

# Revolving Hopper Scale

## ED-90 / ED-91



### Features

- Convenient, proven concept as the outcome of many years of development work in conformity with practical requirements.
- No connection between hopper and patented discharging mechanism, thereby creating a complete, self-contained weighing system free of external disturbing influences, e.g. pneumatic and electric connections. High weighing accuracy is the benefit.
- Optimal tare/net ratio.
- Load cell measuring sensor.
- Use of specific hopper shapes for given application.
- Various materials are used for the hoppers, but preferably stainless steel.
- Rapid hopper changing.
- Exceptionally robust construction for unfailing reliability, even under the harsh operating conditions.
- No ambient air and aspiration problems.
- Patented decoupling arrangement of hopper.

### Application

- Wherever precise weighing of powdered, granular and liquid materials is required, also under harsh operating conditions.
- Batch weighing in conjunction with variable feeding elements, for instance bulk material feeding by coarse/fine flow or ramp control with single and multi-component systems.
- Optional cleaning beater for sticky products.
- Weighing range ED-90: 1 - 10 kg. / 10 l  
max.  $\pm 1$  g.
- Weighing range ED-91: 10 - 25 kg. / 32 l  
max.  $\pm 2$  g.

### Functional principle

- An initiator indicates to the connected controller the basic hopper position.
- Bulk material feeding or one or more components is continued until the required target weight for the given batch size is reached.
- The hopper is emptied by turning it by 180°; an initiator informs the controller that the emptying position has been reached.
- Optional use of a cleaning beater for complete emptying action, (if the dosage materials tend to stick).
- The revolving hopper is returned to its basic position.

### Standard equipment

- ED-90 revolving hopper made of stainless steel, 10 dm<sup>3</sup> gross volume.
- ED-91 revolving hopper made of stainless steel; 10, 16, 20, 25 or 32 dm<sup>3</sup> gross volume.
- Load cell sensor matching the weighing range.
- Overload protection of the measuring sensor.
- Initiators monitoring the hopper positions.
- Pneumatic revolving motion drive, controlled by 5/2-way solenoid valve with exhaust-air throttle.
- Aluminium case with detachable covering hood; fastening screw thread in the base plate 4 x M8.

### Accessories

- Supporting feet, either standard or according to the buyer's specifications.
- Dust case and design according to the buyer's specifications, e.g. ED-91 with a 25 litres hopper, a dust case diameter of 500 mm, and with up to 8 filling inlets in a common plane.
- Pneumatic cleaning beater with a read contact to monitor its position; Controlled by a 5/2-way valve with exhaust air throttle. The built-in rapid-action retracting mechanism offsets the inertia of solenoid switch-over. Consequently, hopper vibrations are not dampened, thereby promoting complete emptying.
- Automatic weight calibration with 4 calibrating values. The standard calibrating weights are placed in position by pneumatic cylinders controlled by 5/2-way solenoid valves with exhaust-air throttle. Read contacts to monitor the calibrating values.

### Technical data

- Air supply 5 to 6 bar.
- Electrical connection of the load cell measuring sensor and solenoid valve via plug sockets at the back of the housing.
- Supply voltage for the solenoid valve coil and the initiators 24 V<sub>DC</sub>.
- Long life of the pneumatic drive.
- Resolution and linearity between 0.5 g and 2 g, depending upon the max. final weight.
- Permissible ambient temperatures 0°C to +50°C.

### Standards and norms

- According to conformity explanation the valid European standards.
- EC- declaration

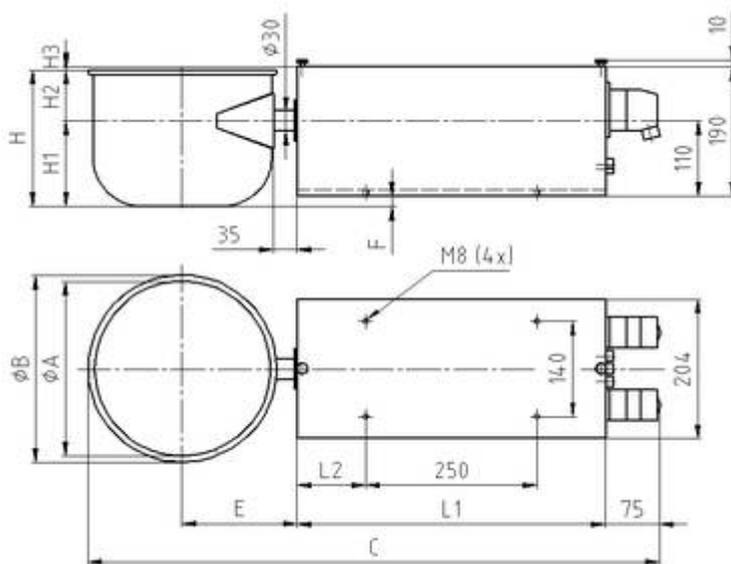
# Revolving Hopper Scale ED-90 / ED-91



## Dimensions of the standard equipment

### Dimensions Revolving Hopper Scale type ED-90

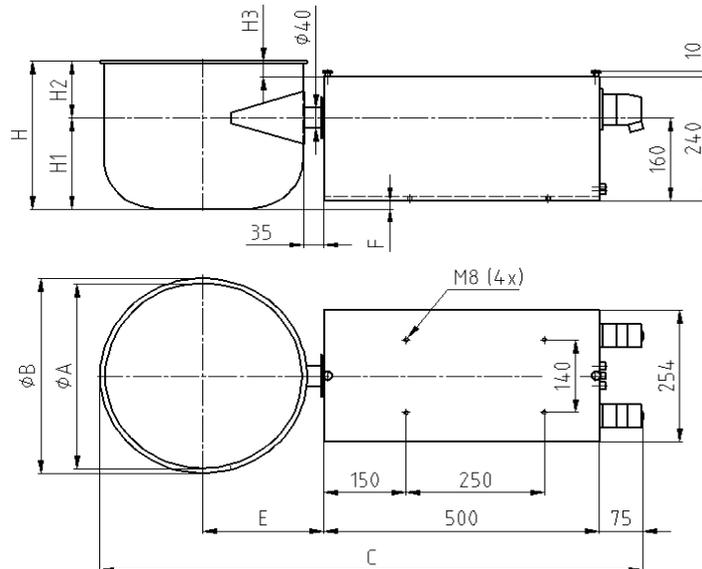
Please refer the table below for the actual dimensions of the identifying Letters.  
Unit of measurement: mm.



Gross - volume	10 dm <sup>3</sup>	Without weight control	With weight control
Hopper ØA	260		
ØB	276		
C		831	881
E	168		
F	20		
H	200		
H1	130		
H2	70		
H3	10		
L1		450	500
L2		100	150

### Dimensions Revolving Hopper Scale type ED-91

Please refer the table below for the actual dimensions of the identifying Letters.  
Unit of measurement: mm.



Gross - volume	10 dm <sup>3</sup>	16 dm <sup>3</sup>	20 dm <sup>3</sup>	25 dm <sup>3</sup>
Hopper ØA	260	300	320	360
ØB	275	315	335	375
C	875	915	935	975
E	168	188	198	218
F	-30	-10	20	15
H	200	250	300	285
H1	130	150	180	175
H2	70	100	120	110
H3	-10	20	40	30