

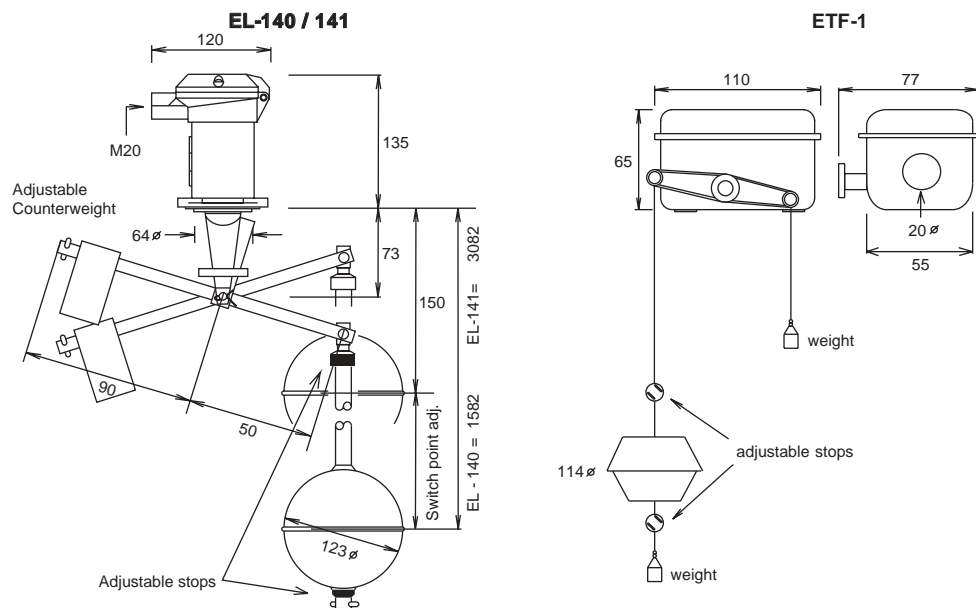
# LIQUID LEVEL SWITCHES VERTICAL

## EL-140 / 141, ETF-1

<p>■ To monitor liquid level in tanks and switch pumps or an alarm in the event of high or low level. Two switches are required when using both high and low level or limit and alarm functions. EL-140 / 141 switches contain magnets, therefore ensure that no metal objects are present in the liquid.</p>			<p>Volt free contacts Max. ambient 70°C Liquid sp. gravity &gt; 0.75 Enclosure Flammability: EL.. = Metal    ETF.. = UL94-HB Media : <b>ETF..</b> Oil, Diesel, Water, Non-aggressive fluids  <b>EL-140 / 141</b> Oil, Diesel, Water, Some aggressive fluids</p>				

Type	Mounting	Diff. mm	Max. Media Temp °C	Max. Media Press. Bar	230VAC SPDT	Media Contact Materials	Enclosure
<b>EL-140</b>	Vertical	30/1340 adj.	330	25	10(5)A	Stainless steel	IP65
<b>EL-141</b>	Vertical	30/2340 adj.	330	25	10(5)A	Stainless steel	IP65
<b>ETF-1</b>	Vertical	30/900 adj.	65	5	10(5)A	Nylon/Plastic	IP54

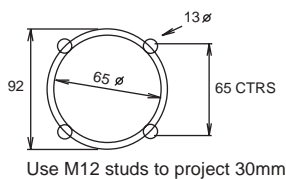
### DIMENSIONS:



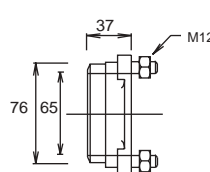
When float reaches upper adj stop C-NC close : When float reaches lower adj stop C-NO close  
EL-140/141 - The counter balance/weight on the arm/lever should be adjusted for correct operation.

### DRILLING DETAIL:

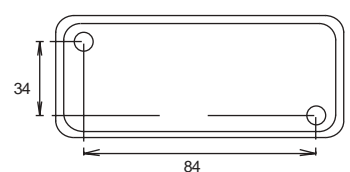
**EL-14. - DIRECT MOUNTING**



**EL-MF.. WELDED MATING FLANGE**



**ETF-1**

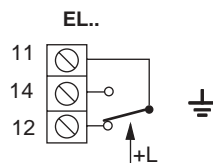


**ACCESSORIES:** WELDED MATING FLANGE for EL-140, 141 :

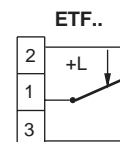
**EL-MF** Carbon Steel

**EL-MF/ST** Stainless Steel

### WIRING:



On level rise contacts 11-14 close 11-12 open.  
On level fall contacts 11-12 close 11-14 open.



On level rise contacts 1-3 close 1-2 open.  
On level fall contacts 1-2 close 1-3 open.

### CAUTION:

These products may be connected to 230VAC supply. Isolate device from electrical supply before removing cover. Observe design limits of temperatures. ETF contacts contain Mercury, observe safety precautions. Check for leaks and correct operation. If failure of the device can cause damage a safety backup control should be fitted. All data is for guidance purposes only, subject to change without prior notice and not guaranteed to be absolutely correct Unless confirmed by us in writing.

Device should be checked by a qualified technician before applying any voltage. Observe all relevant safety precautions, wiring/earthing regulations and electrical ratings. Ensure electrical entry hole is completely sealed for all IP65/weatherproof models.

