Light Duty Fuse Links



L562 Miniature, Glass, 5/8" x 3/16" (15,9 x 4,76mm) diameter

This range of miniature fuse links was developed originally for Services' use, but has many applications in instrumentation, electronic data processing machines, printed circuitry, and all miniaturised equipment.



These fuse links have a minimum life of 1,000 hours at rated current, at 20° C The higher ratings (250 mA and over) blow within 10 seconds at twice their rated current, lower ratings at $3 \times Ir$.

CONTINUOUS RATING (1000 Hours)	RATED VOLTAGE d.c.	COLOUR CODE
50mA	900V	Salmon Pink
100mA	900V	Dark Grey
150mA	600V	Red
250mA	600V	Dark Brown
350mA	360V	
500mA	360V	Yellow
1A	300V	Azure Blue
2·5A	150V	Yellow & Purple-brown
4A	150V	
7·0A	120V	Orange

Marking:	Rated value on cap, and colour coded body
Weight (average):	0.61g (0.02 oz)
Belling-Lee reference nos.:	L562/current rating in amp. Example: L562/050 is a 50mA fuse link
Fuseholders: (Subject to their individual ratings)	L 575 panel mounting L 1383 for printed circuits L 1596 panel mounting



Light Duty Fuse Links

size 0







L 1055 Standard, Glass 1¼" x ¼"(31,8 x 6,35mm) diameter

These fuse links have a minimum life of 1,000 hours at rated current at 20°C, and blow within 10 seconds at 2 x Ir.

De-rating factor for operation at elevated temperatures:

1.75% per 10°C up to 100°C

Markings:

Rated value on cap (colour coded body if required)

Weight (average): 1,98g (0.07 oz)

Belling-Lee reference nos.:

L1055/current rating

Example: L1055/060 is a 60mA fuse link.

Continuous Rating 1000 Hours	RATED VOLTAGE To BS 2950/A		COLOUR CODE (If Required)
	d,c,	a.c.	
60mA	1000	1000	Black
100mA	1000	1000	Dark Grey
150mA	1000	1000	Red
250mA	750	1000	Dark Brown
500mA	350	750	Yellow
750mA	300	500	Green
1A	250	350	Azure Blue
1·5A	250	250	Sky Blue
2A	250	250	Dark Violet
3A	32	250	White
5A	32	250	Black & White
7·5A	32	100	Orange
10A	32	100	Light Orange & Black
12A	32	100	Lt. Orange & Dk. Grey
15A	32	50	Light Orange & Green
20A	32	32	Lt. Orange & Dk. Viole
25A	32	32	Lt. Orange & White

Fuseholders (Subject to their individual ratings):

L 510 single, open

*L 1382 panel, sealed

*L 670 single, closed, sealed

L 1744 panel, bayonet cap

L 1045/C3 single, closed L 1341 panel, bayonet cap L 1745 single, in-line

*L 1348 panel

L 1848 panel, indicating

*L 672 twin, closed, sealed

L 676 twin, indicating, sealed

L 1033/C4 twin, closed

L 1291 twin, semi-recessed

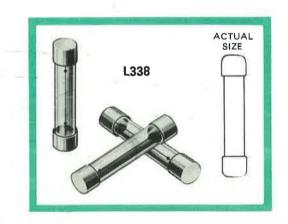
(* Qualification approved)

L 338 'MAG-NICKEL', delay

1¼" x ¼" (31,8 x 6,35mm) diameter

This range withstands surges of up to 15 times the rated current for a period not exceeding 0.01 second, and without shortening of normal life through embrittlement. Suitable fuseholders as for L 1055.

Current ratings:	250mA, 500mA, 750mA	
Life:		
Markings:	Rated value on caps, colour coded body	
Weight (average):	1,41g (0·05 oz)	
Belling-Lee reference nos.:	L338/L250 , L338/500 , L338/750	



Light & Heavy Duty Fuse Links

size 00 & 20mm x 5mm



L 754 Miniature, Ceramic 5/8" x 3/16" (15,9 x 4,76 mm) diameter

These fuse links range from 50mA to 2A and have a category of duty 250V AC2, 230V DC2 (max. prospective overload 4000A at 0.4 pf and 250V a.c.), and so may be described as high-rupturing capacity fuse links. They have a minimum life of 1000 hours at rated current at temperatures up to 25°C and at 80% of their rated current at temperatures beyond this up to 100°C. Temperature range: -60° to +100°C. Humidity classification, D.T.D. 1085-C.

Specification:

DEF.63

Marking:

Body colour coded and marked

with rating

Weight (average): 0,85 g (0 03 oz)

Belling-Lee

reference nos.:

L754/current rating. Example L754/050 is a 50mA fuse link.

Fuseholders:

*L575 panel mounting

*L675 sealed, panel mounting L1383 for printed circuit mounting

L1596 panel mounting

*Qualification Approved

Note: The L754 range of fuse links has been extended downwards for instrument protection and other light duty applications, by the addition of 10, 15 and 25 mA ratings.



CONTINUOUS RAT		
NOMINAL @ 25°C	SERVICE @ 100°C	COLOUR CODE
50mA	40mA	Pink
100mA	80mA	Grey
*250mA	200mA	Brown
*500mA	400mA	Yellow
*1A	0·8A	Dark Blue
*2A	1·6A	Dark Violet

* Qualification Approved

COLOUR CODE

10 mA, green and yellow 15 mA, red and light blue

25 mA, Eau-de-Nil



Fuseholders:

E6011 - miniature panel mounting L1426 – for printed circuit mounting

L1427 International, glass, 20 x 5 mm diameter

A range of quick-acting, cartridge fuse links for the protection of appliances or parts of appliances for use at a maximum ambient temperature of 35°C, a maximum relative humidity of 75% and a minimum air pressure of 860 mbar.

The blowing characteristics (pre-arcing times) are in accordance with I.E.C.127, Standard Sheet II requirements.

Current Ratings:

1-1.25-1.6-2A

Rated voltage 250V a.c.

2.5 - 3.15 - 4A5 - 6.3A

Rated voltage 150V a.c.

Breaking Capacity:

35A a.c. or 10 x Ir (whichever is greater at 0 8 power facter.

Marking:

Current and voltage rating on cap.

Belling-Lee reference nos.:

L1427/current rating in amp.

Example: L1427/1 is a 1A fuse link.



Heavy Duty Fuse Links size 0



CONTINUOUS RATING 1000 HOURS		COLOUR CODE	
Nominal @ 25°C	Services @ 100°C	COLOGN CODE	
250mA-	200mA	Brown	
500mA	400mA	Yellow	
1A	800mA	Azure Blue	
2A	1·6A	Violet	
3A	2·4A	White	
5A	4·0A	Black & White	
7A	5·6A	Orange	
10A	8·0A	Black & Orange	

Standard Ceramic, 14" x 4" (31,8 x 6,35mm) diameter

Approved by Joint Services, ARB, Central Electricity Generating Board, and Lloyd's Register of Shipping.

These fuse links have a category of duty 440V AC4, 230V DC4 (max. prospective overload 33,000A at 0.3 pf and 440V a.c.). They have a minimum life of 1,000 hours at rated current at temperatures up to 25°C and at 80% of their rated current at temperatures beyond this up to 100°C. Temperature range, -60° to +100°C. Humidity classification, D.T.D. 1085-C.

Specification:

DEF.63

Marking:

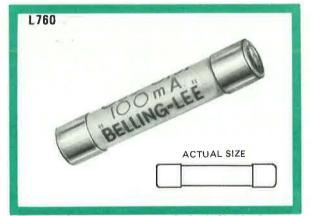
Rated value, on cap; body colour coded and marked with rating, and Joint Service Catalogue number. Weight (average):

2,6 g (0.09 oz)

Belling-Lee reference nos.:

L693/rating. Example: L693/250 is a 250mA fuse link.

For suitable fuseholders, see below.



In these fuse links, which extend the range of heavy duty fuse links down to 60mA, the ceramic bodies are not filled with silica since this is unnecessary on account of the smaller material content and rating of the elements.

Category of duty, 250V AC2, 230V DC2 (max. prospective overload 4,000A at 0.4 pf and 250V a.c.).

Specification:	DEF.63
Current Ratings & Colours:	60mA (black), 100mA (dark grey), 150mA (red).
Blowing Time:	Within 10 seconds at 2 x Ir
Life:	As L693 series (above)
Weight (average):	2,2g (0·07 oz)

Fuseholders (Subject to their individual ratings):-

L 510

* L 670 single, closed, sealed L 1045/C3 single, closed L 1341 panel, bayonet cap

single, open

* L 1348 panel *L 1382 panel, sealed L 1744

panel, bayonet cap

L 1745 single, in-line L 1848 panel, indicating *L 672 twin, closed, sealed

L 676 twin, indicating, sealed L 1033/C4 twin, closed

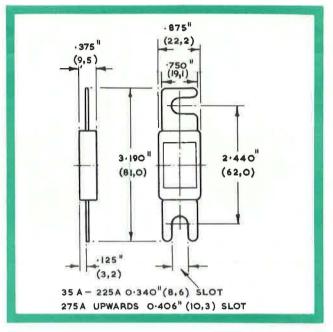
L 1291 twin, semi-recessed (* Qualification approved)

Belling-Lee reference nos.: L760/rating in Amp. Example: L760/060 is a 60mA fuse link.

Heavy Duty 'Air-Fuse'







Cut-outs minima, normal tolerance +0 005".

DIMENSIONS: Overall sizes and fixing centres nominal.

Figures in brackets are approx.mm equivalents.

L1330 "Airfuse"

The "Airfuse" is the British equivalent of the Burndy "Current Limiter" used in 28 V.d.c. aircraft power supply circuits. Needing no holder, the "Airfuse" commends itself to the aircraft industry by its saving in weight, and has Air Registration Board Approval. It has numerous other applications, such as the

protection of battery driven vehicles, heavy current rectifiers, and low voltage furnaces, etcetera.

The "Airfuse" is an unfilled fuse link in a ceramic housing, with a transparent window for inspection. Heavy duty terminal lugs are fitted. There are eleven standard ratings from 35A to 500A.

Specification:	B.S. G176, parts 1 and 4
Current Ratings: (in Amps):	35, 50, 80, 100, 130, 150, 200, 225, 275, 325, 500A
Max. Prospective Overload:	35A-2,500A, remainder 3,000A, at 30V d.c.
Life:	>1,000 hours at rated current, at 20°C
Temperature Range:	-65° to +70°C
Humidity	Class H,
Altitude:	60,000ft (18000m)
Acceleration:	B.S. G100, grade 3 Class A
Vibration:	B.S. G100, for grade 2 and 3 equipment
Materials:	Body, ceramic. Window, glass, Element, tinned Copper
Weight (average):	18,7-29,8g (0.66-1.05 oz) according to rating
Marking:	Rating printed on the window, and stamped on lug.

Belling-Lee reference nos.: L1330/Current rating. Example: L1330/30

size 00



L1383 Fuseholder, open, for printed circuits 0·1" module
L1426 Similar type,

for 20×5mm fuse links



L1596 Fuseholder, panel, E6011 Similar type for 20×5mm fuse links



L675 Fuseholder, panel, sealed Qualification approved



L575 Fuseholder, panel, Qualification approved.

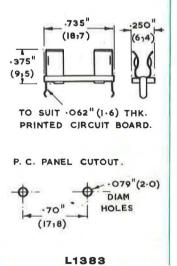
	L1383	L 1596	L675	L575
Specification:	-	-	DEF.64	RCS 262 Iss.2
Current Rating:	2A *	7A *	2A*	2.5A Temp. rise <55°C
Breakdown Voltage (d.c.):	at sea level	sea level 60,000 ft (18000m) >4kV 1kV	sea level 60,000 ft (18000m) >9kV 1kV	sea level 60,000 ft (18000m) >3.5kV >1kV
Insulation Resistance:	3 x 106 megohms	30 × 103 megohms	>100 megohms	>102 megohms
Insertion Resistance:	<4 milliohms	<10 milliohms	<30 milliohms	<5 mllliohms
Humidity:	Dry conditions only	H _s (DEF.5011)	·H _s	Class H ₂
Temperature Range:	90°C max.	-55°C to +70°C	-55°C to +70°C	-40°C to +70°C
Panel Thickness (max.):	0.063 in (1,6mm)	9/64 in (3,57mm)	0-15in (3,8mm)	0.064in (1,6mm)
Fixing Torque (max.):	_	1,36 Nm (12 lbf-ln)	0,62 Nm (5·5 lbf-ln)	0,32 Nm (2·8 lbf-ln)
Weight (average):	0.03 oz (0,9g)	0·17 oz (4,75g)	0.48 oz (13,7g)	0·19 oz (5,3g)

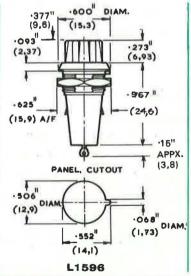
^{*} Temperature rise > 40°C

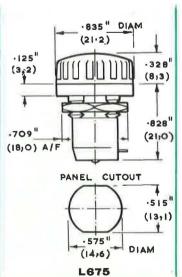
Cut-outs minima, normal tolerance +0 005".

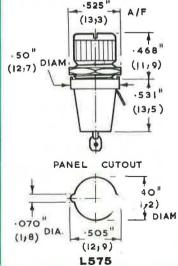
DIMENSIONS: Overall sizes and fixing centres nominal.

Figures in brackets are approx. mm equivalents.













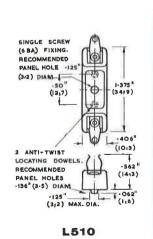
L510 Fuseholder, open, single-pole L1348 Fuseholder, panel Qualification approved

L1341 Fuseholder, panel, bayonet-locking L1341/H with test-prod aperture, 0.051 in (1,3mm) diam.

L1382 Fuseholder, panel, sealed Qualification approved
L1382/H with test-prod aperture,
0.094 in (2,4mm) diam.

	L510	L1348	L1341	L1382
Specification:	-	RCS 262. Issue 2	-	DEF.64
Current Rating:*	7A	7A	15 A	7A
Breakdown Voltage (d.c.):	>10kV	>9kV	>9kV	>10kV
Insulation Resistance:	>10³ megohms	>100 megohms	>10×10³ megohms	>100 megohms
Insertion Resistance:	<10 milliohms	<5 milliohms	<5 milliohms	<15 milliohms
Humidity:	H ₂ (RCS.11)	H ₂ (RCS.11)	H ₂ (RCS.11)	H _s (DEF.5011)
Temperature Range:	-40°C to +70°C	-40°C to +100°C	-40°C to +100°C	-55°C to +70°C
Panel Thickness (max.):	-	0-4 in (10mm)	0∙312 in (7,92mm)	0·312 in (7,92mm)
Fixing Torque:		0,57 Nm (5lbf-in)	2,71 Nm (24 lbf-in)	1,70 Nm (15 lbf-in)
Weight (average):	0·13 oz (3,71g)	0.7 oz (19,7g)	1·27 oz (36g)	0.84 oz (23,4g)

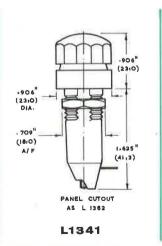
* Temperature rise > 40°C

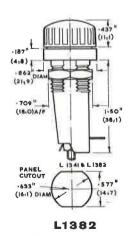


-750"
(19,1)
DIAM
-709"
(18,0)
A/F

CUTOUT
PANEL
-640"
(16,3)
DIAM
(3,6)
DIAM
(3,6)
DIAM
(17,5)

L1348





DIMENSIONS:

Cut-outs minima, normal tolerance +0.005". Overall sizes and fixing centres nominal. Figures in brackets are approx. mm equivalents.



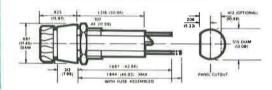
L 1744 FUSEHOLDER, PANEL, BAYONET LOCKING

A panel mounting fuseholder for 1¼" ¼" (32 x 6,3mm) fuse links fitting a 0.515" diameter panel piercing. It has a bayonet locking cap and connection posts suitable for soldering or for ¼" (6,3mm) solderless snap-on connectors. A special insulation barrier is incorporated to provide superior internal breakdown performance.



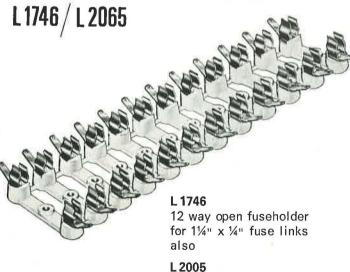
Current Rating:	30A max. (see de-rating table above)
Breakdown Voltage;	>4kV between terminations >10kV terminations to panel
Insulation Resistance:	>10 x 10³ megohms
Insertion Resistance:	<2 milli-ohms
Humidity:	H5 (DEF.5011)
Temperature Range:	–55° to +100°C
Panel Thickness (max.):	0-313 in (7,9mm)
Fixing Torque (max.):	1,13 Nm (10lbf-in)
Moulding:	Phenolic
Contacts:	Brass, silver-plated
Weight (average):	13,7g (4 48 oz)

Current/temperature derating		
Current (amp)	Max.ambient temp. (°C)	
5	90	
10	75	
15	65	
20	50	
25	40	
30	30	



AVAILABLE SHORTLY

NEON INDICATOR



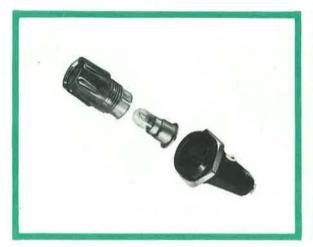
12 way open fuseholder for 20 x 5 mm fuse links.



L 1897

LAMPHOLDER





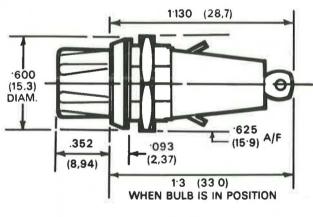


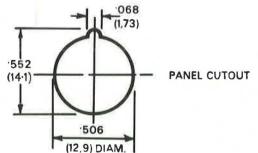
L1896 MINIATURE PANEL LAMPHOLDER

This miniature panel lampholder has been designed to match the styling of our existing range of fuse-holders L1596 for 5%" x 3/4" and E6011 for 20 x 5 mm fuse links; having the same panel cutout and a single fixing nut. The addition of a locating spigot on the underside of its rim prevents rotation on the panel.

By unscrewing the lense, the bulb withdraws from the front of the panel, which makes the task of replacing the bulb very much simpler. The lenses are moulded in polycarbonate and are available in amber, blue, clear, green and red, while the body is a phenolic moulding.

The L1896 lampholder utilizes the L.E.S. pea-lamps, giving a range of voltage ratings and filament life requirements.





Insertion Resistance: < 5 milli-ohms

Power Rating (lamp): >1.5 watts (temperature rise>40°C)

Voltage Proof: 2 kV @ 50 Hz
Insulation Resistance: >100 megohms
Temperature Range: -55° to +60° C

Panel Thickness (max.): 0.125 in (3,17 mm)
Fixing Torque (max.): 1,36 Nm (12 lbf-in)

Colours (lens): Amber, blue, clear, green or red

Materials and Finish: Body moulding, Phenolic

Lens, polycarbonate Contacts, silver-plated

Lamp Style: 5 mm tubular, Lilliput Edison screw

cap (E5/8)















L 1045/C3 Fusebox, single pole

L 1033/C4 Double pole version

Suitable for chassis or panel mounting, these fuse-boxes accept standard $1\frac{1}{4}$ " \times $\frac{1}{4}$ " fuse links. These are carried in the lid, and are automatically exposed and isolated from the circuit as the lid is raised. Leads may be inserted through the back or through the ends of the box.

L 1291 Fusebox, double pole, semi-recessed

The carrier of this robust component is retained by a central screw which may be wired to discourage unauthorised access. The body is secured by a clamp below the chassis.

Data

Current rating for 40°C temperature rise: 10A Breakdown (d.c.): between poles >8kV poles to chassis >4kV

Temperature range: -40° to +90°C

L 670 Fusebox, single pole, sealed

L 672 Double pole version.

These qualification approved components have beryllium-copper fuse clips, precipitation hardened, which provide consistent contact pressure on the fuse links. Technical data is on page E11.

L 676 Fusebox, indicating, double pole, sealed

Similar to L672, but this unit has two neon lampholders incorporated, with a resistor network so wired that each lamp is extinguished when the associated fuse link blows. The non-reversible lid also fits the L672 base. Supplied without lamps; GEC type 9 and Hivac type 7L are suitable.

Data: See page E11.

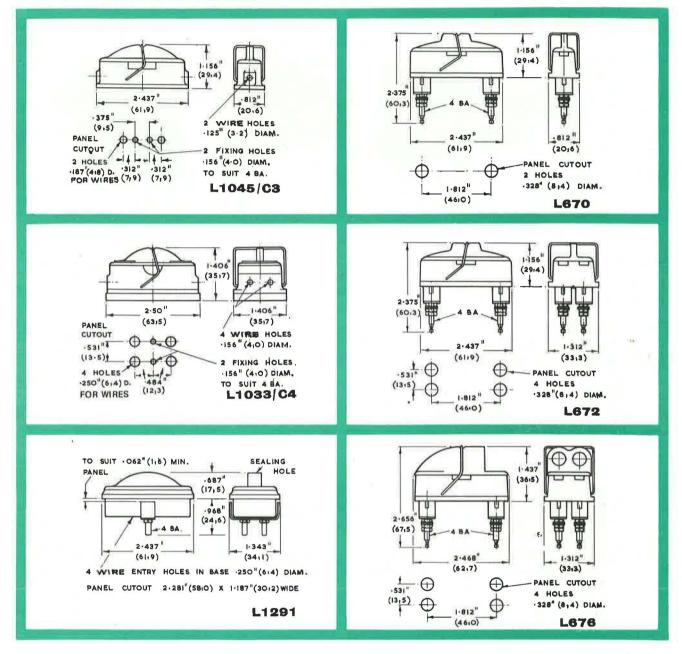
Fuseboxes

size 0



DIMENSIONS

Cut-outs minima, normal tolerance +0.005" Overall sizes and fixing centres nominal. Figures in brackets are approx. mm equivalents.

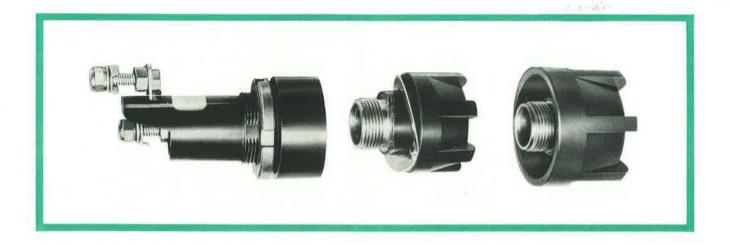


Belling Lee Reference No.	L670 and L672	L 676
Specification: "	DEF.64	-
Current Rating:	>7A	10A
Breakdown Voltage (d.c.): Between Poles: Poles to Chassis':	at sea level—at 18000m (60,000 ft) 10kV >1kV >7kV >1kV	sea level-18000m 2kV <900V 8kV >1kV
Insulation Resistance:	>100 megohms	>10³ megohms
Insertion Resistance (per pole):	<20 milliohms	<10 milliohms
Humidity:	Class H _s (DEF.5011)	
Temperature Range:	-55°C to +70°C	_
Panel Thickness (max.):	3,2mm (0 125 in)	3,2mm (0·125 in)
Weight (average):	L670, 36g (1·1 oz) L672, 65,2g (2·3 oz)	77, 9g (2·7 oz)

^{*} Temperature rise > 40°C

Fuseholders

sizes 1 & 2



Size 1 Fuseholders, panel sealed
L 1302 Complete fuseholder, with large lid
L 1303 As above, but with standard lid
Size 2 Fuseholders, panel sealed
L 1304 Complete fuseholder, with large lid
L 1305 As above, but with standard lid

DIMENSIONS

Cut-outs minima, normal tolerance +0:005" Overall sizes and fixing centres nominal Figures in brackets are approx.mm equivalents. This series of panel mounting fuseholders was developed in collaboration with the Ministry of Supply, for use in military air, sea, and land vehicles, but has many industrial applications, too.

Fuse link withdrawal is effected automatically as the lid is unscrewed. The variety with the larger lid provides a fingerguard and increased creepage path for additional safety, permitting a higher working voltage to be used.

Mounting on the panel is effected through a single hole, shaped to engage the anti-swivel flats on the fuseholder body, which is secured with a ringnut. The terminals are supplied complete with washers and shakeproof nuts.

L 1302	L 1303	L 1304	L 1305
15A	15A	30A	30A
440V a.c.	250V peak	440V a.c.	250V peak
>100 MΩ	>100 M Ω	>100 MΩ	>100 M Ω
<5 m Ω	$<$ 5 m Ω	<5 m Ω	<5 m Ω
-40° to +100°C	-40° to +100°C	-40° to +100°C	-40° to +100°C
Leakage less than 1cc/h at 15 lbf/in²			
0.204 in (5,2 mm)	0.204 in (5,2 mm)	0.204 in (5,2 mm)	0.204 in (5,2 mm)
2·25 oz (64g)	2·0 oz (57g)	4·4 oz (125g)	6.6 oz (187g)
	$^{440\text{V}}$ a.c. $^{>100\text{ M}\Omega}$ $^{<5\text{ m}\Omega}$ $^{-40^{\circ}}$ to $^{+100^{\circ}}\text{C}$ Leakage less t $^{0.204\text{ in }(5.2\text{ mm})}$	$\begin{array}{cccc} 440 \text{V a.c.} & 250 \text{V peak} \\ >& 100 \text{ M}\Omega & >& 100 \text{ M}\Omega \\ <& 5 \text{ m}\Omega & <& 5 \text{ m}\Omega \\ -& 40^{\circ} \text{ to} +& 100^{\circ} \text{C} & -& 40^{\circ} \text{ to} +& 100^{\circ} \text{C} \\ \text{Leakage less than 1cc/h at 15 lb} \\ 0.204 \text{ in (5,2 mm)} & 0.204 \text{ in (5,2 mm)} \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

* Temperature rise > 40°C

