

# CONNECTORS FOR AS-Interface CONNECTIONS

at spool valves and solenoid valves  
3 x DIN 46244 or ISO 4400 spade terminals



Series

**881**



## GENERAL

- AS-Interface connections are suitable for direct control of solenoid valves and spool valves with DIN 46244 (three 6.3 x 0.8 mm spade terminals) or ISO 4400, plug coils with maximum power ratings of **7,2 W** at 24 V DC (-15 or -10%, +10%).
- Solenoid valves and spool valves can be directly integrated into the AS-Interface bus.
- Electrical connection by vampire connections designed for standard flat yellow and black AS-Interface cables.
- Compact design (comparable to a standard connector).
- Available with or without an additional M12 connector for one or two input/return of information sensors.

## COMMUNICATION AND SPECIFICATION

|                                    |   |
|------------------------------------|---|
| Protocol                           | : <b>AS-Interface</b>   |
| Transmission medium                | : flat black cable: 24V DC power via 2 conductors. On connecting to the power supply unit, <b>observe polarity</b> , blue : - , brown : +<br>: flat yellow cable: data via 2 conductors |
| Bus topology                       | : backbone or tree  |
| Maximum number of connectors       | : 31 slaves   |
| Number of outputs per connector    | : 1 solenoid valve or spool valve per connector   |
| Maximum length of bus cable        | : 100 m (300 m with repeater)   |
| I/O refresh time                   | : 5 ms max.   |
| Connector addressing (subscribers) | : by AS-Interface master via configuration software or by pocket unit   |
| Compatible PLCs                    | : SIEMENS, SCHNEIDER, IFM<br>AS-Interface gateways: Profibus - DP, Interbus-S, DeviceNet, Worldfip/FIPIO  |



## ELECTRICAL SPECIFICATION

|                                    |  |
|------------------------------------|--|
| AS-Interface data voltage          | : 31,5 V   |
| Power voltage (black cable)        | : 24 V DC (-5%, +10%)  |
| Maximum ripple                     | : 10%  |
| Max. connector power               | : <b>7,2 W (0.3A)</b>  |
| Yellow cable connector consumption | : <150 mA  |
| 24 V power connection              | : vampire connection for AS-Interface cable (black cable)                        |
| I/O network connection             | : vampire connection for AS-Interface cable (yellow cable)                       |
| Connection of inputs               | : M12 5 pin female connectors, <b>power supply of inputs through black cable</b> |
| Trigger level of one input         | : 0,36 mA  |
| Signalling                         | : 2 LEDs : 1 for AS-Interface and 1 for coil                                     |
| Ambient temperature                | : -10°C to <b>+60°C</b>  |
| Protection                         | : IP65, provided connectors and covers are correctly in place (see accessories)  |

## CHOICE OF EQUIPMENT

These connectors are **non** rotatable.

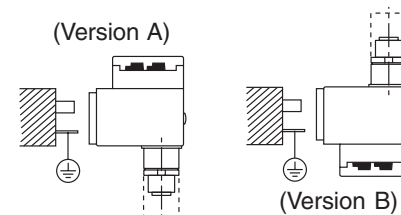
| Connector type  | Adaptation | CODES AS-Interface connector |                 |                 |                            |
|---|------------|------------------------------|-----------------|-----------------|----------------------------|
|   |            | on solenoid valves           | on coil         | no input        | with M12 input (Version A) |
| AS-Interface connector with DIN 46244 plug (industrial standard - spacing 11mm) | 189        | CM22                         | <b>88100277</b> | <b>88100337</b> | <b>88100408</b>            |
| AS-Interface connector with ISO 4400 plug (DIN 43650 Form A)                    | 190<br>192 | CM25<br>CM30/5W              | <b>88100278</b> | <b>88100339</b> | <b>88100409</b>            |

## ACCESSORIES

- M12 five male pins connectors for inputs (sensor return):
- with Pg7 90° **elbow mono** input cable for one 4 to 6 mm diameter cable,
  - with Pg7 **straight mono** cable input for one 4 to 6 mm diameter cable,
  - with straight **duo** cable input for two 3 to 5 mm diameter cables,

Thermoretractable ends (set of 10 pieces), for IP65 protection at the end of the connection lines

- code: **88161927**  
code: **88100330**  
code: **88100253**  
code: **88157927**



## DIMENSIONS AND WEIGHTS

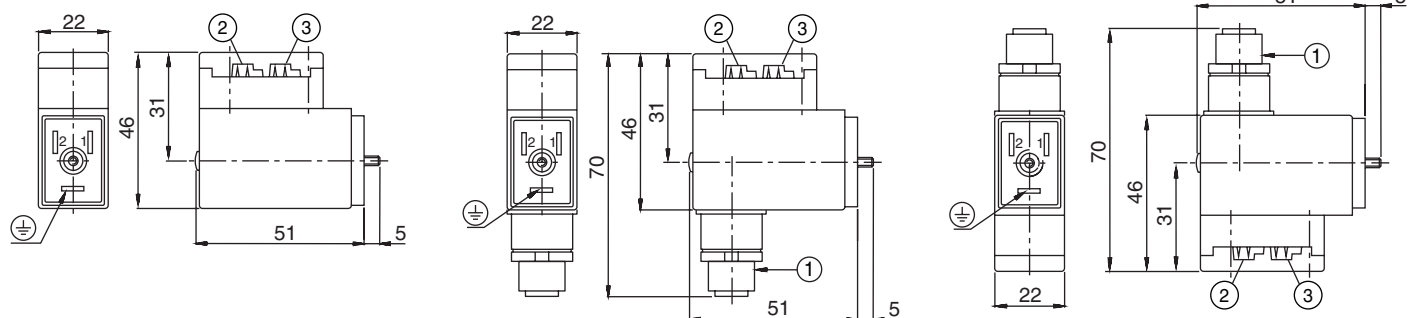
AS-Interface connectors are non rotatable

### AS-Interface connector with 3-pin DIN 46244 plug (size 22)

• Without input  
Weight: 38 g

• With M12 input (Version A)  
Weight: 54 g

• With M12 input (Version B)  
Weight: 54 g

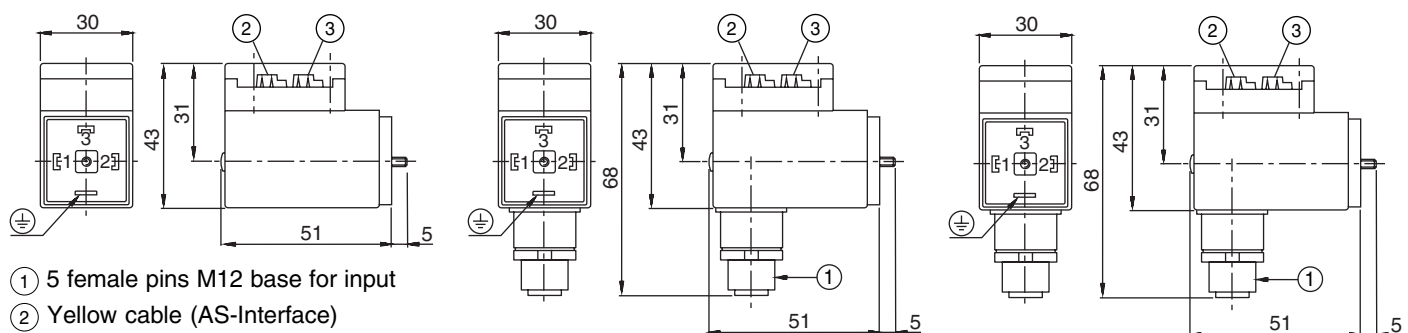


### AS-Interface connector with ISO 4400 / DIN 43650-A plug (size 30)

• Without input  
Weight: 42 g

• With M12 input (Version A)  
Weight: 58 g

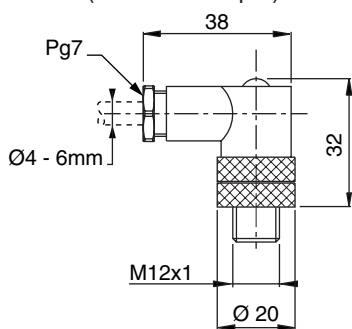
• With M12 input (Version B)  
Weight: 58 g



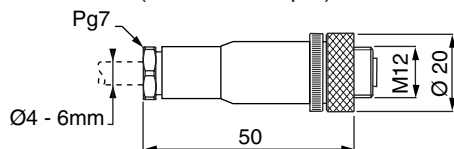
- ① 5 female pins M12 base for input
- ② Yellow cable (AS-Interface)
- ③ Black cable (power supply)

### M12 connector with 5 male pins for inputs

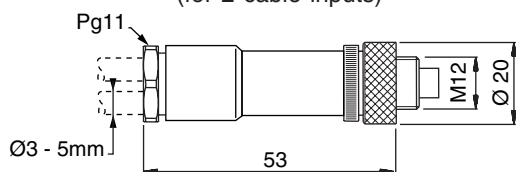
90° elbow MONO connector: **88161927**  
rotatable by 90° increments  
(for 1 cable input)



Straight MONO connector: **88100330**  
(for 1 cable input)



DUO connector: **88100253**  
(for 2 cable inputs)



### Connection to M12 connector

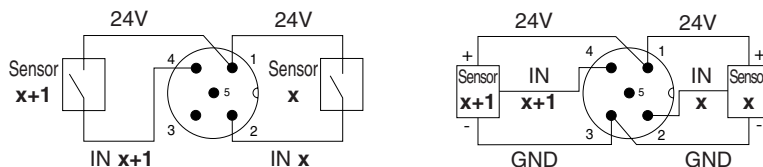
| Contact | Name      | Description               |
|---------|-----------|---------------------------|
| 1       | 24V DC IN | Input power               |
| 2       | IN x      | Positive logic input x    |
| 3       | GROUND    | Ground (3-wire sensors)   |
| 4       | IN x +1   | Positive logic input x +1 |
| 5       | PE        | Earth                     |

### Input wiring diagram

Male connector thread side view

• 2-wire sensor

• 3-wire sensor  
(e.g. solid state)



Compatible with inductive detectors if the leak current is less than 0.3 mA with a switching threshold, at ground state, of less than 4V.

### Input signal addressing

D0, D1, D2, D3: data bits for AS-Interface slave (one non two-directional node)

| Connector   | D0            | D1       | D2       | D3       |
|-------------|---------------|----------|----------|----------|
| No input    | Output (coil) | Not used | Not used | Not used |
| With inputs | Output (coil) | Not used | Input 1  | Input 2  |

If the AS-Interface network is configured with an AS-Interface coupler integrated in the PLC, the following ASCO/JOUCOMATIC AS-Interface connector identification codes apply

|   | I/O code   | ID-code |
|---|------------|---------|
| ASCO/JOUCOMATIC connector identification code | 11 (or BH) | 15      |