

---

# Pilot devices, 22 mm

## Modular metal range

### Ordering details

56	Non-illuminated pushbuttons momentary
57	Non-illuminated marked pushbuttons momentary
58	Illuminated pushbuttons momentary
59	Non-illuminated mushroom pushbuttons
60	Illuminated mushroom pushbuttons
61	Pilot lights
62	Non-illuminated selector switches - 2-position
63	Illuminated selector switches - 2-position
64	Non-illuminated selector switches - 3-position
65	Illuminated selector switches - 3-position
66	Non-illuminated selector switches
68	Key-operated selector switches
72	Joysticks
74	Toggle switches
75	Selector pushbuttons

### Accessories for modular range

76	Holders and contact blocks for front mounting
77	Power supplies
78	LED bulbs for power supplies
79	LED blocks for front mounting
80	Accessories
81	Metal enclosures

### 83 Technical data

### 85 Dimension

### 86 Drilling plan

# Modular metal range

## Non-illuminated pushbuttons momentary



1SFC151476V0001

P9MPNRG with holder



1SFC151529V0001

P9MPNGG



1SFC151510V0001

P9MPN BG



1SFC151526V0001

P9MPNNG



1SFC151519V0001

P9MPNRS



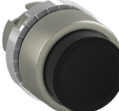
1SFC151518V0001

P9MPNVS



1SFC151521V0001

P9MPNLS



1SFC151520V0001

P9MPNNS



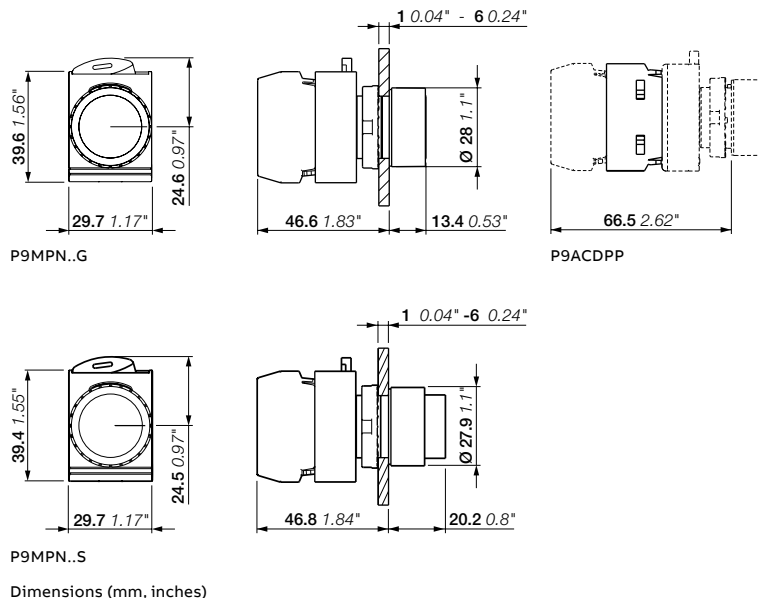
1SFC151628V0001

P9ACDPP

### Description

Each reference includes the satin chrome metal body and nut together with the holder.

Operator	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Flush pushbutton</b>				
● Red	P9MPNRG	1SFA184001R9001	1	0.058
● Green	P9MPNVS	1SFA184002R9002	1	0.058
● Yellow	P9MPNGG	1SFA184003R9003	1	0.058
● Blue	P9MPNLS	1SFA184006R9004	1	0.058
○ White	P9MPN BG	1SFA184007R9005	1	0.058
● Black	P9MPNNG	1SFA184000R9006	1	0.058
● Grey	P9MPNHG	1SFA184008R9007	1	0.058
<b>Extended pushbutton</b>				
● Red	P9MPNRS	1SFA184011R9001	1	0.062
● Green	P9MPNVS	1SFA184012R9002	1	0.062
● Yellow	P9MPNGS	1SFA184057R9003	1	0.062
● Blue	P9MPNLS	1SFA184016R9004	1	0.062
○ White	P9MPNBS	1SFA184017R9005	1	0.062
● Black	P9MPNNS	1SFA184010R9006	1	0.062
<b>Maintained accessory</b>				
Device for standard pushbuttons, illuminated pushbuttons: To be used only with contact blocks P9B01VN, P9B01VR, P9B10VA and P9B01FN	P9ACDPP	1SFA187843R8000	1	0.012



## Modular metal range

Non-illuminated marked pushbuttons momentary



P9MPNNG037

15FC151454V0001



P9MPNNG030

15FC151449V0001



P9MPNNG028

15FC151449V0001



P9MPNNG029

15FC151446V0001



P9MPNNG029

15FC151446V0001



P9MPNNG006

15FC151445V0001



P9MPNRS029

15FC151647V0001

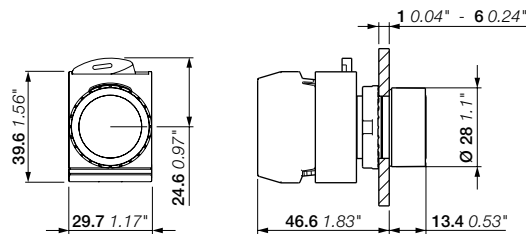
### Flush pushbuttons

Each reference includes the satin chrome metal body and nut together with the holder.

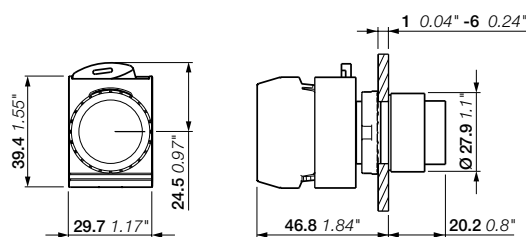
Text/symbol	Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Flush pushbuttons</b>					
START	Green	P9MPNNG202	1SFA187149R9502	1	0.058
STOP	Red	P9MPNNG201	1SFA187147R9501	1	0.058
	Black	P9MPNNG201	1SFA188908R9506	1	0.058
R	Blue	P9MPNNG037	1SFA187143R9504	1	0.058
⊕	Green	P9MPNNG030	1SFA187146R9502	1	0.058
	White	P9MPNNG030	1SFA188057R9505	1	0.058
	Black	P9MPNNG030	1SFA187145R9506	1	0.058
I	Green	P9MPNNG028	1SFA187112R9502	1	0.058
	White	P9MPNNG028	1SFA187151R9505	1	0.058
	Black	P9MPNNG028	1SFA187111R9506	1	0.058
O	Red	P9MPNNG029	1SFA187110R9501	1	0.058
	Black	P9MPNNG029	1SFA187150R9506	1	0.058
→	Green	P9MPNNG006	1SFA187118R9502	1	0.058
	White	P9MPNNG006	1SFA187152R9505	1	0.058
	Black	P9MPNNG006	1SFA187117R9506	1	0.058
↯	Black	P9MPNNG085	1SFA188886R9506	1	0.058
↔	Blue	P9MPNNG007	1SFA188900R9504	1	0.058
⚙	Black	P9MPNNG002	1SFA187139R9506	1	0.058

### Extended pushbutton

O	Red	P9MPNRS029	1SFA187210R9501	1	0.058
O	Black	P9MPNNS029	1SFA187250R9506	1	0.058
⬆	Black	P9MPNNS032	1SFA187235R9506	1	0.058



P9MPN..G



P9MPN..S

Dimensions (mm, inches)

# Modular metal range

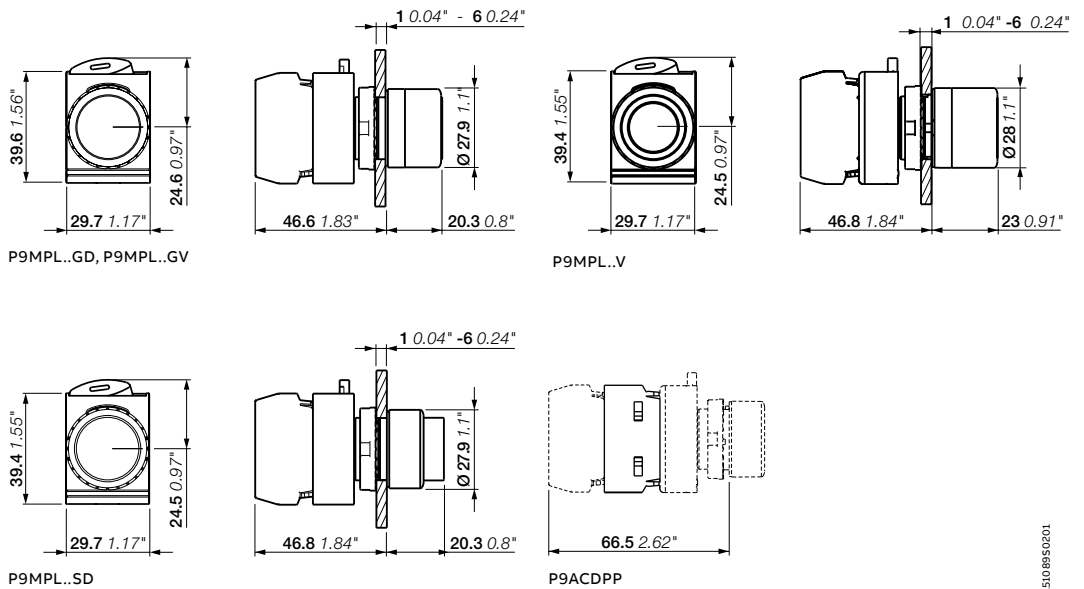
## Illuminated pushbuttons momentary



### Description

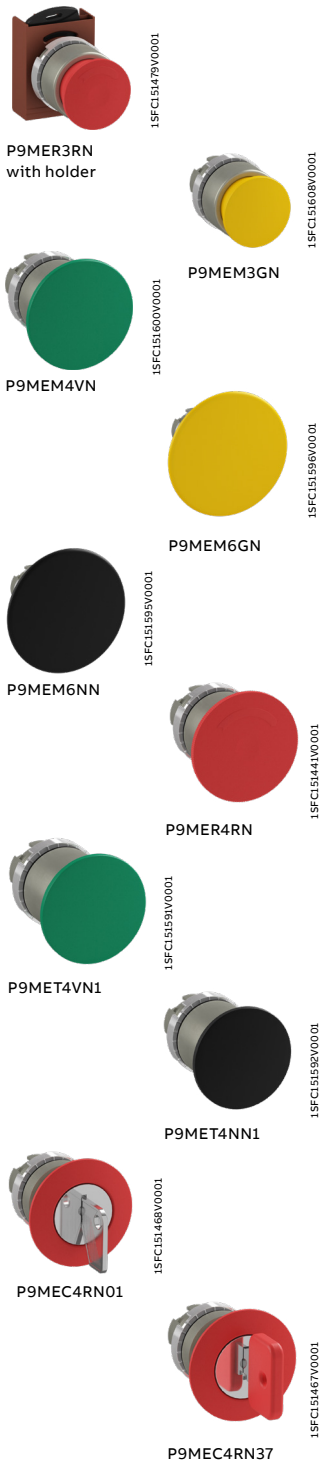
Each reference includes the satin chrome metal body and nut together with the holder.

Operator	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Flush pushbutton - Plastic lens type</b>				
● Red	P9MPLRGD	1SFA184491R9101	1	0.057
● Green	P9MPLVGD	1SFA184492R9102	1	0.057
● Yellow	P9MPLGGD	1SFA184493R9103	1	0.057
● Blue	P9MPLLGD	1SFA184496R9104	1	0.057
○ White	P9MPLBGD	1SFA184497R9105	1	0.057
● Orange	P9MPLAGD	1SFA184495R9109	1	0.057
○ Clear	P9MPLIGD	1SFA184498R9108	1	0.057
<b>Flush pushbutton - Glass lens type</b>				
● Red	P9MPLRGV	1SFA184521R9101	1	0.060
● Green	P9MPLVGV	1SFA184522R9102	1	0.060
● Yellow	P9MPLGGV	1SFA184523R9103	1	0.060
● Blue	P9MPLLGV	1SFA184526R9104	1	0.060
○ White	P9MPLBGV	1SFA184527R9105	1	0.060
<b>Extended pushbutton - Plastic lens type</b>				
● Red	P9MPLRSD	1SFA184501R9101	1	0.059
● Green	P9MPLVSD	1SFA184502R9102	1	0.059
● Yellow	P9MPLGSD	1SFA184503R9103	1	0.059
● Blue	P9MPLLSD	1SFA184506R9104	1	0.059
○ White	P9MPLBSD	1SFA184507R9105	1	0.059
● Orange	P9MPLASD	1SFA184505R9109	1	0.059
<b>Maintained accessory</b>				
Device for standard pushbuttons, illuminated pushbuttons: To be used only with contact blocks P9B01VN, P9B01VR, P9B10VA and P9B01FN	P9ACDPP	1SFA187843R8000	1	0.012



# Modular metal range

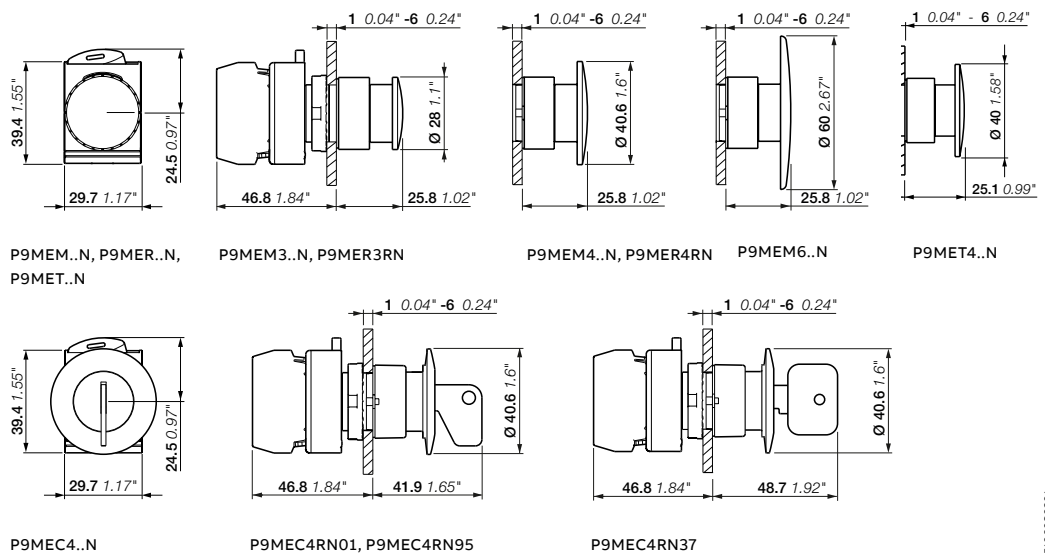
## Non-illuminated mushroom pushbuttons



### Description

Each reference includes the satin chrome metal body and nut together with the holder.

Color	Release method	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Momentary</b>					
<b>Ø 28 mm</b>					
● Red	–	P9MEM3RN	1SFA184031R9001	1	0.060
● Green	–	P9MEM3VN	1SFA184032R9002	1	0.060
● Yellow	–	P9MEM3GN	1SFA184033R9003	1	0.060
● Black	–	P9MEM3NN	1SFA184030R9006	1	0.060
<b>Ø 40 mm</b>					
● Red	–	P9MEM4RN	1SFA184041R9001	1	0.061
● Green	–	P9MEM4VN	1SFA184042R9002	1	0.061
● Yellow	–	P9MEM4GN	1SFA184043R9003	1	0.061
● Black	–	P9MEM4NN	1SFA184040R9006	1	0.061
<b>Ø 60 mm</b>					
● Red	–	P9MEM6RN	1SFA184051R9001	1	0.070
● Green	–	P9MEM6VN	1SFA184052R9002	1	0.070
● Yellow	–	P9MEM6GN	1SFA184053R9003	1	0.070
● Black	–	P9MEM6NN	1SFA184050R9006	1	0.070
<b>Maintained</b>					
<b>Ø 28 mm</b>					
● Red	Twist release	P9MER3RN	1SFA184070R9001	1	0.066
<b>Ø 40 mm</b>					
● Red	Pull release	P9MET4RN1	1SFA184061R9001	1	0.069
	Twist release	P9MER4RN	1SFA184071R9001	1	0.069
● Green	Pull release	P9MET4VN1	1SFA184062R9002	1	0.069
● Yellow	Pull release	P9MET4GN1	1SFA184063R9003	1	0.069
● Black	Pull release	P9MET4NN1	1SFA184060R9006	1	0.069
<b>Maintained with key</b>					
<b>Ø 40 mm</b>					
● Red	Key code 01	P9MEC4RN01	1SFA192000R9001	1	0.090
	Key code 37	P9MEC4RN37	1SFA192012R9001	1	0.090
	Key code 95	P9MEC4RN95	1SFA184073R9001	1	0.090



## Modular metal range

### Illuminated mushroom pushbuttons



1SFC151602V0001

P9MEM4RL



1SFC151604V0001

P9MEM4GL



1SFC151888V0001

P9MET4RL1



1SFC151887V0001

P9MET4LL1

#### Description

Each reference includes the satin chrome metal body and nut together with the holder.

Color	Release method	Type	Order code	Pkg qty	Weight (1 pce) kg
-------	----------------	------	------------	---------	-------------------

#### Momentary

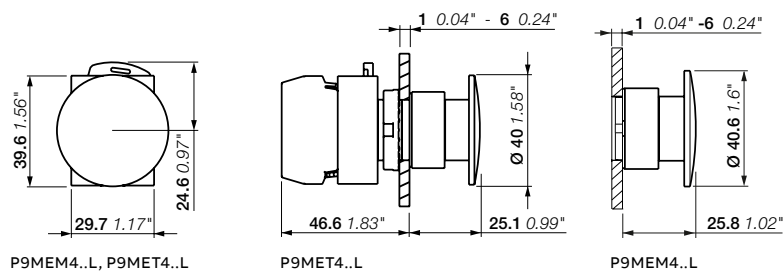
Ø 40 mm

● Red	-	P9MEM4RL	1SFA184551R9101	1	0.062
● Green	-	P9MEM4VL	1SFA184552R9102	1	0.062
● Yellow	-	P9MEM4GL	1SFA184553R9103	1	0.062
● Blue	-	P9MEM4LL	1SFA184556R9104	1	0.062

#### Maintained

Ø 40 mm

● Red	Pull release	P9MET4RL1	1SFA184561R9101	1	0.062
● Green	Pull release	P9MET4VL1	1SFA184562R9102	1	0.062
● Yellow	Pull release	P9MET4GL1	1SFA184563R9103	1	0.062
● Blue	Pull release	P9MET4LL1	1SFA184566R9104	1	0.062



P9MEM4..L, P9MET4..L  
Dimensions (mm, inches)

# Modular metal range

## Pilot lights



P9MLBD  
with holder

1SFC151478V0001



P9MLRD

1SFC151579V0001



P9MLVD

1SFC151578V0001



P9MLGD

1SFC151582V0001



P9MLLD

1SFC151580V0001



P9MLID

1SFC151581V0001



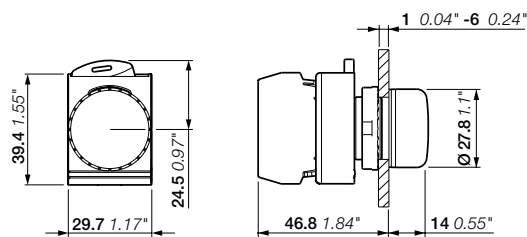
P9MLAD

1SFC151584V0001

### Description

Each reference includes the satin chrome metal body and nut together with the holder.

Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Operator - Plastic lens type</b>				
● Red	P9MLRD	1SFA184791R9001	1	0.050
● Green	P9MLVD	1SFA184792R9002	1	0.050
● Yellow	P9MLGD	1SFA184793R9003	1	0.050
● Blue	P9MLLD	1SFA184796R9004	1	0.050
○ White	P9MLBD	1SFA184797R9005	1	0.050
○ Clear	P9MLID	1SFA184798R9008	1	0.050
● Orange	P9MLAD	1SFA184795R9009	1	0.050



P9ML...D

Dimensions (mm, inches)

# Modular metal range

## Non-illuminated selector switches - 2-position

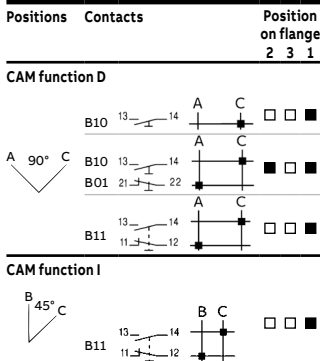


### Description

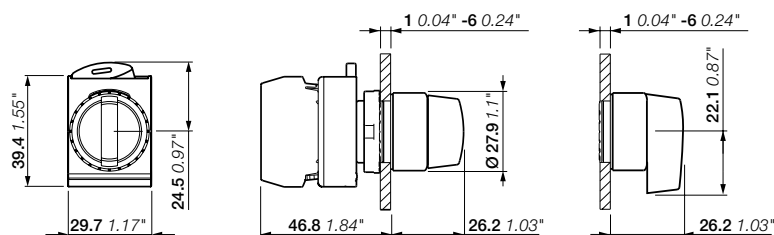
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Yellow	I	P9MSMI0G	1SFA184123R9003	1	0.065
	● Black	I	P9MSMI0N	1SFA184120R9006	1	0.065
	● Red	D	P9MSMD0R	1SFA184111R9001	1	0.065
	● Black	D	P9MSMD0N	1SFA184110R9006	1	0.065
	● Red	I	P9MSMI5R	1SFA184151R9001	1	0.065
	● Green	I	P9MSMI5V	1SFA184152R9002	1	0.065
	● Black	I	P9MSMI5N	1SFA184150R9006	1	0.065
	● Red	D	P9MSMD5R	1SFA184141R9001	1	0.065
	● Yellow	D	P9MSMD5G	1SFA184143R9003	1	0.065
	● Black	D	P9MSMD5N	1SFA184140R9006	1	0.065
<b>Long handle</b>						
	● Black	I	P9MSVI0N	1SFA184371R9006	1	0.068
	● Yellow	D	P9MSVD0G	1SFA184822R9003		
	● Black	D	P9MSVD0N	1SFA184370R9006	1	0.068
	● Black	I	P9MSVI5N	1SFA184374R9006	1	0.068
	● Black	D	P9MSVD5N	1SFA184373R9006	1	0.068

### Electrical diagram



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSM, P9MSV  
 Dimensions (mm, inches)



# Modular metal range

## Illuminated selector switches - 2-position

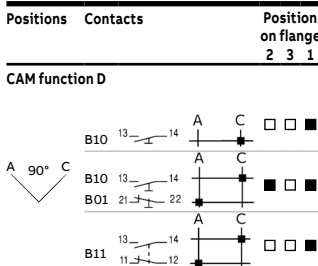


### Description

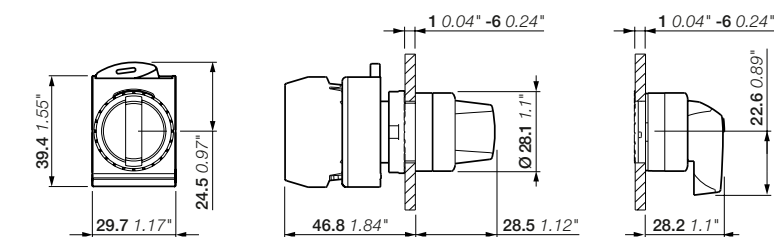
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Red	D	P9MSLD0R	1SFA184591R9101	1	0.059
	● Green	D	P9MSLD0V	1SFA184592R9102	1	0.059
	● Yellow	D	P9MSLD0G	1SFA184593R9103	1	0.059
	● Blue	D	P9MSLD0L	1SFA184596R9104	1	0.059
	○ White	D	P9MSLD0B	1SFA184597R9105	1	0.059
	● Orange	D	P9MSLD0A	1SFA184595R9109	1	0.059
	○ Clear	D	P9MSLD0I	1SFA184598R9108	1	0.059
<b>Long handle</b>						
	● Red	D	P9MSAD0R	1SFA184641R9101	1	0.060
	● Green	D	P9MSAD0V	1SFA184642R9102	1	0.060
	● Blue	D	P9MSAD0L	1SFA184646R9104	1	0.060
	○ White	D	P9MSAD0B	1SFA184647R9105	1	0.060

### Electrical diagram



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSL, P9MSA  
 Dimensions (mm, inches)

# Modular metal range

## Non-illuminated selector switches - 3-position

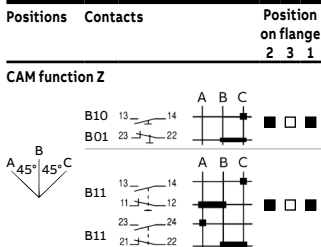


### Description

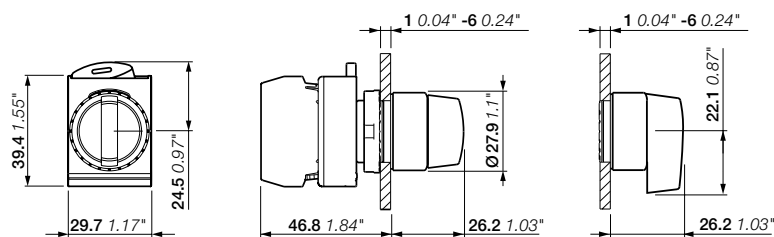
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Red	Z	P9MSMZ0R	1SFA184201R9001	1	0.065
	● Black	Z	P9MSMZ0N	1SFA184200R9006	1	0.065
	● Red	Z	P9MSMZ3R	1SFA184321R9001	1	0.065
	● Black	Z	P9MSMZ3N	1SFA184320R9006	1	0.065
	● Black	Z	P9MSMZ5N	1SFA184280R9006	1	0.065
	● Red	Z	P9MSMZ1R	1SFA184241R9001	1	0.065
	● Black	Z	P9MSMZ1N	1SFA184240R9006	1	0.065
<b>Long handle</b>						
	● Red	Z	P9MSVZ0R	1SFA184856R9001	1	0.068
	● Black	Z	P9MSVZ0N	1SFA184379R9006	1	0.068
	● Black	Z	P9MSVZ3N	1SFA184391R9006	1	0.068
	● Black	Z	P9MSVZ5N	1SFA184387R9006	1	0.068
	● Black	Z	P9MSVZ1N	1SFA184383R9006	1	0.068

### Electrical diagram



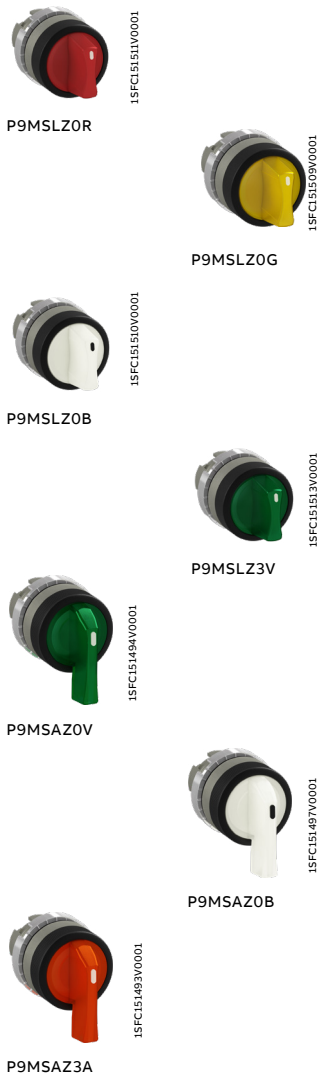
Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSM, P9MSV  
 Dimensions (mm, inches)

# Modular metal range

## Illuminated selector switches - 3-position

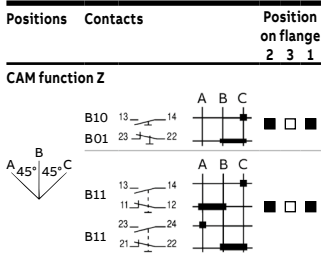


### Description

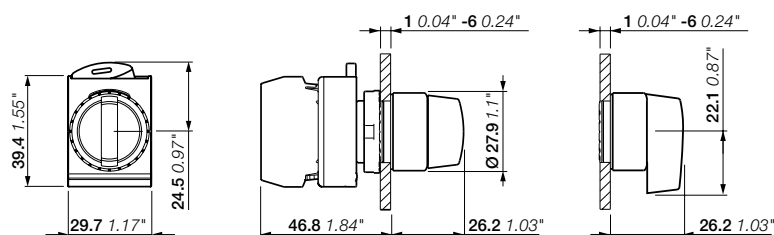
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Red	Z	P9MSLZ0R	1SFA184601R9101	1	0.065
	● Green	Z	P9MSLZ0V	1SFA184602R9102	1	0.065
	● Yellow	Z	P9MSLZ0G	1SFA184603R9103	1	0.065
	● Blue	Z	P9MSLZ0L	1SFA184606R9104	1	0.065
	○ White	Z	P9MSLZ0B	1SFA184607R9105	1	0.065
	● Orange	Z	P9MSLZ0A	1SFA184605R9109	1	0.065
	● Red	Z	P9MSLZ3R	1SFA184631R9101	1	0.065
	● Green	Z	P9MSLZ3V	1SFA184632R9102	1	0.065
	● Yellow	Z	P9MSLZ3G	1SFA184633R9103	1	0.065
	● Blue	Z	P9MSLZ3L	1SFA184636R9104	1	0.065
	○ White	Z	P9MSLZ3B	1SFA184637R9105	1	0.065
	● Orange	Z	P9MSLZ3A	1SFA184635R9109	1	0.065
	○ Clear	Z	P9MSLZ3I	1SFA184638R9108	1	0.065
	● Red	Z	P9MSLZ5R	1SFA184621R9101	1	0.065
	● Green	Z	P9MSLZ5V	1SFA184622R9102	1	0.065
	● Blue	Z	P9MSLZ5L	1SFA184626R9104	1	0.065
	○ Clear	Z	P9MSLZ5I	1SFA184628R9108	1	0.065
	● Red	Z	P9MSLZ1R	1SFA184611R9101	1	0.065
	● Green	Z	P9MSLZ1V	1SFA184612R9102	1	0.065
	● Yellow	Z	P9MSLZ1G	1SFA184613R9103	1	0.065
	● Blue	Z	P9MSLZ1L	1SFA184616R9104	1	0.065
	○ White	Z	P9MSLZ1B	1SFA184617R9105	1	0.065
	<b>Long handle</b>					
	● Green	Z	P9MSAZ0V	1SFA184652R9102	1	0.068
	○ White	Z	P9MSAZ0B	1SFA184657R9105	1	0.068
	● Green	Z	P9MSAZ3V	1SFA184682R9102	1	0.068
	○ White	Z	P9MSAZ3B	1SFA184687R9105	1	0.068
	● Orange	Z	P9MSAZ3A	1SFA184685R9109	1	0.068

### Electrical diagram



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSL, P9MSA  
 Dimensions (mm, inches)

# Modular metal range

## Non-illuminated selector switches - 4-position



1SFCL51471V0001

P9MSMX0N with holder



P9MSMX0N

1SFCL51508V0001

### Description

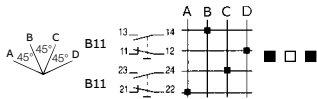
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Black	X	P9MSMX0N	1SFA184397R9006	1	0.065
	● Black	X	P9MSMX5N	1SFA184340R9006	1	0.065
<b>Long handle</b>						
	● Black	X	P9MSVX0N	1SFA184392R9006	1	0.068
	● Black	X	P9MSVX5N	1SFA184393R9006	1	0.068

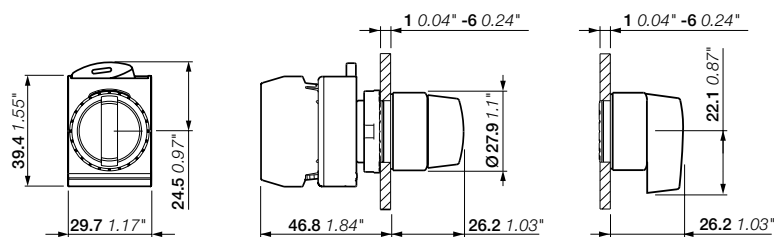
### Electrical diagram

Positions	Contacts	Position on flange
		2 3 1

CAM function X



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSM, P9MSV  
 Dimensions (mm, inches)

# Modular metal range

## Non-illuminated selector switches - 5-position



1SFC1511V0001

P9MSMYOR

### Description

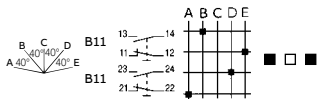
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	Color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Short handle</b>						
	● Black	W	P9MSMW0N	1SFA184360R9006	1	0.065
	● Red	Y	P9MSMYOR	1SFA184351R9001	1	0.065
	● Black	Y	P9MSMY0N	1SFA184350R9006	1	0.065

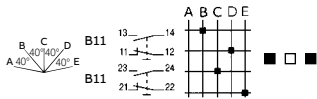
### Electrical diagram

Positions	Contacts	Position on flange
		2 3 1

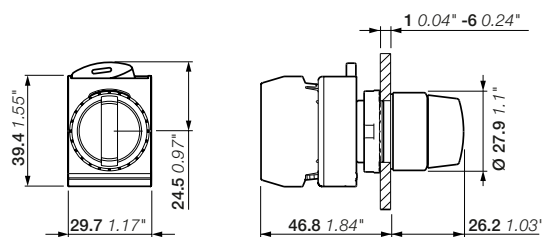
#### CAM function Y



#### CAM function W



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



P9MSM  
 Dimensions (mm, inches)

# Modular metal range

## Key-operated selector switches - 2-position



P9MSCI0C37 with holder



P9MSCI0C95

### Description

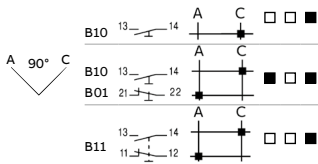
Each reference includes the satin chrome metal body and nut together with the holder, 2 keys included.

Operating principle	Key code	Key head color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
 Key can be removed in B only	37	Red/Metal	I	P9MSCI0C37	1SFA192162R9006	1	0.120
	01	Metal	I	P9MSCI0C01	1SFA192150R9006	1	0.120
	95	Metal	I	P9MSCI0C95	1SFA184403R9006	1	0.120
 Key can be removed in C only	01	Metal	I	P9MSCI0E01	1SFA192165R9006	1	0.120
	95	Metal	I	P9MSCI0E95	1SFA184404R9006	1	0.120
 Key can be removed in B and C	95	Metal	I	P9MSCI0N95	1SFA184405R9006	1	0.120
 Key can be removed in A only	37	Red/Metal	D	P9MSCD0A37	1SFA192117R9006	1	0.120
	01	Metal	D	P9MSCD0A01	1SFA192105R9006	1	0.120
	95	Metal	D	P9MSCD0A95	1SFA184400R9006	1	0.120
 Key can be removed in C only	01	Metal	D	P9MSCD0E01	1SFA192120R9006	1	0.120
	95	Metal	D	P9MSCD0E95	1SFA184401R9006	1	0.120
 Key can be removed in A and C positions	37	Red/Metal	D	P9MSCD0K37	1SFA192147R9006	1	0.120
	01	Metal	D	P9MSCD0K01	1SFA192135R9006	1	0.120
	95	Metal	D	P9MSCD0K95	1SFA184402R9006	1	0.120
 Key can be removed in B position	37	Red/Metal	I	P9MSCI5C37	1SFA192267R9006	1	0.120
	01	Metal	I	P9MSCI5C01	1SFA192255R9006	1	0.120
	95	Metal	I	P9MSCI5C95	1SFA184410R9006	1	0.120
 Key can be removed in A position	37	Red/Metal	D	P9MSCD5A37	1SFA192252R9006	1	0.120
	01	Metal	D	P9MSCD5A01	1SFA192240R9006	1	0.120
	95	Metal	D	P9MSCD5A95	1SFA184409R9006	1	0.120
	33	Yellow	D	P9MSCD5A33	1SFA192250R9006	1	0.120

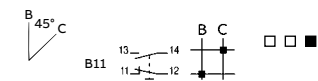
### Electrical diagram

Positions	Contacts	Position on flange
		2 3 1

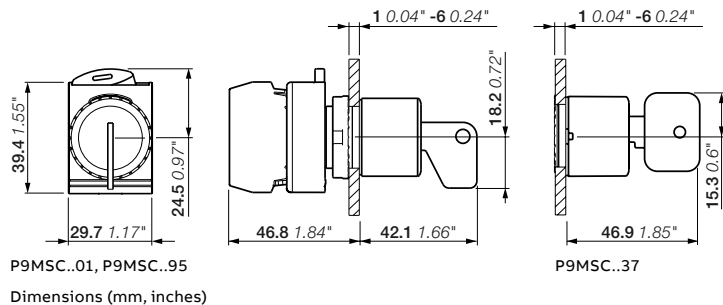
#### CAM function D



#### CAM function I



Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks



# Modular metal range

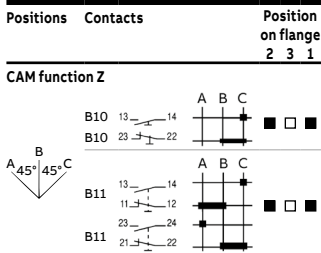
## Key-operated selector switches - 3-position



P9MSCZ0T37 with holder

P9MSCZ0T95



### Electrical diagram

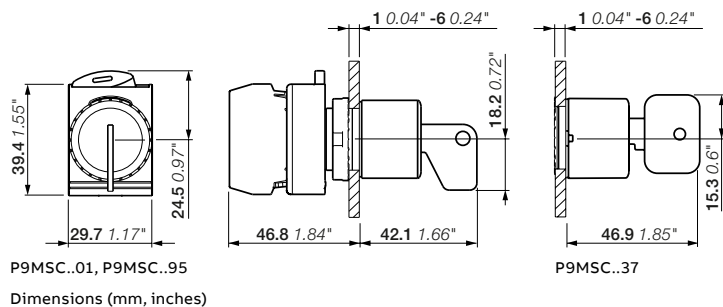


Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks

### Description

Each reference includes the satin chrome metal body and nut together with the holder, 2 keys included.

Operating principle	Key code	Key head color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
	37	Red/Metal	Z	P9MSCZ0T37	1SFA192702R9006	1	0.120
	01	Metal	Z	P9MSCZ0T01	1SFA192690R9006	1	0.120
	95	Metal	Z	P9MSCZ0T95	1SFA184439R9006	1	0.120
Key can be removed in all positions	95	Metal	Z	P9MSCZ0A95	1SFA184433R9006	1	0.120
Key can be removed in A position only	95	Metal	Z	P9MSCZ0C95	1SFA184434R9006	1	0.120
Key can be removed in B position only	95	Metal	Z	P9MSCZ0H95	1SFA184436R9006	1	0.120
Key can be removed in A and B positions	95	Metal	Z	P9MSCZ0N95	1SFA184438R9006	1	0.120
Key can be removed in B and C positions	95	Metal	Z	P9MSCZ1C95	1SFA184449R9006	1	0.120
	95	Metal	Z	P9MSCZ1N95	1SFA184451R9006	1	0.120
	95	Metal	Z	P9MSCZ1N95	1SFA184451R9006	1	0.120



03  
1SFC15109550201

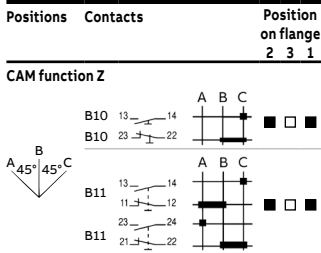
## Modular metal range

### Key-operated selector switches - 3-position



P9MSCZ3C01 with holder

#### Electrical diagram

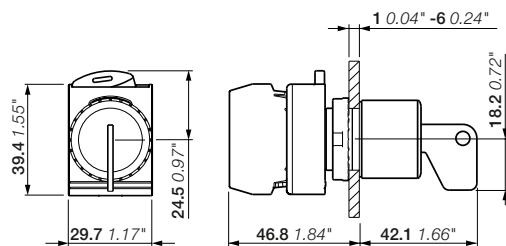


Note: dot in this diagram = contact closed.  
 B10 = P9B10VN, P9B10FN contact blocks  
 B01 = P9B01VN, P9B01FN contact blocks  
 B11 = P9B11VN contact blocks

#### Description

Each reference includes the satin chrome metal body and nut together with the holder, 2 keys included.

Operating principle	Key code	Key head color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<p>Key can be removed in B position only</p>	01	Metal	Z	P9MSCZ3C01	1SFA193110R9006	1	0.120
	95	Metal	Z	P9MSCZ3C95	1SFA184467R9006	1	0.120
<p>Key can be removed in A position only</p>	01	Metal	Z	P9MSCZ5A01	1SFA193020R9006	1	0.120
	95	Metal	Z	P9MSCZ5A95	1SFA184461R9006	1	0.120
<p>Key can be removed in A and B positions</p>	01	Metal	Z	P9MSCZ5H01	1SFA193050R9006	1	0.120
	95	Metal	Z	P9MSCZ5H95	1SFA184463R9006	1	0.120
<p>Key can be removed in B position only</p>	95	Metal	Z	P9MSCZ5C95	1SFA184462R9006	1	0.120



P9MSC..01, P9MSC..95  
 Dimensions (mm, inches)



## Modular metal range

### Key-operated selector switches - 4-position



P9MSCX0A95 with holder

#### Description

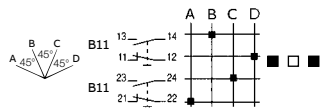
Each reference includes the satin chrome metal body and nut together with the holder, 2 keys included.

Operating principle	Key code	Key head color	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
	95	Metal	X	P9MSCX0A95	1SFA184468R9006	1	0.120
	Key can be removed in A position						
	01	Metal	X	P9MSCX0Z01	1SFA193335R9006	1	0.120
	Key can be removed in all positions						
	95	Metal	X	P9MSCX0Z95	1SFA184482R9006	1	0.120

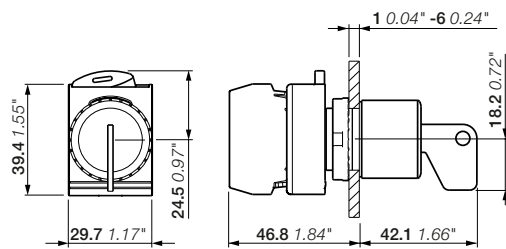
#### Electrical diagram

Positions	Contacts	Position on flange
		2 3 1

CAM function X



Note: dot in this diagram = contact closed.  
B11 = P9B11VN contact blocks



P9MSC..01, P9MSC..95  
Dimensions (mm, inches)

# Modular metal range

## Joysticks - 2-position and 4-position



1SFC151477V0001

P9MMN2A with holder



1SFC151576V0001

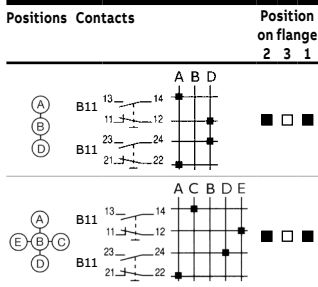
P9MMB2FG

### Description

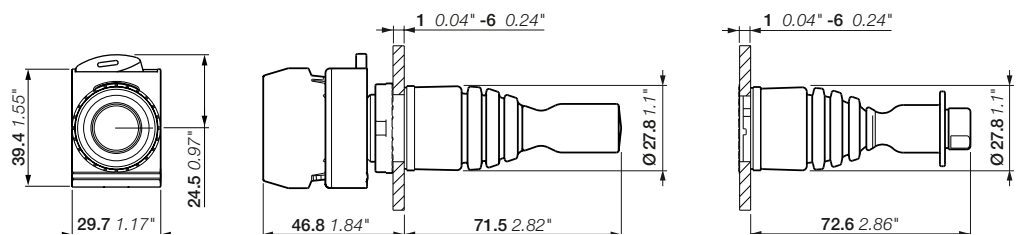
Each reference includes the satin chrome metal body and nut together with the holder.

Position	Material Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Without latching function</b>					
	Rubber/Black	P9MMN2F	1SFA184700R9006	1	0.090
	Rubber/Black	P9MMN2T	1SFA184701R9006	1	0.090
	Rubber/Black	P9MMN2A	1SFA184702R9006	1	0.090
	Rubber/Black	P9MMN2B	1SFA184703R9006	1	0.090
	Rubber/Black	P9MMN4F	1SFA184720R9006	1	0.090
	Rubber/Black	P9MMN4T	1SFA184721R9006	1	0.090
	Silicone/Grey	P9MMN4TG	1SFA184716R9006	1	0.090
<b>With latching function</b>					
	Rubber/Black	P9MMB2F	1SFA184710R9006	1	0.090
	Silicone/Grey	P9MMB2FG	1SFA184709R9006	1	0.090
	Rubber/Black	P9MMB2T	1SFA184711R9006	1	0.090
	Rubber/Black	P9MMB2A	1SFA184712R9006	1	0.090
	Rubber/Black	P9MMB4F	1SFA184740R9006	1	0.090
	Rubber/Black	P9MMB4T	1SFA184741R9006	1	0.090
	Silicone/Grey	P9MMB4TG	1SFA184744R9006	1	0.090

### Electrical diagram



Note: dot in this diagram = contact closed.  
B11= P9B11VN contact blocks



P9MMN, P9MMB  
Dimensions (mm, inches)

## Modular metal range

### Joysticks - Accessories



15FC151435V0001

P9ARSCMN



15FC151614V0001

P9ARSCMB



15FC151434V0001

P9ARSGMN



15FC151613V0001

P9ARSGMB

#### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce) kg
Rubber boot for joystick without latching	● Black	P9ARSCMN	1SFA188043R8000	5	0.008
Rubber boot for joystick with latching	● Black	P9ARSCMB	1SFA188044R8000	5	0.008
Silicone boot for joystick without latching	● Grey	P9ARSGMN	1SFA187495R8000	5	0.008
Silicone boot for joystick with latching	● Grey	P9ARSGMB	1SFA187496R8000	5	0.008

# Modular metal range

## Toggle switches



1SFA184690001

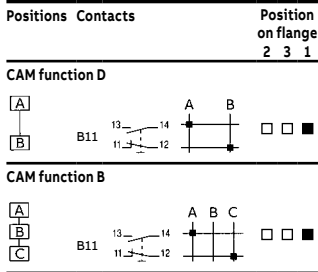
P9MCD with holder

### Description

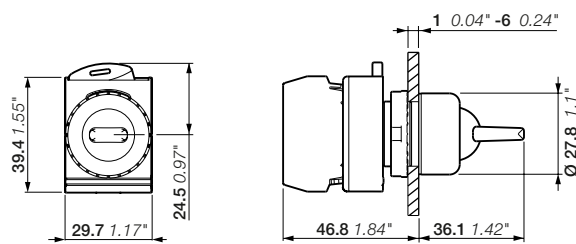
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>2 position</b>					
	D	P9MCD	1SFA184695R9006	1	0.073
<b>3 position</b>					
	B	P9MCB	1SFA184696R9006	1	0.073
	B	P9MCC	1SFA184697R9006	1	0.073

### Contacts actuated



B11 = P9B11VN contact blocks



P9MC  
Dimensions (mm, inches)

# Modular metal range

## Selector pushbuttons



1SFC151474V0001

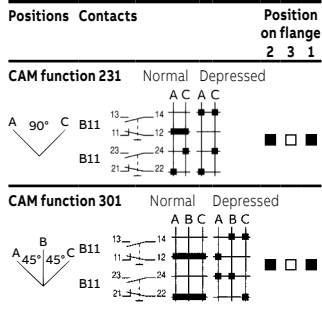
P9MPS22G with holder

### Description

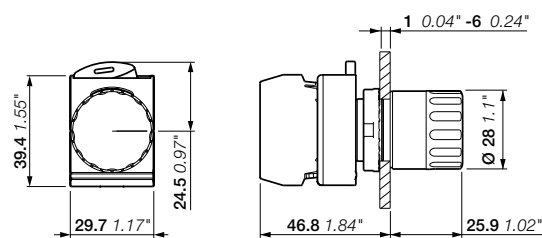
Each reference includes the satin chrome metal body and nut together with the holder.

Operating principle	CAM function	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>2 position</b>					
	231	P9MPS22G	1SFA184691R9006	1	0.069
<b>3 position</b>					
	301	P9MPS34G	1SFA184693R9006	1	0.065

### Electrical diagram



Note: dot in this diagram = contact closed.  
B11 = P9B11VN contact blocks



P9MPS  
Dimensions (mm, inches)

# Modular metal range

Holders and contact blocks for front mounting



P9ACFS3

1SFC151627V0001



P9ACFS5

1SFC151626V0001



P9B10VN

1SFC151611V0001



P9B20VN

1SFC15160V0001



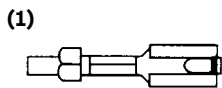
P9B10VA

1SFC151611V0001



P9B10FN

1SFC151612V0001



1x (6.35 x 0.8 mm)  
2x (2.8 x 0.8 mm)

## Screw terminals

Description	Contacts	Type	Order code	Pkg qty	Weight (1 pce)
					kg

## Holders

3-position	- -	P9ACFS3	1SFA187841R8000	1	0.009
5-position	- -	P9ACFS5	1SFA187842R8000	1	0.016

## Single contact blocks

For 3 & 5-position holder	1 0	P9B10VN	1SFA187002R8001	1	0.009
	1 0	P9B10VN-AA	1SFA215832R8001	200	0.009
	0 1	P9B01VN	1SFA187001R8010	1	0.009

## Double contact blocks

For 3 & 5-position holder	2 0	P9B20VN	1SFA187009R8002	1	0.016
	0 2	P9B02VN	1SFA187008R8020	1	0.016
	0 2	P9B02VN-AA	1SFA205236R8020	200	0.016
	1 1	P9B11VN	1SFA187000R8011	1	0.016
	1 1	P9B11VN-AA	1SFA242712R8011	500	0.016

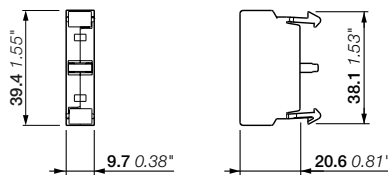
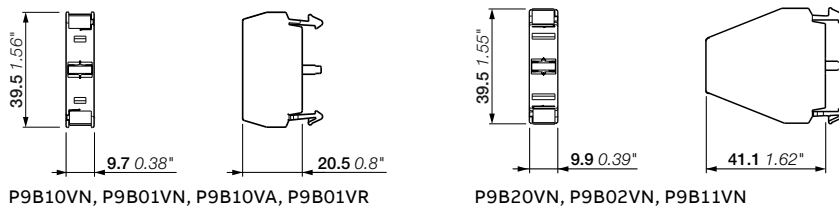
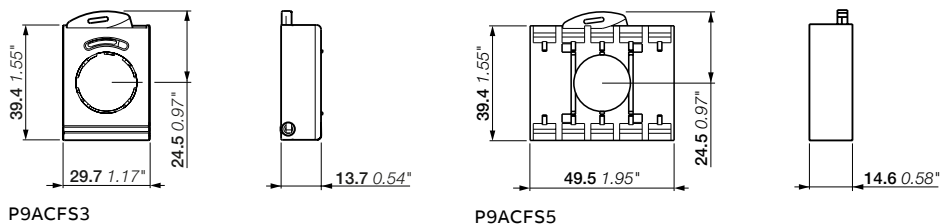
## Single contact blocks with N.O. early make contacts and N.C. late break contacts

For 3 & 5-position holder	1 0	P9B10VA	1SFA187004R8201	1	0.009
	0 1	P9B01VR	1SFA187003R8110	1	0.010

## Faston terminals

### Single contact blocks (1)

For 3 & 5-position holder	1 0	P9B10FN	1SFA187013R8301	1	0.009
	1 0	P9B10FN-AA	1SFA215835R8301	200	0.009
	0 1	P9B01FN	1SFA187012R8310	1	0.009



P9B10FN, P9B01FN  
Dimensions (mm, inches)

# Modular metal range

## Power supplies



P9PDNV0



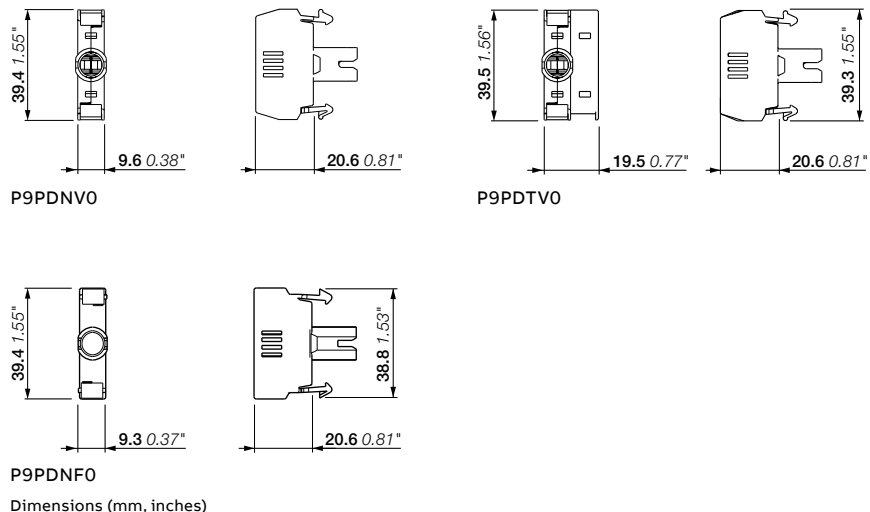
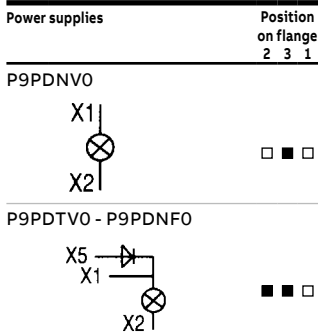
P9PDTV0



P9PDNF0

Description	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Screw terminals</b>				
Full voltage IEC: BA9S max 380 V - 2 W bulb not included UL - CSA: BA9S max 250 V - 2 W bulb not included	P9PDNV0	1SFA187020R1080	1	0.010
	P9PDNV0-AA	1SFA215831R1000	100	0.010
Test full voltage IEC: BA9S max 380 V - 2 W bulb not included UL - CSA: BA9S max 250 V - 2 W bulb not included	P9PDTV0	1SFA187027R8000	1	0.018
Note: P9PDTV0 are not included in UL listing.				
<b>Faston terminals</b>				
Full voltage IEC: BA9S max 380 V - 2 W bulbs not included UL - CSA: BA9S max 250 V... - 2 W bulbs not included	P9PDNF0	1SFA187055R1300	1	0.013
	P9PDNF0-AA	1SFA215834R1300	100	0.013

### Contacts actuated



## Modular metal range

LED bulbs for power supplies



BA9S6LEDB

1SFC151630V0001

Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Rated voltage 6 V AC/DC</b>				
● Red	BA9S6LEDR	1SFA187163R1001	5	0.002
● Green	BA9S6LEDV	1SFA187164R1002	5	0.002
● Yellow	BA9S6LEDG	1SFA187161R1003	5	0.002
● Blue	BA9S6LEDL	1SFA187162R1004	5	0.002
○ White	BA9S6LEDB	1SFA187160R1005	5	0.002
<b>Rated voltage 12 V AC/DC</b>				
● Red	BA9S12LEDR	1SFA187168R1011	5	0.002
● Green	BA9S12LEDV	1SFA187169R1012	5	0.002
● Yellow	BA9S12LEDG	1SFA187166R1013	5	0.002
● Blue	BA9S12LEDL	1SFA187167R1014	5	0.002
○ White	BA9S12LEDB	1SFA187165R1015	5	0.002
<b>Rated voltage 24 V AC/DC</b>				
● Red	BA9S24LEDR	1SFA187173R1021	5	0.002
● Green	BA9S24LEDV	1SFA187174R1022	5	0.002
● Yellow	BA9S24LEDG	1SFA187171R1023	5	0.002
● Blue	BA9S24LEDL	1SFA187172R1024	5	0.002
○ White	BA9S24LEDB	1SFA187170R1025	5	0.002
<b>Rated voltage 48 V AC/DC</b>				
● Red	BA9S48LEDR	1SFA187178R1031	5	0.002
● Green	BA9S48LEDV	1SFA187179R1032	5	0.002
● Yellow	BA9S48LEDG	1SFA187176R1033	5	0.002
● Blue	BA9S48LEDL	1SFA187177R1034	5	0.002
○ White	BA9S48LEDB	1SFA187175R1035	5	0.002
<b>Rated voltage 60 V AC/DC</b>				
○ White	BA9S60LED	1SFA187191R1045	5	0.002
<b>Rated voltage 110 - 120 V AC/DC</b>				
● Red	BA9S110LEDR	1SFA187183R1041	5	0.002
● Green	BA9S110LEDV	1SFA187184R1042	5	0.002
● Yellow	BA9S110LEDG	1SFA187181R1043	5	0.002
● Blue	BA9S110LEDL	1SFA187182R1044	5	0.002
○ White	BA9S110LEDB	1SFA187180R1045	5	0.002
<b>Rated voltage 130 V AC/DC</b>				
○ White	BA9S130LED	1SFA187190R1045	5	0.002
<b>Rated voltage 230 V AC</b>				
● Red	BA9S230LEDR	1SFA187188R1051	5	0.002
● Green	BA9S230LEDV	1SFA187189R1052	5	0.002
● Yellow	BA9S230LEDG	1SFA187186R1053	5	0.002
● Blue	BA9S230LEDL	1SFA187187R1054	5	0.002
○ White	BA9S230LEDB	1SFA187185R1055	5	0.002



## Modular metal range

LED blocks for front mouting



1SFC151499W0001

P9PLNVDR

### Standard Light

Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Rated voltage 24 V AC/DC</b>				
● Red	P9PLNVDR	1SFA197004R1011	1	0.020
● Green	P9PLNVDV	1SFA197005R1012	1	0.020
● Yellow	P9PLNV DG	1SFA197002R1013	1	0.020
● Blue	P9PLNV DL	1SFA197003R1014	1	0.020
○ White	P9PLNV DB	1SFA197001R1015	1	0.020

### Rated voltage 120 V AC

● Red	P9PLNVJR	1SFA197010R1041	1	0.020
● Green	P9PLNVJV	1SFA197011R1042	1	0.020
● Yellow	P9PLNVJG	1SFA197008R1043	1	0.020
● Blue	P9PLNVJL	1SFA197009R1044	1	0.020
○ White	P9PLNVJB	1SFA197007R1045	1	0.020

### Rated voltage 230 V AC

● Red	P9PLNVNR	1SFA197016R1071	1	0.020
● Green	P9PLNVNV	1SFA197017R1072	1	0.020
● Yellow	P9PLNVNG	1SFA197014R1073	1	0.020
● Blue	P9PLNVNL	1SFA197015R1074	1	0.020
○ White	P9PLNVNB	1SFA197013R1075	1	0.020

### Flashing Light

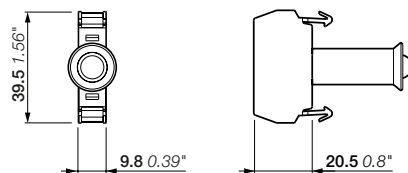
Color	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>Rated voltage 24 V AC/DC</b>				
● Red	P9PLFVDR	1SFA197022R1011	1	0.020
● Green	P9PLFVDV	1SFA197023R1012	1	0.020
● Yellow	P9PLFVDG	1SFA197020R1013	1	0.020
● Blue	P9PLFVDL	1SFA197021R1014	1	0.020
○ White	P9PLFVDB	1SFA197019R1015	1	0.020
● Orange	P9PLFVDA	1SFA197018R1019	1	0.020

### Rated voltage 120 V AC

● Red	P9PLFVJR	1SFA197028R1041	1	0.020
● Yellow	P9PLFVJG	1SFA197026R1043	1	0.020
○ White	P9PLFVJB	1SFA197025R1045	1	0.020

### Rated voltage 230 V AC

● Red	P9PLFVNR	1SFA197034R1071	1	0.020
● Yellow	P9PLFVNG	1SFA197032R1073	1	0.020
○ White	P9PLFVNB	1SFA197031R1075	1	0.020



P9PL

Dimensions (mm, inches)

## Modular metal range

### Accessories



P9ACRCL

15FC151463V0001



P9ACDPP

15FC151628V0001



P9ACWAF

15FC151629V0001



P9ARAM32

15FC151464V0001



P9ACA6

15FC151462V0001



080CPR

15FC151460V0001




080CPN

15FC151461V0001



P9ARCST

15FC151465V0001

Description	Contacts	Type	Order code	Pkg qty	Weight (1 pce)
					kg
<b>Protection cover</b>					
Protection cover padlockable for standard pushbuttons, illuminated pushbuttons, selector switches, illuminated selector switches		P9ACRCL	1SFA187840R8000	1	0.039
<b>Maintained accessory</b>					
Device for standard pushbuttons, illuminated pushbuttons: To be used only with contact blocks P9B01VN, P9B01VR, P9B10VA and P9B01FN		P9ACDPP	1SFA187843R8000	1	0.012
<b>Tools</b>					
Locking ring wrench		P9ACWAF	1SFA187845R8000	1	0.037
<b>Adapter ring</b>					
Adapter ring for 30 mm hole to mount P9 22 mm in a 30 mm hole		P9ARAM32	1SFA188801R8000	5	0.006
<b>Terminal adapter</b>					
PCB adapter for faston contacts		P9ACA6	1SFA188804R8000	5	0.051

### Rubber protective caps (IP66) for standard pushbuttons

#### Flush pushbuttons

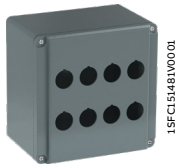
Description	Type	Order code	Pkg qty	Weight (1 pce)
nutrilic rubber				kg
● Red	080CPR	1SFA170191R8000	5	0.004
● Green	080CPV	1SFA170192R8000	5	0.004
● Black	080CPN	1SFA170190R8000	5	0.004
○ Clear	080CPT	1SFA170198R8000	5	0.004

#### Extended pushbuttons

○ Clear	P9ARCST	1SFA187490R8000	5	0.004
---------	---------	-----------------	---	-------

## Modular metal range

Metal enclosures with holes and accessories



080SP8



080SP12



080SP18



080SP24

### Enclosure with holes for pilot devices

Empty enclosures in aluminium, IP66. Grey color.

Description	Hole types	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>With hole for cable gland</b>					
1-seat	1	080SP1	1SFA170801R1001	1	0.313
2-seat	2	080SP2	1SFA170802R1002	1	0.440
3-seat	3	080SP3	1SFA170803R1003	1	0.695
4-seat	4	080SP4	1SFA170804R1004	1	0.435
6-seat	6	080SP6	1SFA170806R1006	1	0.694
8-seat	8	080SP8	1SFA170807R1008	1	0.932
12-seat	12	080SP12	1SFA170808R1012	1	1.685
18-seat	18	080SP18	1SFA170809R1018	1	2.891
24-seat	24	080SP24	1SFA170810R1024	1	2.912
<b>With hole for cable gland and deep base</b>					
1-seat	1M	080SP1M	1SFA170831R1001	1	0.402
2-seat	2M	080SP2M	1SFA170832R1002	1	0.540
4-seat	4M	080SP4M	1SFA170834R1004	1	0.530
<b>Without hole for cable gland</b>					
1-seat	1	080SP1SFE	1SFA170836R3001	1	0.335
2-seat	2	080SP2SFE	1SFA170842R3002	1	0.442
3-seat	3	080SP3SFE	1SFA170848R3003	1	0.715
4-seat	4	080SP4SFE	1SFA170850R3004	1	0.453
6-seat	6	080SP6SFE	1SFA170852R3006	1	0.705
8-seat	8	080SP8SFE	1SFA170854R3008	1	0.990
12-seat	12	080SP12SFE	1SFA170857R3012	1	1.737
<b>Without hole for cable gland and deep base</b>					
1-seat	1M	080SP1MSFE	1SFA170839R3001	1	0.416

## Modular metal range

Metal enclosures without holes



080SP1SFC

1SFCL51642V0001



080SP3SFC

1SFCL51634V0001



080SP8SF

1SFCL51482V0001

### Enclosure without holes for pilot devices

Empty enclosures in aluminium, IP66. Grey color.

Description	Size type	Type	Order code	Pkg qty	Weight (1 pce) kg
<b>With hole for cable gland</b>					
	1	080SP1SFC	1SFA170835R2000	1	0.324
	2	080SP2SFC	1SFA170841R2000	1	0.444
	3	080SP3SFC	1SFA170847R2000	1	0.708
	8	080SP8SFC	1SFA170853R2000	1	0.977
	12	080SP12SFC	1SFA170856R2000	1	1.720
	18	080SP18SFC	1SFA170859R2000	1	2.948
<b>With hole for cable gland and deep base</b>					
	1M	080SP1MSFC	1SFA170838R2000	1	0.405
	2M	080SP2MSFC	1SFA170844R2000	1	0.542
<b>Without hole for cable gland</b>					
	1	080SP1SF	1SFA170837R4000	1	0.333
	2	080SP2SF	1SFA170843R4000	1	0.446
	3	080SP3SF	1SFA170849R4000	1	0.735
	8	080SP8SF	1SFA170855R4000	1	1.019
	12	080SP12SF	1SFA170858R4000	1	1.775
	18	080SP18SF	1SFA170861R4000	1	3.050
<b>Without hole for cable gland and deep base</b>					
	1M	080SP1MSF	1SFA170840R4000	1	0.414
	2M	080SP2MSF	1SFA170846R4000	1	0.553

## Modular metal 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 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)
UL 508	Industrial control equipment
CSA C22.2 No 14	Industrial control equipment

#### Environmental data

##### Degrees of protection

Operators	IEC/EN DIN	UL/CSA
Modular metal range: P9M	IP66	Type 1, 3, 3R, 3S, 4, 4X, 12, 13
Contact block: P9B	IP2x	-
Metallic enclosures: 080SP	IP66, IP69K	-
For size 080SP1, 1M, 2, 2M, 3, 4, 4M or 6	IP66, IP69K	Type 1, 3, 3R, 3S, 4, 4X, 12, 13

#### Connecting capacity

	Solid/stranded	1 x 0.75...2.5 mm <sup>2</sup>
		2 x 0.75...2.5 mm <sup>2</sup>
	Flexible	1 x 0.75...2.5 mm <sup>2</sup>
		2 x 0.75...2.5 mm <sup>2</sup>
	Flexible with non insulated ferrule	1 x 0.75...2.5 mm <sup>2</sup>
		2 x 0.75...2.5 mm <sup>2</sup>
	Flexible with insulated ferrule	1 x 0.75...2.5 mm <sup>2</sup>
		2 x 0.75...2.5 mm <sup>2</sup>
	Lugs	L < 7.0 mm
		L > 3.5 mm
Connection capacity acc. to UL / CSA		AWG 18...14
Stripping length		10 mm

#### Tightening torques

Cable terminals M3.5	0.9 Nm
Recommended screwdriver for cable terminal	Pozidriv 2
Operators locking nut	Min. 2 Nm / Max. 2.3 Nm

#### Electrical data

P9B Standard contact blocks

Self cleaning silver contacts, NC contact with positive opening.

##### Ratings as per IEC 60947-5-1

Rated insulation voltage, U <sub>i</sub>	690 V	
Rated thermal current, I <sub>th</sub>	10 A	
Rated operational current, I <sub>e</sub>	at: 24 V	10 A
	at: 48 V	10 A
Utilization category AC 15,	at: 60 V	10 A
	at: 110 V	6 A
	at: 220V	3 A
	at: 380 V	2 A
	at: 500 V	1.5 A
	at: 600 V	1.2 A
Rated operational current, I <sub>e</sub> utilisation category DC 13,	at: 24 V	2.5 A
	at: 48 V	1.4 A
	at: 60 V	1 A
	at: 110 V	0.55 A
	at: 220V	0.27 A
	at: 300 V	0.2 A
Rated impulse withstand voltage	U <sub>imp</sub>	4 kV
Rated frequency	50/60 Hz	

##### Performances according to CSA and UL

AC heavy duty	(A600)
DC standard duty	(Q300)

##### Number of electrical contacts

Holder	Standard 3 positions	Optional 5 positions
Momentary pushbuttons		
Momentray mushroom pushbuttons	Max 6	Max 8
Standard selector switches		
Key selector switches	Max 4	Max 8
Joysticks		
Selector pushbuttons	Max 4	-
Toggle switches		
Maintained mushroom pushbuttons	Max 4	-
Illuminated pushbuttons		
Illuminated momentary mushroom pushbuttons	Max 4	Max 4
Illuminated selector switches		
Illuminated maintained mushroom pushbuttons	Max 2	Max 2

##### Short circuit protection

With fuses 16 A gG acc. to IEC 60269-1 and IEC 60269-3

##### Minimum switching capacity

Standard contact blocks	12 V DC	5 mA
-------------------------	---------	------

## Modular metal range

### Technical data

#### Mechanical endurance

Joysticks	500 000 operations
Key pushbuttons	500 000 operations
Toggle switches	
Illuminated selector switches	
Maintained accessory	
Standard selector switches	1 million operations
Key selector switches	1 million operations
Illuminated pushbuttons	
Selector pushbuttons	
Standard pushbuttons	3 million operations
Mushroom head pushbuttons	3 million operations

#### Performances of the contacts

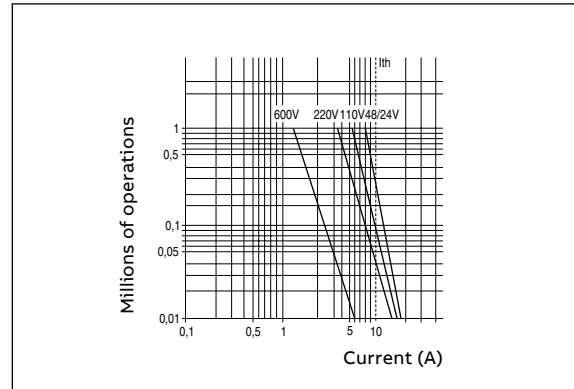
- Slow acting
- Self-cleaning sliding
- NC forced breaking
- Double movable bridge
- Four switching points
- Double break

#### Identification of the terminals

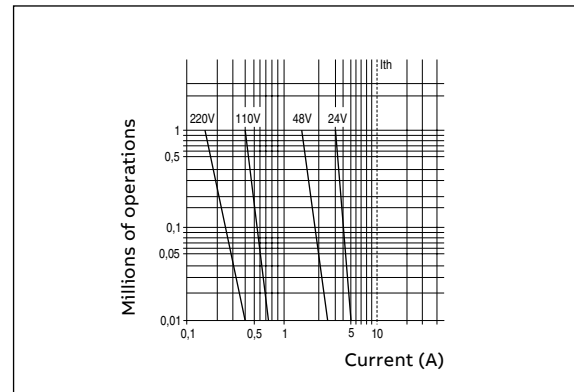
According to EN 50013

#### Electrical endurance

Alternative current 50/60Hz cat. AC 15



Direct current cat. DC 13



#### Rear panel modularity

The P9 series is composed with 10 mm or a multiple of 10 mm modular units, fitted side by side on a proper mounting flange.

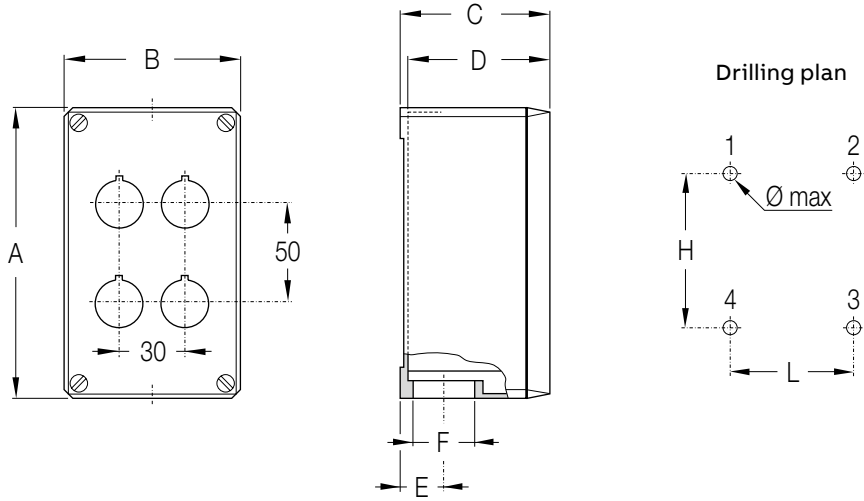
The standard operators are supplied with a three position flange with a capacity of 3 units of 10 mm or 1 of 10 mm and 1 of 20 mm or 1 of 30 mm.

When the three position flange is not enough to satisfy the applications needs, the five position flange is required to add two more units of 10 mm mounted side by side.

Using the five position flange take into account the bigger width (50 mm instead of 30 mm).

# Modular metal range

## Dimension



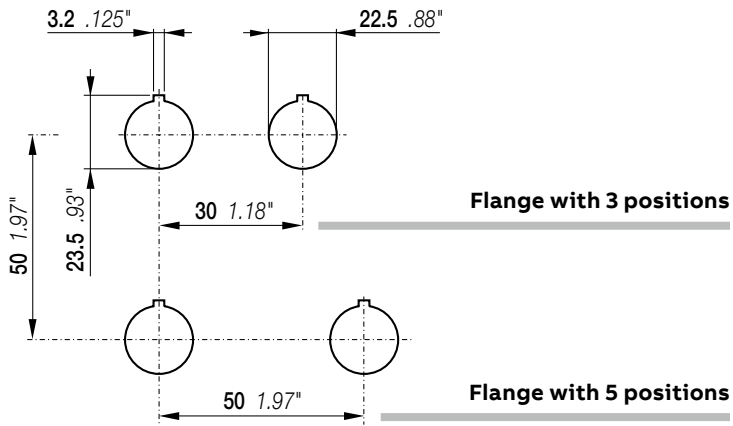
Size type	Holes Ø 22		Dimensions										Drilling plan		Position of the holes	
	Vertic.	Horizont.	A mm	in	B mm	in	C mm	in	D mm	in	E mm	in	F	H x L x Ø max mm		in
1	1	-	87	3.43	87	3.43	75	2.95	72	2.83	21.5	0.85	PG 21	74x55x4	2.91x2.17x0.16	1-3
1M	1	-	87	3.43	87	3.43	100	3.94	97	3.82	21.5	0.85	PG 21	68x55x4	2.68x2.17x0.16	1-3
2	2	-	145	5.71	87	3.43	75	2.95	72	2.83	21.5	0.85	PG 21	132x55x4	5.2x2.17x0.16	1-3
2M	2	-	145	5.71	87	3.43	100	3.94	97	3.82	21.5	0.85	PG 21	126x55x4	4.96x2.17x0.16	1-3
3	3	-	195	7.68	87	3.43	100	3.94	97	3.82	21.5	0.85	PG 21	176x55x4	6.93x2.17x0.16	1-3
4	2	2	145	5.71	87	3.43	75	2.95	72	2.83	21.5	0.85	PG 21	132x55x4	5.2x2.17x0.16	1-3
4M	2	2	145	5.71	87	3.43	100	3.94	97	3.82	21.5	0.85	PG 21	126x55x4	4.96x2.17x0.16	1-3
6	3	2	195	7.68	87	3.43	100	3.94	97	3.82	21.5	0.85	PG 21	176x55x4	6.93x2.17x0.16	1-3
8	2	4	152	5.98	152	5.98	101.5	4	98.5	3.88	27	1.06	PG 29	136x119x6	5.35x4.69x0.24	1-2-3-4
12	3	4	205	8.07	230	9.06	101.5	4	98.5	3.88	27	1.06	PG 29	172x214x6	6.77x8.43x0.24	1-2-3-4
18	3	6	257	10.12	300	11.81	101.5	4	98.5	3.88	35	1.38	PG 36	221x282x6	8.7x11.1x0.24	1-2-3-4
24	4	6	257	10.12	300	11.81	101.5	4	98.5	3.88	35	1.38	PG 36	221x282x6	8.7x11.1x0.24	1-2-3-4

# Modular metal range

## Drilling plan

### Mounting

Fitted for panels 1 to 6 mm thick with holes drilled according to IEC60947-5-1 standard.



03





