

### SLOVENSKI STANDARD SIST EN 60534-6-2:2002

01-junij-2002

# Industrial-process control valves - Part 6-2: Mounting details for attachment of positioners to control valves - Positioner mounting on rotary actuators (IEC 60534-6-2:2000)

Industrial-process control valves -- Part 6-2: Mounting details for attachment of positioners to control valves - Positioner mounting on rotary actuators

Stellventile für die Prozessregelung -- Teil 6-2: Montageeinzelheiten zur Befestigung von Stellungsreglern an Stellventil-Antriebe - Montage von Stellungsreglern an Schwenkantriebe (standards.iteh.ai)

Vannes de régulation des processus industriels --- Partie 6-2: Détails d'assemblage pour le montage des positionneurs sur les actionneurs de vannes de régulation - Montage des positionneurs sur les actionneurs de vannes de régulation - Montage des positionneurs sur les actionneurs rotatifs

Ta slovenski standard je istoveten z: EN 60534-6-2:2001

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25.040.40	Merjenje in krmiljenje industrijskih postopkov

Pressure regulators Industrial process measurement and control

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<u>SIST EN 60534-6-2:2002</u> https://standards.iteh.ai/catalog/standards/sist/f4e3407f-cf9c-4aa2-b2b3-52e4556b3dc9/sist-en-60534-6-2-2002



### EUROPEAN STANDARD

## EN 60534-6-2

### NORME EUROPÉENNE

### EUROPÄISCHE NORM

February 2001

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### Industrial-process control valves Part 6-2: Mounting details for attachment of positioners to control valves -Positioner mounting on rotary actuators (IEC 60534-6-2:2000)

Vannes de régulation des processus industriels Partie 6-2: Détails d'assemblage pour le montage des positionneurs sur les actionneurs de vannes de régulation Montage des positionneurs sur les actionneurs rotatifs (CEI 60534-6-2:2000) Stellventile für die Prozessregelung Teil 6-2: Montageeinzelheiten zur Befestigung von Stellungsreglern an Stellventil-Antriebe -Montage von Stellungsreglern an Schwenkantriebe

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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### Foreword

The text of document 65B/410/FDIS, future edition 1 of IEC 60534-6-2, prepared by SC 65B, Devices, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60534-6-2 on 2001-01-01.

The following dates were fixed:

-	latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2001-10-01
-	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2004-01-01

### **Endorsement notice**

The text of the International Standard IEC 60534-6-2:2000 was approved by CENELEC as a European Standard without any modification.

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## NORME INTERNATIONALE INTERNATIONAL STANDARD

## CEI IEC 60534-6-2

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Part 6-2: Mounting details for attachment of positioners to control valves – Positioner mounting on rotary actuators

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### INDUSTRIAL-PROCESS CONTROL VALVES -

## Part 6-2: Mounting details for attachment of positioners to control valves – Positioner mounting on rotary actuators

### FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 60534-6-2 has been prepared by subcommittee 65B: Devices, of IEC technical committee 65: Industrial-process measurement and control.

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

FDIS	Report on voting
65B/410/FDIS	65B/419/RVD

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 3.

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

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

### INDUSTRIAL-PROCESS CONTROL VALVES -

## Part 6-2: Mounting details for attachment of positioners to control valves – Positioner mounting on rotary actuators

#### 1 Scope

This part of IEC 60534 is intended to permit a variety of positioning devices, which respond to a rotary motion, to be mounted on the actuator of a control valve, either directly or by employing an intermediate mounting bracket. This standard is applicable where interchangeability between actuators and positioners is desired.

- a) The standardized mounting in this standard defines the interface between the positioner and a part of the actuator having a rotary movement proportional to the control valve travel.
- b) This standard also covers the direct connection between the positioner feedback and the shaft (or its axial extension) of a rotary control valve. In such cases, the feedback rotation is coincident with the valve angular travel.
- c) The standardized mounting applies to those rotary actuators in which the rotary part mentioned in item a) has a maximum travel of 90°. Such a travel is coincident with the valve travel when a direct connection (see item b)) is performed.
- d) The standardized mounting is divided into two options. Figure 1 shows the basic design and defines the minimum requirements an actuator must fulfill to adapt most common positioners. The universal design in figure 2 offers more variations of positioner adaptation and positioner feedback connection. The positioner manufacturer should state which mounting design is required.

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#### 2 Definitions

For the purpose of this part of IEC 60534, the definitions given in other parts of IEC 60534 apply.

#### **3** Positioner mounting

**3.1** To allow the attachment of the positioner, the actuator manufacturer shall provide a drilled plane surface perpendicular to the axis of the end of the rotary part mentioned in item a) of clause 1 and located at the distance indicated in figure 1 or 2, as appropriate.

**3.2** The multiple drilling allows for different dimensions and masses of the positioner housing.

**3.3** The positioner may be mounted directly on the actuator, or indirectly by means of an intermediate bracket. The bracket on which the positioner is mounted may be an integral part of the actuator housing.

**3.4** The mounting design shall take vibration resistance into consideration.

### 4 Feedback connection

**4.1** The valve (or actuator) manufacturer shall provide suitable machining of the rotary part end as shown in figures 1 and 2.

**4.2** The positioner manufacturer shall provide appropriate means for connecting the moving parts of the positioner to the shaft or shaft extension. The design of such linkage shall minimize the lost motion along the feedback path.

**4.3** To allow for the possibility that the rotary part is rigidly connected to the valve shaft, thermal linear expansion of the rotary part of up to 1 mm shall be taken into account by the positioner manufacturer.

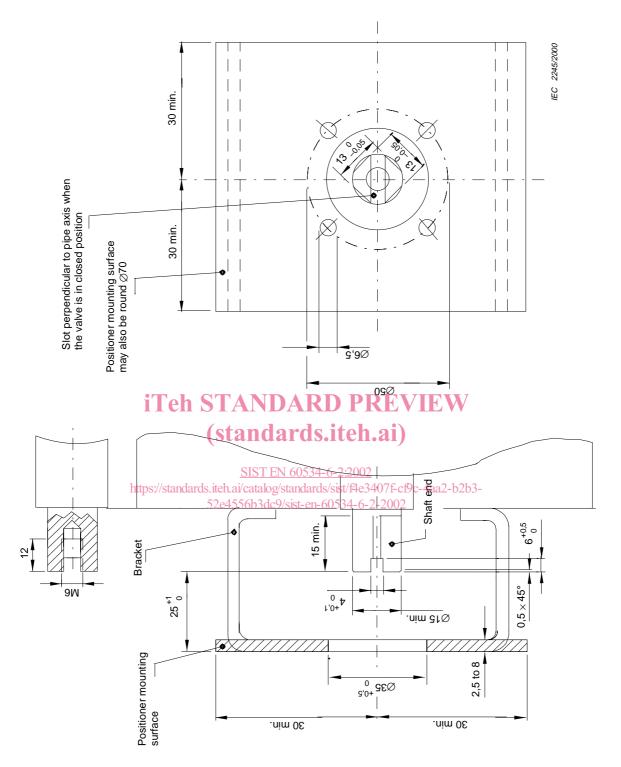
**4.4** The feedback connection shall take vibration resistance into consideration.

#### 5 Mounting accessories

Unless otherwise specified, the positioner manufacturer shall provide two or more M6 screws (plus nuts and washers) according to the design of the positioner, to permit the positioner mounting on the actuator.

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Dimensions in millimetres

NOTE The shaft end may be square or round. Flats are not required for round shaft end.

Figure 1 – Basic design