

ifm electronic



Operating instructions

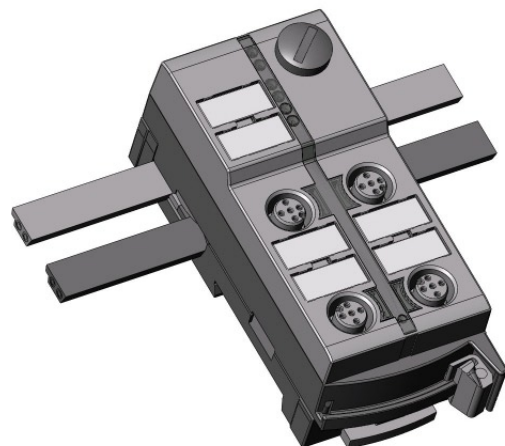
**AS interface**

ClassicLine module

**AC5290**

**UK**

7390796 / 00 07 / 2009



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# 1 Safety instructions

- Please read the product description prior to set-up of the unit. Ensure that the product is suitable for your application without any restrictions.
- The unit conforms to the relevant regulations and EC directives.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application.

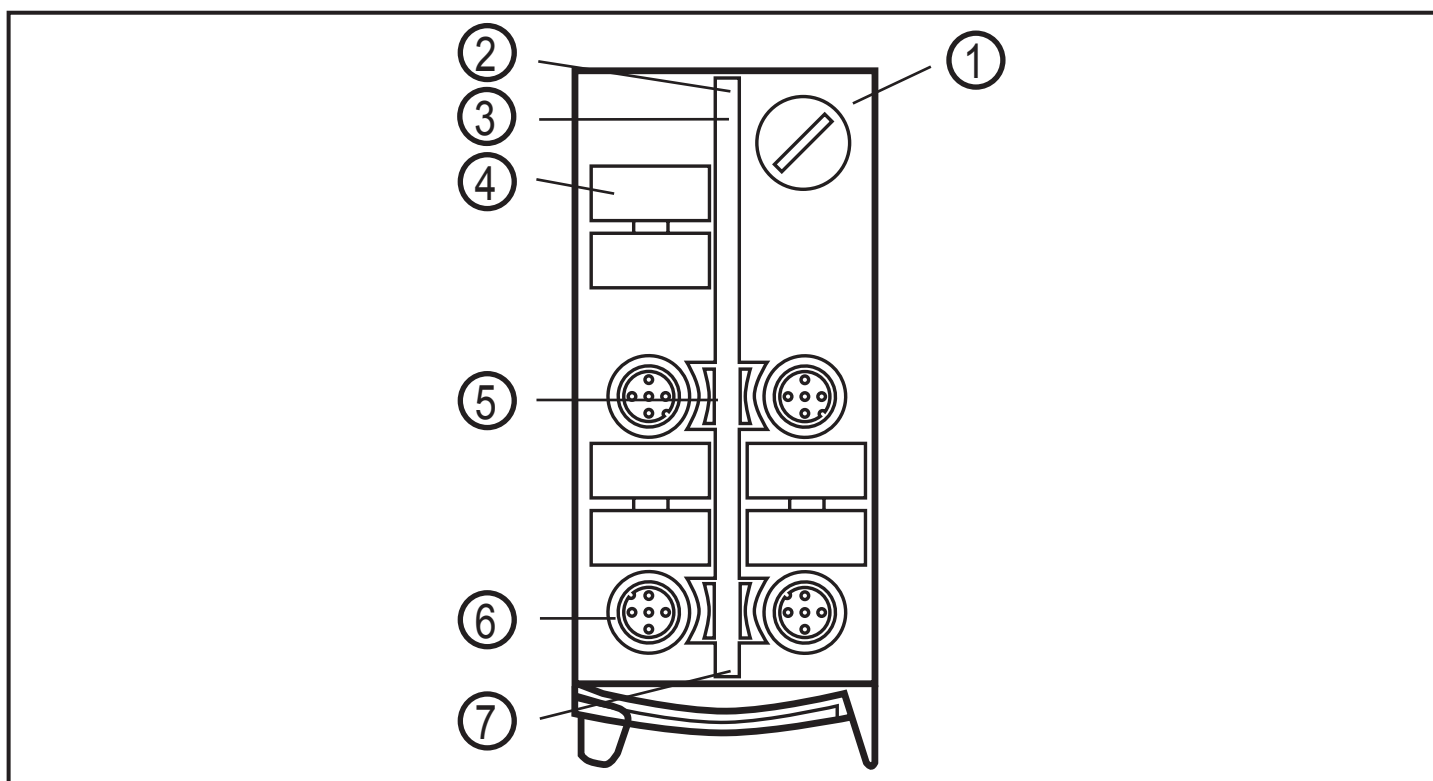
That is why installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.

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# 2 Functions and features

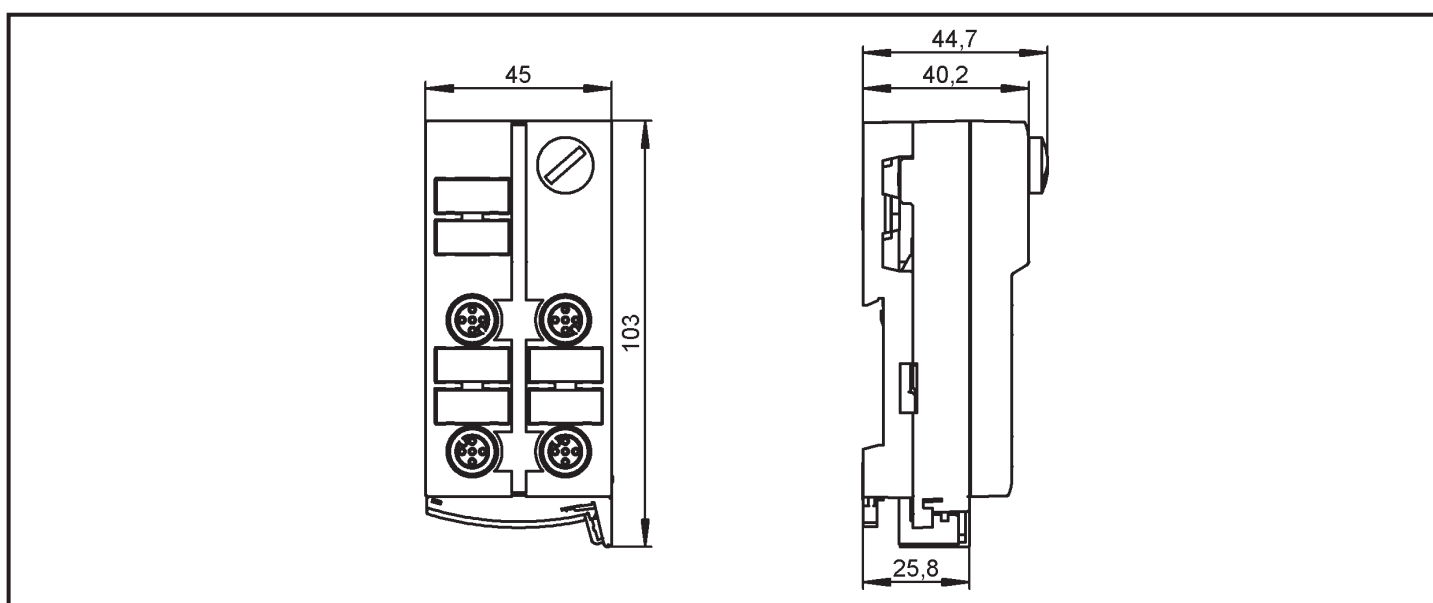
- maximum number of modules per master: 62
- AS-interface version 3.0, downward compatible
- inputs supplied externally via the black flat cable

### 3 Operating and display elements

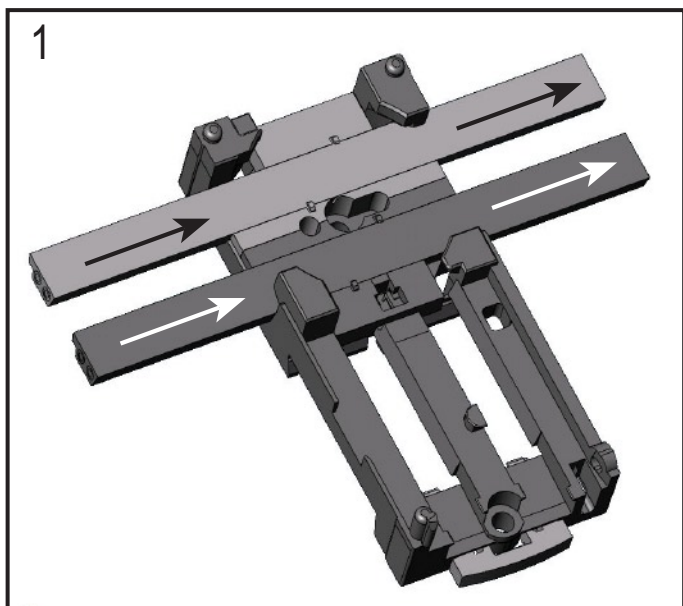


- 1: Addressing interface
- 2: LED PWR
- 3: LED FAULT
- 4: Labels
- 5: LED 1
- 6: 4 M12 sockets
- 7: LED AUX

#### Scale drawing

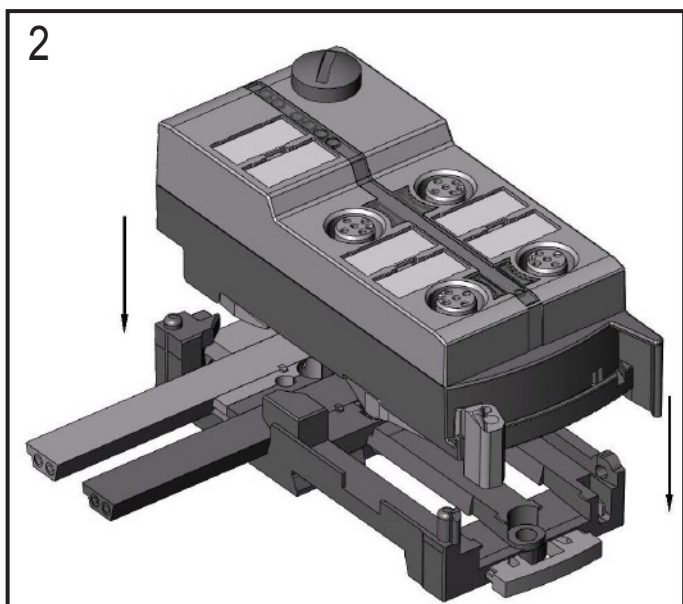


## 4 Installation

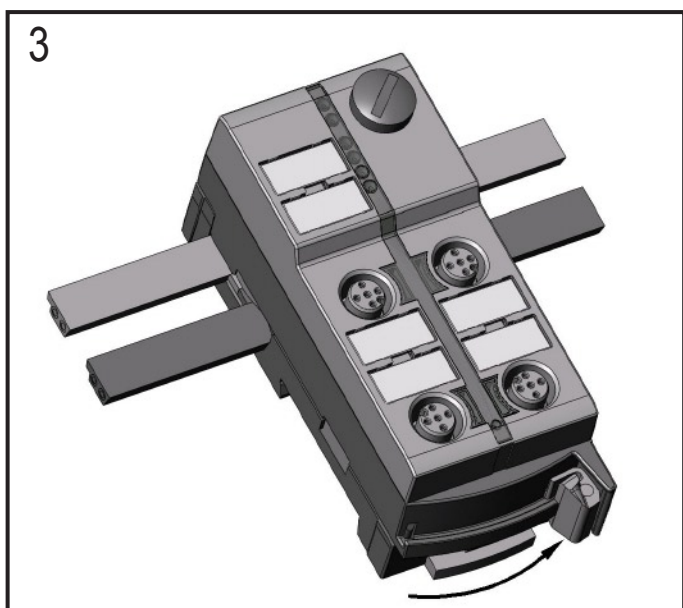


### Alignment of the flat cable on delivery

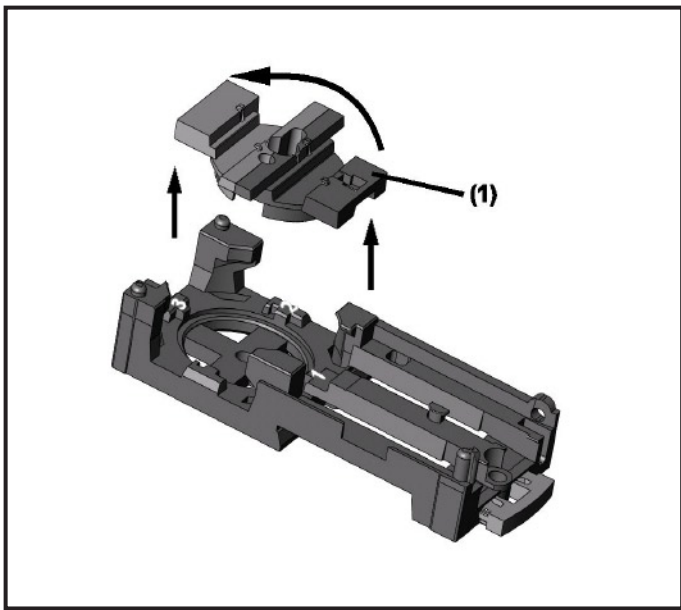
Carefully place the yellow and the black AS-i flat cable into the profile slot.



Mount the upper part.

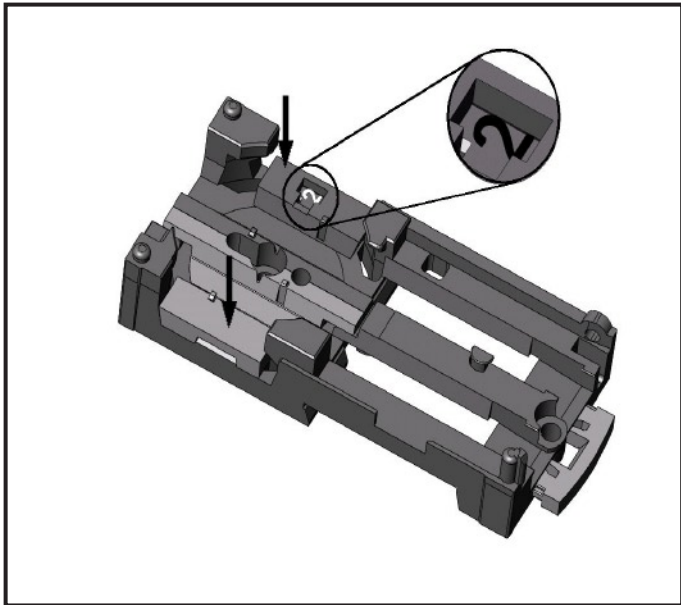


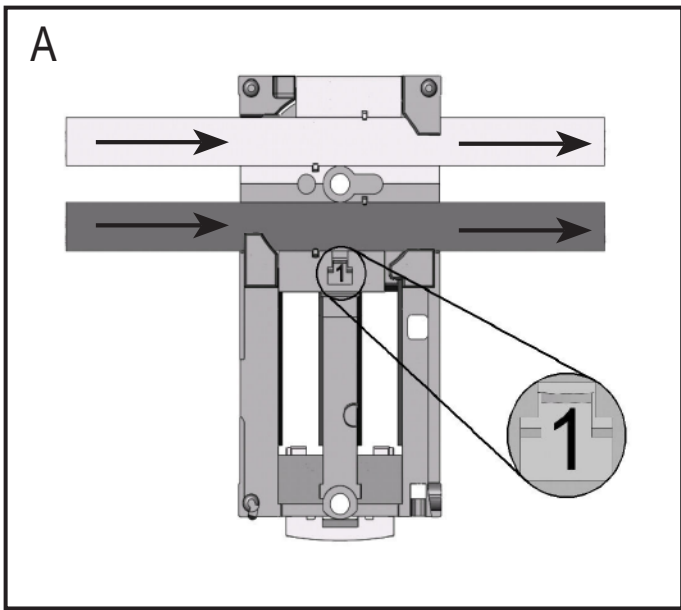
Lock the unit.



With the supplied lower part the flat cable can be aligned in three directions.

For the requested direction place the flat cable guide (1) accordingly.

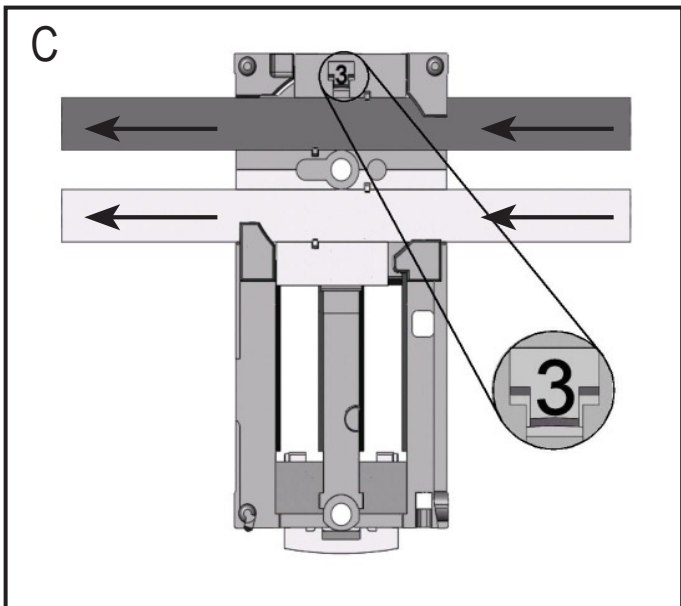
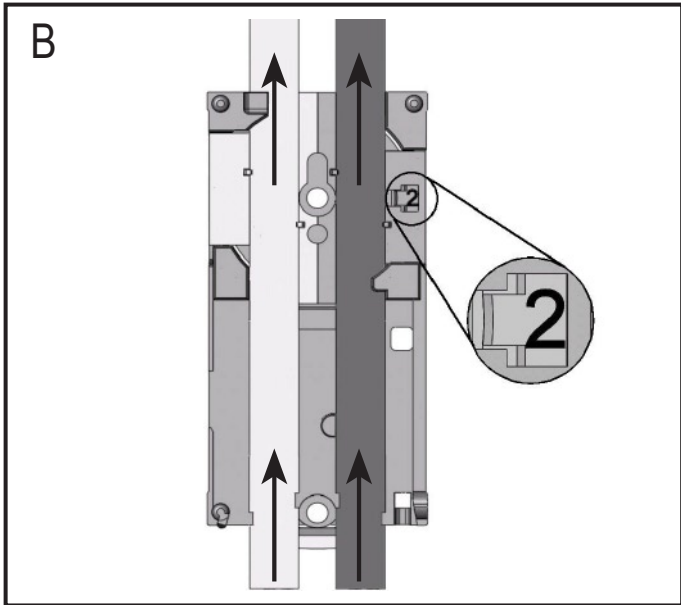


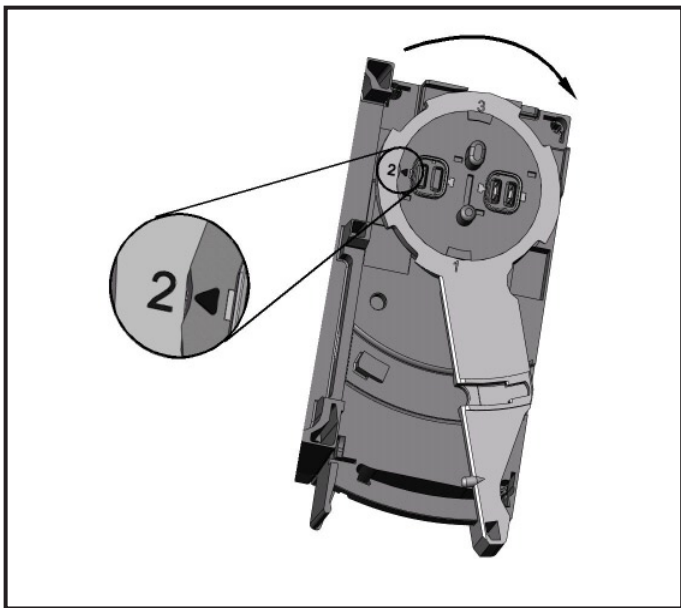


## Settings at the lower part

Select the position 1, 2 or 3 depending on the requested flat cable orientation (→).

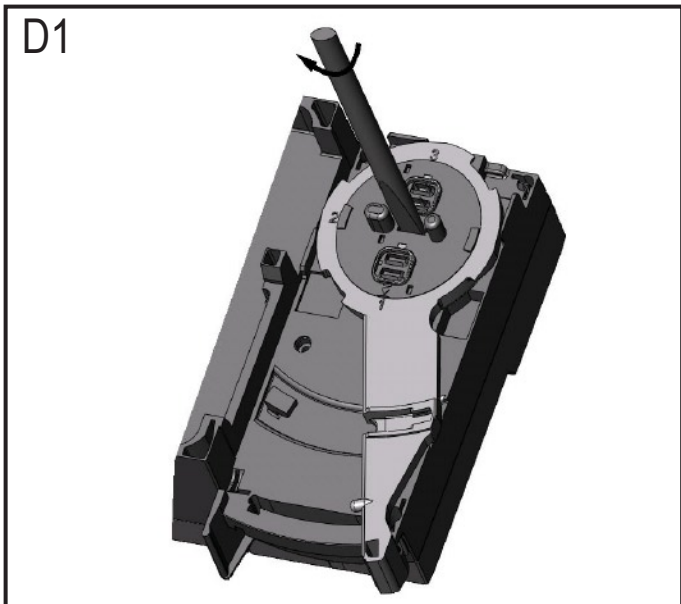
A = factory setting



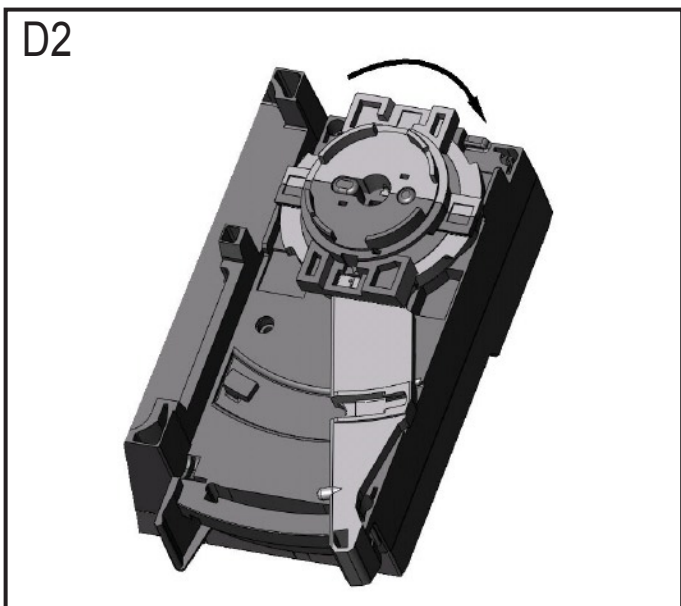


## Settings at the upper part

Then set the selected position at the upper part. To do so, turn the triangle to the corresponding number (fig. D1 and D2).



Use a tool, e.g. a screwdriver (figure D1) or the yellow / black flat cable guide (figure D2).

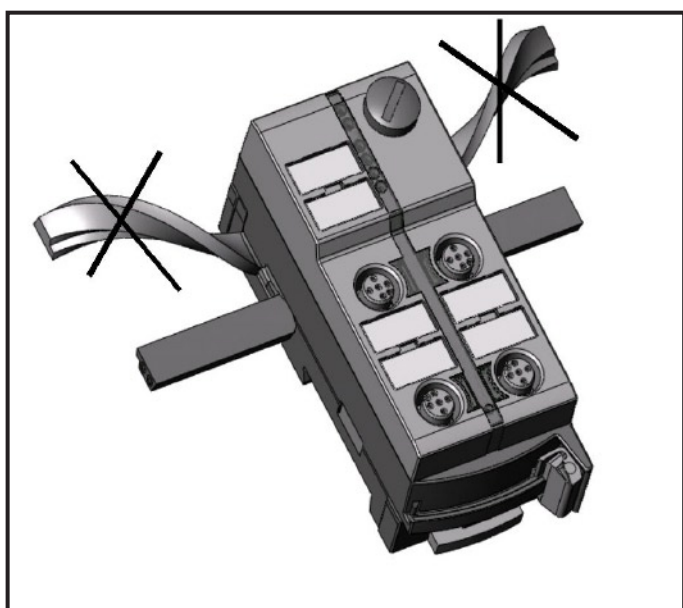
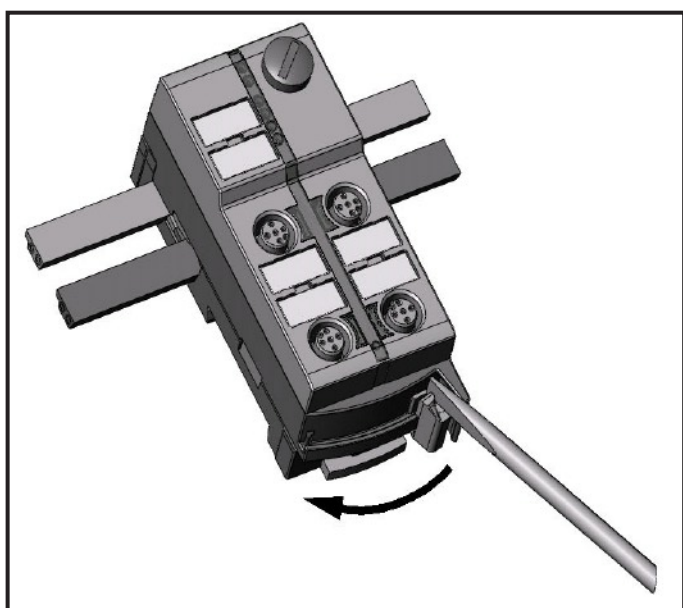




## Open the unit



Open the unit using a tool as shown (e.g. screwdriver).



Take care in laying the AS-i flat cable, the flat cable should be laid straight for about 15 cm.

# 5 Addressing

The address is set to 0 at the factory.

## 5.1 Addressing with the AC1144 addressing unit

When mounted and wired the module can be addressed with the addressing cable (E70213) via the integrated addressing interface.

If a slave with the extended addressing mode is used in combination with a master of the first generation (version 2.0), the parameter P3 must be 1 and the output bit D3 must be 0\*. The output bit D3 and the parameter bit P3 must not be used.

\* default setting

If a slave with the extended addressing mode is used in combination with a master of the first generation (version 2.0), an address between 1A and 31A must be assigned to this slave.

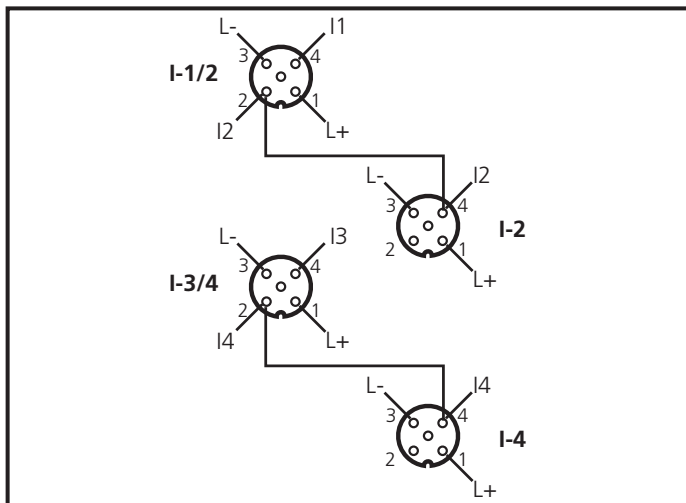
## AC5290

4 inputs (supplied externally via the black flat cable)

AS-i profile S-0.A.E / extended addressing mode: Yes

| Data bit | D0    | D1          | D2    | D3          |
|----------|-------|-------------|-------|-------------|
| Input    | I1    | I2          | I3    | I4          |
| Socket   | I-1/2 | I-1/2   I-2 | I-3/4 | I-3/4   I-4 |

### Y-circuit inputs



| Parameter bit | Designation      | Description   |
|---------------|------------------|---|
| P1            | Peripheral fault | 1 peripheral fault indication active<br>0 periphery fault indication not active |

## 6 Electrical connection

Connect the plugs of the sensors to the M12 sockets. Cover the unused sockets with protective caps (E73004)\*, the addressing socket with the supplied protective cap. Tightening torque 0.8 Nm.

The flat cable end seal (E70413)\* must be used if the module is at the end of the cable line.

\* to be ordered separately

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## 7 Operation



Avoid build-up of dirt and dust on the upper and lower parts so that the locking mechanism is not affected.

- LED PWR green: AS-i voltage supply ok
- LED FAULT red lights: AS-i communication error, slave does not participate in the "normal" exchange of data, e.g. slave address 0
- LED FAULT red flashes: peripheral fault, e.g. sensor supply overloaded or shorted
- LED 1 yellow: input switched
- LED AUX green: AUX voltage supply ok



Overload and short circuit of the input supply are signalled as peripheral fault to the AS-i master (version 2.1 or higher).

## 8 Technical data

Technical data and further information at

[www.ifm.com](http://www.ifm.com) → Select your country → Data sheet direct: