
Pilot devices, 22 mm

Modular plastic range

Ordering details

14	Mounting instructions
15	Non-illuminated pushbuttons
17	Illuminated flush pushbuttons
19	Non-illuminated double pushbuttons
20	Illuminated double pushbuttons
22	Mushroom pushbuttons
23	Emergency stop pushbuttons
24	Machine stop pushbuttons
25	Heavy duty pushbuttons
26	Non-illuminated selector switches
32	Illuminated selector switches - 2, 3 and 4 position
36	Key-operated selector switches - 2 and 3 position
38	Potentiometers
39	Reset pushbuttons
41	Joysticks
42	Toggle switches

Accessories for modular range

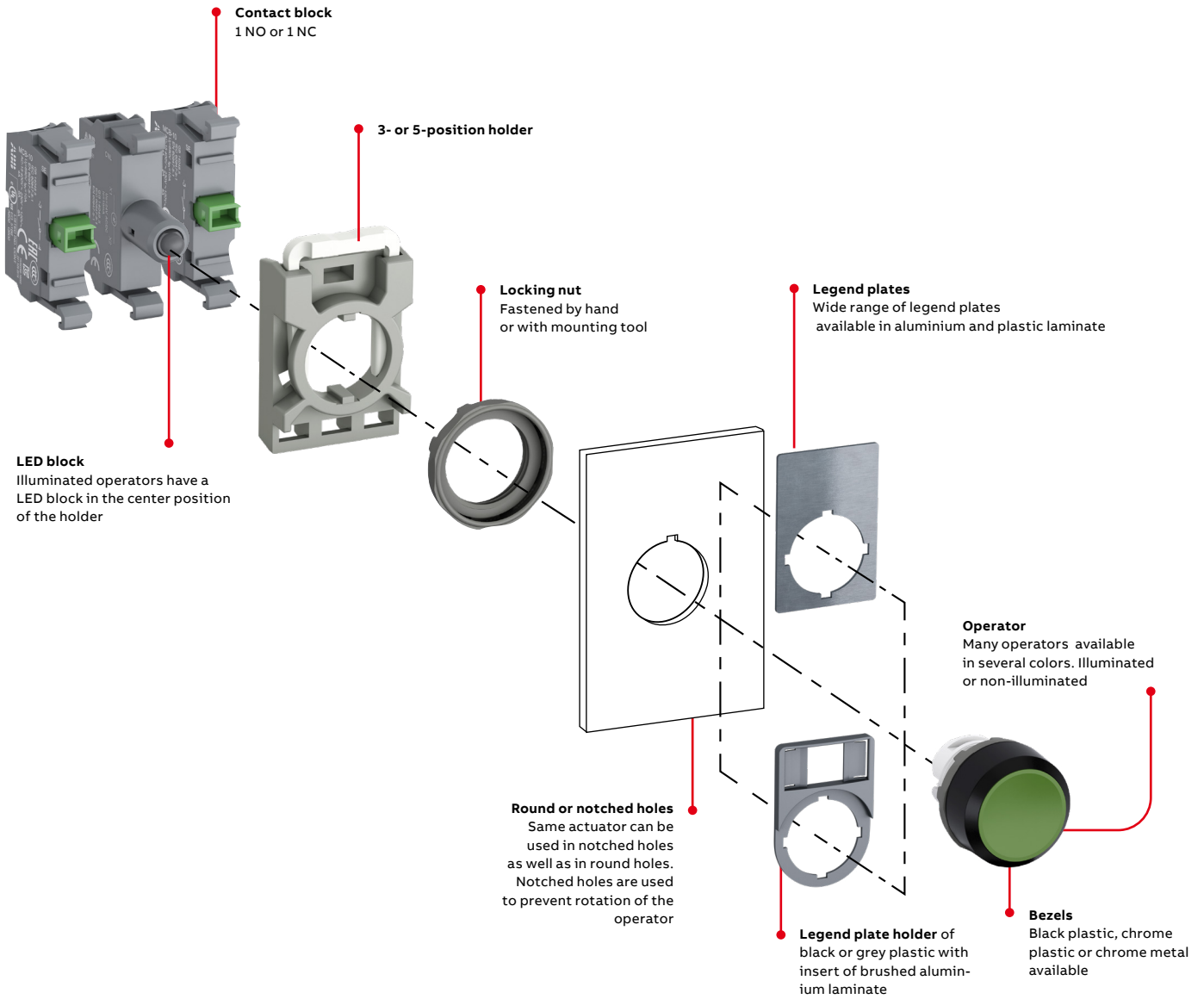
43	Contact block configuration
44	HOLDERS and contact blocks for front mounting
45	LED blocks for front mounting
47	Other accessories

Technical data

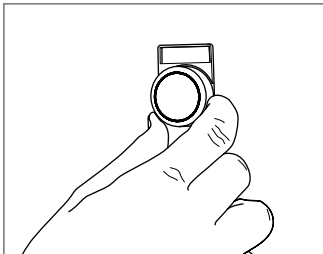
Drilling plan

Modular plastic range

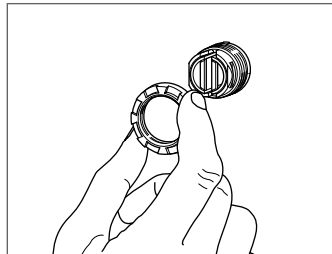
02



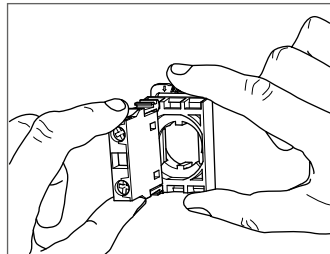
Easy to install



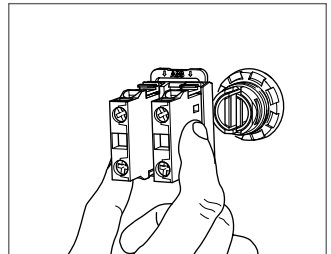
The operator is to be inserted from the front...



...and secured at the back with the nut.

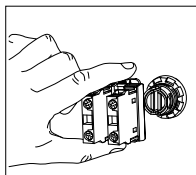
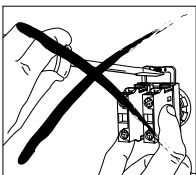


The contact blocks/LED block are then snapped on to the holder...



...and the holder snaps on to the operator.

...and to remove



Press down the spring on the holder and pull the holder from the actuator.

Simple and fast installation



Watch the video

Modular plastic range

Non-illuminated flush pushbuttons



MP1-10R

1SFC151004V0001



MP1-10Y

1SFC151016V0001



MP1-30L

1SFC151031V0001



MP2-10G

1SFC151015V0001



MP2-10W

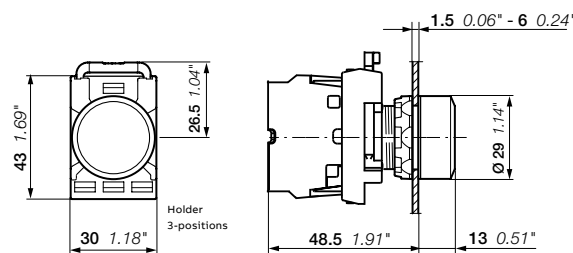
1SFC151018V0001



MP2-20B

1SFC151029V0001

Operator	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
Momentary					
● Red	Black plastic	MP1-10R	1SFA611100R1001	1	0.016
	Chrome plastic	MP1-20R	1SFA611100R2001	1	0.016
	Chrome metal	MP1-30R	1SFA611100R3001	1	0.026
● Green	Black plastic	MP1-10G	1SFA611100R1002	1	0.016
	Chrome plastic	MP1-20G	1SFA611100R2002	1	0.016
	Chrome metal	MP1-30G	1SFA611100R3002	1	0.026
● Yellow	Black plastic	MP1-10Y	1SFA611100R1003	1	0.016
	Chrome plastic	MP1-20Y	1SFA611100R2003	1	0.016
	Chrome metal	MP1-30Y	1SFA611100R3003	1	0.026
● Blue	Black plastic	MP1-10L	1SFA611100R1004	1	0.016
	Chrome plastic	MP1-20L	1SFA611100R2004	1	0.016
	Chrome metal	MP1-30L	1SFA611100R3004	1	0.026
○ White	Black plastic	MP1-10W	1SFA611100R1005	1	0.016
	Chrome plastic	MP1-20W	1SFA611100R2005	1	0.016
	Chrome metal	MP1-30W	1SFA611100R3005	1	0.026
● Black	Black plastic	MP1-10B	1SFA611100R1006	1	0.016
	Chrome plastic	MP1-20B	1SFA611100R2006	1	0.016
	Chrome metal	MP1-30B	1SFA611100R3006	1	0.026
○ Clear	Black plastic	MP1-10C	1SFA611100R1008	1	0.016
	Chrome plastic	MP1-20C	1SFA611100R2008	1	0.016
	Chrome metal	MP1-30C	1SFA611100R3008	1	0.026
Maintained					
● Red	Black plastic	MP2-10R	1SFA611101R1001	1	0.016
	Chrome plastic	MP2-20R	1SFA611101R2001	1	0.016
	Chrome metal	MP2-30R	1SFA611101R3001	1	0.026
● Green	Black plastic	MP2-10G	1SFA611101R1002	1	0.016
	Chrome plastic	MP2-20G	1SFA611101R2002	1	0.016
	Chrome metal	MP2-30G	1SFA611101R3002	1	0.026
● Yellow	Black plastic	MP2-10Y	1SFA611101R1003	1	0.016
	Chrome metal	MP2-30Y	1SFA611101R3003	1	0.026
	● Blue	Black plastic	MP2-10L	1SFA611101R1004	1
Chrome plastic		MP2-20L	1SFA611101R2004	1	0.016
Chrome metal		MP2-30L	1SFA611101R3004	1	0.026
○ White	Black plastic	MP2-10W	1SFA611101R1005	1	0.016
	Chrome plastic	MP2-20W	1SFA611101R2005	1	0.016
	● Black	Black plastic	MP2-10B	1SFA611101R1006	1
Chrome plastic		MP2-20B	1SFA611101R2006	1	0.016
Chrome metal		MP2-30B	1SFA611101R3006	1	0.026
○ Clear	Black plastic	MP2-10C	1SFA611101R1008	1	0.016



MP1, MP2
Dimensions (mm, inches)

Modular plastic range

Non-illuminated extended pushbuttons



MP3-10R

1SFC151006V0001



MP3-20Y

1SFC151028V0001



MP3-10W

1SFC151013V0001



MP3-10C

1SFC151383V0001



MP4-10G

1SFC151012V0001



MP4-10L

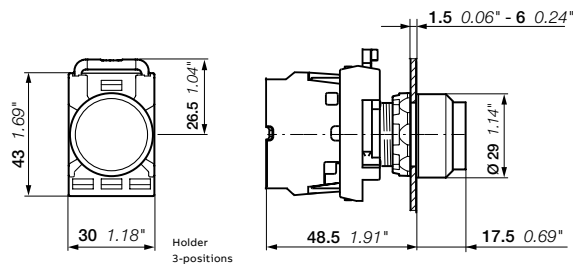
1SFC151019V0001



MP4-10B

1SFC151011V0001

Operator	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
Momentary					
● Red	Black plastic	MP3-10R	1SFA611102R1001	1	0.016
	Chrome plastic	MP3-20R	1SFA611102R2001	1	0.016
	Chrome metal	MP3-30R	1SFA611102R3001	1	0.026
● Green	Black plastic	MP3-10G	1SFA611102R1002	1	0.016
	Chrome plastic	MP3-20G	1SFA611102R2002	1	0.016
	Chrome metal	MP3-30G	1SFA611102R3002	1	0.026
● Yellow	Black plastic	MP3-10Y	1SFA611102R1003	1	0.016
	Chrome plastic	MP3-20Y	1SFA611102R2003	1	0.016
	Chrome metal	MP3-30Y	1SFA611102R3003	1	0.026
● Blue	Black plastic	MP3-10L	1SFA611102R1004	1	0.016
	Chrome plastic	MP3-20L	1SFA611102R2004	1	0.016
	Chrome metal	MP3-30L	1SFA611102R3004	1	0.026
○ White	Black plastic	MP3-10W	1SFA611102R1005	1	0.016
	Chrome plastic	MP3-20W	1SFA611102R2005	1	0.016
	Chrome metal	MP3-30W	1SFA611102R3005	1	0.026
● Black	Black plastic	MP3-10B	1SFA611102R1006	1	0.016
	Chrome plastic	MP3-20B	1SFA611102R2006	1	0.016
	Chrome metal	MP3-30B	1SFA611102R3006	1	0.026
○ Clear	Black plastic	MP3-10C	1SFA611102R1008	1	0.016
	Chrome metal	MP3-30C	1SFA611102R3008	1	0.026
Maintained					
● Red	Black plastic	MP4-10R	1SFA611103R1001	1	0.016
	Chrome plastic	MP4-20R	1SFA611103R2001	1	0.016
● Green	Black plastic	MP4-10G	1SFA611103R1002	1	0.016
	Chrome plastic	MP4-20G	1SFA611103R2002	1	0.016
	Chrome metal	MP4-30G	1SFA611103R3002	1	0.026
● Yellow	Black plastic	MP4-10Y	1SFA611103R1003	1	0.016
	Chrome plastic	MP4-20Y	1SFA611103R2003	1	0.016
● Blue	Black plastic	MP4-10L	1SFA611103R1004	1	0.016
	Chrome plastic	MP4-20L	1SFA611103R2004	1	0.016
○ White	Black plastic	MP4-10W	1SFA611103R1005	1	0.016
● Black	Black plastic	MP4-10B	1SFA611103R1006	1	0.016
	Chrome metal	MP4-30B	1SFA611103R3006	1	0.026
○ Clear	Black plastic	MP4-10C	1SFA611103R1008	1	0.016



MP3, MP4
Dimensions (mm, inches)

Modular plastic range

Illuminated flush pushbuttons



MP1-31G

1SFCL51048V0001



MP1-11Y

1SFCL51042V0001



MP1-21L

1SFCL51046V0001



MP2-31R

1SFCL51046V0001



MP2-11L

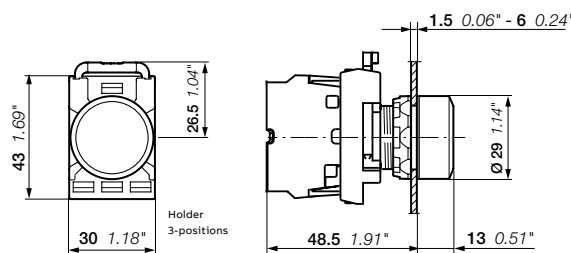
1SFCL51040V0001



MP2-11C

1SFCL51044V0001

Operator	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
Momentary					
● Red	Black plastic	MP1-11R	1SFA611100R1101	1	0.016
	Chrome plastic	MP1-21R	1SFA611100R2101	1	0.016
	Chrome metal	MP1-31R	1SFA611100R3101	1	0.026
● Green	Black plastic	MP1-11G	1SFA611100R1102	1	0.016
	Chrome plastic	MP1-21G	1SFA611100R2102	1	0.016
	Chrome metal	MP1-31G	1SFA611100R3102	1	0.026
● Yellow	Black plastic	MP1-11Y	1SFA611100R1103	1	0.016
	Chrome plastic	MP1-21Y	1SFA611100R2103	1	0.016
	Chrome metal	MP1-31Y	1SFA611100R3103	1	0.026
● Blue	Black plastic	MP1-11L	1SFA611100R1104	1	0.016
	Chrome plastic	MP1-21L	1SFA611100R2104	1	0.016
	Chrome metal	MP1-31L	1SFA611100R3104	1	0.026
○ White	Black plastic	MP1-11W	1SFA611100R1105	1	0.016
	Chrome plastic	MP1-21W	1SFA611100R2105	1	0.016
	Chrome metal	MP1-31W	1SFA611100R3105	1	0.026
○ Clear	Black plastic	MP1-11C	1SFA611100R1108	1	0.016
	Chrome plastic	MP1-21C	1SFA611100R2108	1	0.016
	Chrome metal	MP1-31C	1SFA611100R3108	1	0.026
Maintained					
● Red	Black plastic	MP2-11R	1SFA611101R1101	1	0.016
	Chrome plastic	MP2-21R	1SFA611101R2101	1	0.016
	Chrome metal	MP2-31R	1SFA611101R3101	1	0.026
● Green	Black plastic	MP2-11G	1SFA611101R1102	1	0.016
	Chrome plastic	MP2-21G	1SFA611101R2102	1	0.016
	Chrome metal	MP2-31G	1SFA611101R3102	1	0.026
● Yellow	Black plastic	MP2-11Y	1SFA611101R1103	1	0.016
	Chrome plastic	MP2-21Y	1SFA611101R2103	1	0.016
	Chrome metal	MP2-31Y	1SFA611101R3103	1	0.026
● Blue	Black plastic	MP2-11L	1SFA611101R1104	1	0.016
	Chrome plastic	MP2-21L	1SFA611101R2104	1	0.016
	Chrome metal	MP2-31L	1SFA611101R3104	1	0.026
○ White	Black plastic	MP2-11W	1SFA611101R1105	1	0.016
	Chrome plastic	MP2-21W	1SFA611101R2105	1	0.016
	Chrome metal	MP2-31W	1SFA611101R3105	1	0.026
○ Clear	Black plastic	MP2-11C	1SFA611101R1108	1	0.016
	Chrome plastic	MP2-21C	1SFA611101R2108	1	0.016
	Chrome metal	MP2-31C	1SFA611101R3108	1	0.026



MP1, MP2

Dimensions (mm, inches)

Modular plastic range

Illuminated extended pushbuttons



MP3-11R

1SFCL51065V0001



MP3-31G

1SFCL51062V0001



MP3-11W

1SFCL51072V0001



MP4-11Y

1SFCL51083V0001



MP4-31L

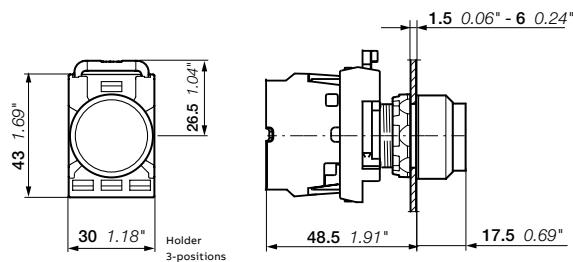
1SFCL51061V0001



MP4-21C

1SFCL51067V0001

Operator	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
Momentary					
● Red	Black plastic	MP3-11R	1SFA611102R1101	1	0.016
	Chrome plastic	MP3-21R	1SFA611102R2101	1	0.016
	Chrome metal	MP3-31R	1SFA611102R3101	1	0.026
● Green	Black plastic	MP3-11G	1SFA611102R1102	1	0.016
	Chrome plastic	MP3-21G	1SFA611102R2102	1	0.016
	Chrome metal	MP3-31G	1SFA611102R3102	1	0.026
● Yellow	Black plastic	MP3-11Y	1SFA611102R1103	1	0.016
	Chrome plastic	MP3-21Y	1SFA611102R2103	1	0.016
	Chrome metal	MP3-31Y	1SFA611102R3103	1	0.026
● Blue	Black plastic	MP3-11L	1SFA611102R1104	1	0.016
	Chrome plastic	MP3-21L	1SFA611102R2104	1	0.016
	Chrome metal	MP3-31L	1SFA611102R3104	1	0.026
○ White	Black plastic	MP3-11W	1SFA611102R1105	1	0.016
	Chrome plastic	MP3-21W	1SFA611102R2105	1	0.016
	Chrome metal	MP3-31W	1SFA611102R3105	1	0.026
○ Clear	Black plastic	MP3-11C	1SFA611102R1108	1	0.016
	Chrome plastic	MP3-21C	1SFA611102R2108	1	0.016
	Chrome metal	MP3-31C	1SFA611102R3108	1	0.026
Maintained					
● Red	Black plastic	MP4-11R	1SFA611103R1101	1	0.016
	Chrome plastic	MP4-21R	1SFA611103R2101	1	0.016
	Chrome metal	MP4-31R	1SFA611103R3101	1	0.026
● Green	Black plastic	MP4-11G	1SFA611103R1102	1	0.016
	Chrome plastic	MP4-21G	1SFA611103R2102	1	0.016
	Chrome metal	MP4-31G	1SFA611103R3102	1	0.026
● Yellow	Black plastic	MP4-11Y	1SFA611103R1103	1	0.016
	Chrome plastic	MP4-21Y	1SFA611103R2103	1	0.016
● Blue	Black plastic	MP4-11L	1SFA611103R1104	1	0.016
	Chrome plastic	MP4-21L	1SFA611103R2104	1	0.016
	Chrome metal	MP4-31L	1SFA611103R3104	1	0.026
○ White	Black plastic	MP4-11W	1SFA611103R1105	1	0.016
	Chrome plastic	MP4-21W	1SFA611103R2105	1	0.016
○ Clear	Black plastic	MP4-11C	1SFA611103R1108	1	0.016
	Chrome plastic	MP4-21C	1SFA611103R2108	1	0.016
	Chrome metal	MP4-31C	1SFA611103R3108	1	0.026



MP3, MP4

Dimensions (mm, inches)

Modular plastic range

Non-illuminated double pushbuttons momentary



MPD1-11B



MPD5-11B



MPD13-11B



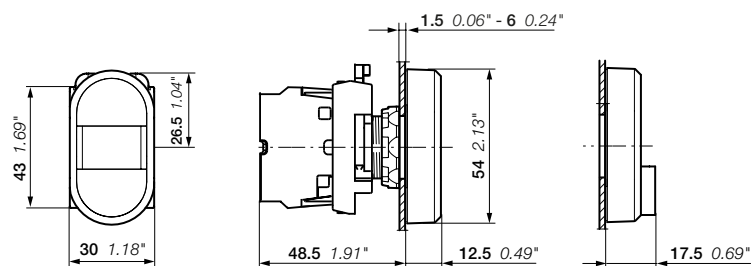
MPD15-11B



MA1-8139

Operator upper button	Operator lower button	Type	Order code	Pkg qty	Weight (1 pce) kg
Flush pushbutton					
● Green	● Red				
No text	No text	MPD1-11B	1SFA611130R1106	1	0.025
I	O	MPD2-11B	1SFA611131R1106	1	0.025
ON	OFF	MPD3-11B	1SFA611132R1106	1	0.025
START	STOP	MPD4-11B	1SFA611133R1106	1	0.025
○ White	● Black				
No text	No text	MPD5-11B	1SFA611134R1106	1	0.025
I	O	MPD6-11B	1SFA611135R1106	1	0.025
ON	OFF	MPD7-11B	1SFA611136R1106	1	0.025
START	STOP	MPD8-11B	1SFA611137R1106	1	0.025
● Black	● Red				
No text	No text	MPD9-11B	1SFA611138R1106	1	0.025
Extended lower pushbutton					
● Green	● Red				
No text	No text	MPD12-11B	1SFA611141R1106	1	0.025
I	O	MPD13-11B	1SFA611142R1106	1	0.025
ON	OFF	MPD14-11B	1SFA611143R1106	1	0.025
START	STOP	MPD15-11B	1SFA611144R1106	1	0.025
○ White	● Black				
No text	No text	MPD16-11B	1SFA611145R1106	1	0.025
I	O	MPD17-11B	1SFA611146R1106	1	0.025
ON	OFF	MPD18-11B	1SFA611147R1106	1	0.025
START	STOP	MPD19-11B	1SFA611148R1106	1	0.025
Accessories					
Legend plate holder					
2-position		MA1-8139	1SFA611920R8139	10	0.030

Note: Insert not included. Suitable for insert size 27 x 15 mm. Refer to Legend plates section.



MPD
Dimensions (mm, inches)

Modular plastic range

Illuminated double pushbuttons momentary - Flush lower button



MPD4-11C



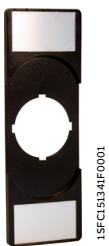
MPD5-11C



MPD2-11R



MDP3-11G



MA1-8139

Operator upper button	Operator lower button	Type	Order code	Pkg qty	Weight (1 pce) kg
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Clear light indicator

● Green		● Red			
No text	No text	MPD1-11C	1SFA611130R1108	1	0.025
I	0	MPD2-11C	1SFA611131R1108	1	0.025
ON	OFF	MPD3-11C	1SFA611132R1108	1	0.025
START	STOP	MPD4-11C	1SFA611133R1108	1	0.025
○ White		● Black			
No text	No text	MPD5-11C	1SFA611134R1108	1	0.025
I	0	MPD6-11C	1SFA611135R1108	1	0.025
START	STOP	MPD8-11C	1SFA611137R1108	1	0.025

Red light indicator

● Green		● Red			
No text	No text	MPD1-11R	1SFA611130R1101	1	0.025
I	0	MPD2-11R	1SFA611131R1101	1	0.025
ON	OFF	MPD3-11R	1SFA611132R1101	1	0.025
START	STOP	MPD4-11R	1SFA611133R1101	1	0.025
○ White		● Black			
No text	No text	MPD5-11R	1SFA611134R1101	1	0.025

Green light indicator

● Green		● Red			
No text	No text	MPD1-11G	1SFA611130R1102	1	0.025
I	0	MPD2-11G	1SFA611131R1102	1	0.025
ON	OFF	MPD3-11G	1SFA611132R1102	1	0.025
START	STOP	MPD4-11G	1SFA611133R1102	1	0.025
○ White		● Black			
No text	No text	MPD5-11G	1SFA611134R1102	1	0.025
I	0	MPD6-11G	1SFA611135R1102	1	0.025
ON	OFF	MPD7-11G	1SFA611136R1102	1	0.025
START	STOP	MPD8-11G	1SFA611137R1102	1	0.025

Yellow light indicator

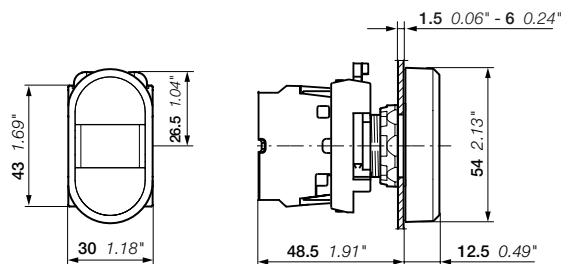
● Green		● Red			
No text	No text	MPD1-11Y	1SFA611130R1103	1	0.025
I	0	MPD2-11Y	1SFA611131R1103	1	0.025
ON	OFF	MPD3-11Y	1SFA611132R1103	1	0.025
START	STOP	MPD4-11Y	1SFA611133R1103	1	0.025
○ White		● Black			
No text	No text	MPD5-11Y	1SFA611134R1103	1	0.025

Accessories

Legend plate holder

2-position	MA1-8139	1SFA611920R8139	10	0.030
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Note: Insert not included. Suitable for insert size 27 x 15 mm. Refer to Legend plates section.



MPD
Dimensions (mm, inches)

Modular plastic range

Illuminated double pushbuttons momentary - Extended lower button



MPD12-11C



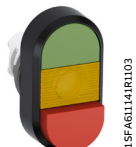
MPD14-11C



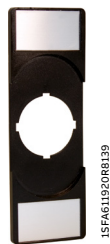
MDP13-11R



MDP14-11G



MDP12-11Y



MA1-8139

Operator upper button	Operator lower button	Type	Order code	Pkg qty	Weight (1 pce) kg
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Clear light indicator

Green	Red				
No text	No text	MPD12-11C	1SFA611141R1108	1	0.025
I	0	MPD13-11C	1SFA611142R1108	1	0.025
ON	OFF	MPD14-11C	1SFA611143R1108	1	0.025
START	STOP	MPD15-11C	1SFA611144R1108	1	0.025

White	Black				
No text	No text	MPD16-11C	1SFA611145R1108	1	0.025
I	0	MPD17-11C	1SFA611146R1108	1	0.025
START	STOP	MPD19-11C	1SFA611148R1108	1	0.025

Red light indicator

Green	Red				
No text	No text	MPD12-11R	1SFA611141R1101	1	0.025
I	0	MPD13-11R	1SFA611142R1101	1	0.025
ON	OFF	MPD14-11R	1SFA611143R1101	1	0.025
START	STOP	MPD15-11R	1SFA611144R1101	1	0.025

White	Black				
No text	No text	MPD16-11R	1SFA611145R1101	1	0.025

Green light indicator

Green	Red				
No text	No text	MPD12-11G	1SFA611141R1102	1	0.025
I	0	MPD13-11G	1SFA611142R1102	1	0.025
ON	OFF	MPD14-11G	1SFA611143R1102	1	0.025
START	STOP	MPD15-11G	1SFA611144R1102	1	0.025

White	Black				
No text	No text	MPD16-11G	1SFA611145R1102	1	0.025
I	0	MPD17-11G	1SFA611146R1102	1	0.025
START	STOP	MPD19-11G	1SFA611148R1102	1	0.025

Yellow light indicator

Green	Red				
No text	No text	MPD12-11Y	1SFA611141R1103	1	0.025
I	0	MPD13-11Y	1SFA611142R1103	1	0.025
ON	OFF	MPD14-11Y	1SFA611143R1103	1	0.025
START	STOP	MPD15-11Y	1SFA611144R1103	1	0.025

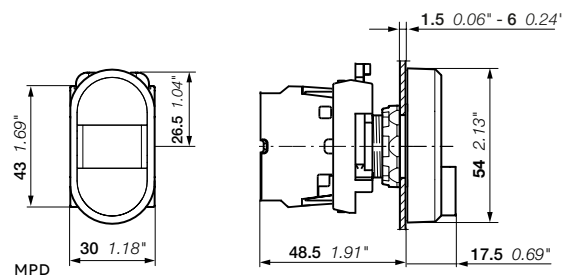
White	Black				
No text	No text	MPD16-11Y	1SFA611145R1103	1	0.025
I	0	MPD17-11Y	1SFA611146R1103	1	0.025

Accessories

Legend plate holder

2-position	MA1-8139	1SFA611920R8139	10	0.030
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Note: Insert not included. Suitable for insert size 27 x 15 mm. Refer to Legend plates section.



Modular plastic range

Mushroom pushbuttons momentary

02



1SFC151007V0001

MPM1-10G



1SFC151010V0001

MPM1-10B



1SFC151073V0001

MPM2-10R



1SFC151074V0001

MPM2-10Y



1SFC151173V0001

MPM1-11G



1SFC151155V0001

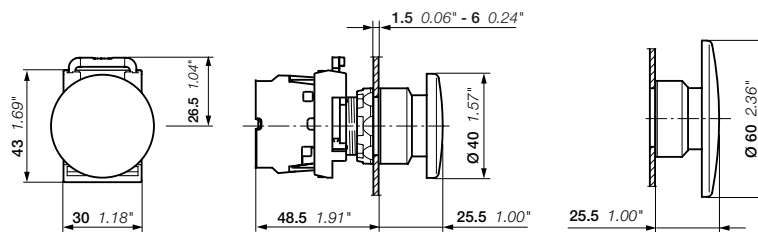
MPM2-11R

Non illuminated

Operator	Type	Order code	Pkg qty	Weight (1 pce) kg
Ø 40 mm				
● Red	MPM1-10R	1SFA611124R1001	1	0.018
● Green	MPM1-10G	1SFA611124R1002	1	0.018
● Yellow	MPM1-10Y	1SFA611124R1003	1	0.018
● Black	MPM1-10B	1SFA611124R1006	1	0.018
Ø 60 mm				
● Red	MPM2-10R	1SFA611125R1001	1	0.020
● Yellow	MPM2-10Y	1SFA611125R1003	1	0.020
● Black	MPM2-10B	1SFA611125R1006	1	0.020

Illuminated

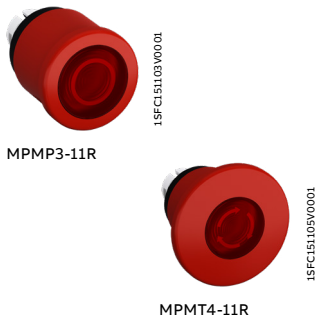
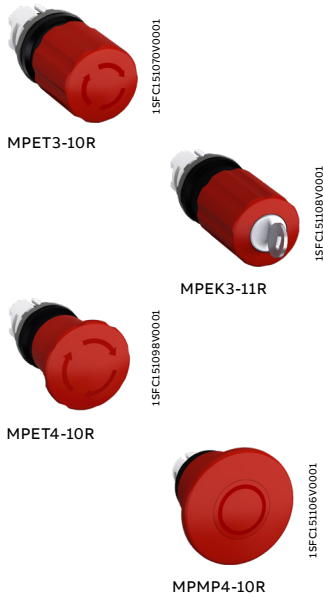
Operator	Type	Order code	Pkg qty	Weight (1 pce) kg
Ø 40 mm				
● Red	MPM1-11R	1SFA611124R1101	1	0.018
● Green	MPM1-11G	1SFA611124R1102	1	0.018
● Yellow	MPM1-11Y	1SFA611124R1103	1	0.018
Ø 60 mm				
● Red	MPM2-11R	1SFA611125R1101	1	0.020
● Yellow	MPM2-11Y	1SFA611125R1103	1	0.020



MPM1, MPM2
Dimensions (mm, inches)

Modular plastic range

Emergency stop pushbuttons



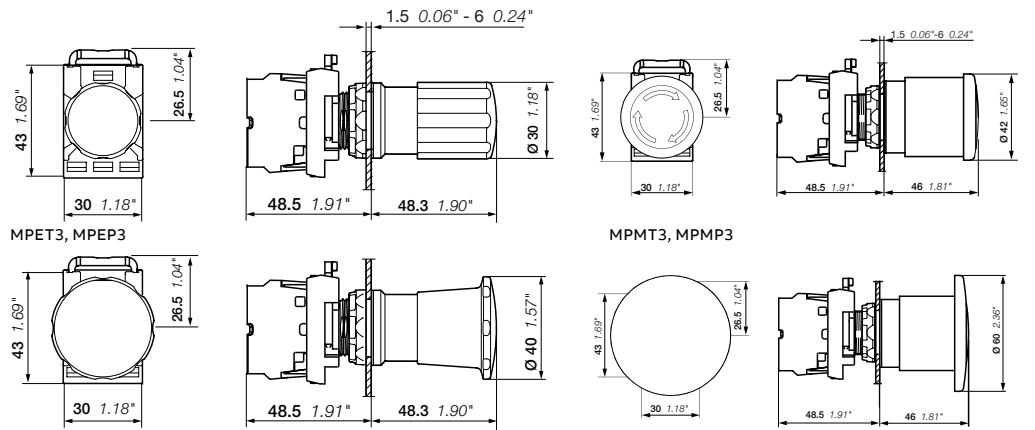
Non illuminated

The emergency stops pushbuttons conform to the standard EN/IEC 60947-5-5, Safety of machinery EN/ISO 13850, IEC 60204-1 and to Machinery directive 2006/42/EC.

Operator	Release method	Type	Order code	Pkg qty	Weight (1 pce) kg
Ø 30 mm					
● Red	Twist release	MPET3-10R	1SFA611520R1001	1	0.036
● Red	Pull release	MPEP3-10R	1SFA611521R1001	1	0.036
● Red	Key code 455	MPEK3-11R	1SFA611522R1101	1	0.065
● Red	Key code 421	MPEK3-12R	1SFA611522R1201	1	0.065
● Red	Key code 3433-E	MPEK3-13R	1SFA611522R1301	1	0.065
Ø 40 mm					
● Red	Twist release	MPET4-10R	1SFA611523R1001	1	0.036
● Red	Pull release	MPEP4-10R	1SFA611524R1001	1	0.036
● Red	Key code 455	MPEK4-11R	1SFA611525R1101	1	0.065
● Red	Key code 421	MPEK4-12R	1SFA611525R1201	1	0.065
● Red	Key code 3433-E	MPEK4-13R	1SFA611525R1301	1	0.065
Ø 60 mm					
● Red	Twist release	MPMT4-10R	1SFA611513R1001	1	0.048
● Red	Pull release	MPMP4-10R	1SFA611514R1001	1	0.048

Illuminated

Operator	Release method	Type	Order code	Pkg qty	Weight (1 pce) kg
Ø 40 mm					
● Red	Twist release	MPMT3-11R	1SFA611510R1101	1	0.041
● Red	Pull release	MPMP3-11R	1SFA611511R1101	1	0.041
Ø 60 mm					
● Red	Twist release	MPMT4-11R	1SFA611513R1101	1	0.048
● Red	Pull release	MPMP4-11R	1SFA611514R1101	1	0.048



Dimensions (mm, inches)

Modular plastic range

Machine stop pushbuttons



1SFC151094V0001

MPET3-10B



1SFC151096V0001

MPET4-10B

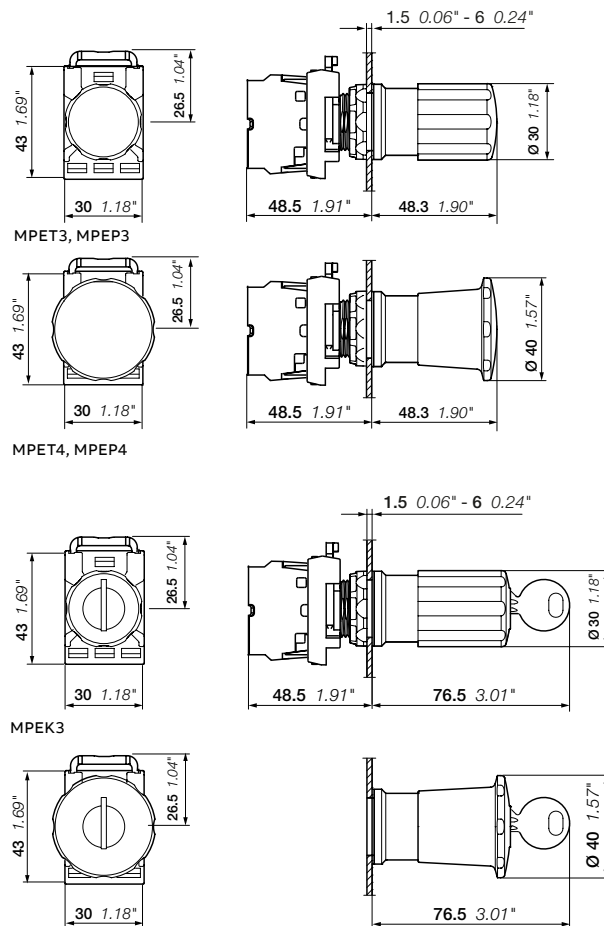


1SFC15110V0001

MPEK4-11B

Non illuminated

Operator	Release method	Type	Order code	Pkg qty	Weight (1 pce) kg
Ø 30 mm					
● Black	Twist release	MPET3-10B	1SFA611520R1006	1	0.036
● Black	Pull release	MPEP3-10B	1SFA611521R1006	1	0.036
● Black	Key code 455	MPEK3-11B	1SFA611522R1106	1	0.065
Ø 40 mm					
● Black	Twist release	MPET4-10B	1SFA611523R1006	1	0.036
● Black	Pull release	MPEP4-10B	1SFA611524R1006	1	0.036
● Black	Key code 455	MPEK4-11B	1SFA611525R1106	1	0.065



Dimensions (mm, inches)

Modular plastic range

Heavy duty pushbuttons



KP6-40R



KP6-40G

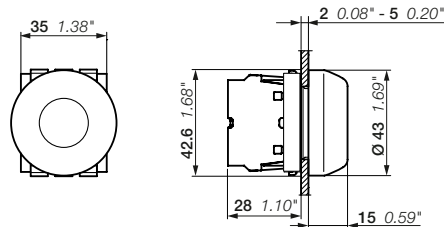


KP6-40B

Description

For 30 mm mounting hole, 3-position holder included

Color	Type	Order code	Pkg qty	Weight (1 pce) kg
● Red	KP6-40R	1SFA616105R4001	1	0.028
● Green	KP6-40G	1SFA616105R4002	1	0.028
● Black	KP6-40B	1SFA616105R4006	1	0.028



KP6

Modular plastic range

Pilot lights



ML1-100R



ML1-100G



ML1-100Y



ML1-100C



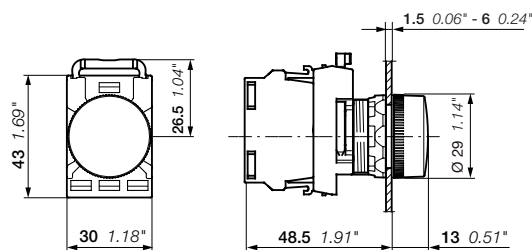
ML1-100L

Color	Type	Order code	Pkg qty	Weight (1 pce) kg
● Red	ML1-100R	1SFA611400R1001	1	0.018
● Green	ML1-100G	1SFA611400R1002	1	0.018
● Yellow	ML1-100Y	1SFA611400R1003	1	0.018
● Blue	ML1-100L	1SFA611400R1004	1	0.018
○ White	ML1-100W	1SFA611400R1005	1	0.018
○ Clear	ML1-100C	1SFA611400R1008	1	0.018

Lens

Light diffusing lens	Order code	Pkg qty	Weight (1 pce) kg
KA1-8005	1SFA616920R8005	10	0.001

Note: Light diffusing lens is used to improve spread of illumination from LED blocks. Cannot be used together with text cap.



ML1

Dimensions (mm, inches)

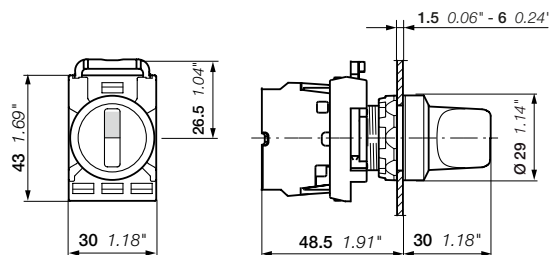
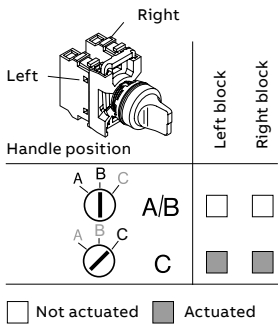
Modular plastic range

Non-illuminated selector switches - 2-position - Short handle



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg	
	● Red	Black plastic	M2SS1-10R	1SFA611200R1001	1	0.015	
		Chrome plastic	M2SS1-20R	1SFA611200R2001	1	0.015	
		Chrome metal	M2SS1-30R	1SFA611200R3001	1	0.024	
	● Black	Black plastic	M2SS1-10B	1SFA611200R1006	1	0.015	
		Chrome plastic	M2SS1-20B	1SFA611200R2006	1	0.015	
		Chrome metal	M2SS1-30B	1SFA611200R3006	1	0.024	
● Grey	Black plastic	M2SS1-10U	1SFA611200R1007	1	0.015		
	Chrome plastic	M2SS1-20U	1SFA611200R2007	1	0.015		
	● Red	Black plastic	M2SS2-10R	1SFA611201R1001	1	0.015	
		Chrome plastic	M2SS2-20R	1SFA611201R2001	1	0.015	
		Chrome metal	M2SS2-30R	1SFA611201R3001	1	0.024	
	● Black	Black plastic	M2SS2-10B	1SFA611201R1006	1	0.015	
		Chrome plastic	M2SS2-20B	1SFA611201R2006	1	0.015	
		Chrome metal	M2SS2-30B	1SFA611201R3006	1	0.024	
	● Grey	Black plastic	M2SS2-10U	1SFA611201R1007	1	0.015	
		Chrome plastic	M2SS2-20U	1SFA611201R2007	1	0.015	
		Chrome metal	M2SS2-30U	1SFA611201R3007	1	0.024	
		● Red	Black plastic	M2SS3-10R	1SFA611202R1001	1	0.015
			Chrome plastic	M2SS3-20R	1SFA611202R2001	1	0.015
			Chrome metal	M2SS3-30R	1SFA611202R3001	1	0.024
● Black		Black plastic	M2SS3-10B	1SFA611202R1006	1	0.015	
		Chrome plastic	M2SS3-20B	1SFA611202R2006	1	0.015	
		Chrome metal	M2SS3-30B	1SFA611202R3006	1	0.024	
● Grey	Black plastic	M2SS3-10U	1SFA611202R1007	1	0.015		
	Chrome plastic	M2SS3-20U	1SFA611202R2007	1	0.015		

Contacts actuated



M2SS
Dimensions (mm, inches)

Modular plastic range

Non-illuminated selector switches - 2-position - Long handle



M2SS4-10R



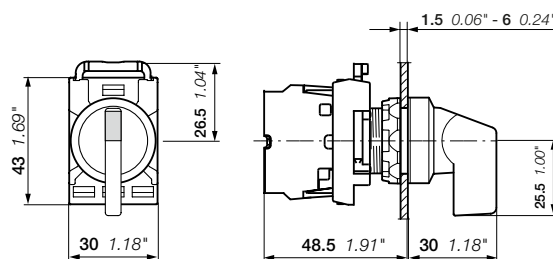
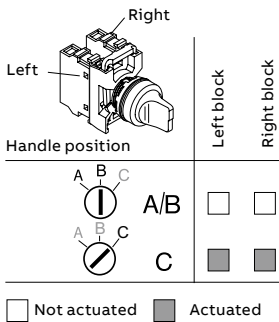
M2SS4-30B



M2SS4-10U

Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M2SS4-10R	1SFA611203R1001	1	0.018
		Chrome plastic	M2SS4-20R	1SFA611203R2001	1	0.018
	● Black	Black plastic	M2SS4-10B	1SFA611203R1006	1	0.018
		Chrome plastic	M2SS4-20B	1SFA611203R2006	1	0.018
	● Grey	Chrome metal	M2SS4-30B	1SFA611203R3006	1	0.027
		Black plastic	M2SS4-10U	1SFA611203R1007	1	0.018
	● Red	Black plastic	M2SS5-10R	1SFA611204R1001	1	0.018
		Chrome plastic	M2SS5-20R	1SFA611204R2001	1	0.018
		Chrome metal	M2SS5-30R	1SFA611204R3001	1	0.027
	● Black	Black plastic	M2SS5-10B	1SFA611204R1006	1	0.018
		Chrome plastic	M2SS5-20B	1SFA611204R2006	1	0.018
		Chrome metal	M2SS5-30B	1SFA611204R3006	1	0.027
● Grey	Black plastic	M2SS5-10U	1SFA611204R1007	1	0.018	
	Chrome plastic	M2SS5-20U	1SFA611204R2007	1	0.018	
	● Red	Black plastic	M2SS6-10R	1SFA611205R1001	1	0.018
		Black plastic	M2SS6-10B	1SFA611205R1006	1	0.018
		Chrome plastic	M2SS6-20B	1SFA611205R2006	1	0.018
	● Black	Chrome metal	M2SS6-30B	1SFA611205R3006	1	0.027
		Black plastic	M2SS6-10U	1SFA611205R1007	1	0.018
		Chrome plastic	M2SS6-20U	1SFA611205R2007	1	0.018

Contacts actuated



M2SS

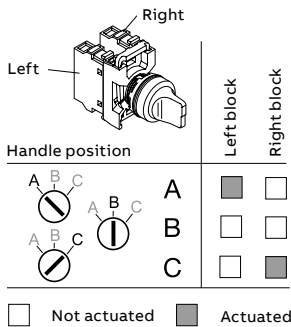
Dimensions (mm, inches)

Modular plastic range

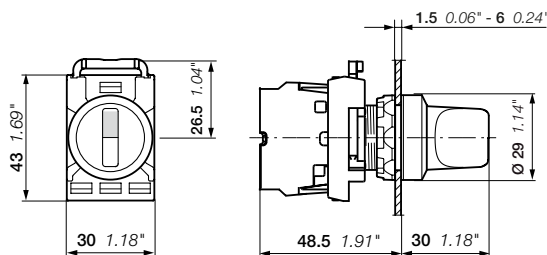
Non-illuminated selector switches - 3-position - Short handle



Contacts actuated



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M3SS1-10R	1SFA611210R1001	1	0.015
		Chrome plastic	M3SS1-20R	1SFA611210R2001	1	0.015
		Chrome metal	M3SS1-30R	1SFA611210R3001	1	0.024
	● Black	Black plastic	M3SS1-10B	1SFA611210R1006	1	0.015
		Chrome plastic	M3SS1-20B	1SFA611210R2006	1	0.015
		Chrome metal	M3SS1-30B	1SFA611210R3006	1	0.024
	● Grey	Black plastic	M3SS1-10U	1SFA611210R1007	1	0.015
		Chrome plastic	M3SS1-20U	1SFA611210R2007	1	0.015
		Chrome metal	M3SS1-30U	1SFA611210R3007	1	0.024
	● Red	Black plastic	M3SS2-10R	1SFA611211R1001	1	0.015
		Chrome plastic	M3SS2-20R	1SFA611211R2001	1	0.015
		Chrome metal	M3SS2-30R	1SFA611211R3001	1	0.024
	● Black	Black plastic	M3SS2-10B	1SFA611211R1006	1	0.015
		Chrome plastic	M3SS2-20B	1SFA611211R2006	1	0.015
		Chrome metal	M3SS2-30B	1SFA611211R3006	1	0.024
	● Grey	Black plastic	M3SS2-10U	1SFA611211R1007	1	0.015
		Chrome plastic	M3SS2-20U	1SFA611211R2007	1	0.015
		Chrome metal	M3SS2-30U	1SFA611211R3007	1	0.024
	● Red	Black plastic	M3SS3-10R	1SFA611212R1001	1	0.015
		Chrome plastic	M3SS3-20R	1SFA611212R2006	1	0.015
		Chrome metal	M3SS3-30R	1SFA611212R3006	1	0.024
	● Black	Black plastic	M3SS3-10B	1SFA611212R1006	1	0.015
		Chrome plastic	M3SS3-20B	1SFA611212R2006	1	0.015
		Chrome metal	M3SS3-30B	1SFA611212R3006	1	0.024
	● Grey	Black plastic	M3SS3-10U	1SFA611212R1007	1	0.015
		Chrome plastic	M3SS3-20U	1SFA611212R2007	1	0.015
		Chrome metal	M3SS3-30U	1SFA611212R3007	1	0.024
	● Red	Black plastic	M3SS7-10R	1SFA611216R1001	1	0.015
		Chrome plastic	M3SS7-20R	1SFA611216R2001	1	0.015
		Chrome metal	M3SS7-30R	1SFA611216R3006	1	0.024
	● Black	Black plastic	M3SS7-10B	1SFA611216R1006	1	0.015
		Chrome plastic	M3SS7-20B	1SFA611216R2006	1	0.015
		Chrome metal	M3SS7-30B	1SFA611216R3006	1	0.024
	● Grey	Black plastic	M3SS7-10U	1SFA611216R1007	1	0.015
		Chrome plastic	M3SS7-20U	1SFA611216R2007	1	0.015
		Chrome metal	M3SS7-30U	1SFA611216R3007	1	0.024



M3SS
Dimensions (mm, inches)

Modular plastic range

Non-illuminated selector switches - 3-position - Long handle



M3SS4-10R



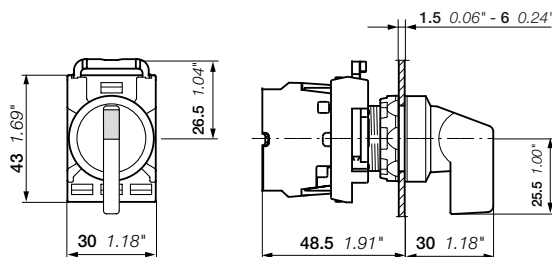
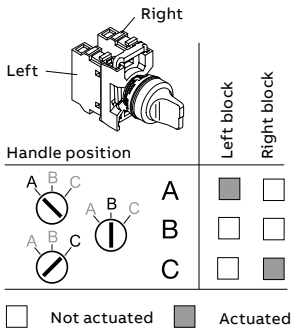
M3SS5-30B



M3SS6-10U

Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M3SS4-10R	1SFA611213R1001	1	0.018
		Chrome plastic	M3SS4-20R	1SFA611213R2001	1	0.018
	● Black	Black plastic	M3SS4-10B	1SFA611213R1006	1	0.018
		Chrome plastic	M3SS4-20B	1SFA611213R2006	1	0.018
	● Chrome metal	Black plastic	M3SS4-30B	1SFA611213R3006	1	0.027
		Chrome metal	M3SS4-10U	1SFA611213R1007	1	0.018
	● Red	Black plastic	M3SS5-10R	1SFA611214R1001	1	0.018
		Chrome metal	M3SS5-30R	1SFA611214R3001	1	0.018
	● Black	Black plastic	M3SS5-10B	1SFA611214R1006	1	0.018
		Chrome plastic	M3SS5-20B	1SFA611214R2006	1	0.018
	● Chrome metal	Black plastic	M3SS5-30B	1SFA611214R3006	1	0.027
		Chrome metal	M3SS5-10U	1SFA611214R1007	1	0.018
	● Red	Black plastic	M3SS6-10R	1SFA611215R1001	1	0.018
		Black plastic	M3SS6-10B	1SFA611215R1006	1	0.018
	● Black	Chrome plastic	M3SS6-20B	1SFA611215R2006	1	0.018
		Chrome metal	M3SS6-30B	1SFA611215R3006	1	0.027
	● Grey	Black plastic	M3SS6-10U	1SFA611215R1007	1	0.018
			● Red	Black plastic	M3SS8-10R	1SFA611217R1001
Black plastic	M3SS8-10B			1SFA611217R1006	1	0.018
● Black	Chrome plastic		M3SS8-20B	1SFA611217R2006	1	0.018
	Chrome metal		M3SS8-30B	1SFA611217R3006	1	0.027
● Grey	Black plastic	M3SS8-10U	1SFA611217R1007	1	0.018	

Contacts actuated



M3SS
Dimensions (mm, inches)

Modular plastic range

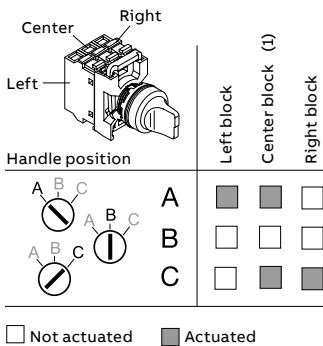
Non-illuminated selector switches - 3-position - Short handle



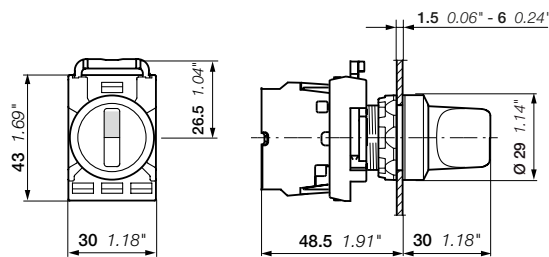
Center block operating

Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Black	Black plastic	M3SSC1-10B	1SFA611250R1006	1	0.015
		Chrome metal	M3SSC1-30B	1SFA611250R3006	1	0.024
	● Black	Black plastic	M3SSC2-10B	1SFA611251R1006	1	0.015
		Chrome metal	M3SSC2-30B	1SFA611251R3006	1	0.024
	● Black	Black plastic	M3SSC3-10B	1SFA611252R1006	1	0.015
		Chrome metal	M3SSC3-30B	1SFA611252R3006	1	0.024
	● Black	Black plastic	M3SSC7-10B	1SFA611256R1006	1	0.015
		Chrome metal	M3SSC7-30B	1SFA611256R3006	1	0.024

Contacts actuated



(1) To connect 3 separate circuits, one to each position ABC, use 1 NO in left position and right position and 1 NC in center position.



M3SSC
Dimensions (mm, inches)

Modular range

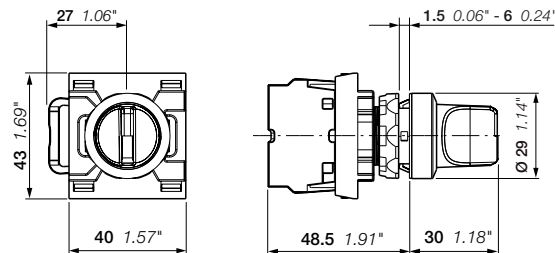
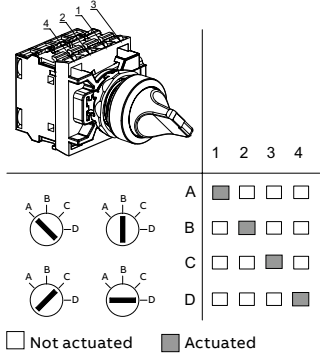
Non-illuminated selector switches - 4-position



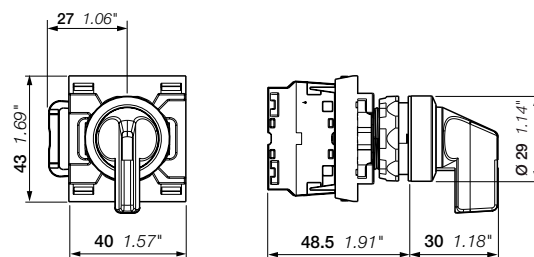
4 position holder included. Contact blocks need to order separately.

Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
Short handle						
● Red	Black plastic	M4SS1-10R	1SFA611290R4001	1	0.027	
	Chrome metal	M4SS1-30R	1SFA611290R6001	1	0.036	
● Black	Black plastic	M4SS1-10B	1SFA611290R4006	1	0.027	
	Chrome metal	M4SS1-30B	1SFA611290R6006	1	0.036	
Long handle						
● Red	Black plastic	M4SS2-10R	1SFA611291R4001	1	0.030	
	Chrome metal	M4SS2-30R	1SFA611291R6001	1	0.039	
● Black	Black plastic	M4SS2-10B	1SFA611291R4006	1	0.030	
	Chrome metal	M4SS2-30B	1SFA611291R6006	1	0.039	

Contacts actuated



M4SS Short handle



M4SS Long handle

Dimensions (mm, inches)

Modular plastic range

Illuminated selector switches - 2-position - Short handle



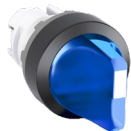
M2SS1-11R



M2SS1-31G



M2SS2-11Y

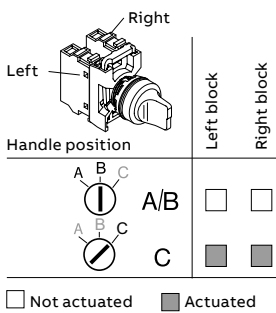


M2SS2-11L

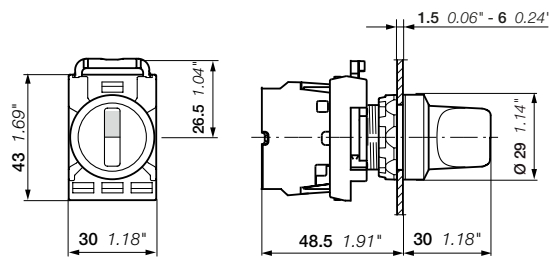


M2SS3-11C

Contacts actuated



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg	
	● Red	Black plastic	M2SS1-11R	1SFA611200R1101	1	0.015	
		Chrome plastic	M2SS1-21R	1SFA611200R2101	1	0.015	
		Chrome metal	M2SS1-31R	1SFA611200R3101	1	0.024	
	● Green	Black plastic	M2SS1-11G	1SFA611200R1102	1	0.015	
		Chrome plastic	M2SS1-21G	1SFA611200R2102	1	0.015	
		Chrome metal	M2SS1-31G	1SFA611200R3102	1	0.024	
	● Yellow	Black plastic	M2SS1-11Y	1SFA611200R1103	1	0.015	
		Chrome plastic	M2SS1-21Y	1SFA611200R2103	1	0.015	
		Chrome metal	M2SS1-31Y	1SFA611200R3103	1	0.024	
● Blue	Black plastic	M2SS1-11L	1SFA611200R1104	1	0.015		
	Chrome plastic	M2SS1-21L	1SFA611200R2104	1	0.015		
	Chrome metal	M2SS1-31L	1SFA611200R3104	1	0.024		
○ Clear	Black plastic	M2SS1-11C	1SFA611200R1108	1	0.015		
	Chrome plastic	M2SS1-21C	1SFA611200R2108	1	0.015		
	Chrome metal	M2SS1-31C	1SFA611200R3108	1	0.024		
	● Red	Black plastic	M2SS2-11R	1SFA611201R1101	1	0.015	
		Chrome plastic	M2SS2-21R	1SFA611201R2101	1	0.015	
		Chrome metal	M2SS2-31R	1SFA611201R3101	1	0.024	
	● Green	Black plastic	M2SS2-11G	1SFA611201R1102	1	0.015	
		Chrome plastic	M2SS2-21G	1SFA611201R2102	1	0.015	
		Chrome metal	M2SS2-31G	1SFA611201R3102	1	0.024	
	● Yellow	Black plastic	M2SS2-11Y	1SFA611201R1103	1	0.015	
		Chrome plastic	M2SS2-21Y	1SFA611201R2103	1	0.015	
		Chrome metal	M2SS2-31Y	1SFA611201R3103	1	0.024	
	● Blue	Black plastic	M2SS2-11L	1SFA611201R1104	1	0.015	
		Chrome plastic	M2SS2-21L	1SFA611201R2104	1	0.015	
		Chrome metal	M2SS2-31L	1SFA611201R3104	1	0.024	
	○ Clear	Black plastic	M2SS2-11C	1SFA611201R1108	1	0.015	
		Chrome plastic	M2SS2-21C	1SFA611201R2108	1	0.015	
		Chrome metal	M2SS2-31C	1SFA611201R3108	1	0.024	
		● Red	Black plastic	M2SS3-11R	1SFA611202R1101	1	0.015
			Chrome plastic	M2SS3-21R	1SFA611202R2101	1	0.015
			Chrome metal	M2SS3-31R	1SFA611202R3101	1	0.024
● Green		Black plastic	M2SS3-11G	1SFA611202R1102	1	0.015	
		Chrome plastic	M2SS3-21G	1SFA611202R2102	1	0.015	
		Chrome metal	M2SS3-31G	1SFA611202R3102	1	0.024	
● Yellow		Black plastic	M2SS3-11Y	1SFA611202R1103	1	0.015	
		Chrome metal	M2SS3-31Y	1SFA611202R3103	1	0.024	
		Chrome metal	M2SS3-31Y	1SFA611202R3103	1	0.024	
● Blue	Black plastic	M2SS3-11L	1SFA611202R1104	1	0.015		
	Black plastic	M2SS3-11C	1SFA611202R1108	1	0.015		
	Chrome metal	M2SS3-31C	1SFA611202R3108	1	0.024		



M2SS
Dimensions (mm, inches)

Modular plastic range

Illuminated selector switches - 2-position - Long handle



M2SS4-11R

1SFCL51895V0001



M2SS4-31G

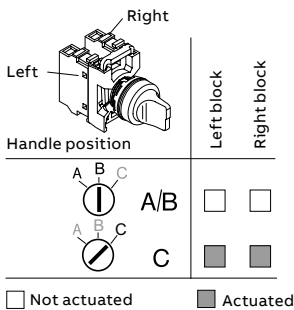
1SFCL51889V0001



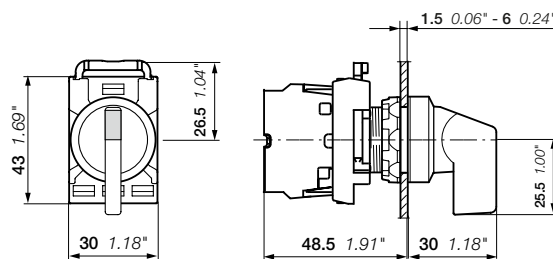
M2SS5-11Y

1SFCL51893V0001

Contacts actuated



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M2SS4-11R	1SFA611203R1101	1	0.018
		Chrome plastic	M2SS4-21R	1SFA611203R2101	1	0.018
	● Green	Black plastic	M2SS4-11G	1SFA611203R1102	1	0.018
		Chrome plastic	M2SS4-21G	1SFA611203R2102	1	0.018
	● Yellow	Black plastic	M2SS4-11Y	1SFA611203R1103	1	0.018
		Chrome plastic	M2SS4-21Y	1SFA611203R2103	1	0.018
	● Blue	Black plastic	M2SS4-11L	1SFA611203R1104	1	0.018
		Chrome plastic	M2SS4-21L	1SFA611203R2104	1	0.018
	○ Clear	Black plastic	M2SS4-11C	1SFA611203R1108	1	0.018
		Chrome plastic	M2SS4-21C	1SFA611203R2108	1	0.018
		Chrome metal	M2SS4-31C	1SFA611203R3108	1	0.027
		● Red	Black plastic	M2SS5-11R	1SFA611204R1101	1
Chrome plastic			M2SS5-21R	1SFA611204R2101	1	0.018
Chrome metal			M2SS5-31R	1SFA611204R3101	1	0.027
● Green		Black plastic	M2SS5-11G	1SFA611204R1102	1	0.018
		Chrome plastic	M2SS5-21G	1SFA611204R2102	1	0.018
		Chrome metal	M2SS5-31G	1SFA611204R3102	1	0.027
● Yellow		Black plastic	M2SS5-11Y	1SFA611204R1103	1	0.018
		Chrome plastic	M2SS5-21Y	1SFA611204R2103	1	0.018
		Chrome metal	M2SS5-31Y	1SFA611204R3103	1	0.027
● Blue		Black plastic	M2SS5-11L	1SFA611204R1104	1	0.018
		Chrome plastic	M2SS5-21L	1SFA611204R2104	1	0.018
		Chrome metal	M2SS5-31L	1SFA611204R3104	1	0.027
○ Clear	Black plastic	M2SS5-11C	1SFA611204R1108	1	0.018	
	Chrome plastic	M2SS5-21C	1SFA611204R2108	1	0.018	
	Chrome metal	M2SS5-31C	1SFA611204R3108	1	0.027	
	● Red	Black plastic	M2SS6-11R	1SFA611205R1101	1	0.018
		Chrome plastic	M2SS6-21R	1SFA611205R2101	1	0.018
	● Green	Black plastic	M2SS6-11G	1SFA611205R1102	1	0.018
		Chrome plastic	M2SS6-21G	1SFA611205R2102	1	0.018
	● Yellow	Black plastic	M2SS6-11Y	1SFA611205R1103	1	0.018
		Chrome plastic	M2SS6-21Y	1SFA611205R2103	1	0.018
	● Blue	Black plastic	M2SS6-11L	1SFA611205R1104	1	0.018
		Chrome plastic	M2SS6-21L	1SFA611205R2104	1	0.018
	○ Clear	Black plastic	M2SS6-11C	1SFA611205R1108	1	0.018
		Chrome metal	M2SS6-31C	1SFA611205R3108	1	0.027



M2SS

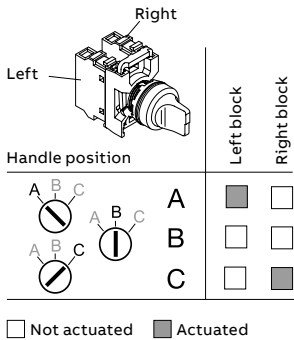
Dimensions (mm, inches)

Modular plastic range

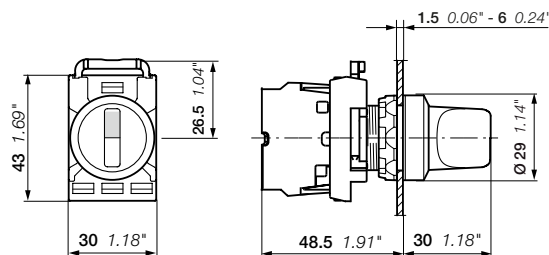
Illuminated selector switches - 3-position - Short handle



Contacts actuated



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M3SS1-11R	1SFA611210R1101	1	0.015
		Chrome plastic	M3SS1-21R	1SFA611210R2101	1	0.015
		Chrome metal	M3SS1-31R	1SFA611210R3101	1	0.024
	● Green	Black plastic	M3SS1-11G	1SFA611210R1102	1	0.015
		Chrome plastic	M3SS1-21G	1SFA611210R2102	1	0.015
		Chrome metal	M3SS1-31G	1SFA611210R3102	1	0.024
	● Yellow	Black plastic	M3SS1-11Y	1SFA611210R1103	1	0.015
		Chrome plastic	M3SS1-21Y	1SFA611210R2103	1	0.015
		Chrome metal	M3SS1-31Y	1SFA611210R3103	1	0.024
● Blue	Black plastic	M3SS1-11L	1SFA611210R1104	1	0.015	
	Chrome plastic	M3SS1-21L	1SFA611210R2104	1	0.015	
	Chrome metal	M3SS1-31L	1SFA611210R3104	1	0.024	
○ Clear	Black plastic	M3SS1-11C	1SFA611210R1108	1	0.015	
	Chrome plastic	M3SS1-21C	1SFA611210R2108	1	0.015	
	Chrome metal	M3SS1-31C	1SFA611210R3108	1	0.024	
	● Red	Black plastic	M3SS2-11R	1SFA611211R1101	1	0.015
		Chrome plastic	M3SS2-21R	1SFA611211R2101	1	0.015
		Chrome metal	M3SS2-31R	1SFA611211R3101	1	0.024
	● Green	Black plastic	M3SS2-11G	1SFA611211R1102	1	0.015
		Chrome plastic	M3SS2-21G	1SFA611211R2102	1	0.015
		Chrome metal	M3SS2-31G	1SFA611211R3102	1	0.024
	● Yellow	Black plastic	M3SS2-11Y	1SFA611211R1103	1	0.015
		Chrome plastic	M3SS2-21Y	1SFA611211R2103	1	0.015
		Chrome metal	M3SS2-31Y	1SFA611211R3104	1	0.024
● Blue	Black plastic	M3SS2-11L	1SFA611211R1104	1	0.015	
	Chrome plastic	M3SS2-21L	1SFA611211R2104	1	0.015	
	Chrome metal	M3SS2-31L	1SFA611211R3104	1	0.024	
○ Clear	Black plastic	M3SS2-11C	1SFA611211R1108	1	0.015	
	Chrome plastic	M3SS2-21C	1SFA611211R2108	1	0.015	
	Chrome metal	M3SS2-31C	1SFA611211R3108	1	0.024	
	● Red	Black plastic	M3SS3-11R	1SFA611212R1101	1	0.015
		Chrome plastic	M3SS3-21R	1SFA611212R2101	1	0.015
		Chrome plastic	M3SS3-31R	1SFA611212R3101	1	0.015
	● Green	Black plastic	M3SS3-11G	1SFA611212R1102	1	0.015
		Chrome plastic	M3SS3-21G	1SFA611212R2102	1	0.015
		Chrome plastic	M3SS3-31G	1SFA611212R3102	1	0.015
	● Yellow	Black plastic	M3SS3-11Y	1SFA611212R1103	1	0.015
		Black plastic	M3SS3-11L	1SFA611212R1104	1	0.015
		Black plastic	M3SS3-11C	1SFA611212R1108	1	0.015
○ Clear	Black plastic	M3SS3-11C	1SFA611212R1108	1	0.015	
	Chrome plastic	M3SS3-21C	1SFA611212R2108	1	0.015	
	Chrome metal	M3SS3-31C	1SFA611212R3108	1	0.024	
	● Red	Black plastic	M3SS7-11R	1SFA611216R1101	1	0.015
		Chrome plastic	M3SS7-21G	1SFA611216R2102	1	0.015
		Chrome metal	M3SS7-31G	1SFA611216R3102	1	0.024
	● Yellow	Black plastic	M3SS7-11Y	1SFA611216R1103	1	0.015
		Black plastic	M3SS7-11L	1SFA611216R1104	1	0.015
		Chrome plastic	M3SS7-21L	1SFA611216R2104	1	0.015
	○ Clear	Black plastic	M3SS7-11C	1SFA611216R1108	1	0.015
		Chrome plastic	M3SS7-21C	1SFA611216R2108	1	0.015
		Chrome metal	M3SS7-31C	1SFA611216R3108	1	0.024



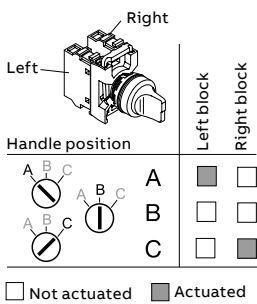
M3SS
Dimensions (mm, inches)

Modular plastic range

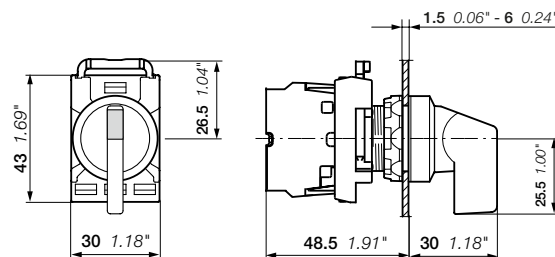
Illuminated selector switches - 3-position - Long handle



Contacts actuated



Operating principle	Color	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
	● Red	Black plastic	M3SS4-11R	1SFA611213R1101	1	0.018
		Chrome plastic	M3SS4-21R	1SFA611213R2101	1	0.018
		Chrome metal	M3SS4-31R	1SFA611213R3101	1	0.027
	● Green	Black plastic	M3SS4-11G	1SFA611213R1102	1	0.018
		Chrome plastic	M3SS4-21G	1SFA611213R2102	1	0.018
	● Yellow	Black plastic	M3SS4-11Y	1SFA611213R1103	1	0.018
		Chrome plastic	M3SS4-21Y	1SFA611213R2103	1	0.018
	● Blue	Black plastic	M3SS4-11L	1SFA611213R1104	1	0.018
		Chrome plastic	M3SS4-21L	1SFA611213R2104	1	0.018
○ Clear	Black plastic	M3SS4-11C	1SFA611213R1108	1	0.018	
	Chrome plastic	M3SS4-21C	1SFA611213R2108	1	0.018	
	Chrome metal	M3SS4-31C	1SFA611213R3108	1	0.027	
	● Red	Black plastic	M3SS5-11R	1SFA611214R1101	1	0.018
		Chrome plastic	M3SS5-21R	1SFA611214R2101	1	0.018
		Chrome metal	M3SS5-31G	1SFA611214R3102	1	0.027
	● Green	Black plastic	M3SS5-11G	1SFA611214R1102	1	0.018
		Chrome plastic	M3SS5-21G	1SFA611214R2102	1	0.018
	● Yellow	Black plastic	M3SS5-11Y	1SFA611214R1103	1	0.018
		Chrome plastic	M3SS5-21Y	1SFA611214R2103	1	0.018
	● Blue	Black plastic	M3SS5-11L	1SFA611214R1104	1	0.018
		Chrome plastic	M3SS5-21L	1SFA611214R2104	1	0.018
○ Clear	Black plastic	M3SS5-11C	1SFA611214R1108	1	0.018	
	Chrome plastic	M3SS5-21C	1SFA611214R2108	1	0.018	
	Chrome metal	M3SS5-31C	1SFA611214R3108	1	0.027	
	● Red	Black plastic	M3SS6-11R	1SFA611215R1101	1	0.018
		Chrome plastic	M3SS6-21G	1SFA611215R2102	1	0.018
		Chrome metal	M3SS6-31G	1SFA611215R3104	1	0.027
	● Green	Black plastic	M3SS6-11G	1SFA611215R1102	1	0.018
		Chrome plastic	M3SS6-21Y	1SFA611215R2103	1	0.018
	● Yellow	Black plastic	M3SS6-11Y	1SFA611215R1103	1	0.018
		Chrome plastic	M3SS6-21Y	1SFA611215R2103	1	0.018
	● Blue	Black plastic	M3SS6-11L	1SFA611215R1104	1	0.018
		Chrome metal	M3SS6-31L	1SFA611215R3104	1	0.027
○ Clear	Black plastic	M3SS6-11C	1SFA611215R1108	1	0.018	
	Black plastic	M3SS8-11R	1SFA611217R1101	1	0.018	
	Chrome plastic	M3SS8-21R	1SFA611217R2101	1	0.018	
● Green	Chrome metal	M3SS8-31R	1SFA611217R3101	1	0.027	
	Black plastic	M3SS8-11G	1SFA611217R1102	1	0.018	
	Chrome plastic	M3SS8-21G	1SFA611217R2102	1	0.018	
● Yellow	Chrome metal	M3SS8-31G	1SFA611217R3102	1	0.027	
	Black plastic	M3SS8-11Y	1SFA611217R1103	1	0.018	
	Black plastic	M3SS8-11L	1SFA611217R1104	1	0.018	
○ Clear	Black plastic	M3SS8-11C	1SFA611217R1108	1	0.018	



M3SS
Dimensions (mm, inches)

Modular plastic range





Key-operated selector switches - 2-position



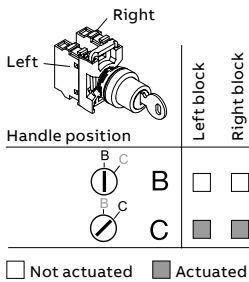
M2SSK1-101

Description

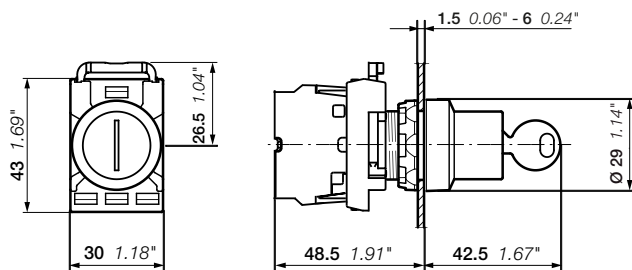
Key-operated selector switches are delivered in black color.

Operating principle	Key	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg	
 Key can be removed in both positions	Key code 455	Black plastic	M2SSK1-101	1SFA611280R1001	1	0.045	
		Chrome plastic	M2SSK1-201	1SFA611280R2001	1	0.045	
		Chrome metal	M2SSK1-301	1SFA611280R3001	1	0.054	
	Key code 421	Black plastic	M2SSK1-102	1SFA611280R1002	1	0.045	
		Chrome metal	M2SSK1-302	1SFA611280R3002	1	0.054	
		Key code 3433-E	Black plastic	M2SSK1-103	1SFA611280R1003	1	0.045
	Random selection (1)	Black plastic	M2SSK1-104	1SFA611280R1004	25	0.045	
		Chrome metal	M2SSK1-304	1SFA611280R3004	25	0.054	
	 Key can be removed in B position only	Key code 455	Black plastic	M2SSK2-101	1SFA611281R1001	1	0.045
			Chrome plastic	M2SSK2-201	1SFA611281R2001	1	0.045
Chrome metal			M2SSK2-301	1SFA611281R3001	1	0.054	
Key code 421		Black plastic	M2SSK2-102	1SFA611281R1002	1	0.045	
		Chrome metal	M2SSK2-302	1SFA611281R3002	1	0.054	
		Key code 3433-E	Black plastic	M2SSK2-103	1SFA611281R1003	1	0.045
Random selection (1)		Black plastic	M2SSK2-104	1SFA611281R1004	25	0.045	
		Chrome metal	M2SSK2-304	1SFA611281R3004	25	0.054	
 Key can be removed in position B only		Key code 455	Black plastic	M2SSK3-101	1SFA611282R1001	1	0.045
			Chrome metal	M2SSK3-301	1SFA611282R3001	1	0.054
	Key code 421	Black plastic	M2SSK3-102	1SFA611282R1002	1	0.045	
		Chrome metal	M2SSK3-302	1SFA611282R3002	1	0.054	
	Key code 3433-E	Black plastic	M2SSK3-103	1SFA611282R1003	1	0.045	
		Chrome metal	M2SSK3-303	1SFA611282R3003	1	0.054	
	Random selection (1)	Black plastic	M2SSK3-104	1SFA611282R1004	25	0.045	
		Chrome metal	M2SSK3-304	1SFA611282R3004	25	0.054	
	 Key can be removed in A only	Key code 455	Black plastic	M2SSK4-101	1SFA611289R1001	1	0.045

Contacts actuated



(1) The order code includes 25 keys operated selector switches. Each selector switch includes unique key code. Key codes 455, 421 and 3433-E not included.



M2SSK
Dimensions (mm, inches)







Modular plastic range

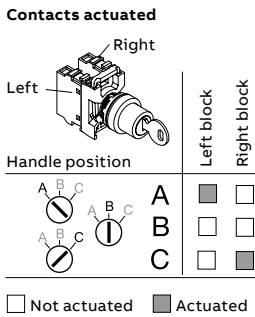
Key-operated selector switches - 3-position



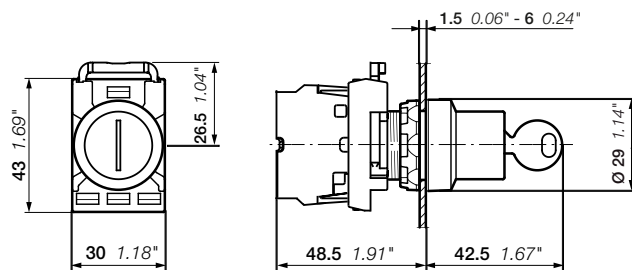
Description

Key-operated selector switches are delivered in black color.

Operating principle	key	Bezel	Type	Order code	Pkg qty (1 pce)	Weight kg
 Key can be removed in all positions	Key code 455	Black plastic	M3SSK1-101	1SFA611283R1001	1	0.045
		Chrome plastic	M3SSK1-201	1SFA611283R2001	1	0.045
	Key code 421	Chrome metal	M3SSK1-301	1SFA611283R3001	1	0.054
		Black plastic	M3SSK1-102	1SFA611283R1002	1	0.045
	Key code 3433-E	Chrome metal	M3SSK1-302	1SFA611283R3002	1	0.054
		Black plastic	M3SSK1-103	1SFA611283R1003	1	0.045
Random selection (1)	Chrome metal	M3SSK1-303	1SFA611283R3003	1	0.054	
	Black plastic	M3SSK1-104	1SFA611283R1004	25	0.045	
 Key can be removed in position B only	Key code 455	Black plastic	M3SSK2-101	1SFA611284R1001	1	0.045
		Chrome metal	M3SSK2-301	1SFA611284R3001	1	0.054
Key code 421	Black plastic	M3SSK2-102	1SFA611284R1002	1	0.045	
	Key code 3433-E	Black plastic	M3SSK2-103	1SFA611284R1003	1	0.045
Random selection (1)	Black plastic	M3SSK2-104	1SFA611284R1004	25	0.045	
	 Key can be removed in position B only	Key code 455	Black plastic	M3SSK3-101	1SFA611285R1001	1
Chrome metal			M3SSK3-301	1SFA611285R3001	1	0.054
Key code 421	Black plastic	M3SSK3-102	1SFA611285R1002	1	0.045	
	Chrome metal	M3SSK3-302	1SFA611285R3002	1	0.054	
Key code 3433-E	Black plastic	M3SSK3-103	1SFA611285R1003	1	0.045	
	Chrome metal	M3SSK3-303	1SFA611285R3003	1	0.054	
Random selection (1)	Black plastic	M3SSK3-104	1SFA611285R1004	25	0.045	
	 Key can be removed in position A only	Key code 455	Black plastic	M3SSK4-101	1SFA611286R1001	1
Chrome metal			M3SSK4-301	1SFA611286R3001	1	0.054
Key code 421	Black plastic	M3SSK4-102	1SFA611286R1002	1	0.045	
	Chrome metal	M3SSK4-302	1SFA611286R3002	1	0.054	
 Key can be removed in all positions	Key code 455	Black plastic	M3SSK5-101	1SFA611287R1001	1	0.045
		Chrome metal	M3SSK5-301	1SFA611287R3001	1	0.054
Key code 3433-E	Black plastic	M3SSK5-103	1SFA611287R1003	1	0.045	
	 Key can be removed in A only	Key code 455	Black plastic	M3SSK6-101	1SFA611288R1001	1



(1) The order code includes 25 key operated selector switches. Each selector switch includes unique key code. Key codes 455, 421 and 3433-E not included.



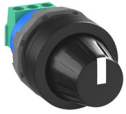
M3SSK

Dimensions (mm, inches)

Modular plastic range

Potentiometers

02



1SFC151B55W0001

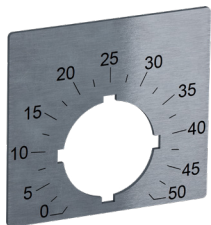
MT-110B

Description

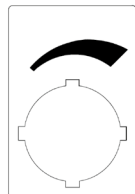
Black knob with integrated position indication and marking in white.

Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg	
Knob with resistor 5 kΩ					
Black plastic	MT-105B	1SFA611410R1056	1	0.040	
Chrome plastic	MT-205B	1SFA611410R2056	1	0.040	
Chrome metal	MT-305B	1SFA611410R3056	1	0.049	
Knob with resistor 10 kΩ					
Black plastic	MT-110B	1SFA611410R1106	1	0.040	
Chrome plastic	MT-210B	1SFA611410R2106	1	0.040	
Chrome metal	MT-310B	1SFA611410R3106	1	0.048	
Knob with resistor 50 kΩ					
Black plastic	MT-150B	1SFA611410R1506	1	0.040	
Chrome plastic	MT-250B	1SFA611410R2506	1	0.040	
Chrome metal	MT-350B	1SFA611410R3506	1	0.049	
Knob without resistor (1)					
Black plastic	MT-1B	1SFA611410R1006	10	0.022	
Chrome metal	MT-3B	1SFA611410R3006	10	0.030	
Legend plates aluminum					
29.6 x 44.5 mm	Ø 22 mm	–	SK615562-87	10	0.002
48.5 x 44.5 mm, scale: 0-10	Ø 22 mm	–	SK615562-88	10	0.002
48.5 x 44.5 mm, scale: 0-50	Ø 22 mm	MA6-1252	1SFA611930R1252	10	0.002

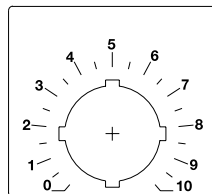
(1) Knob without resistor: for shaft diameter 6-6.35 mm. Min. shaft length 20 mm.



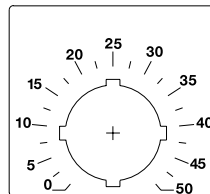
MA6-1252



SK615562-87



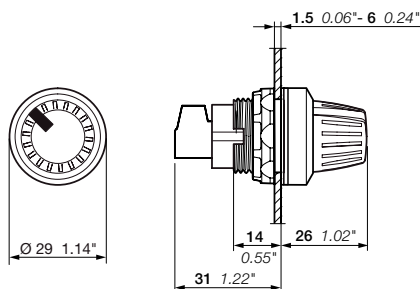
SK615562-88



MA6-1252

Technical data

Power rating	2 W
Mechanical angle	280°
Insulation voltage	900 V
Operating temperature	-1 ... + 70° C
Resistance tolerance	± 10 ohm
Mechanical life	20 000 operations



MT

Dimensions (mm, inches)

Modular plastic range

Reset pushbuttons



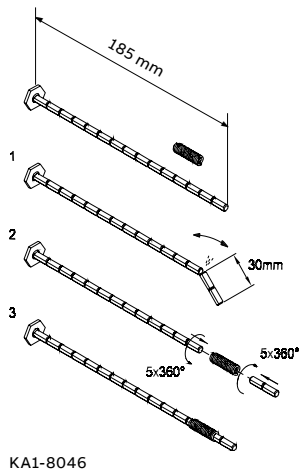
Description

Reset pushbuttons are momentary and include only black plastic bezel.

Color	Text	Type	Order code	Pkg qty	Weight (1 pce) kg	
Flush reset pushbutton						
● Red	No text	KPR1-100R	1SFA616160R1001	10	0.020	
● Green	No text	KPR1-100G	1SFA616160R1002	10	0.020	
	I	KPR1-102G	1SFA616160R1022	10	0.020	
	II	KPR1-103G	1SFA616160R1032	10	0.020	
● Yellow	No text	KPR1-100Y	1SFA616160R1003	10	0.020	
	● Blue	No text	KPR1-100L	1SFA616160R1004	10	0.020
		R	KPR1-101L	1SFA616160R1014	10	0.020
○ White	No text	KPR1-100W	1SFA616160R1005	10	0.020	
	R	KPR1-101W	1SFA616160R1015	10	0.020	
	I	KPR1-102W	1SFA616160R1025	10	0.020	
	II	KPR1-103W	1SFA616160R1035	10	0.020	
	● Black	No text	KPR1-100B	1SFA616160R1006	10	0.020
		RESET	KPR1-104B	1SFA616160R1046	10	0.020

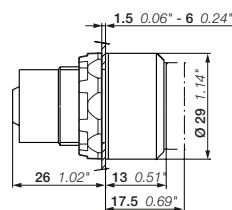
Extended reset pushbutton

● Red	No text	KPR2-100R	1SFA616161R1001	10	0.021
	O	KPR2-105R	1SFA616161R1051	10	0.021
● Black	No text	KPR2-100B	1SFA616161R1006	10	0.021



Accessories

	Type	Order code	Pkg qty	Weight (1 pce) kg
Shaft	KA1-8046	1SFA616920R8046	10	0.007
Flexible joint	KA1-8047	1SFA616920R8047	10	0.005



KPR1, KPR2

Dimensions (mm, inches)

Modular plastic range

Reset pushbuttons with shaft

02



KPR3-100R

15FC15125V0001



KPR3-104B

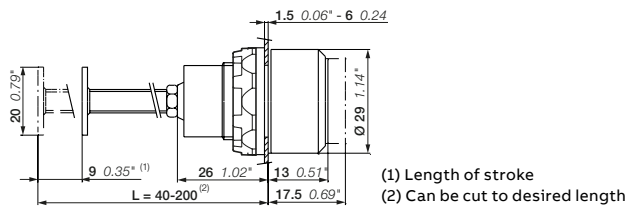
15FC15122V0001

Description

Reset pushbuttons are momentary and include only black plastic bezel.

Color	Text	Type	Order code	Pkg qty	Weight (1 pce) kg
Flush reset pushbutton					
● Red	No text	KPR3-100R	1SFA616162R1001	1	0.027
● Green	No text	KPR3-100G	1SFA616162R1002	1	0.027
	II	KPR3-103G	1SFA616162R1032	1	0.027
● Yellow	No text	KPR3-100Y	1SFA616162R1003	1	0.027
● Blue	No text	KPR3-100L	1SFA616162R1004	1	0.027
	R	KPR3-101L	1SFA616162R1014	1	0.027
○ White	No text	KPR3-100W	1SFA616162R1005	1	0.027
	R	KPR3-101W	1SFA616162R1015	1	0.027
● Black	No text	KPR3-100B	1SFA616162R1006	1	0.027
	RESET	KPR3-104B	1SFA616162R1046	1	0.027
Extended reset pushbutton					
● Red	No text	KPR4-100R	1SFA616163R1001	1	0.028
	O	KPR4-105R	1SFA616163R1051	1	0.028
● Black	No text	KPR4-100B	1SFA616163R1006	1	0.028
	O	KPR4-105B	1SFA616163R1056	1	0.028

Note: Flexible joint not included.



KPR3, KPR4

Dimensions (mm, inches)

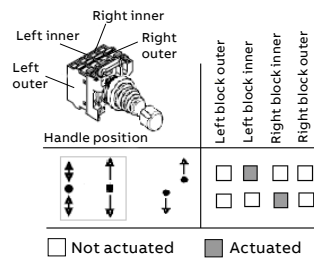
Modular plastic range

Joysticks

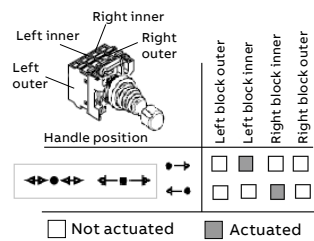


MJS1-60B

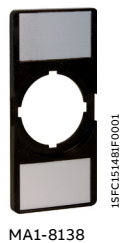
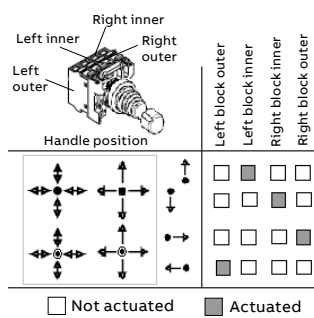
Contacts actuated



Contacts actuated



Contacts actuated



MA1-8138



MA1-8137

Description

IP protection degree : IP66, IP67 and IP69K. 4-position holder included.

Position	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
 	Black plastic	MJS1-40B	1SFA611701R4006	1	0.043
	Chrome metal	MJS1-60B	1SFA611701R6006	1	0.052
	Black plastic	MJS2-40B	1SFA611702R4006	1	0.043
	Chrome metal	MJS2-60B	1SFA611702R6006	1	0.052
	Black plastic	MJS3-40B	1SFA611703R4006	1	0.043
	Chrome metal	MJS3-60B	1SFA611703R6006	1	0.052
	Black plastic	MJS4-40B	1SFA611704R4006	1	0.043
	Chrome metal	MJS4-60B	1SFA611704R6006	1	0.052
	Black plastic	MJS5-40B	1SFA611705R4006	1	0.043
	Chrome metal	MJS5-60B	1SFA611705R6006	1	0.052
	Black plastic	MJS6-40B	1SFA611706R4006	1	0.043
	Chrome metal	MJS6-60B	1SFA611706R6006	1	0.052

With latching function

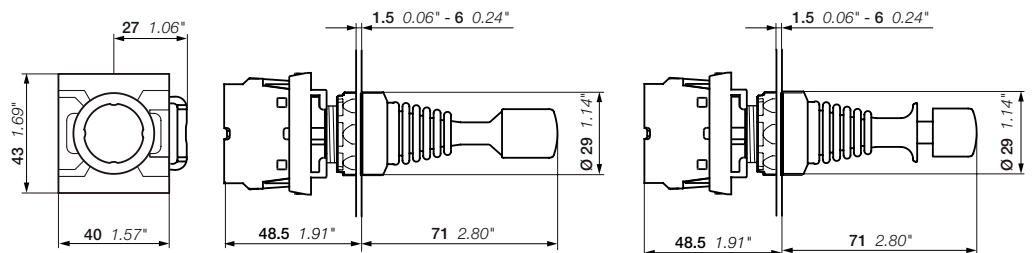
 	Black plastic	MJS7-40B	1SFA611707R4006	1	0.043
	Chrome metal	MJS7-60B	1SFA611707R6006	1	0.052
	Black plastic	MJS9-40B	1SFA611709R4006	1	0.043
	Chrome metal	MJS9-60B	1SFA611709R6006	1	0.052
	Black plastic	MJS8-40B	1SFA611708R4006	1	0.043
	Chrome metal	MJS8-60B	1SFA611708R6006	1	0.052
	Black plastic	MJS10-60B	1SFA611710R6006	1	0.052
	Chrome metal	MJS10-60B	1SFA611710R6006	1	0.052
	Black plastic	MJS11-40B	1SFA611711R4006	1	0.043
	Chrome metal	MJS11-60B	1SFA611711R6006	1	0.052
	Black plastic	MJS12-40B	1SFA611712R4006	1	0.043
	Chrome metal	MJS12-60B	1SFA611712R6006	1	0.052

Accessories

Type	Order code	Pkg qty	Weight (1 pce) kg
Legend plates, 66 x 59 aluminum laminate with adhesive back			
2-position - Up - Down	MA6-1240 1SFA611930R1240	10	0.004
2-position - Left - Right	MA6-1241 1SFA611930R1241	10	0.004
4-position Up - down - right - left	MA6-1242 1SFA611930R1242	10	0.004

Legend plates holder (inserts not included, suitable for insert size 27x15)

2-position	MA1-8138 1SFA611920R8138	10	0.002
4-position	MA1-8137 1SFA611920R8137	10	0.003



MJS
Dimensions (mm, inches)

Modular plastic range

Toggle switches



MTS1-10B

1SFC15132V0001

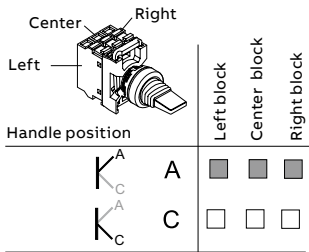


MTS1-30B

1SFC151346V0001

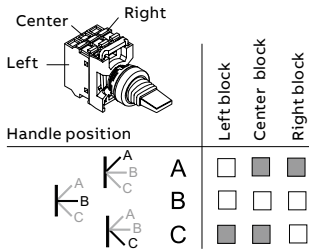
Operating principle	Bezel	Type	Order code	Pkg qty	Weight (1 pce) kg
2-position					
K A C	Black plastic	MTS1-10B	1SFA611300R1006	10	0.014
	Chrome plastic	MTS1-20B	1SFA611300R2006	10	0.014
	Chrome metal	MTS1-30B	1SFA611300R3006	10	0.023
3-position					
K A B C	Black plastic	MTS3-10B	1SFA611302R1006	10	0.014
	Chrome plastic	MTS3-20B	1SFA611302R2006	10	0.014
	Chrome metal	MTS3-30B	1SFA611302R3006	10	0.023
K A B C	Black plastic	MTS2-10B	1SFA611301R1006	10	0.014
	Chrome plastic	MTS2-20B	1SFA611301R2006	10	0.014
	Chrome metal	MTS2-30B	1SFA611301R3006	10	0.023

Contacts actuated, 2-position

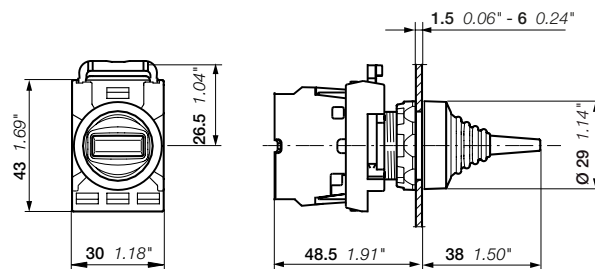


Not actuated Actuated

Contacts actuated, 3-position



Not actuated Actuated

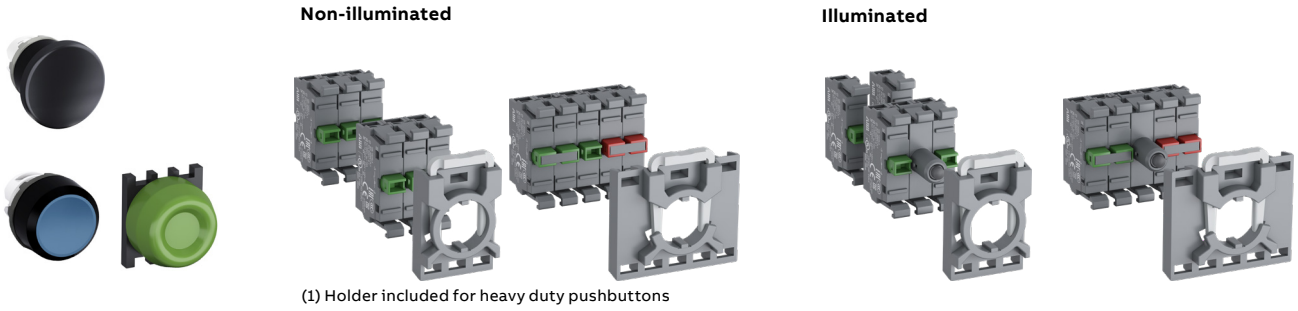


MTS
Dimensions (mm, inches)

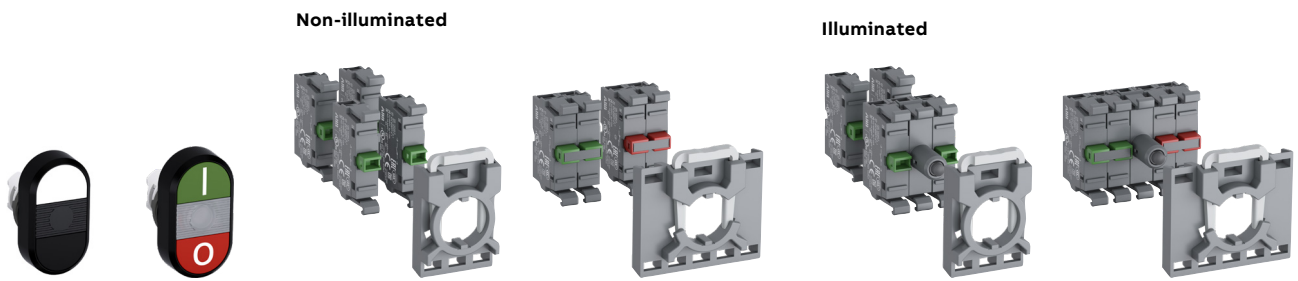
Modular plastic range

Contact block configuration

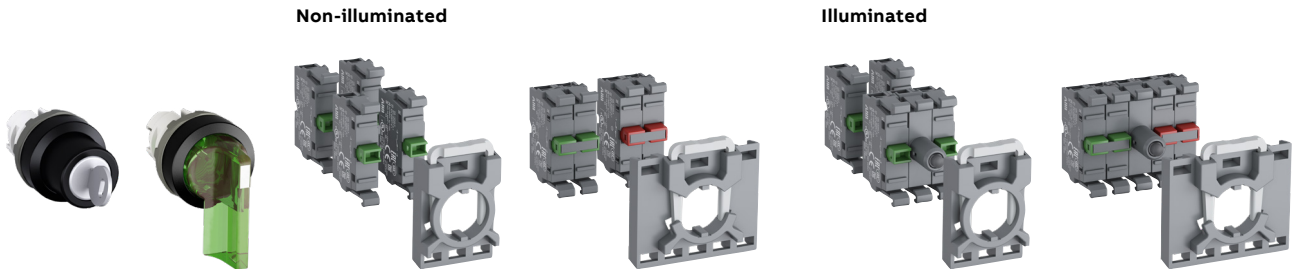
Pushbuttons - Heavy duty pushbuttons (1) - Mushrooms pushbuttons



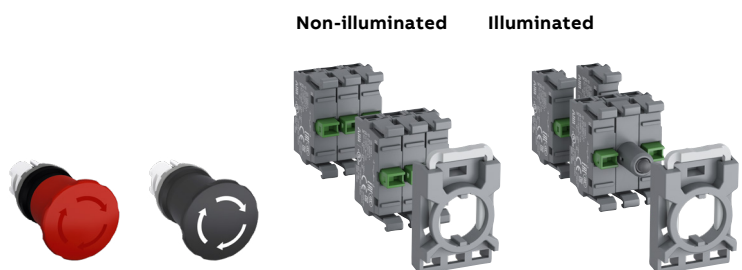
Double pushbuttons



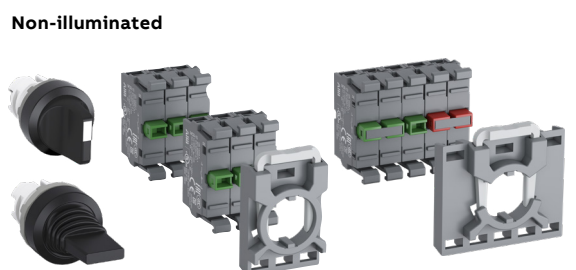
Selector switches



Emergency stop pushbuttons - Machine stop pushbuttons



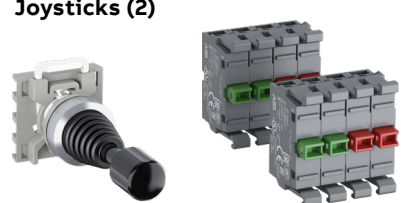
Toggle switches - Center block operating selector switches



Pilot lights



Joysticks (2)



Note: locking nut included with all operators.

(2) Holder is included for joystick.

Modular plastic range

Holders and contact blocks for front mounting



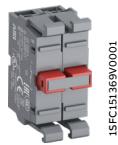
MCBH-00



MCBH5-00



MCB-10



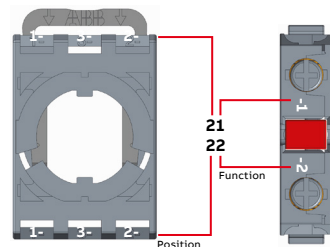
MCB-02



MCBL-01

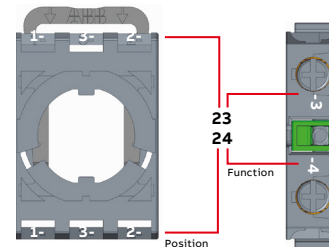
Description	Contacts	Type	Order code	Pkg qty	Weight (1 pce)
kg					
Holders					
3-position	--	MCBH-00	1SFA611605R1100	10	0.006
5-position	--	MCBH5-00	1SFA611601R1100	10	0.008
Single contact blocks					
For 3 & 5-position holder	10	MCB-10	1SFA611610R1001	10	0.013
	01	MCB-01	1SFA611610R1010	10	0.013
Single contact blocks, gold plated contacts					
For 3 & 5-position holder	10	MCB-10G	1SFA611610R1101	10	0.013
	01	MCB-01G	1SFA611610R1110	10	0.013
Double contact blocks					
For 3 & 5-position holder	20	MCB-20	1SFA611610R1002	10	0.026
	02	MCB-02	1SFA611610R1020	10	0.026
	11	MCB-11	1SFA611610R1011	10	0.026
Double contact blocks, gold plated contacts					
For 3 & 5-position holder	20	MCB-20G	1SFA611610R1102	10	0.026
	02	MCB-02G	1SFA611610R1120	10	0.026
	11	MCB-11G	1SFA611610R1111	10	0.026
Micro switch contact blocks					
For 3-position holder	10	MCBL-10	1SFA611612R1010	10	0.013
	01	MCBL-01	1SFA611612R1001	10	0.013

Note: 3 micro switch contact blocks max. allowed. If more than 3 contact blocks are needed, micro switch contact block to be mounted on the second stack.



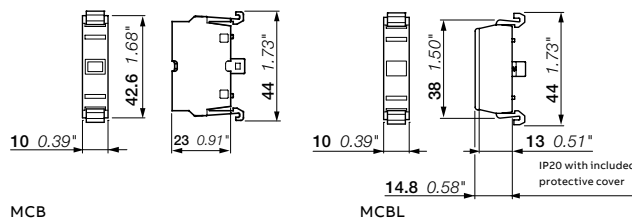
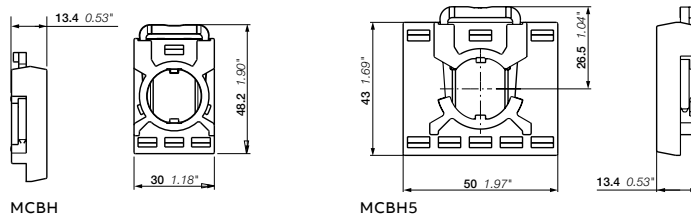
Combined markings

11	31	21
12	32	22



Combined markings

13	33	23
14	34	24



Dimensions (mm, inches)

Modular plastic range

LED blocks for front mounting



MLBL-00W

1SFC151417V0001

Color	Rated current mA	Wavelength nm	Luminance mcd	Type	Order code	Pkg qty	Weight (1pce) kg
Rated voltage 12 V DC							
● Red	12.0	620	320	MLBL-00R	1SFA611621R1001	10	0.012
● Green	12.0	520	1500	MLBL-00G	1SFA611621R1002	10	0.012
● Yellow	12.0	588	380	MLBL-00Y	1SFA611621R1003	10	0.012
● Blue	12.0	468	450	MLBL-00L	1SFA611621R1004	10	0.012
○ White	12.0	(1)	600	MLBL-00W	1SFA611621R1005	10	0.012
Rated voltage 24 V AC/DC							
● Red	10.0	620	250	MLBL-01R	1SFA611621R1011	10	0.012
● Green	10.0	520	1500	MLBL-01G	1SFA611621R1012	10	0.012
● Yellow	10.0	588	250	MLBL-01Y	1SFA611621R1013	10	0.012
● Blue	10.0	468	450	MLBL-01L	1SFA611621R1014	10	0.012
○ White	10.0	(1)	600	MLBL-01W	1SFA611621R1015	10	0.012
Rated voltage 48 V AC/DC							
● Red	10.0	620	260	MLBL-02R	1SFA611621R1021	10	0.012
● Green	13.0	520	1500	MLBL-02G	1SFA611621R1022	10	0.012
● Yellow	10.0	588	300	MLBL-02Y	1SFA611621R1023	10	0.012
● Blue	13.0	468	450	MLBL-02L	1SFA611621R1024	10	0.012
○ White	13.0	(1)	600	MLBL-02W	1SFA611621R1025	10	0.012
Rated voltage 60 V AC/DC							
● Red	13.0	620	350	MLBL-03R	1SFA611621R1031	10	0.012
● Green	13.0	520	2000	MLBL-03G	1SFA611621R1032	10	0.012
● Yellow	13.0	588	400	MLBL-03Y	1SFA611621R1033	10	0.012
● Blue	13.0	468	550	MLBL-03L	1SFA611621R1034	10	0.012
○ White	13.0	(1)	750	MLBL-03W	1SFA611621R1035	10	0.012
Rated voltage 110-130 V AC							
● Red	10.0	620	200	MLBL-04R	1SFA611621R1041	10	0.012
● Green	10.0	520	1200	MLBL-04G	1SFA611621R1042	10	0.012
● Yellow	10.0	588	250	MLBL-04Y	1SFA611621R1043	10	0.012
● Blue	10.0	468	400	MLBL-04L	1SFA611621R1044	10	0.012
○ White	10.0	(1)	500	MLBL-04W	1SFA611621R1045	10	0.012
Rated voltage 110-130 V AC high anti-inductive voltage (2)							
● Red	10.0	620	250	MLBL-04AR	1SFA611621R3041	10	0.012
● Green	10.0	520	1500	MLBL-04AG	1SFA611621R3042	10	0.012
● Yellow	10.0	582	300	MLBL-04AY	1SFA611621R3043	10	0.012
● Blue	10.0	468	450	MLBL-04AL	1SFA611621R3044	10	0.012
○ White	10.0	(1)	600	MLBL-04AW	1SFA611621R3045	10	0.012
Rated voltage 110-130 V DC							
● Red	10.0	620	250	MLBL-05R	1SFA611621R1051	10	0.012
● Green	10.0	520	1500	MLBL-05G	1SFA611621R1052	10	0.012
● Yellow	10.0	588	300	MLBL-05Y	1SFA611621R1053	10	0.012
● Blue	10.0	468	450	MLBL-05L	1SFA611621R1054	10	0.012
○ White	10.0	(1)	600	MLBL-05W	1SFA611621R1055	10	0.012
Rated voltage 220 V DC							
● Red	8.0	620	180	MLBL-06R	1SFA611621R1061	10	0.012
● Green	8.0	520	110	MLBL-06G	1SFA611621R1062	10	0.012
● Yellow	8.0	588	200	MLBL-06Y	1SFA611621R1063	10	0.012
● Blue	8.0	468	450	MLBL-06L	1SFA611621R1064	10	0.012
○ White	8.0	(1)	600	MLBL-06W	1SFA611621R1065	10	0.012

Note: care should be taken for DC supply where + and - must be correctly connected. This is marked X1 (+) and X2 (-) on the product.

(1) X=0.31, Y=0.32 according to the ICI Chromaticity diagram.

(2) Higher threshold to light up LED to be used in application where there is risk of large induced voltages.

Modular plastic range

LED blocks for front mounting



MLBL-00W

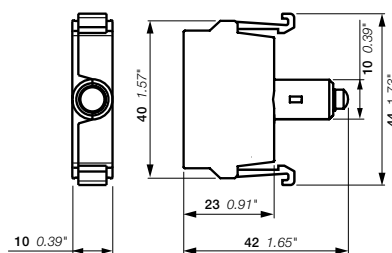
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Color	Rated current mA	Wavelength nm	Luminance mcd	Type	Order code	Pkg qty	Weight (1pce) kg
Rated voltage 230 V AC							
● Red	10.0	620	250	MLBL-07R	1SFA611621R1071	10	0.012
● Green	10.0	520	1500	MLBL-07G	1SFA611621R1072	10	0.012
● Yellow	10.0	588	300	MLBL-07Y	1SFA611621R1073	10	0.012
● Blue	10.0	468	450	MLBL-07L	1SFA611621R1074	10	0.012
○ White	10.0	(1)	600	MLBL-07W	1SFA611621R1075	10	0.012
Rated voltage 230 V AC high anti-inductive voltage (2)							
● Red	10.0	620	250	MLBL-99R	1SFA611621R1991	10	0.012
● Green	10.0	520	1500	MLBL-99G	1SFA611621R1992	10	0.012
● Yellow	10.0	588	300	MLBL-99Y	1SFA611621R1993	10	0.012
● Blue	10.0	468	450	MLBL-99L	1SFA611621R1994	10	0.012
○ White	10.0	(1)	600	MLBL-99W	1SFA611621R1995	10	0.012
Rated voltage 380 V AC							
● Red	10.0	620	250	MLBL-08R	1SFA611621R1081	10	0.012
● Green	10.0	520	1500	MLBL-08G	1SFA611621R1082	10	0.012
● Yellow	10.0	582	300	MLBL-08Y	1SFA611621R1083	10	0.012
● Blue	10.0	468	450	MLBL-08L	1SFA611621R1084	10	0.012
○ White	10.0	(1)	600	MLBL-08W	1SFA611621R1085	10	0.012
Rated voltage 415 V AC							
● Red	11	620	280	MLBL-09R	1SFA611621R1091	10	0.012
● Green	11	520	1800	MLBL-09G	1SFA611621R1092	10	0.012
● Yellow	11	588	350	MLBL-09Y	1SFA611621R1093	10	0.012
● Blue	11	468	500	MLBL-09L	1SFA611621R1094	10	0.012
○ White	11	(1)	650	MLBL-09W	1SFA611621R1095	10	0.012

Note: care should be taken for DC supply where + and - must be correctly connected. This is marked X1 (+) and X2 (-) on the product.

(1) X=0.31, Y=0.32 according to the ICI Chromaticity diagram.

(2) Higher threshold to light up LED to be used in application where there is risk of large induced voltages.



MLBL

Dimensions (mm, inches)

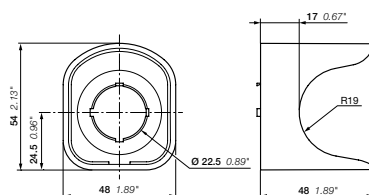
Modular plastic range

Accessories



Description	Bezel / color	Type	Order code	Pkg qty	Weight (1pce) kg
30 mm adaptors for 22 mm operator (1.5 - 4 mm panel thickness)					
Emergency stop pushbuttons, MPM	Black plastic	KA1-8027	1SFA616920R8027	1	0.007
	Chrome metal	KA1-8028	1SFA616920R8028	1	0.021
Pushbuttons, selector switches, pilot lights, potentiometers, emergency stop pushbuttons, MPE, MJS	Black plastic	KA1-8029	1SFA616920R8029	1	0.010
Flush mounted pushbuttons	Chrome metal	KA1-8073	1SFA616920R8073	1	0.050
Flush mounted selector switches	Chrome metal	MA1-8074	1SFA611920R8074	1	0.050
Protective membrane, silicone					
Flush pushbutton		MA1-8052	1SFA611920R8052	10	0.002
Double pushbutton		MA1-8126	1SFA611920R8126	10	0.002
Extended pushbutton		MA1-8002	1SFA611920R8002	10	0.002
Protective ring					
To prevent accidental operation. Cannot be used together with Legend plate holder					
Flush and extended pushbuttons	Clear plastic	-	SK615512-1	10	0.002
Flush pushbuttons	Metal and black plastic	KA1-8010	1SFA616920R8010	10	0.008
Bezel					
Pushbuttons	Black plastic	KA1-8022	1SFA616920R8022	10	0.002
	Chrome plastic	KA1-8020	1SFA616920R8020	10	0.002
	Chrome metal	KA1-8021	1SFA616920R8021	10	0.015
Selector switches	Black plastic	KA1-8080	1SFA616920R8080	10	0.002
	Chrome metal	KA1-8024	1SFA616920R8024	10	0.015
Square bezel					
Black plastic		-	SK616016-2	10	0.001
Lockable shroud					
Pushbuttons, selector switches	Plastic	MA1-8153	1SFA611920R8153	1	0.023
Emergency stop 30 mm	Metal	-	SK615502-D	1	0.080
Touch guard					
Touch guard		MA1-8152	1SFA611920R8152	1	0.023
Shroud with anti rotation tabs, slot for pad-lock and with water drainage					
Emergency stop, machine stop 40 mm	● Yellow	MA1-8053	1SFA611920R8053	1	0.020
	● Grey	MA1-8128	1SFA611920R8128	1	0.020

Note: Din-rail adaptor should be used with 2 contact blocks for rear mounting type MCB..B.



MA1
Dimensions (mm, inches)

Modular plastic range

Accessories



MA1-8131

1SFC151276V0001



MDB-2

1SFC151455F0001



MA1-8015

1SFC151275V0001



MA1-8149

1SFC151004F0001



MA1-8019

1SFC151385V0001

Description	Bezel / color	Type	Order code	Pkg qty	Weight (1pce) kg
DIN-rail adaptor					
DIN-rail adaptor		MA1-8131	1SFA611920R8131	1	0.020
DIN-rail adaptor with one dummy block		MA1-8001	1SFA611920R8001	1	0.028
Dummy block		MDB-2	1SFA611630R1002	10	0.003
Note: Din-rail adaptor should be used with 2 contact blocks for rear mounting type MCB..B.					
Note: Dummy blocks are used when only one contact block or a compact pilot device is used together with the DIN-rail adaptor					
Mounting tools					
Mounting tool for tightening the locking nut		MA1-8015	1SFA611920R8015	1	0.021
Mounting tool for power tool		MA1-8149	1SFA611920R8149	1	0.155
Extra key					
Key code 455			SK616021-71	10	0.007
Key code 421			SK616021-72	10	0.007
Key code 3433-E			SK616021-73	10	0.007
Locking nut					
Locking nut		MA1-8019	1SFA611920R8019	10	0.001

Modular plastic range

Technical data

Standards and approvals	
IEC / EN 60947-1	Low Voltage switchgear and controlgear - Part 1: General rules
IEC / EN 60947-5-1	Low Voltage switchgear and controlgear - part 5-1: control circuit devices and switching elements - Electromechanical control circuit devices
IEC / EN 60947-5-5	Low Voltage switchgear and controlgear - part 5-5: control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function
IEC / EN 60073	Basic and safety principles for man-machine interface, marking and identification coding principles for indicators and actuators
IEC / EN 60529	Degrees of protection provided by enclosures (IP code)
EN 50013	Low Voltage switchgear and controlgear for industrial use, terminal marking and distinctive number for particular control switches
DIN 40050-9	Road vehicles; Degrees of protection (IP-code); protection against foreign objects; water and contact; electrical equipment
UL 508	Industrial control equipment
CSA C22.2 No 14	Industrial control equipment

Environmental data

Degrees of protection






Operators	IEC/EN DIN	UL/CSA
Pushbutton: MP	IP66	Type 1, 3R, 4, 4X, 12, 13
Double pushbutton: MPD	IP66	Type 1, 3R, 4, 4X, 12, 13
Mushroom pushbutton: MPM	IP66	Type 1, 3R, 4, 4X, 12, 13
Emergency stop pushbuttons: MPMT, MPMP, MPET, MPEP, MPEK	IP66	Type 1, 3R, 4, 4X, 12, 13
Selector switch: M2SS, M3SS	IP66	Type 1, 3R, 4, 4X, 12, 13
Key-operated selector switch: M2SSK, M3SSK	IP66	Type 1, 3R, 4, 4X, 12
Toggle switch: MTS2, MTS3	IP66	Type 1, 3R, 4, 4X, 12, 13
Heavy duty pushbutton: KP6	-	Type 1, 3R, 4, 4X
Reset pushbutton: KPR	IP66	Type 1, 3R, 4, 4X, 12, 13
Joystick: MJS	IP66, 67, 69K	Type 1, 4X (indoor), 12, 13
Pilot light: ML	IP66	Type 1, 3R, 4, 4X, 12, 13
Potentiometer: MT	IP66	Type 1, 3R, 4, 4X, 12, 13
Contact block : MCB	IP20	-
Plastic enclosure: MEP	IP66	Type 1, 3R, 4, 4X, 12, 13

Note: Specified degree of protection is for operator mounted on panel. If other items are mounted in between, please make sure that they are correctly sealed.

Temperature

Ambient temperature during operation	-25 to +70 °C
Storage temperature	-40 to +85 °C

Connecting capacity

Contact block type	MCB	MCBL	MLBL
Connection capacity (min. ... max.)			
 Solid/stranded	1x	0.75...2.5 mm ²	
	2x	0.75...2.5 mm ²	
 Flexible	1x	0.75...2.5 mm ²	
	2x	0.75...2.5 mm ²	
 Flexible with non insulated ferrule	1x	0.75...2.5 mm ²	
	2x	0.75...2.5 mm ²	
 Flexible with insulated ferrule	1x	0.75...2.5 mm ²	
	2x	0.75...2.5 mm ²	
 Lugs	L ≤	7.0 mm	
	l >	3.5 mm	
Connection capacity acc. to UL/CSA 1 or 2 x AWG 18...14			
Stripping length 8 mm			
Tightening torque			
Cable terminals M3.5		0.9 Nm	
Recommended screwdriver for cable terminal		Pozidriv No. 2	
Operators locking nut		Min. 2 Nm / Max. 2.3 Nm	

Material

No ozone depleting substances in the products. All front of panel plastic components are made of polycarbonate

PC polycarbonate	High impact strength, good outdoor resistance. Chemical resistance (see table below)
PSU polysulphone	Can withstand high temperatures, acids, basic solutions, alkaline compounds, oils, alcohols
PA polyamide	Can withstand high temperatures, aliphatic, aromatic and chlorinated hydrocarbons, esters, ketone-aldehydes, alcohols and basic solutions
PBT	Can withstand high temperature, aliphatic and aromatic hydrocarbons, acids, basic solutions, alcohols, grease and oils
Zinc	Good corrosion resistance in inland-, sea and industrial atmosphere
Light-alloy	Good corrosion resistance in inland-, sea and industrial atmosphere

Chemical resistance for polycarbonate

Chemical class	Effects
Alcohols and alkalis	Generally compatible at low concentration and room temperature. Higher concentrations and elevated temperatures can result in etching and attack evidenced by decomposition
Aliphatic hydrocarbons	Generally compatible
Amines	Surface crystallization and chemical attack. Avoid
Aromatic hydrocarbons	Partial solvents and severe stress cracking agents (i.e., xylene, toluene) Avoid
Detergents and cleaners	Mild soap solutions are generally compatible. Strong alkaline materials should be avoided
Esters	Cause severe crystallization. Partial solvents Avoid
Greases and oils	Pure petroleum types generally compatible. Many additives used with them are not
Halogenated, hydrocarbons	Solvents Avoid
Ketones	Cause severe crystallization and stress cracking. Partial solvents Avoid
Silicone oil and greases	Generally compatible up to 85 °C

Modular plastic range

Technical data

Electrical data

MCB Standard contact blocks (standard and gold plated)

Self cleaning silver contacts, NC contact with positive opening.
At voltages and currents below 24 V and 5.6 mA we recommend our micro switch blocks.

Ratings as per IEC 60947-5-1

Rated insulation voltage, U_i	690 V	
Rated thermal current, I_{th}	10 A	
Rated operational current, I_e Utilization category AC 15,	at: 120 V	8 A
	at: 230 V	6 A
	at: 400 V	4 A
	at: 690 V	2 A
Rated operational current, I_e utilisation category DC 13,	at: 24 V	5 A
	at: 125 V	1.1 A
	at: 250 V	0.55 A
Rated impulse withstand voltage	U_{imp}	6 kV
Rated frequency	50/60 Hz	
Pollution degree	3	

Ratings as per UL, CSA, NEMA

	A600 AC	Q600 DC
Rated insulation voltage	600 V	600 V
Rated thermal current	10 A	2.5 A
Rated operational current	at: 120 V	6 A
	at: 240 V	3 A
	at: 480 V	1.5 A
	at: 600 V	1.2 A
	at: 125 V	0.55 A
	at: 250 V	0.27 A
	at: 480 V	0.10 A
	at: 600 V	0.10 A

Max. number of contact blocks per operator

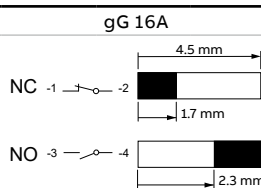
The contact blocks can be stacked in max two levels on the 3-block holder. Only one level is accepted on the 5-block holder.

Pushbutton, toggle switch, mushroom pushbutton, double pushbutton, selector switch, key-operated selector switch and emergency stop operator	6
Joystick	8

Short circuit protection

Max. fuse at 1 kA

Diagram for make and break contact MCB, MCBL



Micro switch block

Ratings as per IEC 60947-5-1

Rated insulation voltage, U_i	125 V	
Rated thermal current, I_{th}	3 A	
Rated operational current, I_e utilisation category AC 14,	at: 125 V	0.5 A
	at: 24 V	0.3 A
Rated operational current, I_e utilization category DC 13,	at: 24 V	0.1 A
Rated operational current, I_e utilization category DC 12,	at: 24 V	0.1 A

Ratings as per UL 508

	125 V AC	3 A
	60 V DC	0.2 A
	48 V DC	0.1 A

Minimum switching capacity

Standard contact blocks	24 V DC	5.6 mA
Gold plated contact blocks	5 V DC	12 mA
	12 V DC	1 mA
Micro switch blocks	3 V DC	1 mA

Mechanical data

Mechanical life

Standard contact blocks MCB	10 million operations
Micro switch block MCBL	1 million operations
Pushbuttons MP, momentary mushroom pushbuttons MPM	2 million operations

Selector switches M2SS, M3SS

Standard contact blocks and micro switch block	3-position holder		500 000 operations
Standard contact blocks	3-position holder		
Standard contact blocks	5-position holder		
Standard contact blocks in two stacks	3-position holder		

Selector switches - center block operating M3SSC

Standard contact blocks	3-position holder		250 000 operations
Standard contact blocks in two stacks	3-position holder		150 000 operations

Key-operated selector switch M2SSK, M3SSK and double pushbutton MPD

Emergency stop pushbuttons MPET, MPEP, MPEK	100 000 operations
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Toggle switch MTS

1 million operations

Joystick MJS

Micro switch block	4-position holder		500 000 operations
Standard contact blocks	4-position holder		
Standard contact blocks and micro switch block	4-position holder		400 000 operations
Standard contact blocks in two stacks	4-position holder		300 000 operations

LED blocks MLBL

Service life for LED means number of service hours until the brightness has been reduced down 50%. Service life 50 000 h operating at 25 °C, 40-70% rh (relative humidity)

Color of white LED	$x=0.31$ $Y=0.32$ means the position of color in the ICI Chromaticity diagram
Voltage tolerance on LED blocks	-30 to +10% voltage is acceptable without affecting the Service life
Voltage peaks on LED blocks	Voltage peaks up to 1000 V. Current peaks up to 500 mA during a few msec.
Glowing light	All integrated LED bulbs have a function built in to cut leakage currents
Rated frequency	50/60 Hz for AC supplied products

Modular plastic range

Technical data

LED blocks front and rear mounting MLBL

Color	Current		Illuminance		Anti ... inductive peak voltage V	Main wavelength Nm	Color temperature K
	mA Min.	Max.	lx Min.	Max.			
Voltage range 12 V DC							
● Red	11	15	1000	3500	5	620 ... 625	–
● Green	8	12	3700	12500	5	515 ... 520	–
● Yellow	11	15	1200	4250	5	585 ... 590	–
● Blue	8	12	1500	5300	5	465 ... 470	–
○ Clear	8	12	1800	8500	5	–	8000 ... 12000
Voltage range 24 V AC / DC							
● Red	8	12	900	3100	5	620 ... 625	–
● Green	8	12	3000	11500	5	515 ... 520	–
● Yellow	8	12	1000	3400	5	585 ... 590	–
● Blue	8	12	1500	5300	5	465 ... 470	–
○ Clear	8	11	1800	8500	5	–	8000 ... 12000
Voltage range 48 V AC / DC							
● Red	8	12	900	3100	5	620 ... 625	–
● Green	8	12	3000	11500	5	515 ... 520	–
● Yellow	8	12	1000	3400	5	585 ... 590	–
● Blue	8	12	1500	5300	5	465 ... 470	–
○ Clear	8	12	1800	8500	5	–	8000 ... 12000
Voltage range 60 V AC / DC							
● Red	8	12	900	3100	5	620 ... 625	–
● Green	8	12	3000	11500	5	515 ... 520	–
● Yellow	8	12	1000	3400	5	585 ... 590	–
● Blue	8	12	1500	5300	5	465 ... 470	–
○ Clear	8	12	1800	8500	5	–	8000 ... 12000
Voltage range 110 ... 130 V AC							
● Red	8	12	900	3100	15	620 ... 625	–
● Green	8	12	3200	12000	15	515 ... 520	–
● Yellow	8	12	1000	3700	15	585 ... 590	–
● Blue	8	12	1550	5500	15	465 ... 470	–
○ Clear	8	12	1850	8800	15	–	8000 ... 12000
Voltage range 110 ... 130 V AC high anti-inductive voltage (1)							
● Red	14	16	700	2600	25	620 ... 625	–
● Green	14	16	2100	8200	25	515 ... 520	–
● Yellow	14	16	750	3000	25	585 ... 590	–
● Blue	14	16	1000	5000	25	465 ... 470	–
○ Clear	14	16	1500	8100	25	–	8000 ... 12000
Voltage range 110 ... 130 V DC							
● Red	8	12	900	3100	15	620 ... 625	–
● Green	8	12	3000	11500	15	515 ... 520	–
● Yellow	8	12	1000	3400	15	585 ... 590	–
● Blue	8	12	1500	5300	15	465 ... 470	–
○ Clear	8	12	1800	8500	15	–	8000 ... 12000

Note:

The testing distance of illuminance is 2 mm, between top of lens and the sensor surface. Clean test environment, supply voltage at 50/60 Hz with harmonized wave and without length high frequency.

Rated voltage tolerance of LED blocks: -30% to +10%.

(1) Higher threshold to light up LED to be used in applications where there is risk of large induced voltages.

Modular plastic range

Technical data

Color	Current		Illuminance		Anti-inductive peak voltage	Main wavelength	Color temperature
	mA Min.	Max.	lx Min.	Max.	V	Nm	K
Voltage range 220 V DC							
● Red	7	10	700	2300	15	620 ... 625	–
● Green	7	10	2400	8000	15	515 ... 520	–
● Yellow	7	10	800	3100	15	585 ... 590	–
● Blue	7	10	1200	4350	15	465 ... 470	–
○ Clear	7	10	1400	7000	15	–	8000 ... 12000
Voltage range 230 V AC							
● Red	8	12	900	3100	15	620 ... 625	–
● Green	8	12	3000	11500	15	515 ... 520	–
● Yellow	8	12	1000	3400	15	585 ... 590	–
● Blue	7	11	1500	5300	15	465 ... 470	–
○ Clear	7	11	1800	8500	15	–	8000 ... 12000
Voltage range 380 V AC							
● Red	8	12	900	3100	15	620 ... 625	–
● Green	8	12	3000	11500	15	515 ... 520	–
● Yellow	8	12	1000	3400	15	585 ... 590	–
● Blue	8	12	1500	5300	15	465 ... 470	–
○ Clear	8	12	1800	8500	15	–	8000 ... 12000
Voltage range 415 V AC							
● Red	8	12	900	3100	15	620 ... 625	–
● Green	8	12	3000	11500	15	515 ... 520	–
● Yellow	8	12	1000	3400	15	585 ... 590	–
● Blue	8	12	1500	5300	15	465 ... 470	–
○ Clear	8	12	1800	8500	15	–	8000 ... 12000
Voltage range 230 V AC high anti-inductive voltage (1)							
● Red	8	12	480	1700	55	620 ... 625	–
● Green	6	11	1500	5800	55	515 ... 520	–
● Yellow	8	12	530	1900	55	585 ... 590	–
● Blue	6	11	850	3100	55	465 ... 470	–
○ Clear	6	11	1000	5200	55	–	8000 ... 12000

Note:

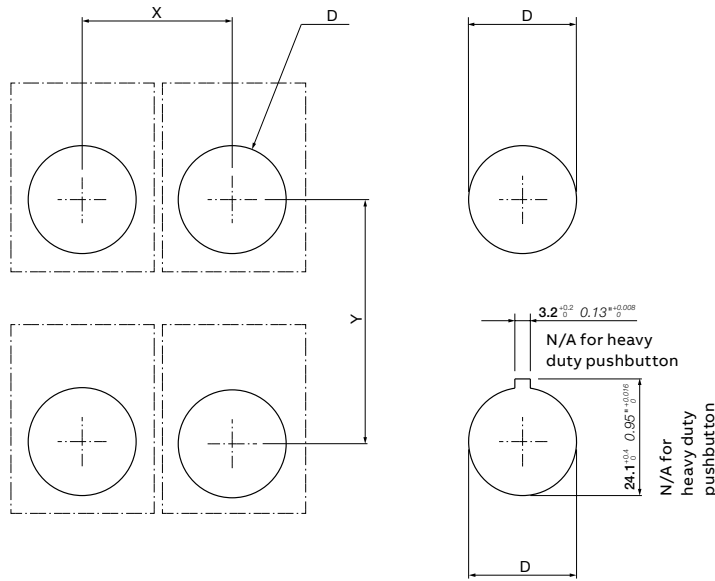
The testing distance of illuminance is 2 mm, between top of lens and the sensor surface. Clean test environment, supply voltage at 50/60 Hz with harmonized wave and without length high frequency.

Rated voltage tolerance of LED blocks: ... 30% to +10%.

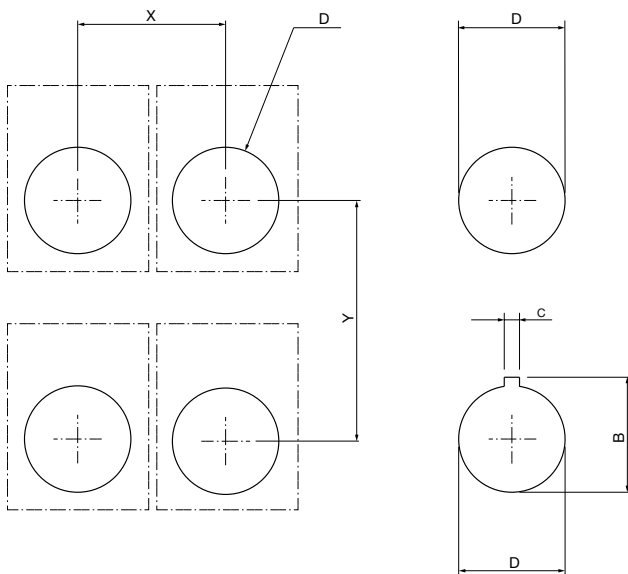
(1) Higher threshold to light up LED to be used in applications where there is risk of large induced voltages.

Modular plastic range

Drilling plan



Description	X	Y	D		Panel thickness
			Ø mm	inch	
Pushbutton, pilot light, selector switch short handle, potentiometer, toggle switch, 30 mm emergency stop, key-operated selector switch	31 1.22"	50 1.97"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Pushbutton, pilot light, selector switch short handle (with legend plate)	31 1.22"	55 2.17"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Mushroom pushbutton, emergency stop, machine stop (60 mm)	45 1.77"	50 1.97"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Mushroom pushbutton, emergency stop, machine stop (40 mm)	65 2.56"	70 2.76"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Double pushbutton	31 1.22"	55 2.17"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Double pushbutton (with legend plate)	31 1.22"	95 3.74"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Heavy duty pushbutton	50 1.97"	50 1.97"	Ø 30.5 ^{+0.5} ₀	1.20" ^{+0.02} ₀	2 0.08" - 5 0.20"
Potentiometer (with legend plate)	51 2.01"	50 1.97"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Toggle switch (with legend plate)	31 1.22"	66 2.60"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"
Joystick (with legend plate)	100 3.94"	100 3.94"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	1.5 0.06" - 6 0.24"



Accessories	X	Y	D		B		C	Panel thickness
			Ø mm	inch	Ø mm	inch		
5 block holder	51 2.01"	50 1.97"	Ø 22.3 ^{+0.4} ₀	0.88" ^{+0.016} ₀	24.1 ^{+0.4} ₀	0.95" ^{+0.016} ₀	3.2 0.13"	1.5 0.06" - 6 0.24"
30 mm adaptor	42 1.65"	52 2.05"	Ø 30.5 ^{+0.5} ₀	1.20" ^{+0.02} ₀	33 ^{+0.5} ₀	1.30" ^{+0.02} ₀	5 0.20"	2 0.08" - 7 0.28"

