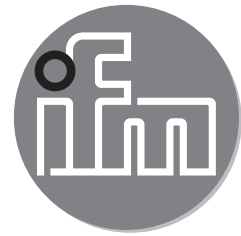


ifm electronic



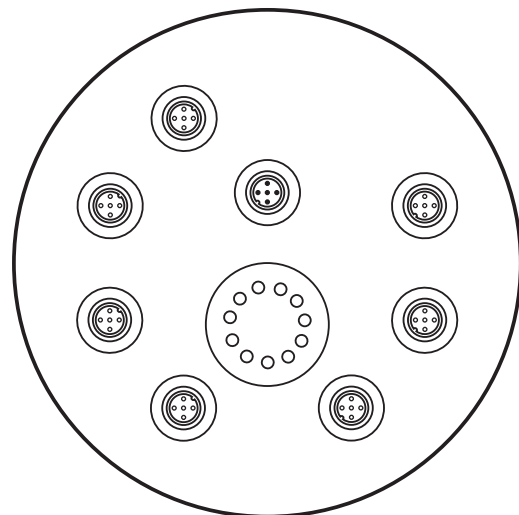
Installation instructions
AS-i Modul

AS interface

AC2904

UK

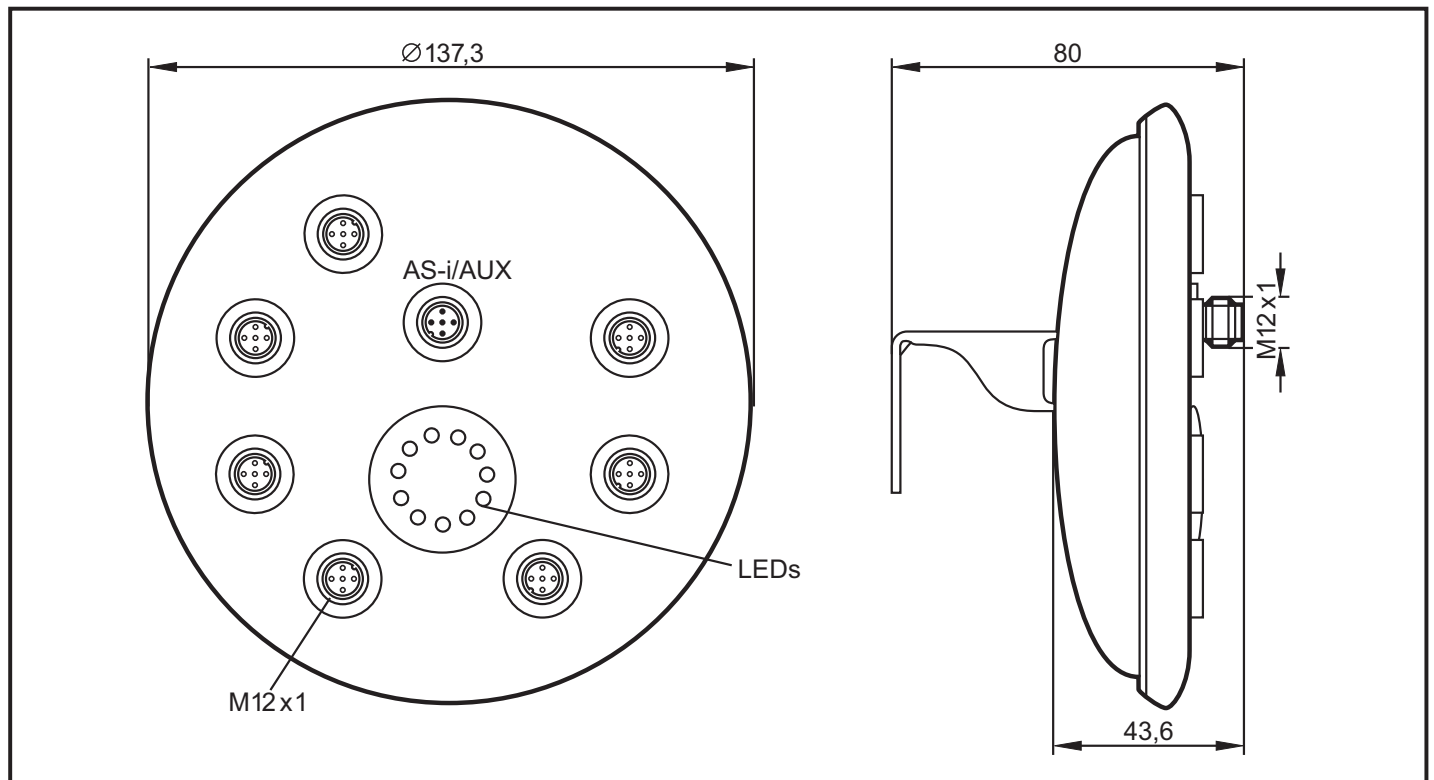
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Function and features

- AS-i profile S-7.A.E
- maximum number of modules per master: 31 (62 with AS-i master 2.1)
- AS-Interface version 2.1

Operating and indicating elements



Electrical connection

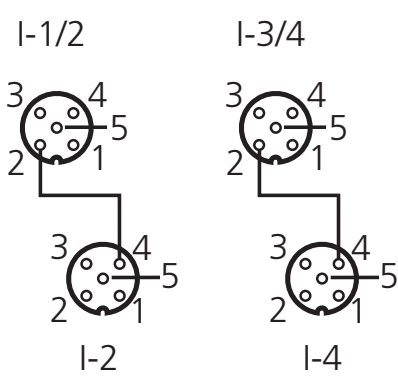
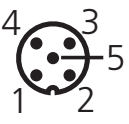
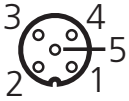
Do not remove the mounted protective caps (E70297) before the sensor plugs are connected to the M12 sockets.

To guarantee the protection rating IP69K

- unused sockets must be covered with these protective caps (tightening torque 0.6...0.8 Nm).
- the M12 connector must be tightened with a tightening torque of 0.6...0.8 Nm.



The round cable connected to AS-i/AUX should not be longer than 2 m.

Inputs		AS-i / AUX	
			1: AS-i + 2: 0 V 3: AS-i - 4: 24 V 5: FE
		Outputs O-1, O-2, O-3	
			
M12 socket	Pin	M12 socket	Pin
sensor supply L+	1	switching output +	4
sensor supply L-	3	external voltage -	3
functional earth	5	functional earth	5

UK

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
output	1	2		3	4	
socket	O-1	O-2		O-3	–	
Pin	4	4		4	–	

Addressing with the addressing unit AC1154



For addressing the module, a 2/4-core cable is connected to the M12 plug (AS-i/AUX). At the factory the address is set to 0.

If a slave with the ID code „A“ (option of extended addressing mode) is connected to a master of the first generation (version 2.0), the parameter P3 must be 1 and the output bit D3 = 0*. The output bit D3 must not be used.

If a slave with the ID code „A“ (option of extended addressing mode) is connected to a master of the first generation (version 2.0), an address between 1A and 31A must be assigned to this slave.

* default setting

Operation

Check the reliable functioning of the unit. Indication by LEDs:

- LED 1 yellow: input/output switched
- LED green: voltage supply o.k.
- LED 2 red is lit: AS-i communication error, slave does not participate in the normal“ data exchange, e. g. slave address 0
- LED 2 red flashing: periphery fault, e.g. overload or short-circuit of the sensor supply / output



Overload and short circuit of the input/output are signalled to the AS-i master (version 2.1) via the „periphery fault“ flag in the status register.

Technical data

Technical data and further information at www.ifm.com --> Select your country -->
Data sheet direct:

The device shall be supplied from an isolating transformer having a secondary Listed fuse rated as noted in the following table.

Overcurrent protection		
Control-circuit wire size		Maximum protective device rating Ampere
AWG	(mm ²)	
26	(0.13)	1
24	(0.20)	2
22	(0.32)	3
20	(0.52)	5
18	(0.82)	7
16	(1.3)	10