Solids Flow Meters Model TFM

- Flow rate measurement for bulks solids
- Dust-tight housing
- Compact design
- Robust, Cost effective with simple application



Application

The TFM Solids Flow Meters are designed as a totally enclosed measuring or feeding systems for dry bulk materials.

These measuring systems can be used for;

- flow rate
- totalisation
- batching
- Train/Truck loading

of dry bulk materials with a maximum grain size of up to 30 mm.

The units can be supplied with an optional controlled pre-feeder to form a feed system.

Construction

The standard Solids Flow Meter comprises:

- Dust tight, painted mild steel housing
- Stainless Steel measuring chute
- Load cell, mounted externally to the product flow and housing (thus protecting the load cell and facilitating route calibration).
- Cable junction box.

Options include:

- Special wear resistant measuring plates, in ARS360, P80 and manganese coated steel
- Material specific liners and housings
- Load cell cooling for high temperature applications.
- DIP protection for hazardous areas.

Function

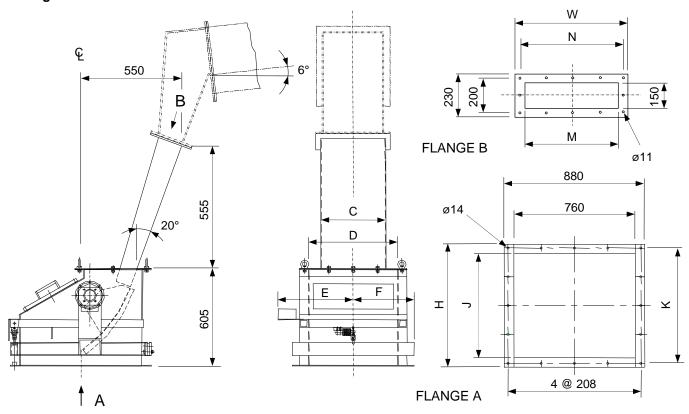
The measuring chute evaluates the flow rate either by the impact force or the reactive force.

For Impact type flow meters the measuring plate is set in the material flow, imposing the flow rate via a material constant.

For deflection type meters the material is evened out and then guided to the curved measuring chute, free from impact force. On the measuring chute the material is accelerated radially. The resulting reactive force is acquired by the load cell.

Flow meters typically achieve in service accuracies of 2%.

Configurations and Dimensions



Dimensions

	С	D	Е	F	Н	J	K	М	N	W
TFM40	400	550	470	380	670	550	4 x 155	3 x 150	150	480
TFM75	500	650	520	430	770	650	4 x 180	4 x 137.5	137.5	580
TFM125	650	800	595	505	920	800	4 x 217.5	5 x 140	140	730

Technical Data

Technical Data								
	TFM40	TFM75	TFM125					
Flow Rate	Min. 4 t/h – max. 400m³/h (max. 1000t/h)	Min. 16 t/h – max. 750m³/h (max. 1000t/h)	Min. 40 t/h – max. 1250m³/h (max. 1000t/h)					
Accuracy	2% of nominal rate							
Measuring Range	1:5 (20 to 100% of nominal flow rate)							
Weight	155 kg	250 kg	390 kg					
Ambient temperature	-30°C to 60° C							
Material temperature	Maximum 100° C (Option to max. 200 ° C)							
Bulk Density	Minimum 0.4 t/m³							
Grain Size	Maximum 10mm with single grain to 30mm							
Flow Properties	Dry and non-sticky							

Custom designs are also available on request. Accuracy quoted is subject to confirmation by formal quotation. Dimensions and specifications are subject to change without notice.

