MULTICOR S
Coriolis mass flow meters

- **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**

Application

The MULTICOR S Coriolis mass flow meter is a closed measuring system for continuous totalized amount of material and feed rate acquisition. The MULTICOR S measuring devices are suitable for free- to moderately flowing bulk materials for:

- Throughput and consumption measurement
- Balancing
- Batching

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 MULTICOR S series offers solutions for many applications involving gravity feeding into processes.

Equipment

A MULTICOR S Coriolis mass flow comprises:

- Dust-proof stainless steel housing
- Measuring rotor with hollow fixed blades
- Weighing module
- Terminal box
- Geared Motor

All product contact parts are made of stainless steel.
The flanged inlet connection for installation on the customer-side inlet is equipped with a DIN flange or a Jakob pipe connection.
The discharge cone is fitted with a flexible connection for connecting to the conveyor line provided by customer.
The weighing module arranged outside the bulk material chamber also allows use with bulk material temperatures of up to 130 °C (up to 200 °C as a hot material version).

Function

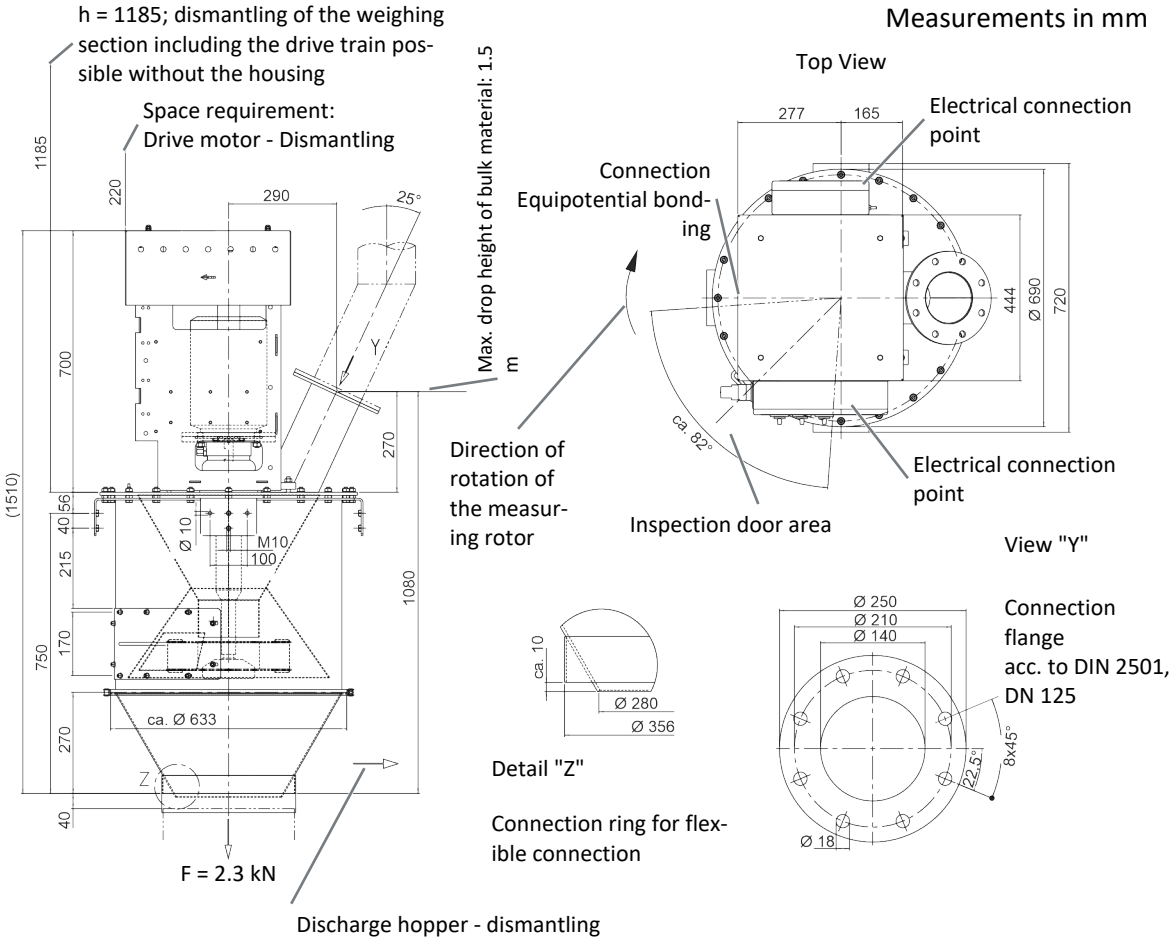
In MULTICOR S measuring devices, the principle of Coriolis force measurement is used to determine the mass flow rate. The bulk solids flow being measured hits a measuring wheel in the device that is rotating at a constant speed.
The bulk solids are caught by the blades of the measuring wheel and accelerated 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 and is converted into an electrical signal.
The measurement is independent of mechanical properties of the bulk solids, such as grain spectrum, flow behavior, humidity and temperature.

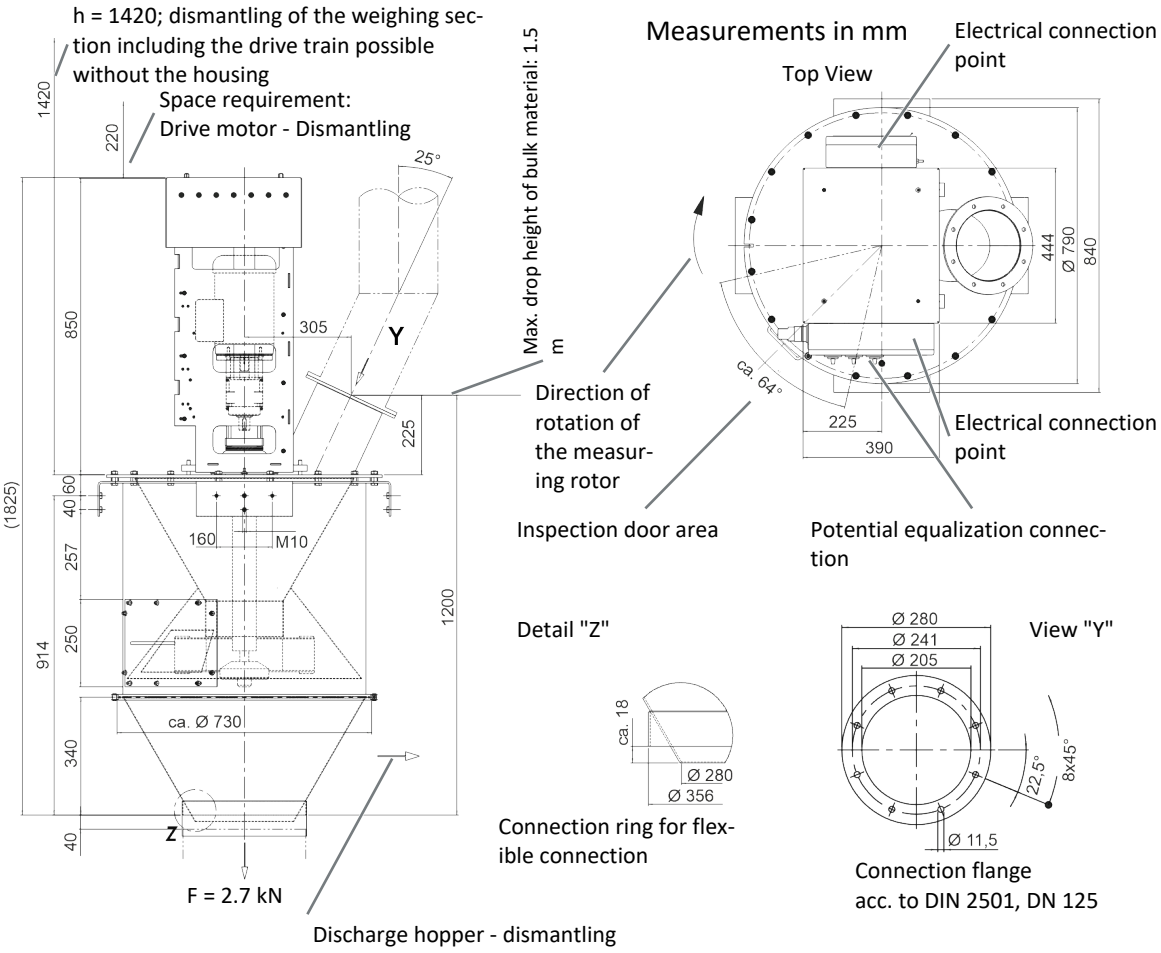
The force of the bulk solids on the measuring wheel and changes in the flow speed in the measuring device do not affect the measuring signal.

Dimension

MULTICOR S40



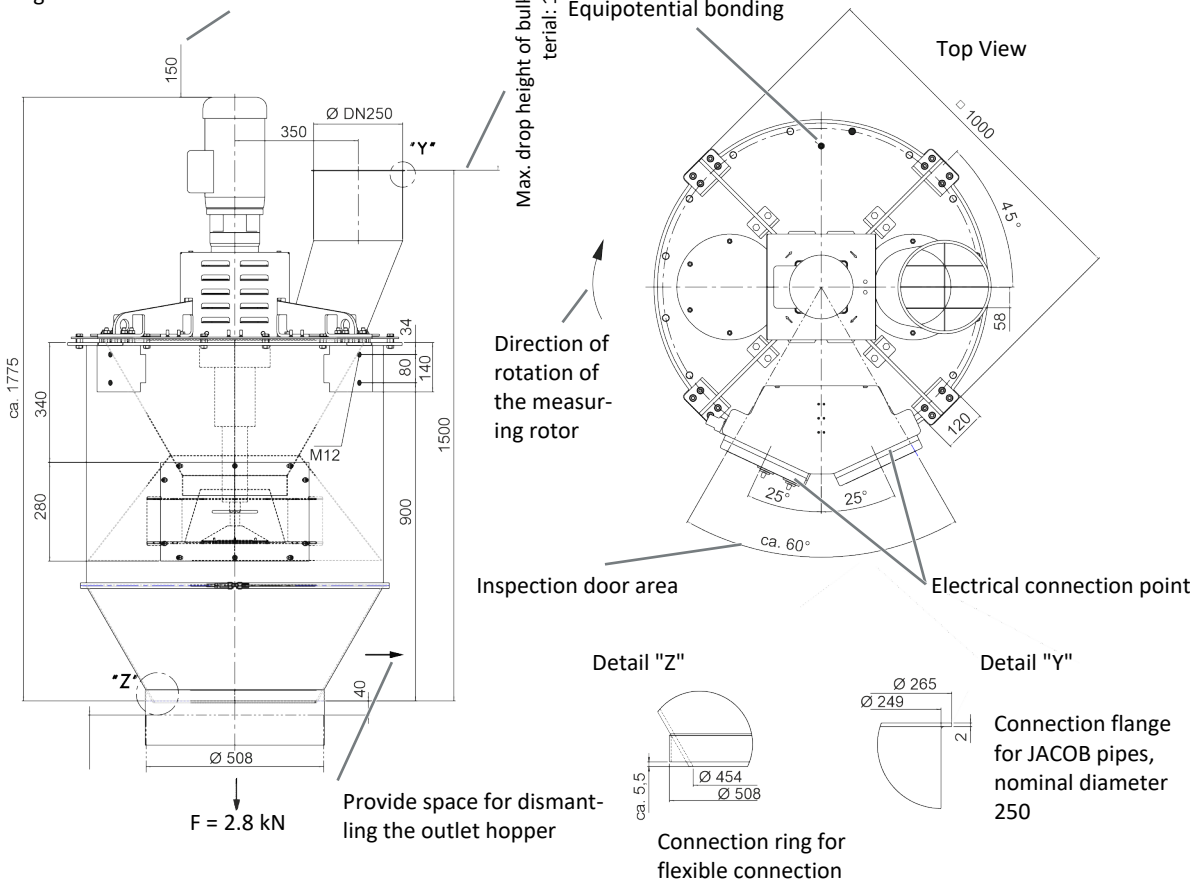
MULTICOR S80



MULTICOR S160

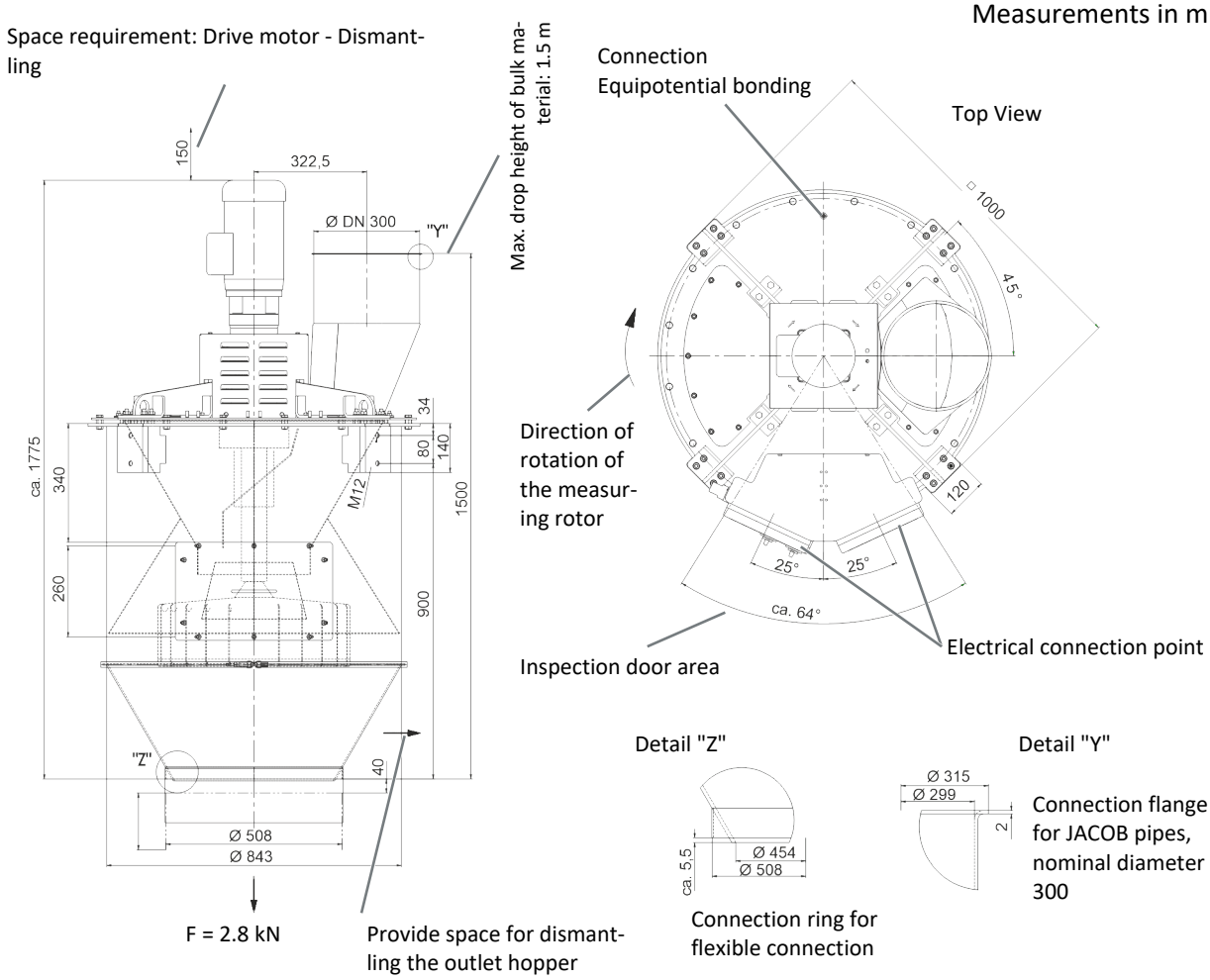
Space requirement: Drive motor - Dismantling

Measurements in mm

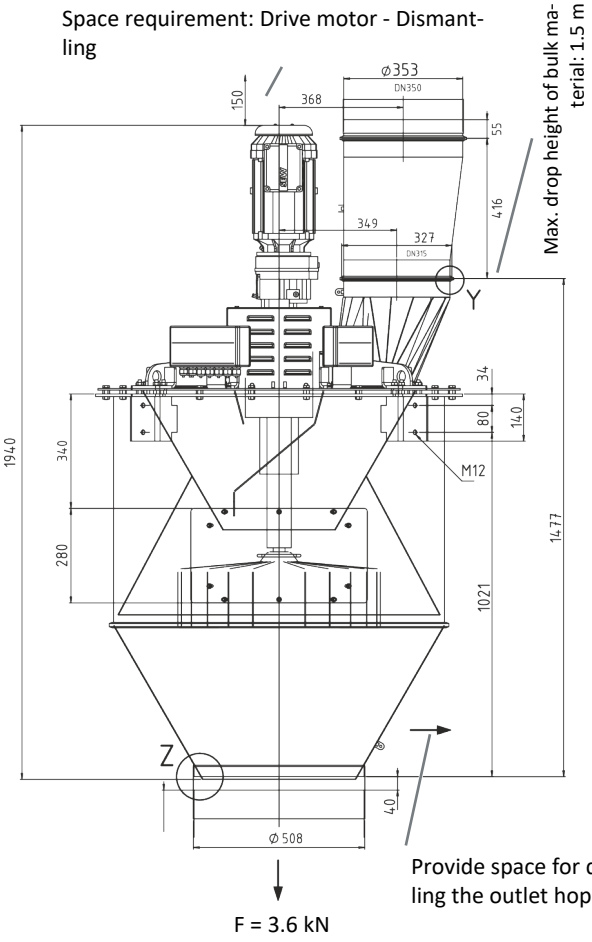


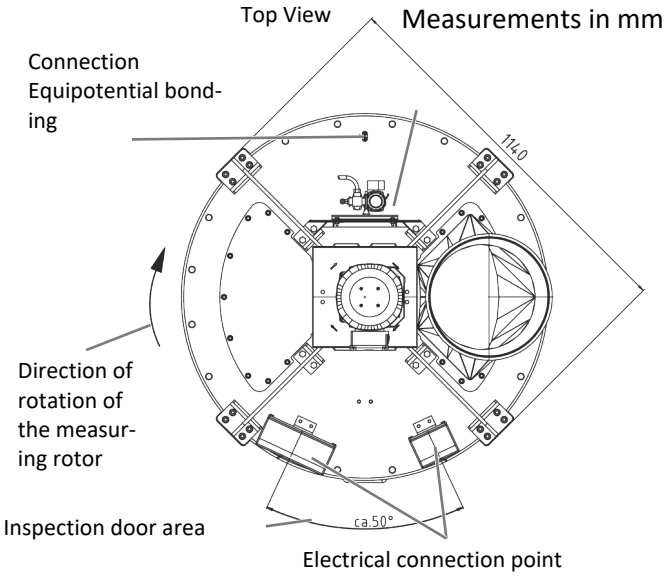
MULTICOR S260

Measurements in mm



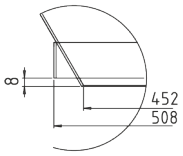
MULTICOR S380





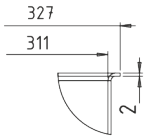
Provide space for dismantling the outlet hopper

Detail "Z"



Connection ring for flexible connection

Detail "Y"



D349 (Connection cone grip JACOB pipe, rated width 350)

Technical Data

Class	S40	S80	S160	S260	S380
Conveying rate	min. 0.5 t/h … max. 20 t/h (40 m³/h)	min. 2 t/h … max. 60 t/h (80 m³/h)	min. 6 t/h … max. 150 t/h (160 m³/h)	min. 5 t/h … max. 120 t/h (260 m³/h)	min. 6 t/h … max.150 t/h (380 m³/h)
Accuracy rated to actual feedrate	from ±0.5 % (depending on installation configuration)				
Adjustment range	1:10				
Operating pressure	-10 mbar … +30 mbar				
Pressure fluctuations	+/- 5 mbar				
Inlet dimensions	Ø 140 mm (DIN 2501 DN 125)	Ø 200 mm (DIN 24154)	Ø 249 mm (JAKOB pipe connection flange, nominal diameter 250)	Ø 315 mm (JAKOB pipe connection flange, nominal diameter 300)	Ø 349 mm (JAKOB pipe connection flange, nominal diameter 350)
Outlet connecting dimensions	Ø 356 mm	Ø 356 mm	Ø 508 mm	Ø 508 mm	Ø 508 mm
Weight	225 Kg	260 kg	270 kg	300 kg	360 kg
Ambient Temperature	-25 °C … +40 °C (+50 °C)				
Bulk solids temperature	max. +130 °C (+200 °C model suitable for hot material)				
Material bulk density	min. density 0.2 t/m³				
Maximum particle size (standard measuring wheels) [mm]	25	25	15 / 25 / 30	25	30
Maximum particle size (measuring wheels open for PE/ PP powder) [mm]	—	50	50	50	75
Moisture	max. 1 %				
Flow properties	free flowing to slightly sluggish, also flushing, non-sticky, powdery to grainy				
Product-contact materials	Housing, measuring wheel WS 1.4404/AISI 316 LN				

Further data

Accuracy

The accuracy stated refers to the actual feedrate 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)

Additional requirements

If you also have specific requirements, such as:

- larger feedrate ranges
- Use in EX areas
- Direct feeding into pneumatic conveyor lines
- Use as feed system

Please contact us directly.

Order Data

In order to process your request quickly and smoothly we require the following order data in addition to the order number.

Material data

Bulk density .....[t/m³]

Bulk solids .....

Feed rate range

from .....[t/h]

to .....[t/h

Variants
MULTICOR S40 for 0.5 t/h … 20 t/h with 50 Hz drive, 0.5 t/h … 18 t/h with 60 Hz drive
MULTICOR S80 for 1 t/h … 60 t/h with 50/60 Hz drive
MULTICOR S160 for 6 t/h … 150 t/h with 50/60 Hz drive
MULTICOR S260 for 5 t/h … 120 t/h with 50/60 Hz drive
MULTICOR S380 for 5 t/h … 150 t/h with 50/60 Hz drive

Options

- Wear protection
- Prefeeder
- Noise control
- Measuring wheel with non-stick coating
- Measuring wheel in special design for PE/PP powder dosing
- The purging gas design for the drive line
- Model suitable for hot material up to +200 °C
- ATEX model