

The KB Series of discrete sizes of printed circuit connectors, have mouldings with two rows of contact cavities. The same moulding is used for both single and double sided versions. For single sided printed circuit boards one row is assembled with nickel silver backing contacts which do not have an electrical function but maintain even pressure on the printed circuit board thus ensuring good electrical contact on the connecting edge of the printed circuit board to the gold finished conductive contacts assembled in the opposite row.

The single sided versions of KB are the Series KBS.

For double sided printed circuit boards both rows of the KB moulding are assembled with gold finished conductive contacts.

The double sided versions of KB are the Series KBD.

The KB Series of printed circuit connectors are available with 8, 12, 16, 24, 32 and 40 contacts as KBS for single sided

P.C.B.'s and as KBD for double sided P.C.B.'s with 2 rows of 8, 12, 16, 24, 32 and 40 contacts.

The KB Series gives the designer a choice of 3 styles of contact termination, wire wrap, solder eyelet and dip solder.

All these contacts are manufactured from high quality phosphor bronze. The contact is bifurcated to assure a precise contact interface with the P.C.B. and two plating alternatives are offered; either bright nickel covered by hard gold plating or 0.0002" gold (5.08µM) which is recommended for severe industrial atmosphere environments.

A feature of the KB contacts is that should they become damaged for any reason, they can be easily replaced individually thereby prolonging the connector life.

KB printed circuit connectors can be polarised in the contact cavity in place of contacts or between contact cavities without losing a pair of contacts.

## Technical Specification

### ELECTRICAL SPECIFICATION

<b>Current rating</b>	5 amps per contact at 25°C.
<b>Working voltage</b>	750V d.c. or a.c. peak at sea level
<b>Voltage proof</b>	2500V d.c. or a.c. peak at sea level
<b>Contact resistance initial</b>	Less than 5 milliohms
<b>Contact resistance after 500 insertions and withdrawals</b>	Less than 10 milliohms.
<b>Insulation resistance</b>	Greater than 10 <sup>5</sup> megohms.

### MATERIALS SPECIFICATION

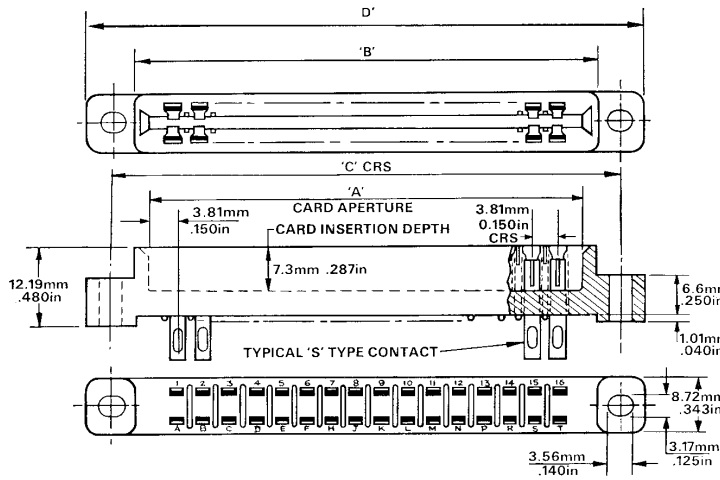
<b>Moulding</b>	Glass-filled Diallyl Phthalate. Colour Blue Guides: Polypropylene
<b>Contacts</b>	Type W,S and D. Phosphor bronze. Backing contact Nickel silver.
<b>Plating</b>	Standard 0.000012 ins. (0.30µM) gold average over 0.0001 ins. (2.54µM) nickel, also 0.0002 ins. (5.08µM) gold.

### MECHANICAL SPECIFICATION

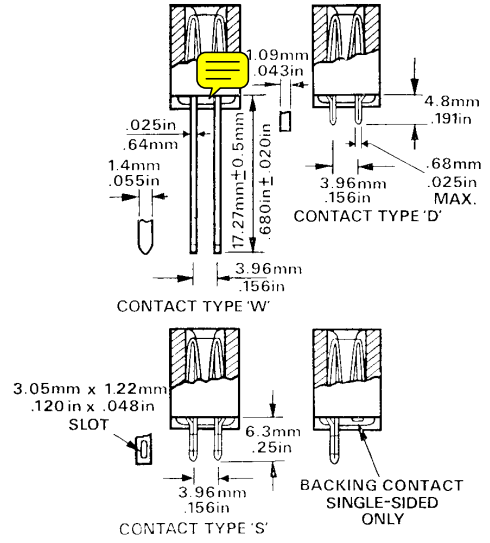
<b>Contact pitch</b>	0.150 ins. (3.81 mm)
<b>Working temperature</b>	—55°C to +110°C.
<b>Insertion force</b>	Less than 16 oz (453 gm).
<b>Printed Circuit Board Thickness</b>	0.054 ins. to 0.071 ins. (1.37 mm to 1.80 mm).
<b>Polarisation</b>	In contact cavity or between contact cavity. (See "Recommended Board cut out for Polarising Keys" opposite.)



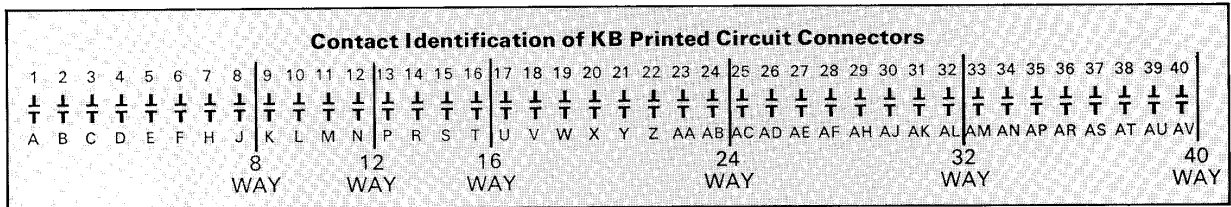
**OUTLINE DIMENSIONS**



**TERMINATION DETAIL**



NO. OF WAYS		DIMENSIONS							
KBS	KBD	A ± 0.005"		B Nominal		C Nominal		D Nominal	
		in.	mm	in.	mm	in.	mm	in.	mm
8	8/8	1.350	34.29	1.530	38.86	1.800	45.72	2.100	53.34
12	12/12	1.950	49.53	2.130	54.10	2.400	60.96	2.700	68.58
16	16/16	2.550	64.77	2.730	69.34	3.000	76.20	3.300	83.82
24	24/24	3.750	95.25	3.930	99.82	4.200	106.68	4.500	114.30
32	32/32	4.950	125.73	5.130	130.30	5.400	137.16	5.700	144.78
40	40/40	6.150	156.21	6.330	160.78	6.600	167.64	6.900	175.26



**POLARISING KEYS**

In contact:  
Part number 101-516  
*Supplied in bags of 100*

A = .235 in. (5.97mm)  
B = .297 in. (7.53mm)  
C = .080 in. (2.03mm)

Between contact:  
Part number 101-517  
*Supplied in bags of 100*

D = .265 in. (6.73mm)  
E = .108 in. (2.74mm)  
F = .028 in. (0.71mm)

**RECOMMENDED BOARD CUTOUT FOR POLARISING KEYS**

+ Cut Out PCB .091 in. (2.31mm) for Polarising Key 101-516  
\* Cut Out PCB .040 in. (1.01mm) for Polarising Key 101-517

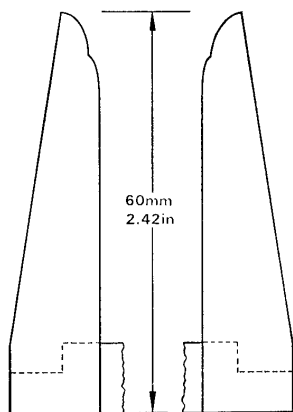
**POLARISING KEY TOOLS**

3.00 in. (76.2mm)

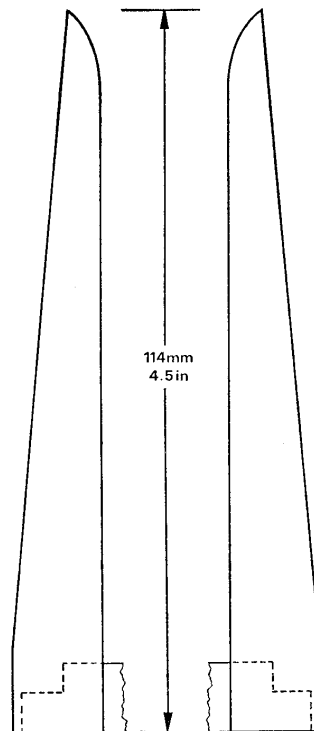
Insertion Tool for 101-516 Part number 101-520  
Insertion Tool for 101-517 Part number 101-521

# Guides for KB Printed circuit connectors

These plastic guides are designed to ensure positive alignment between printed circuit connectors and printed circuit boards; to prevent accidental disconnection due to vibration or physical shock; and to give overall support to printed circuit boards. They are supplied in pairs.

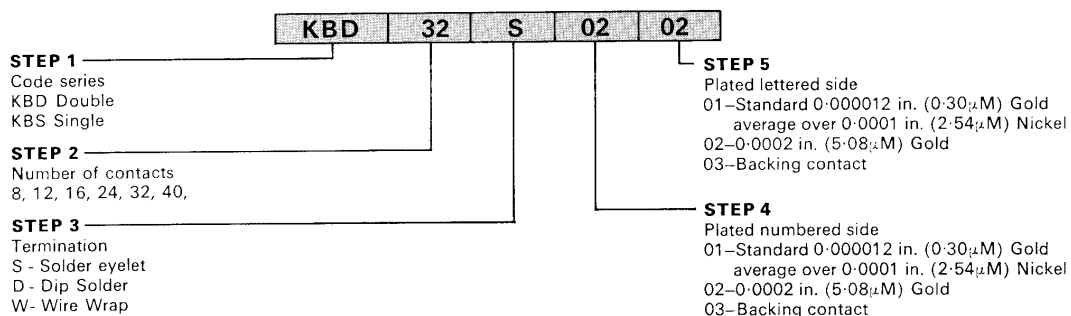


For use with series KB printed circuit connectors and recommended printed circuit boards. Part Number 101-558 (Supplied in pairs).



For use with series KB printed circuit connectors and recommended printed circuit boards. Part Number 101-561 (Supplied in pairs).

## ORDERING INFORMATION



Tel: +44 (0)1962 773004  
Fax: +44 (0)1962 773104

[sales@in2connect.uk.com](mailto:sales@in2connect.uk.com)  
<[www.in2connect.uk.com](http://www.in2connect.uk.com)>