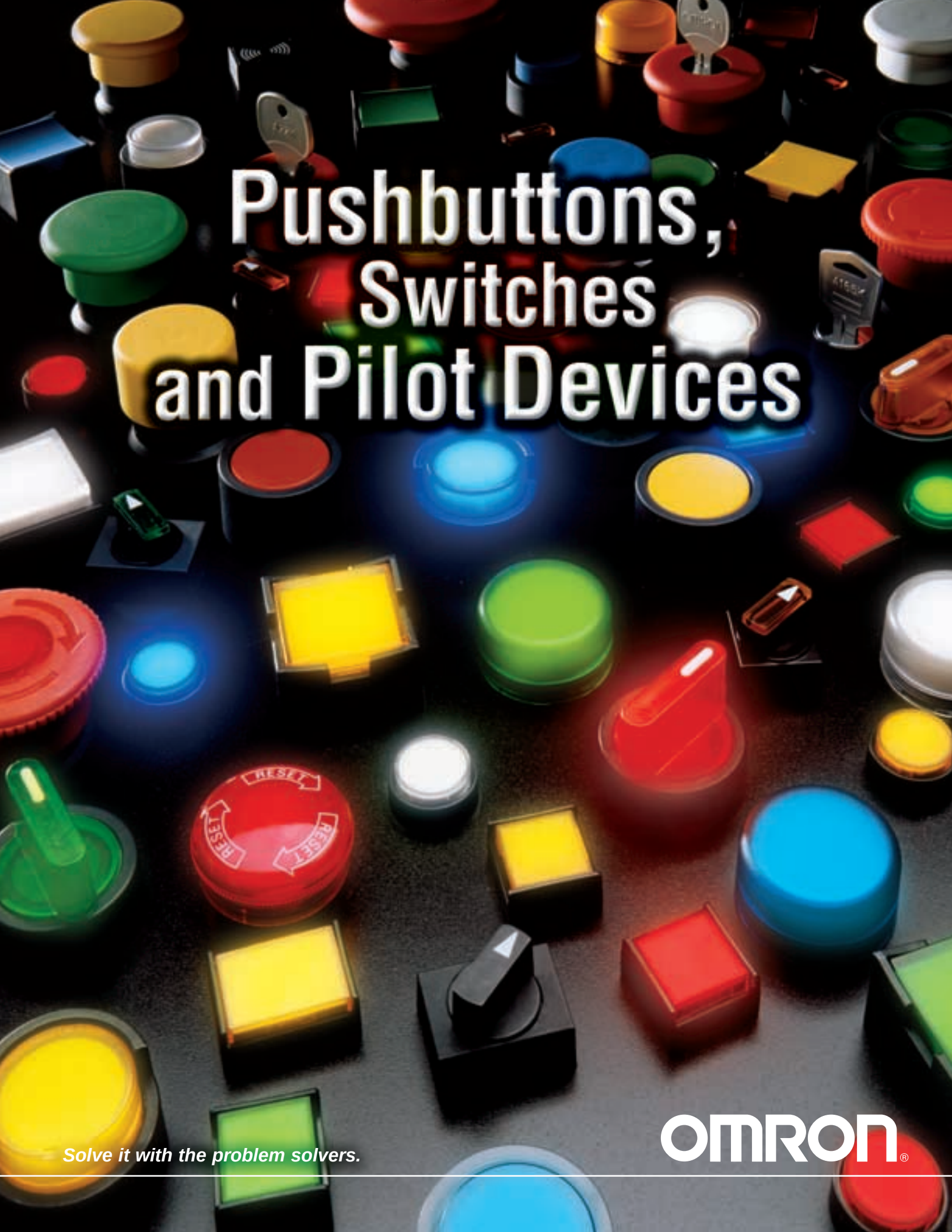




# Pushbuttons, Switches and Pilot Devices

*Solve it with the problem solvers.*

**OMRON**<sup>®</sup>

## Industrial Switch Solutions for Your Automation Needs

**Omron offers a broad product line, worldwide delivery coordination and single-point customer service support**

Design your machine controls to give operators a confident feel and quick grasp of status using Omron's wide range of pushbutton and selector switches, pilot devices and emergency stop switches. Combine these switches with Omron PLCs, safety relays, SSRs, I/O blocks, and power supplies to organize and minimize wiring requirements inside the cabinet.

### A reliable partner

With over 65 years of expertise in industrial automation and electronic components manufacturing, Omron has become a global leader in making the production process easier for operators to monitor and control. Our factories meet ISO 9000 and ISO 14000 certification, and products are designed to meet international standards, so exporting machines outside North America goes smoothly. We back up our expertise with sizeable investments in R&D amounting to seven percent of the annual 5 Billion US\$ sales. We continually achieve innovations that make machines work smarter to keep operators safe, confident and effective.

### Worldwide availability and support

What sets Omron ahead of many switch and pilot device suppliers is the combined advantages of a wide array of control product lines to support your system design inside and out. By consolidating product sourcing with Omron, you achieve the best pricing advantage and coordination in scheduling deliveries to match your production needs. Our national network of distributors and worldwide sales and technical partners can support your equipment.

**Let's work together to solve your control panel and system design problems.**

## Reduce Installation Time



*Just two parts snap together for tool-free, timesaving installation*



22 mm



*Single-action latching lever for fast, secure mounting*



16 mm

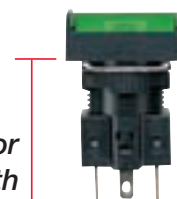
## Reduce Panel Depth



*Compact side-by-side contacts eliminate piggyback contact arrangements, reducing panel depth*

22 mm

**IP65 oil-tight construction**



*Improved design for reduced panel depth*

16 mm

**IP65 oil-tight models and IP40 commercial models**

## Enclosures

Let Omron provide the reliable plastic or metal enclosures you need for a complete machine control installation of 22 mm switches and pilot devices.

- Light gray plastic enclosures for lightweight control pendants; 1, 2 or 3 switches
- Light gray metal enclosures for panel or pendant use; 1, 2, 3, 4, 6, 9, 12, or 16 switches





## Other Features



*Finger-safe contact blocks are shipped with the screws backed out for fast wiring*



**Contact blocks rated for general purpose and microloads**

16 mm

22 mm

**Normally closed contacts approved for safety circuits**

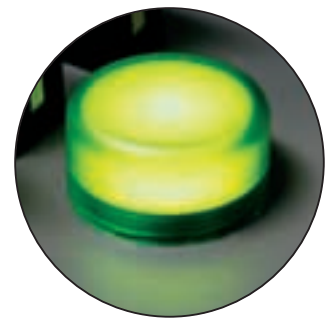


*Knob and key-type selector switches have robust mechanical detents*



*E-Stops and buzzers—protect and alert*

**All 16 mm and 22 mm models are UL and CE approved**



*Super-bright LED illumination offers 60 times longer life than incandescent*

## Nameplates

Omron offers a wide range of nameplates to clearly identify each switch and indicator.

- Adhesive-backed plastic, 22 mm
- Metal, 22 mm
- Round E-Stop switch, 16 mm and 22 mm
- Snap-in plastic nameplates, 16 mm and 22 mm
- Custom-engraved plastic, 22 mm, in square, rectangular and shield shapes
- Custom-engraved metal, 22 mm, in rectangular shape

Order custom nameplates in Spanish, French, as well as English, or dual language as required for your design.



## Non-illuminated

## 22 mm Selection Guide

| Shape       | Pushbutton                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | Selector Switch                                                                     |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Part Number | Round flush A22-F                                                                 | Round extended A22-T                                                              | Round full-guard A22-G                                                            | Round half-guard A22-H                                                            | 30 mm mushroom A22-S                                                              | 40 mm mushroom A22-M                                                               | Square extended A22-C                                                               | Square full-guard A22-D                                                             | 2- or 3-position knob A22S                                                          |
| Appearance  |  |  |  |  |  |  |  |  |  |
| Color       | ◆◆◆◆◆◆◆◆◆◆                                                                        | ◆◆◆◆◆◆◆◆◆◆                                                                        | ◆◆◆◆◆◆◆◆◆◆                                                                        | ◆◆◆◆◆◆◆◆◆◆                                                                        | ◆◆◆◆◆◆◆◆◆◆                                                                        | ◆◆◆◆◆◆◆◆◆◆                                                                         | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆                                                                                   |
| Page Number | 6                                                                                 | 6                                                                                 | 6                                                                                 | 6                                                                                 | 6                                                                                 | 6                                                                                  | 6                                                                                   | 6                                                                                   | 10                                                                                  |

| Shape       | Selector Switch<br>Extended Lever                                                 | Key Switch                                                                        | Emergency Stop                                                                    |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Part Number | 2- or 3-position knob A22S-C                                                      | 2- or 3-position knob A22K                                                        | Push-pull 40 mm dia. A22E-MP                                                      | Push-pull 60 mm dia. A22E-LP                                                      | Push-lock, turn-reset 30 mm dia. A22E-S                                           | Push-lock, turn-reset 40 mm dia. A22E-M                                            | Push-lock, turn-reset 60 mm dia. A22E-L                                             | Push-lock, key-reset 30 mm dia. A22E-SK                                             | Push-lock, key-reset 40 mm dia. A22E-MK                                             |
| Appearance  |  |  |  |  |  |  |  |  |  |
| Color       | ◆                                                                                 | ◆                                                                                 | ◆                                                                                 | ◆                                                                                 | ◆                                                                                 | ◆                                                                                  | ◆                                                                                   | ◆                                                                                   | ◆                                                                                   |
| Page Number | 10                                                                                | 12                                                                                | 14                                                                                | 14                                                                                | 14                                                                                | 14                                                                                 | 14                                                                                  | 14                                                                                  | 14                                                                                  |

## Illuminated

| Shape       | Pushbutton                                                                          |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Selector Switch                                                                      | Pilot Light                                                                           |                                                                                       | Emergency Stop                                                                        |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Part Number | Round extended A22L-T                                                               | Round half-guard A22L-H                                                             | Round full-guard A22L-G                                                             | Square extended A22L-C                                                              | Square full-guard A22L-D                                                            | 2- or 3-position knob A22W                                                           | Round M22-F                                                                           | Square M22-C                                                                          | Push-lock, turn-reset 40 mm dia. A22EL-M                                              |
| Appearance  |  |  |  |  |  |  |  |  |  |
| Color       | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                          | ◆◆◆◆◆◆◆◆◆◆                                                                           | ◆◆◆◆◆◆◆◆◆◆                                                                            | ◆◆◆◆◆◆◆◆◆◆                                                                            | ◆                                                                                     |
| Page Number | 7                                                                                   | 7                                                                                   | 8                                                                                   | 8                                                                                   | 9                                                                                   | 10                                                                                   | 13                                                                                    | 13                                                                                    | 14                                                                                    |

# 16 mm Selection Guide

|                    |                                                                                   |                                                                                   |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Shape</b>       | <b>Buzzer</b><br>Rectangular<br>standard and<br>high sound                        | <b>Emergency Stop</b><br>Push-lock,<br>turn-reset<br>30 mm dia.                   |
| <b>Part Number</b> | M2BJ                                                                              | A165E-S                                                                           |
| <b>Appearance</b>  |  |  |
| <b>Color</b>       | ◆                                                                                 | ◆ Also available:<br>40 mm dia.<br>A165E-M                                        |
| <b>Page Number</b> | 22                                                                                | 22                                                                                |

◆ Also available:  
40 mm dia.  
A165E-M

| Shape       | Pushbutton                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                     | Selector Switch                                                                                                                                                         |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number | Round<br>A165L-T                                                                                                                                                                                                                                                                                                                                | Square<br>A165L-A                                                                                                                                                                                                                                                                                                                                                                                                                   | Rectangular<br>A165L-J                                                                                                                                                                                                                                                                                                                                                                                                              | Round<br>2- or 3-<br>position knob<br>A165W-T                                                                                                                           | Square<br>2- or 3-<br>position knob<br>A165W-A                                                                                                                                                                                                              | Rectangular<br>2- or 3-<br>position knob<br>A165W-J                                                                                                                                                                                                               |
| Appearance  |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                                                                                                                                                                          |                                                                                                                                                                              |
| Color       |     |      |      |   |    |    |
| Page Number | 19                                                                                                                                                                                                                                                                                                                                              | 19                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19                                                                                                                                                                                                                                                                                                                                                                                                                                  | 20                                                                                                                                                                      | 20                                                                                                                                                                                                                                                          | 20                                                                                                                                                                                                                                                                |

| Shape       | Pilot Lights                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                 | Emergency Stop                                                                                                                |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Part Number | Round<br>M165-T                                                                                                                                                                                                                                                                                                                                 | Square<br>M165-A                                                                                                                                                                                                                                                                                                                                | Rectangular<br>M165-J                                                                                                                                                                                                                                                                                                                           | Push-lock,<br>turn reset<br>30 mm dia.<br>A165E-LS                                                                            |
| Appearance  |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                              |                                            |
| Color       |     |     |     |  Also available:<br>40 mm dia.<br>A165E-LM |
| Page Number | 22                                                                                                                                                                                                                                                                                                                                              | 22                                                                                                                                                                                                                                                                                                                                              | 22                                                                                                                                                                                                                                                                                                                                              | 22                                                                                                                            |

◆ Also available.  
40 mm dia.  
A165E-LM

## Pushbutton Switches

### Non-illuminated Round Type

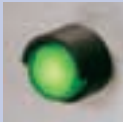
| Description                                                                                                                      |                   | Part number         |                      | Operator color                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                       | Contacts          | Momentary operation | Maintained operation |                                                                                                                                 |
| Round flush<br>                                 | SPST-NO           | A22-F□-10M          | A22-F□-10A           | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue)<br>B (black) |
|                                                                                                                                  | SPST-NC           | A22-F□-01M          | A22-F□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-F□-11M          | A22-F□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-F□-20M          | A22-F□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-F□-02M          | A22-F□-02A           |                                                                                                                                 |
| Round extended<br>                              | SPST-NO           | A22-T□-10M          | A22-T□-10A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NC           | A22-T□-01M          | A22-T□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-T□-11M          | A22-T□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-T□-20M          | A22-T□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-T□-02M          | A22-T□-02A           |                                                                                                                                 |
| Round full-guard<br>                            | SPST-NO           | A22-G□-10M          | A22-G□-10A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NC           | A22-G□-01M          | A22-G□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-G□-11M          | A22-G□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-G□-20M          | A22-G□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-G□-02M          | A22-G□-02A           |                                                                                                                                 |
| Round half-guard<br>                            | SPST-NO           | A22-H□-10M          | A22-H□-10A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NC           | A22-H□-01M          | A22-H□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-H□-11M          | A22-H□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-H□-20M          | A22-H□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-H□-02M          | A22-H□-02A           |                                                                                                                                 |
| Small-size mushroom<br>(30-mm dia. head)<br>   | SPST-NO           | A22-S□-10M          | A22-S□-10A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NC           | A22-S□-01M          | A22-S□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-S□-11M          | A22-S□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-S□-20M          | A22-S□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-S□-02M          | A22-S□-02A           |                                                                                                                                 |
| Medium-size mushroom<br>(40-mm dia. head)<br> | SPST-NO           | A22-M□-10M          | A22-M□-10A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NC           | A22-M□-01M          | A22-M□-01A           |                                                                                                                                 |
|                                                                                                                                  | SPST-NO + SPST-NC | A22-M□-11M          | A22-M□-11A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NO           | A22-M□-20M          | A22-M□-20A           |                                                                                                                                 |
|                                                                                                                                  | DPST-NC           | A22-M□-02M          | A22-M□-02A           |                                                                                                                                 |

### Non-illuminated Square Type

| Description                                                                                              |                   | Part number         |                      | Operator color                                                                                                                  |
|----------------------------------------------------------------------------------------------------------|-------------------|---------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                               | Contacts          | Momentary operation | Maintained operation |                                                                                                                                 |
| Square extended<br>   | SPST-NO           | A22-C□-10M          | A22-C□-10A           | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue)<br>B (black) |
|                                                                                                          | SPST-NC           | A22-C□-01M          | A22-C□-01A           |                                                                                                                                 |
|                                                                                                          | SPST-NO + SPST-NC | A22-C□-11M          | A22-C□-11A           |                                                                                                                                 |
|                                                                                                          | DPST-NO           | A22-C□-20M          | A22-C□-20A           |                                                                                                                                 |
|                                                                                                          | DPST-NC           | A22-C□-02M          | A22-C□-02A           |                                                                                                                                 |
| Square full-guard<br> | SPST-NO           | A22-D□-10M          | A22-D□-10A           |                                                                                                                                 |
|                                                                                                          | SPST-NC           | A22-D□-01M          | A22-D□-01A           |                                                                                                                                 |
|                                                                                                          | SPST-NO + SPST-NC | A22-D□-11M          | A22-D□-11A           |                                                                                                                                 |
|                                                                                                          | DPST-NO           | A22-D□-20M          | A22-D□-20A           |                                                                                                                                 |
|                                                                                                          | DPST-NC           | A22-D□-02M          | A22-D□-02A           |                                                                                                                                 |

## Pushbutton Switches

### Illuminated Round Type

| Description                                                                                                                                      |                   |               | Part number         |                      | Operator color                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                                       | Contacts          | Rated voltage | Momentary operation | Maintained operation |                                                                                                                       |
| Round extended<br>LED lighting<br>(without transformer)<br>     | SPST-NO           | 6 VDC         | A22L-T□-6D-10M      | A22L-T□-6D-10A       | Insert one of the following<br>letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                                                  |                   | 6 VAC         | A22L-T□-6A-10M      | A22L-T□-6A-10A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-T□-12A-10M     | A22L-T□-12A-10A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-T□-24A-10M     | A22L-T□-24A-10A      |                                                                                                                       |
|                                                                                                                                                  | SPST-NC           | 6 VDC         | A22L-T□-6D-01M      | A22L-T□-6D-01A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-T□-6A-01M      | A22L-T□-6A-01A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-T□-12A-01M     | A22L-T□-12A-01A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-T□-24A-01M     | A22L-T□-24A-01A      |                                                                                                                       |
|                                                                                                                                                  | SPST-NO + SPST-NC | 6 VDC         | A22L-T□-6D-11M      | A22L-T□-6D-11A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-T□-6A-11M      | A22L-T□-6A-11A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-T□-12A-11M     | A22L-T□-12A-11A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-T□-24A-11M     | A22L-T□-24A-11A      |                                                                                                                       |
|                                                                                                                                                  | DPST-NO           | 6 VDC         | A22L-T□-6D-20M      | A22L-T□-6D-20A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-T□-6A-20M      | A22L-T□-6A-20A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-T□-12A-20M     | A22L-T□-12A-20A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-T□-24A-20M     | A22L-T□-24A-20A      |                                                                                                                       |
|                                                                                                                                                  | DPST-NC           | 6 VDC         | A22L-T□-6D-02M      | A22L-T□-6D-02A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-T□-6A-02M      | A22L-T□-6A-02A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-T□-12A-02M     | A22L-T□-12A-02A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-T□-24A-02M     | A22L-T□-24A-02A      |                                                                                                                       |
| Round extended<br>LED lighting<br>(with transformer)<br>      | SPST-NO           | 110 VAC       | A22L-T□-T1-10M      | A22L-T□-T1-10A       |                                                                                                                       |
|                                                                                                                                                  |                   | 220 VAC       | A22L-T□-T2-10M      | A22L-T□-T2-10A       |                                                                                                                       |
|                                                                                                                                                  | SPST-NC           | 110 VAC       | A22L-T□-T1-01M      | A22L-T□-T1-01A       |                                                                                                                       |
|                                                                                                                                                  |                   | 220 VAC       | A22L-T□-T2-01M      | A22L-T□-T2-01A       |                                                                                                                       |
|                                                                                                                                                  | SPST-NO + SPST-NC | 110 VAC       | A22L-T□-T1-11M      | A22L-T□-T1-11A       |                                                                                                                       |
|                                                                                                                                                  |                   | 220 VAC       | A22L-T□-T2-11M      | A22L-T□-T2-11A       |                                                                                                                       |
|                                                                                                                                                  | DPST-NO           | 110 VAC       | A22L-T□-T1-20M      | A22L-T□-T1-20A       |                                                                                                                       |
|                                                                                                                                                  |                   | 220 VAC       | A22L-T□-T2-20M      | A22L-T□-T2-20A       |                                                                                                                       |
|                                                                                                                                                  | DPST-NC           | 110 VAC       | A22L-T□-T1-02M      | A22L-T□-T1-02A       |                                                                                                                       |
|                                                                                                                                                  |                   | 220 VAC       | A22L-T□-T2-02M      | A22L-T□-T2-02A       |                                                                                                                       |
| Round half-guard<br>LED lighting<br>(without transformer)<br> | SPST-NO           | 6 VDC         | A22L-H□-6D-10M      | A22L-H□-6D-10A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-H□-6A-10M      | A22L-H□-6A-10A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-H□-12A-10M     | A22L-H□-12A-10A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-H□-24A-10M     | A22L-H□-24A-10A      |                                                                                                                       |
|                                                                                                                                                  | SPST-NC           | 6 VDC         | A22L-H□-6D-01M      | A22L-H□-6D-01A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-H□-6A-01M      | A22L-H□-6A-01A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-H□-12A-01M     | A22L-H□-12A-01A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-H□-24A-01M     | A22L-H□-24A-01A      |                                                                                                                       |
|                                                                                                                                                  | SPST-NO + SPST-NC | 6 VDC         | A22L-H□-6D-11M      | A22L-H□-6D-11A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-H□-6A-11M      | A22L-H□-6A-11A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-H□-12A-11M     | A22L-H□-12A-11A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-H□-24A-11M     | A22L-H□-24A-11A      |                                                                                                                       |
|                                                                                                                                                  | DPST-NO           | 6 VDC         | A22L-H□-6D-20M      | A22L-H□-6D-20A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-H□-6A-20M      | A22L-H□-6A-20A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-H□-12A-20M     | A22L-H□-12A-20A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-H□-24A-20M     | A22L-H□-24A-20A      |                                                                                                                       |
|                                                                                                                                                  | DPST-NC           | 6 VDC         | A22L-H□-6D-02M      | A22L-H□-6D-02A       |                                                                                                                       |
|                                                                                                                                                  |                   | 6 VAC         | A22L-H□-6A-02M      | A22L-H□-6A-02A       |                                                                                                                       |
|                                                                                                                                                  |                   | 12 VAC/DC     | A22L-H□-12A-02M     | A22L-H□-12A-02A      |                                                                                                                       |
|                                                                                                                                                  |                   | 24 VAC/DC     | A22L-H□-24A-02M     | A22L-H□-24A-02A      |                                                                                                                       |

(This table continues on the next page.)

## Pushbutton Switches

## Illuminated Round Type (continued)

| Description                                                                                                                                          |                   |               | Part number         |                      | Operator color                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                                           | Contacts          | Rated voltage | Momentary operation | Maintained operation |                                                                                                                       |
| Round half-guard<br>LED lighting<br>(with transformer)<br>          | SPST-NO           | 110 VAC       | A22L-H□-T1-10M      | A22L-H□-T1-10A       | Insert one of the following<br>letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                                                      |                   | 220 VAC       | A22L-H□-T2-10M      | A22L-H□-T2-10A       |                                                                                                                       |
|                                                                                                                                                      | SPST-NC           | 110 VAC       | A22L-H□-T1-01M      | A22L-H□-T1-01A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-H□-T2-01M      | A22L-H□-T2-01A       |                                                                                                                       |
|                                                                                                                                                      | SPST-NO + SPST-NC | 110 VAC       | A22L-H□-T1-11M      | A22L-H□-T1-11A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-H□-T2-11M      | A22L-H□-T2-11A       |                                                                                                                       |
|                                                                                                                                                      | DPST-NO           | 110 VAC       | A22L-H□-T1-20M      | A22L-H□-T1-20A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-H□-T2-20M      | A22L-H□-T2-20A       |                                                                                                                       |
|                                                                                                                                                      | DPST-NC           | 110 VAC       | A22L-H□-T1-02M      | A22L-H□-T1-02A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-H□-T2-02M      | A22L-H□-T2-02A       |                                                                                                                       |
| Round clear full-guard<br>LED lighting<br>(without transformer)<br> | SPST-NO           | 6 VDC         | A22L-G□-6D-10M      | A22L-G□-6D-10A       |                                                                                                                       |
|                                                                                                                                                      |                   | 6 VAC         | A22L-G□-6A-10M      | A22L-G□-6A-10A       |                                                                                                                       |
|                                                                                                                                                      |                   | 12 VAC/DC     | A22L-G□-12A-10M     | A22L-G□-12A-10A      |                                                                                                                       |
|                                                                                                                                                      |                   | 24 VAC/DC     | A22L-G□-24A-10M     | A22L-G□-24A-10A      |                                                                                                                       |
|                                                                                                                                                      | SPST-NC           | 6 VDC         | A22L-G□-6D-01M      | A22L-G□-6D-01A       |                                                                                                                       |
|                                                                                                                                                      |                   | 6 VAC         | A22L-G□-6A-01M      | A22L-G□-6A-01A       |                                                                                                                       |
|                                                                                                                                                      |                   | 12 VAC/DC     | A22L-G□-12A-01M     | A22L-G□-12A-01A      |                                                                                                                       |
|                                                                                                                                                      |                   | 24 VAC/DC     | A22L-G□-24A-01M     | A22L-G□-24A-01A      |                                                                                                                       |
|                                                                                                                                                      | SPST-NO + SPST-NC | 6 VDC         | A22L-G□-6D-11M      | A22L-G□-6D-11A       |                                                                                                                       |
|                                                                                                                                                      |                   | 6 VAC         | A22L-G□-6A-11M      | A22L-G□-6A-11A       |                                                                                                                       |
|                                                                                                                                                      |                   | 12 VAC/DC     | A22L-G□-12A-11M     | A22L-G□-12A-11A      |                                                                                                                       |
|                                                                                                                                                      |                   | 24 VAC/DC     | A22L-G□-24A-11M     | A22L-G□-24A-11A      |                                                                                                                       |
|                                                                                                                                                      | DPST-NO           | 6 VDC         | A22L-G□-6D-20M      | A22L-G□-6D-20A       |                                                                                                                       |
|                                                                                                                                                      |                   | 6 VAC         | A22L-G□-6A-20M      | A22L-G□-6A-20A       |                                                                                                                       |
|                                                                                                                                                      |                   | 12 VAC/DC     | A22L-G□-12A-20M     | A22L-G□-12A-20A      |                                                                                                                       |
|                                                                                                                                                      |                   | 24 VAC/DC     | A22L-G□-24A-20M     | A22L-G□-24A-20A      |                                                                                                                       |
|                                                                                                                                                      | DPST-NC           | 6 VDC         | A22L-G□-6D-02M      | A22L-G□-6D-02A       |                                                                                                                       |
|                                                                                                                                                      |                   | 6 VAC         | A22L-G□-6A-02M      | A22L-G□-6A-02A       |                                                                                                                       |
|                                                                                                                                                      |                   | 12 VAC/DC     | A22L-G□-12A-02M     | A22L-G□-12A-02A      |                                                                                                                       |
|                                                                                                                                                      |                   | 24 VAC/DC     | A22L-G□-24A-02M     | A22L-G□-24A-02A      |                                                                                                                       |
| Round clear full-guard<br>LED lighting<br>(with transformer)<br>  | SPST-NO           | 110 VAC       | A22L-G□-T1-10M      | A22L-G□-T1-10A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-G□-T2-10M      | A22L-G□-T2-10A       |                                                                                                                       |
|                                                                                                                                                      | SPST-NC           | 110 VAC       | A22L-G□-T1-01M      | A22L-G□-T1-01A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-G□-T2-01M      | A22L-G□-T2-01A       |                                                                                                                       |
|                                                                                                                                                      | SPST-NO + SPST-NC | 110 VAC       | A22L-G□-T1-11M      | A22L-G□-T1-11A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-G□-T2-11M      | A22L-G□-T2-11A       |                                                                                                                       |
|                                                                                                                                                      | DPST-NO           | 110 VAC       | A22L-G□-T1-20M      | A22L-G□-T1-20A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-G□-T2-20M      | A22L-G□-T2-20A       |                                                                                                                       |
|                                                                                                                                                      | DPST-NC           | 110 VAC       | A22L-G□-T1-02M      | A22L-G□-T1-02A       |                                                                                                                       |
|                                                                                                                                                      |                   | 220 VAC       | A22L-G□-T2-02M      | A22L-G□-T2-02A       |                                                                                                                       |

## Illuminated Square Type

| Description                                                                                                                                     |          |               | Part number         |                      | Operator color                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                                      | Contacts | Rated voltage | Momentary operation | Maintained operation |                                                                                                                       |
| Square extended<br>LED lighting<br>(without transformer)<br> | SPST-NO  | 6 VDC         | A22L-C□-6D-10M      | A22L-C□-6D-10A       | Insert one of the following<br>letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                                                 |          | 6 VAC         | A22L-C□-6A-10M      | A22L-C□-6A-10A       |                                                                                                                       |
|                                                                                                                                                 |          | 12 VAC/DC     | A22L-C□-12A-10M     | A22L-C□-12A-10A      |                                                                                                                       |
|                                                                                                                                                 |          | 24 VAC/DC     | A22L-C□-24A-10M     | A22L-C□-24A-10A      |                                                                                                                       |
|                                                                                                                                                 | SPST-NC  | 6 VDC         | A22L-C□-6D-01M      | A22L-C□-6D-01A       |                                                                                                                       |
|                                                                                                                                                 |          | 6 VAC         | A22L-C□-6A-01M      | A22L-C□-6A-01A       |                                                                                                                       |
|                                                                                                                                                 |          | 12 VAC/DC     | A22L-C□-12A-01M     | A22L-C□-12A-01A      |                                                                                                                       |
|                                                                                                                                                 |          | 24 VAC/DC     | A22L-C□-24A-01M     | A22L-C□-24A-01A      |                                                                                                                       |

(This table continues on the next page.)



## Pushbutton Switches

### Illuminated Square Type (continued)

| Description                                                                                                                                                  |                   |               | Part number         |                      | Operator color                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                                                   | Contacts          | Rated voltage | Momentary operation | Maintained operation |                                                                                                                       |
| Square extended<br>LED lighting<br>(without transformer)<br>(continued)<br> | SPST-NO + SPST-NC | 6 VDC         | A22L-C□-6D-11M      | A22L-C□-6D-11A       | Insert one of the following<br>letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                                                              |                   | 6 VAC         | A22L-C□-6A-11M      | A22L-C□-6A-11A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-C□-12A-11M     | A22L-C□-12A-11A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-C□-24A-11M     | A22L-C□-24A-11A      |                                                                                                                       |
|                                                                                                                                                              | DPST-NO           | 6 VDC         | A22L-C□-6D-20M      | A22L-C□-6D-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-C□-6A-20M      | A22L-C□-6A-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-C□-12A-20M     | A22L-C□-12A-20A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-C□-24A-20M     | A22L-C□-24A-20A      |                                                                                                                       |
|                                                                                                                                                              | DPST-NC           | 6 VDC         | A22L-C□-6D-02M      | A22L-C□-6D-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-C□-6A-02M      | A22L-C□-6A-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-C□-12A-02M     | A22L-C□-12A-02A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-C□-24A-02M     | A22L-C□-24A-02A      |                                                                                                                       |
| Square extended<br>LED lighting<br>(with transformer)<br>                   | SPST-NO           | 110 VAC       | A22L-C□-T1-10M      | A22L-C□-T1-10A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-C□-T2-10M      | A22L-C□-T2-10A       |                                                                                                                       |
|                                                                                                                                                              | SPST-NC           | 110 VAC       | A22L-C□-T1-01M      | A22L-C□-T1-01A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-C□-T2-01M      | A22L-C□-T2-01A       |                                                                                                                       |
|                                                                                                                                                              | SPST-NO + SPST-NC | 110 VAC       | A22L-C□-T1-11M      | A22L-C□-T1-11A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-C□-T2-11M      | A22L-C□-T2-11A       |                                                                                                                       |
|                                                                                                                                                              | DPST-NO           | 110 VAC       | A22L-C□-T1-20M      | A22L-C□-T1-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-C□-T2-20M      | A22L-C□-T2-20A       |                                                                                                                       |
|                                                                                                                                                              | DPST-NC           | 110 VAC       | A22L-C□-T1-02M      | A22L-C□-T1-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-C□-T2-02M      | A22L-C□-T2-02A       |                                                                                                                       |
| Square full-guard<br>LED lighting<br>(without transformer)<br>            | SPST-NO           | 6 VDC         | A22L-D□-6D-10M      | A22L-D□-6D-10A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-D□-6A-10M      | A22L-D□-6A-10A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-D□-12A-10M     | A22L-D□-12A-10A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-D□-24A-10M     | A22L-D□-24A-10A      |                                                                                                                       |
|                                                                                                                                                              | SPST-NC           | 6 VDC         | A22L-D□-6D-01M      | A22L-D□-6D-01A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-D□-6A-01M      | A22L-D□-6A-01A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-D□-12A-01M     | A22L-D□-12A-01A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-D□-24A-01M     | A22L-D□-24A-01A      |                                                                                                                       |
|                                                                                                                                                              | SPST-NO + SPST-NC | 6 VDC         | A22L-D□-6D-11M      | A22L-D□-6D-11A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-D□-6A-11M      | A22L-D□-6A-11A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-D□-12A-11M     | A22L-D□-12A-11A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-D□-24A-11M     | A22L-D□-24A-11A      |                                                                                                                       |
|                                                                                                                                                              | DPST-NO           | 6 VDC         | A22L-D□-6D-20M      | A22L-D□-6D-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-D□-6A-20M      | A22L-D□-6A-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-D□-12A-20M     | A22L-D□-12A-20A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-D□-24A-20M     | A22L-D□-24A-20A      |                                                                                                                       |
|                                                                                                                                                              | DPST-NC           | 6 VDC         | A22L-D□-6D-02M      | A22L-D□-6D-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 6 VAC         | A22L-D□-6A-02M      | A22L-D□-6A-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 12 VAC/DC     | A22L-D□-12A-02M     | A22L-D□-12A-02A      |                                                                                                                       |
|                                                                                                                                                              |                   | 24 VAC/DC     | A22L-D□-24A-02M     | A22L-D□-24A-02A      |                                                                                                                       |
| Square full-guard<br>LED lighting<br>(with transformer)<br>               | SPST-NO           | 110 VAC       | A22L-D□-T1-10M      | A22L-D□-T1-10A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-D□-T2-10M      | A22L-D□-T2-10A       |                                                                                                                       |
|                                                                                                                                                              | SPST-NC           | 110 VAC       | A22L-D□-T1-01M      | A22L-D□-T1-01A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-D□-T2-01M      | A22L-D□-T2-01A       |                                                                                                                       |
|                                                                                                                                                              | SPST-NO + SPST-NC | 110 VAC       | A22L-D□-T1-11M      | A22L-D□-T1-11A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-D□-T2-11M      | A22L-D□-T2-11A       |                                                                                                                       |
|                                                                                                                                                              | DPST-NO           | 110 VAC       | A22L-D□-T1-20M      | A22L-D□-T1-20A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-D□-T2-20M      | A22L-D□-T2-20A       |                                                                                                                       |
|                                                                                                                                                              | DPST-NC           | 110 VAC       | A22L-D□-T1-02M      | A22L-D□-T1-02A       |                                                                                                                       |
|                                                                                                                                                              |                   | 220 VAC       | A22L-D□-T2-02M      | A22L-D□-T2-02A       |                                                                                                                       |

## Selector Switches

## Non-illuminated Knob Type

| Appearance                                                                                               | Positions   | Operating method                                                                                     | Contacts          | Part number | Operator color |
|----------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------|-------------------|-------------|----------------|
| Knob<br>                | 2 positions | Maintained<br>      | SPST-NO           | A22S-2M-10  | Black          |
|                                                                                                          |             |                                                                                                      | SPST-NC           | A22S-2M-01  |                |
|                                                                                                          |             |                                                                                                      | SPST-NO + SPST-NC | A22S-2M-11  |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-2M-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-2M-02  |                |
|                                                                                                          |             | Spring return<br>   | SPST-NO           | A22S-2A-10  |                |
|                                                                                                          |             |                                                                                                      | SPST-NC           | A22S-2A-01  |                |
|                                                                                                          |             |                                                                                                      | SPST-NO + SPST-NC | A22S-2A-11  |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-2A-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-2A-02  |                |
| Extended lever knob<br> | 2 positions | Maintained<br>      | SPST-NO + SPST-NC | A22S-3M-11  | Black          |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-3M-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-3M-02  |                |
|                                                                                                          |             | Spring return<br>   | SPST-NO + SPST-NC | A22S-3A-11  |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-3A-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-3A-02  |                |
|                                                                                                          | 3 positions | Maintained<br>      | SPST-NO + SPST-NC | A22S-3M-11  |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-3M-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-3M-02  |                |
|                                                                                                          |             | Spring return<br>   | SPST-NO + SPST-NC | A22S-3A-11  |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-3A-20  |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-3A-02  |                |
| Extended lever knob<br> | 2 positions | Maintained<br>      | SPST-NO           | A22S-C2M-10 | Black          |
|                                                                                                          |             |                                                                                                      | SPST-NC           | A22S-C2M-01 |                |
|                                                                                                          |             |                                                                                                      | SPST-NO + SPST-NC | A22S-C2M-11 |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-C2M-20 |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-C2M-02 |                |
|                                                                                                          |             | Spring return<br>   | SPST-NO           | A22S-C2A-10 |                |
|                                                                                                          |             |                                                                                                      | SPST-NC           | A22S-C2A-01 |                |
|                                                                                                          |             |                                                                                                      | SPST-NO + SPST-NC | A22S-C2A-11 |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-C2A-20 |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-C2A-02 |                |
| Extended lever knob<br> | 3 positions | Maintained<br>    | SPST-NO + SPST-NC | A22S-C3M-11 | Black          |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-C3M-20 |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-C3M-02 |                |
|                                                                                                          |             | Spring return<br> | SPST-NO + SPST-NC | A22S-C3A-11 |                |
|                                                                                                          |             |                                                                                                      | DPST-NO           | A22S-C3A-20 |                |
|                                                                                                          |             |                                                                                                      | DPST-NC           | A22S-C3A-02 |                |

## Illuminated Knob Type

| Appearance                                                                                                                           | Positions   | Operating method                                                                                  | Contacts          | Rated voltage | Part number     | Operator color                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------|-------------------|---------------|-----------------|-------------------------------------------------------------------------------------------------------|
| Knob<br>LED lighting<br>(without transformer)<br> | 2 positions | Maintained<br> | SPST-NO           | 6 VDC         | A22W-2M□-6D-10  | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>A (blue) |
|                                                                                                                                      |             |                                                                                                   |                   | 6 VAC         | A22W-2M□-6A-10  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 12 VAC/DC     | A22W-2M□-12A-10 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 24 VAC/DC     | A22W-2M□-24A-10 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   | SPST-NC           | 6 VDC         | A22W-2M□-6D-01  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 6 VAC         | A22W-2M□-6A-01  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 12 VAC/DC     | A22W-2M□-12A-01 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 24 VAC/DC     | A22W-2M□-24A-01 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   | SPST-NO + SPST-NC | 6 VDC         | A22W-2M□-6D-11  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 6 VAC         | A22W-2M□-6A-11  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 12 VAC/DC     | A22W-2M□-12A-11 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 24 VAC/DC     | A22W-2M□-24A-11 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   | DPST-NO           | 6 VDC         | A22W-2M□-6D-20  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 6 VAC         | A22W-2M□-6A-20  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 12 VAC/DC     | A22W-2M□-12A-20 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 24 VAC/DC     | A22W-2M□-24A-20 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   | DPST-NC           | 6 VDC         | A22W-2M□-6D-02  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 6 VAC         | A22W-2M□-6A-02  |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 12 VAC/DC     | A22W-2M□-12A-02 |                                                                                                       |
|                                                                                                                                      |             |                                                                                                   |                   | 24 VAC/DC     | A22W-2M□-24A-02 |                                                                                                       |

Note: Refer to page 11 for contact configurations.

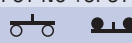
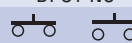
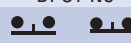
(This table continues on the next page.)

## Selector Switches

## Illuminated Knob Type (continued)

| Appearance                                                                                                                                        | Positions   | Operating method                                                                                     | Contacts          | Rated voltage | Part number     | Operator color                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------|-------------------|---------------|-----------------|-------------------------------------------------------------------------------------------------------|
| Knob<br>LED lighting<br>(without transformer)<br>(continued)<br> | 2 positions | Spring return<br>   | SPST-NO           | 6 VDC         | A22W-2A□-6D-10  | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>A (blue) |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-2A□-6A-10  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-2A□-12A-10 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-2A□-24A-10 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | SPST-NC           | 6 VDC         | A22W-2A□-6D-01  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-2M□-6A-01  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-2A□-12A-01 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-2A□-24A-01 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | SPST-NO + SPST-NC | 6 VDC         | A22W-2A□-6D-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-2A□-6A-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-2A□-12A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-2A□-24A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NO           | 6 VDC         | A22W-2A□-6D-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-2A□-6A-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-2A□-12A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-2A□-24A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NC           | 6 VDC         | A22W-2A□-6D-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-2A□-6A-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-2A□-12A-02 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-2A□-24A-02 |                                                                                                       |
| Knob<br>LED lighting<br>(without transformer)<br>               | 3 positions | Maintained<br>      | SPST-NO + SPST-NC | 6 VDC         | A22W-3M□-6D-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3M□-6A-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3M□-12A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3M□-24A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NO           | 6 VDC         | A22W-3M□-6D-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3M□-6A-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3M□-12A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3M□-24A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NC           | 6 VDC         | A22W-3M□-6D-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3M□-6A-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3M□-12A-02 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3M□-24A-02 |                                                                                                       |
|                                                                                                                                                   |             | Spring return<br> | SPST-NO + SPST-NC | 6 VDC         | A22W-3A□-6D-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3A□-6A-11  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3A□-12A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3A□-24A-11 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NO           | 6 VDC         | A22W-3A□-6D-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3A□-6A-20  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3A□-12A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3A□-24A-20 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      | DPST-NC           | 6 VDC         | A22W-3A□-6D-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 6 VAC         | A22W-3A□-6A-02  |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 12 VAC/DC     | A22W-3A□-12A-02 |                                                                                                       |
|                                                                                                                                                   |             |                                                                                                      |                   | 24 VAC/DC     | A22W-3A□-24A-02 |                                                                                                       |

## Contact Configurations for Selector Switches

| 2 Position Type                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Knob position                                                                       | SPST-NO                                                                             | SPST-NC                                                                             | SPST-NO + SPST-NC                                                                   | DPST-NO                                                                               | DPST-NC                                                                               |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 3 Position Type                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
| Knob position                                                                       | SPST-NO + SPST-NC                                                                   |                                                                                     | DPST-NO                                                                             |                                                                                       | DPST-NC                                                                               |
|  |  |                                                                                     |  |                                                                                       |  |
|  |  |                                                                                     |  |                                                                                       |  |
|  |  |                                                                                     |  |                                                                                       |  |

## Selector Switches

## Illuminated Knob Type (continued)

| Appearance                                                                                                                       | Positions   | Operating method                                                                                     | Contacts          | Rated voltage | Part number    | Operator color                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------|-------------------|---------------|----------------|-------------------------------------------------------------------------------------------------------|
| Knob<br>LED lighting<br>(with transformer)<br>  | 2 positions | Maintained<br>      | SPST-NO           | 110 VAC       | A22W-2M□-T1-10 | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>A (blue) |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2M□-T2-10 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | SPST-NC           | 110 VAC       | A22W-2M□-T1-01 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2M□-T2-01 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | SPST-NO + SPST-NC | 110 VAC       | A22W-2M□-T1-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2M□-T2-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NO           | 110 VAC       | A22W-2M□-T1-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2M□-T2-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NC           | 110 VAC       | A22W-2M□-T1-02 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2M□-T2-02 |                                                                                                       |
|                                                                                                                                  |             | Spring return<br>   | SPST-NO           | 110 VAC       | A22W-2A□-T1-10 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2A□-T2-10 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | SPST-NC           | 110 VAC       | A22W-2A□-T1-01 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2A□-T2-01 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | SPST-NO + SPST-NC | 110 VAC       | A22W-2A□-T1-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2A□-T2-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NO           | 110 VAC       | A22W-2A□-T1-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2A□-T2-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NC           | 110 VAC       | A22W-2A□-T1-02 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-2A□-T2-02 |                                                                                                       |
| Knob<br>LED lighting<br>(with transformer)<br> | 3 positions | Maintained<br>      | SPST-NO + SPST-NC | 110 VAC       | A22W-3M□-T1-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3M□-T2-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NO           | 110 VAC       | A22W-3M□-T1-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3M□-T2-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NC           | 110 VAC       | A22W-3M□-T1-02 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3M□-T2-02 |                                                                                                       |
|                                                                                                                                  |             | Spring return<br> | SPST-NO + SPST-NC | 110 VAC       | A22W-3A□-T1-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3A□-T2-11 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NO           | 110 VAC       | A22W-3A□-T1-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3A□-T2-20 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      | DPST-NC           | 110 VAC       | A22W-3A□-T1-02 |                                                                                                       |
|                                                                                                                                  |             |                                                                                                      |                   | 220 VAC       | A22W-3A□-T2-02 |                                                                                                       |

## Non-illuminated Key type

| Appearance                                                                                 | Positions   | Operator type                                                                                     | Contacts          | Key release position                                                                | Part number | Color of operational unit |
|--------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|-------------|---------------------------|
| Key<br> | 2 positions | Maintained<br> | SPST-NO           |  | A22K-2ML-10 | Black                     |
|                                                                                            |             |                                                                                                   |                   |  | A22K-2M-10  |                           |
|                                                                                            |             |                                                                                                   | SPST-NC           |  | A22K-2ML-01 |                           |
|                                                                                            |             |                                                                                                   |                   |  | A22K-2M-01  |                           |
|                                                                                            |             |                                                                                                   | SPST-NO + SPST-NC |  | A22K-2ML-11 |                           |
|                                                                                            |             |                                                                                                   |                   |  | A22K-2M-11  |                           |
|                                                                                            |             |                                                                                                   | DPST-NO           |  | A22K-2ML-20 |                           |
|                                                                                            |             |                                                                                                   |                   |  | A22K-2M-20  |                           |
|                                                                                            |             |                                                                                                   | DPST-NC           |  | A22K-2ML-02 |                           |
|                                                                                            |             |                                                                                                   |                   |  | A22K-2M-02  |                           |

Note: Refer to page 11 for contact configurations.

(This table continues on the next page.)



## Selector Switches

### Non-illuminated Key Type (continued)

| Appearance                                                                                           | Positions   | Operator type                                                                                      | Contacts          | Key release position                                                               | Part number | Color of operational unit |
|------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------|-------------|---------------------------|
| Key (continued)<br> | 2 positions | Spring return<br> | SPST-NO           |   | A22K-2AL-10 | Black                     |
|                                                                                                      |             |                                                                                                    | SPST-NC           |                                                                                    | A22K-2AL-01 |                           |
|                                                                                                      |             |                                                                                                    | SPST-NO + SPST-NC |                                                                                    | A22K-2AL-11 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NO           |                                                                                    | A22K-2AL-20 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NC           |                                                                                    | A22K-2AL-02 |                           |
|                                                                                                      | 3 positions | Maintained<br>    | SPST-NO + SPST-NC |   | A22K-3ML-11 |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3M-11  |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3MC-11 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NO           |   | A22K-3ML-20 |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3M-20  |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3MC-20 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NC           |   | A22K-3ML-02 |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3M-02  |                           |
|                                                                                                      |             |                                                                                                    |                   |   | A22K-3MC-02 |                           |
|                                                                                                      |             | Spring return<br> | SPST-NO + SPST-NC |   | A22K-3AC-11 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NO           |   | A22K-3AC-20 |                           |
|                                                                                                      |             |                                                                                                    | DPST-NC           |  | A22K-3AC-02 |                           |

Note: Refer to page 11 for contact configurations.

### Illuminated Pilot Light

| Appearance                                                                                                                    | Lighting | Rated voltage | Part number | Operator color                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------|----------|---------------|-------------|---------------------------------------------------------------------------------------------------------------------------|
| Round/Flush<br>without transformer<br>     | LED      | 6 VDC         | M22-F□-6D   | Insert one of the following<br>letters into the box □.<br><br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                               |          | 6 VAC         | M22-F□-6A   |                                                                                                                           |
|                                                                                                                               |          | 12 VAC/DC     | M22-F□-12A  |                                                                                                                           |
|                                                                                                                               |          | 24 VAC/DC     | M22-F□-24A  |                                                                                                                           |
| Round/Flush<br>with transformer<br>        | LED      | 110 VAC       | M22-F□-T1   |                                                                                                                           |
|                                                                                                                               |          | 220 VAC       | M22-F□-T2   |                                                                                                                           |
| Square/Extended<br>without transformer<br> | LED      | 6 VDC         | M22-C□-6D   |                                                                                                                           |
|                                                                                                                               |          | 6 VAC         | M22-C□-6A   |                                                                                                                           |
|                                                                                                                               |          | 12 VAC/DC     | M22-C□-12A  |                                                                                                                           |
|                                                                                                                               |          | 24 VAC/DC     | M22-C□-24A  |                                                                                                                           |
| Square/Extended<br>with transformer<br>    | LED      | 110 VAC       | M22-C□-T1   |                                                                                                                           |
|                                                                                                                               |          | 220 VAC       | M22-C□-T2   |                                                                                                                           |

**Note:** To order incandescent versions of the M22 Pilot Light, replace the part number suffix (i.e., 12A, 24A, T1) with the appropriate code from the table below.  
Example: M22-FR-24 is a red, round indicator with 24 VAC incandescent light source.

#### Incandescent Light Source

| Code | Rated Voltage |
|------|---------------|
| 5    | 5 VAC         |
| 12   | 12VAC         |
| 24   | 24 VAC        |
| HI   | 110 VAC       |

## Emergency Stop Switches

## Non-illuminated Push-lock - Pull-reset, Turn-reset, and Key-reset Types

| Appearance                                                                                                                       | Output            | Part number | Color of cap |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|--------------|
| 40 mm dia. head<br>push-lock,<br>pull-reset<br> | SPST-NC           | A22E-MP-01  | Red          |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-MP-11  |              |
|                                                                                                                                  | DPST-NC           | A22E-MP-02  |              |
| 60 mm dia. head<br>push-lock,<br>pull-reset<br> | SPST-NC           | A22E-LP-01  |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-LP-11  |              |
|                                                                                                                                  | DPST-NC           | A22E-LP-02  |              |
| 30 mm dia. head<br>push-lock,<br>turn-reset<br> | SPST-NC           | A22E-S-01   |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-S-11   |              |
|                                                                                                                                  | DPST-NC           | A22E-S-02   |              |
| 40 mm dia. head<br>push-lock,<br>turn-reset<br> | SPST-NC           | A22E-M-01   |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-M-11   |              |
|                                                                                                                                  | DPST-NC           | A22E-M-02   |              |
| 60 mm dia. head<br>push-lock,<br>turn-reset<br> | SPST-NC           | A22E-L-01   |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-L-11   |              |
|                                                                                                                                  | DPST-NC           | A22E-L-02   |              |
| 30 mm dia. head<br>push-lock,<br>key-reset<br>  | SPST-NC           | A22E-SK-01  |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-SK-11  |              |
|                                                                                                                                  | DPST-NC           | A22E-SK-02  |              |
| 40 mm dia. head<br>push-lock,<br>key-reset<br> | SPST-NC           | A22E-MK-01  |              |
|                                                                                                                                  | SPST-NO + SPST-NC | A22E-MK-11  |              |
|                                                                                                                                  | DPST-NC           | A22E-MK-02  |              |

## Illuminated Push-lock, Turn-reset Type

| Appearance                                                                                                                                                             | Output            | Rated voltage | Part number    | Color of cap |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|----------------|--------------|
| 40 mm dia. head<br>push-lock,<br>turn-reset<br>LED lighting<br>                     | SPST-NC           | 6 VDC         | A22EL-M-6D-01  | Red          |
|                                                                                                                                                                        |                   | 6 VAC/DC      | A22EL-M-6A-01  |              |
|                                                                                                                                                                        |                   | 12 VAC/DC     | A22EL-M-12A-01 |              |
|                                                                                                                                                                        |                   | 24 VAC/DC     | A22EL-M-24A-01 |              |
|                                                                                                                                                                        | SPST-NO + SPST-NC | 6 VDC         | A22EL-M-6D-11  |              |
|                                                                                                                                                                        |                   | 6 VAC/DC      | A22EL-M-6A-11  |              |
|                                                                                                                                                                        |                   | 12 VAC/DC     | A22EL-M-12A-11 |              |
|                                                                                                                                                                        |                   | 24 VAC/DC     | A22EL-M-24A-11 |              |
|                                                                                                                                                                        | DPST-NC           | 6 VDC         | A22EL-M-6D-02  |              |
|                                                                                                                                                                        |                   | 6 VAC/DC      | A22EL-M-6A-02  |              |
|                                                                                                                                                                        |                   | 12 VAC/DC     | A22EL-M-12A-02 |              |
|                                                                                                                                                                        |                   | 24 VAC/DC     | A22EL-M-24A-02 |              |
| 40 mm dia. head<br>push-lock,<br>turn-reset with<br>transformer<br>LED lighting<br> | SPST-NC           | 110 VAC       | A22EL-M-T1-01  |              |
|                                                                                                                                                                        |                   | 220 VAC       | A22EL-M-T2-01  |              |
|                                                                                                                                                                        | SPST-NO + SPST-NC | 110 VAC       | A22EL-M-T1-11  |              |
|                                                                                                                                                                        |                   | 220 VAC       | A22EL-M-T2-11  |              |
|                                                                                                                                                                        | DPST-NC           | 110 VAC       | A22EL-M-T1-02  |              |
|                                                                                                                                                                        |                   | 220 VAC       | A22EL-M-T2-02  |              |

## Accessories

| Item                 |                          | Appearance                                                                          | Classification                           |                      | Remarks                                                                                                                           | Part number          |
|----------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Contact Blocks       |                          |    | SPST-NO                                  | General-purpose load | Provided as standard. Order contact blocks only when adding or replacing them.                                                    | A22-10               |
|                      |                          |                                                                                     |                                          | Microload            |                                                                                                                                   | A22-10S              |
|                      |                          |                                                                                     | SPST-NC                                  | General-purpose load |                                                                                                                                   | A22-01               |
|                      |                          |                                                                                     |                                          | Microload            |                                                                                                                                   | A22-01S              |
|                      |                          |                                                                                     | SPST-NO/SPST-NC                          | General-purpose load |                                                                                                                                   | A22-11               |
|                      |                          |                                                                                     | DPST-NO                                  | General-purpose load |                                                                                                                                   | A22-20               |
|                      |                          |                                                                                     |                                          | Microload            |                                                                                                                                   | A22-20S              |
|                      |                          |                                                                                     |                                          | DPST-NC              |                                                                                                                                   | General-purpose load |
|                      |                          |                                                                                     | Microload                                |                      | A22-02S                                                                                                                           |                      |
| Lamp Sockets         |                          |    | Direct lighting                          |                      | Used when changing the lighting method.                                                                                           | A22-TN               |
|                      | Transformer illumination | 110 VAC                                                                             | A22-T1                                   |                      |                                                                                                                                   |                      |
|                      |                          | 220 VAC                                                                             | A22-T2                                   |                      |                                                                                                                                   |                      |
| Mounting Latches     |                          |    | For momentary operation models           |                      | Provided as standard. Order mounting latches only when mounting contact blocks or lamp sockets are purchased individually.        | A22-3200             |
|                      |                          |                                                                                     | For maintained operation models          |                      |                                                                                                                                   | A22-3210             |
|                      |                          |                                                                                     |                                          |                      |                                                                                                                                   |                      |
| Legend plate frames  | Standard size            |    | With Snap-in Legend Plate (Without text) | White                | Snap-in legend plate is acrylic.                                                                                                  | A22Z-3321            |
|                      |                          |                                                                                     |                                          | Red                  |                                                                                                                                   | A22Z-3322            |
|                      |                          |                                                                                     |                                          | Black                |                                                                                                                                   | A22Z-3323            |
|                      |                          |                                                                                     | Without Snap-in Legend Plate             |                      |                                                                                                                                   | A22Z-3320            |
|                      | Large size               |    | With Snap-in Legend Plate (Without text) | White                |                                                                                                                                   | A22Z-3331            |
|                      |                          |                                                                                     |                                          | Red                  |                                                                                                                                   | A22Z-3332            |
|                      |                          |                                                                                     |                                          | Black                |                                                                                                                                   | A22Z-3333            |
|                      |                          |                                                                                     | Without Snap-in Legend Plate             |                      |                                                                                                                                   | A22Z-3330            |
| Lock fitting         |                          |    | Round                                    |                      | The body is equipped with a lock fitting. This lock fitting is used when a more secure lock feature is required.                  | A22Z-3360            |
| Metallic bezel rings |                          |   | For flush or projection models           |                      | Replace with the standard model.                                                                                                  | A22Z-3580            |
|                      |                          |                                                                                     | For full-guard models                    |                      | Material: nickel-plated zinc.                                                                                                     | A22Z-3582            |
| Sealing caps         |                          |  | For flush models                         |                      | Used to prevent dust or water from entering the operational unit. Color: opaque. Material: silicon.                               | A22Z-3600F           |
|                      |                          |                                                                                     | For extended models                      |                      |                                                                                                                                   | A22Z-3600T           |
|                      |                          |                                                                                     | For full-guard models                    |                      |                                                                                                                                   | A22Z-3600G           |
| Color lenses         |                          |  | Red                                      |                      | Used for changing the operational unit color of the pushbutton switch.                                                            | A22Z-30TR            |
|                      |                          |                                                                                     | Green                                    |                      |                                                                                                                                   | A22Z-30TG            |
|                      |                          |                                                                                     | Yellow                                   |                      |                                                                                                                                   | A22Z-30TY            |
|                      |                          |                                                                                     | White                                    |                      |                                                                                                                                   | A22Z-30TW            |
|                      |                          |                                                                                     | Blue                                     |                      |                                                                                                                                   | A22Z-30TA            |
|                      |                          |                                                                                     |                                          |                      |                                                                                                                                   |                      |
| Three-throw spacers  |                          |  | For Pushbutton Switches                  |                      | Used when mounting three non-illuminated switch units. Cannot be used with illuminated emergency stop switches.                   | A22Z-3003            |
| Hole plug            |                          |  | Round                                    |                      | Can be plugged into pre-cut panel holes for future expansion. The color is black. Can be fit into a 25 mm dia. hole in the panel. | A22Z-3550            |
| 25 mm dia. ring      |                          |  | 25 mm ring                               |                      | Since this is not attached to the main body, order separately.                                                                    | A22Z-R25             |

## Accessories

| Item                                                          |                           | Appearance                                                                          | Classification                                                |             | Remarks                                                                                                                         | Part number                                                                               |            |
|---------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------|
| Snap-in legend plates                                         | Standard size             |    | Without text                                                  | Black       | Attached to the standard-size legend plate frame. Material: Acrylic.                                                            | A22Z-3443B                                                                                |            |
|                                                               |                           |                                                                                     |                                                               | Red         |                                                                                                                                 | A22Z-3443R                                                                                |            |
|                                                               |                           |                                                                                     |                                                               | White       |                                                                                                                                 | A22Z-3443W                                                                                |            |
|                                                               |                           |                                                                                     |                                                               | Transparent |                                                                                                                                 | A22Z-3443C                                                                                |            |
|                                                               |                           |                                                                                     | White text on red background                                  | ○           |                                                                                                                                 | A22Z-3443R-2                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | STOP        |                                                                                                                                 | A22Z-3443R-4                                                                              |            |
|                                                               |                           |                                                                                     | White text on black background                                | I           |                                                                                                                                 | A22Z-3443B-1                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | START       |                                                                                                                                 | A22Z-3443B-3                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | ON          |                                                                                                                                 | A22Z-3443B-5                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | OFF         |                                                                                                                                 | A22Z-3443B-6                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | UP          |                                                                                                                                 | A22Z-3443B-7                                                                              |            |
|                                                               |                           |                                                                                     |                                                               | DOWN        |                                                                                                                                 | A22Z-3443B-8                                                                              |            |
|                                                               | POWER ON                  | A22Z-3443B-9                                                                        |                                                               |             |                                                                                                                                 |                                                                                           |            |
|                                                               | OFF-ON                    | A22Z-3443B-10                                                                       |                                                               |             |                                                                                                                                 |                                                                                           |            |
|                                                               | Large size                |    | Without text                                                  | Black       |                                                                                                                                 | Attached to the large-size legend plate frame. Material: Acrylic.                         | A22Z-3453B |
|                                                               |                           |                                                                                     |                                                               | Red         |                                                                                                                                 |                                                                                           | A22Z-3453R |
|                                                               |                           |                                                                                     |                                                               | White       |                                                                                                                                 |                                                                                           | A22Z-3453W |
|                                                               | For Emergency Stop Switch |    | 60 dia. round plate with black letters on a yellow background |             |                                                                                                                                 | “EMERGENCY STOP” is engraved on the plate. Used as an emergency stop switch legend plate. | A22N-PE190 |
| 90 dia. round plate with black letters on a yellow background |                           |                                                                                     | A22N-PE191                                                    |             |                                                                                                                                 |                                                                                           |            |
| Character films                                               |                           |    | No print (Round)                                              |             | After printing on a film, affix to the indicator plate of the illuminated pushbutton switch (The back is coated with adhesive.) | A22Z-3460                                                                                 |            |
|                                                               |                           |                                                                                     | Character print (Round)                                       | I           |                                                                                                                                 | A22Z-3460-1                                                                               |            |
|                                                               |                           |                                                                                     |                                                               | ○           |                                                                                                                                 | A22Z-3460-2                                                                               |            |
|                                                               |                           |                                                                                     |                                                               | START       |                                                                                                                                 | A22Z-3460-3                                                                               |            |
|                                                               |                           |                                                                                     | STOP                                                          | A22Z-3460-4 |                                                                                                                                 |                                                                                           |            |
|                                                               |                           |                                                                                     | No print (Square)                                             |             | A22Z-3480                                                                                                                       |                                                                                           |            |
| Lamp extractor                                                |                           |  |                                                               |             | Rubber tool used to easily replace lamps.                                                                                       | A22Z-3901                                                                                 |            |
| Tightening wrench                                             |                           |  |                                                               |             | Tool used to tighten nuts from the back of the panel.                                                                           | A22Z-3905                                                                                 |            |
| Lens tightening tool                                          |                           |  |                                                               |             | Used for replacing the cap of the half-guard pushbutton switch.                                                                 | A22Z-3908                                                                                 |            |
| Lens puller                                                   |                           |  |                                                               |             | Used for removing the lens from the indicator of the square illuminated pushbutton switch.                                      | A3PJ-5080                                                                                 |            |

## Enclosures



| Material  | Hole size         | Number of holes | Part number  |
|-----------|-------------------|-----------------|--------------|
| Metallic  | 22.5 mm (0.88 in) | 1               | A22N-MENC-1  |
|           |                   | 2               | A22N-MENC-2  |
|           |                   | 3               | A22N-MENC-3  |
|           |                   | 4               | A22N-MENC-4  |
|           |                   | 6               | A22N-MENC-6  |
|           |                   | 9               | A22N-MENC-9  |
|           |                   | 12              | A22N-MENC-12 |
|           |                   | 16              | A22N-MENC-16 |
| Polyester | 22.5 mm (0.88 in) | 1               | A22N-PENC-1  |
|           |                   | 2               | A22N-PENC-2  |
|           |                   | 3               | A22N-PENC-3  |

## Standard Nameplates

To complete the part number of the standard nameplates, select the plate type and add the number from the table below for the required text.

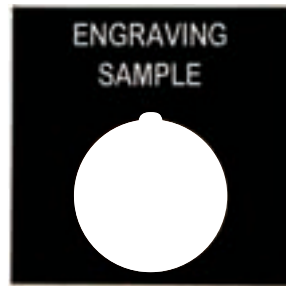
All plastic nameplates are adhesive backed for easy, permanent installation.

For custom engraved nameplates please use the order form on the next page.

Example: Plastic Square Nameplate  
engraved "RESET": A22N-PS38

A22N-\_\_\_\_\_  
Number from table below

| Code | Material/Shape      | Code | Material/Shape | Code | Material/Shape | Code | Material/Shape    |
|------|---------------------|------|----------------|------|----------------|------|-------------------|
| PR   | Plastic Rectangular | PS   | Plastic Square | PX   | Plastic Shield | MR   | Metal Rectangular |



All plastic nameplates are supplied standard with white lettering on a black background.

Metal nameplates are brushed aluminum with black lettering.

|                    |                  |                  |                     |                     |
|--------------------|------------------|------------------|---------------------|---------------------|
| 1 AUTO             | 26 LOWER         | 50 3RD SPEED     | 122 SAFE-RUN        | 167 OFF-LOC-REMOTE  |
| 2 CLOSE            | 27 MOTOR RUN     | 51 4TH SPEED     | 123 SLOW-FAST       | 168 OFF-MAN-AUTO    |
| 3 CYCLE START      | 28 MOTOR STOP    | 100 AUTO-MAN     | 124 START-JOG       | 169 OFF-SLOW-FAST   |
| 4 CYCLE STOP       | 29 OFF           | 101 CLOSE-OPEN   | 125 START-STOP      | 170 OFF-1-2         |
| 5 DECREASE         | 30 ON            | 102 DOWN-UP      | 126 STOP-START      | 171 OPEN-OFF-CLOSE  |
| 6 DOWN             | 31 OPEN          | 103 FAST-SLOW    | 127 SUMMER-WINTER   | 172 RAISE-OFF-LOWER |
| 8 FAST             | 32 OUT           | 104 FOR-REV      | 128 UP-DOWN         | 173 SLOW-OFF-FAST   |
| 9 FAULT            | 33 POWER ON      | 105 HAND-AUTO    | 150 AUTO-MAN-OFF    | 174 SLOW-OFF-START  |
| 10 FEED            | 34 PULL TO START | 106 HIGH-LOW     | 151 AUTO-OFF-HAND   | 175 START-JOG-STOP  |
| 11 FEED START      | 35 PUSH TO TEST  | 107 INCH-REVERSE | 152 AUTO-OFF-MAN    | 176 START-RUN-STOP  |
| 12 FEED STOP       | 36 PUSH TO STOP  | 108 JOG-FOR      | 153 CLOSE-OFF-OPEN  | 177 UP-OFF-DOWN     |
| 13 FLUID LEVEL LOW | 37 RAISE         | 109 JOG-REV      | 154 DOWN-OFF-SLOW   | 178 1-OFF-2         |
| 14 FORWARD         | 38 RESET         | 110 JOG-RUN      | 155 FAST-OFF-SLOW   | 179 HAND-OFF-AUTO   |
| 15 FULL SPEED      | 39 REVERSE       | 111 LEFT-RUN     | 156 FOR-OFF-REV     | 180 I               |
| 16 HAND            | 40 RIGHT         | 112 LOWER-RAISE  | 157 FOR-STOP-REV    | 181 II              |
| 17 HIGH            | 41 RUN           | 113 MAN-AUTO     | 158 HIGH-LOW-OFF    | 182 I-O             |
| 18 IN              | 42 SLOW          | 114 OFF-ON       | 159 HIGH-OFF-LOW    | 183 O-I             |
| 19 INCH            | 43 SPEED         | 115 ON-OFF       | 160 JOG-SAFE-RUN    | 184 I-O-II          |
| 20 INCREASE        | 44 START         | 116 OPEN-CLOSE   | 161 JOG-STOP-RUN    | 185 I-II            |
| 21 JOG             | 45 STOP          | 117 RAISE-LOWER  | 162 LEFT-OFF-RIGHT  | 186 I-O-I           |
| 22 JOG FORWARD     | 46 TEST          | 118 REV-FOR      | 163 LOC-OFF-REMOTE  | 187 I-II-III        |
| 23 LEFT            | 47 UP            | 119 RUN-INCH     | 164 LOW-OFF-HIGH    | 188 III             |
| 24 LOW             | 48 1ST SPEED     | 120 RUN-JOG      | 165 LOWER-OFF-RAISE | 200 BLANK NAMEPLATE |
| 25 LOW SPEED       | 49 2ND SPEED     | 121 RUN-SAFE     | 166 OFF COOLANT ON  |                     |

## Emergency Stop Nameplates



A22N-PR7



A22N-PS7



A22N-PX7



A22N-PE190  
60 mm diameter



A22N-PE191  
90 mm diameter



# Custom Engraved Nameplates \_\_\_\_\_ Order Form

Copy this order form and utilize it to specify Custom Engraved Nameplates. Once completed, mail the form to:

Omron Electronics LLC, Attn: Customer Service, One Commerce Drive, Schaumburg, IL 60173-5302

Or, you may fax this form to either Omron Electronics LLC at: 847.843.8261 or to your local Omron sales office.

## Bill to:

Date: \_\_\_\_\_

Company name: \_\_\_\_\_

Your name: \_\_\_\_\_

Address: \_\_\_\_\_

Your signature: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

P.O.# \_\_\_\_\_

Attention: \_\_\_\_\_

Fax: \_\_\_\_\_

## Ship to:

Company name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Attention: \_\_\_\_\_

Phone: \_\_\_\_\_

## To order:

Select blank nameplate **Shape** (circle A, B, C, or D). For plastic nameplates - Select **Nameplate Color** (circle Black, Yellow, Red, or White).

Select **Text Color** (circle Black or White). Note - Metal nameplates are brushed aluminum with black text. All plastic nameplates are adhesive backed.

Fill in the **QUANTITY** box. Print text in the spaces provided as it should appear on the finished nameplate.

### A - Plastic Rectangular

11 characters max.  
2 lines max.



A22N-PR200E

### B - Plastic Square

14 characters max.  
2 lines max.



A22N-PS200E

### C - Plastic Shield

11 characters max.  
2 lines max.



A22N-PX200E

### D - Metal Rectangular

11 characters max.  
2 lines max.



A22N-MR200E

|                                                                                                                                                           |       |       |        |     |       |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|--------|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                                                                                                                                                     | _____ | A     | B      | C   | D     | <div style="border: 1px solid black; width: 50px; height: 40px; margin: 0 auto;"></div> <div style="background-color: black; color: white; text-align: center; padding: 2px;"><b>QUANTITY</b></div> |
| Nameplate Color                                                                                                                                           | _____ | Black | Yellow | Red | White |                                                                                                                                                                                                     |
| Text Color                                                                                                                                                | _____ | Black | White  |     |       |                                                                                                                                                                                                     |
| <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> |       |       |        |     |       |                                                                                                                                                                                                     |

|                                                                                                                                                           |       |       |        |     |       |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|--------|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                                                                                                                                                     | _____ | A     | B      | C   | D     | <div style="border: 1px solid black; width: 50px; height: 40px; margin: 0 auto;"></div> <div style="background-color: black; color: white; text-align: center; padding: 2px;"><b>QUANTITY</b></div> |
| Nameplate Color                                                                                                                                           | _____ | Black | Yellow | Red | White |                                                                                                                                                                                                     |
| Text Color                                                                                                                                                | _____ | Black | White  |     |       |                                                                                                                                                                                                     |
| <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> |       |       |        |     |       |                                                                                                                                                                                                     |

|                                                                                                                                                           |       |       |        |     |       |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|--------|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                                                                                                                                                     | _____ | A     | B      | C   | D     | <div style="border: 1px solid black; width: 50px; height: 40px; margin: 0 auto;"></div> <div style="background-color: black; color: white; text-align: center; padding: 2px;"><b>QUANTITY</b></div> |
| Nameplate Color                                                                                                                                           | _____ | Black | Yellow | Red | White |                                                                                                                                                                                                     |
| Text Color                                                                                                                                                | _____ | Black | White  |     |       |                                                                                                                                                                                                     |
| <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> |       |       |        |     |       |                                                                                                                                                                                                     |

|                                                                                                                                                           |       |       |        |     |       |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|--------|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                                                                                                                                                     | _____ | A     | B      | C   | D     | <div style="border: 1px solid black; width: 50px; height: 40px; margin: 0 auto;"></div> <div style="background-color: black; color: white; text-align: center; padding: 2px;"><b>QUANTITY</b></div> |
| Nameplate Color                                                                                                                                           | _____ | Black | Yellow | Red | White |                                                                                                                                                                                                     |
| Text Color                                                                                                                                                | _____ | Black | White  |     |       |                                                                                                                                                                                                     |
| <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> <div style="border-top: 1px dashed black; height: 15px; width: 100%;"></div> |       |       |        |     |       |                                                                                                                                                                                                     |

## Pushbutton Switches

### Non-illuminated Pushbutton

| Appearance  |                                                                                   | Contacts | Part number         |                 |                      |                 | Operator color                                                                                                                  |
|-------------|-----------------------------------------------------------------------------------|----------|---------------------|-----------------|----------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------|
|             |                                                                                   |          | Momentary operation |                 | Maintained operation |                 |                                                                                                                                 |
|             |                                                                                   |          | Enclosed (IP40)     | Oiltight (IP65) | Enclosed (IP40)      | Oiltight (IP65) |                                                                                                                                 |
| Round       |  | SPDT     | A16-T□M-1           | A165-T□M-1      | A16-T□A-1            | A165-T□A-1      | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue)<br>B (black) |
|             |                                                                                   | DPDT     | A16-T□M-2           | A165-T□M-2      | A16-T□A-2            | A165-T□A-2      |                                                                                                                                 |
| Square      |  | SPDT     | A16-A□M-1           | A165-A□M-1      | A16-A□A-1            | A165-A□A-1      |                                                                                                                                 |
|             |                                                                                   | DPDT     | A16-A□M-2           | A165-A□M-2      | A16-A□A-2            | A165-A□A-2      |                                                                                                                                 |
| Rectangular |  | SPDT     | A16-J□M-1           | A165-J□M-1      | A16-J□A-1            | A165-J□A-1      |                                                                                                                                 |
|             |                                                                                   | DPDT     | A16-J□M-2           | A165-J□M-2      | A16-J□A-2            | A165-J□A-2      |                                                                                                                                 |

### Illuminated Pushbutton

| Appearance                                                                          | Illumination method       | Voltage | Contacts | Part number         |                 |                      |                 | Operator color                                                                                                         |
|-------------------------------------------------------------------------------------|---------------------------|---------|----------|---------------------|-----------------|----------------------|-----------------|------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                           |         |          | Momentary operation |                 | Maintained operation |                 |                                                                                                                        |
|                                                                                     |                           |         |          | Enclosed (IP40)     | Oiltight (IP65) | Enclosed (IP40)      | Oiltight (IP65) |                                                                                                                        |
|    | LED (DC)                  | 5 V     | SPDT     | A16L-T□M-5D-1       | A165L-T□M-5D-1  | A16L-T□A-5D-1        | A165L-T□A-5D-1  | Insert one of the following letters into the box □.<br><br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                     |                           | 12 V    |          | A16L-T□M-12D-1      | A165L-T□M-12D-1 | A16L-T□A-12D-1       | A165L-T□A-12D-1 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-T□M-24D-1      | A165L-T□M-24D-1 | A16L-T□A-24D-1       | A165L-T□A-24D-1 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-T□M-5-1        | A165L-T□M-5-1   | A16L-T□A-5-1         | A165L-T□A-5-1   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-T□M-12-1       | A165L-T□M-12-1  | A16L-T□A-12-1        | A165L-T□A-12-1  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-T□M-24-1       | A165L-T□M-24-1  | A16L-T□A-24-1        | A165L-T□A-24-1  |                                                                                                                        |
|                                                                                     | LED (DC)                  | 5 V     | DPDT     | A16L-T□M-5D-2       | A165L-T□M-5D-2  | A16L-T□A-5D-2        | A165L-T□A-5D-2  |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-T□M-12D-2      | A165L-T□M-12D-2 | A16L-T□A-12D-2       | A165L-T□A-12D-2 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-T□M-24D-2      | A165L-T□M-24D-2 | A16L-T□A-24D-2       | A165L-T□A-24D-2 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-T□M-5-2        | A165L-T□M-5-2   | A16L-T□A-5-2         | A165L-T□A-5-2   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-T□M-12-2       | A165L-T□M-12-2  | A16L-T□A-12-2        | A165L-T□A-12-2  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-T□M-24-2       | A165L-T□M-24-2  | A16L-T□A-24-2        | A165L-T□A-24-2  |                                                                                                                        |
|  | LED (DC)                  | 5 V     | SPDT     | A16L-A□M-5D-1       | A165L-A□M-5D-1  | A16L-A□A-5D-1        | A165L-A□A-5D-1  |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-A□M-12D-1      | A165L-A□M-12D-1 | A16L-A□A-12D-1       | A165L-A□A-12D-1 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-A□M-24D-1      | A165L-A□M-24D-1 | A16L-A□A-24D-1       | A165L-A□A-24D-1 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-A□M-5-1        | A165L-A□M-5-1   | A16L-A□A-5-1         | A165L-A□A-5-1   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-A□M-12-1       | A165L-A□M-12-1  | A16L-A□A-12-1        | A165L-A□A-12-1  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-A□M-24-1       | A165L-A□M-24-1  | A16L-A□A-24-1        | A165L-A□A-24-1  |                                                                                                                        |
|                                                                                     | LED (DC)                  | 5 V     | DPDT     | A16L-A□M-5D-2       | A165L-A□M-5D-2  | A16L-A□A-5D-2        | A165L-A□A-5D-2  |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-A□M-12D-2      | A165L-A□M-12D-2 | A16L-A□A-12D-2       | A165L-A□A-12D-2 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-A□M-24D-2      | A165L-A□M-24D-2 | A16L-A□A-24D-2       | A165L-A□A-24D-2 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-A□M-5-2        | A165L-A□M-5-2   | A16L-A□A-5-2         | A165L-A□A-5-2   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-A□M-12-2       | A165L-A□M-12-2  | A16L-A□A-12-2        | A165L-A□A-12-2  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-A□M-24-2       | A165L-A□M-24-2  | A16L-A□A-24-2        | A165L-A□A-24-2  |                                                                                                                        |
|  | LED (DC)                  | 5 V     | SPDT     | A16L-J□M-5D-1       | A165L-J□M-5D-1  | A16L-J□A-5D-1        | A165L-J□A-5D-1  |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-J□M-12D-1      | A165L-J□M-12D-1 | A16L-J□A-12D-1       | A165L-J□A-12D-1 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-J□M-24D-1      | A165L-J□M-24D-1 | A16L-J□A-24D-1       | A165L-J□A-24D-1 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-J□M-5-1        | A165L-J□M-5-1   | A16L-J□A-5-1         | A165L-J□A-5-1   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-J□M-12-1       | A165L-J□M-12-1  | A16L-J□A-12-1        | A165L-J□A-12-1  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-J□M-24-1       | A165L-J□M-24-1  | A16L-J□A-24-1        | A165L-J□A-24-1  |                                                                                                                        |
|                                                                                     | LED (DC)                  | 5 V     | DPDT     | A16L-J□M-5D-2       | A165L-J□M-5D-2  | A16L-J□A-5D-2        | A165L-J□A-5D-2  |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-J□M-12D-2      | A165L-J□M-12D-2 | A16L-J□A-12D-2       | A165L-J□A-12D-2 |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-J□M-24D-2      | A165L-J□M-24D-2 | A16L-J□A-24D-2       | A165L-J□A-24D-2 |                                                                                                                        |
|                                                                                     | Incandescent lamp (AC/DC) | 5 V     |          | A16L-J□M-5-2        | A165L-J□M-5-2   | A16L-J□A-5-2         | A165L-J□A-5-2   |                                                                                                                        |
|                                                                                     |                           | 12 V    |          | A16L-J□M-12-2       | A165L-J□M-12-2  | A16L-J□A-12-2        | A165L-J□A-12-2  |                                                                                                                        |
|                                                                                     |                           | 24 V    |          | A16L-J□M-24-2       | A165L-J□M-24-2  | A16L-J□A-24-2        | A165L-J□A-24-2  |                                                                                                                        |

Note: To order illuminated pushbuttons with 110 VAC transformer, replace the voltage code (5, 12, 24, 5D, 12D, 24D) with T1 for 110 VAC or T2 for 220 VAC. The secondary voltage of the transformer is always 24 VDC.

## Selector Switches

## Non-illuminated Knob Type

| Appearance                                                                                       | Positions   | Contacts | Reset method                        | Part number                | Operator color |
|--------------------------------------------------------------------------------------------------|-------------|----------|-------------------------------------|----------------------------|----------------|
| Round<br>       | 2 positions | SPDT     | Maintained<br>Spring return (right) | A165S-T2M-1<br>A165S-T2A-1 | Black          |
|                                                                                                  |             | DPDT     | Maintained<br>Spring return (right) | A165S-T2M-2<br>A165S-T2A-2 |                |
|                                                                                                  | 3 positions | DPDT     | Maintained<br>Spring return (both)  | A165S-T3M-2<br>A165S-T3A-2 |                |
|                                                                                                  |             |          |                                     |                            |                |
| Square<br>      | 2 positions | SPDT     | Maintained<br>Spring return (right) | A165S-A2M-1<br>A165S-A2A-1 |                |
|                                                                                                  |             | DPDT     | Maintained<br>Spring return (right) | A165S-A2M-2<br>A165S-A2A-2 |                |
|                                                                                                  | 3 positions | DPDT     | Maintained<br>Spring return (both)  | A165S-A3M-2<br>A165S-A3A-2 |                |
|                                                                                                  |             |          |                                     |                            |                |
| Rectangular<br> | 2 positions | SPDT     | Maintained<br>Spring return (right) | A165S-J2M-1<br>A165S-J2A-1 |                |
|                                                                                                  |             | DPDT     | Maintained<br>Spring return (right) | A165S-J2M-2<br>A165S-J2A-2 |                |
|                                                                                                  | 3 positions | DPDT     | Maintained<br>Spring return (both)  | A165S-J3M-2<br>A165S-J3A-2 |                |
|                                                                                                  |             |          |                                     |                            |                |

## Illuminated Knob Type (2-Position)

| Appearance                                                                                         | Type                          | Rated voltage | Contacts | Part number      |                          | Operator color                                                                            |
|----------------------------------------------------------------------------------------------------|-------------------------------|---------------|----------|------------------|--------------------------|-------------------------------------------------------------------------------------------|
|                                                                                                    |                               |               |          | Maintained       | Spring return from right |                                                                                           |
| Round<br>        | Full voltage<br>LED (DC)      | 5 VDC         | SPDT     | A165W-T2M□-5D-1  | A165W-T2A□-5D-1          | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green) |
|                                                                                                    |                               | 12 VDC        |          | A165W-T2M□-12D-1 | A165W-T2A□-12D-1         |                                                                                           |
|                                                                                                    |                               | 24 VDC        |          | A165W-T2M□-24D-1 | A165W-T2A□-24D-1         |                                                                                           |
|                                                                                                    | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-T2M□-T1-1  | A165W-T2A□-T1-1          |                                                                                           |
|                                                                                                    |                               | 220 VAC       |          | A165W-T2M□-T2-1  | A165W-T2A□-T2-1          |                                                                                           |
|                                                                                                    |                               |               | DPDT     | A165W-T2M□-5D-2  | A165W-T2A□-5D-2          |                                                                                           |
|                                                                                                    | Full voltage<br>LED (DC)      | 5 VDC         |          | A165W-T2M□-12D-2 | A165W-T2A□-12D-2         |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-T2M□-24D-2 | A165W-T2A□-24D-2         |                                                                                           |
| Square<br>      | Full voltage<br>LED (DC)      | 5 VDC         | SPDT     | A165W-A2M□-5D-1  | A165W-A2A□-5D-1          |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-A2M□-12D-1 | A165W-A2A□-12D-1         |                                                                                           |
|                                                                                                    |                               | 24 VDC        |          | A165W-A2M□-24D-1 | A165W-A2A□-24D-1         |                                                                                           |
|                                                                                                    | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-A2M□-T1-1  | A165W-A2A□-T1-1          |                                                                                           |
|                                                                                                    |                               | 220 VAC       |          | A165W-A2M□-T2-1  | A165W-A2A□-T2-1          |                                                                                           |
|                                                                                                    |                               |               | DPDT     | A165W-A2M□-5D-2  | A165W-A2A□-5D-2          |                                                                                           |
|                                                                                                    | Full voltage<br>LED (DC)      | 5 VDC         |          | A165W-A2M□-12D-2 | A165W-A2A□-12D-2         |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-A2M□-24D-2 | A165W-A2A□-24D-2         |                                                                                           |
| Rectangular<br> | Full voltage<br>LED (DC)      | 5 VDC         | SPDT     | A165W-J2M□-5D-1  | A165W-J2A□-5D-1          |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-J2M□-12D-1 | A165W-J2A□-12D-1         |                                                                                           |
|                                                                                                    |                               | 24 VDC        |          | A165W-J2M□-24D-1 | A165W-J2A□-24D-1         |                                                                                           |
|                                                                                                    | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-J2M□-T1-1  | A165W-J2A□-T1-1          |                                                                                           |
|                                                                                                    |                               | 220 VAC       |          | A165W-J2M□-T2-1  | A165W-J2A□-T2-1          |                                                                                           |
|                                                                                                    |                               |               | DPDT     | A165W-J2M□-5D-2  | A165W-J2A□-5D-2          |                                                                                           |
|                                                                                                    | Full voltage<br>LED (DC)      | 5 VDC         |          | A165W-J2M□-12D-2 | A165W-J2A□-12D-2         |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-J2M□-24D-2 | A165W-J2A□-24D-2         |                                                                                           |
|                                                                                                    | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-J2M□-T1-2  | A165W-J2A□-T1-2          |                                                                                           |
|                                                                                                    |                               | 220 VAC       |          | A165W-J2M□-T2-2  | A165W-J2A□-T2-2          |                                                                                           |
|                                                                                                    |                               |               |          |                  |                          |                                                                                           |
|                                                                                                    | Full voltage<br>LED (DC)      | 5 VDC         |          | A165W-J2M□-12D-2 | A165W-J2A□-12D-2         |                                                                                           |
|                                                                                                    |                               | 12 VDC        |          | A165W-J2M□-24D-2 | A165W-J2A□-24D-2         |                                                                                           |
|                                                                                                    |                               | 24 VDC        |          |                  |                          |                                                                                           |
|                                                                                                    | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-J2M□-T1-2  | A165W-J2A□-T1-2          |                                                                                           |
|                                                                                                    |                               | 220 VAC       |          | A165W-J2M□-T2-2  | A165W-J2A□-T2-2          |                                                                                           |

Note: Refer to page 23 for contact configurations.

## Selector Switches

### Illuminated Knob Type (3-Position)

| Appearance                                                                                       | Type                          | Rated voltage | Contacts | Part number      |                          | Operator color                                                                                  |
|--------------------------------------------------------------------------------------------------|-------------------------------|---------------|----------|------------------|--------------------------|-------------------------------------------------------------------------------------------------|
|                                                                                                  |                               |               |          | Maintained       | Spring return from right |                                                                                                 |
| Round<br>       | Full voltage<br>LED (DC)      | 5 VDC         | DPDT     | A165W-T3M□-5D-2  | A165W-T3A□-5D-2          | Insert one of the<br>following letters into<br>the box □.<br>R (red)<br>Y (yellow)<br>G (green) |
|                                                                                                  |                               | 12 VDC        |          | A165W-T3M□-12D-2 | A165W-T3A□-12D-2         |                                                                                                 |
|                                                                                                  |                               | 24 VDC        |          | A165W-T3M□-24D-2 | A165W-T3A□-24D-2         |                                                                                                 |
|                                                                                                  | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-T3M□-T1-2  | A165W-T3A□-T1-2          |                                                                                                 |
|                                                                                                  |                               | 220 VAC       |          | A165W-T3M□-T2-2  | A165W-T3A□-T2-2          |                                                                                                 |
| Square<br>      | Full voltage<br>LED (DC)      | 5 VDC         | DPDT     | A165W-A3M□-5D-2  | A165W-A3A□-5D-2          |                                                                                                 |
|                                                                                                  |                               | 12 VDC        |          | A165W-A3M□-12D-2 | A165W-A3A□-12D-2         |                                                                                                 |
|                                                                                                  |                               | 24 VDC        |          | A165W-A3M□-24D-2 | A165W-A3A□-24D-2         |                                                                                                 |
|                                                                                                  | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-A3M□-T1-2  | A165W-A3A□-T1-2          |                                                                                                 |
|                                                                                                  |                               | 220 VAC       |          | A165W-A3M□-T2-2  | A165W-A3A□-T2-2          |                                                                                                 |
| Rectangular<br> | Full voltage<br>LED (DC)      | 5 VDC         | DPDT     | A165W-J3M□-5D-2  | A165W-J3A□-5D-2          |                                                                                                 |
|                                                                                                  |                               | 12 VDC        |          | A165W-J3M□-12D-2 | A165W-J3A□-12D-2         |                                                                                                 |
|                                                                                                  |                               | 24 VDC        |          | A165W-J3M□-24D-2 | A165W-J3A□-24D-2         |                                                                                                 |
|                                                                                                  | Transformer 24 V<br>Secondary | 110 VAC       |          | A165W-J3M□-T1-2  | A165W-J3A□-T1-2          |                                                                                                 |
|                                                                                                  |                               | 220 VAC       |          | A165W-J3M□-T2-2  | A165W-J3A□-T2-2          |                                                                                                 |

### Non-illuminated Key Type

| Appearance                                                                                         | Positions   | Contacts | Reset method          | Key release position | Part number  |
|----------------------------------------------------------------------------------------------------|-------------|----------|-----------------------|----------------------|--------------|
| Round<br>         | 2 positions | SPDT     | Maintained            | Left                 | A165K-T2ML-1 |
|                                                                                                    |             |          |                       | Right                | A165K-T2MR-1 |
|                                                                                                    |             |          |                       | All                  | A165K-T2M-1  |
|                                                                                                    |             | DPDT     | Spring return (right) | Left                 | A165K-T2AL-1 |
|                                                                                                    |             |          |                       | Right                | A165K-T2MR-2 |
|                                                                                                    |             |          |                       | All                  | A165K-T2M-2  |
|                                                                                                    | 3 positions | DPDT     | Maintained            | Center               | A165K-T3MC-2 |
|                                                                                                    |             |          |                       | Right                | A165K-T3MR-2 |
|                                                                                                    |             |          |                       | Left                 | A165K-T3ML-2 |
|                                                                                                    |             | DPDT     | Spring return (both)  | All                  | A165K-T3M-2  |
|                                                                                                    |             |          |                       | Center               | A165K-T3AC-2 |
|                                                                                                    |             |          |                       |                      |              |
| Square<br>      | 2 positions | SPDT     | Maintained            | Left                 | A165K-A2ML-1 |
|                                                                                                    |             |          |                       | Right                | A165K-A2MR-1 |
|                                                                                                    |             |          |                       | All                  | A165K-A2M-1  |
|                                                                                                    |             | DPDT     | Spring return (right) | Left                 | A165K-A2AL-1 |
|                                                                                                    |             |          |                       | Right                | A165K-A2MR-2 |
|                                                                                                    |             |          |                       | All                  | A165K-A2M-2  |
|                                                                                                    | 3 positions | DPDT     | Maintained            | Center               | A165K-A3MC-2 |
|                                                                                                    |             |          |                       | Right                | A165K-A3MR-2 |
|                                                                                                    |             |          |                       | Left                 | A165K-A3ML-2 |
|                                                                                                    |             | DPDT     | Spring return (both)  | All                  | A165K-A3M-2  |
|                                                                                                    |             |          |                       | Center               | A165K-A3AC-2 |
|                                                                                                    |             |          |                       |                      |              |
| Rectangular<br> | 2 positions | SPDT     | Maintained            | Left                 | A165K-J2ML-1 |
|                                                                                                    |             |          |                       | Right                | A165K-J2MR-1 |
|                                                                                                    |             |          |                       | All                  | A165K-J2M-1  |
|                                                                                                    |             | DPDT     | Spring return (right) | Left                 | A165K-J2AL-1 |
|                                                                                                    |             |          |                       | Right                | A165K-J2MR-2 |
|                                                                                                    |             |          |                       | All                  | A165K-J2M-2  |
|                                                                                                    | 3 positions | DPDT     | Maintained            | Center               | A165K-J3MC-2 |
|                                                                                                    |             |          |                       | Right                | A165K-J3MR-2 |
|                                                                                                    |             |          |                       | Left                 | A165K-J3ML-2 |
|                                                                                                    |             | DPDT     | Spring return (both)  | All                  | A165K-J3M-2  |
|                                                                                                    |             |          |                       | Center               | A165K-J3AC-2 |
|                                                                                                    |             |          |                       |                      |              |

Note: Refer to page 23 for contact configurations.

## Pilot Lights

### Illuminated Pilot Light

| Appearance                                                                                       | Type                           | Voltage   | Part number |               | Operator color                                                                                                     |
|--------------------------------------------------------------------------------------------------|--------------------------------|-----------|-------------|---------------|--------------------------------------------------------------------------------------------------------------------|
|                                                                                                  |                                |           | IP40        | IP65 oiltight |                                                                                                                    |
| Round<br>       | Full voltage LED (DC)          | 5 VDC     | M16-T□-5D   | M165-T□-5D    | Insert one of the following letters into the box □.<br>R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                  |                                | 12 VDC    | M16-T□-12D  | M165-T□-12D   |                                                                                                                    |
|                                                                                                  |                                | 24 VDC    | M16-T□-24D  | M165-T□-24D   |                                                                                                                    |
|                                                                                                  | Full voltage incandescent lamp | 5 VAC/DC  | M16-T□-5    | M165-T□-5     |                                                                                                                    |
|                                                                                                  |                                | 12 VAC/DC | M16-T□-12   | M165-T□-12    |                                                                                                                    |
|                                                                                                  |                                | 24 VAC/DC | M16-T□-24   | M165-T□-24    |                                                                                                                    |
|                                                                                                  | Transformer 24 V secondary     | 110 VAC   | M16-T□-T1   | M165-T□-T1    |                                                                                                                    |
|                                                                                                  |                                | 220 VAC   | M16-T□-T2   | M165-T□-T2    |                                                                                                                    |
|                                                                                                  |                                |           |             |               |                                                                                                                    |
| Square<br>      | Full voltage LED (DC)          | 5 VDC     | M16-A□-5D   | M165-A□-5D    |                                                                                                                    |
|                                                                                                  |                                | 12 VDC    | M16-A□-12D  | M165-A□-12D   |                                                                                                                    |
|                                                                                                  |                                | 24 VDC    | M16-A□-24D  | M165-A□-24D   |                                                                                                                    |
|                                                                                                  | Full voltage incandescent lamp | 5 VAC/DC  | M16-A□-5    | M165-A□-5     |                                                                                                                    |
|                                                                                                  |                                | 12 VAC/DC | M16-A□-12   | M165-A□-12    |                                                                                                                    |
|                                                                                                  |                                | 24 VAC/DC | M16-A□-24   | M165-A□-24    |                                                                                                                    |
|                                                                                                  | Transformer 24 V secondary     | 110 VAC   | M16-A□-T1   | M165-A□-T1    |                                                                                                                    |
|                                                                                                  |                                | 220 VAC   | M16-A□-T2   | M165-A□-T2    |                                                                                                                    |
|                                                                                                  |                                |           |             |               |                                                                                                                    |
| Rectangular<br> | Full voltage LED (DC)          | 5 VDC     | M16-J□-5D   | M165-J□-5D    |                                                                                                                    |
|                                                                                                  |                                | 12 VDC    | M16-J□-12D  | M165-J□-12D   |                                                                                                                    |
|                                                                                                  |                                | 24 VDC    | M16-J□-24D  | M165-J□-24D   |                                                                                                                    |
|                                                                                                  | Full voltage incandescent lamp | 5 VAC/DC  | M16-J□-5    | M165-J□-5     |                                                                                                                    |
|                                                                                                  |                                | 12 VAC/DC | M16-J□-12   | M165-J□-12    |                                                                                                                    |
|                                                                                                  |                                | 24 VAC/DC | M16-J□-24   | M165-J□-24    |                                                                                                                    |
|                                                                                                  | Transformer 24 V secondary     | 110 VAC   | M16-J□-T1   | M165-J□-T1    |                                                                                                                    |
|                                                                                                  |                                | 220 VAC   | M16-J□-T2   | M165-J□-T2    |                                                                                                                    |
|                                                                                                  |                                |           |             |               |                                                                                                                    |

## Buzzers

### Non-illuminated Buzzer

| Appearance                                                                                    | Item           |                 | Part number            |                      |                             |                                    |                             |                      |
|-----------------------------------------------------------------------------------------------|----------------|-----------------|------------------------|----------------------|-----------------------------|------------------------------------|-----------------------------|----------------------|
|                                                                                               |                |                 | Standard sound (80 dB) |                      |                             |                                    | High sound (70 - 100 dB)    |                      |
| Buzzer<br> | Sound          | With jumper     | Intermittent           | Intermittent (short) | Intermittent (high-pitched) | Intermittent (short, high-pitched) | Intermittent (high-pitched) | Intermittent (short) |
|                                                                                               |                | Without jumper  | Continuous             | Intermittent (long)  | Continuous (high-pitched)   | Intermittent (long, high-pitched)  | Continuous                  | Intermittent (long)  |
|                                                                                               | Supply voltage | 6 VAC/DC        | M2BJ-B06               | M2BJ-B06A            | M2BJ-B06B                   | M2BJ-B06C                          | M2BJ-BH06D                  | M2BJ-BH06E           |
|                                                                                               |                | 12 to 24 VAC/DC | M2BJ-B24               | M2BJ-B24A            | M2BJ-B24B                   | M2BJ-B24C                          | M2BJ-BH24D                  | M2BJ-BH24E           |
|                                                                                               |                | 12 to 24 DC     | M2BJ-B24-D             | —                    | M2BJ-B24B-D                 | —                                  | M2BJ-BH24D-D                | M2BJ-BH24E-D         |

## Emergency Stop Switches

### Non-illuminated Push-lock, Turn-reset Systems

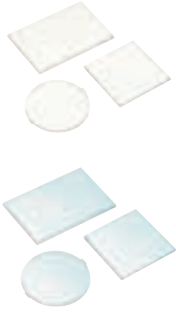
| Appearance                                                                                            | Button type      | Terminal        | Contact type | Part number                        |
|-------------------------------------------------------------------------------------------------------|------------------|-----------------|--------------|------------------------------------|
| Emergency stop<br> | 30 dia. red head | Solder terminal | SPST-NC      | A165E-S-01                         |
|                                                                                                       |                  |                 | DPST-NC      | A165E-S-02                         |
|                                                                                                       |                  |                 | TPST-NC      | A165E-S-03U (Unibody construction) |
|                                                                                                       | 40 dia. red head | Solder terminal | SPST-NC      | A165E-M-01                         |
|                                                                                                       |                  |                 | DPST-NC      | A165E-M-02                         |
|                                                                                                       |                  |                 | TPST-NC      | A165E-M-03U (Unibody construction) |

### Illuminated Push-lock, Turn-reset Systems

| Appearance                                                                                            | Illumination | Rated voltage | Button type      | Terminal        | Contact type | Part number     |
|-------------------------------------------------------------------------------------------------------|--------------|---------------|------------------|-----------------|--------------|-----------------|
| Emergency stop<br> | LED          | 24 VDC        | 30 dia. red head | Solder terminal | SPST-NC      | A165E-LS-24D-01 |
|                                                                                                       |              |               |                  |                 | DPST-NC      | A165E-LS-24D-02 |
|                                                                                                       |              |               | 40 dia. red head | Solder terminal | SPST-NC      | A165E-LM-24D-01 |
|                                                                                                       |              |               |                  |                 | DPST-NC      | A165E-LM-24D-02 |
|                                                                                                       |              |               |                  |                 |              |                 |
|                                                                                                       |              |               |                  |                 |              |                 |



## Accessories

| Item                                | Appearance                                                                          | Classification                                  |                    |                        | Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                        | Part number                               |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------|--------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Switch guards                       |    | Rectangular                                     | Square and round   |                        | Cannot be used with the dust cover.                                                                                                                                                                                                                                                                                                                                                                                                            | A16ZJ-5050<br>A16ZA-5050                  |
| Dust covers                         |    | Rectangular                                     | Square<br>Round    |                        | Cannot be used with the switch guard.                                                                                                                                                                                                                                                                                                                                                                                                          | A16ZJ-5060<br>A16ZA-5060<br>A16ZT-5060    |
| Panel plugs                         |    | Rectangular                                     | Square<br>Round    |                        | Used for covering the panel cutouts for future panel expansion.                                                                                                                                                                                                                                                                                                                                                                                | A3BJ-3003<br>A3BA-3003<br>A3BT-3003       |
| Legend panels                       |    | Rectangular                                     | IP40               | Opaque<br>Transparent  | A single legend panel (transparent) is included with a standard model.<br><br>The opaque legend panel can be used with the IP40 and oil-resistant IP65.                                                                                                                                                                                                                                                                                        | A16ZJ-5204<br>A16ZJ-5202                  |
|                                     |                                                                                     |                                                 | Oil-resistant IP65 | Opaque<br>Transparent  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16ZJ-5204<br>A16ZJ-5203                  |
|                                     |                                                                                     | Square                                          | IP40               | Opaque<br>Transparent  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16ZA-5204<br>A16ZA-5202                  |
|                                     |                                                                                     |                                                 | Oil-resistant IP65 | Opaque<br>Transparent  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16ZA-5204<br>A16ZA-5203                  |
|                                     |                                                                                     | Round                                           | IP40               | Opaque<br>Transparent  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16ZT-5204<br>A16ZT-5202                  |
|                                     |                                                                                     |                                                 | Oil-resistant IP65 | Opaque<br>Transparent  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16ZT-5204<br>A16ZT-5203                  |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
| Color caps (for IP40)               |    | LED indicator/incandescent lamp/non-illuminated |                    | White<br>Red<br>Yellow | Insert one of the following letters into the box (□).<br>J: Rectangular<br>A: Square<br>T: Round<br><br>The color cap is supplied. Replace the cap if the color is to be changed. When using an LED indicator, be sure to use a color cap that matches the luminescent color of the LED.<br>The materials used for the IP40 and oil-resistant IP65 are different, so be sure to use a color cap that matches the specifications of the switch. | A16Z□-5001W<br>A16Z□-5001R<br>A16Z□-5001Y |
|                                     |                                                                                     | LED indicator                                   |                    | Green                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5001GY                              |
|                                     |                                                                                     | Incandescent lamp/non-illuminated               |                    | Blue<br>Green          |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5001A<br>A16Z□-5001G                |
|                                     |                                                                                     | Non-illuminated                                 |                    | Black                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5011B                               |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
| Color caps (for oil-resistant IP65) |  | LED indicator/incandescent lamp/non-illuminated |                    | White<br>Red<br>Yellow |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5101W<br>A16Z□-5101R<br>A16Z□-5101Y |
|                                     |                                                                                     | LED indicator                                   |                    | Green                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5101GY                              |
|                                     |                                                                                     | Incandescent lamp/non-illuminated               |                    | Blue<br>Green          |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5101A<br>A16Z□-5101G                |
|                                     |                                                                                     | Non-illuminated                                 |                    | Black                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                | A16Z□-5111B                               |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
|                                     |                                                                                     |                                                 |                    |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |

| Item                        | Appearance                                                                          | Applicable types  |                           |                          |               |           | Remarks                                                                                    | Part number |
|-----------------------------|-------------------------------------------------------------------------------------|-------------------|---------------------------|--------------------------|---------------|-----------|--------------------------------------------------------------------------------------------|-------------|
|                             |                                                                                     | Pushbutton Switch | Knob-type Selector Switch | Key-type Selector Switch | E-Stop Switch | Indicator |                                                                                            |             |
| Pushbutton switch extractor |  | Yes               | No                        | No                       | No            | Yes       | Convenient for extracting pushbutton switches.                                             | A3PJ-5080   |
| Screw fitting               |  | Yes               | Yes                       | Yes                      | Yes           | Yes       | Convenient for ganged installation.<br>Tighten to a torque of 0.39 N • m (5 kgf • cm) min. | A16Z-3004   |
| Lamp unit extractor         |  | Yes               | Yes                       | Yes                      | Yes           | Yes       | Convenient for extracting the switch unit and lamps.                                       | A16Z-5080   |

## Contact Configurations for Selector Switches

| 2 Position Type                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Knob position                                                                       | SPDT (SW)                                                                           | DPDT (SW1)                                                                          | DPDT (SW2)                                                                          |
|  |  |  |  |
|  |  |  |  |
| 3 Position Type                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Knob position                                                                       | DPDT (SW1)                                                                          |                                                                                     | DPDT (SW2)                                                                          |
|  |  |                                                                                     |  |
|  |  |                                                                                     |  |
|  |  |                                                                                     |  |

2 Position



3 Position



# Complete your panel with these reliable Omron products



## Power Supplies

Switching power supplies provide reliable DC power for controls from line supply voltage. Omron's broad selection includes open frame and enclosed models, UL508 rated and CE conforming types, some with power factor correction (PFC) built in.



## Terminal Blocks

Omron's wiring solutions organize and simplify control panel wiring. We offer relay terminal blocks, screw terminals, sensor connector blocks, and cables.

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## Touch Screen Terminals

Give operators the big picture with Omron's high-visibility HMI terminals. Available in touch screens, two-line message displays and function-key models.



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