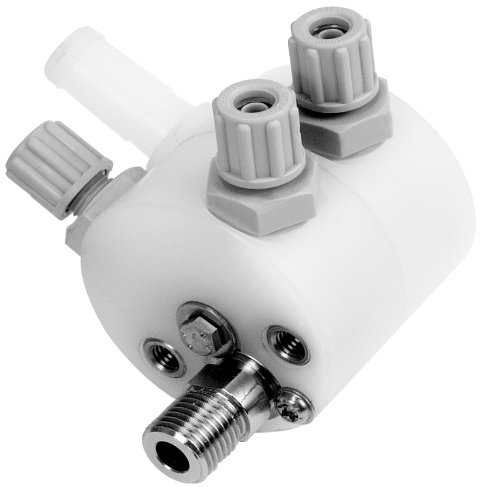
Technical Information
TI 342C/07/en/10.02
No. 51510059

Rinse connection adapter
CPR 40

Rinse connection adapter for use with retractable assembly



Applications
With the CPR 40, several media can be conveyed into a retractable assembly's rinse chamber.
In conjunction with the TopCal S:
Fully automatic cleaning and calibration with the TopCal S are carried out with cleaning agent, water, air and buffers 1 and 2. If you require additional media such as:

- Superheated steam,
- Hot water,
- Sterile air,
- Second cleaning agent,

these can be conveyed under pressure via the CPR 40. Aggressive and/or hot media *must* be conveyed via the CPR 40 rinse connection adapter. Cleaning/ calibration programs are integrated automatically with TopCal.

Your Benefits

- Simple installation:
  – Direct connection to the retractable assembly
- Flexible range of applications:
  – Material PVDF or SS 1.4435 (AISI 316L)
  – Insert glands for installing hoses
  – Clamping ring screw connections (Serto) for hose/pipe mounting
  – With D 12 (1/2") hose clip
  – With 2 or 4 connections
- High volume throughput possible due to large volume hose clip
- Very high degree of safety:
  – Check valves with various sealing materials
  – Step-free turning, for optimum draining

Quality made by Endress+Hauser

ISO 9001

Endress+Hauser
The Power of Know How

Designated use

Any use other than that described in this documentation compromises the safety of persons and the entire measuring system and is, therefore, not permitted.
The manufacturer does not accept liability for damage caused by improper or not intended use.

Installation, commissioning, operation

Please note the following items:
- Installation, electrical connection, commissioning, operation and maintenance of the measuring system must only be carried out by trained technical personnel.
  The technical personnel must be authorised for the specified activities by the system operator.
- Technical personnel must have read and understood these Operating Instructions and must adhere to them.
- Before commissioning the entire measuring point, check all the connections for correctness. Ensure that electrical cables and hose connections are not damaged.
- Do not operate damaged products and secure them against unintentional commissioning. Mark the damaged product as being defective.
- Measuring point faults may only be rectified by authorised and specially trained personnel.
- If faults can not be rectified, the products must be taken out of service and secured against unintentional commissioning.
- Repairs not described in these Operating Instructions may only be carried out at the manufacturer's or by the Endress+Hauser service organisation.

The rinsing block has been constructed and tested to state-of-the-art operational security standards and left the factory in perfect condition as regards technical safety. The appropriate regulations and EC directives have been met.

Operational safety

As the user, you are responsible for complying with the following safety conditions:
- Installation instructions
- Local prevailing standards and regulations.

Return

In case of repair, please send the rinsing block *cleaned* to your local Endress+Hauser Sales Center.
Please use the original packaging where possible.

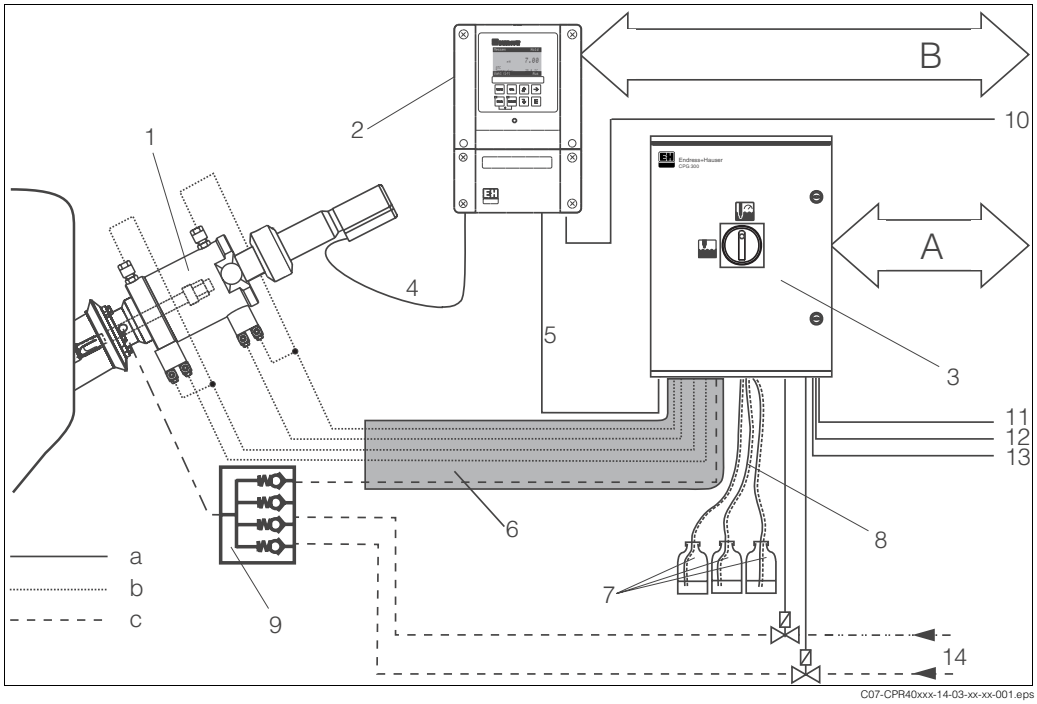
Safety icons and symbols

Warning!
This symbol alerts you to hazards. They can cause serious damage to the instrument or to persons if ignored.

Caution!
This symbol alerts you to possible faults which could arise from incorrect operation. They could cause damage to the instrument if ignored.

Note!
This symbol indicates important items of information.

Functions and system design



Fully automatic measuring point

1 Retractable assembly CleanFit H CPA 475
2 Transmitter Mycom S CPM 153
3 Control unit CPG 300
4 pH measuring cable
5 Power supply/ control cable
6 Multihose
7 Canister for cleaning agent, buffer solutions
8 Hoses CPG 300 for canisters
9 Rinsing block CPR 40 with 4 connections
A Message and control signals: assembly position, program status, move assembly, program stop
B Hold input, six relay contacts, two current outputs 2/0 ... 20 mA

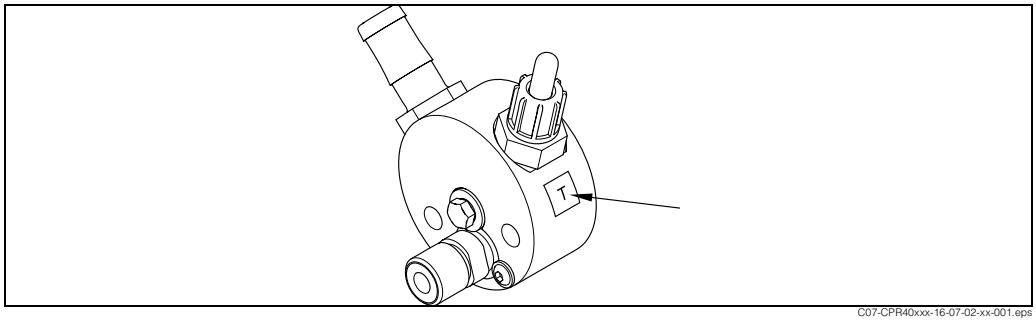
To be supplied by the customer:

10 Power supply for Mycom S CPM 153
11 Power supply for CPG 300
12 Compressed air
13 Water connection
14 Superheated steam / water / other cleaning agents (optional)
a Electrical wiring
b Compressed air
c Fluids / cleaning mixture

Measuring system

A complete measuring system consists of the following components:
- TopCal S CPC 300 / TopClean S CPC 30
- pneumatically driven retractable assembly (e.g. CleanFit or ProbFit series) with pneumatic / electric limit switches
- pH electrode
- Electrode cable
- Buffer solutions and cleaning agent
- Rinsing block (for media which are controlled via additional valves).

Caution!
For use with the systems TopCal S resp. TopClean S you need the adapter CPR 40 with the "**T**" marking forTopCal/TopClean. In this version the signed connection has *no* check valve.
This is important in case of TopCal/TopClean: the white PTFE hose which you connect here from the multi hose, is already provided with a check valve internally.



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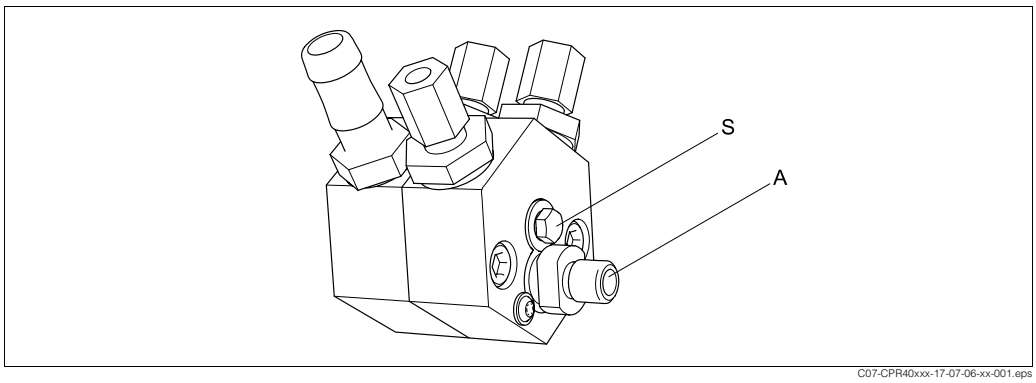
*For use with the systems TopCal S resp. TopClean S you need the adapter CPR 40 with the "**T**" marking forTopCal/TopClean.*

Installation

Installation instructions

Caution!
Install the rinsing block such that the rinse connections face upwards. This is the only way to guarantee optimum draining of the rinsing block. For this purpose, the position of the rinsing block can be fixed via the adjustable assembly connection A with the locking screw S (see diagram).



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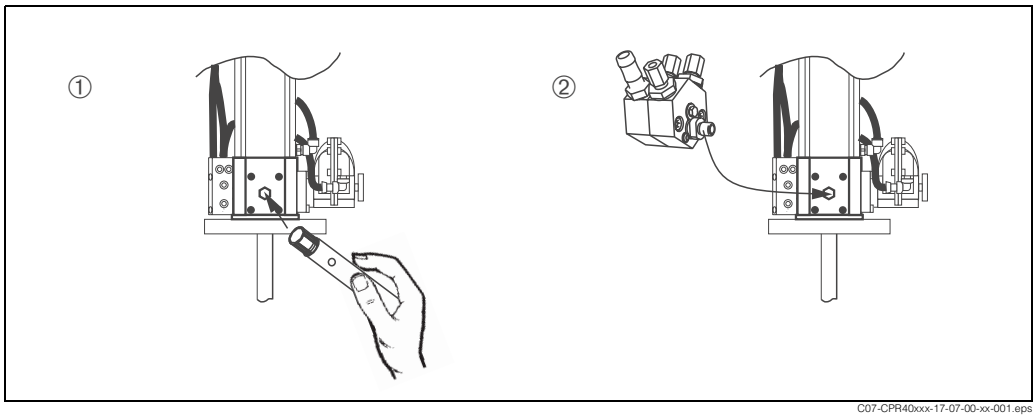
S: Locking screw for fixing the location of the rinsing block

A: Assembly connection

Installation with ProbFit CPA 463 / 463 S assemblies



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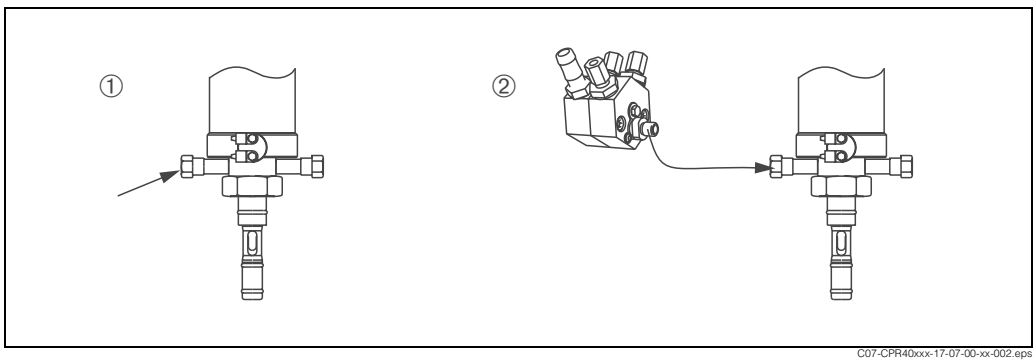
1. Remove the dummy plug.
2. Screw the CPR 40 to the assembly's rinse connection. If you loosen the locking screw S (see Installation instructions diagram) slightly, you can turn the assembly connection A.

Installation with CleanFit P CPA 471 / 472 and CleanFit H CPA 475 assemblies



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1. Remove the dummy plug.
2. Screw the CPR 40 to the assembly's rinse connection. If you loosen the locking screw S (see Installation instructions diagram) slightly, you can turn the assembly connection A.

Allocation of rinse connections

Allocate the rinse connections (2 or 4) to your required media. For this, a D12 hose connection clip and clamping ring screw connections (Serto) AD 6 or insert glands with ID 4 and AD 6 are available.

Installation

Install the rinsing block such that the rinse connections face upwards. This is the only way to guarantee optimum draining of the rinsing block.

Ambient conditions

Storage temperature

0 ... +50 °C

Temperature and pressure (medium)

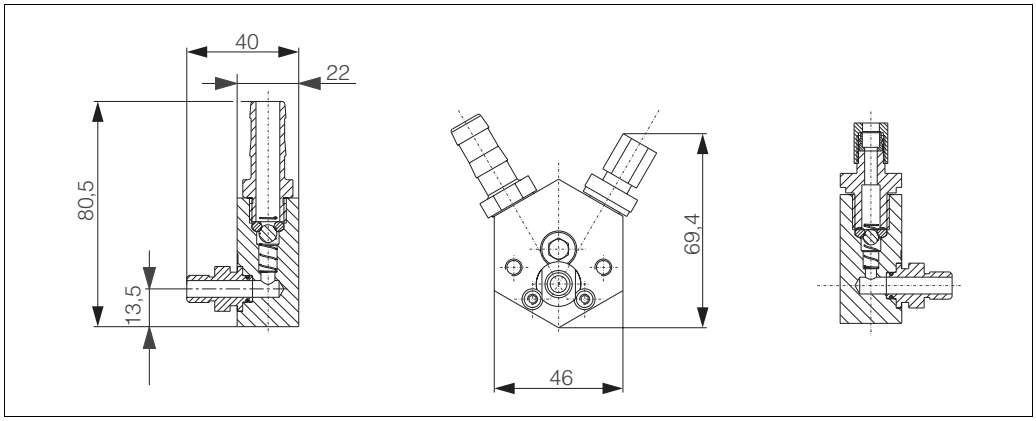
PVDF:	up to 8 bar at 20 °C at 1 bar up to max. 60°C
Stainless steel:	Continuous operation: 10 bar at 100 °C Short-term: 10 bar at 140°C

Process conditions

See Technical Data of the assembly used.

Physical data

Design/dimensions



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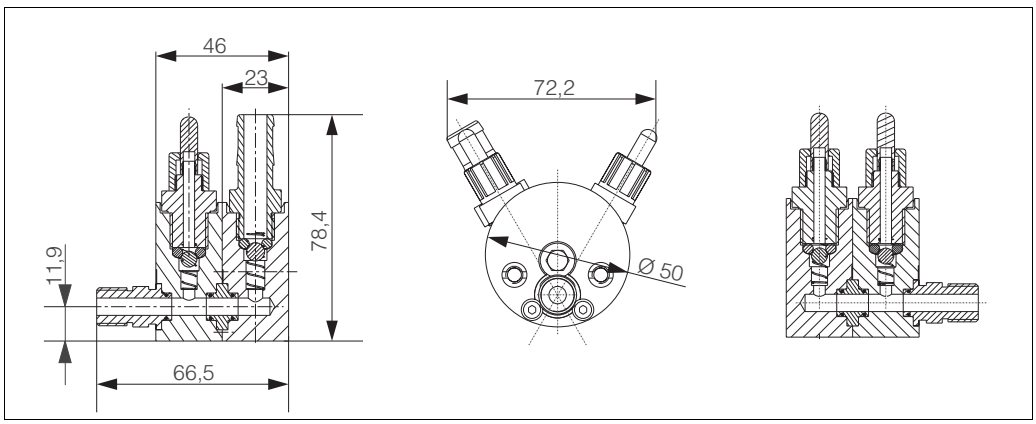
Rinsing block dimensions CPR 40 in the stainless steel version;
Connection example: 1 D 12 clip, 1 insert gland ID 4 / AD 6



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Rinsing block dimensions CPR 40 in the plastic version;
Connection example: 1 D 12 clip, 3 clamping ring screw connections (Serto) AD 6

Weight

	Two connections	Four connections
Version in stainless steel	approx. 200 g	approx. 400 g
Version in plastic	approx. 150 g	approx. 300 g

Materials

In contact with medium: PVDF, stainless steel SS 1.4435L (AISI 316L)
Check valve: glass, Hastelloy
Hose gland: PVDF, PP

Adaption for assembly

G ¼ external and NPT ¼'' external

Ordering information

Product structure
Rinse connection adapter
CPR 40

		Material in contact with medium
	A	PVDF; check valve: Hastelloy glass; Hose gland: PP
	B	PVDF; check valve: Hastelloy glass; Hose gland: PVDF
	C	Stainless steel SS 1.4435L (AISI 316L); check valve: Hastelloy, glass

			Connections
		0	1 grommet D12, 1 insert gland ID 4 / AD 6
		1	1 grommet D12, 1 clamping ring screw connection (Serto) AD 6
		2	1 grommet D12, 3 insert glands ID 4 / AD 6
		3	1 grommet D12, 3 clamping ring screw connections (Serto) AD 6

				Sealing material
			0	EPDM
			1	Viton
			2	Chemraz

				Adaption for assembly
			0	G ¼ external
			2	MNPT ¼"
			9	Special design to customer specifications

CPR40-					Complete order code

Documentation

- ❑ Technical Information CleanFit P CPA 471, TI 217C/07/en; Order No. 51502595
- ❑ Technical Information CleanFit P CPA 472, TI 223C/07/en; Order No. 51502644
- ❑ Technical Information CleanFit H CPA 475, TI 240C/07/en; Order No. 505598
- ❑ Technical Information ProbFit CPA 463, TI 007C/07/en; Order No. 50041832
- ❑ Technical Information ProbFit CPA 463 S, TI 151C/07/en; Order No. 50079943

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