOUSING TYPE** Inline cable connecting receptacle 4101 = 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 Ρ _ Male pin contacts GENDER *Not required for dustcap S Female socket contacts = part numbers С **OPTIONS** = Supplied with Dustcap

MP-41 Series

STANDARD DATA MP-41 SERIES

						VALUE				
GENERAL	Number of contacts		13	19	25	37	54	85	150	
CHARACTERISTICS	Number of channels		4	6	8	12	16	28	48	
	Termination				Solder / Crin	np "Combo"	1		Crimp	
	Wire Gauge - Stranded Wire				16AWG - 2	20AWG			18AWG	
	Environmental			Complies v	with EU RoHS	2 Directive 2	011/65/EU		1	
ELECTRICAL	Operating Voltage at Sea level - DC				250)V*			250V*	
CHARACTERISTICS	Operating Voltage at Sea level - AC				200)V*			200V*	
	Test Voltage AC RMS				100)0V			1000V	
	Current Carrying Capacity				13	A			7.5A	
	Typical Contact Resistance		3.46mΩ							
	Insulation Resistance				5000	ΟΜΩ			1	
	Protection Class				IP67 (wł	nen mated)				
CHARACTERISTICS	Operating Temperature			-55°	C to +125°C	(-67°F to +2	57°F)			
MECHANICAL	Cable Retention				PG	Gland				
CHARACTERISTICS	Mechanical Operations				2000 ma	ting cycles				
MATERIALS	Connector / Shell Finish				Aluminium	Alloy / Black				
	Insert			S	ynthetic Inser	t to MIL-R-30	65			
	Male pin contact / Plating		Brass / Gold plated							
	Female socket contact / Plating		Brass / Gold plated							
	PG Gland		11	13.5	16	2	21	29	36	
CHARACTERISTICS	Cable Clamping range	mm	4-10	5-12	9-14	13	-18	14-25	19-32	
	(inc	ches)	(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

MP-62/65 Series



MP-62/65 SERIES

Amphenol's Multipin MP-62 series of circular connectors utilise the same design principles as 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
- Metal housings

Specifications: Page 133

• Environmental resistant.

- Black finish.
- · Positive bayonet locking
- PG cable glands
- usings

Wiring Info: Page 141

PRODUCT - FIGURE	Dimensions in mm (inches)	Dimensio	ns in mm (in	ches)	PINS	PART NUMBER	PART NUMBER
	DRAWING	A	В	PG			With Dustcap
	Straight cable plug with pin contacts, Black finish, Gold plated solder contacts.	38.9	181.5	16	39		
COLUMN AND AND AND AND AND AND AND AND AND AN	P	(1.53)	(7.15)			MP-6216-39P	MP-6216-39P-C
		45.5	193	21	61		
-		(1.80)	(7.60)			MP-6216-61P	MP-6216-61P-C
()	Cable connecting receptacle with socket contacts, Black finish, Gold plated solder contacts.	36.7	181.5	16	39		
	B	(1.45)	(7.15)			MP-6211-39S	MP-6211-39S-C
		43.0	193	21	61		
	_p _G	(1.70)	(7.60)			MP-6211-61S	MP-6211-61S-C
	Straight cable plug with pin contacts, NPT 3/4" threaded backshell, Black finish, Gold plated solder contacts.	38.9	90	NPT	39		
		(1.53)	(3.54)	3/4"		MP-6516-39P	MP-6516-39P-C
		45.5	100	NPT	61		
		(1.80)	(3.94)	3/4"		MP-6516-61P	MP-6516-61P-C
	Cable connecting receptacle with socket contacts, NPT 3/4" threaded backshell, Black finish,	36.7	90	NPT	39		
	Gold plated solder contacts.	(1.45)	(3.54)	3/4"		MP-6511-39S	MP-6511-39S-C
		43.0	100	NPT	61		
		(1.70)	(3.94)	3/4"		MP-6511-61S	MP-6511-61S-C

Multipin Connectors MP-62/65 Series

PRODUCT - FIGURE	Dimensions in mm (inches)						PINS	PART	PART NUMBER		
	DRAWING	A	В	C	D	E	F	1 1110	NUMBER	With Dustcap	
·	ish, Gold plated solder contacts.		29.36				-				
		(1.53)	(1.16)	UNC	(1.54)	(1.26)	-	39	MP-6256-39P	MP-6256-39P-C	
		43.94	34.93	6-32	45.5	35	-				
		(1.73)	(1.38)	UNC	(1.80)	(1.38)	-	61	MP-6256-61P	MP-6256-61P-C	
°	Panel receptacle plug with socket contacts, Black finish, Gold plated solder contacts.	36.7	29.36	3.05	31.8	22.3	30.1				
	B → B → ØC	(1.44)	(1.15)	(0.12)	(1.25)	(0.87)	(1.18)	39	MP-6212-39S	MP-6212-39S-C	
		43.0	34.93	3.74	38.1	22.3	36.4				
1 2222		(1.69)	(1.38)	(0.15)	(1.50)	(0.87)	(1.43)	61	MP-6212-61S	MP-6212-61S-C	

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches) DESCRIPTION	DESCRIPTION	D	imensions	in mm (ind	ches)	PINS	PART NUMBER
	וואאחע Dimensions in mm (inches)	DESURIFIIUN	A	В	C		LIN9	
		Plug protective dustcap to suit MP-6256	31.7	15.9	127	4.40	39	MP-742-39S
			(1.25)	(0.62)	(4.99)	(0.17)		
			38.05	16.70	127	4.40	61	MP-742-61S
		¢A	(1.50)	(0.66)	(4.99)	(0.17)		
		Receptacle protective dustcap to suit MP-6216	36.9	13.13	127	-	39	MP-742-39L
	۲		(1.45)	(0.52)	(4.99)		- 55	WI -7-72-03L
			43.14	14.15	127	-	61	MP-742-61L
			(1.70)	(0.56)	(4.99)		01	
Sec. 10		Plug protective dustcap to suit MP-6212	31.7	15.9	127	4.40	39	MP-738-39S
P24	cc		(1.25)	(0.62)	(4.99)	(0.17)	39	MP-730-395
			38.05	16.70	127	4.40		
		ØA	(1.50)	(0.66)	(4.99)	(0.17)	61	MP-738-61S
		Receptacle protective dustcap to suit MP-6211	36.9	13.13	127	-		MD 700 001
	¢¢		(1.45)	(0.52)	(4.99)		39	MP-738-39L
Q			43.14	14.15	127	-	61	MP-738-61L
		<i>ØA</i>	(1.70)	(0.56)	(4.99)		01	WIT-730-01L

Multipin Connectors MP-62/65 Series

STANDARD DATA MP-62 SERIES / MP - 65 SERIES

		VALU	E					
GENERAL Number of contacts		39	61					
CHARACTERISTICS Number of channels		12	20					
	Termination	Solder	r					
	Wire Gauge - Stranded Wire	37 x 24AWG-20AWG	24AWG-20AWG					
		2 x 20AWG-16AWG						
	Environmental	Complies with EU RoHS 2	Directive 2011/65/EU					
ELECTRICAL	Operating Voltage at Sea level - DC	600V ³	*					
CHARACTERISTICS	Operating Voltage at Sea level - AC	600V ³	*					
	Test Voltage AC RMS	1500V						
	Current Carrying Capacity	37 x 7.5A	7.5A					
		2 x 13A						
	Insulation Resistance	5000M	Ω					
CLIMATIC	Protection Class	IP67 (when	mated)					
CHARACTERISTICS	Operating Temperature	-55°C to +125°C (-67	7°F to +257°F)					
MECHANICAL	Cable Retention	PG Gland ,	/ NPT Thread					
CHARACTERISTICS	Mechanical Operations	500 mating cycle	s (minimum)					
MATERIALS	Connector / Shell Finish	Aluminium Allo	oy / Black					
	Insert	Neoprei	ne					
	Male pin contact machined - Plating	Brass / Gold	plated					
	Female socket contact machined - Plating	Brass / Gold	plated					
CLAMPING	PG Gland	16	21					
CHARACTERISTICS	Cable Clamping range mm (inches)	9-14 (0.35"-0.55") 13-18 (0.51"-0.70")						

*Not suitable for domestic applications above 50V



AMPHENOL-TUCHEL C146 HEAVY | MATE CONNECTORS

Amphenol Tuchel C146 series rectangular connectors feature modular components ensuring a vast range of different features and benefits for the end user. The zinc diecast aluminum housings are finished in a durable powder coat and available in either top or side entry. Connector coupling is achieved via a positive locking lever ensuring a positive rapid connection. The C146 series is suitable for general-purpose audio and lighting applications and is completely intermateable with all competitor connectors.



FIBRE OPTIC

Amphenol has over 25 years experience in fibre optics dating back to their development of the first industry standard connector, the SMA. Today we can offer a complete range of products including Hybrid Fibre optic connectors for HDTV broadcast cameras SMPTE 304M compliant and ruggedised connectors and cable assemblies for indoor or outdoor applications.