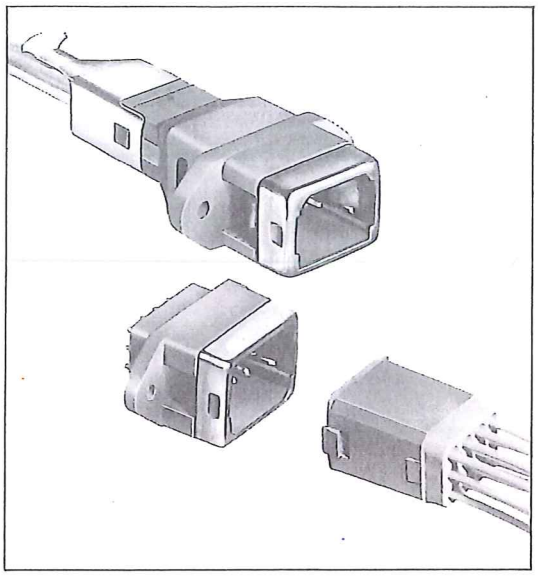
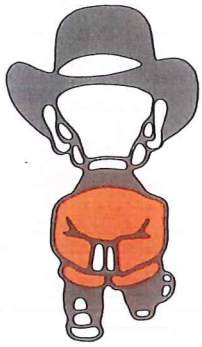
Deutsch Helermann

MM SERIES

MM6,9 PLUG AND RECEPTACLE MODULES





MM 6 Plugs and MM 9 Receptacle modules provide an excellent method of interconnection using a common socket contact. They offer the same weight and time-saving features as other members of the MM family. Receptacles are two-hole flange mounted as standard for through-bulkhead applications. Backshells, strain relief brackets and receptacles without mounting flanges are also available.

GENERAL SPECIFICATION

CURRENT RATING

The current rating of any contact within a module is governed by the heating effect of the current and the ambient temperature. The performance of the MM Series at all times exceeds the bunched ratings of the appropriate size wire having insulation equal in temperature rating to that of the module. Contact loading should not exceed:-
Size 20 contacts 7.5 amps Max.

TEMPERATURE

Operating temperature range – 65°C to + 200°C.
The upper limit quoted is the maximum internal hot spot temperature resulting from any combination of ambient temperature and heating due to current.

DIELECTRIC WITHSTANDING VOLTAGE

1500 VAC r.m.s. at Sea level.

CONTACT RETENTION

20 = 15 lbs Min. Axial Load

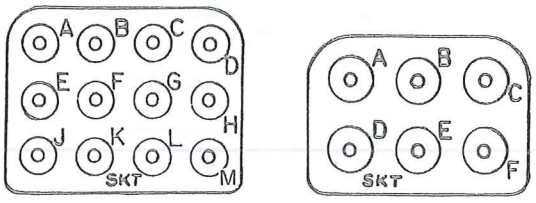
Usable Wire Size	Wire Sealing Range Contact	Max Wire O.D.	Min Wire O.D.
20 accepts sizes 20, 22 & 24 AWG.	20	.083	.040

DURABILITY

No electrical or mechanical defect after 500 cycles of engagement and disengagement.

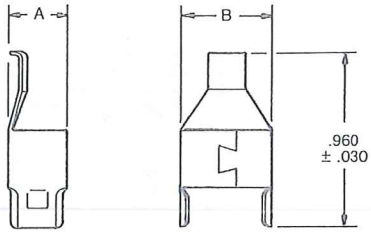
Plug and Receptacle Modules/MM Characteristics

LAYOUT ARRANGEMENT
VIEW FROM GROMMET SIDE



20-12 20-06

STRAIN RELIEF



PART NO.	USED ON:	B ± .030	A ± .030
1629-01-06117	6 CONTACT MODULE	.320	.490
1629-01-12117	12 CONTACT MODULE	.470	.630

Sold separately. Adapts to all plugs and receptacles with rear package only.

TOOLS

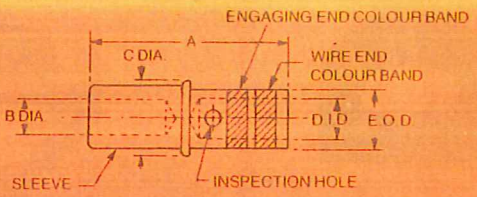
Crimp Tool Positioner
Part No. M22520/7-12

Crimp Tool
Part No. M22520/7-01

Insertion & Extraction Tool
Part No. M15570-20*

* Supplied Separately

CONTACTS

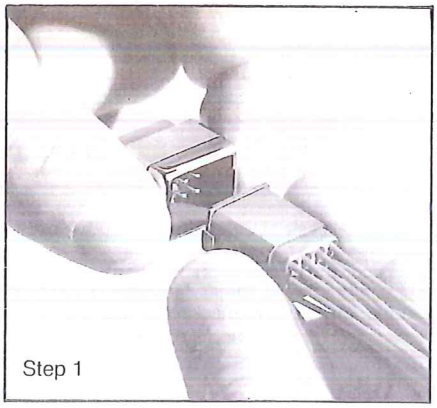


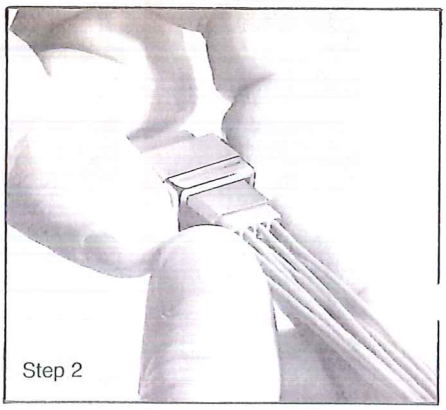
CONTACT DIMENSIONS

CONTACT PART NO.	ENGAGING END SIZE	ENGAGING END COLOUR BAND	WIRE END SIZE	WIRE END COLOUR BAND	A MAX	B DIA	C MAX	D MIN	E MAX	WEIGHT (LBS)	WIRE GAUGE
601041	20	RED	20	RED	358	.044/.042	094	046	070	.00027	20 THRO' 24

MATING

MM 6 plug mates with MM 9 receptacle as follows:
Step 1. With plug engaging surface facing towards receptacle face, and with plug 45° keying surfaces aligned with receptacle keying, insert plug into receptacle. Make sure pins of receptacle properly align with plug socket holes. Step 2. Press firmly until audible "clicks" are heard. Plug is then correctly engaged and locked in position with receptacle.

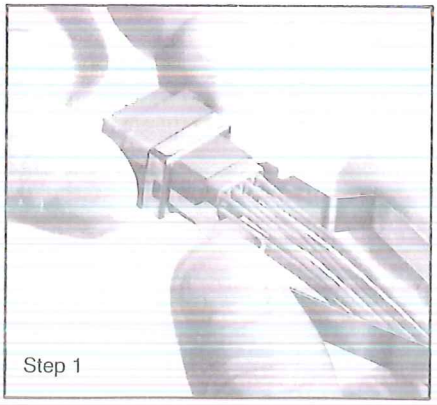

Step 1

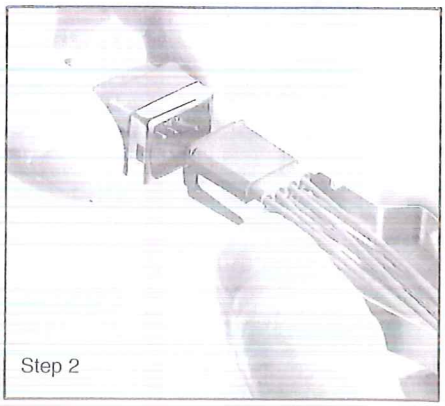

Step 2

UNMATING

To disengage plug and receptacle:
Step 1. Insert module extraction tool into spaces on both sides of receptacle. Push tool in until module locking fingers are disengaged. Step 2. Pull extraction tool and plug out simultaneously.

Module Extraction Tool
Part No. MM R00
Sold separately


Step 1

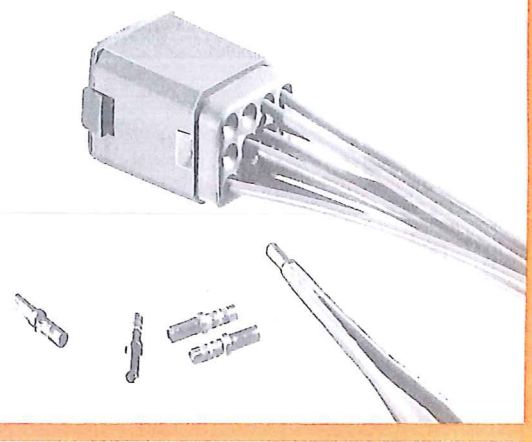

Step 2

HELLERMANN DEUTSCH LTD
Imberhorne Way, East Grinstead, Sussex, England, RH19 1RW
Telephone: East Grinstead (0342) 27411-8 (Sales), or 21231 (General) Telex: 95118
Cables: Connectors, East Grinstead

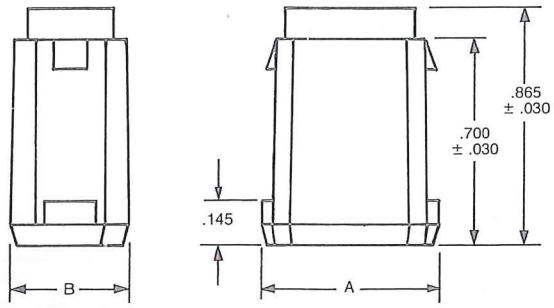
A Member of the Bowthorpe Holdings P.L.C.

PLUG

MM 6 plug modules are lightweight and have smaller envelope size than other comparable connector types. They feature a dielectric contact retention system that assures superior performance. Individual cavity identification enables pre-wiring of modules to the wire harness. When wired and properly mated with the MM 9 receptacle, the pair become environment resistant.

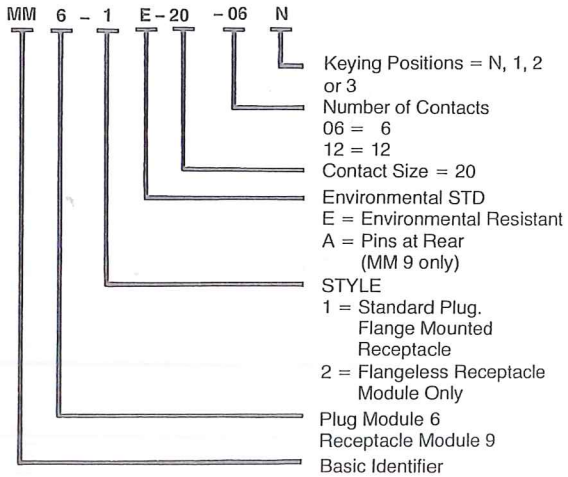


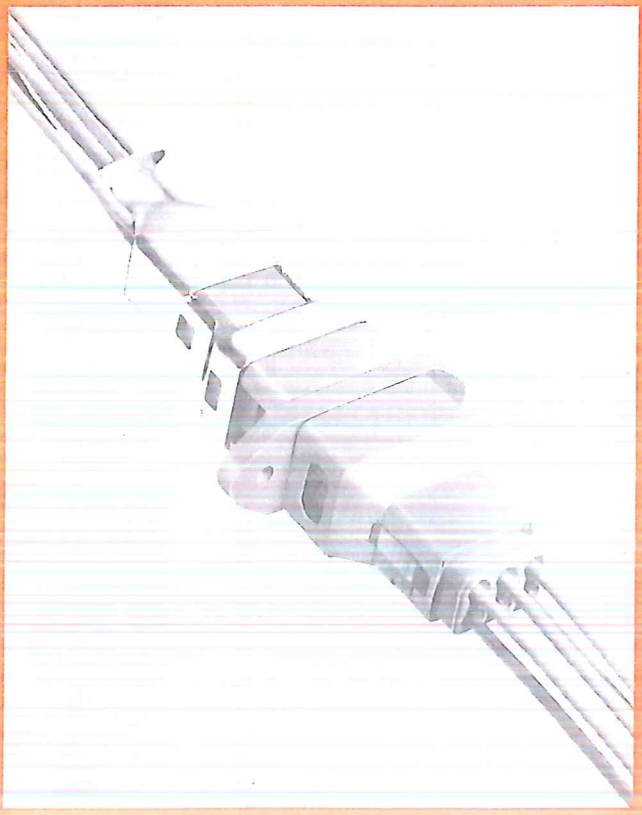
OUTLINE DIMENSIONS

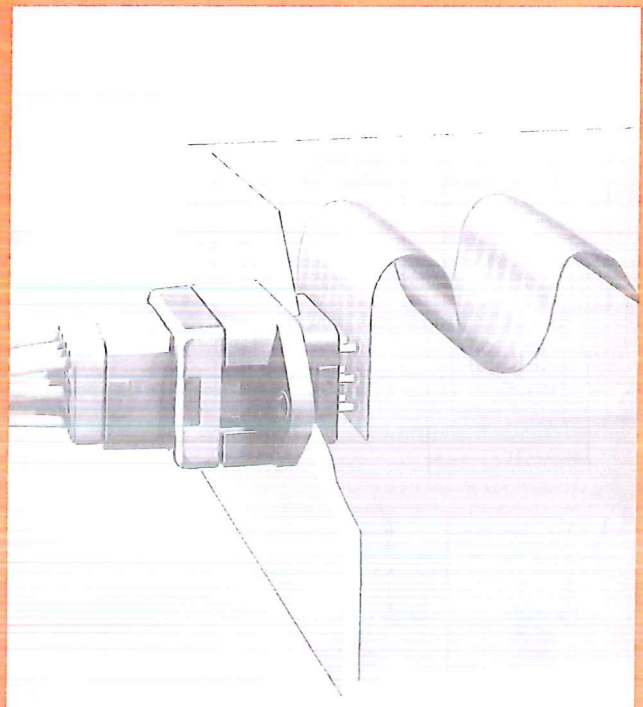


PART NUMBER	A ± .010	B ± .010	NO. OF CONTACTS
MM6-1E-20-06*	.530	.360	6
MM6-1E-20-12*	.652	.510	12

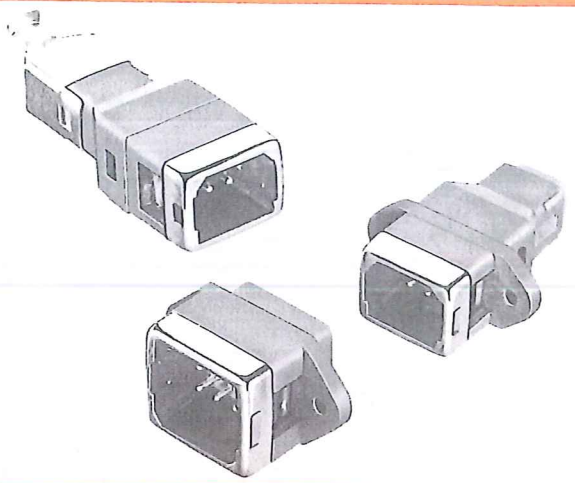
PART NUMBERING SYSTEM





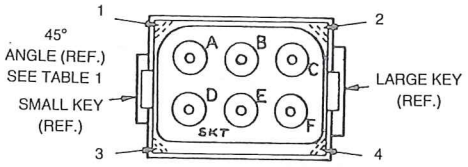


RECEPTACLE



The versatile MM 9 receptacle modules feature dielectric retention and are available in two layouts and four configurations (see outline dimensions). Extended pins at the rear of the standard receptacle provide an excellent means of terminating to flex tape and printed circuits as well as discrete wiring. The addition of an environment resistant rear package converts the standard receptacle to a feedthrough device with environmental sealing at both ends. Both flange mounting and flangeless in-line types are available in all configurations.

ALTERNATE CLOCKING POSITIONS



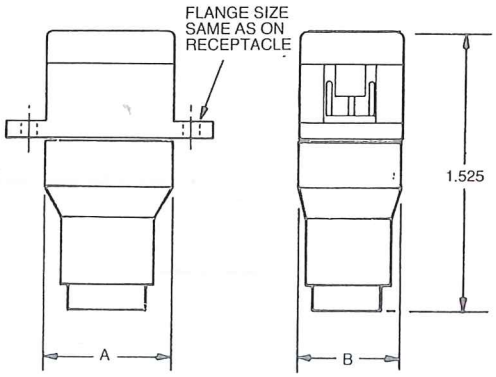
VIEW OF GROMMET SIDE

TABLE 1

KEYING POSITION	45° ANGLE LOCATIONS
N	1 & 2
1	3 & 4
2	1 & 3
3	2 & 4

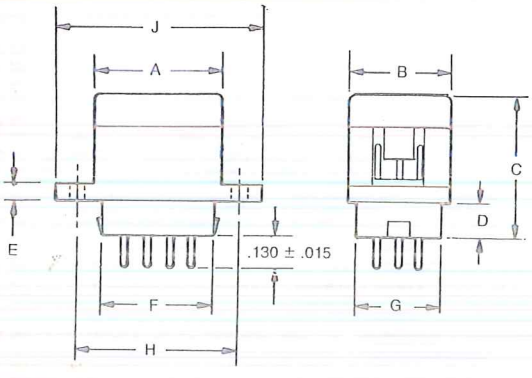
OUTLINE DIMENSIONS

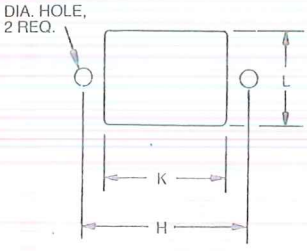
RECEPTACLE MODULE WITH
REAR ENVIRONMENTAL ASSEMBLY
MM9-1E-20-***



STANDARD

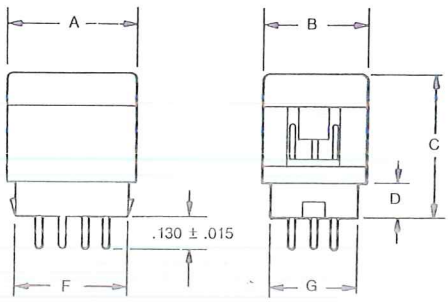
FLANGE RECEPTACLE MODULE
MM9-1A-20-***





PANEL CUT OUT

FLANGELESS RECEPTACLE MODULE
MM9-2A-20-*** FOR STANDARD EXTENDED PINS
MM9-2E-20-*** FOR REAR ENVIRONMENTAL ASSEMBLY



OUTLINE AND MOUNTING DIMENSIONS

LAYOUT	NUMBER OF CONTACTS	A ± .030	B ± .030	C ± .030	D ± .010	E ± .010	F	G	H	J ± .030	K	L
06	6	.650	.470	.750	.200	.100	.550	.360	.880	1.180	.600	.380
12	12	.770	.620	.750	.200	.100	.690	.510	1.000	1.300	.740	.530