Installation Instructions

Kit XPC0003 seals

Replacement for Cleanfit CPA871 process retractable assembly
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1 Overview of seal positions

1.1 Basic version

The basic version with a 36 and 78 mm stroke is presented in the following section. This is valid for all process connections except the immersion version and the process connection DN25.

Valid for seal kit: $XPC0003\text{-}V+QQ / +QM / +QO / +QS / +QT$ and $+QL$ not wetted (nw)

The seal that is not in contact with the medium (not wetted seal) (2) is also included in all kits with wetted seals (w); please replace always.

1: O-ring ID 7.00 W 1.50 OD 10.00
   (material depends on the version)
2: Seal 28.00 x 2.00 mm (nw)
3: Seal 7.00 x 1.50 mm (w)
4: Seal 37.77 x 2.62 mm (w)
w = wetted seal, nw = not wetted seal
5: Seal 11.00 x 2.00 mm (w)
6: Seal 18.72 x 2.62 mm (w)
7: Seal 18.72 x 2.62 mm (nw)
1.2 Version DN25 G1¼"

The DN25 G1¼" version, stroke 78 mm, is presented in the following section.

Valid for seal kit: XPC0003-V+QP / +QM / +QO / +QS / +QT and +QL not wetted (nw)

The seal that is not in contact with the medium (not wetted seal) (2) is also included in all kits with wetted seals; please replace always.

2 Overview for DN25 G1¼" version

1: Seal 37.77 x 2.62 mm (nw) (only with pneumatic drive) 5: Seal 11.00 x 2.00 mm (w)
2: Seal 28.00 x 2.00 mm (nw) 6: Seal 18.72 x 2.62 mm (w)
3: Seal 7.00 x 1.50 mm (w) 7: Seal 18.72 x 2.62 mm (nw)
4: Seal 21.95 x 1.78 mm (w)

w = wetted seal, nw = not wetted seal
1.3 Immersion versions

The immersion version, with stroke 36 mm, 99 mm / 151 mm insertion depth, is presented in the following section.

Valid for seal kit: XPC0003-V+QM / +QO / +QR and +QL not wetted (nw)

The seal that is not in contact with the medium (not wetted seal) (2) is also included in all kits with wetted seals; please replace always.

3 Overview for immersion versions

1: Seal 37.77 x 2.62 mm (nw) (only with pneumatic drive)  6: Slide bushing (w), only for 151 mm insertion depth
2: Seal 28.00 x 2.00 mm (nw)  7: Seal 11.00 x 2.00 mm (w)
3: Seal 21.95 x 1.78 mm (nw)  8: Seal 18.72 x 2.62 mm (w)
4: Seal 7.00 x 1.50 mm (w)  9: Seal 37.77 x 2.62 mm (w)
5: Rinse chamber seal (w)  10: Seal 18.72 x 2.62 mm (nw)

w = wetted seal, nw = not wetted seal
1.4 Seal positions for the check valve, 16 bar version

4 Overview of seals for the check valve, 16 bar version

1: Bearing
2: O-ring ID 7.00 W 1.50 OD 10.00
   (material depends on the version)
3: Spring
1.5 Seal positions for not wetted seals (nw)

Additional, not wetted seals are illustrated in Figures 1, 3, 2, 4 and 3, 5.

Valid for seal kit: XPC0003-V+QL

![Diagram of seal positions](image)

5 Overview for not wetted seals

1: Seal 11.00 x 1.50 mm (unlocking)
2: Seal 14.00 x 1.78 mm (gel-KCl adapter)
3: Seal 30.00 x 2.00 mm (retraction pipe)
4: Seal 23.52 x 1.78 mm
5: Seal 60.00 x 1.50 mm
6: Seal 34.65 x 1.78 mm (man. version)
7: Seal 34.59 x 2.62 mm (pneum. version)
2  Intended use

- The parts of the kits must only be used as retrofit parts or replacement parts for Cleanfit CPA871 retractable assemblies. Any other use is not permitted!
- Only use original parts from Endress+Hauser.
- In the W@M Device Viewer, check if the spare part is suitable for the existing device.

3  Authorized installation personnel

- Installation, commissioning, operation and maintenance of the measuring system may be carried out only by specially trained technical personnel.
- The technical personnel must be authorized by the plant operator to carry out the specified activities.
- The electrical connection may be performed only by an electrical technician.
- The technical personnel must have read and understood these Installation Instructions and must follow the instructions they contain.
- Faults at the measuring point may only be rectified by authorized and specially trained personnel.

⚠️ Repairs not described in the Operating Instructions provided must only be carried out directly at the manufacturer's site or by the service organization.

4  Safety instructions

⚠️ WARNING
Risk of injury from high pressure, high temperature or chemical hazards if process medium escapes!
- Before installing or removing an assembly, depressurize the system, drain the system and clean it.

⚠️ WARNING
Danger due to compressed air in the case of pneumatically operated assemblies!
- Before starting work on the assembly, switch off the compressed air supply and vent the compressed air lines.

⚠️ CAUTION
Contact with the medium poses a health hazard!
- Wear protective gloves, protective goggles and protective clothing, particularly when working with reagents, chemicals or process solutions.
- In case of contact with eyes or skin, rinse the affected area with plenty of water and then seek medical advice. Show the relevant safety data sheet to the physician.
NOTICE

Material damage due to solvents!

- Do not use any halogen-containing organic solvents or acetone. These solvents could destroy plastic components of the assembly.

Impact on the process

Before decommissioning an active device, the potential impact on the overall process must be taken into account! This applies in particular to the use of the switching contacts, analog signal outputs or the communication interface of the associated measuring device to control process variables. Coordinate service tasks with the operator!
5  Scope of delivery

5.1  Kit XPC0003-V+QL, not wetted for all versions

The kit contains the following parts →  6, 10:

1  1 x  Seal 14.00 x 1.78 mm, EPDM
2  1 x  Seal 11.00 x 1.50 mm, EPDM
3  1 x  Seal 18.72 x 2.62 mm, EPDM
4  1 x  Seal 21.95 x 1.78 mm, EPDM
5  1 x  Seal 28.00 x 2.00 mm, EPDM
6  1 x  Seal 23.52 x 1.78 mm, Viton
7  1 x  Seal 30.00 x 2.00 mm, EPDM
8  1 x  Seal 34.59 x 2.62 mm, EPDM
9  1 x  Seal 37.77 x 2.62 mm, EPDM
10 1 x  Seal 34.65 x 1.78 mm, EPDM
11 1 x  Seal 60.00 x 1.50 mm, FKM
12 1 x  O-ring picker
1  1 x  Kit instructions

The seal that is not in contact with the medium (not wetted seal) (5) is also included in all kits with wetted seals.

6  Kit XPC0003-V+QL

The color of the seals may vary.
5.2 Kit XPC0003-V+QM (EPDM) and XPC0003-V+QO (FKM), wetted for all versions

The two kits contain the following parts → 7, 11:

1 1 x Seal 11.00 x 2.00 mm 6 1 x Seal 21.95 x 1.78 mm
2 1 x Slide bushing, only for 151 mm insertion depth 7 1 x Seal 37.77 x 2.62 mm
3 2 x Seal 7.00 x 1.50 mm 8 1 x Rinse chamber seal
4 4 x Seal 18.72 x 2.62 mm 9 1 x O-ring picker
5 1 x Seal 28.00 x 2.00 mm, EPDM 1 x Kit instructions

The seal (5) is identical to the seal (5) in kit XPC0003-V+QL, the material is always EPDM.

The color of the seals may vary.
5.3 Kit XPC0003-V+QS (EPDM-FDA) und XPC0003-V+QT (FKM-FDA), wetted incl. FDA for basic version and DN25 version

An FDA declaration for the seals is included in the kit.

The two kits contain the following parts → 8, 12:

1 1 x Seal 11.00 x 2.00 mm
2 1 x Seal 21.95 x 1.78 mm
3 2 x Seal 37.77 x 2.62 mm
4 2 x Seal 7.00 x 1.50 mm
5 1 x Seal 28.00 x 2.00 mm, EPDM
6 4 x Seal 18.72 x 2.62 mm
7 1 x O-ring picker
1 x Kit instructions

The seal (5) is identical to the seal (5) in kit XPC0003-V+QL, the material is always EPDM.

8 Kits XPC0003-V+QS (EPDM-FDA) and XPC0003-V+QT (FKM-FDA)

The color of the seals may vary.
5.4 Kit XPC0003-V+QQ (FFKM-FDA), wetted for the basic version

An FDA declaration for the seals is included in the kit.

The kit contains the following parts →  9, 13:

1 1 x Seal 11.00 x 2.00 mm
2 2 x Seal 7.00 x 1.50 mm
3 4 x Seal 18.72 x 2.62 mm
4 1 x Seal 37.77 x 2.62 mm
5 1 x Seal 28.00 x 2.00 mm, EPDM
6 1 x O-ring picker
1 x Kit instructions

The seal (5) is identical to the seal (5) in kit XPC0003-V+QL, not wetted, the material is always EPDM.

The color of the seals may vary.
5.5  Kit XPC0003-V+QP (FFKM-FDA), wetted incl. FDA for DN 25 version

An FDA declaration for the seals is included in the kit.

The kit contains the following parts → 10, 14:

1  1 x  Seal 11.00 x 2.00 mm
2  2 x  Seal 7.00 x 1.50 mm
3  4 x  Seal 18.72 x 2.62 mm
4  1 x  Seal 21.95 x 1.78 mm
5  1 x  Seal 28.00 x 2.00 mm, EPDM
6  1 x  O-ring picker

1 x  Kit instructions

The seal (5) is identical to the seal (5) in kit XPC0003-V+QL, not wetted, the material is always EPDM.

The color of the seals may vary.
5.6  Kit XPC0003-V+QR (FFKM), wetted for the immersion version
The kit contains the following parts → ▶ 11, ▶ 15:

1  1 x  Slide bushing, only for 151 mm insertion depth   6  1 x  Seal 37.77 x 2.62 mm
2  2 x  Seal 7.00 x 1.50 mm   7  1 x  Rinse chamber seal
3  1 x  Seal 11.00 x 2.00 mm   8  1 x  O-ring picker
4  4 x  Seal 18.72 x 2.62 mm
5  1 x  Seal 28.00 x 2.00 mm, EPDM

The seal (5) is identical to the seal (5) in kit XPC0003-V+QL, not wetted, the material is always EPDM.

▶ 11  Kit XPC0003-V+QR (FFKM)

The color of the seals may vary.
5.7 Kits XPC0003-V+QU (EPDM), XPC0003-V-QV (FKM) and XPC0003-V-QW (FFKM), maintenance and seals, 16 bar version

The kits contain the following parts → 12, 16:

1 2 x Spring
2 4 x O-ring ID 7.00 W 1.50 OD 10.00 EPDM FDA (for option QU)
    O-ring ID 7.00 W 1.50 OD 10.00 FKM FDA (for option QV)
    O-ring ID 7.00 W 1.50 OD 10.00 FFKM FDA (for option QW)
3 1 x O-ring picker
4 2 x Bearing
5 2 x Sealing washer OD12.00 W2.00 EPDM (for option QU)
    Sealing washer OD12.00 W2.00 FKM (for option QV)
    Sealing washer OD12.00 W2.00 FFKM (for option QW)

12 Kits XPC0003-V+QU (EPDM), XPC0003-V-QV (FKM) and XPC0003-V-QW (FFKM)

The color of the seals may vary.

The sealing washers are used for the rinse chamber sealing plugs, M16, 1.4404.
6 Additional documentation

Detailed information on the device can be found in the Operating Instructions for the sensor and in the other documentation available via:
- www.endress.com/device-viewer
- Smartphone / tablet: Endress+Hauser Operations app

**Detailed service instructions CPA871**

The purpose of these instructions is to provide an overview of the seal spare parts kits available for CPA871 and the scope of delivery of these kits.

Information on the use of these spare parts is not included in these instructions, but can be found in the detailed repair and maintenance instructions CPA871 (document number 71269404). These are available in the spare parts finder tool on the Endress+Hauser website or directly via https://portal.endress.com/picpool/sft/advicepdfs/71269404_service.pdf

7 Disposal

7.1 Sensors

If required by the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the product is marked with the depicted symbol in order to minimize the disposal of WEEE as unsorted municipal waste. Do not dispose of products bearing this marking as unsorted municipal waste. Instead, return them to the manufacturer for disposal under the applicable conditions.