

Technical Information - Switches and Fuseholders

Most major technical information is shown on each specific product page, other details are grouped here for easy reference. Details shown here apply to most switches and fuseholders. Snap-action switches (pages 48-49, 51 and 56-59), indicators (pages 70-84) and connectors (pages 85-87) have product specific information within the section.

MATERIALS	MOST PRODUCTS	EXCEPTIONS
Body and actuator (opaque)	Nylon 6.6 . . . . .	.8300V, 1900V, 0916V & 0911V bezels & actuators are stainless steel 0600 and 3900 actuators are plated brass
Actuator (transparent)	Polycarbonate	
Current carrying parts	Copper Alloy	
Contact points	Silver Alloy . . . . .	.N/A for 0055/56, 0600/2, 0916-0920, 0017, 2000 & 3005/3006. Gold plated for 1100.

PROPERTIES

Electrical

Class II compliant	Confirmed . . . . .	.IEC Sockets
Electrical life (Operations)	>10k, many >50k . . . . .	.See relevant page for details
Mechanical life (Operation) . . . . .	.See relevant page for details	
Contact resistance (switches) new condition	<100m Ω (at 12Vdc, 1A) . . . . .	.For 1100 & 2000 call sales
Contact resistance (fuseholders) new condition . . . . .	.5m Ω (average)	
Insulation resistance	>20M Ω	
Dielectric strength:		
across open contacts	>1kV	
between poles	>3kV	
between live parts and accessible metal	>4kV	
Comparative Tracking Index (CTI)	>250	
Temperature rise (terminals) at end of rated life . . . . .	.max 30 $^{\circ}$ K (UL 1054), max 55 $^{\circ}$ K (EN 61058-1)	

PROPERTIES

Physical

Humidity resistance at 91-95% relative humidity (to subsequently comply with requirements of the Dielectric strength test) . . . . .	.48hrs	
Impact resistance	>0.5Nm	
Storage temp. (1 year period)	<125 $^{\circ}$ C . . . . .	.Some discolouration of terminals may occur
Flame retardancy . . . . .	.UL94V2	
Solderability to BS 2011 pt.2.1T - (with an iron) . . . . .	.6 secs at 350 $^{\circ}$ C	
Angular movement \pm 4 $^{\circ}$ overall (where applicable) . . . . .	.38$^{\circ}$ . . . . .	.1250, 6000, 8500, 8550, 8600, 8650, 8800 - 26 $^{\circ}$
Force to operate . . . . .	.2.ON - 20.ON . . . . .	.Call sales for specific values

INGRESS PROTECTION

IP40 unless otherwise stated.

Higher ratings where available will be shown on the relevant catalogue page.

GENERAL INFORMATION

ALL SWITCHES

Heat and Fire resistance Category D.

ALL PRODUCTS

Solder terminals should not be fitted with “Push on”, “QD” or “Fast on” type cable connectors.

Panel holes must be punched in the direction of insertion.

μ = micro gap switch contacts <3mm.

All products should be applied, installed and maintained by the customer using competent persons in accordance with good electrical practice. Products should be tested by the customer in the application to ensure suitability. Special care should be taken not to expose switches to water, dust, corrosive chemicals, silicone, excessive solder flux, cyanoacrylate adhesives, severe impact, extremes of temperature, electrical supply voltage or load current in excess of the specified limits.

Transparent lenses on indicator lights and lit switches are moulded in polycarbonate, a material which is attacked by organic chemicals and animal or vegetable fats. Please contact sales for advice on these products.

For performance in accord with the stated ratings, switch actuators should be fully depressed and fully released during operation.

WEIGHTS OF OUR MOST FREQUENTLY SUPPLIED PRODUCTS, not including packaging.

Product	gms	Product	gms	Product	gms	Product	gms	Product	gms
0055, 0056	.5.7/6.8	1091FH	.12.6	1700H	.8.4	5567	.14.3	8550	.4.8
0305	.32.9	1100	.2.0	1750H	.13.2	6050	.13.58	8553	.5.2
0333	.4.5	1250SP	.5.9	17500	.25.6	6053	.14.15	8600	.3.5
0345	.8.9	1250DP	.7.0	2000 2pos C SP	.3.8	7000	.10.4	8620	.4.3
0340 sw only	.7.12	1300	.5.7	2000 2pos C DP	.4.5	7050	.12.3	8650	.6.3
0430	.5.5	1350	.11.2	2000 5pos A SP	.6.3	7053	.12.9	8670	.8.5
0589	.3.5	1500	.5.7	2000 5pos A DP	.7.3	8250	.4.9	8800	.2.9
0711-1S	.16.6	1520	.6.6	T2225B	.5.0	8300	.4.0	9100	.20.0
0712-S	.27.8	1550	.11.2	2950	.5.3	8350	.5.0		
0717-1S	.22.4	1553	.11.8	3111	.11.8	8350RP	.34.0		
0900S/L	.2.6/2.9	1570	.12.7	5500	.7.1	8353	.5.9		
1048	.2.8	1584-1589	.11.1	5503	.7.8	8500	.3.8		

Technical Information - Indicators

The majority of Arcoelectric indicator lights can be supplied with alternative light sources:

Neon, Fluorescent, Filament lamp or LED.

NEON and FLUORESCENT LAMPS

Colours

Available with Red, Amber, Green, Blue or Clear lenses.

Maximum striking voltages

Standard brightness types 65Vac 90Vdc.

High brightness types 85Vac 135Vdc.

High brightness types are usually fitted.

Life

Typically 25,000 hours (Green fluorescent lamps 20,000 hours). (Measured to a point when the light output of the lamp is half its original level.)

The end of life for a neon lamp is not usually a sudden failure.

False signals due to long wiring

It is possible for neon or fluorescent tubes to glow when they should be off. The false signal is caused by the capacitance effect of fairly long wiring to the indicator being adjacent to other live cables. This effect can be prevented in most cases by fitting a 100k resistor across the supply wires close to the indicator assembly.

MATERIALS

Moulded bodies and bases	Nylon 6.6
Metal bodies and bezels	Chrome plated brass (except #)
Lenses	Polycarbonate
Terminals (most types)	Brass (electro-tin plated)
Terminals (exceptions)	Brass (flash silver* or nickel** plated)
Threaded metal nuts	Brass (nickel plated on 0275/7)
Other fixings	Call sales for details

* R9, 0061, 0062, 0430, 0480, 1090, 1091, 6030, 7030, 8630, 8580

** # 3130, 3160, 3161, 3221 have nickel plated terminals with steel screws and plated polyamide bezel trims

FILAMENT LAMPS

Colours

Available with Red, Amber, Green, Clear or Blue lenses.

LEDs - DC

Colours

Red, Yellow, Green, Blue and White.

Voltage

Basic voltage 2.0/2.2V. Some items are available with integral resistors for 12V use. For details of resistors required for higher voltages, please call sales.

Current

Maximum continuous forward current 20mA.

Life

>100,000hrs

LEDs - AC

Colours

Red, Yellow, Green, Blue and White.

Voltage

Rated up to 230V ac, suitable for use at 110V and 230V ac.

Current

<3mA


Life


>100,000hrs

TEMPERATURE RATING

Authority	with Terminals	with Wire leads	
		PVC	SILICONE
European	T125°C	T105°C	T125°C
UL	T65/75°C	T65/75°C	

SYMBOLS

 Terminals
C 6.3, H 4.8, K 2.8

 Wire leads
200mm long Standard

 Solid wires
LED only

 Panel hole size

 Panel thickness

 Temperature rating