

Modular 2.54mm (0.1") Edge Card Connectors

www.in2connect.co.uk

TECHNICAL DATA

Materials

Insulator	Glass filled thermoplastic rated UL94 V-0
Contact	Copper alloy plated hard acid gold
Termination	Tin lead

Mechanical

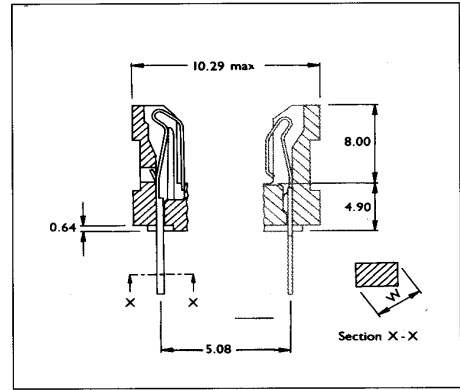
Mechanical operations	100 ('Q' finish) 250 ('N' finish)
Insertion and withdrawal force (per contact pair)	2.2N max. 0.2N min.
Contact holding force	0.15N min.
Operating temperature	-55°C to + 125°C

Electrical

Current	
Individual contacts (in isolation)	at 25°C Tamb. 4.5 A max. at 85°C Tamb. 3 A max.
All contacts (simultaneously)	at 25°C Tamb. 4 A max. at 85°C Tamb. 2.5 A max.
Working Voltage	350V d.c. or a.c. peak.
Proof voltage	1050V d.c. or a.c. peak.
Contact Resistance (initially)	10mΩ max.
Contact Resistance (after conditioning)	15mΩ max.
Insulation Resistance (initially)	1000MΩ min.
Insulation Resistance (after conditioning)	100MΩ min.

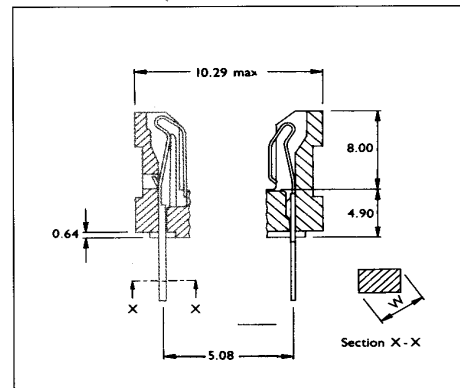
Replaceable Contacts - Bifurcated Inverted Bellows

Termination Style	Wire Wrapping				Straight p.c.	
	Double Sided	Single Sided	Double Sided	Single Sided	Double Sided	Single Sided
Assembly Style	54708	54709	54716	54717	54740	54741
Metal Fixings	54710	54711	54718	54719	54742	54743
Plastic Fixings	14.6		5.3		3.9	
Y	0.95		0.95		0.71	
W max.	0.63 X 0.63		0.63 X 0.63		0.41 X 0.53	
Section XX						

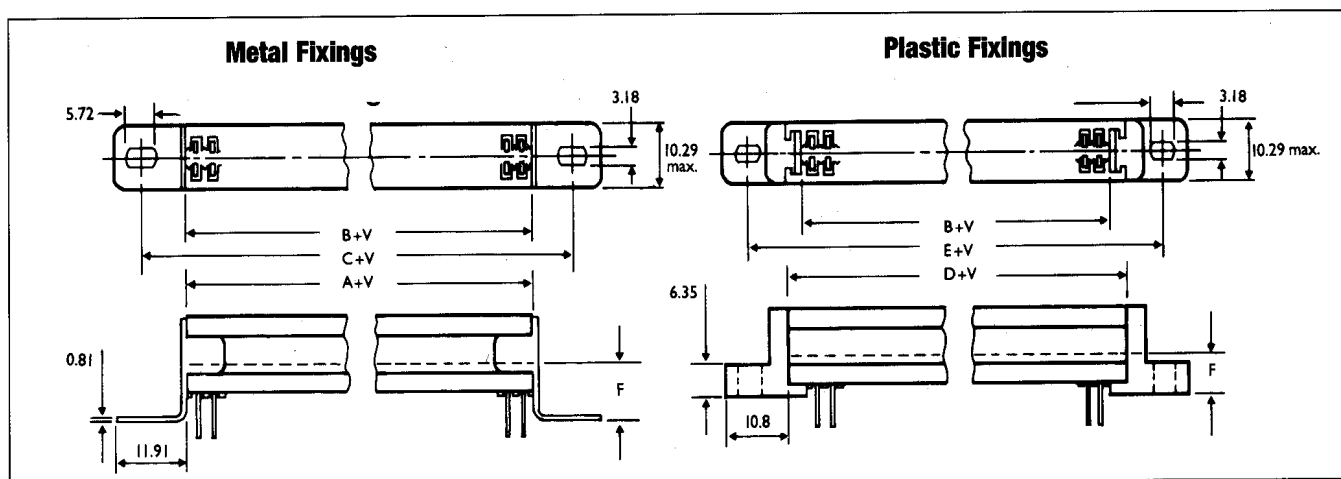


Fixed Contacts - Bifurcated Inverted Bellows

Termination Style	Wire Wrapping		Solder Eyelet		Straight p.c.			
	Double Sided	Single Sided	Double Sided	Single Sided	Double Sided	Single Sided	Double Sided	Single Sided
Assembly Style	54684	54685	54680	54681	54688	54689	54694	54695
Metal Fixings	54686	54687	54682	54683	54690	54691	54696	54697
Plastic Fixings	14.6		4.4		6.3		3.7	
Y	0.90				0.75		0.65	
W max.	0.38 X 0.76				0.38 X 0.57		0.38 X 0.46	
Section XX								
Z	14.1				4.6		3.1	



Outline Dimensions



Constant

A = 0.97

B = 0.71

C = 15.19

D = 6.05

E = 18.75

Moulding length using metal fixings

Board length (max.)

Fixing centres with metal fixings

Moulding length using plastic fixings

Fixing centres with plastic fixings

End fixing

31152-104-0

31152-507-0

31152-508-0

31152-510-0

31152-511-0

'F'

6.35

7.98

7.98

6.25

6.25

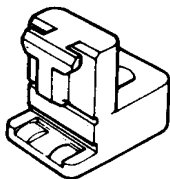
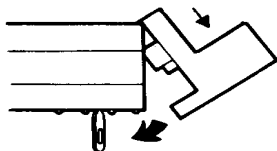
Variable V

No. of ways	mm	No. of ways	mm	No. of ways	mm	No. of ways	mm
5	12,70	26	66,04	47	119,38	68	172,72
6	15,24	27	68,58	48	121,92	69	175,26
7	17,78	28	71,12	49	124,46	70	177,80
8	20,32	29	73,66	50	127,00	71	180,34
9	22,86	30	76,20	51	129,54	72	182,88
10	25,40	31	78,74	52	132,08	73	185,42
11	27,94	32	81,28	53	134,62	74	187,96
12	30,48	33	83,82	54	137,16	75	190,50
13	33,02	34	86,36	55	139,70	76	193,04
14	35,56	35	88,90	56	142,24	77	195,58
15	38,10	36	91,44	57	144,78	78	198,12
16	40,64	37	93,98	58	147,32	79	200,66
17	43,18	38	96,52	59	149,86	80	203,20
18	45,72	39	99,06	60	152,40	81	205,74
19	48,26	40	101,60	61	154,94	82	208,28
20	50,80	41	104,14	62	157,48	83	210,82
21	53,34	42	106,68	63	160,02	84†	213,36
22	55,88	43	109,22	64	162,56	85†	215,90
23	58,42	44	111,76	65	165,10		
24	60,96	45	114,30	66	167,64		
25	63,50	46	116,84	67	170,18		

† Not available with plastic fixings

End Fixings (order separately)

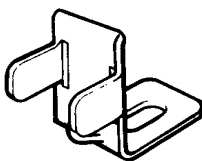
**Plastic
PLASTIC**



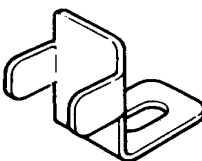
31152-104-0
self-retaining

Metal

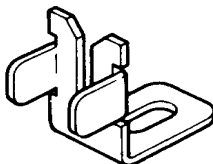
METAL



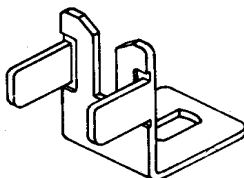
31152-507-0



31152-510-0

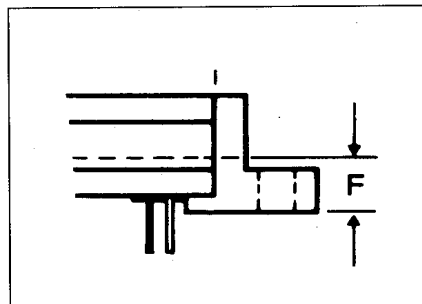


31152-511-0



31152-508-0

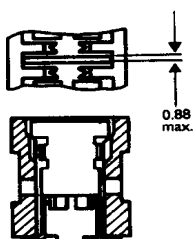
All connectors listed can be mounted with plastic or metal end fixings as detailed below. When using plastic fixings a pair of cavities must be left empty at either end, and the appropriate dimensional constants automatically compensate for the extra connector length.



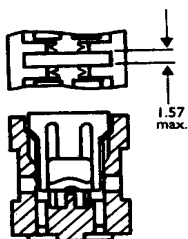
End Fixing	F
31152-104-0	6.35
31152-507-0	7.98
31152-508-0	7.98
31152-510-0	6.25
31152-511-0	6.25

Polarising/Location Keys

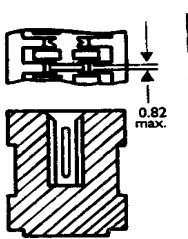
Removable Contact



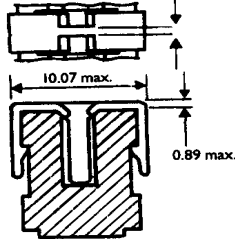
0.88 max.



1.57 max.



0.82 max.



0.82 max.

10.07 max.

0.89 max.

Contact Replacement

Type LA
Metal

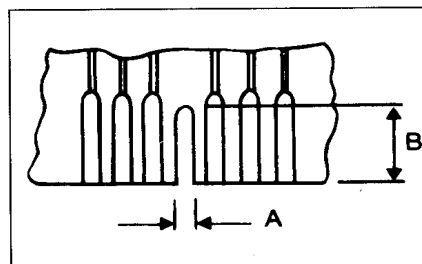
Type DA
Plastic

Inter-contact

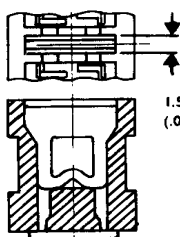
Type EA
Plastic

Type MA
Plastic
Positive Retention

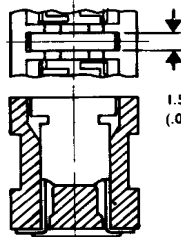
The contact replacement keys are inserted in a pair of opposing cavities i.e. to replace a pair of contacts. They can be ordered separately, or assembled by specifying the type and position required. See ordering information page 6. Key types EA and MA are supplied separately to be fitted by the customer.



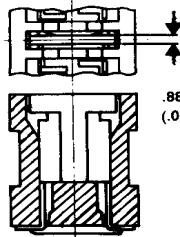
Fixed Contact



1.58 max.
(.062)



1.52 max.
(.060)



.88 max.
(.035)

Type KA
Plastic

Type CA
Metal

Type LA
Metal

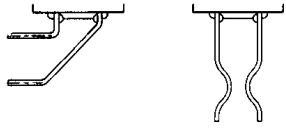
Recommended board cut out

Key Type	A min	B
EA	0.89	7.90
DA/KA	1.65	7.90
MA	0.89	9.40
LA	0.92	7.90
CA	1.60	7.90

Other Edge Card Connectors

The following styles are available with minimum order quantities, for details contact our sales office.

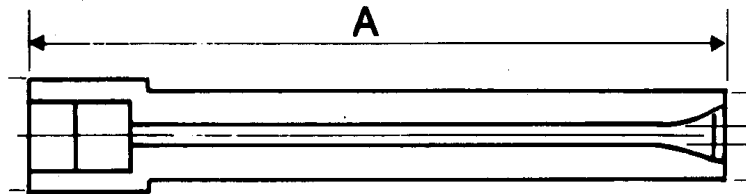
Modular

2.54 mm pitch (0.1 in)	Extender Board Terminations		
3.81 mm pitch (0.15 in)	Available in	5-62 ways 10-124 ways	Single Double
3.96 mm pitch (0.156 in)	Available in	5-62 ways 10-124 ways	Single Double
5.08 mm pitch (0.2 in)	Available in	4-43 ways 8-86 ways	Single Double

Discrete

2.54 mm pitch (0.1 in)	Available in	8, 16, 24, and 32 ways (with staggered terminations)	
2.54 mm pitch (0.1 in)	Available in	5, 26, 35 and 40 ways 15+15, 26+26, 35+35 and 40+40 ways	Single Double
3.81 mm pitch (0.15 in)	Available in	8, 16, 24, 32 and 40 ways 8+8, 16+16, 24+24, 32+32 and 40+40 ways	Single Double
3.96 mm pitch (0.156 in)	Available in	22 ways 22+22 ways	Single Double
5.08 mm pitch (0.2 in)	Available in	8, 24 and 32 ways 8+8, 24+24 and 32+32 ways	Single Double

Card Guides



Discrete

Order Code	31153-301-0	31153-401-0	31153-304-0
Dim A	102.87	160.34	45.21

Modular

Order Code	31153-302-0	31153-501-0
Dim A	108	166

ORDERING INFORMATION

CONTACT TYPE	B	54716	Q	Q	15-15	LA	6
ASSEMBLY STYLE							
SIDE 'A' CONTACT FINISH							
SIDE 'B' CONTACT FINISH							
No. OF CONTACTS							
POLARISING KEY TYPE							
POLARISING KEY POSITION							

Contact Type

B - Bifurcated

Assembly Style

See pages 2 and 3

Side A/B Contact Finish

- Q - Gold (100 operations)
- N - Gold (250 operations)
- H - Tin lead (backing springs)
- Z - Single sided no backing springs

No of Contacts

- 5 to 85 single sided
- 5-5 to 85-85 double sided

Polarising Key Type

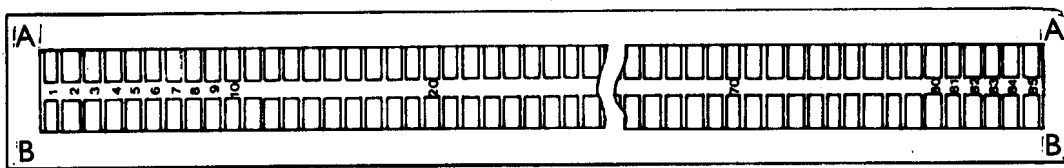
LA, CA, KA etc (see page 4)

Polarising Key Position

- In place of contact position 1 to 85
- Intercontact position 1-2 to 84-85

Note: For non standard configurations, please contact the sales office.

Contact identification



View from rear of mould