

ASME MFC-16–2007

[Revision of ASME MFC-16M–1995 (R2006)]

Measurement of Liquid Flow in Closed Conduits With Electromagnetic Flowmeters

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

Three Park Avenue • New York, NY 10016

CONTENTS

Foreword	iv
Committee Roster	v
Correspondence With the MFC Committee	vi
1 Scope	1
2 References	1
3 Definitions and Symbols	1
4 Theory and Measurement Technique	2
5 Flowmeter Descriptions	4
6 Application Considerations	4
7 Equipment Markings	7
8 Calibration	7
Figures	
1 Basic Components of an Electromagnetic Flowmeter	3
2 Electromagnetic Flowmeter System	3
3 Examples of Electromagnetic Field (B_o) Variation With Time	3
4 Examples of Electrodes for an Electromagnetic Flowmeter	3
Table	
1 Symbols	2
Nonmandatory Appendices	
A Additional Details Regarding Theory and Measurement Technique	9
B Items of Potential Interest to Users	10
C Liner Material Guidelines	12
D Accuracy Specifications for Electromagnetic Flowmeters	13
E Calculation Examples	14
F Additional References	15