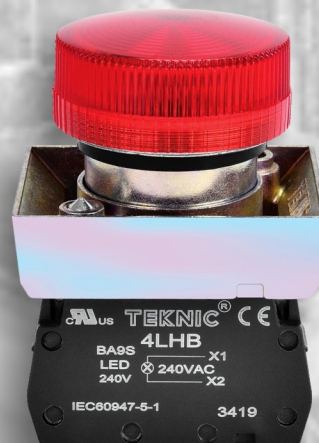
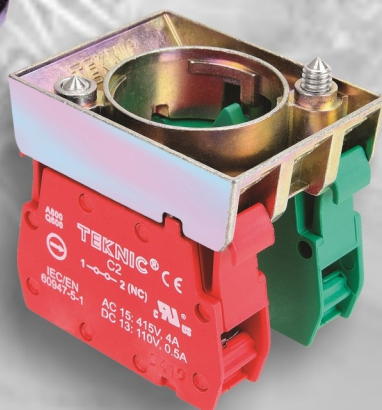


# TEKNIC



Control and Signaling Devices Ø 22.5 Metal Clip on Series



# Control and signaling devices Ø22.5 Metallic Clip on series

## Salient features

This range of Ø22.5 Metallic Clip on series pushbuttons, selector switches, illuminated switches and pilot lights in engineering plastic construction have been designed to provide the following salient features:

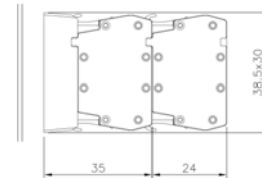
- Economy of space
- Protection against electrical shock
- Robust in materials of construction
- Larger operating surface than Ø30.5 series
- Safe in operation
- Simple to fix-screw driver is all that is required
- Fixing method unaffected by excessive vibration unit does not rotate
- Very good flame resistance
- Aesthetically elegant
- Shrouded terminals
- Resistant to corrosion

## Actuators

The circular actuators have metallic bezels and are functionally interchangeable on the different types of contact elements.

## Contact elements

The contact elements have double break contacts. The elements are interchangeable and can be stacked without additional hardware. 1 to 6 elements (NO or NC) can be used with non illuminated actuators, whereas 1 to 4 elements (NO or NC) can be used for illuminated actuators. Gold plated NO and NC contact elements for low voltage, low current switching circuits < 25mA are available



## Illuminated pushbuttons and pilot lights

Pilot lights and illuminated switches are suitable for direct connection using bayonet cap led bulb type BA9S as follows:

Supply voltage for direct connection without series resistor.....6V-240V

Bulb.....led type Ba9S with OAL max 28mm

## Terminals

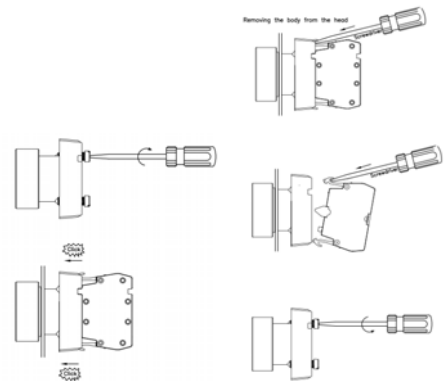
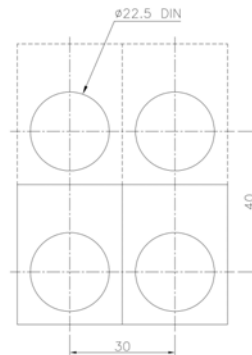
Contact elements and pilot lights are designed to have shrouded terminals with combi screws

## Fixing

The Ø22.5 4P metallic Clip on series control devices can be fixed in any position on panels of 1 to 5 mm thickness.

We recommend minimum fixing centres of 30mm X 40mm. However, the dimensions and configuration should be decided on the basis of the application.

The actuators, pilot lights bayonet fits & the lense assemblies snap fits on the holding bracket. Details of the assembly shown in the diagram



## Electrical and mechanical characteristics

Standards conformity	: UL508, EN 60947-5-1
Approvals	: UL508
Degree of protection	: IP65 as per IEC 60529, NEMA 4X, 12 as per UL50
Ambient	: -25°C to +70°C
Operating position	: All positions
Pollution degree	: 3

## Contact Block

Rated insulation voltage	: 500V																		
Rated thermal current	: 10A																		
Contact operation	: Slow break NO or NC																		
Make and break capacity	: AC15 4A, 415V AC																		
As per IEC 60947-5-1	: DC13 0.5A, 110VDC																		
As per UL 508	: A600 Q600																		
Terminal Capacity	: Maximum 2X1.5mm <sup>2</sup> , Minimum 1X2.5mm <sup>2</sup> or minimum 1X0.5mm <sup>2</sup>																		
Terminal marking	: 1NC 2 for NC & 3NO 4 for NO																		
Short circuit protection	: 10A HRC cartridge fuse, rated for resistive loading at 1000A prospective current																		
Mechanical life	: Over 1 million operations																		
Electrical rating (for 1 million operation cycles at 3600 cycles per hour, load factor 0.5)	: AC15																		
	<table> <tr> <td>V</td> <td>24</td> <td>120</td> <td>230</td> <td></td> <td>DC13</td> </tr> <tr> <td>A</td> <td>4</td> <td>3</td> <td>2</td> <td></td> <td>V 24 110</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A 0.5 0.2</td> </tr> </table>	V	24	120	230		DC13	A	4	3	2		V 24 110						A 0.5 0.2
V	24	120	230		DC13														
A	4	3	2		V 24 110														
					A 0.5 0.2														
Screw clamp tightening torque	: 0.8Nm (nominal recommended)																		

## Modules for pilot lights & illuminated switches with LED bulbs (Ba9S cap)

Current consumption (applicable to all colors)	: max 20mA
Terminal capacity	: Maximum 2X1.5mm <sup>2</sup> , Minimum 1X2.5mm <sup>2</sup> or minimum 1X0.5mm <sup>2</sup>
Service life (at nominal voltage and at ambient temperature at 25°C)	: 50,000 hours

# TEKNIC

Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## MOMENTARY ACTUATORS

	TYPE	COLOUR	ORDERING CODE
	<b>Flush</b>	White	4AF1
		Black	4AF2
		Green	4AF3
		Red	4AF4
		Blue	4AF6
		Yellow	4AF8
		<b>Flush with arrow marking</b>	White
		Black	4AF2WA
	<b>Projecting</b>	White	4AP1
		Black	4AP2
		Green	4AP3
		Red	4AP4
		Blue	4AP6
		Yellow	4AP8
	<b>Flush Relay Reset</b>	White	4AF1RR
		Black	4AF2RR
		Green	4AF3RR
		Red	4AF4RR
		Blue	4AF6RR
		Yellow	4AF8RR
	<b>Recess head</b>	White	4AF1RH
		Black	4AF2RH
		Green	4AF3RH
		Red	4AF4RH
		Blue	4AF6RH
		Yellow	4AF8RH
	<b>Booted</b>	Black	4AB2
		Green	4AB3
		Red	4AB4
		Blue	4AB6
		Yellow	4AB8

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Control & Signalling Devices 22.5 Ø

CLIP ON METAL SERIES

MUSHROOM ACTUATORS			
	TYPE	COLOUR	ORDERING CODE
	<b>Momentary</b>	Black	4AM2
	<b>Head Ø 40mm</b>	Green	4AM3
		Red	4AM4
		Blue	4AM6
		Yellow	4AM8
	<b>Latching</b>	Black	4AMLS2
	<b>Head Ø 30mm</b>	Red	4AMLS4
	<b>Latching</b>	Black	4AML2
	<b>Head Ø 40mm</b>	Red	4AML4
	<b>Push-Pull</b>	Black	4AMPP2
	<b>Head Ø 40mm</b>	Red	4AMPP4
	<b>Latching</b>	Black	4AMLKB2
	<b>with Key</b>	Red	4AMLKB4
	<b>Head Ø 40mm</b>		

# TEKNIC

Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

MUSHROOM ACTUATORS			
	TYPE	COLOUR	ORDERING CODE
			
	Latching Trigger	Black	4AMLT2
	Head Ø 40mm	Red	4AMLT4
			
	Latching Trigger	Black	4AMLTKB2
	with key Head Ø 40mm	Red	4AMLTKB4
			
	Latching	Black	4AMLJ2
	Head Ø 60mm	Red	4AMLJ4
			
	Push-Pull	Black	4AMPPJ2
	Head Ø 60mm	Red	4AMPPJ4
		Black	4AMJ2
	Momentary	Green	4AMJ3
	Head Ø 60mm	Red	4AMJ4
		Blue	4AMJ6
		Yellow	4AMJ8

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Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## SELECTOR ACTUATORS










	TYPE		COLOUR	ORDERING CODE
	<b>SELECTOR</b>			
	<b>2 position LATCHING</b>		Black	4AS2-2P
	<b>2 position MOMENTARY</b>		Black	4AS2-2PSR
	<b>3 position STAY PUT</b>		Black	4AS2-3P
	<b>3 position MOMENTARY, on both sides</b>		Black	4AS2-3PSR
	<b>3 position MOMENTARY, on right</b>		Black	4AS2-3PSRR
	<b>3 position MOMENTARY, on left</b>		Black	4AS2-3PSRL

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Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## SELECTOR ACTUATORS WITH EXTENDED KNOB

	TYPE		COLOUR	ORDERING CODE
	SELECTOR			
	2 position, with extended knob		Black	4AS2E-2P
	LATCHING			
	2 position, with extended knob		Black	4AS2E-2PSR
	MOMENTARY			
	With extended knob			
	3 position, with extended knob		Black	4AS2E-3P
	STAY PUT			
	3 position, with extended knob		Black	4AS2E-3PSR
	MOMENTARY, on both sides			
	3 position, with extended knob		Black	4AS2E-3PSRR
	MOMENTARY on right			
	3 position, with extended knob		Black	4AS2E-3PSRL
	MOMENTARY, on left			

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Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## KEY SELECTOR





	TYPE		COLOUR	ORDERING CODE
	<b>2 POSITION</b>			
	<b>Stayput</b>			
			Black	4AK2-2PB
				4AK2-2PO
				4AK2-2PI
	<b>Spring Return</b>		Black	4AK2-2POSR
	<b>3 POSITION</b>			
	<b>Stayput</b>		Black	4AK2-3PA
				4AK2-3PB
				4AK2-3PC
	<b>Spring Return</b>		Black	4AK2-3PCSR
	<b>Spring Return right to centre</b>		Black	4AK2-3PCSRR
	<b>Spring Return left to centre</b>		Black	4AK2-3PCSRL
	* X stands for position in which key is removable			





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Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## TWIN ACTUATOR

	TYPE	COLOUR	ORDERING CODE
	<b>Twin Actuator Double Flush, (IO) Mark</b>		
	Flush Button with I mark	Green	4ATF3F4(IO)
	Flush Button with O mark	Red	
	<b>Twin Actuator Flush/Projecting, (IO) Mark</b>		
	Flush Button with I mark	Green	4ATF3P4(IO)
	Projecting Button with O mark	Red	


## TWIN ILLUMINATED ACTUATORS WITH LED BULB

	TYPE	COLOUR	ORDERING CODE
	<b>Twin Illuminated Double Flush, (IO) Mark</b>		
	LED Bulb, BA9S type 24V AC/DC, 110VAC, 110VDC 230VAC, 220VDC	Flush Green Button with I mark Flush Red Button with O mark Amber Lens / Amber LED	4ATL5LBF3F4 (IO)
	Please mention the voltage required after the ordering code		
	<b>Twin Illuminated 1 Flush, 1 Projecting, (IO) Mark</b>		
	LED Bulb, BA9S type 24V AC/DC, 110VAC, 110VDC 230VAC, 220VDC	Flush Green Button with I mark Projecting Red Button with O mark Amber Lens / Amber LED	4ATL5LBF3P4 (IO)
	Please mention the voltage required after the ordering code		


# TEKNIC

Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## ILLUMINATED MOMENTARY ACTUATORS WITH LED BULB

	Type	Colour of LED / Lens	Ordering Code
<b>Illuminated Flush, Momentary</b>			
	LED Bulb, BA9S type	White LED Bulb / White Lens	4ALF1LB(S)
	24V AC/DC,	Green LED Bulb / Green Lens	4ALF3LB
	110VAC, 110VDC	Red LED Bulb / Red Lens	4ALF4LB
	230VAC, 220VDC	Amber LED Bulb / Amber Lens	4ALF5LB
		Blue LED Bulb / Blue Lens	4ALF6LB
		White LED Bulb / Clear Lens	4ALF7LB(S)
		Yellow LED Bulb / Yellow Lens	4ALF8LB
	Please mention the voltage required after the ordering code		

## Illuminated Projecting, Momentary

	LED Bulb, BA9S type	White LED Bulb / White Lens	4ALP1LB(S)
	24V AC/DC,	Green LED Bulb / Green Lens	4ALP3LB
	110VAC, 110VDC	Red LED Bulb / Red Lens	4ALP4LB
	230VAC, 220VDC	Amber LED Bulb / Amber Lens	4ALP5LB
		Blue LED Bulb / Blue Lens	4ALP6LB
		White LED Bulb / Clear Lens	4ALP7LB(S)
		Yellow LED Bulb / Yellow Lens	4ALP8LB
	Please mention the voltage required after the ordering code		






## ILLUMINATED SELECTOR ACTUATOR WITH LED BULB

	Type	Colour of LED / Lens	Ordering Code	
<b>2 Position illuminated selector actuator</b>				
	LED Bulb BA9S type	White LED Bulb / White Lens	4ASL1LB(S)-2P	
	24V AC/DC,	Green LED Bulb / Green Lens	4ASL3LB-2P	
	110VAC, 110VDC	Red LED Bulb / Red Lens	4ASL4LB-2P	
	230VAC, 220VDC	Amber LED Bulb / Amber Lens	4ASL5LB-2P	
			Blue LED Bulb / Blue Lens	4ASL6LB-2P
			White LED Bulb / Clear Lens	4ASL7LB(S)-2P
			Yellow LED Bulb / Yellow Lens	4ASL8LB-2P
	Please mention the voltage required after the ordering code			
		LED Bulb BA9S type	White LED Bulb / White Lens	4ASL1LB(S)-2PSR
		24V AC/DC,	Green LED Bulb / Green Lens	4ASL3LB-2PSR
110VAC, 110VDC		Red LED Bulb / Red Lens	4ASL4LB-2PSR	
230VAC, 220VDC		Amber LED Bulb / Amber Lens	4ASL5LB-2PSR	
		Blue LED Bulb / Blue Lens	4ASL6LB-2PSR	
		White LED Bulb / Clear Lens	4ASL7LB(S)-2PSR	
		Yellow LED Bulb / Yellow Lens	4ASL8LB-2PSR	
Please mention the voltage required after the ordering code				

# TEKNIC



Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## ILLUMINATED SELECTOR WITH LED BULB

	TYPE	Colour of LED / Lens	ORDERING CODE	
<b>3 Position Illuminated Selector Actuator</b>				
	<b>Stayput</b>	White LED Bulb / White Lens	4ASL1LB(S)-3P	
	<b>LED Bulb BA9S type</b>	Green LED Bulb / Green Lens	4ASL3LB-3P	
	<b>24V AC/DC,</b>	Red LED Bulb / Red Lens	4ASL4LB-3P	
	<b>110VAC, 110VDC</b>	Amber LED Bulb / Amber Lens	4ASL5LB-3P	
	<b>230VAC, 220VDC</b>	Blue LED Bulb / Blue Lens	4ASL6LB-3P	
		White LED Bulb / Clear Lens	4ASL7LB(S)-3P	
		Yellow LED Bulb / Yellow Lens	4ASL8LB-3P	
	<b>Please mention the voltage required after the ordering code</b>			
	<b>Momentary</b>	White LED Bulb / White Lens	4ASL1LB(S)-3PSR	
	<b>LED Bulb BA9S type</b>	Green LED Bulb / Green Lens	4ASL3LB-3PSR	
	<b>24V AC/DC,</b>	Red LED Bulb / Red Lens	4ASL4LB-3PSR	
	<b>110VAC, 110VDC</b>	Amber LED Bulb / Amber Lens	4ASL5LB-3PSR	
	<b>230VAC, 220VDC</b>	Blue LED Bulb / Blue Lens	4ASL6LB-3PSR	
		White LED Bulb / Clear Lens	4ASL7LB(S)-3PSR	
	Yellow LED Bulb / Yellow Lens	4ASL8LB-3PSR		
<b>Please mention the voltage required after the ordering code</b>				
<b>Momentary / Stayput</b>	White LED Bulb / White Lens	4ASL1LB(S)-3PSRL		
<b>LED Bulb BA9S type</b>	Green LED Bulb / Green Lens	4ASL3LB-3PSRL		
<b>24V AC/DC,</b>	Red LED Bulb / Red Lens	4ASL4LB-3PSRL		
<b>110VAC, 110VDC</b>	Amber LED Bulb / Amber Lens	4ASL5LB-3PSRL		
<b>230VAC, 220VDC</b>	Blue LED Bulb / Blue Lens	4ASL6LB-3PSRL		
	White LED Bulb / Clear Lens	4ASL7LB(S)-3PSRL		
	Yellow LED Bulb / Yellow Lens	4ASL8LB-3PSRL		
<b>Please mention the voltage required after the ordering code</b>				
<b>Momentary / Stayput</b>	White LED Bulb / White Lens	4ASL1LB(S)-3PSRR		
<b>LED Bulb BA9S type</b>	Green LED Bulb / Green Lens	4ASL3LB-3PSRR		
<b>24V AC/DC,</b>	Red LED Bulb / Red Lens	4ASL4LB-3PSRR		
<b>110VAC, 110VDC</b>	Amber LED Bulb / Amber Lens	4ASL5LB-3PSRR		
<b>230VAC, 220VDC</b>	Blue LED Bulb / Blue Lens	4ASL6LB-3PSRR		
	White LED Bulb / Clear Lens	4ASL7LB(S)-3PSRR		
	Yellow LED Bulb / Yellow Lens	4ASL8LB-3PSRR		
<b>Please mention the voltage required after the ordering code</b>				

# TEKNIC


Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

ILLUMINATED MUSHROOM WITH LED BULB			
	TYPE	COLOUR	ORDERING CODE
	<b>Illuminated Mushroom, Momentary</b>		
	LED Bulb, BA9S type	Red	4ALM4LB
	24V AC/DC,		
	110VAC, 110VDC		
	230VAC, 220VDC		
Please mention the voltage required after the ordering code			
	<b>Illuminated Mushroom, Push Pull</b>		
	LED Bulb, BA9S type	Red	4ALMPP4LB
	24V AC/DC,		
	110VAC, 110VDC		
	230VAC, 220VDC		
Please mention the voltage required after the ordering code			

# TEKNIC

Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

## PILOT LIGHTS

	TYPE	Colour of LED / Lens	ORDERING CODE
	<b>Pilot Light with LED Bulb</b>		
	LED Bulb, BA9S type	White LED Bulb / White Lens	4PLB1LB(S)
	24V AC/DC,	Green LED Bulb / Green Lens	4PLB3LB
	110VAC, 110VDC	Red LED Bulb / Red Lens	4PLB4LB
	230VAC, 220VDC	Amber LED Bulb / Amber Lens	4PLB5LB
		Blue LED Bulb / Blue Lens	4PLB6LB
		White LED Bulb / Clear Lens	4PLB7LB(S)
		Yellow LED Bulb / Yellow Lens	4PLB8LB
<b>Please mention the voltage required after the ordering code</b>			

# TEKNIC

Control & Signalling Devices 22.5 Ø  
CLIP ON METAL SERIES

CONTACT ELEMENTS		
	TYPE	ORDERING CODE
	<b>PANEL MOUNTING</b>	
	NORMALLY OPEN (NO) SILVER CONTACT	C1
	NORMALLY CLOSED (NC) SILVER CONTACT	C2
	NORMALLY OPEN (NO) GOLD CONTACT	C3
	NORMALLY CLOSED (NC) GOLD CONTACT	C4
	<b>BASE MOUNTING</b>	
	NORMALLY OPEN (NO) SILVER CONTACT	C5
	NORMALLY CLOSED (NC) SILVER CONTACT	C6
	NORMALLY OPEN (NO) GOLD CONTACT	C7
	NORMALLY CLOSED (NC) GOLD CONTACT	C8

## Common types of control and signalling devices Ø 22.5 Metallic, Clip on Series

Description	Type of Actuator or Lense Assembly	Colour of Actuator or Lense	Contact elements NO=C1 NC=C2 or Lamp Holder	Type of complete Control or Signalling Device
Flush pushbutton	4AF3	Green	1NO	4PSF310
	4AF8	Yellow	2NO+1NC	4PSF821
Projecting pushbutton	4AP2	Black	2NC	4PSP202
	4AP4	Red	3NO+3NC	4PSF433
Booted Pushbutton	4AF3+2BT7	Green+clear boot	2NO	4PSF320+2BT7
	4AF4+2BT7	Red+clear boot	2NC	4PSF402+2BT7
Mushroom Pushbutton Spring return	4AM2	Black	1NO+1NC	4PSM211
	4AM4	Red	1NC	4PSM401
Mushroom Pushbutton Latching turn to release	4AML2	Black	1NC	4PSML201
	4AML4	Red	2NO+2NC	4PSML422
Mushroom Pushbutton Latching Key to release	4AMLKB4	Red	1NO+1NC	4PSMLKB411
Selector Pushbutton-2P	4AS2-2P	Black	1NO	4PSS210-2P
Selector Pushbutton-3P	4AS2-3P	Black	1NO+1NC	4PSS211-3P
Key Pushbutton (2Pos) key removable in both positions	4AK2-2PB	Black	1NO	4PSK210-2PB
Key Pushbutton (3Pos) key removable in left & right positions	4AK2-3PB	Black	1NO+1NC	4PSK211-3PB
Twin Pushbutton marked "IO" Flush-Flush	4ATF3-F4-IO	Flush-Green	1NO	4PSTF310-F401-IO
		Flush-Red	1NC	
Twin Pushbutton marked "IO" Flush-Projecting	4ATF3-P4-IO	Flush-Green	1NO	4PSTF310-P401-IO
		Projecting-Red	1NC	
Flush illuminated pushbutton with multichip LED bulb direct connection	4ALF3LB24DC	Green	1NO+1NC	4PSLF3LB1124DC
Twin Luminous Pushbutton with "IO" marking Flush-Flush with LED bulb (230VAC)	4ATL5LB-F3-F4230AC-IO	Lense-Amber	1NO	4PSTL5LBF310-F401230AC-IO
		Flush-Green	1NC	
		Flush-Red	1NC	
Twin Luminous Pushbutton with "IO" marking Flush - Projecting with LED bulb (110VAC)	4ATL5LB-F3-P4110AC-IO	Lense-Amber	1NO	4PSTL5LBF310-P401110AC-IO
		Flush-Green	1NC	
		Projecting-Red	1NC	
Pilot Light with LED bulb for 24V Bulb:24V	4PLLA5	Amber	4LHB24	4PLB5LB24
Pilot Light with LED bulb for 230VAC Bulb: 230V	4PLLA5	Amber	4LHB230AC	4PLB5LB230AC

