

User Manual

## Unclean 710/720

Modular Control and Cleaning System



Read before installation.  
Keep for future use.



## Supplemental Directives

READ AND SAVE THIS DOCUMENT FOR FUTURE REFERENCE. BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT, PLEASE ENSURE A COMPLETE UNDERSTANDING OF THE INSTRUCTIONS AND RISKS DESCRIBED HEREIN. ALWAYS OBSERVE ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS DOCUMENT COULD RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE. THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.



These supplemental directives explain how safety information is laid out in this document and what content it covers.

### Safety Chapter






This document's safety chapter is designed to give the reader a basic understanding of safety. It illustrates general hazards and gives strategies on how to avoid them.

### Warnings

This document uses the following warnings to indicate hazardous situations:

Symbol	Category	Meaning	Remark
	<b>WARNING</b>	Designates a situation that can lead to death or serious (irreversible) injury.	The warnings contain information on how to avoid the hazard.
	<b>CAUTION</b>	Designates a situation that can lead to slight or moderate (reversible) injury.	
<i>None</i>	<b>NOTICE</b>	Designates a situation that can lead to property or environmental damage.	

### Symbols Used in this Document

Symbol	Meaning
	Reference to additional information
	Interim or final result in instructions for action
	Sequence of figures attached to an instruction for action
	Item number in a figure
	Item number in text

### Related Documents

- Retractable fitting User Manual. → [www.knick-international.com](http://www.knick-international.com)
- Industrial transmitter User Manual. → [www.knick-international.com](http://www.knick-international.com)
- Uniclean 700 system component Installation Guides.  
→ [www.knick-international.com](http://www.knick-international.com)

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# 1 Safety

This document contains important instructions for the use of the product. Always follow all instructions and operate the product with caution. If you have any questions, please contact Knick Elektronische Messgeräte GmbH & Co. KG (hereinafter sometimes referred to as “Knick”) using the information provided on the back page of this document.

## 1.1 Intended Use

Uniclean 710/720 (the “EPC710/720” or “product”) is an electro-pneumatic control and cleaning system for the semi-automatic operation of a measuring point, e.g., in the field of process analytics. In combination with the products listed below, a sensor can be temporarily moved into the process medium to record measured values and then automatically cleaned.

EPC710/720 can be combined with the following products, for example:

Static fittings	ARD50 with rinse function
	ARD75 with rinse function
Retractable fittings	SensoGate
	WA111
Transmitter	Stratos Multi

Further information can be found in the relevant product documentation.

The defined operating conditions must be observed when using this product.

→ *Specifications, p. 29*

**USE CAUTION AT ALL TIMES WHEN INSTALLING, USING, MAINTAINING OR OTHERWISE INTERACTING WITH THE PRODUCT. ANY USE OF THE PRODUCT EXCEPT AS SET FORTH HEREIN IS PROHIBITED, AND MAY RESULT IN SERIOUS INJURY OR DEATH, AS WELL AS DAMAGE TO PROPERTY. THE OPERATING COMPANY SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES RESULTING FROM OR ARISING OUT OF AN UNINTENDED USE OF THE PRODUCT.**

## 1.2 Personnel Requirements

The operating company shall ensure that any personnel using or otherwise interacting with the product is adequately trained and has been properly instructed.

The operating company shall comply and cause its personnel to comply with all applicable laws, regulations, codes, ordinances, and relevant industry qualification standards related to product. Failure to comply with the foregoing shall constitute a violation of operating company’s obligations concerning the product, including but not limited to an unintended use as described in this document.

### 1.3 Residual Risks

The product has been developed and manufactured in accordance with generally accepted safety rules and regulations, as well as an internal risk assessment. Despite the foregoing, the product may among others bear the following risks:

#### Environmental Influences

The effects of moisture, ambient temperature, chemicals, and corrosion can negatively impact the safe operation of the product. Observe the following instructions:

- Only operate the EPC710/720 control and cleaning system in compliance with the stated operating conditions. → *Specifications, p. 29*
- Observe the permissible ambient temperature. Alternatively, use protective cabinets and heatable media connections. → *Specifications, p. 29*

#### Drinking Water Connection

If the EPC710/720 is connected to the drinking water supply, impurities caused by the rinse and process media may occur. Note the information in EN 1717. Install a suitable check valve at the water or rinse connection. → *Accessories, p. 25*

### 1.4 Hazardous Substances

**IN THE EVENT OF ANY CONTACT WITH HAZARDOUS SUBSTANCES OR OTHER INJURY HEREUNDER, SEEK IMMEDIATE MEDICAL ATTENTION OR FOLLOW APPLICABLE PROCEDURES TO ADDRESS HEALTH AND SAFETY OF PERSONNEL. FAILURE TO SEEK IMMEDIATE MEDICAL ATTENTION MAY RESULT IN SERIOUS INJURY OR DEATH.**

In certain situations (e.g., sensor replacement or corrective maintenance), personnel may come into contact with the following hazardous substances:

- Process medium
- Cleaning medium
- Buffer and calibration solutions

The operating company is responsible for conducting a risk assessment.

See the relevant manufacturers' safety datasheets for hazard and safety instructions on handling hazardous substances.

## **1.5 Operation and Installation**

All national and local regulations relating to the installation and operation of the product in force at the destination must be followed.

## **1.6 Maintenance and Spare Parts**

### **Preventive Maintenance**

Preventive maintenance can keep the product in good condition and minimize downtimes. Knick provides recommended inspection and maintenance intervals.

→ *Maintenance, p. 22*

### **Spare Parts**

For professional corrective maintenance of the product, only use Knick genuine spare parts. Usage of any other spare parts shall constitute an unintended use of the product.

### **Repair Service**

The Knick Repair Service offers professional corrective maintenance for the product to the original quality. Upon request, a replacement unit can be obtained for the period of the repair.

Further information can be found at [www.knick-international.com](http://www.knick-international.com).

## **1.7 Safety Training**

Upon request, Knick Elektronische Messgeräte GmbH & Co. KG will provide safety briefings and product training during initial commissioning of the product. More information is available from the relevant local contacts.

## 2 Product

### 2.1 Package Contents

- EPC700 Base Plate
- User Manual

### 2.2 Product Identification

The different versions of the EPC710/720 are encoded in a model designation.

The model designation is stated on the nameplate, the delivery note, and the product packaging. → *Nameplate, p. 10*

#### 2.2.1 Example of a Version

Model Designation		EPC720	-	N	N	S	1	P	W	0	A	0	5	0	A	-	0	0	0	
Explosion protection/approval	Without approval			N	N												-			
Housing material	Stainless steel A2					S											-			
Electrical valve connection	Valve connection box with screw terminals						1										-			
Valve function 1	Retractable fitting 5/2-way pneumatic valve							P									-			
Valve function 2	Water rinsing 2/2-way valve								W								-			
Valve function 3	None									0							-			
Hose version	Single hoses in sheath (4x pneumatic (PA), 1x water (EPDM)) Length: 5 m											A	0	5			-			
Add-on function	Program module A														0	A	-			
Special version																	-	0	0	0



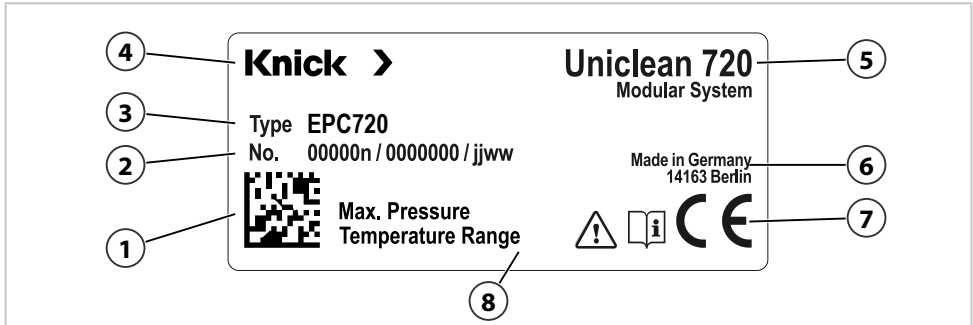
## 2.2.2 Product Code

Control and Cleaning System		EPC710/720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Explosion protection/approval	Without approval		N	N																				
Housing material	Stainless steel A2			S																				
Electrical valve connection	Individual valves with M12 connector				0																			
	Valve connection box with screw terminals				1																			
Valve function 1	Retractable fitting 5/2-way pneumatic valve				P																			
	Water rinsing 2/2-way valve				W	0/L/V																		
	Compressed air purging 2/2-way valve				L																			
	Control valve 3/2-way pneumatic valve				V																			
	None					0																		
Valve function 2	Water rinsing 2/2-way valve					W																		
	Compressed air purging 2/2-way valve					L																		
	Control valve 3/2-way pneumatic valve					V																		
	None					0																		
Valve function 3	Compressed air purging 2/2-way valve						L																	
	Control valve 3/2-way pneumatic valve						V																	
	None						0																	
Hose version	Without hoses									0	0	0												
	Single hoses in sheath (4x pneumatic (PA), 1x water (EPDM)) Length: 5 m											A	0	5										
	Single hoses in sheath (4x pneumatic (PA), 1x water (EPDM)) Length: 10 m												A	1	0									
Add-on function	None														0	0	-							
	Program module A															0	A	-						
Special version																					-	0	0	0

## 2.3 Nameplate

The EPC710/720 Control and Cleaning System is identified by a nameplate on the base plate.

The figure shows the nameplate for the EPC720 Control and Cleaning System.



1	DataMatrix code	5	Product family
2	Item number, serial number, year/month	6	Manufacturer address
3	Model designation	7	CE mark
4	Manufacturer	8	For temperature range and max. operating pressure, see Specifications

## 2.4 Symbols and Markings



Special conditions and the product's possible danger points. Read the user manual, observe the specifications, and follow the instructions in the safety guide.



Refer to the product documentation.



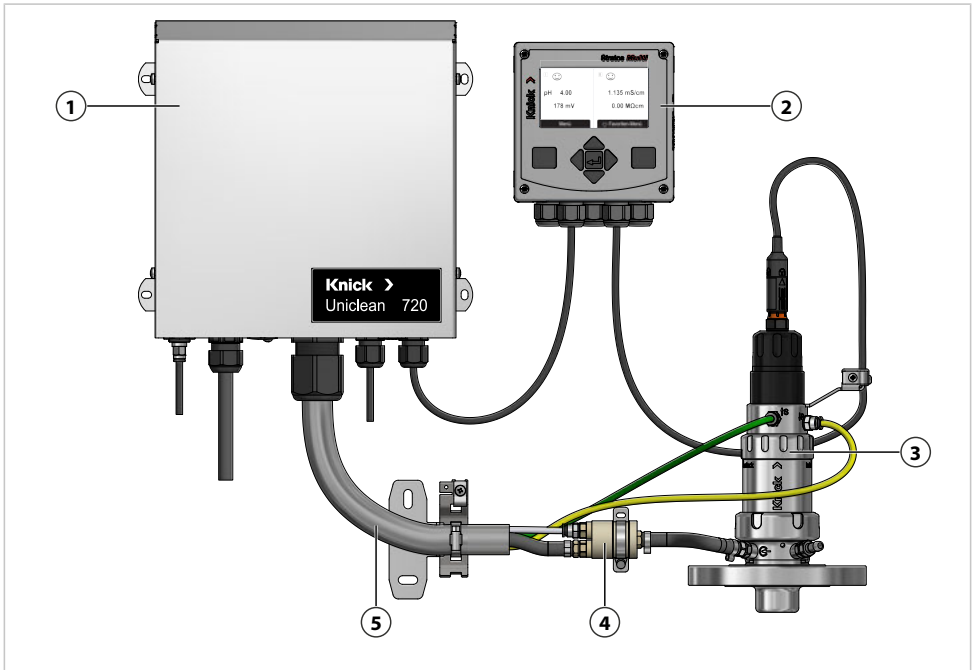
Attaching the CE marking to the product means that the product satisfies the applicable requirements specified in the European Union harmonization legislation.



The symbol on Knick products means that the waste devices must be disposed of separately from unsorted municipal waste.

## 2.5 Design of the Control and Cleaning System

The figure shows an example installation of the EPC720 Control and Cleaning System.



1 EPC720 Control and Cleaning System

4 ZU1182 connector for rinsing media

2 Industrial transmitter, e.g., Stratos Multi

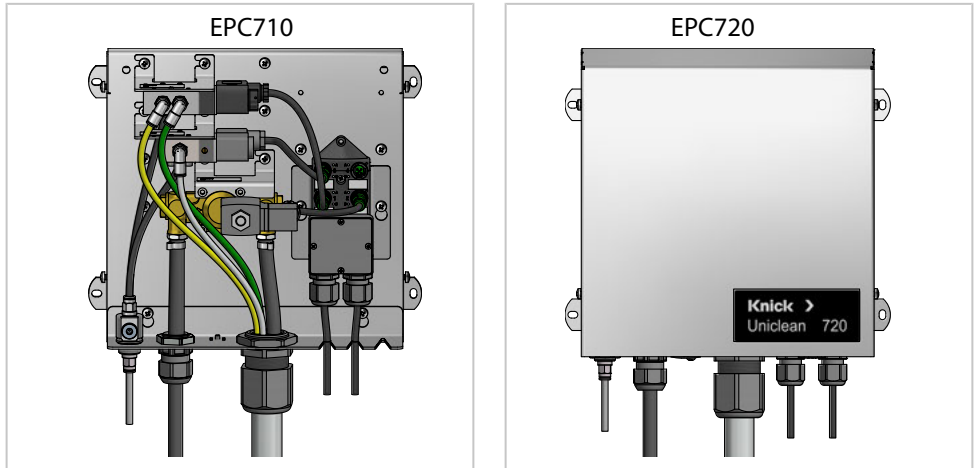
5 EPC700 Media Hose

3 Retractable fitting, e.g., WA131

### 2.5.1 Design

The EPC710/720 Control and Cleaning System is a modular system. The combination of different valves meets the specific requirements of a measuring point.

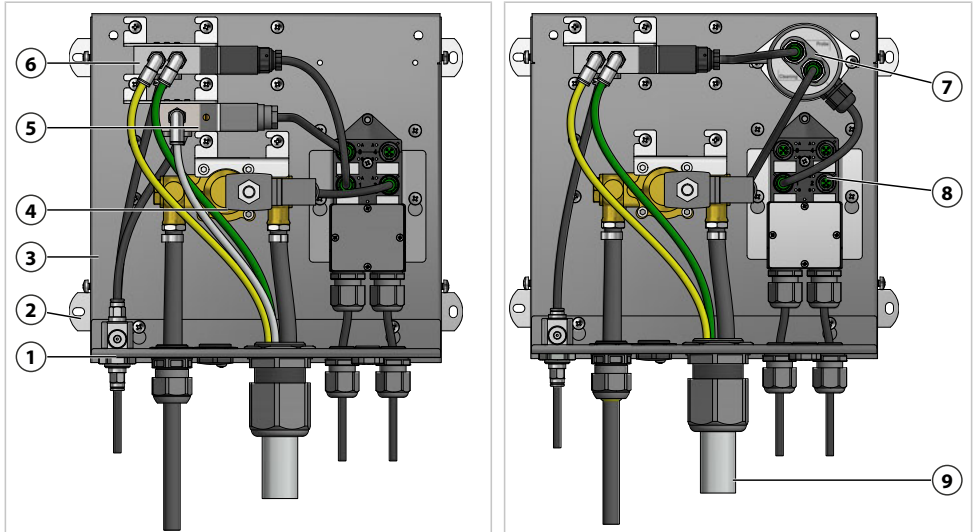
→ *Function*, p. 13



As supplied, the system consists of a base plate with pre-installed screws. On the base plate, components such as the following are installed:

EPC710	EPC720
	EPC720 Cover
EPC710 Connection Bracket	EPC720 Connection Bracket
Valves (e.g., EPC700 Air 5/2-Way Valve, EPC700 Water 2/2-Way Valve) <sup>1)</sup>	Valves (e.g., EPC700 Air 5/2-Way Valve, EPC700 Water 2/2-Way Valve) <sup>1)</sup>
EPC700 Media Hose <sup>1)</sup>	EPC700 Media Hose <sup>1)</sup>
EPC700 Valve Connection Box <sup>1)</sup>	EPC700 Valve Connection Box <sup>1)</sup>
EPC700 Module A <sup>1)</sup>	EPC700 Module A <sup>1)</sup>

<sup>1)</sup> Availability dependent on the ordered version → *Product Code*, p. 9



- 1 Compressed air distributor  
(max. 3 connections)
- 2 Wall mount
- 3 Base plate
- 4 EPC700 Water 2/2-Way Valve
- 5 EPC700 Air 2/2-Way Valve

- 6 EPC700 Air 5/2-Way Valve
- 7 EPC700 Module A
- 8 EPC700 Valve Connection Box
- 9 EPC700 Media Hose

## 2.5.2 Function

### Valve Functions

The EPC710/720 electro-pneumatic control and cleaning system can be combined with different devices and fittings and expanded into a complete measuring point for process analytics. Different valves are required for the fittings.

An overview of possible fittings and functions:

Fitting	Valve	Functions
ARF210, ARF215 flow-through fittings with rinse function	EPC700 Water 2/2-Way Valve	Cleaning with water
	EPC700 Air 2/2-Way Valve	Purging with air
	EPC700 Air 3/2-Way Valve	Cleaning with cleaner <sup>1)</sup>
ARD50/ARD75 immersion fitting with rinse function	EPC700 Water 2/2-Way Valve	Cleaning with water
	EPC700 Air 2/2-Way Valve	Purging with air
	EPC700 Air 3/2-Way Valve	Cleaning with cleaner <sup>1)</sup>

<sup>1)</sup> An external pneumatically switched cleaner valve or a pneumatically driven pump is also required.

<b>Fitting</b>	<b>Valve</b>	<b>Functions</b>
ARD75 immersion fitting sensor adapter with lock- gate function	EPC700 Air 5/2-Way Valve	Move to PROCESS and SERVICE positions
	EPC700 Water 4/2-Way Valve	Pneumatic
	EPC700 Water 2/2-Way Valve	Water-hydraulic
	EPC700 Air 2/2-Way Valve	Cleaning with water
	EPC700 Air 3/2-Way Valve	Purging with air
WA111 retractable fitting	EPC700 Air 5/2-Way Valve	Cleaning with cleaner <sup>1)</sup>
	EPC700 Water 4/2-Way Valve	Move to PROCESS and SERVICE positions
	EPC700 Water 2/2-Way Valve	Pneumatic
	EPC700 Air 2/2-Way Valve	Water-hydraulic
	EPC700 Air 3/2-Way Valve	Cleaning with water
SensoGate WA131/WA132 retractable fitting	EPC700 Air 5/2-Way Valve	Purging with air
	EPC700 Water 2/2-Way Valve	Cleaning with water
	EPC700 Air 2/2-Way Valve	Purging with air
	EPC700 Air 3/2-Way Valve	Cleaning with cleaner <sup>1)</sup>
SensoGate WA131H retractable fitting	EPC700 Air 5/2-Way Valve	Move to PROCESS and SERVICE positions
	EPC700 Water 2/2-Way Valve	Pneumatic
	EPC700 Air 2/2-Way Valve	Cleaning with water
	EPC700 Air 3/2-Way Valve	Purging with air
SensoGate WA131M/ WA133M retractable fitting	EPC700 Air 2/2-Way Valve	Cleaning with cleaner <sup>1)/steam<sup>2)</sup></sup>
	EPC700 Water 2/2-Way Valve	Cleaning with water
	EPC700 Air 3/2-Way Valve	Purging with air
SensoGate WA131MH retractable fitting	EPC700 Water 2/2-Way Valve	Cleaning with water
	EPC700 Air 2/2-Way Valve	Purging with air
	EPC700 Air 3/2-Way Valve	Cleaning with cleaner <sup>1)/steam<sup>2)</sup></sup>

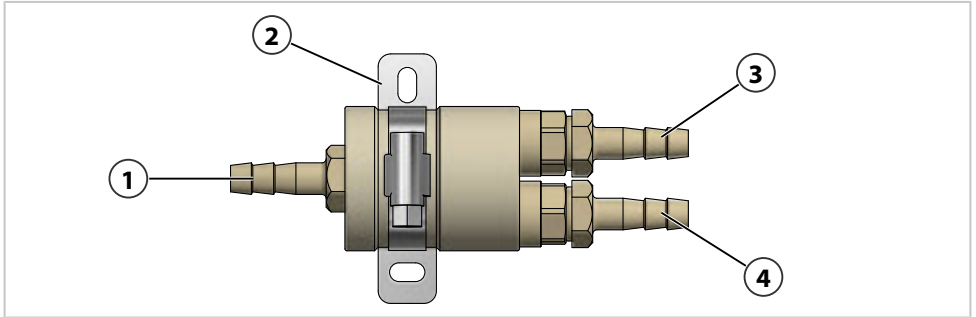
<sup>1)</sup> An external pneumatically switched cleaner valve or a pneumatically driven pump is also required.

<sup>2)</sup> An external steam valve is also required.

### 2.5.3 ZU1182 Connector for Rinsing Media

When cleaning the retractable fitting's rinsing chamber with two rinsing media, the connection hoses must first be bundled in the connector for rinsing media. Check valves are located at each connector input to prevent the backflow of media.

**Note:** Do not activate both rinsing media simultaneously.



**1** Output for rinsing medium 1 or 2  
(connection nozzle  $\varnothing$  6 mm)

**2** Wall holder with clamp

**3** Input for rinsing medium 1 (connection  
nozzle  $\varnothing$  6 mm)

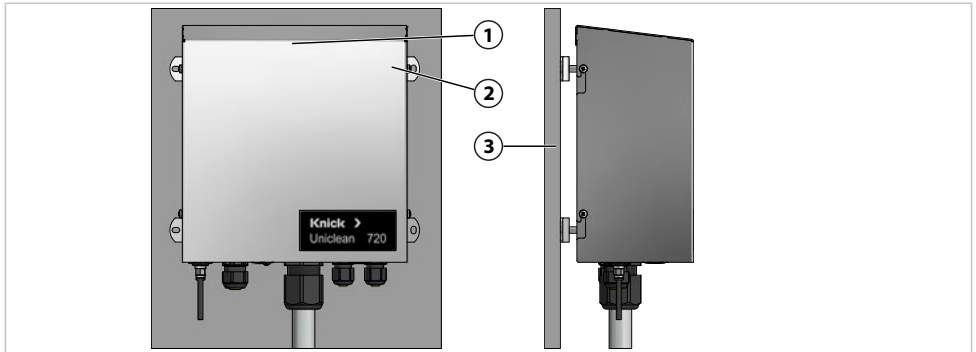
**4** Input for rinsing medium 2 (connection  
nozzle  $\varnothing$  6 mm)

## 3 Installation

### 3.1 General Installation Instructions

- The EPC710/720 control and cleaning system can be installed on a wall or pipe.
- The mounting location must have sufficient strength and be vibration-free.
- If installing outdoors, pay attention to the ambient temperature.  
→ *Specifications, p. 29*

### 3.2 Wall Mounting



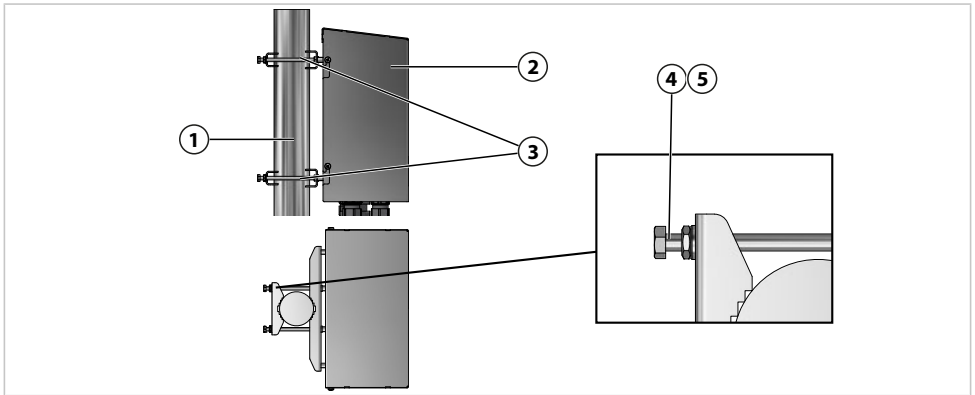
01. Check the EPC710/720 **(1)** for damage.
02. Prepare the holes in accordance with the Dimension Drawing.  
→ *Dimension Drawings, p. 27*
03. Using screws and washers, fasten the EPC710/720 to the wall **(3)** via the four holes in the wall mount **(2)** <sup>1)</sup>.
04. Check for a tight fit.

<sup>1)</sup> Not included in the package contents.



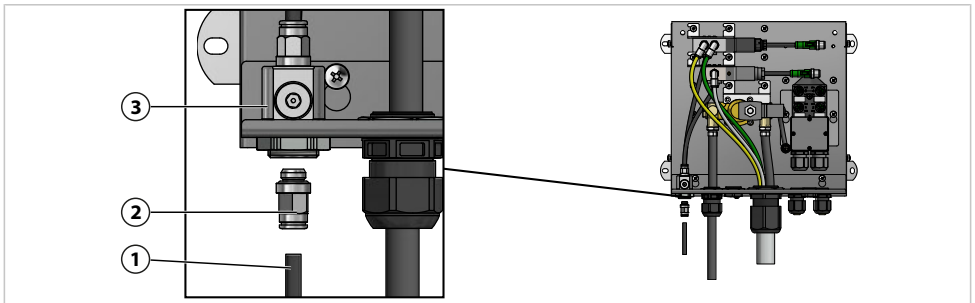
### 3.3 Pipe Mounting

**Note:** Accessory ZU0601 is designed for a pipe diameter of 30 ... 65 mm (1.18 ... 2.56").



01. Check the EPC710/720 **(2)** for damage.
02. Fasten accessory ZU0601 pipe-mount kit<sup>1)</sup> **(3)** to the rear of the housing.
03. Remove the screws **(4)** and washers **(5)** from accessory ZU0601 pipe-mount kit **(3)**.
04. Position the EPC710/720 on the pipe **(1)** and fasten with screws **(4)** and washers **(5)**.
05. Check for a tight fit.

### 3.4 Compressed Air Supply Installation



01. For the compressed air connection, select a suitable hose **(1)** with connector **(2)** (male thread G $\frac{1}{4}$ ").
02. Screw the connector **(2)** into the compressed air distributor **(3)** and install the compressed air hose **(1)**.

<sup>1)</sup> Refer to the User Manual for the ZU0601 accessory.

## 4 Commissioning

**⚠ WARNING! In the event of damage or improper installation, process medium may escape from the fitting, potentially releasing hazardous substances.** Adhere to the safety instructions.

01. Check the EPC710/720 Control and Cleaning System to make sure it is complete and undamaged.  
**Note:** Do not use damaged parts.
  02. Install the EPC710/720 on a wall or pipe. → *Wall Mounting, p. 16*  
→ *Pipe Mounting, p. 17*
  03. Install the EPC710 or EPC720 Connection Bracket on the base plate; see the installation guide.
  04. Install the valves<sup>1)</sup> on the base plate; see the installation guide.
  05. Install the EPC700 Valve Connection Box<sup>2)</sup> on the base plate; see the installation guide.
  06. Install the EPC700 Module A<sup>2)</sup> on the base plate; see the installation guide.
  07. Install the EPC700 Media Hose<sup>2)</sup> on the base plate; see the installation guide.
  08. EPC720: Install the EPC720 Cover on the base plate; see the installation guide.
  09. Install the fitting and transmitter; see the relevant user manual.
  10. Connect the compressed air and check the tightness of the hose connections.
  11. Connect the water supply and check the tightness of the hose connections.
  12. Connect the 24 V DC power supply.
  13. Check the grounding connection; see the EPC720 Connection Bracket installation guide.
  14. Check the function of the retractable fitting; see the relevant user manual.
- ✓ EPC710/720 is ready for operation.

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<sup>1)</sup> Availability dependent on the ordered version → *Product Code, p. 9*

<sup>2)</sup> Dependent on the ordered version → *Product Code, p. 9*

## 5 Operation

The EPC710/720 Control and Cleaning System is controlled, for example, by an industrial transmitter such as the Stratos Multi. For the user-defined control of program flows (move sensor into the process, move sensor out of the process, cleaning), a user-defined relay contact must be available per valve.

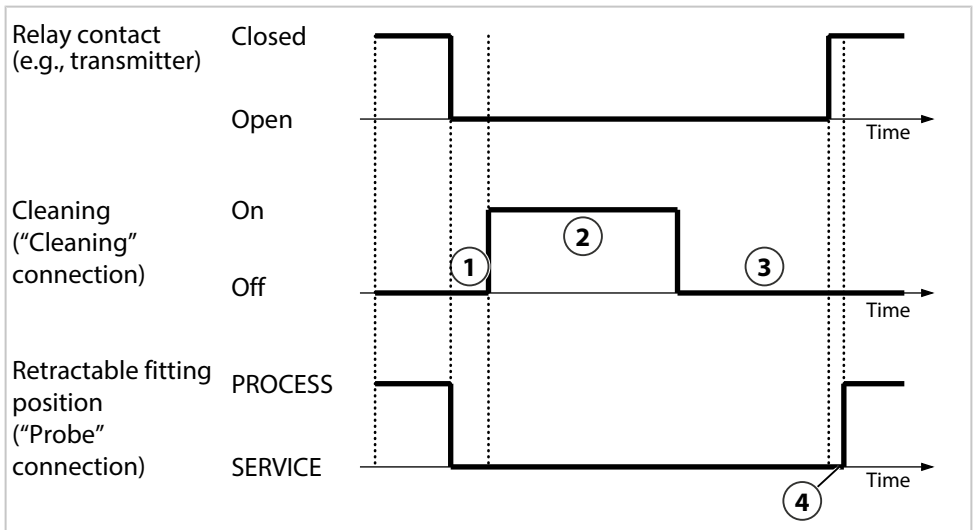
### Program Flows if Using EPC700 Module A

With program module A, a fixed cleaning cycle in a retractable fitting can be triggered via a relay contact in the industrial transmitter.

**Note:** The relay contact must be configured as a normally closed contacts (NC contact). The valves are controlled in a fixed sequence.

- Move the sensor out of the process.
- Clean the sensor.
- Move the sensor into the process.

The following switching sequence is defined:



1 Waiting time approx. 5 s

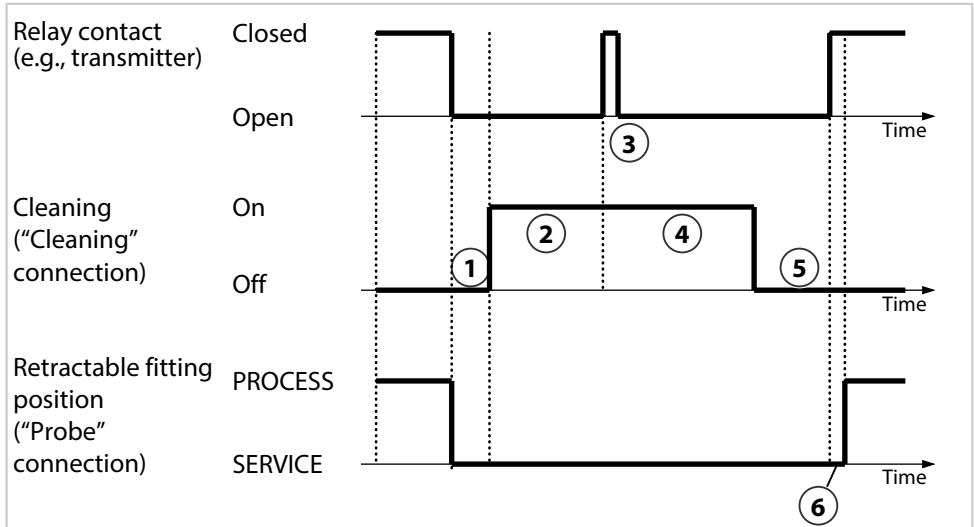
2 Cleaning duration approx. 30 s

3 Waiting time (sensor in park position)

4 Pick-up delay approx. 2 s

## Extension of the Cleaning Time

Longer cleaning is achieved by pulsing the relay contact no later than 25 seconds after the relay contact opens. Multiple extensions of the cleaning time (by approximately 30 seconds each) are possible.



1 Waiting time approx. 5 s

2 Cleaning duration < 25 s

3 Extension pulse < 2 s

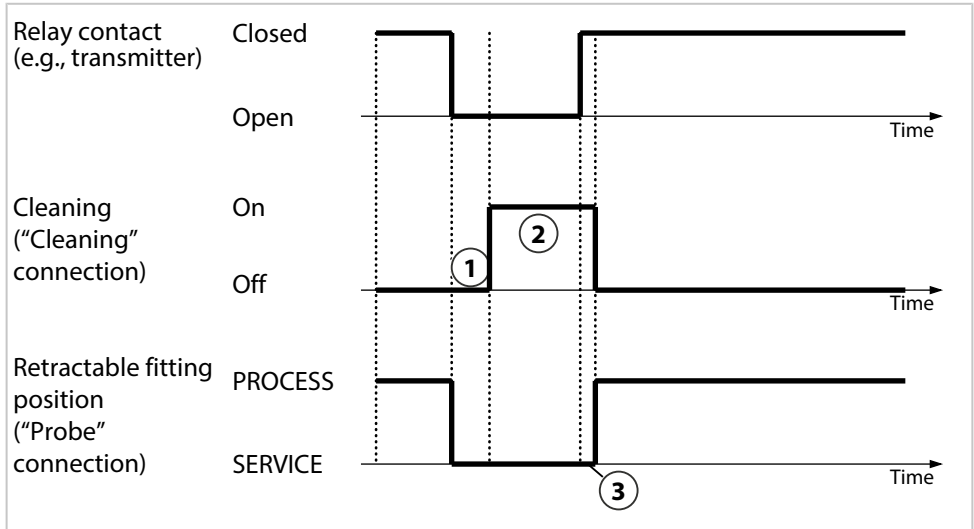
4 Cleaning duration approx. 30 s

5 Waiting time (sensor in park position)

6 Pick-up delay approx. 2 s

## Interrupting Cleaning

Closing the switch contact for longer than 2 seconds interrupts cleaning. The sensor is moved to the process position.



1 Waiting time approx. 5 s

3 Pick-up delay approx. 2 s

2 Shortened cleaning duration

## 6 Maintenance

### 6.1 Inspection and Maintenance

**NOTICE!** Different process conditions (e.g., pressure, temperature, chemically aggressive media) will affect the inspection and maintenance intervals. Analyze the specific application and process conditions at hand. Define appropriate intervals based on similar application cases where experience has already been gained.

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Interval <sup>1)</sup>	Work required
6 months	Check the valves to make sure they are functioning correctly. If not, replace valves.

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### 6.2 Corrective Maintenance

#### 6.2.1 Replacing Faulty Components

Faulty components must be replaced.

01. EPC720: Remove the EPC720 Cover; see the installation guide.
02. Disconnect the EPC700 Valve Connection Box<sup>2)</sup> from the power supply.
03. Disconnect the compressed air and water supply.
04. Replace components; see the installation guides.
05. Check the tightness of the connections and hoses.
06. Connect the EPC700 Valve Connection Box to the power supply.
07. EPC720: Install the EPC Cover; see the installation guide.

#### 6.2.2 Knick Repair Service

The Knick Repair Service offers professional corrective maintenance for the product to the original quality. Upon request, a replacement unit can be obtained for the period of the repair.

Further information can be found at [www.knick-international.com](http://www.knick-international.com).

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<sup>1)</sup> The stated intervals are general recommendations based on Knick's experience. The actual intervals are dependent on the specific application for which the EPC710/720 is used.

<sup>2)</sup> Availability dependent on the ordered version → *Product Code, p. 9*

## 7 Troubleshooting

Malfunction State	Possible Cause	Remedy
Fitting does not move.	No compressed air supply.	Install and connect the compressed air supply. → <i>Compressed Air Supply Installation, p. 17</i>
	PROCESS and SERVICE position compressed air connections reversed.	Replace the compressed air hoses; see the EPC700 Air 5/2-Way Valve and EPC700 Hose installation guides.
	Valve faulty.	Replace the EPC700 Air 5/2-Way Valve. → <i>Replacing Faulty Components, p. 22</i>
	No 24 V DC power supply.	Check the terminal assignments; see the EPC700 Valve Connection Box installation guide.
	Power supply is connected via the industrial transmitter.	Connect the EPC700 Valve Connection Box to its own power supply; see the installation guide.
Fitting is not cleaned.	No compressed air supply	Install and connect the compressed air supply. → <i>Compressed Air Supply Installation, p. 17</i>
	No water supply	Check and, as necessary, reconnect the water supply; see the EPC700 Water 2/2-Way Valve installation guide.
	Supply hoses leaking.	Check the connections of the compressed air and water hoses; see the EPC700 Hose installation guide.
	Compressed air or water valve faulty.	Replace the valve. → <i>Replacing Faulty Components, p. 22</i>
	No 24 V DC power supply	Check the terminal assignments; see the EPC700 Valve Connection Box installation guide.
	Power supply is connected via the industrial transmitter.	Connect the EPC700 Valve Connection Box to its own power supply; see the installation guide.
EPC710/720 does not work.	No 24 V DC power supply.	Check the terminal assignments; see the EPC700 Valve Connection Box installation guide.
	Power supply is connected via the industrial transmitter.	Connect the EPC700 Valve Connection Box to its own power supply; see the installation guide.

## 8 Decommissioning

### 8.1 Removal

**▲ WARNING! Process medium, potentially containing hazardous substances, may escape from the fitting.** Follow the safety instructions. → *Safety, p. 5*

01. As necessary, move the retractable fitting into SERVICE position.
02. Disconnect the EPC700 Valve Connection Box<sup>1)</sup> from the power supply.
03. Depressurize the process.
04. Disconnect the compressed air and water supply.
05. Remove components; see the installation guide.
06. Remove the EPC700 Media Hose. Drain media from hoses and dispose of if necessary.

### 8.2 Return

If required, send the product in a clean condition and securely packed to your local contact. → [www.knick-international.com](http://www.knick-international.com)

If there has been contact with hazardous substances, the product must be decontaminated or disinfected prior to shipment. The consignment must always be accompanied by a corresponding return form (declaration of decontamination) to prevent service employees being exposed to potential hazards. → [www.knick-international.com](http://www.knick-international.com)

### 8.3 Disposal

Local codes and regulations must be observed when disposing of the product.

The EPC710/720 can contain various materials, depending on the version concerned; see the installation guide.

Customers can return their waste electrical and electronic devices.

Details on the return and environmentally friendly disposal of electrical and electronic equipment can be found in the manufacturer's declaration on our website. If you have any queries, suggestions, or questions regarding the recycling of waste electrical and electronic equipment from Knick, please send an email to → [support@knick.de](mailto:support@knick.de)

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<sup>1)</sup> Availability dependent on the ordered version → *Product Code, p. 9*



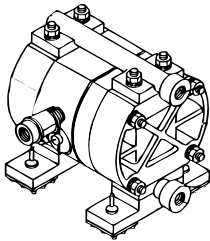
## 9 Spare Parts and Accessories

### 9.1 Accessories



#### ZU0601 Pipe-Mount Kit

For installation of the EPC710/720 on a horizontal or vertical pipe.



#### ZU0741 Chemical Pump

**Note:** Supplementary external valve kit required.

The chemical pump is used for pumping cleaners not compatible with the standard PP and EPDM or Viton pump.



#### RV01 Check Valve

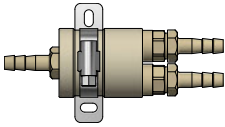
The RV01 check valve prevents process medium or calibration, cleaning, or rinsing media from flowing back into the inlet. The check valve is selected using a product code.

Check Valve		RV01	-	-	-	-
Housing material, valve body	Stainless steel 1.4404	H				
	PEEK	E				
Seal material	FKM			A		
	EPDM			B		
	FFKM			C		
	FKM-FDA			F		
	EPDM-FDA			E		
	FFKM-FDA			H		
Inlet connection, female thread	G $\frac{1}{4}$ "				4	
	G $\frac{1}{8}$ "				8	
Outlet connection, male thread	G $\frac{1}{4}$ "					4
	G $\frac{1}{8}$ "					8

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**ZU0876 Valve for Chemical Cleaners**

Accessory ZU0876 is a valve and enables the control of chemical cleaners (diluted acids or bases) for cleaning sensors in fittings.



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**ZU1182 Connector for Rinsing Media**

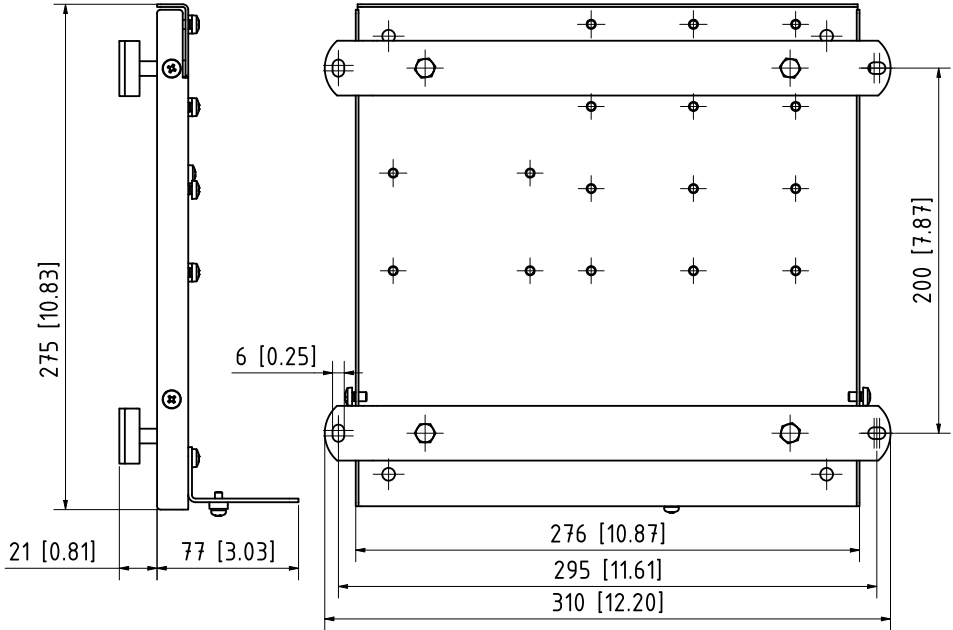
Accessory ZU1182 brings the hoses of two rinsing media together and forwards one of the rinsing media in a hose.

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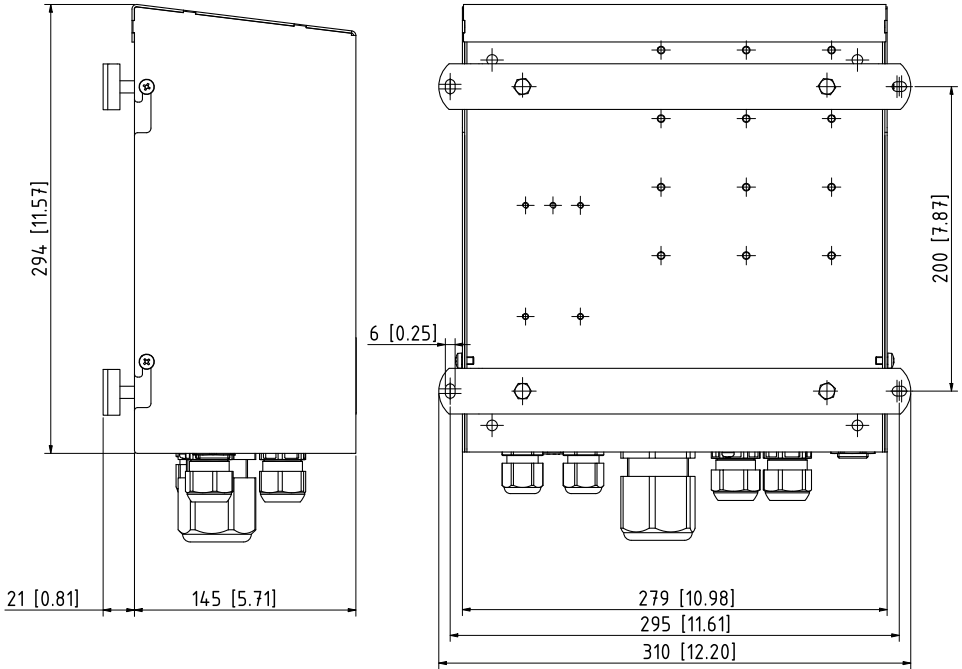
# 10 Dimension Drawings

**Note:** All dimensions are listed in millimeters [inches].

## EPC710



**EPC720**



## 11 Specifications

### Compressed Air Supply

Quality of compressed air according to ISO 8573-1:2010	Quality class 7:2:4, free of aggressive constituents
Operating pressure	Max. 10 bar (max. 145 psi)
Connection	G $\frac{1}{4}$ " female thread

### Water Supply

Water quality	Filtered, 100 $\mu$ m
Operating pressure	0.5 ... 16 bar (7.3 ... 232 psi)
Temperature	5 ... 80 °C (41 ... 176 °F)
Connection (on valve)	G $\frac{1}{4}$ " female thread, connection nozzle for hose DN 6

### Electrical Power Supply

Operating voltage	24 V DC $\pm$ 10 %
Current consumption	Max. 1 A, less dependent on version
Connection	Screw terminal for rated cross-section of up to 1.5 mm <sup>2</sup>

### Ambient Conditions

Transport/storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Ambient temperature	-10 ... 70 °C (14 ... 158 °F) When using a water valve: 5 ... 50 °C (41 ... 122 °F)
Relative humidity	5 ... 95 %, not condensing

### General

Base plate dimensions (W × H × D)	Approx. 275 × 310 × 40 mm (10.83 × 12.20 × 1.57")
EPC710 dimensions when installed (W × H × D)	Approx. 275 × 310 × 98 mm (10.83 × 12.20 × 3.86")
EPC720 dimensions when installed (W × H × D)	Approx. 294 × 310 × 166 mm (11.57 × 12.20 × 6.53")
Base plate weight	Approx. 1.6 kg
Material	Stainless steel A2
Installation	Wall or pipe mounting
Degree of protection according to EN 60529 (housing installed)	EPC710: No degree of protection EPC720: IP43

## Conformity

EMC	EN IEC 61326-1
Immunity to interference	Industrial applications
Emitted interference	Class A (industrial applications) This equipment is not designed for domestic use, and is unable to guarantee adequate protection of the radio reception in such environments.
RoHS conformity	Acc. to EU directive 2011/65/EU





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The latest documents are available for download on our  
website under the corresponding product description.

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