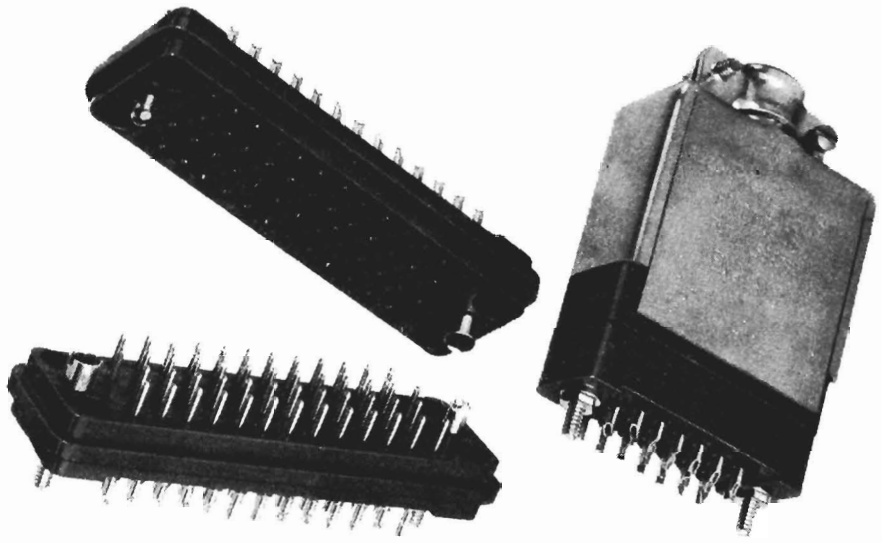
Series MRE Mk I Miniature Connectors with 7, 14, 18, 26, 34 and 50 contacts contact diameter 0·040 in

General description

MRE plugs and sockets were originally approved to DEF 5321 Pattern 103: this specification has now been withdrawn and superseded by DEF 5325–1 to which connector MREQ conforms.



G Guides

All connectors in the series can be fitted with G-type gold-plated brass guides, which protect the contact pins and ensure positive polarisation. They should be fitted at all times unless jackscrews are to be used. Phosphor bronze spring guides are also available, and if preferred should be ordered by inserting GC in place of G in the ordering code. If guides are not required, all reference to them should be omitted from the ordering code.

Specification

Contact arrangements and dimensions

Current rating per contact 7·5A

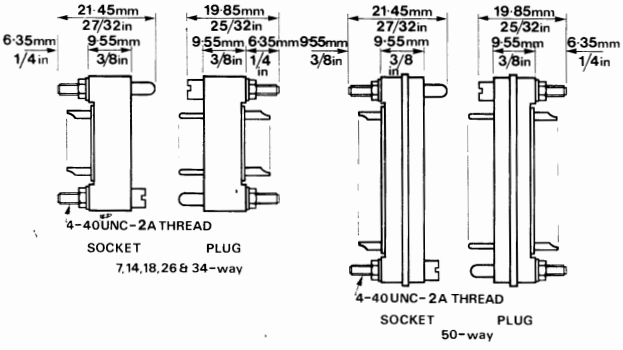
D.C. Breakdown voltage: between contacts

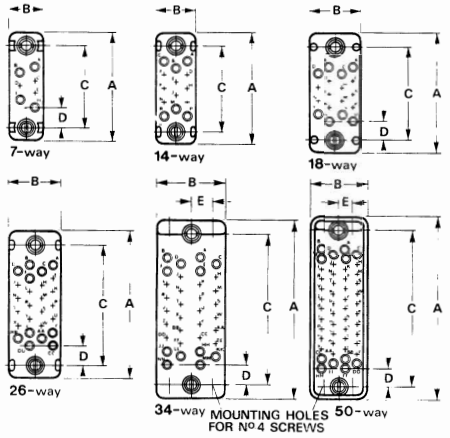
	sea level	60,000 ft
7-way	3100V	1000V
14- to 50-way	5200V	1000V
	Contacts to ground	
	sea level	60,000 ft
7-way	2500V	780V
14- to 50-way	6000V	1000V

Moulding material D.A.P.

Wire size, 21 s.w.g. maximum.

Contact identification: alphabetical.





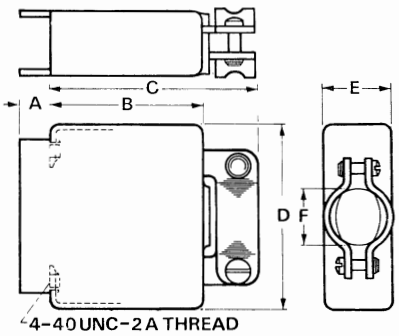
Size		A	B	C	D	E
7 way	in	$1\frac{7}{32}$	$\frac{3}{8}$	0·906	$\frac{7}{32}$	—
	mm	30·96	9·53	23·02	5·55	—
14 way	in	$1\frac{1}{4}$	$\frac{7}{16}$	0·937	$\frac{11}{64}$	—
	mm	31·75	11·11	23·81	4·26	—
18 way	in	$1\frac{5}{16}$	$\frac{9}{16}$	1·000	$\frac{13}{64}$	—
	mm	33·34	14·29	25·4	5·16	—
26 way	in	$1\frac{5}{8}$	$\frac{9}{16}$	1·312	$\frac{13}{64}$	—
	mm	41·28	14·29	33·34	5·16	—
34 way	in	2	$\frac{3}{4}$	1·688	$\frac{1}{4}$	$\frac{15}{64}$
	mm	50·8	19·05	42·86	6·35	5·95
50 way	in	$2\frac{23}{32}$	$\frac{7}{8}$	2·282	$\frac{1}{4}$	$\frac{15}{64}$
	mm	69·06	22·23	57·96	6·35	5·95

Accessories for Series MRE Mk I Connectors

Hoods (anodised aluminium)

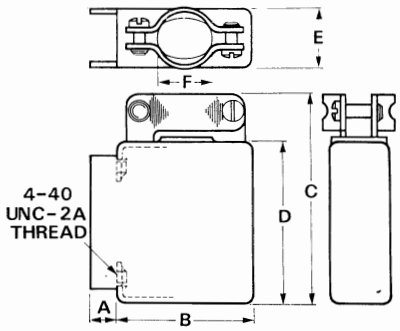
Hoods give protection to the wire connections, provide support and strain relief for the cable, and facilitate the disengagement of mated connectors. When hoods are ordered separately state 'drilled' if JTC jackscrews are to be used.

Top Entry Hood: Type H



Fits Connector		A	B	C	D	E	F
*7 way	in	1/4	1 1/32	1 11/32	1 7/32	7/16	5/16 dia
	mm	6·35	26·19	34·13	30·96	11·11	7·94 dia
*14 way	in	9/32	3/4	1 7/32	1 1/4	1/2	7/16 dia
	mm	7·14	19·05	30·96	31·75	12·7	11·11 dia
*18 way	in	9/32	3/4	1 7/32	1 5/16	5/8	7/16 dia
	mm	7·14	19·05	30·96	33·34	15·88	11·11 dia
26 way	in	9/32	1 9/32	1 3/4	1 5/8	41/64	9/16 dia
	mm	7·14	32·54	44·45	41·28	16·27	14·29 dia
34 way	in	9/32	1 1/4	1 43/64	2	53/64	21/32 dia
	mm	7·14	31·75	43·66	50·8	21·03	16·67 dia
50 way	in	3/32	1 19/64	1 3/4	2 19/32	53/64	5/8 dia
	mm	2·38	32·94	44·45	65·88	21·03	15·88 dia

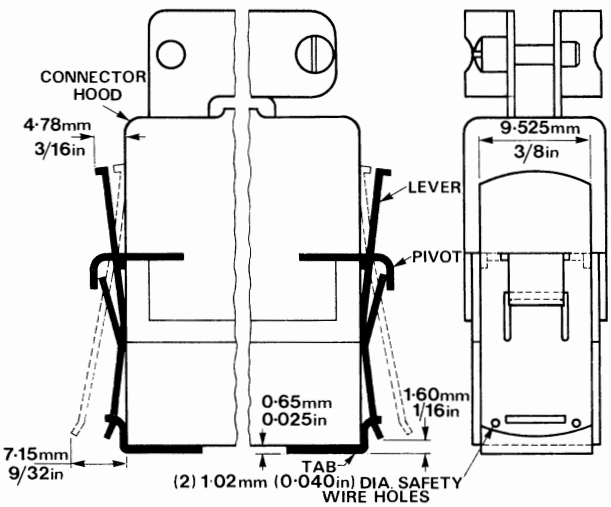
Side Entry Hood: Type H-I



Fits Connector		A	B	C	D	E	F
7 way	in	1/4	1 1/32	1 17/32	1 7/32	7/16	5/16 dia
	mm	6·35	26·19	38·89	30·96	11·11	7·94 dia
14 way	in	9/32	1 9/32	1 23/32	1 1/4	1/2	3/8 dia
	mm	7·14	32·54	43·66	31·75	12·7	9·53 dia
18 way	in	9/32	1 9/32	1 25/32	1 5/16	5/8	7/16 dia
	mm	7·14	32·54	45·24	33·34	15·88	11·11 dia
26 way	in	9/32	1 9/32	2 3/32	1 5/8	41/64	9/16 dia
	mm	7·14	32·54	53·18	41·28	16·27	14·29 dia
34 way	in	9/32	1 1/4	2 15/32	2	53/64	21/32 dia
	mm	7·14	31·75	62·71	50·8	21·03	16·67 dia
50 way	in	3/32	1 19/64	3 1/16	2 19/32	53/64	5/8 × 1/2
	mm	2·38	32·94	77·39	65·88	21·03	15·88 × 12·7

Vibration locks

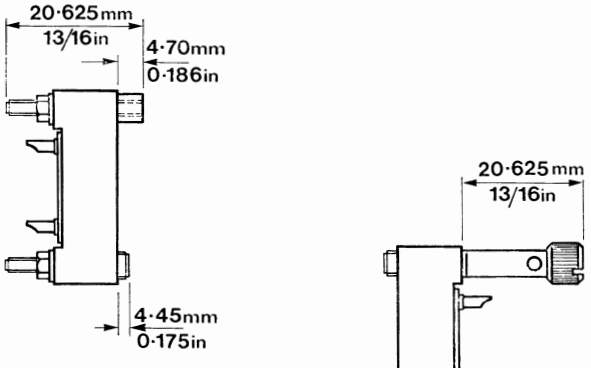
Vibration locks prevent accidental disconnection of mated connectors. They lock automatically when the plug and socket are engaged, and can only be unlocked by depression of the lever arms. A complete unit comprises two lever and pivot assemblies (VL) and two lock-tabs (V). The former are installed on the cable-mounted half of the connector (usually with a hood), and the latter on the mating connector. The lever and pivot assemblies, or the lock-tabs, can be fitted to a plug or socket as required. Vibration locks cannot be used with side-entry hoods or shells.



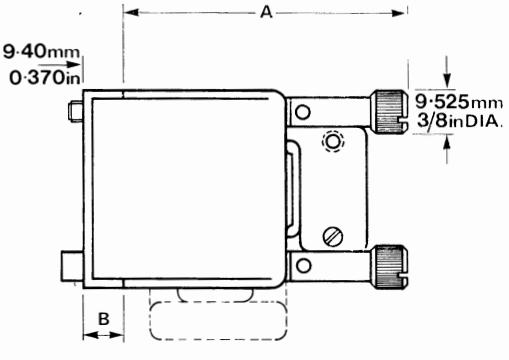
Jackscrews

Jackscrew locking devices provide a positive method of mating and locking together two halves of a connector. Jackscrews are manufactured from stainless steel, and are available as fixed or turnable types. The turnable types have anodised aluminium knobs which can be secured with safety wires when the connectors are locked together.

Fixed jackscrews type J fitted to socket (or plug)



Turnable jackscrews type JT fitted to plug (or socket)

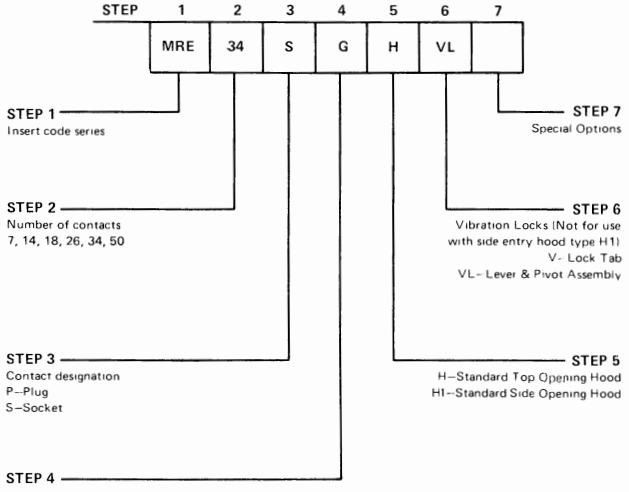


Long turnable jackscrews type JTC fitted to plug (or socket) with hood

Fits Connector	A		B
	Top Entry	Side Entry	
7 in way mm	— —	$1\frac{9}{16}$ 39·68	$\frac{1}{4}$ 6·35
14 in way mm	— —	$1\frac{13}{16}$ 46·03	$\frac{9}{32}$ 7·14
18 in way mm	— —	$1\frac{13}{16}$ 46·03	$\frac{9}{32}$ 7·14
26 in way mm	$2\frac{3}{32}$ 53·2	$1\frac{13}{16}$ 46·03	$\frac{9}{32}$ 7·14
34 in way mm	$1\frac{13}{16}$ 46·03	$1\frac{13}{16}$ 46·03	$\frac{9}{32}$ 7·14
50 in way mm	$1\frac{7}{8}$ 47·63	$1\frac{7}{8}$ 47·63	$\frac{3}{32}$ 2·38

Ordering information for MRE Mk I

Specify complete plug or receptacle by following Step 1 through 7. Omit steps not required. If accessories only are required, omit Step 3 but include Steps 1, 2 and those relating to the particular accessories required.



Guides and Jackscrews
Guides:
G—Standard brass guides
GC—Phosphor bronze spring guides
GSS—Stainless steel guides
Jackscrews:
J—Polarized fixed jackscrew and jacksocket
JT—Polarized short turning jackscrew and jacksocket
JTC—Polarized long turning jackscrew and jacksocket