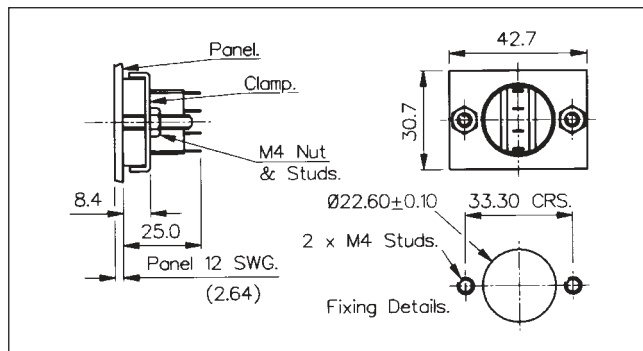
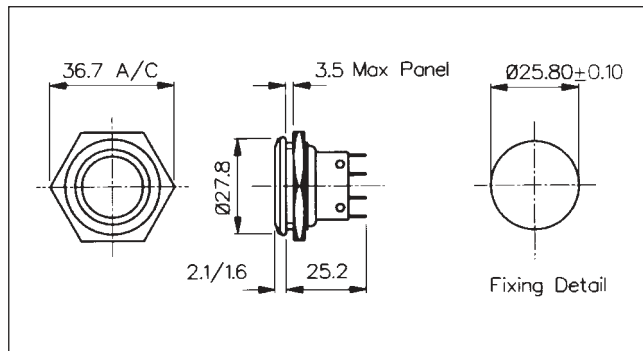
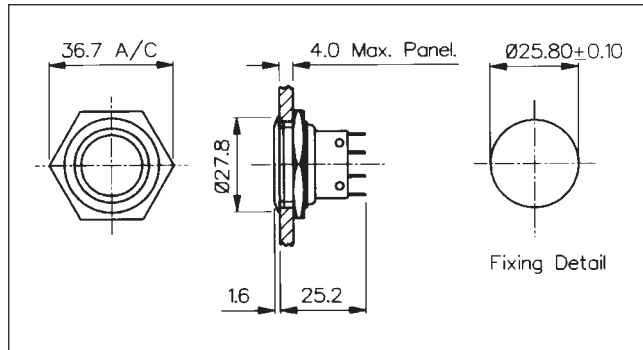
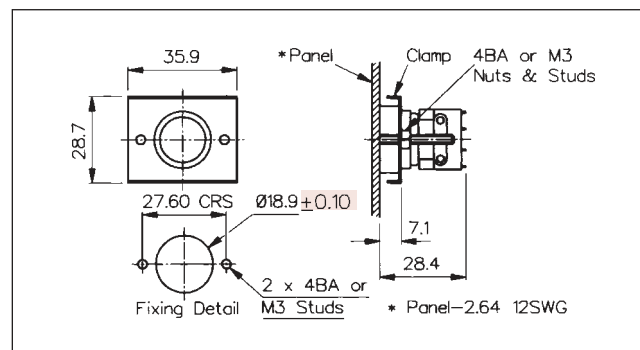
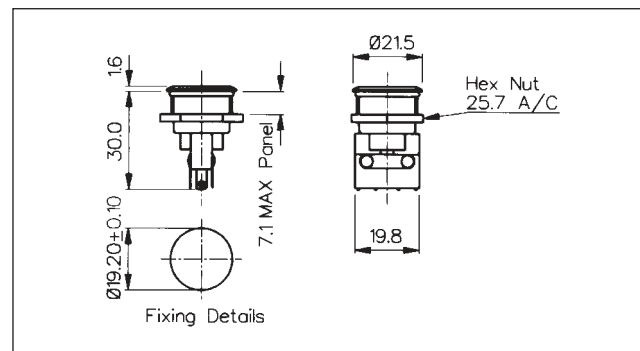
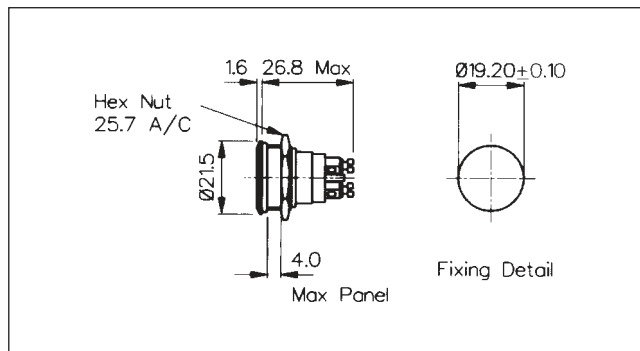


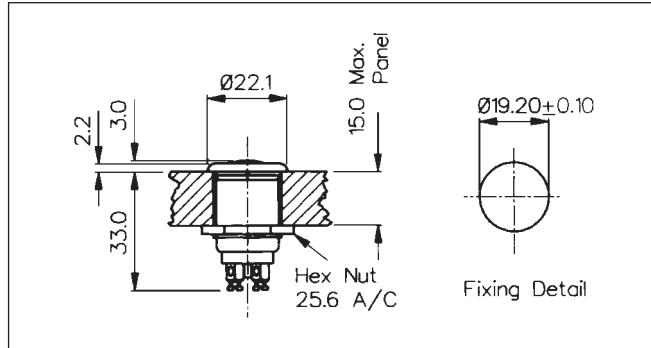
| Data                   | List No. | VS0001   | VS0002   |  |
|------------------------|----------|--|--|--|
| Max. Rating:           |          | 6.3A. 120/ 240V.                                   | 6.3A. 120/ 240V.                                   |  |
| Insulation Resistance: |          | >10 <sup>6</sup> MΩ                                | >10 <sup>6</sup> MΩ                                |  |
| Termination:           |          | 2.8 series tabs/ solder tags.                      | 2.8 series tabs/ solder tags.                      |  |
| Temperature Range:     |          | -20 to +85°C                                       | -20 to +85°C                                       |  |
| Materials: Mouldings:  |          | Glass Filled Nylon.<br>Flammability Rating UL94V-1 | Glass Filled Nylon.<br>Flammability Rating UL94V-1 |  |
| Tags:                  |          | Brass, Silver Plated.                              | Brass, Silver Plated.                              |  |
| Contacts:              |          | Copper Silver Alloy.                               | Copper Silver Alloy.                               |  |
| Approvals:             |          |  |  |  |
| Variants:              |          | Other markings, details on request.                | Other markings, details on request.                |  |



| Data                           | List No.              | MP0027                                   | MP0038   | MP0025                                   |
|--------------------------------|-----------------------|--|--|--|
| Terminations:                  |                       | Solder tags.                             | Solder tags.   | Solder tags.                             |
| Switching:                     |                       | S.P.C.O. Momentary Action (Microswitch). | S.P.C.O. Momentary Action (Microswitch).                                 | S.P.C.O. Momentary Action (Microswitch). |
| Max. Rating:                   |                       | 5A. 250V. a.c.                           | 5A. 250V. a.c.   | 5A. 250V. a.c.                           |
| Insulation Resistance:         |                       | >10 <sup>3</sup> MΩ.                     | >10 <sup>3</sup> MΩ.   | >10 <sup>3</sup> MΩ.                     |
| Contact Resistance:            |                       | < 10mΩ.                                  | < 10mΩ.  | < 10mΩ.                                  |
| Dielectric Strength:           |                       | >2.0kV. a.c.                             | >2.0kV. a.c.   | >2.0kV. a.c.                             |
| Operating Temp. Range:         |                       | -20°C to + 70°C.                         | -20°C to + 70°C.   | -20°C to + 70°C.                         |
| Sealing (Front of panel only): |                       |  | Protection Classification: IP66 EN60529 1992. (Micro switch not sealed). |  |
| Materials:                     | Mouldings:            | Glass Filled Nylon.                      | Glass Filled Nylon.  | Glass Filled Nylon.                      |
|                                | Tags/ Terminations:   | Brass, Tin Plated.                       | Brass, Tin Plated.   | Brass, Tin Plated.                       |
|                                | Switch Body & Button: | Stainless Steel.                         | Stainless Steel.   | Stainless Steel.                         |
| Contacts:                      |                       | Fine Silver.                             | Fine Silver.   | Fine Silver.                             |
| Variants:                      |                       | Non-Rotating Button, details on request. | Non-Rotating Button, details on request.                                 | Non-Rotating Button, details on request. |



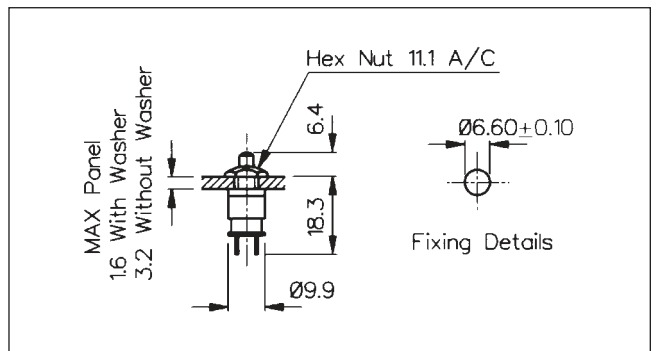
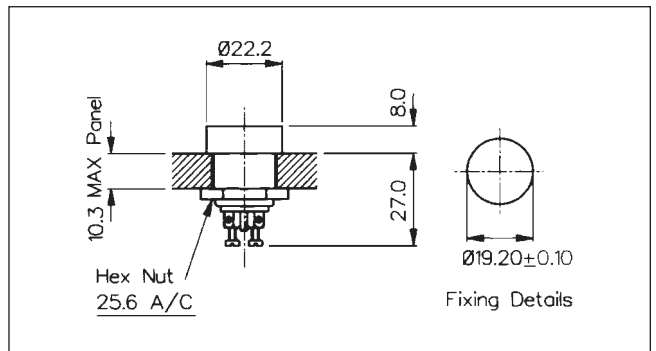
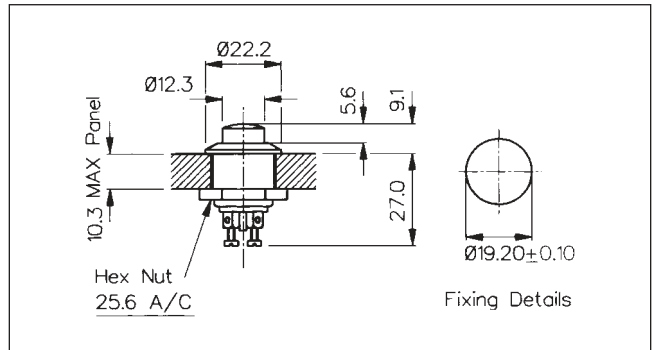
| Data                        | List No.              | MP0037  | MP0031   | MP0034                                      |
|-----------------------------|-----------------------|---|--|---|
| Terminations:               |                       | Screw terminals.  | Solder tags.   | Solder tags.                                |
| Switching:                  |                       | S.P. Push to make.<br>Slow momentary action.                          | S.P.C.O. Momentary Action<br>(Microswitch).                              | S.P.C.O. Momentary Action<br>(Microswitch). |
| Max. Rating:                |                       | 1A. 50V.  | 5A. 250V. a.c.   | 5A. 250V. a.c.                              |
| Insulation Resistance:      |                       | >10 <sup>5</sup> MΩ.  | >10 <sup>3</sup> MΩ.   | >10 <sup>3</sup> MΩ.                        |
| Contact Resistance:         |                       | < 10mΩ.   | < 10mΩ.  | < 10mΩ.                                     |
| Dielectric Strength:        |                       | >1.0kV. a.c.  | >2.0kV. a.c.   | >2.0kV. a.c.                                |
| Operating Temp. Range:      |                       | -20°C to +70°C.   | -20°C to +70°C.  | -20°C to +70°C.                             |
| Sealing (Front panel only): |                       | Protection Classification: IP66 EN60529 1992. (Terminals not sealed). | Protection Classification: IP66 EN60529 1992. (Micro switch not sealed). |   |
| Materials:                  | Mouldings:            | Glass Filled Nylon.   | Glass Filled Nylon.  | Glass Filled Nylon.                         |
|                             | Tags/Terminals:       | Brass, Silver Plated.   | Brass, Tin Plated.   | Brass, Tin Plated.                          |
|                             | Switch Body & Button: | Stainless Steel.  | Stainless Steel.   | Stainless Steel.                            |
| Contacts/Terms:             |                       | Brass, Silver Plated, Silver  | Fine Silver.   | Fine Silver.                                |
| Variants:                   |                       |   | Non-Rotating Button, details on request.                                 | Non-Rotating Button, details on request.    |



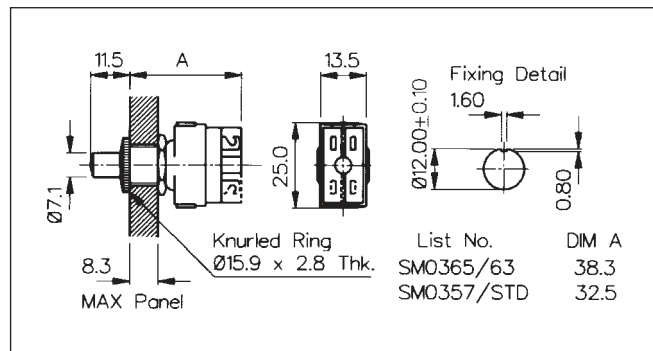
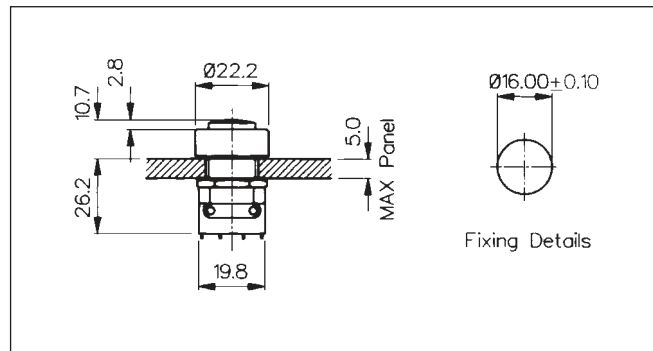
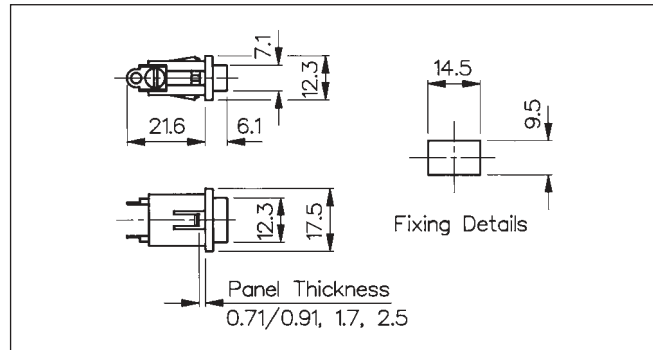
SWITCHES



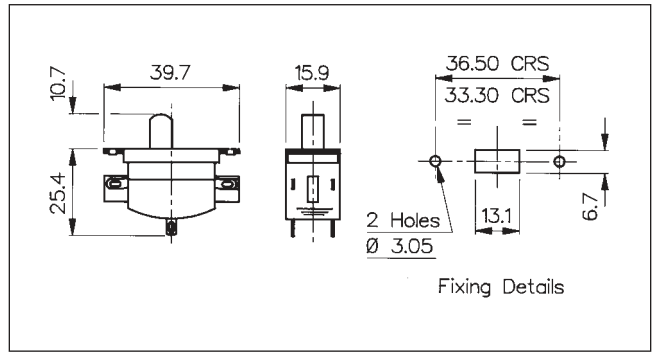
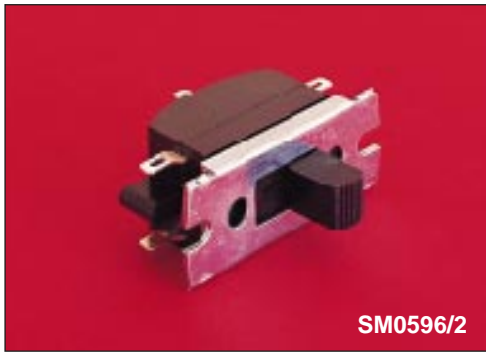
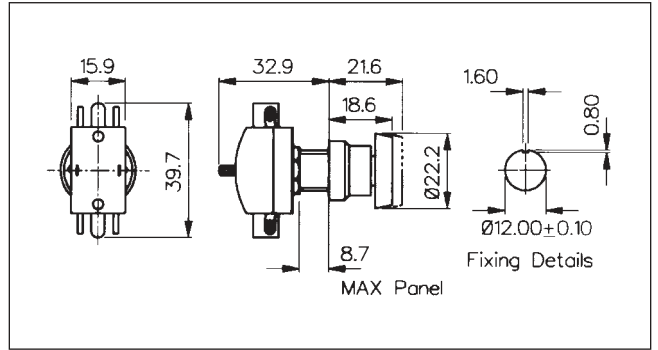
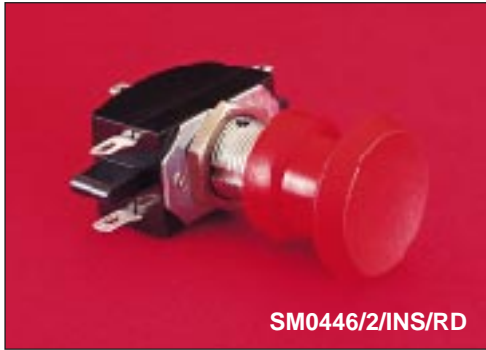
|                        |                       |  |  |  |
|------------------------|-----------------------|--|--|--|
| Data                   | List No.              | MP0013, MP0033   |  |  |
| Terminations:          |                       | Screw terminals.   |  |  |
| Switching:             |                       | S.P. Push to Make.<br>Slow Momentary Action.                       |  |  |
| Max. Rating:           |                       | 1A. 50V.   |  |  |
| Insulation Resistance: |                       | >10 <sup>4</sup> MΩ.   |  |  |
| Contact Resistance:    |                       | <15 mΩ.  |  |  |
| Dielectric Strength:   |                       | >2.5kV. a.c.   |  |  |
| Operating Temp. Range: |                       | -20°C to + 85°C.   |  |  |
| Sealing:               |                       | MP0033 only - internally sealed against ingress of water and dust. |  |  |
| Materials:             | Mouldings:            | Glass Filled Nylon.  |  |  |
|                        | Tags/Terminals:       | Brass, Silver Plated.  |  |  |
|                        | Switch Body & Button: | Body: Brass, Chrome Plated.<br>Button: Stainless Steel.            |  |  |
| Contacts/Terms:        |                       | Copper, Silver Plated.   |  |  |
| Variants:              |                       |  |  |  |



| Data                   | List No.  | MP0012/Colour  | MP0012/1/Colour  | MP0016  |
|------------------------|-----------|--|--|---|
| Terminations:          |           | Screw terminals.   | Screw terminals.   | Solder tags.  |
| Switching:             |           | S.P. Push to Make.<br>Slow Momentary Action.                               | S.P. Push to Make.<br>Slow Momentary Action.                               | S.P. Push to Make.<br>Slow Momentary Action.                        |
| Max. Rating:           |           | 0.25A. 250V. a.c., 1A. 110V.a.c.,<br>2A. 12V. a.c./ d.c.                   | 0.25A. 250V. a.c., 1A. 110V.a.c.,<br>2A. 12V. a.c./ d.c.                   | 1A. 28V. a.c/ d.c. (non-inductive).                                 |
| Contact Resistance:    |           | <15 mΩ.  | <15 mΩ.  | <15 mΩ.   |
| Insulation Resistance: |           | >10 <sup>4</sup> MΩ.   | >10 <sup>4</sup> MΩ.   | >10 <sup>4</sup> MΩ.  |
| Dielectric Strength:   |           | >2.5kV. a.c.   | >2.5kV. a.c.   | >2kV. a.c.  |
| Operating Temp. Range: |           | -20°C to + 85°C.   | -20°C to + 85°C.   | -20°C to + 85°C.  |
| Materials:             | Moulding: | Glass Filled Nylon.  | Glass Filled Nylon.  | Glass Filled Nylon.   |
|                        | Body:     | Brass, Chrome Plated.  | Brass, Chrome Plated.  | Brass, Nickel Plated.   |
| Contacts/Terms:        |           | Brass, Silver Plated.  | Brass, Silver Plated.  | Brass, Silver Plated.   |
| Variants:              |           | Button Colour: Standard: / BK - black.<br>(/ RD - red details on request). | Button Colour: Standard: / BK - black.<br>(/ RD - red details on request). | Button Colour: Standard: black.<br>(/ RD - red details on request). |

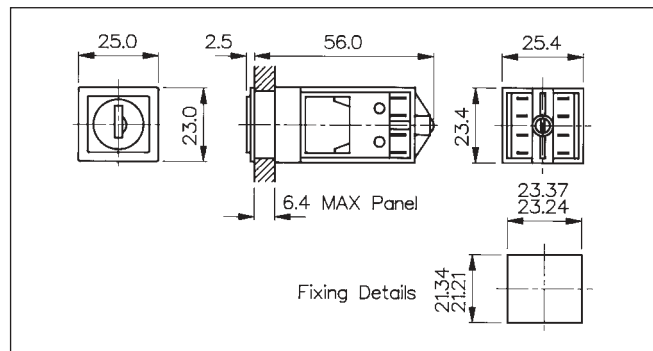
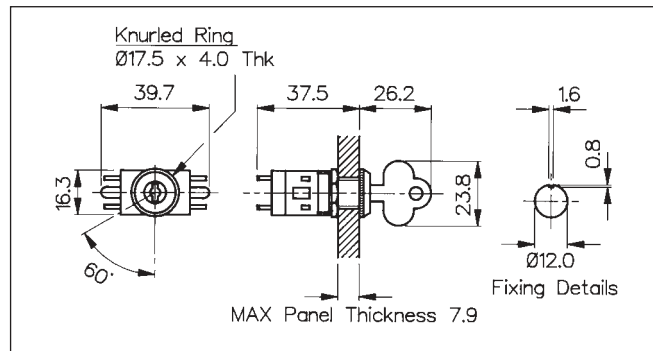
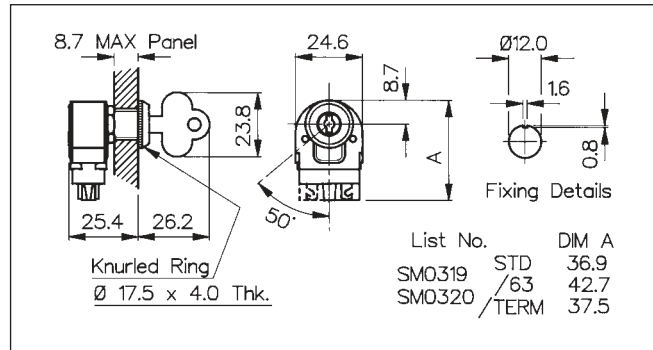


| Data                   | List No.                     | MP0022/Colour   | SX0904/Colour   | SM0357, SM0365   |
|------------------------|------------------------------|---|---|--|
| Terminations:          |                              | Solder tags.  | Solder tags.  | Solder tags.   |
| Switching:             |                              | S.P. Push to Make.<br>Slow Momentary Action.  | S.P.C.O. Momentary Action<br>(Microswitch).   | SM0357 S.P.C.O. 2 pairs contacts.<br>SM0365 S.P.M.B. push to make. 1 pair contacts.        |
| Max. Rating:           |                              | 0.25A. 250V. a.c., 0.5A. 110V. a.c.,<br>1A. 0.1 to 28V. a.c./ d.c   | 5A. 250V. a.c.  | SM0357 2A. 250V. a.c.<br>SM0365 3A. 250V. a.c  |
| Contact Resistance:    |                              | <15 mΩ.   | < 10mΩ.   | <10 mΩ.  |
| Insulation Resistance: |                              | >10 <sup>4</sup> MΩ.  | >10 <sup>3</sup> MΩ   | >10 <sup>3</sup> MΩ.   |
| Dielectric Strength:   |                              | >2.5kV. a.c.  | >2.0kV. a.c.  | >4.5kV. a.c.   |
| Operating Temp. Range: |                              | -20°C to + 70°C.  | -20°C to + 70°C   | -20°C to + 70°C.   |
| Sealing:               |                              |   | Protection Classification: IP66 BS5490 : 1992<br>(Microswitch not sealed).  |  |
| Materials:             | Mouldings:<br>Tags:<br>Body: | Nylon.<br>Brass, Silver Plated.<br>Nylon.   | Glass Filled Nylon.<br>Brass, Tin Plated.<br>Black anodised aluminium.  | Phenolic.<br>Brass, Silver Plated.<br>Steel, Zinc Plated.                                  |
| Contacts:              |                              | Brass, Silver Plated.   | Fine Silver.  | Brass, Silver Plated.  |
| Variants:              |                              | Button Colours: Standard: / BK - black<br>(/ WH - white details on request).<br>MP0022/ TERM - Screw terminals (to agreed orders) | Button Colours: Standard: / BK - black<br>(/ RD - red / GN - green details on request).<br>/ 28 (2.8 mm tabs) to agreed orders. | Screw Terminals add / TERM to List No. (Not SM0357)<br>/ 63 (6.3mm tabs) to agreed orders. |



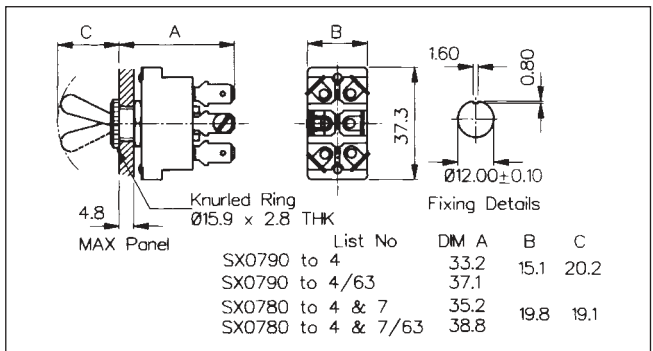
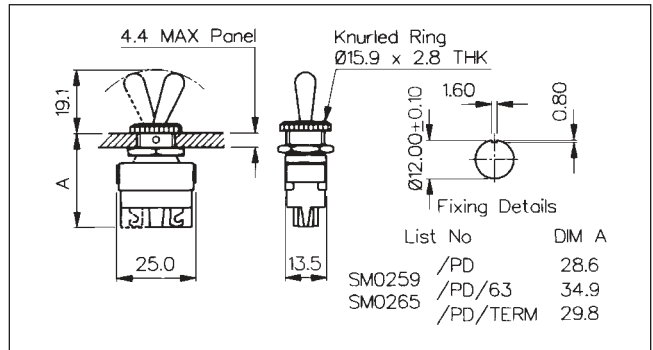
| Data                   | List No. | SM0446/2/INS/RD   | SM0596/2   |
|------------------------|----------|---|--|
| Terminations:          |          | Solder tags.  | Solder tags.   |
| Switching:             |          | D.P.C.O. Quick Make / Break.<br>3 pairs of contacts.                                    | D.P.C.O. Quick Make / Break.<br>3 pairs of contacts. |
| Max. Rating:           |          | 2A. 250V. a.c.  | 2A. 250V. a.c.                                       |
| Contact Resistance:    |          | <10 mΩ.   | <10 mΩ.  |
| Insulation Resistance: |          | >10 <sup>3</sup> MΩ.  | >10 <sup>3</sup> MΩ.                                 |
| Dielectric Strength:   |          | >3.5kV. a.c.  | >3.5kV. a.c.   |
| Operating Temp. Range: |          | -20°C to + 70°C.  | -20°C to + 70°C.                                     |
| Materials:             |          | Mouldings: Body: Phenolic.<br>Button/ Ring: Nylon (Red)<br>Tags: Copper, Silver Plated. | Mouldings: Phenolic.<br>Tags: Copper, Silver Plated. |
| Contacts:              |          | Copper Silver Alloy.  | Copper Silver Alloy.                                 |
| Variants:              |          | SM0446/ 2 - metal locking ring front of panel.  |  |





| Data                   | List No. | SM0319, SM0320   | SM0324/2   | SX0686   |
|------------------------|----------|--|--|--|
| Terminations:          |          | Solder tags.   | Solder tags.   | Solder tags.   |
| Switching:             |          | <b>SM0319</b> S.P.M.B. Quick Make / Break.<br><b>SM0320</b> S.P.C.O. Quick Make / Break.<br>Key removable in anti-clockwise position.      | D.P.C.O. (Quick Make/ Break).<br>Key removable in anti-clockwise position. | D.P.C.O.   |
| Max. Rating:           |          | <b>SM0319</b> 3A. 250V. a.c.<br><b>SM0320</b> 2A. 250V. a.c.   | 2A. 250V. a.c.   | 5A. 250V. a.c. (non inductive).  |
| Contact Resistance:    |          | <10 mΩ.  | <10 mΩ.  | <10 mΩ.  |
| Insulation Resistance: |          | >10 <sup>3</sup> MΩ.   | >10 <sup>3</sup> MΩ  | >10 <sup>3</sup> MΩ.   |
| Dielectric Strength:   |          | >4.5kV. a.c.   | >3.5kV. a.c.   | >4kV. a.c.   |
| Operating Temp. Range: |          | -20°C to + 70°C.   | -20°C to + 70°C.   | -20°C to + 70°C.   |
| Materials:             |          | Mouldings: Phenolic.<br>Tags: Brass, Silver Plated.  | Mouldings: Phenolic.<br>Tags: Copper, Silver Plated.                       | Mouldings: Glass Filled Nylon.<br>Tags: Brass, Tin Plated.   |
| Contacts:              |          | Brass, Silver Plated.  | Copper Silver Alloy.   | Fine Silver.   |
| Variants:              |          | add / TERM (Screw Terminals), (Not SM0320)/ 63 (6.3mm tab) to List No.<br>Key removable in both positions add / D to List No. (Not SM0320) | Key removable in both positions add / D to List No.                        | 2 position 90° key rotation. Key Switches incorporating 5 tumbler cylinders. Supplied with 2 keys. Keys removable anti-clockwise position.<br><b>SX0686</b> / D key removable both positions.<br><b>SX0686</b> / SL Biased to anti-clockwise position.<br><b>SX0686</b> Identical keys (spares available). |
| Keys:                  |          | Supplied with 1 key (spare keys order P.No. 6083/ C).  | Supplied with 1 key (spare keys order P.No. 6083/ C).                      |  |

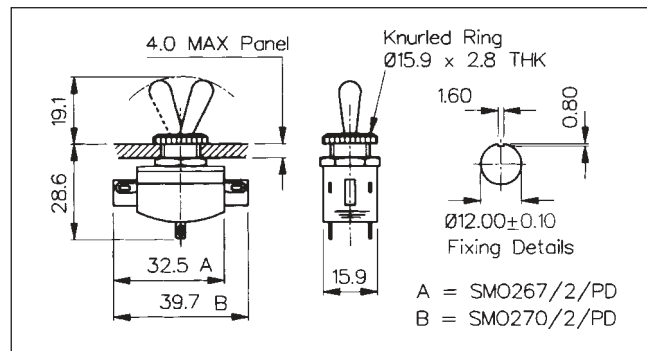




| Single Pole List No. | Double Pole List No. | Description   | 1   | 2   | 3  |
|----------------------|----------------------|---|-----|-----|----|
| SX0790               | SX0780               | Change-over. Centre-off.                                    | ON  | OFF | ON |
| SX0791               | -                    | Change-over. Centre-off.<br>One position biased off.        | ON  | OFF | ON |
| SX0792               | SX0782               | Change-over. Centre-off.<br>Two positions biased off.       | ON  | OFF | ON |
| SX0793               | SX0783               | Change-over.<br>Two positions only                          | ON  | -   | ON |
| SX0794               | SX0784               | ON/OFF<br>Two positions only                                | OFF | -   | ON |
| -                    | SX0787               | Change-over. Two positions only,<br>biased to one position. | ON  | -   | ON |



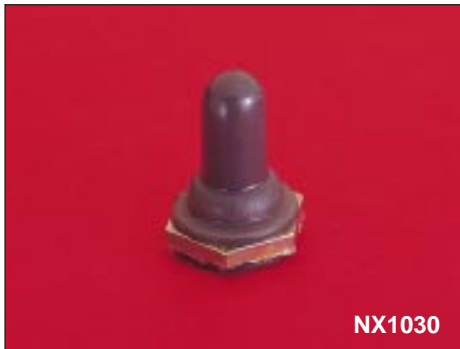
| Data                   | List No. | SM0259/PD, SM0265/PD  | SX0780, SX0790 Series  |
|------------------------|----------|---|--|
| Terminations:          |          | Solder tags.  | Screw terminals.   |
| Switching:             |          | SM0259/ PD S.P.M.B. 1 pair of contacts. (Quick Make/ Break).<br>SM0265/ PD S.P.C.O. 2 pairs of contacts. (Quick Make/ Break). | See table for types.<br>Slow Make, Slow Break.                           |
| Max. Rating:           |          | SM0259/ PD 3A. 250V. a.c.<br>SM0265/ PD 2A. 250V. a.c.  | 10A. 250V. a.c.<br>10A. 0-28V. d.c. (non-reactive circuits).             |
| Contact Resistance:    |          | <10 m $\Omega$ .  | <10 m $\Omega$ .   |
| Insulation Resistance: |          | >10 <sup>3</sup> M $\Omega$ .   | >10 <sup>3</sup> M $\Omega$ .  |
| Dielectric Strength:   |          | >4.5kV. a.c.  | >2.5kV. a.c.   |
| Operating Temp. Range: |          | -20°C to +70°C.   | -20°C to +85°C.  |
| Materials:             |          | Mouldings: Phenolic.<br>Tags: Brass, Silver Plated.   | Mouldings: Glass filled Polyester<br>Terms: Brass, Silver Plated.        |
| Contacts:              |          | Brass, Silver Plated.   | Copper with Silver face.   |
| Variants:              |          | For Screw Terminals add / TERM to List No. (Not SM0265/ PD)<br>For 6.3mm tab (to agreed orders) add / 63 to List No.          | For 6.3 series tabs (to agreed orders) add / 63 to List No. (Not SX0791) |
| Accessories:           |          | SX0550, PNo. 5943/ D1 (See Page 192).<br>NX1030 & / B (See Page 192).   |  |



| Data                   | List No. | SM0267/2/PD,<br>SM0270/2/PD  |  |  |
|------------------------|----------|--|--|--|
| Terminations:          |          | Solder tags.   |  |  |
| Switching:             |          | SM0267/ 2/ PD - D.P.M.B.<br>2 pairs of contacts.<br>SM0270/ 2/ PD - D.P.C.O.<br>3 pairs of contacts.<br>(Quick Make/ Break). |  |  |
| Max. Rating:           |          | 2A 250V a.c.   |  |  |
| Contact Resistance:    |          | <10 mΩ.  |  |  |
| Insulation Resistance: |          | >10 <sup>3</sup> MΩ.   |  |  |
| Dielectric Strength:   |          | >3.5kV. a.c.   |  |  |
| Operating Temp. Range: |          | -20°C to +70°C.  |  |  |
| Materials:             |          | Mouldings: Phenolic.<br>Tags: Copper Silver Plated.  |  |  |
| Contacts:              |          | Copper Silver Alloy.   |  |  |
| Accessories:           |          | SX0550, P.No. 5943/ D1 (see page 192).<br>NX1030, & / B (see page 192).  |  |  |

## Switch Boots & Plates

SWITCHES



| Data                   | List No. | SX0550, SX0550/Brass  | P.No.5943/D1   | NX1030, NX1030/B   |
|------------------------|----------|---|--|--|
|                        |          | Water and dust resistant Black PVC cover for use with all Bulgin / PD switches. | Washer to enable plain round holes to be used in place in normal keyed fixing. | NX1030 Completely covers toggle.<br>NX1030/ B Switch toggle protrudes. |
| Thread:                |          | $15/32$ " x 32 TPI Whit Form, BS84.   |  | $15/32$ " - 32NS - 2B  |
| Operating Temperature: |          | 0° to +60°C.  |  | -70° to +205°C.  |
| Material               | Boot:    | Black PVC.  | Brass, Nickel Plated.  | Silicone rubber.   |
|                        | Insert:  | Glass Filled Nylon.<br>SX0550/Brass: Brass, Nickel Plated.                      |  | Brass, Nickel Plated.  |

A full range of Toggle, Rocker & Circuit Breaker Switch Boots & Covers are available from our APM Hexseal Range. See page 194.