FM series

Snap-in rocker switches •
panel cut-out 19 x 13 (.750 x .508)

DISTINCTIVE FEATURES

For class II appliances

VDE and UL approved

Protection against moisture by double-shell case

Illuminated or non-illuminated

Optional sealing boot

ELECTRICAL AND GENERAL SPECIFICATIONS

• Approved ratings (functions 1 and 6) :
  VDE : 10(4) A 250 VAC T85 °C - UL : 6 A 250 VAC & 125 VAC T 65°C

• Max. contact rating :
  - functions 1 and 6 : see above.
  - function 3 : 4 A 250 VAC
  - functions 8 and 9 : 6 A 250 VAC

• LED types available :
  3.3 V (4 V max.) 10 mA LED (resistor to be series connected by the user)
  5 V or 12 V LED with integrated resistor

• Initial contact resistance : 20 mΩ max.

• Insulation resistance : 1,000 MΩ min. at 500 VDC

• Dielectric strength :
- functions 1 and 6 : 2,500 Vrms between terminals
- functions 3, 8 and 9 : 1,500 Vrms between terminals

• Electrical life at full load : 10,000 cycles

• Operating temperature : -20 °C to +85 °C (-4 °F to +185 °F)

MATERIALS

• Case, frame, rocker : PA6/6

• Contacts : silver

• Terminals : silver plated

• Lens : PC

• Lamp terminal : no plating

• Fluorescent lamp for blue or green lens, neon lamp for other colors

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

The company reserves the right to change specifications without notice.

FM series

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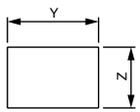panel cut-out 19 x 13 (.750 x .508)

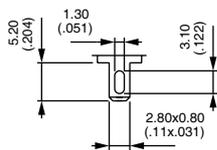## AGENCY APPROVALS

EN 61058-1

Availability : functions 1 and 6.
Marking : approved models are standard marked.

PANEL CUT-OUT

Panel thickness	Dim. Y	Dim. Z
0.75 to 1.25 mm	19.2 +0/-0.1	12.9 +0.15/-0
1.25 to 2 mm	19.4 +0/-0.1	12.9 +0.15/-0
2 to 3 mm	19.8 +0/-0.1	12.9 +0.15/-0

TERMINALS

5.20 (.204)
1.30 (.051)
3.10 (.122)
2.80x0.80 (.11x.031)

2
Solder lug

7.00 (.275)
4.70x0.80 (.185x.031)

8
Quick-connect

1.20 x 0.80 (.047 x .031)
13.00 (.512)

9
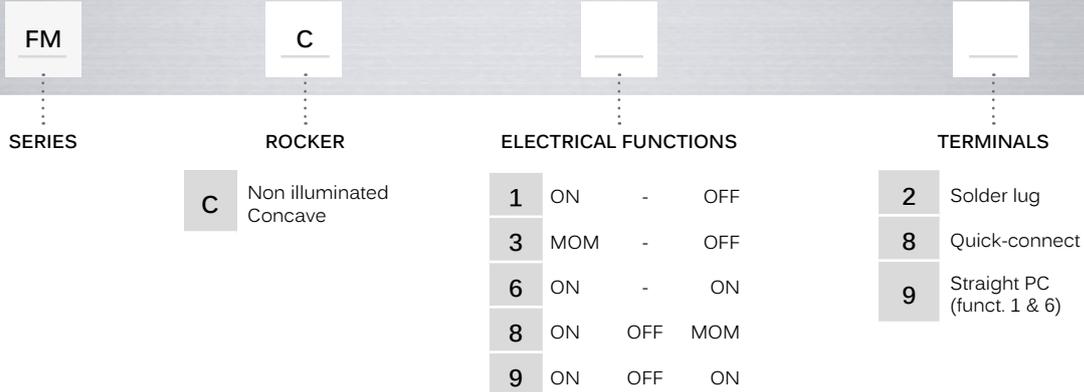Straight PC
(functions 1 and 6 only)

FM series

Snap-in rocker switches •
panel cut-out 19 x 13 (.750 x .508) • non-illuminated

BUILD YOUR PART NUMBER
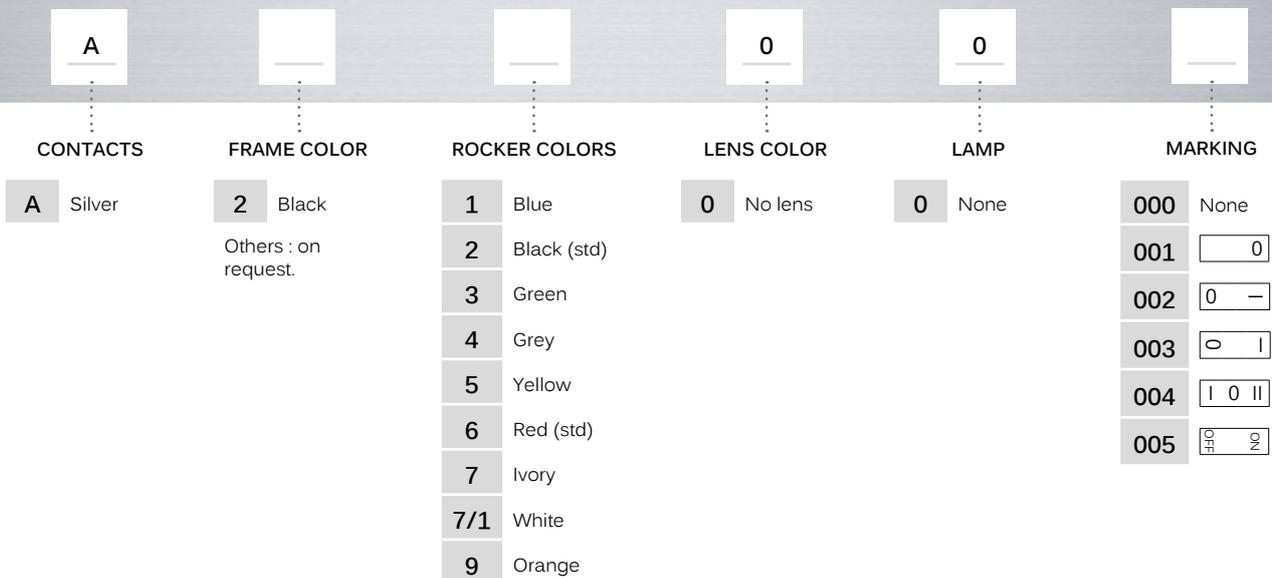
NON-ILLUMINATED
ILLUMINATED SEE NEXT PAGES

BASIC PART NUMBER

FM	C	__		__
SERIES	ROCKER	ELECTRICAL FUNCTIONS		TERMINALS

ROCKER

C	Non illuminated Concave

ELECTRICAL FUNCTIONS

1	ON	-	OFF
3	MOM	-	OFF
6	ON	-	ON
8	ON	OFF	MOM
9	ON	OFF	ON

TERMINALS

2	Solder lug
8	Quick-connect
9	Straight PC (funct. 1 & 6)

OPTIONS

A	__	__	0	0	__
CONTACTS	FRAME COLOR	ROCKER COLORS	LENS COLOR	LAMP	MARKING

CONTACTS

A	Silver

FRAME COLOR

2	Black

Others : on request.

ROCKER COLORS

1	Blue
2	Black (std)
3	Green
4	Grey
5	Yellow
6	Red (std)
7	Ivory
7/1	White
9	Orange

LENS COLOR

0	No lens

LAMP

0	None

MARKING

000	None
001	0
002	0 —
003	○ I
004	I 0 II
005	OFF ON

ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

Notice : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

A sealing boot is available to protect the switches against sand or splashing water. Part number U7720. See "Sealing boots" section of website.
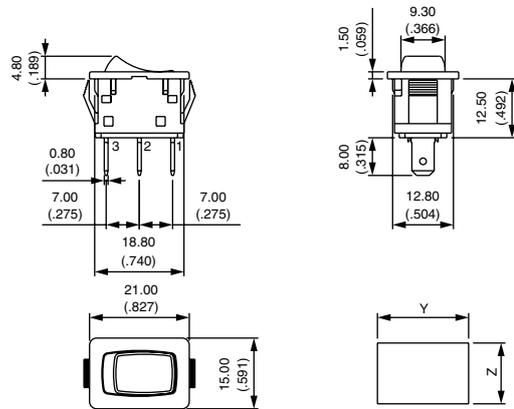
FM series

Snap-in rocker switches •
panel cut-out 19 x 13 (.750 x .508) • non-illuminated

NON-ILLUMINATED
QUICK-CONNECT TERMINALS

Single pole	1-2		2-3
FMC18	ON	-	OFF
FMC38	MOM	-	OFF
FMC68	ON	-	ON
FMC88	ON	OFF	MOM
FMC98	ON	OFF	ON

For solder lug terminals, replace 8 with 2 (FMC•2)
For straight PC terminals, replace 8 with 9 (FMC•9)

4.80 (.189)
0.80 (.031)
7.00 (.275)
7.00 (.275)
18.80 (.740)
21.00 (.827)
3 2 1
15.00 (.591)

9.30 (.366)
1.50 (.059)
12.50 (.492)
8.00 (.315)
12.80 (.504)
Y
Z

CONTACT MATERIALS

BASIC P/N

A   Silver

FRAME COLOR

BASIC P/N

2   Black

Others : on request

ROCKER COLORS

BASIC P/N

1   Blue
2   Black (std)
3   Green
4   Grey
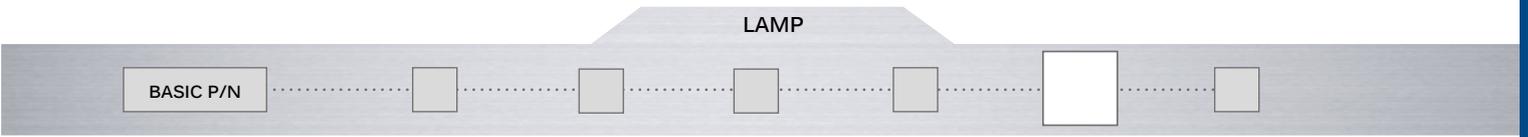5   Yellow
6   Red (std)
7   Ivory
7/1 White
9   Orange

LENS COLOR

BASIC P/N

0   No lens

FM series

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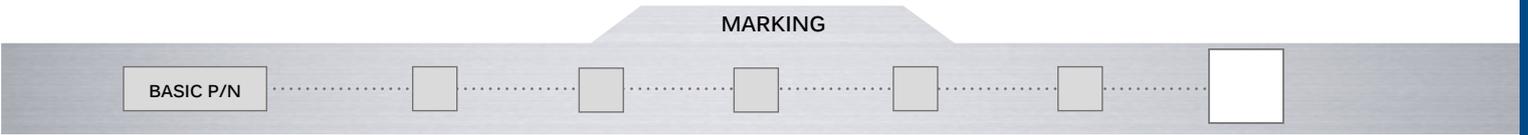
LAMP

BASIC P/N						

0   None

MARKING

BASIC P/N						

Color of marking : white for black rockers - black for other colors - Other : on request.

000   None

001   ☐   0

002   0   —

003   ○   I

004   I   0   II

005   OFF   ON
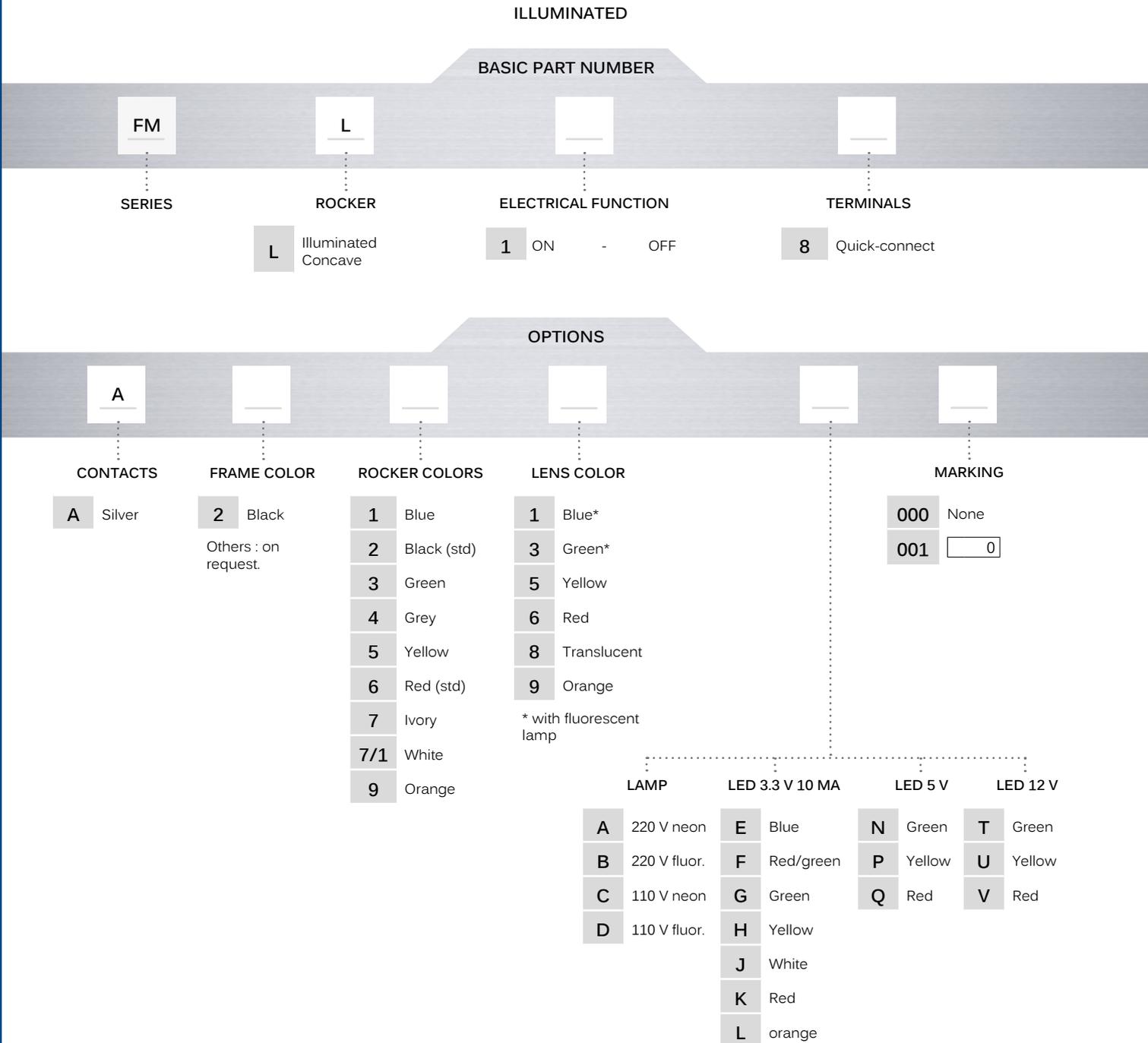
FM series

Snap-in rocker switches •
panel cut-out 19 x 13 (.750 x .508) • illuminated

BUILD YOUR PART NUMBER

ILLUMINATED

BASIC PART NUMBER

FM	L	___	___
SERIES	ROCKER	ELECTRICAL FUNCTION	TERMINALS

L Illuminated Concave	**1** ON - OFF	**8** Quick-connect

OPTIONS

A	___	___	___	___	___
CONTACTS	FRAME COLOR	ROCKER COLORS	LENS COLOR		MARKING

CONTACTS

A Silver

FRAME COLOR

2 Black

Others : on request.

ROCKER COLORS

1	Blue
2	Black (std)
3	Green
4	Grey
5	Yellow
6	Red (std)
7	Ivory
7/1	White
9	Orange

LENS COLOR

1	Blue*
3	Green*
5	Yellow
6	Red
8	Translucent
9	Orange

* with fluorescent lamp

MARKING

| **000** | None |
| **001** | [0] |

LAMP		LED 3.3 V 10 MA		LED 5 V		LED 12 V	
A	220 V neon	**E**	Blue	**N**	Green	**T**	Green
B	220 V fluor.	**F**	Red/green	**P**	Yellow	**U**	Yellow
C	110 V neon	**G**	Green	**Q**	Red	**V**	Red
D	110 V fluor.	**H**	Yellow				
		J	White				
		K	Red				
		L	orange				

No resistor**

** Resistor value = $\dfrac{\text{supply voltage - LED forward voltage}}{\text{LED forward current}}$

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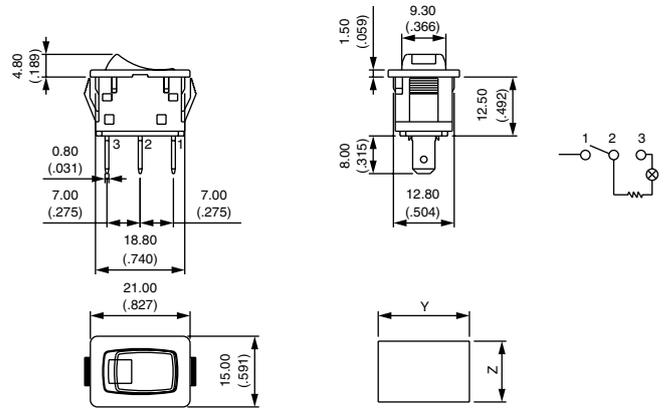
FM series

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ILLUMINATED
QUICK-CONNECT TERMINALS

Single pole

| **FML18** | ON | - | OFF |

For LED models, terminal 2 = cathode (-), terminal 3 = anode (+)

CONTACT MATERIALS

| BASIC P/N | | | | | | | |

A   Silver

FRAME COLOR

| BASIC P/N | | | | | | | |

2   Black
Others : on request

ROCKER COLORS

| BASIC P/N | | | | | | | |

1   Blue
2   Black (std)
3   Green
4   Grey
5   Yellow
6   Red (std)
7   Ivory
7/1   White
9   Orange

LENS COLORS

| BASIC P/N | | | | | | | |

1   Blue *   * with fluorescent lamp
3   Green *
5   Yellow
6   Red
8   Translucent
9   Orange

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LAMPS / LEDS

BASIC P/N

LAMP

A	220 V neon
B	220 V fluorescent
C	110 V neon
D	110 V fluorescent

LED 3.3 V 10 mA

E	Blue
F	Red/green
G	Green
H	Yellow
J	White
K	Red
L	Orange

No resistor **

LED 5 V

N	Green
P	Yellow
Q	Red

LED 12 V

T	Green
U	Yellow
V	Red

** Resistor value = $\dfrac{\text{supply voltage - LED forward voltage}}{\text{LED forward current}}$

MARKING

BASIC P/N

Color of marking : white for black rockers - black for other colors - Other : on request.

000	None
001	0

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Apem](#):

FMC62A2200000 FMC92A2200000 FMC32A2200000 FMC12A2200000 FML18A276A000 FMC12A2200005
FMC12A2500000 FMC12A2600000 FMC18A2200000 FMC18A2200002 FMC18A2200003 FMC18A2200005
FMC18A2300000 FMC18A2600002 FMC18A2600003 FMC18A2700001 FMC19A2200000 FMC19A2200005
FMC38A2200000 FMC38A2200002 FMC38A2200003 FMC38A2600000 FMC38A2600003 FMC68A2200000
FMC68A2200003 FMC68A2200006 FMC68A2600000 FMC69A2900000 FMC78A2200006 FMC82A2200000
FMC88A2200000 FMC88A2200006 FMC92A2200004 FMC98A2200000 FMC98A2200004 FMC98A2200006
FMC98A2600004 FML18A221D000 FML18A223B000 FML18A225A000 FML18A226A000 FML18A226V000
FML18A228A000 FML18A228B000 FML18A236A000 FML18A266A000