# NORMOND E-SERIES SANALOGUE GAUGES



THE NORMOND E-SERIES GAUGE

PROVIDES LOW COST REMOTE MONITORING WITH UNIVERSAL TANK CALIBRATION.

- Calibrates to any tank or product on site.
- □ Recalibrate in-situ for product changes.
- Simple installation and operation.
- ☐ Low maintenance.
- ☐ Self powered.
- ☐ Rugged weather-resistant casing.
- ☐ Proven NORMOND reliability.
- □ Extensive product compatibility.
- Continuous reading options.

#### THE GAUGE

The Normond E-Series Analogue Gauge is an accurate, low cost solution for remote liquid measurement and control. E-Series gauges can be used with a variety of balance chamber materials, giving flexibility to monitor different fuel types and chemical products. The reliability and durability offered represent excellent value for money.

Because the gauge requires no power source, it is particularly suited for use in hazardous or explosive environments and when power is unreliable or not available.

Each gauge is supplied as standard with everything necessary for basic tank monitoring, including the balance chamber, tank entry fitting and 10 metres of connection capillary tube.

#### **OPERATION**

E-Series gauges employ hydrostatic technology to obtain the tank readings. A balance chamber is installed through the tank lid and connected to the gauge via capillary tubing. Operation of the integral hand pump displaces the liquid from the balance chamber, resulting in a back pressure which is referenced by the gauge and displayed on the dial indicator.

Where continuous reading is required, a range of air supply units is available. These utilise an existing compressed air or 240 volt electricity supply to power either single or multiple gauge installations.

## UNIVERSAL CALIBRATION

E-Series gauges display tank contents as 0 -100% of volume. Calibration can be set up on site by means of a simple adjustment. Product changes and even relocation to another tank can take place without the need to return the gauge to the factory.

### SIMPLE INSTALLATION

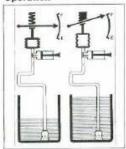
E-Series gauges are supplied with simple installation and troubleshooting instructions and can be located remotely up to 120 metres from the tank.

#### CONSTRUCTION

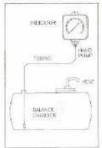
The E-Series gauge can operate from 1m to 9.2m head of water and employs hydrostatic technology to indicate the liquid volume within a tank. Operation of the integral hand pump expells the liquid from within the balance chamber, and the resultant back pressure expands a copper capsule linked to the gauge movement. This action causes the pointer to rotate, thereby indicating the tank contents on the universally calibrated dial face.

For stability and accuracy the Swiss rotary movement and capsule are housed in a die cast frame, secured internally via a single fixing point. This allows the gauge mechanism to operate independently of any external forces that may affect accuracy. E-Series gauges are constructed in rugged ABS plastic with integral mounting bracket and have a clear acrylic cover for ease of reading.

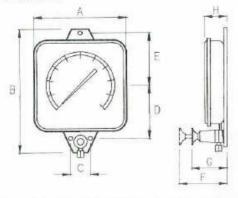
### Operation



#### Installation



#### DIMENSIONS



A	В	C	D:	E	F	G	H
170	240	38	95.5	96.5	148	111	54

# BALANCE CHAMBERS

E-Series gauges are supplied with a standard balance chamber (BC) and 10m of PVC tubing. A range of supplementary units is available to suit different fluid types and chemical products, or where high fill rates are encountered. All balance chambers are supplied with a tank adapter fitting for installation through the top of the tank.

### STANDARD BC

Construction: Brass weight, PVC connecting tube 6.4mm o/d.

lax Temp: 38°C

Application: Tanks up to 3.0m deep for heating oils or where the liquid will not attack PVC.

Minimum Tank Entry: 1/2".

#### BC

Construction: Zinc plated steel magnetic bell, PVC connecting tube 6.4mm o/d.

Viscosity Limit: 150 seconds Redwood No 1 @ 16°C.

Max Temp: 38°C.

Application: Tanks up to 6m deep for heating oils, paraffin or where the liquid will not attack PVC. Minimum Tank Entry: 11/2".

#### BC4

Construction: Rigid PVC tube.

Viscosity Limit: 3,500 seconds Redwood No.1 @ 16<sup>t</sup>C.

Max Temp: 38°C

Application: Acids etc, where metals would be attacked. Suitable up to 9.2m head of water.

Minimum tank Entry: 1".

#### BC 6/1, 6/4 & 6/5

Construction: BC 6/1 mild steel, BC 6/4 copper, BC 6/5

stainless steel ASI 316. All rigid tube.

Viscosity Limit: 3,500 seconds Redwood No.1 @ 16°C.

Max temp: 100°C.

Application: General use where above materials are compatible and for deeper tanks up to 9.2m head of water. Minimum Tank Entry: 1".

## CONTINUOUS READING

E-Series gauges can be made to read continuously by using one of the Air Supply Units below, along with continuous reading balance chambers.

#### P7 AIR FILTER/REGULATOR

Regulates site compressed air to supply 1 gauge.

# P7A AIR FILTER/REGULATOR

Regulates site compressed air to supply 2 gauges.

## P2A AIR FILTER/REGULATOR

Regulates site compressed air to supply up to 9 gauges.

# P2E CONTINUOUS AIR SUPPLY UNIT

Supplies and regulates site compressed air to supply up to 9 gauges. Requires 240v mains supply.

### CABINETS

Vandal resistant, locking heavy gauge steel cabinets, powder coated green, can be supplied where conditions require.