

Control Switch

F16 Series



Pilot Light



Non-Illuminated
Push Button Switch
(Ø20 - Flush Type)



Illuminated
Push Button Switch
(Ø20 - Flush Type)



Selector Switch
(Ø20 - Flush Type)



Key Switch
(Ø20 - Flush Type)



Pilot Light



Non-Illuminated
Push Button Switch



Illuminated
Push Button Switch



Selector Switch



Key Switch



Non-Illuminated
Emergency Stop Switch



Illuminated
Emergency Stop Switch



Non-Illuminated
Emergency Stop Switch With
Name Plate



Non-Illuminated
Emergency Stop Switch With
Name Plate



Non-Illuminated
Mushroom Push Button Switch



Illuminated
Mushroom Push Button Switch

Control Switch

F16 Series - Flush Type

Part Number Description

F16 - 1 2 3 4 5 6 7

| Model | KACON F16 Control Switch | | | | | | | | | |
|---|---|---|-----------------|---------------------------------------|-----------------|------------|------------------------------------|---|---|---|
| 1 Operator Type | 1 : Pilot Light | | | 2 : Momentary | | | 3 : Maintained | | | |
| | 4 : 2 Position selector | | | 5 : 3 Position selector | | | 6 : 2 Position key | | | |
| | 7 : 3 Position key | | | 8 : Emergency Stop(Nominal) | | | 9 : Push Mushroom | | | |
| 2 Illumination & Shape | 1 : Non-Illuminated Round | | | 2 : Non-Illuminated square | | | 3 : Non-Illuminated Rectangular | | | |
| | 4 : Non-Illuminated Round(Ø20-Flush Type) | | | 5 : Illuminated Round(Ø20-Flush Type) | | | | | | |
| | 7 : Illumination Round (LED) | | | 8 : Illumination Square (LED) | | | 9 : Illumination Rectangular (LED) | | | |
| 3 Contact Form | 0 : No Contact | | 1 : 1N/O + 1N/C | | 2 : 2N/O + 2N/C | | 3 : 3N/O + 3N/C | | | |
| 4 Color | R : Red | | | G : Green | | | Y : Yellow | | | |
| | W : White | | | B : Blue | | | K : Black | | | |
| 5 Rated voltage | 6VDC | | | 12VDC | | | 24VDC | | | |
| | 220VAC | | | No mark : Standard (no voltage) | | | | | | |
| 6 Selector type | 2 Position | | | 3 Position | | | | | | |
| | Spring Return | | Maintained | Spring Return | | Maintained | | | | |
| | 0 | 2 | | 1 | 6 | 7 | 3 | | | |
| | | | | | | | | | | |
| 7 Key Operator function (Removal position) | 2 Position | | | 3 Position | | | | | | |
| | A | B | D | A | B | C | D | E | F | G |
| | | | | | | | | | | |

Ø20 : Flush Type

General Specification

| | | | | | |
|---------------------------|----------------------------------|---|--|----------------------------|--------|
| Contact Ratings | Contact Form | Standard options : 1N/O + 1N/C and more : 2N/O + 2N/C, 3N/O + 3N/C | | | |
| | Contact Material | Ag Alloy (24K gold plate) | | | |
| | Maximum Switching Current | Max. 5A | | | |
| | Maximum Rated Voltage | 250VAC / 110VDC | | | |
| | Rated Current | Resistance load (AC12/DC12) | | Induction load (AC13/DC13) | |
| | | 3A | 24VDC | 0.7A | 24VDC |
| | | 0.2A | 125VDC | 0.15A | 125VDC |
| | | 3A | 110VAC | 1A | 110VAC |
| | | 1.5A | 250VAC | 0.7A | 250VAC |
| | Minimum Switching Current | 10mA 5VDC | | | |
| LED Module Ratings | Color | Red, Green, Yellow, Blue, White, Black | | | |
| | Rated Voltage | 24VDC, 12VDC, 6VDC, 220VAC(to be released) | | | |
| | Rated Current | Approx. 10mA | | | |
| | Life Cycle | 50,000 hrs | | | |
| | Light Type | LED | | | |
| General Ratings | Insulation Resistance | Min. 100M Ω (500VDC) | | | |
| | Dielectric Strength | 2,000VAC (for 1 minute). | | | |
| | Life Cycle | Mechanical | Push button (release) : Min. 1,000,000 | | |
| | | Electrical | Others : Min. 250,000 | | |
| | Frequency Of On/Off | 1,200 times / hour | | | |
| | Vibration Resistance | Dual wave length 0.1mm(10 ~ 55Hz) | | | |
| | Shock Resistance | Malfunction : 100m/s ² Destruction : 500m/s ² | | | |
| | Ambient Temperature | -20 ~ +70°C (with no icing) | | | |
| | Ambient Humidity | 45 ~ 85%RH | | | |
| | Degree Of Protection | Key, Selector : IP40 / Others : IP65 | | | |

* LED working 50% less than the original brightness after 50000 hours.

Products Selection

| Illumination Method | Shape | Contact Form | Color | Part Number | Rated Voltage |
|---|-------|--------------|--------|-------------|------------------------|
| Ø 20 Illuminated LED Pilot Light - Flush Type  | Round | - | Red | F16-150R | 6VDC 12VDC 24VDC |
| | | | Green | F16-150G | |
| | | | Blue | F16-150B | |
| | | | Yellow | F16-150Y | |
| | | | White | F16-150W | |
| | | | Black | F16-150K | |
| Ø 20 Momentary Non-Illuminated Push Button Switch - Flush Type  | Round | 1N/O + 1N/C | Red | F16-241R | - |
| | | | Green | F16-241G | |
| | | | Blue | F16-241B | |
| | | | Yellow | F16-241Y | |
| | | | White | F16-241W | |
| | | | Black | F16-241K | |
| Ø 20 Momentary Illuminated LED Push Button Switch - Flush Type  | Round | 1N/O + 1N/C | Red | F16-251R | 6VDC 12VDC 24VDC |
| | | | Green | F16-251G | |
| | | | Blue | F16-251B | |
| | | | Yellow | F16-251Y | |
| | | | White | F16-251W | |
| | | | Black | F16-251K | |
| Ø 20 Maintained Non-Illuminated Push Button Switch - Flush Type  | Round | 1N/O + 1N/C | Red | F16-341R | - |
| | | | Green | F16-341G | |
| | | | Blue | F16-341B | |
| | | | Yellow | F16-341Y | |
| | | | White | F16-341W | |
| | | | Black | F16-341K | |
| Ø 20 Maintained Illuminated LED Push Button Switch - Flush Type  | Round | 1N/O + 1N/C | Red | F16-351R | 6VDC 12VDC 24VDC |
| | | | Green | F16-351G | |
| | | | Blue | F16-351B | |
| | | | Yellow | F16-351Y | |
| | | | White | F16-351W | |
| | | | Black | F16-351K | |

















Control Switch

F16 Series - Flush Type

Products Selection

| Illumination Method | Shape | Contact Form | Color | Part Number | Operator Function | Rated Voltage | | |
|---|-------------|--|-------|---------------|---|---------------|---|-------------|
| Ø 20 Non-Illuminated Selector Switch (2 Position) - Flush Type  | Round | 1N/O + 1N/C | Black | Spring Return |  | F16-441K-0 | | |
| | | 2N/O + 2N/C | | | | F16-442K-0 | | |
| | | 3N/O + 3N/C | | | | F16-443K-0 | | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-441K-2 | | |
| | | 2N/O + 2N/C | | | | F16-442K-2 | | |
| | | 3N/O + 3N/C | | | | F16-443K-2 | | |
| Ø 20 Non-Illuminated Selector Switch (3 Position) - Flush Type  | Round | 2N/O + 2N/C | Black | Spring Return |  | F16-542K-1 | | |
| | | 3N/O + 3N/C | | | | F16-543K-1 | | |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-542K-3 | | |
| | | 3N/O + 3N/C | | | | F16-543K-3 | | |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-542K-6 | | |
| | | 3N/O + 3N/C | | | | F16-543K-6 | | |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-542K-7 | | |
| | | 3N/O + 3N/C | | | | F16-543K-7 | | |
| | | Ø 20 Non-Illuminated Key Switch (2 Position) - Flush Type  | Round | 1N/O + 1N/C | Black | Spring Return |  | F16-641K-0A |
| | | | | 2N/O + 2N/C | | | | F16-642K-0A |
| 3N/O + 3N/C | F16-643K-0A | | | | | | | |
| 1N/O + 1N/C | Black | | | Spring Return |  | F16-641K-0B | | |
| 2N/O + 2N/C | | | | | | F16-642K-0B | | |
| 3N/O + 3N/C | | | | | | F16-643K-0B | | |
| 1N/O + 1N/C | Black | | | Maintained |  | F16-641K-2A | | |
| 2N/O + 2N/C | | | | | | F16-642K-2A | | |
| 3N/O + 3N/C | | | | | | F16-643K-2A | | |
| 1N/O + 1N/C | Black | | | Maintained |  | F16-641K-2B | | |
| 2N/O + 2N/C | | | | | | F16-642K-2B | | |
| 3N/O + 3N/C | | | | | | F16-643K-2B | | |
| 1N/O + 1N/C | Black | | | Maintained |  | F16-641K-2D | | |
| 2N/O + 2N/C | | | | | | F16-642K-2D | | |
| 3N/O + 3N/C | | F16-643K-2D | | | | | | |


Products Selection

| Illumination Method | Shape | Contact Form | Color | Part Number | Operator Function | Rated Voltage |
|---|--------|--------------|-------|---------------|---|---------------|
| Ø 20 Non-Illuminated Key Switch (3 Position) - Flush Type | Square | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-1C |
| | | 3N/O + 3N/C | | | | F16-743K-1C |
|  | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-1E |
| | | 3N/O + 3N/C | | | | F16-743K-1E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-6D |
| | | 2N/O + 2N/C | | | | F16-743K-6D |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-6E |
| | | 3N/O + 3N/C | | | | F16-743K-6E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-6F |
| | | 3N/O + 3N/C | | | | F16-743K-6F |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-7A |
| | | 3N/O + 3N/C | | | | F16-743K-7A |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-7E |
| | | 3N/O + 3N/C | | | | F16-743K-7E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-742K-7G |
| | | 3N/O + 3N/C | | | | F16-743K-7G |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3A |
| | | 3N/O + 3N/C | | | | F16-743K-3A |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3B |
| | | 3N/O + 3N/C | | | | F16-743K-3B |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3C |
| | | 3N/O + 3N/C | | | | F16-743K-3C |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3D |
| | | 3N/O + 3N/C | | | | F16-743K-3D |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3E |
| | | 3N/O + 3N/C | | | | F16-743K-3E |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3F |
| | | 3N/O + 3N/C | | | | F16-743K-3F |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-742K-3G |
| | | 3N/O + 3N/C | | | | F16 3K-3G |


Control Switch

F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage |
|--|-------------|--------------|----------|-------------|------------------------|
| Ø 16 Illuminated LED Pilot Light  | Round | - | Red | F16-170R | 6VDC 12VDC 24VDC |
| | | | Green | F16-170G | |
| | | | Blue | F16-170B | |
| | | | Yellow | F16-170Y | |
| | | | White | F16-170W | |
| | | | Black | F16-170K | |
| | Square | - | Red | F16-180R | 6VDC 12VDC 24VDC |
| | | | Green | F16-180G | |
| | | | Blue | F16-180B | |
| | | | Yellow | F16-180Y | |
| | | | White | F16-180W | |
| | | | Black | F16-180K | |
| | Rectangular | - | Red | F16-190R | 6VDC 12VDC 24VDC |
| | | | Green | F16-190G | |
| | | | Blue | F16-190B | |
| Yellow | | | F16-190Y | | |
| White | | | F16-190W | | |
| Black | | | F16-190K | | |


Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage | |
|--|-------------|--------------|----------|-------------|---------------|---|
| Ø 16 Non-Illuminated Momentary Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-211R | - | |
| | | | Green | F16-211G | | |
| | | | Blue | F16-211B | | |
| | | | Yellow | F16-211Y | | |
| | | | White | F16-211W | | |
| | | | Black | F16-211K | | |
| | | 2N/O + 2N/C | Red | F16-212R | | - |
| | | | Green | F16-212G | | |
| | | | Blue | F16-212B | | |
| | Yellow | | F16-212Y | | | |
| | White | | F16-212W | | | |
| | Black | | F16-212K | | | |
| | 3N/O + 3N/C | Red | F16-213R | - | | |
| | | Green | F16-213G | | | |
| | | Blue | F16-213B | | | |
| | | Yellow | F16-213Y | | | |
| | | White | F16-213W | | | |
| | | Black | F16-213K | | | |
| | Square | 1N/O + 1N/C | Red | F16-221R | - | |
| | | | Green | F16-221G | | |
| | | | Blue | F16-221B | | |
| | | | Yellow | F16-221Y | | |
| | | | White | F16-221W | | |
| | | | Black | F16-221K | | |
| | | 2N/O + 2N/C | Red | F16-222R | | - |
| | | | Green | F16-222G | | |
| | | | Blue | F16-222B | | |
| Yellow | | | F16-222Y | | | |
| White | | | F16-222W | | | |
| Black | | | F16-222K | | | |
| 3N/O + 3N/C | | Red | F16-223R | - | | |
| | | Green | F16-223G | | | |
| | | Blue | F16-223B | | | |
| | | Yellow | F16-223Y | | | |
| | | White | F16-223W | | | |
| | | Black | F16-223K | | | |
| Rectangular | 1N/O + 1N/C | Red | F16-231R | - | | |
| | | Green | F16-231G | | | |
| | | Blue | F16-231B | | | |
| | | Yellow | F16-231Y | | | |
| | | White | F16-231W | | | |
| | | Black | F16-231K | | | |
| | 2N/O + 2N/C | Red | F16-232R | | - | |
| | | Green | F16-232G | | | |
| | | Blue | F16-232B | | | |
| | | Yellow | F16-232Y | | | |
| | | White | F16-232W | | | |
| | | Black | F16-232K | | | |
| | 3N/O + 3N/C | Red | F16-233R | | - | |
| | | Green | F16-233G | | | |
| | | Blue | F16-233B | | | |
| | | Yellow | F16-233Y | | | |
| | | White | F16-233W | | | |
| | | Black | F16-233K | | | |


Control Switch

F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage |
|--|-------------|--------------|----------|------------------------|------------------------|
| Ø 16 Illuminated LED Momentary Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-271R | 6VDC 12VDC 24VDC |
| | | | Green | F16-271G | |
| | | | Blue | F16-271B | |
| | | | Yellow | F16-271Y | |
| | | | White | F16-271W | |
| | | | Black | F16-271K | |
| | | 2N/O + 2N/C | Red | F16-272R | 6VDC 12VDC 24VDC |
| | | | Green | F16-272G | |
| | | | Blue | F16-272B | |
| | | | Yellow | F16-272Y | |
| | | | White | F16-272W | |
| | | | Black | F16-272K | |
| | | 3N/O + 3N/C | Red | F16-273R | 6VDC 12VDC 24VDC |
| | | | Green | F16-273G | |
| | | | Blue | F16-273B | |
| | Yellow | | F16-273Y | | |
| | White | | F16-273W | | |
| | Black | | F16-273K | | |
| | Square | 1N/O + 1N/C | Red | F16-281R | 6VDC 12VDC 24VDC |
| | | | Green | F16-281G | |
| | | | Blue | F16-281B | |
| | | | Yellow | F16-281Y | |
| | | | White | F16-281W | |
| | | | Black | F16-281K | |
| | | 2N/O + 2N/C | Red | F16-282R | 6VDC 12VDC 24VDC |
| | | | Green | F16-282G | |
| | | | Blue | F16-282B | |
| Yellow | | | F16-282Y | | |
| White | | | F16-282W | | |
| Black | | | F16-282K | | |
| 3N/O + 3N/C | | Red | F16-283R | 6VDC 12VDC 24VDC | |
| | | Green | F16-283G | | |
| | | Blue | F16-283B | | |
| | Yellow | F16-283Y | | | |
| | White | F16-283W | | | |
| | Black | F16-283K | | | |
| Rectangular | 1N/O + 1N/C | Red | F16-291R | 6VDC 12VDC 24VDC | |
| | | Green | F16-291G | | |
| | | Blue | F16-291B | | |
| | | Yellow | F16-291Y | | |
| | | White | F16-291W | | |
| | | Black | F16-291K | | |
| | 2N/O + 2N/C | Red | F16-292R | 6VDC 12VDC 24VDC | |
| | | Green | F16-292G | | |
| | | Blue | F16-292B | | |
| | | Yellow | F16-292Y | | |
| | | White | F16-292W | | |
| | | Black | F16-292K | | |
| | 3N/O + 3N/C | Red | F16-293R | 6VDC 12VDC 24VDC | |
| | | Green | F16-293G | | |
| | | Blue | F16-293B | | |
| Yellow | | F16-293Y | | | |
| White | | F16-293W | | | |
| Black | | F16-293K | | | |


Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage |
|---|-------------|--------------|----------|-------------|---------------|
| Ø 16 Non-Illuminated Maintained Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-311R | - |
| | | | Green | F16-311G | |
| | | | Blue | F16-311B | |
| | | | Yellow | F16-311Y | |
| | | | White | F16-311W | |
| | | | Black | F16-311K | |
| | | 2N/O + 2N/C | Red | F16-312R | |
| | | | Green | F16-312G | |
| | | | Blue | F16-312B | |
| | Yellow | | F16-312Y | | |
| | White | | F16-312W | | |
| | Black | | F16-312K | | |
| | 3N/O + 3N/C | Red | F16-313R | | |
| | | Green | F16-313G | | |
| | | Blue | F16-313B | | |
| | | Yellow | F16-313Y | | |
| | | White | F16-313W | | |
| | | Black | F16-313K | | |
| | Square | 1N/O + 1N/C | Red | F16-321R | - |
| | | | Green | F16-321G | |
| | | | Blue | F16-321B | |
| | | | Yellow | F16-321Y | |
| | | | White | F16-321W | |
| | | | Black | F16-321K | |
| | | 2N/O + 2N/C | Red | F16-322R | |
| | | | Green | F16-322G | |
| | | | Blue | F16-322B | |
| Yellow | | | F16-322Y | | |
| White | | | F16-322W | | |
| Black | | | F16-322K | | |
| 3N/O + 3N/C | | Red | F16-323R | | |
| | | Green | F16-323G | | |
| | | Blue | F16-323B | | |
| | | Yellow | F16-323Y | | |
| | | White | F16-323W | | |
| | | Black | F16-323K | | |
| Rectangular | 1N/O + 1N/C | Red | F16-331R | - | |
| | | Green | F16-331G | | |
| | | Blue | F16-331B | | |
| | | Yellow | F16-331Y | | |
| | | White | F16-331W | | |
| | | Black | F16-331K | | |
| | 2N/O + 2N/C | Red | F16-332R | | |
| | | Green | F16-332G | | |
| | | Blue | F16-332B | | |
| | | Yellow | F16-332Y | | |
| | | White | F16-332W | | |
| | | Black | F16-332K | | |
| | 3N/O + 3N/C | Red | F16-333R | | |
| | | Green | F16-333G | | |
| | | Blue | F16-333B | | |
| | | Yellow | F16-333Y | | |
| | | White | F16-333W | | |
| | | Black | F16-333K | | |

Control Switch

F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage |
|---|-------------|--------------|----------|------------------------|------------------------|
| Ø 16 Illuminated LED Maintained Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-371R | 6VDC 12VDC 24VDC |
| | | | Green | F16-371G | |
| | | | Blue | F16-371B | |
| | | | Yellow | F16-371Y | |
| | | | White | F16-371W | |
| | | | Black | F16-371K | |
| | | 2N/O + 2N/C | Red | F16-372R | 6VDC 12VDC 24VDC |
| | | | Green | F16-372G | |
| | | | Blue | F16-372B | |
| | | | Yellow | F16-372Y | |
| | | | White | F16-372W | |
| | | | Black | F16-372K | |
| | | 3N/O + 3N/C | Red | F16-373R | 6VDC 12VDC 24VDC |
| | | | Green | F16-373G | |
| | | | Blue | F16-373B | |
| | Yellow | | F16-373Y | | |
| | White | | F16-373W | | |
| | Black | | F16-373K | | |
| | Square | 1N/O + 1N/C | Red | F16-381R | 6VDC 12VDC 24VDC |
| | | | Green | F16-381G | |
| | | | Blue | F16-381B | |
| | | | Yellow | F16-381Y | |
| | | | White | F16-381W | |
| | | | Black | F16-381K | |
| | | 2N/O + 2N/C | Red | F16-382R | 6VDC 12VDC 24VDC |
| | | | Green | F16-382G | |
| | | | Blue | F16-382B | |
| Yellow | | | F16-382Y | | |
| White | | | F16-382W | | |
| Black | | | F16-382K | | |
| 3N/O + 3N/C | | Red | F16-383R | 6VDC 12VDC 24VDC | |
| | | Green | F16-383G | | |
| | | Blue | F16-383B | | |
| | Yellow | F16-383Y | | | |
| | White | F16-383W | | | |
| | Black | F16-383K | | | |
| Rectangular | 1N/O + 1N/C | Red | F16-391R | 6VDC 12VDC 24VDC | |
| | | Green | F16-391G | | |
| | | Blue | F16-391B | | |
| | | Yellow | F16-391Y | | |
| | | White | F16-391W | | |
| | | Black | F16-391K | | |
| | 2N/O + 2N/C | Red | F16-392R | 6VDC 12VDC 24VDC | |
| | | Green | F16-392G | | |
| | | Blue | F16-392B | | |
| | | Yellow | F16-392Y | | |
| | | White | F16-392W | | |
| | | Black | F16-392K | | |
| | 3N/O + 3N/C | Red | F16-393R | 6VDC 12VDC 24VDC | |
| | | Green | F16-393G | | |
| | | Blue | F16-393B | | |
| Yellow | | F16-393Y | | | |
| White | | F16-393W | | | |
| Black | | F16-393K | | | |

Rev. 2/14

Data subject may change without notice.

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Industrial Controls Catalog

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KACON













Products Selection

| Operator Type | Shape | Contact Form | Color | Selector Type | Operator Function | Part Number |
|--|-------------|--------------|---------------|---|--|-------------|
| Ø 16 Non-Illuminated Selector Switch (2 Position)  | Round | 1N/O + 1N/C | Black | Spring Return |  | F16-411K-0 |
| | | 2N/O + 2N/C | | | | F16-412K-0 |
| | | 3N/O + 3N/C | | | | F16-413K-0 |
| | | 1N/O + 1N/C | Black | Maintained | | F16-411K-2 |
| | | 2N/O + 2N/C | | |  | F16-412K-2 |
| | | 3N/O + 3N/C | | | | F16-413K-2 |
| | Square | 1N/O + 1N/C | Black | Spring Return |  | F16-421K-0 |
| | | 2N/O + 2N/C | | | | F16-422K-0 |
| | | 3N/O + 3N/C | | | | F16-423K-0 |
| | | 1N/O + 1N/C | Black | Maintained | | F16-421K-2 |
| | | 2N/O + 2N/C | | |  | F16-422K-2 |
| | | 3N/O + 3N/C | | | | F16-423K-2 |
| Rectangular | 1N/O + 1N/C | Black | Spring Return |  | F16-431K-0 | |
| | 2N/O + 2N/C | | | | F16-432K-0 | |
| | 3N/O + 3N/C | | | | F16-433K-0 | |
| | 1N/O + 1N/C | Black | Maintained | | F16-431K-2 | |
| | 2N/O + 2N/C | | |  | F16-432K-2 | |
| | 3N/O + 3N/C | | | | F16-433K-2 | |

















Control Switch

F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact Form | Color | Selector Type | Operator Function | Part Number | |
|--|-------------|--------------|---------------|---|---|---|------------|
| Ø 16 Non-Illuminated Selector Switch (3 Position)  | Round | 2N/O + 2N/C | Black | Spring Return |  | F16-512K-1 | |
| | | 3N/O + 3N/C | | | | F16-513K-1 | |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-512K-3 | |
| | | 3N/O + 3N/C | | | | F16-513K-3 | |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-512K-6 | |
| | | 3N/O + 3N/C | | | | F16-513K-6 | |
| | 2N/O + 2N/C | Black | Spring Return |  | F16-512K-7 | | |
| | 3N/O + 3N/C | | | | F16-513K-7 | | |
| | Square | 2N/O + 2N/C | Black | Spring Return |  | F16-522K-1 | |
| | | 3N/O + 3N/C | | | | F16-523K-1 | |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-522K-3 | |
| | | 3N/O + 3N/C | | | | F16-523K-3 | |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-522K-6 | |
| | | 3N/O + 3N/C | | | | F16-523K-6 | |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-522K-7 | |
| | | 3N/O + 3N/C | | | | F16-523K-7 | |
| | | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-532K-1 |
| | | | 3N/O + 3N/C | | | | F16-533K-1 |
| 2N/O + 2N/C | | | Black | Maintained |  | F16-532K-3 | |
| 3N/O + 3N/C | | | | | | F16-533K-3 | |
| 2N/O + 2N/C | Black | | Spring Return |  | F16-532K-6 | | |
| 3N/O + 3N/C | | | | | F16-533K-6 | | |
| 2N/O + 2N/C | Black | | Spring Return |  | F16-532K-7 | | |
| 3N/O + 3N/C | | | | | F16-533K-7 | | |

















Products Selection

| Operator Type | Shape | Contact From | Color | Selector Type | Operator Function | Part Number | |
|---|-------------|--------------|------------|---|---|-------------|-------------|
| Ø 16 Non-Illuminated Key Switch (2 Position)  | Round | 1N/O + 1N/C | Black | Spring Return |  | F16-611K-0A | |
| | | 2N/O + 2N/C | | | | F16-612K-0A | |
| | | 3N/O + 3N/C | | | | F16-613K-0A | |
| | | 1N/O + 1N/C | Black | Spring Return |  | F16-611K-0B | |
| | | 2N/O + 2N/C | | | | F16-612K-0B | |
| | | 3N/O + 3N/C | | | | F16-613K-0B | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-611K-2A | |
| | | 2N/O + 2N/C | | | | F16-612K-2A | |
| | | 3N/O + 3N/C | | | | F16-613K-2A | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-611K-2B | |
| | | 2N/O + 2N/C | | | | F16-612K-2B | |
| | | 3N/O + 3N/C | | | | F16-613K-2B | |
| | 1N/O + 1N/C | Black | Maintained |  | F16-611K-2D | | |
| | 2N/O + 2N/C | | | | F16-612K-2D | | |
| | 3N/O + 3N/C | | | | F16-613K-2D | | |
| | Square | 1N/O + 1N/C | Black | Spring Return |  | F16-621K-0A | |
| | | | | | | 2N/O + 2N/C | F16-622K-0A |
| | | | | | | 3N/O + 3N/C | F16-623K-0A |
| | | 1N/O + 1N/C | Black | Spring Return |  | F16-621K-0B | |
| | | 2N/O + 2N/C | | | | F16-622K-0B | |
| | | 3N/O + 3N/C | | | | F16-623K-0B | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-621K-2A | |
| | | 2N/O + 2N/C | | | | F16-622K-2A | |
| | | 3N/O + 3N/C | | | | F16-623K-2A | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-621K-2B | |
| | | 2N/O + 2N/C | | | | F16-622K-2B | |
| | | 3N/O + 3N/C | | | | F16-623K-2B | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-621K-2D | |
| | | 2N/O + 2N/C | | | | F16-622K-2D | |
| | | 3N/O + 3N/C | | | | F16-623K-2D | |
| Rectangular | | 1N/O + 1N/C | Black | Spring Return |  | F16-631K-0A | |
| | | | | | | 2N/O + 2N/C | F16-632K-0A |
| | | | | | | 3N/O + 3N/C | F16-633K-0A |
| | | 1N/O + 1N/C | Black | Spring Return |  | F16-631K-0B | |
| | | 2N/O + 2N/C | | | | F16-632K-0B | |
| | | 3N/O + 3N/C | | | | F16-633K-0B | |
| | | 1N/O + 1N/C | Black | Maintained |  | F16-631K-2A | |
| | | 2N/O + 2N/C | | | | F16-632K-2A | |
| | | 3N/O + 3N/C | | | | F16-633K-2A | |
| | 1N/O + 1N/C | Black | Maintained |  | F16-631K-2B | | |
| | 2N/O + 2N/C | | | | F16-632K-2B | | |
| | 3N/O + 3N/C | | | | F16-633K-2B | | |
| | 1N/O + 1N/C | Black | Maintained |  | F16-631K-2D | | |
| | 2N/O + 2N/C | | | | F16-632K-2D | | |
| | 3N/O + 3N/C | | | | F16-633K-2D | | |




















Control Switch

F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact From | Color | Selector Type | Operator Function | Part Number |
|---|-------|--------------|-------|---------------|---|-------------|
| Ø 16 Non-Illuminated Key Switch (3 Position) | Round | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-1C |
| | | 3N/O + 3N/C | | | | F16-713K-1C |
|  | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-1E |
| | | 3N/O + 3N/C | | | | F16-713K-1E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-6D |
| | | 2N/O + 2N/C | | | | F16-713K-6D |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-6E |
| | | 3N/O + 3N/C | | | | F16-713K-6E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-6F |
| | | 3N/O + 3N/C | | | | F16-713K-6F |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-7A |
| | | 3N/O + 3N/C | | | | F16-713K-7A |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-7E |
| | | 3N/O + 3N/C | | | | F16-713K-7E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-712K-7G |
| | | 3N/O + 3N/C | | | | F16-713K-7G |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3A |
| | | 3N/O + 3N/C | | | | F16-713K-3A |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3B |
| | | 3N/O + 3N/C | | | | F16-713K-3B |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3C |
| | | 3N/O + 3N/C | | | | F16-713K-3C |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3D |
| | | 3N/O + 3N/C | | | | F16-713K-3D |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3E |
| | | 3N/O + 3N/C | | | | F16-713K-3E |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3F |
| | | 3N/O + 3N/C | | | | F16-713K-3F |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-712K-3G |
| | | 3N/O + 3N/C | | | | F16-713K-3G |

Products Selection




















| Operator Type | Shape | Contact From | Color | Selector Type | Operator Function | Part Number |
|---|--------|--------------|-------|------------------|---|-------------------|
| Ø 16 Non-Illuminated Key Switch (3 Position) | Square | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-1C |
| | | 3N/O + 3N/C | | | | F16-723K-1C |
|  | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-1E |
| | | 3N/O + 3N/C | | | | F16-723K-1E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-6D |
| | | 3N/O + 3N/C | | | | F16-723K-6D |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-6E |
| | | 3N/O + 3N/C | | | | F16-723K-6E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-6F |
| | | 3N/O + 3N/C | | | | F16-723K-6F |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-7A |
| | | 3N/O + 3N/C | | | | F16-723K-7A |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-7E |
| | | 3N/O + 3N/C | | | | F16-723K-7E |
| | | 2N/O + 2N/C | Black | Spring Return |  | F16-722K-7G |
| | | 3N/O + 3N/C | | | | F16-723K-7G |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3A |
| | | 3N/O + 3N/C | | | | F16-723K-3A |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3A(45°)* |
| | | 3N/O + 3N/C | | | | F16-723K-3A(45°)* |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3B |
| | | 3N/O + 3N/C | | | | F16-723K-3B |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3C |
| | | 3N/O + 3N/C | | | | F16-723K-3C |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3D |
| | | 3N/O + 3N/C | | | | F16-723K-3D |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3E |
| | | 3N/O + 3N/C | | | | F16-723K-3E |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3E(45°)* |
| | | 3N/O + 3N/C | | | | F16-723K-3E(45°)* |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3F |
| | | 3N/O + 3N/C | | | | F16-723K-3F |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3G |
| | | 3N/O + 3N/C | | | | F16-723K-3G |
| | | 2N/O + 2N/C | Black | Maintained |  | F16-722K-3G(45°)* |
| | | 3N/O + 3N/C | | | | F16-723K-3G(45°)* |

* 45 ° is the type of order.

Control Switch





F16 Series - Flush Type

Products Selection

| Operator Type | Shape | Contact Form | Color | Selector Type | Operator Function | Part Number |
|---|-------------|--------------|-------|------------------|---|-------------------|
| Ø 16 Non-Illuminated Key Switch (3 Position) | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-1C |
| | | 3N/O + 3N/C | | | | F16-733K-1C |
|  | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-1E |
| | | 3N/O + 3N/C | | | | F16-733K-1E |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-6D |
| | | 3N/O + 3N/C | | | | F16-733K-6D |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-6E |
| | | 3N/O + 3N/C | | | | F16-733K-6E |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-6F |
| | | 3N/O + 3N/C | | | | F16-733K-6F |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-7A |
| | | 3N/O + 3N/C | | | | F16-733K-7A |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-7E |
| | | 3N/O + 3N/C | | | | F16-733K-7E |
| | Rectangular | 2N/O + 2N/C | Black | Spring Return |  | F16-732K-7G |
| | | 3N/O + 3N/C | | | | F16-733K-7G |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3A |
| | | 3N/O + 3N/C | | | | F16-733K-3A |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3A(45°)* |
| | | 3N/O + 3N/C | | | | F16-733K-3A(45°)* |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3B |
| | | 3N/O + 3N/C | | | | F16-733K-3B |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3C |
| | | 3N/O + 3N/C | | | | F16-733K-3C |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3D |
| | | 3N/O + 3N/C | | | | F16-733K-3D |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3E |
| | | 3N/O + 3N/C | | | | F16-733K-3E |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3E(45°)* |
| | | 3N/O + 3N/C | | | | F16-733K-3E(45°)* |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3F |
| | | 3N/O + 3N/C | | | | F16-733K-3F |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3G |
| | | 3N/O + 3N/C | | | | F16-733K-3G |
| | Rectangular | 2N/O + 2N/C | Black | Maintained |  | F16-732K-3G(45°)* |
| | | 3N/O + 3N/C | | | | F16-733K-3G(45°)* |

* 45 ° is the type of order.









Products Selection

| Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage | |
|--|--------------|--------------|-----------------------------|-------------|------------------------|------------------------|
| Ø 16 Non-Illuminated Emergency Stop Switch  | Round | 1N/O + 1N/C | Red | F16-811R | - | |
| | | 2N/O + 2N/C | | F16-812R | - | |
| | | 3N/O + 3N/C | | F16-813R | - | |
| | + Name Plate | 1N/O + 1N/C | Red + Yellow(Name Plate) | F16-A11R | - | |
| | | 2N/O + 2N/C | | F16-A12R | - | |
| | | 3N/O + 3N/C | | F16-A13R | - | |
| Ø 16 Illuminated LED Emergency Stop Switch  | Round | 1N/O + 1N/C | Red | F16-871R | 24VDC | |
| | | 2N/O + 2N/C | | F16-872R | | |
| | | 3N/O + 3N/C | | F16-873R | | |
| | + Name Plate | 1N/O + 1N/C | Red + Yellow(Name Plate) | F16-A71R | 24VDC | |
| | | 2N/O + 2N/C | | F16-A72R | | |
| | | 3N/O + 3N/C | | F16-A73R | | |
| Ø 16 Non-Illuminated Mushroom Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-911R | - | |
| | | | Green | F16-911G | | |
| | | | Yellow | F16-911Y | | |
| | | 2N/O + 2N/C | Red | F16-912R | | |
| | | | Green | F16-912G | | |
| | | | Yellow | F16-912Y | | |
| | | 3N/O + 3N/C | Red | F16-913R | | |
| | | | Green | F16-913G | | |
| | | | Yellow | F16-913Y | | |
| | Square | 1N/O + 1N/C | Red | F16-921R | | |
| | | | Green | F16-921G | | |
| | | | Yellow | F16-921Y | | |
| | | 2N/O + 2N/C | Red | F16-922R | - | |
| | | | Green | F16-922G | | |
| | | | Yellow | F16-922Y | | |
| | | 3N/O + 3N/C | Red | F16-923R | | |
| | | | Green | F16-923G | | |
| | | | Yellow | F16-923Y | | |
| Rectangular | 1N/O + 1N/C | Red | F16-931R | | | |
| | | Green | F16-931G | | | |
| | | Yellow | F16-931Y | | | |
| | 2N/O + 2N/C | Red | F16-932R | - | | |
| | | Green | F16-932G | | | |
| | | Yellow | F16-932Y | | | |
| | 3N/O + 3N/C | Red | F16-933R | | | |
| | | Green | F16-933G | | | |
| | | Yellow | F16-933Y | | | |
| Ø 16 Illuminated LED Mushroom Push Button Switch  | Round | 1N/O + 1N/C | Red | F16-971R | 6VDC 12VDC 24VDC | |
| | | | Green | F16-971G | | |
| | | | Yellow | F16-971Y | | |
| | | Square | Red | F16-981R | | 6VDC 12VDC 24VDC |
| | | | Green | F16-981G | | |
| | | | Yellow | F16-981Y | | |
| | Rectangular | 1N/O + 1N/C | Red | F16-991R | 6VDC 12VDC 24VDC | |
| | | | Green | F16-991G | | |
| | | | Yellow | F16-991Y | | |

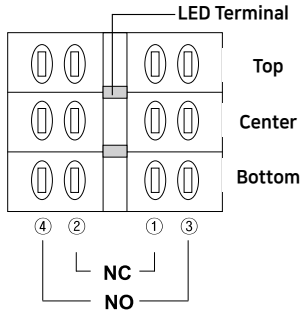
Control Switch

F16 Series

Accessory

| | Operator Type | Shape | Contact Form | Color | Part Number | Rated Voltage |
|---|----------------------------|----------|--------------|--------|---------------|---------------|
|  | 220VAC Trans | - | - | Black | F16 - T1 | 220VAC |
|  | LED | - | - | Red | F16-S115R 24V | 24VAC/DC |
| | | | | | F16-S115R 12V | 12VAC/DC |
| | | | | | F16-S115R 6V | 6VAC/DC |
| | | | | Green | F16-S115G 24V | 24VAC/DC |
| | | | | | F16-S115G 12V | 12VAC/DC |
| | | | | | F16-S115G 6V | 6VAC/DC |
| | | | | Yellow | F16-S115Y 24V | 24VAC/DC |
| | | | | | F16-S115Y 12V | 12VAC/DC |
| | | | | | F16-S115Y 6V | 6VAC/DC |
| | | | | White | F16-S115W 24V | 24VAC/DC |
| | | | | | F16-S115W 12V | 12VAC/DC |
| | | | | | F16-S115W 6V | 6VAC/DC |
| Blue | F16-S115B 24V | 24VAC/DC | | | | |
| | F16-S115B 12V | 12VAC/DC | | | | |
| | F16-S115B 6V | 6VAC/DC | | | | |
|  | Safety Guard (Ø16 only) | Round | - | Yellow | K16 - G1 | - |
|  | Contact Block | - | 1N/O + 1N/C | Black | FCB | - |
|  | Empty Block | - | - | Black | FEB | - |
|  | Ø16 Hole Cover | - | - | Black | K16 - S117 | - |
|  | Mounting Ring Wrench | - | - | Black | K16 - W1 | - |
|  | Terminal Protection | - | - | White | F16 - S116 | - |

Terminal Arrangement









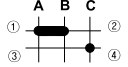
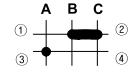
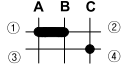
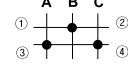
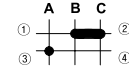


The figure on the right shows the terminal arrangement and internal switch circuit when the product bottom is viewed from the front.

The factory setting is the contact block 1N/O + 1N/C, and blocks can be added up to 3N/O + 3N/C.

As for the selector and key switch, two- and three-stage switches have different ON/OFF operating points. Refer to the following table. Round/Square Rectangular Emergency Stop/Push Mushroom.

Diagram (Selector / Key Switch)

| Types | Contact Form | Left | Middle | Right |
|---|--------------|---|---|---|
|  2 Position | 1N/O + 1N/C | - |  | - |
| | 2N/O + 2N/C |  | - |  |
| | 3N/O + 3N/C |  |  |  |
|  3 Position | 2N/O + 2N/C |  | - |  |
| | 3N/O + 3N/C |  |  |  |

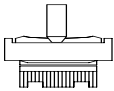
Control Switch

F16 Series

Caution

1. Connection of wires

- 1) soldering
The power consumption of the soldering iron must be 30W or less.
Use a 30 W soldering iron within 5s, and a 20W soldering iron within 10s.
- 2) Tab terminal
Use the #110 tab terminal.
- 3) Wires for connection
Single wire: Maximum $\varnothing 0.8\text{mm}$
Stranded wire: Maximum 0.75mm^2



2. Replacement/installation of the front button and LED

- 1) Button : Use a driver in the groove on the side of the button to remove it
(To insert the button, push it until it clicks.)
- 2) LED : Pull the LED using a tool such as pliers. Assemble it in the reverse sequence of the disassembly.

3. Mounting the product on the panel

- 1) Press both the projections of the contact unit module with two fingers to remove the module from the operating unit.
- 2) The operating unit and contact unit module have their directivity. Use caution for insertion.
- 3) Separate the fixing ring and anti-rotation fixture from the operating unit.
- 4) Insert the operating unit in the panel, and assemble it in the reverse order of the disassembly.
- 5) The fixing ring can be firmly tightened using the K16-W1.

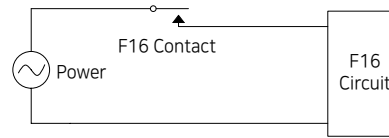
4. Contact block replacement/installation

- 1) Widen four projections on both sides of the contact unit module to separate the contact block.
- 2) Push the contact block into the empty space of the contact unit module to assemble it. The block is mounted with a click sound.
(Be sure to check the left and right sides are firmly locked.)
- 3) A maximum of three (3N/O + 3N/C) contact blocks can be mounted.

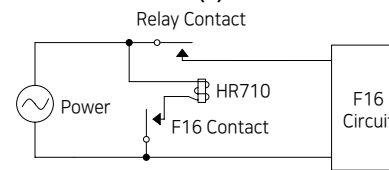
5. When using a F16 small Control Switch as the power switch for the control

Panel Cut-Out

unit, please follow the following instruction for longer product life span and reliability.



(X)



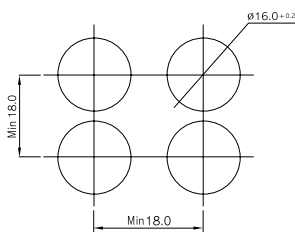
(O)

6. When rectifying the AC current for the DC power for lighting, the DC power must be a constant voltage source with a ripple range of 10 % or less. Otherwise, the LED life is significantly Reduced

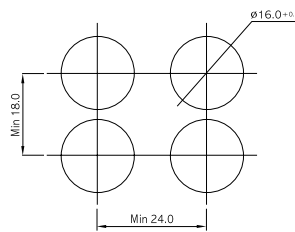
7. Do not apply excessive impact or force to prevent damage to the product. When using the K16-W1 tool, do not tighten the fixing ring with an excessive force, because it may damage the product (When fixing the product on the panel, the tightening torque must be $0.1 \sim 0.23 \text{ N}\cdot\text{m}$ or less).

8. When soldering the terminal for wiring, comply with the specified temperature and time. Failure to meet the specifications may lead to the damage and thermal deformation to the product.

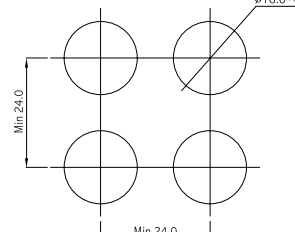
Round/Square ($\varnothing 16$)



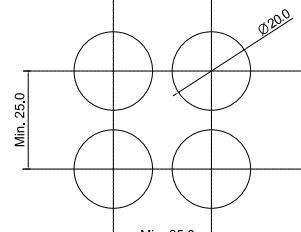
Rectangular ($\varnothing 16$)



Emergency Stop/Push Mushroom ($\varnothing 16$)

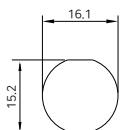


Round($\varnothing 20$)

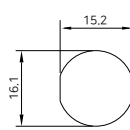


D-Cut

셀렉타, 키



셀렉타, 키 외

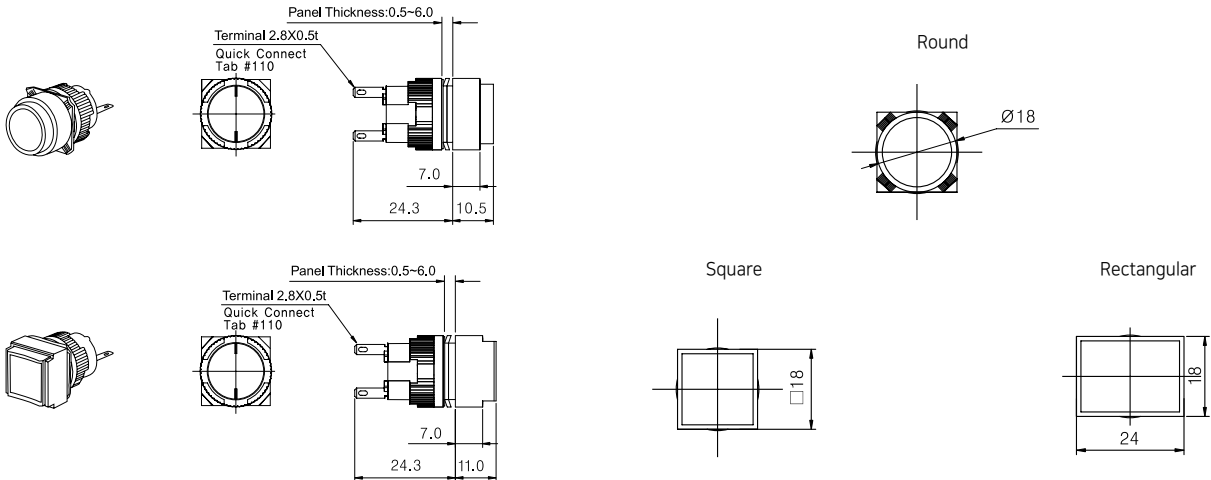


- Note.
1. When processing the panels, consider the usability by the operator when deciding the distance between the holes.
 2. The dimension of the hole should be $\varnothing 16.0 \pm 0.2$ or $\varnothing 20.0 \pm 0.2$.
(If the diameter of the hole is larger than the specified value above, the product may not operate properly.)
 3. When using the protection guards, reconfigure the distances between the holes.
 4. In case of the lever switches, the distances between the holes during the panel processing has some differences among them, be careful about this.
- In case of an Emergency Stop type, the distance is min.41mm between holes from upper, lower,

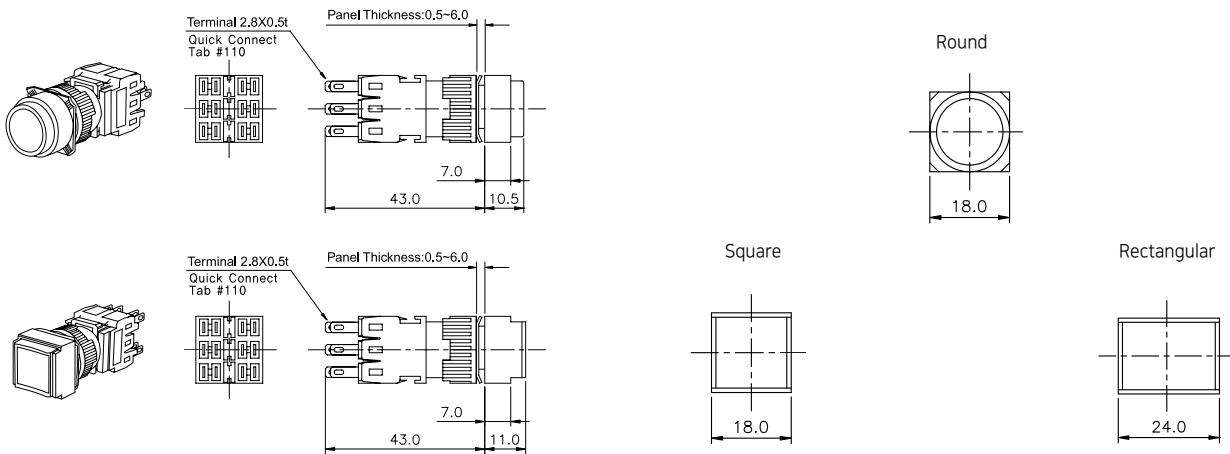
Dimension

unit : mm

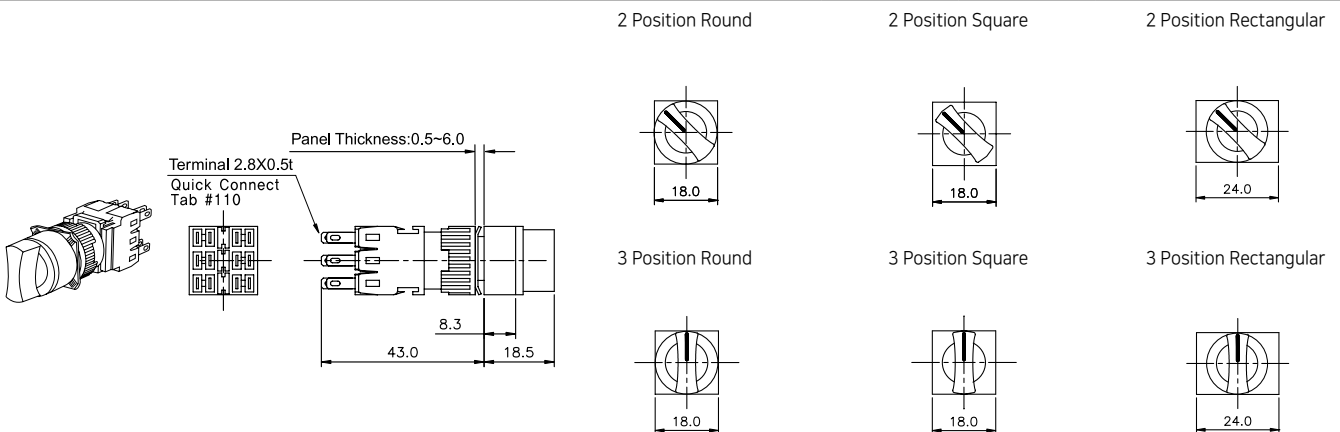
Pilot Light



Momentary & Maintained Push Button Switch



Selector Switch



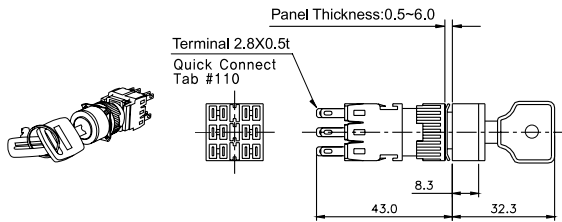
Control Switch

F16 Series

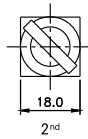
Dimension

unit : mm

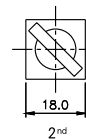
Key Switch



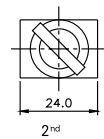
2 Position Round



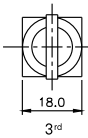
2 Position Square



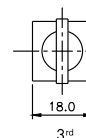
2 Position Rectangular



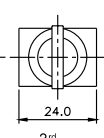
3 Position Round



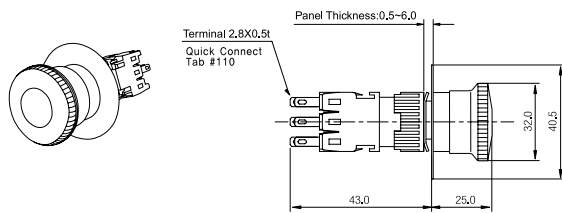
3 Position Square



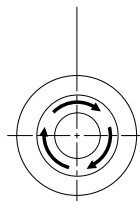
3 Position Rectangular



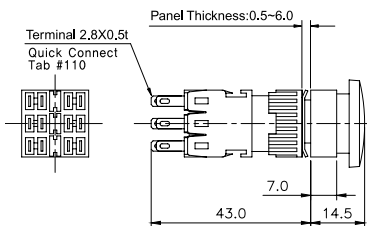
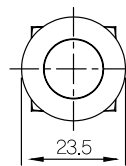
Emergency Stop Switch



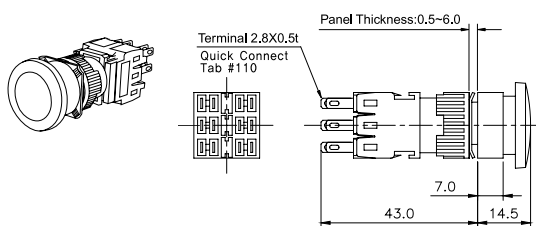
Round



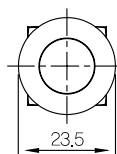
Round



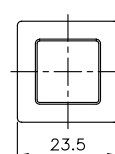
Mushroom Push Button Switch



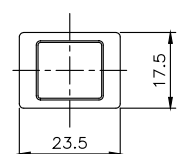
Round



Square



Rectangular

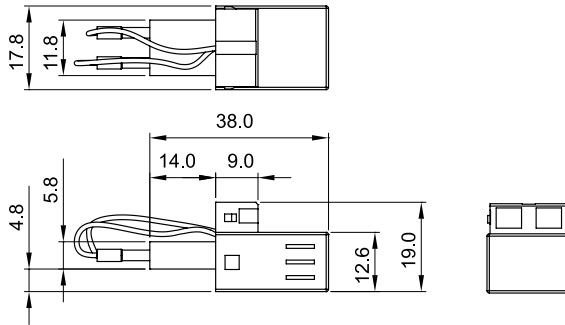


Dimension

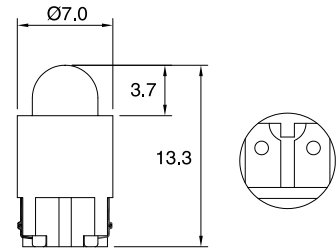
unit : mm

Accessory

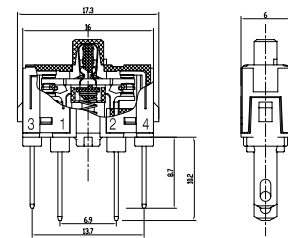
F16 - T1 / 220VAC transformer



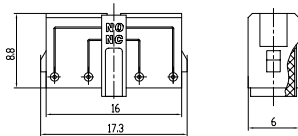
F16 - S115 / LED



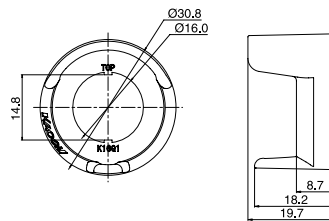
FCB / Contact Block((1N/O + 1N/C)



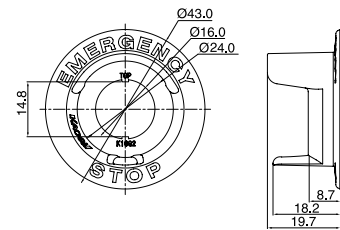
FEB / Empty Block



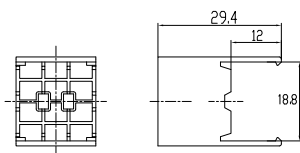
K16 - G1 / Safety Guard



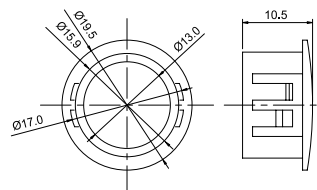
K16 - G2 / Safety Guard



F16 - S116 / Terminal Protection



K16 - S117 / Ø16 Hole Cover



K16 - W1 / Fastening Tool for the Fixture Ring

