



11 Hoist Limit Switch

11.1 Upper and Lower Limit Switch

Upper and lower limit switches are furnished as standard on any LM electric chain hoist except with the DigiChain option. Limit switches are not available with DigiChain option. This weight-operated limit switch, which is only effective if the hoist is mounted in the upright (standard) position, is an automatic reset, control circuit type. The switch housing is recessed into the underside of the hoist body.

The upper and lower limit switches are emergency over-travel protection and are not to be used as automatic stops.

The hook block activates the upper limit switch as it approaches the hoist body and once it is activated, only the “up” circuit is opened. When the hook block is lowered to its lowest limit of travel, the fall stop, mounted to the free end of the load chain, activates the lower limit switch, which opens the “down” circuit only.

The lower limit position is adjustable from maximum lift. It is adjusted by repositioning the fall stop assembly on the free end of the load chain. The fall stop shall always be located at least 6 inches [150mm] from the end of the chain. The upper limit position is adjustable only when an additional fall stop assembly (optional) is added between the hook block and the hoist body.

11.2 Rotary Limit Switch Option

A rotary (geared) type limit switch is available as an option for each hoist body size. The switches are wired to the control circuits. The limit switch enclosure has a protection rating of IP-55 [NEMA 3R].

Once the limit switch is tripped, the load must travel at least eighteen inches [50cm] in the opposite direction to reset the switch.

The 2-position rotary limit switch is adjustable and provides over-travel protection for the upper and lower limits of hoist travel. The 4-position rotary limit switch is adjustable and provides over-travel protection for the travel limits of the hoist and can be set for two intermediary positions as needed.

When the rotary limit switch is mounted on the outside of the hoist body, it increases some of the outline dimensions of the hoist body. The table below shows the availability and location of the rotary limit switch for each hoist body.

Hoist Body	2 position / Location	4 Position / Location
LM1	Available / Inside	Not Available
LM05 Series II	Available / Inside	Not Available
LM05 Stepless	Available / Inside	Not Available
LM10	Available / Outside	Available / Outside
LM16	Available / Inside	Not Available
LM20	Available / Inside	Not Available
LM25	Available / Inside	Not Available