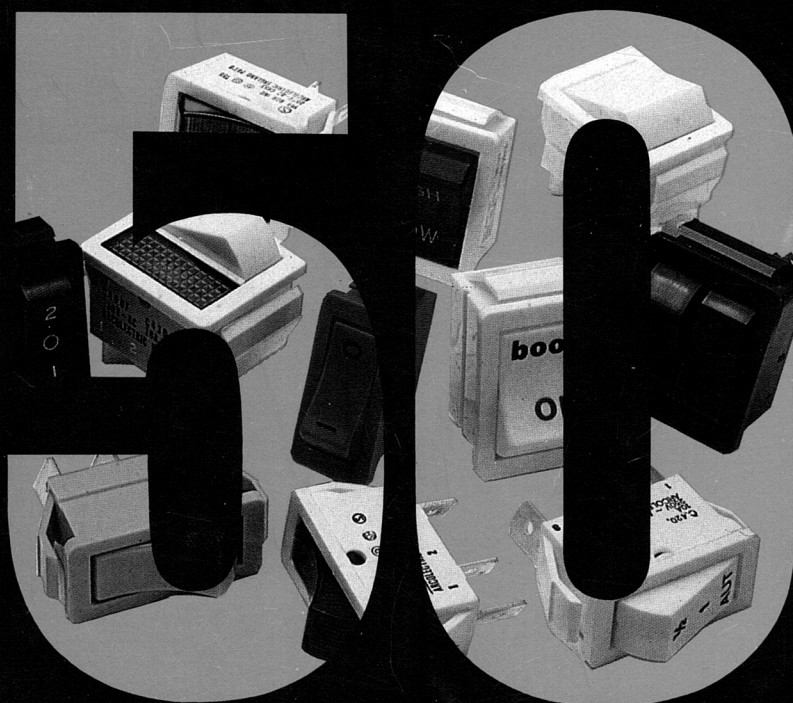


# Arcoelectric

ARCOELECTRIC SWITCHES p.l.c. · CENTRAL AVENUE · EAST MOLESEY · SURREY · ENGLAND  
Tel: 01-979 3232 Telex: 24959 ARCMOL G



A range of high quality components including Switches,  
Indicator Lights and Fuse Holders. Most products have a  
full range of international approvals

**CATALOGUE No.150 1982**

**A**  
**50**  
1932-1982



# Arcoelectric Switches p.l.c.

Registered in London, England No. 357431

## Registered Office:

Central Avenue,  
East Molesey, Surrey,  
England KT8 0RF

## Telephone:

STD 01.979 3232 10 lines

## Cables:

Arcoelectric Molesey.

## Telex Number:

24959 ARCMOL

## VAT Registration Number:

211 3314 30

## BANKERS

Barclays Bank p.l.c.

2 High Stret, East Molesey, Surrey

Sort code 20-94-62

Acc. No. 60122106

## HISTORY

**1932:** The original company, Collier Electric Co Ltd, was established by Richard Collier. Electrical components were manufactured in small factories, at first in Croydon and later in Twickenham.

**1939:** H. C. Harris joined the company and it was reformed with the name Arcoelectric Switches Ltd. derived by taking the 'Ar' from Harris and the 'Col' from Collier.

**1947:** The company moved to East Molesey.

**1958:** Arcoelectric Holdings Ltd. was formed.

**1959:** Richard Collier died.

**1966:** The No. 2 factory at East Molesey was opened.

**1973:** The No. 3 factory at Aldershot was opened.

**1976:** H. C. Harris died.

**1980:** The No. 4 factory at Aldershot was opened.

Rodney Collier, B.Sc.(Econ.)  
Chairman and Managing Director

John Harris  
Technical Director

Arthur Arnold  
Engineering Director

## HOME SALES

Peter Dillistone, Manager  
Richard Entract, Asst. Manager

## EXPORT SALES

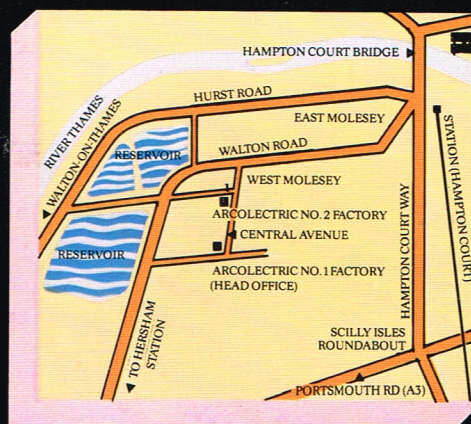
Howard Cowley, Manager  
Roger Sign, Asst. Manager

## U.K. Sales Areas

Graham Wood-Smith  
Area Manager, Central England

Chris Macdonald,  
Area Manager, Northern England

Tony Lane,  
Technical Representative, Southern Area



The Arcoelectric factories drawn on the map are 10 miles South of London Airport, Heathrow, and 3 miles north east of B.E.A.B., Mark House, Hersham.

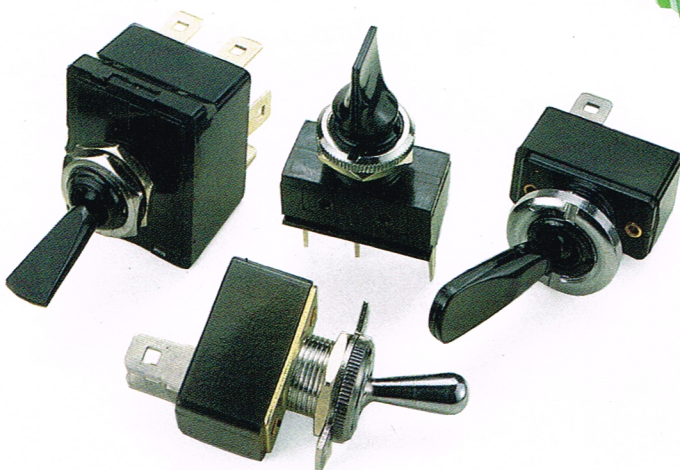
# Arcoelectric Products

Arcoelectric specialise in the manufacture of switches, indicator lights, fuse holders and other small electrical components. They have been designed to meet the requirements of makers of domestic and industrial equipment. Over nearly fifty years we have established a reputation for high quality components that are convenient to use, well styled and internationally accepted as electrically safe.

Design collaboration with customer's engineers ensures that there is a steady flow of new products every year. Typical customers are manufacturers of washing machines, deep freezers, coffee makers, central heating controls, battery chargers, photo-copying equipment, computers, electronic measuring equipment and motor vehicles.



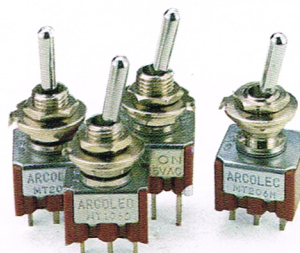
**Rocker Switches**  
Pages 4, 5, 6, 7, 8 and 13



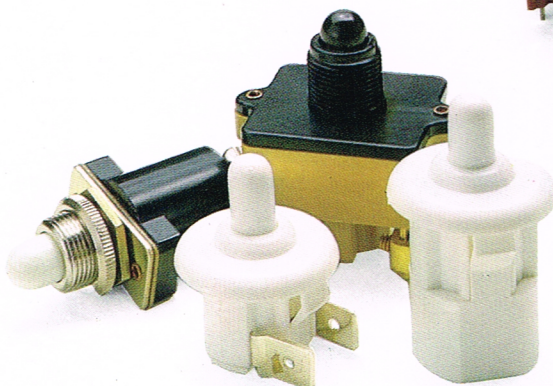
**Lever Switches**  
Pages 10, 11, 12, 13 and 14



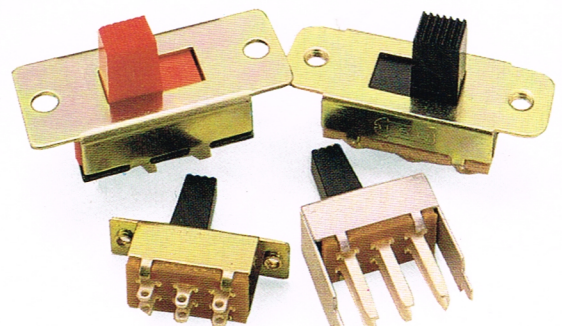
**Miniature Push Switches**  
Pages 16 and 17



**Sub-miniature  
Lever Switches**  
Page 9



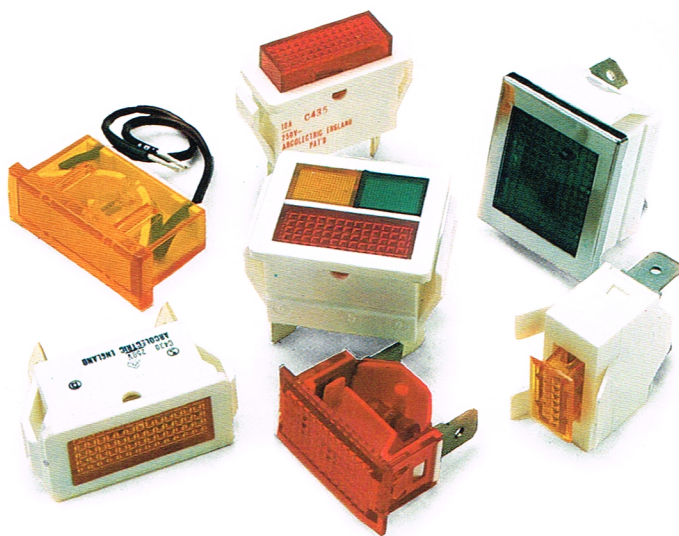
**Door Switches**  
Pages 16 and 17



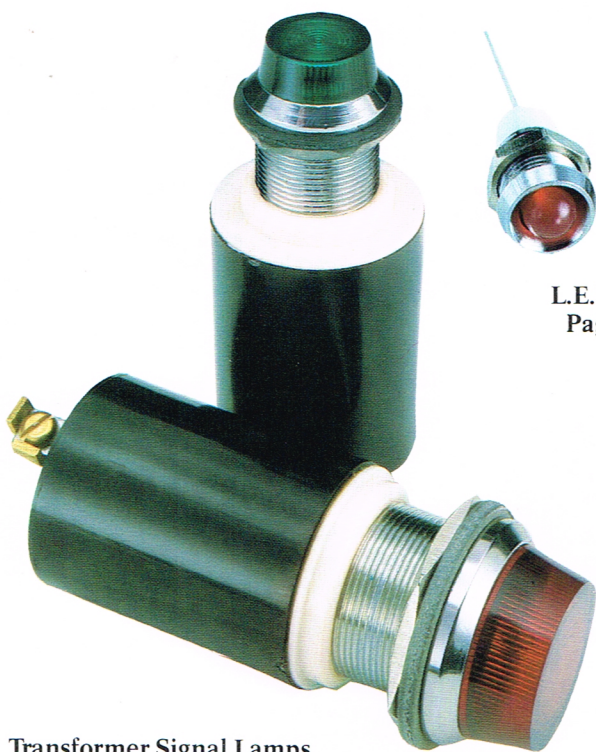
**Slide Switches**  
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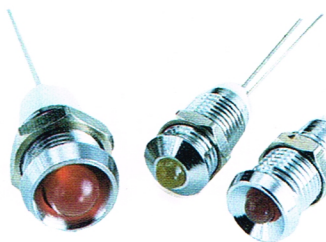
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Switches and Accessories  
for the Motor Industry  
Publication No. 29

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## EXPLANATION OF PREFIXES USED IN CATALOGUE NUMBERS

Catalogue numbers listed on pages 4 to 8 inclusive referring to Rocker Switches, have a prefix identification the explanation of which, is as follows:-

<b>SR</b>	=	Switch, rocker.
<b>SN</b>	=	Switch, neon illumination.
<b>SG</b>	=	Switch, green illumination.
<b>SF</b>	=	Switch, low voltage illumination.
<b>LN</b>	=	Indicator light, neon.
<b>LG</b>	=	Indicator light, green.
<b>LF</b>	=	Indicator light, low voltage illumination.

### SINGLE POLE SIZE

Cat. No. printed on switch has to match approval listing and may differ from ordering number.

**10A 250V AC Resistive**  
**3A 250V AC Inductive**  
**20A 6, 12 or 24V DC**

On request, Style No. SR 1400 switches only, can be supplied with larger silver contacts for 16 (4) A.

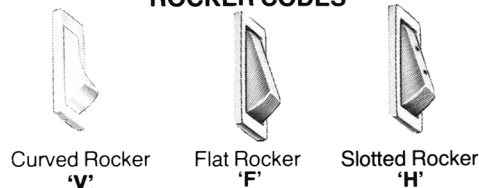
Style		Terminal Numbers	Style No.
		ON/OFF	<b>SR 1400</b>
		ON/OFF Momen. on	<b>SR 401</b>
		ON/OFF Momen. off	<b>SR 402</b>
		ON/OFF with light	<b>SN 403</b>
		ON/OFF with light Momen. on	<b>SN 404</b>
		ON/OFF	<b>SR 5400</b>
		ON/OFF with light	<b>SN 5403</b>
		Flat Rocker only	<b>SF 5403</b> 12V. Filament light only
		ON/OFF with light	<b>SF 403</b>
		Ref. 'Q' panel cut-out only	
		2-Position change-over	<b>SR 1410</b>
		2-Position change-over Momentary	<b>SR 411</b>
		3-Position change-over centre off	<b>SR 1420</b>
		3-Position change-over centre off Momen. 1-side	<b>SR 421</b>
		3-Position change-over centre off Momen. 2-sides	<b>SR 422</b>

### To order use following method:-

Style No., + Rocker Code letter + Panel Cut-out Ref. + Terminal letter

Example: **SR 1400 VQC** = On/off switch, curved rocker, Ref. 'Q' panel cut-out, and 6.3 tab terminals.

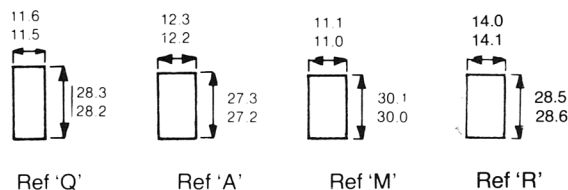
### ROCKER CODES



### BEZEL

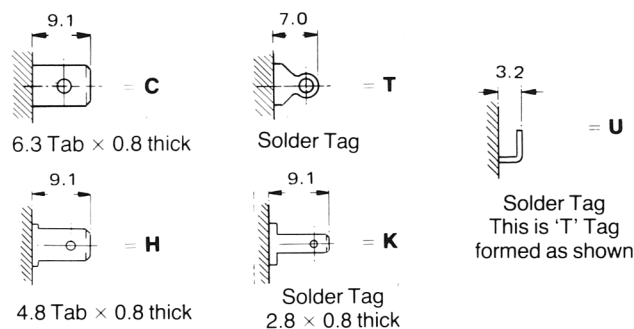


### PANEL CUT-OUTS



Ref 'Q' Snap-in fixing  
 Ref 'A' Panel thickness:-  
 Ref 'M' .75 min.  
 Ref 'R' 2.5 max. for solid fixing clips.  
 For thicker panels please enquire for correct length of cut-out.

### TERMINATIONS



For chrome bezel, add letter 'Z' to Cat. No. Example: **SR 1400 VQCZ**.  
 Not available with 'M' panel cut-out.

Switches for panel cut-out Ref 'R' are 'Q' size switches supplied with a special adaptor.

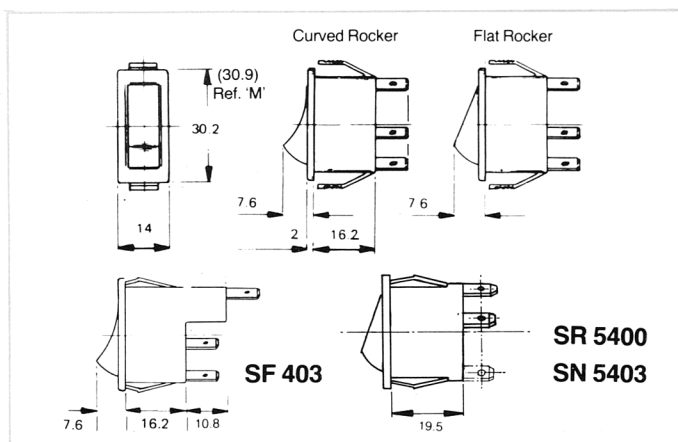
Body and Rocker colours, and voltage should be stated on order.

Colours:-  
 Body and Rocker : Many standard colours.  
 Matt finish available on 'A' size switches only, curved rockers only.

Illuminated Rocker : Red, Amber, Green, Clear or Blue (Blue with filament lamps only)

Voltage Range:-  
 Neon and fluorescent : Below 100V (Specify), 100/130V, 200/250V.  
 Filament lamps : 6/8V, 12/14V, 24/28V.

Approvals : See Publication No. 200.

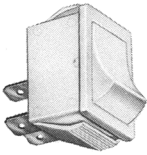

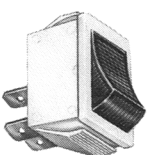

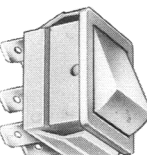

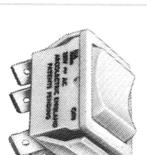



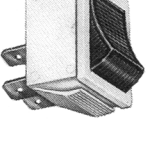



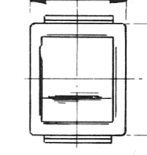

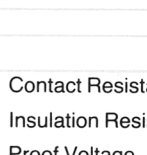

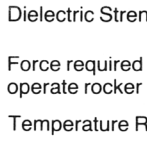





### DOUBLE POLE SIZE

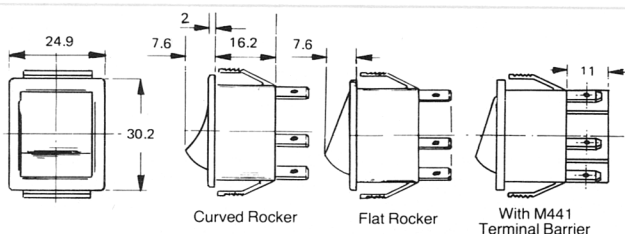
Cat. No. printed on switch has to match approval listing and may differ from ordering number.

**10A 250V AC Resistive**  
**3A 250V AC Inductive**  
**20A 6, 12 or 24V DC**

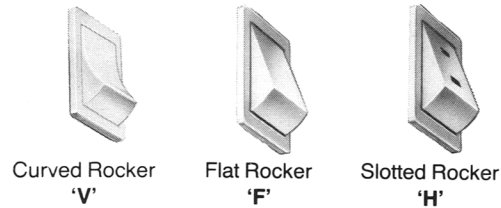
On request, Style No. SR 1450 switches only, can be supplied with larger silver contacts for 16 (4) A.

Style	Terminal Numbers	Style No.
	 ON/OFF * SR 1450 SP	SR 1450
	 ON/OFF Momen. on SR 451	SR 451
	 ON/OFF Momen. off SR 452	SR 452
	 ON/OFF with light Curved Rocker only SN 1453	SN 1453
	 2-position changeover * SR 1460 SP	SR 1460
	 2-position changeover Momentary SR 461	SR 461
	 Single Pole 2-position 2-circuit SR 1462	SR 1462
	 3-position changeover centre off * SR 1470 SP	SR 1470
	 3-position changeover centre off Momen. 1-side SR 471	SR 471
	 S.P. Switch Isol. Light SN 1456	SN 1456
	 D.P. Switch Isol. Light SN 1457	SN 1457
	S.P. Switch with Light SN 1458	SN 1458
	S.P. Switch Momen. on Isol. Light SN 1459	SN 1459
	2-position changeover with Light SN 1465	SN 1465
	Single Pole changeover Isol. Light SN 1466	SN 1466
	D.P. Switch Light in one Line SN 1490	SN 1490

\* Suffix SP means a single pole switch in this body



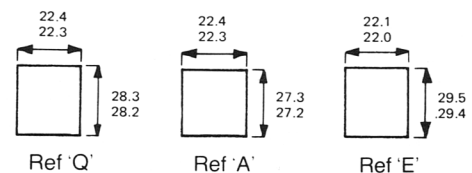
### ROCKER CODES



### BEZEL



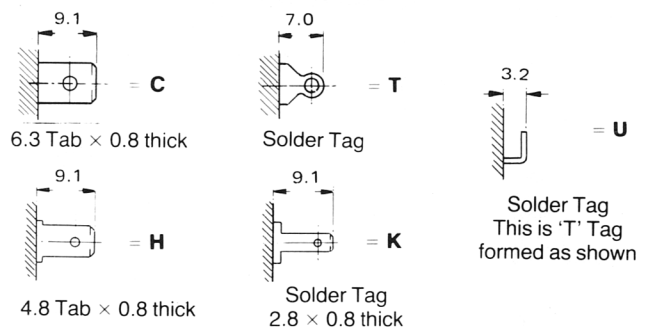
### PANEL CUT-OUTS



Snap-in fixing.

Panel thickness between .75 and 3.3mm.  
 Panel thickness when used with M516 – 1.6 max.

### TERMINATIONS



For chrome bezel, add letter 'Z' to Cat. No. Example: **SR 1450 VQCZ**.  
 For terminal barrier add **M441**. Example: **SR 1450 VQC/M441**.

Moulded guard to prevent accidental operation of switch available to fit panel cut-out Ref 'E' Add **M516** to Cat. No.

Body and Rocker colours, and voltage should be stated on order.

Colours:-

Body and Rocker : Many standard colours.  
 Matt finish available on 'A' size switches only.  
 Illuminated Rocker : Red, Amber, Green, Clear or Blue  
 (Blue with filament lamps only)

Voltage Range:-

Neon and fluorescent : Below 100V (Specify), 100/130V, 200/250V.  
 Filament lamps : 6/8V, 12/14V, 24/28V.

Approvals

: See Publication No. 200.

### SPECIFICATION S.P. and D.P. SWITCHES

Contact Resistance	10mΩ in new condition.	Humidity Resistance	48 hours at 91%—95% relative humidity.
Insulation Resistance	> 20MΩ.	Impact Resistance	> 0.5N <sub>m</sub>
Proof Voltage	1,000V R.M.S. across contacts in open circuit.	Life	> 10,000 operations on rated loading at a rate of 15 operations per minute.
Dielectric Strength	> 3KV between live poles, and between live poles and exposed metal.	Weight	S.P – 8gr approx. D.P – 12gr approx
Force required to operate rocker	1.5Kg.	Body and Rocker (Opaque)	Nylon 66.
Temperature Range	–25°C to 85°C at rated current. T125°C on request.	Rocker (Transparent)	Polycarbonate.
		Terminals and Moving Contact.	Brass, Silver plated.
		Contact Points	Fine Silver.



### SINGLE POLE SIZE

Cat. No. printed on switch has to match approval listing and may differ from ordering number.

To order use following method:-

Style	Terminal Numbers	Style No.
	 Single Light Indicator	<b>LN 430</b>
	 2-Light indicator (flex leads only)	<b>LN 431</b>
	 2-Light indicator	<b>LN 433</b>
	 Single Light indicator	<b>LN 435</b>
	 Single Light indicator Matching Switch 5403 See drg below	<b>LN 435/1</b> (Not illustrated)
 14, 2, 16.2, 4.5, 3.5, 30.2, (30.9) Ref. 'M'		

#### Single Light indicators (430 Series)

Style No., + Panel Cut-out Ref. + Terminal letter

(Panel Cut-out references on page 4)

Example: **LN 430 QC** = Single light indicator, Ref 'Q' panel cut-out, 6.3 tab terminals.

Body colour and lens colour to be stated on order.

#### 2-light indicators (430 Series)

Style No., + Panel Cut-out Ref. + Terminal letter + Lens colours and locations.

Example: **LN 433 QC. 1R. 2A.** Diagram 6.

Diagram 6



For lens colour abbreviations, see below.

#### Single light indicators (480 Series)

Style No., + Panel Cut-out Ref. + Terminal letter.

(Panel Cut-out references on page 5)

Example: **LN 480 QC** = Single light indicator, Ref 'Q' panel cut-out, 6.3 tab terminals.

Body colour and lens colour to be stated on order.

#### Multi-light indicators (480 Series)

Style No., + Panel Cut-out Ref. + Terminal letter + lens colours and locations.

Example: **LN 482 QC. 1R. 2A. 3G.** Diagram 9.

Diagram 7



**481**

Diagram 8



**482**

Diagram 9



**482**

Diagram 10



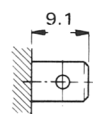
**483**

For lens colour abbreviations, see below.

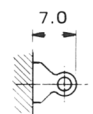
### DOUBLE POLE SIZE

Style	Terminal Numbers	Style No.
	 Single Light Indicator	<b>LN 480</b>
	 2-Light Indicator	<b>LN 481</b>
	 3-Light Indicator	<b>LN 482</b>
	 4-Light Indicator	<b>LN 483</b>
 24.9, 2, 16.2, 30.2		

### TERMINATIONS



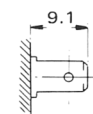
6.3 Tab x 0.8 thick



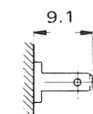
Solder Tag



Solder Tag  
This is 'T' Tag  
formed as shown



4.8 Tab x 0.8 thick



Solder Tag  
2.8 x 0.8 thick

For Chrome bezel, add letter 'Z' to Cat. No. Example: **LN 430 QCZ** (Illustrations on pages 4 and 5). Not available on 'M' panel cut-out.  
For moulded terminal barrier (double pole size only) add **M441** to Cat. No. Example: **LN 480 QC/M441** (Illustration on page 5)

Body colour, lens colours and voltage must be stated on order.

Colours:-

Body

: Many standard colours.

Lens

Matt finish available on 'A' size only  
: Red (R), Amber (A), Green (G),  
Clear (CL), Blue (BL),  
(Blue with filament lamps only).

Voltage Range:-

Neon and fluorescent : Below 100V (Specify), 100/130V,  
200/250V, 380/440V.

Temperature range

: 85° max. T125°C max. on request.

Filament lamps

: 6/8V, 12/14V, 24/28V

Approvals

: See Publication No. 200



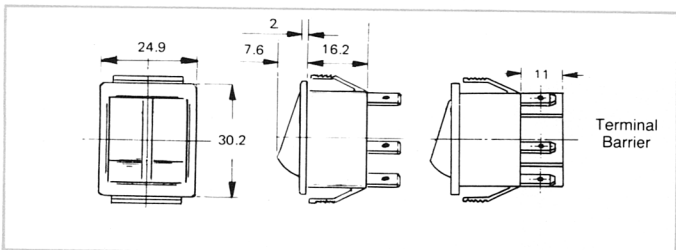
## TWIN UNITS

Cat. No. printed on switch has to match approval listing and may differ from ordering number.

These units consist of combinations of single pole switches or single pole switches and indicator lights, assembled into a double pole size body.

Style	Terminal Numbers	Style No.
	On-Off / On-Off	SR 1400 F / SR 1400 F
	On-Off / Single Light Indicator	SR 1400 F / LN 430
	On-Off with Light / On-Off with Light	SN 1403 F / SN 1403 F

## Selection of available units



## To order use the following method:-

Style Nos. + Rocker Code letters (where applicable),  
+ Panel Cut-out Ref + Terminal letter + Diagram No.

(Switch Styles on page 4. Indicator light styles on page 6)  
Flat rockers only on these units

Units available to fit all double pole panel cut-outs  
Ref. Nos. 'Q', 'A', and 'E' shown page 5.

Examples : **SR 1400 FC/SR 1400 FQC**. Diag. 1  
**SR 1400 FC/LN 433 QC, 1R,2G**. Diag. 4.  
**SN 1403 FCR/SN1403 FQCR** Diag. 1.  
(Letter 'R' in last example indicates colour of illuminated rocker). Lens colour abbreviations on page 6.



For chrome bezel, add letter 'Z' to Cat. No.

Example : **SR 1400 FC/SR 1400 FQCZ**. Diag. 1.

For insulating rear terminal barrier, add M441 to Cat. No.

Example : **SR 1400 FC/SR 1400 FQC/M441**

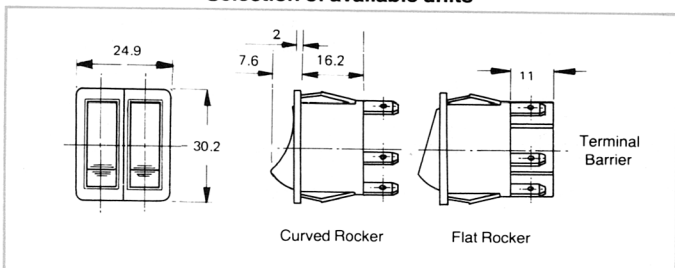
Voltage ranges, specifications etc. on pages 4 and 6.

Approvals : See publication No. 200.

## DUAL UNITS

Style	Terminal Numbers	Style No.
	On-Off / On-Off	SR 1400 F / SR 1400 FJ
	2-position Changeover / 2-Light Indicator	SR 1410 / LN 433 J

## Selection of available units



## 1400 / 1400J SERIES

These units are similar in all respects to the twin units above, excepting that they consist of separate single pole units assembled together to fit a double pole size panel cut-out.

To order, use formula shown above for twin units.

Flat or curved rockers

Units available to fit Ref 'Q' panel cut-out only shown on page 5.

Note, that Catalogue Nos. for these units have a distinguishing suffix 'J'

Examples : **SR 1400 FC/SR 1400 FQCJ**. Diag. 1.  
**SR 1400 FC/LN 433 QCJ, 1R,2G**. Diag. 4.  
**SN 1403 FCR/SN 1403 FQCJR**. Diag. 1.  
(Letter 'R' in last example indicates colour of illuminated rocker). Lens colour abbreviations on page 6.

Diagrams as above.

For chrome bezel, add letter 'Z' to Cat. No.

Example : **SR 1400 FC/SR 1400 FQCJZ**. Diag. 1.

For insulating rear terminal barrier, add M441 to Cat. No.

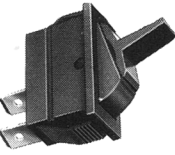
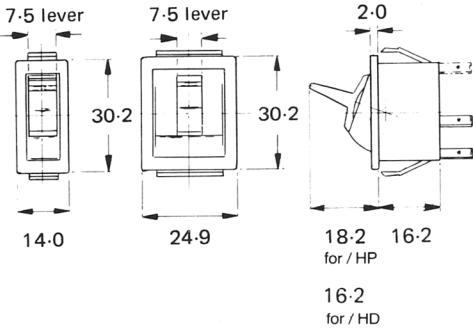
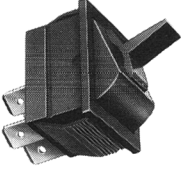
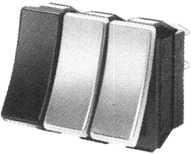
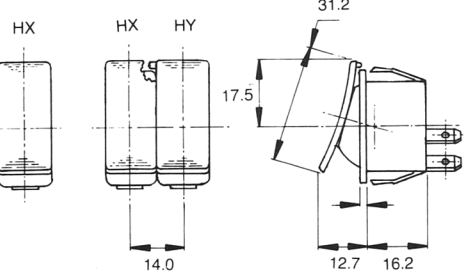
Example : **SR 1400 FC/SR 1400 FQCJ/M441**

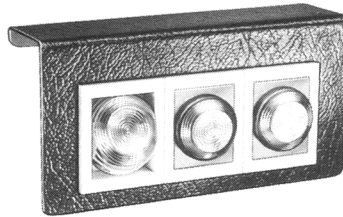
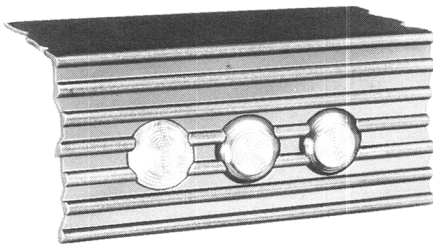
Voltage ranges, specifications etc. on page 4 and 6.



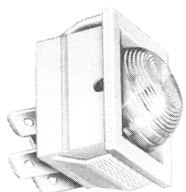
## ROCKER SWITCHES

### 1400 and 1450 SERIES

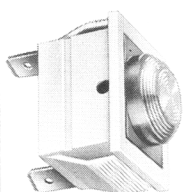
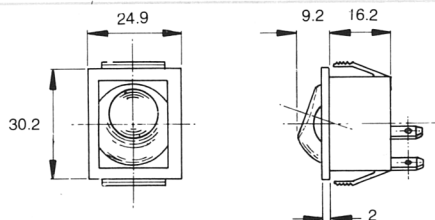
Style	Style No.		
	<b>SR 1400 HP</b> <b>SR 1400 HD</b> Single Pole Series		<b>SR 1400 HP</b> Single Pole Paddle <b>SR 1400 HD</b> As above, shorter lever matt finish only. <b>SR 1450 HP</b> Double Pole Paddle. <b>SR 1450 HD</b> As above, shorter lever matt finish only. <b>SR 1400 HX</b> Single Pole Piano Rocker Designed for adjacent mounting in a single panel hole where multiple switching is required. Non-interlocking rocker for independent control. <b>SR 1400 HY</b> As above with interlocking rocker for selective control.
	<b>SR 1450 HP</b> <b>SR 1450 HD</b> Double Pole Series		
	<b>SR 1400 HX</b> Non-Interlocking <b>SR 1400 HY</b> Interlocking		



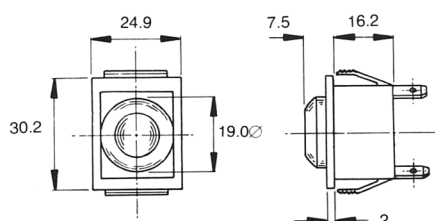
Version of a double pole rocker switch with a semi-spherical rocker. Suitable for chassis mounting behind a fascia panel, necessitating only a single round hole in the panel.  
Illuminated or non-illuminated.



**SN 1453/1**

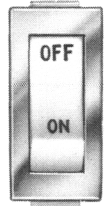
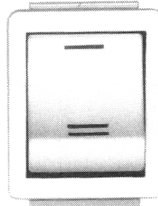
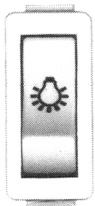
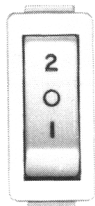
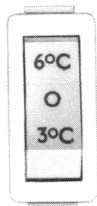
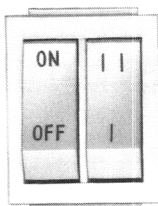


**LN 480/1**



Version of indicator light with frontal appearance to match rocker switch above, and for similar panel mounting.

#### EXAMPLES OF MARKED ROCKERS



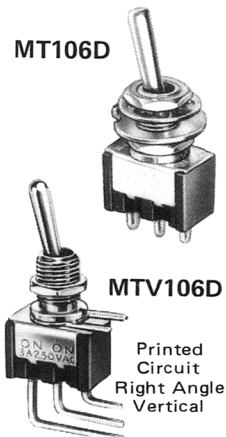
Characters may be ink printed or hot stamped.



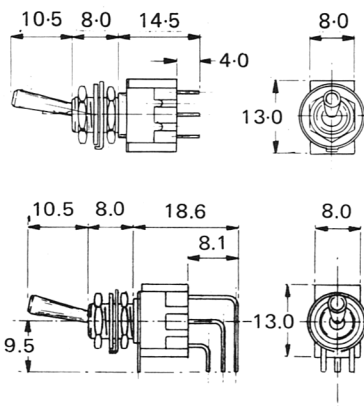
### 3A. 250V. AC.

### SINGLE POLE

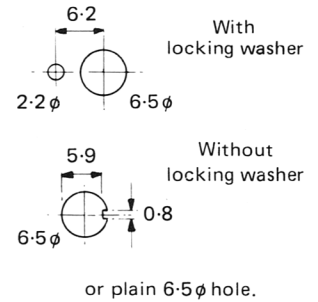
MT106D



Switch Type		Cat. No.
	2-pos C/O	MT106D MTV106D
	2-pos C/O Momentary	MT106F MTV106F
	3-pos C/O centre off	MT106E MTV106E
	3-pos C/O centre off Momen. 1-side	MT106H MTV106H
	3-pos C/O centre off Momen. 2-sides	MT106G MTV106G



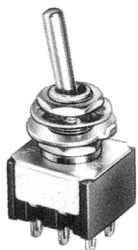
Metal fixing necks screwed:  
6-3/6-2mm dia. x 40 T.P.I.  
Whit. and will fit the following panel cut-outs:-



or plain 6-5φ hole.

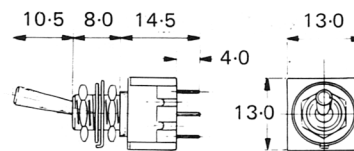
### 3A. 250V. AC.

### DOUBLE POLE



MT206N

Switch Type		Cat. No.
	2-pos C/O	MT206N
	2-pos C/O Momentary	MT206R
	3-pos C/O centre off	MT206P
	3-pos C/O centre off Momen. 1-side	MT206T
	3-pos C/O centre off Momen. 2-sides	MT206S



Max. panel thickness:-

With locking washer 2.7  
Without locking washer 3.7

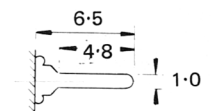
Chrome finish lever and neck.

Phenolic moulded case.

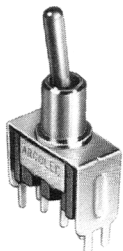
2mm wide x .8mm thick solder tag terminations.

or

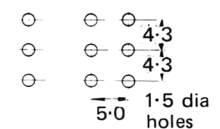
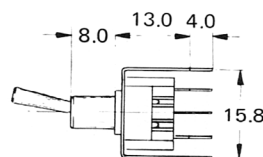
Printed circuit terminations details below.



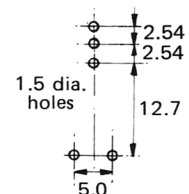
### V30 BRACKET



Support Bracket for use with single or double pole switches having printed circuit terminals.

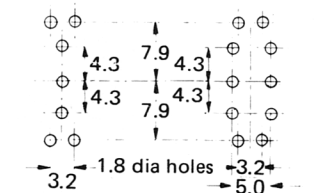


Single Pole Double Pole  
Board drilling MT Series



Single Pole

Board drilling MTV Series



Single Pole Double Pole

Board drilling when using V30 bracket.

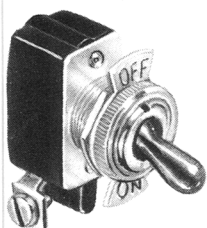
### SPECIFICATIONS

Rating:	3A. 250V. AC.
Initial Contact Resistance:	10 milliohms maximum (after 3 successive on-off cycles at 2-4V. DC. and 0-1 A.).
Dielectric Strength:	1,000V. AC. (Between terminals or terminals and ground, for one minute).
Insulation Resistance:	1,000 megohms minimum.
Humidity Resistance:	Exceeds 10 megohms after exposure to 95% R.H. and 40°C for 48 hours.
Overload Capacity:	Can be operated at 50 times at 150% of rated current at rate of 5 cycles per minute.
Electrical Life:	10,000 cycles minimum (at rated voltage and current, at rate of 10 to 30 cycles per minute).
Mechanical Life:	100,000 cycles minimum.
Corrosion Resistance:	No corrosion on metal parts after 50 hours salt spray. (5% solution).
Contact Materials:	Coin Silver (standard).

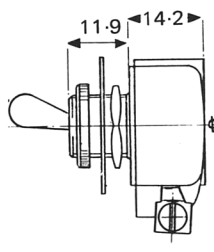
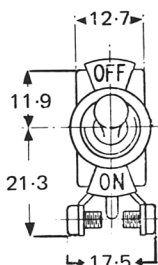


3A. 250V ~ 10A. 6/24V D.C.

SINGLE POLE ON/OFF

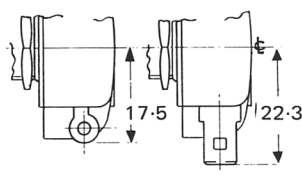


G 600



5 BA. Screws

G 600



Solder Tags

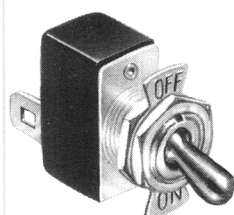
T 600

6-3 Tab Terminals

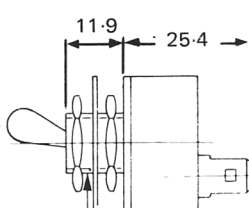
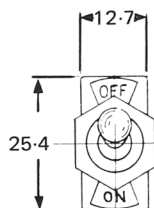
F 600/C

3A. 250V ~ 10A. 6/24V D.C.

SINGLE POLE ON/OFF

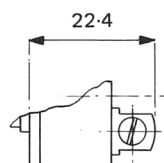


BC 600/C



6-3 Tab Terminal

BC 600/C

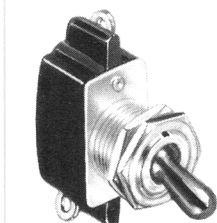


5 BA. Screw

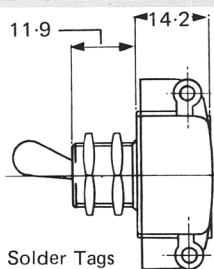
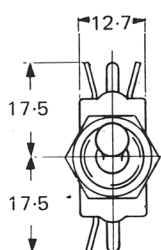
BC 600

2A. 250V ~

SINGLE POLE CHANGE OVER

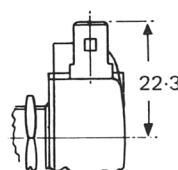


T 590



Solder Tags

T 590

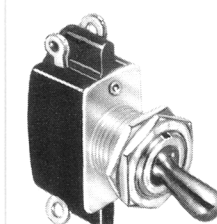


6-3 Tab Terminals

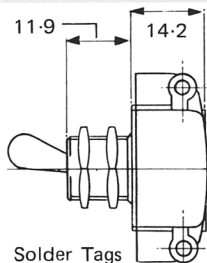
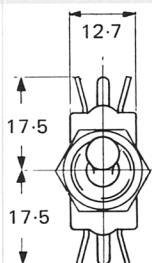
T 590/C

2A. 250V ~

SINGLE POLE 2-CIRCUIT

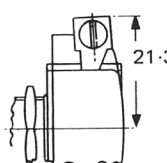


T 610



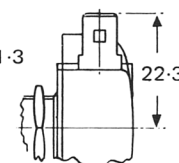
Solder Tags

T 610



5 BA. Screw

F 610

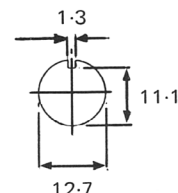


6-3 Tab Terminals

F 610/C

Dimensions in mm

All fixing necks are screwed 11.79 mm dia. x 32 TPI. Whit. and will fit a 12.7mm panel hole or cut-out of following size:



Max. Panel thickness: 5.6mm but this may be increased by omitting the back nut on nylon necks only. The back nut must be used on switches with brass necks.

Alternative fixing nuts on page 19.

Metal levers are nickel plated, but chrome finish can be supplied at extra cost.

Insulated levers are moulded in black or white nylon.

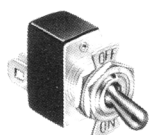
Alternatively, levers can be moulded in a more pliable material, which will flex under impact. To order switches fitted with these levers place /S, at rear of basic catalogue number.

Example: BC 605S/C

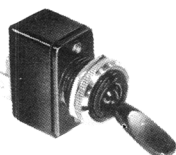
D.C. ratings where not stated, supplied on request.

Details of approved switches are listed in separate publication, No. 200

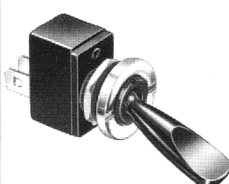
EXAMPLES OF ALTERNATIVE LEVERS



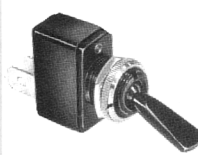
BC 601/C



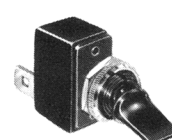
BC 603/C



BC 605/C



BC 606/C

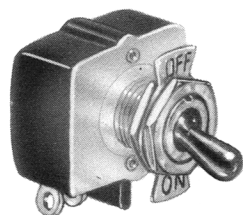


BC 600P/C

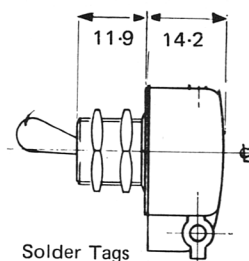
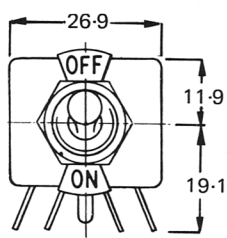
Full range of levers shown on page 11

2A. 250V ~

DOUBLE POLE ON/OFF 



**T 620**



Dimensions in mm

Fixing neck details as page 10

Panel cut-out details as page 10

Panel thickness as page 10

Alternative fixing nuts on page 19.

Details of metal and insulated levers shown below.

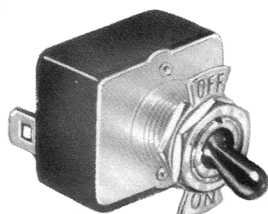
D.C. and low voltage ratings on request.

A version of Cat. No. T 620 fitted with silver plated tags to fit printed circuit boards is Cat. No. T 620/PC.

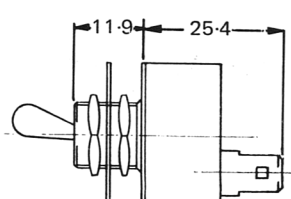
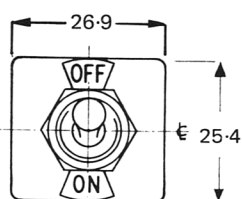
Details of approved switches are listed in separate publication.

2A. 250V ~

DOUBLE POLE ON/OFF 




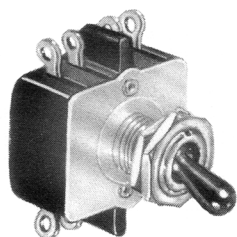
**BC 620/C**



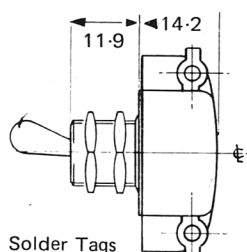
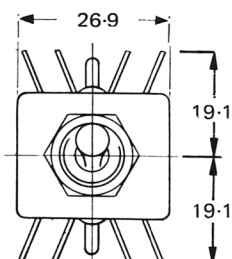
6.3 Tab Terminals

2A. 250V ~

DOUBLE POLE 2-CIRCUIT 

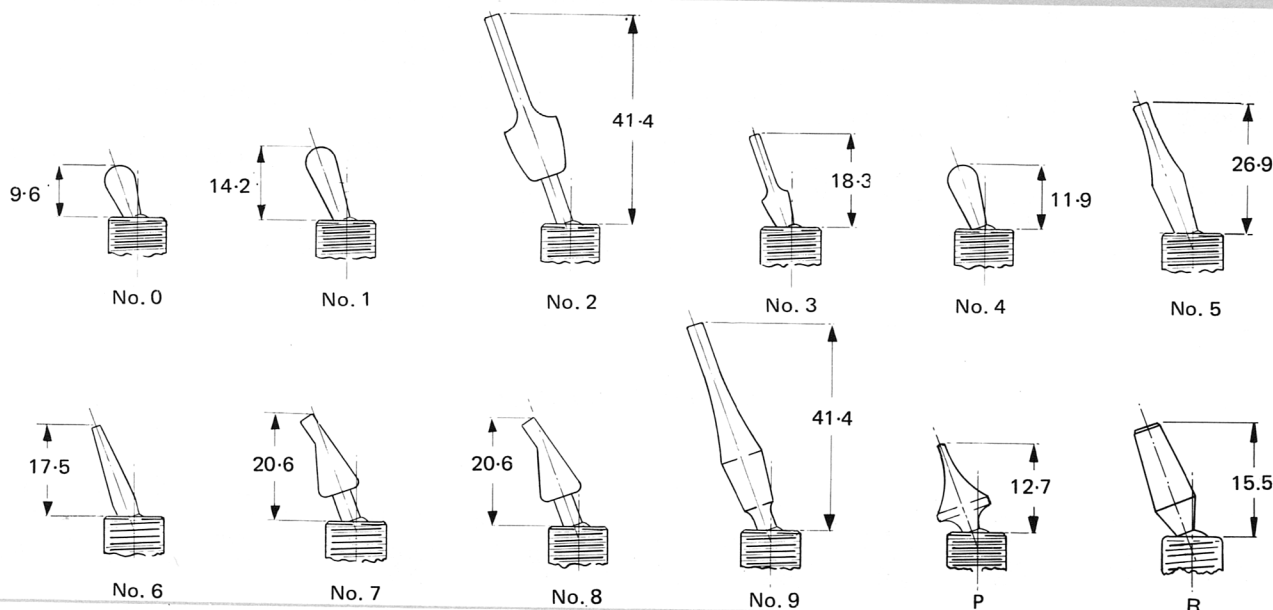


**T 630**



NOTE: Switches on this page, should have the incoming cables connected to outer terminals, and outgoing cables to the inner terminals.

**ALTERNATIVE LEVERS FOR '600' SERIES SWITCHES**

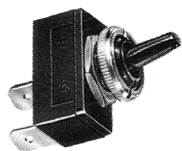


Lever No.	0 and 1	2	3, 4, 5, 6	7	8, 9 and P	R
Lever Material	Nickel Plated Brass	Nylon lever moulded on chrome brass shaft	Nylon	Nylon lever moulded on chrome brass shaft	Nylon	Chrome Plated Brass
Fixing neck Material	Nickel Plated Brass	Chrome Plated Brass	Nylon	Chrome Plated Brass	Nylon	Chrome Plated Brass

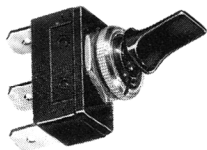


10(3)A. 250V ~





## SINGLE POLE



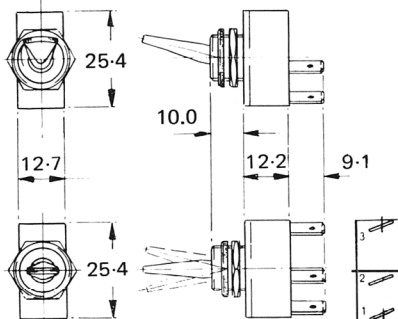
C1800N



C1810M

Switch Type	Cat. No.
 ON/OFF	<b>1800</b>
 ON/OFF Momen. on	<b>1801</b>
 2-pos C/O	<b>1810</b>
 3-pos C/O centre off	<b>1820</b>

All the lever styles shown  
below are available on these  
switches



Fixing necks screwed:  
11.79 mm dia. x 32 TPI Whit.  
11.68 mm dia. x 32 TPI Whit.  
and will fit a 12.7mm dia.  
panel hole, or cut-out as  
page 10.

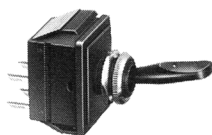
Max. Panel thickness: 3.5mm.  
This may be increased by omit-  
ting back nut.

Chrome finish slotted fixing  
rings are supplied, but details  
of alternative rings and  
splashproof covers on page 19.

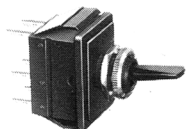
Standard colour is black. White  
supplied on request.

10(3)A. 250V ~





## DOUBLE POLE



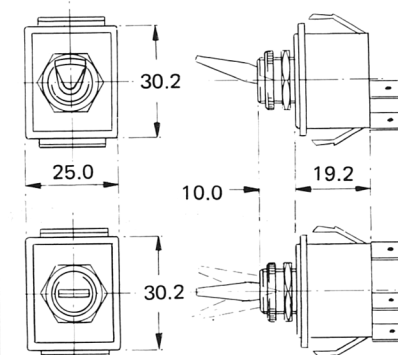
C1850G



C1860H

Switch Type	Cat. No.
 ON/OFF	<b>1850</b>
 2-pos C/O	<b>1860</b>
 3-pos C/O centre off	<b>1870</b>
 Single Pole 2-pos C/O 2-Circuit	<b>1862</b>

Lever styles 'E' 'G' 'H' 'R' and 'S'  
are available on these switches



To order with 6-3 Tab terminals  
prefix Cat. No. with letter 'C'.

4-8 Tab terminals = H

2-8 Tab terminals = K

Solder tags = T

5 BA screws = S

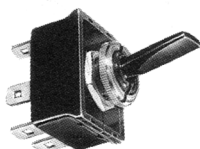
(1800, 1801 only)

Further dimensions for term-  
inals shown on page 5.



Details of approved switches  
are listed in publication No. 200

13(3)A. 250V

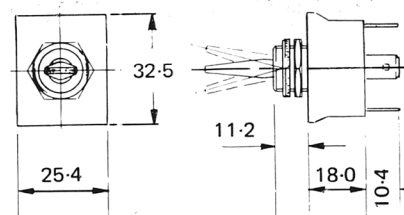
## DOUBLE POLE (REVERSING)



C863H

Switch Type	Cat. No.
 2-pos C/O Reversing	<b>863</b>
 3-pos C/O centre off Reversing	<b>873</b>

All the lever styles shown  
below are available on these  
switches

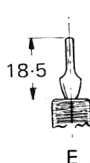


All switch details as above.

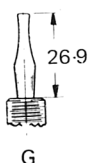
To order with 6.3 tab terminals  
prefix Cat. No. with letter 'C'.

5 BA Screw terminals = S

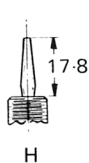
## ALTERNATIVE LEVER



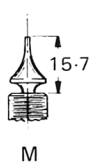
E



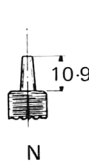
G



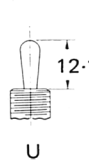
H



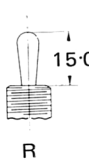
M



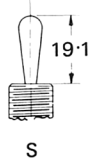
N



U



R



S

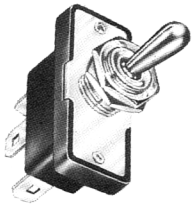
When ordering, please indicate  
style of lever required, by  
placing appropriate letter at  
rear of Cat. No. e.g. 1800N.

Nylon levers and necks



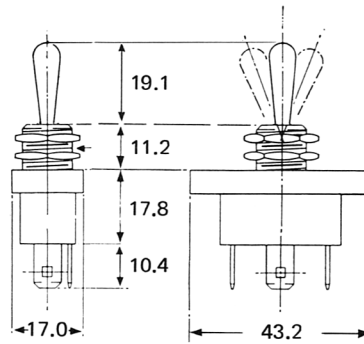
13(3)A 250V~

## SINGLE POLE



C2710

Switch Type		Cat. No.
	ON/OFF	2700
	ON/OFF Momen on	2704
	ON/OFF Momen off	2705
	2-Position change-over	2701
	2-Position change-over Momentary	2706
	3-Position change-over Centre off	2710
	3-Position change-over Centre off Momen. 1-side	2714
	3-Position change-over Centre off Momen. 2-side	2715



Metal levers only are standard on this series.

For moulded levers refer to page 12.

Fixing necks screwed:  
11.79 mm dia. x 32 TPI Whit.  
11.68 mm dia. x 32 TPI Whit.  
and will fit a 12.7mm dia. panel hole, or cut-out as page 10.

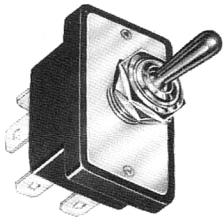
Max. Panel thickness: 5.6mm.

Back nut must be used.

Details of alternative rings and splashproof covers on page 19.

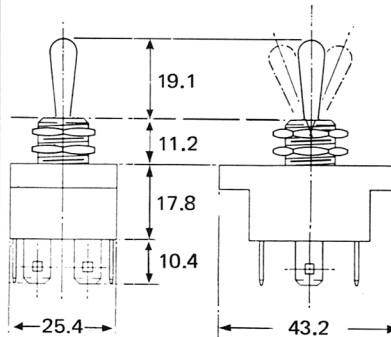
13(3)A 250V ~

## DOUBLE POLE



C2730

	ON/OFF	2720
	ON/OFF Momen. on	2724
	ON/OFF Momen. off	2725
	2-position change over	2721
	2-Position change-over Momentary	2726
	3-Position change-over centre off	2730
	3-Position change-over centre off Momen. 1-side	2734
	3-Position change-over centre off Momen. 2-sides	2735
	2 position change over reversing	2723
	2-position change over reversing Momentary	2727
	3-position change over centre off reversing	2733
	2-position single pole 2-circuit change over	2702
	2-position single pole 2-circuit change over Momentary	2707



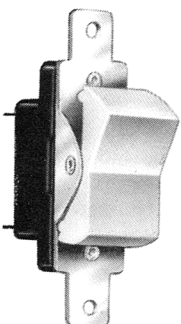
To order with 6.3 tab terminals prefix Cat. No. with letter 'C'

For screw and clamp terminals use letter 'S'.

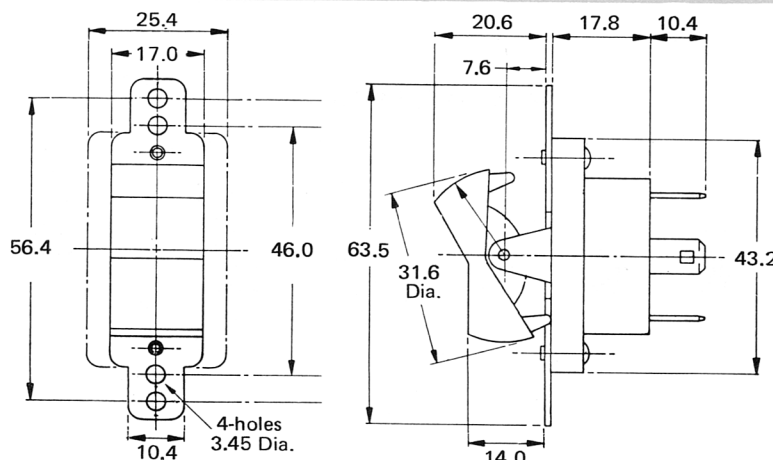
Please note that ON/OFF switches Nos. 2700 and 2720 only, can be supplied, on request, for 16 amp, and will be marked with this rating.

13(3)A 250V ~

## ROCKER SWITCHES



R1/C2700



Rocker version of the switches tabulated above.

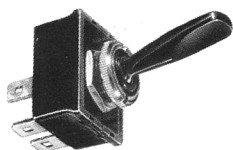
Rockers can be supplied in various colours.

To order prefix Cat. No. from chart above with 'R1'.  
Example: R1/C2700.

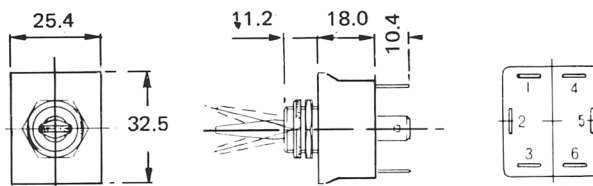


13(3)A. 250V ~

SELECTIVE



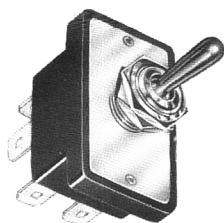
C884G



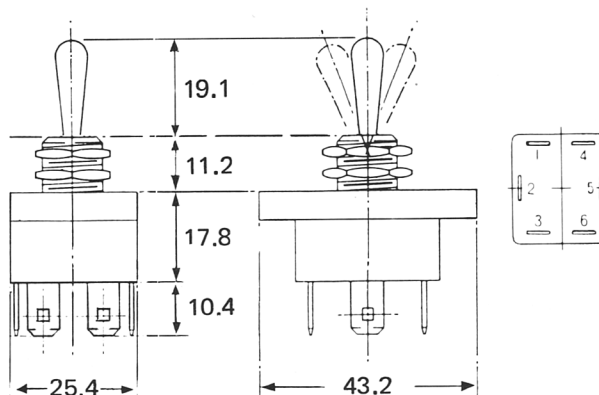
This series of switches available with nylon necks and levers only.

Details of switches as page 12.

All lever styles shown below can be supplied.



C2745



This series of switches available with metal necks and levers only.

Details of switches on page 13.

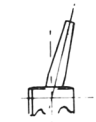
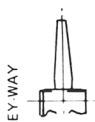
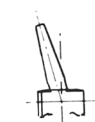
Position 1

Position 2

Position 3

Cat. No.

Terminal Connections

884  
2744

OFF

A  
4A + B  
4-12  
or  
5885  
2745

OFF

A  
4B  
1

2

886  
2746A  
3A + B  
3-4B + C  
4-1

2

887  
2747A  
3B  
6C  
4

2

888  
2478A  
3B  
1B + C  
1-42  
or  
5889  
2749A  
3A + B  
3-4B  
42  
or  
5

Switching diagrams viewed from rear of switch

Numbers are terminal positions, as shown in drawing

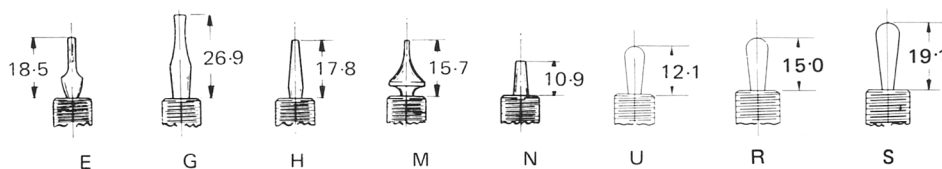
Series of catalogue Nos. 884 onward are those for switches with nylon necks and levers.

Catalogue Nos 2744 onward are those for switches with metal necks and levers.

To order with 6.3 tab terminals prefix Cat. No. with letter 'C'.

For screw and clamp terminals use letter 'S'.

## ALTERNATIVE LEVERS



When ordering, please indicate style of lever required, by placing appropriate letter at rear of Cat. No. e.g. 884 G

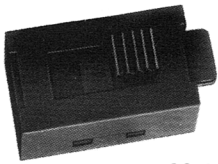
Nylon levers and necks



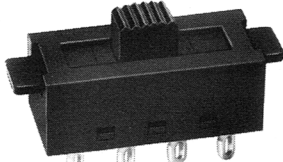
## 6A. 250V ~

## SLIDE SWITCHES

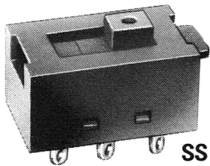
## 2000 SERIES



SS 2220T

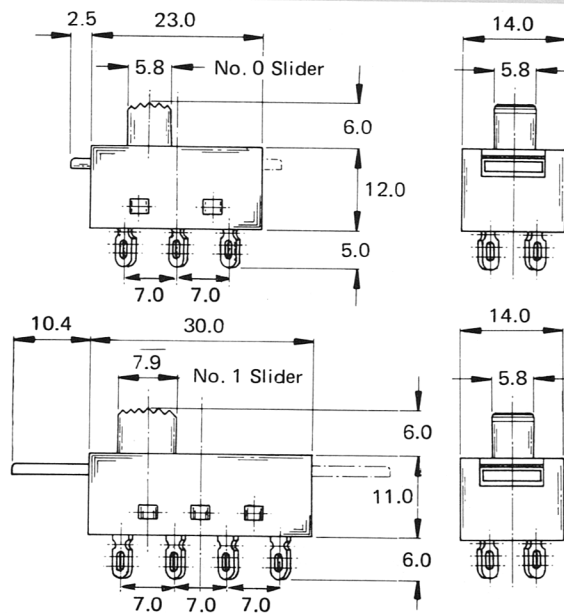


SS 2321T



SS 2222T

Version with short slider for selective changeover, e.g. for selecting 110V or 250V.



Panel Cut-out 2-pos — 13.5/13.3 x 6.3/6.1

Panel Cut-out 3-pos — 22.5/22.3 x 6.3/6.1

All moulded construction. Standard colour is black.

Slider in other colours and various sizes to order.

Solder tag terminals.

These switches have no fixing and therefore are retained in appliance.



## Single Pole

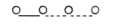
SS 2210T. 2-Pos C/O



SS 2230T. On/Off



SS 2311T. 3-Position



SS 2331T. 3-Position Including Off



## Double Pole

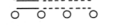
SS 2220T. 2-Pos C/O



SS 2240T. On/Off



SS 2321T. 3-Position



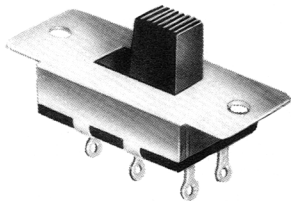
SS 2341T. 3-Position Including Off



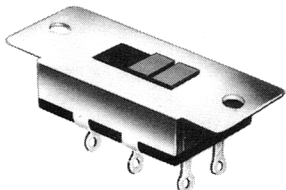
## 0.5A. 125V. ~

## SLIDE SWITCHES

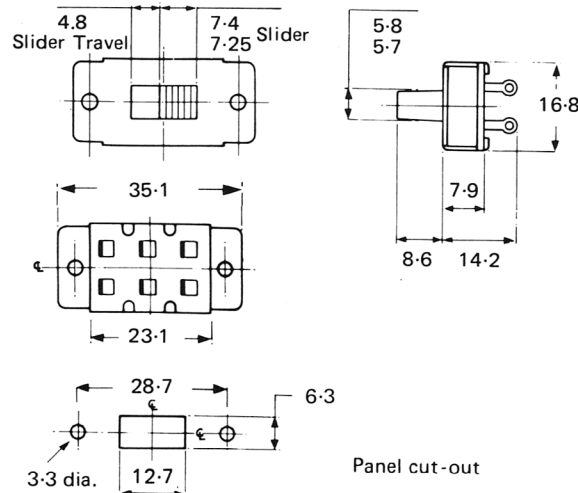
## 225 SERIES



T 225



T 225/SD



Panel cut-out

Black moulded slider. Other colours to order.

Solder tags standard.

Special terminals for printed circuits add /PCT to Cat. No.

16mm high slider, add /LD to Cat. No.

Shallow slotted slider add /SD to Cat. No.

T 216 SP. On/Off



T 218 2-Circuit C/O



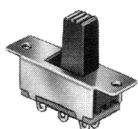
T 220 SP. C/O



T 222 DP. On/Off

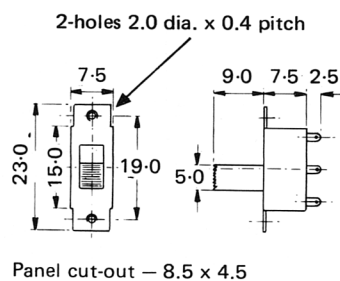


T 225 DP. C/O

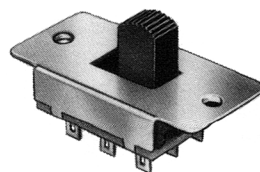


S 530

DP. C/O 9mm Moulded Slider  
0.5A. 125V. AC.

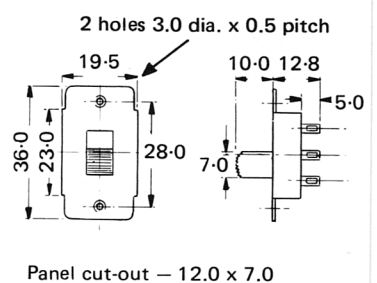


Panel cut-out — 8.5 x 4.5

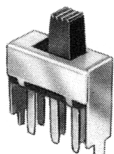


S 505

TP. C/O 10mm Moulded Slider  
0.5A. 125V. AC.

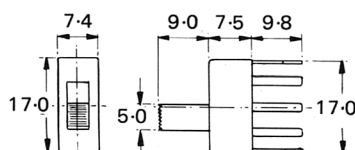


Panel cut-out — 12.0 x 7.0

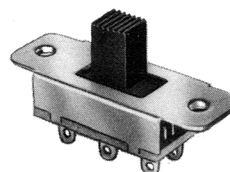


S 306

DP. C/O Insert Type  
9mm Moulded Slider  
0.3A. 125V. AC.

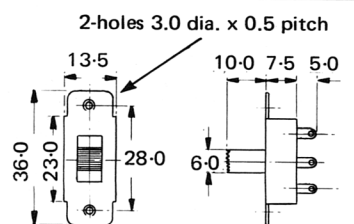


Panel cut-out — 8.5 x 4.5



S 535

DP. C/O Centre 'OFF'  
10mm Moulded Slider  
0.5A. 125V. AC.

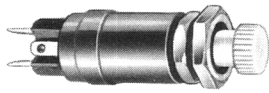


Panel cut-out — 12.0 x 7.0



0.5A. 250V ~

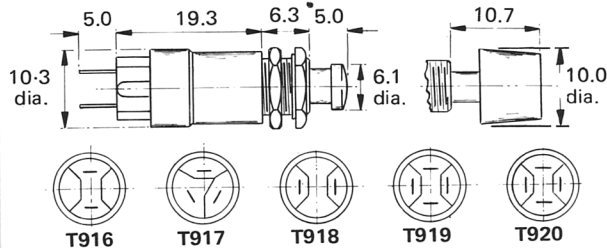
916 – 920



T 919



T 919L



T 916	Push for on	n/o	
T 917	Change-over	(50Volt only)	
T 918	Push for off	n/c	
T 919	2-Circuit		
T 920	Push for on. n/o		

Max. Plunger  
Movement  
2.5Fixing necks: 7.04 dia. x 40 TPI Whit.  
6.95

Panel hole: 7.1 dia.

Operating pressure: 600 gr. approx.

Solder Tags only.

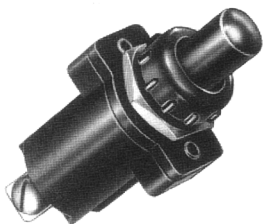
Alternative snap-on press buttons in  
Black, Red, White, or Green.Fixing nuts: Ring or domed hexagon  
chrome finish.Self-cleaning silver plated contacts.  
Slow make and break action.

Max. panel thickness:	Both nuts 2.5	Less back nut 4.0
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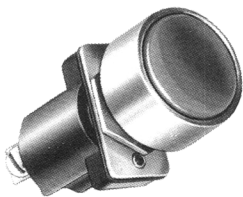
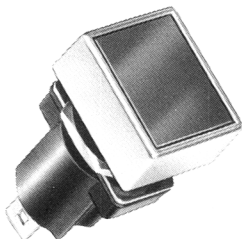
0.5A. 250V ~

0.25A. 250V DC

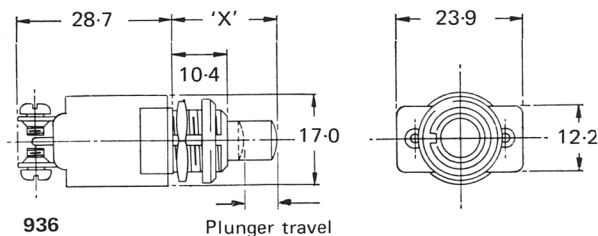
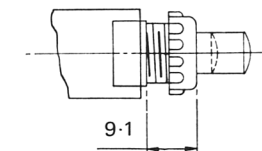
936 and 938



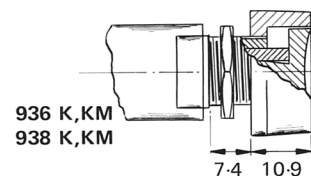
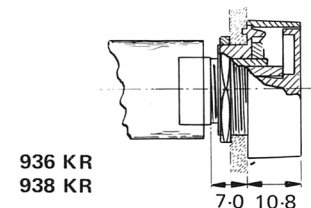
S 936/D1 and S 938/D1

S 936 K,KM and  
S 938 K,KM

C 936 KR and C 938 KR

936  
938936 DI  
938 DI

936 & 936L	— 6.3mm
938 & 938 L	— 4.1mm
936 K,KM & 938 K,KM	— 1.5mm
936 KR & 938 KR	— 3.0mm

936 K,KM  
938 K,KM936 KR  
938 KR'X' Dimension  
936 — 19.8mm  
938 — 17.5mm

Plunger travel

Fixing necks screwed:  
11.79  
11.68 mm dia. x 32 TPI Whit.Panel hole: 12.7mm dia. except /KR  
series (rect. push).For details of special panel drilling on  
/KR series, see drawing of 290/KR on  
page 18.

## MAX. PANEL THICKNESS

936 and 938	— 4.8mm
936 DI and 938 DI	— 4mm
936 K and 938 K	— 4mm
936 KR and 938 KR	— 4mm
936 L and 938 L	— 4.8mm
936L/DI and 938L/DI	— 4mm

Button colours: Black, Red, Green, White  
or Blue, Spashproof covers on page 19.

Metal fixing necks nickel finish.

'K' shrouds, anodized aluminium.

'KM' shrouds, moulded. Many colours.

'KR' shrouds, moulded natural colour or  
finished matt or bright chrome.

Slow make or break action.

Current carrying parts silver plated.

NOTE: Back nut must always be used on  
switches with metal necks.

Terminals

Standard  
Press ButtonRound  
Shrouded PushRectangular  
Shrouded PushAs /K, but less  
Push and ShroudMetal  
NeckNylon  
NeckMetal  
NeckMetal  
NeckMetal  
NeckNylon  
Neck

936

Push for on



6-3 Tab.	C 936	C 936/D1
5 BA Screw	S 936	S 936/D1
Solder Tags	T 936	T 936/D1

C 936 K,KM.

C 936 KR

C 936 L

C 936L/D1

938

Push for off



6-3 Tab.	C 938	C 938/D1
5 BA Screw	S 938	S 938/D1
Solder Tags	T 938	T 938/D1

C 938 K,KM.

C 938 KR

C 938 L

C 938L/D1

T 938 K,KM.

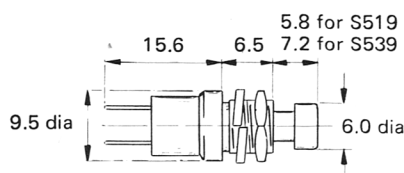
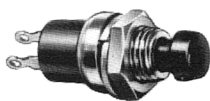
T 938 KR

T 938 L

T 938L/D1



0.5A. 50V ~

**S519 and S539**



Max. plunger movement

**S519**

S519	Push for ON	N/O		1.5
S539	Push for OFF	N/C		2.5

Threaded metal neck

Panel hole: 7.1 dia.

Solder tags

Press buttons: Black, Red, White or Green on S519

Black or Red on S539

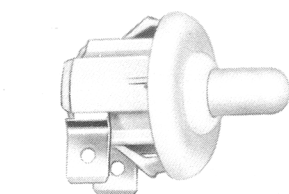
Hex. nut and spring washer fixing

Slow make and break action

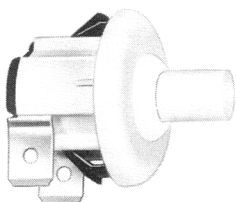
Max. panel thickness with spring washer - 2.5

0.4A. 250V ~

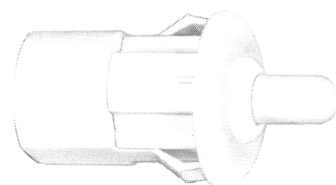
**55 and 56**



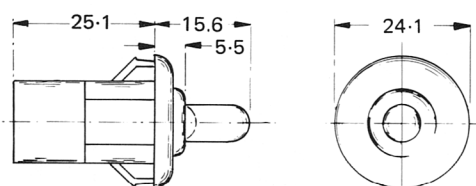
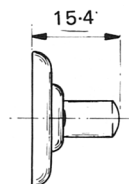
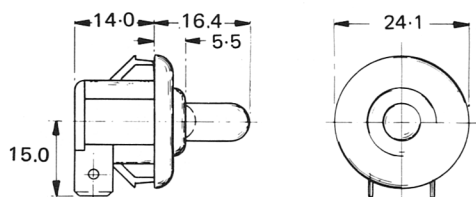
**B 55R**



**B 55F**



**B 56**



Max. plunger travel - 9.6

All insulated moulded body, with integral nylon clips for snap-in panel mounting.

Slow make and break, normally closed single pole switch action.

Nylon plunger with overtravel.

6-3 Tab terminals.

Operating pressure: 280gr. approx.

Panel cut-out: 19.2  
19.05 dia. hole.

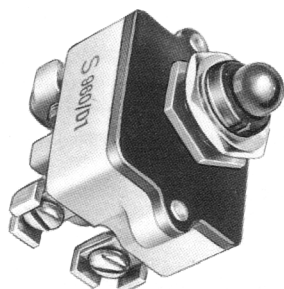
		Min.	Max.
Panel Thickness	B 55R	1.0	1.6
	B 55F	1.0	1.6
	B 56	1.0	2.6

Details of approved switches are listed in separate publication No. 200.

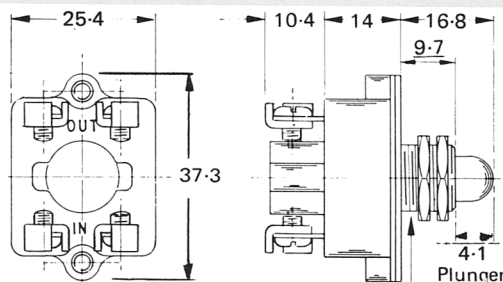
Please state whether refrigerator or oven light application.

15(3)A. 250V ~

**960**



**S 960/DI**



Slot in neck

Plunger travel

**C 962/DI**

Dimensions in mm

Fixing necks 11.79  
11.68 mm dia. x 32 TPI Whit.

Panel hole: 12.7mm dia.

Max. Panel thickness: 5.8mm

All insulated moulded body and nylon neck. Slow make and break single or double pole normally open switch action. Nylon plunger with overtravel.

Alternative panel fixing nuts on page 19.

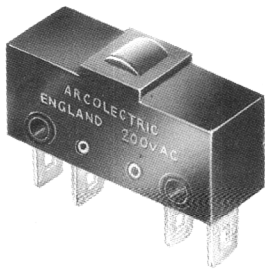
Operating pressure: 1120gr. approx.

S 960/DI	Double pole. Screw terminals.
C 960/DI	As above with 6-3 Tab terminals.
S 960F/DI	As S 960/DI with flat top plunger.
S 961/DI	Single pole version of S 960/DI.
C 962/DI	As C 960/DI, with duplex incoming terminals for screw and tab connection.

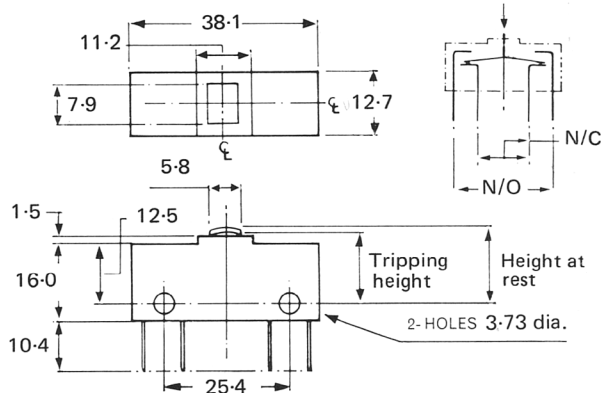
Rating with screw terminals reduced to 6A 250V



10A. 250V~



C 290

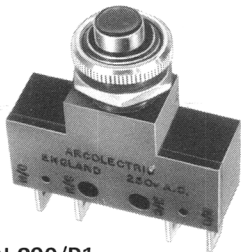


Normally 'CLOSED' or normally 'OPEN' depending on terminal connections.

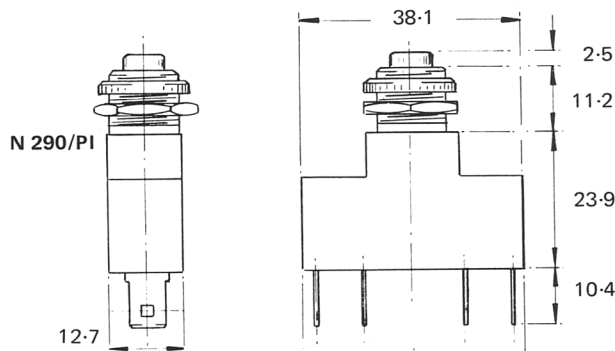
6.3mm Tab Terminals.

Height at rest	15.6mm
Tripping point height	14.5mm
Movement differential	5.0mm
Available overtravel	Plunger flush with case.

Operating force: C 290 680 gr. approx.



N 290/P1



Fixing necks screwed:  
11.79 mm dia. x 32 TPI Whit.  
11.68

Panel hole: 12.7 dia. except /KR series.

Drawing below shows special panel cut-out, to accept moulded adaptor, use on /KR series.

Max. Panel thickness: 5.6mm.

6.3 Tab Terminals.

Press button colours: Black, Red, Green, White or Blue.

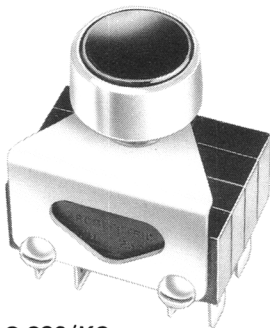
Fixing rings on 'P' series chrome finish.

Shrouds on 'K' series anodised aluminium.

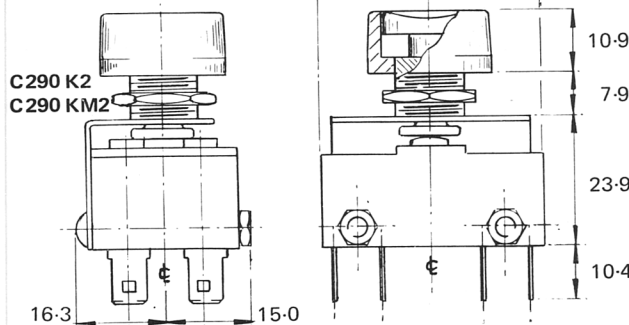
Shrouds on 'KM' series. Moulded.

Shrouds on 'KR' series, moulded natural colour or finished matt or bright chrome.

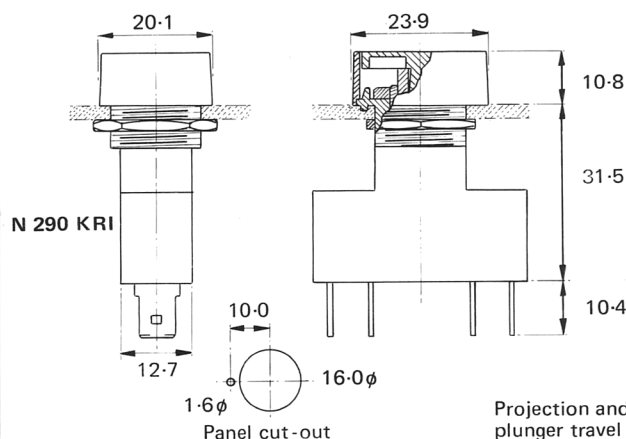
Splashproof covers for 'P' series on page 19.



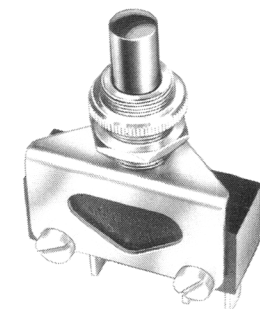
C 290/K2  
C 290/KM2



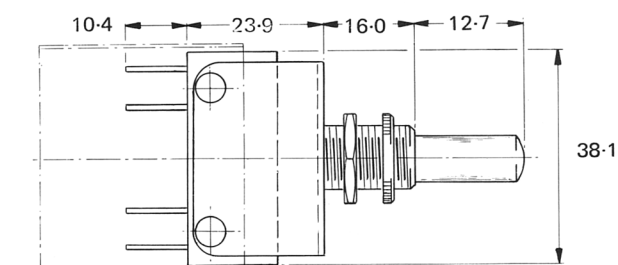
N 290/KR1



Projection and plunger travel



C290/PI/TDA



C290/PI/TDA

Dimensions in mm

Terminal cover can be supplied as an extra.

### Single Pole Switches

All Nylon

N 290/P1	Standard Press Button
N 290/K1	Circular Press Button (Shrouded)
N 290/KM1	Rectangular Press Button (Shrouded)
N 290/KR1	As /K1 less Button & Shroud

### Double Pole Switches

Metal Bush and mounting bracket

C 290/P2	Standard Press Button
C 290/K2	Circular Press Button (Shrouded)
C 290/KM2	Rectangular Press Button (Shrouded)
C 290/KR2	As /K2 less Button & Shroud

### Single Pole Switches

Metal Bush and mounting bracket

C 290/P1/TDA	Special version having 12.7 plunger movement including overtravel.
--------------	--



## SWITCH ACCESSORIES

These accessories are suitable for switches  
having 11.79mm dia. x 32 T.P.I. Whit. screwed necks.  
11.68

### FLEXIBLE MOULDED SPASH-PROOF COVERS



M 331

Suitable for levers:-  
No. 1 (600 series). Page 11.



M 398

Suitable for levers:-  
Nos. 0 and 4 (600 series).  
Page 11  
Letter U (1800 series). Page 12.



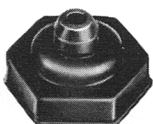
M 323

For use with press button  
switches Cat. Nos. 290 P1 and  
P2 illustrated on page 18.



M 327

For use with press button  
switches Cat. Nos. 936  
and 938 illustrated on page  
16.



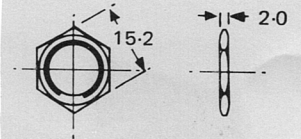
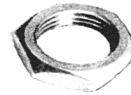
M539

Suitable for lever switches  
illustrated on pages 11, 12, and  
14.

All supplied with captive  
fixing nuts.

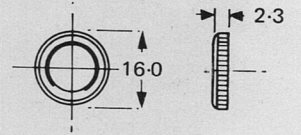
### HEXAGON NUTS

**T 5** **M 506**  
Nickel finish Nylon  
chrome extra



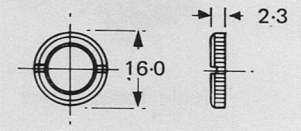
### KNURLED RING NUT

**T 4**  
Nickel finish  
standard, chrome  
extra



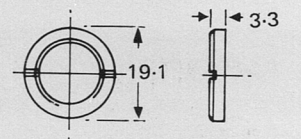
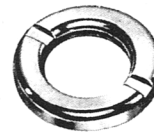
### SLOTTED RING NUT

**T 92** **T 185**  
Knurled Plain  
Edge Edge  
Chrome finish is standard



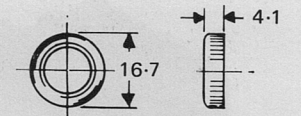
### LARGE RING NUTS

**T 18** **M 472**  
Chrome Nylon  
finish (non-  
slotted) slotted)



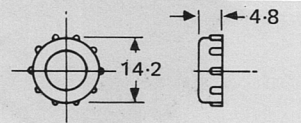
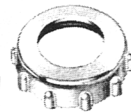
### NYLON RING NUT

**M 279**  
White or Black



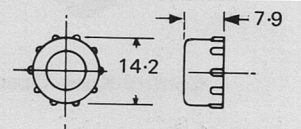
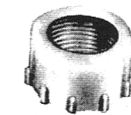
### NYLON RING NUT

**M 51**  
White or Black  
Cannot be used with switches fitted  
with lever Nos. 2, 5, 7, 8, 9, M or P



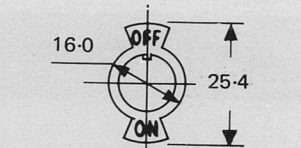
### DEEP NYLON RING NUT

**M 10**  
White or Black  
Cannot be used with switches fitted  
with lever Nos. 2, 5, 7, 8, 9, M or P



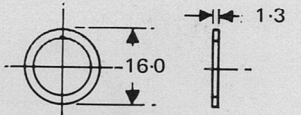
### INDICATOR PLATE

**P 23**  
Alternative engraving  
is OFF at bottom  
or LOW-HIGH  
When ordering please state finish  
required either nickel or chrome



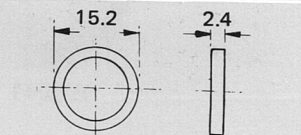
### FIBRE WASHER

**P 116**



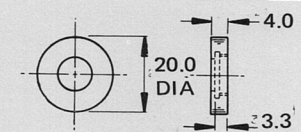
### MOULDED SPACER

**M 535**  
Low cost spacer which can  
be supplied to replace T 5 back  
nut on switches with nylon necks



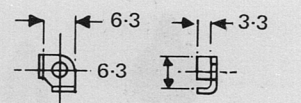
### LARGE CAP NUT

**T262**  
Chrome finish is standard



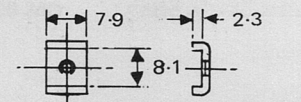
### TERMINAL CLAMPS

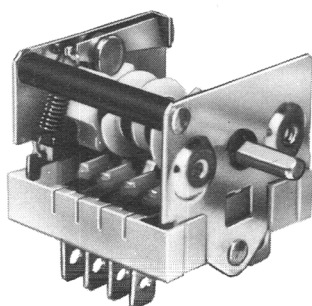
**P 174** **P 36**  
3.56mm dia 5 BA.  
plain hole tapped hole



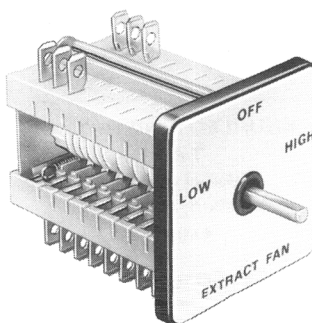
### TERMINAL CLAMP

**P 173**  
4 BA. tapped hole





Single 4-way frame



Double 8-way frame with escutcheon

16A 250V AC~ 1.8A 250V Resistive

Types available:-

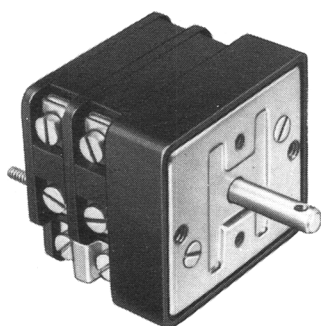
Single 4-way frame. 4-pairs of contacts  
Double 4-way frame. 8-pairs of contacts  
Single 8-way frame. 8-pairs of contacts  
Double 8-way frame. 16-pairs of contacts  
Indexing at 30°, 36°, 45°, 60°, 72° or 90° throughout 360°, to requirements.

Front of panel escutcheon, moulded in various colours, supplied at extra cost. Centre removable insert suitable for engraving, or may be in transparent material for rear insertion of engraved plates.

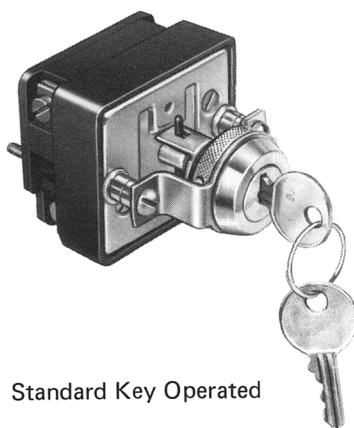
For full details of these switches, see separate publication No. 35.

## PACKET SWITCHES

## 'D' SERIES



Control Knob Operated



Standard Key Operated

16A 250V AC~

Types: Any number of ganged packets

Indexing at 90°, 60° or 45° either fully or semi-rotational to requirements.

Up to 2-independent single pole change-over contacts per packet.

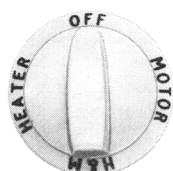
Size: 50.8 x 57.1

Front of panel escutcheon supplied as an extra. Details at 'E' series.

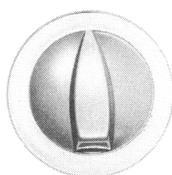
For full details of these switches, see separate publication No. 35.

## CONTROL KNOBS

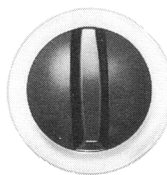
## 'E' and 'D' SERIES SWITCHES



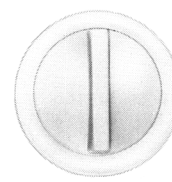
A 1041



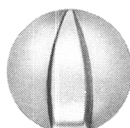
A 1054  
Clear Plastic  
Surround



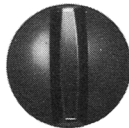
A 1062  
Clear Plastic  
Surround



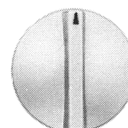
A 1056  
Clear Plastic  
Surround



CM 97



CM 120



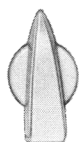
CM 99



A 1042

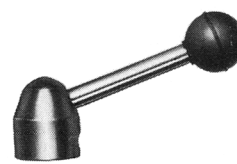


CM 63



CM 8

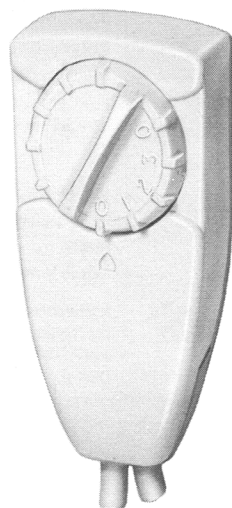
Further details of these knobs with method of fixing, i.e. either cross screw, or spring clip, in separate publication No. 35



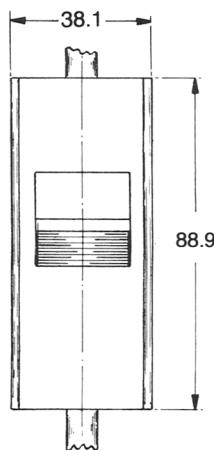
Lever Handle



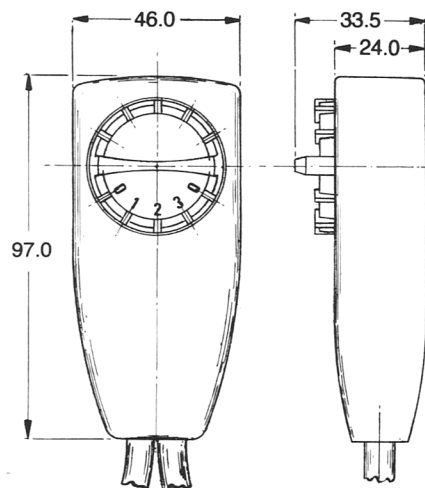
NS 41



NS 53



NS41



NS53

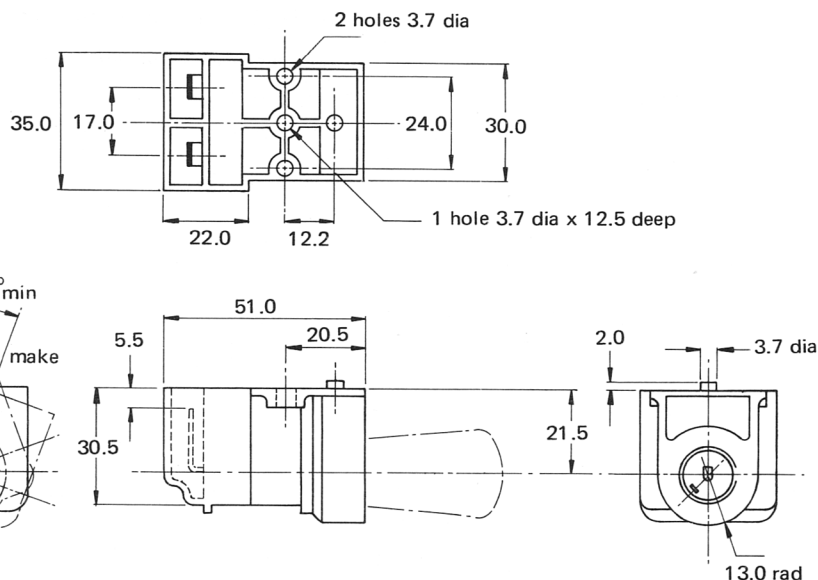
**NS41** Rating – 180 watt. 200/250V. AC ~  
Switching – 2-pole on/off with or without neon indicator.

**NS53** Rating – 180 watt. 200/250V. AC ~  
Switching – 2-pole, single heat, dual single heat or 3 heat with or without neon indicator.

## NEW PRODUCT

## TILT SWITCHES

## 310, 311 SERIES



The switch is designed to make circuit when tilted, to operate the lamp. Drawing indicates the angles of tilt, and the position of the lamp.

All moulded nylon body with an integral E.14 (S.E.S.) lampholder, (Lamp not supplied).

The switch mechanism is of all metal construction and does not involve the use of mercury.

A characteristic installation is that of mounting the switch to the cover of a chest freezer for controlling internal illumination.

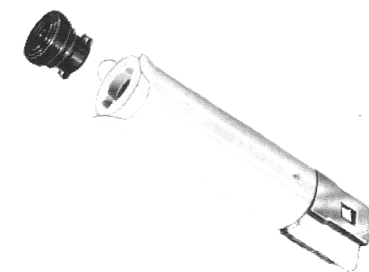
**ST 310C** – 6.3 tab terminals  
Grey finish engraved  
'10 watts'

**ST 310H** – above with 4.8 tab terminals.

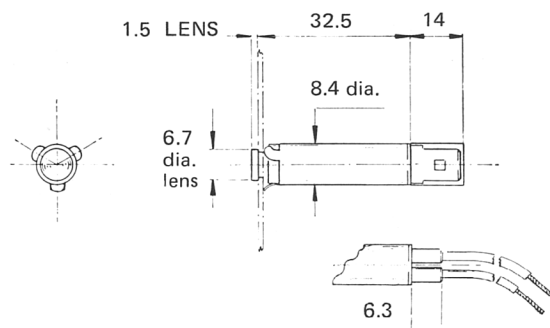
**ST 311C** – 6.3 tab terminals  
White finish, engraved  
'15 watts'.

**ST 311H** – As above with 4.8 tab terminals

**5.8 mm dia. panel hole**



**SL 145**



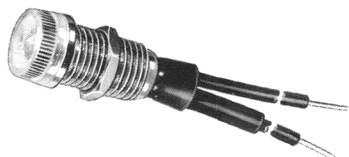
Dimensions in mm

White nylon body.  
Polycarbonate coloured lens.  
Max. panel thickness 0.9.  
For thicker panels up to 3.0 max. a longer lens can be supplied.

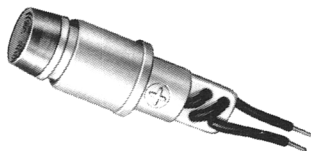
SL 145 has 6.3 tab terminals.  
SL 145/WL has 200mm long flexible leads.  
For LV version add /LV to Cat. No.

Indicators are assembled into panel by inserting lens into front of panel and fixing body to the lens at rear of panel by a push and turn movement.

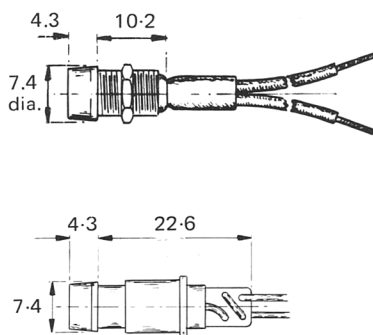
**6.3 mm dia. panel hole**



**SL 41**



**SL 45**



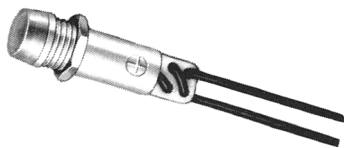
Dimensions in mm

SL 41. Metal body, screwed nut fixing.  
SL 41/C. As above with extra front bezel.  
Metal body screwed 6.27/6.22 dia. x 40 TPI Whit.  
Body and bezel chromium finish.  
Max. panel thickness 6.3mm.  
For LV version see SL40 on page 36.

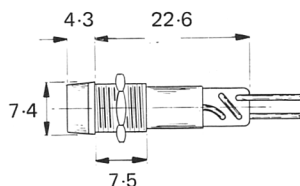
SL 45. Moulded body push-on collar or push-on nut fixing.

SL 45/C. As above with chrome front bezel.  
Max. panel thickness 10.0mm.  
Resistors are assembled in body moulding.  
Both fitted with 200mm long PVC flexible leads.  
Coloured non-removable lenses.  
For LV version see SL44 on page 36.

**7.1mm dia. panel hole**



**SL 245**



Nylon body, screwed 7.04/6.95 dia. x 40 TPI Whit. for screwed nut fixing.

Coloured non-removable lens.

Max. panel thickness 6.3mm.

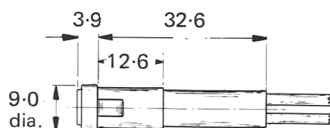
SL 245 — 200mm long PVC flexible leads.  
SL 245/C — As above with chrome front bezel.  
For LV version see SL244 on page 36.



## 8 mm dia panel hole



SL 295/WL



Nylon body with integral spring clips for snap-in panel fixing.

Coloured polycarbonate non-removable lens.

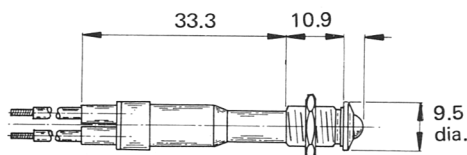
SL 295/WL — 200 mm long PVC covered flexible leads.

SL 295/WL/C — As above with chrome bezel

Panel thickness 0-8mm min. 1-6 max.



SL 297/232



Chrome finish metal body for use with SL 232 or SL 233 shown below.

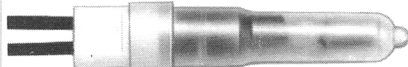
Polycarbonate lens.

Threaded 7.9/7.8 dia. x 40 TPI. Whit.

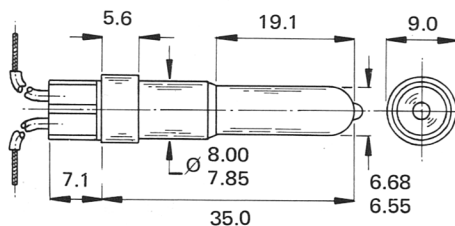
Panel thickness — 8.0

Quote: SL297/SL232 or

SL297/SL233 or SL297. Body Only.



SL 232



Transparent nylon body.

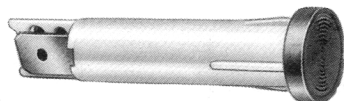
200mm long PVC covered flexible leads. Other lengths or heatproof to order.



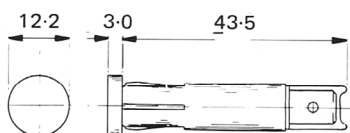
SL 233

Neon tube, resistor and flexible lead assembly, protected by "shrunk on" transparent sleeving. For use with own coloured lens moulding.

## 9 mm dia panel hole



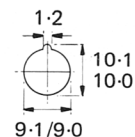
SL 273



Nylon body with integral spring clips for snap-in panel fixing, and linear rib for location in panel.

Coloured polycarbonate lens.

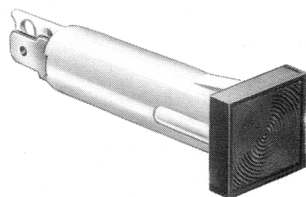
Max. panel thickness — 2-0mm.



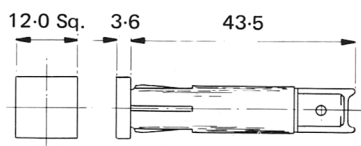
Panel cut-out

SL 273 — 6-3, 4-8 or 2-8 tab terminals.

SL 273/WL — 200 mm long PVC covered flexible leads.



SL 274



As SL 273 above, but with alternative lens shape.

SL 274 — 6-3, 4-8 or 2-8 tab terminals.

SL 274/WL — 200 mm long PVC covered flexible leads.

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

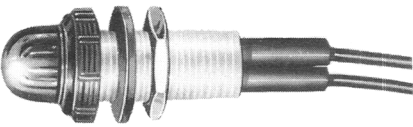
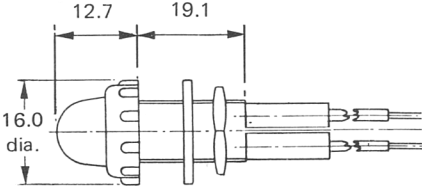
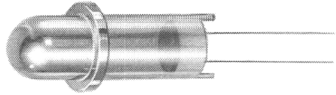
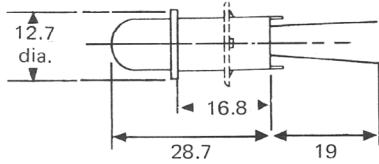
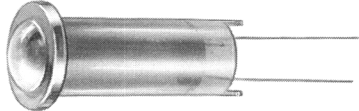
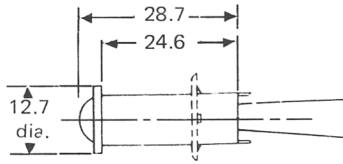
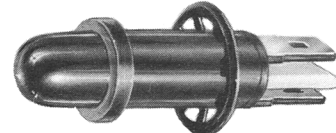
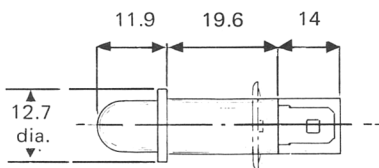
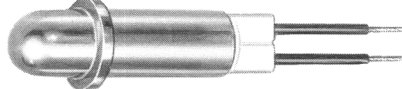
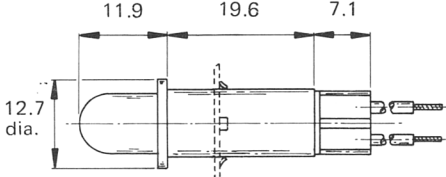
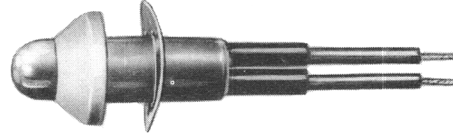
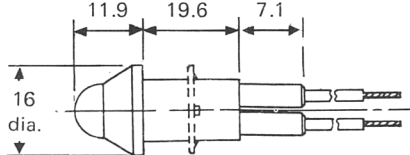
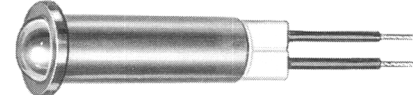
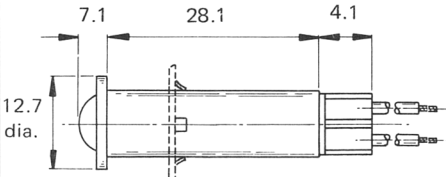
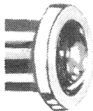
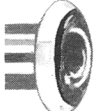
RED, AMBER  
CLEAR or  
GREEN only

Filament  
Lamps

Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

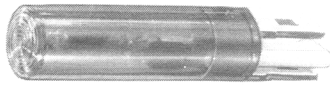
ALL  
COLOURS

### 9.5 mm dia. panel hole

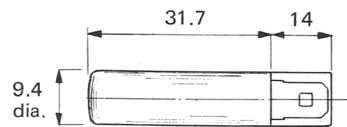
 <p><b>SL 78</b></p>		<p>Nylon body <math>9.47^{+0.05}_{-0.03}</math>mm <math>\phi</math> x 26 TPI Whit. Removable coloured lens. 200mm PVC flexible leads. Other lengths or heatproof type to order. Max. panel thickness — 16.7mm.</p>
 <p><b>SL 166</b></p>		<p>Coloured lens and neon tube only complete with push-on fixing nut.  Series resistor supplied at extra cost if requested.  Max. panel thickness — 14.2mm.</p>
 <p><b>SL 266</b></p>		<p>As SL 166 but with shallower front of panel projection.  Max. panel thickness — 22.4mm.</p>
 <p><b>SL 164</b></p>		<p>Polycarbonate coloured lens Complete with push-on nut. SL 164: 6.3 tab terminals SL164/WL — 200mm PVC flexible leads. Heatproof to order. Max. panel thickness — 17.5mm.</p>
 <p><b>SL 168</b></p>		<p>Polycarbonate coloured lens. Complete with push-on nut. SLC 168: 6.3 tab terminals SL 168 — 200mm PVC flexible leads. Heatproof to order. Alternative version with panel locating pip available. Max. panel thickness — 14.2mm.</p>
 <p><b>SL 169</b></p>		<p>As SL 168 but fitted with moulded front bezel.  SLC 169: 6.3 tab terminals SL 169 — 200mm PVC flexible leads. Heatproof to order.  Max. panel thickness — 14.2mm.</p>
 <p><b>SL 268</b></p>		<p>As SL 168 but with reduced front of panel projection.  SLC 268: 6.3 tab terminals SL 268 — 200mm PVC flexible leads. Heatproof to order.  Max. panel thickness — 22.4mm.</p>
 <p>Front Bezel 'B' 14mm o/dia. Chrome finish</p>	 <p>Front Bezel 'C' 15.5mm o/dia. Chrome finish</p>	<p>All indicators of SL 78 and SL 169 may be fitted with either of these bezels. To order, place appropriate letter at rear of Cat. No. For example — SL 168/B.</p>
<p>Neon Tubes</p>	<p>Voltage range: Below 100V, (Specify) 100/130V, 200/250V</p>	<p>Temp. range T85°C is standard T125°C available on request</p>
<p>RED, AMBER CLEAR or GREEN only</p>	<p>Filament Lamps</p>	<p>Voltage range: 6V, 12V or 24V Add LV to Cat. No.</p>
<p>ALL COLOURS</p>		



## 9.5 mm dia. panel hole



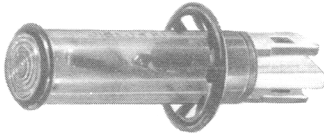
SL 263



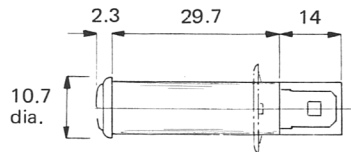
Dimensions in mm

Polycarbonate coloured rimless lens.

For front or rear insertion into panel. Suitable for rubber grommet mounting in panel.  
SL 263: 6·3 tab terminals  
SL 263/WL – 200 mm.  
PVC flexible leads. Heatproof to order.



SL 264



Polycarbonate coloured lens.

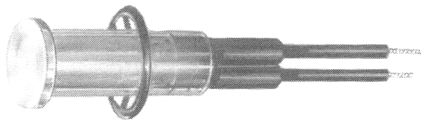
Complete with push-on nut.

SL 264 6·3 tab terminals.

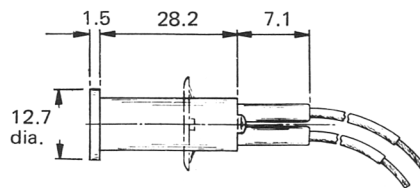
SL 264/WL 200mm PVC flexible leads. Heatproof to order.

Available with chrome bezel 'C' illustrated on page 24.

Max. panel thickness – 27mm.



SL 265



Polycarbonate coloured lens.

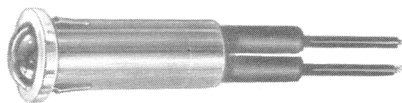
Complete with push-on nut.

SL 265: 200mm PVC flexible leads. Heat proof to order.

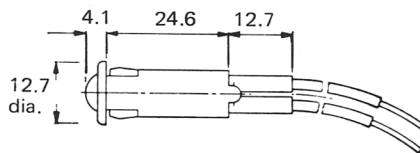
SL 262: 6·3 tab terminals.

Available with chrome bezel 'C' illustrated on page 24.

Max. panel thickness – 22·4mm.



SL 267

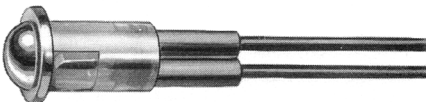


Polycarbonate coloured lens snap-in fixing into panel.

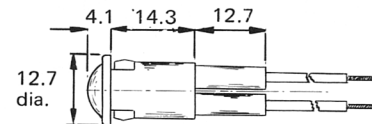
SL 267 – 200mm PVC flexible leads. Heatproof to order.

Available with chrome bezel 'B' illustrated on page 24.

Panel thickness- between .9 &amp; 1.1mm.



SL 269



As SL 267 but with reduced back of panel projection.

Panel thickness - between .9 &amp; 1.1mm.

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

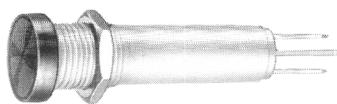
RED, AMBER  
CLEAR or  
GREEN only

Filament  
Lamps

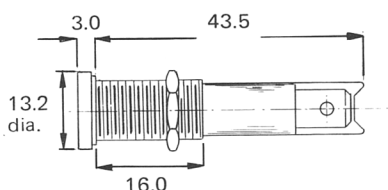
Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

ALL  
COLOURS

### 10 mm dia panel hole



SL 275



Max. panel thickness 12mm

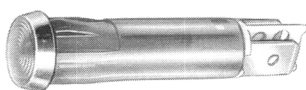
Moulded nylon body, threaded 9.9/9.8 dia. x 32 T.P.I. Whit, for screwed nut fixing.

Polycarbonate coloured lens.

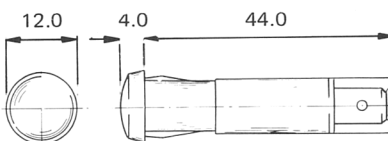
SL 275. 6-3, 4-8 or 2-8 tab terminals

SL 275/WL. 200mm PVC flexible leads.

Loose chrome finish bezel can be supplied. Add /C to Cat. No.



SL 276

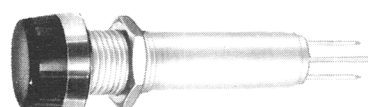
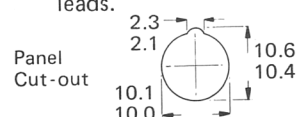


Max. panel thickness 2-8mm

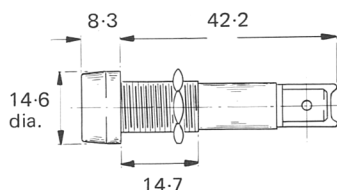
Polycarbonate coloured lens with integral spring clips for snap-in fixing into panel.

SL 276. 6-3, 4-8 or 2-8 tab terminals.

SL 276/WL. 200mm PVC flexible leads.



SL 277



Max. panel thickness 10-7mm

Moulded nylon body, threaded 9-9/9-8 dia. x 32 T.P.I. Whit. for screwed nut fixing.

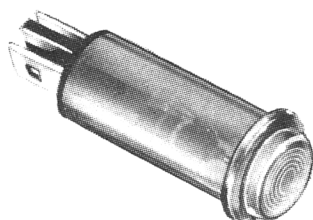
Polycarbonate coloured lens.

Polished chrome bezel.

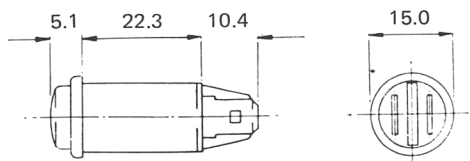
SL 277 6-3, 4-8 or 2-8 tab terminals.

SL 277/WL 200mm PVC flexible leads.

### 12 mm dia. panel hole



SL 280

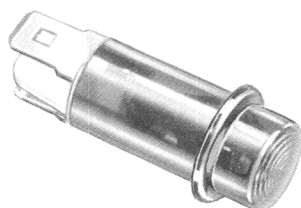


Max. panel thickness 19mm

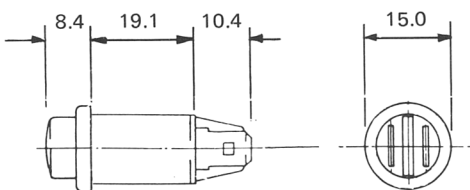
Polycarbonate coloured lens.

6.3 tab terminals.

Versions with flexible leads (as drawing on page 27) available at extra cost. To order add /WL to Cat. No. e.g. SL 280/WL.

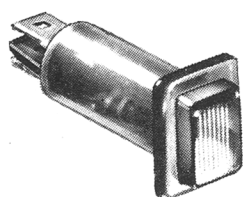
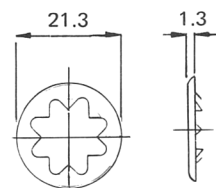


SL 281

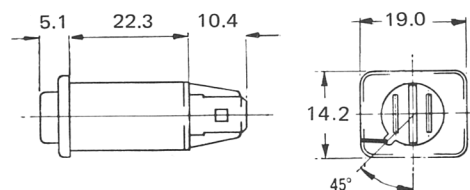


Max. panel thickness 16mm

Complete with push-on nut No. N20

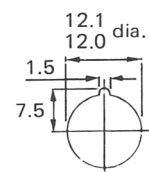


SL 285



Max. panel thickness 19mm

SL 285 has a linear locating rib on the barrel, location of which is shown on drawing. A suitable panel hole is shown herewith.



To order versions with chrome finish bezels illustrated on page 27, add /K to Cat. No.

Neon Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

RED, AMBER  
CLEAR or  
GREEN only

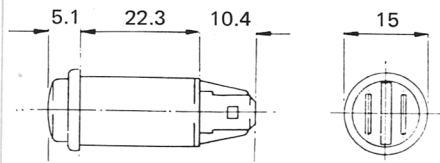
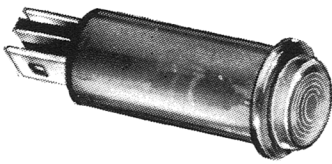
Filament  
Lamps

Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

ALL  
COLOURS

12.7 mm dia.  $\begin{smallmatrix} +0.1 \\ -0 \end{smallmatrix}$  panel hole

SL 180

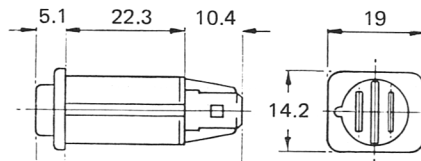
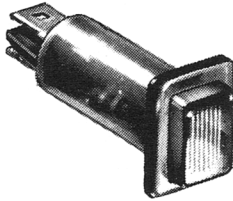


Max. panel thickness 19mm

Polycarbonate coloured lens.  
6.3 tab terminals

For flexible leads, add /WL to  
Cat No. e.g: SL 180/WL.

SL 185

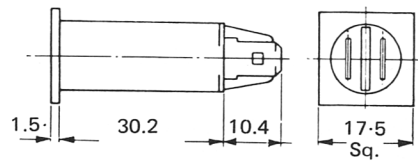


Max. panel thickness 19mm

Version of SL 185, but with 4mm  
less back of panel projection is  
available. Quote SL 184.

Indicators SL 180, SL 184, SL 185  
can be supplied with chrome  
finish front bezels. Add 'K' to  
Cat. No. e.g: SL 180K.

SL 186

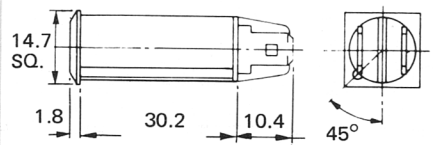
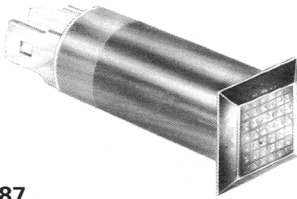


Max. panel thickness 25mm

Supplied complete with push-on  
fixing nut N17.

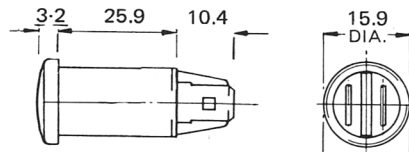
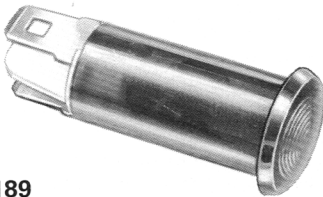
Indicators SL 184, SL 185, SL 187  
have a locating rib on the barrel  
as shown on drawings. Details  
of suitable panel mounting hole  
shown at foot of page.

SL 187



Max. panel thickness 25mm

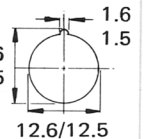
SL 189



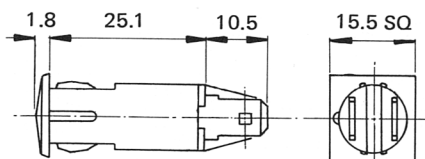
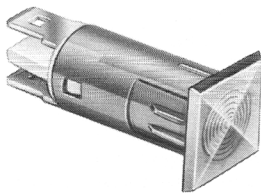
Max. panel thickness 21mm

Polycarbonate coloured lens.  
Integral spring clips for snap-in fixing.  
Panel hole locating rib.

SL 586. 6.3 tab  
terminals  
SL 586/WL Flexible  
leads  
Panel Cut-out



SL 586

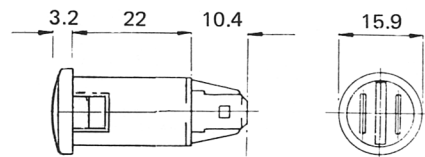


Panel thickness between .8 and 1.15.

Polycarbonate coloured lens with  
integral moulded spring clips for  
snap-in fitting into panel.

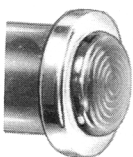
SL 589. 6.3 tab terminals  
SL 589/WL. Flexible leads

SL 589



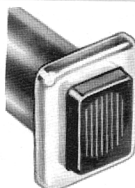
Panel thickness between .9 and 1.14mm

SL 180K

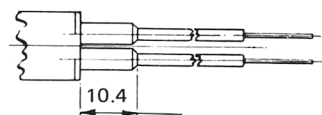


'K' type  
front rims

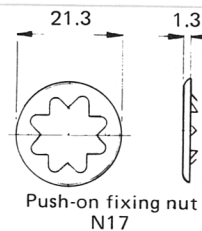
SL 185K



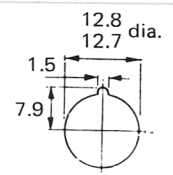
'/WL'  
Leads



PVC covered leads 200mm  
long. Other lengths and  
heatproof type to order.



Push-on fixing nut  
N17



Panel Cut-out for  
SL 184, SL 185, SL 187

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

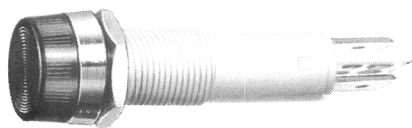
RED, AMBER  
CLEAR or  
GREEN only

Filament  
Lamps

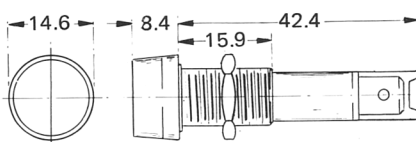
Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

ALL  
COLOURS

**12.7 mm dia. panel hole**

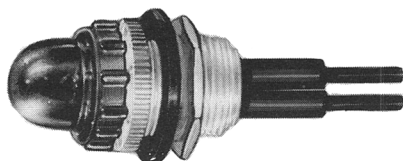


**SL 177/C**

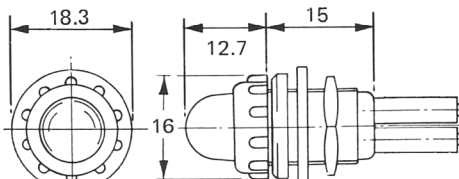


Max. panel thickness 12.5

Nylon barrel 9.9 mm dia. x 32 TPI Whit.  
Removable coloured lens.  
Chrome finish front bezel.  
SL 177- 6·3(C), 4·8(H) or 2·8(K)  
tab terminals.  
SL 177/WL - 200mm PVC flexible leads.

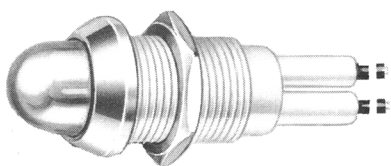


**SL 80**

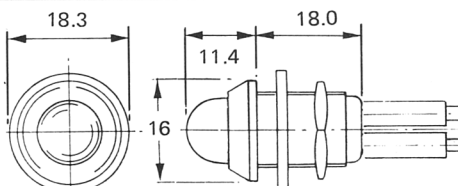


Max. panel thickness 6.3

Nylon barrel 11.79 mm dia. x 32 TPI Whit.  
Removable coloured lens.  
200mm PVC covered flexible leads.  
Other lengths or heatproof to order.

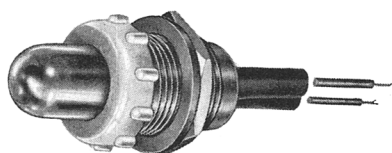


**SL 81**

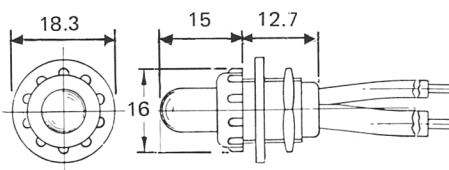


Max. panel thickness 9.5

Nylon barrel 11.79 mm dia. x 32 TPI Whit.  
Non-removable coloured lens.  
200mm PVC covered flexible leads.  
Other lengths or heatproof to order.  
SL 81 Nickel finish front bezel.  
SL 81/C. Chrome finish bezel.

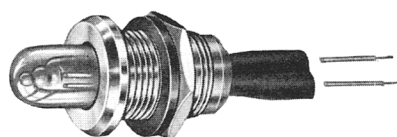


**SL 160**

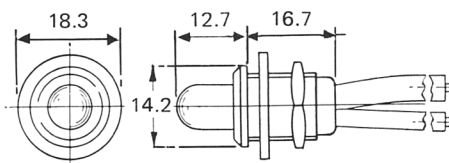


Max. panel thickness 7.1

Metal barrel 11.79 mm dia. x 32 TPI Whit.  
Non-removable coloured lens.  
Removable nylon front ring nut.  
White or Black.  
200mm PVC covered flexible leads.  
Other lengths or heatproof to order.

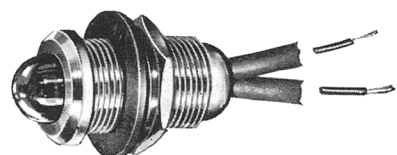


**SL 162**

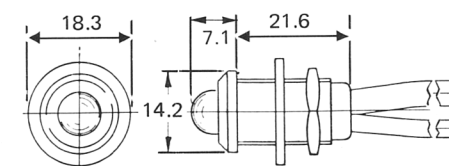


Max. panel thickness 8.7

Metal barrel 11.79 mm dia. x 32 TPI Whit.  
Non-removable coloured lens.  
Front flange nickel finish.  
Chrome finish to order.  
200mm PVC covered flexible leads.  
Other lengths or heatproof to order.

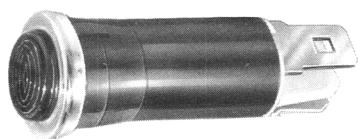


**SL 163**

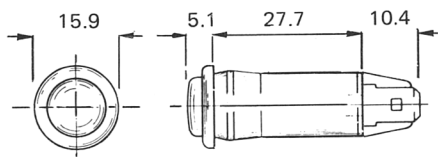


Max. panel thickness 13.5

Metal barrel 11.79 mm dia. x 32 TPI Whit.  
Non-removable coloured lens.  
Front flange chrome finish.  
200mm PVC covered flexible leads.  
Other lengths or heatproof to order.

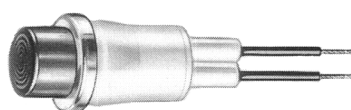


**SL 67/N**

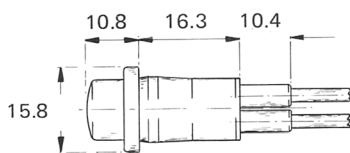


Max. panel thickness 1.1 for snap-in fit

Flexible moulded body for snap-in fixing.  
Bright chrome or matt-black finish front bezels.  
SL 67/N 6.3 tab terminals.  
SL 67/N/WL 200mm PVC covered leads.  
For LV version see page 37



**SL 193/N/WL**



Max. panel thickness 1.1 for snap-in fit

This version is similar in all respects to SL 67/N above, but has a greater lens area and reduced back of panel projection.  
SL 193/N. 6·3 tab terminals.  
SL 193/N/WL. 200mm PVC covered leads.

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

**RED, AMBER  
CLEAR or  
GREEN only**

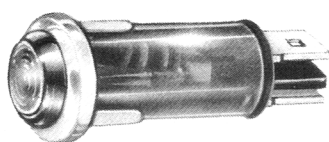
Filament  
Lamps

Voltage range:  
6V, 12V or 24V

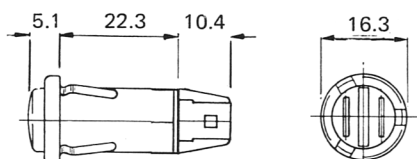
**ALL  
COLOURS**

Neon indicators with  
metal bodies should be  
adequately earthed.

### 13.5 mm dia. panel hole



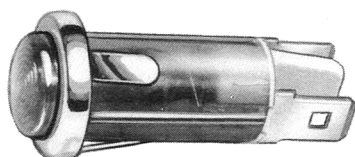
**SL 180B**



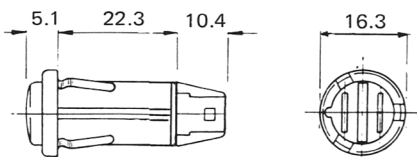
Polycarbonate coloured lenses.

6.3 tab terminals.

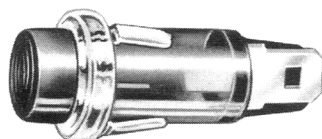
To order versions with flexible leads, details, as drawing on page 27 add /WL to Cat. No.: eg. SL 180B/WL.



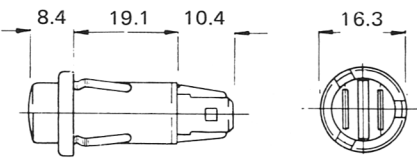
**SL 180BR**



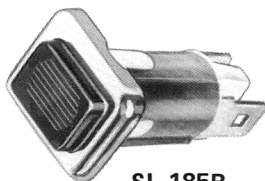
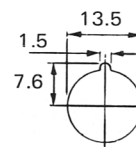
All models have a chrome finish front rim, and spring clips for snap-in fixing into panel. Thickness of panel is between .9 and 1.14mm.



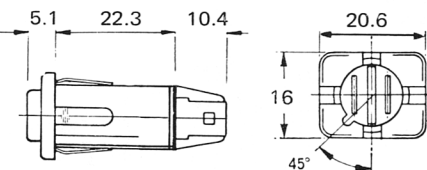
**SL 181B**



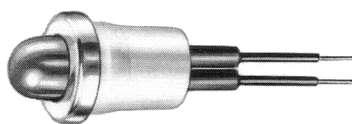
SL 180BR and SL 185B both have a linear locating rib on barrel, location of which is shown on adjacent drawings. Details of a suitable panel mounting hole is shown herewith:



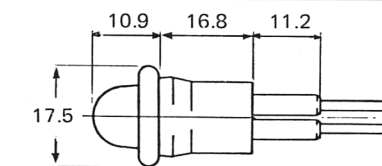
**SL 185B**



A push-on nut, Part No. N20 can be supplied if requested at extra cost. Overall sizes are shown on page 26.



**SL 190/L7**

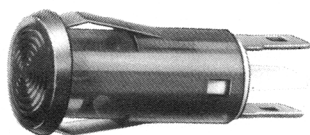


Max. panel thickness 2.0 for snap-in fit

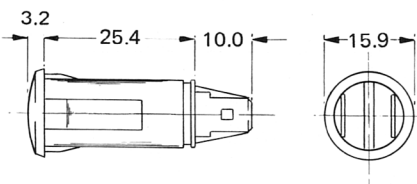
Flexible moulded body for snap-in fixing. Chrome finish front bezel. Coloured lens. 200mm PVC covered leads.

Alternative version with flat top lens available. No. SL 190/L106.

### 14.0 mm dia. panel hole



**SL 579**



Max. panel thickness 2.5 for snap-in fit

Polycarbonate coloured lens with integral moulded clips for snap-in fixing.

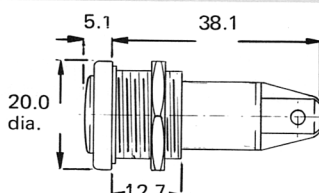
SL 579C — 6.3 Tab terminals

SL 579/WL — 200mm. PVC covered flexible leads.

### 17.5 mm dia. panel hole



**SL 69/N**



Moulded threaded body for nut fixing. Scrd. 15.75/15.62mm dia. x 26 TPI Whit. Bright chrome or matt-black finish bezel.

SL 69/N 6.3 tab terminals.

SL 69/N/WL 200mm PVC covered leads.

For LV version see page 37.

Neon Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

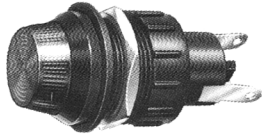
RED, AMBER  
CLEAR or  
GREEN only

Filament Lamps

Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

ALL COLOURS

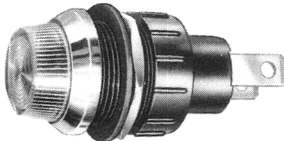
**19 mm dia. panel hole**



**SL 88N/L90**



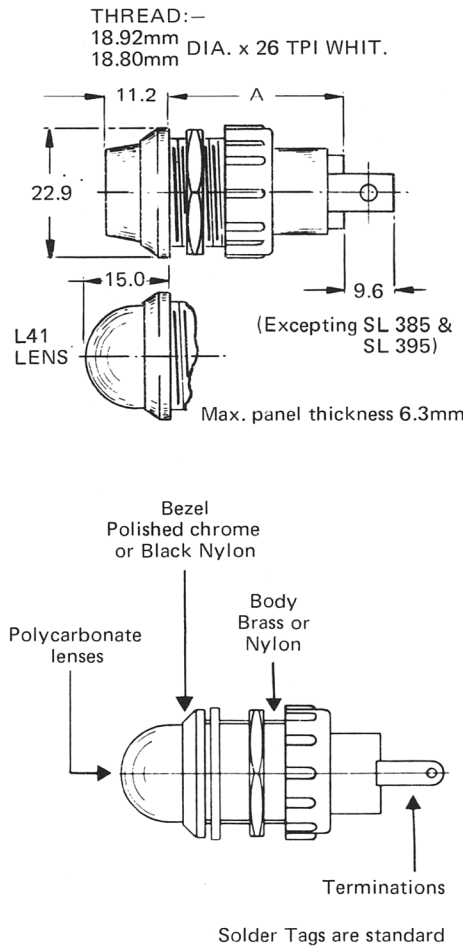
**SL 90N/L90**



**SL 391/C/L90**



**SL 395/C/L90**



For 6.3mm Tab type add /C to Cat. No.  
For 6 BA Screw Terms. add /S to Cat. No.  
For insulated flexible leads add /WL to Cat. No.

**MES (E10) NEON TUBE**

Cat.No.	Bezel	Body	'A' dimension
SL 88/N	Nylon	Nylon	30.2mm
SL 90/N	Chrome	Brass	30.2mm
SL 381	Nylon	Nylon	30.2mm
SL 391	Chrome	Nylon	30.2mm

Supplied complete with NT 147 M.E.S. (E10) neon tube with built-in resistor.

To order green fluorescent tube specify NT 147G.

Alternative terminations which can be supplied are:- /C and /S. See drawing.

For LV versions see page 38

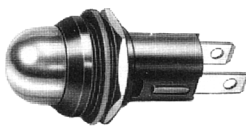
**BUILT-IN NEON TUBE**

Cat.No.	Bezel	Bezel	'A' dimension
SL 385	Nylon	Nylon	26.9mm
SL 395	Chrome	Nylon	26.9mm

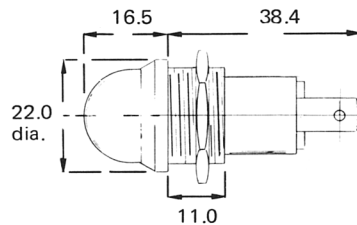
Supplied complete with NT 14 neon tube and separate resistor, built-in to the assy.

To order green fluorescent tube specify NT 29.

Alternative terminations which can be supplied are:- /C, /S and /WL. (See drawing).



**SL 138N**



SL 138N. Nylon bezel, nylon body.  
SL 139N. Chrome bezel, nylon body.  
Supplied complete with NT 151 MCC (BA9s) neon tube with built-in resistor.

To order green fluorescent tube specify NT 151G.

Terminations:- /C, /S, or solder tags.

For LV version see page 38.

**L90**



**L41**



Either of these two lenses can be supplied

See page 31 for details of insulating terminal cover which can be supplied as an extra.

Neon Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

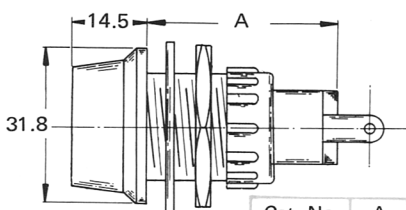
**RED, AMBER, CLEAR  
or GREEN only.**

Neon indicators with  
metal bodies should be  
adequately earthed.

**22.5 mm dia. panel hole**



**SL 687**



Cat. No.	A
SL 686 SL 687	35.5
SL 688 SL 689	41.8

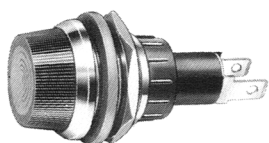
These indicators are similar in all respects to the 19mm series shown on page 30.

Chrome finish metal body only.

Terminations available as on page 30.

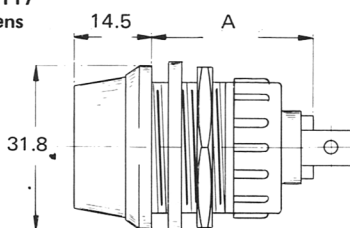
For LV versions see page 39.

**25.4 mm dia. panel hole**



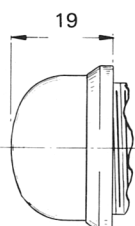
**SL 693/C/L117**

**L 117  
Lens**



**SL 691/L73**

**L 73  
Lens**



Cat. No.	A
SL 690 SL 691	30.2
SL 692 SL 693	41.8

**22.5 Series**

SL 687 MES (E10) Neon tube.  
SL 689 MBC (BA9s) Neon tube.  
Max Panel thickness — 11.1

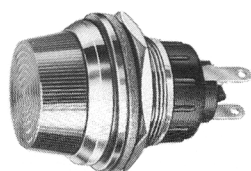
**25.4 Series**

SL 691 MES (E10) Neon tube.  
SL 693 MBC (BA9s) Neon tube.  
Max. panel thickness — 8.7

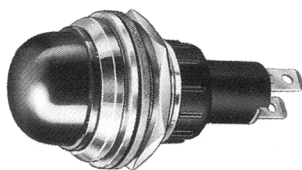
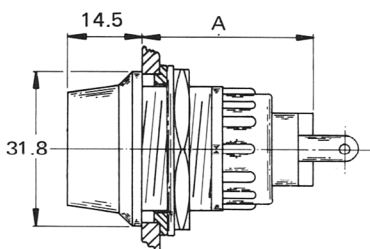
**30.5 Series**

SL 695 MES (E10) Neon tube.  
SL 697 MBC (BA9s) Neon tube.  
Max. panel thickness — 7.1

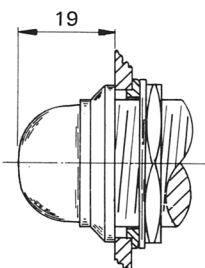
**30.5 mm dia. panel hole**



**SL 697/L117**



**SL 695/L73**



Cat. No.	A
SL 694 SL 695	30.2
SL 696 SL 697	41.8

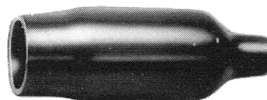


**L 117**



**L 73**

Either of the two lenses may be supplied



58.4 long x 17.8 dia

Moulded PVC  
Insulating Terminal  
Cover Part No. M445  
Supplied as an extra

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

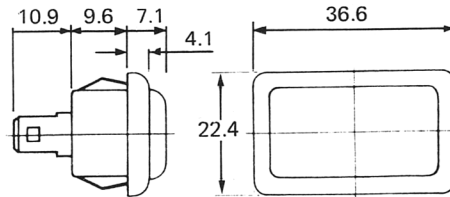
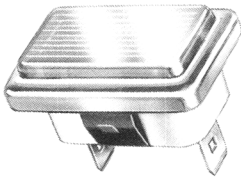
**RED, AMBER, CLEAR  
or GREEN only.**

Neon indicators with  
metal bodies should be  
adequately earthed.



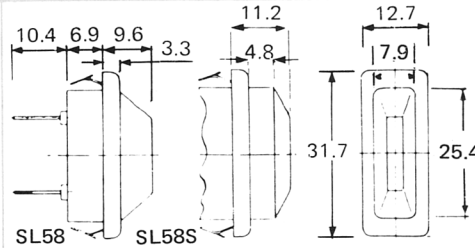
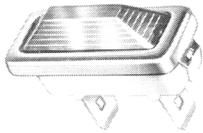
## Rectangular panel hole

SL 52



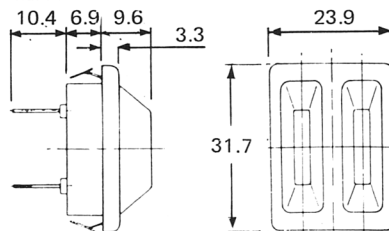
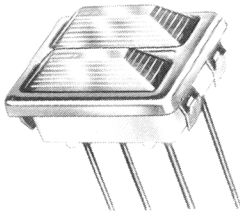
White moulded body with polished chrome surround.  
Polycarbonate coloured lens.  
6.3mm tab terminals.  
Metal spring clips for snap-in panel fixing.  
Panel cut-out: 28.7mm  $\pm$  .13 x 16.7mm  $\pm$  .13  
Panel thickness between .8mm and 1.6mm.

SL 58

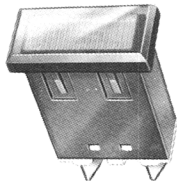
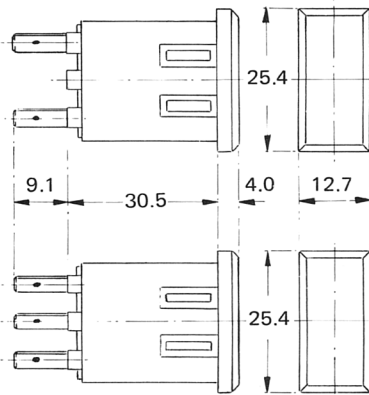
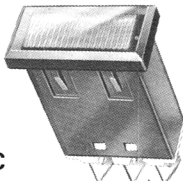


White moulded body with polished chrome surround, and polycarbonate coloured lens.  
Metal spring clips for snap-in fixing.  
Panel cut-out: 29.4mm  $\pm$  .13 x 8.3mm  $\pm$  .13.  
SL 57 and 57S 200mm PVC covered leads.  
SL 58 and 58S 6.3 tab terminals.  
Panel thickness between .8mm and 1.5mm.

SL 257

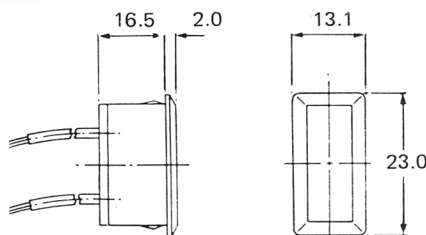


Dual lens version of SL 57 and SL 58.  
Panel cut-out: 29.4mm  $\pm$  .13 x 20.8mm  $\pm$  .13  
SL 257 has 200mm PVC covered leads.  
SL 258 has 6.3 tab terminals.  
Panel thickness between .8mm and 1.5mm.

SL 172/C  
SL 174/CSL 171/C  
SL 173/C

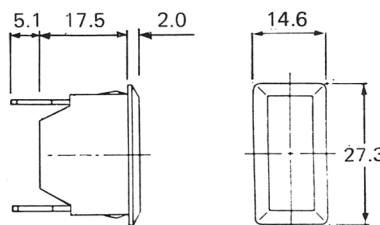
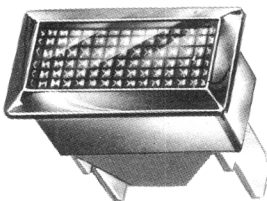
Polycarbonate coloured lens with integral moulded clips for snap-in fixing.  
Flashing or steady signals.  
6.3 tab terminals.  
Panel cut-out - 21.6  $\begin{smallmatrix} +0.2 \\ -0 \end{smallmatrix}$  x 10.0  $\begin{smallmatrix} +0.2 \\ -0 \end{smallmatrix}$   
SL 171/C Steady signal. 3 terminals  
SL 172/C Flashing signal 2 terminals.  
SL 173/C Flashing or steady signals 3 terminals.  
SL 174/C Steady signal 2 terminals.  
Panel thickness - 2.0 max.

SL 175



Polycarbonate coloured lens with integral moulded clips for snap-in fixing.  
200mm long flexible PVC covered leads. Other lengths and heatproof to order.  
Panel cut-out: 21.0mm min. x 11.0mm min.  
Panel thickness between .9mm and 1.14mm.

SL 176



Polycarbonate coloured lens with integral moulded clips for snap-in fixing.  
Panel cut-out: 23.8mm min. x 11.1mm min.  
SL 176 has 6.3 tab terminals.  
SL 176/WL has 200mm PVC covered leads. Other lengths and heatproof to order.  
Panel thickness between .9mm and 1.14mm.

Neon  
Tubes

Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

Temp. range  
T85°C is standard  
T125°C available  
on request

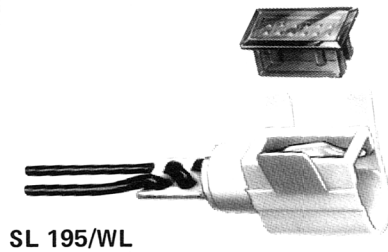
RED, AMBER  
CLEAR or  
GREEN only

Filament  
Lamps

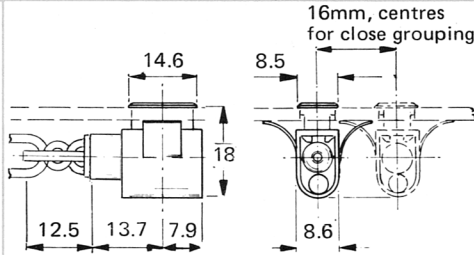
Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

ALL  
COLOURS

**Rectangular panel hole**



**SL 195/WL**



Polycarbonate coloured lens and nylon body. Body is adapted to snap-on to lens, the resilient wings on body ensuring a tight assembly.

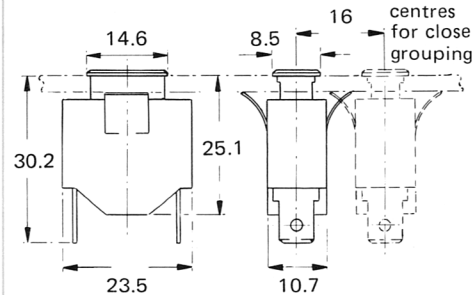
SL 195/WL - 200mm PVC flexible leads.

Panel cut-out: 13mm x 6.5mm.

Panel thickness between .8mm and 3mm.



**SL 196**

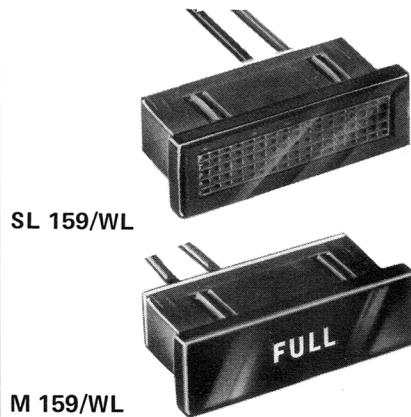


Polycarbonate coloured lens and nylon body.

Method of assembly into panel as 195/WL.

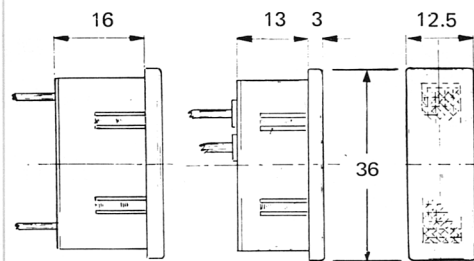
SL 196 has 6.3 tab terminals.

Panel cut-out and panel thickness as SL 195 above.



**SL 159/WL**

**M 159/WL**



**SL 158/WL**

**SL 159/WL**

Min. panel thickness .8mm

Polycarbonate coloured lens, with integral clips for snap-in panel fixing.

SL 158/WL - 200mm, PVC, flexible leads  
Standard high brightness.

Panel cut-out: 32mm x 9.9/10.1mm

SL 159/C - 6.3 tab terminals

SL 159/2C - As above with 2-bulbs

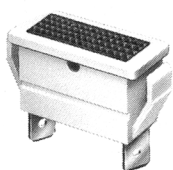
SL 159/WL - PVC flexible leads

Special high brightness

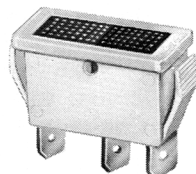
Panel cut-out 32mm x 9.5/10.0mm

SL 159/WL is Post Office approved  
PO Nos 51A and 51C

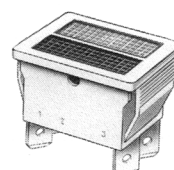
M 159/WL as SL 159/WL but is fitted with "Secret until lit" legends. Red and Amber only.



**LN 430C**



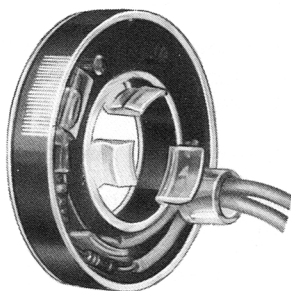
**LN 433C**



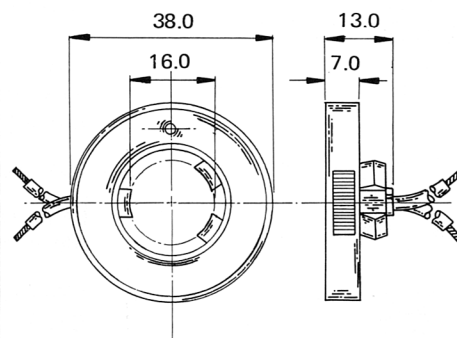
**LN 481C**

Full details of the range may be found on page 6, headed 'Rocker Switches'.

**Miscellaneous**



**SL 238**



An indicator specifically developed for the illumination of appliance control knobs. It is mounted to the rear of the knob, which should be translucent, and enables engraved switch indexing positions to be easily readable through the rim of the knob.

Neon Tubes  
Voltage range:  
Below 100V, (Specify)  
100/130V, 200/250V

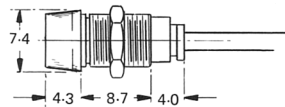
Temp. range  
T85°C is standard  
T125°C available  
on request

**RED, AMBER  
CLEAR or  
GREEN only**

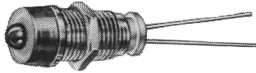
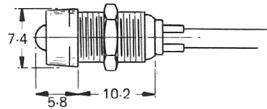
Filament  
Lamps

Voltage range:  
6V, 12V or 24V  
Add LV to Cat. No.

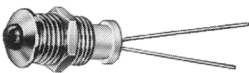
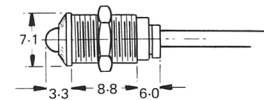
**ALL  
COLOURS**

**LIGHT EMITTING DIODE LAMPS**  
**6·3mm dia. panel hole. T1 L.E.D.****SL 42**

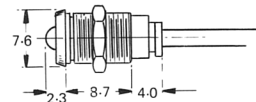
Max. panel thickness - 6·3mm

**SL 42A**

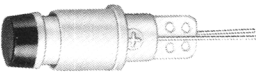
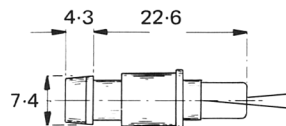
Max. panel thickness - 6·3mm

**SL 43**

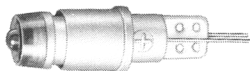
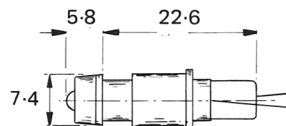
Max. panel thickness - 6·3mm

**SL 43V**

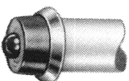
Max. panel thickness - 6·3mm

**SL 46**

Max. panel thickness - 10·0mm

**SL 46A**

Max. panel thickness - 10·0mm

**SL 46A/C**

Alternative bodies, either chrome finish brass or nylon. Metal bodies threaded 6.27/6.22mm dia. x 40 TPI Whit, nylon bodies are plain for push-on nut fixing. Polycarbonate lenses and diodes in RED, GREEN or YELLOW.

Plain wire terminations, or at extra cost, 200mm PVC covered flexible leads. Add /WL to Cat. No. for flexible leads.

Cat. No. SL 42 Metal body and coloured lens.

Cat. No. SL 42A As SL 42, but with diode projecting through the lens.

Cat. No. SL 43 As SL 42, less lens, but with diode projecting through chrome finish bezel.

Cat. No. SL 43V As SL 43, but with extended chrome finish shrouding bezel.

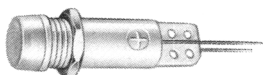
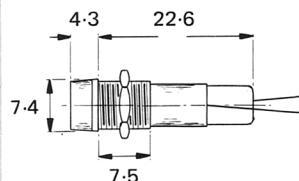
Cat. No. SL 46 Nylon body and coloured lens.

Cat. No. SL 46A All insulated body, with diode projecting through lens.

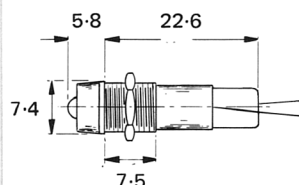
Cat. No. SL 46A/C As SL 46A, but fitted with loose chrome bezel.

Flexible leads are colour coded: WHITE indicating positive and BLACK for negative, to prevent polarity reversal.

On units with plain wire terminations, rear nylon plug is clearly marked with polarity.

**7·1mm dia. panel hole. T1 L.E.D.****SL 246**

Max. panel thickness - 6·3mm

**SL 246A**

Max. panel thickness - 6·3mm

**SL 246A/C**

Nylon body, screwed 7·04/6·95 dia. x 40 TPI Whit. for screwed nut fixing.

Coloured polycarbonate non-removable lens, in RED, GREEN or YELLOW.

Plain wire terminations. 200mm long PVC covered flexible leads at extra cost. For flexible leads add /WL to Cat. No.

Rear plug clearly marked with polarity.

Loose chrome finish bezel available to order, add /C to Cat. No.

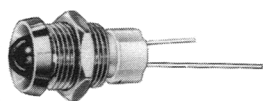
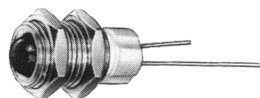
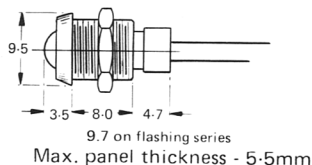
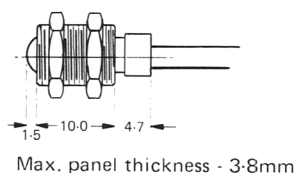
Cat. No. SL 246 Coloured lens.

Cat. No. SL 246A Coloured lens, but with diode projecting through lens.

Cat. No. SL 246A/C As above, but fitted with loose chrome bezel.



## LIGHT EMITTING DIODE LAMPS

8-0mm dia. panel hole. T1 $\frac{3}{4}$  L.E.D.SL 48L  
SL 48HSL 48PL  
SL 48PH

Chrome finish brass bodies, threaded 7-9/  
7.8mm dia. x 40 TPI Whit.

Low intensity LED – RED only.

High intensity LED – RED, GREEN or  
YELLOW.

Cat. No. SL 48L Low intensity LED.

Cat. No. SL 48H High intensity LED.

Cat. No. SL 48PL Low intensity LED, rim-  
less body.

Cat. No. SL 48PH High intensity LED,  
otherwise exactly as SL  
48PL.

Cat. No. SL 48 As SL 48L, but less LED  
lamp, for manufacturers  
who wish to fit their own  
T 1 $\frac{3}{4}$  size LED.

Plain wire terminations, or, at extra cost,  
200 mm PVC covered flexible leads.

Note: 8.0 series only are available with flashing signal suitable  
for connection to 5.0V supply without resistor.  
Please quote LP series

## T1 L.E.D. lamps used on 6-3 and 7-1mm dia. series

Arcoelectric Reference	Colour	Typical Forward Voltage	Maximum Forward Voltage	Continuous Forward Current
LED 10	RED	1.7V	2.0V	40-50 mA
LED 14	YELLOW	2.4V	3.0V	35-40 mA
LED 17	GREEN	2.4V	3.0V	35-40 mA

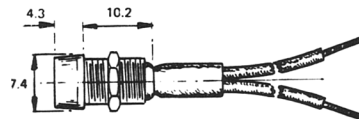
T1 $\frac{3}{4}$  L.E.D. lamps used on 8-0mm dia. series

Arcoelectric Reference	Colour	Typical Forward Voltage	Maximum Forward Voltage	Continuous Forward Current
LED 12	RED	1.7V	2.2V	100 mA
LED 13	RED	2.0V	3.0V	35mA
LED 15	YELLOW	2.4V	3.0V	35-60 mA
LED 16	GREEN	2.4V	3.0V	35-60 mA

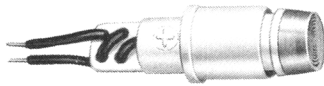
LED lamps are available for the above stated voltages. Our Technical  
Dept however, will supply, on request, the size of resistors required to  
enable the lamps to be connected to any specified voltage. We do not  
stock and therefore cannot supply resistors.

LOW VOLTAGE FILAMENT LAMPS  
6-3mm dia. panel hole

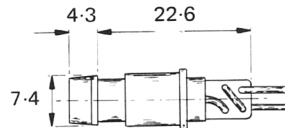
SL 40



Max. panel thickness - 6-3mm



SL 44



Max. panel thickness - 10-0mm

Alternative bodies, either chrome finish brass or nylon. Metal bodies threaded 6.27/6.22mm dia. x 40 TPI Whit. Black or white nylon bodies are plain for push-on nut fixing. 200 mm flexible PVC covered leads.

RED, GREEN, AMBER, BLUE or CLEAR polycarbonate lenses.

Complete with built-in filament lamp. Voltage range: 5/6V, 12/14V, 24/28V.

SL 40 Brass body.

SL 40/C As SL 40 but fitted with loose chrome bezel.

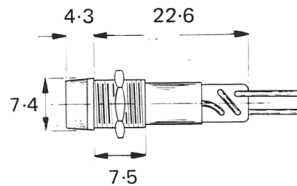
SL 44 Nylon body.

SL 44/C As SL 44 but fitted with loose chrome bezel.

## 7-1mm dia. panel hole



SL 244



Nylon body, threaded 7-04/6-95 dia. x 40 TPI Whit. for screwed nut fixing.

200mm flexible PVC covered leads.

RED, GREEN, AMBER, BLUE or CLEAR polycarbonate lenses.

Complete with built-in filament lamp. Voltage range: 5/6V, 12/14V, 24/28V.

Loose chrome finish bezel available. To order add /C to Cat. No.



## 9.5 mm dia. panel hole

Dimensions in mm

## LES (E5/8) Bulb

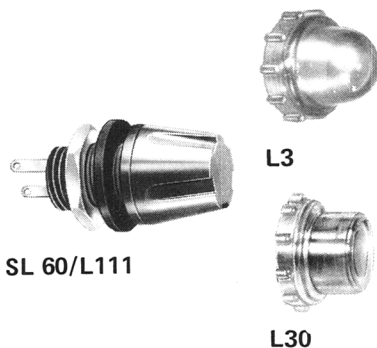
Threaded nylon body for screwed nut fixing. Screwed 9.5/9.3mm dia. x 26 TPI Whit.

Removable polycarbonate lens for front of panel bulb replacement.

Lens No. L111 is standard, but either Lens No. L3 or Lens No. L30 can be supplied

Solder tag connections.

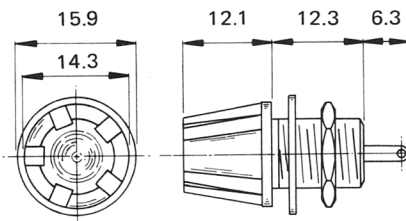
SL 60 LED. Version fitted with T1¾ light emitting diode.



SL 60/L111

L3

L30



Max. panel thickness 8.6mm

## LES (E5/8) Bulb

Polycarbonate lens-body, with clips for snap-in panel mounting.

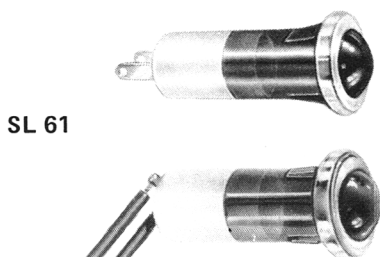
Rear nylon base assembly removable for bulb replacement.

SL 61 Moulded bezel. Solder tags.

SL 61B Chrome bezel. Solder tags;

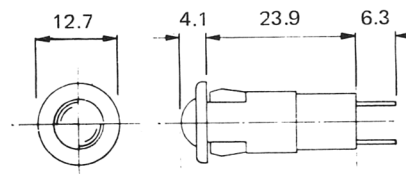
SL 61/WL Moulded bezel. 200mm PVC covered flexible leads.

SL 61B/WL Chrome bezel. 200mm PVC covered flexible leads.



SL 61

SL 61B/WL



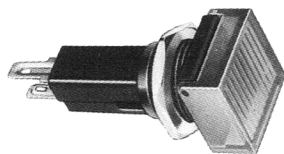
Panel thickness between .9 and 1.14mm

Lenses available in:-  
RED, GREEN, AMBER, BLUE or CLEAR.

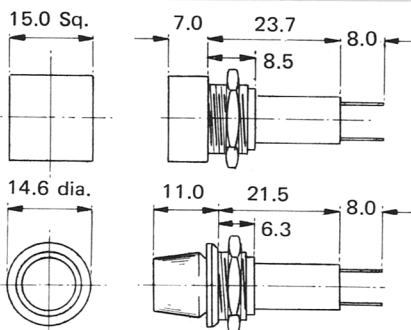
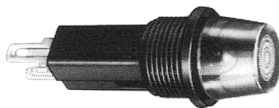
Details of suitable bulbs for signal lampholders  
are listed on page 41.

**12 mm dia. panel hole**

**SL 115**  
Hinged lens



**SL 116**  
Removable lens

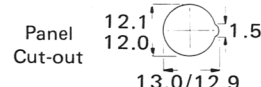


T1¼(6mm), All glass, wedge shape bulb  
Threaded nylon body for screwed nut fixing. Screwed 11.79/11.68mm dia. x 32 TPI Whit.

Polycarbonate coloured lens. Front of panel bulb replacement. 2-8 tab terminals.

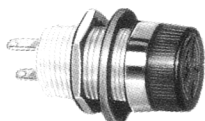
SL115. Hinged lens  
SL116. Removable lens  
SL116/C With chrome bezel

With anti-rotational pip

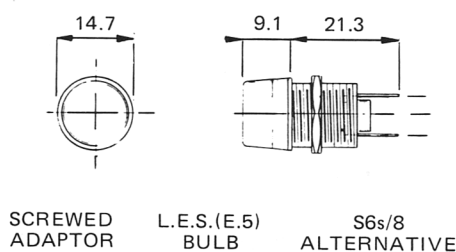
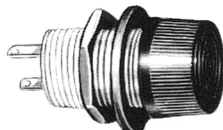


**12.7 mm dia. panel hole**

**SL 62**  
**SL 63**



**SL 62M**  
**SL 63M**



SCREWED ADAPTOR L.E.S.(E.5) BULB S6s/8 ALTERNATIVE

Max. panel thickness 9.6mm

T1¼ (6mm), S6s/8 cap midjet flange bulb

Threaded nylon body for screwed nut fixing. Screwed 11.79/11.68mm dia. x 32 TPI Whit.

Polycarbonate coloured lens. Front of panel bulb replacement. Solder tag connections.

SL 62 Chrome finish bezel. Removable lens/bezel. Bezel is 'live'.

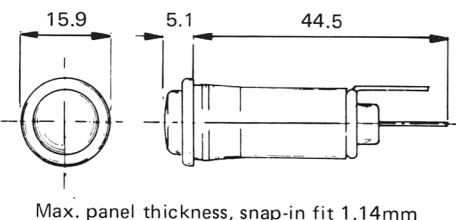
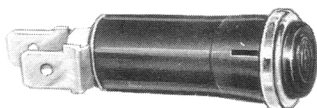
SL 62M As above less bezel. Removable lens.

**LES (E5/8) Bulb**

SL 63 As SL 62, but complete with loose adaptor (see adjacent drawing).

SL 63M As SL 62M, but complete with loose adaptor (see adjacent drawing).

**SL 67/C**



Max. panel thickness, snap-in fit 1.14mm

**BA7s Bulb**

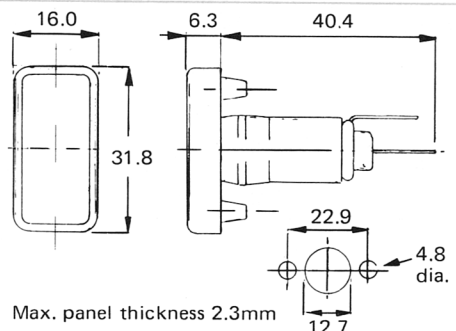
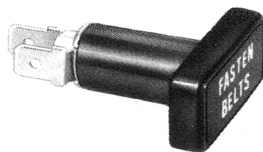


Flexible nylon body for snap-in fixing. Polycarbonate coloured lens.

Bright chrome or matt-black finish front bezels.

Rear base assembly removable for bulb replacement. Supplied complete with bulb. 6.3 tab terminals.

**SL 71/C /Legend**



Max. panel thickness 2.3mm

**BA7s Bulb**



Flexible nylon body for snap-in fixing.

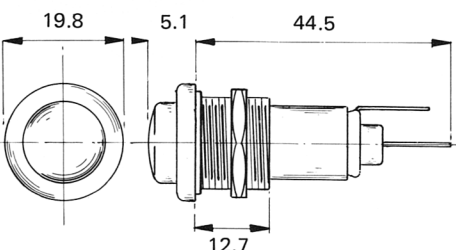
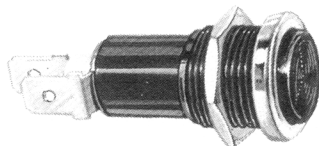
Rear base assembly removable for bulb replacement. Supplied complete with bulb.

6.3 tab terminals. Black bezel.

The legend is not visible until lit. When ordering, please state type of legend required, and the colour.

**17.5 mm dia. panel hole**

**SL 69/C**



**BA7s Bulb**



Threaded nylon body for screwed nut fixing. Screwed 15.75/15.62mm dia. x 26 TPI Whit.

Polycarbonate coloured lens.

Bright chrome or matt-black finish bezel.

Rear base assembly removable for bulb replacement. Supplied complete with bulb.

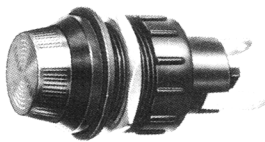
6.3 tab terminals.

**Lenses available in:-  
RED, GREEN, AMBER, BLUE or CLEAR**

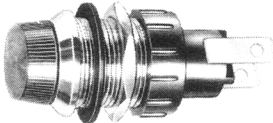
**Details of suitable bulbs for signal lampholders  
are listed on page 41**



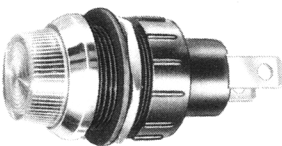
## 19 mm dia. panel hole



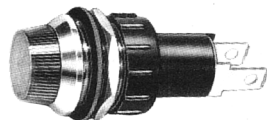
SL 88/L90



SL 90/C/L 90



SL 390/C/L 90

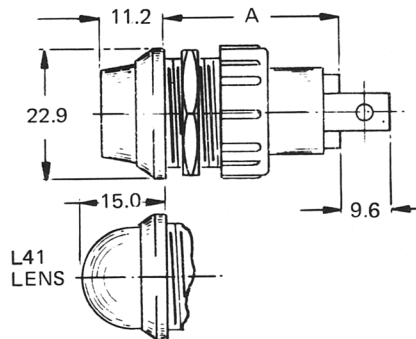


SL 392/C/L 90

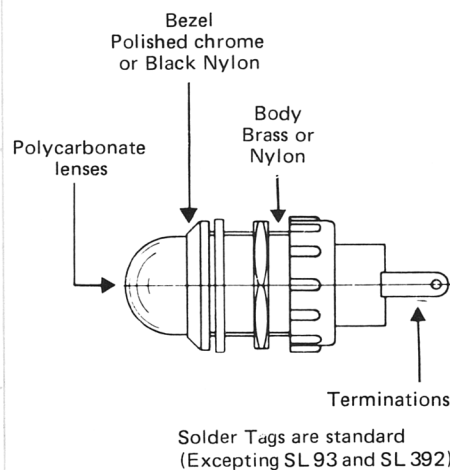


SL 396/L 90

THREAD:—  
18.92mm  
18.80mm  
DIA. x 26 TPI WHIT.



Max. panel thickness 6.3mm  
(except SL90 which is 11.2mm)



For 6.3mm Tab type add /C to Cat. No.  
For 6 BA Screw Terms. add /S to Cat. No.  
(Excepting SL 386 and SL 396).

## MES (E10) Bulb



Cat. No.	Bezel	Body	'A' Dimension
SL 88	Nylon	Nylon	30.2
SL 89	Nylon	Nylon	24.6
SL 90	Chrome	Brass	35.0
SL 90SB	Chrome	Brass	30.2
SL 99	Chrome	Brass	24.6
SL 390	Chrome	Nylon	30.2

## MCC (BA9s) Bulb



SL 93	Chrome	Brass	35.0
SL 382	Nylon	Nylon	35.0
SL 392	Chrome	Nylon	35.0

## TWIN LES (E5/8) Bulbs



SL 386	Nylon	Nylon	21.3
SL 396	Chrome	Nylon	21.3

Bulbs are accessible from front or rear of panel.  
Bulbs are not supplied unless requested, but the following chart indicates those types which are suitable.

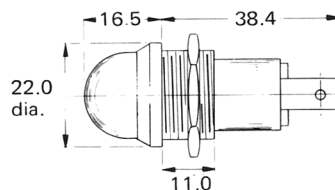
Symbol "RO" means 11mm round bulbs.  
Symbol "TU" means 10mm tubular bulbs.

Underlining of symbols means that bulbs may easily be removed by fingers from the front.

Cat Nos.	Suitable bulbs
SL 88, 90SB, 93, 390, 392	RO, <u>TU</u>
SL 90, 382	RO, TU
SL 89, 99	<u>RO</u> , <u>TU</u> with L41 only



SL 138/C/L 41



Max. panel thickness 6.3mm

## MCC (BA9s) Bulb

SL 138. Nylon bezel, Nylon body.  
SL 139. Chrome bezel, Nylon body.

Bulbs accessible from front only.  
Bulbs not supplied unless requested.

Terminations: - /C, /S or solder tags.

L 90



L 41



Either of these  
two lenses can  
be supplied.



58.4 long x 17.8 dia.

Moulded PVC  
Insulated Terminal  
Cover. Part No. M445  
Supplied as an extra.

Lenses available — Transparent RED, AMBER, GREEN, BLUE or CLEAR  
Translucent RED, YELLOW or OPAL

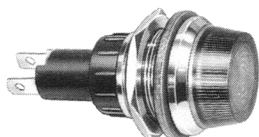
Details of suitable bulbs for signal  
lampholders are listed on page 41.



**22.5, 25.4, 30.5 mm dia. panel holes**



**SL 690/L73**



**SL 692/C/L117**

Overall dimensions of these lampholders and details of alternative lenses on page 31

These indicators are similar in all respects to the 19mm series shown on page 38.

Chrome finish metal body only.

Terminations available as on page 38.

SL 686 MES (E10)  
SL 688 MCC (BA9s)  
Max. panel thickness - 11.1

22.5 dia.  
panel hole

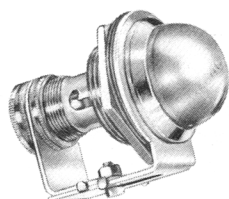
SL 690 MES (E10)  
SL 692 MCC (BA9s)  
Max. panel thickness - 8.7

25.4 dia.  
panel hole

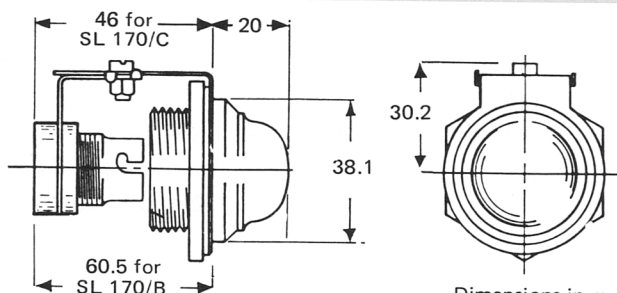
SL 694 MES (E10)  
SL 696 MCC (BA9s)  
Max. panel thickness - 7.1

30.5 dia.  
panel hole

**31.8 mm dia. panel hole**



**SL 170/C  
SL 170/B**



Dimensions in mm

**SBC Bulb**

SL 170/C. Brass lampholder.  
SL 170/B. Moulded lampholder.

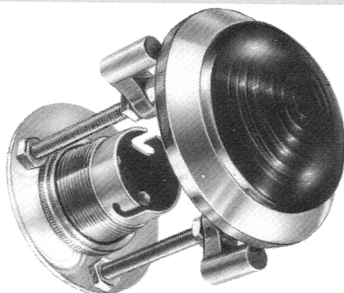
Removable coloured polycarbonate lens for bulb replacement.

Polished chrome bezel.

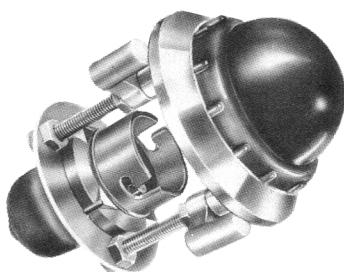
Bezel threaded 31.75mm dia. x 16 TPI Whit.

Max. panel thickness 9.6mm.

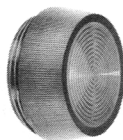
**54.1 mm dia. panel hole**



**SL 100 (L39 Lens)**

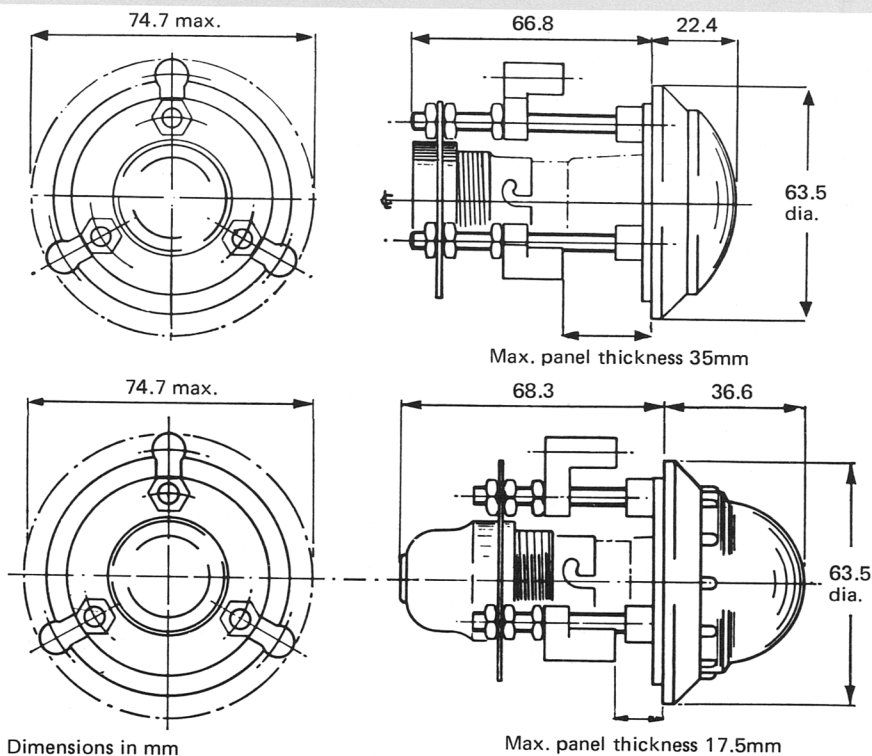


**SL 102 (L44 Lens)**



**L123  
Lens**

Supplied if requested



**BC or SBC Bulbs**

Removable coloured polycarbonate lenses for bulb replacement.

SL 100 has brass BC lampholder, for a 15 watt pigmy lamp.

SL 102 has moulded BC lampholder, for a 15 watt pigmy lamp.

Polished chrome bezel.

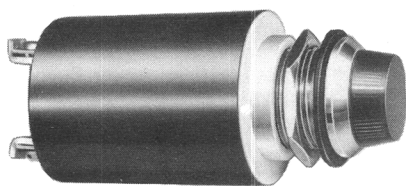
SBC lampholders if requested.

Lenses available in:-  
**RED, GREEN, AMBER, BLUE or CLEAR**

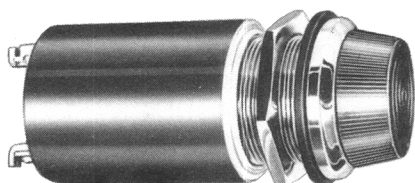
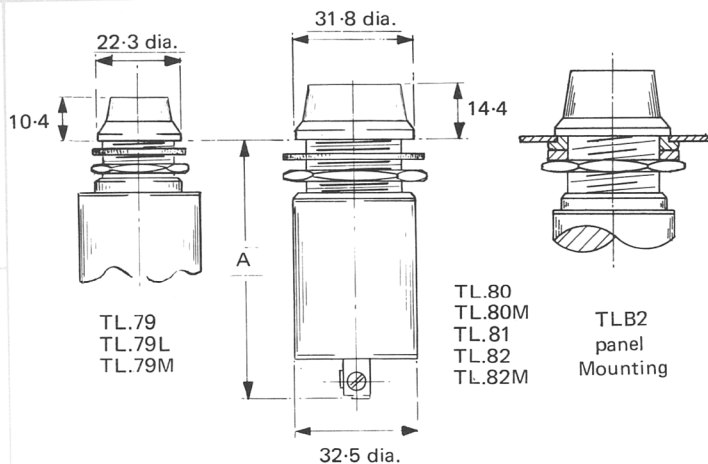
Details of suitable bulbs for signal  
lampholders are listed on page 41.



19.0 mm, 22.5 mm, 25.4 mm and 30.5 mm. dia. panel holes



TL79/L/L90

TL80/L117  
TL81/L141  
TL82/L117

'A' DIMENSION

	79	79L	79M	80 80M	81	82 82M
TL Series	67.6	72.1	79.5	71.4	72.5	71.4
TF Series	73.9	78.4	85.8	77.7	78.8	77.7



L41



L73

Alternative Lenses  
79, 80 and 82 Series

Threaded polycarbonate coloured lenses facilitate bulb replacement. Bulbs must be 6.5 V .15 A. Transformers are sealed with epoxy resin in moulded cases, polished chrome bezels. Transformers for the following supply voltages:- 100/120 V AC, 200/250 V AC, 380/440 V AC. Bulbs supplied with all models.

Lens Colours **TRANSPARENT Red, Amber, Green, Blue or Clear**  
**TRANSLUCENT Red, Yellow or White**

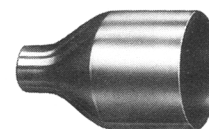
Transformer lamps now available with flashing signal. Quote TF series.

T221  
Screwed  
Adaptor

A complete TL80 unit is available, using the screwed adaptor shown, a special bezel, and a TL79 transformer unit. To order, quote:-  
TL80A. MES bulb.  
TL80A/M. MBC bulb.

Cat. No.	Panel Hole	Max. Panel Thickness	Type of Bulb 6.5 Volt	Terminals	Lens Type and Cat. No.	Weight approx
T.L.79	19.00 mm $\phi$	5.6 mm	11 mm MES Round	5BA screw & Clamp	L41 only	127gr
T.L.79/C	19.0 mm $\phi$	5.6 mm	11 mm MES Round	6.3 Snap-on	L41 only	127gr
T.L.79/L	19.0 mm $\phi$	10.4 mm	11 mm MES Round	5BA Screw & Clamp	L41 only	127gr
T.L.79/M	19.0 mm $\phi$	10.4 mm	11 mm MBC Round	5BA Screw & Clamp	L41 or L90	127gr
T.L.80	25.4 mm $\phi$	9.6 mm	11 mm MES Round	5BA Screw & Clamp	L73 or L117	170gr
T.L.80/C	25.4 mm $\phi$	9.6 mm	11 mm MES Round	6.3 Snap-on	L73 or L117	170gr
T.L.80/M	25.4 mm $\phi$	9.6 mm	11 mm MBC Round	5BA Screw & Clamp	L73 only	170gr
T.L.G.80	This model, similar to T.L.80 is fitted with glass lens. Overall sizes supplied on request.					
T.L.81	22.5 mm $\phi$	12.4 mm	11mm MES Round	5 BA Screw & Clamp	L141 only	
T.L.81/C	22.5 mm $\phi$	12.4 mm	11mm MES Round	6.3 Snap-on	L141 only	
T.L.82	30.5 mm $\phi$	8.1 mm	11mm MES Round	5 BA Screw & Clamp	L73 or L117	170gr
T.L.82/C	30.5 mm $\phi$	8.1 mm	11 mm MES Round	6.3 Snap-on	L73 or L117	170gr
T.L.82/M	30.5 mm $\phi$	8.1 mm	11 mm MBC Round	5 BA Screw & Clamp	L73 only	170 gr

Extras



M272

P.V.C. Insulating terminal cover

Third terminal for earthing secondary winding of transformer

Legend Plates. Quote:  
P.387 for T.L.79  
P.386 for T.L.80  
P.551 for T.L.81Rubber Washers for Improving Seal between Bezel and Panel  
and  
Improving Seal between Lens and Bezel

Twin LES (E5/8) bulb units also available. Add 2' to Cat. No. Example:- TL792



## GUIDANCE ON THE CHOICE OF LOW VOLTAGE BULBS FOR SIGNAL LAMPHOLDERS

Signal Lampholder Cat. No.	Bulb Type	Max. bulb diameter mm.	Max. bulb length mm.	Maximum wattage bulb for continuous running at 20-25°C ambient	Bulb Accessibility from front of panel	Bulb Accessibility from rear of panel	Remarks
				Polycarbonate lens			
SL 60	LES (E5/8)	7	16	1.5	Yes	No	
SL 61	LES (E5/8)	7	16	1.5	No	Yes	
SL 62	T1 ¾ 6mm midjet flange S 6s/8 CAP	6	16	1.5	Yes	No	
SL 63	LES (E5/8)	6	16	1.5	Yes	No	
SL 67/C	BA7s	7.5	23	2	No	Yes	
SL 69	BA7s	7.5	23	2	No	Yes	
SL 71	BA7s	7.5	23	2	No	Yes	
SL 88	MES (E10/13)	12	31	3	See chart page 38	Yes	
SL 89	MES (E10/13)	12	31	3		Yes	
SL 90	MES (E10/13)	12	35	3		Yes	
SL 90/SB	MES (E10/13)	12	31	3		Yes	
SL 93	MCC (BA9s)	12	31	3	See chart	Yes	
SL 115 SL 116	T1 ¾ mm All glass Wedge shape.	6	20	1	Yes	No	
SL 99	MES (E10/13)	12	31	3	page 38	Yes	
SL 138 SL 139	MCC (BA9s)	12	30	3	Yes	No	
SL 390	MES (E10/13)	12	30	3	See chart page 38	Yes	
SL 382 SL 392	MCC (BA9s)	12	30	3		Yes	
SL 690	MES (E10/13)	12	30	3	Yes	Yes	
SL 692	MCC (BA9s)	12	30	3	Yes	Yes	

If bulbs are alight only intermittently the wattage ratings given above may be exceeded.  
For higher ambient temperatures than 20-25°C and use in confined spaces the bulb rating may need to be reduced.

## SIGNAL LAMP LENSES

When ordering as spares, please state colour.  
Available in TRANSPARENT or TRANSLUCENT material.  
Polycarbonate suitable for temperatures up to 130°C.

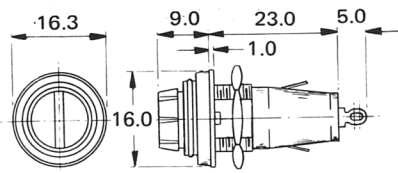
Cat. No.	Description	Thread Details	Effective Length of Thread
L 2	Polycarbonate lens as supplied on SL 82	22.15/22.05mm dia. x 16 T.P.I. WHIT (EXTERNAL)	4.1
L 3	Polycarbonate lens as supplied on SL 80. Transparent RED, AMBER and CLEAR only.	11.99/11.86mm dia. x 32 T.P.I. WHIT (INTERNAL)	
L 8	Similar to above L 3 but smaller internal thread fits SL 78. Transparent RED, AMBER and CLEAR only.	9.68/9.58mm dia. x 26 T.P.I. WHIT (INTERNAL)	
L 30	Polycarbonate lens as supplied on SL 60	11.99/11.86mm dia. x 32 T.P.I. WHIT (INTERNAL)	
L 39	Polycarbonate lens as supplied on SL 100	45.41/45.28mm dia. x 12 T.P.I. WHIT (EXTERNAL)	5.8
L 40	Polycarbonate lens as supplied on SL 170	25.20/25.07mm dia. x 16 T.P.I. WHIT (EXTERNAL)	7.1
L 41	Polycarbonate lens as supplied on SL 90, SL 88 etc.	15.62/15.49mm dia. x 26 T.P.I. WHIT (EXTERNAL)	4.3
L 44	Polycarbonate lens as supplied on SL 102	45.41/45.28mm dia. x 12 T.P.I. WHIT (EXTERNAL)	5.6
L 73	Polycarbonate lens as supplied on TL 80	22.15/22.05mm dia. x 26 T.P.I. WHIT (EXTERNAL)	6.3
L 90	Polycarbonate lens as supplied on SL 390	15.62/15.49mm dia. x 26 T.P.I. WHIT (EXTERNAL)	4.8
L 99	Polycarbonate lens as supplied on SL 77	12.57/12.50mm dia. x 32 T.P.I. WHIT (EXTERNAL)	1.8
L 111	Polycarbonate lens as supplied on SL 60	11.99/11.86mm dia. x 32 T.P.I. WHIT (INTERNAL)	
L 117	Polycarbonate lens as supplied on TL 80	22.15/22.05mm dia. x 26 T.P.I. WHIT (EXTERNAL)	9.1
L 123	Polycarbonate lens as supplied on SL 100	45.41/45.28mm dia. x 12 T.P.I. WHIT (EXTERNAL)	7.1
L 141	Polycarbonate lens as supplied on TL 81	22.35/22.28mm dia. x 26 T.P.I. WHIT (INTERNAL)	



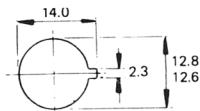
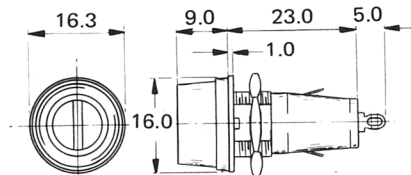
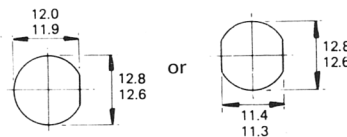
## PANEL MOUNTING



FH 332



FH 333

Panel hole 'A'  
Max. Panel thickness 3.5Panel hole 'B'  
Max Panel thickness 4.5

Designed to comply with all the latest international safety standards.

Alternative versions available i.e.

Release of fuse carrier by fingers or

Release of fuse carrier by screwdriver.

Moulded nylon body and fuse carrier. Body threaded for screwed nut fixing.

Silver plated solder tag terminations.

Alternatives for either 5 mm dia. x 20 mm fuses or 3/16" dia. x 5/8" fuses.

Max. rating 6-3A. 250V. AC.

Fuses not supplied.

FH 333 and FH 337 are CSA and Semko approved.

## FINGER RELEASE

FH 330 3/16" dia. x 5/8" Fuse. Panel hole 'A'.

FH 332 5mm dia. x 20mm Fuse. Panel hole 'A'.

FH 334 3/16" dia. x 5/8" Fuse. Panel hole 'B'.

FH 336 5mm dia. x 20mm Fuse. Panel hole 'B'.

## SCREWDRIVER RELEASE

FH 331 3/16" dia. x 5/8" Fuse. Panel hole 'A'.

FH 333 5mm dia. x 20mm Fuse. Panel hole 'A'.

FH 335 3/16" dia. x 5/8" Fuse. Panel hole 'B'.

FH 337 5mm dia. x 20mm Fuse. Panel hole 'B'.

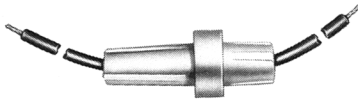
## EXTRA

Moulded PVC insulating terminal cover  
30mm long x 4.75mm dia. outlet.

Part No. M520.

## IN-LINE FUSE HOLDER

## F33, F35 SERIES



F33

F33. Overall length 36.5mm.

F35. Overall length 50.8mm.

Moulded in natural colour nylon.

Supplied without fuses or leads.

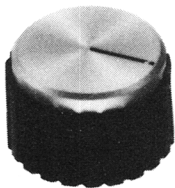
Fuses 5 amp maximum.

F33 For 15.9mm long x 4.7mm dia. fuses  
or 20mm long x 5mm dia fuses.

F35 For 31.7mm long x 6.3mm dia. fuses

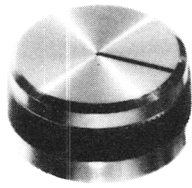
## CONTROL KNOBS

Style H15



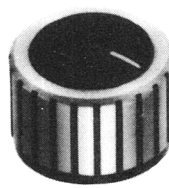
H15/20 20 $\phi$   
H15/25 25 $\phi$   
x 16 deep

Style H35



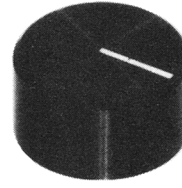
H35/22.7 22.7 $\phi$   
H35/27.5 27.5 $\phi$   
x 12 deep

Style H45



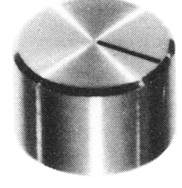
H45/19 19 $\phi$   
H45/21 21 $\phi$   
H45/28 28 $\phi$   
x 16 deep

Style H50



H50/18.5 18.5 $\phi$   
H50/22.7 22.7 $\phi$   
H50/27.5 27.5 $\phi$   
x 12 deep

Style H60



H60/18.5 18.5 $\phi$   
H60/22.7 22.7 $\phi$   
x 12 deep

All Knobs to suit 6.0 dia spindle, ( 6.3 dia on request ), grub screw fixing, and have position indicating line.



# SIGNAL LIGHT WINDOWS AND MISCELLANEOUS COMPONENTS



**L 84**

Moulded polycarbonate in all colours.

14.6mm long x 8.5mm wide.

Snap-in fit in panel cut-out:-  
13.1/13.0 x 7.1/7.0mm.

Panel thickness between .75 and 1.3mm.



**L 54**

Moulded polycarbonate in all colours.

Interchangeable with Post Office Cap.  
Lamp. No. 1.

9.5mm dia. 6.1mm deep lens area.  
6.7mm dia. bore.

Push fit in panel cut-out 7.9mm dia.



**SL 97**  
All moulded



**SL 96**  
Chrome bezel

Moulded polycarbonate lenses. All colours.

Threaded 9.4/9.3mm dia. x 26 TPI Whit.

16 mm dia. bezel. 12.7 mm dia. lens area.

Panel cut-out 9.5mm dia.

Panel thickness max. 4.8mm



**SL 65**

All moulded



**SL 70**

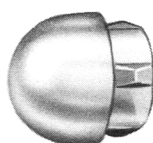
Chrome finish

Moulded polycarbonate lenses. All colours.

22.4mm dia. bezel 19mm dia. lens area.  
Panel cut-out 19mm dia.

Threaded 18.9/18.8mm dia. x 26 TPI Whit.

Panel thickness (10.4 for SL 65  
max. ( 7.1 for SL 70



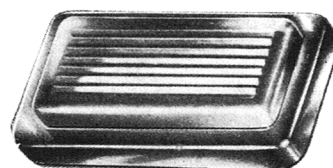
**L 14**

Moulded snap-in lens. All colours.

19mm dia. x 12.7mm deeps.

Panel cut-out 16.1/16.0mm dia.

Snap-in fit in panel 3.0mm max.

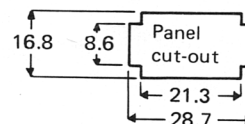


**SL 53**

Chrome finish bezel

Moulded polycarbonate lens. All colours.  
36.6mm long, 22.4mm wide, 7.1mm deep.

Held in panel  
by bending  
rear tags.



**SL 103**



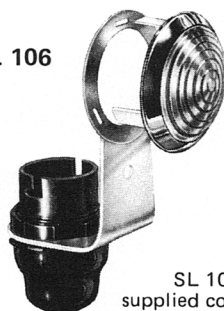
Moulded lens, all colours, chrome  
finish bezel.

46.0mm dia., 12.7mm deep.

Panel cut-out 38.1mm dia.

Max. panel thickness 9.6mm.

**SL 106**



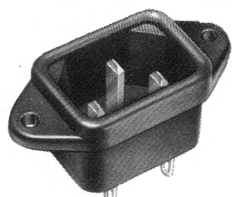
SL 103 unit  
supplied complete with  
BC lampholder.

**K 76**  
POINTER  
KNOB



Moulded in black nylon, white optional.  
Moulded-in brass insert for 6-35 dia. spindle.  
Grub screw fixing.  
19mm dia. 12.7mm deep. 31.7mm over pointer.

## APPLIANCE SOCKET and PLUG

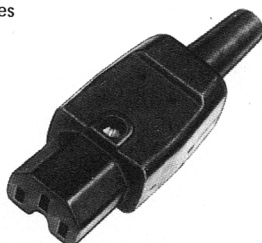


**NC 174**

48.0 overall x 22.5 wide x 20.0 deep.

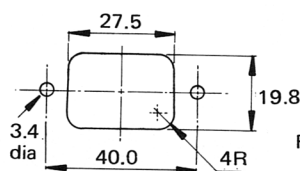
2-pin and earthing contact  
for class 1 appliances  
to standard CEE22.

6A.250V

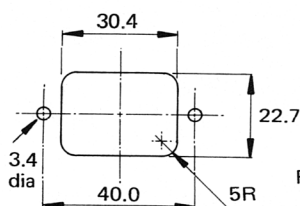


**81/0789/50**

84.9 overall x 29.9 wide x 20.6 deep.



Front of panel  
mounting

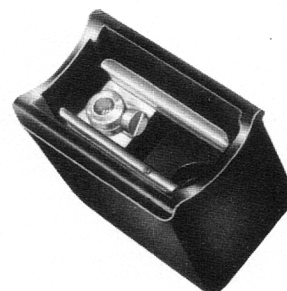


Rear of panel  
mounting

NC 174 - Specification 'COLD'  
Working Temp. 65°C

81/0789/50 - Specification 'HOT'  
Working Temp. 120°C max.

## ARCHITECTURAL LAMPHOLDER



**L94** **L95**  
Black White

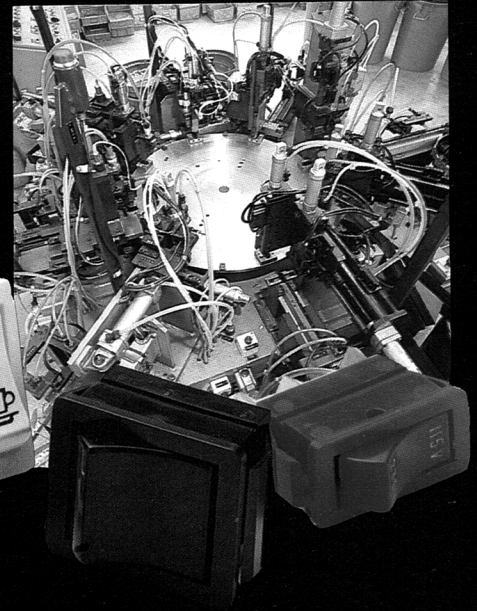
curved or straight  
tubes

38.1mm. long  
25.4mm. wide  
33.1mm. high

Single 2BA fixing

No. 2 Building East Molesey

# Production Automated Assembly



## Tool Making

For more than forty years tool making has been the key to the company's success. Many of our Senior Tool-makers have served with us since their apprenticeship. Today we continue to have a steady flow of apprentices undergoing training.



*"Sonny" Bevan*



*Tool Room*

*Arthur Arnold and Max Kornreich*

