



## GEMÜ 4242 combi switchbox with ASI-5 interface

### Areas of application

- Chemical processes
- Power generation and environmental systems
- Industrial water treatment
- Mechanical engineering and processing industries
- Foodstuffs and beverages
- Surface finishing
- Pharmaceutical, biotechnology and cosmetics industries

### Features

- ASI-5 interface with extended data bandwidth
- Up to 96 participants per master
- Shorter cycle time and faster transfer speed
- Compatible with ASI-3 and IO-Link devices
- Commissioning and control via the GEMÜ App
- Monitoring of status data using the integrated sensor system
- Can be combined with single or double acting linear actuators or quarter turn actuators

# GEMÜ 4242 combi switchbox

## Description

The GEMÜ 4242 combi switchbox was designed especially for pneumatic linear and quarter turn actuators. Its universal adaptation option means that it can be fitted to a large number of different actuators. The internally installed contactless travel sensor detects the position of the valve spindle using hall sensors. The sensors determine the magnetic field of moving magnets and enables you to precisely and reliably determine the position of the valve without wear. The internally installed pilot valves enable the process valve to be activated directly and this is indicated by the programmable high visibility LEDs.

The combi switchbox is commissioned and controlled via the GEMÜ App. The new ASi-5 interface provides an extended data bandwidth and a shorter cycle time, as well as ensuring compatibility with ASi-3 and IO-Link devices. The versatile, integrated sensor system detects status changes at an early stage, avoiding unexpected plant shutdowns. The sensor technology allows data, such as temperature, humidity, acceleration, current consumption and supply voltage to be read out via the communication interface and the GEMÜ App.

**Traceable**  
due to location function

**Visible**  
due to programmable high visibility LEDs

**Smart**  
read-out from the sensor system and operation via the GEMÜ App

**Flexible**  
for combination with single or double acting linear actuators or quarter turn actuators

**Versatile**  
thanks to various materials and sizes

**Reliable**  
due to automatic end position programming

**UV resistant**  
thanks to a plastic cover made from polycarbonate

**Explosion-proof**  
for use in ATEX, IECEx or NEC-compliant plants

**Communicative**  
via an AS-Interface, DeviceNet or IO-Link interface

**Rotatable**  
M12 plug for orientation of the angled connections

**Without play and tension-free**  
for recording the valve stroke

**ASi** **IO-Link** **DeviceNet**

## Technical specifications

- **Ambient temperature**  
0 to 60 °C
- **Linear measuring range**  
2 to 30 mm, 5 to 75 mm
- **Radial measuring range**  
0 to 90°
- **Flow rate**  
max. 250 NI/min
- **Supply voltages**  
24 V DC
- **Electrical connection types**  
M12 plug
- **Protection class**  
IP 65, IP 67
- **Communication modes**  
24 V | ASi-3 | ASi-5 | IO-Link | DeviceNet
- **Conformities**  
ATEX | EAC | ETL Listed C US | functional safety | IECEx | NEC
- **Mode of action**  
Single acting | double acting

## Comparison between ASi-3 and ASi-5

Properties	ASi-3	ASi-5
Participants per master	Up to 62 participants	Up to 96 participants
Cycle time	5 ms cycle time for up to 31 participants	1.2 ms cycle time for up to 24 participants
Data bandwidth	4 bits	16 bits
Process data per participant	Up to 4 bytes of process data	Up to 32 bytes of process data
Number of I/Os	496 I/Os	1536 I/Os
Range	Up to 100 metres	Up to 200 metres
Compatibility	Not forwards compatible with ASi-5	Backwards compatible with all ASi generations, can be connected to IO devices



**Would you like to use the combi switchbox for process automation and monitoring of your valves?**

With GEMÜ, you get a pre-assembled solution. The entire system consisting of combi switchbox and process valve is already preset and tested. This means that you also save on the time and effort required for logistics and installation of the system on-site, as well as for documentation.



