



ACTUATOR SPECIFICATIONS

THRUST MAX	SELF LOCK MAX	SPEED MAX	STROKE LENGTH mm	DUTY CYCLE %	MAX AMP
500 NEWTONS	500 NEWTONS	21 mm/S	40, 70, 100, 130	20	1.6

CIRCUIT DESCRIPTION

THE INTERNAL WIRING OF THE LA 12.1 ACTUATOR CONSISTS OF A FRACTIONAL HORSE POWER, 24VDC MOTOR WHICH IS GEARED TO DRIVE A SCREW THREAD WHICH WINDS THE PISTON EITHER IN OR OUT. ON THE PISTON ROD IS A MOULDED RAMP WHICH WINDS THE INTERNAL MICROSWITCHES OPEN STROKE LIMIT AND CLOSED STROKE LIMIT WHEN THE PISTON ROD REACHES THE FULLY EXTENDED OR FULLY RETRACTED POSITIONS.

WHEN THE PISTON ROD IS FULLY RETRACTED, THE CLOSED STROKE LIMIT IS IN THE NORMALLY OPEN POSITION AND THE OPEN STROKE LIMIT IS IN THE NORMALLY CLOSED POSITION. WHEN J2 IS POSITIVE AND J1 IS NEGATIVE, VOLTAGE FLOWS THROUGH D4, J6, MOTOR, J5 AND OPEN STROKE LIMIT THROUGH TO J1. THE MOTOR THEN DRIVES THE PISTON ROD INTO THE EXTENDED POSITION, AND THE CLOSED STROKE LIMIT SWITCHES TO THE NORMALLY CLOSED POSITION. WHEN THE PISTON ROD IS FULLY EXTENDED, OPEN STROKE LIMIT IS SWITCHED TO THE NORMALLY OPEN POSITION, BREAKING THE CONTACT TO NEGATIVE J1 AND DISCHARGING THE MOTOR THROUGH D3. WHEN J1 IS MADE POSITIVE AND J2 IS NEGATIVE, VOLTAGE FLOWS THROUGH D1, J5, MOTOR, J6 AND CLOSED STROKE LIMIT THROUGH TO J2. THE MOTOR IS POWERED IN REVERSE AND THE PISTON ROD RETRACTS.

WHEN THE PISTON ROD BEGINS TO RETRACT THE OPEN STROKE LIMIT SWITCHES TO NORMALLY CLOSED. WHEN THE PISTON ROD IS FULLY RETRACTED THE CLOSED STROKE LIMIT SWITCHES TO NORMALLY OPEN, BREAKING THE CONTACT TO NEGATIVE J2 AND DISCHARGING THE MOTOR THROUGH D2.

DRAWN: A. HULME DATE: 6.3.96
INTERNAL CONNECTIONS & WIRING FOR LINAK
ACTUATOR TYPE LA 12.1 FOR USE ON HOMELIFT



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