

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.

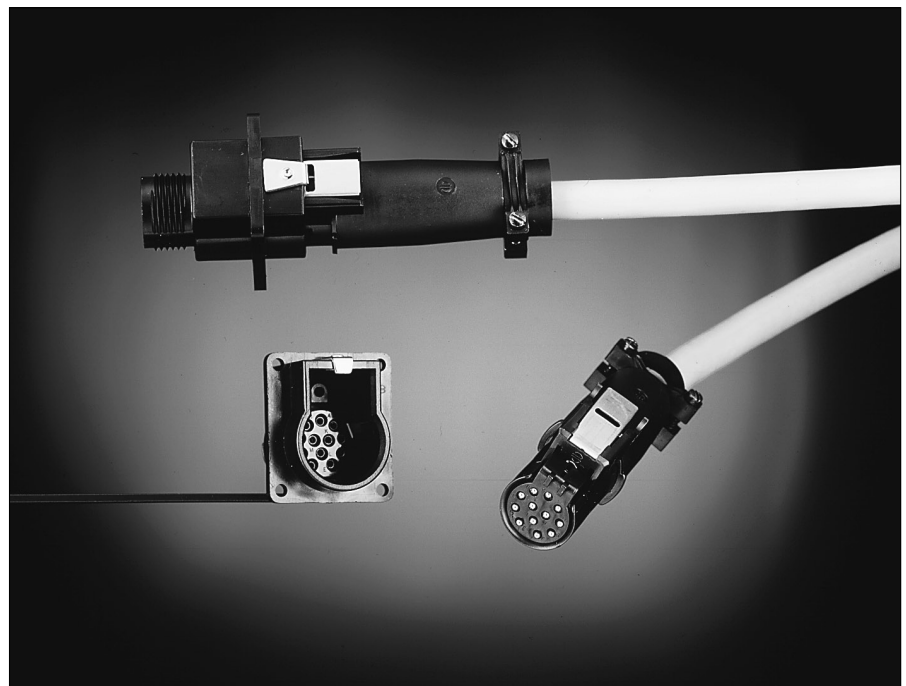
On mating, the stripper plate is pushed deep into the connector wiping a thin film of lubricant onto the male contacts.

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 MΩ min.
Test potential:	2000 VAC
Durability:	Min. 5000 matings cycles
Vibration resistance:	5-50Hz, 0,5 dA; 8 hours axis
Thermal shock:	5 cycles -55°C to +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 and hook:	Stainless steel, 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 separately.

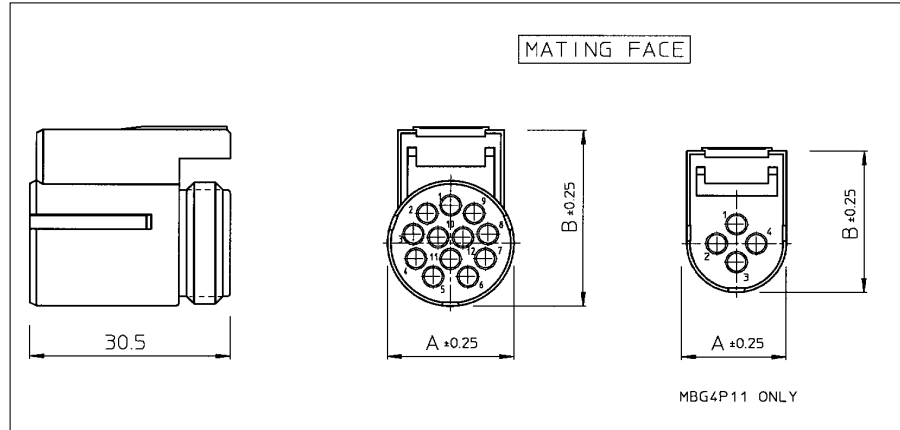
How to order

Connector family	MBG	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 receptacle 11: Reversed version with male contacts in plug			

MBG

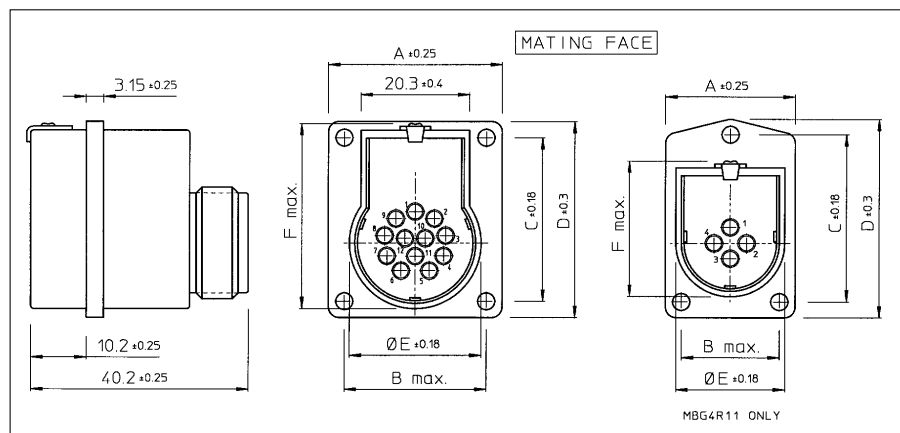


Female plug connector for socket contacts (MBG--P1) - Standard version Male plug connector for pin contacts (MBG--P11) - Reversed version



Female plug	Part number Male plug	$\varnothing A \pm 0.25$	$B \pm 0.25$
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	MBG46P11	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

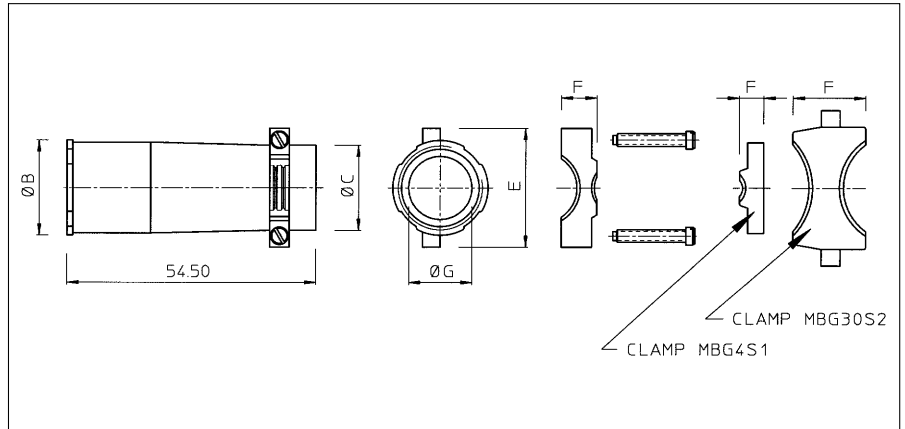


Male receptacle	Part number Female receptacle	$\varnothing A \pm 0.25$	$B \text{ max.}$	$C \pm 0.18$	$D \pm 0.30$	$\varnothing E \pm 0.18$	$F \text{ max.}$
MBG4R1	MBG4R11	23.90	18.08	31.45	37.36	20.07	29.46
MBG12R1	MBG12R11	32.49	26.54	30.76	36.86	24.64	34.93
MBG19R1	MBG19R11	32.44	26.54	34.04	40.13	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

MBG

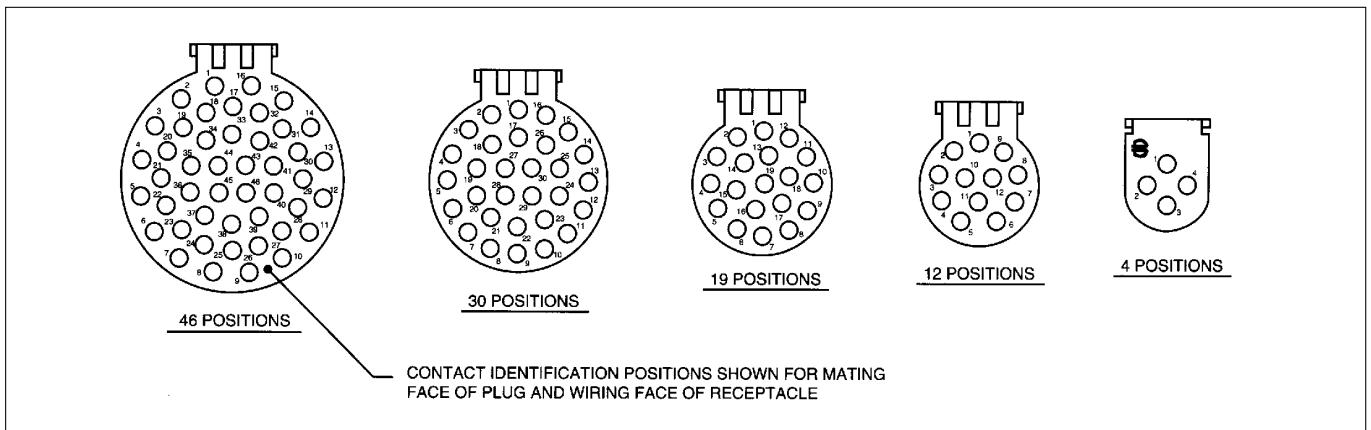


Strain relief (MBG--S1)



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

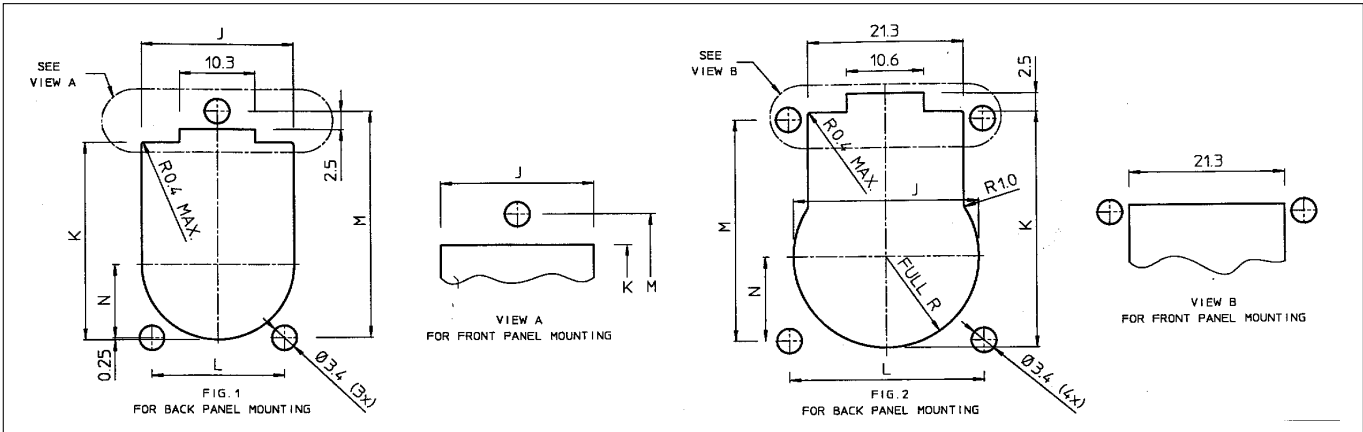


Contact identification positions shown are for mating face of plug and wiring face of receptacle.

MBG

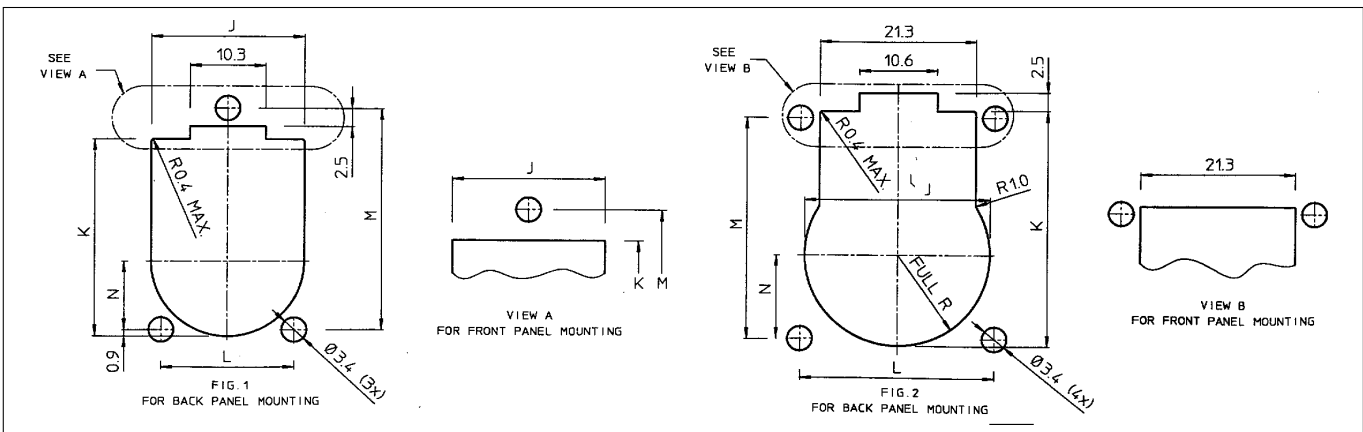


Panel cut-out dimensions for receptacle - Standard version (MBG--R1)



Part number	Fig.	J	K	L	M	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	K	L	M	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