Transmitters for use in industrial-process control systems –

Part 2: Methods for inspection and routine testing

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CONTENTS

FOREWORD ....................................................................................................................... 3
INTRODUCTION ................................................................................................................... 4

1 Scope and object ............................................................................................................. 5
2 Normative references ....................................................................................................... 5
3 Terms and definitions ....................................................................................................... 6
4 Sampling for test ............................................................................................................ 7
5 Performance tests ............................................................................................................ 7
   5.1 Test conditions ....................................................................................................... 7
   5.2 Preconditioning ....................................................................................................... 8
   5.3 Adjustments ............................................................................................................ 8
   5.4 Tests under reference conditions ............................................................................ 8
   5.5 Effects of influence quantities ................................................................................10
6 Test report and documentation ........................................................................................12

Figure 1 – Typical measured error plot .................................................................................... 9
Figure 2 – Two examples of responses to a step input ...........................................................10
FOREWORD

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International Standard IEC 60770-2 has been prepared by subcommittee 65B: Devices, of IEC technical committee 65: Industrial-process measurement and control.

This second edition cancels and replaces the first edition published in 1989 and constitutes a technical revision.

The text of this standard is based on the following documents:

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<tr>
<th>FDIS</th>
<th>Report on voting</th>
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<tbody>
<tr>
<td>65B/468/FDIS</td>
<td>65B/477/RVD</td>
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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A bilingual edition may be issued at a later date.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.
INTRODUCTION

The methods of inspection and routine testing specified in this standard are intended for use in acceptance tests or after repair to verify the fulfilment of the performance specifications as established by the user. The methods given in this standard are primarily intended for the testing of conventional analogue transmitters. For setting up test procedures for microprocessor-based instruments IEC 62098 should be consulted.
1 Scope and object

This part of IEC 60770 is applicable to transmitters, which have either a standard analogue electric current output signal or a standard pneumatic output signal in accordance with IEC 60381-1 or IEC 60382. The tests detailed herein may be applied to transmitters which have other output signals, provided that due allowance is made for such differences.

For certain types of transmitters, where the sensor is an integral part, other specific IEC or ISO standards may need to be consulted (e.g. for chemical analyzers, flow-meters, etc.)

This standard is intended to provide technical methods for inspection and routine testing of transmitters, for instance, for acceptance tests or after repair. For a full evaluation, IEC 60770-1 shall be used.

Quantitative criteria for acceptable performance should be established by agreement between manufacturer and user.

By agreement the tests need not be carried out by an accredited laboratory.

2 Normative references

At the time of the publication the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on these normative documents are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.


IEC 60381-1:1982, Analogue signals for process control systems – Part 1: Direct current signals

IEC 60382:1991, Analogue pneumatic signal for process control systems

IEC 60410:1973, Sampling plans and procedures for inspection by attributes


