

Coriolis Mass Flow Meter - H

- Continuous mass flow metering according to the Coriolis principle
- Non-sensitive, highly accurate principle of measuring
- Fast measured value recording and high control quality
- Compact construction
- Economical, simple integration
- Dustproof housing
- Feedrate up to 1250 m³/h



Application

The Coriolis Mass Flow Meter - H is a closed measuring system for continuous totalized amount of material and feed rate acquisition. The Coriolis Mass Flow Meter - H measuring device is suitable for:

- Throughput and consumption measurement
- Balancing
- Batching

From good to slightly sluggish bulk solids.

In combination with a controllable prefeeder (e.g. valve, mill or helix with center rod), the measuring device can also be used as a feed system.

The Coriolis Mass Flow Meter - H type series offers solutions for many applications:

- Coriolis Mass Flow Meter - H
Gravity feed in operations

Construction

A Coriolis Mass Flow Meter - H comprises:

- Mild steel, painted dust-proof hopper
- Measuring rotor with hollow fixed blades
- Weighing module with wireless data transmissions
- Junction box
- AC geared motor (three-phase current)

The flanged inlet connections for attaching to the feed pipe provided by customer is fitted with a Jacob pipe connection, smooth pipe ends and flexible connection.

The discharge cone is fitted with a flexible connection for connecting to the conveyor line provided by customer.

The weighing module makes it possible to easily take on jobs at bulk solid temperatures up to 90 °C. For high temperatures up to 120 °C, the device is fitted with a cooling fan that is automatically activated as required.

Function

In Coriolis Mass Flow Meter - H measuring devices, the principle of Coriolis force measurement is used to determine the mass flow rate. The bulk solids flow being measured hits a measuring wheel in the device that is rotating at a constant speed.

The bulk solids are caught by the blades of the measuring wheel and accelerated to the circumferential speed of the measuring wheel.

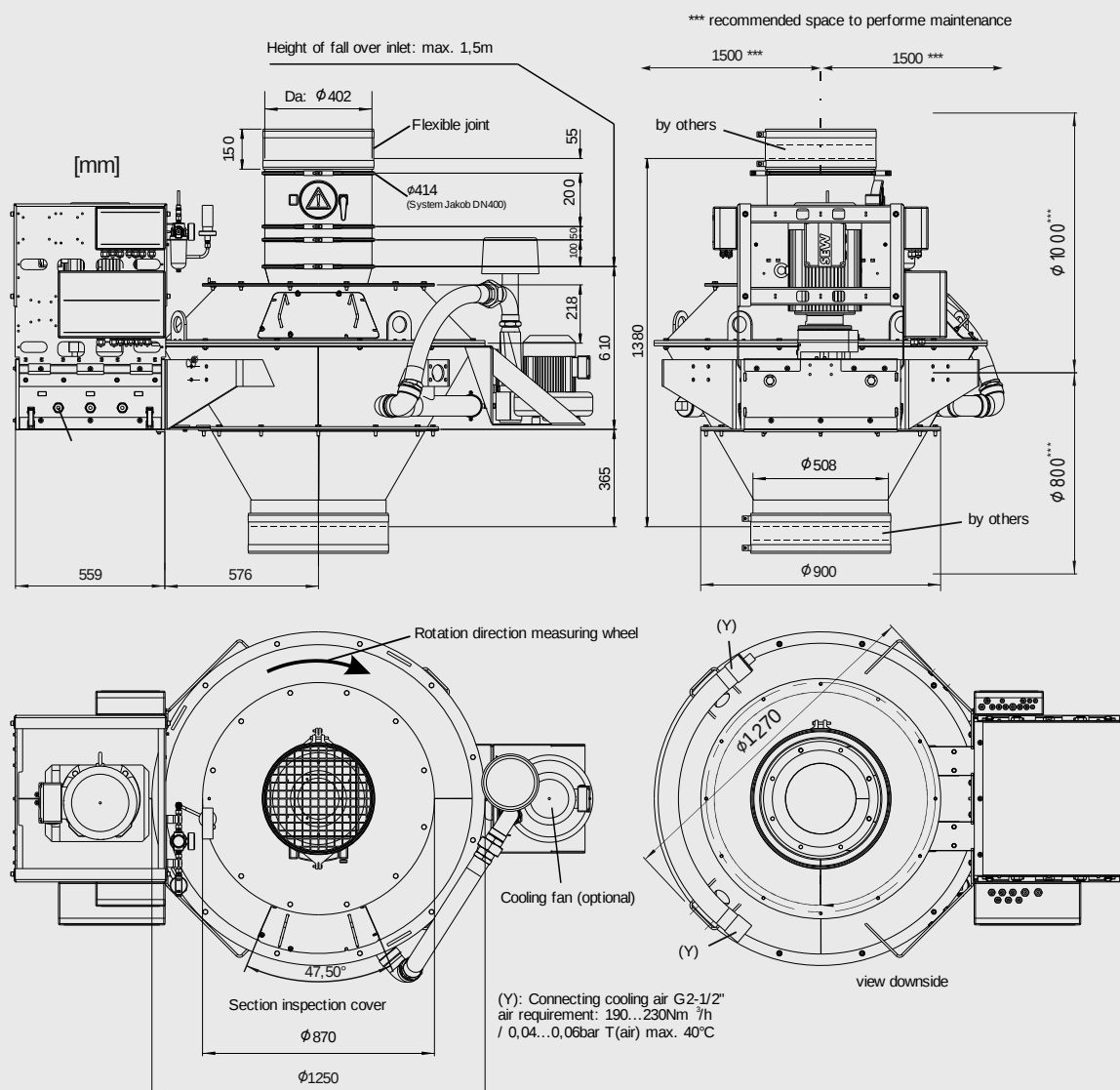
A torque is required for the acceleration, which directly corresponds to the feedrate. The torque is measured with a measuring module integrated directly into the drive line and is converted into a electrical signal. The data transfer is inductive. The measurement is independent of mechanical

properties of the bulk solids, such as grain spectrum, flow behaviour, humidity and temperature.

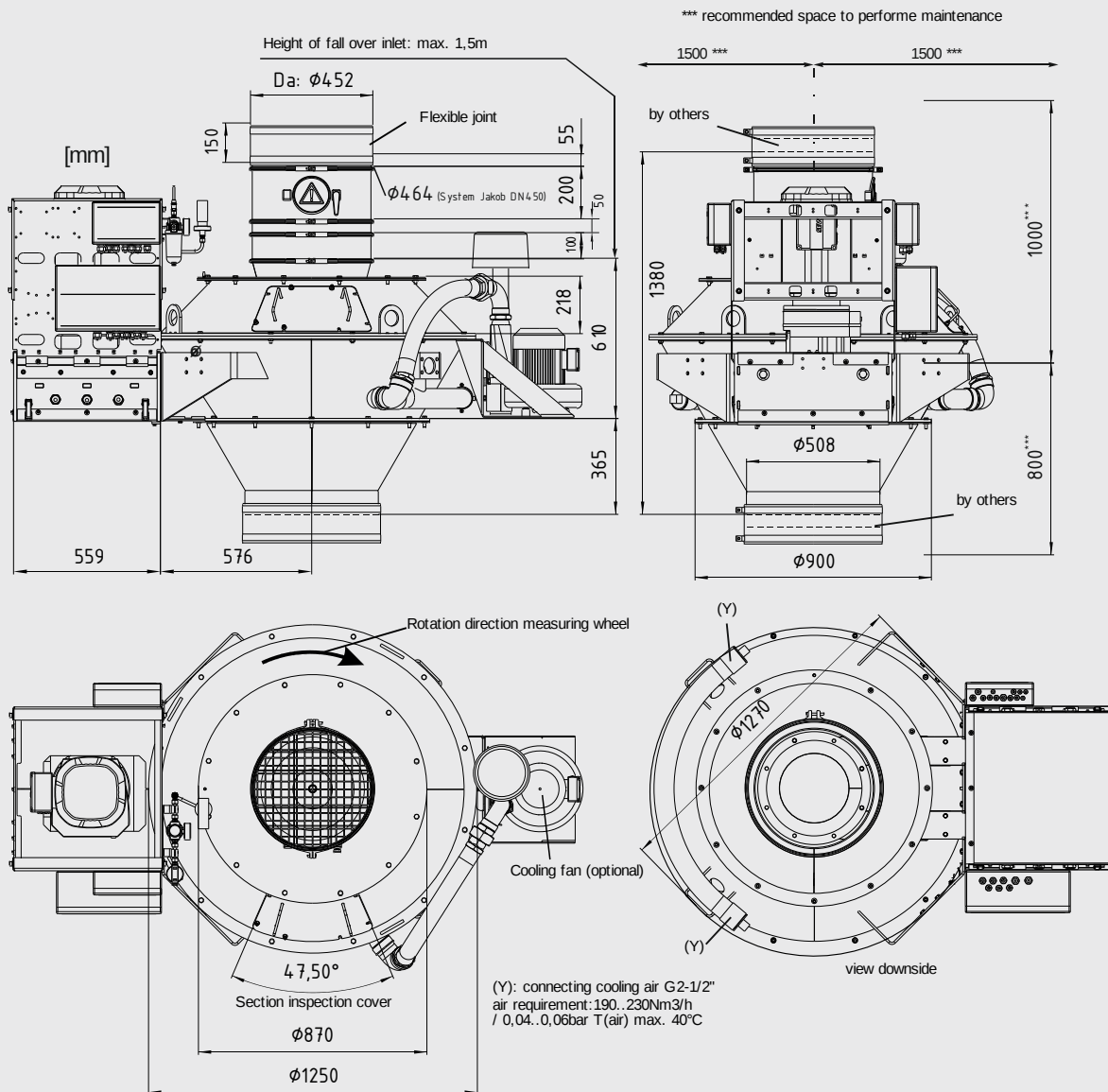
The force of the bulk solids on the measuring wheel and changes in the flow speed in the measuring device do not affect the measuring signal.

Dimensions

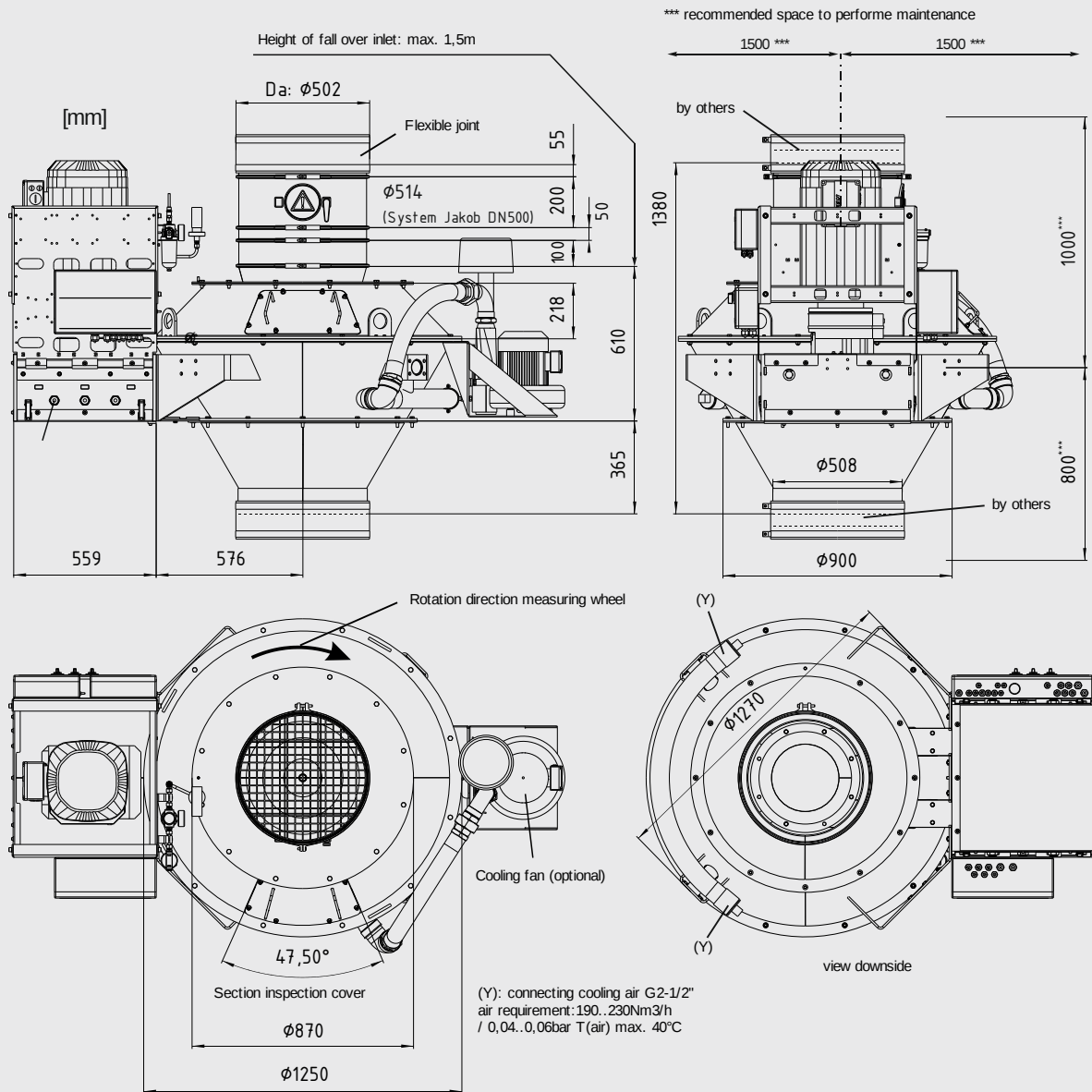
Coriolis Mass Flow Meter - H450



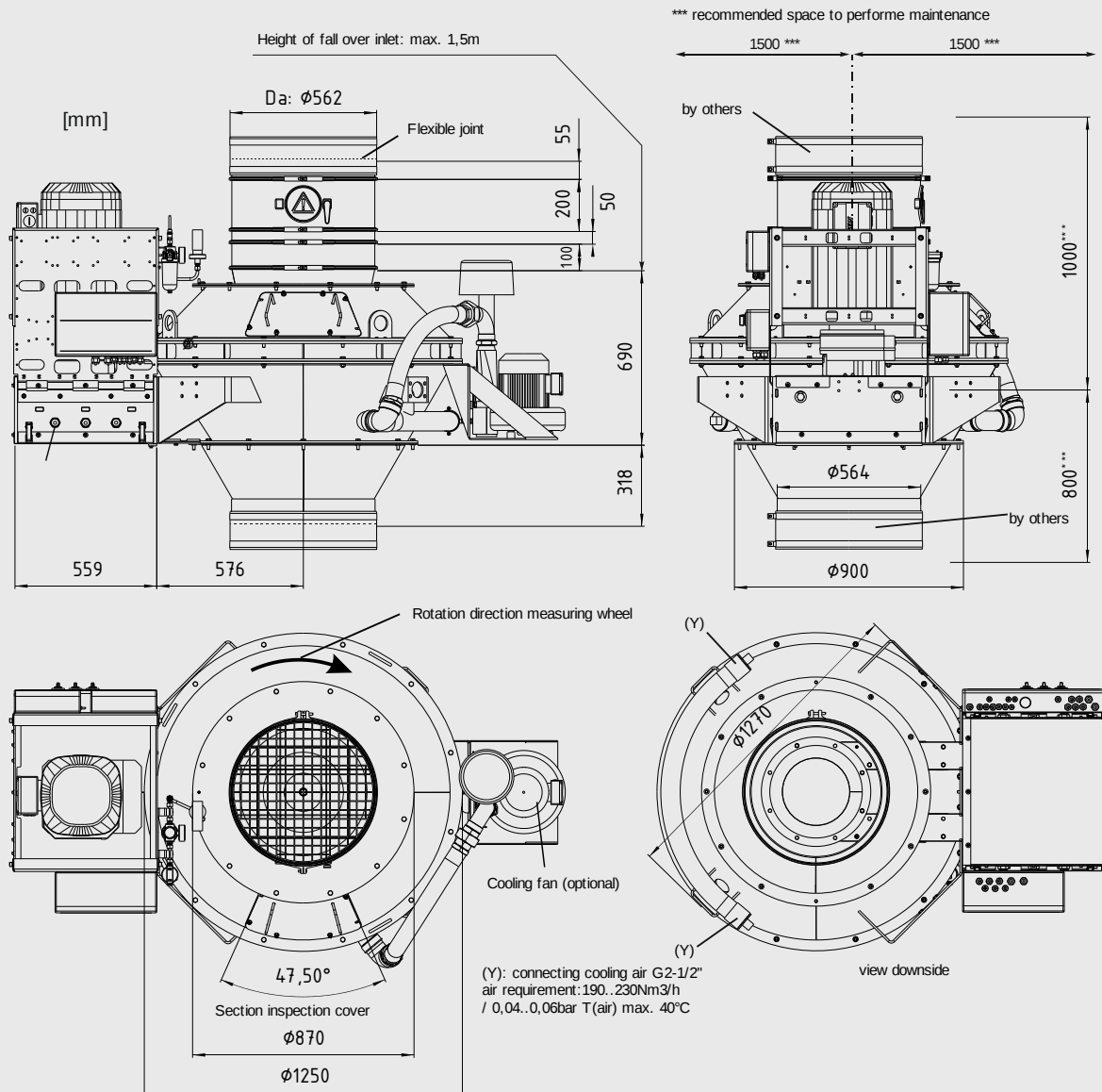
Coriolis Mass Flow Meter - H800



Coriolis Mass Flow Meter - H1000



Coriolis Mass Flow Meter - H1250



Technical Data

Type series	H450		H800	H1000	H1250
Feedrate	15 t/h ... 150 t/h or 30 t/h ... 300 t/h or 40 t/h ... 400 t/h		60 t/h ... 600 t/h	75 t/h ... 750 t/h	90 t/h ... 900 t/h
Throughput volumes max.	450 m³/h		800 m³/h	1000 m³/h	1250 m³/h
Accuracy rated to actual feed rate	from ±0.5 % (depending on installation configuration)				
Adjustment range	1 : 10				
Operating Pressure	-25 mbar ... +25 mbar				
Inlet dimensions	Ø402 mm (Connection cone grip JACOB pipe, rated width 400)	Ø452 mm (Connection cone grip JACOB pipe, rated width 450)	Ø502 mm (Connection cone grip JACOB pipe, rated width 500)	Ø562 mm (Connection cone grip JACOB pipe, rated width 560)	
Outlet connecting dimensions	Ø508 mm	Ø508 mm	Ø508 mm	Ø564 mm	
Weight	850 kg	900 kg	950 kg	1050 kg	
Permissible Ambient Temperature	-30 °C ... +40 °C				
Max. bulk solids temperature without cooling air supply	+90 °C				
Max. bulk solids temperature with cooling air supply (T _k max. 40 °C)	+120 °C				
Material bulk density	min. density 0.3 t/m³				
Grain size max. (without/with screen)	30/25 mm	25/25 mm			
Moisture	max. 1 %				
Flow properties	free flowing to slightly sluggish, also flushing, non-sticky				
Material property of product contact parts	Hopper: Painted mild steel Measuring wheel: 1.4404/AISI 316 LN/1.4571				

Accuracy	Additional requirements	Order Data
The accuracy stated refers to the actual feed rate in each case in the range of 10 % ... 100 % of the nominal feedrate under the following conditions: Assembly and commissioning corresponding to our assembly and commissioning instructions. Because of the Coriolis measuring principle, the accuracy is not affected by variable material properties of the bulk solids (flow behavior, moisture, temperature, grain size).	If you also have specific requirements, such as: - larger feedrate ranges - Direct feeding into pneumatic conveyor lines - Use as feed system Please contact us directly.	Apart from the order numbers, in order to process your request quickly and smoothly we require the following order data: Material data Bulk density [t/m³] Bulk solids Bulk solids temperature [°C] Feedrate range From [t/h] To [t/h]

Options
Prefeeder for Coriolis Mass Flow Meter - H
Measuring wheel with non-stick coating
Measuring wheel with wear protection
Cooling air unit for high bulk solids temperatures

Variants
Coriolis Mass Flow Meter - H450 Coriolis mass flow meter for 15 ... 150 t/h with 50/60 Hz drive
Coriolis Mass Flow Meter - H450 Coriolis mass flow meter for 30 ... 300 t/h with 50/60 Hz drive
Coriolis Mass Flow Meter - H450 Coriolis mass flow meter for 40 ... 400 t/h with 50/60 Hz drive
Coriolis Mass Flow Meter - H800 Coriolis mass flow meter for 60 ... 600 t/h with 50/60 Hz drive
Coriolis Mass Flow Meter - H1000 Coriolis mass flow meter for 75 ... 750 t/h with 50/60 Hz drive
Coriolis Mass Flow Meter - H1250 Coriolis mass flow meter for 90 ... 900 t/h with 50/60 Hz drive

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