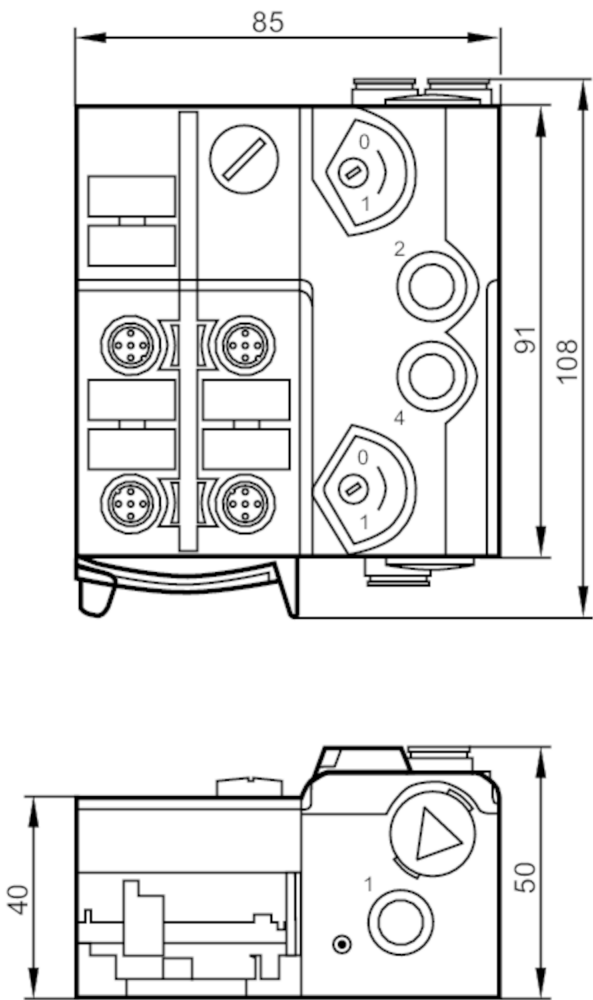


# AC5251



## AS-Interface Airbox with quick mounting technology

AirBox 5/2 bistable 4DI-Y IP67



### Application

|                         |                               |
|-------------------------|-------------------------------|
| Design                  | housing for DIN rail mounting |
| Application             | field installation            |
| Medium temperature [°C] | -10...50                      |

### Electrical data

|                                            |                |
|--------------------------------------------|----------------|
| Operating voltage [V]                      | 26.5...31.6 DC |
| Max. current consumption [mA]<br>from AS-i | 280            |
| Integrated watchdog                        | yes            |

### Inputs / outputs

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Number of inputs and outputs | Number of digital inputs: 4; Number of pneumatic outputs: 2 |
|------------------------------|-------------------------------------------------------------|

### Inputs

|                                 |     |
|---------------------------------|-----|
| Number of digital inputs        | 4   |
| Input circuit of digital inputs | PNP |



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|                                                 |                           |
|-------------------------------------------------|---------------------------|
| Sensor supply of the inputs                     | AS-i                      |
| Voltage supply [V]                              | 20...30; (via flat cable) |
| Max. total current rating of inputs [mA]        | 200                       |
| Input current High [mA]                         | 6...10                    |
| Input current low [mA]                          | 0...2                     |
| Switching level high [V]                        | > 11                      |
| Digital inputs protected against short circuits | yes                       |

### Outputs

|                             |                                                   |
|-----------------------------|---------------------------------------------------|
| Number of pneumatic outputs | 2; (pneumatic NO/NC selectable output ; Bistable) |
| Actuator supply outputs     | AS-i                                              |

### Operating conditions

|                          |              |
|--------------------------|--------------|
| Ambient temperature [°C] | -10...55     |
| Protection               | IP 65; IP 67 |

### Tests / approvals

|              |               |  |
|--------------|---------------|--|
| EMC          | EN 50295      |  |
|              | IEC 61000-6-2 |  |
| MTTF [years] | 258           |  |

### AS-i classification

|                          |                   |       |           |       |           |
|--------------------------|-------------------|-------|-----------|-------|-----------|
| AS-i version             | 2.11; 3.0         |       |           |       |           |
| AS-i addressing          | Addressing socket |       |           |       |           |
| Extended addressing mode | yes               |       |           |       |           |
| AS-i master profile      | M2; M3; M4        |       |           |       |           |
| AS-i profile             | S-7.A.E           |       |           |       |           |
| AS-i I/O configuration   | [hex]             | 7     |           |       |           |
| AS-i ID code             | [hex]             | A.E   |           |       |           |
| Data bits                | Data bit          | D0    | D1        | D2    | D3        |
|                          | Input             | 1     | 2         | 3     | 4         |
|                          | Socket            | I-1/2 | I-1/2 I-2 | I-3/4 | I-3/4 I-4 |
|                          | Pin               | 4     | 2 4       | 4     | 2 4       |
|                          | pneumatic output  | 2     | 4         | -     | -         |

### Mechanical data

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| Weight [g]                  | 376                                                                                 |
| Housing                     | rectangular                                                                         |
| Type of mounting            | quick mounting; AS-i flat cable connection; Mounting on DIN rail; (TH35 (EN 60715)) |
| Dimensions [mm]             | 108 x 85 x 50                                                                       |
| Material                    | PA; POM; Piercing contacts: CuSn6 nickel-plated and tin-plated                      |
| Pneumatic system            | 1 x 5/2-way slide valve (free from overlapping); bistable                           |
| Operating pressure range    | 3...8 bar    0.3...0.8 MPa    43.5...116 psi                                        |
| Air flow at 6/5 bar [l/min] | 500                                                                                 |
| Permissible compressed air  | non-lubricated compressed air class 6-3-1; lubricated compressed air class 6-3-4    |
| Manual override             | pressing/releasing or pressing/turning/locking                                      |
| Tube fittings               | 8 mm                                                                                |
| Exhaust                     | exhaust can be discharged through tube connection                                   |

AC5251

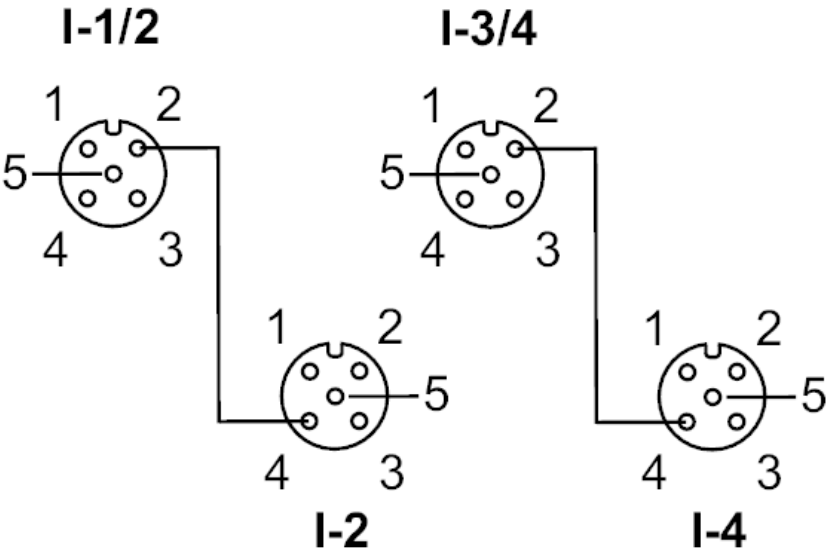


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| Displays / operating elements |                                                                      |             |
|-------------------------------|----------------------------------------------------------------------|-------------|
| Display                       | Power                                                                | LED, green  |
|                               | errors                                                               | LED, red    |
|                               | Function                                                             | LED, yellow |
| Electrical connection         |                                                                      |             |
| Module connection             | Flat cable                                                           |             |
| Accessories                   |                                                                      |             |
| Items supplied                | lower part                                                           |             |
| Accessories (optional)        | Mounting plate:, E74999                                              |             |
|                               | Module lower part:, E75000                                           |             |
|                               | Protective cap: M12, E73004                                          |             |
|                               | sealing plug:, E75231                                                |             |
|                               | Silencer:, E75232                                                    |             |
|                               | Push-in L-fitting:, E75228                                           |             |
|                               | Push-in T-fitting:, E75227                                           |             |
| Remarks                       |                                                                      |             |
| Remarks                       | If not pneumatically operated, E75231 sealing plug must be inserted. |             |
|                               | Avoid ingress of dirt and dust.                                      |             |
|                               | Do not connect any of the following points to an external potential: |             |
|                               | L-, L+, I-1, I-2, I-3, I-4                                           |             |
|                               | The connections are electrically connected with the AS-i cable.      |             |
|                               | Please see the notes on compressed air and EMC/ESD under "Downloads" |             |
| Pack quantity                 | 1 pcs.                                                               |             |

| Electrical connection                                                        |  |
|------------------------------------------------------------------------------|--|
| quick mounting technology for AS-i flat cable: ; three selectable directions |  |
| Connection                                                                   |  |





AS-Interface Airbox with quick mounting technology

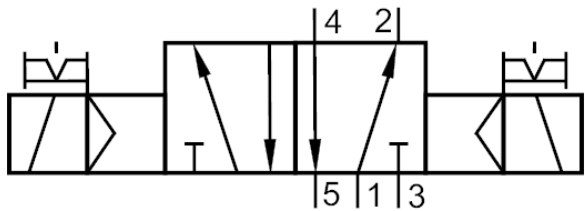
AirBox 5/2 bistable 4DI-Y IP67

Connector: M12

|   |                   |
|---|-------------------|
|   | Inputs            |
|   | Socket I-1/2      |
| 1 | Sensor supply L+  |
| 2 | Data input 2      |
| 3 | Sensor supply L-  |
| 4 | Data input 1      |
| 5 | not used          |
|   | Socket I-2        |
| 1 | Sensor supply L+  |
| 2 | not used          |
| 3 | Sensor supply L-  |
| 4 | Data input 2      |
| 5 | not used          |
|   | Socket I-3/4      |
| 1 | voltage supply L+ |
| 2 | Data input 4      |
| 3 | Sensor supply L-  |
| 4 | Data input 3      |
| 5 | not used          |
|   | Socket I-4        |
| 1 | Sensor supply L+  |
| 2 | not used          |
| 3 | Sensor supply L-  |
| 4 | Data input 4      |
| 5 | not used          |

Diagrams and graphs

Pneumatic symbol



1 x 5/2-way slide valve (free from overlapping); bistable