

## Easy installation, operation and status control

Control Head Type 8681 for hygienic process valves



**bürkert**  
FLUID CONTROL SYSTEMS

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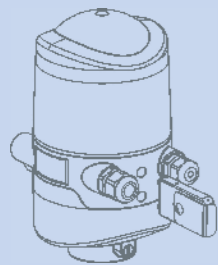
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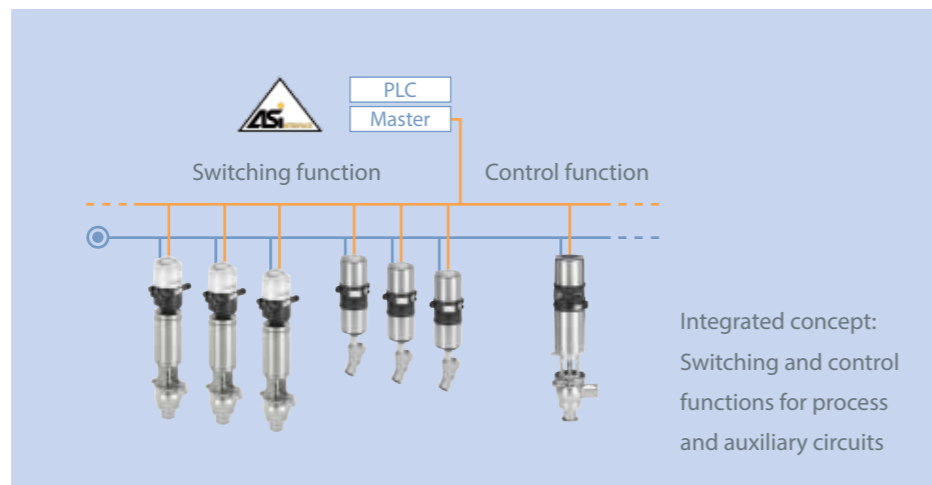
- Universal adapter for hygienic process valves
- Contactless position measurement system with 3 switching points (Teach-In function)
- Coloured status display
- Manual override to be used with closed housing
- Communication interfaces AS-Interface and DeviceNet

## With our control head 8681 a new star is born!

With the 8681 Bürkert presents a new control head which has been specially optimized for decentral automation of pneumatically controlled hygienic process valves. It is universally adaptable and can be combined with all commercially available valve types, such as butterfly valves, ball valves and single and double-seat valves. Making it to a universal standard solution for the automation of complete hygienic process installations. Since the control head is very easy to clean, features time-tested IP protection and is made of chemical-resistant materials, it is ideal for use in these applications. Within the framework of decentral automation concepts the 8681 performs all pneumatic actuation, feedback and diagnostic functions, as well as bus communication. By programmable diagnostic functions specific service functions may be defined and controlled via the control head.



Magnetic tool starts the maintenance mode of the process valve from the exterior



### Easy installation, operation and status control

The automated teach-function of the switching positions replaces manual setting work and guarantees function safety. The switching speed can be set individually in each direction and in terms of the absolute process safety pneumatic check valves prevent switching errors due to back pressure. Additionally to the control layer the valve status of the plant is clearly shown via coloured status indication.

### Maintenance function process valve

A maintenance demand programmed via limit value for switching cycles and operating hours is shown via the blinking status indication. Thanks to a the patented magnetically encoded manual override tool the actuator can be used to open the process valve from the exterior. The IP protection is guaranteed every time.

### Decentral automation completed

The universally adaptable Control Head 8681 completes the ELEMENT valve product range with an integrated automation function for the control of auxiliary circuits like steam, pressurized air or cleaning agents. With this all the advantages of a decentral automation as an alternative to cabinet solutions can be used for all armatures. Process monitoring, minimal installation effort for electrical wiring and pneumatic tubing when using the AS-interface. Flexibility during planning and clear plant construction for plant hygienic, energy saving by minimal compressed air consumption and shortest switching times.

### Easy parametrization via PC-interface

Parametrization and configuration of the Control Head are done via USB-interface. A device remote control, teach-in and activation of the autotune-function is possible. Furthermore, diagnostic functions are read and edited or device data as software version and bus specific parameters are shown.

## Technical data

### Function

- Up to 3 pilot valves for actuation
- Contact-free position sensor for switch position feedback
- Process monitoring via optical status indicator
- Communication interfaces

### Pneumatic pilot valve system

- Pilot valve modules with restrictable function to reduce the switching speed
- Integrated check valve for absolute process safety
- Manual override

### Position sensor

- High-resolution, inductive position indicator
- Automated Teach-function for up to 3 feedback signals PNP
- Fourth switching position can be read via external initiator

### Status indication

- Status indication via coloured high power LEDs
- Colour coding yellow, green and red individually adjustable

### Housing

- Hygienic and optimized for cleaning
- Materials noncorrosive and durable against cleaning agents
- Protection type IP 65 and 67; additionally controlled over pressure protection
- Universal mechanical attachment to valve actuator

### Communication interfaces

- AS-Interface; external power supply switchable
- DeviceNet, IO-Link

### Service function process valve

Activation of the service function when Control Head housing is closed via patented magnetic hand-tool actuation

### Diagnostic function

- Operating hours and switching cycle counter
- Error signal indication and maintenance request

### Parametrization/Configuration

- PC-interface via USB
- Device remote control for manual control, teaching and starting of the autotune-function
- Reading and editing of the diagnostic function
- Showing device data, software version and bus specific parameters

### Ignition protection

- ATEX Zone 2 II 3G Ex nA IIC T4
- ATEX Zone 22 II 3D A22 T135°C



Hygienic Process valves  
decentrally automated



Control Head 8681 with  
coloured status indication



Parametrization/configu-  
ration and maintenance  
function via USB-interface