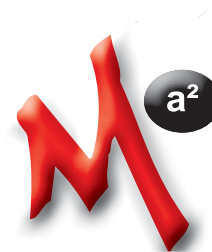


16mm control switches

16mm control switches

Indicators	166 – 167
Pushbutton switches	168 – 169
Selector switches	170 – 171
Emergency stop switches	172 – 173
Keylock switches	174 – 175
Buzzers	176 – 177
Accessories	178 – 179

Linking your system



Materiales auxiliares de automatización, SL
 C/Llobregat, 11 nave D 08174 Valldoreix
 Tel. 93 584 38 58 Fax 93 544 14 81
 mauxa@mauxa.cat

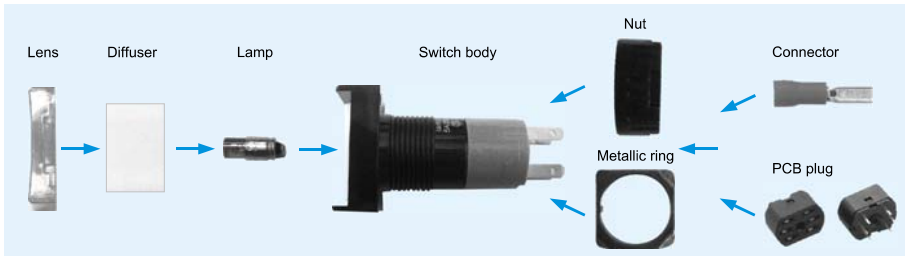
Features

- Mounting hole diameter 16mm, there shapes are available: rectangular 18x24m/m, square 18x18m/m and round diameter 18m/m.
- The rubber-sealed type provided to prevent the liquid penetration in front of panel.
- High bezel that prevents accidental touching
- ILLuminated by midget grooved T1 3/4 lamps including incandescent,discharged and LED lamps
- Snap-action which accelerates on-off switching
- Normally closed and normally open contacts in each switch block
- High performance plastics resistant to high-temperature and oil-polluted environments
- UL 94V0 class plastics to make self-extinguished

Technical Specifications

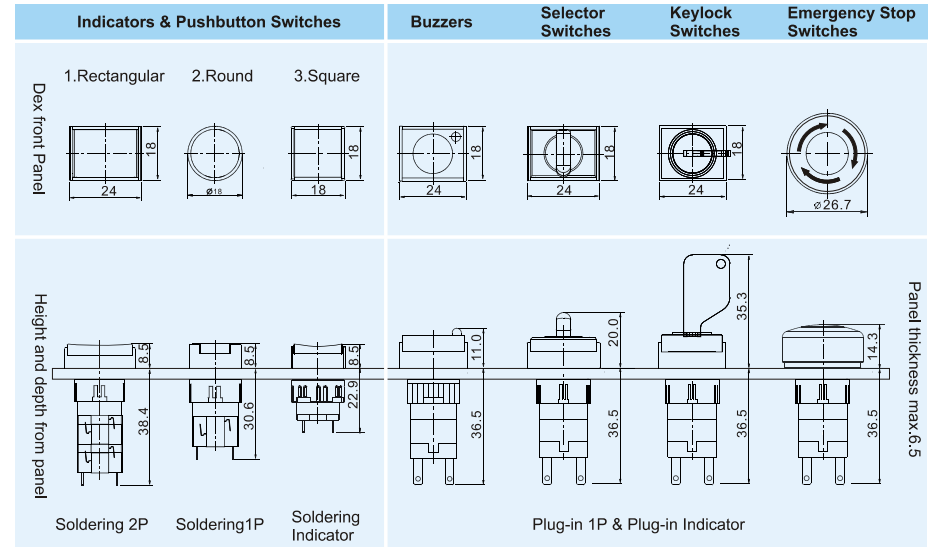
- Contact materials: gold flushed silver
- Breaking capacity: 250VAC/5A(p.f.≥0.9)
- Contact resistance: < 50MΩ
- Electrical lifetime:
 - 5A/250VAC 50,000 operations
 - 4A/250VAC 60,000 operations
 - 2A/250VAC 200,000 operations
 - 1A/250VAC 400,000 operations
- Maximal insulation: 2500VAC,50Hz,1min between all terminals and plastic case
- Insulation resistance: ≥10⁴MΩ at 500VDC
- Soldering heat resistance: 300°C/5s
- Operating temperature: -25°C ~ +55°C
- Storage temperature: -40°C ~ +85°C
- Housing materials: high-performance plastics resistant to high temperature and Oil-polluted environments,self-extinguished.

Mounting

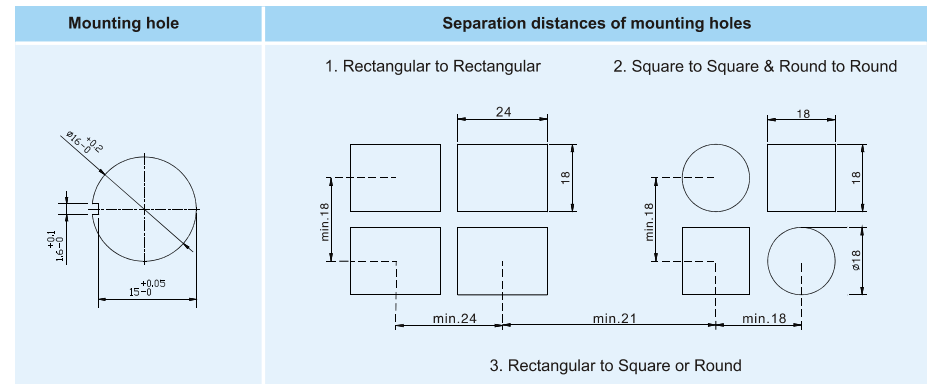


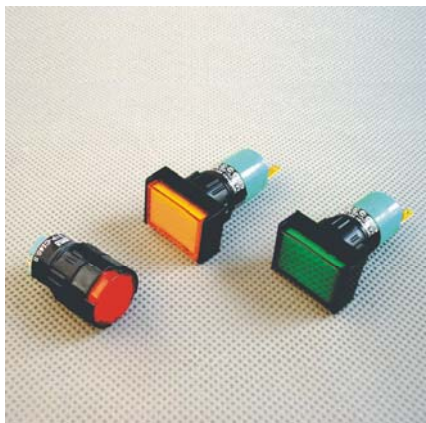
Shapes and Panel cutting

■ Apparent shapes



■ Panel cutting





- Mounting hole diameter 16mm
Apparent shapes with rectangular 18X24mm, square 18X18mm and round diameter 18mm
- Illuminated by midget grooved T1 3/4 lamps including incandescent, discharged and LED lamps
- The lifetime of LED with high brightness up to 50000 hours



Coding Principle

01 P - R I 40 . Q + W + L 24 Y
 I II III IV V VI VII VIII IX X

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	P=Indicators		
III: Front shape	C=Round	S=Square	R=Rectangular
IV: Function code	I=Indicators		
V: Protection rating	40=Standard	65=Rubber-sealed	
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Cap color	R=Red, Y=Yellow, O=Orange, G=Light Green, V=Deep Green, B=Blue, W=White, K=Black		
VIII: Light source	L=LED lamp	D=Incandescent lamp	A=Discharged lamp Omission=Without lamp
IX: Operating voltage	06=6VDC 12=12VDC 24=24VDC 11=110VAC 22=220VAC		
X: Extra code	If the color of lamps and lens are different, please add this code to indicate the color of lamp		

Note 1: Available colors of LED are red,yellow, green, blue,white
 The standard matches between cap and LED are as followed:
 R Red LED Y Yellow LED O Orange LED G Green LED V Green LED B Blue LED W Yellow / White LED
 The standard matches between cap and lamp are as followed:
 W, R, Y, O Red lamp G, B, V Green lamp

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01P-RI40.Q	E5001	01P-CI40.S	E5004
01P-RI65.Q	E5001	01P-CI65.S	E5004
01P-RI40.S	E5002	01P-SI40.Q	E5005
01P-RI65.S	E5002	01P-SI65.Q	E5005
01P-CI40.Q	E5003	01P-SI40.S	E5006
01P-CI65.Q	E5003	01P-SI65.S	E5006



- Mounting hole diameter 16mm
- Apparent shapes with rectangular 18X24mm, square 18X18mm and round diameter 18mm
- High bezel that prevents accidental touching
- Illuminated by midget grooved T1 3/4 lamps including incandescent, discharged and LED lamps
- Snap-action which accelerates on-off switching
- Normally closed and normally open contacts in each switch block
- Actuating travel: 3mm
- Mechanical lifetime: Momentary 2X10⁶ operations; Alternative 1X10⁶ operations

RoHS

01 P - R A 40 . Q 1P + W + L 24 Y
I II III IV V VI VII VIII IX X XI

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	P=Pushbutton Switches		
III: Front shape	C=Round	S=Square	R=Rectangular
IV: Function code	M=Momentary	A=Alternative	
V: Protection rating	40=Standard	65=Rubber-sealed	
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Contact mode	1P=1A1B	2P=2A2B	
VIII: Cap color	R=Red, Y=Yellow, O=Orange, G=Light Green, V=Deep Green, B=Blue, W=White, K=Black		
IX: Light source	L=LED lamp	D=Incandescent lamp	A=Discharged lamp Omission=Without lamp
X: Operating voltage	06=6VDC 12=12VDC 24=24VDC 11=110VAC 22=220VAC		
XI: Extra code	If the color of lamps and lens are different, please add this code to indicate the color of lamp		

Note 1: Available colors of LED are red,yellow, green, blue,white

The standard matches between cap and LED are as followed:

R Red LED Y Yellow LED O Orange LED G Green LED V Green LED B Blue LED W Yellow / White LED

The standard matches between cap and lamp are as followed:

W, R, Y, O Red lamp G, B, V Green lamp

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01P-RM40.Q1P	E5007	01P-CA40.S1P	E5011
01P-RM65.Q1P	E5007	01P-CA65.S1P	E5011
01P-RA40.Q1P	E5007	01P-CM40.S2P	E5012
01P-RA65.Q1P	E5007	01P-CM65.S2P	E5012
01P-RM40.S1P	E5008	01P-CA40.S2P	E5012
01P-RM65.S1P	E5008	01P-CA65.S2P	E5012
01P-RA40.S1P	E5008	01P-SM40Q1P	E5013
01P-RA65.S1P	E5008	01P-SM65.Q1P	E5013
01P-RM40.S2P	E5009	01P-SA40.Q1P	E5013
01P-RM65.S2P	E5009	01P-SA65.Q1P	E5013
01P-RA40.S2P	E5009	01P-SM40.S1P	E5014
01P-RA65.S2P	E5009	01P-SM65.S1P	E5014
01P-CM40.Q1P	E5010	01P-SA40.S1P	E5014
01P-CM65.Q1P	E5010	01P-SA65.S1P	E5014
01P-CA40.Q1P	E5010	01P-SM40.S2P	E5015
01P-CA65.Q1P	E5010	01P-SM65.S2P	E5015
01P-CM40.S1P	E5011	01P-SA40.S2P	E5015
01P-CM65.S1P	E5011	01P-SA65.S2P	E5015

16mm
Control Switches

22/25/30mm
Control Switches

50/70mm
Multi-Layer
Light Tower



- Mounting hole diameter 16mm
Apparent shapes with rectangular 18X24mm, square 18X18mm and round diameter 18mm
- Snap-action which accelerates on-off switching
- Normally closed and normally open contacts in each switch block
- Actuating travel: 2 positions L 90° and V 90°
- Mechanical lifetime: 50000 operations



Coding Principle

01 S - R A 40 . Q 1P * L
 I II III IV V VI VII VIII

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	S=Selector Switches		
III: Front shape	C=Round	S=Square	R=Rectangular
IV: Function code	M=2 way Momentary	A=2 way Alternative	
V: Protection rating	40=Standard	65=Rubber-sealed	
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Contact mode	1P=1A1B	2P=2A2B	
VIII: Knob type	L=L type 90°	V=V type 90°	

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01S-RM40.Q1P	E5016	01S-CA40.S1P	E5020
01S-RM65.Q1P	E5016	01S-CA65.S1P	E5020
01S-RA40.Q1P	E5016	01S-CM40.S2P	E5021
01S-RA65.Q1P	E5016	01S-CM65.S2P	E5021
01S-RM40.S1P	E5017	01S-CA40.S2P	E5021
01S-RM65.S1P	E5017	01S-CA65.S2P	E5021
01S-RA40.S1P	E5017	01S-SM40.Q1P	E5022
01S-RA65.S1P	E5017	01S-SM65.Q1P	E5022
01S-RM40.S2P	E5018	01S-SA40.Q1P	E5022
01S-RM65.S2P	E5018	01S-SA65.Q1P	E5022
01S-RA40.S2P	E5018	01S-SM40.S1P	E5023
01S-RA65.S2P	E5018	01S-SM65.S1P	E5023
01S-CM40.Q1P	E5019	01S-SA40.S1P	E5023
01S-CM65.Q1P	E5019	01S-SA65.S1P	E5023
01S-CA40.Q1P	E5019	01S-SM40.S2P	E5024
01S-CA65.Q1P	E5019	01S-SM65.S2P	E5024
01S-CM40.S1P	E5020	01S-SA40.S2P	E5024
01S-CM65.S1P	E5020	01S-SA65.S2P	E5024



- Mounting hole diameter 16mm, Front size is round diameter 26mm
- Cladding cover design to meet the requirement of European system
- There are only red LED and red discharged lamp available in illuminated emergency switch
- Snap-action which accelerates on-off switching
- Normally closed and normally open contacts in each switch block
- Mechanical lifetime: 50000 operations



Coding Principle

01 S - C E 40 . Q 1P + R + L 12
 I II III IV V VI VII VIII IX X

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	S=Emergency Stop Switches		
III: Front shape	C=Round		
IV: Function code	E=Rotate to reset		
V: Protection rating	40=Standard	65=Rubber-sealed	
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Contact mode	1P=1A1B	2P=2A2B	
VIII: Light color	R=Red		
IX: Light source	L=LED lamp	A=Discharged lamp	Omission=Without lamp
X: Operating voltage	06=6VDC 12=12VDC 24=24VDC 11=110VAC 22=220VAC		

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01S-CE40.Q1P	E5025	01S-CE65.S1P	E5026
01S-CE65.Q1P	E5025	01S-CE40.S2P	E5027
01S-CE40.S1P	E5026	01S-CE65.S2P	E5027



- Mounting hole diameter 16mm
Apparent shapes with rectangular 18X24mm, square 18X18mm and round diameter 18mm
- Snap-action which accelerates on-off switching
- Normally closed and normally open contacts in each switch block
- Actuating travel: 2 positions L 90° and V 90°
- Mechanical lifetime: 50000 operations



Coding Principle

01 K - R A 40 . Q 1P * L2
I II III IV V VI VII VIII

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	K=Keylock Switches		
III: Front shape	C=Round	S=Square	R=Rectangular
IV: Function code	M=2 Way Momentary	A=2 Way Alternative	
V: Protection rating	40=Standard	65=Rubber-sealed	
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Contact mode	1P=1A1B	2P=2A2B	
VIII: Inlet type	L1=L type 90° one inlet V1=V type 90° one inlet	L2=L type 90° two inlets V2=V type 90° two inlets	

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01K-RM40.Q1P	E5028	01K-CA40.S1P	E5032
01K-RM65.Q1P	E5028	01K-CA65.S1P	E5032
01K-RA40.Q1P	E5028	01K-CM40.S2P	E5033
01K-RA65.Q1P	E5028	01K-CM65.S2P	E5033
01K-RM40.S1P	E5029	01K-CA40.S2P	E5033
01K-RM65.S1P	E5029	01K-CA65.S2P	E5033
01K-RA40.S1P	E5029	01K-SM40.Q1P	E5034
01K-RA65.S1P	E5029	01K-SM65.Q1P	E5034
01K-RM40.S2P	E5030	01K-SA40.Q1P	E5034
01K-RM65.S2P	E5030	01K-SA65.Q1P	E5034
01K-RA40.S2P	E5030	01K-SM40.S1P	E5035
01K-RA65.S2P	E5030	01K-SM65.S1P	E5035
01K-CM40.Q1P	E5031	01K-SA40.S1P	E5035
01K-CM65.Q1P	E5031	01K-SA65.S1P	E5035
01K-CA40.Q1P	E5031	01K-SM40.S2P	E5036
01K-CA65.Q1P	E5031	01K-SM65.S2P	E5036
01K-CM40.S1P	E5032	01K-SA40.S2P	E5036
01K-CM65.S1P	E5032	01K-SA65.S2P	E5036



- Mounting hole diameter 16mm
- Apparent shapes with rectangular 18X24mm, square 18X18mm and round diameter 18mm
- 70dB at a distance 30cm



Coding Principle

01 B — R I 40 . Q * 24 FR
 I II III IV V VI VII VIII

I: Series code	01 Series with 16mm diameter mounting hole		
II: Main category	B=Buzzers		
III: Front shape	C=Round	S=Square	R=Rectangular
IV: Function code	C=Continuous	I=Intermittent	
V: Protection rating	40=Standard		
VI: Terminal type	S=Soldering	Q=Plug-in	
VII: Operating voltage	06=6VDC 12=12VDC 24=24VDC		
VIII: Light source	R=Red LED lamp	FR=Flash LED	Omission=Without lamp

Note: Only rectangular shape can be assembled lamps.

Drawing

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Order information

Order No.	Drawing No.	Order No.	Drawing No.
01B-RC40.Q *◇◇	E5037	01B-CC40.Q	E5041
01B-RI40.Q *◇◇	E5037	01B-CI40.Q	E5041
01B-RC40.S *◇◇	E5038	01B-CC40.S	E5042
01B-RI40.S *◇◇	E5038	01B-CI40.S	E5042
01B-RC40.Q	E5039	01B-SC40.Q	E5043
01B-RI40.Q	E5039	01B-SI40.Q	E5043
01B-RC40.S	E5040	01B-SC40.S	E5044
01B-RI40.S	E5040	01B-SI40.S	E5044

Note: ◇ Assembled lamps
 Consumption current max. 7mA

Accessories

Order No.	Anti-twisting Ring	Description	Drawing No.
01Z-100		Enhance the anti-twisting torque	E5045
Order No.	Protective Cover	Description	Drawing No.
01Z-200.R		Suitable to rectangular cover	E5046
01Z-200.S		Suitable to square cover	E5047
Order No.	PCB Plug-in Base	Description	Drawing No.
01Z-300		Only for plug-in terminals	E5048
Order No.	Blanking Plate	Description	Drawing No.
01Z-400		For blanking hole	E5049
Order No.	BA9s Lamp	Description	Drawing No.
L.BA9s-L06.R(Y/G/B/W)		LED Lamp Red(Yellow/Green/Blue/White), 6VDC/AC	E5129
L.BA9s-L12.R(Y/G/B/W)		LED Lamp Red(Yellow/Green/Blue/White), 12VDC/AC	
L.BA9s-L24.R(Y/G/B/W)		LED Lamp Red(Yellow/Green/Blue/White), 24VDC/AC	
L.BA9s-L11.R(Y/G/B/W)		LED Lamp Red(Yellow/Green/Blue/White), 110 VAC	E5130
L.BA9s-L22.R(Y/G/B/W)		LED Lamp Red(Yellow/Green/Blue/White), 220 VAC	
L.BA9s-D06(12/24)		Incandescent lamp, 6VDC/AC (12/24)	E5131
L.BA9s-A11.R(G)		Helium neon lamp Red(Green),110VAC	
L.BA9s-A22.R(G)		Helium neon lamp Red(Green),220VAC	

Drawing

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Order No.	Connector	Description	Drawing No.
01Z-500		Only for plug-in terminals	-
Order No.	Insulation Cover	Description	Drawing No.
01Z-600		Only for plug in terminals	-
Order No.	Mounting Tool	Description	Drawing No.
01Z-T01		Max.torque force : 0.5Nm	-
Order No.	Lens Remover	Description	Drawing No.
01Z-T02		Easily pull lens, lamps can be changed before mounting panels	-
Order No.	Lamp Remover	Description	Drawing No.
01Z-T03		Easily pull lenses	-
Order No.	Metallic Screw Nut	Description	Drawing No.
01Z-NU.M		Metallic screw nut can be used if the panel is excessively thick	-
Order No.	Dust Wrapper	Description	Drawing No.
01Z-700.R		Suitable to rectangular cover	E5050
01Z-700.S		Suitable to square cover	E5051
Order No.	Cover	Description	Drawing No.
01Z-800.R		Suitable to rectangular flush mounting	E5052
01Z-800.S		Suitable to square flush mounting	E5053
Order No.	Emergency-Stop Label	Description	Drawing No.
1. 01Z-900.0(N) 2. 01Z-900.1(N)		External diameter:45mm, "N" represents that 3M paster is not attached	E5054