OMRON

PUSHBUTTONS

Pushbuttons, Selector Switches and Pilot Lights

NEW Enhanced brightness with low current consumption

Build-to-Order Guides help you select the right model.

- »Wide range of styles in 16 mm and 22 mm
- »Over 6,000 models available
- »Short delivery time
- »Assembled to your order in U.S.A.

Why Choose Omron Industrial Switches?

Omron offers build-to-order Pushbuttons, Selector Switches and Pilot Lights to shorten delivery time and increase the availability of the exact parts you want. They are assembled at Omron's manufacturing facility in St. Charles, IL, so no matter where you are located, parts reach you in a just few days or overnight as needed. Use this guide to choose from over 6,000 part combinations as well as legend plates and accessories. Choose Omron for your next control panel project.

Reduce Installation Time

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

16 mm

22 mm

Single-action latching lever for fast, secure mounting.

Reduce Panel Depth

Improved design for reduced panel depth.

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

22 mm

IP65 oil-tight construction

16 mm

IP65 oil-tight models and IP40 commercial models

Other Features

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

22 mm

Normally closed contacts approved for safety circuits.

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

16 mm

Contact blocks rated for general purpose and microloads.

E-Stops and buzzers – protect and alert.

Super-bright LED illumination offers 60 times longer life than incandescent lamps, reducing maintenance.

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

Ultra-bright, Energy Saving LEDs

Everyone wants to do their part for the environment and reducing power consumption can make a small but notable difference. Omron redesigned lighted pushbuttons, selector switches and indicators to take advantage of ultra-bright, energy-saving LEDs. Available now on 16 mm models, the new LEDs will be available soon on 22 mm models.

Bright, Evenly Lit Colors

Design your control panels with Omron's ultra-bright switches for appealing aesthetics and rich color evenly distributed across the lighted surface. Compared to Omron's previous LED, switches using the new lamp are fully 20% brighter for improved visibility for operators.

How Big is the Energy Savings?

Depending on the lamp voltage and color, Omron has reduced the current consumption by 20% to 73%! The milliamps saved add up to a fair energy savings over the years of operation and increased LED lifetime.

Lamp voltage	LED color	Before	After	Reduction
5 VDC	Red	15 mA	8 mA	47%
	Yellow, White, Green, Blue	30 mA	8 mA	73%
12 VDC	All colors	15 mA	8 mA	47%
24 VDC	All colors	10 mA	8 mA	20%

Eliminate Wiring Errors

The 12 V and 24 V switches now accept both AC and DC voltages. Non-polarized terminals are now provided to eliminate polarity errors during wiring. This flexibility also helps reduce inventory costs for panel builders and for customers who buy their machines.

Locally Built to Your Order

Fast Delivery From Local Stock

Omron builds the exact switches you need, when you need them, from a large local stock of components. Omron's manufacturing facility in St. Charles, Illinois makes 100% quality tested switches on a modern production line that meets both ISO-9000 and ISO-14000 standards.

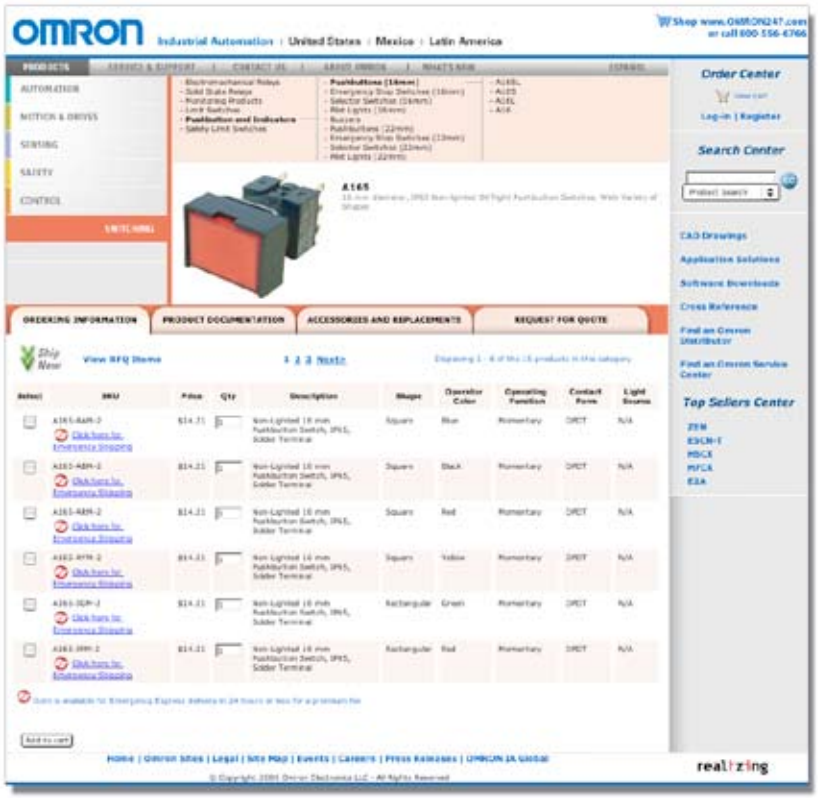
Contact your Omron sales representative today for build-to-order switches and custom-built control panels.

Do You Need Custom-Built Panels?

Our manufacturing facility is a UL-certified panel builder ready to help you design and build control panels using Omron pushbutton switches, pilot lights, power supplies and other controls. We even incorporate controls from your preferred suppliers to maintain your standardized usage. Each panel is fully tested, documented then delivered ready to install on your machine.

Do You Need More Info?

Visit **omron247.com** and enter "pushbuttons," "switches," or "pilot lights" in our search center to learn more. You can also view part numbers of our most popular pushbutton types with complete part number description and pricing.



A22 Series: Overview

Reliable oil-tight pushbutton switches offer a wide range of shapes and colors. A locking lever ensures easy mounting and removal of the switch unit. To increase wiring efficiency and decrease mounting depth, switches feature a three-row mounting of switch contact blocks.

- Finger protection mechanism on switch unit provided as a standard feature
- Mounted using either open-type (fork-type) or closed-type (round-type) crimp terminals.
- Use 25-dia. ring to install in 25-dia. panel cutouts.
- Wide range of shapes and colors.
- IP65 oil resistant
- EN60947-5-1, IEN60947-5-1

Available Styles	Series	Page
Pushbutton Switch, Non-Lighted	A22	5
Pushbutton Switch, Lighted	A22L	5
Emergency Stop Switch, Non-Lighted	A22E	6
Emergency Stop Switch, Lighted	A22EL	6
Selector Switches, Non-Lighted	A22S	7
Selector Switches, Lighted	A22W	7
Keyed Selector Switches	A22K	8
Pilot Light	M22	9

A22 Non-Lighted Pushbutton Switches, 22 mm dia., A22L Lighted Pushbutton Switches, 22 mm dia.

Non-Lighted

Round Flat **A22-F**

Round Projection **A22-T**

Round Full Guard **A22-G**

Round Half Guard **A22-H**

Non-Lighted

Square Projection **A22-C**

Square Full Guard **A22-D**

Round Mushroom Head 30 mm dia. **A22-S**

Round Mushroom Head 40 mm dia. **A22-M**

Lighted

Lighted Round Projection **A22L-T**

Lighted Round Full Guard **A22L-G**

Lighted Round Half Guard **A22L-H**

Lighted Square Projection **A22L-C**

Lighted Square Full Guard **A22L-D**

A22 1 2 3 4 5 6

1 Lighted/Non-lighted

Code	Description
No symbol	Non-lighted
L	Lighted

2 Flange Shape

Non-lighted	
Code	**Description**
F	Round/Flat
T	Round/Projection
G	Round/Full-guard
H	Round/Half-guard
C	Square/Projection
D	Square/Full-guard
S	Round/Mushroom (30-dia. head)
M	Round/Mushroom (40-dia. head)
Lighted	
T	Round/Projection
G	Round/Full-guard
H	Round/Half-guard
C	Square/Projection
D	Square/Full-guard

3 Illumination Color

Code	Description
R	Red
G	Green
Y	Yellow
W	White
A	Blue
B	Black (for non-lighted type only)

4 Light Source

Without Voltage Reduction Unit		
Code	**Operating Voltage**	
No symbol	Non-lighted	
6D	LED	6 VDC
6A		6 VAC
12A		12 VAC/VDC
24A		24 VAC/VDC
With Voltage Reduction Unit		
T1	LED	110 VAC (See note 1)
T2		220 VAC (See note 2)

5 Contacts

Code	Description
10	SPST-NO
01	SPST-NC
11	SPST-NO + SPST-NC
20	SPST-NO + SPST-NO
02	SPST-NC + SPST-NC

Note: 1. Add a "–1" suffix to part number when ordering two contact styles consisting of one contact block.

2. Double contact block types add 18mm in depth and 10 mm in width from single contact types.

6 Switch Action

Code	Description
M	Momentary
A	Alternate

Note: 1. Operational voltage: 95 to 115 VAC

2. Operational voltage: 190 to 230 VAC

3. The LED lamp (24 VAC/VDC) can be lit by directly applying 100 VAC/VDC (200 VAC/VDC) to the lamp terminal.

4. LED incorporates the 24 VAC/VDC type to the Voltage Reduction Unit models.

A22E Series: Emergency Stop Switches, 22 mm dia.

Use these e-stop switches as part of a Safety Category 4 system.

- Direct opening mechanism opens the circuit when the contact welds.
- Safety lock mechanism prevents operating errors.
- Easily mount and remove Switch Blocks using a lever.
- Mount three Switch Units in series to improve wiring efficiency.
- Finger protection mechanism on Switch Unit provided as a standard feature.
- Install using either round or forked crimp terminals.
- Oil-resistant to IP65

Push-pull

Round Medium
40 mm dia.
Push-pull
A22E-MP

Round Large
60 mm dia.
Push-pull
A22E-LP

Push-lock turn-reset

Round Large
30 mm dia.
Push-lock turn-reset
A22E-S

Round Medium
40 mm dia.
Push-lock turn-reset
A22E-M

Round Large
60 mm dia.
Push-lock turn-reset
A22E-L

Lighted Round
Medium 40 mm dia.
Push-lock turn-reset
A22EL-M

A22E 1 2 3 4 5

1 Lighted/Non-lighted

Code	Description
None	Non-lighted
L	Lighted (See note.)

Note: Lighted Emergency Stop Switches are available only for the medium (M) push-lock turn-reset models.

2 Head Size

Code	Size	Description
MP	Medium 40 dia.	Push-pull
LP	Large 60 dia.	
S	Small 30 dia.	Push-lock turn-reset
M	Medium 40 dia.	
L	Large 60 dia.	
SK	Small 30 dia.	Push-lock key reset
MK	Medium 40 dia.	

3 Light Source

Code	Operating Voltage	
Without Voltage Reduction Unit		
None	Non-lighted	
6D	LED	6 VDC
6A		6 VAC
12A		12 VAC/VDC
24A		24 VAC/VDC
With Voltage Reduction Unit		
None	Non-lighted	
T1	LED	110 VAC
T2		220 VAC

Note: 1. The LED lamp (24 VAC/VDC) can be lit by directly applying 110 VAC/VDC (220 VAC/VDC) to the lamp terminal. LED incorporates the 24 VAC/VDC models.
2. Equipped with 24 VAC/DC LED.

4 Contacts

Code	Description
01	SPST-NC
11	SPST-NO + SPST-NC
02	DPST-NC

Note: 1. Add a "–1" suffix to part number when ordering two contact styles consisting of one contact block.
2. Double contact block types add 18mm in depth and 10 mm in width from single contact types.

5 Configuration

Code	Configuration
None	Switch only
B	Switch with Integrated Control Box

A22S Selector Switches, Non-Lighted, 22 mm dia.
A22W Selector Switches, Lighted, 22 mm dia.

Knob style selector switches provide users a reliable way to start or choose between machine operations. Two- and three-position switches with manual or automatic reset are available in non-lighted and lighted models. Use optional legend plates to identify the selections.

Non-lighted
Selector Switch
A22S

Lighted
Selector Switch
A22W

A22 □-□-□-□-□ (1 2 3 4 5)

1 Lighted/Non-Lighted

Code	Description
S	Non-lighted
W	Lighted

2 Number of Positions/Reset Method

Code	Description
2M	2 Positions/Maintained
2A	2 Positions/Spring return
3M	3 Positions/Maintained
3A	3 Positions/Spring return
C2M	2 Positions/Maintained extended lever
C2A	2 Positions/Spring return extended lever
C3M	3 Positions/Maintained extended lever
C3A	3 Positions/Spring return extended lever

3 Operator Color

Code	Description
None	Black
R	Red
G	Green
Y	Yellow
A	Blue

4 Light Source

Without transformer		
Code	**Rated Voltage**	
None	Non-lighted	
6D	LED	6 VDC
6A		6 VAC
12A		12 VAC/DC
24A		24 VAC/DC
With transformer		
None	Non-lighted	
T1	LED	110 VAC*[1]
T2		220 VAC*[2]

Note: 1. Operational voltage: 95 to 115 VAC
2. Operational voltage: 190 to 230 VAC
3. The LED lamp (24 VAC/VDC) can be lit by directly applying 100 VAC/VDC (200 VAC/VDC) to the lamp terminal.
4. LED incorporates the 24 VAC/VDC type to the Voltage Reduction Unit models.

5 Contacts

Code	Description
10	SPST-NO (2 position models)
01	SPST-NC (2 position models)
11	SPST-NO+SPST-NC
20	SPST-NO+SPST-NO
02	SPST-NC+SPST-NC

Note: 1. Add a "–1" suffix to part number when ordering two contact styles consisting of one contact block.
2. Double contact block types add 18mm in depth and 10 mm in width from single contact types.

A22K Series: Keyed Selector Switches, 22 mm dia.

Design in extra security with keyed selector switches. Only authorized operators are allowed to change settings using the key.

Keyed selector switch
A22K

A22K 1 2 -

1 Number of Positions/Reset Method

Code	Positions	Reset Method	Key release position
2ML	2 Positions	Maintained	Left
2M			Left and right
2AL		Spring return	Left
3ML	3 Positions	Maintained	Left
3M			Left and right
3MC			Center
3AC		Spring return	Center

2 Contacts

Code	Description
10	SPST-NO (2 position models)
01	SPST-NC (2 position models)
11	SPST-NO+SPST-NC
20	DPST-NO
02	DPST-NC

Note: 1. Add a "–1" suffix to part number when ordering two contact styles consisting of one contact block.

2. Double contact block types add 18mm in depth and 10 mm in width from single contact types.

Contact Configurations for Selector Switches
A22K, A22S, A22W Models

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
↖			
↑			
↗			

M22 Series: Pilot Lights, 22 mm dia.

Pilot lights indicate status of machinery and processes on control panels. Bright LED light source is easy to read under most lighting conditions.

Square projection pilot light
M22-CR

Round flat pilot light
M22-FR

M22 □-□-□

1 Display Shape

Code	Description
F	Round/Flat
C	Square/Projection

2 Illumination Color

Code	Description
R	Red
G	Green
Y	Yellow
W	White
A	Blue

3 Light Source

Code	Operating voltage	
Without Voltage Reduction Unit		
6D	LED	6 VDC
6A		6 VAC
12A		12 VAC/VDC
24A		24 VAC/VDC
With Voltage Reduction Unit		
T1	LED	110 VAC
T2		220 VAC

Note: The LED lamp (24 VAC/VDC) can be lit by directly applying 110 VAC/VDC (220 VAC/VDC) to the lamp terminal. LED incorporates the 24 VAC/VDC type.

A16 Series: Overview

Space-saving pushbutton switches offer a wide range of sizes, shapes and colors to match your panel requirements. Lighted models use color LED lamps instead of colored lenses so the switch appears white when unlit and a vivid color when lit. The LED lamp lasts 60 times longer than switches with incandescent lamps, lowering maintenance costs over the life of the machine.

- New Enhanced Brightness
- New Low Current types
- New non-polarized types
- New vivid color options including "Pure White"
- Quick and easy assembly, snap-in switch
- Shapes to match your aesthetic requirements: round, square and rectangular
- Wide range of switching capacity from standard to microload
- High reliability, in standard IP40 and oil-resistant IP65 models
- Short mounting depth, less than 28.5 mm below panel
- Conforms to EN60947-5-1, IEC60947-5-1

Available Styles	Series	Page
Pushbutton Switch, Non-Lighted, IP40	A16	11
Pushbutton Switch, Non-Lighted, IP65	A165	11
Pushbutton Switch, Lighted, IP40	A16L	11
Pushbutton Switch, Lighted, IP65	A165L	11
Emergency Stop Switch, Non-Lighted	A165E	12
Emergency Stop Switch, Lighted	A165E-L	12
Selector Switches, Non-Lighted, IP65	A165S	13
Selector Switches, Lighted, IP65	A165W	13
Keyed Selector Switches, IP65	A165K	14
Pilot Light, IP40	M16	15
Pilot Light, IP65	M165	15
Buzzer	M2BJ	15

A16 Series: Pushbutton Switches, 16 mm dia.

These switches deliver the wide range of options to match most of your panel building needs:

- Protection: IP65 oil-resistant models (A165) and standard IP40 models (A16)
- Lighting: Non-lighted (A16 and A165) and lighted (A16L and A165L)

Round

Lit and Unlit Round Projection
A16-T, A16L-T
A165-T, A165L-T

Lighted Round Projection, 110 VAC Transformer
A16L-T-T1
A165L-T-T1

Lighted Round Projection, 220 VAC Transformer
A16L-T-T2
A165L-T-T2

Square

Lit and Unlit Square 2-Way Guard
A16-A, A16L-A,
A165-A, A165L-A

Lighted Square 2-Way Guard, 110 VAC Transformer
A16L-A-T1
A165L-A-T1

Lighted Square 2-Way Guard, 220 VAC Transformer
A16L-A-T2
A165L-A-T2

Rectangular

Lit and Unlit Rectangular 2-Way Guard
A16-J, A16L-J,
A165-J, A165L-J

Lighted Rectangular 2-Way Guard, 110 VAC Transformer
A16L-J-T1
A165L-J-T1

Lighted Rectangular 2-Way Guard, 220 VAC Transformer
A16L-J-T2
A165L-J-T2

A16 5 - L - J R M - 24D - 2
(1 2 3 4 5 6 7)

1 Degree of Protection

Symbol	Protection
None	IP40
5	IP65 oil-resistant

2 Lighted/Non-lighted

Symbol	Type
None	Non-lighted
L	Lighted

3 Shape of Pushbutton

Symbol	Shape	
J	Rectangular	2-way guard
A	Square	2-way guard
T	Round	Projecting model

4 Color of Pushbutton

Symbol	Color
R	Red
Y	Yellow
PY	Pure yellow
G	Green
W	White
PW	Pure White
A	Blue
B	Black (non-lighted models only)

"Colored-illumination" models operate in the way shown below:

Unlit	Lit
White	Color

The built-in LED is colored.

5 Switch Operation

Symbol	Operation
M	Momentary
A	Alternate

Momentary. Self-resetting.
Alternate. Self-holding.

6 Light Source

Symbol	Type	Operating voltage	Rated voltage
None	Non-lighted		
5D	LED	5 ±5% VDC	5 VDC
12D		12 ±5% VAC/VDC	12 VAC/VDC
24D		24 ±5% VAC/VDC	24 VAC/VDC

Voltage Reduction Unit (24-V Built-in LED)

Symbol	Type	Operating voltage	Rated voltage
T1	LED	90 to 121 VAC/VDC	110 VAC
T2		180 to 242 VAC/VDC	220 VAC

Note:
1. Solder terminals are available only with 100-V models.
2. The Voltage Reduction Unit is not available for models with PCB terminals.
3. "T2" is available only for the Screw-Less Clamp type.

7 Contact Configuration

Symbol	Type	Terminal
1	SPDT	Solder Terminal
2	DPDT	
1P	SPDT	PCB Terminal
2P	DPDT	
2S	DPDT	Screw-Less Clamp

Only DPDT contacts are available with Screw-Less Clamp.

A165E Series: Emergency Stop Switches, 16 mm dia.

Use these e-stop switches as part of a Safety Category 4 system.

- Direct opening mechanism to open contacts in emergencies, such as when they are welded.
- Conforms to EN60418.
- Includes a safety lock to prevent misuse.
- Features separate construction that allows the switch to be separated for easier wiring and one-piece-like construction that allows easier handling.
- Models available with 3 contacts built into a single block (A165E-U).

Push-lock turn-reset

Lighted Round Small
30 mm dia.,
Push-lock turn-reset
A165E-LS

Round Medium
40 mm dia.,
Push-lock turn-reset
A165E-S

Round Medium
40 mm dia.,
Push-lock turn-reset
A165E-M

A165E 1 2 3

IP65 (Oil-resistant)

1 Operation Unit Shape and Functions

Code	Functions		Pushbutton
S	Non-lighted	Push-lock, turn-reset	30 dia.
LS	Lighted		
M	Non-lighted		40 dia.
LM	Lighted		

2 Light Source

Code	Type	Operation voltage	Rated voltage
None	Non-lighted	–	–
5D	LED	5 VDC	5 VDC
12D	LED	12 VDC	12 VAC/DC
24D	LED	24 VDC	24 VAC/DC

Note: Models with separate construction (SPST-NC and DPST-NC) are for normal loads only. One-piece models (TPST-NC) are for either normal loads or microloads.

3 Contacts

Code	Description
01	SPST-NC
02	DPST-NC
03U	TPST-NC (See note.)

Note: TPST-NC models have one-piece construction with the contact unit. Only non-lighted models are available.

A165S Selector Switches, Non-Lighted, 16 mm dia.
A165W Selector Switches, Lighted, 16 mm dia.

Knob style selector switches provide users a reliable way to start or choose between machine operations. Two- and three-position switches with manual or automatic reset are available in non-lighted and lighted models. Use optional legend plates to identify the selections.

Non-Lighted

Square Base Selector Switch
A165S-A

Rectangular Base Selector Switch
A165S-J

Round Base Selector Switch
A165S-T

Lighted

Lighted Square Base Selector Switch
A165W-A

Lighted Rectangular Base Selector Switch
A165W-J

Lighted Round Base Selector Switch
A165W-T

A 165 W - A - 2A R - 24D - 1
(1 2 3 4 5 6)

1 Lighted/Non-lighted

Symbol	Type
S	Non-lighted
W	Lighted

2 Shape of Selector

Symbol	Shape
J	Rectangular
A	Square
T	Round

3 Number of Notches/Resetting Method

Symbol	No. of notches	Reset method
2M	2 notches	Manual
2A		Automatic
3M	3 notches	Manual
3A		Automatic

4 Color of Selector

Symbol	Color
None	Black (non-lighted models only)
R	Red
G	Green
Y	Yellow

5 Light Source

Symbol	Type
None	Non-lighted
5D	5 VDC LED
12D	12 VAC/DC LED
24D	24 VAC/DC LED

6 Contact Configuration

Symbol	Type	Terminal
1	SPDT	Solder terminal
2	DPDT	
1P	SPDT	PCB terminal
2P	DPDT	
2S	DPDT	Screw-Less Clamp

Note: 1. Only DPDT contacts are available with 3-notch models and Screw-Less Clamp models.
2. PCB terminals are available only with 2-notch models.

Voltage Reduction Unit (24-V Built-in LED)

Symbol	Type	Rated voltage
T1	LED	110 VAC/VDC
T2		220 VAC/VDC

Note: 1. Solder terminals are only available with "T1" 110-V models.
2. The Voltage Reduction Unit is not available for models with PCB terminals.

A165K Series: Keyed Selector Switches, 16 mm dia.

Design in extra security with keyed selector switches. Only authorized operators are allowed to change settings using the key.

Square Base Keyed Selector Switch
A165K-A

Rectangular Base Keyed Selector Switch
A165K-J

Round Base Keyed Selector Switch
A165K-T

A165K-[1]-[2]-[3]

1 Shape of Selector

Symbol	Shape	Color
J	Rectangular	Black
A	Square	
T	Round	

2 Number of Notches/Resetting Method

Symbol	No. of notches	Reset method	Key release position
2ML	2 notches	Manual	Left
2MR			Right
2M			Left and right
2AL		Automatic	Left
3MC	3 notches	Manual	Center
3MR			Right
3ML			Left
3M			Left, right, and center
3AC	3 notches	Automatic	Center

3 Contact Configuration

Symbol	Type	Terminal
1	SPDT	Solder Terminal
2	DPDT	
2S	DPDT	Screw-Less Clamp

Note: 1. Only DPDT contacts are available with 3-notch models.
2. PCB terminals are available only with 2-notch models.

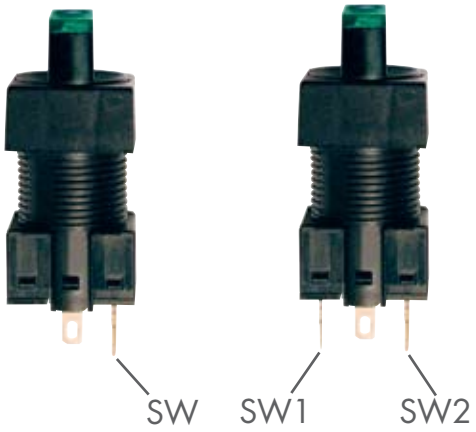
Contact Configurations for Selector Switches
A165K, A165S, A165W Models

2 Position Type

Knob position	SPDT (SW)	DPDT (SW1)	DPDT (SW2)
↖			
↗			

3 Position Type

Knob position	DPDT (SW1)	DPDT (SW2)
↖		
↑		
↗		



M16 Series: Pilot Lights, 16 mm dia.

Pilot lights indicate status of machinery and processes on control panels.
Bright LED light source is easy to read under most lighting conditions.

- Easy mounting and removal of socket unit.
- Standard IP40 and oil-resistant IP65 models

Square Pilot Light
M16-A, M165-A

Rectangular Pilot Light
M16-J, M165-J

Round Pilot Light
M16-T, M165-T

M16-5-TR-24D-S

1 Degree of Protection

Symbol	Protection
No symbol	IP40
5	IP65 oil-resistant

2 Shape of Display

Symbol	Shape
J	Rectangular
A	Square
T	Round

3 Color of Display

Symbol	Color
R	Red
G	Green
Y	Yellow
PY	Pure yellow
W	White
PW	Pure White
A	Blue

4 Light Source

Symbol	Type	Operating voltage	Rated voltage
5D	LED	5 ±5% VDC	5 VDC
12D		12±5% VAC/VDC	12 VAC/VDC
24D		24±5% VAC/VDC	24 VAC/VDC

Voltage Reduction Unit (24-V Built-in LED)

Symbol	Type	Rated voltage
T1	LED	110 VAC/VDC
T2		220 VAC/VDC

Solder terminals are available only with "T1" 110-V models.

5 Terminal Type

Symbol	Terminal type
No symbol	Solder terminals
S	Screw-Less Clamp

M2BJ Series: Panel-Mounted Buzzer, 16 mm dia.

- Four models offer eight different types of sounds, plus two modes with high-sound output
- Intermittent or continuous sound selected by jumper setting
- Jumper storage provided at bottom of unit
- Complements the A16 range of Pushbuttons, Selector Switches and Key Switches.

Standard
Sound Buzzer
M2BJ

High Volume
Sound Buzzer
M2BJ-H

M2BJ-B□□□-□

1 Sound Output

Symbol	Output
None	Standard Sound
H	High Volume Sound

2 Supply Voltage

Symbol	Voltage Range
06	6 VAC/VDC
24	12 to 24 VAC/VDC
24-D	12 to 24 VDC

3 Sound Types

Symbol	Sound with/without jumper
None	Intermittent/Continuous
A	Intermittent short/Intermittent long
B	Intermittent high pitched/Continuous high pitched
C	Intermittent short, high-pitched/Intermittent long, high-pitched
D	Intermittent high-pitched/Continuous
E	Intermittent short/Intermittent long

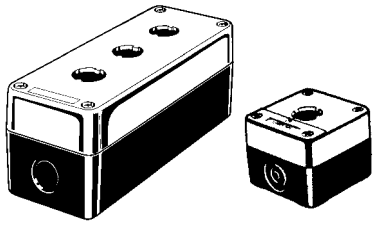
Accessories: 22 mm Switches

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
			Mircoload		A22-10S
		SPST-NC	General-purpose load		A22-01
			Mircoload		A22-01S
		SPST-NO+SPST-NC	General-purpose load		A22-11
		DPST-NO	General-purpose load		A22-20
			Mircoload		A22-20S
		DPST-NC	General-purpose load		A22-02
			Mircoload		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
Legend plate frames — 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. Material: nickel-plated zinc.	A22Z-3580
		For full-guard models			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 25mm 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, 22 mm *continued*

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	|		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
				Transparent		A22Z-3453C
	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)			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 lighted pushbutton switch.	A3PJ-5080

Enclosures



Material	Hole Size	Number of Holes	Part Number
Polycarbonate	22.5 mm (0.88 in)	1	A22Z-B101
		2	A22Z-B102
		3	A22Z-B103
	22.5 mm (0.88 in)	1	A22Z-B101Y*

* Yellow box for emergency stop

Accessories, 22 mm *continued*

A22 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
PR	Plastic Rectangular

Code	Material/Shape
PS	Plastic Square

Code	Material/Shape
PX	Plastic Shield

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

Code	Material/Shape
MR	Metal Rectangular

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-HIGH	187 II-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

A22 Custom Engraved Nameplates Order Form

OMRON

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: _____ PO#: _____

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**	**QUANTITY**
Nameplate Color	Black	Yellow	Red	White	
Text Color	Black	White			

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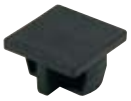
Accessories, 16 mm Switches

Item	Appearance	Classification			Remarks	Part Number
Switch guards		Rectangular			Cannot be used with the dust cover.	A16ZJ-5050
		Square and Round				A16ZA-5050
Dust covers		Rectangular			Cannot be used with the switch guard.	A16ZJ-5060
		Square				A16ZA-5060
		Round				A16ZT-5060
Panel plugs		Rectangular			Used for covering the panel cutouts for future panel expansion.	A3BJ-3003
		Square				A3BA-3003
		Round				A3BT-3003
Legend panels		Rectangular	IP40	Opaque	A single legend panel (transparent) is included with a standard model. The opaque legend panel can be used with the IP40 and the oil-resistant IP65.	A16ZJ-5204
				Transparent		A16ZJ-5202
			Oil-resistant IP65	Opaque		A16ZJ-5204
				Transparent		A16ZJ-5203
		Square	IP40	Opaque		A16ZA-5204
				Transparent		A16ZA-5202
			Oil-resistant IP65	Opaque		A16ZA-5204
				Transparent		A16ZA-5203
		Round	IP40	Opaque		A16ZT-5204
				Transparent		A16ZT-5202
			Oil-resistant IP65	Opaque		A16ZT-5204
				Transparent		A16ZT-5203
Color caps (for IP40)		LED indicator/ Non-lighted		White	Insert one of the following letters into the box (❑). J: Rectangular A: Square T: Round 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. 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
				Red		A16Z❑-5001R
				Yellow		A16Z❑-5001Y
		LED indicator		Green		A16Z❑-5001GY
		Non-lighted		Blue		A16Z❑-5001A
				Green		A16Z❑-5001G
		Non-lighted		Black		A16Z❑-5011B
Color caps (for oil-resistant IP65)		LED indicator/ Non-lighted		White		A16Z❑-5101W
				Red		A16Z❑-5101R
				Yellow		A16Z❑-5101Y
		LED indicator		Green		A16Z❑-5101GY
		Non-lighted		Blue		A16Z❑-5101A
				Green		A16Z❑-5101G
		Non-lighted		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. Tighten to a torque of 0.39 N • (5 kgf•cm) min.	A16Z-3004
Lamp unit extractor		Yes	Yes	Yes	Yes	Yes	Convenient for extracting the switch unit and lamps.	A16Z-5080

A16 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": A16N-PS38

A16N-□□□ ← Number from table below

Code	Material/Shape
PR	Plastic Rectangular

Code	Material/Shape
PS	Plastic Square

Code	Material/Shape
PX	Plastic Shield

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

Code	Material/Shape
MR	Metal Rectangular

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
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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-HIGH	187 II-I-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

A16N-PR7

A16N-PS7

A16N-PX7

A16N-PE190
60 mm diameter

A16N-PE191
90 mm diameter

A16 Custom Engraved Nameplates Order Form

OMRON

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:

Company name: _____ Date: _____

Address: _____ Your name: _____

City/State/Zip: _____ Your signature: _____

Attention: _____ PO#: _____

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.

A16N-PR200E

B - Plastic Square
14 characters max.
2 lines max.

A16N-PS200E

C - Plastic Shield
11 characters max.
2 lines max.

A16N-PX200E

D - Metal Rectangular
11 characters max.
2 lines max.

A16N-MR200E

Shape ———	**A**	**B**	**C**	**D**	**QUANTITY**
Nameplate Color	Black	Yellow	Red	White	
Text Color ———	Black	White			

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Shape ———	**A**	**B**	**C**	**D**	**QUANTITY**
Nameplate Color	Black	Yellow	Red	White	
Text Color ———	Black	White			

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Shape ———	**A**	**B**	**C**	**D**	**QUANTITY**
Nameplate Color	Black	Yellow	Red	White	
Text Color ———	Black	White			

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Shape ———	**A**	**B**	**C**	**D**	**QUANTITY**
Nameplate Color	Black	Yellow	Red	White	
Text Color ———	Black	White			

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A02I-E-02

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