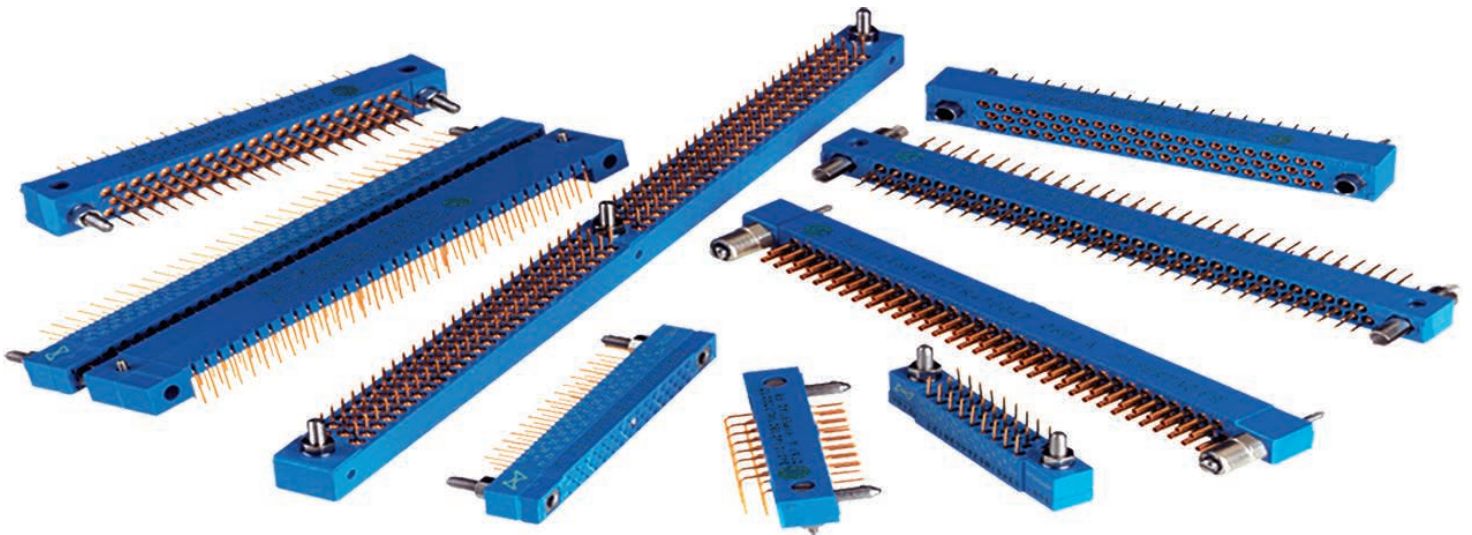


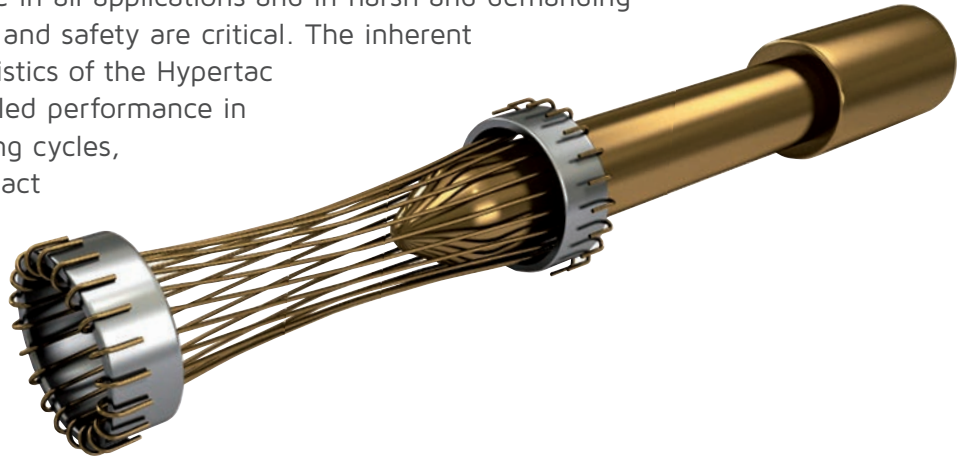
K Series

Medium & High Density PCB Connectors



Hypertac® Hyperboloid Technology

Smiths Interconnect offers an extensive range of superior contact technologies suitable for standard and custom solutions. Hypertac® (HYPERboloid conTACT) is the original superior performing hyperboloid contact technology designed for use in all applications and in harsh and demanding environments where high reliability and safety are critical. The inherent electrical and mechanical characteristics of the Hypertac hyperboloid contact ensures unrivalled performance in terms of reliability, number of mating cycles, low contact force and minimal contact resistance. The shape of the contact sleeve is formed by hyperbolically arranged contact wires, which align themselves elastically as contact lines around the pin, providing a number of linear contact paths.



Features

Benefits

Low insertion/extraction forces

The angle of the socket wires allows tight control of the pin insertion and extraction forces. The spring wires are smoothly deflected to make line contact with the pin.

High density interconnect systems

Significant reductions in size and weight of sub-system designs. No additional hardware is required to overcome mating and un-mating forces.

Long contact life

The smooth and light wiping action minimizes wear on the contact surfaces. Contacts perform up to 100,000 insertion/extraction cycles with minimal degradation in performance.

Low cost of ownership

The Hypertac contact technology will surpass most product requirements, thus eliminating the burden and cost of having to replace the connector or the entire subsystem.

Lower contact resistance

The design provides a far greater contact area and the wiping action of the wires insures a clean and polished contact surface. Our contact technology has about half the resistance of conventional contact designs.

Low power consumption

The lower contact resistance of our technology results in a lower voltage drop across the connector reducing the power consumption and heat generation within the system.

Higher current ratings

The design parameters of the contact (e.g., the number, diameter and angle of the wires) may be modified for any requirement. The number of wires can be increased so the contact area is distributed over a larger surface. Thus, the high current carried by each wire because of its intimate line contact, can be multiplied many times.

Maximum contact performance

The lower contact resistance of the Hypertac contact reduces heat build-up; therefore Hypertac contacts are able to handle far greater current in smaller contact assemblies without the detrimental effects of high temperature.

Immunity to shock & vibration

The low mass and resultant low inertia of the wires enable them to follow the most abrupt or extreme excursions of the pin without loss of contact. The contact area extends 360° around the pin and is uniform over its entire length. The 3 dimensional symmetry of the Hypertac contact design guarantees electrical continuity in all circumstances.

Reliability under harsh environments

Harsh environmental conditions require connectors that will sustain their electrical integrity even under the most demanding conditions such as shock and vibration. The Hypertac contact provides unmatched stability in demanding environments when failure is not an option.

Contents

KN Series - Medium Density PCB Connectors

KNB series (2 rows).....	2
KXB series (2 rows)	19
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Accessories and tools	40

KM Series - High Density PCB Connectors

KMC Series (3 rows).....	42
KMH Series (3 rows).....	65
Accessories and tools	71

Technical Characteristics

Contact diameter	HYPERTAC® type Ø 0.60 mm rear removable
Number of contact	Up to 120
Pitch	2.54mm between rows - 1.27mm between quicuncial contacts
Rows	2

Materials & Platings

Contact	Brass or bronze	
Moulding	Glass fiber filled diallyl - Phtalate	
Guides	Stainless steel or nickel plated brass	
	Standard	ESA
Pin body	0.25 µm Gold / 1.27 µm Ni	1.27 µm Gold / 1.27 µm Ni (min)
Socket body	0.25 µm Gold / 1.27 µm Ni on activ area 1.27 µm Ni on non activ area	0.25 µm Gold / 1.27 µm Ni (min)
Socket wires	1 µm Gold / 0.20 µm Ni	1.27 µm Gold / 0.20 µm Ni (min)

Electrical

Current rating (at 25°C)	Standard: 3 A max - ESA: 5 A max
Dielectric withstanding voltage	1200 Vrms
Contact resistance	≤ 8 mΩ
Insulation resistance	> 10 ⁴ MΩ (500 Vcc)

Mechanical

Mating & unmating cycle	5000
Guiding	By two outside guides (2 guiding styles) and one central guide (3 guiding styles)
Keying	By rotating of outside polarised guides (up to 36 keying)

Environmental

Temperature range	-55° C + 125° C
Conformity	MIL C 55302, ESA/ESCC3401/016 - 3401/017, NF C-UTE C 93-424

How To Order



K N B

1 2 3



4



5



6



7

1 Series																				
2 Pitch or type	N 1.27 mm pitch, rear removable contacts																			
3 Model	B 2 rows																			
4 Number of contacts	0 1 7 0 2 9 0 4 1 0 5 3 0 6 5 0 7 2 0 8 4 0 9 6 1 2 0																			
For the right angle 053 layout, KNB must be replaced by KXB (non ESA qualified, details on page 20)																				
5 Moulding polarity	NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE				NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE				NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE											
	12	14	54	54	Female plug				1A	1C	-	5A	Tinned female plug**		26	28	-	46	Tinned female receptacle*	
	13	15	55	55	Male plug				1B	1D	-	5B	Tinned male plug**		27	29	-	47	Tinned male receptacle*	
	16	18	-	56	Tinned female plug*				22	24	44	44	Female receptacle		2A	2C	-	-	Tinned female receptacle**	
	17	19	-	57	Tinned male plug*				23	25	45	45	Male receptacle		2B	2D	-	-	Tinned male receptacle**	
6 Termination styles	10 Through board solder - 90°- length 3 mm				21 Double crimp				51 Wire wrap (3 wrapping levels)											
	11 Through board solder - 90°- length 4 mm				30 Through board solder - straight				91 Female - male											
	20 Crimp				40 Solder bucket															
7 Mounting hardware	Guide Style (consult us for special guides)																			
	110 Male polarised, transverse mount, standard plug				145 Male polarised, transverse mount on receptacle only				131 Male unpolarised, transverse mount											
	111 Male polarised, vertical mount				190 Female power or mass contact, vertical mount				132 Female unpolarised, transverse mount											
	113 Male polarised, float mount				125 Male unpolarised, transverse mount				133 Female all polarised, transverse mount											
	121 Female polarised, vertical mount				126 Female unpolarised, vertical mount				191 Male power or mass contact, vertical mount											
	123 Female polarised, float mount				127 Male unpolarised, vertical mount															
	124 Female polarised, transverse mount				130 Female unpolarised, vertical mount															
	Locking Styles																			
	MALE PLUG					FEMALE RECEPTACLE														
	201 1/4 turn, free connector					202 1/4 turn, vertical mount					212 Jackscrew, transverse mount									
203 1/4 turn, transverse mount					204 1/4 turn, transverse mount					215 Jackscrew, vertical mount										
207 Jackscrew, free connector					208 Jackscrew, transverse mount					219 Jackscrew, vertical mount										
211 Jackscrew, free connector					210 Jackscrew, free connector					232 Jackscrew, with operation button										
290 Jackscrew, vertical mount																				

* For 90° & straight terminations (splicing on PCB)

** RoHS compliant for 90° & straight terminations (splicing on PCB)

Hypertac & ESA Correspondance Table

HYPERTAC

KNB

34 01 016 01 B

1

2

3

4

5

6

1 ESCC component number

2 Mounting

HYPERTAC

ESA

Plug KNB 017	01	Plug KNB 096	08	Receptacle KNB 053	16	Plug KNB 072	56	Plug KNC 098	62
Plug KNB 029	02	Plug KNB 120	10	Receptacle KNB 065	17	Receptacle KNB 072	57	Receptacle KNC 098	63
Plug KNB 041	03	Plug KNC 160	12	Receptacle KNB 084	19	Plug KNC 062	58		
Plug KNB 053	04	Receptacle KNB 017	13	Receptacle KNB 096	20	Receptacle KNC 062	59		
Plug KNB 065	05	Receptacle KNB 029	14	Receptacle KNB 120	22	Plug KNC 080	60		
Plug KNB 084	07	Receptacle KNB 041	15	Receptacle KNC 160	24	Receptacle KNC 080	61		

REMINDER SPATIAL P.P.P. (Party Polarity Protection)

Female receptacle	44	Plug female	54
Male receptacle	45	Plug male	55

EXAMPLE

KNB 029 44 40 113
P.P.P.

3 Termination style

HYPERTAC

ESA

Bent male 10	MC	Solder bucket male 40	MS	Crimp female 20	FR	Female-male 91	FM
Bent long male 11	ML	Mini-wrapping male 51	MY	Straight female 30	FD		
Crimp male 20	MR	Bent female 10	FC	Solder bucket female 40	FS		
Straight male 30	MD	Bent long female 11	FL	Mini-wrapping female 51	FY		

4 Locking type
On left side

HYPERTAC

ESA

Guideless connector	00	KNB	145	40	KNC	10	209	49	KNB	11	125	71	KNB	11	208	79
KNB	131	31	KNB	124	41	KN	210	50	KNB	11	110	72	KN	219	80	
KNB	132	32	KNC	10	230	43	KN	211	51	KNB	10	230	73	KN	290*	81
KNB	10	110	33	KN	232	45	KNB	212	52	KNC	124	74				
KNC	10	110	34	KN	231	46	KN	215	53	KNC	132	75				
KN	111	35	KN	207	47	KN	123	54	KNC	11	110	76				
KN	121	36	KNB	10	208	48	KN	113	55	KNC	11	125	77			

5 Locking type
In center

00

For 2 guide connectors

--

For 3 guide connectors (see table 4, Locking type - On left side)

HYPERTAC

ESA

KNB	10	125	26	KNC	10	125	27	KN	127	28	KN	126	29
-----	----	-----	----	-----	----	-----	----	----	-----	----	----	-----	----

6 Locking type
On right side

(see table 4, Locking type - On left side)

Contact Terminations

Plug

Male

Female

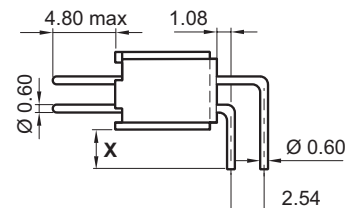
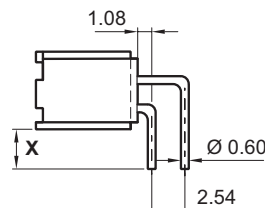
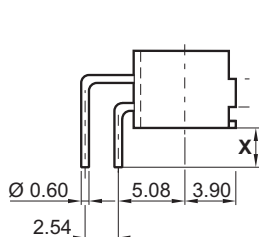
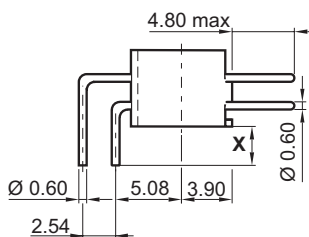
Receptacle

Female

Male

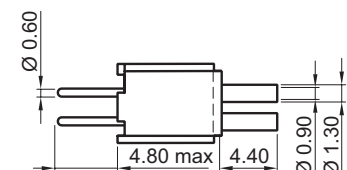
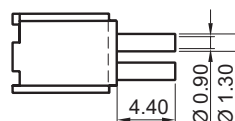
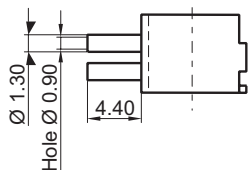
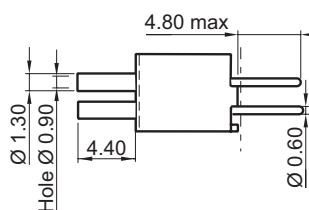
90° Through board solder

Ref: **10** (X=3) Ref : **MC & FC** - Ref: **11** (X=4) Ref : **ML & FL**



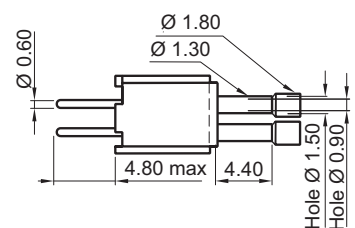
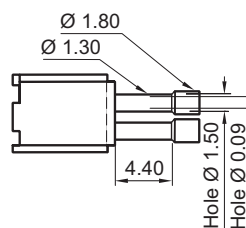
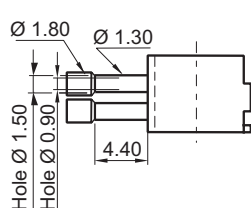
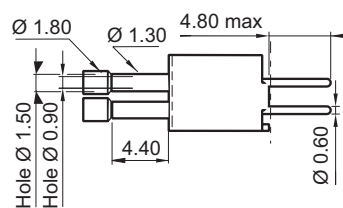
Crimp (AWG 28-26 & 24-22)

Ref: **20** Ref : **MR & FR**



Crimp (AWG 28-26 & 24-22) & Crimp on sheath (Ø 1.45)

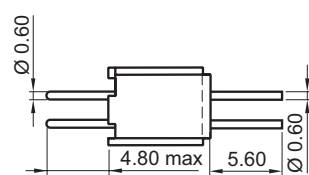
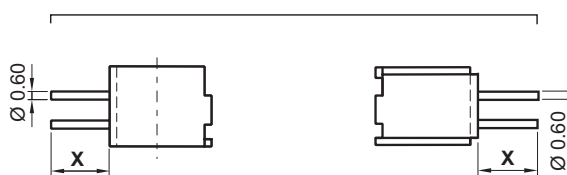
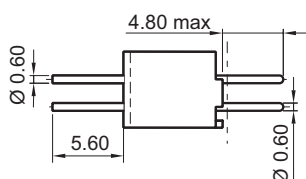
Ref: **21**



Straight through board solder

Ref: **30** (X=4.50) Ref : **MD & FD** Ref **31** (5.60)

See: 90° Through board solder



Plug

Male

Female

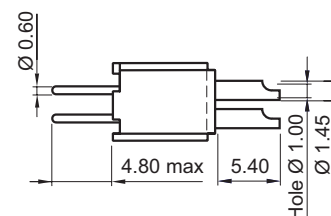
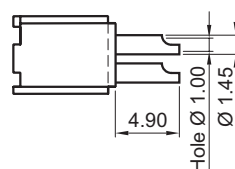
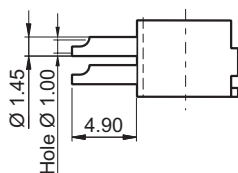
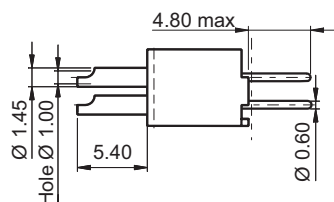
Receptacle

Female

Male

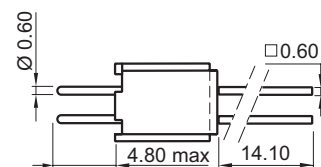
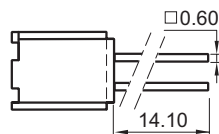
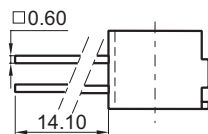
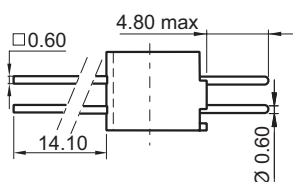
Solder bucket (AWG 22 max)

Ref: **40** Ref : **MS & FS**



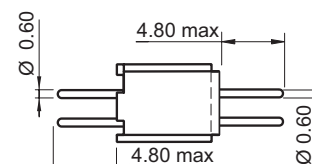
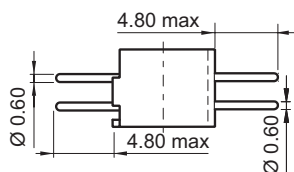
Wire wrap (3 wrapping levels)

Ref: **51** Ref : **MY & FY**



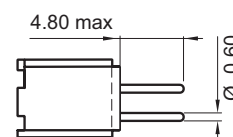
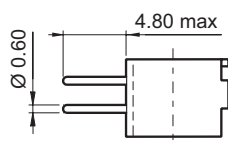
Saver (male-male)

Ref: **90**



Saver (female-male)

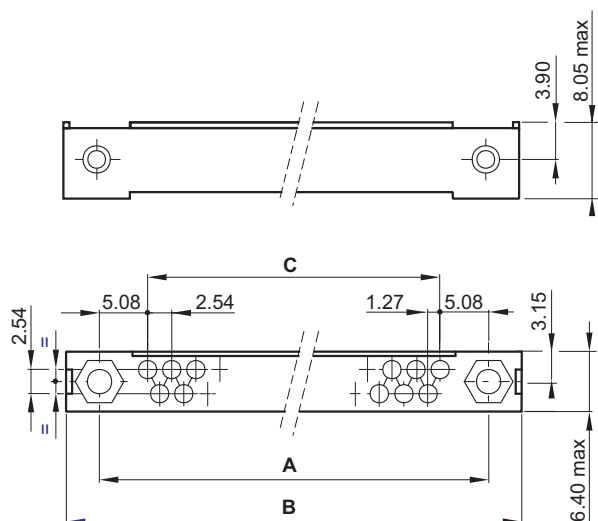
Ref: **91** Ref : **FM**



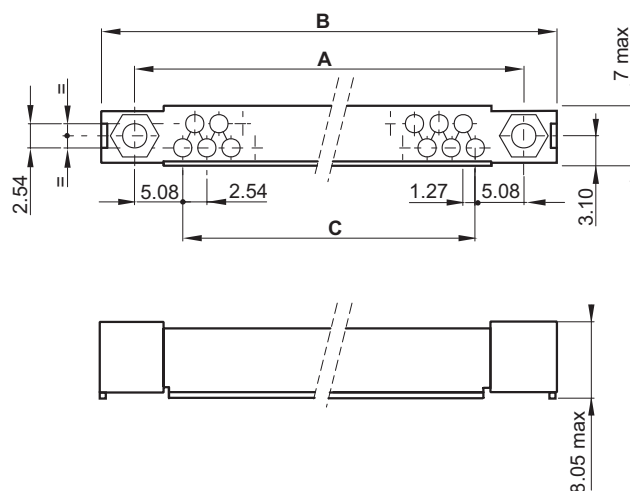
Connector Dimensions

Plug

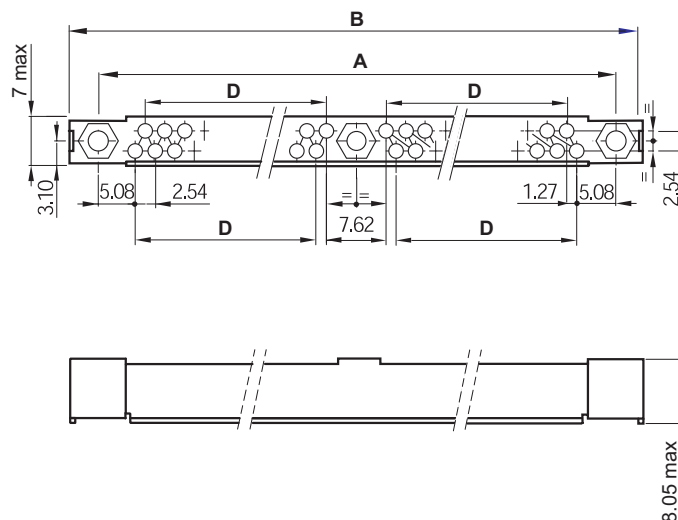
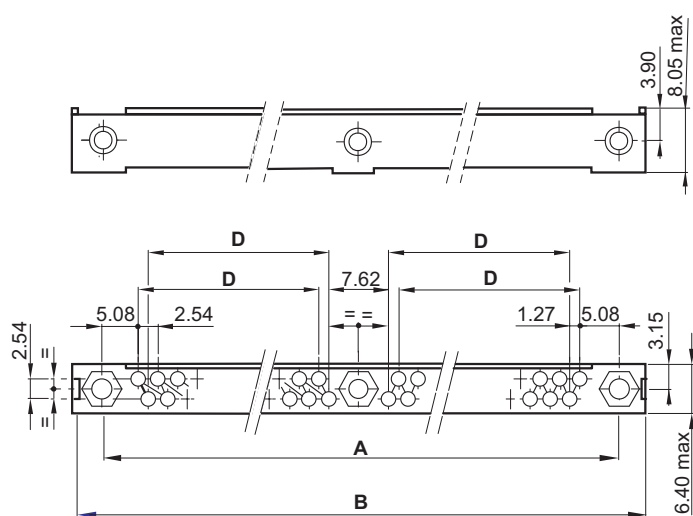
17 to 65 contacts



Receptacle



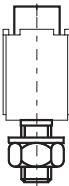
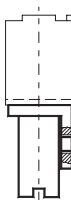
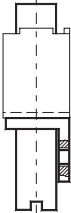
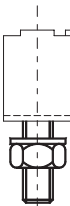
72 to 120 contacts

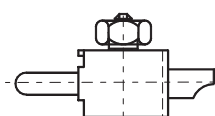
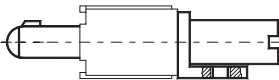
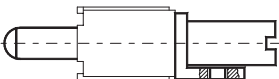
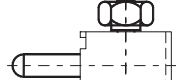
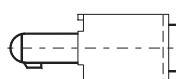
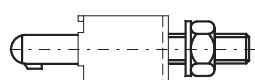
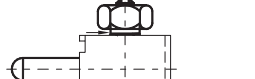
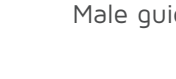
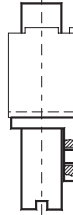
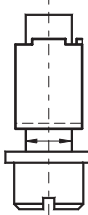
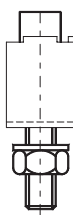


No. of contacts	17	29	41	53	65	72	84	96	120
A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	167.64
B max	38.50	53.70	69.00	84.20	99.50	114.70	129.90	145.20	175.50
C	20.32	35.56	50.80	66.04	81.28	-	-	-	-
D	-	-	-	-	-	43.18	50.80	58.42	73.66

	Compatible
	Compatible special saver connector

[illegible]

			
190	133	132	130
Guiding devices			

MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	Polarity				
																	Receptacle		Moulding	
																	Plug			
																	90°	10	11	Contact
																	Straight	30	31	
																	Solder bucket		40	
																	Crimp	20	21	
																	Wire wrap		51	
																		191		Guiding devices
																	145			
																	131			
																	127			
																	125			
																	113			
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																	110			
																				
																Male guides				
																Female guides				
126				124				123				121								
Guiding devices																				

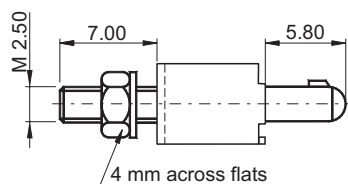
Guide Styles

Plug & Receptacle

Male

Polarised vertical mount

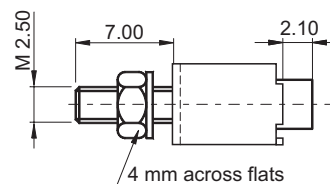
Ref: 111 Ref : 35



Female

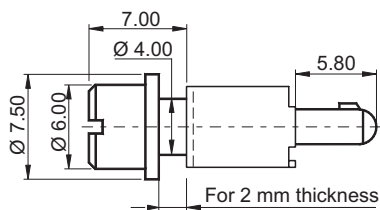
Polarised vertical mount

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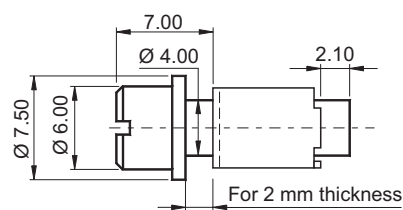
Polarised vertical float mount

Ref: 113 Ref : 55



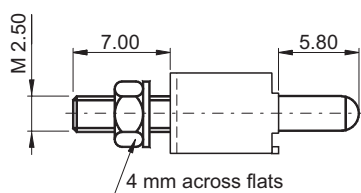
Polarised vertical float mount

Ref: 123 Ref : 54



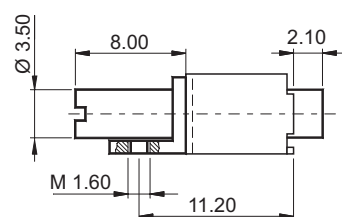
Unpolarised vertical mount

Ref: 127 Ref : 28



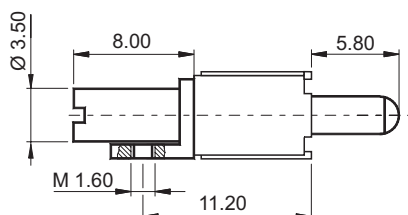
Polarised transverse mount

Ref: 124 Ref : 41



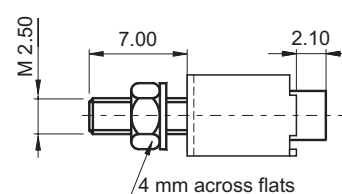
Unpolarised transverse mount

Ref: 131 Ref : 31



Unpolarised vertical mount

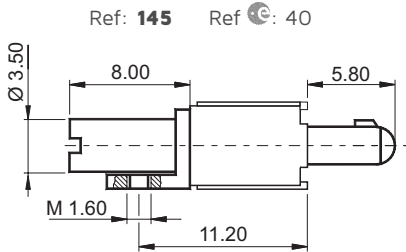
Ref: 126 Ref : 29



Plug & Receptacle

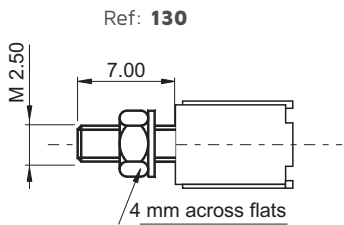
Male

Polarised transverse mount



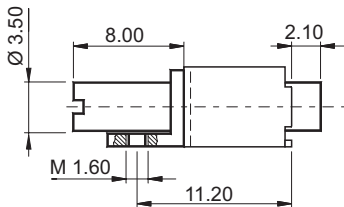
Female

All polarised vertical mount



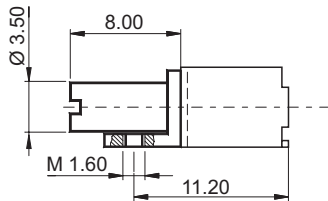
Unpolarised transverse mount

Ref: **132** Ref : **32**



All polarised transverse mount

Ref: **133**

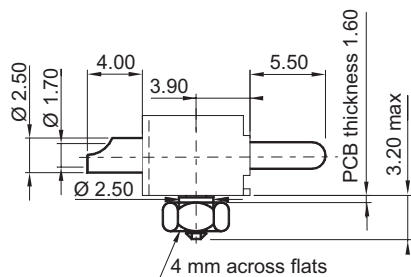


Plug & Receptacle

Male

Power or mass transverse mount

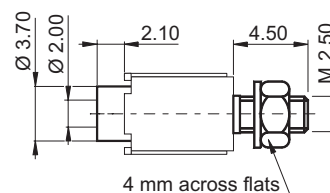
Ref: **191**



Female

Power or mass vertical mount

Ref: **190**

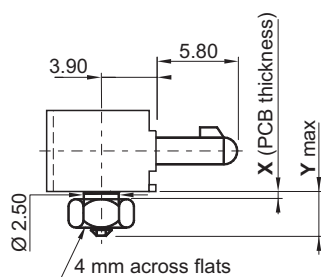


Male plug only

Polarised transverse mount

Ref: **10 110** Ref: **33** X=1.60 Y=3.20

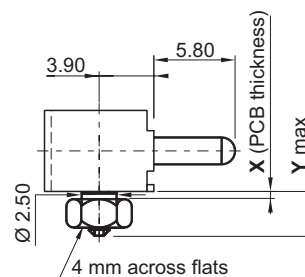
Ref: **11 110** Ref: **72** X=2.40 Y=4.90



Unpolarised transverse mount

Ref: **10 125** Ref: **26** X=1.60 Y=3.20

Ref: **11 125** Ref: **71** X=2.40 Y=4.90

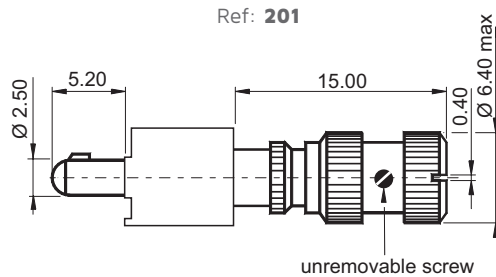


	R	P	R	P	R	P	R	P	R	P	R	P	R	P		
Compatible															Receptacle	Moulding
															Plug	
P R															 	290
P R															 	231
P R															 	211
P R															 	207
P R															 	205
P R															 	203
P R															 	201
Receptacle															Male locking devices	
Plug															Female locking devices	
Moulding	232	219	215	212	210	208	204	202								

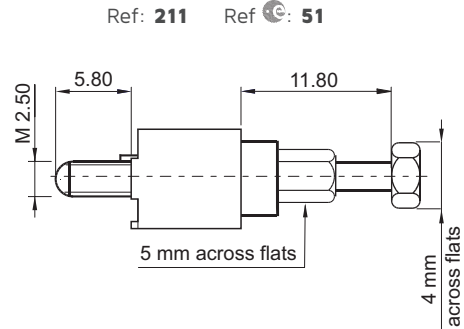
Male Locking Styles

Plug & Receptacle

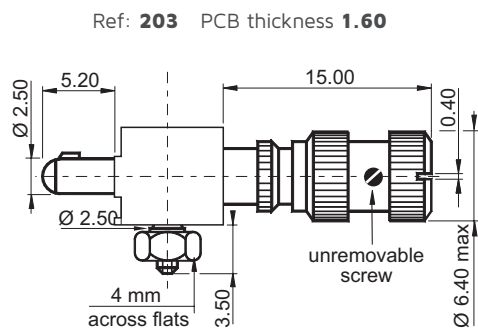
Jack 1/4 turn lock, free connector



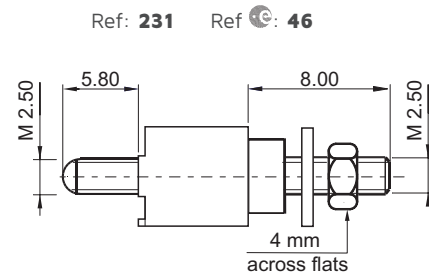
Jackscrew, free connector



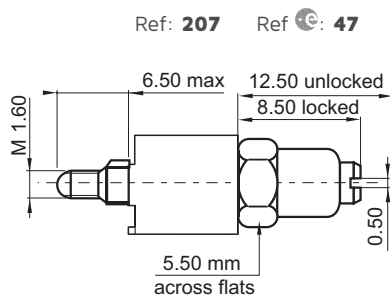
Jack 1/4 turn lock, transverse mount



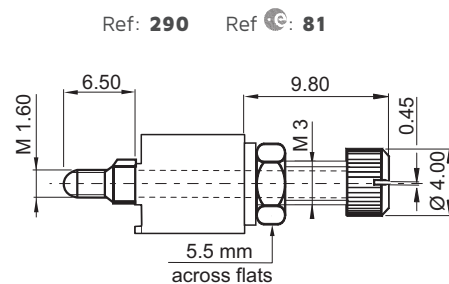
Jackscrew, vertical mount



Jackscrew, free connector



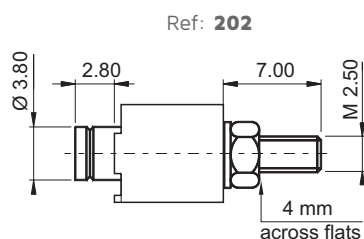
Jackscrew, vertical mount



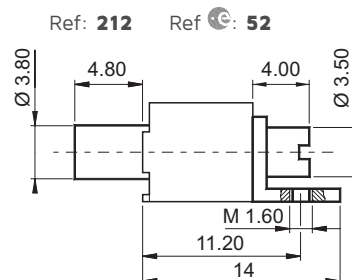
Female Locking Styles

Plug & Receptacle

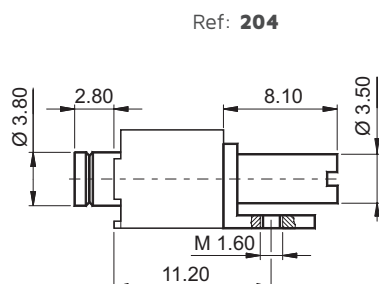
Jack 1/4 turn lock, vertical mount



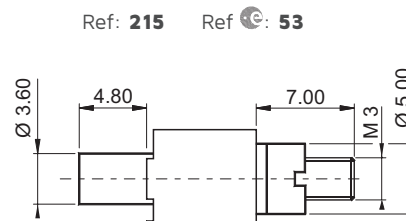
Jackscrew, transverse mount



Jack 1/4 turn lock, transverse mount

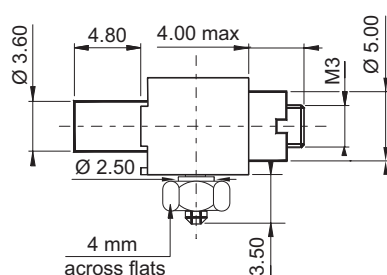


Jackscrew, vertical mount



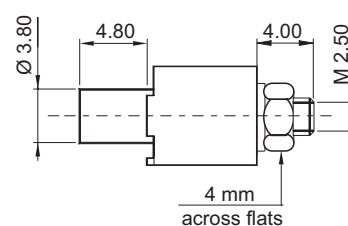
Jackscrew, transverse mount

Ref: **10 208** Ref: **48** PCB thickness 1.60
Ref: **11 208** Ref: **79** PCB thickness 2.40



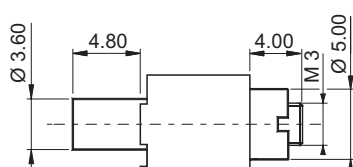
Jackscrew, vertical mount

Ref: **219** Ref: **80**



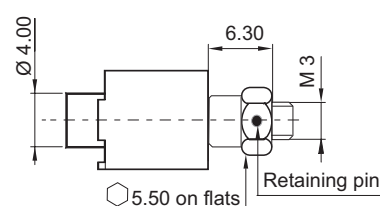
Jackscrew, free connector

Ref: **210** Ref: **50**



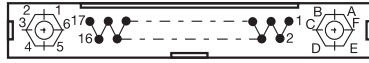
Rotating jackscrew, free connector

Ref: **232** Ref: **45**

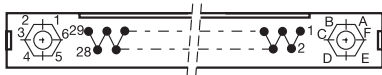


Mating Side Layout View

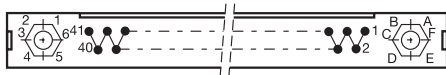
Plug



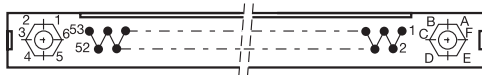
017



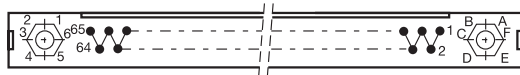
029



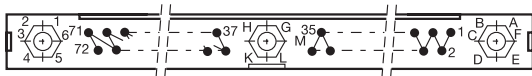
041



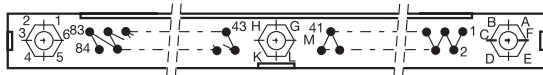
053



065



072



084

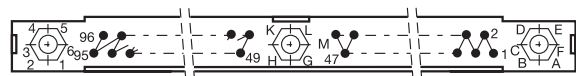
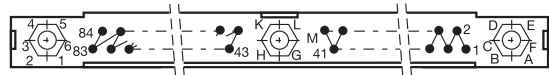
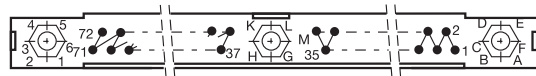
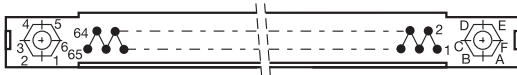
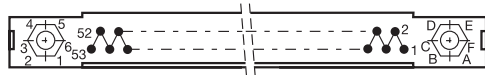
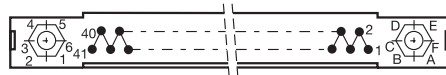
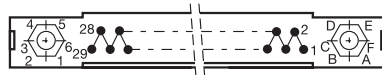
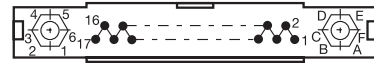


096



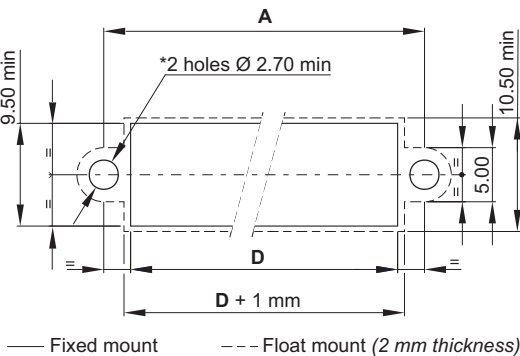
120

Receptacle

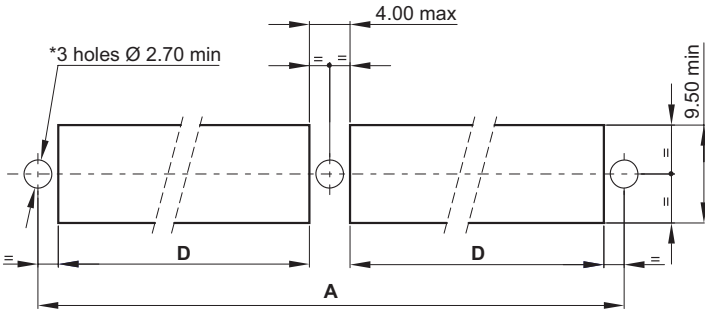


Panel Preparation Details

17 to 65 Contacts



72 to 120 Contacts



Panel: female or male, plug or receptacle, terminations 20 - 40 - 51
Guide styles: 111 - 121 - 126 - 127 - 130 - 190 (Fixed Mount) - 113 - 123 (Float Mount)
Locking styles: 202 - 215* - 219 - 231

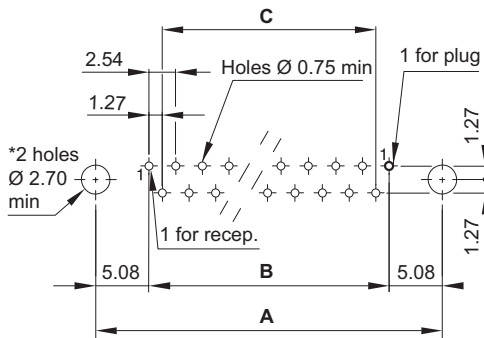
No. of contacts	17	29	41	53	65	72	84	96	120
A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	167.64
D	25.90	41.10	56.40	71.60	86.90	48.50	56.00	63.30	78.80

* for ref: 215, holes Ø 3.20 mm

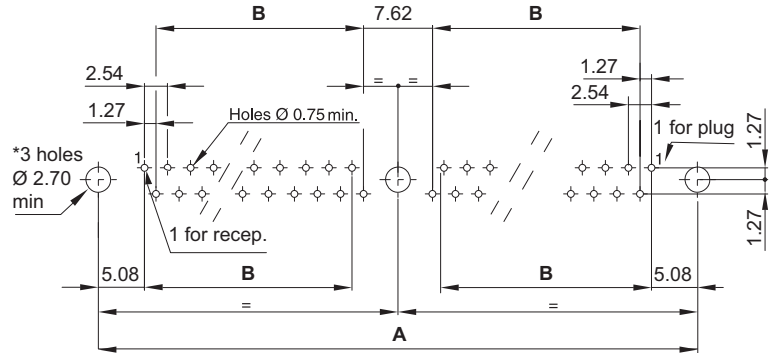
Board Preparation Details

Mother board

17 to 65 Contacts



72 to 120 Contacts

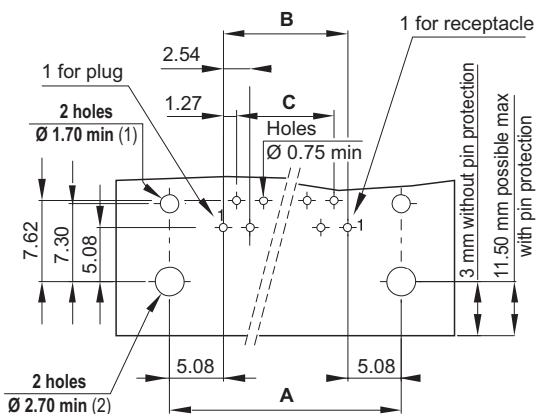


Mother Board: female or male, plug or receptacle, straight solder termination
Guide styles: 111 - 121 - 126 - 127 - 130 - 190 Locking styles: 202 - 215* - 219 - 231

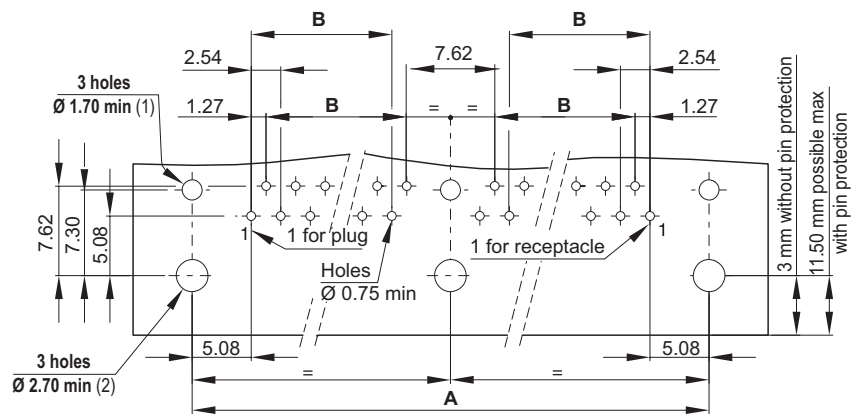
* for ref: 215, holes $\varnothing$ 3.20 mm

Daughter board

17 to 65 Contacts



72 to 120 Contacts



Daughter Board: female or male, plug or receptacle, 90° termination
 (1) **Guide styles:** 124 - 131 - 132 - 133 - 145 Locking styles: 204 - 212
 (2) **Guide styles:** 110 - 125 - 191 Locking styles: 203 - 208

No. of contacts	17	29	41	53	65	72	84	96	120
A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	167.64
B	20.32	35.56	50.80	66.04	81.28	43.18	50.80	58.42	73.66
D	17.78	33.02	48.26	63.50	78.74	-	-	-	-

Technical Characteristics

Contact diameter	HYPERTAC® type Ø 0.60 mm rear removable
Number of contact	53
Pitch	2.54mm between rows - 1.27mm between quicuncial contacts
Rows	2

Materials & Platings

Contact	Brass or bronze
Moulding	Glass fiber filled diallyl - Phtalate
Guides	Stainless steel or nickel plated brass
Pin body	0.25 µm Gold / 1.27 µm Ni
Socket body	0.25 µm Gold / 1.27 µm Ni on activ area; 1.27 µm Ni on non activ area
Socket wires	1 µm Gold / 0.20 µm Ni

Electrical

Current rating (at 25°C)	3 A max
Dielectric withstanding voltage	1200 Vrms
Contact resistance	≤ 8 mΩ
Insulation resistance	> 10 ⁴ MΩ (500 Vcc)

Mechanical

Mating & unmating cycle	5000
Guiding	By two outside guides (2 guiding styles) and one central guide (3 guiding styles)
Keying	By rotating of outside polarised guides (up to 36 keying)

Environmental

Temperature range	-55° C + 125° C
Conformity	NF C-UTE C 93-424

How To Order



K X B 0 5 3

1



2



3



4

1 Thermoplastic material	X															
2 Moulding polarity	<table><tr><td>NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE</td><td>NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE</td><td>NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE</td></tr><tr><td>12 14 54 Female plug</td><td>1A 1C 5A Tinned female plug**</td><td>26 28 46 Tinned female receptacle*</td></tr><tr><td>13 15 55 Male plug</td><td>1B 1D 5B Tinned male plug**</td><td>27 29 47 Tinned male receptacle*</td></tr><tr><td>16 18 56 Tinned female plug*</td><td>22 24 44 Female receptacle</td><td>2A 2C - Tinned female receptacle**</td></tr><tr><td>17 19 57 Tinned male plug*</td><td>23 25 45 Male receptacle</td><td>2B 2D - Tinned male receptacle**</td></tr></table>	NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE	NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE	NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE	12 14 54 Female plug	1A 1C 5A Tinned female plug**	26 28 46 Tinned female receptacle*	13 15 55 Male plug	1B 1D 5B Tinned male plug**	27 29 47 Tinned male receptacle*	16 18 56 Tinned female plug*	22 24 44 Female receptacle	2A 2C - Tinned female receptacle**	17 19 57 Tinned male plug*	23 25 45 Male receptacle	2B 2D - Tinned male receptacle**
NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE	NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE	NF C-UTE C 93-424 MIL-C-55302 SPACE GRADE														
12 14 54 Female plug	1A 1C 5A Tinned female plug**	26 28 46 Tinned female receptacle*														
13 15 55 Male plug	1B 1D 5B Tinned male plug**	27 29 47 Tinned male receptacle*														
16 18 56 Tinned female plug*	22 24 44 Female receptacle	2A 2C - Tinned female receptacle**														
17 19 57 Tinned male plug*	23 25 45 Male receptacle	2B 2D - Tinned male receptacle**														
3 Termination styles	<table><tr><td>1 0 Through board solder - 90° - length 3 mm</td><td>1 3 Through board solder - 90° - length 2.3 mm, plug only</td></tr><tr><td>1 1 Through board solder - 90° - length 4 mm</td><td>1 4 Through board solder - 90° - length 8 mm, receptacle only</td></tr><tr><td>1 2 Through board solder - 90° - length 5.1 mm, plug only</td><td></td></tr></table>	1 0 Through board solder - 90° - length 3 mm	1 3 Through board solder - 90° - length 2.3 mm, plug only	1 1 Through board solder - 90° - length 4 mm	1 4 Through board solder - 90° - length 8 mm, receptacle only	1 2 Through board solder - 90° - length 5.1 mm, plug only										
1 0 Through board solder - 90° - length 3 mm	1 3 Through board solder - 90° - length 2.3 mm, plug only															
1 1 Through board solder - 90° - length 4 mm	1 4 Through board solder - 90° - length 8 mm, receptacle only															
1 2 Through board solder - 90° - length 5.1 mm, plug only																
4 Mounting hardware	Guide Style*** <table><tr><td>1 1 0 Male polarised, transverse mount, standard plug</td><td>1 3 1 Male unpolarised, transverse mount</td></tr><tr><td>1 2 1 Female polarised, vertical mount</td><td>1 4 5 Male polarised, transverse mount on receptacle only</td></tr><tr><td>1 2 4 Female polarised, transverse mount</td><td>1 9 1 Male power or mass contact, vertical mount</td></tr><tr><td>1 2 5 Male unpolarised, transverse mount</td><td></td></tr></table> Locking Styles*** <table><tr><td>FEMALE RECEPTACLE</td><td></td><td>MALE PLUG</td></tr><tr><td>2 0 4 1/4 turn, transverse mount</td><td>2 1 8 Jackscrew, transverse mount</td><td>2 0 3 1/4 turn, transverse mount</td></tr></table>	1 1 0 Male polarised, transverse mount, standard plug	1 3 1 Male unpolarised, transverse mount	1 2 1 Female polarised, vertical mount	1 4 5 Male polarised, transverse mount on receptacle only	1 2 4 Female polarised, transverse mount	1 9 1 Male power or mass contact, vertical mount	1 2 5 Male unpolarised, transverse mount		FEMALE RECEPTACLE		MALE PLUG	2 0 4 1/4 turn, transverse mount	2 1 8 Jackscrew, transverse mount	2 0 3 1/4 turn, transverse mount	
1 1 0 Male polarised, transverse mount, standard plug	1 3 1 Male unpolarised, transverse mount															
1 2 1 Female polarised, vertical mount	1 4 5 Male polarised, transverse mount on receptacle only															
1 2 4 Female polarised, transverse mount	1 9 1 Male power or mass contact, vertical mount															
1 2 5 Male unpolarised, transverse mount																
FEMALE RECEPTACLE		MALE PLUG														
2 0 4 1/4 turn, transverse mount	2 1 8 Jackscrew, transverse mount	2 0 3 1/4 turn, transverse mount														

* No RoHS compliant = 16 et 17

** RoHS Compliant = 1A et 1B

Technical Characteristics

Contact diameter	HYPERTAC® type Ø 0.60 mm rear removable
Number of contact	Up to 160
Pitch	2.54mm between rows - 1.27mm between quicuncial contacts
Rows	3

Materials & Platings

Contact	Brass or bronze	
Moulding	Glass fiber filled diallyl - Phtalate	
Guides	Stainless steel or nickel plated brass	
	Standard	ESA
Pin body	0.25 µm Gold / 1.27 µm Ni	1.27 µm Gold / 1.27 µm Ni (min)
Socket body	0.25 µm Gold / 1.27 µm Ni on activ area 1.27 µm Ni on non activ area	0.25 µm Gold / 1.27 µm Ni (min)
Socket wires	1 µm Gold / 0.20 µm Ni	1.27 µm Gold / 0.20 µm Ni (min)

Electrical

Current rating (at 25°C)	Standard: 3 A max - ESA: 5 A max
Dielectric withstanding voltage	1200 Vrms
Contact resistance	≤ 8 mΩ
Insulation resistance	> 10 ⁴ MΩ (500 Vcc)

Mechanical

Mating & unmating cycle	5000
Guiding	By two outside guides (2 guiding styles) and one central guide (3 guiding styles)
Keying	By rotating of outside polarised guides (up to 36 keying)

Environmental

Temperature range	-55° C + 125° C
Conformity	MIL C 55302, ESA/ESCC3401/016 - 3401/017, NF C-UTE C 93-424

How To Order



1 Series										
2 Pitch or type	N 1.27 mm pitch, rear removable contacts									
3 Model	C 3 rows centered fixing					D 3 rows uncentered fixing				
4 Number of contacts	KNC 062 080 098 160 KND 026 044 062 080 098 108 126 144									
5 Moulding polarity	NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE 12 14 54 54 Female plug 13 15 55 55 Male plug 16 18 - 56 Tinned female plug* 17 19 - 57 Tinned male plug* NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE 1A 1C - 5A Tinned female plug** 1B 1D - 5B Tinned male plug** 22 24 44 44 Female receptacle 23 25 45 45 Male receptacle NF C-UTE C 93-424 MIL-C-55302 ESA/ESCC 3401/01601B SPACE GRADE 26 28 - 46 Tinned female receptacle* 27 29 - 47 Tinned male receptacle* 2A 2C - - Tinned female receptacle** 2B 2D - - Tinned male receptacle**									
6 Termination styles	10 Through board solder - 90°- length 3 mm 11 Through board solder - 90°- length 4 mm 20 Crimp 21 Double crimp 30 Through board solder - straight 40 Solder bucket 51 Wire wrap (3 wrapping levels) 91 Female - male									
7 Mounting hardware	Guide Style (consult us for special guides) 110 Male polarised, transverse mount, standard plug 111 Male polarised, vertical mount 113 Male polarised, float mount 121 Female polarised, vertical mount 123 Female polarised, float mount 124 Female polarised, transverse mount 145 Male polarised, transverse mount on receptacle only 190 Female power or mass contact, vertical mount 125 Male unpolarised, transverse mount 126 Female unpolarised, vertical mount 127 Male unpolarised, vertical mount 130 Female unpolarised, vertical mount 131 Male unpolarised, transverse mount 132 Female unpolarised, transverse mount 133 Female all polarised, transverse mount 191 Male power or mass contact, vertical mount									
Locking Styles										
MALE PLUG					FEMALE RECEPTACLE					
201 1/4 turn, free connector					202 1/4 turn, vertical mount					
203 1/4 turn, transverse mount					204 1/4 turn, transverse mount					
207 Jackscrew, free connector					208 Jackscrew, transverse mount					
211 Jackscrew, free connector					210 Jackscrew, free connector					
290 Jackscrew, vertical mount					212 Jackscrew, transverse mount					
					215 Jackscrew, vertical mount					
					219 Jackscrew, vertical mount					
					232 Jackscrew, with operation button					

* For 90° & straight terminations (*splicing on PCB*)

** RoHS compliant for 90° & straight terminations (*splicing on PCB*)

Hypertac & ESA Correspondance Table

HYPERTAC **KNC**
34 01 016 01 B
1**2****3****4****5****6**
1 ESCC component number
2 Mounting
HYPERTAC**ESA**

Plug KNB 017	01	Plug KNB 096	08	Receptacle KNB 053	16	Plug KNB 072	56	Plug KNC 098	62
Plug KNB 029	02	Plug KNB 120	10	Receptacle KNB 065	17	Receptacle KNB 072	57	Receptacle KNC 098	63
Plug KNB 041	03	Plug KNC 160	12	Receptacle KNB 084	19	Plug KNC 062	58		
Plug KNB 053	04	Receptacle KNB 017	13	Receptacle KNB 096	20	Receptacle KNC 062	59		
Plug KNB 065	05	Receptacle KNB 029	14	Receptacle KNB 120	22	Plug KNC 080	60		
Plug KNB 084	07	Receptacle KNB 041	15	Receptacle KNC 160	24	Receptacle KNC 080	61		

REMINDER SPATIAL P.P.P. (Party Polarity Protection)

Female receptacle	44	Plug female	54
Male receptacle	45	Plug male	55

EXAMPLE

 KNC 062 **44** 30 113
 P.P.P.

3 Termination style
HYPERTAC**ESA**

Bent male 10	MC	Solder bucket male 40	MS	Crimp female 20	FR	Female-male 91	FM
Bent long male 11	ML	Mini-wrapping male 51	MY	Straight female 30	FD		
Crimp male 20	MR	Bent female 10	FC	Solder bucket female 40	FS		
Straight male 30	MD	Bent long female 11	FL	Mini-wrapping female 51	FY		

**4 Locking type
On left side**
HYPERTAC**ESA**

Guideless connector	00	KNB 145	40	KNC 10 209	49	KNB 11 125	71	KNB 11 208	79
KNB 131	31	KNB 124	41	KN 210	50	KNB 11 110	72	KN 219	80
KNB 132	32	KNC 10 230	43	KN 211	51	KNB 10 230	73	KN 290*	81
KNB 10 110	33	KN 232	45	KNB 212	52	KNC 124	74		
KNC 10 110	34	KN 231	46	KN 215	53	KNC 132	75		
KN 111	35	KN 207	47	KN 123	54	KNC 11 110	76		
KN 121	36	KNB 10 208	48	KN 113	55	KNC 11 125	77		

**5 Locking type
In center**
0 0 For 2 guide connectors

- - For 3 guide connectors (see table 4, Locking type - On left side)
HYPERTAC**ESA**

KNB 10 125	26	KNC 10 125	27	KN 127	28	KN 126	29
------------	-----------	------------	-----------	--------	-----------	--------	-----------

**6 Locking type
On right side**

(see table 4, Locking type - On left side)

Contact Terminations

Plug

Male

Female

Receptacle

Female

Male

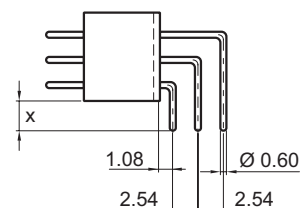
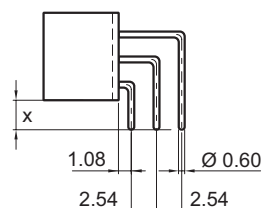
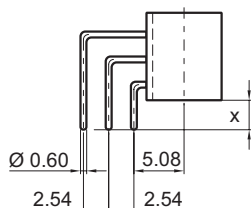
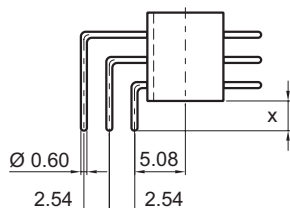
90° Through board solder

Ref: **10** (X=3)

Ref: **MC & FC**

- Ref: **11** (X=4)

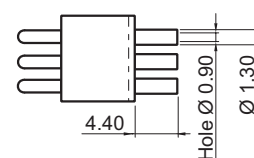
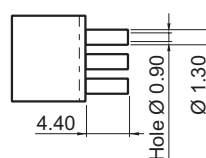
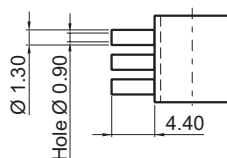
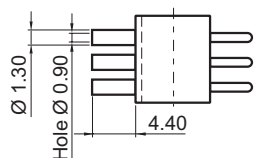
Ref: **ML & FL**



Crimp (AWG 28-22)

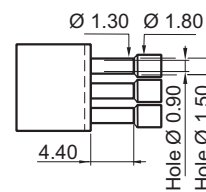
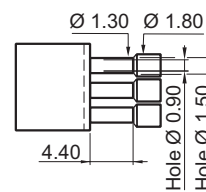
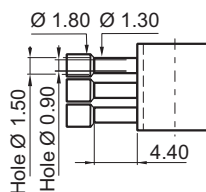
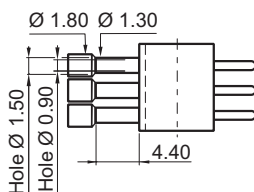
Ref: **20**

Ref: **MR & FR**



Crimp (AWG 28-22)

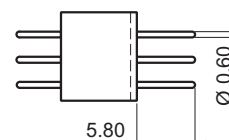
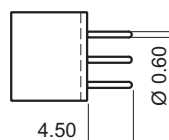
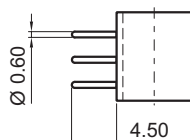
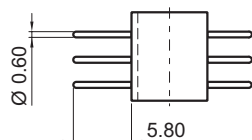
Ref: **21**



Straight through board solder

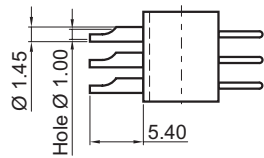
Ref: **30**

Ref: **MD & FD**

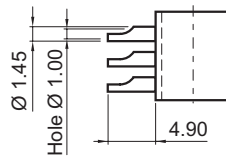


Plug

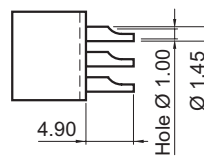
Male



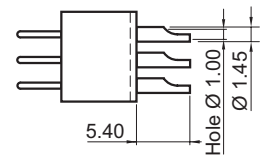
Female



Female



Male

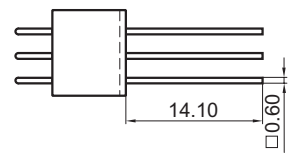
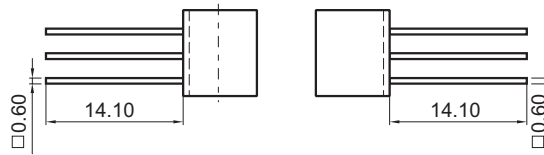
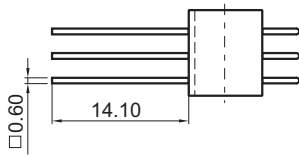


Solder bucket (AWG 22 max)

Ref: 40 Ref: MS & FS

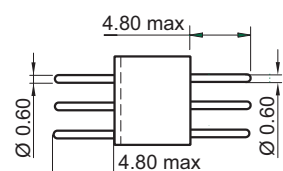
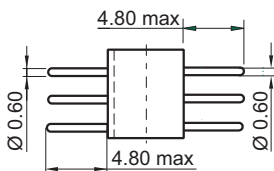
Wire wrap (3 wrapping levels)

Ref: 51 Ref: MY & FY



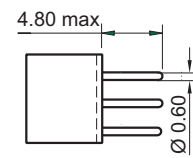
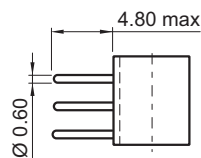
Saver (male-male)

Ref: 90



Saver (female-male)

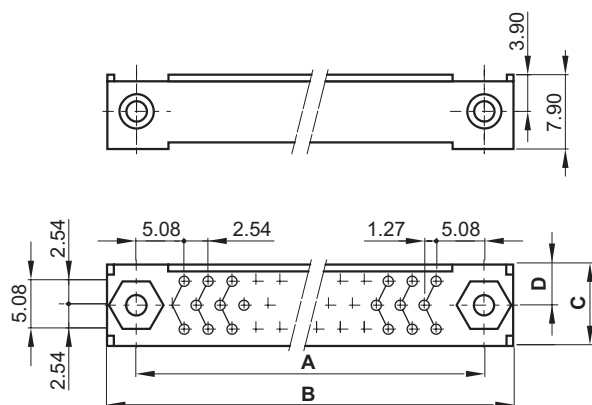
Ref: 91 Ref: FM



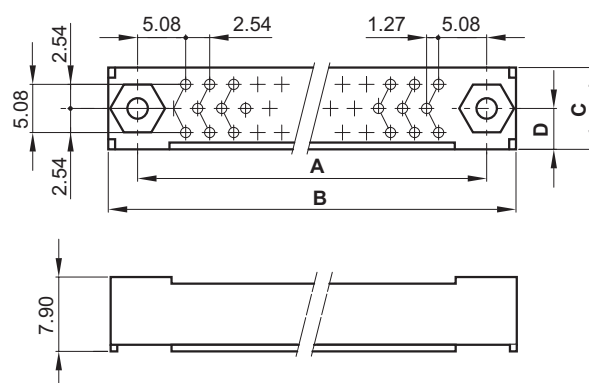
Dimensions

Plug

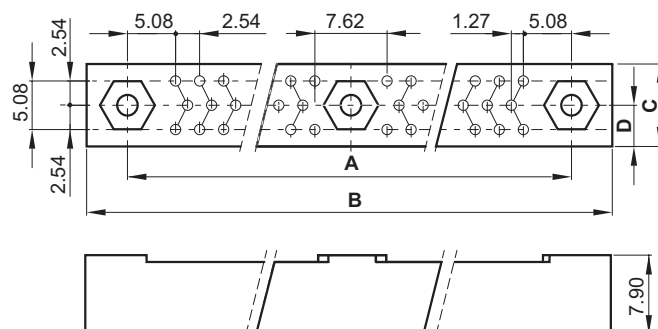
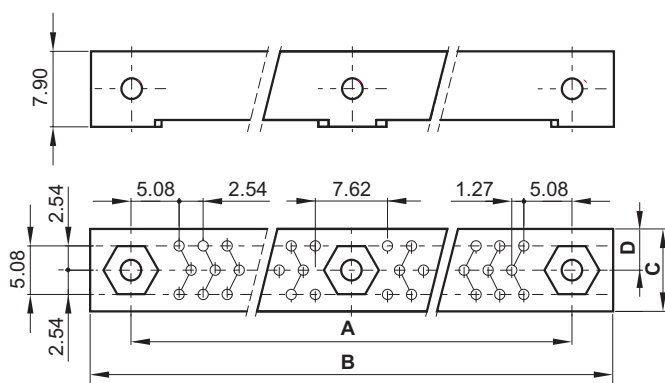
26 to 98 contacts



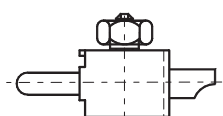
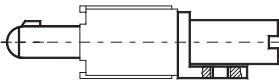
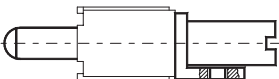
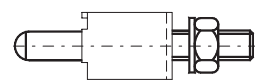
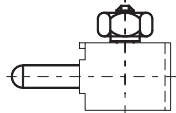
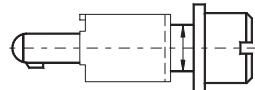
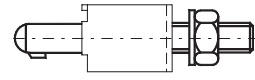
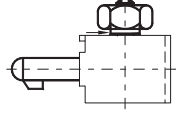
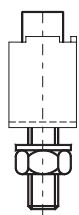
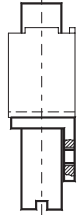
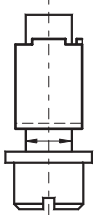
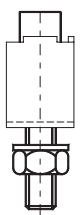
Receptacle



108 to 160 contacts



		No. of contacts	26	44	62	80	98	108	126	144	160
KNC	Plug & Receptacle	A	–	–	60.96	76.20	91.44	–	–	–	149.86
		B max	–	–	69.00	84.20	99.50	–	–	–	158.00
	Plug	C max	–	–	9.45	9.45	9.45	–	–	–	9.30
		D	–	–	4.42	4.42	4.42	–	–	–	4.70
	Receptacle	C max	–	–	9.30	9.30	9.30	–	–	–	9.30
		D	–	–	4.70	4.70	4.70	–	–	–	4.70
KND	Plug & Receptacle	A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	–
		B max	38.50	53.70	69.00	84.20	99.50	114.70	129.90	145.20	–
	Plug	C min	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	–
		C max	9.55	9.55	9.55	9.55	9.55	9.55	9.55	9.55	–
		D	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	–
	Receptacle	C max	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	–
		D	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	–

MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	MR 23	FR 22	FP 12	MP 13	Polarity				
																	Receptacle		Moulding	
																	Plug			
																	90°	10	11	Contact
																	Straight	30	31	
																	Solder bucket		40	
																	Crimp	20	21	
																	Wire wrap		51	
																		191	Guiding devices	
																	145			
																	131			
																	127			
																	125			
																	113			
																	111			
																	110			
																Male guides		Female guides		
126				124				123				121								
Guiding devices																				

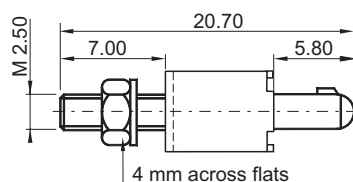
Guide Styles

Plug & Receptacle

Male

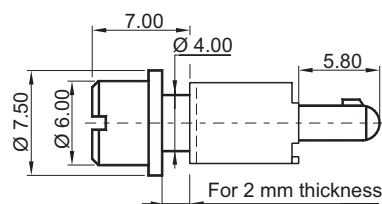
Polarised vertical mount

Ref: **111** Ref : **35**



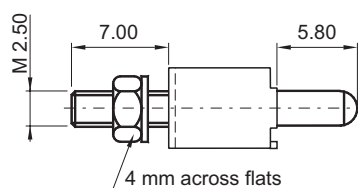
Polarised vertical float mount

Ref: **113** Ref : **55**



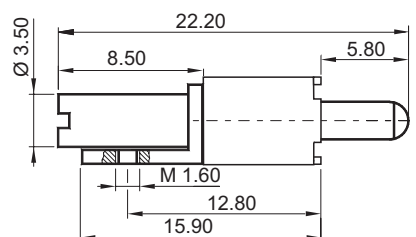
Unpolarised vertical mount

Ref: **127** Ref : **28**



Unpolarised transverse mount

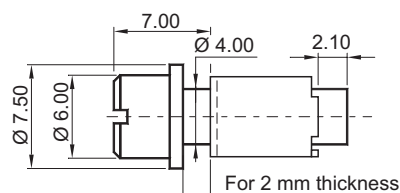
Ref: **131**



Female

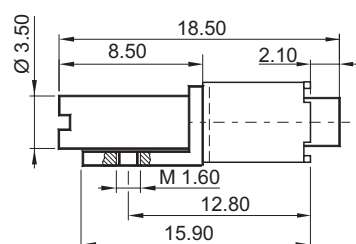
Polarised vertical float mount

Ref: **123** Ref : **54**



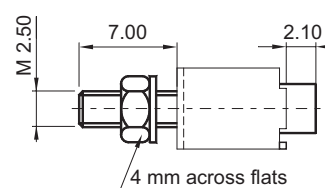
Polarised transverse mount

Ref: **124** Ref : **74**



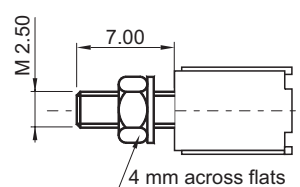
Unpolarised vertical mount

Ref: **126** Ref : **29**



All polarised vertical mount

Ref: **130**

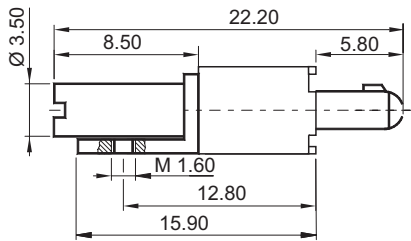


Plug & Receptacle

Male

Polarised transverse mount

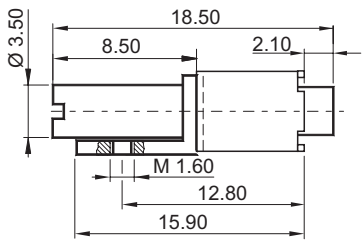
Ref: 145



Female

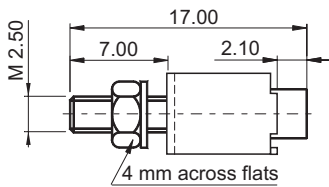
Unpolarised transverse mount

Ref: 132 Ref : 75



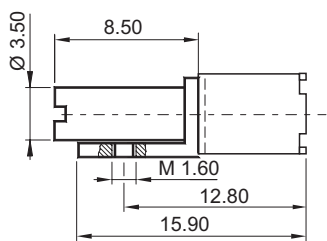
Polarised vertical mount

Ref: 121 Ref : 36



All polarised transverse mount

Ref: 133

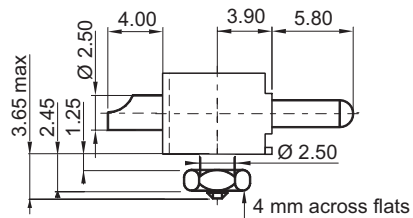


Plug & Receptacle

Male

Power or mass vertical mount

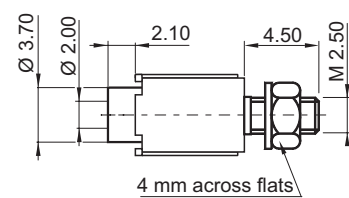
Ref: **191** PCB thickness **1.60**



Female

Power or mass vertical mount

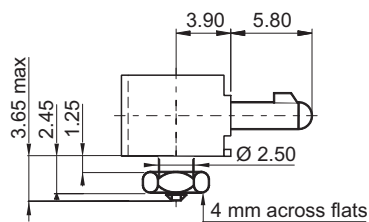
Ref: **190**



Male plug only

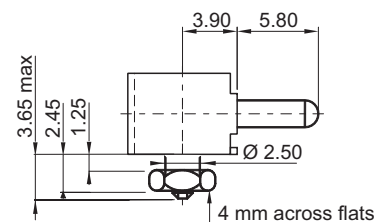
Polarised transverse mount

Ref: **10 110** Ref: **34** PCB thickness **1.60**

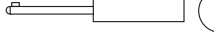


Unpolarised transverse mount

Ref: **10 125** Ref: **27** PCB thickness **1.60**



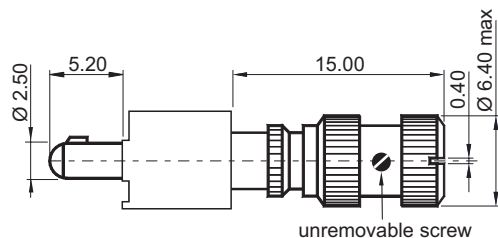
Locking Devices Compatibility Chart

			R	P	R	P	R	P	R	P	R	P	R	P		
Compatible															Receptacle	Moulding
															Plug	
P																290
R																
P																231
R																
P																211
R																
P																207
R																
P																205
R																
P																203
R																
P																201
R																
															Male locking devices	
															Female locking devices	

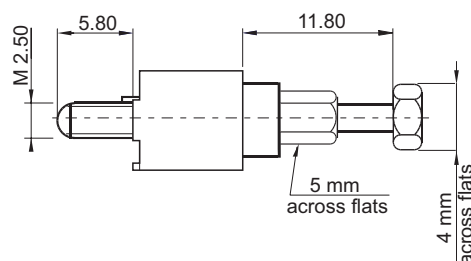
Male Locking Styles

Plug & Receptacle

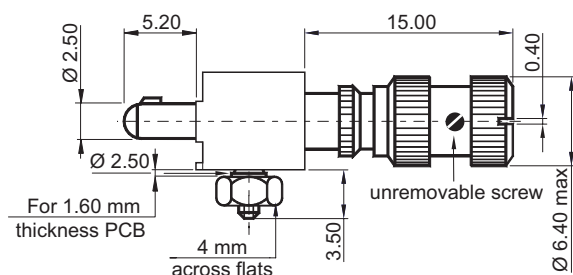
Jack 1/4 turn lock, free connector

Ref: **201**

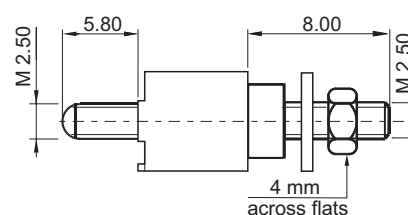
Jackscrew, free connector

Ref: **211** Ref: **51**

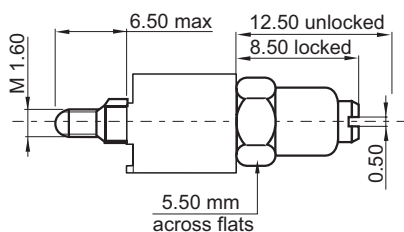
Jack 1/4 turn lock, transverse mount

Ref: **206**

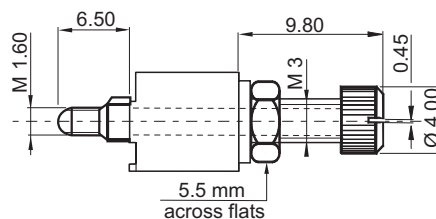
Jackscrew, vertical mount

Ref: **231** Ref: **46**

Jackscrew, free connector

Ref: **207** Ref: **47**

Jackscrew, vertical mount

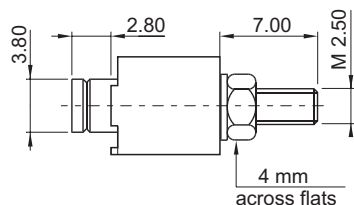
Ref: **290** Ref: **81**

Female Locking Styles

Plug & Receptacle

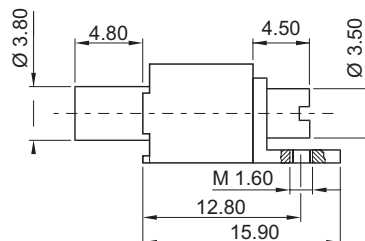
Jack 1/4 turn lock, vertical mount

Ref: **202**



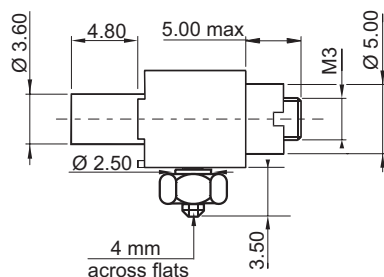
Jackscrew, transverse mount

Ref: **212**



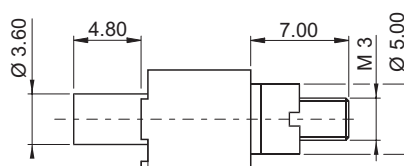
Jackscrew, transverse mount

Ref: **10 209** Ref: **49** PCB thickness 1.60



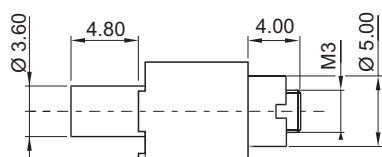
Jackscrew, vertical mount

Ref: **215** Ref: **53**



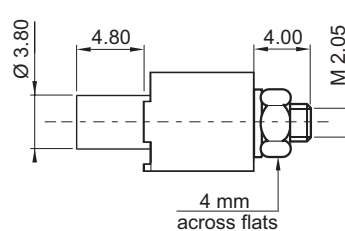
Jackscrew, free connector

Ref: **210** Ref: **50**



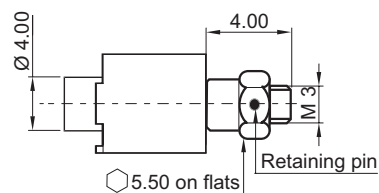
Jackscrew, vertical mount

Ref: **219** Ref: **80**



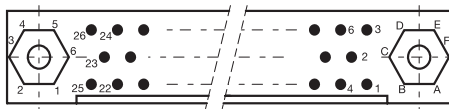
Rotating jackscrew

Ref: **232**

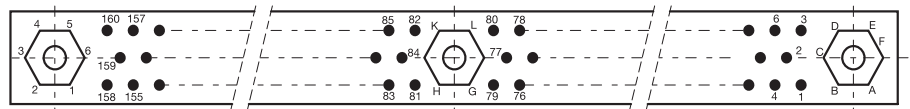


Receptacle Mating Side Layout View

26 to 98 contacts

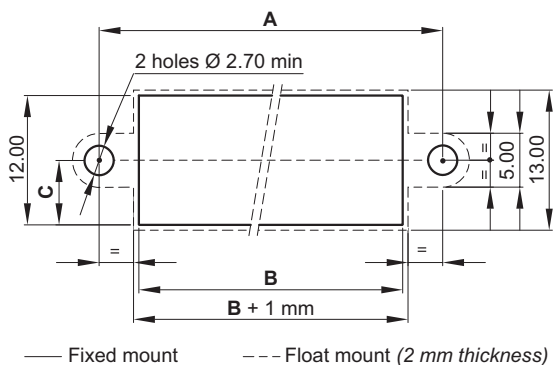


108 to 160 contacts

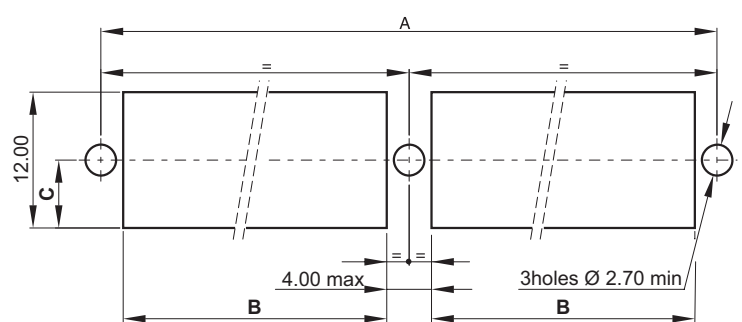


Panel Preparation Details

26 to 98 contacts



108 to 160 contacts



Panel: female or male, plug or receptacle

Terminations: 40 - 51

Guide styles: 111 - 121 (Fixed Mount)

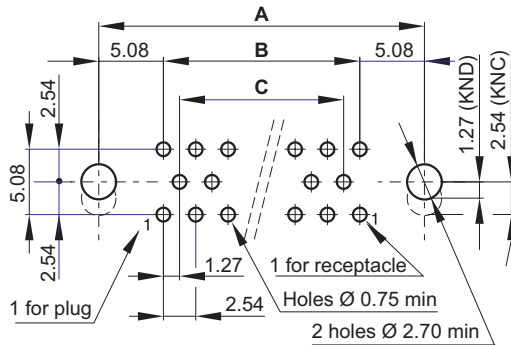
Guide styles: 113 - 123 - 202 (Float Mount)

No. of contacts	26	44	62	80	98	108	126	144	160
A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	149.86
B min	25.90	41.10	56.40	71.60	86.90	48.50	56.00	63.60	69.95
C (KNC)	-	-	6.00	6.00	6.00	-	-	-	6.00
C (KND)	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	-

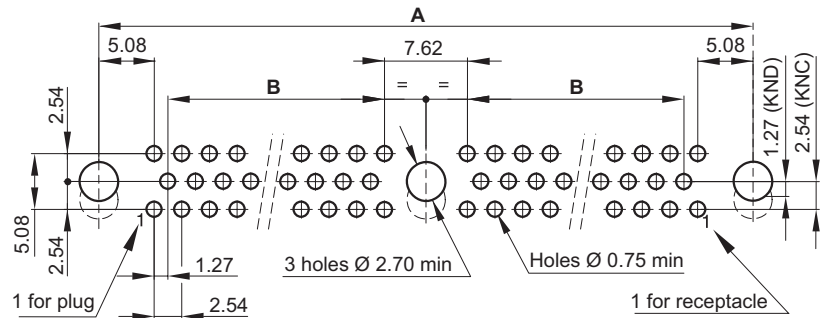
Board Preparation Details

Mother board

26 to 98 Contacts



108 to 160 Contacts

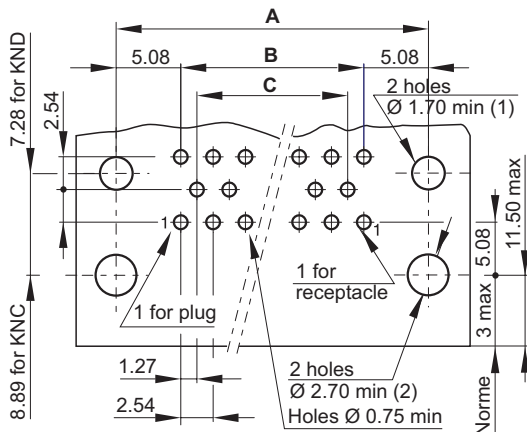


Mother Board: female or male, plug or receptacle, straight solder termination

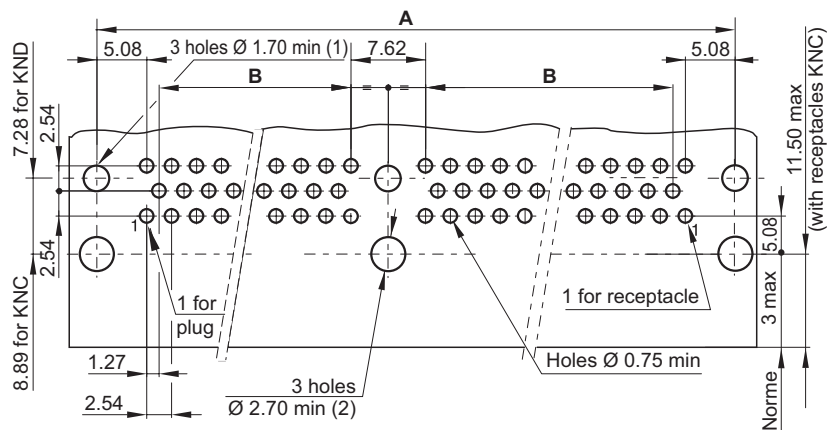
Guide styles: 111 - 121- 202

Daughter board

26 to 98 Contacts



108 to 160 Contacts



Daughter Board: female or male, plug or receptacle, 90° termination

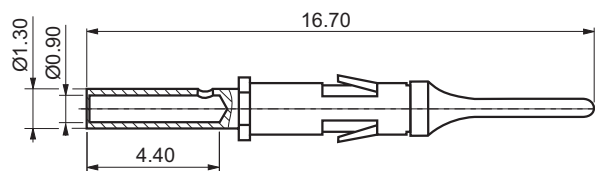
(1) **Guide styles:** 124 (2) **Guide styles:** 110 - 206

No. of contacts	26	44	62	80	98	108	126	144	160
A	30.48	45.72	60.96	76.20	91.44	106.68	121.92	137.16	149.86
B	20.32	35.56	50.80	66.04	81.28	43.18	50.80	58.42	64.77
C	17.78	33.02	48.26	63.50	78.74	-	-	-	-

Contacts

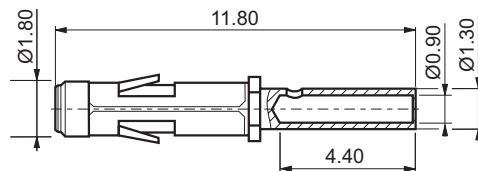
Male

Crimp terminations awg 22-28 (0.079 - 0.34 mm²)



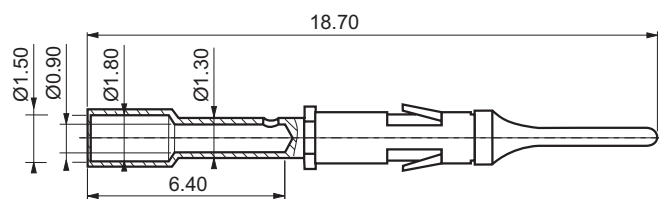
Reference	Part number
KN- ---13 20 ---	006 042 1- 20R OG
KN- ---55 20 --- MR	006 042 1- 20P OF 3401 017 004B

Female

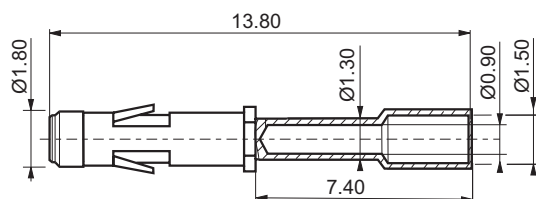


Reference	Part number
KN- ---22 20 ---	006 042 2- 20R G0
KN- ---44 20 --- FR	006 042 2- 20P J9 3401 017 015B

Crimp terminations awg 22-28 (0.079 - 0.34 mm²) & Sheath Ø1.45



Reference	Part number
KN- ---13 20 ---	006 063 1- 21R OG
KN- ---55 20 ---	006 063 1- 20R OF



Reference	Part number
KN- ---22 20 ---	006 063 2- 21R G0
KN- ---44 20 ---	006 063 2- 21R J3

Tools

Crimp tool & Positioner



Ref: S_102
(M22520/2.01)

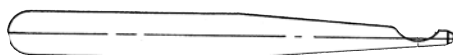


Contact part number	Crimp tool	AWG	Wire cross section	Positioner	Tool turret	Selector position
006 042 1- 20R OG 006 042 2- 20R GO	ASTRO TOOL M22520/2.01	28	0.079	SS-0060000001		3
		26	0.14			4
		24	0.20			4
		22	0.34			5
	DANIELS M22520/2.01	28	0.079	SS-0060000001		3
		26	0.14			4
		24	0.20			4
		22	0.34			5

006 063 1- 21R OG 006 063 2- 21R GO	2 operations	ASTRO TOOL M22520/2.01	28	0.079	SS-0060000001		3
			26	0.14			4
			24	0.20			4
			22	0.34			5
		DANIELS M22520/2.01	28	0.079	SS-0060000001		3
			26	0.14			4
			24	0.20			4
			22	0.34			5
	2 nd crimp (sheath)	ASTRO TOOL M22520/2.01	28	0.079	SS-0060000002		*
			26	0.14			6
			24	0.20			7
			22	0.34			7
		DANIELS M22520/2.01	28	0.079	SS-0060000002		*
			26	0.14			6
			24	0.20			7
			22	0.34			7

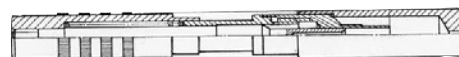
	1 operation	52007	28	0.079		SP717	2
			26	0.14			3
			24	0.20			4
			22	0.34			4

Insertion



SM-0060000001

Extraction



SD-0060000006

Alignment Combs

for 90° through board termination

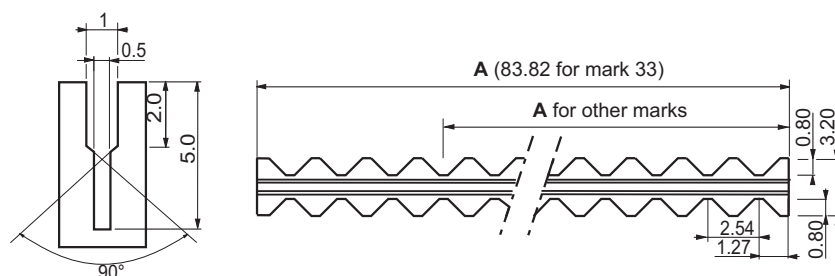
2 fixing points SP. 006 00 00 006
3 fixing points SP. 006 00 00 004

Screwdriver for m3 nut

208 locking devices S_075
215 locking devices

Accessories

Antistatic Pin Protector



Ordering information

K N B - - - _ 314

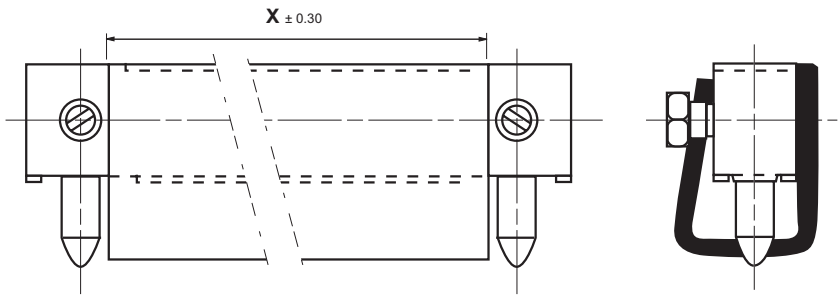
Ref

Use	A	Ref
KNB 017	24.13	009
KND 026		
KNB 029 KND 044	39.37	015
KNB 072 KND 108	46.99	018
KNB 041 & 084 KNC 062 KND 062 & 126	54.61	021

Use	A	Ref
KNB 096	62.23	024
KND 144		
KNB 053 KNC 080 & 160 KND 080	69.85	027
KNB 120	77.47	030
KNB 065 KNC 098 KND 098	83.82	033

Each part number contains only one header. To equip fully the connector, you have to order 2, 3, 4 or 6 identical headers.
Header can fit on contacts or be positioned between rows.

Pin Protector (extruded polypropylene)



Ordering information

K N - - - 308

B, C or D Number of positions

KNB	017	029	041	053	065	072	084	096	120
X ± 0.30	25.50	40.70	56	71.20	86.50	48.40	56	63.60	78.80
Qty	1	1	1	1	1	2	2	2	2

KNC	062	080	098	119	160
X ± 0.30	66	81.20	96.40	114.20	155.00
Qty	1	1	1	1	1

KND	026	044	108	126	144
X ± 0.30	35.50	50.70	111.70	127.00	142.20
Qty	1	1	1	1	1

Technical Characteristics

Contact diameter	HYPERTAC® type Ø 0.50 mm rear removable
Number of contact	Up to 162
Pitch	1.905mm between rows - 1.27mm between quicuncial contacts
Rows	3

Materials & Platings

Contact	Brass or bronze	
Moulding	Glass fiber filled diallyl - Phtalate	
Guides	Stainless steel or nickel plated brass	
	Standard	ESA
Pin body	0.25 µm Gold / 1.27 µm Ni	1.27 µm Gold / 1.27 µm Ni (min)
Socket body	0.25 µm Gold / 1.27 µm Ni on activ area 1.27 µm Ni on non activ area	0.25 µm Gold / 1.27 µm Ni (min)
Socket wires	1 µm Gold / 0.20 µm Ni	1.27 µm Gold / 0.20 µm Ni (min)

Electrical

Current rating (at 25°C)	3 A max
Dielectric withstanding voltage	800 Vrms
Contact resistance	≤ 8 mΩ
Insulation resistance	> 10 ⁴ MΩ (500 Vcc)

Mechanical

Mating & unmating cycle	5000
Guiding	By two outside guides (2 guiding styles) and one central guide (3 guiding styles)
Keying	By rotating of outside polarised guides (up to 16 keying)

Environmental

Temperature range	-55° C + 125° C
Conformity	ESA/ESCC3401/016 - 3401/017, NF C-UTE C 93-424

How To Order



Hypertac & ESA Correspondance Table

ESA 3401/039 01B

K M C

1

2

3

4

5

1 Series														
2 Number of contacts	0 2 6		0 4 4		0 6 2		0 8 0		0 9 8		1 4 4		1 6 2	
3 Moulding polarity	NF C-UTE C 93-424 Ⓒ ESA/ESCC 3401/01601B SPACE GRADE				NF C-UTE C 93-424 Ⓒ ESA/ESCC 3401/01601B SPACE GRADE				NF C-UTE C 93-424 Ⓒ ESA/ESCC 3401/01601B SPACE GRADE					
	12	-	54	Female plug	1A	-	-	Tinned female plug**	26	-	46	Tinned female receptacle*		
	13	55	55	Male plug	1B	-	-	Tinned male plug**	27	-	47	Tinned male receptacle*		
	16	-	56	Tinned female plug*	22	44	44	Female receptacle	2A	-	-	Tinned female receptacle**		
	17	-	57	Tinned male plug*	23	-	45	Male receptacle	2B	-	-	Tinned male receptacle**		
4 Termination styles	Ⓒ 10 90° lenght 3 mm ("A" moulding)				Ⓒ 30 Through board solder - straight - lenght 4.5 mm				Ⓒ 51 Wire wrap (3 wrapping levels)					
	10 90° lenght 3 mm ("B" moulding)				Ⓒ 31 Through board solder - straight - lenght 5.6 mm				90 Male - Female					
	11 90° lenght 4 mm ("A" moulding)				Ⓒ 40 Solder bucket				Ⓒ 91 Female - male					
	13 90° lenght 5.5 mm ("B" moulding)				50 Wire wrap (2 wrapping levels)									
5 Mounting hardware	Guide Styles (consult us for special guides)													
	Ⓒ 110 Male polarised, transverse mount ⁽¹⁾				127 Male unpolarised, vertical mount ⁽²⁾				156 Male unpolarised, transverse mount ⁽²⁾					
	111 Male polarised, vertical mount ⁽²⁾				128 Male unpolarised, float mount ⁽²⁾				173 Female unpolarised, transverse mount ⁽¹⁾					
	112 Male polarised, vertical mount ⁽²⁾				130 Female unpolarised, vertical mount ⁽²⁾				174 Female polarised, transverse mount ⁽¹⁾					
	113 Male polarised, float mount ⁽²⁾				133 Female unpolarised, transverse mount ⁽²⁾				190 Female power or mass contact, vertical mount ⁽²⁾					
	Ⓒ 121 Female polarised, vertical mount ⁽²⁾				Ⓒ 143 Female polarised, vertical mount ⁽²⁾				191 Male power or mass contact, transverse mount ⁽¹⁾					
	123 Female polarised, float mount ⁽²⁾				153 Female unpolarised, transverse mount ⁽²⁾				Ⓒ 703 Female - male unpolarised guide ⁽¹⁾					
	124 Female polarised, transverse mount ⁽²⁾				154 Female polarised, transverse mount ⁽²⁾									
	125 Male unpolarised, transverse mount ⁽¹⁾				155 Male unpolarised, transverse mount ⁽²⁾									
	Locking Styles													
	FEMALE						MALE							
	Ⓒ 202 Jackscrew, vertical mount ⁽²⁾						Ⓒ 201 Jackscrew, free connector ⁽²⁾							
	203 Jackscrew, transverse mount						205 Jackscrew, transverse mount ⁽¹⁾							
	Ⓒ 204 Jackscrew, transverse mount ⁽²⁾						Ⓒ 206 Jackscrew, free connector ⁽²⁾							
	207 Jackscrew, vertical mount ⁽²⁾													

(1) Moulding A - (2) Moulding B

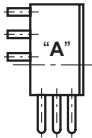
* For 90° & straight terminations (splicing on PCB)

** RoHS compliant for 90° & straight terminations (splicing on PCB)

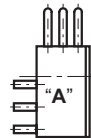
Moulding Styles

Plug

One Part (moulding A)



- Fitted with male contacts**
- 90° through board solder

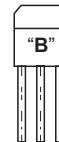


- Fitted with male contacts**
- 90° through board solder
(same design as the "A" plug type but printed as receptacle)

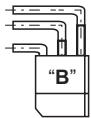
Two Parts (moulding B)



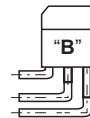
- Fitted with male contacts (pins)**
- Straight through board solder
 - Wire wrap type
(2 and 3 wrapping levels)
 - Solder bucket



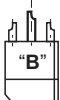
- Fitted with female contacts**
- Straight through board solder
 - Wire wrap type
(2 and 3 wrapping levels)
 - Solder bucket
(same design as the "B" plug type but printed as receptacle)



- Fitted with female contacts (sockets)**
- 90° through board solder
Note: the spacing of the rows for board preparation is different to the spacing of the plug fitted with the 90° termination
 - Straight through board solder
 - Wire wrap type
(2 and 3 wrapping levels)
 - Solder bucket



- Fitted with female contacts (sockets)**
- 90° through board solder
Note: the spacing of the rows for board preparation is different to the spacing of the plug fitted with the 90° termination



- Fitted with male contacts (pins)**
- Straight through board solder
 - Wire wrap type
(2 and 3 wrapping levels)
 - Solder bucket
(same design as the "B" plug type but printed as receptacle)

Contact Terminations

Plug

Male

Female

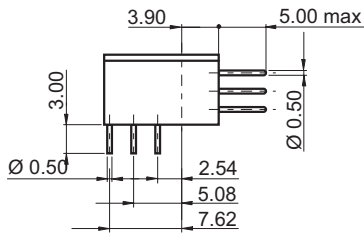
Receptacle

Female

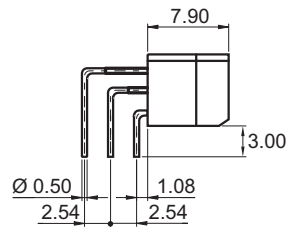
Male

90° Through board solder

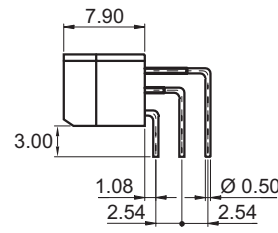
Ref: **10** Ref : **10** (only A Moulding)



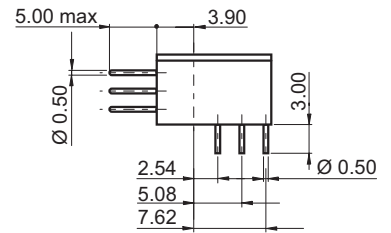
Moulding "A"



Moulding "B"



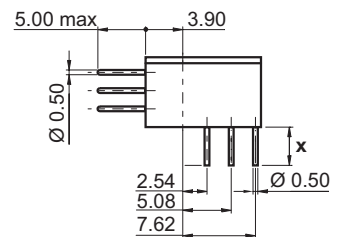
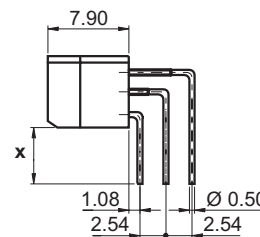
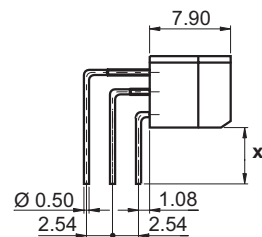
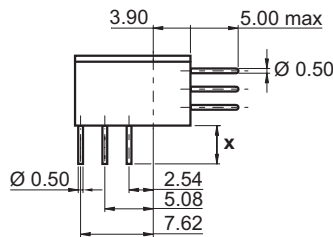
Moulding "B"



Moulding "A"

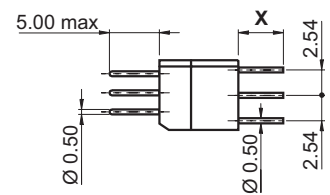
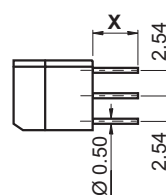
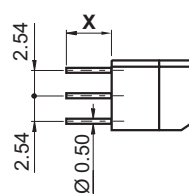
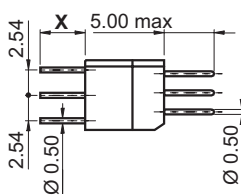
90° through board solder

Moulding A Ref: **11** (X=4.00) Moulding B Ref: **13** (X=5.50)



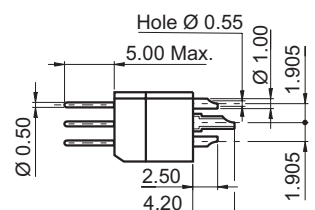
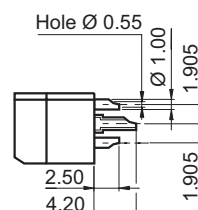
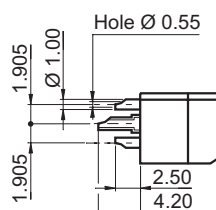
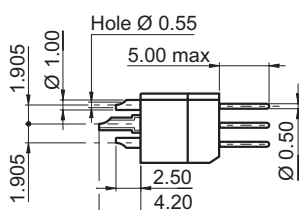
Straight through board solder

Ref: **30** (X=4.50) Ref : **30** Ref: **31** (X=5.60) Ref : **31**



Solder bucket (AWG 26 max)

Ref: **40** Ref : **40**



Note: moulding A and B need different preparation board details for 90° tail termination.

Plug

Male

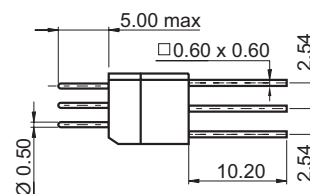
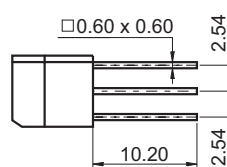
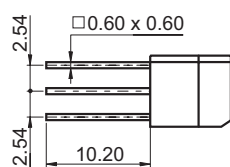
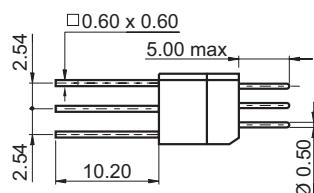
Female

Receptacle

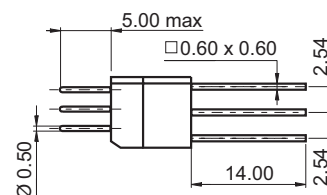
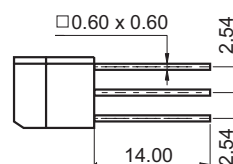
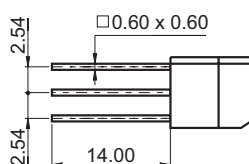
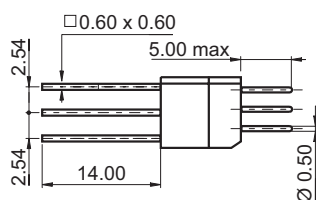
Female

Male

Wire wrap (2 wrapping levels)

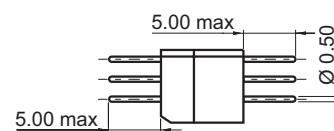
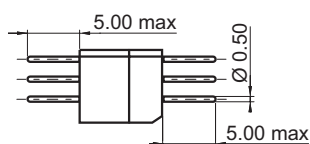
Ref: 50 Ref: : 50

Wire wrap (3 wrapping levels)

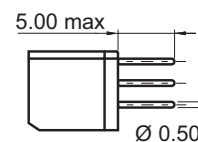
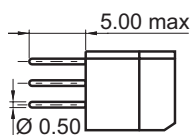
Ref: 51 Ref: : 51

Saver (Male-Male)

Ref: 90



Saver (Female-Male)

Ref: 91 Ref: : 91

Note: moulding A and B need different preparation board details for 90° tail termination.

Dimensions

26 to 98 Contacts

144 to 162 Contacts

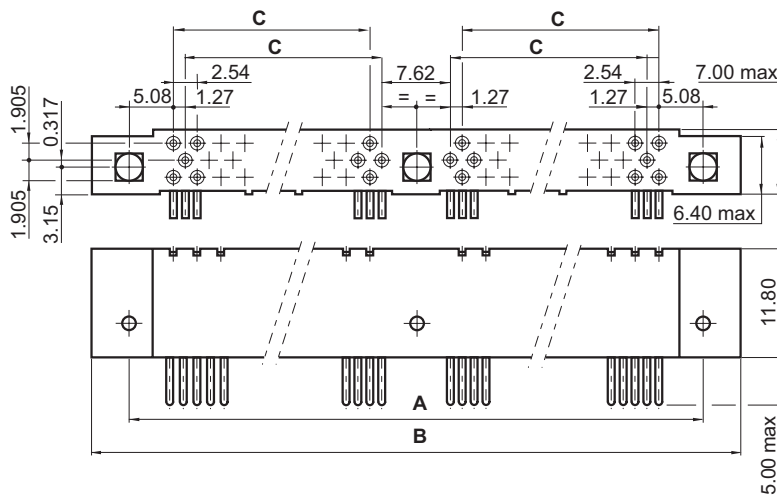
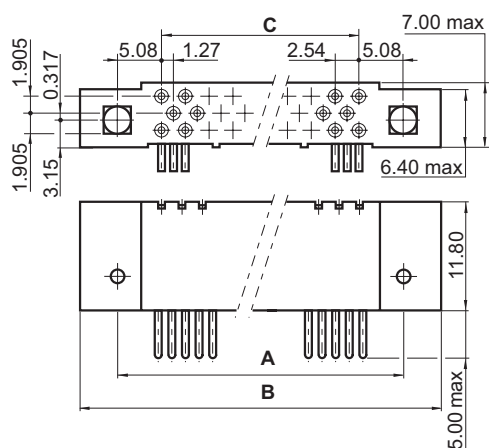
One Part (moulding A)

90° male plug

KMC ... 13 10 ...

90° male receptacle

KMC ... 23 10 ...



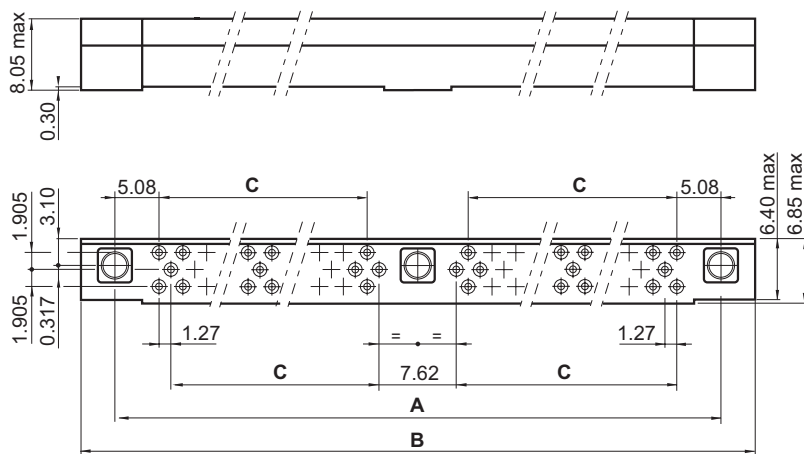
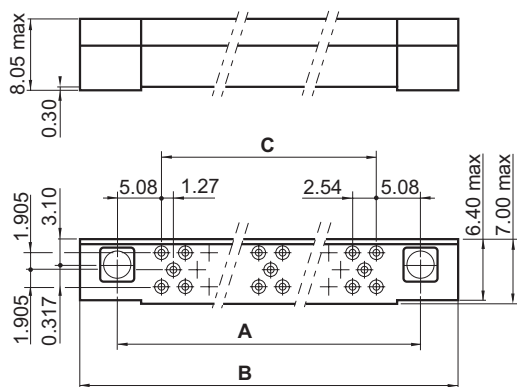
Two parts (moulding B)

Female or male receptacle

KMC ... 2. ...

Female or male plug

KMC ... 1. ...



No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B max	38.50	53.70	69.00	84.20	99.50	145.20	160.40
C	20.32	35.56	50.80	66.04	81.28	58.42	66.04

Guide Device and Polarity Termination Compatibility Chart

Legend:

- Compatible
- Compatible special saver connector

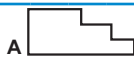
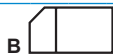
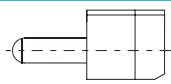
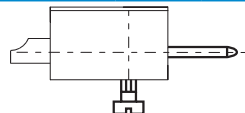
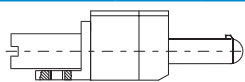
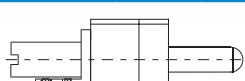
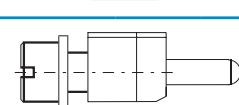
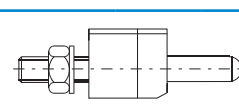
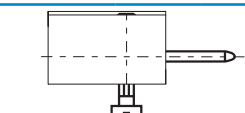
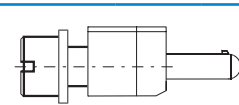
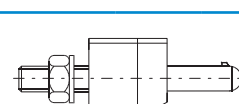
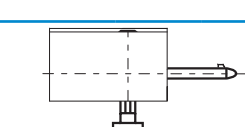
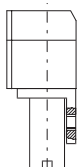
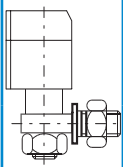
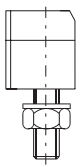
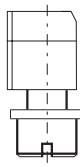
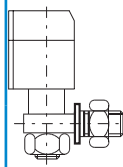
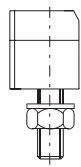
FP = Female Plug

MP = Male Plug

FR = Female Receptacle

MR = Male Receptacle

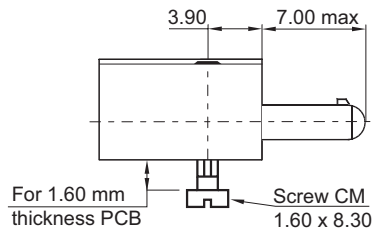
[illegible]

FR 22	FP 12	FR 22	FP 12	MR 23	FR 12	MP 13	MR 23	FR 22	FP 12	MP 13	FR 22	FP 12	MR 23	FR 22	FP 12	MP 13	Polarity							
																		All pinning			Moulding			
																	All pinning							
																		90°	13F	11M	10	Male or female	Contact	
																		Straight		31	30			
																		Solder bucket			40			
																		Wire wrap			51			50
																		Female/male	Male/male		91			90
																						Guide devices		
																			703					
																			191					
																			156					
																			155					
																			128					
																			127					
																			125					
																			113					
																			112 111					
																			110					
																		Male guides						
																		Female guides						
																			153			133		
																			130			123		
																			124			143/121		
Guide devices																								

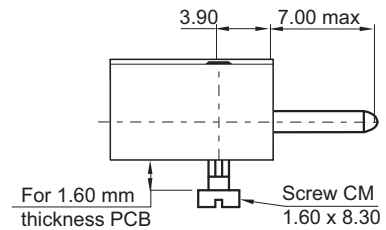
Male Guide Styles

Polarised transverse mount (moulding A)

Ref: **110** Ref: : **110**

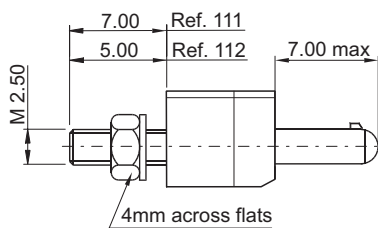


Unpolarised transverse mount (moulding A) central guide (KMC 144-162)

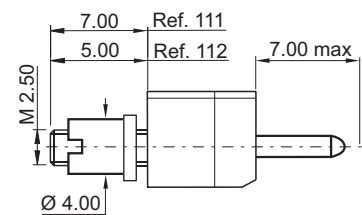


Polarised vertical mount (moulding B)

Ref: **111** Ref: **112**

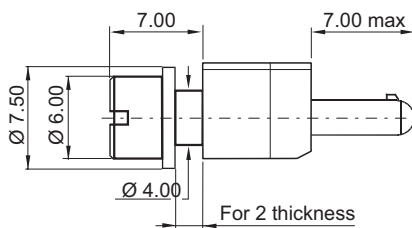


Unpolarised vertical mount (moulding B) central guide (KMC 144-162)

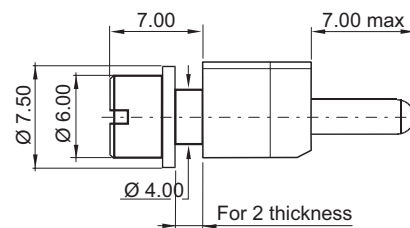


Polarised vertical float mount (moulding B)

ref: **113**

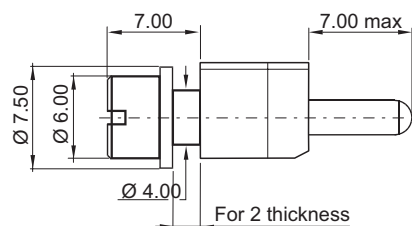


Unpolarised vertical float mount (moulding B) central guide (KMC 144-162)



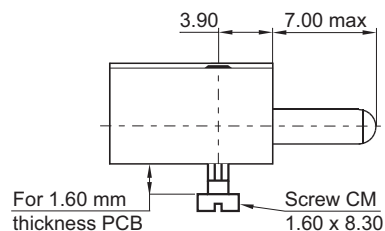
Polarised vertical float mount (moulding B)

Ref: **128**



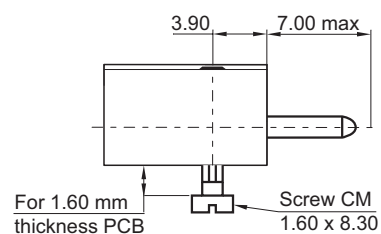
Unpolarised transverse mount (moulding A)

Ref: **125**



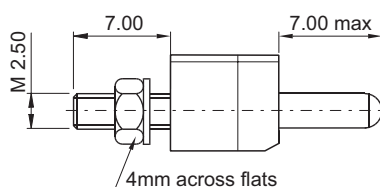
Unpolarised transverse mount (moulding A) central guide (KMC 144-162)

Ref: **125**



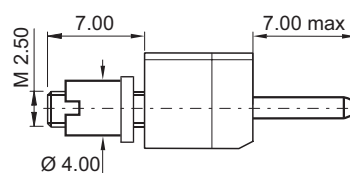
Unpolarised vertical mount (moulding B)

Ref: **127**



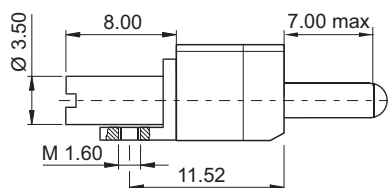
Unpolarised vertical mount (moulding B) central guide (KMC 144-162)

Ref: **127**



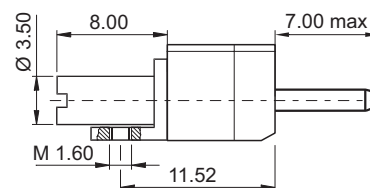
Unpolarised transverse mount (moulding B)

Ref: **155**



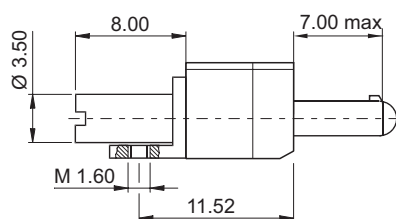
Unpolarised transverse mount (moulding B) central guide (KMC 144-162)

Ref: **155**



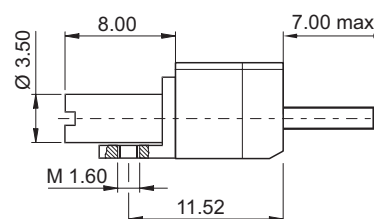
Polarised transverse mount (moulding B)

Ref: **156**



Unpolarised transverse mount (Moulding B) central guide (KMC 144-162)

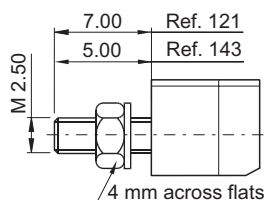
Ref: **156**



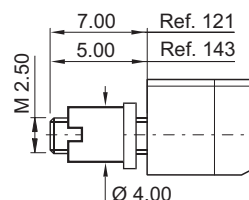
Female Guide Styles

Polarised vertical mount (moulding B)

Ref. : 121 Ref: 143 Ref. : 143

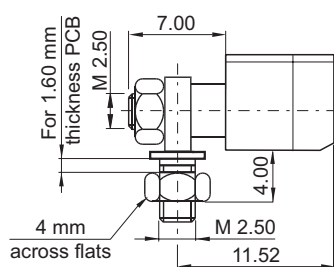


Unpolarised vertical mount (moulding B) central guide (KMC 144-162)

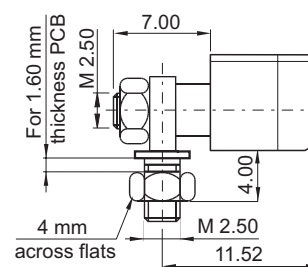


Polarised transverse mount (moulding B)

Ref: 124

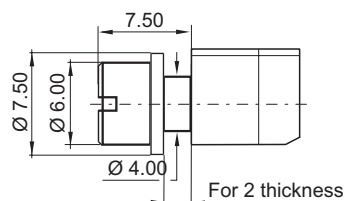


Unpolarised transverse mount (moulding B) central guide (KMC 144-162)



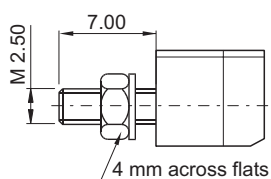
Polarised vertical float mount (moulding B)

Ref: 123

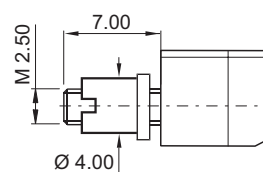


All keying types (moulding B)

Ref: 130

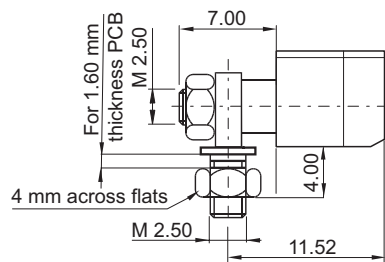


All keying types (moulding B) central guide (KMC 144-162)

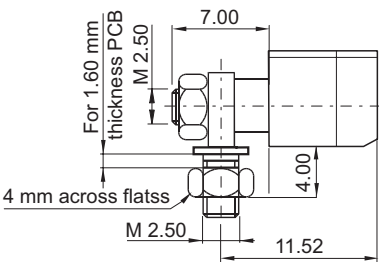


All keying types
(moulding B)

Ref: 133

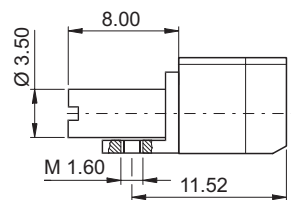


All keying types (moulding B)
central guide (KMC 144-162)

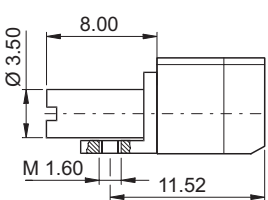


All keying types
(moulding B)

Ref: 153

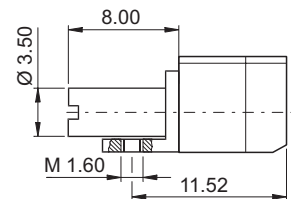


All keying types (moulding B)
central guide (KMC 144-162)

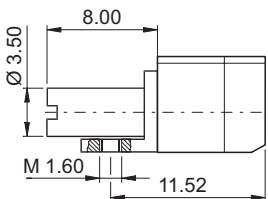


Polarised transverse mount
(moulding B)

Ref: 154



Unpolarised transverse mount (moulding B)
central guide (KMC 144-162)

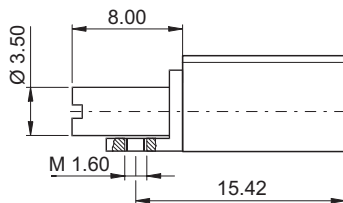


Guide Styles

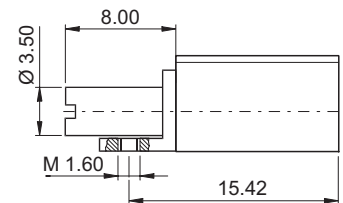
Female

Unpolarised transverse mount
(moulding A)

Ref: **173**

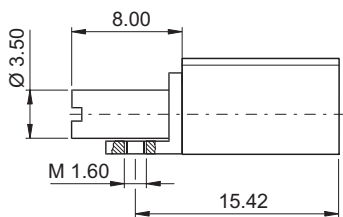


Unpolarised transverse mount (moulding A)
central guide (KMC 144-162)

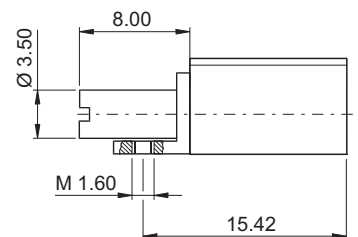


Polarised transverse mount
(moulding A)

Ref: **174**



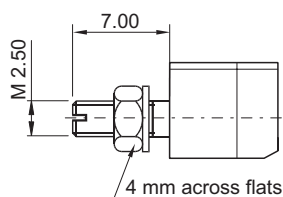
Unpolarised transverse mount (moulding A)
central guide (KMC 144-162)



Female

Mass and power contact
(moulding B)

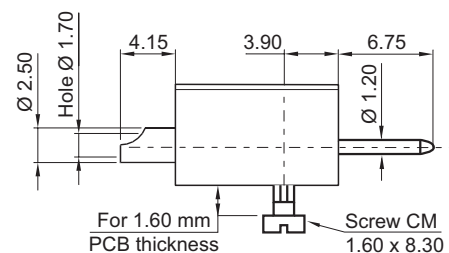
Ref: **190**



Male

Mass and power contact
(moulding A)

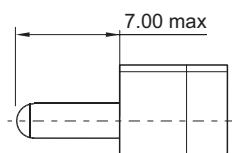
Ref: **191**



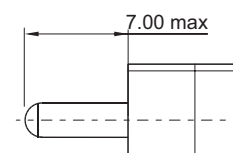
Female - Male

Unpolarised transverse mount
(moulding B)

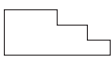
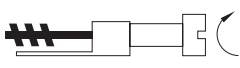
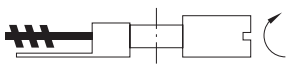
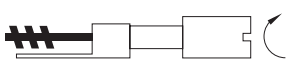
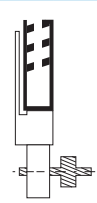
Ref: **703** Ref: **703**



Unpolarised transverse mount (moulding B)
central guide (KMC 144-162)



Locking Device Compatibility chart

						A	Moulding
						B	
							206
							205
							201
					Male locking devices		
A	B				Female locking devices		
Moulding		204	203	202/207			

 Compatible

Note: the connector must be fitted with its locking devices before soldering on the PCB (straight through board solder):

- Connector on PCB: impossibility to change the keying.
- If you need to change the keying:
 - pierce PCB through Ø 3.70, fixing devices
 - use 054826.000R shouldered washer
 } (for 202 and 207)

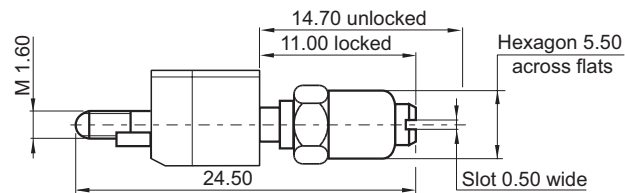
Locking Styles

Male

Jackscrew, free connector (moulding B)

Ref: **201** Ref: : **201**

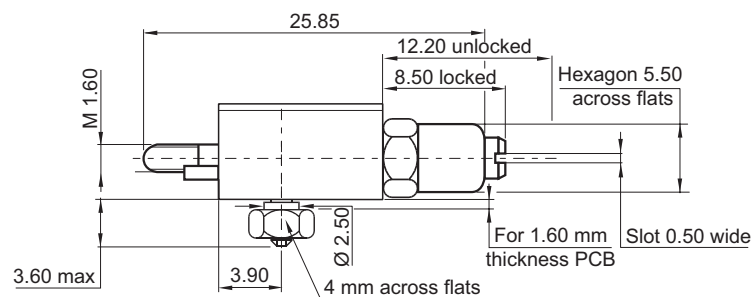
For **KMC 144-162** the supplied central guide is Ref: **111**



Jackscrew, transverse mount (moulding A)

Ref: **205**

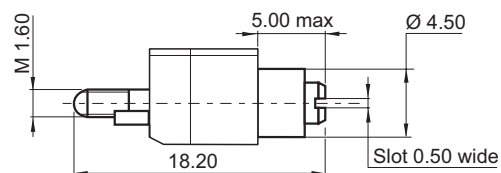
For **KMC 144-162** the supplied central guide is Ref: **110**



Jackscrew, free connector (moulding B)

Ref: **206** Ref: : **206**

For **KMC 144-162** the supplied central guide is Ref: **112**



Female

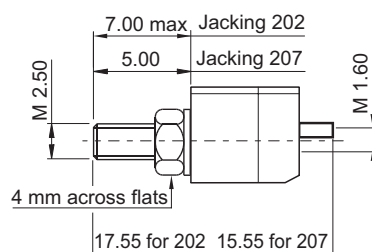
Non rotating jackscrew, vertical mount (moulding B)

Ref: **202** Ref: : **202**

For **KMC 144-162** jackscrew 202 the supplied central guide is Ref: **121**

Ref: **207**

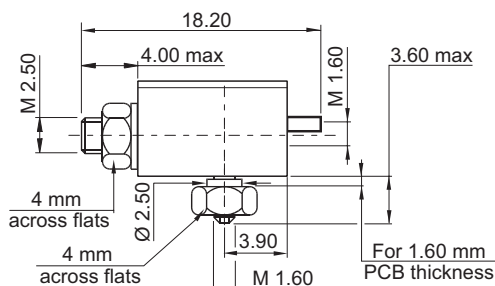
jackscrew 207 the supplied central guide is Ref: **143**



Non rotating jackscrew, transverse mount (moulding A)

Ref: **203**

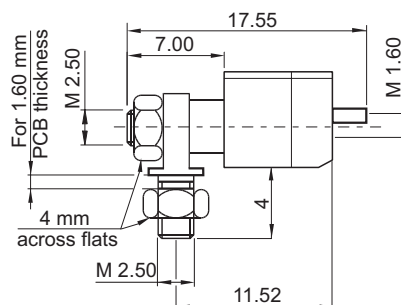
For **KMC 144-162** jackscrew 202 the supplied central guide is Ref: **173**



Non rotating jackscrew, transverse mount (moulding B)

Ref: **204** Ref: : **204**

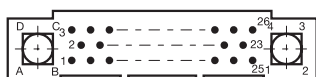
For **KMC 144-162** the supplied central guide is Ref: **111**



Mating Side Layout View

Moulding A

Plug



026



044



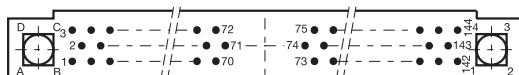
062



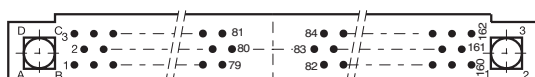
080



098

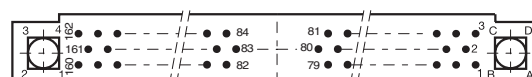
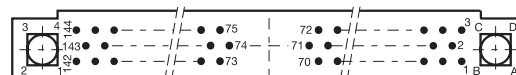
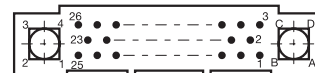


144



162

Receptacle



Moulding B

Plug



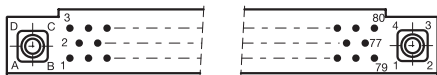
026



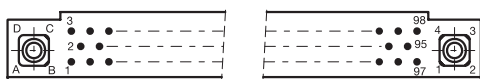
044



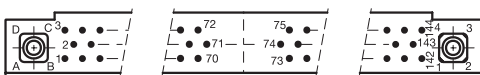
062



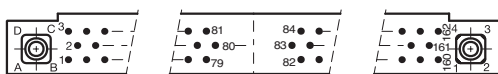
080



098

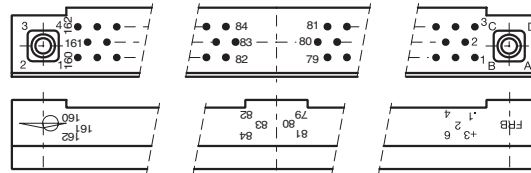
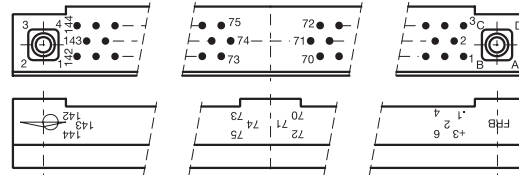
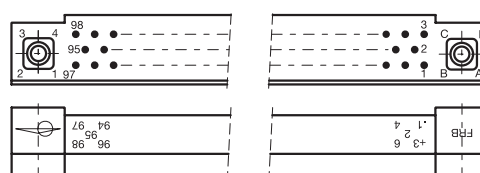
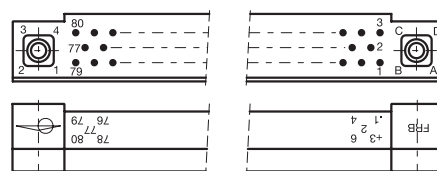
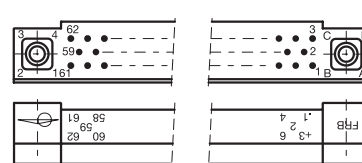
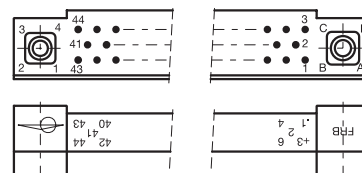
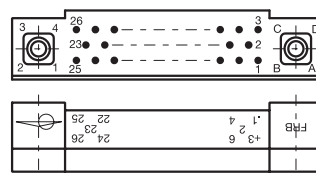


144



162

Receptacle



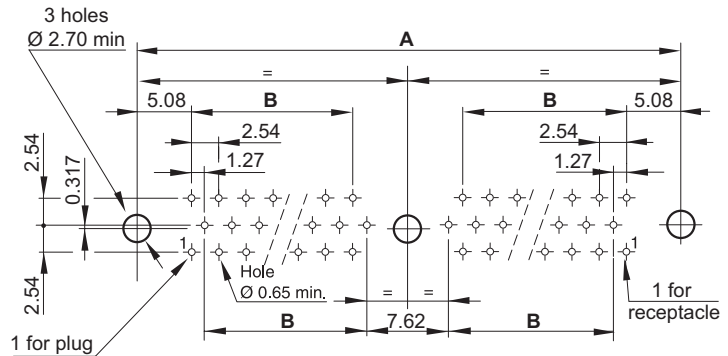
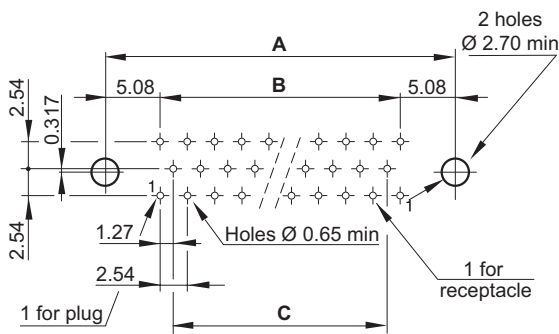
Board Preparation Details

Two Parts (moulding B)

26 to 98 contacts

144 to 162 contacts

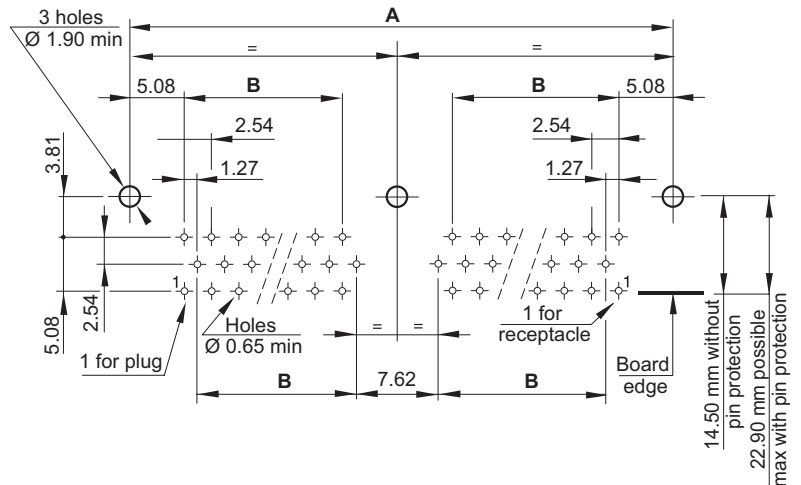
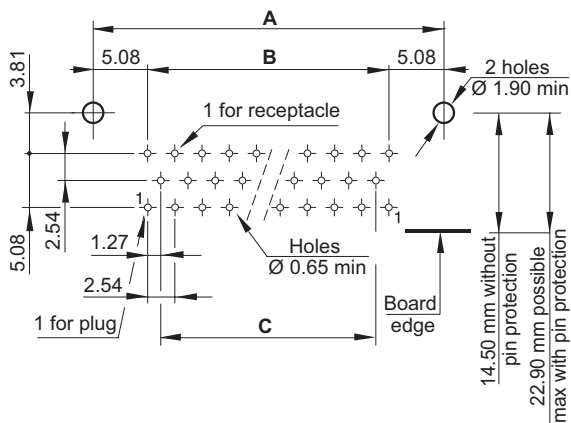
Mother board



Female or male, plug or receptacle, straight solder terminations 30 or 31

Guide styles: 111 - 112 - 121 - 127 - 130 - 143 - 190

Daughter board



Female or male, plug or receptacle, 90° termination

Guide styles: 153 - 154 - 155 - 156

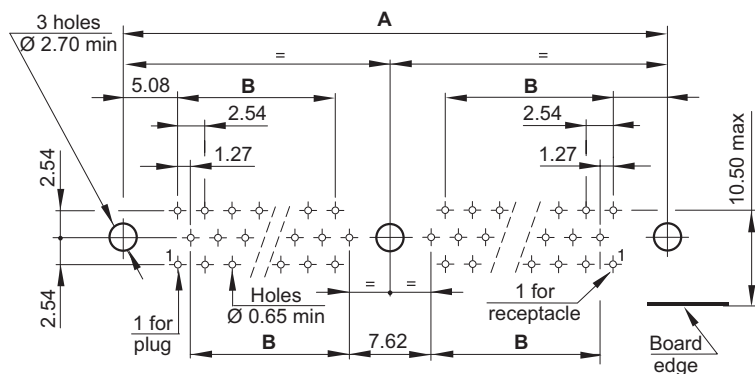
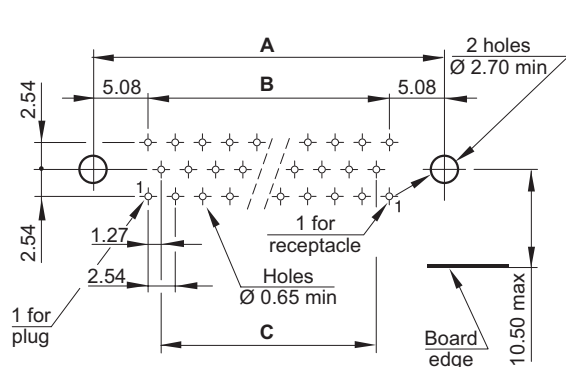
No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B	20.32	35.56	50.80	66.04	81.28	58.42	66.04
C	17.78	33.02	48.26	63.50	78.74	-	-

Two Parts (moulding B)

26 to 98 Contacts

144 to 162 Contacts

Daughter board



Female or male, plug or receptacle, 90° termination

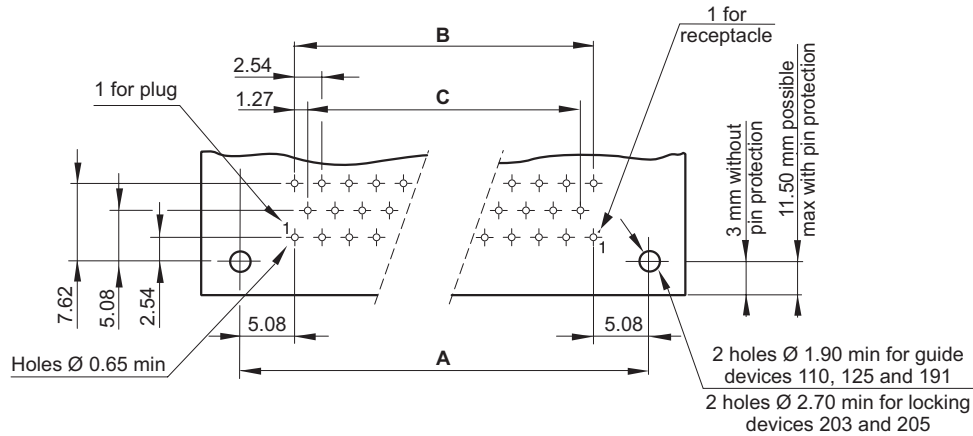
Guide styles: 124 - 133

No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B	20.32	35.56	50.80	66.04	81.28	58.42	66.04
C	17.78	33.02	48.26	63.50	78.74	-	-

One Part (moulding A)

Daughter board

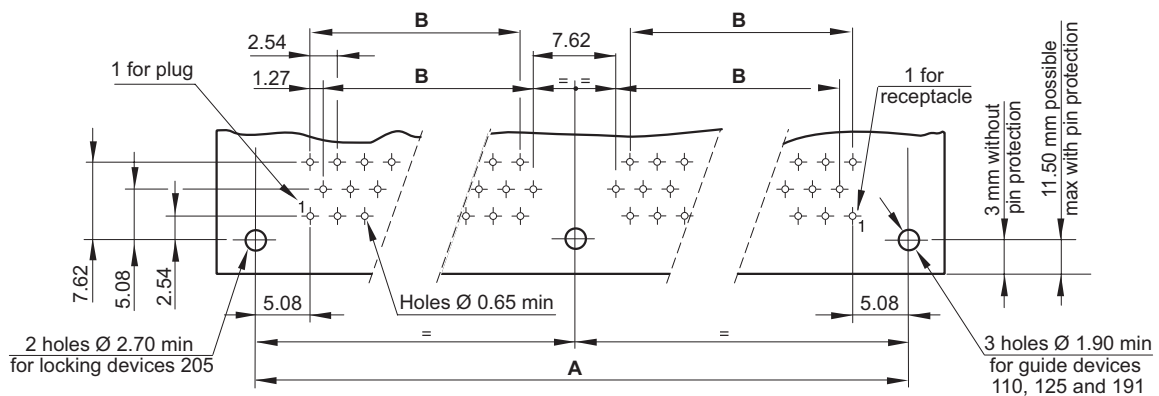
26 to 98 Contacts



Male, plug or receptacle, 90° termination

Guide styles: 110 - 125 - 191 - 203 - 205

144 to 162 Contacts



Male, plug or receptacle, 90° termination

Guide styles: 110 - 125 - 191 - 205

No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B	20.32	35.56	50.80	66.04	81.28	58.42	66.04
C	17.78	33.02	48.26	63.50	78.74	-	-

Daughter board

144 to 162 Contacts



Locking styles: 203

No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B	20.32	35.56	50.80	66.04	81.28	58.42	66.04
C	17.78	33.02	48.26	63.50	78.74	–	–

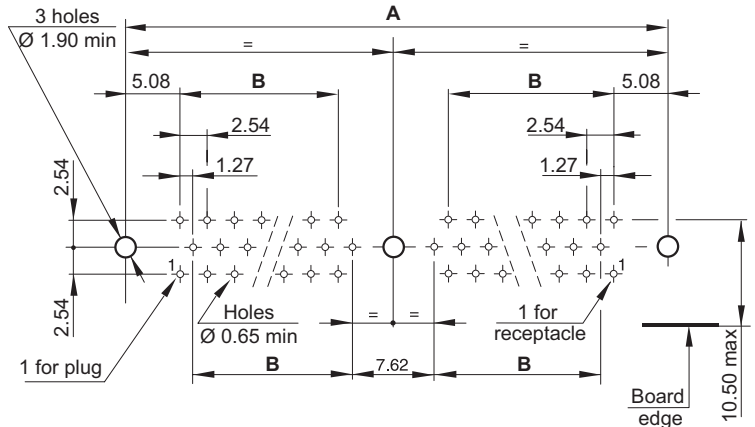
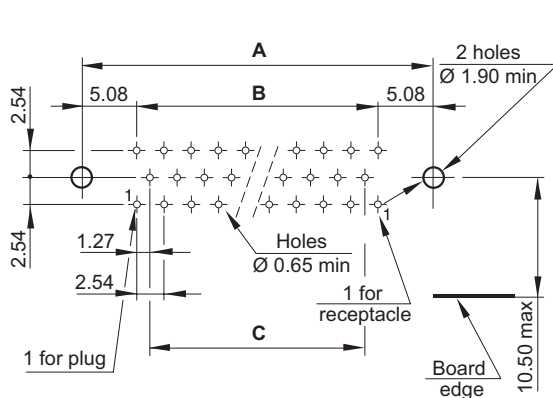
Panel Preparation Details

Two Parts (moulding B)

26 to 98 contacts

144 to 162 contacts

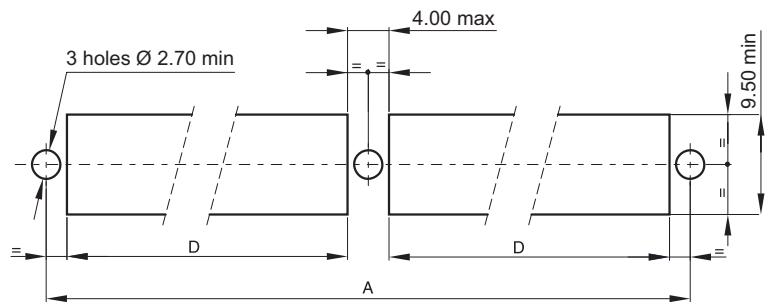
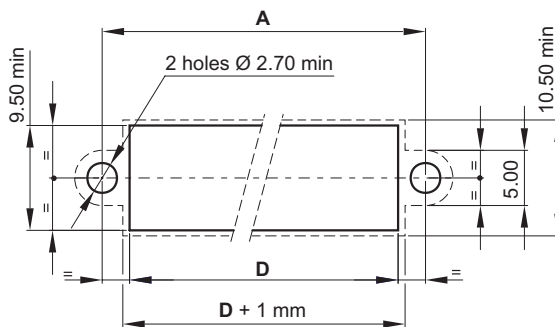
Mother board



Plug or receptacle, 90° termination

Guide styles: 153 - 154 - 155 - 156

Daughter board



— Fixed mount --- Float mount (2 mm thickness)

Female or male, plug or receptacle, 90° termination 40 - 50 - 51

Guide styles: 111 - 112 - 121 - 127 - 130 - 143 - 190 - (Fixed Mount)**Guide styles:** 113 - 123 - 128 - (Float Mount)**Locking Styles:** 202 - 207

No. of contacts	26	44	62	80	98	144	162
A	30.48	45.72	60.96	76.20	91.44	137.16	152.40
B	20.32	35.56	50.80	66.04	81.28	58.42	66.04
C	17.78	33.02	48.26	63.50	78.74	—	—
D	25.90	41.20	56.40	71.60	86.90	63.60	71.60

Technical Characteristics

	Signal contact	Power contact	High frequency contact
Contact diameter	HC® Ø 0.50 mm	HC® Ø 2.00 mm	HE 807 type
Number of contact	Up to 162		
Pitch	1.905 mm between rows 1.27 mm between quicuncial contacts	5.08 on 1 row	
Rows	3		

Electrical

Current rating (at 25°C)	3 A max	15 A	0.5 A
Dielectric withstanding voltage	800 Vrms		
Nominal voltage			180 Vrms 50 Hz
Impedance			50 Ω
Contact resistance	≤ 8 mΩ	≤ 2 mΩ	≤ 10 mΩ
Insulation resistance	10 ⁴ MΩ (500 Vcc)		≥ 10 ⁷ MΩ

Environmental

Temperature range		-55° C + 125° C	
Mating forces		FI ≤ 8N - FS ≤ 3N	1N ≤ FI/FS ≤ 5N
Conformity		NF C-UTE C 93-424	

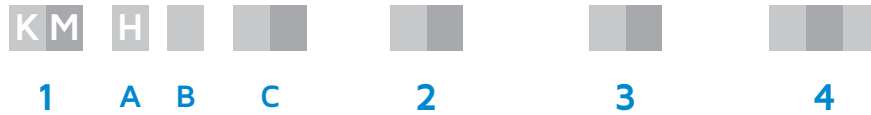
Materials & Platings

Contact	Brass or bronze
Moulding	Glass fiber filled diallyl - Phtalate
Guides	Stainless steel or nickel plated brass
Pin body	Standard: 0.25 µm Gold / 1.27 µm Ni Space: 1.27 µm Gold / 1.27 µm Ni (min)
Socket body	Standard: 0.25 µm Gold / 1.27 µm Ni on activ area - 1.27 µm Ni on activ area Space: 0.25 µm Gold / 1.27 µm Ni (min)
Socket wires	Standard: 1 µm Gold / 0.20 µm Ni Space: 1.27 µm Gold / 0.20 µm Ni (min)

Mechanical

Mating & unmating cycle	5000
Guiding	By two outside guides (2 guiding styles) and one central guide (3 guiding styles)
Keying	By rotating of outside polarised guides (up to 16 keying)

How To Order

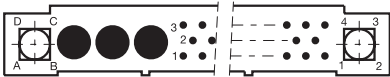


1 Type	A H Moulding with cavities for special contacts B 3 6 Number of cavities for special contacts C 2 6 4 4 8 0 9 0 Number of signal contacts 0.50 mm																																						
2 Moulding polarity	NF C-UTE C 93-424 SPACE GRADE <table><tr><td>12</td><td>54</td><td>Female plug</td></tr><tr><td>13</td><td>55</td><td>Male plug</td></tr><tr><td>16</td><td>56</td><td>Tinned female plug*</td></tr><tr><td>17</td><td>57</td><td>Tinned male plug*</td></tr></table>	12	54	Female plug	13	55	Male plug	16	56	Tinned female plug*	17	57	Tinned male plug*	NF C-UTE C 93-424 SPACE GRADE <table><tr><td>1A</td><td>-</td><td>Tinned female plug**</td></tr><tr><td>1B</td><td>-</td><td>Tinned male plug**</td></tr><tr><td>22</td><td>44</td><td>Female receptacle</td></tr><tr><td>23</td><td>45</td><td>Male receptacle</td></tr></table>	1A	-	Tinned female plug**	1B	-	Tinned male plug**	22	44	Female receptacle	23	45	Male receptacle	NF C-UTE C 93-424 SPACE GRADE <table><tr><td>26</td><td>46</td><td>Tinned female receptacle*</td></tr><tr><td>27</td><td>47</td><td>Tinned male receptacle*</td></tr><tr><td>2A</td><td>-</td><td>Tinned female receptacle**</td></tr><tr><td>2B</td><td>-</td><td>Tinned male receptacle**</td></tr></table>	26	46	Tinned female receptacle*	27	47	Tinned male receptacle*	2A	-	Tinned female receptacle**	2B	-	Tinned male receptacle**
12	54	Female plug																																					
13	55	Male plug																																					
16	56	Tinned female plug*																																					
17	57	Tinned male plug*																																					
1A	-	Tinned female plug**																																					
1B	-	Tinned male plug**																																					
22	44	Female receptacle																																					
23	45	Male receptacle																																					
26	46	Tinned female receptacle*																																					
27	47	Tinned male receptacle*																																					
2A	-	Tinned female receptacle**																																					
2B	-	Tinned male receptacle**																																					
3 Termination styles	(see KMC ordering information p. 43)																																						
4 Mounting hardware	Guide Styles (see p. 50 to 54) - (Consult us for special guides) - See KMC ordering information p. 43 Locking Styles (see p. 56-57) - See KMC ordering information p. 43																																						

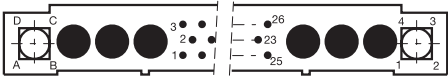
* For 90° & straight terminations (splicing on PCB)

** RoHS conform for 90° & straight terminations (splicing on PCB)

Layout



No. of fixings	KMH layout	No. of special contact cavities	No. of signal contacts
2	326	3	26
2	344	3	44
2	380	3	80
3	390	3	90



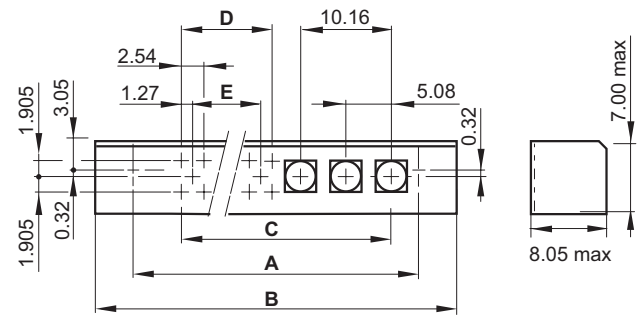
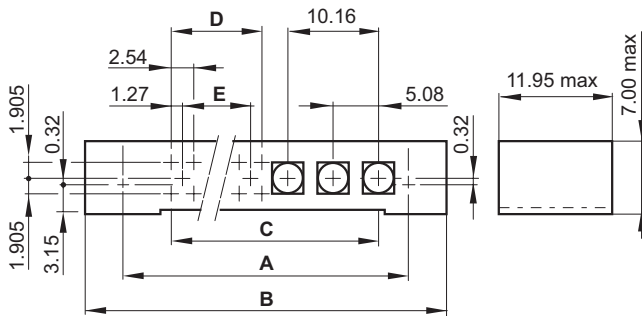
KMH layout	No. of special contact cavities	No. of signal contacts	KMH layout equivalent dimensions
			044
626	6	26	062
			098
			108

Dimensions

26 to 80 Signal Contacts & 3 Special contact cavities

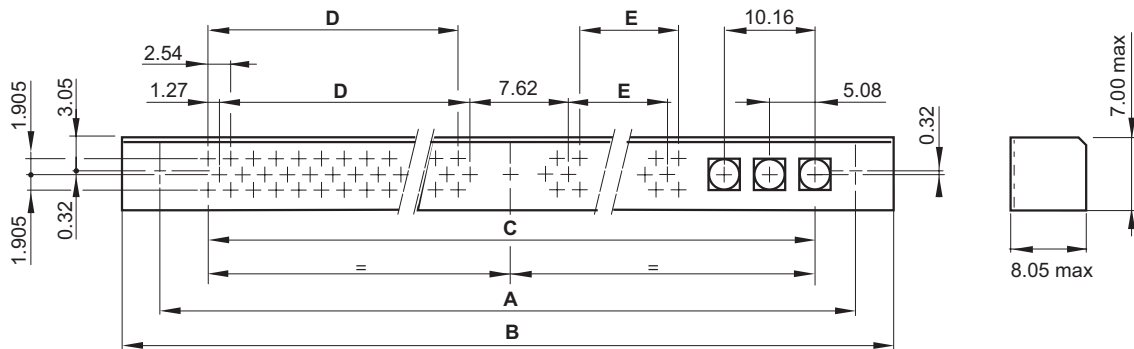
One part plug (moulding A)
only KMH 380

Two parts plug & receptacle (moulding B)
KMH 326, 344, 380



90 Signal Contacts & 3 Special contact cavities

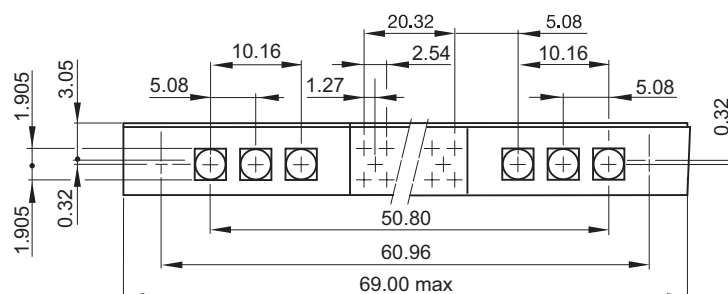
Two parts plug & receptacle (moulding B) KMH 390



KMH layout	A	B max	C	D	E	KMH layout equivalent dimensions
326	45.72	53.70	35.56	20.32	17.78	044
344	60.96	69.00	50.80	35.56	33.02	062
380	91.44	99.50	81.28	66.04	63.50	098
390	106.68	114.70	96.52	43.18	27.94	108

26 Signal Contacts & 6 Special contact cavities

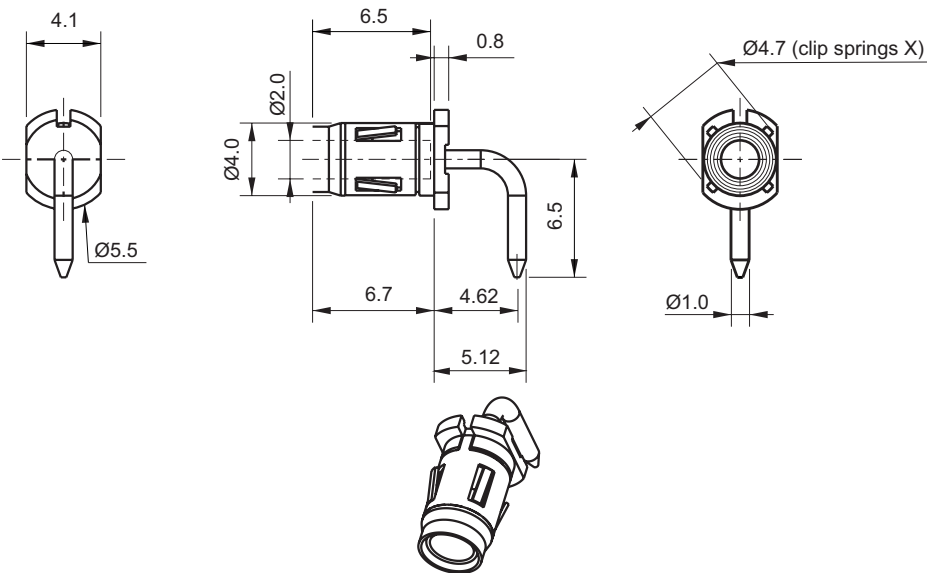
Two parts plug & receptacle (moulding B) with special contact cavities on both extremities KMH 626



Power & High Frequency Contacts

(NF C-UTE C 93-569)

Example of contact overview (020 084 2- 10 RN1)



Male	P/N	Female	P/N
90° termination	020 085 1- 10R OG	90° termination	020 084 2- 10R G1
Straight termination	020 087 1- 30R OG	Straight termination	020 056 2- 30R G1
Solder bucket termination	020 091 1- 40R OG	Solder bucket termination	020 060 2- 40R G1

Coaxial Contacts

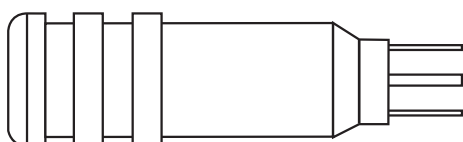
	Male P/N	Female P/N
Vertical mount, suitable for flexible cable Ø 1.9 max ref. KX 21 A (RG 178 B/U or RG 196)	KMX 3-M 081	KMX 3-F 081
Transverse mount, suitable for flexible cable Ø 1.9 max ref. KX 21 A (RG 178 B/U or RG 196) Usable with mother board, thickness 3.2 mm max	KMX 3-M 092	KMX 3-F 092
Vertical mount, suitable for flexible cable Ø 2.5 max ref. KX 22 A (RG 316)	KMX 3-M 101	KMX 3-F 101
Transverse mount, suitable for flexible cable Ø 2.5 max ref. KX 22 A (RG 316) Usable with mother board, thickness 3.2 mm max	KMX 3-M 112	KMX 3-F 112
Vertical mount, suitable to semi-rigid cable Ø 2.2 max ref. KS 1 A (RG 405 - UT 85)	KMX 3-M 131	KMX 3-F 131
Transverse mount, suitable to semi-rigid cable Ø 2.2 max ref. KS 1 A (RG 405 - UT 85) Usable with mother board, thickness 3.2 mm max	KMX 3-M 142	KMX 3-F 142
Straight tail termination for direct mount on to PCB	KMX 3-M 041	KMX 3-F 041
90° tail termination for direct mount on to PCB	KMX 3-M 032	KMX 3-F 032
SMT termination	KMX 3-M 172	KMX 3-F 172

Accessories & Tools

Screwdrivers

Reference	Use	Pinning			Remark
S_____028	- Connector fitted with female guides - "B" moulding - Cover's fixing screw for female guide	144	to	162	These three screwdrivers can be delivered in a same packing under the reference S_____036
S_____029	- Connector fitted with male guides - "B" moulding - Cover's fixing screw for female guide and screw central fixing on wiring side	144	to	162	
S_____033	- "B" moulding - Cover's fixing screws	026	to	162	

Special contact extraction tool



SD.030 00 CX 003

Pin protector

Reference	Use	Guide style
KMC..._____302*  Pinning	KMC... 13..110-KMC...23..111 KMC ... 13..111	Polarised male guide
KMC..._____303*  Pinning	KMC... 13..125	Unpolarised male guide
KMC..._____304*  Pinning	KMC... 23..153	Unpolarised female guide
KMC..._____305*  Pinning	KMC... 23..121 KMC... 23..154	Polarised female guide

* Antistatic material

Note: these 4 references are not available for the 162 contacts version

Disclaimer 2018

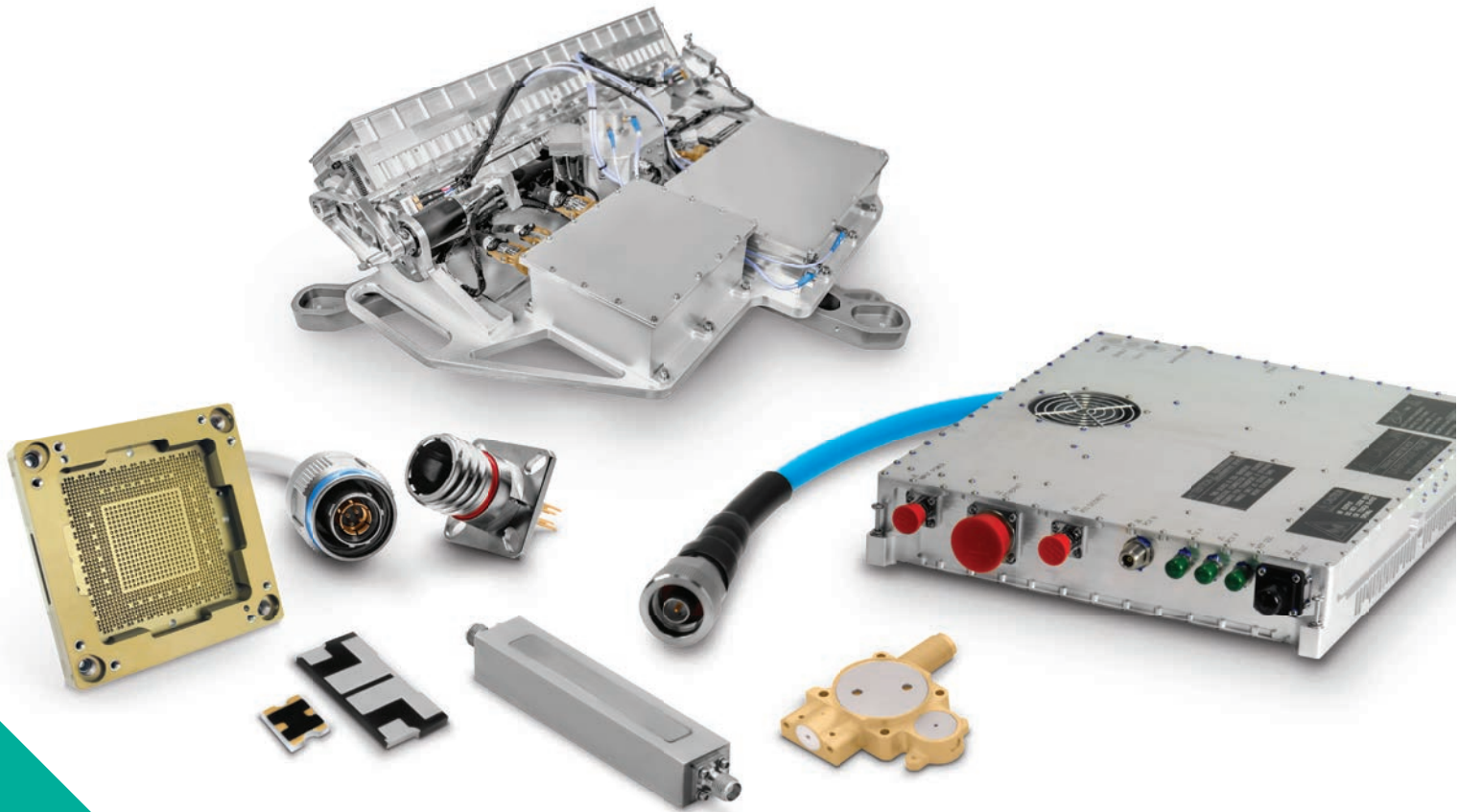
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 - RF Components
 - Test Sockets and WLCSP Probe Heads
 - Time & Frequency Systems

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