

# 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 recognized File nr.: E238675
- 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
resistance:	hours axis
Thermal	5 cycles -55°C to
shock:	+105°C
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,
and hook: passivated

Compression
Spring: Music wire, Nickel plated
Lubricating pad: Polyurethane foam
Rivet: Brass, Tin plated

Strain relief screws: Steel, Cadmium plated

### **Contact accommodation**

- "MBG" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered seperately.

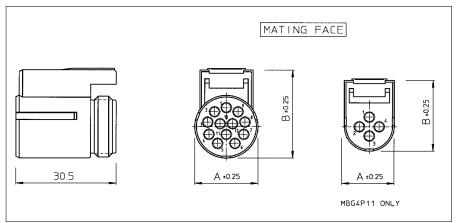
### How to order

Connector family		MBG	12	P	1
Insert arrangemer	<b>1t:</b> 4, 12, 19, 30, 46 positions				
Body variation:	P: Plug body R: Receptacle body S: Strain relief				
Design variation:	1: Standard version with male co		•		



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

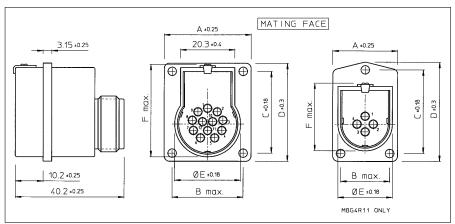




Part number Female plug Male plug	Ø A ±0.25	B ±0.25
MBG4P1		
MBG4P11	15.08	21.90
MBG12P1		
MBG12P11	19.43	27.25
MBG19P1		
MBG19P11	22.83	30.53
MBG30P1		
MBG30P11	27.94	35.51
MBG46P1		
MBG46P1	34.42	41.91

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



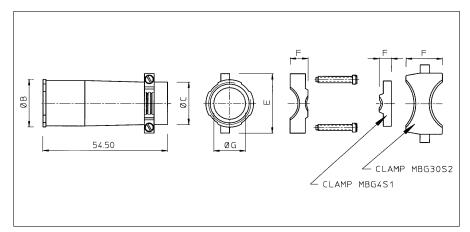


Par	t number						
Male receptacle	Female receptacle	Ø A ±0.25	B max.	C ±0.18	D ±0.30	Ø E ±0.18	F max.
MBG4R1							
	MBG4R11	23.90	18.08	31.45	37.36	20.07	29.46
MBG12R1							
	MBG12R11	32.49	26.54	30.76	36.86	24.64	34.93
MBG19R1							
	MBG19R11	32.44	26.54	34.04	40.13	27.86	38.10
MBG30R1							
	MBG30R11	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



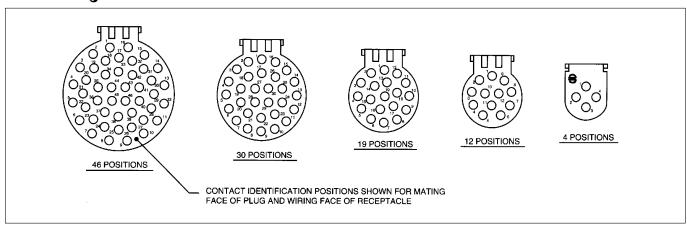
### **Strain relief (MBG--S1)**





Part number	Ø-C	Ø-D	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			

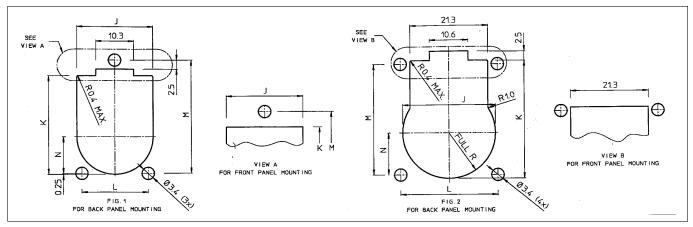
### Insert arrangements and moulded-in contact identification



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

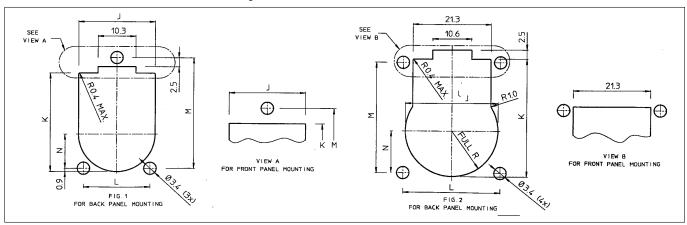


### Panel cut-out dimensions for receptacle - Standard version (MBG--R1)



Part number	Fig.	J	K	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