

AZO CleanDock®

Contamination-free docking and undocking with integrated scales decoupling

Patented

Exact dosing and weighing

Contamination-free operation

Product and operator protection

Easy to clean design

No ATEX zone classification required

Preferred applications

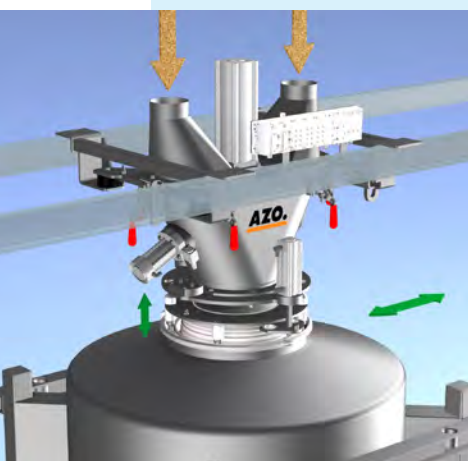
The AZO CleanDock® is used to automatically dock and undock mobile containers (e.g. hoppers, drums, big bags) at fixed dosing devices. It establishes a dust-tight connection between the container and dosing device. When undocked, the dosing device and the mobile hopper are tightly sealed off so that bulk material cannot escape into the atmosphere. When docked, the hopper on the scales is decoupled in such a way that the scales are

not influenced by mechanical forces. The design ensures cross contamination between the dosing points cannot take place. Owing to the low dust emissions with the AZO CleanDock®, it is not necessary to define ATEX zones relating to this product transfer point.

Special advantages

- Automatic docking and undocking of containers, big bags, drums, etc.
- Reliable contamination prevention
- Exact dosing and weighing results with scale decoupling
- Operator and product protection due to sealed system
- Owing to the low dust emissions, it is not necessary to define ATEX zones here.
- Easy to clean design

THE INNOVATION



How it works

The hopper (e.g. BATCHTAINER®, drum, container) mounted on scales is positioned under the defined dosing point. The grippers on the active part then raise and centre the coupling plate on the passive part. The scales are tared if product is to be weighed into the hopper. The AZO CleanDock® then opens the passage allowing the product to be dosed into the container.

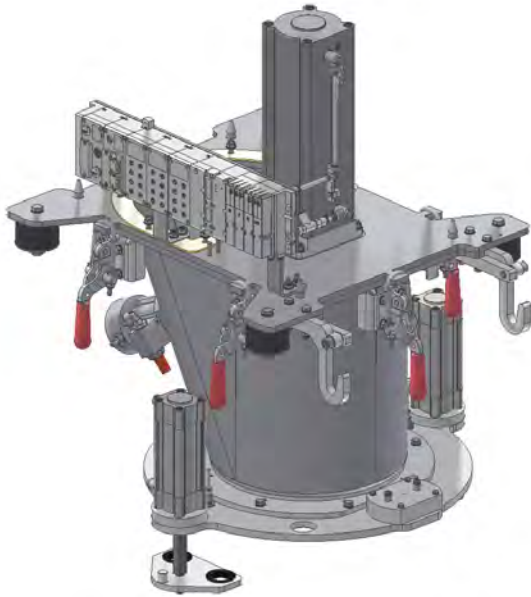
Switching from coarse flow to fine flow by reducing the speed at the drive motor of the dosing device

enables a high degree of dosing and weighing accuracy. Dosing is stopped on reaching the specified target weight and the passage is then closed. The mobile hopper is undocked after the coupling plate has been lowered on the passive part, allowing it to move to another dosing point.

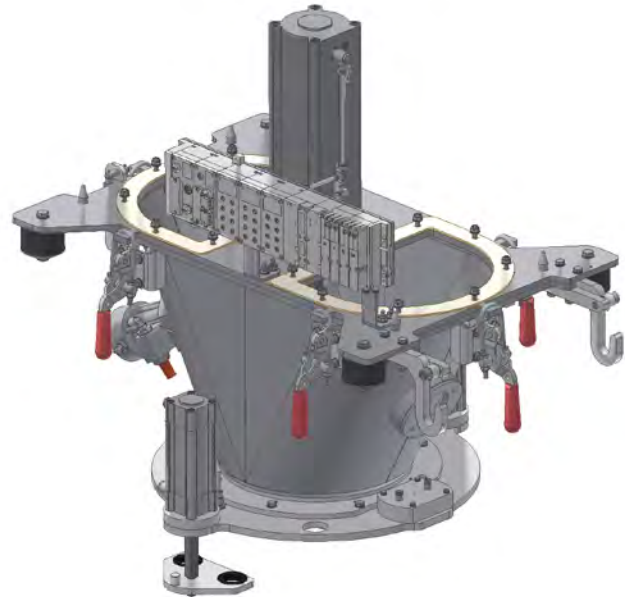
The AZO CleanDock® can be quickly cleaned and inspected in situ by opening the quick release fasteners and using corresponding handling aids. The AZO CleanDock® can optionally be of mobile design

and can be moved out of the line for cleaning. Cleaning then takes place while production continues on the active dosing lines.

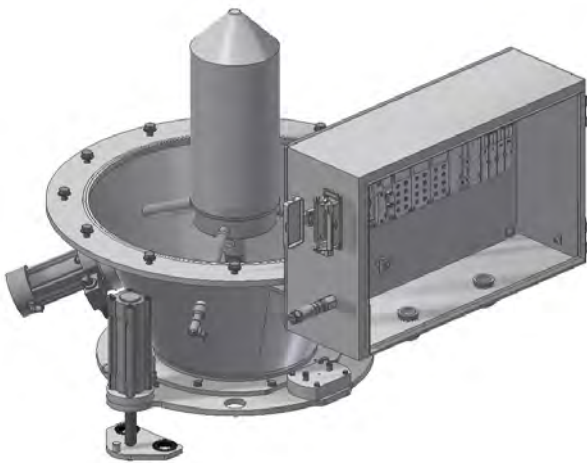
Versions



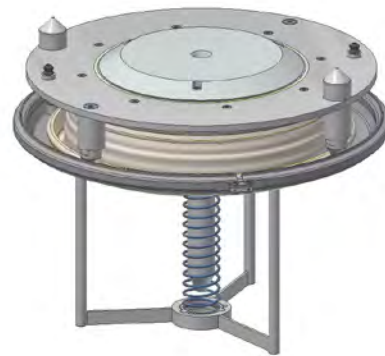
Active part, type CD 300 E for one dosing unit



Active part, type CD 300 D for two dosing units



Active part, type CD 300 ET for hoppers



Passive part, type CD 300 P

The active part type CD 300 E with one inlet is designed for connection of one dosing unit. Two dosing units can be connected to type CD 300 D. The active part type CD 300 ET is a shutter unit for non-pressurised hoppers, e.g. feeding hoppers. Mobile containers can be docked in a dust-tight manner to all three versions of the active part using the passive part CD 300 P.

Electrical power and compressed air are supplied at the active parts. The passive part is secured by means of a clamping ring to the

inlet of the mobile hopper (BATCHTAINER®, drum, container) that can be placed on scales. The passive part closes off the hopper when it is not docked to a dosing point.

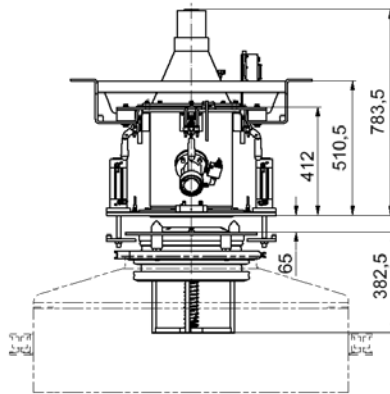
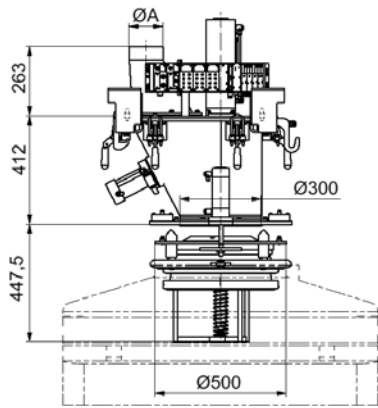
During docking, passive and active parts are centred and docked. Both shutter cones are then opened together. Here, the compensator fastened to the passive part serves as a flexible connection element for the docking and undocking movement as well as for venting and exhausting. The compensator on

the passive part prevents force shunt on the scale, ensuring exact dosing and weighing results are achieved.

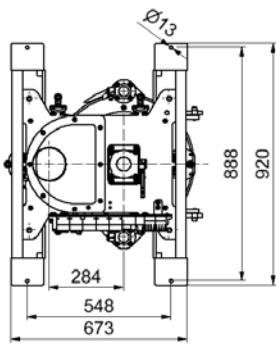
The active part can be released at the quick release fasteners and opened for inspection and cleaning purposes. The housing, active cone and product inlet are now well accessible and can be easily cleaned. The compensator on the passive part can be easily removed and installed for cleaning purposes; it can also be washed if necessary. The AZO CleanDock® can optionally be of mobile

design. It can be moved out of the line for cleaning, so that there is no need to stop production. Cleaning then takes place during production on the active dosing lines.

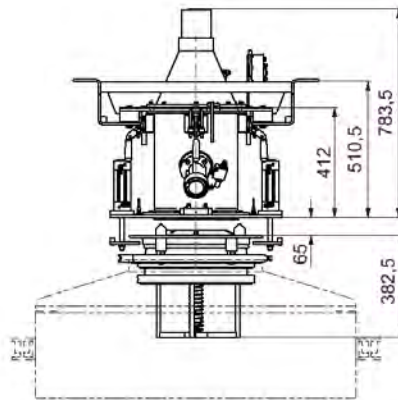
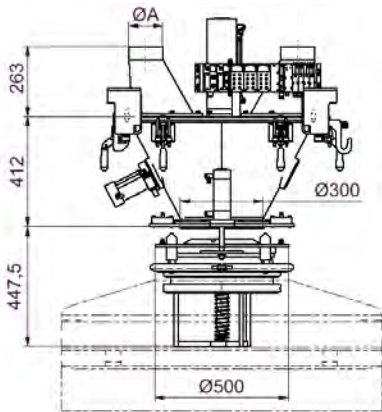
Technical data



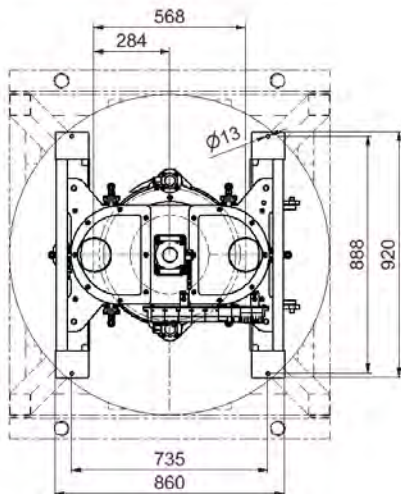
Ø A
128
193
300



AZO CleanDock® type CD 300 E

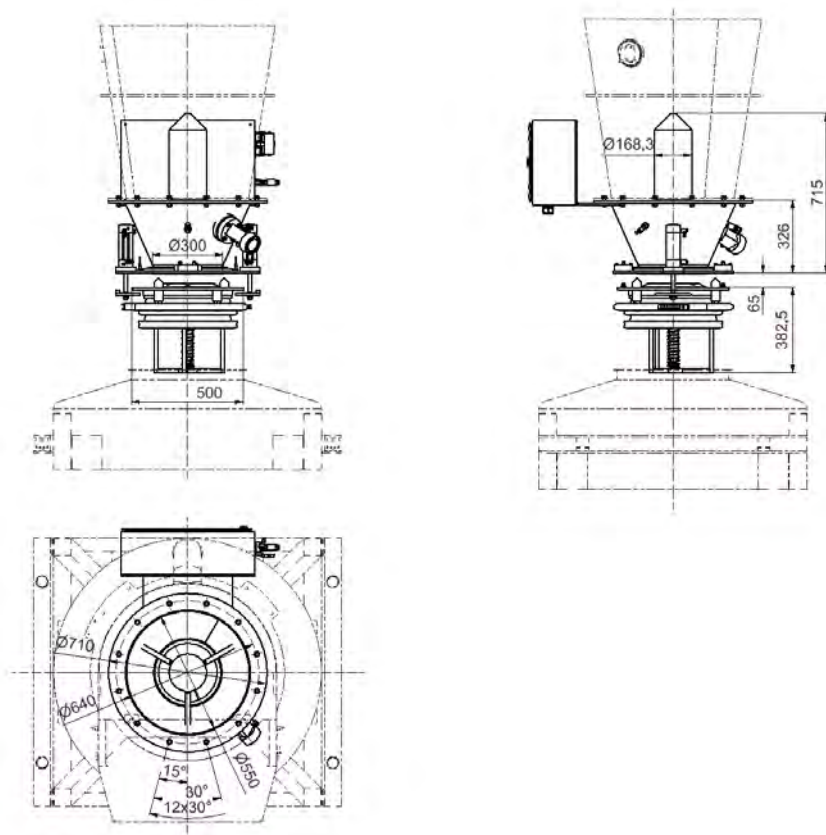


Ø A
128
193
300



AZO CleanDock® type CD 300 D

Technical data



AZO CleanDock® type CD 300 ET

Technical data for all versions

Ambient temperature:	0° C to 40° C
System supply pressure:	p (overpressure) =5-6 bar
Compressed air consumption at p (overpressure) = 6 bar without rapper and valve terminal:	~ 40 standard litres / cycle

Data on product to be processed

Minimum ignition energy (MIE):	> 3 mJ
Minimum ignition temperature (MIT):	200° C