



ILE37 and ILE61

Measuring head for impact flow meters for solids, with LVDT

ELECTRONIC EQUIPMENT

ACOUSTIC

WEIGHING

ANTI-TILTING

VALVES

TEMPERATURE

DETECT A FIRE®

FLOW/RATE

DENSITY

INTERFACE

PRESSURE

LEVEL



The ILE37 and ILE61 measuring heads are external sensing elements for the TFE/TFV series flowmeters for solids.

Benefits

- Simple installation thanks to modular design
- Min. accuracy $\pm 1\%$, high reproducibility
- Flow measurement of bulk material in a fully enclosed dust-tight enclosure
- Sensor applied externally to protect against soiling
- No zero drift thanks to unique sensing mechanism
- Low maintenance; only the measuring plate is in contact with the bulk material
- No influence on material flow

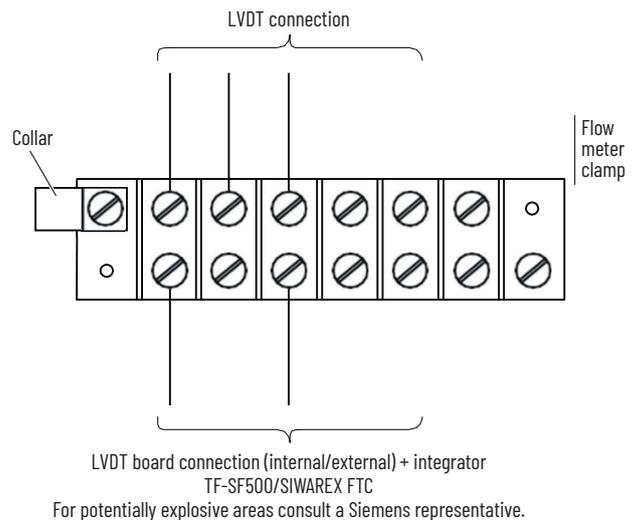
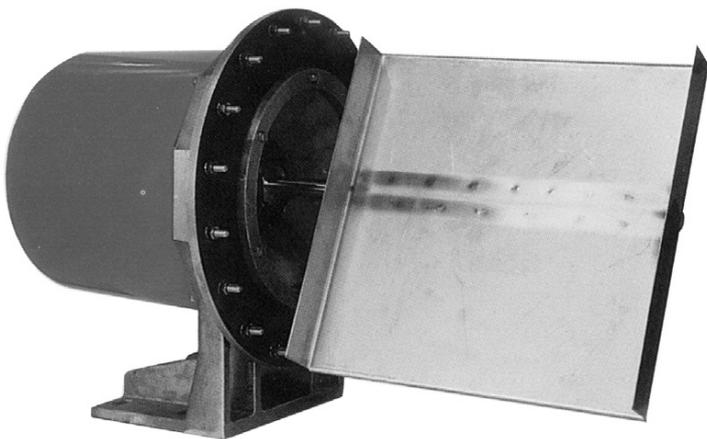
Application

The ILE37 and ILE61 measuring heads are suitable for use in a variety of applications ranging from product dosing to batch loading/unloading operations to feeding in the process. They have amply demonstrated their outstanding long-term reliability in the field. The ILE37 and ILE61 measuring heads only measure the horizontal force created by the impact of the material on the measuring plate. The horizontal deflection is applied to a highly reliable linear variable differential transformer (LVDT). Frictionless joints exclude the influence of vertical forces on the measurement. The displacement by deflection acting on the differential transformer is controlled by a spring corresponding to the maximum flow rate. A shock-absorbing fluid ensures the smooth continuity of displacement in the presence of pulsating flow. The differential transformer converts the horizontal displacement, proportional to the force of the impact on the measuring plate, into an electrical signal. The integrator then processes this signal to display the range and totalised weight. This method of flow measurement has been tried and tested in countless applications around the world.

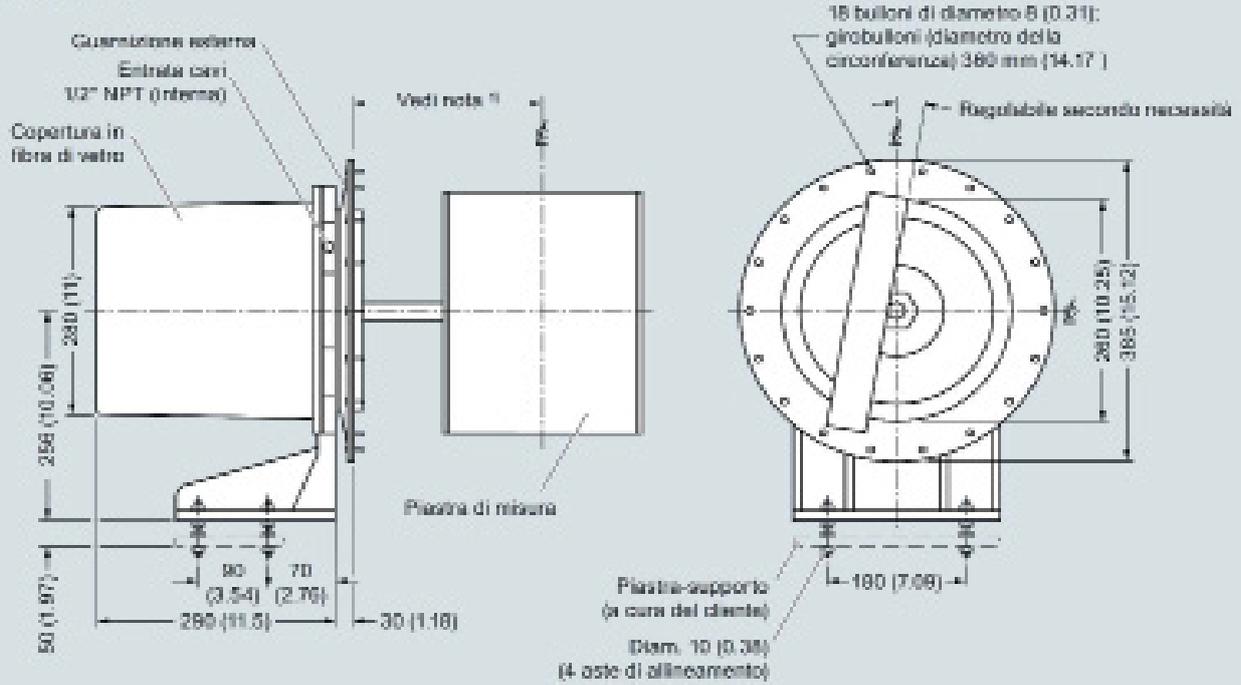
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TECHNICAL SPECIFICATIONS

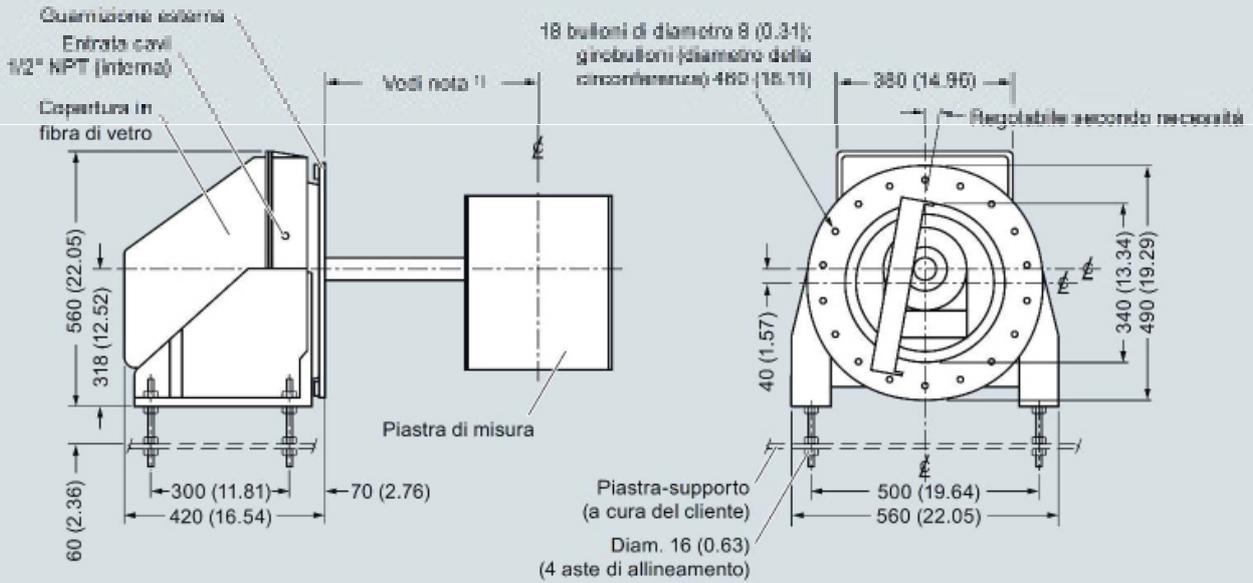
Measurement tests	ILE37	ILE61
Operating mode		
Measuring principle Typical applications	Deflection measurement with LVDT (Linear Variable Differential Transformer) compatible with all TFE/TFV series flowmeters for solids	
Capacity		
Max. particle size	13 mm (0.5 inch)	25 mm (1 inch)
Min. flow rate	0 ... 0.2 t/h (0 ... 0.2 STPH)	0 ... 20 t/h (0 ... 22 STPH)
Max. delivery capacity	0 ... 40 t/h (0 ... 44 STPH)	0 ... 300 t/h (0 ... 330 STPH)
Performance		
Accuracy1)	Min. ± 1 % of full scale value: higher accuracy when using the integrator linearization function	
Reproducibility	± 0.2 %	
Specified field	33 ... 100 %	
Condition of the material		
Ambient temperature	-40 ... +60 °C (-40 ... +140 °F)	-40 ... +60 °C (-40 ... +140 °F)
• Without integrated LVDT board	-40 ... +50 °C (-40 ... +122 °F)	-40 ... +50 °C (-40 ... +122 °F)
• With integrated LVDT option board		
Max. product temperature	232 °C (450 °F)	232 °C (450 °F)
Constructive execution	IP64, aluminium, glass fibre cover, stainless steel measuring plate. 304 (1.4306)	
Options	<ul style="list-style-type: none"> • Aluminium exterior surfaces with epoxy resin coating • Integrated LVDT interface board for use with TF-SF500 integrator • Outdoor-mounted LVDT interface card in IP65 (NEMA 4) enclosure for use with TF-SF500 integrator or request when mounting measuring head in Ex area or high temperature environment 	
Certifications	CE, RCM, CSA, FM, EAC, ATEX, IEC Ex	CE, RCM, CSA, FM, EAC, ATEX, IEC Ex



Testa di misura ILE-37



Testa di misura ILE-61



Notes:

- 1) See flowmeter diagram to determine the size of the measuring head-center axis flow guide mounting hole.
- 2) The measuring head support plate must be rigid and independent of the flowmeter enclosure.
- 3) Use an external watertight seal to ensure the meter is dustproof.
- 4) Dimensions and material of the measuring plate depend on the application.