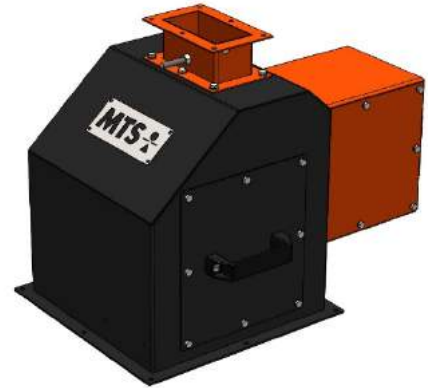


## ▶ IPW S

- Mass flow meter for free-flowing bulk materials, also with low bulk density
- Weighing in vertical process routes
- For flow rates from 1 up to 6 m<sup>3</sup>/h
- Very compact dimensions
- Robust housing made of stainless steel
- Separate product and measuring chamber
- Weighing mechanic made of stainless steel



### DESCRIPTION:

The mass flow meter IPW S is used for continuous weighing of free-flowing bulk materials.

The IPW S from MTS consists of a stable housing, the measuring chute with a special mounting system and the measuring chamber. The separation of product and measuring chamber secures the weighing system and allows also the use in dustproof Ex-zones (optional).

The stable mechanics and the dustproof housing guarantee high reliability and low maintenance cycles. The low height of only 415 mm allows quick installation even in existing and narrow conveyors.

The IPW S is often used for numerous weighing applications in closed dosing or conveying systems, such as capacity recording of internal material flows or for inventory control.

### FUNCTIONING:

The IPW S mass flow meter is based on the principle of centripetal force.

The material flow rate is defined by the inlet of the housing and directed to the measuring chute. When the material arrives on the curved chute, a deflection of the material flow rate occurs from the vertical downstream axis into a circular flow. According to Newton's second law of motion, a centrifugal force is exerted upon the product which then results in a counteracting force – the centripetal force – upon the suspension of the chute.

This force is recorded by a high precision strain gauge load cell situated in the measuring chamber. Compared to the impact scales, the measuring principle of the mass flow meter allows for a continuous and exact weighing of very light bulk materials, such as powder or granules.

The mass flow meter IPW S has to be integrated into a conveying system in such a way that a constant output speed of the bulk material is guaranteed. Screw conveyors, rotary valves, bucket elevators, vibrating chutes, conveyor belts or scraper conveyors can be used to this effect.

## TECHNICAL DATA:

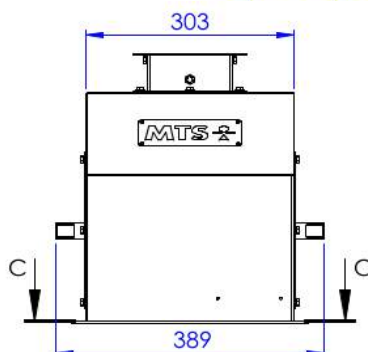
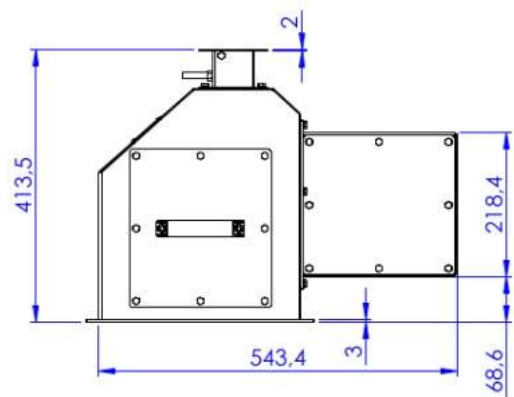
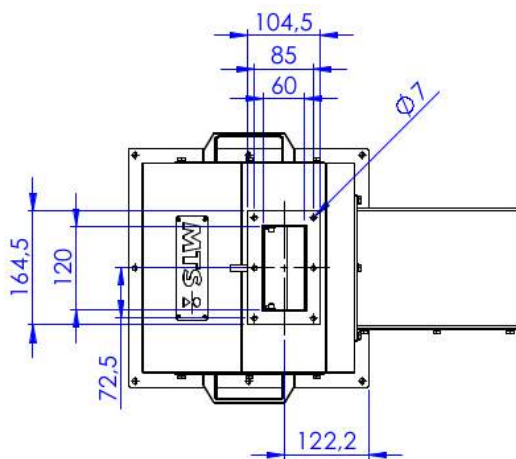
### Mass flow meter IPW S

Load cell*:	full bridge strain gauge load cell
Design:	aluminium
Power supply:	nominal 10 V DC (via the control unit)
Output signal:	2 mV/V
Output resistance:	350 Ω
Electronic overload:	double nominal load related to nominal flow rate
Connection:	6-wire cable
Combined measuring error:	nominal +/- 1 to max. 2 % in the range from 50 to 100 % of max. flow rate and tested application in the temperature range from -10°C to +40°C
Operating temperature range:	-25°C up to +80°C
Protection class:	IP 65 (load cell and junction box)
Material:	
Housing:	stainless steel 1.4301 (AISI 304)
Measuring chute:	stainless steel 1.4301 (AISI 304)
Weighing mechanic:	stainless steel 1.4301 (AISI 304)

\* For data of the load cell, please see the type label.

### Dimensions:

Type	Flow rate in m <sup>3</sup> /h	Width in mm	Depth in mm	Height in mm
IPW S	1 bis 6	389	543,4	413,5



The right of technical changes is reserved.  
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