



# VLF Flowmeters

## Models VLF 4 (1/8")

## VLF 8 (3/8"), VLF 20 (3/4")

TS-240

Rev. 0-96-04-04

VLF Flowmeters

Size 1/8", 3/8", 3/4"

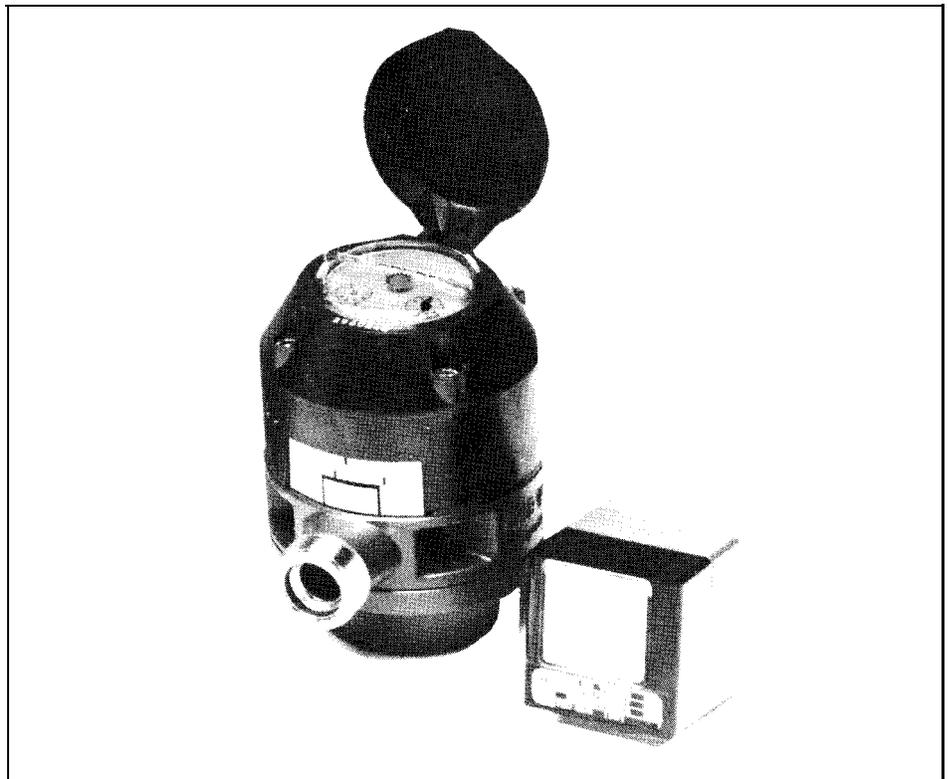
## SPECIFICATIONS

### DESCRIPTION

Schlumberger's VLF (very low flow) flowmeters have been designed to measure the flow of light fuel or diesel oil. They are available in three different sizes: 1/8", 3/8" and 3/4" to measure flow rates ranging from 0.25 to 390 gph. The oscillating piston of these flowmeters forms two measuring chambers that are alternately filled and emptied. The passing oil is measured by fractions reflected by the register.

The register unit of the VLF 8 and VLF 20 is housed in a vacuum sealed casing. It is secure from dirt, dust and condensation.

Operation of the flowmeters can be verified at any time by checking the disc rotation in the dial center. This allows accurate monitoring and prompt adjustment of the burner. Flow volume can be determined and quickly compared with the optimal adjustment, allowing full control of oil consumption.



Note: A fine filter is built into the inlet but should the liquid being metered contain foreign matter, a separate screen or removable filter of appropriate size should be fitted on the inlet side. The filter mesh should not be larger than 50 micron for the VLF 4 and VLF 8 meters and 100 micron for the VLF 20.

### SPECIFICATIONS (for light oils and diesels only)

MODEL	VLF 4 (1/8")	VLF 8 (3/8")	VLF 20 (3/4")
Flow Rate	0.25 to 20 gph (1-80 dm <sup>3</sup> /hr)	1 to 50 gph (4-200 dm <sup>3</sup> /hr)	9 to 390 gph (34-1476 dm <sup>3</sup> /hr)
Accuracy	±1%	±1%	± 1%
Repeatability	±.1 %		
Operating Temperature	140°F (60°C)	140°F (60°C)*	260°F (130°C)*
Operating Pressure	350 psi (25 bar)*	350 psi (25 bar)*	225 psi (16 bar)*
Dial Registration	0.01 USG (.01 Litres)	0.1 USG (.1 Litres)	0.1 USG (1 Litres)

\*Maximum

# VLF PULSER SPECIFICATIONS

Ambient Temperature Limits	-10°C to 60°C (-14°F to 140°F)
Switching Element	Reed contact (potential free)
Switching Voltage	Max. 48 V DC/AC
Switching Current	Max. 50 mA ( $R_i = 47 \text{ Ohm}$ ) <sup>1</sup>
Switching Capacity	Max. 3 watts
Static Current	nil

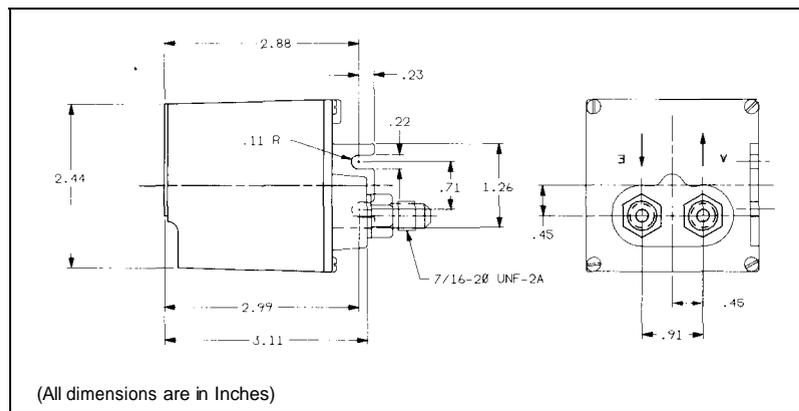
VLF Pulsers are only available for the VLF 8 and VLF 20 models.

Pulse Values depend on the size of the meter and the units of registration. For metric registration the pulse values are either 1 or 10 pulse(s) per litre for the VLF 8 and 0.1 or 1 pulse per litre for the VLF 20. For US units of registration the pulse values range from 0.1 gallons/pulse for the VLF 8 and 1 gallon/pulse for the VLF 20.

Note:  $R_i$  is the resistance of the electronic device that is being driven by the pulser, eg., a counter.

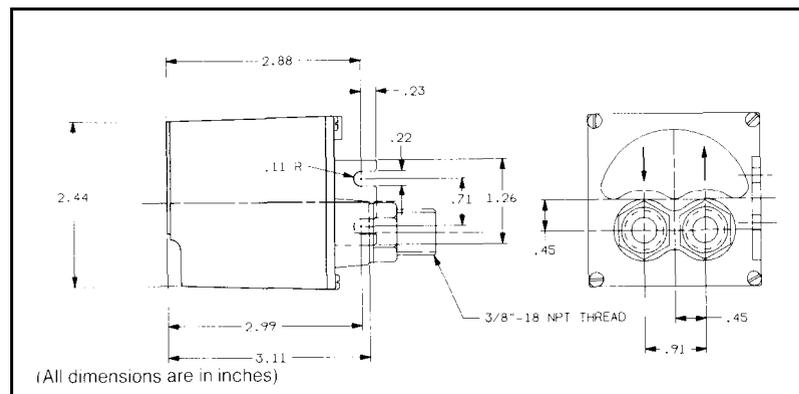
## PHYSICAL DIMENSIONS

### Model VLF 4



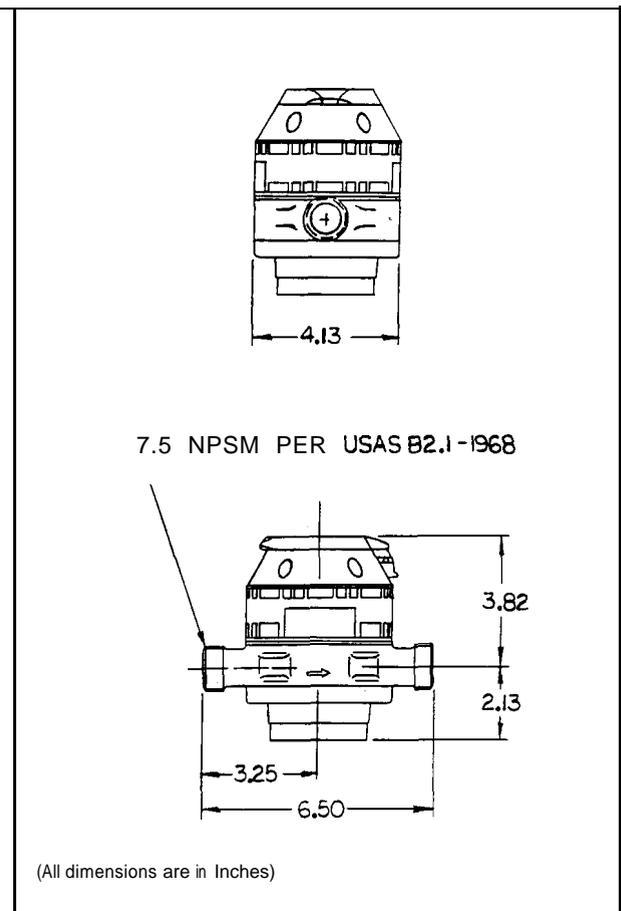
Connections are provided for attaching 1/4" 45° female tube fittings.

### Model VLF 8



Connections are provided for attaching 3/8"-16 NPT female fittings.

### Model VLF 20



Connections are provided for attaching W-14 NPT female fittings.



Measurement Division

