

# Plastic connector with quick mating feature

#### **Description**

The BANTAMATE II cylindrical plastic connector has been designed for use in applications requiring a high number of mating cycles and rapid connections and disconnections.

BANTAMATE II meets minimum durability requirements of 5000 mating/unmating cycles by using a unique contact wiping system consisting of a lubricant saturated foam pad bonded to a spring loaded stripper plate within the receptacle or plug. On mating, the stripper plate is pushed deep into the connector wiping a thin film of lubricant onto the male contacts. A distinctive shape provides mating ease in blind or difficult to reach applications. Some typical applications would include test equipment, medical diagnostic equipment, or any of the hardware interconnections found in the modern electronic office.

### **Features and benefits**

- 5000 mating / unmating cycles
- Lubricated male contacts with spring actuated foam plate
- Quick and easy installation with latching mechanism
- Easy mating due to the positive polarisation, even in blind spots
- Unmated male contacts are protected by the spring actuated plate
- Available with 4, 12, 19, 30, and 46 contact positions.
- Applicable for front or rear panel mounting as well as free hanging applications
- UL recognised File number E31151
- CSA certified LR54977



#### Performance characteristics

Operating	
temperature:	-55°C to +125°C
Insulation	
resistance:	5000 M $\Omega$ min.
Test potential:	2000 VAC
Durability:	Min. 5000 matings cycles
Vibration	5-50Hz, 0,5 dA; 8 hours axis
resistance:	
Thermal	5 cycles -55°C to +105°C
shock:	
Humidity:	10 days at 85% RH, +85°C

#### Construction

Connector body and strain relief:
Glass filled thermoplast UL94-V0
Colour: black
Locking latch
Stainless steel,

Locking latch	Stainless steel,
and hook:	passivated
Compression	
Spring:	Music wire, Nickel plated
Lubricating pad:	Polyurethane foam
Rivet:	Brass, Tin plated
Strain relief screw	s:Steel, Cadmium plated
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#### **Contact accommodation**

- "MBG" connectors accept Trim-Trio removable snap-lock contacts (see contact section)
- · Contacts to be ordered seperately.

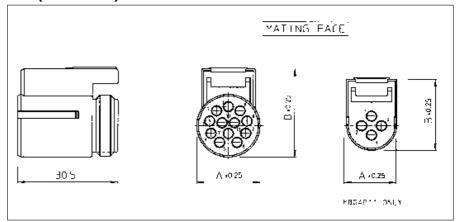
#### How to order

Connector family	мвс	12	P	1
Insert arrangement:	4, 12, 19, 30, 46 positions			
Body variation:	P: Plug body R: Receptacle body S: Strain relief			
Design variation:	1: Standard version with male contacts in 11: Reversed version with male contacts in			



# Female plug connector for socket contacts (MBG--P1) - Standard version Male plug connector for pin contacts (MBG--P11) - Reversed version

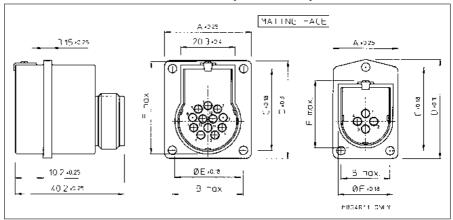




Female plug	Part number	<b>C A</b> 1025	<b>B</b> ±0.25		
i emale plug	Male plug	Ø A ±0.25	<b>B</b>		
MBG4P1					
	MBG4P11	15.08	21.90		
MBG12P1					
	MBG12P11	19.43	27.25		
MBG19P1					
	MBG19P11	22.83	30.53		
MBG30P1					
	MBG30P11	27.94	35.51		
MBG46P1					
	MBG46P1	34.42	41.91		

# Panel mounting male receptacle connector for pin contacts (MBG--R1) - Standard version Panel mounting female receptacle connector for socket contacts (MBG--R11) - Reversed version



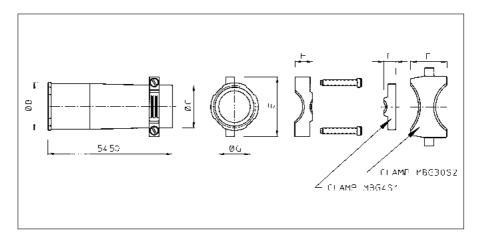


Female plug	Part number	Ø A ±0.25	D may	C ±0.18	D ±0.30	Ø E ±0.18	F max.
	Male plug	Ø A	B max.	C	D	Ø E	r max.
MBG4R1							
	MBG4R11	23.90	18.08	31.45	37.36	20.07	29.46
MBG12R1							
	MBG12R11	32.49	26.54	30.76	36.86	24.64	34.93
MBG19R1							
	MBG19R11	32.44	26.54	34.04	40.13	27.86	38.10
MBG30R1							
	MBG30R11	35.61	28.65	38.00	44.91	33.10	43.31
MBG46R1							
	MBG46R11	42.24	35.13	46.94	54.05	39.70	49.61



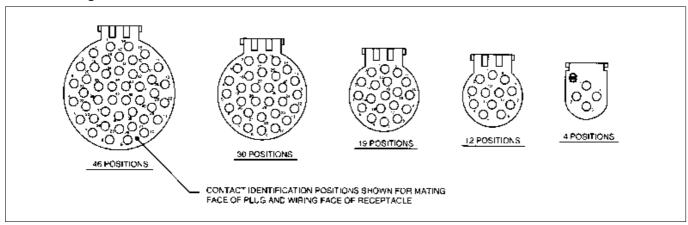
### Strain relief (MBG--S1)





Part number	ØС	ØD	E	F	Cable range Ø G side A	Cable range Ø G side B
MBG4S1	12.2	15.0	20.1	5.3	8.51/6.35	_
MBG12S1	18.8	21.1	26.4	7.9	11.30/7.65	14.99/11.38
MBG19S1	21.3	24.4	29.0	9.4	13.08/8.66	17.53/13.12
MBG30S1	26.7	29.0	34.5	16.3	19.02/15.88	22.86/19.05
MBG30S2	26.7	29.0	34.5	15.9	12.67/10.01	15.85/12.70
MBG46S1			Not available			

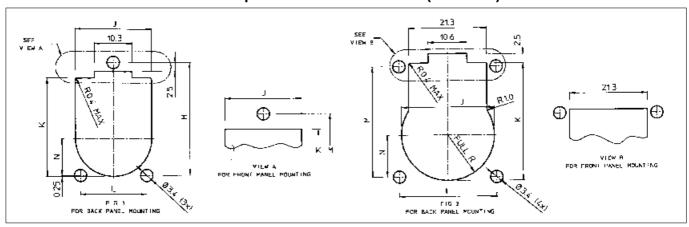
### Insert arrangements and moulded-in contact identification



Contact identification positions shown are for mating face of plug and wiring face of receptacle.

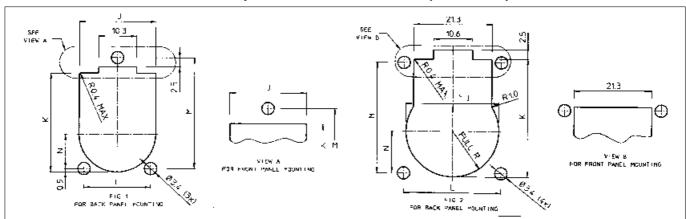


### Panel cut-out dimensions for receptacle - Standard version (MBG--R1)



Part number	Fig.	J	К	L	М	N
MBG4R1	1	20.86	27.41	18.08	31.45	10.16
MBG12R1	2	25.30	32.74	26.54	30.76	11.65
MBG19R1	2	28.50	35.89		34.04	13.32
MBG30R1	2	33.73	40.97	28.65	38.00	15.49
MBG46R1	2	40.36	47.22	35.13	46.94	18.85

### Panel cut-out dimensions for receptacle - Reversed version (MBG--R11)



Part number	Fig.	J	К	L	М	N
MBG4R11	1	20.86	27.41	18.08	31.45	10.16
MBG12R11	2	25.30	32.74	26.54	30.76	11.65
MBG19R11	2	28.50	35.89		34.04	13.32
MBG30R11	2	33.73	40.97	28.65	38.00	15.49
MBG46R11	2	40.36	47.22	35.13	46.94	18.85

### **Mouser Electronics**

**Authorized Distributor** 

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### Souriau:

<u>MBG12R1</u> <u>MBG12P1</u> <u>MBG12S1</u> <u>MBG19R1</u> <u>MBG19P-11</u> <u>MBG19P-11</u> <u>MBG4P1</u> <u>MBG4S1</u> <u>MBG30S2</u> <u>MBG30S1</u> <u>MBG12P-11</u> <u>MBG12R-11</u> <u>MBG46R-11</u> <u>MBG30R11</u> <u>MBG30R11</u> <u>MBG30P11</u> <u>MBG30R1</u> <u>MBG46P1</u> <u>MBG46R1</u> MBG4P11 MBG4R11