TERNIC

Control and Signaling Devices Ø 22.5 Metal Series



Salient features

This range of Ø 22.5 pushbuttons, selector switches, illuminated switches, illuminated selector switches and pilot lights have been designed to provide the following salient features:

- Economy of space
 Aesthetically elegant
 SELF WIPING CONTACT
- Simple to fix screw driver is all that required
 Safe in operation
 - Fixing method unaffected by excessive vibration-unit does not rotate
- · Protection against electric shock (unit earthed)

Actuators

The circular actuators have chrome plated metal bezels, and are interchangeable on the different types of contact elements.

Contact elements

The contact elements are double break and have **self wiping** 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 < 25 mA, are available.**

Illuminated pushbuttons and pilot lights

Pilot lights and illuminated switches are suitable for direct connection, through series resistor, through series resistor and diode, using bayonet cap filament bulb type BA9S, as follow :

| Supply voltage for direct connection without series resistor: | 6V-130V |
|---|----------|
| Supply voltage through series resistor | 12V-415V |
| Supply voltage through series resistor and diode | 230V AC |

Bulb: Filament, type BA9S with OAL max., 28 mm Pilot lights and illuminated switches are available with integral LED chips, suitable for operating at various voltages namely 6V, 12V, 24V, 30V, 48V, 63.5V, 110V, 125V, 230V AC or DC and 415V AC. Pilot lights and illuminated actuators are available with LED bulbs (bayonet cap, BA9S design with OAL max. 28 mm) suitable for operating at various voltages namely 24V, 48V, 110V and 230V. On request an extra short circuit protection consisting of built in fuse in the LED modules can be provided. Specific models of pilot lights are available with integral LED chips suitable for operating over wide range of voltage 24V to 230V AC or DC.

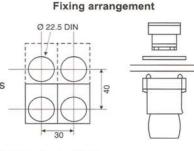
Pilot lights are available with built in transformers suitable for operating at 230, 110 volts AC input and 6V, 12V and 24V output.

Terminals

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

Fixing

The control devices Ø 22.5 can be fixed in any position on panels of 1 to 6 mm thickness. We recommend minimum fixing centers of 30 mm X 40 mm. However, the dimensions and configuration should be decided on the basis of the application. The actuators and the lense assemblies lock on to the holding bracket using a bayonet type of fixing which enables a simple and fast assembly. The complete assembly is locked into position on the panel by two M4 pointed screws on the bracket, tightened equally from the rear. The screws should be tightened adequately to such an extent as to pierce through the paint on the panel from inside. These screws also ensure the earthing of the unit.



40X30

Electrical and mechanical characteristics

| Environment | | | | | | | 00 | | |
|--|---|---|--------------------------------|---------|---------|------------------------------------|------|------|-----|
| Standard conformity Approvals Degree of protection Ambient Operating position | CSA - | C22.2 is per to + 7 | No. 14 IEC 52 | -95, UL | 508, VI | N 60947 - DE 0660 2 as per L | | 2000 | |
| Contact Block | | | | | | | | | |
| Rated insulation voltage Rated thermal current Contact operation | : 500 V : 10 A : Self w i | ping, | slow br | reak NO |) or NC | | | | |
| Make and break capacity As per IEC 947 - 5 - (1) 1990 | : AC 15 : DC 13 | | | | | | | | |
| As per CSA - C22.2 No. 14-95, UL508, Terminal capacity Terminal marking Short circuit protection Mechanical life | : 1-2 for | NC, 3 NC, 3 | 0.5 mn -4 for N e fuse I | HRC ty | | x 1.5 mm d for resis | | | 'n |
| Electric rating (for 1 million operation cycles, operation at | : AC 15 | V | 24 | 120 | 230 | DO 10 | V | 24 | 110 |
| 3600 cycles per hour, load factor 0.5) | : AC 15 | А | 4 | 3 | 2 | DC 13 | A | 0.5 | 0.2 |
| Modules for pilot light & illuminated switches Current consumptions (applicable to all colours) 24 VAC/DC, 110 VAC & 240 VAC 110 VDC 220 VDC Service life (at nominal voltage and at ambient temperature of 25 C) Voltage limits (nominal voltage) Short circuit protection Terminal capacity | with integr : max. 2 : max. 1 : max. 1 : 100,00 : < 20% : on spec : min. 1 | 0 mA 5 mA 0 mA 0 hour of rate | s d volta | ge > | 24 | | | | |
| | | 0.01 | , 1110 | ax. Z X | 1.5 mm | or 1 x 2. | 5 mm | | |

- · Robust in materials of construction
- · Very good flame resistance
- Shrouded terminals

| TEK | |]C |
|----------------------------|-------------|-----------|
| Control & Signa | lling Devic | es 22.5 Ø |

METALLIC SERIES

| MOMENTARY A | CTUATORS | | |
|--------------------|-------------------------|------------------------|---------------|
| | TYPE | COLOUR | ORDERING CODE |
| | | | |
| | | White | 2AF1 |
| | Flush | Black | 2AF2 |
| | | Green | 2AF3 |
| | | Red | 2AF4 |
| | | Blue | 2AF6 |
| | | Yellow | 2AF8 |
| | | | |
| | | White | 2AF1A |
| $ \rightarrow $ | Flush with | Black | 2AF2A |
| | arrow marking | Green | 2AF3A |
| | | Red | 2AF4A |
| | | Blue | 2AF6A |
| | | Yellow | 2AF8A |
| | | | |
| | | White | 2AP1 |
| | Projecting | Black | 2AP2 |
| | | Green | 2AP3 |
| | | Red | 2AP4 |
| | | Blue | 2AP6 |
| | | Yellow | 2AP8 |
| | | | |
| 0 | | White | 2AP10 |
| | Projecting with | Black | 2AP20 |
| | O marking | Green | 2AP30 |
| | | Red | 2AP40 |
| | | Blue | 2AP60 |
| | | Yellow | 2AP80 |
| | | | |
| | | White | 2AF1RH |
| | Recess head | Black | 2AF2RH |
| | | Green | 2AF3RH |
| - | | Red | 2AF4RH |
| | | Blue | 2AF6RH |
| | | Yellow | 2AF8RH |
| | | | |
| | | Black | 2AB2 |
| | Booted | Green | 2AB3 |
| | | Red | 2AB4 |
| | | Blue | 2AB6 |
| | | Yellow | 2AB8 |
| | | | |
| | *All actuators are supp | lied with fixing flang | e |

TEKNIC Control & Signalling Devices 22.5 Ø

METALLIC SERIES

| SHROOM ACTUATOR | YPE | COLOUR | ORDERING CC |
|--------------------------------------|---------------------|--------------|------------------|
| _ | | | 0.4.140 |
| | | Black | 2AM2 2AM3 |
| | lomentary Ø 40mm | Green Red | 2AM3 2AM4 |
| | 40mm | Blue | 2AM4 2AM6 |
| | | Yellow | 2AM8 |
| | | | |
| | otobing | Diack | |
| | atching Ø 30mm | Black Red | 2AMLS2 2AMLS4 |
| | 5 501111 | | |
| | Latching Ø 40mm | Black | 2AML2 2AML4 |
| | 9 4011111 | Red | |
| | | | |
| P | ush-Pull | Black | 2AMPP2 |
| | 9 40mm | Red | 2AMPP4 |
| 10 | | | |
| | atching | Black | 2AMLKB2 |
| W | vith Key | Red | 2AMLKB4 |
| | 9 40mm | | |
| ctuators are supplied with fixing fl | | | |

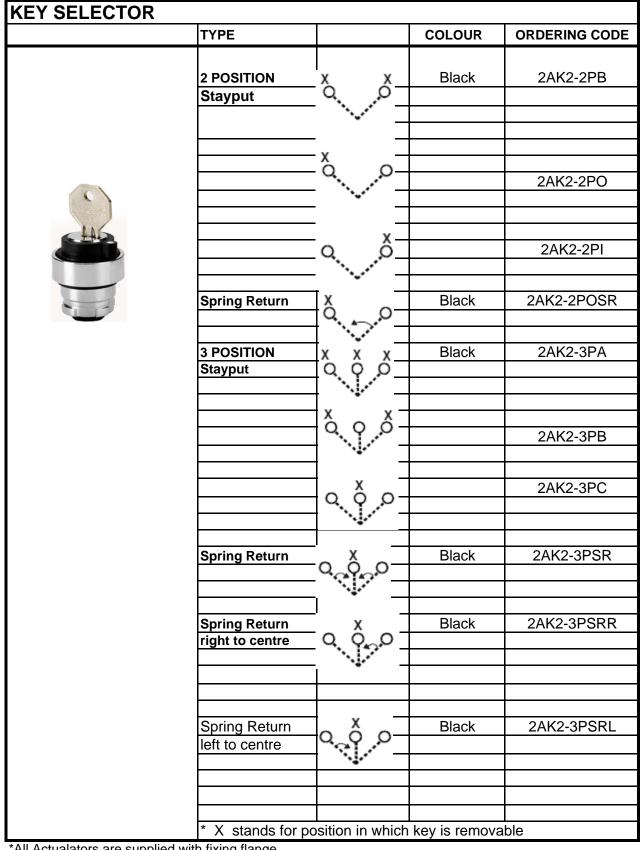
*All actuators are supplied with fixing flange

TEKNIC

| MUSHROOM ACTUA | TORS | | |
|---|----------------------------|---------------------------------------|--------------------|
| | ТҮРЕ | COLOUR | ORDERING CODE |
| | | | |
| and the second second | | Diask | |
| | Latching Trigger Ø 40mm | Black | 2AMLT2 |
| | 9 40mm | Red | 2AMLT4 |
| A CONTRACTOR OF THE REAL | | | |
| and the second se | | | |
| | | | |
| Tatista | | | |
| 115 | Latching Trigger | Black | 2AMLTKB2 |
| | with key Ø 40mm | Red | 2AMLTKB2 |
| 10 B | | Neu | |
| Concern and | | | |
| | | | |
| | | | |
| | | | |
| | Latahing | Disala | 24141.12 |
| | Latching Ø 60mm | Black Red | 2AMLJ2 2AMLJ4 |
| | | Reu | ZAIVILJ4 |
| | | | |
| | | | |
| | | | |
| | | | |
| 0 | Push-Pull | Black | 2AMPPJ2 |
| | Ø 60mm | Red | 2AMPPJ2 2AMPPJ4 |
| | | i i i i i i i i i i i i i i i i i i i | |
| \smile | | | |
| | | | |
| | | | |
| | | Black | 2AMJ2 |
| | Momentary | Green | 2AMJ2 2AMJ3 |
| | Ø 60mm | Red | 2AM33 |
| | | Blue | 2AMJ6 |
| | | Yellow | 2AMJ8 |
| | | - | |
| | | | |
| | | | |

| SELECTOR ACTU | ATORS | | | |
|---------------|--|----|--------|---------------------|
| | ТҮРЕ | | COLOUR | ORDERING CODE |
| | SELECTOR | | | |
| | 2 position LATCHING With ext. knob | Q | Black | 2AS2-2P 2AS2E-2P |
| - | | | | |
| | 2 position MOMENTARY | · | Black | 2AS2-2PSR |
| | With ext. knob | | | 2AS2E-2PSR |
| | | | | |
| | 3 position | | Black | 2AS2-3P |
| | STAY PUT Q | 00 | | |
| | With ext. knob | ·↓ | | 2AS2E-3P |
| | 3 position MOMENTARY on both sides | | Black | 2AS2-3PSR |
| | With ext. knob | | | 2AS2E-3PSR |
| | | | | 2702E-JFJK |
| | 3 position MOMENTARY on right | | Black | 2AS2-3PSRR |
| | With ext. knob | | | 2AS2E-3PSRR |
| | 3 position MOMENTARY on left | | Black | 2AS2-3PSRL |
| | With ext. knob | | | 2AS2E-3PSRL |

*All actuators are supplied with fixing flange



*All Actualators are supplied with fixing flange

| | TYPE | COLOUR | ORDERING COD |
|--|--------------|--------|---------------|
| | | | |
| | | Green | 2ATF3F4 |
| | Double Flush | Red | 2711 51 4 |
| | w/o IO Mark | Yellow | 2ATF8F2 |
| | | Black | ZAIFOFZ |
| | | | |
| | | Green | 2ATF3F4(IO) |
| | Double Flush | Red | 2/11 31 4(10) |
| | with IO Mark | Yellow | 2ATF8F2(IO) |
| | | Black | |
| | | | |
| | | Green | |
| | 1 Flush, | Red | 2ATF3P4 |
| | 1 Projecting | Yellow | 0475000 |
| | w/o IO Mark | Black | 2ATF8P2 |
| | | | |
| | | Green | |
| | 1 Flush, | Red | 2ATF3P4(IO) |
| | 1 Projecting | Yellow | |
| | with IO Mark | Black | 2ATF8P2(IO) |

Note : Other colours as per request

| ILLUMINATED FLUSH WITH BULB | | | | | | | |
|--|------------------------------|---------------------------|-------------------|-------------------|--|--|--|
| | ТҮРЕ | TYPE COLOUR ORDERING CODE | | | | | |
| | Illuminated Flush, Momentary | | | | | | |
| 0 | | | | | | | |
| And the second se | | | White | 2ALF1 | | | |
| | Filament Bulb | _ | Green | 2ALF3 | | | |
| | 6V to 130V AC/DC | C | Red | 2ALF4 | | | |
| Designed and the second | | | Amber | 2ALF5 | | | |
| | | | Blue | 2ALF6 | | | |
| | | | Clear | 2ALF7 | | | |
| | | | Yellow | 2ALF8 | | | |
| Direct Connection | Please ment | tion the volta | ge required after | the ordering code | | | |
| | | | White | 2ALRF1 | | | |
| | Filement Dull | | | 2ALRF1 2ALRF3 | | | |
| | Filament Bulb | -1 000 1/ | Green Red | 2ALRF3 2ALRF4 | | | |
| TERMINA CO | 24V, 48V,110V an AC/DC | a 230 v | Amber | 2ALRF4 2ALRF5 | | | |
| and a second | | | Blue | 2ALRF5 2ALRF6 | | | |
| | | | Clear | 2ALRF7 | | | |
| | | | Yellow | 2ALRF7 2ALRF8 | | | |
| Connection with | Please ment | tion the volta | | the ordering code | | | |
| Resistor | | | | | | | |
| | | | | | | | |
| (, | | | White | 2ALRF1 230V AC | | | |
| | Filament Bulb | | Green | 2ALRF3 230V AC | | | |
| | 230V AC | | Red | 2ALRF4 230V AC | | | |
| Saladice Ce | | | Amber | 2ALRF5 230V AC | | | |
| and the second s | | | Blue | 2ALRF6 230V AC | | | |
| 414 | | | Clear | 2ALRF7 230V AC | | | |
| | | | Yellow | 2ALRF8 230V AC | | | |
| Connection with | | | | | | | |
| Resistor+Diode | | | | | | | |

TEKNIC Control & Signalling Devices 22.5 Ø

METALLIC SERIES

| ILLUMINATED FI | LUSH ACTUATOR V | VITH LED | | | | | |
|---|---|------------------------------------|---------------|--|--|--|--|
| | ТҮРЕ | COLOUR of LED / LENS | ORDERING CODE | | | | |
| | Illuminated Flush actuator, spring return | | | | | | |
| | | | 041.054 | | | | |
| | | Yellow LED / White Lens | 2ALRF1L | | | | |
| | | White LED / White Lens | 2ALRF1L(S) | | | | |
| | | Green LED / Green Lens | 2ALRF3L | | | | |
| | Integral LED | Red LED / Red Lens | 2ALRF4L | | | | |
| | 6V, 12V, 24V, 48V AC/DC | Amber LED / Amber Lens | 2ALRF5L | | | | |
| z Under John Quanting and Action | 110VAC, 110VDC, | Blue LED / Blue Lens | 2ALRF6L | | | | |
| and the same same | 230VAC, 220VDC | Yellow LED / Clear Lens | 2ALRF7L | | | | |
| 2 | | White LED / Clear Lens | 2ALRF7L(S) | | | | |
| | | Yellow LED / Yellow Lens | 2ALRF8L | | | | |
| | | | | | | | |
| Integral | Please mention t | he voltage required after the ord | ering code | | | | |
| | | | | | | | |
| Triney at 11 | LED Bulb, BA9S type | Yellow LED Bulb / White Lens | 2ALF1LB | | | | |
| - Carallel | 24V AC/DC, | White LED Bulb / White Lens | 2ALF1LB(S) | | | | |
| | 110VAC, 110VDC | Green LED Bulb / Green Lens | 2ALF3LB | | | | |
| TELEVISION | 230VAC, 220VDC | Red LED Bulb / Red Lens | 2ALF4LB | | | | |
| and | | Amber LED Bulb / Amber Lens | 2ALF5LB | | | | |
| 4155 | | Blue LED Bulb / Blue Lens | 2ALF6LB | | | | |
| - | | Yellow LED Bulb / Clear Lens | 2ALF7LB | | | | |
| | | White LED Bulb/ Clear Lens | 2ALF7LB(S) | | | | |
| | | Yellow LED Bulb / Yellow Lens | 2ALF8LB | | | | |
| Bayonet Bulb | Please mention t | he voltage required after the ord | ering code | | | | |
| | | | | | | | |
| | | White LED / White Lens | 2ALRF1L | | | | |
| | Integral LED | White LED / White Lens | 2ALRF1L(S) | | | | |
| | 24V, 110V, 230V, AC | Green LED / Green Lens | 2ALRF3L | | | | |
| | | Red LED / Red Lens | 2ALRF4L | | | | |
| | | Amber LED / Amber Lens | 2ALRF5L | | | | |
| LED/STD 240 40 | | Blue LED / Blue Lens | 2ALRF6L | | | | |
| No. 10 States | | Yellow LED / Clear Lens | 2ALRF7L | | | | |
| 1200 | | White LED / Clear Lens | 2ALRF7L(S) | | | | |
| | | Yellow LED / Yellow Lens | 2ALRF8L | | | | |
| | | | | | | | |
| Flasher | Please mention t | the voltage required after the ord | ering code | | | | |

| ILLUMINATED PROJECTING WITH BULB | | | | | | | |
|---|-----------------------------------|---------------------------|--------------------|---------------|--|--|--|
| | TYPE | TYPE COLOUR ORDERING CODE | | | | | |
| | Illuminated Projecting, Momentary | | | | | | |
| | |) A //b :+ | _ | | | | |
| | | White | | 2ALP1 | | | |
| | Filament Bulb | Gree | | 2ALP3 | | | |
| TERRITOR | 6V to 130V AC/DC with | | | 2ALP4 | | | |
| and | | Ambe | | 2ALP5 | | | |
| | | Blue | | 2ALP6 | | | |
| | | Clea | | 2ALP7 | | | |
| Direct Connection | Please mention the | | | 2ALP8 | | | |
| Direct Connection | Please mention the | voltage require | | ordening code | | | |
| | | White | e | 2ALRP1 | | | |
| | Filament Bulb | Gree | | 2ALRP3 | | | |
| | 24V, 48V,110V and 230 | | | 2ALRP4 | | | |
| AND THE REAL PROPERTY OF | AC/DC | Ambe | er | 2ALRP5 | | | |
| | | Blue | | 2ALRP6 | | | |
| | | Clea | | 2ALRP7 | | | |
| Connection with | Please mention the | | | | | | |
| Resistor | | | | | | | |
| | | | | | | | |
| | | White | | LRP1 230V AC | | | |
| | Filament Bulb | Gree | n 2 <mark>A</mark> | LRP3 230V AC | | | |
| | 230V AC | Red | 2 A | LRP4 230V AC | | | |
| TERRICO (C | | Ambe | er 2A | LRP5 230V AC | | | |
| AL OF AL | | Blue | 2A | LRP6 230V AC | | | |
| | | Clea | r 2A | LRP7 230V AC | | | |
| | | Yello | w 2A | LRP8 230V AC | | | |
| Connection with | | | | | | | |
| Resistor+Diode | | | | | | | |

| ILLUMINATED P | ROJECTING WITH LI | ED | | | | | | |
|-----------------|--|-------------------------------------|---------------|--|--|--|--|--|
| | ТҮРЕ | COLOUR | ORDERING CODE | | | | | |
| | Illuminated Projecting actuator, spring return | | | | | | | |
| | | | | | | | | |
| | | Yellow LED / White Lens | 2ALRP1L | | | | | |
| | Integral LED | White LED / White Lens | 2ALRP1L(S) | | | | | |
| | 6V, 12V, 24V, 48V AC/DC | Green LED / Green Lens | 2ALRP3L | | | | | |
| | 110VAC, 110VDC, | Red LED / Red Lens | 2ALRP4L | | | | | |
| D Galeron and | 230VAC, 220VDC | Amber LED / Amber Lens | 2ALRP5L | | | | | |
| LED & DANA C ** | | Blue LED / Blue Lens | 2ALRP6L | | | | | |
| CC MA | | Yellow LED / Clear Lens | 2ALRP7L | | | | | |
| | | White LED / Clear Lens | 2ALRP7L(S) | | | | | |
| | | Yellow LED / Yellow Lens | 2ALRP8L | | | | | |
| Integral | Please mention the | ne voltage required after the order | ing code | | | | | |
| | | | | | | | | |
| | | Yellow LED Bulb / White Lens | 2ALP1LB | | | | | |
| | LED Bulb, BA9S type | White LED Bulb / White Lens | 2ALP1LB(S) | | | | | |
| | 24V AC/DC, | Green LED Bulb / Green Lens | 2ALP3LB | | | | | |
| TEXALE | 110VAC, 110VDC | Red LED Bulb / Red Lens | 2ALP4LB | | | | | |
| A CONTRACTOR | 230VAC, 220VDC | Amber LED Bulb / Amber Lens | 2ALP5LB | | | | | |
| 4144 | | Blue LED Bulb / Blue Lens | 2ALP6LB | | | | | |
| | | Yellow LED Bulb / Clear Lens | 2ALP7LB | | | | | |
| | | White LED Bulb/ Clear Lens | 2ALP7LB(S) | | | | | |
| | | Yellow LED Bulb / Yellow Lens | 2ALP8LB | | | | | |
| Bayonet Bulb | Please mention the | ne voltage required after the order | ing code | | | | | |
| | | | | | | | | |
| | | White LED / White Lens | 2ALRP1LF | | | | | |
| A-0-0 | Integral LED | White LED / White Lens | 2ALRP1LF(S) | | | | | |
| | 24V, 110V, 230V, AC | Green LED / Green Lens | 2ALRP3LF | | | | | |
| Min stress | | Red LED / Red Lens | 2ALRP4LF | | | | | |
| LED LE Dans to | | Amber LED / Amber Lens | 2ALRP5LF | | | | | |
| | | Blue LED / Blue Lens | 2ALRP6LF | | | | | |
| | | Yellow LED / Clear Lens | 2ALRP7LF | | | | | |
| | | White LED / Clear Lens | 2ALRP7LF(S) | | | | | |
| | | Yellow LED / Yellow Lens | 2ALRP8LF | | | | | |
| Flasher | Please mention the | ne voltage required after the order | ing code | | | | | |

| ILLUMINATED SE | ELECTOR WITH BULB | | | | |
|--|--|--------|----------------------|--|--|
| | ТҮРЕ | COLOUR | ORDERING CODE | | |
| | 2 Position Stayput illuminated selector actuator | | | | |
| | | White | 2ASL1-2P | | |
| | Filament bulb | Green | 2ASL1-2P 2ASL3-2P | | |
| | 6V to 130V AC/DC | Red | 2ASL3-2P 2ASL4-2P | | |
| A STREET OF | | Amber | 2ASL4-2P 2ASL5-2P | | |
| and the second s | | Blue | 2ASL5-2P 2ASL6-2P | | |
| | | Clear | 2ASL0-21 2ASL7-2P | | |
| | | Yellow | 2ASL7-2P 2ASL8-2P | | |
| Direct Connection | Please mention the voltage | | | | |
| | | | | | |
| The second se | | White | 2ASLR1-2P | | |
| | Filament bulb | Green | 2ASLR3-2P | | |
| TERMINA | 24 V,48V,110V,230V AC/DC | Red | 2ASLR4-2P | | |
| A CONTRACTOR OF | | Amber | 2ASLR5-2P | | |
| | | Blue | 2ASLR6-2P | | |
| | | Clear | 2ASLR7-2P | | |
| | | Yellow | 2ASLR8-2P | | |
| Connection with | Please mention the voltage | | | | |
| Resistor | g. | | | | |
| | | | | | |
| | | White | 2ASLR1-2P 230V AC | | |
| | Filament bulb | Green | 2ASLR3-2P 230V AC | | |
| | 230V AC | Red | 2ASLR4-2P 230V AC | | |
| S S S S S S S S S S S S S S S S S S S | | Amber | 2ASLR5-2P 230V AC | | |
| | | Blue | 2ASLR6-2P 230V AC | | |
| | | Clear | 2ASLR7-2P 230V AC | | |
| | | Yellow | 2ASLR8-2P 230V AC | | |
| Connection with | | | | | |
| Resistor+Diode | | | | | |
| Note : | 2 Position Spring return | n | Replace 2P with 2PSR | | |
| | * | | | | |

| | ELECTOR WITH LED | | |
|---|---------------------------|---------------------------------------|----------------------|
| | ТҮРЕ | COLOUR | ORDERING CODE |
| | 2 Position Illumina | ted Selector Actuator | r |
| | | | |
| | | Yellow LED / White Lens | 2ASLR1L-XXXXX |
| | | White LED / White Lens | 2ASLR1L(S)-XXXXX |
| | Integral LED | Green LED / Green Lens | 2ASLR3L-XXXXX |
| | 6V, 12V, 24V, 48V AC/DC | Red LED / Red Lens | 2ASLR4L-XXXXX |
| ALL COMPANY OF THE OWNER | 110VAC, 110VDC, | Amber LED / Amber Lens | 2ASLR5L-XXXXX |
| LED CONTRACTOR | 230VAC, 220VDC | Blue LED / Blue Lens | 2ASLR6L-XXXXX |
| A CE | | Yellow LED / Clear Lens | 2ASLR7L-XXXXX |
| 1000 | | White LED / Clear Lens | 2ASLR7L(S)-XXXXX |
| | | Yellow LED / Yellow Lens | 2ASLR8L-XXXXX |
| ntegral LED | | | |
| - | Please mentior | n the voltage required after the c | ordering code |
| | | | |
| | | Yellow LED Bulb / White Lens | 2ASL1LB-XXXXX |
| | | White LED Bulb / White Lens | 2ASL1LB(S)-XXXXX |
| | LED Bulb, BA9S type | Green LED Bulb / Green Lens | 2ASL3LB-XXXXX |
| | 24V AC/DC, | Red LED Bulb / Red Lens | 2ASL4LB-XXXXX |
| | 110VAC, 110VDC | Amber LED Bulb / Amber Lens | 2ASL5LB-XXXXX |
| | 230VAC, 220VDC | Blue LED Bulb / Blue Lens | 2ASL6LB-XXXXX |
| ALCO CE TO | | Yellow LED Bulb / Clear Lens | 2ASL7LB-XXXXX |
| No. Contraction of the second | | White LED Bulb/ Clear Lens | 2ASL7LB(S)-XXXXX |
| 4100 | <u>├</u> ──── | Yellow LED Bulb / Yellow Lens | 2ASL8LB-XXXXX |
| | | TCHOW EED Dub / TCHOW LCH3 | |
| LED Bulb | Please | mention the voltage required aft | er the ordering code |
| | | Yellow LED / White Lens | 2ASLR1LF-XXXXX |
| | ├ ─── ├ ─── | White LED / White Lens | 2ASLR1L(S)-XXXXX |
| | Integral LED | Green LED / Green Lens | 2ASLR3LF-XXXXX |
| a sha | 24V, 110V, 230V, AC | Red LED / Red Lens | 2ASLR4LF-XXXXX |
| | 244, 1104, 2004, AC | Amber LED / Amber Lens | 2ASLR5LF-XXXXX |
| | | Blue LED / Blue Lens | 2ASLR6LF-XXXXX |
| Ridle® @ | | Yellow LED / Clear Lens | |
| ANI KOZ ZAL | ├ ─── ├ ─── | | 2ASLR7LF-XXXXX |
| V201 | ├ ─── | White LED / Clear Lens | 2ASLR7L(S)-XXXXX |
| | | Yellow LED / Yellow Lens | 2ASLR8LF-XXXXX |
| sher | Please | I mention the voltage required aft | er the ordering code |
| | 1 | | XXXXX |
| q _ | Stayput | | 2P |
| | | | ۲ |
| | - | | |
| | _ | | |
| Q | | | 2000 |
| <u> </u> | Spring return | ו ז | 2PSR |
| = - - | Spring return | | 2PSR |

| ILLUMIN | NATED S | ELECTOR WITH BULB | | |
|---|--------------------------|---|-------------------------------|--|
| | | ТҮРЕ | COLOUR | ORDERING CODE |
| | | 3 Position Stayput illuminat | ed selector actuator | |
| | | | White | 2ASL1-3P |
| Are | (1) | Filament bulb | Green | 2ASL3-3P |
| | | 6V to 130V AC/DC | Red | 2ASL4-3P |
| TERMINA | | | Amber | 2ASL5-3P |
| and | (e | | Blue | 2ASL6-3P |
| | | | Clear | 2ASL7-3P |
| | | | Yellow | 2ASL8-3P |
| Direct | Connection | Please mention the voltage required | | |
| | | | White | 2ASLR1-3P |
| | | Filament bulb | Green | 2ASLR3-3P |
| | | 24 V,48V,110V,230V AC/DC | Red | 2ASLR4-3P |
| TOP | | | Amber | 2ASLR5-3P |
| and | | | Blue | 2ASLR6-3P |
| | | | Clear | 2ASLR7-3P |
| | | | Yellow | 2ASLR8-3P |
| Canad | ection with | | TEIIOW | ZASER0-SF |
| | esistor | Place mention th | ne voltage required after the | |
| | 5313101 | r lease menuon u | le vollage required aller the | |
| | | | White | 2ASLR1-3P 230V AC |
| 415 | | Filament bulb | Green | 2ASLR3-3P 230V AC |
| | | 230V AC | Red | 2ASLR4-3P 230V AC |
| Timues Timues | | 2007 AO | Amber | 2ASLR5-3P 230V AC |
| A State | | | Blue | 2ASLR6-3P 230V AC |
| 110 | | | Clear | 2ASLR0-3P 230V AC 2ASLR7-3P 230V AC |
| 0 | | | | |
| | ection with tor+Diode | | Yellow | 2ASLR8-3P 230V AC |
| | | | | |
| Ř | 1 | Q Q O O 3 Position Spri | ng return | Replace 3P with 3PSR |
| SELECTOR | 2 | 0000 3 Position Spring | g return Left | Replace 3P with 3PSRL |
| SE | 3 | 3 Position Spring | return Right | Replace 3P with 3PSRR |
| | | : 3 Position Spring return right Illumi | inated Selector Actuator | , Red, 110V DC |
| | Ordering | Code : 2ASLR4 - 3PSRR 110V DC | | |

| ILLUMINATED SE | ELECTOR WITH LED | | |
|--|-------------------------|---|-------------------|
| | ТҮРЕ | COLOUR | ORDERING CODE |
| | 3 Position Illumin | ated Selector Actuator | |
| | | Yellow LED / White Lens | 2ASLR1L-XXXXX |
| | | White LED / White Lens | 2ASLR1L(S)-XXXXX |
| | Integral LED | | |
| ALL THE REAL PROPERTY AND A | Integral LED | Green LED / Green Lens | 2ASLR3L-XXXXX |
| | 6V, 12V, 24V, 48V AC/DC | Red LED / Red Lens | 2ASLR4L-XXXXX |
| Ce Ce | 110VAC, 110VDC, | Amber LED / Amber Lens | 2ASLR5L-XXXXX |
| 10 | 230VAC, 220VDC | Blue LED / Blue Lens | 2ASLR6L-XXXXX |
| | | Yellow LED / Clear Lens | 2ASLR7L-XXXXX |
| | | White LED / Clear Lens | 2ASLR7L(S)-XXXXX |
| Integral I ED | | Yellow LED / Yellow Lens | 2ASLR8L-XXXXX |
| Integral LED | Please mer | ntion the voltage required after the orde | ering code |
| | | | |
| Terroll | | Yellow LED Bulb / White Lens | 2ASL1LB-XXXXX |
| | | White LED Bulb / White Lens | 2ASL1LB(S)-XXXXX |
| | LED Bulb, BA9S type | Green LED Bulb / Green Lens | 2ASL3LB-XXXXX |
| TEXALES | 24V AC/DC, | Red LED Bulb / Red Lens | 2ASL4LB-XXXXX |
| and a state of the | 110VAC, 110VDC | Amber LED Bulb / Amber Lens | 2ASL5LB-XXXXX |
| 4105 | 230VAC, 220VDC | Blue LED Bulb / Blue Lens | 2ASL6LB-XXXXX |
| | | Yellow LED Bulb / Clear Lens | 2ASL7LB-XXXXX |
| | | White LED Bulb/ Clear Lens | 2ASL7LB(S)-XXXXX |
| | | Yellow LED Bulb / Yellow Lens | 2ASL8LB-XXXXX |
| LED Bulb | Please mer | ntion the voltage required after the orde | ering code |
| | | | - |
| | | Yellow LED / White Lens | 2ASLR1LF-XXXXX |
| | | White LED / White Lens | 2ASLR1L(S)-XXXXX |
| | Integral LED | Green LED / Green Lens | 2ASLR3LF-XXXXX |
| | 24V, 110V, 230V, AC | Red LED / Red Lens | 2ASLR4LF-XXXXX |
| | | Amber LED / Amber Lens | 2ASLR5LF-XXXXX |
| | | Blue LED / Blue Lens | 2ASLR6LF-XXXXX |
| All All All All All All All All | | Yellow LED / Clear Lens | 2ASLR7LF-XXXXX |
| 300 | | White LED / Clear Lens | 2ASLR7LF(S)-XXXXX |
| | | Yellow LED / Yellow Lens | 2ASLR8LF-XXXXX |
| Flasher | Please mer | ntion the voltage required after the orde | |
| | | | |
| | | | XXXXX |
| | Ч, <u>р</u> | | |
| 1 | Stayput | | 3P |
| | 0 0 | | |
| 2 0 | Y | | |
| • | Spring return | | 3PSR |
| 0 | 0 | | |
| 3 | 12. | | |
| | Spring return | Right | 3PSRR |
| 4 0 | 0 0 | | |
| 200 | Spring return | | 3PSRL |
| | ·•· | XXXXX - Denotes Standard Executio | n |

| PILOT LIGHTS WI | THBULB | | |
|--|--|-------------------|------------------------|
| | ТҮРЕ | COLOUR | ORDERING CODE |
| | Pilot Light | | |
| | | \A/bite | |
| | Filement Dulk | White | 2PLB1 |
| | Filament Bulb | Green | 2PLB3 |
| Therease (c | 6V to 130V AC/DC | Red | 2PLB4 2PLB5 |
| and the second | | Amber Blue | 2PLB5 2PLB6 |
| 14 | | Clear | 2PLB0 2PLB7 |
| | | Yellow | 2PLB7 2PLB8 |
| Direct Connection | | renow | ZFLDO |
| 0 | | | |
| ** | | White | 2PLBR1 |
| | Filament Bulb | Green | 2PLBR3 |
| TRUNCE CO | 24V,48V,110V, | Red | 2PLBR4 |
| and a state of the | 230V, AC/DC | Amber | 2PLBR5 |
| | | Blue | 2PLBR6 |
| | | Clear | 2PLBR7 |
| | | Yellow | 2PLBR8 |
| Connection with Resistor | | _ | |
| | | | |
| | | White | 2PLBR1240AC |
| | Filament Bulb | Green | 2PLBR3240AC |
| A DECEMBER OF | 230V AC | Red | 2PLBR4240AC |
| | | Amber | 2PLBR5240AC |
| | | Blue | 2PLBR6240AC |
| | | Clear | 2PLBR7240AC |
| Connection with | 1 | Yellow | 2PLBR8240AC |
| Resistor+Diode | | | |
| 0 | | | |
| | | White | 2PLBT1XX/YYY |
| | Filament Bulb | Green | 2PLBT3XX/YYY |
| | | Red | 2PLBT4XX/YYY |
| 17853606 0 299487 240- | Primary volt. Secondary Volt. | Amber | 2PLBT5XX/YYY |
| No. Constant | 110 V 6V | Blue | 2PLBT6XX/YYY |
| 101 | 12V | Clear | 2PLBT7XX/YYY |
| | 230 V 24V | Yellow | 2PLBT8XX/YYY |
| Connection with | | | XX - Secondary Voltage |
| Transformer | | | YYY - Primary Voltage |
| e.g i ransformer type pilot li | ight, red colour, 220 V input and 24 out | out. Type no. 2PL | ВТ4220/24 |

TEKNIC

| PILOT LIGHTS V | VITH LED | | |
|-------------------|-------------------------|--|---------------|
| | Туре | Colour of Lens / LED | Ordering Code |
| | Pilot Light | | |
| | | | |
| | | Yellow LED / White Lens | 2PLBR1L |
| | Integral LED | White LED / White Lens | 2PLBR1L(S) |
| | 6V, 12V, 24V, 48V AC/DC | Green LED / Green Lens | 2PLBR3L |
| N. | 110VAC, 110VDC, | Red LED / Red Lens | 2PLBR4L |
| BURNES C | 230VAC, 220VDC | Amber LED / Amber Lens | 2PLBR5L |
| an and a second | | Blue LED / Blue Lens | 2PLBR6L |
| | | Yellow LED / Clear Lens | 2PLBR7L |
| | | White LED / Clear Lens | 2PLBR7L(S) |
| | | Yellow LED / Yellow Lens | 2PLBR8L |
| Integral | Please mention | on the voltage required after the ordering | g code |
| | | | |
| States and | LED Bulb | Yellow LED Bulb / White Lens | 2PLB1LB |
| An | BA9S type | White LED Bulb / White Lens | 2PLB1LB(S) |
| | 24V AC/DC, | Green LED Bulb / Green Lens | 2PLB3LB |
| | 110VAC, 110VDC | Red LED Bulb / Red Lens | 2PLB4LB |
| LUNG CONCE | 230VAC, 220VDC | Amber LED Bulb / Amber Lens | 2PLB5LB |
| and a second | | Blue LED Bulb / Blue Lens | 2PLB6LB |
| 1103 | | Yellow LED Bulb / Clear Lens | 2PLB7LB |
| | | White LED Bulb/ Clear Lens | 2PLB7LB(S) |
| | | Yellow LED Bulb / Yellow Lens | 2PLB8LB |
| LED Bulb | Please mention | on the voltage required after the ordering | g code |
| | | | |
| | Integral LED | Yellow LED / White Lens | 2PLBR1LF |
| | 24V, 110V, 230V, AC | White LED / White Lens | 2PLBR1LF(S) |
| | | Green LED / Green Lens | 2PLBR3LF |
| | | Red LED / Red Lens | 2PLBR4LF |
| ANA TRATEICO O | | Amber LED / Amber Lens | 2PLBR5LF |
| LED LE CONTRACTOR | | Blue LED / Blue Lens | 2PLBR6LF |
| (E | | Yellow LED / Clear Lens | 2PLBR7LF |
| | | White LED / Clear Lens | 2PLBR7LF(S) |
| | | Yellow LED / Yellow Lens | 2PLBR8LF |
| Flasher | Please mention | on the voltage required after the ordering | g code |
| | | | |
| | Integral LED | Yellow LED / White Lens | 2PLBR1LU |
| (10) | 24V upto 240V AC / DC | White LED / White Lens | 2PLBR1LU(S) |
| | | Green LED / Green Lens | 2PLBR3LU |
| | | Red LED / Red Lens | 2PLBR4LU |
| TROUGH | | Amber LED / Amber Lens | 2PLBR5LU |
| | | Blue LED / Blue Lens | 2PLBR6LU |
| | | Yellow LED / Clear Lens | 2PLBR7LU |
| | | White LED / Clear Lens | 2PLBR7LU(S) |
| | | Yellow LED / Yellow Lens | 2PLBR8LU |
| Universal | | | |

TEKNIC

| TWIN ILLUMINA | TED WITH FILAMENT BUL | В | | | |
|--|--|----------------------|--------------------------|--|--|
| | Туре | COLOUR | ORDERED CODE | | |
| | Twin Illuminated 1 Flush, 1 Projecting (IO) Marked | | | | |
| 0 | | | | | |
| | Filament bulb | Red button | 2ATL5 F3P4 (IO) | | |
| | 6V to 130V AC/DC | Green button | | | |
| Tableton (| | Amber lens | | | |
| and a second | | | | | |
| | | | | | |
| Direct Connection | | | | | |
| Direct Connection | Please mention the vo | Itage required aft | er the ordering code | | |
| | | | | | |
| (at) | Filament bulb | Red button | 2ATLR5 F3P4 (IO) | | |
| | 24 V,48V,110V,230V AC/DC | Green button | | | |
| TER | | Amber lens | | | |
| Ser Ser | | | | | |
| | | | | | |
| | | | | | |
| Connection with | 1 | | | | |
| Resistor | Please mention the vo | Itage required after | er the ordering code | | |
| | | | | | |
| A A A A A A A A A A A A A A A A A A A | Filament bulb | Red button | 2ATLR5 F3P4 (IO) 230V AC | | |
| | 230V AC | Green button | | | |
| Thomas and the | | Amber lens | | | |
| and a state of the | | | | | |
| 400 | | | | | |
| | | | | | |
| Connection with | | | | | |
| Resistor+Diode | | | | | |

TWIN ILLUMINATED WITH LED TYPE COLOUR **ORDERING CODE** Twin Illuminated, Flush (IO) Marked 2ATLR5LF3F4 (IO) Integral LED Green 6V, 12V, 24V, 48V AC/DC Red 110VAC, 110VDC, Amber lens 230VAC, 220VDC Please mention the voltage required after the ordering code Integral LED LED Bulb, BA9S type Green 2ATL5LBF3F4 (IO) 24V AC/DC, Red 110VAC, 110VDC Amber lens 230VAC, 220VDC LED Bulb Please mention the voltage required after the ordering code Green 2ATLR5LF3F4 (IO)F Integral LED Red 24V, 110V, 230V, AC Amber lens Please mention the voltage required after the ordering code Flasher

TWIN ILLUMINATED WITH BULB COLOUR Туре **ORDERED CODE** Twin Illuminated Flush (IO) Marked **Filament bulb** Red button 2ATL5 F3F4 (IO) 6V to 130V AC/DC Green button Amber lens **Direct Connection** Please mention the voltage required after the ordering code 2ATLR5 F3F4 (IO) Red button **Filament bulb** 24 V,48V,110V,230V AC/DC Green button Amber lens Connection with Resistor Please mention the voltage required after the ordering code 2ATLR5 F3F4 (IO) 230V AC Filament bulb Red button 230V AC Green button Amber lens Connection with Resistor+Diode

| TWIN ILLUMINAT | ED WITH LED | | | |
|---|--|---|-------------------------|--|
| | ТҮРЕ | COLOUR | ORDERING CODE | |
| | Twin Illuminated 1 Flu | sh, 1 Projecti | ng (IO) Marked | |
| | | Croop | | |
| | Integral LED | Green | 2ATLR5LF3P4 (IO) | |
| | 6V, 12V, 24V, 48V AC/DC | Red | | |
| 2 LALLES AD AN | 110VAC, 110VDC, 230VAC, 220VDC | Amber lens | | |
| the television | Please mention the voltage required after the ordering code | | | |
| Upp | Flease mention the | e voltage required | | |
| Integral LED | | | | |
| TO COMPANY OF THE PARTY OF THE | LED Bulb,BA9S type 24V AC/DC, 110VAC, 110VDC 230VAC, 220VDC | Green Red Amber lens | 2ATL5LBF3P4 (IO) | |
| LED Bulb | Please mention the | e voltage required | after the ordering code | |
| | Integral LED | Green | 2ATLR5LF3P4 (IO)F | |
| | 24V, 110V, 230V, AC | Red | | |
| | 244, 1104, 2304, AC | Amber lens | | |
| | | 7 111001 10113 | | |
| C. | | | | |
| | | | | |
| Flasher | Please mention the | Please mention the voltage required after the ordering code | | |



| ILLUMINATED MU | JSHROOM WITH BULB | | | | |
|--|---------------------------------|--------|---------------|--|--|
| | TYPE | COLOUR | ORDERING CODE | | |
| | Illuminated Mushroom, Momentary | | | | |
| 0 | | Ded | 201 M4 | | |
| AT A REPART | Filament bulb | Red | 2ALM4 | | |
| | 6V to 130V AC/DC | | | | |
| TRANSPORT | | | | | |
| and | | | | | |
| | | | | | |
| | | | | | |
| Direct Connection | | | | | |
| | Filament bulb | Red | 2ALRM4 | | |
| | 24 V,48V,110V,230V AC/DC | Reu | ZALRIVI4 | | |
| | 24 V,46V,110V,230V AC/DC | | | | |
| TRANSFER | | | | | |
| Di managana ang | | | | | |
| | | | | | |
| | | | | | |
| Connection with | | | | | |
| Resistor | | | | | |
| 0 | Filament bulb | Red | 2ALRM4 230AC | | |
| | 230V AC | Neu | | | |
| | | | | | |
| TELEVICE (C | | | | | |
| The second secon | | | | | |
| | | | | | |
| Connection with | | | | | |
| Connection with Resistor+Diode | | | | | |
| RESISIOI+DIQUE | | | | | |

| ILLUMINATED MUSHROOM WITH LED | | | | | |
|-------------------------------|--|---------------------|------------------------------|--|--|
| | ТҮРЕ | COLOUR | ORDERING CODE | | |
| | Illuminated Mushroom, Momentary | | | | |
| | Integral LED 6V, 12V, 24V, 48V AC/DC 110VAC, 110VDC, 230VAC, 220VDC | Red | 2ALRM4L | | |
| Integral LED | Please mention th | e voltage required | after the ordering code | | |
| | LED Bulb, BA9S type 24V AC/DC, 110VAC, 110VDC 230VAC, 220VDC | Red | 2ALM4LB | | |
| LED Bulb | Please mention th | e voltage required | after the ordering code | | |
| | Integral LED 24V, 110V, 230V, AC | Red | 2ALRM4LF | | |
| Flasher | Please mention | on the voltage requ | ired after the ordering code | | |

ILLUMINATED MUSHROOM WITH BULB TYPE COLOUR ORDERING CODE Illuminated Mushroom, Push Pull Filament bulb 2ALMPP4 Red 6V to 130V AC/DC **Direct Connection** Red 2ALRMPP4 Filament bulb 24 V,48V,110V,230V AC/DC Connection with Resistor Filament bulb Red 2ALRMPP4 230AC 230V AC Connection with Resistor+Diode

| | METALLIC | | | | |
|----------------|---|---------------------|-------------------------|--|--|
| ILLUMINATED MU | IUSHROOM WITH LED | | | | |
| | ТҮРЕ | COLOUR | ORDERING CODE | | |
| | Illuminated Mushroom, Push pull | | | | |
| | Integral LED 6V, 12V, 24V, 48V AC/D 110VAC, 110VDC, 230VAC, 220VDC | Red C | 2ALRMPP4L | | |
| Integral LED | Please mention th | ne voltage required | after the ordering code | | |
| | LED Bulb, BA9S type 24V AC/DC, 110VAC, 110VDC 230VAC, 220VDC | Red | 2ALMPP4LB | | |
| LED Bulb | Please mention th | ne voltage required | after the ordering code | | |
| | Integral LED 24V, 110V, 230V, AC | Red | 2ALRMPP4LF | | |
| Flasher | Please mention th | ne voltage required | after the ordering code | | |

| CONTACT ELEM | ENTS | | | | |
|---------------------------------------|-----------------|-----------------------------|------------------|----|--|
| | ТҮРЕ | | | | |
| | P/ | ANEL MOUNTI | NG | | |
| and to cent | NORMALLY | OPEN SILVER | CONTACTS | S1 | |
| | NORMALLY C | CLOSED SILVE | R CONTACTS | S2 | |
| | NORMALLY | OPEN GOLD | CONTACTS | S3 | |
| C TREASE | NORMALLY | CLOSED GOLD | O CONTACTS | S4 | |
| · · · · · · · · · · · · · · · · · · · | B | ASE MOUNTIN | IG | | |
| | NORMALLY | OPEN SILVER | CONTACTS | S5 | |
| | NORMALLY C | LOSED SILVE | R CONTACTS | S6 | |
| | NORMALLY | NORMALLY OPEN GOLD CONTACTS | | | |
| | NORMALLY | CLOSED GOLD | CONTACTS | S8 | |
| | SPECIAL PURI | POSE ACTUA | TORS | | |
| | TYPE | COLOUR | ORDERING CODE | | |
| | | | 045400 | | |
| | Flush Relay | White | 2AF1RR | | |
| | | | 04 500 0 | | |
| | Reset Actuators | Black | 2AF2RR | | |
| | | Black Green | 2AF3RR | | |
| | | Black Green Red | 2AF3RR 2AF4RR | | |
| | | Black Green | 2AF3RR | | |

Control and signalling devices Ø 22.5

Ordering instructions 1. Actuators, illuminated actuators, contact elements, lense assemblies & pilot lights can all be ordered separately or in combination. 2. The type numbers of contact elements are : NO: Actuator mounting : S1, S3 Note: Individual mounting S3, S4, S7, S8 are gold plated contacts : S5, S7 NC: Actuator mounting : S2. S4 suitable for low voltage, low current Individual mounting : S6, S8 switching circuits < 25 mA 3. Some examples of type numbers: :Type 2AF3 is flush actuator, GREEN Actuator Pilot light :Type 2PLB4 is pilot light without series resistor, RED Complete pushbutton : Type 2PSF411 is flush pushbutton, RED, with 1NO+1NC contact elements 1NC element S2 1NO element S1 Colour actuator, RED Ø 22.5 flush type pushbutton Accessories and spares ERGEN Legend plates Legend plates 30 x 40 mm are supplied with the following standard texts: TRIP START FORWARD UP OPEN AUTO SLOW RESET ON RIGHT REVERSE DOWN CLOSE HAND FAST INCH OFF LEFT POWER ON STOP STOP Legend plate Ø 60 mm yellow with black characters for EMERGENCY STOP **Filament bulb** Filament bulb type BA9S, OAL 28mm 30 48 60 130 : 6 12 24 Voltage Watts : 1 2 2 2 2 2 2.6 LED bulb LED multichip bulb type BA9S, OAL 28mm W V Colour White Green Red Amber Blue Yellow Type No. : MCB9124 MCB9324 MCB9424 MCB9524 MCB9624 MCB9824 24 0.5 MCB91110 MCB93110 MCB94110 MCB95110 MCB96110 MCB98110 110 1.0 MCB91230 MCB93230 MCB94230 MCB95230 MCB96230 MCB98230 230 1.0 Lenses Colour of lense : Translucent Green Red Amber Blue Clear Yellow White For pilot lights 2PLL1 2PLL3 2PLL4 2PLL5 2PLL6 2PLL7 2PLL8 with filament bulb For illuminated 2LAL1 2LAL3 2LAL4 2LAL5 2LAL6 2LAL7 2LAL8 actuators with filament bulb (flush/projecting) For pilot lights 2PLL1L 2PLL3L 2PLL4L 2PLL5L 2PLL6L 2PLL7L 2PLL8L with LED For illuminated 2LAL1L 2LAL3L 2LAL4L 2LAL5L 2LAL6L 2LAL7L 2LAL8L actuators with LED (flush/projecting) naton Push Push mechanism for converting spring return actuator into stay put type Type No.: 2PPM --22.5 Adaptor for fixing Ø 22.5 devices in Ø 30.5 cutout. Type No. : 2ADP 30.5 **Fixing flange** Type No. : 2BRK Padlock For mushroom actuator : type no. 2PAM For projecting actuator : type no. 2PAP Boot for non ill. flush actuator Boots for booted actuators Colour of Boot : Clear Yellow Red Blue Colour of Boot : Black Green **2BT8** Type No : 2BT7 2BT6 **2BT4** : 2BT2 **2BT3** Type No Boot for twin ill. actuator Boot for twin actuator Boot for flush / proj. ill. actuator Clear Colour of Boot : Colour of Boot : Clear Colour of Boot : Clear : 2ATBT7 Type No : 2ATLBT7 Type No : 2ALBT7 Type No **Bulb** extractor Type No. : 2BA9SE Blanking plug for Ø 22.5 hole, black Type No. : 2BP2

| Bulbs | | | | | | | | |
|---|---|--|----------------------|------------|----------------|------------------|----------|--------|
| Filament Bulb | s type BA98 | S | | | | | | |
| Voltage: | 6 | 12 | 24 | 30 | 48 | 60 | 130 | |
| Watts : | 1 | 2 | 2 | 2 | 2 | 2 | 2.6 | |
| | | | | | | | | |
| Multichip LED | type BA9S | | | | | | | |
| Colour: | White | Green | Red | Amber | Blue | Yellow | | |
| Code : | MCB91 | MCB93 | MCB94 | MCB95 | MCB96 | MCB98 | | |
| Please pu | it supply vo | ltage 24 / 48 / | / 110AC / 110 | DC / 230AC | 220 DC after t | he part no. of L | ED bulbs | |
| | | | | | | | | |
| Lenses | | | | | | | | |
| Colour of Lens: | | TransWhite | Green | Red | Amber | Blue | Clear | Yellow |
| For Pilot lights with Filament Bulb | | 2PLL1 | 2PLL3 | 2PLL4 | 2PLL5 | 2PLL6 | 2PLL7 | 2PLL8 |
| | | | | | | | | |
| For Pilot lights | s with LED | 2PLL1L | 2PLL3L | 2PLL4L | 2PLL5L | 2PLL6L | 2PLL7L | 2PLL8L |
| For Illuminated Actuators (Fil. bulb) | | 2LAL1 | 2LAL3 | 2LAL4 | 2LAL5 | 2LAL6 | 2LAL7 | 2LAL8 |
| | | | | | | | | |
| Illuminated Act | tuators LED | 2LAL1L | 2LAL3L | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| | tuators LED | 2LAL1L | 2LAL3L | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots | | | | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots Boots for non | -illuminated | flush actuate | | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots Boots for non Colour of | -illuminated | flush actuat Transparent | | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots Boots for non | -illuminated | flush actuate | | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I | -illuminated Boot: No. | flush actuate Transparent 2BT7 | | 2LAL4L | 2LAL5L | 2LAL6L | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boot | -illuminated Boot: No. ted actuato | I flush actuat Transparent 2BT7 | ors | | | | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boo Colour of | -illuminated Boot: No. ted actuator f Boot | I flush actuat Transparent 2BT7 r s Black | ors Green | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boot | -illuminated Boot: No. ted actuator f Boot | I flush actuat Transparent 2BT7 | ors | | | | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boor Colour of Type I | -illuminated Boot: No. ted actuator f Boot No. | flush actuate Transparent 2BT7 rs Black 2BT2 | ors Green | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boo Colour of Type I Boot for illum | -illuminated Boot: No. ted actuator f Boot No. inated flush | flush actuate Transparent 2BT7 rs Black 2BT2 actuators | ors Green | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boot Colour of Type I Boot for illumi Colour of | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot | flush actuate Transparent 2BT7 rs Black 2BT2 | ors Green | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boo Colour of Type I Boot for illum | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot | I flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent | ors Green | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boor Colour of Type I Boot for illumi Colour of Type I | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. | I flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boor Colour of Type I Boot for illumi Colour of Type I | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. | flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 ated actuators | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boor Colour of Type I Boot for illumi Colour of Type I | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. non-illumina f Boot | I flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boo Colour of Type I Boot for illumi Colour of Type I Boot for twin i | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. non-illumina f Boot | flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 ated actuators Transparent | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boot Colour of Type I Boot for illumi Colour of Type I Boot for twin | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. non-illumina f Boot No. | I flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 ated actuators Transparent 2ATBT7 | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |
| Boots Boots for non- Colour of Type I Boots for boo Colour of Type I Boot for illumi Colour of Type I Boot for twin i | -illuminated Boot: No. ted actuator f Boot No. inated flush Boot No. non-illumina f Boot No. | I flush actuate Transparent 2BT7 rs Black 2BT2 actuators Transparent 2ALBT7 ated actuators Transparent 2ATBT7 | ors Green 2BT3 | Red | Blue | Yellow | 2LAL7L | 2LAL8L |



Bulb extractor

Type No.: 2BA9SE

Blanking plug for 22.5 Ø hole, Black Type No.: 2BP2

 Padlock

 Padlock for mushroom actuator : Ordering Code 2PAM

 Padlock for projecting actuator : Ordering Code 2PAP

Fixing Flange Type No. : 2BRK

Adaptor for fixing 22.5 Ø devices in 30.5 Ø cutout. Type No. : 2ADP

Push Push Mechanism to convert momentary actuators into latching type Type No. : 2PPM

Accessories and spares

Standard Legend Plates

| | 2 POSITION | | | | | |
|-------------------------------|---------------|--------------|------------------------------|------------|----------|---------------|
| LEGEND | ORDERING CODE | Price in Rs. | | LEGEND | | ORDERING CODE |
| START | 2LP01 | 10.50 | ST | ART | STOP | 2LP28 |
| STOP | 2LP02 | 10.50 | UP | | DOWN | 2LP29 |
| FORWARD | 2LP03 | 10.50 | ON | | OFF | 2LP30 |
| REVERSE | 2LP04 | 10.50 | REV. | | FWD. | 2LP31 |
| UP | 2LP05 | 10.50 | AUTO | | HAND | 2LP32 |
| DOWN | 2LP06 | 10.50 | LOCAL | | REMOTE | 2LP33 |
| OPEN | 2LP07 | 10.50 | | | II | 2LP34 |
| CLOSE | 2LP08 | 10.50 | 0 | | I | 2LP35 |
| AUTO | 2LP09 | 10.50 | | | | |
| HAND | 2LP10 | 10.50 | | | | |
| SLOW | 2LP11 | 10.50 | 3 POSITION | | | |
| FAST | 2LP12 | 10.50 | LEGEND | | | ORDERING CODE |
| RESET | 2LP13 | 10.50 | HAND | 0 | AUTO | 2LP36 |
| INCH | 2LP14 | 10.50 | SLOW | OFF | FAST | 2LP37 |
| ON | 2LP15 | 10.50 | UP | OFF | DOWN | 2LP38 |
| OFF | 2LP16 | 10.50 | Ι | 0 | II | 2LP39 |
| RIGHT | 2LP17 | 10.50 | | | | |
| LEFT | 2LP18 | 10.50 | | | | |
| TRIP | 2LP19 10.50 | | OTHERS | | | |
| POWER ON | 2LP20 | 10.50 | | LEGEND | | ORDERING CODE |
| LOCAL | 2LP21 | 10.50 | | | 2LP40 | |
| REMOTE | 2LP22 | 10.50 | EMERGENCY STOP (60mm) 2 | | 2LP41 | |
| TEST | 2LP23 | 10.50 | | | | |
| RUN | 2LP24 | 10.50 | | | | |
| R PHASE | 2LP25 | 10.50 | | | | |
| Y PHASE | 2LP26 | 10.50 | | | | |
| B PHASE | 2LP27 | 10.50 | | | | |
| | | | | | | |
| Legend Plates (Aluminum) from | | | Legend Plate 2LP41 (Plastic) | | | |
| 2LPO1 to 2LP40 |) | | Yellow with Black characters | | | |
| | | | | for EMERGE | NCY STOP | |

Common types of control and signalling devices Ø 22.5

| Description | Type of Actuator or Lense Assembly | Actuator | ontact Elements NO = S1 NC = S2 or Lamp Holder | Type of complete Control or Signalling Device |
|--|--|--|--|---|
| Firsh Darbhan | 2AF3 | Green | 1NO | 2PSF310 |
| Flush Pushbutton | 2AF8 | Yellow | 2NO+1NC | 2PSF821 |
| Projecting Pushbutton | 2AP2 | Black | 2NC | 2PSP202 |
| Frojecting Fusibution | 2AP4 | Red | 3NO+3NC | 2PSP433 |
| Mushroom Pushbutton Spring | 2AM2 | Black | 1NO+1NC | 2PSM211 |
| return | 2AM4 | Red | 1NC | 2PSM401 |
| Mushroom Pushbutton | 2AML2 | Black | 1NC | 2PSML201 |
| latching turn to release | 2AML4 | Red | 2NO+2NC | 2PSML422 |
| Mushroom Pushbutton latching, key to release | 2AMLKB4 | Red | 1NO+1NC | 2PSMLKB411 |
| Selector Actuator(2Pos) | 2AS2-2P | Black | 1NO | 2PSS210-2P |
| Selector Actuator(3Pos) | 2AS2-3P | Red | 1NO+1NC | 2PSS211-3P |
| Key Actuator (2Pos), Key withdrawab | le 2AK2-2PB | | 1NO | 2PSK210-2PB |
| in both positions Key Actuator (3Pos), Key withdrawab in left & right positions | le 2AK2-3PB | ÷ | 1NO+1NC | 2PSK211-3PB |
| Selector illuminated pushbutton, 2 position with resistance and diode (230V) | 2ASLR3-2P230AC | Green | 1NO+1NC | 2PSSLR311-2P230AC |
| Selector illuminated pushbutton, 3 position with resistance (24V) | 2ASLR4-3P24 | Red | 1NO+1NC | 2PSSLR411-3P24 |
| Pilot light for direct | 2PLLA3 | Green | 2LHB24 | 2PLB324 |
| connection upto 130V | 2PLLA4 | Red | 2LHB130 | 2PLB4130 |
| Pilot light through resistor and diode | 2PLLA5 | Amber | 2LHBR230AC | 2PLBR5230AC |
| for 230 V AC. Bulb:130V. | 2PLLA6 | Blue | 2LHBR230AC | 2PLBR6230AC |
| Pilot light with transformer for | 2PLLA4 | Red | 2LHBT230/24 | 2PLBT4230/24 |
| for 230 V Bulb:24 V. | 2PLLA3 | Green | 2LHBT230/24 | 2PLBT3230/24 |
| Flush illuminated pushbutton with integral LED for 24 V DC | 2ALRF3L24DC | Green | 1NO+1NC | 2PSLRF3L1124DC |
| Projecting illuminated pushbutton with integral LED 230 V AC | 2ALRP4L230AC | Red | 1NO+1NC | 2PSLRP4L11230AC |
| Pilot Light with LED bulb for 110 V Bulb:110 V | 2PLLA5L | Amber | 2LHB110 | 2PLB5LB110 |
| Twin Pushbutton marked "I O" | 24752 5410 | Flush-Black | 1 NO | 2PSTF210-F401-IO |
| Flush - Flush | 2ATF2-F4-IO | Flush-Red | 1 NC | |
| Twin Pushbutton not marked | 2ATF3-P4 | Flush-Gree | n 1NO+1NC | |
| Flush - Projecting | | Proj-Red | 1NO+1NC | 2PSTF311-P411 |
| Twin Illuminated Pushbutton marked "I O" Flush - Flush direct connection (130V) | 2ATL3-F2 -F4 IO130 | Lense-Gree Flush-Black Flush-Red | | 2PSTL3F211-F401-I0130 |
| Twin Illuminated Pushbutton not marked Flush - Projecting with resistance (24V) | 2ATLR5-F3 -P424 | Lense-Amb Flush-Gree ProjRed | | 2PSTLR5F310-P40124 |

Other products include control and signaling devices Ø 22.5 (plastic series), Ø 30.5 and aluminium/plastic control stations