

Dosino/Dosing Unit – Stopcock Blocked Error

Troubleshooting 'stopcock blocked' on dosino/dosing unit.

Technology: Titration, Ion Chromatography

How do you know you have this problem?

The stopcock blocked error occurs due to resistance (mechanical or electronic) as the cylinder inside the dosing unit is rotating (moving from port to port). Depending on how often the dosing unit is used, there may be some salt build up, or it is possible that the discs have dried out and the physical resistance needs to be broken.



What can I try to resolve it?

- Disassemble and clean the dosing unit per the following video: [Titration – How to clean the dosing unit | Metrohm](#)
- Check the valve disc and distributor disc. Blockage of the valve opening or of the outlet port is to be avoided under all circumstances.

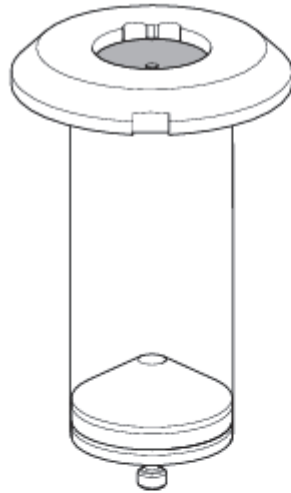


Figure 28 Valve disc in the cylinder base

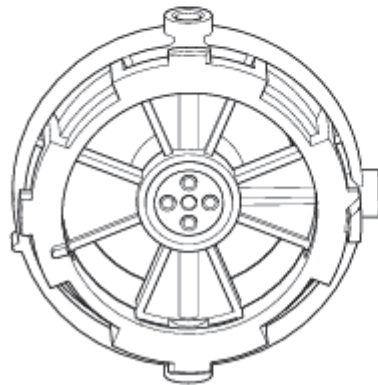


Figure 29 Distributor disc with 4 ports (in the distributor)

- Use a liquid cleaning agent and a soft cloth for polishing the contact surfaces of the two discs. Abrasive cleaning powders are unsuitable and could scratch the valve disk.
- Rinse the discs thoroughly with plenty of water.

What are some ways to prevent the problem?

- Metrohm recommends replacing glass cylinder unit annually.
- Dosing units require regular inspections and must be disassembled down to the cylinder unit from time to time and cleaned as necessary.

- Monthly or even weekly inspections are called for in the event that alkali, corrosive or high-concentration reagents are used. If non-problematic reagents are used, then the inspection intervals can be extended to between six and twelve months.
- A film of liquid must always be present between the valve disc and the distributor disc. If the dosing unit is used with solvent or pure water, it could happen that this film of liquid will dry out during prolonged periods of disuse. This could then lead to the valve disc and the distributor disc adhering to one another so strongly that the dosing unit is no longer able to function. It will no longer be possible to switch the stopcock position in such cases. The control device will announce that the dosing drive is over loaded.
- If aggressive reagents are dosed with dosing units, then such units should be rinsed with an inert solvent when not in use ('PREP'/Preparing function) and then subsequently emptied ('EMPTY'/Emptying function).
- In the event of that the dosing unit is not in use for > 2 days, the dosing unit should be emptied without fail, because even water can corrode the buret glass in the event of prolonged periods of disuse. Remove the dosing drive (Dosino) in the event of prolonged periods of disuse (longer than one week).

Other ideas

'Submit a request' for further assistance from Metrohm Technical Support at support.metrohmusa.com.