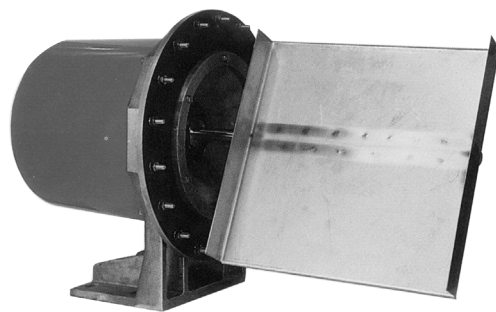


The Milltronics ILE-37 and ILE-61 Sensing Heads are out-of-the-process sensing elements for series A, E, V, and C solids flowmeters. Used in applications such as product ratioing, batch loadout, and process feed rate control, the ILE series of sensing heads has been field-proven in thousands of applications with some units providing over a quarter century of reliable performance.

The ILE sensing heads use only the horizontal force created by impact of product upon the sensing plate and then apply the horizontal deflection to a highly reliable Linear Variable Differential Transformer (LVDT).

Friction-less pivots exclude the vertical force from the sensing process and the LVDT travel range is controlled by a coil spring selected for the specified full-scale flow rate. A viscous fluid damper provides mechanical damping in the event of pulsating flows.

The LVDT converts the horizontal movement, proportional to the impact forces into an electrical signal, which is converted by the integrator to time-based flow rate indication and totalling. This method of sensing material flow has been proven best in thousands of applications all over the world.



### Product Features

- Easy installation with modular assembly
- $\pm 1$  % accuracy, or better, with high repeatability
- Totally enclosed, dust-tight, flow metering of bulk solids
- Sensing mechanism is outside the process, protected from contamination
- No zero drift, due to unique sensing mechanism
- Low maintenance; only the sensing plate is in the process
- No restriction of product flow

## Technical Specifications

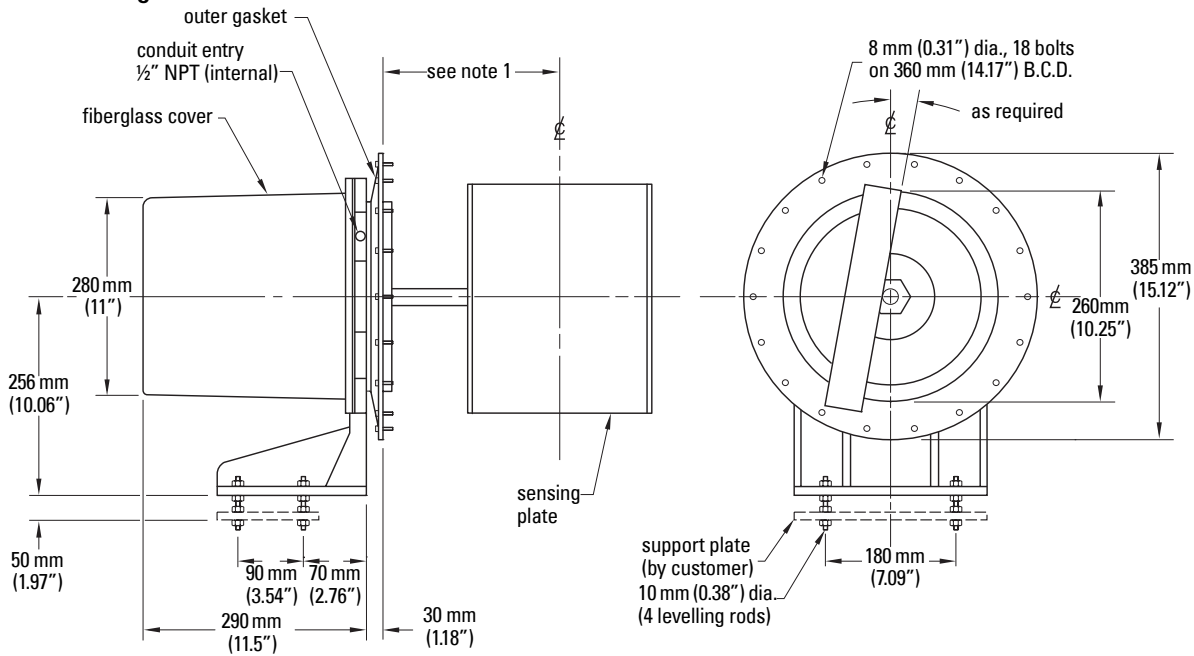
	ILE-37	ILE-61
<b>Maximum flow range</b>	0 – 40 t/h (0 – 44 STPH)	0 – 300 t/h (0 – 330 STPH)
<b>Minimum flow range</b>	0 – 0.2 t/h (0 – 0.2 STPH)	0 – 20 t/h (0 – 22 STPH)
<b>Maximum product size</b>	13 mm (0.5")	25 mm (1")
<b>Maximum product temperature</b>	232 °C (450 °F)	232 °C (450 °F)
<b>Ambient temperature</b> - without internally mounted LVDT card - with optional internally mounted LVDT card	-40 to 60 °C (-40 to 140 °F) -40 to 50 °C (-40 to 122 °F)	-40 to 60 °C (-40 to 140 °F) -40 to 50 °C (-40 to 122 °F)
<b>Volumetric capacity</b>	as provided by the flowguide	
<b>Construction</b>	aluminum body, fibreglass cover, 304 (1.4306) stainless steel sensing plate	
<b>Accuracy</b>	$\pm 1$ % of full scale, higher accuracy with linearizing features offered by integrators	
<b>Repeatability</b>	$\pm 0.2$ %	$\pm 0.2$ %
<b>Optional</b>	<ul style="list-style-type: none"> <li>• CSA certified for Class 1, Groups C &amp; D; Class II Groups E, F &amp; G; Class III hazardous areas</li> <li>• epoxy paint, synergistic polymer or PFA coating of external aluminum casting surfaces</li> <li>• high temperature, to 400 °C (750 °F) product temperature</li> <li>• 316 stainless steel (1.4404) sensing plate construction</li> <li>• abrasion resistant and non-stick sensing plate coating/liners</li> <li>• internally mounted LVDT Conditioner Card for use with Milltronics SF 500 integrator</li> <li>• externally mounted LVDT Conditioner Card in NEMA 4 (IP65) enclosure for use with Milltronics SF 500 integrator when sensing head is mounted in hazardous area or with high ambient temperatures</li> </ul>	
<b>Approvals</b>	CE	CE

*Specifications are subject to change without notice.*

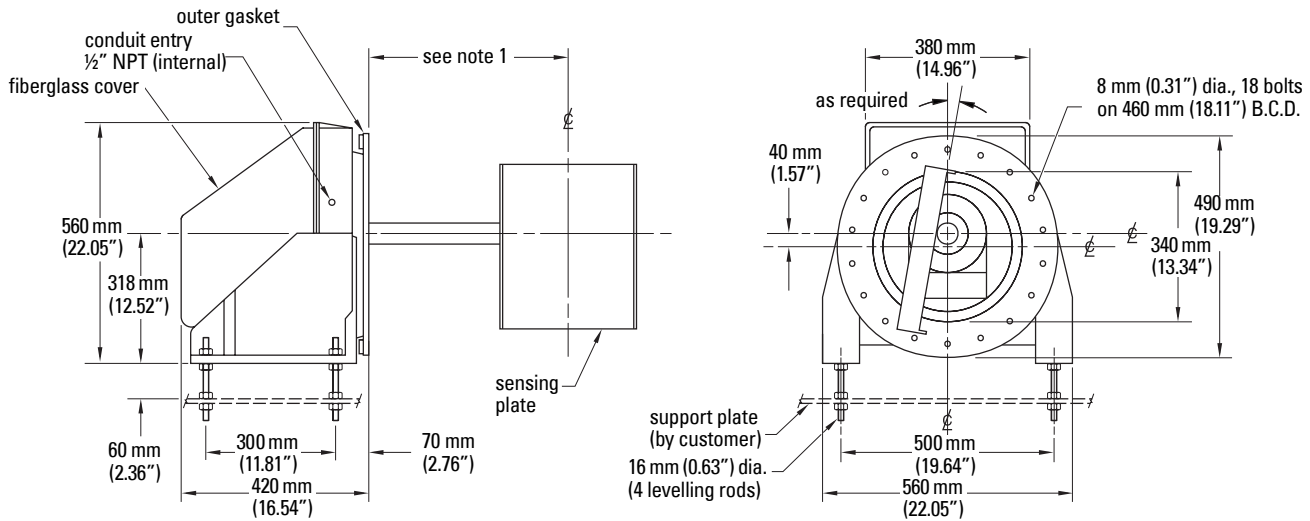
# ILE Sensing Heads

## Dimensions

### ILE-37 Sensing Head



### ILE-61 Sensing Head



### Notes

- 1) Refer to flowmeter drawing for sensing head face to sensing plate centreline dimension.
- 2) Sensing head support plate should be rigid and independent of flowmeter housing.
- 3) Ensure outer gasket seals dust tight to flowmeter exterior housing wall.