



INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS: VLS LIMIT SWITCH BOX - SWITCH TYPE 004 - FLAT SWITCH OPERATOR

SUITABLE FOR DIRECT MOUNT TO KINETROL ACTUATORS SIZE RANGE: 03 TO 15 & DISCRETE MOUNT OPTION.

1. Remove temporary threaded plugs.
2. Customer to supply and fit cable glands to maintain IP54 Environmental Protection. Second conduit entry can be plugged using a suitable IP67 plug or ordered from Kinetrol with plug already fitted.
3. Connect cable terminals as required (wiring diagram shown below).
4. Materials of construction:
 - Main body & lid - Zinc or Aluminium alloy diecast epoxy painted.
 - Shaft - Glass filled nylon 6.6./Zinc plated mild steel
 - Switch body - Glass filled nylon 6.6.
 - Terminal strip - Gemin (KRG).
 - Rubber seals - NBR. (Other mat'ls available on request)
 - Switch cables - PVC coated copper.
 - Switch contacts - Fine silver.

Resistive load ratings for standard microswitches for a minimum of 10⁶ operations:

VOLTAGE	RESISTIVE LOAD
125 V ac	3.5 A
250 V ac	2.4 A
Up to 12 V dc	15 A
Up to 24 V dc	10 A
Up to 48 V dc	1.8 A
Up to 250 V dc	0.25 A

Multiplication factors for non-resistive loads:
 Steady state tungsten lamp load: X 0.1
 Steady state inductive load: X 0.2
 Peak inductive load: X 1.0

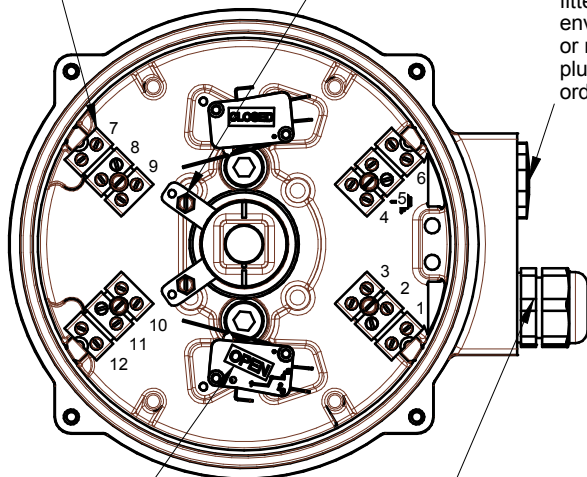
5. Operating conditions:
 - Minimum operating time: 20ms.
 - Maximum angle of travel: 110°
 - Vibrating conditions: 4G @ 100Hz
 - Ambient temperature range: -40°C to +80°C.
 - Ensure operating loads given opposite are not exceeded.
6. If direct mount units supplied separately this box must be kept sealed in its polythene bag during storage. The fixing screws and 'o' rings are provided. Only use replacement parts supplied by Kinetrol. Assemble as shown below.
7. Discrete mount units: Discrete mount units are designed to be bracket mounted to the actuator and are supplied with either a male Kinetrol square or a namur VDI/VDE interface shaft insert. Ensure mounting arrangement does not apply side or end load to the switch box shaft.
8. When mounting to 03 actuators mount kit SP/ASP1620 is required. When mounting to 05 actuators mount kit SP/ASP1621 is required.
9. Open/Closed label supplied loose - to be fitted by user in desired position.

Additional optional terminal blocks available for connection of solenoid valves. (Depending on ordering code)

Strikers can be adjusted to suit actuator stroke: Slacken M3 screw.

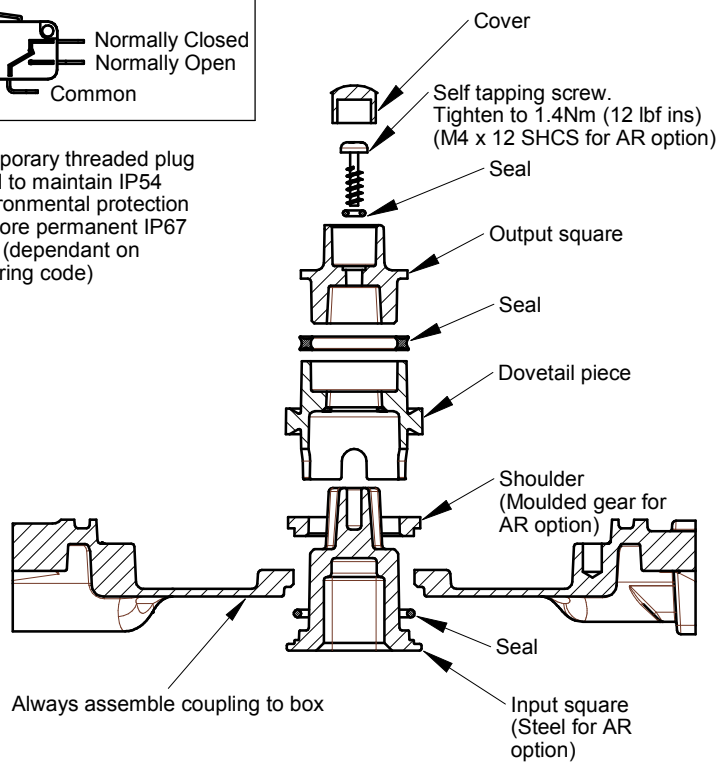


Temporary threaded plug fitted to maintain IP54 environmental protection or more permanent IP67 plug (dependant on ordering code)



Label position for illustration, shown anti-clockwise rotation opening.

M20 x 1.5
1/2"-14 NPS
Conduit thread
dependent on market
& ordering code.



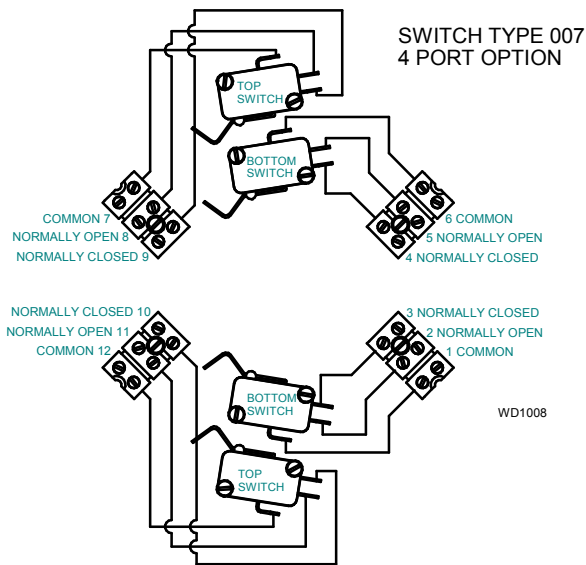
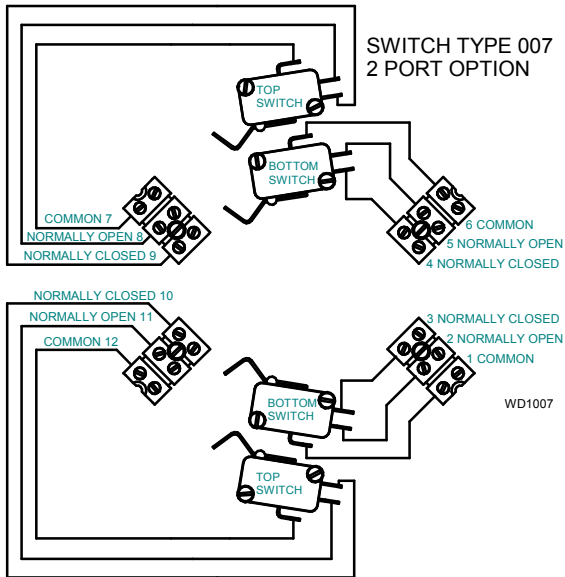
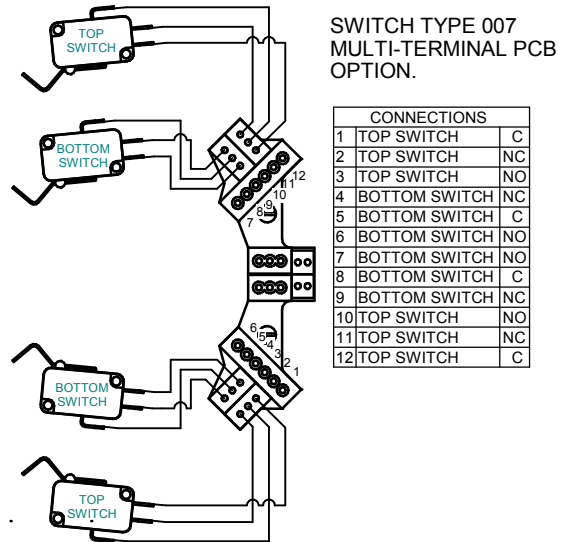
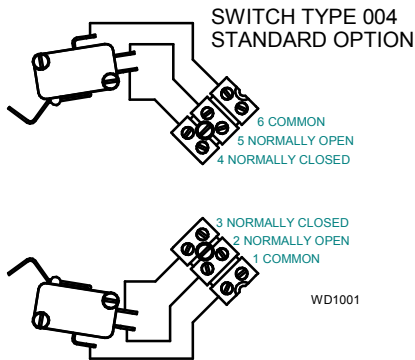


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WIRING DIAGRAMS:

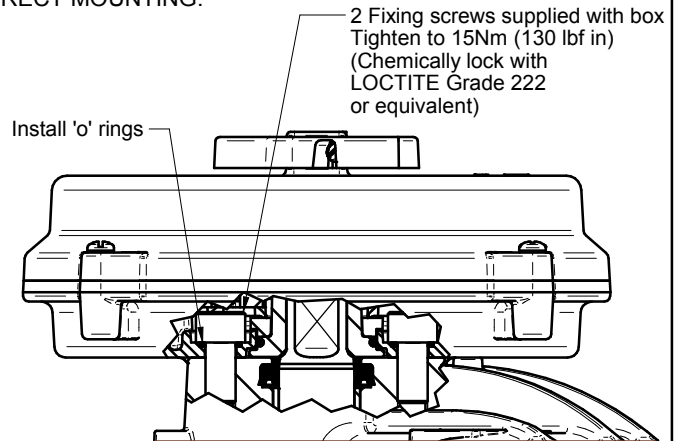
ENSURE EXTERNAL WIRING INSULATION LIES WITHIN THROAT OF TERMINAL

CABLE RANGE:
0.5mm² TO 2.5mm²

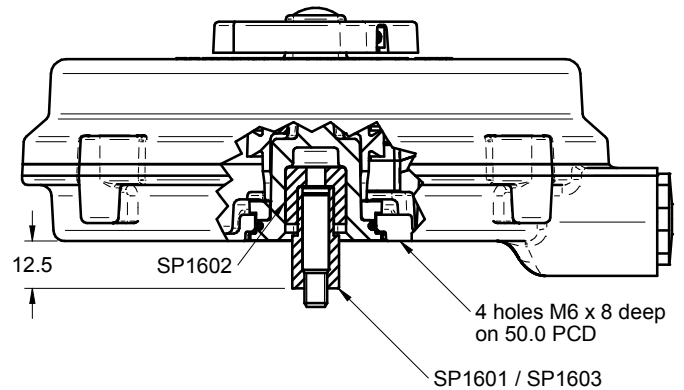


MOUNTING:

DIRECT MOUNTING:



DISCRETE MOUNTING:



DISCRETE MOUNT BOX OPTION
SHOWN WITH KINETROL SQ. (SP1601)
IT CAN ALSO BE FITTED WITH
DISCRETE SHAFT TO VDI/VDE 3845 USING SP 1603