



# LoTo for aseptic and hygienic seat valves

## AIR LOCK/DISK LOCK

The Lock Out, Tag Out (LoTo) device is used to ensure a safe maintenance & commissioning of process plants. Energy sources will be locked and visually marked to prevent the unintentional movement of the valve.

The **DISK LOCK** for seat valves can be installed on all nominal sizes of GEA single-seat and mixproof valves (D-tec® and VARIVENT®). This advanced solution with its increased safety blocks the movement of the actuator, so that the valve disk can no longer be moved. If the valve is used with any feedback it needs to be taken off for locking the valve.

The **AIR LOCK** is independent of the nominal size. With this solution, either the air connection on the actuator or control top is locked. Hence, pneumatic actuation is no longer possible. This solution is not designed to withstand water hammers.



AIR LOCK



DISK LOCK

# Technical data LoTo

## Aseptic and hygienic seat valves

### AIR LOCK

#### Locks the air connection to the control top or actuator

- Prevents movement of actuator
- Not water hammer proof
- Does not stay at the valve permanently (only needed when locking the valve)

#### The same solution for all valve types & nominal sizes

- Suitable for straight & angled air connections
- Only difference: separation in metric & imperial

#### The AIR LOCK is available for:

- Single seat valves:
  - VARIVENT® N, W, U & X
  - ECOVENT® N & W
  - D-tec® N & W
  - VESTA® (pneumatic with stainless steel actuator)
  - Aseptomag® AV & UV
- Mixproof Valves:
  - VARIVENT® D, B, R, Y, K, C, T, L, PMO
  - D-tec® D/DV
- GEA Hygienic butterfly valves

### LoTo for mixproof valves:

LoTo can be applied for mixproof valves. When doing so the main stroke of the valve will be locked (with AIR or DISK LOCK). The single valve disks could still be activated (when using a lifting actuator). Hence, the engineering company or the plant operator needs to evaluate if further locks are needed.

### DISK LOCK

#### Locking the movement of the actuator

- Valve disk is fixed
- Advanced solution – increased safety
- In the event of a water hammer, the valve remains closed
- Slight deformation of stainless steel or gasket possible
- In order to achieve 100 % water hammer safety, block & bleed needs to be applied additionally

#### One solution for all valve sizes

#### The DISK LOCK is available for:

- Single seat valves:
  - VARIVENT® N, W, U & X
  - D-tec® N & W
- Mixproof Valves:
  - VARIVENT® D, B, R, Y, K, C, T, L, PMO
  - D-tec® D/DV

### Order code

#### AIR LOCK:

Position	Description of Order Code
1	<b>Basic type</b>
	HV_LoTo For hygienic valves
	AV_LoTo For aseptic valves
2	<b>LoTo type</b>
	AL AIR LOCK
3	<b>Air connection</b>
	M Metric
	Z Imperial

Position	1	2	3
Code		AL	

#### DISK LOCK:

Position	Description of Order Code
1	<b>Basic type</b>
	HV_LoTo For hygienic valves
	AV_LoTo For aseptic valves
2	<b>LoTo type</b>
	DL DISK LOCK
3	<b>Valve family</b>
	VAR VARIVENT® valves (only for HV)
	D-tec D-tec® valves (only for AV)

Position	1	2	3
Code		DL	