

# VA Master FAM540 Metal Cone Variable Area Flowmeter

Measurement made easy



# Contents

- 1 Safety instructions for repair work ..... 3
- 2 Name plate specifications for spare parts orders ..... 3
- 3 Overview ..... 4
  - 3.1 Spare parts 1/2" DN 15 ..... 5
  - 3.2 Spare parts 1" DN 25 ..... 6
  - 3.3 Spare parts 2" 3" 4" DN 50, DN 80, DN 100 ..... 7
  - 3.4 Housing ..... 8

## 1 Safety instructions for repair work

ABB flowmeters are designed to be easy to repair thanks to uniform replacement parts and simple replacement of predefined parts.

However, if repair work is not carried out in accordance with the guidelines, this may result in malfunctioning of the device, causing serious injury to persons, and harm to the environment. This is especially true for safety-critical devices and those certified for use in explosion hazard environments.

Certifications will also lapse if the repairs were not carried out with the proper tool or by persons without adequate training. We therefore recommend all repair work on flowmeters be carried out by ABB service technicians.

As the manufacturer of the device, ABB cannot guarantee the necessary quality of the repair procedures if the work and/or parts exchange was not carried out by ABB.

The plant operator is responsible for all repairs carried out by the customer, plant operator, or third party. In this case, ABB will reject all responsibility for any improper device functionality, in particular all safety-related functions.

ABB does not assume any liability for the deterioration or loss of device performance, malfunctions, or damage arising from the above repair work or replacement. All liability for defects shall lapse when the replacement or repair work is not carried out by ABB.

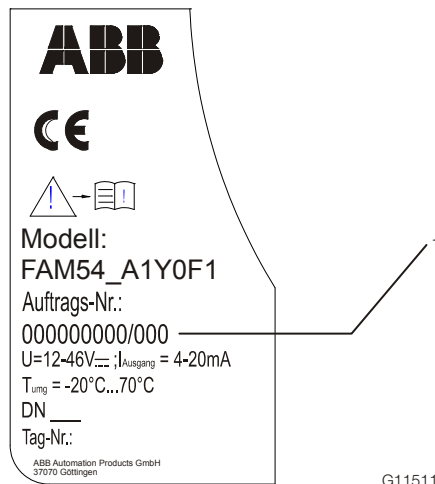
If you are unsure about the repair process even if some or all replacement parts are available, please get in touch with ABB Service before beginning work.

Respect national and internal laws when carrying out repairs. In particular laws relating to certified flowmeters used in explosion hazard environments. Repair work which is carried out without following the legal requirements can result in the revocation of your operating permit.

For more information, go to <http://new.abb.com/service/repairs> or contact your local ABB Customer Service Center.

## 2 Name plate specifications for spare parts orders

The flowmeter version can be identified by referring to the name plate that is attached to the housing. When placing spare parts orders, always remember to state the order number as shown on the name plate.



**Fig. 1: Name Plate**  
**1 Order number**

### 3 Overview

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**i** NOTICE

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No spare are dispatched for devices with Ex-admittance. Reconstruction / repair only in Göttingen.

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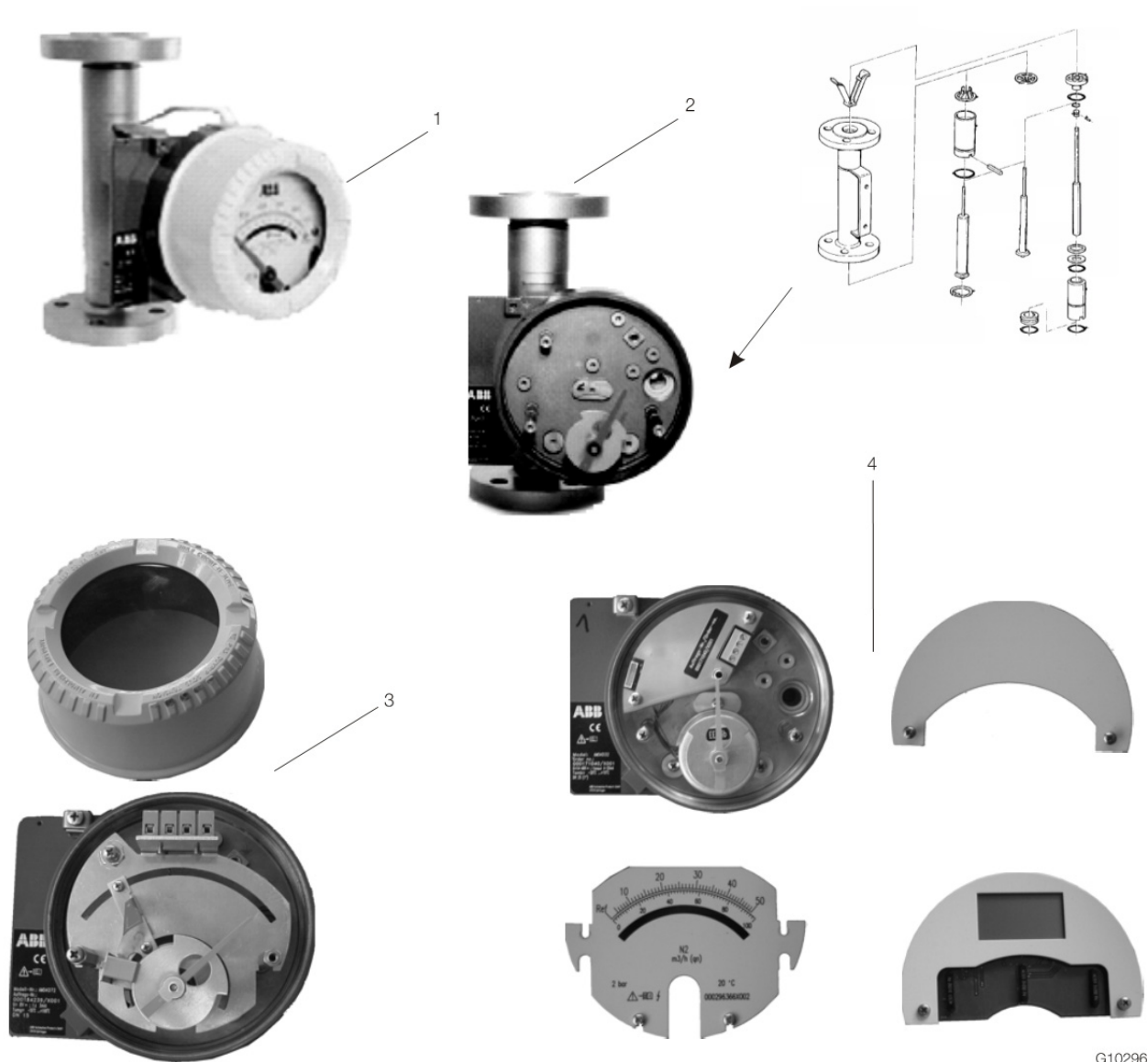


Fig. 2: Overview

1 Converter | 2 Meter housing | 3 Housing | 4 Cover (accessory)

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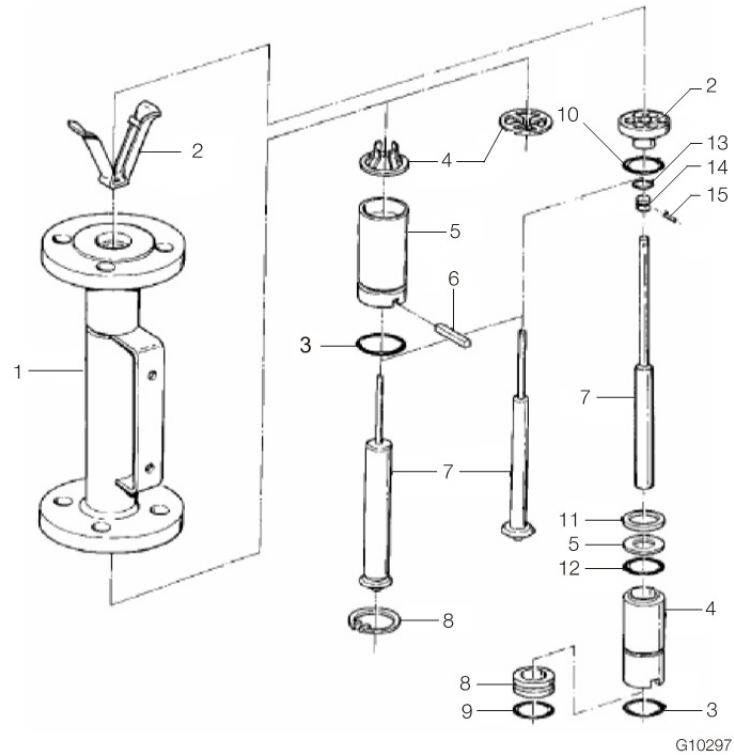
**i** NOTICE

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All prices on inquiry!

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### 3.1 Spare parts 1/2" DN 15



G10297

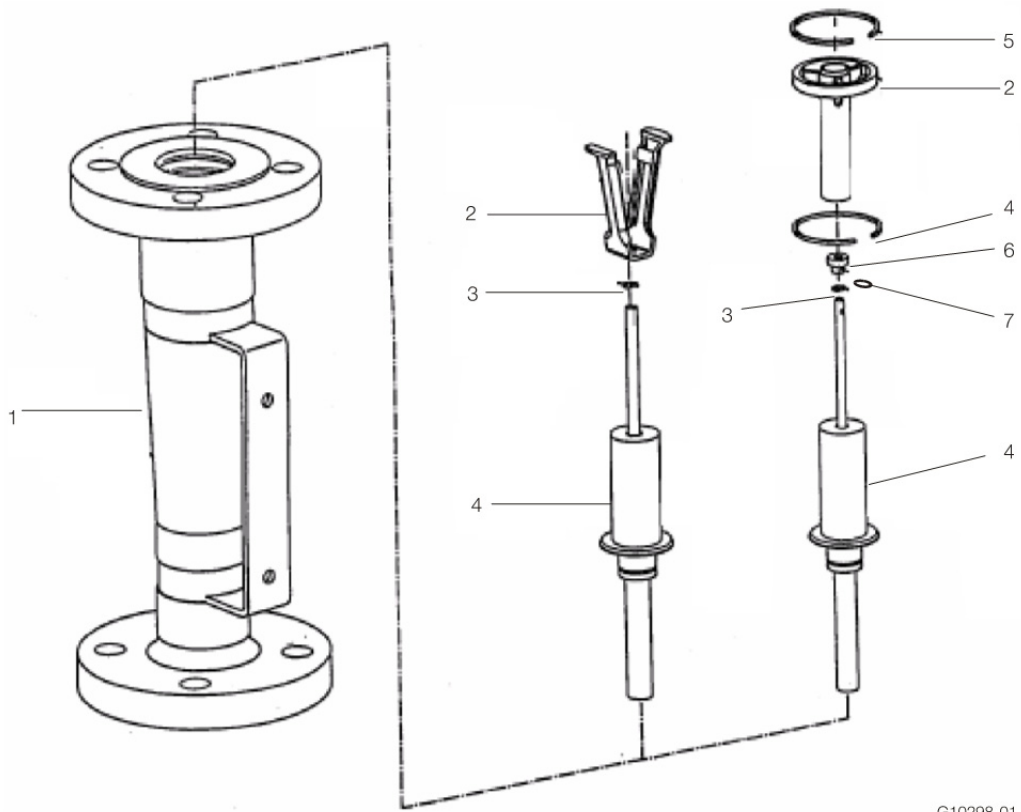
Fig. 3

Position	Name of part	Variant	Order number	Weight kg (lb)	Price (€)
1	Meter housing	-	-	-	
2	Float stop	-	D604A001U01	-	
	Float stop, gas	-	D631B023U01	-	
	Float stop, gas	-	D631B061U01	-	
3	O-ring 25.12x1.78	-	101V909	-	
4	Spacer	30 ... 60 l/h	D375A008U01	-	
	Float guide	80 ... 150 l/h	D303D025U01	-	
	Float guide	200 ... 800 l/h	D303D037U01	-	
5	Meter cone	-	-	-	
	Metering orifice	-	-	-	
6	Bar	-	D352B019U01	-	
7	Float, standard	-	-	-	
	Float stop gas damping	-	-	-	
	Float orifice, standard	-	-	-	
	Float orifice, gas damping	-	-	-	
8	Ring	-	D376B015U01	-	
9	O-ring 26,64 x 2,62	-	101V921	-	
10	O-ring 23,39 x 3,53	-	101V718	-	
11	Ring 1/2" orifice	-	D376B020U01	-	
12	O-ring 21 X 3 orifice	-	D101V004U01	-	
13	O-ring for ceramics	-	D101V022U01	-	
14	Piston Kolsterising	-	D373A017U01	-	
	Pins ceramic	-	D373A006U01	-	
15	Pin for stainless steel pistons	-	D107D001U07	-	
	Pin for ceramics	-	D107D001U04	-	

#### **i** NOTICE

For meter housing, float and metering cone, include serial numbers with your request.

### 3.2 Spare parts 1" DN 25



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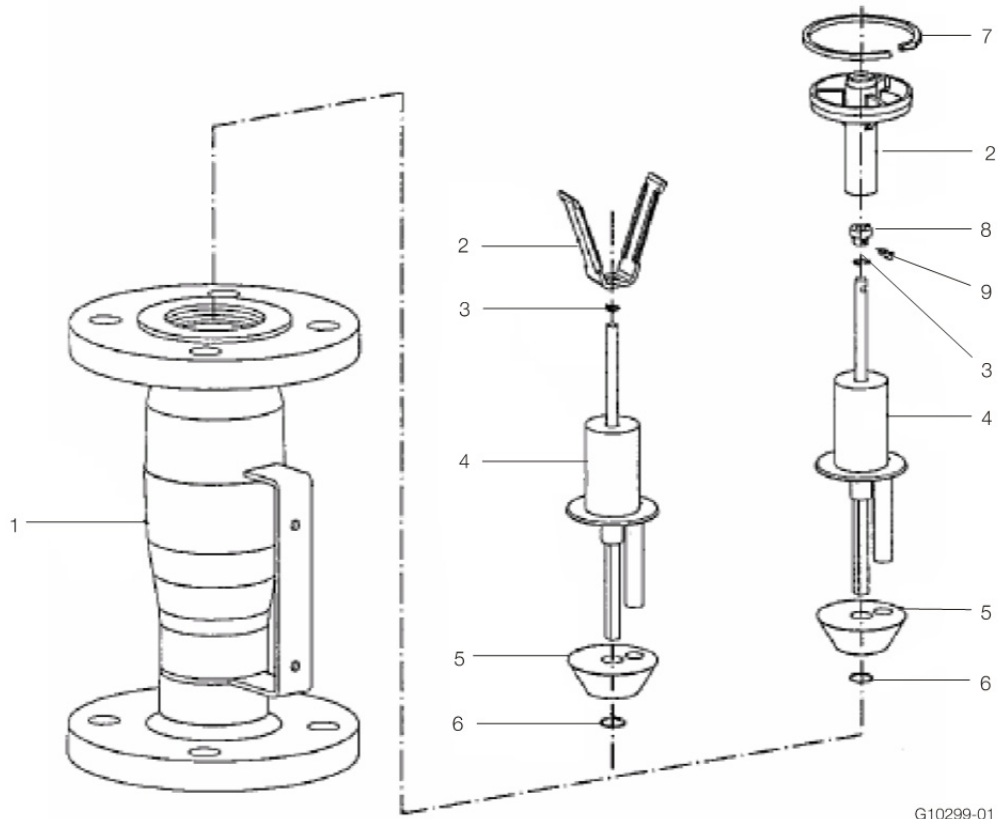
Fig. 4

Position	Name of part	Variant	Order number	Weight kg (lb)	Price (€)
1	Meter housing	-	-	-	
2	Float stop	-	D604A040U01	-	
	Float stop gas damping	old-	D631B043U01	-	
	Float stop gas damping	new-	D631B063U01	-	
3	Clamp ring	-	D376A116U01	-	
4	Float, standard	-	-	-	
	Float, gas damping	-	-	-	
5	Split ring	-	D106B001U09	-	
6	Piston 1"	-	D373A017U01	-	
7	Pin M6 x 8	-	D107D001U07	-	

#### **i** NOTICE

For float, metering tube and metering cone, include serial numbers with your request

### 3.3 Spare parts 2" 3" 4" DN 50, DN 80, DN 100



G10299-01

Fig. 5

Position	Name of part	Variant	Order number	Weight kg (lb)	Price (€)
1	Meter housing	-	-	-	
2	Float stop 2"	-	D604A041U01	-	
	Float stop 3"	-	D604A042U01	-	
	Float stop, gas 2"	-	D631B044U01	-	
	Float stop, gas 3"	-	D631B045U01	-	
3	Clamp ring	-	D376A117U01	-	
4	Float, standard compl.	-	-	-	
	Float, gas damping standard compl.	-	-	-	
6	Clamp ring	-	D376A118U01	-	
7	Clamp ring 2"	-	D376A120U01	-	
	Clamp ring 3"	-	D376A121U01	-	
8	Piston 2"	-	D373A012U01	-	
	Piston 3"	-	D373A013U01	-	
9	Pin M6 x 10	-	D107D001U08	-	

#### **i** NOTICE

For meter housing, float, metering tube and metering cone, include serial numbers with your request.

### 3.4 Housing

#### **i** NOTICE

Installation on-site is not recommended, since deviations in accuracy may result.

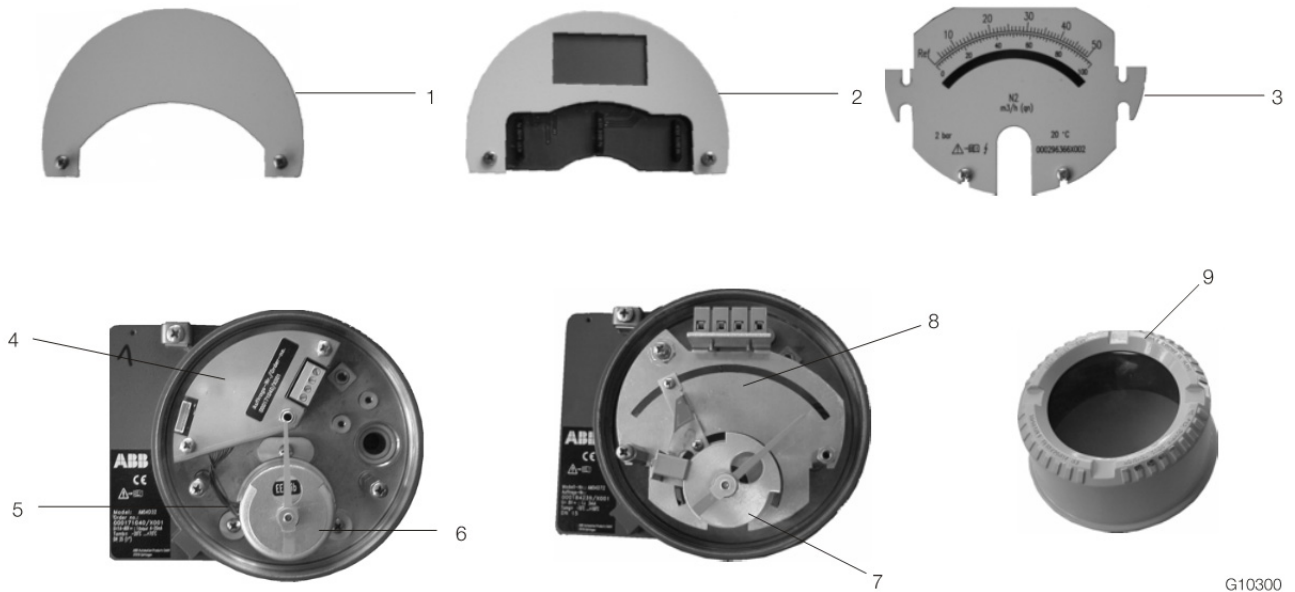


Fig. 6

G10300

Position	Name of part	Variant	Order number	Weight kg (lb)	Price (€)
1	Cover plate for AM54 3.0525 / PVDF	-	D336A014U01	-	
2	Display board for AM54 3.0525 / PVDF	-	D626A003U01	-	
2a	Display new FAM 54	-	D626A002U01	-	
3	Scale plate AM54 labeled	-	-	-	
4	Slide-in conv. AM5400 stand.	-	D674A853U02	-	
4a	Mainboard Ex FAM 54	-	D685A1096402	-	
5	Cable set AM5400 FRONT-END-DIGITAL	-	D677A353U04	-	
7	Basic assembly MIN-ALARM AM54	-	D679A021U01	-	
	Basic assembly MAX-ALARM AM54	-	D679A021U02	-	
	Basic assembly MIN/MAX-ALARM AM54	-	D679A021U03	-	
8	Pointer with damping cam AM54	-	D699A041U01	-	
9	Cover compl. STD AM54	-	D613A033U01	-	
	Cover compl. Flameproof 5400 F	-	D613A034U01	-	
	Damping magnet PERMADYM 220/150 (not shown)	-	D619A016U01	-	

#### **i** NOTICE

Item 3 is available upon request only with serial number.



# Notes

# Notes

# Notes

# Contact us

To find your local ABB branch, go to:  
[www.abb.com/contacts](http://www.abb.com/contacts)

Additional product information is  
available at:  
[www.abb.com](http://www.abb.com)

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