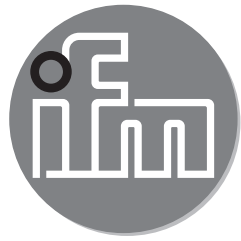


ifm electronic



Operating instructions

AS interface

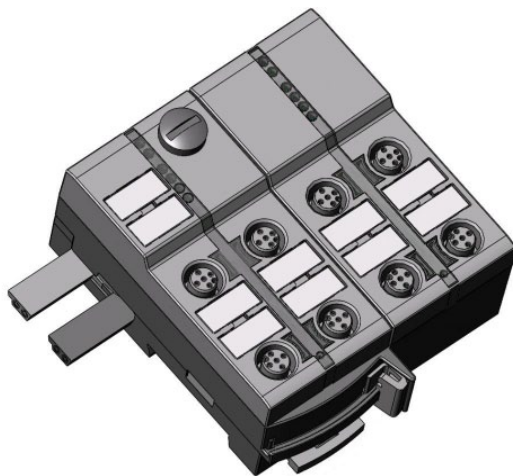
ClassicLine module

AC5292

AC5293

UK

7390797 / 00 10 / 2011



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1 Safety instructions

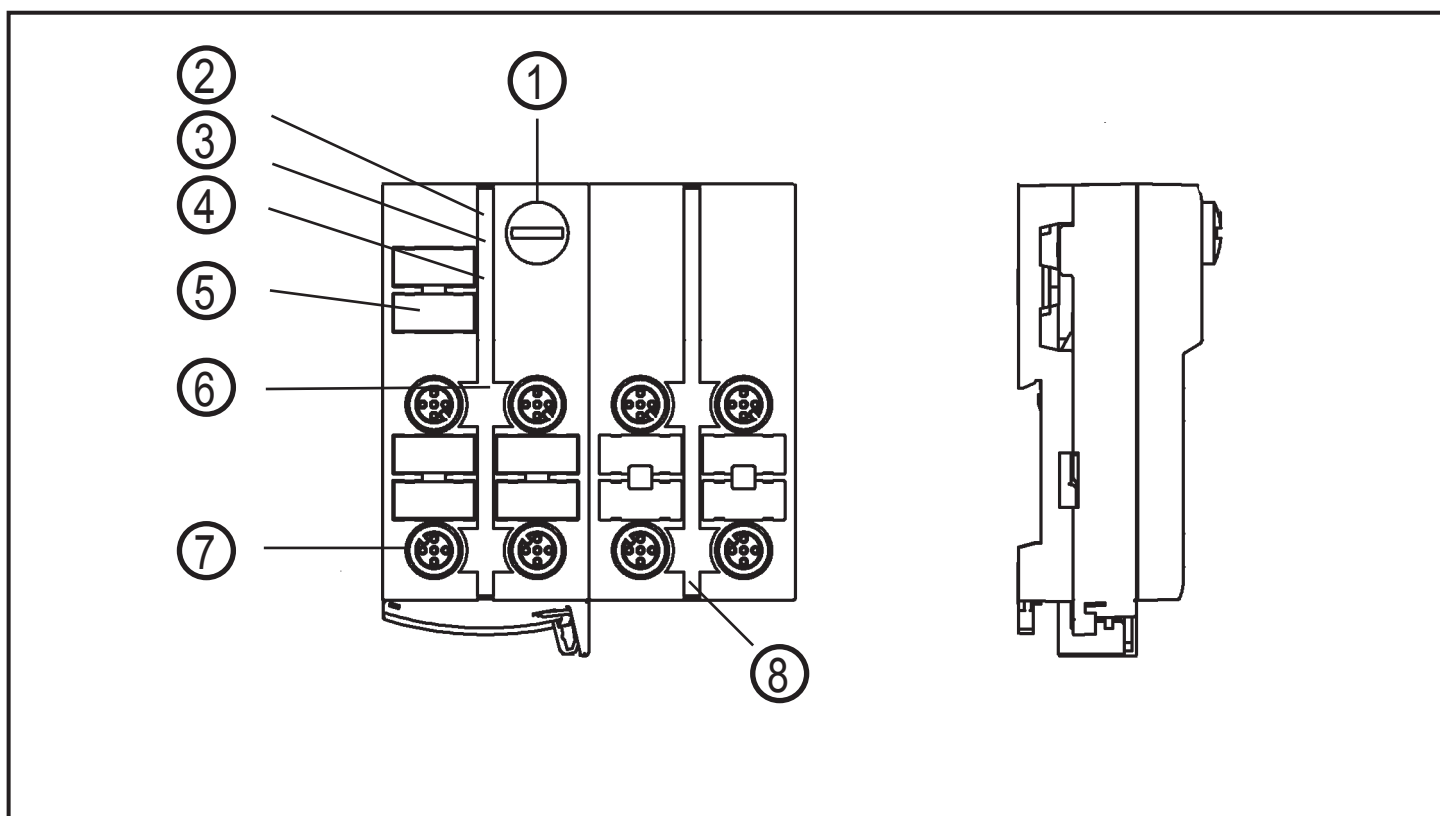
- Please read the product description prior to set-up of the unit. Ensure that the product is suitable for your application without any restrictions.
- The unit conforms to the relevant regulations and EC directives.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects 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 (AC5292)
- The module AC5293 can only be operated in conjunction with a version 3.0 master (master profile M4)
- External sensor and actuator supply to PELV via the black flat cable

3 Operating and display elements



1: Addressing interface

2: LED PWR

3: LED FAULT

4: LED 2

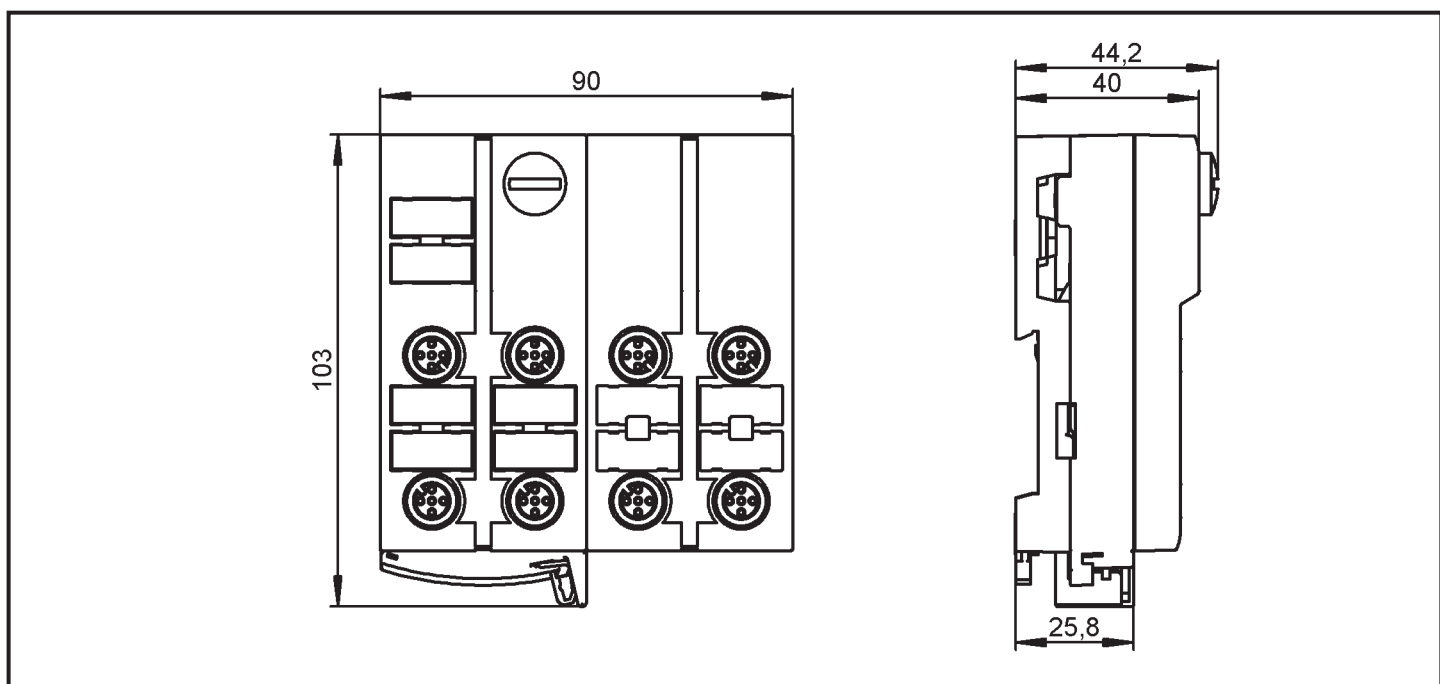
5: Labels

6: LED 1

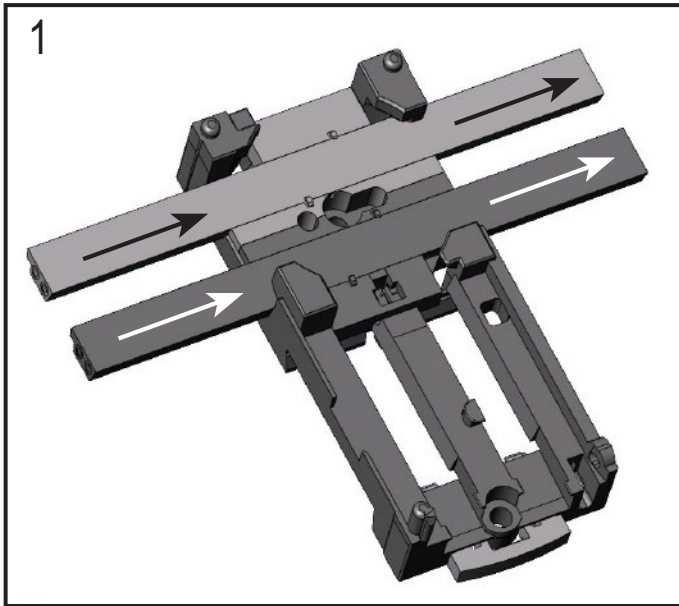
7: 8 M12 sockets

8: LED AUX

Scale drawing

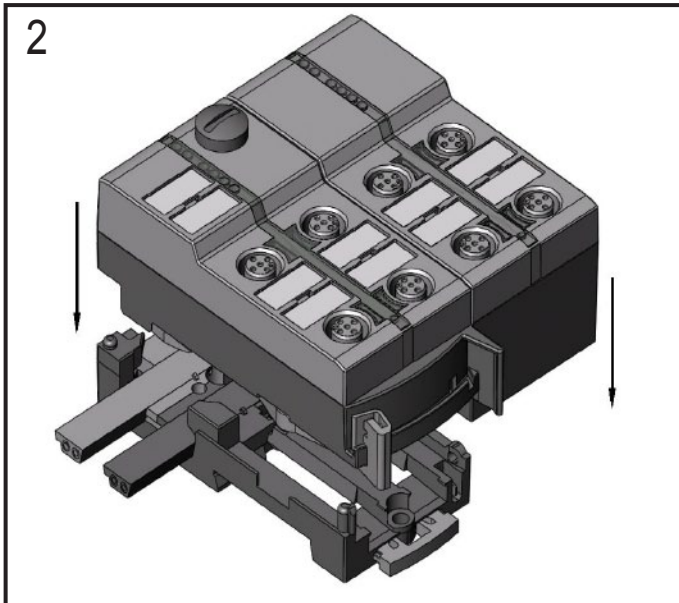


4 Installation

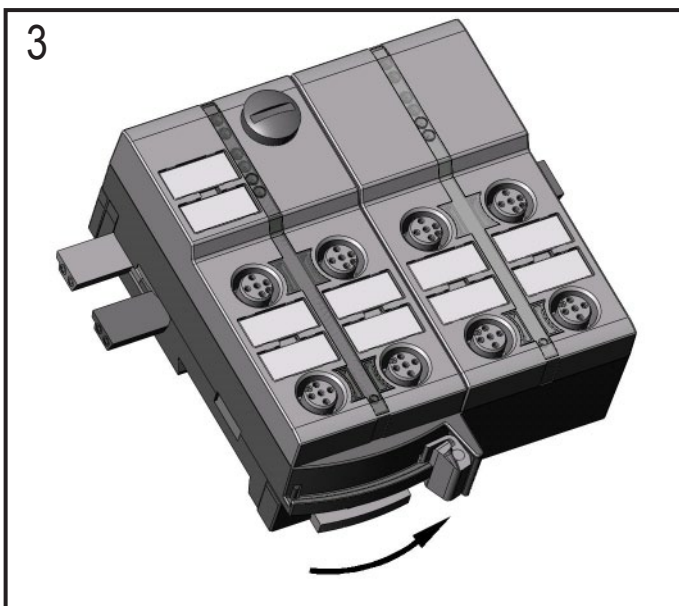


Alignment of the flat cable on delivery

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

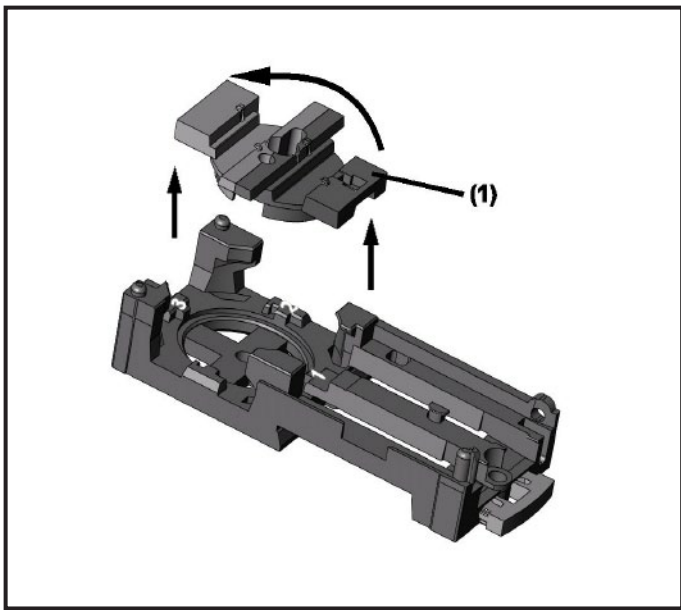


Mount the upper part.



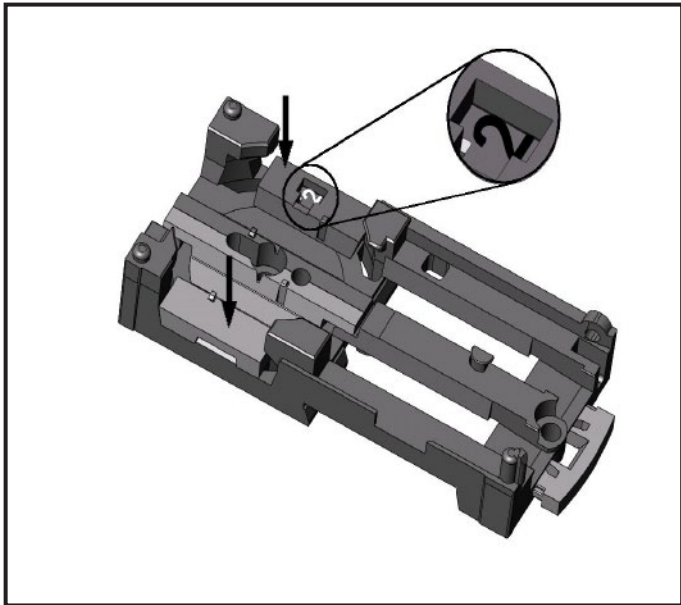
Lock the unit.

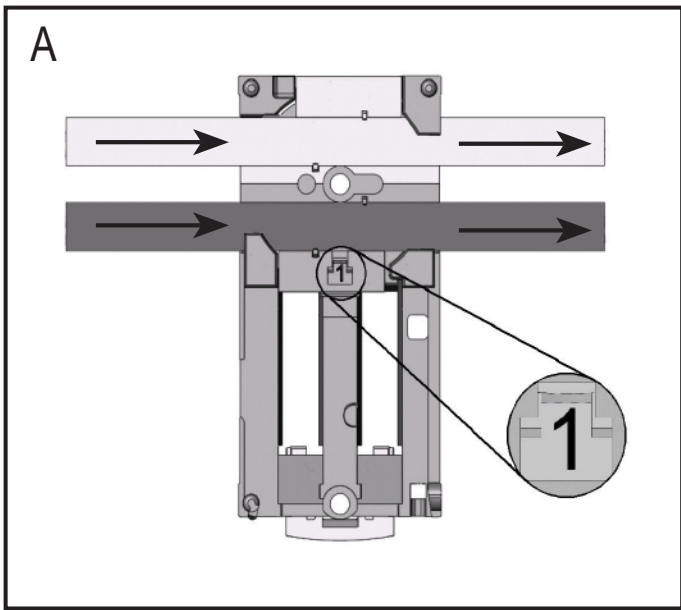
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With the supplied lower part the flat cable can be aligned in three directions.

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

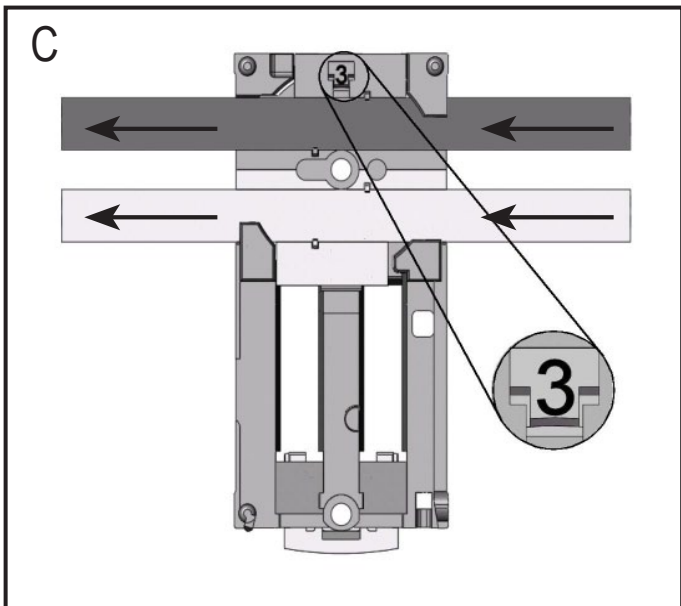
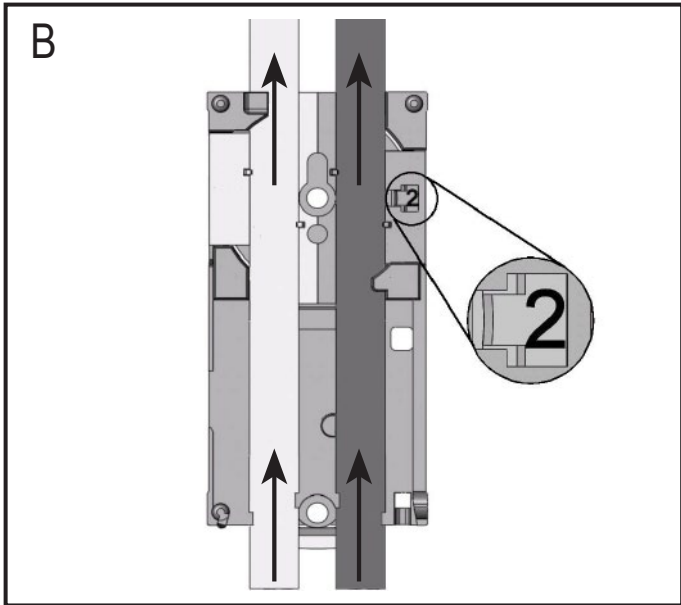


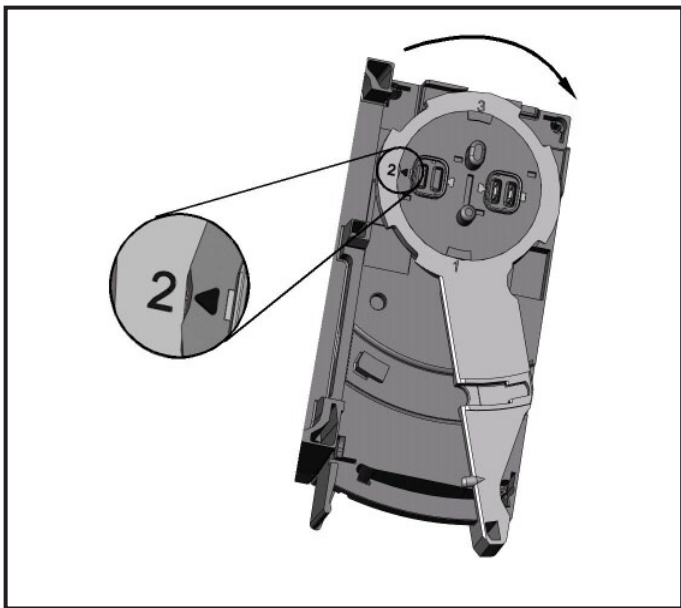


Settings at the lower part

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

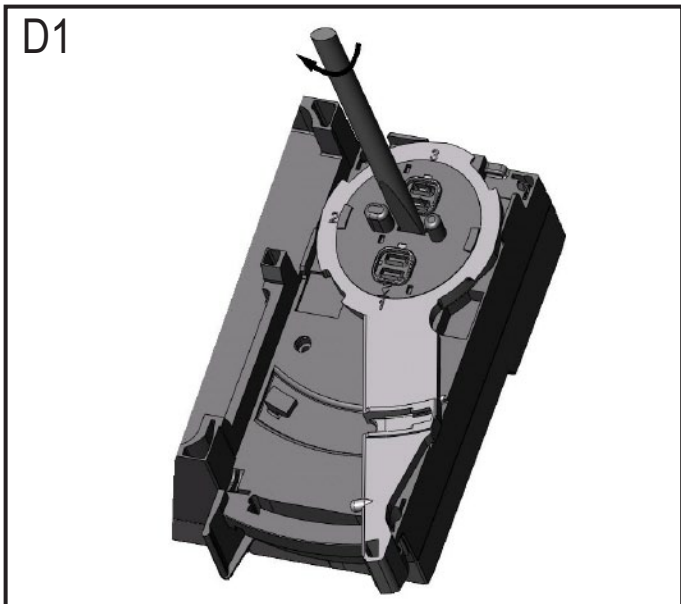
A = factory setting



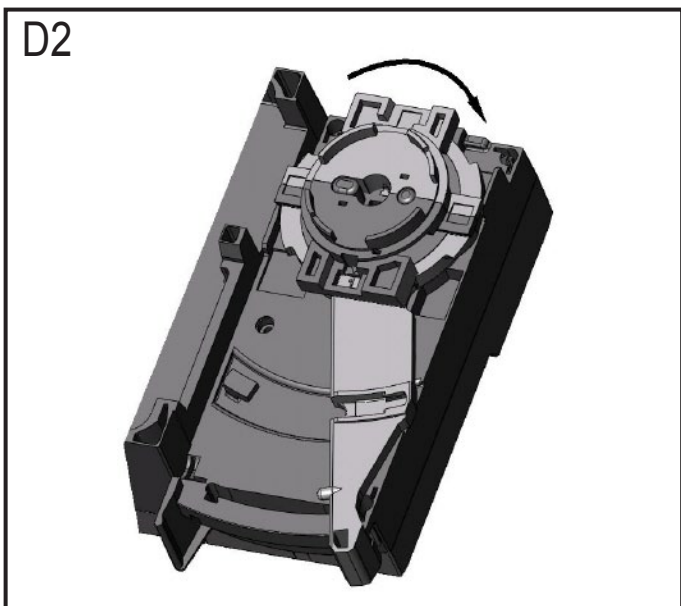


Settings at the upper part

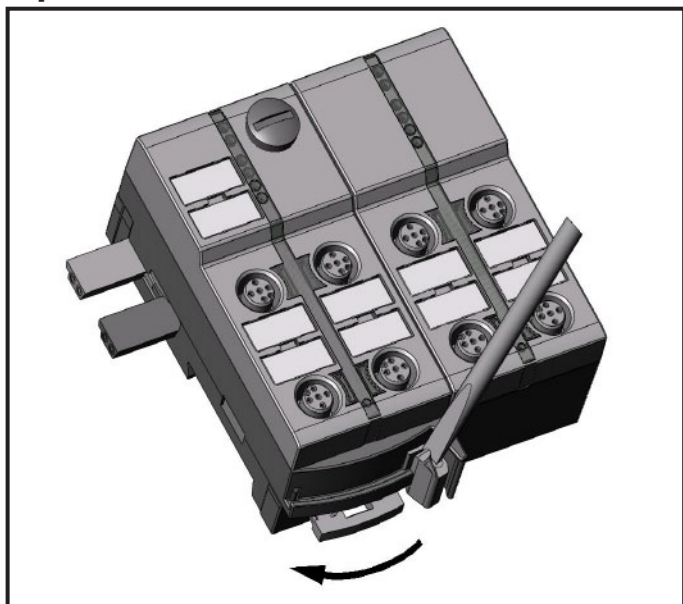
Then set the selected position at the upper part. To do so, turn the triangle to the corresponding number (fig. D1 and D2).



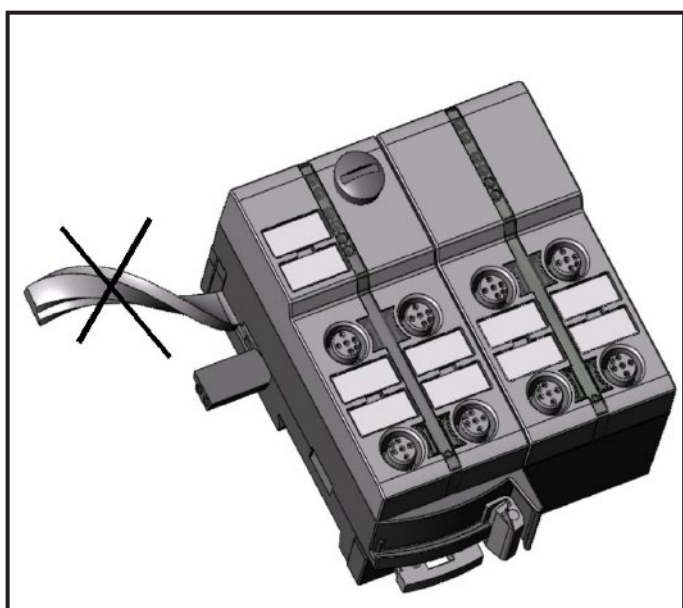
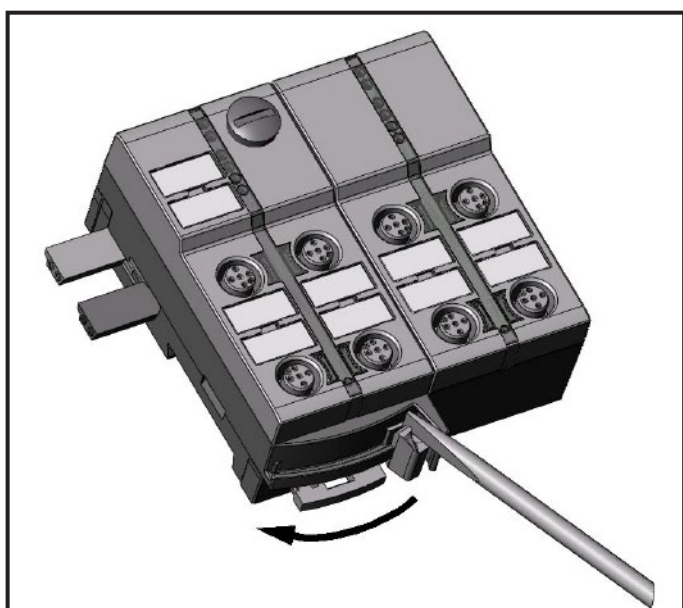
Use a tool, e.g. a screwdriver (figure D1) or the yellow / black flat cable guide (figure D2).



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.

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5 Electrical connection

Connect the plugs of the sensors / actuators to the M12 sockets.

To guarantee protection rating IP 67

- cover the unused sockets with protective caps (E73004)*, tightening torque 0.6...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



Max. current load per output 1 A,
max. total current load for all outputs of the module 3 A.

6 Addressing

The address is set to 0 at the factory.

6.1 Addressing with the AC1154 addressing unit

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

AC5292

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.

7 Pin connection / Data bits

AC5292

4 inputs / 3 outputs

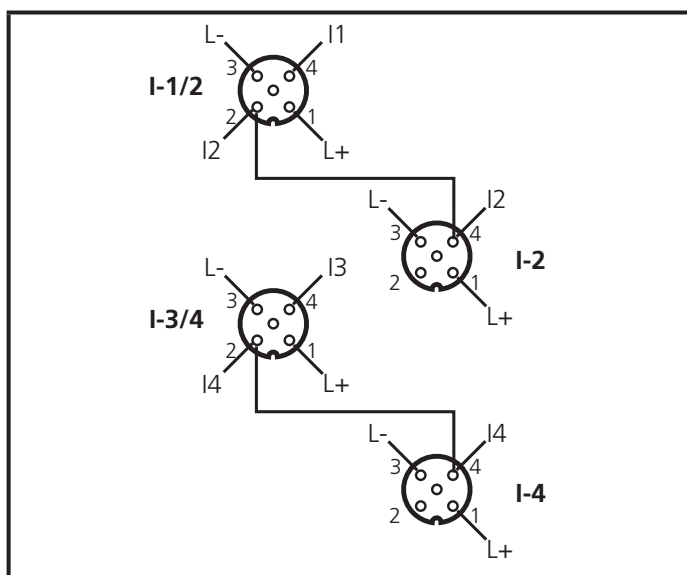
AS-i profile S-7.A.E / extended addressing mode: Yes

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

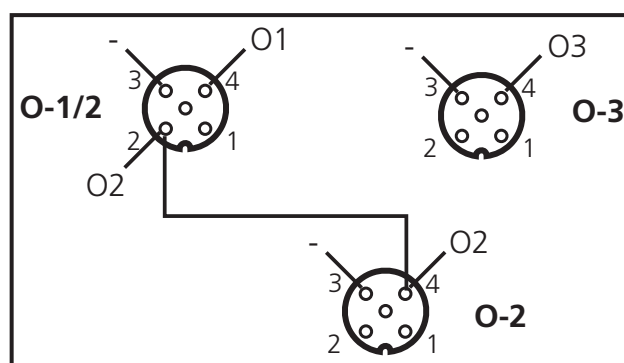
Output	1	2		3	-
Socket	O-1/2	O-1/2	O-2	O-3	-

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Y-circuit inputs



Y-circuit outputs



Parameter bit	Designation	Description
P1	peripheral fault	1 peripheral fault indication active 0 periphery fault indication not active

AC5293

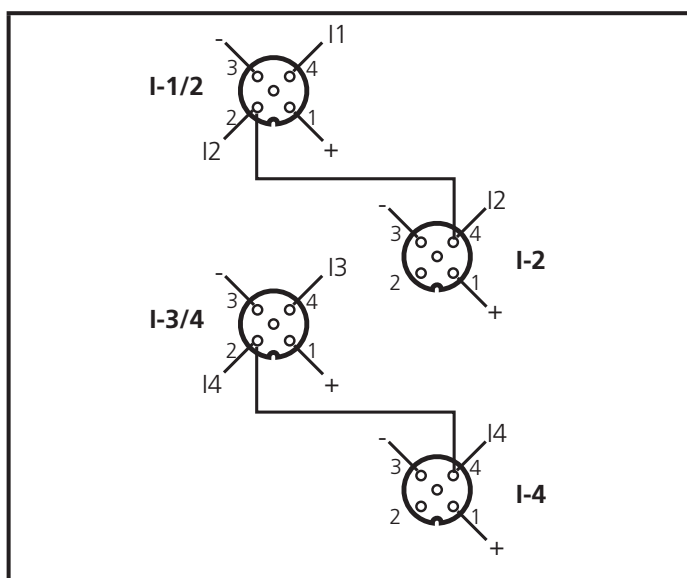
4 inputs / 4 outputs

AS-i profile S-7.A.7 / extended addressing mode: Yes

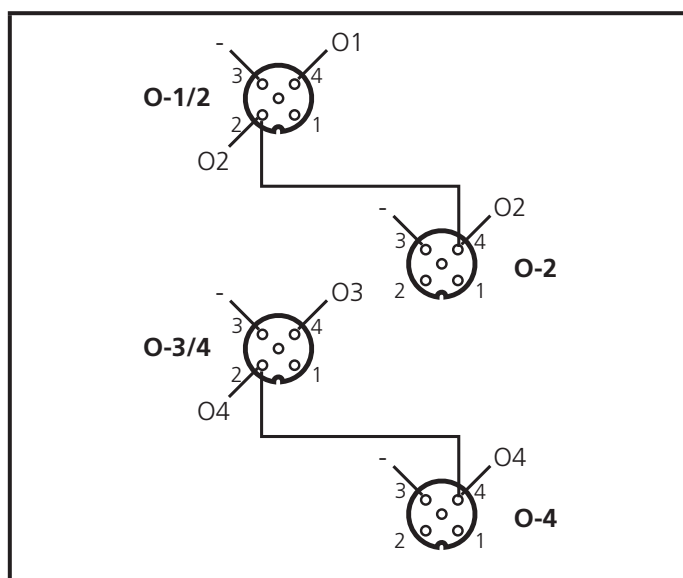
Data bit	D0		D1		D2		D3	
Input	I1		I1		I3		I4	
Socket	I-1/2		I-1/2	I-2	I-3/4		I-3/4	I-4

Output	O1		O2		O3		O4	
Socket	O-1/2		O-1/2	O-2	O-3/4		O-3/4	O-4

Y-circuit inputs



Y-circuit outputs



Parameter bit	Designation	Description
P1	peripheral fault	1 peripheral fault indication active 0 periphery fault indication not active

8 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.
LED FAULT red flashes:	peripheral fault, e.g. sensor supply / output overloaded or shorted
LED 2 yellow:	logic state of the outputs
LED 1 yellow:	input/output switched
LED AUX green:	AUX voltage supply ok

UK



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

9 Technical data

Technical data and further information at

www.ifm.com → Select your country → Data sheet direct: