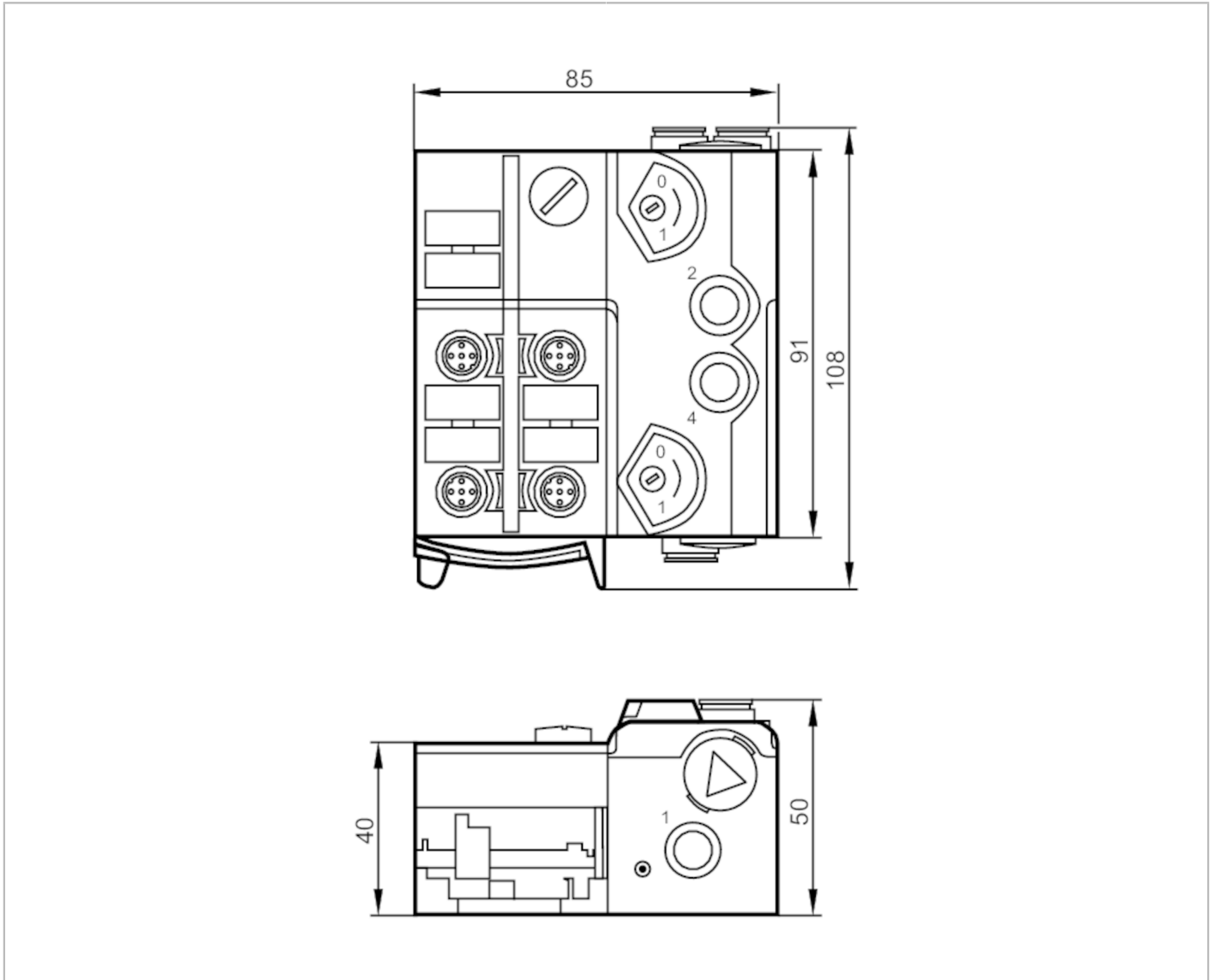


# AC542A



## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D



### Electrical data

Operating voltage	[V]	26.5...31.6 DC
Max. current consumption from AS-i	[mA]	280
Integrated watchdog		yes

### Inputs / outputs

Number of inputs and outputs	Number of digital inputs: 4; Number of pneumatic outputs: 2
------------------------------	---

# AC542A



## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D

Inputs																										
Number of digital inputs	4																									
Input circuit of digital inputs	PNP																									
Sensor supply of the inputs	AS-i																									
Voltage supply [V]	20...30; (via flat cable)																									
Max. total current rating of inputs [mA]	200																									
Input current High [mA]	6...10																									
Input current Low [mA]	0...2																									
Min. switching level high signal [V]	11																									
Digital inputs protected against short circuits	yes																									
Outputs																										
Electrical design	AS-i																									
Number of pneumatic outputs	2																									
Operating conditions																										
Ambient temperature [°C]	-10...50																									
Protection	IP 50																									
Tests / approvals																										
ATEX marking	Ⓔ II 3D Ex tc IIIB T80°C Dc X IP50																									
EMC	EN 50295																									
MTTF [years]	288																									
AS-i classification																										
AS-i version	2.11 + 3.0																									
AS-i addressing	addressing socket																									
Extended addressing mode possible	no																									
AS-i profile	S-7.F.F																									
AS-i I/O configuration [hex]	7																									
AS-i ID code [hex]	F.F																									
AS-i certificate pending	yes																									
Assignment of the data bits	<table border="1"> <thead> <tr> <th>data bit</th> <th>D0</th> <th>D1</th> <th>D2</th> <th>D3</th> </tr> </thead> <tbody> <tr> <td>input</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>socket</td> <td>I-1/2</td> <td>I-1/2 / I-2</td> <td>I-3/4</td> <td>I-3/4 / I-4</td> </tr> <tr> <td>pin</td> <td>4</td> <td>2 4</td> <td>4</td> <td>2 4</td> </tr> <tr> <td>pneumatic output</td> <td>-</td> <td>-</td> <td>2</td> <td>4</td> </tr> </tbody> </table>	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	pneumatic output	-	-	2	4
	data bit	D0	D1	D2	D3																					
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	pin	4	2 4	4	2 4																					
pneumatic output	-	-	2	4																						

# AC542A



## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D

Mechanical data		
Weight [g]	417.5	
Type of mounting	AS-i flat cables directly connectable	
Materials	PA; POM; piercing contacts: CuSn6 nickel-plated and tin-plated	
Pneumatic system	2 x 3/2-way slide valves (free from overlapping)	
Operating pressure range [bar]	2...8	
Operating pressure range [MPa]	0.2...0.8	
Air flow at 6/5 bar [l/min]	500	
Permissible compressed air	non-lubricated compressed air class 6-3-1; lubricated compressed air class 6-3-4	
Manual override	pressing/releasing or pressing/turning/locking	
Tube fittings	8 mm	
Exhaust	exhaust can be discharged through tube connection	
Displays / operating elements		
Display	operation	LED, green
	errors	LED, red
	function	LED, yellow
Accessories		
Accessories (supplied)	lower part	
Accessories (optional)	Mounting plate, E74999	
	Module lower part, E75000	
	Protective cap: M12, E73004	
	sealing plugs, E75231	
	Impact protection housing, E7000A	
	silencer, E75232	
	Push-in L-fitting, E75228	
Push-in T-fitting, E75227		
Remarks		
Remarks	Mechanical protection has to be implemented.	
	Otherwise the unit must be installed together with the impact protection housing (E7000A).	
	If not pneumatically operated, E75231 sealing plug must be inserted.	
	Avoid ingress of dirt and dust.	
	Do not connect any of the following points to an external potential:	
L-, L+, I-1, I-2, I-3, I-4		
The connections are electrically connected with the AS-i cable.		
Notes on compressed air and EMC/ESD at <a href="http://www.ifm.com">www.ifm.com</a>		
Pack quantity	1 pcs.	

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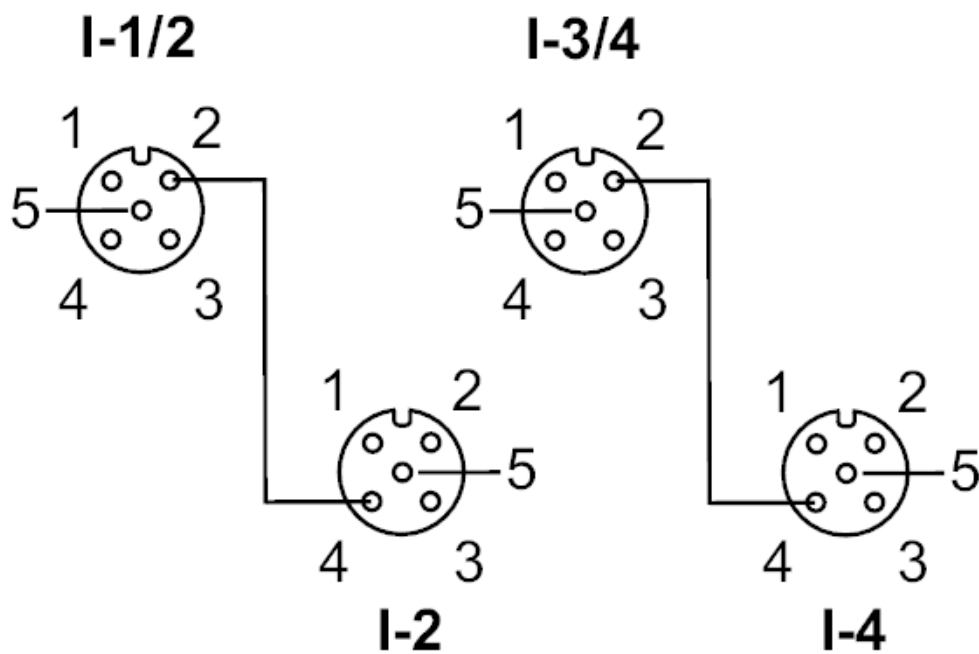
## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D

### Electrical connection

quick mounting technology for AS-i flat cable: ; three orientations possible

### Connection



# AC542A

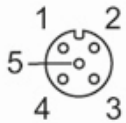


## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D

	Inputs
	socket I-1/2
1	Sensor supply L+
2	data input 2
3	Sensor supply L-
4	data input 1
5	not used
	socket I-2
1	Sensor supply L+
2	not used
3	Sensor supply L-
4	data input 2
5	not used
	socket I-3/4
1	voltage supply L+
2	data input 4
3	Sensor supply L-
4	data input 3
5	not used
	socket I-4
1	Sensor supply L+
2	not used
3	Sensor supply L-
4	data input 4
5	not used

Connector: M12



### Connection

# AC542A

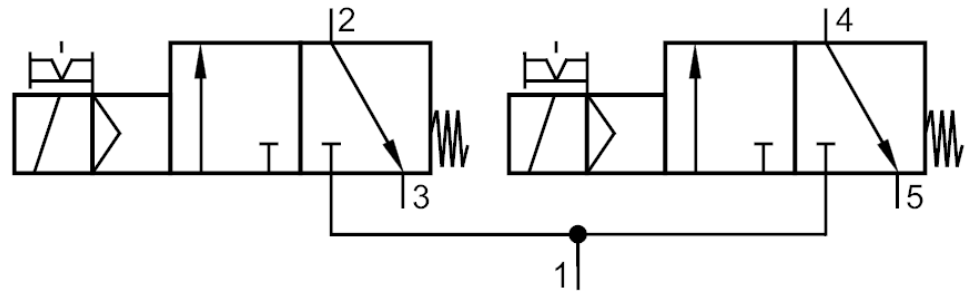


## AS-Interface Airbox with quick mounting technology

AirBox 2x3/2 4DI-Y II 3D

### Diagrams and graphs

Pneumatic symbol



2 x 3/2-way slide valves (free from overlapping)