



I59 Series

The I59 range of plugs and sockets is available with from 7 to 71 poles, and a simple but extremely efficient locking device, gold flash on contacts and solder tags, a robust cover with either top or side cable entry protected by a bonded plastic coat. An inner plastic coating provides insulation between solder tags and cover.

Contacts are arranged in two rows for the 7 to 31 pole range and four rows for the 35 to 71 pole. One row contains a polarised cavity.

The I59 series, apart from normal plug and socket applications and use as a unitor, provides an efficient cable coupling. When used as a cable connector both plug and socket will be provided with the standard cover, the plug member however being fitted with the I59 series retainer.

Specification

Working voltage	350V D.C. or A.C. (peak)
Current rating	3 amps D.C. or A.C. (RMS) at 55 °C 5 amps D.C. or A.C. (RMS) at 20 °C
Maximum operating temperature	70 °C
Average contact resistance	0.002 Ω
Maximum contact resistance	0.0025 Ω
Flashover voltage	4kV between contacts and between contacts and case
Insulation resistance	Greater than $10^{12} \Omega$ ($10^6 M\Omega$) initially. Greater than $10^{11} \Omega$ ($10^5 M\Omega$) after H6 Climatic exposure. (DEF 5011)
Vibration category	VI (DEF 5011)
Insertion and withdrawal force	6 ozs per contact average

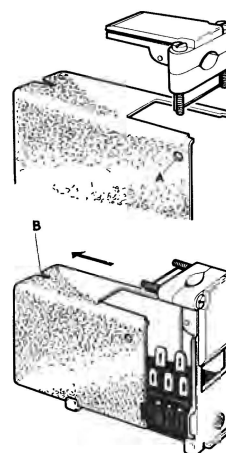
Line connector with cover—2 row

Materials

Clips	Beryllium copper—gold flashed on 0.0003 silver
Blade	Brass—gold flashed on 0.0003 silver
Body mouldings	Delrin 500
Cover	Aluminium—grey PVC coated
End plates and cable clamps	Zinc alloy

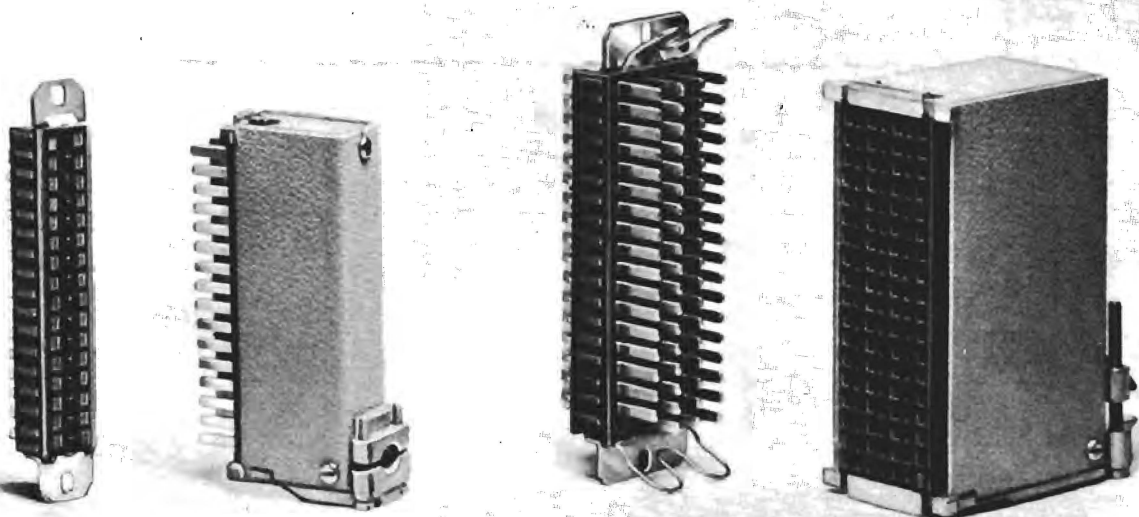
Conversion from top entry to side entry

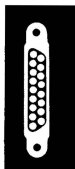
The cable clamp provides a simple method of conversion of the cover from top entry to side entry by its removal and reversal.



This is effected by removing cable clamp screw A and case retaining screw B. Case may now be moved away from cable clamp mounting in the direction of the arrow, and the cable clamp lifted clear, reversed and replaced.

Line connector with cover—4 row





159 Series 2 Row

With mounting brackets, with or without retainers

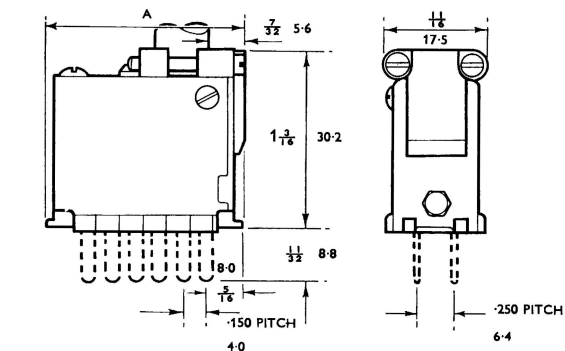
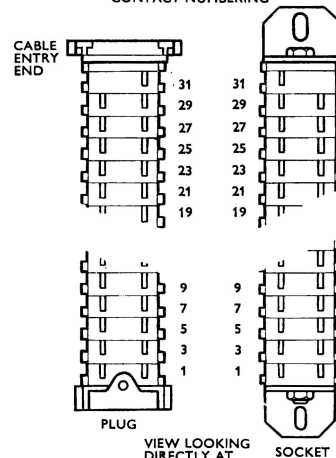
NO. OF WAYS	PART NUMBERS				DIMENSIONS					
	PLUG		SOCKET		B		C		D	
	WITH RETAINERS	WITHOUT RETAINERS	WITH RETAINERS	WITHOUT RETAINERS	INCH	MM	INCH	MM	INCH	MM
7	74/10/0706/10 (324825)	74/10/0705/10 (324797)	74/10/0756/10 (324839)	74/10/0755/10 (324811)	1.37	34.8	1.13	28.7	0.85	21.6
11	74/10/1106/10 (324827)	74/10/1105/10 (324799)	74/10/1156/10 (324841)	74/10/1155/10 (324813)	1.67	42.4	1.43	36.3	1.15	29.2
15	74/10/1506/10 (324829)	74/10/1505/10 (324801)	74/10/1556/10 (324843)	74/10/1555/10 (324815)	1.97	50.0	1.73	43.9	1.44	36.6
19	74/10/1906/10 (324831)	74/10/1905/10 (324803)	74/10/1956/10 (324845)	74/10/1955/10 (324817)	2.26	57.4	2.02	51.3	1.74	44.2
23	74/10/2306/10 (324833)	74/10/2305/10 (324805)	74/10/2356/10 (324847)	74/10/2355/10 (324819)	2.56	65.0	2.32	58.9	2.04	51.8
31	74/10/3106/10 (324837)	74/10/3105/10 (324809)	74/10/3156/10 (324851)	74/10/3155/10 (324823)	3.15	80.0	2.91	73.9	2.63	66.8

Obsolete part numbers shown in brackets.

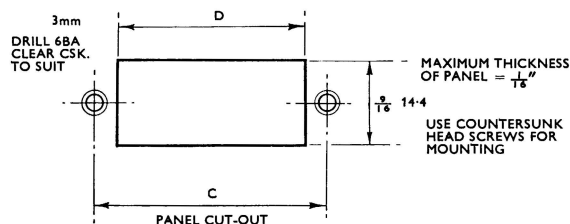
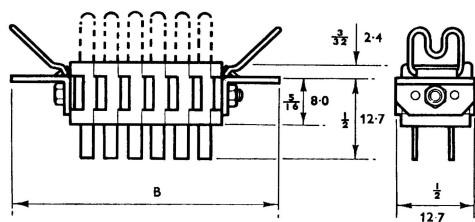
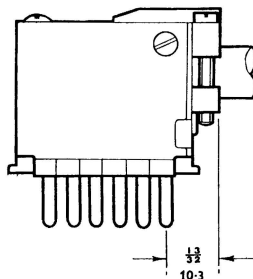
With cover

NUMBER OF WAYS	PART NUMBERS			DIMENSION A	
	PLUG	PLUG WITH RETAINER	SOCKET	INCH	MM
7	74/10/0701/10 (324965)	74/10/0702/10 (324993)	74/10/0751/10 (324979)	1·06	26·9
11	74/10/1101/10 (324967)	74/10/1102/10 (324995)	74/10/1151/10 (324981)	1·35	34·3
15	74/10/1501/10 (324969)	74/10/1502/10 (324997)	74/10/1551/10 (324983)	1·65	41·9
19	74/10/1901/10 (324971)	74/10/1902/10 (324999)	74/10/1951/10 (324985)	1·94	49·3
23	74/10/2301/10 (324973)	74/10/2302/10 (325001)	74/10/2351/10 (324987)	2·24	56·9
31	74/10/3101/10 (324977)	74/10/3102/10 (325005)	74/10/3151/10 (324991)	2·83	71·9

CONTACT NUMBERING



PART VIEW SHOWING
SIDE ENTRY



159 Series 4 row

With mounting brackets

NO. OF WAYS	PART NUMBERS				DIMENSIONS					
	PLUG		SOCKET		B		C		D	
	WITH RETAINERS	WITHOUT RETAINERS	WITH RETAINERS	WITHOUT RETAINERS	INCH	MM	INCH	MM	INCH	MM
35	74/10/3506/10	74/10/3505/10	74/10/3556/10	74/10/3555/10	2.13	54.1	1.89	48.0	1.60	40.6
47	74/10/4706/10	74/10/4705/10	74/10/4756/10	74/10/4755/10	2.58	65.5	2.34	59.4	2.05	52.1
55	74/10/5506/10	74/10/5505/10	74/10/5556/10	74/10/5555/10	2.88	73.2	2.64	67.1	2.35	59.7
59	74/10/5906/10	74/10/5905/10	74/10/5956/10	74/10/5955/10	3.03	77.0	2.79	70.9	2.50	63.5
71	74/10/7106/10	74/10/7105/10	74/10/7156/10	74/10/7155/10	3.48	88.4	3.24	82.3	2.95	74.9

With cover

NO. OF WAYS	PART NUMBERS			DIMENSION A	
	PLUG	PLUG WITH RETAINER	SOCKET	INCH	MM
35	74/10/3501/10	74/10/3502/10	74/10/3551/10	1-80	45-7
47	74/10/4701/10	74/10/4702/10	74/10/4751/10	2-25	57-2
55	74/10/5501/10	74/10/5502/10	74/10/5551/10	2-55	64-8
59	74/10/5901/10	74/10/5902/10	74/10/5951/10	2-70	68-6
71	74/10/7101/10	74/10/7102/10	74/10/7151/10	3-15	80-0

