

# TP5

## Panel Mounted

Push Button

### TP5

Panel cut-out (mm)  $\varnothing$  16.2/22.5

- Characteristics
- momentary or latching
  - sealed IP40 or IP65
  - wide range of bezels
  - shallow mounting depth
  - with or without illumination
  - NO, NC
  - gold plated contact blocks

Rating 250 VAC, 5 A

Dimensions (mm) 18 × 24  
18 × 18  
 $\varnothing$  18  
 $\varnothing$  25

Actuator lenses in different shapes and colours

Approvals UL, CSA, VDE



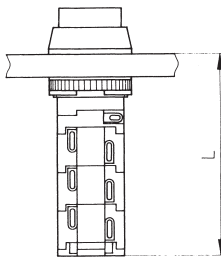
### Popular Products

Ordering Reference	Panel cut-out	Function	Actuator style	Terminals	Electrical rating
TP51LAA2A4CN	$\varnothing$ 16.2 mm	Latching; IP40	18 × 24 mm, red Illumination	Solder	250 VAC, 5A
TP51LDA2D4CN	$\varnothing$ 16.2 mm	Latching; IP40	$\varnothing$ 18 mm, red Illumination	Solder	250 VAC, 5A
TP51MAA2A4CN	$\varnothing$ 16.2 mm	Momentary; IP40	18 × 24 mm, red Illumination	Solder	250 VAC, 5A
TP51MDA2B4CN	$\varnothing$ 16.2 mm	Momentary; IP40	$\varnothing$ 18 mm, red Illumination	Solder	250 VAC, 5A
TP52LFD2F4CN	$\varnothing$ 22.5 mm	Latching; IP40	$\varnothing$ 25 mm, red Illumination	Solder	250 VAC, 5A
TP52MFD2F4CN	$\varnothing$ 22.5 mm	Momentary; IP40	$\varnothing$ 25 mm, green Illumination	Solder	250 VAC, 5A

## Specifications

Mechanism	Bi-functional – momentary or latching
Actuating force	Approximately 2.5N – 1 contact block
Mounting	Central fixing with metal lock nut
Protection	IP40, IP65
Bezel material	Thermoplastic or anodized aluminium alloy
Lens material	Polycarbonate – engravable
Illumination	T13/4 midget grooved lamps – incandescent lamps , LEDs, multi LEDs 60 V, 1.2 W maximum Lamp contact "a" = cathode (-) Appropriate safety regulations should be respected when using the indicator light.
Temperature range °C	-30°C to +80°C
Mechanical life	10 <sup>6</sup> cycles
Contact block (blocks)	Supplied fitted
Contact block housing	Self-extinguishing duroplastic (UL 94 V0)
Terminal material	Silver alloy with 0.2 µm silver plating plus 0.4 µm gold plating
Contact resistance	< 30mOhm
Number of contact blocks	1 NO + 1 NC per contact block, up to a maximum of 3 contact blocks per switch
Terminals	Patented flexible solder - suitable for wire diameter 2 × 1.00 mm <sup>2</sup> (braided), 4 × 0.75 mm (stranded)
Vibration resistance	1.5 mm pp amplitude at 55 Hz

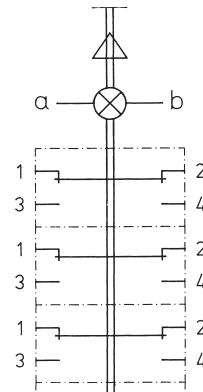
Dimensions



Length in mm (countersunk mounting version)

Panel cut-out	16.2 ±0.1	22.5 ±0.1
N° of contact blocks 1	27.5	26.5 (35.0)
2	36.0	35.0 (43.5)
3	44.5	43.5 (52.0)

Circuit diagram (3 contact blocks)

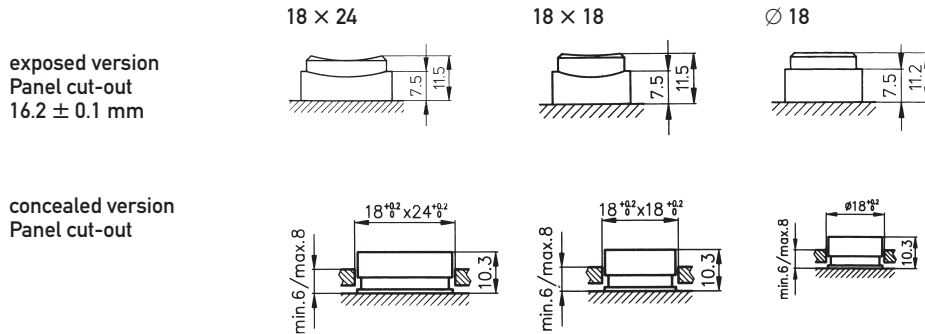


## Recommended maximum electrical ratings

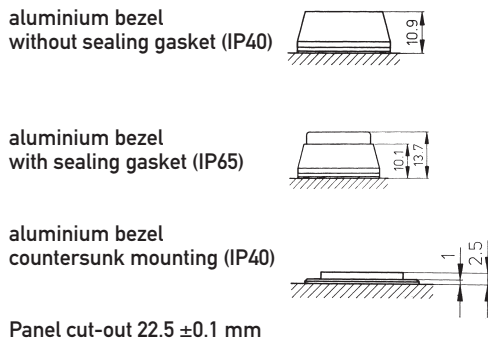
Voltage (max)	Resistive load (A)	Inductive load (A)	Approval
250 VAC	5.0 (0.7 pf)		UL, CSA, VDE - max. admissible circuit breaker C6A
12 VDC	5.0	3.0	General rating
24 VDC	4.0	2.0	General rating
36 VDC	3.0	1.7	General rating
48 VDC	2.0	1.5	General rating
60 VDC	1.5	1.2	General rating
125 VDC	0.5	0.3	General rating
250 VDC	0.3	0.2	General rating

Electrical life 70,000 cycles at 5A, 250 VAC, 0.7 pf

Dimensions Plastic bezel and lens heights in mm (switch off position)



Aluminium bezel ∅ 25 and lens heights in mm (switch off position)

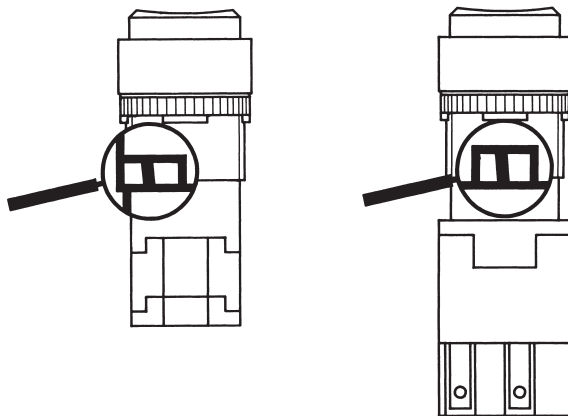


Front panel thickness	plastic bezel	1.0 mm to 5.5 mm
	aluminium bezel	1.0 mm to 5.0 mm
	countersunk mounting	2.0 mm to 20.0 mm

Bi-functional selection

All latching switches in the range incorporate a simple selector mechanism for modifying the function of the switch.

This function is not available with momentary switches.



Application:

When the switch is in the off position the selector mechanism can be moved to the right to obtain a momentary function, or to the left to return to a latching function.

Ordering Reference

Range	TP5				
Panel cut-out	1 16.2 mm				
Switch body (A)	Function	Actuator	Housing (plastic)	Contact blocks	
	MAA1 Momentary	18 × 24 mm	Exposed; IP40	1 NO + 1 NC	
	MAA2 Momentary	18 × 24 mm	Exposed; IP40	2 NO + 2 NC	
	MAA3 Momentary	18 × 24 mm	Exposed; IP40	3 NO + 3 NC	
	LAA1 Latching	18 × 24 mm	Exposed; IP40	1 NO + 1 NC	
	LAA2 Latching	18 × 24 mm	Exposed; IP40	2 NO + 2 NC	
	LAA3 Latching	18 × 24 mm	Exposed; IP40	3 NO + 3 NC	
	MAB1 Momentary	18 × 24 mm	Concealed; IP40	1 NO + 1 NC	
	MAB2 Momentary	18 × 24 mm	Concealed; IP40	2 NO + 2 NC	
	MAB3 Momentary	18 × 24 mm	Concealed; IP40	3 NO + 3 NC	
	LAB1 Latching	18 × 24 mm	Concealed; IP40	1 NO + 1 NC	
	LAB2 Latching	18 × 24 mm	Concealed; IP40	2 NO + 2 NC	
	LAB3 Latching	18 × 24 mm	Concealed; IP40	3 NO + 3 NC	
	Switch body (B)	MBA1 Momentary	18 × 18 mm	Exposed; IP40	1 NO + 1 NC
		MBA2 Momentary	18 × 18 mm	Exposed; IP40	2 NO + 2 NC
MBA3 Momentary		18 × 18 mm	Exposed; IP40	3 NO + 3 NC	
LBA1 Latching		18 × 18 mm	Exposed; IP40	1 NO + 1 NC	
LBA2 Latching		18 × 18 mm	Exposed; IP40	2 NO + 2 NC	
LBA3 Latching		18 × 18 mm	Exposed; IP40	3 NO + 3 NC	
MBB1 Momentary		18 × 18 mm	Concealed; IP40	1 NO + 1 NC	
MBB2 Momentary		18 × 18 mm	Concealed; IP40	2 NO + 2 NC	
MBB3 Momentary		18 × 18 mm	Concealed; IP40	3 NO + 3 NC	
LBB1 Latching		18 × 18 mm	Concealed; IP40	1 NO + 1 NC	
LBB2 Latching		18 × 18 mm	Concealed; IP40	2 NO + 2 NC	
LBB3 Latching		18 × 18 mm	Concealed; IP40	3 NO + 3 NC	
Switch body (C)		MDA1 Momentary	Ø 18 mm	Exposed; IP40	1 NO + 1 NC
		MDA2 Momentary	Ø 18 mm	Exposed; IP40	2 NO + 2 NC
		MDA3 Momentary	Ø 18 mm	Exposed; IP40	3 NO + 3 NC
	LDA1 Latching	Ø 18 mm	Exposed; IP40	1 NO + 1 NC	
	LDA2 Latching	Ø 18 mm	Exposed; IP40	2 NO + 2 NC	
	LDA3 Latching	Ø 18 mm	Exposed; IP40	3 NO + 3 NC	
	MDB1 Momentary	Ø 18 mm	Concealed; IP40	1 NO + 1 NC	
	MDB2 Momentary	Ø 18 mm	Concealed; IP40	2 NO + 2 NC	
	MDB3 Momentary	Ø 18 mm	Concealed; IP40	3 NO + 3 NC	
	LDB1 Latching	Ø 18 mm	Concealed; IP40	1 NO + 1 NC	
	LDB2 Latching	Ø 18 mm	Concealed; IP40	2 NO + 2 NC	
	LDB3 Latching	Ø 18 mm	Concealed; IP40	3 NO + 3 NC	
	Transparent Lens For Switch body style (A)	A0	White	Exposed 15 × 21 mm	Concealed 18 × 24 mm
		A1	Yellow	15 × 21 mm	18 × 24 mm
		A2	Green	15 × 21 mm	18 × 24 mm
A3		Blue	15 × 21 mm	18 × 24 mm	
A4		Red	15 × 21 mm	18 × 24 mm	
A6		Orange	15 × 21 mm	18 × 24 mm	
For Switch body style (B)	B0	White	15 × 15 mm	18 × 18 mm	
	B1	Yellow	15 × 15 mm	18 × 18 mm	
	B2	Green	15 × 15 mm	18 × 18 mm	
	B3	Blue	15 × 15 mm	18 × 18 mm	
	B4	Red	15 × 15 mm	18 × 18 mm	
	B6	Orange	15 × 15 mm	18 × 18 mm	
For Switch body style (C)	D0	White	Ø 15 mm	Ø 18 mm	
	D1	Yellow	Ø 15 mm	Ø 18 mm	
	D2	Green	Ø 15 mm	Ø 18 mm	
	D3	Blue	Ø 15 mm	Ø 18 mm	
	D4	Red	Ø 15 mm	Ø 18 mm	
	D6	Orange	Ø 15 mm	Ø 18 mm	
Illumination	X	Non illuminated			
	A	6V			
	B	12V			
	C	24V			
	F	48V			
Illumination Colour	X	Non illuminated			
	N	Incandescent lamp			
	1	Yellow LED			
	2	Green LED			
	4	Red LED			

## Ordering Reference

Range	TP5			
Panel cut-out	2 22.5 mm			
Switch body	Function	Actuator	Housing (Aluminium)	Contact blocks
	MFC1 Momentary	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 1 NO + 1 NC
	MFC2 Momentary	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 2 NO + 2 NC
	MFC3 Momentary	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 3 NO + 3 NC
	LFC1 Latching_	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 1 NO + 1 NC
	LFC2 Latching_	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 2 NO + 2 NC
	LFC3 Latching_	Ø 25 mm	Exposed Aluminium; IP40 / IP65*; solder	Contact block 3 NO + 3 NC
	MFD1 Momentary	Ø 25 mm	Flush Aluminium; IP40; solder	1 NO + 1 NC
	MFD2 Momentary	Ø 25 mm	Flush Aluminium; IP40; solder	2 NO + 2 NC
	MFD3 Momentary	Ø 25 mm	Flush Aluminium; IP40; solder	3 NO + 3 NC
	LFD1 Latching_	Ø 25 mm	Flush Aluminium; IP40; solder	1 NO + 1 NC
	LFD2 Latching_	Ø 25 mm	Flush Aluminium; IP40; solder	2 NO + 2 NC
	LFD3 Latching_	Ø 25 mm	Flush Aluminium; IP40; solder	3 NO + 3 NC
	MFK1 Momentary	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	1 NO + 1 NC
	MFK2 Momentary	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	2 NO + 2 NC
	MFK3 Momentary	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	3 NO + 3 NC
	LFK1 Latching_	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	1 NO + 1 NC
	LFK2 Latching_	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	2 NO + 2 NC
LFK3 Latching_	Ø 25 mm	Exposed Aluminium with silicon cap;IP65*; solder	3 NO + 3 NC	
Lens, transparent	F0	White	Ø 18	
	F1	Yellow	Ø 18	
	F2	Green	Ø 18	
	F3	Blue	Ø 18	
	F4	Red	Ø 18	
	F6	Orange	Ø 18	
Illumination	X	Non illuminated		
	A	6V		
	B	12V		
	C	24V		
	F	48V		
Illumination Colour	X	Non illuminated		
	N	Incandescent lamp		
	1	Yellow LED		
	2	Green LED		
	4	Red LED		