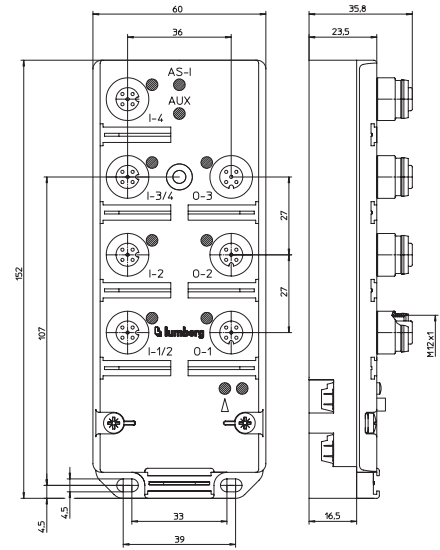# AS-Interface Module with 4-Digital Inputs and 3-Digital Outputs

0910 ASL 414

4 IN / 3 OUT

AS-Interface module with 2 digital inputs to connect standard sensors and 2 digital outputs to connect standard actuators, combined M12 socket, M12 bus connection.

– Version 2.1 –

Bit Assignment

Bit	-	-	-	-	3	2	1	0
M12 Input								
Byte 0	-	-	-	-	I-4	I-3/4	I-2	I-1/2
M12 Output								
Byte 0	-	-	-	-	-	0-3	0-2	0-1

Diagnostic Indication

LED	Indication	Condition
0-1..4 / 0-3..4	yellow	channel status
AS-i	green	AS-Interface power supply active
AUX	green	actuator supply active
FID	red	communication error
	red flashing	periphery error (actuator short circuit/sensor supply error)

Pin Assignments

Input 1 M12	Input 2 M12	Input 3 M12	Input 4 M12
1 = +24 V 2 = IN 2 3 = GND (0 V) 4 = IN 1 5 = earth	1 = +24 V 2 = n.c. 3 = GND (0 V) 4 = IN 2 5 = earth	1 = +24 V 2 = IN 4 3 = GND (0 V) 4 = IN 3 5 = earth	1 = +24 V 2 = n.c. 3 = GND (0 V) 4 = IN 4 5 = earth

Output 1 M12	Output 2 M12	Output 3 M12
1 = n.c. 2 = n.c. 3 = GND (0 V) 4 = OUT 1 5 = earth	1 = n.c. 2 = n.c. 3 = GND (0 V) 4 = OUT 2 5 = earth	1 = n.c. 2 = n.c. 3 = GND (0 V) 4 = OUT 3 5 = earth

The connection to earth for the outputs is implemented via the earthing contacts at the fastening holes.

AS-Interface Module with 4-Digital Inputs and 3-Digital Outputs
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Technical Data

Environmental
Degree of protection	IP 67
Operating temperature range	-25°C (-13°F) to +80°C (+176°F)
Weight	300 g
Housing material	PUR

Bus system — **AS-Interface Version 2.1**
AS-Interface profile	S 7.A.E
I/O configuration	7 hex
ID code	A hex
ID2 code (extended ID-code)	E hex
Support A/B addressing	yes

Electronics power supply — **AS-Interface**
Rated voltage	AS-Interface net
Voltage range	26.5–31.6 V DC
Power consumption	max. 100 mA
Reverse polarity protection	yes
Indication	LED green

Input power supply
Voltage range (AS-Interface net)	17–30 V
Total current of all sensors	max. 100 mA
Short circuit-proof	yes

Inputs — **Type 2 acc. to IEC 61131-2**
Rated input voltage	24 V DC
Signal state "1"	Us > 10 V / Is > 4.7 mA
Signal state "0"	Is < 1.5 mA
Input current at 24 V	15 mA
Input circuit	p-switching
Number of digital channels	4
Channel status indicator	LED yellow per channel

Output power supply — **AUX**
Rated voltage	24 V DC
Voltage range	10–30 V
Potential separation	present
Reverse polarity protection	yes/electronic
Indication	LED green

Outputs — **Type 2 A acc. to IEC 61131-2**
Rated output current	2 A per channel
Short circuit-proof	yes
Max. output current	4 A per module
Overload-proof	yes
Number of digital channels	3
Channel type N.O.	p-switching
Channel status indicator	LED yellow per channel

Diagnostic
Indication	LED red

Included in delivery / Accessories
Dust covers M12	2 pieces
Attachable label	10 pieces

Note

The input channels are connected together. That allows a greater connection flexibility (see pin assignment). In case of connection of a two-channel sensor to input socket 1 or 3 a further sensor must not be plugged to input socket 2 or 4 respectively due to the Y wiring of the inputs.

Part Number	
0910 ASL 414	UL