



MCDONNELL No. 80 and No. E-8 High or Low Liquid Level Switches

For Installation on Oil Storage
Tanks For grade 2 fuel oil with a
specific gravity of 85 or greater.

These float operated switches can be used to control almost any desired program of measuring or regulating oil levels in storage tanks. Each switch is single pole, double throw so it can be wired to respond to high level or low level, to provide any of the following control functions:

- High Level Alarm, Signal or Cut-off
- Low Level Alarm, Signal or Cut-off
- Pump Control: Start pump at low level, stop at high level, to fill tank
- Pump Control Start pump at high level, stop at low level, to drain tank

These controls have a special seal which minimizes the risk of oil leakage into terminal housing even if there is a rupture, as a result of this safeguard they are Under-writers' Laboratories Incorporated Listed for service on oil storage tanks

The No. 80 and No. E-8 both have the same operating mechanism and differ only in method of installation. The No. 80 is mounted externally, with separate equalizing piping, it has tappings at top, bottom and sides for easy hook-up. The No. E-8 is designed to be threaded right in to 2% tapping in side of tank. (See installation drawing on other side)

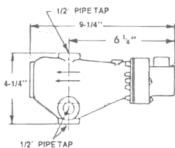


McDonnell No. 80, Designed for mounting with equalizing piping on oil storage tanks.

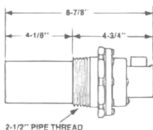


McDonnell No. E-8 has operating mechanism in threaded barrel casting which fits right in $2\frac{1}{2}$ " tapping in side of tank.

Dimension Details-McDonnell No. 80



Dimension Details-McDonnell No. E-8



ELECTRICAL RATINGS

AMPERE RATING

Motor Duty	120 VAC	240 VAC
Full Load	7.4	3.7
Locked Rotor	444	22.2

PILOT DUTY RATING

120 or 240V DC	57VA
120 or 240V AC	125VA

PRODUCT NUMBER No. 80 and No. E-8

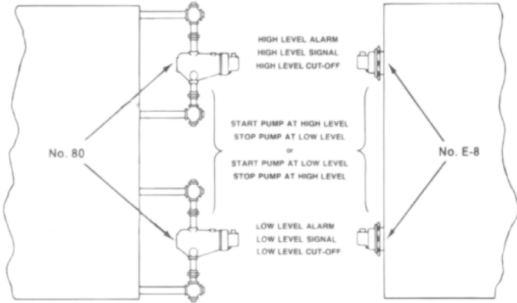
Maximum Operating Pressure	5 psi
Maximum Temperature	190° F

Installation should be performed by qualified personnel only in accordance with all applicable codes. Test operation of all controls before placing in service.



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Typical Installations on oil storage tanks



WIRING DIAGRAM

Illustration above shows McDonnell No. 80 Switch as installed with 1/2" equalizing piping. The McDonnell No. E-8 Switches are threaded directly into 2 1/2" tappings in side of tank.

Controls can be installed to provide alarm, signal or auto- matic cut-off at either high or low level, as shown in wiring diagram 1 and 2 at right. Or controls can be installed at both levels to start and stop oil transfer pumps-to fill or drain tanks automatically-as shown in wiring diagrams 3 and 4 at right.

IMPORTANT: Switch must be installed with No. 1 terminal at top, as shown in wiring diagrams. Terminals are marked on panel.

