

# 1400N series

ermec@ermec.com

## Momentary pushbutton switches - snap-in mounting - square plunger

*Distinctive features and specifications*



- Butt action contacts, double break
- Solder lug, straight PC and quick-connect terminals

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - silver contacts (A) : 6A 12VDC
  - silver plated copper contacts (C) : 3A 12VDC
- Initial contact resistance : 10 mΩ
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength :
  - 1.500 Vrms 50 Hz min. between terminals
  - 2.000 Vrms 50 Hz min. between terminals and metal panel
- Electrical life : 10.000 cycles at full load

### MATERIALS

- Case : polyamide
- Plunger : polyamide
- Contacts :
  - A : silver
  - C : copper, silver plated

### GENERAL SPECIFICATIONS

- Panel thickness : 2 mm (.078) max.
- Operating temperature : -20°C to +55°C

**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.



**Packaging unit** : 60 pieces.



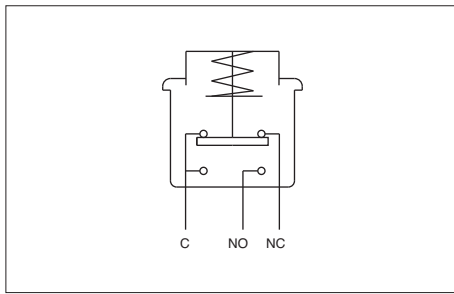
www.ermec.com



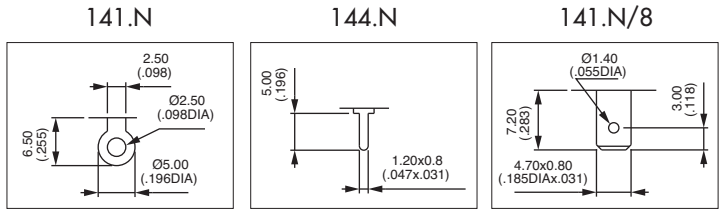
# 1400N series ermec@ermec.com

## Momentary pushbutton switches - snap-in mounting - square plunger

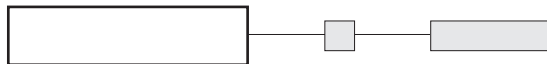
Solder lug, straight PC or quick-connect terminals



- Single pole configurations



MODEL STRUCTURE

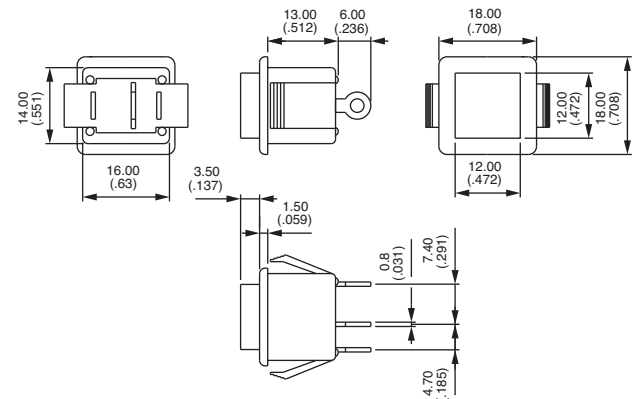


B2

### Solder lug terminals



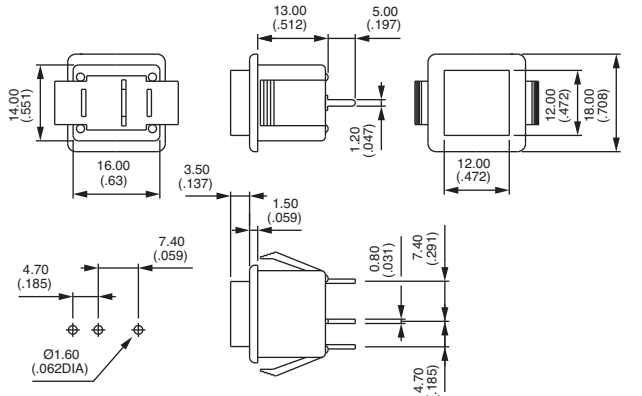
- |       |  |                 |
|-------|--|-----------------|
| 1412N |  | Normally Closed |
| 1413N |  | Normally Open   |
| 1415N |  | Changeover      |



### Straight PC terminals



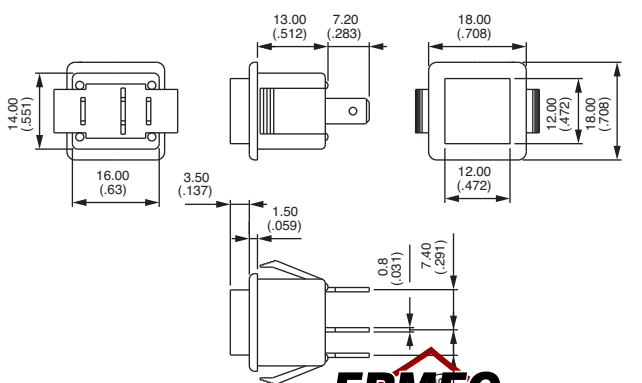
- |       |  |                 |
|-------|--|-----------------|
| 1442N |  | Normally Closed |
| 1443N |  | Normally Open   |
| 1445N |  | Changeover      |



### Quick-connect terminals 4,7 x 0,8 (.185 x .031)



- |         |  |                 |
|---------|--|-----------------|
| 1412N/8 |  | Normally Closed |
| 1413N/8 |  | Normally Open   |
| 1415N/8 |  | Changeover      |

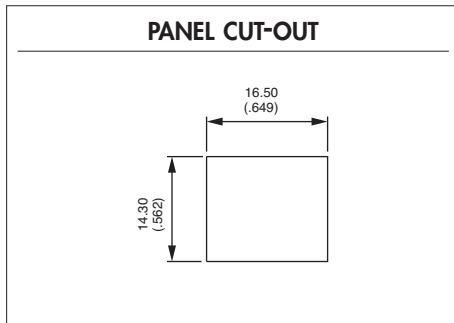


www.ermec.com

# 1400N series

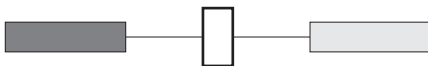
Momentary pushbutton switches - snap-in mounting - square plunger

ermec@ermec.com



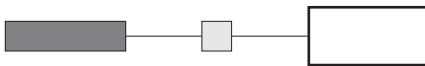
B2

## CONTACT MATERIALS



- A Silver
- C Copper, silver plated

## PLUNGER COLOURS



- 2 Black (standard)
- 3 Green
- 6 Red
- 7 Ivory



Switch frame supplied in black.











www.ermec.com

# Selection guide - Section B2 ermec@ermec.com

## Pushbutton switches

								
Series	ZP	SMT TP	TP	9500	PHAP40	SP	8000	9400/9600
Page	B2-2	B2-4	B2-6	B2-12	B2-20	B2-22	B2-28	B2-34
Poles	1	1	1,2	1	2	1,2	1,2	1
Maximum current	500mA 48VDC	0,4VA 20V AC/DC	0,5A 48V AC/DC	100mA 30VDC	100mA 30VDC	1A 30VDC	(3A 250VAC)* 4A 30VDC	1A 30VDC
Bushing dimension								
Ø4 (.157)				X				
Ø4,83 (10-48)	X							
Ø6,35 (1/4)						X	X	X
Ø11,9 (15/32)							X	
Ø16 (.629)								X
Mounting options								
Horizontal SMT		X						
Vertical right angle SMT		X						
Vertical Through hole	X		X	X	X	X	X	X
Horizontal Through hole			X			X	X	
Vert. right angle Thr. hole			X	X		X		
Panel	X			X		X	X	X
Terminal options								
PCB	X	X	X	X	X	X	X	X
Solder lugs	X			X			X	X
Quick-connect								X
Sealing	No	Process	Process	Optional	No	Process	Optional	Optional

( ) \* See applicable approvals

								
Series	10400	13000	13000X778	18000	IT	1200	1400	4700/4800
Page	B2-42	B2-44	B2-52	B2-63	see website	B2-107	B-114	B-117
Poles	1,2	1,2	2	1,2	2	1	1	1,2
Maximum current	3A 24VDC	4A 30VDC *2A 250VAC)*	4A 30VDC	7A 30VDC	1,5A 250VAC	(4A 250VAC)* 4A 24VDC	6A 12VDC	(3A 250VAC)*
Bushing dimension								
Ø6,35 (1/4)		X		X				
Ø10 (.393)	X							
Ø11,9 (15/32)		X	X					
Ø 12 (.472)						X		X
Mounting options								
Vertical Through hole		X	X	X			X	X
Horizontal Through hole		X		X	X			
Vert. right angle Through hole				X				
Panel	X	X	X	X		X	X	X
Snap-in				X			X	
Terminal options								
PCB		X	X	X				
Solder lugs	X	X	X	X		X		X
Quick-connect						X		X
Screw						X		
Sealing	No	Optional	IP67	No	No	No	No	No



# Selection guide - Section B2 ermec@ermec.com

## Pushbutton switches

	<b>New!</b> 	<b>New!</b> 		<b>New!</b> 	<b>New!</b> 			
Series	CG	CP	PBA	FP	MP	LPI		
Page	B2-120	B2-125	B2-129	B2-145	B2-150	B2-156		
Poles	1 NPN	1 NPN	1	1,2	1,2	1		
Maximum current	200mA 24VDC	200mA 24VDC	1A 24VDC	200mA 12VDC	20mA 5VDC	5A 12VDC 100mA 12VDC		
Illuminated	X	X	X	X		X		
<b>Bushing dimension</b>								
Ø15,20 (.598)					X			
Ø16 (.629)		X	X					
Ø19 (.748)		X	X					
Ø22 (.866)		X	X					
Ø24 (.944)				X				
Ø38 (1.496)						X		
Ø44 (1.732)						X		
<b>Mounting options</b>								
Panel	X	X	X	X	X	X		
<b>Terminal options</b>								
Solder lugs				X				
Screw						X		
Flying leads		X	X					
Cable		X	X	X				
Connector	X	X			X			
Sealing	N/A	IP68, IP69K	IP68,IP69K	No	IP68	IP53		


«|» range selection guide : page 7  
AV series selection guide : page 10

# Selection guide - Section B2 ermec@ermec.com

## AV series

								
Page	B2-78	B2-79	B2-80	B2-81	B2-83	B2-86	B2-87, B2-100	B2-89
<b>General specifications</b>								
Anti-vandal (IK08/IK10)	X	X						
Security			X	X		X	X	X
Approval (optional)	UL/CSA	UL/CSA			UL/CSA			
Sealing	Up to IP65	Up to IP65	Up to IP65	Up to IP65	Up to IP65	IP65, IP69K	Up to IP67	Up to IP65
Illumination							X	X
Marking					X			
<b>Electrical specifications</b>								
Maximum current	2A 48VDC (4A 250VAC)*	2A 48VDC (4A 250VAC)*	0,2A 48VDC	1A 24VDC	2A 48VDC (4A 250VAC)*	5A 15VDC 5A 250VAC	1A 30VDC	2A 48VDC
Momentary (NO)	X	X			X			
Momentary (NO) tactile			X					
Momentary (NO/NC)						X	X	
Latching				X				X
<b>Diameter and shape</b>								
Ø 16 (.629)	Flat		AV063	AV061				
	Curved		AV163	AV161				
Ø 19 (.748)	Flat	AV09			AV09	AV19LP	AV9	AV09..EA
	Curved	AV19			AV19	AV19LB		AV19..EA
Ø 22 (.866)	Flat		AV03				AV3	
	Curved		AV02					

( ) \* See applicable approvals

								
Page	B2-91	B2-93, B2-95	B2-97	B2-98	B2-98	B2-102	B2-104	B2-106
<b>General specifications</b>								
Security	X	X	X	X	X	X	X	X
Approval (optional)			UL/CSA					
Sealing	Up to IP65	Up to IP67, IP69K	Up to IP65	Up to IP65	Up to IP65	Up to IP65	IP'65	IP65
Illumination	X	X				X		
Marking	X	X		X	X			
<b>Electrical specifications</b>								
Maximum current	50mA 24VDC	50mA 24VDC	2A 48VDC (4A 250VAC)*	2A 250VAC	3(1,5)A 250VAC	2A 48VDC	5A 250VAC	5A 250VAC
Momentary (NO)			X					
Momentary (NC)				X				
Momentary (NO) tactile	X	X	Mom. (NO)					
Momentary (NO/NC)							X	X
Latching						X		
Alternate action					X			
<b>Diameter and shape</b>								
Ø 19 (.748)	Flat	AV09C7	AV9S					
	Curved	AV19C7						
Ø 22 (.866)	Flat		AV3S	AV03	AV031200	AV044700	AV03..EA	AV22LP
	Curved			AV02	AV021200		AV02..EA	AV22LB
Ø 24 (.944)	Flat							AV22PNA
	Concave							



www.ermec.com