

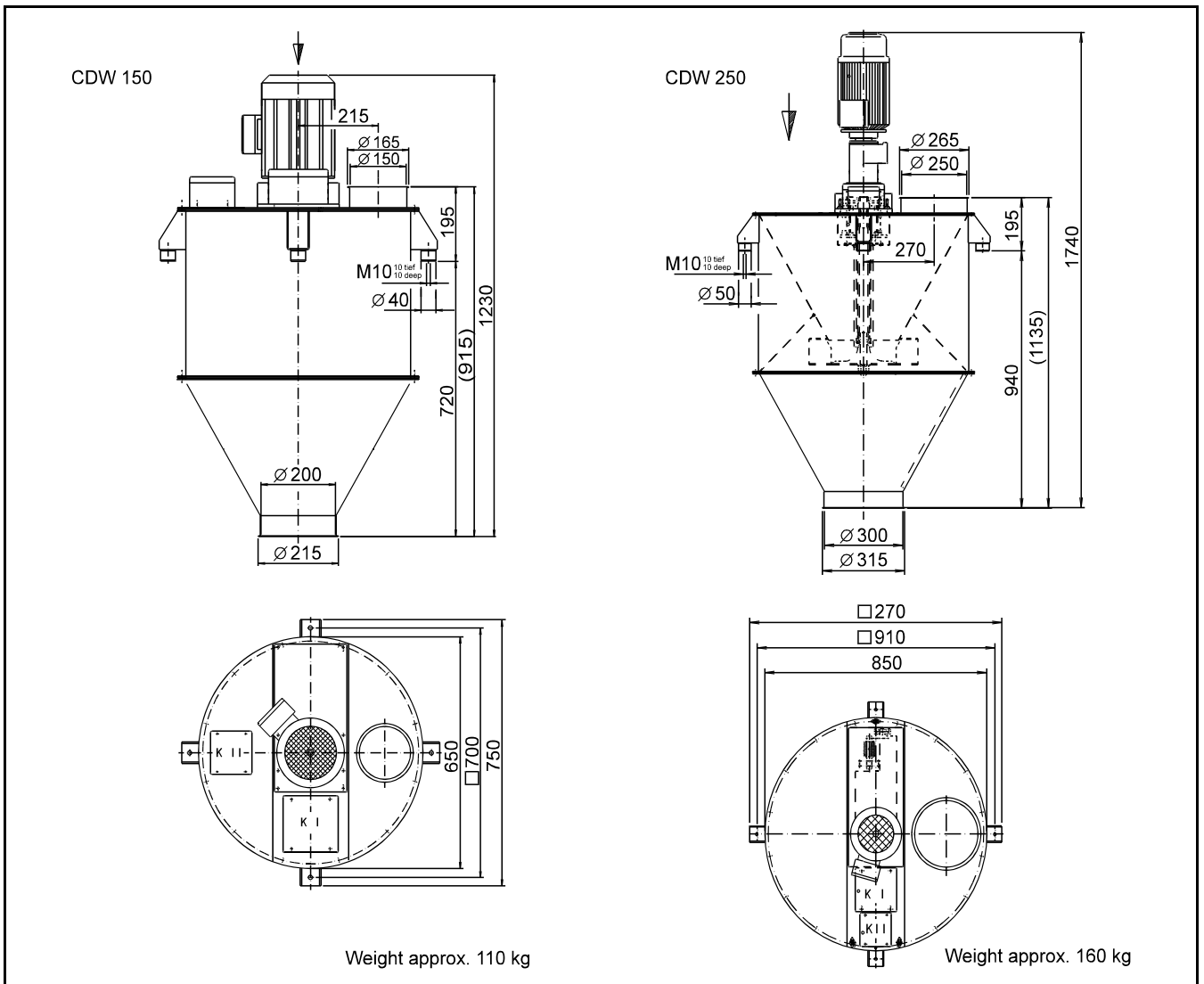
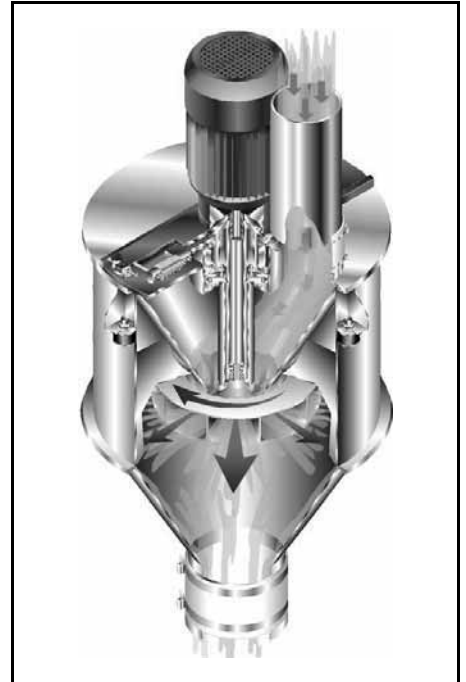
## The Brabender Coriolis Mass Flow Scale Type CDW 150 and CDW 250

The Brabender Coriolis Mass Flow Scale is a dust-tight fully enclosed compact unit for high-accuracy bulk solids flow metering using the principle of Coriolis force measurement. It is suitable for all non-adhesive flowable bulk ingredients at temperatures up to +70°C and is distinguished by its favourable cost-performance ratio. The compact design and the low planning-in dimensions even in case of highest throughputs save space and reduce the installation cost. Little maintenance requirement further reduces the expenses.

The working method: The bulk material is supplied from above and fed onto a constantly rotating impeller wheel, which is driven by a three-phase current motor. The centrifugal force diverts the material radially

and conveys it forward. The tangential Coriolis force acts on the guide blades of the impeller wheel and causes changes in the torque of the drive motor, which are sensed by a load cell. Based on torque and speed, the Congrav<sup>®</sup> microcomputer computes the current flow rate, which is both displayed and issued as an actual value signal for recording. The actual value signal can also be used to control an upstream variable speed proportioning feeder (e.g. screw feeder, rotary valve, etc.). Complete feeding units of this kind can be supplied.

Depending on the throughput, two models (CDW 150 and CDW 250) are available for flow rates up to a maximum of 40 respectively 100 m<sup>3</sup>/hr (for flow rates up to 160 m<sup>3</sup>/hr see Works Standard CDW 350).



## Technical Data\*

### Components

- Casing: cylindrical hopper with discharge cone and outlet pipe
- Cover with inlet pipe
- Mounting brackets with vibration isolation pads
- Three-phase current motor, centrally arranged on the cover
- Vertical shaft with horizontal impeller wheel
- Internal guidance system feeding dry solids to impeller wheel
- Load cell for dynamic measurement of motor torque changes
- Microcomputer Congrav®

### Materials

- Parts in touch with the ingredient: made of stainless steel 1.4301 (≈ AISI 304)
- Mild steel parts painted light grey as per RAL 7035 (textured coating)

### Three-Phase Motors

CDW 150 (CDW 250):  
 Wattage: 1.1 kW (3.0 kW)  
 Voltage: 230/400 V  
 Speed: 750 min<sup>-1</sup> (450 min<sup>-1</sup>)  
 Protection: IP 54 (IP 65)  
 Insulation class F

### Performance Data

- CDW 150: max. 40 m<sup>3</sup>/hr
  - CDW 250: max. 100 m<sup>3</sup>/hr
- Measuring range ≥ 1:5  
 Accuracy: ± 0,5 % to ± 1 %

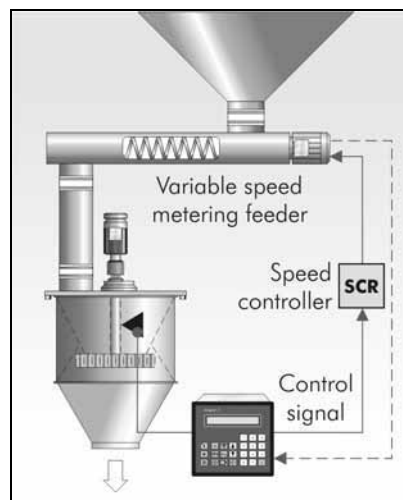
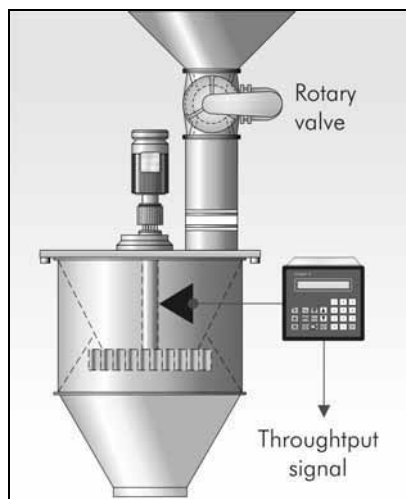
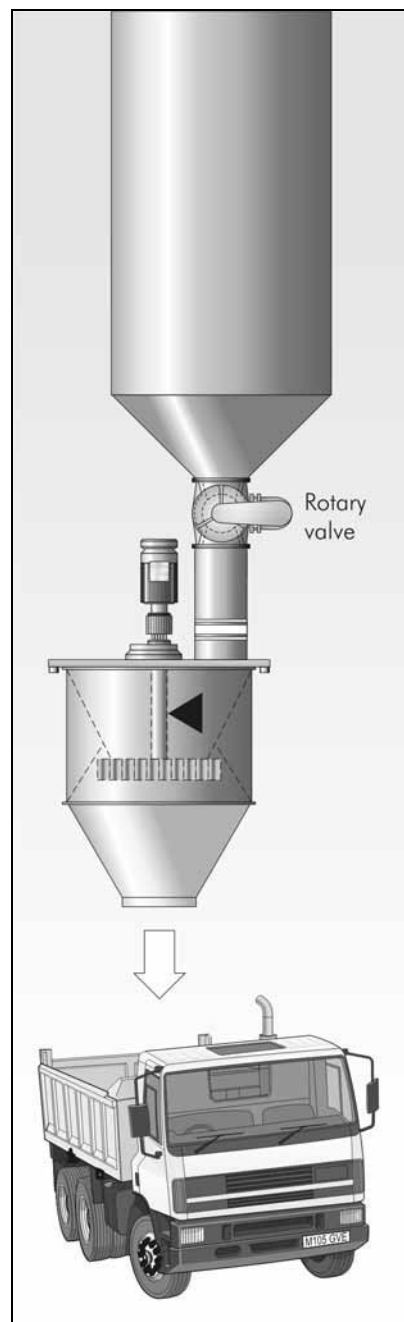
### Ambience

Temperature: -20°C to +70°C

### Options

Explosion-proof design complying with EU Directive 94/9/EG (ATEX 95)

### Application Examples



# brabender

## TECHNOLOGIE

An ISO 9001/EN 29001 Certified Company

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